

**Ag Sector Workgroup Meeting Summary**  
**Friday, August 15 10:00am – 4:00pm**  
**Via videoconference sites in Olympia, Moses Lake, and Spokane, WA**

**In Attendance**Co-Leads:

Kirk Cook, Washington State Department of Agriculture  
Chad Kruger, Washington State University - CSANR

Workgroup Members:

Jim Armstrong, Spokane County Conservation District  
March Fuchs, Washington Department of Ecology  
Patrick Mazza, Climate Solutions  
Warren Morgan, Double Diamond Fruit  
Maurice Robinette, Washington Sustainable Food and Farm Network  
Ron Schultz, Washington State Conservation Commission  
Craig Smith, Northwest Food Processors Association  
John Stuhlmiller, Washington Farm Bureau  
\*Zach Willey, Environmental Defense Fund  
\*Via conference line

Absent:

Larry Cadwell, Cherryview Farms  
Dan DeRuyter, George DeRuyter and Sons Dairy  
Ted Durfey, Natural Selection Farms  
Mark Sheffels, Pacific Northwest Direct Seed Association  
Randy Uhrich, Washington Association of Wheat Growers

Support:

Athena Bertolino, process support/facilitator, Ross & Associates Environmental Consulting, Ltd.

**Background Documents (available online at: [http://www.ecy.wa.gov/climatechange/2008FA\\_agr.htm](http://www.ecy.wa.gov/climatechange/2008FA_agr.htm))**

- Agenda
- Logistics
- Draft Assumptions and Complimentary Policy Statement
- Draft Conservation Land Recommendations
- Anaerobic Digestion Discussion Document
- Anaerobic Digestion Presentation
- Ag Lands Presentation
- Precision Ag Presentation
- July 14 Meeting Summary

## Discussion Items and Key Issues

1. Debrief from the July Meeting
  - 1.1. The Agriculture Sector Carbon Market Workgroup (the Workgroup) reviewed the next steps and agreements from the July 14 meeting as listed in the July 14 Meeting summary.
2. Assumptions and General Policy Recommendation
  - 2.1. The Workgroup reviewed the Draft Assumptions and Complimentary Policy Statement document which included amended assumptions for basing group recommendations, as well as a general policy statement, as was discussed at the July meeting.
    - 2.1.1. **The Workgroup agreed** to the following amendments:
      - 2.1.1.1. Amend Assumption 2 to read: *The carbon market generated as a result of a regional multi-sector market based system will allow offset projects focused on technologies or practices that target reductions in N<sub>2</sub>O, CH<sub>4</sub>, CO<sub>2</sub> or other GHG emissions or increasing storage of carbon in soils, though all will be presented on a CO<sub>2</sub> equivalent basis. Offset projects that impact the emissions of more than one gas will need to account for consequent changes in the emission of each gas.*
      - 2.1.1.2. Change the reference to Section 3(g) in Assumption 1 to Section 4 (g). In addition, the language should be changed to read: *In order to implement the recommendations specified in Section 4(g) of EESB2815, the Workgroup will consider the development of offsets for the following agricultural activities.*
      - 2.1.1.2.1. If any additional topic areas are covered prior to finalizing the recommendations, those will be included in the activity list in Assumption 1.
      - 2.1.1.3. The Policy Statement should include language that is more specific on how to transition from a regional default quantification system to a site-specific system. The default system should be governed by a limited time term and/or a discount factor should be applied to credits under the default system.
      - 2.1.1.4. Mention of the Chicago Climate Exchange should be removed.
    - 2.1.2. Ammonia is another emission consideration for certain projects.
      - 2.1.2.1. All projects will have multiple potential environmental impacts. The Workgroup was charged with considering greenhouse gas (GHG) emissions, and should assume other impacts or emissions would be covered under state regulatory processes.
      - 2.1.2.2. **The Workgroup agreed** to further discuss concerns regarding ammonia emissions during the anaerobic digestion discussion (see Section 6 below).
    - 2.1.3. At the conclusion of the discussion, the Workgroup moved to vote on the final Assumptions and General Policy Recommendation document.
      - 2.1.3.1. The Workgroup, as represented by the members present at the meeting, **unanimously voted to accept the Assumptions and General Policy Recommendation**, as amended based on the day's discussions.
3. Ten Percent Issue
  - 3.1. The Workgroup discussed the language in Section 9.2 of the Western Climate Initiative (WCI) Draft Design of the Region Cap-and-Trade Program document dated July 23, 2008.
    - 3.1.1. The Co-Leads clarified for the Workgroup that 10% means 10% of total emissions, not 10% of the emissions an entity would be required to reduce.

