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MEETING SUMMARY
MARYLAND CLIMATE CHANGE ADVISORY GROUP
Agriculture, Forestry, and Waste Management Technical Work Group
(AFW TWG)
Call #8, December 11, 2007

Attendance:

Technical Working Group: Joel Dunn (The Conservation Fund), Laura Miller (Montgomery County DEP), Gary Allen (Center for Chesapeake Communities)

Maryland State Department Representatives: Rene Fizer and Liz Entwisle (MDE).

Center for Climate Strategies (CCS): Gloria Flora, Steve Roe, Joe Pryor

Public Attendees: None

Background documents: (www.mdclimatechange.us/GHG_Agriculture_Forestry.cfm)

1. Meeting Notice and Agenda
2. Summary of Meeting #7
3. Power Point for Call #8
4. AFW Straw Proposal Document

Discussion items and key issues:

1. Call to order and roll call
2. Review and approve prior call summary
3. Review input from the MWG on straw proposals
4. Discussion on quantification and goals
5. Review of specific proposals
6. Next Steps for AFW TWG
7. Public Input and Announcements
8. Agenda, Time and Date for Next Meeting & Subsequent TWG Meetings

Discussion:

1. Interim Report and the MCCC

- a. The MCCC meeting was held December 4. They recommended that AFW 8, Nutrient Trading option not be a Fast Track Option. AFW-1, Forest Management for Carbon Sequestration remains as a fast track option.
- b. Final report is expected to be sent to the Governor within the next day or so.

2. MWG 12/7 Meeting

- a. Appreciated the work done to date, looking forward to more quantitative goals.
- b. Specific feedback is detailed in the AFW Straw Proposals document listed above.

3. Next MWG meeting – January 15, 2008

- a. Goals for each option need to be finalized.
- b. Initial quantification will need to be started before this meeting.
- c. CCS will add default goals for discussion among TWG members if other goals aren't provided.

General Direction for Straw Proposals:

1. **Sub-groups need to resolve and recommend specific goals within the next week.**
2. Our next meeting is January 3. CCS will attempt some quantification of the goals articulated.
3. Chesapeake Bay Commission 2020 goals will be utilized for straw proposals involving forest lands but they lack a specific goal for Forest Management. In general they are focusing on 600m acres within the immediate watershed, with 250m acres in MD. (Gov. O'Malley has agreed to these goals excerpted below.)

2020 Forest Conservation Goal in Maryland

Maryland is committing to time-specific numeric goals and milestones that work aggressively towards the long-term desired conditions and functions.

1. *Retain existing levels of forest cover in Maryland, estimated at 2.6 million acres past 2020. (AFW 4)*
 2. *Protect an additional 250,000 acres of forest by 2020 through legal mechanisms, with more than half in areas of high value to water quality. (AFW 4)*
 3. *Restore an additional 25,000 acres of forest buffers, or other areas of high value to water quality outside of prime agricultural land, by 2020. (AFW 3)*
 4. *Produce rural and forest land retention guidelines based on watershed indicators by 2008 that can support requirements for forest and water protection in local comprehensive plans.*
 5. *By 2020, have urban canopy goals for 50% of the area developed primarily before stormwater management regulations (pre-1984). (AFW 2)*
4. See other notes in document in addition to the comments below.
 5. Please send your updates to Gloria (at gflora@s-o-solutions.org) as you get them done.

Specific Direction for Each AFW Policy Option from TWG Discussion:

AFW-1: Forest Management for Enhanced Carbon Sequestration.

- a. Usually quantification looks at increased sequestration from above ground (i.e. not soils) because the methodology for calculating forest soil carbon is still rather primitive.
- b. Need two parts for goal:
 - i. Durable wood products section - suggest a percentage increase in sustainable harvest.
 - ii. Number of acres on which active forest management should occur
- c. Need quantitative information from TWG members including specific MD studies on the sequestration benefits of forest management

- i. Joel Dunn suggested that there may be relevant research being conducted by Norm Christiansen at Duke University and at the Nicholas Institute
- d. Laura will send to TWG paper prepared by this sub-group outlining the benefits of forests for carbon sequestration.
- e. MWG suggested including education under this option.
- f. (AFW-xx Mitigation of Forest Loss Due to Insects, Disease, Pests and Invasive Species - MWG approved incorporating this goal under AFW 1.)

AFW-2: Managing Urban Trees and Forests for Greenhouse Gas Benefits.

- a. Use 50% coverage from Chesapeake Bay Commission goal above.

AFW-3: Afforestation, Reforestation and Restoration of Forests and Wetlands.

- a. MWG suggested using caution with the wording. Afforestation is in RGGI but restoration is not. Specific uses of revenues from the sale of carbon credits is at the discretion of states. Compliance language in RGGI is very rigid. Direction is within the rule, be careful to align with model. Need to state case as to why credit revenue should be directed to forestation projects.
- b. References to RGGI will need to be included under the implementation mechanisms as this is only one avenue for afforestation projects.
- c. Take goals from Chesapeake Bay Commission goal (e.g. 25,000 acres by 2020)
- d. Need specific afforestation/reforestation goals and wetland restoration goal.
 - a.E.g. expand wetland areas by X acres by 2020. However, very difficult to quantify because the carbon dynamics (e.g. methane emissions) is relatively unknown.
 - b.Protect, enhance, restore, or create 60,000 acres of wetlands by 2035 (goal from Wetlands Restoration Steering Committee of MD).
 - c.TWG suggests using all 60m acres to restore or create wetlands.
 - d.State currently has No Net Loss policy for the 600,000 acres of tidal and non-tidal wetland acres that currently exist in MD

AFW-4: Protection and Conservation of Agricultural Land, Coastal Wetlands and Forested Land.

