

# Agriculture Workgroup Meeting

4H Center, College Park, MD

June 19, 2014

9:30AM-3:30PM

Meeting Summary

## ACTIONS & DECISIONS

**DECISION:** AgWG members approved the May 1, 2014 meeting minutes.

**ACTION:** AgWG members will provide comments on NRCS' remote sensing pilot project.

**ACTION:** Workgroup members are requested to provide comments on the posted Resource Improvement report to Bob Ensor by July 8<sup>th</sup>.

**DECISION:** AgWG members approved the Manure Treatment Technologies subgroup's written charge to the future expert panel.

**ACTION:** The ad hoc verification group will re-convene to address AgWG's comments and bring back two weeks in advance of the next AgWG meeting.

**ACTION:** AgWG will have a discussion about upcoming topics and schedule during the July 24 meeting.

## MINUTES

**Presentation** "Pilot using remote sensing to ID conservation practice in the Chesapeake Bay watershed"

National Geospatial Center in Fort Worth, GIS work. Overview of what is possible with imagery.

Key Elements; imagery, skilled photo interpreters, facilitated data collection

### **Discussion:**

- Landsat8 satellite flies over every 16 days and collects image every 16 days. Problem with satellite info: highly dependent on weather (cloud cover, the sensor will image the clouds). Must try to sync cloud free days with 16 day repeat cycle. Can't guarantee a usable image, but it is collected every 16 days.
- NRCS training course may be available to others for photo interpretation certification.
- NRCS Toolkit for field offices; since 2005 we have been collecting data to go into toolkit. Imagery since 2004 so database has collected. Polygons in that database differentiate practices we have done on the landscape. Now NRCS is required to document. Toolkit improved the way we collect the data in database. PA, 2006-2008, it was highly encouraged to do it this way and maximized trustworthiness of data.
- Ted Tesler: List of practices predominately field practices. Barnyard practices?
  - If it is a large enough feature to show up on imagery, we should be able to see it and then rely on skill of photo interpreter to determine high probability it's an animal waste storage facility.

- Bill K: hard to distinguish in the imagery between cover crop and active small growing winter grain.
  - Imagery just shows that it is actively growing vegetation, determining if it's a cover crop would take more effort (maybe looking at records of field offices).
  - NRI imagery used, verify with conservation plans? Yes. Local data component to verify.
  - What about volunteer cover crops?
    - Depend on local knowledge
    - You wouldn't know species or if it was fertilized. You would just know there is vegetation growing
- Mark Dubin: Cover crops identified by CBP include planting method, time of planting, species, and how its being managed. Pilot in MD working with MDA, still have to do field testing and verify records.
- Andy Zemba: View as opportunity to find out what is on the ground. We are not viewing this as a compliance tool, trying to see if model is reflecting the progress. Pilot project: we are looking at starting with Potomac. Hope to get feedback on the pilot.
  - Denise: We presented this to EPA, generally favorable. Questions about N and application of fertilizer on cover crops and inability to detect that. Liked it created a digital baseline, overlay with LiDAR, and NRCS information and hopefully not double counting. Something that is time tested. Sending out article about NRI and study done on verification and reliability of data. We in PA have retired skilled people that could look at this. If we worked agreement with DEP, we would be keepers of the data and it would not be used for regulatory purposes. Didn't want image of government overseeing private landowner activity via aerial surveys.
- Rich Sims: chiefs have been interested in capturing voluntary conservation practices. Important to get feedback from the committee because we know it is a locally driven issue.
- Bill Keeling: Has there been any effort to determine percent residue?
  - Dorsey: not recently, there was a study in CA (10 yrs ago) that showed if you acquired fall imagery, you could break residue into 0-30 30-60, rough breaks, and there is some recent research by ARS (cellulose absorption index) that is a way to do this with satellite imagery. Wavelength index is not available on any platform that is orbiting for the CAI.
- Workgroup discussed possible privacy concerns, and several options for aggregating data.
- Andy: Prefer not to wait until the BMP verification committee has finished their work. Does the chair provide the info to CBP so they look at it? What are the next steps?
  - Bill: think of this as tracking and reporting, not verification. Tracking BMPs on the ground that can be reported for the 2014 progress run and ignore verification issue until it becomes issue in 2015.
  - Dana York: one good thing is that this will also give us a good idea on land coverage practices. That alone will make this pilot worth it, also if practices are

identified that have not been recorded the state can then decide if they want to verify implementation date

- Decision: our objective was to hear about this work and ask questions and that the pilot would be a NRCS, DEP, PA initiative. We could provide comments from AgWG about the presentation. From the agencies perspective; they want to know what the potential is before putting resources into the project. Helpful for PA as well, there were no fatal flaw concerns from this group.

