

CHESTER COUNTY GREENHOUSE GAS REDUCTION TASK FORCE

AGRICULTURE AND FORESTRY COMMITTEE

Meeting held at Chester County Library, Exton at 2.00 pm on Wednesday June 4th, 2008.

In attendance: Mike Bullard, Pat O'Donnell, Victoria Laubach, Victoria Webb, Gene Wilson and Duncan Allison. Bruce Arnold and Tom Bott were not able to attend due to prior business travel commitments.

Call to order – The meeting was called to order and the meeting started at 2.05 pm.

Minutes – The Minutes of the May 14th meeting, including the corrections and upgrades submitted by e-mail and incorporated in the final document, were approved.

Climate change and agriculture – There was much discussion prompted by Mike's very diligent trawling of the Internet to gain the latest results from scientists involved in modeling climate change and forecasting possible impacts of temperature and carbon dioxide increases on agriculture, particularly in Pennsylvania and the Northeast. Since the most recent results forecast the much more serious impact on agriculture if GHG emissions are allowed to continue at current levels, our report should point out the critical importance of taking strong action now to reduce the current level of emissions. Mike agreed to prepare a review and appropriate paragraphs to frame our report.

Reports on progress in determining description of current situation, goals and recommendations were discussed by segment.

Increase Local Food Production – Victoria Webb reported briefly on the meetings with Buy Fresh Buy Local and the planning group (Marilyn Anthony – Regional Director, PASA, Claire Murray – farmer and chair of local Buy Fresh Buy Local chapter, Larry Welsch – Manager – Chester County Cares Food Network, Victoria Webb and Duncan Allison). A meeting with the producers, those involved in farmers markets etc. was considered impossible at this busy time of year so key names for interview by phone or in person by Victoria was prepared. The value of good publicity was stressed so as to draw attention and inspire people to purchase local food.

Action – Victoria will prepare brief statement of the current situation, goals and recommendations being developed.

Preserve and increase existing forest lands throughout the county – Mike circulated the Pennsylvania Campaign for Clean Water literature recommending forested buffers of at least 100ft on either side of every stream. Potential for carbon sequestration by planting trees along the open streams is being estimated, providing sequestration of 5 mt CO₂/acre. Our target miles of stream for planting are being developed, together

with our recommendations including access to carbon credits and possible funding such as the Conservation Reserve Enhancement Program (CREP). Robert Lonsdorf (Brandywine Conservancy) and Andrew Pitz (Natural Lands Trust) will be invited to attend our next meeting so that we can get their input and insights and refine recommendations for preserving existing woodland, and expanding tree planting in riparian and other areas.

Action – Mike will prepare brief statement of the current situation on woodland area, current estimated carbon sequestration and goals for carbon sequestration in the future through implementation of recommendations for preserving woodlands and expanding tree planting in riparian and other areas. Victoria Laubach will invite Andy Pitz and Duncan will invite Robert Lonsdorf to our June 25th meeting.

Tillage, fertilizer use etc. – Duncan reported that data was beginning to come in on fertilizer, manure and conservation tillage use so that estimates of current N₂O emissions and potential for increasing soil carbon sequestration by soil conservation practices can be calculated. Recommendations will be developed in conjunction with the Chester County Conservation District with input from Penn State Extension.

Green Industry – Vic Laubach has been getting input from the Pennsylvania Landscape and Nursery Association (PLNA) so that the survey for all nurseries reflects their input. Potential exists for close collaboration between nurseries in producing trees for local planting and landscapers in designing yards that minimize mowing and optimize shelter for winter winds and high summer temperatures.

Open space can be managed with two mowing per year but public education will be required to get homeowners to increase mowing height of traditional lawns to at least 3" and plant areas to grasses that require less mowing or to trees.

Action – Survey is being prepared. Victoria will follow up with Jake Michael regarding extent of open space and lawns in the county and send in statements covering current situation and thinking regarding goals and recommendations for use at the GHRTF meeting later in the month.

Dairy and livestock methane – Mike reported that estimates are being prepared on current enteric methane projections based on best available sources for the dairy and livestock populations in the county. Quality of feed influences methane production with the highest quality feed reducing enteric methane production. Dairy cattle require more feed during lactation and so produce considerably more methane than non-lactating cattle. Since anaerobic digesters for manure slurry have not yet been optimized for small units, uptake by the average dairy farmer (Plain Sect 30-40 and other 70-90 dairy cows) is unlikely to be considered economic. Our recommendations should include funding a project incorporating a prototype power generation project.

Mushroom production – Responses are expected soon from the American Mushroom Institute to questions posed regarding emissions, energy use and potential for reduction

and the use of compost. Representatives of the mushroom industry would be invited to attend a committee meeting to discuss their responses and agree on appropriate recommendations.

Pasture – Victoria Webb reported that it seems unlikely that pastures will offer significant potential for either reducing GHG emissions or increasing carbon sequestration significantly. Investigations continue.

Biomass and cellulosic energy generation – It was agreed that Bruce should be asked to review the potential for energy generation from biomass, either wood or planted vegetation, within the county so that recommendation could be made if considered to be feasible. At present the process of producing ethanol from cellulosic material had not been optimized and could take a further 5-10 years to reach economic levels. The direct use of wood for heating has been shown to be economic and effective where wood or wood pellets are readily available.

Carbon credits – It was agreed that attention should be drawn to the possibility of gaining carbon credits for any crop situation, tree planting, woodland or conservation tillage practice where they could be issued. Recommendations should include both the specific crop and situation and the process of issuing them, ideally with some county involvement. Tom kindly agreed to review the current possibilities and develop targets and recommendations for managing carbon credits in the county.

Action – Committee members agreed to send in their brief statements covering the current situation, possible goals and likely recommendations for each of their segments by June 13th. These would then be included in the overall presentation for review and discussion by the committee on June 25th so that they can be presented at the GHGRTF meeting on June 27th.

Next meeting – The Board Room at Chester County Library, Exton is being booked for 2.00 – 4.00 pm on Wednesday 25th June.

The meeting was adjourned at 4.35 pm.

Minutes approved June 25th, 2008.