



**MEETING SUMMARY**  
**IOWA CLIMATE CHANGE ADVISORY COUNCIL**  
**Agriculture, Forestry and Waste Subcommittee**  
Call #6, March 18, 2008

**Attendance:**

*Subcommittee members:* Richard Cruse, David Miller, Beth Shonts (sitting in for Tom Hadden), Duane Sand.

*Center for Climate Strategies:* Steve Roe, Joe Pryor, Jackson Schreiber, Erin Quigley, Brad Strode

*Iowa Department of Natural Resources:* Marnie Stein

*Public Attendees:* None

**Background Documents:** ([http://www.iaclimatechange.us/Agriculture\\_Forestry.cfm](http://www.iaclimatechange.us/Agriculture_Forestry.cfm))

1. Meeting Notice and Agenda
2. PowerPoint for Teleconference
3. Summary of Call #4
4. Straw Proposal Template
5. Iowa Volunteer Contact List

**Discussion and Key Items:**

1. Call to order and roll call – CCS Introductions
2. Review and approve prior call summary
3. Guest speaker Alan Banwart – Diesel Retrofits
4. Review and Update members of Straw Proposals Groups
5. Review and Finalize Straw Proposals for submission to ICCAC for approval
6. Next Steps for AFW subcommittee
7. Public Input and Announcements
8. Agenda, Time and Date for Next Meetings

*Call to order and roll call – CCS Introductions*

Alan Banwart has sent out information to the subcommittee, but he is not going to be speaking at the meeting today. It is unclear if he will make a presentation at a later meeting.

*Review and approve prior call summary*

No Comments or Revisions. Prior call summary approved.

*Review and Update members of Straw Proposals Groups*

Dawn Snyder has been added to AFW 8 and 9.

*Review and Finalize Straw Proposals for submission to ICCAC for approval*

**1. AFW 1 – Nutrient and Water Management**

- a. The group met to discuss AFW-1. They struggled in coming up with clearly effective policy options.
- b. Considered using cover cropping and to eliminate nitrogen applications on seasonally flooded areas, but this second option is very uncertain.
- c. There is no goal at the moment (in terms of improving efficiency by X%). There are issues of constantly improving efficiency happening already in Nitrogen efficiency. It is not certain if this improvement is likely to continue.
- d. There are many ways this goal can be considered, not merely the amount of Nitrogen applied.
- e. It was agreed that this policy was going to be focusing on nutrient (particularly nitrogen) management, rather than water management, since irrigation is so rare in Iowa. Remove the Water Management part of this option.
- f. The remaining issues for AFW-1 are: addressing any salient efficiency improvements to be made in the state. Units of N/crop yield could be reduced by 10% by 2020. This is a reasonable goal for AFW-1.
- g. It was agreed to investigate this option further to determine the possible benefits of AFW-1.
- h. We are still waiting on the Inventory and Forecast to help us be more informed regarding AFW-1.

**2. AFW 2 – Wetlands Protection and Drainage Management**

- a. This is a policy that will likely not have very quantifiable goals, though there are likely real gains that can be made. The GHG benefits of wetlands remain unclear. It is likely that different types of wetlands have different amounts of sequestration/emissions, depending on the levels of methane emissions.
- b. CCS noted that the GHG inventory does not specifically include wetlands. Iowa may not have great potential for wetlands to act as a carbon sink.
- c. Many of the options on AFW-2 may have GHG benefits occurring outside of the state.
- d. The group is still working on getting a tangible goal for this policy option.

**3. AFW 3 - Expanded Use of Agriculture and Forestry Biomass Feedstocks for Electricity, Heat or Steam Production**

- a. The goal was clarified to be in dry tons.
- b. Energy crops/CRP lands are a subset of the 5 million dry ton goal.

- c. This policy option requires some assumptions on how the policy will be implemented.
- d. These energy crops will mostly be competing with cows, rather than with corn. It is quite possible that the cow industry would have more economic benefits to the state than an energy crop market.

**4. AFW 4 – Encourage Large Scale Manure Management/Methane Capture & Utilization**

- a. The main options are 1) Large scale methane digesters and 2) Improved storage/handling of methane
- b. This policy option is looking almost entirely at hogs/dairy and possibly poultry litter.
- c. This option is focused on natural gas displacement rather than coal or electricity.

**5. AFW 5 – Land Management to Promote Sequestration Benefits**

- a. There was some question about how much land would be available for sequestration. There are perhaps 7-9 million acres of pasture/woodland in Iowa.
- b. This goal includes stream buffers.
- c. Rather than increasing the amount of forestland, there are questions of the management being done for the forests, and how this could be used to improve the sequestration of forests.
- d. The goals for this came from an estimation of the amount of forestland which could be created/increased in the state.
- e. Need to make sure that acres are not “double counted”.

**6. AFW 6 – Cellulosic Fuel Incentives**

- a. This was added late, so there has been very little done on this option at this time.
- b. The goal may need to be strictly based on fuel production rather than proportion of consumption as Iowa is already a net exporter of biofuels. This is a supply side only option.
- c. May be able to generate as much as 50 million tons of feedstock (as an upper limit). We generate 80-100 gallons of ethanol/ton of material.
- d. A feedstock based goal may be more appropriate than the gallons produced.
- e. 10 million tons of cellulosic feedstock may be more reasonable/attainable as a goal. There are probably 70 million tons of AG crop residue available, though some of those are needed to improve/maintain soil quality.

**7. AFW 7 – Improved On-Farm Energy Use and Efficiency**

- a. The goal (10% renewable energy by 2020) currently there seems reasonable, though aggressive for Iowa. 30% improvement in energy efficiency may be an easier goal for the state.

## **8. AFW 8 – Front End Waste Management Technologies**

- a. Recycling and Composting measures are valuable at the back end of the process. Waste prevention would probably have the most impact, but can be difficult to measure and is often less popular.
- b. There was discussion as to whether Front End is a useful description for this option, since recycling and composting should still be considered.
- c. The TWG recommended the title of this option be changed to Waste Management Strategies.
- d. It would be good to have a goal like: Achieve 0% increase in waste production compared to some current date (2005/2007, etc) by 2020.
- e. Recycling rate in Iowa is 27%. A reasonable goal might be to increase to 35-40%, though it is getting more and more expensive to recycle. However, preventing waste would probably be easier/cheaper, only difficulty is quantifying that.
- f. It was agreed to have the goal of 35% recycling rate by 2020, in addition to the 0% increase in waste.

## **9. AFW 9 - Landfill Methane Energy Programs**

- a. 17 facilities still accepting waste in Iowa are candidates for Methane Energy conversion. The maximum achievable number would be about 53% of Iowa waste generated. 1/3 of potential sites in Iowa would be six of them creating energy from methane by 2020.
- b. We will discuss after the meeting on what the optimum goal should be, in terms of % of the available methane capture.
- c. Of the remaining landfills, it is entirely possible that using flares/other controls could reduce the methane emissions from there as well. This should probably be made into a goal for AFW-9 as well.

### *Next Steps for AFW subcommittee*

The ICCAC is meeting on 4/11. We will continue to work on the proposals before then. After that meeting we will have meetings to flesh out the straw proposals.

### *Public Input and Announcements*

None

### *Agenda, Time and Date for Next Meetings*

Date of next meeting is not yet set, but something will be sent out soon. The next meeting will have review of what was discussed at the ICCAC meeting.

Thank you to everyone who participated on the call and contributed to the discussion of these issues.