- 3.1.2. There is a fear by some outside of the Workgroup that the total emissions reduction required by an entity could be met by offsets, thus allowing polluters to take no action to actually lower their emissions.
    - 3.1.3. The Workgroup generally believes that the only way to get close to a cost-minimizing solution is to allow for offsets and that if the cap is enforced, there would not be an issue with reducing overall emissions. Some members of the Workgroup strongly feel that the percentage of offsets allowed should not be limited.
  - 3.2. **The Workgroup agreed** to issue a statement addressing the last sentence of Section 9.2 which reads: “The specific limit will be evaluated based on further analysis and consideration of both the cost reduction objective and the desire to ensure a meaningful fraction of emissions reductions occur at WCI covered sources.” The statement will focus on the fact that artificially limiting offsets will preclude or hinder the cost side of the equation.
4. Topic Area 1: Preservation of Open Space/Ag Land Draft Recommendations
  - 4.1. The Workgroup discussed the set of draft recommendations for the conservation of Ag lands, as developed by the working group convened to build off of the initial discussions on this topic area that occurred at the July Workgroup meeting.
  - 4.2. The Workgroup made the following comments and suggested amendments to the draft recommendations:
    - 4.2.1. Data points all over Washington State are available immediately on the Natural Resources Conservation Service (NRCS) website, as all of their soil surveys measure organic materials, including organic carbon in many cases.
    - 4.2.2. Agriculture lands conceptually have a carbon sequestration value, as well as a development value. The conservation value would be in addition to the development value and would not necessarily be linked to the carbon sequestration value.
      - 4.2.2.1. If an economically rational case can be made that reserve land would be taken out of reserve and put back into row crop, than the carbon credit is justified because it is the tipping factor to keeping the lands out of production.
      - 4.2.2.2. There must be a way to structure carbon credits so that landowners do not take land out of reserve and then put it into production so that they can take it back out of production to receive credits.
        - 4.2.2.2.1. **The Workgroup agreed** the way to address the issue of additionality is to consider whether existing contracts already have co-benefits for carbon sequestration. If they do, the public has already purchased de facto carbon credits. If they do not, then contracting should be allowed to make new commitments for carbon credits, independent of existing contracts.
        - 4.2.2.2.2. Erosion, which has an impact on carbon, is included in existing contracts. However, carbon is an independent item whether or not it is linked to other environmental surface issues, and could be contracted for separately.
    - 4.2.3. The baseline discussion could be more succinct as many statements are similar in nature. A phased, or combination approach should be recommended, as site-specific measurements can not be taken everywhere. A baseline model should be established from which it can be said, “The model predicts x under these set of conditions applied to an area.” If a landowner wants to then pursue the findings further, they can conduct site-specific measurements. The goal is to have the baseline data and the site-specific data complementary, as opposed to mutually exclusive.

- 4.2.3.1. **The Workgroup agreed** the baseline context should include a discussion on comparable lands - the difference between no till and comparable (tilled) land is the basis for the offset.
    - 4.2.4. **The Workgroup agreed** that Transfer of Development Rights (TDRs) are not usually applied to grazing lands, thus the Workgroup will not cover TDRs as they relate to grazing lands in their recommendations.
    - 4.2.5. **The Workgroup agreed** the draft recommendation document should be amended to include impact on both carbon sequestration as well as GHG emissions reductions, more generally.
    - 4.2.6. **The Workgroup agreed** the recommendations should be more specific regarding verification and quantification, and that at a there needs to be some minimum level of confidence associated with quantification and measurement. The Workgroup may even want to state what they think that standard should be (e.g. “We think that the calibration and quantification methods need to be at the 70% confidence interval or higher”).
5. Topic Area 3: Agriculture Nutrient Management
  - 5.1. The Workgroup reviewed a presentation on nutrient management/ precision agriculture activities and relevant considerations for determining their offset potential. Highlights from the discussion that followed are below.
  - 5.2. One issue in considering fuel use reduction is that fuel is inventoried in the transportation sector.
    - 5.2.1. Fuel use for agriculture practices may be considered transportation fuel, but it is really operational fuel used off-road. For this reason, it should be fairly easy to cleave off off-road diesel fuels from the transportation sector to account for reductions in the use of that fuel as it applies to farm practices, and thus make fuel reduction projects in the Ag sector eligible for offsets.
    - 5.2.2. In some cases, direct seeders use far less than half the fuel of a conventional tiller – approximately one gallon per acre including seeding and spraying and three gallons including harvest, versus twelve gallons for conventional tillers.
    - 5.2.3. The use of GPS and other mechanisms to reduce overlap on passes also reduces fuel use, regardless of the tillage system used.
    - 5.2.4. **The Workgroup agreed** to recommend that fuel use in farming practices be creditable regardless of where they are inventoried. In addition, there should be a provision in the legislation for a cap-and-trade system for those in the uncapped sector to include fuel as an offset.
  - 5.3. **The Workgroup agreed** the type of fertilizer used should be included in the discussion because there are differences in emissions depending on how the fertilizer is applied.
  - 5.4. **The Workgroup agreed** that the credit should go to the person who actually reduced the emissions – the owner or operator, as appropriate via the lease agreement.
6. Topic Area 4: Manure Digesters/ Other Waste Energy Utilization
  - 6.1. The Workgroup reviewed a presentation on manure digesters and other waste energy utilization activities and relevant considerations for determining their offset potential. Highlights from the discussion that followed are below.
  - 6.2. **The Workgroup agreed** to recommend that anything that is digestable be eligible for a credit. Carbon credits should not be limited to manure or milking animals only.
  - 6.3. The farm sector and municipal waste and food processing sectors are not mutually exclusive in terms of co-digestion.