- a. Protect, enhance, restore, or create 60,000 acres of wetlands by 2035 (goal from Wetlands Restoration Steering Committee of MD).
- b. TWG suggests using the State's No Net Loss policy goal for the 600,000 acres of tidal and non-tidal wetland acres that currently exist in MD
- c. Use Ag land goal from MD Ag Land Protection Foundation Task Force that recommends buying easements on farming land (current price about \$8-9m/A).
- d. With sea level rise, loss of coastal wetlands will be difficult to stop.
 - i. Recommend slowing loss through soft control measures
 - ii. Will need to coordinate with the Adaptation TWG that is recommending similar option – as an Early Action Item.
 - iii. Gloria to speak to DNR (Zoe) regarding possible numeric goals coming out of adaptation group, including number of shoreline miles targeted for soft (non-structural) protection/enhancement.

- e. Change language to “proceeds from future Maryland carbon markets” rather than “offset allowances”.
- f. DNR currently reconfiguring POS (Program Open Space) criteria. Recommend to DNR, through this report, including GHG considerations under POS and underscore that raiding the fund for other purposes is not permitted.
- g. Increase transfer tax on ag/forestry land transfers to non-ag/forestry uses now at 5%.. MD Land Preservation Taskforce suggests doubling that tax on conversion of ag lands to development. Gary Allen recommends a more feasible and politically viable increase to 7.5%.
- h. Green Infrastructure goals are being revived by State. They should align with each county. Gary has language to be inserted and will send to Gloria.

AFW-5: “Buy Local” Programs for Sustainable Agriculture, Wood and Wood Products.

- a. In relation to the Agriculture piece, this is difficult to quantify. Fresh products can be quantified more easily than processed foods. May need to proceed with this goal as an un-quantified goal.
- b. Look at New Mexico, Washington or Vermont’s final plans for how they handled this topic (each found at www.xxclimatechange.us)

AFW-6: Expanded Use of Forest and Farm Feedstocks and Bi-Products for Energy Production

- a. The RPS (Renewable Portfolio Standard) does include biomass and methane in Tier 1 and Tier 2. Make sure we don’t double count with Energy Supply TWG.
- b. Sustainable biomass- look at definition of biomass in RPS
- c. Gary and Dan Ryder to forward additional information on this option.
- d. Need additional expertise (perhaps Val Connolly) on manure digesters and waste energy recovery projects. Gloria will contact her and talk to the TLU TWG to ensure no overlap.

AFW-7: In-State Liquid Biofuels Production

- a. Goal could be a production target (e.g. offsetting a volume of gasoline production). Need to have specific numeric goals.
- b. Low carbon fuels in general could be incentivized where they have a 20% better life cycle energy/carbon footprint than traditional fuels (currently part of a federal debate.)
- c. Concerned about the life cycle emissions and are eager not to see additional corn based ethanol or soybean based bio-diesel. Do not incentivize options that could increase amount of nutrients and water used for agricultural fuel production.
- d. Need to focus on cellulosic ethanol from switchgrass and forest biomass.
- e. Focus on non-soy bean biodiesel such as bio-oils from algae.
- f. See NC goals (www.ncclimatechange.us) which de-emphasize undesirable sources.
- g. 2 biodiesel plants currently in MD producing 5 million gallons/year.
- h. Center for Agro-Ecology has done some studies on switchgrass biofuels.
- i. TLU focuses on the demand/consumption side while AFW needs to focus on the potential feedstocks and the production side.

AFW-8: Nutrient Trading with Carbon Benefits

- a. Now a Non-fast tracked option because of two concerns: Difficulty in quantifying GHG benefits and MCCC didn't feel that this option was ready and required additional work.
- b. Need to define a cap of nutrients within the trading regime (rather than in all of MD). Gloria to speak to James and George about the possibility of including a cap for quantification purposes.

AFW-9: Waste Management through Source Reduction & Advanced Recycling

- a. Specify baseline in 2006 levels
- b. Segregate goals by what is expected to be achieved through source reduction versus recycling and organic recovery. Consult with Ed Dexter.
- c. Perhaps set or recommend goals by county rather than state wide.
- d. Increasing recycling opportunities in rural areas needs to be incorporated under the implementation mechanism section.
- e. Encourage/incentivize private sector and NGO's to assist in recycling efforts.

Next steps and agreements:

1. The next TWG meeting (Call #9) will be held on **January 3, 2008 from 1:00 to 3:00 EST**. The purpose of the next call will be to further complete the policy options and to discuss the preliminary quantifications.
2. Group members who cannot make the calls can request a personal update in addition to the meeting notes.
3. Next MWG meeting is on 15 January 2008.
4. Next MCCC is on 17 January 2008.
5. TWG members are encouraged to forward germane data and reference material to Gloria Flora gflora@s-o-solutions.org or Brian Hug bhug@mde.state.md.us
6. **Milestones:** The Final Report is targeted for April 20, 2008.

Materials for each call will be posted at the Maryland Climate Change website (see address above). CCS will notify the TWG members when the materials are available for review.

Thanks again to all members. We recognize this is work above and beyond your already full schedules. Your meaningful contributions and excellent discussions are very encouraging.