**ACTION:** AgWG members will provide comments on NRCS' remote sensing pilot project.

### **Presentation: "RI Technical Review Panel Report" Ensor**

Gave overview of what has been discussed at technical panel and opened review comment period, which will close on July 8<sup>th</sup>.

### **Discussion**

- Why were liquid waste storage facilities removed as an RI practice?
  - We have some farmers who have installed manure holding facility for liquid waste but they rarely do it without technical or monetary assistance. It's really just happening with dry waste.
- Kristen: Visual measurement of the area?
  - There are visual indicator sheets that the technician needs to look at how it is reported.
- Roy: Are we creating two sets of standards so if someone is looking at putting in practices would opt out of the RI or NRCS standards?
  - Our panel did discuss this in depth, that's why we focused on the practices being discovered or found rather than going through a design process.
  - But from practical reality, if someone is starting to implement some practices they could just decide to implement a practice that would get RI credit.
- Did the panel exclude self-certification?
  - Yes
- The lifespan is in fact the frequency of inspection. Process of pulling annual spot checked though. Gameplan is that the 5 year "lifespan" on page 9 of the submission report needs to be checked to make sure it's still functioning if it hasn't been inspected within 5 years.
- Matt Johnston: clearly see on table 3 why the narrow buffers are nutrient exclusion areas. Change in landuse.
- Action: Table on pg 15. Change the land use change column to be more descriptive and note what the landuse change is to
- If you use visual indicator and you have several items that end up in the "no" column, would that be counted/reported?
  - It has to be 100% yes or N/A.
  - Action: That language should be added to the document.
- Page 10-"est. by stream size and location" should be "estimate by paces" for #3

- Jurisdiction must approve the submission of an RI practice before it's counted. All must have onsite verification.
  - Guidelines for other states to use when working through verification protocols
- Transect surveys only available for one year practice verification. RI practices are for multi-year BMPs.
- RI panel requests comments by July 8<sup>th</sup>.
- WV—what kind of credit is there for existing buffers,
  - Part of protocol is to determine when these things were installed. Model was calibrated in 2006. If it was prior 2006, it was already incorporated into the model and captured.
- Recommend the RI panel present to technical workgroup and get feedback
  - Members of WTWG are invited to join the July 24<sup>th</sup> meeting to hear this presentation.

**ACTION:** Workgroup members are requested to provide comments on the posted Resource Improvement report to Bob Ensor by July 8<sup>th</sup>.

### **Manure Treatment Technology Subgroup Final Report Presentation**

#### **Discussion:**

Report is final and ready for AgWG approval.

- This proposal will be sent to VT as one of the top projects for 2015.
- This can move forward with VT before they have the coordinator hired, needs to go in front of other universities and develop proposal for process.
- TetraTech assistance is another option.
- Decision: No concerns at this time, workgroup consensus to move forward with the panel process.

**DECISION:** AgWG members approved the Manure Treatment Technologies subgroup's written charge to the future expert panel.

#### **Presentation Update on other panels and subgroups**

- Cover crop panel met and working on final edits to TetraTech developed report from the panel's recommendations last year. As they finish the recommendations, they will send to TetraTech for final editing. Panel is in the process of developing webinar or workshop.
- Conservation tillage panel has a meeting scheduled in July, going through final process of looking over TetraTech report.
  - The panel is moving forward with TetraTech assistance on APEX modeling runs. Started the process of a technical directive to fund TetraTech to support the work and get that done in July 2014.
  - USDA modelers to run this? We approached them previously and they didn't feel the position could do the runs for the panel, so they funded the Post-doc position but the timeline doesn't work with the panel process.