- 6.4. Quantifying the diversion of waste can be difficult.
  - 6.4.1. The total package including tipping fees and additional revenue produced through electricity should be accounted for.
  - 6.4.2. Most food waste goes to some aftermarket, and in those cases the baseline would be zero since there would be no direct emissions reductions, only improved utilization of manure in terms of co-digestion. This removes crediting from a large potential source of material; however a credit can not be taken from something where emissions reduction potential does not exist (i.e. with a zero baseline). The potential of putting the Ag sector at a disadvantage by removing this potential source of credits is averted due to the money saved from the increased efficiency of the digester.
  - 6.4.3. Waste diverted from the municipal sector/landfills can be measured using landfill records.
  - 6.4.4. Building off of the discussion above, **the Workgroup agreed** to recommend a project level assessment of where materials are being diverted from (landfill versus aftermarket) as the basis for a baseline calculation.
- 6.5. The recommendations need to be clear on the potential for GHG reductions. In some cases of digester use reductions could be net zero or even potentially net positive, but from a total environmental footprint reductions are net negative.
  - 6.5.1. Nutrient recovery technology, when commercially ready, should resolve the ammonia emissions and potential surface and ground water runoff issues.
- 6.6. In considering the use of on-farm methane, both for power production and fuel substitution, **the Workgroup agreed** there should be a project-specific assessment, and each project should get credit for what the methane is displacing – diesel, natural gas, or electricity on the grid.
  - 6.6.1. To get the most credit, the baseline for all projects should be the worst fuel used; however, the real world change is based on the actual fuel type being displaced.
  - 6.6.2. Where digesters can provide baseline power that wind and solar can not, thus reducing demand on grid power, a marginal emissions factor should be accounted for – this is exclusive for electricity. Washington State credits can be sold anywhere, but the change made is on the Washington State grid, and that will determine the value of the credit.
    - 6.6.2.1. Seattle City Light uses an emissions factor of 0.6 metric tones CO2 per megawatt hour based on regional marginal generating resources.
- 6.7. **The Workgroup agreed** projects receiving a renewable energy certificate for green power should be eligible for a carbon credit as well, as recipients of the certificate are not getting paid for the carbon.
- 6.8. Nutrient recovery should be considered a direct offset rather than a best management practice so the livestock industry is not pressured into to having a digester.
- 6.9. The Workgroup recognizes ammonia emissions from the digester process as a big concern; however ammonia is not on WCI's list of GHG emissions and thus, if the group were to address it in the recommendations it could create the potential for regulatory confusion. If ammonia emissions were included as a GHG it would create a potential new credit stream, however its future inclusion can not be assumed.
  - 6.9.1. **The Workgroup agreed** to include a discussion on ammonia in the other considerations section of the recommendations package, but not develop a specific recommendation or issue statement.

#### Next Steps and Agreements:

1. The Co-Leads will include the amendments to the Assumptions and General Policy recommendation document, as agreed to by the Workgroup today. The final document will be distributed to the

Workgroup the week of August 18. No further action is necessary by the Workgroup, as full consensus was reached at today's meeting for including the amended document as part of the final recommendations package.

2. The Co-Leads will work with a small sub-committee to draft an issue statement regarding the language in Section 9.2 of the Western Climate Initiative Draft Design of the Region Cap-and-Trade Program. The draft statement will be distributed to the Workgroup for review and discussion via email in the next couple of weeks, with the goal of reaching consensus agreement on a final statement prior to the September Workgroup meeting.
3. The Co-Leads will finalize Topic Area 1 recommendations, based on today's discussions and distribute them to the Workgroup for a final review, prior to voting on the recommendations at the September Workgroup meeting.
4. The Co-Leads will draft recommendations on agriculture nutrient management/precision ag, based on today's initial discussion, for review and additional discussion at the September Workgroup meeting.
5. The Co-Leads, working with Jeff Canan at the Department of Agriculture, will draft recommendations on manure digesters and other waste energy utilization, based on today's initial discussion, for review and additional discussion at the September Workgroup meeting.

### **Public Comment**

1. Dale Cummins with AgriGreen, LLC thanked the Workgroup for allowing the opportunity to attend the meeting and view the proceedings. He stated that the discussions were insightful and informative, and he plans to attend future meetings.

### **Next Meeting**

The next Ag Sector Workgroup meeting will be held on September 22 in Moses Lake, WA. The meeting will focus on consensus agreement on the final recommendations regarding preservation of open space/ag land, and discussion on draft recommendations on the topics of agriculture carbon management, agriculture nutrient management, and manure digesters/other waste energy utilization. The Workgroup will also review and vote on, if not conducted via email prior to the meeting, a statement regarding the WCI draft design recommendations. Lastly, the Workgroup will determine at the September meeting if there will be time at the October meeting to discuss and agree on recommendations for any outstanding topic areas, including biofuels and on-farm energy use.