- Looking at data and helping decide how to organize various forms of data into concise range. Setting up with phosphorous mgmt. tools folks around the country to do a webinar. To focus on panels to help them work through this and decide what direction they feel comfortable with P mgmt. tools.
- Besides cover crops, what panels think they need this webinar?
  - Conservation tillage
  - Nutrient mgmt. panel will probably be invited to speak
- Nutrient Management panel had call two weeks ago to go over TetraTech literature review, presented to Nutrient Management Expert Panel, the panel decided that manure injection and incorporation should be evaluated separately. Nutrient Management Panel broke into subgroups (6). They will meet in next couple months to come to consensus for manure application timing and split applications and other practices. Before deadline for report, get subgroups together as EP as a whole and make recommendation based best professional judgment.
- Agricultural Modeling Subgroup will provide an update in July. They are working on use of fertilizer sales data.

Break for lunch

#### 1. Partnership Governance Protocols

- Mark announced that the partnership may be developing additional governance guidance for the workgroups.

#### 2. Agricultural BMP Draft Verification Guidance

- Mark reviewed the draft agricultural verification guidance that was developed following the last Agriculture Workgroup meeting on May 1<sup>st</sup>.
- Comments and suggestions are requested in preparation for finalizing the guidance during the July meeting.
- Each jurisdiction and submitter of written comments summarized their comments for the group.
- VA questions the practicality of accomplishing the minimum standards as currently outlined in the guidance. Propose a prioritization for verification so that the most vulnerable practices have a higher percentage verified.
- NY is concerned about resources for verification competing with resources for implementation. NRCS' verification protocols are set at 5% with spot checking, recommend mirroring the NRCS rate. Clarify language in 3a in reference to transitioning BMPs from cost-share to non-cost share.
- WV suggests that the guidance language is too strong, particularly because everything is voluntary in WV. WV recommends allowing for producer verification on certain BMPs.

- NGO: Note that NRCS verification rate was based on both workload and cost not on water quality. Recommend that the states aim high or explain why. The purpose of verification guidance was to establish a heightened level of verification, not just to continue with what has been done in the past.
- MDA: MD verifies 10% of their own practices; however they are not in a position of authority to ask NRCS to increase their rate. Recommend considering less than 100% ate for the regulatory and permitting. Reference the stormwater verification protocol for consistency.
- PA NRCS: Note that all NRCS programs are voluntary, the current language implies that the practices are regulatory. Also note that some producers will not take financial assistance but will take technical assistance from NRCS. Account for these practices. It is not feasible for NRCS to achieve 10% verification, and NRCS would not give state agencies their database of practices so that someone else could verify them.
- NE Pasture Consortium: Prescribed grazing is visual assessment. It is a plan not a practice.
- NGO: Recommend that the guidance contain the goals for verification to provide the most accurate information for the model. The cost limitations should be part of the jurisdictions rationale for deviating from the guidance. Open to placing a higher priority on certain more vulnerable practices as VA suggested.
- VA: In the current language requiring independent review, there is not sufficient staff in VA to qualify as an independent review. Recommend allowing more flexibility in the definition.
  - i. NY agrees; in some cases there may be only one person in the county.
  - ii. Dana York: The verification panel intended conservation district staff to fit the independent review requirement.
- Mark clarified that the guidance documents will be reviewed by the Management Board and PSC, the final document will be what the states use to write their verification protocols. Those will be submitted to the review panel and committee for review. Eventually it will be reviewed by EPA. The protocols will then be reflected the QAPPs.
- Dana clarified further: this is a guidance document and the states write their own protocols. Once the jurisdictions submit their protocol, they will justify what they choose to do. The protocols will go to the expert panel for guidance.
- Dana recommends that AgWG members submit comments to Rich Batiuk during this time when comments are being requested from the Partnership.
- KSB: Is a 5% verification rate the current floor for verification in all the states?
  - i. PA: 5% of NRCS installed BMPs is the current floor for verification. Once all the non cost share BMPs are added, 5% will be above the current floor because there will be a larger number of BMPs overall.

- KSB: Does the group need to know whether there is a statistical difference between 5% and 10%?
    - i. TetraTech: For statistical significance, recommend starting with the objective, which is how much confidence you want to have in the number of BMPs. Then the number of total BMPs tells you what percentage to verify. You could choose a lower confidence level required for the low risk BMPs, and a higher confidence for the vulnerable BMPs.
    - ii. Dubin: Suggest giving states the option of going through the statistical approach just outlined, or using the 10%.
  - VA: Recommend prioritizing the historic BMPs.
  - VA: Support the statistical significance approach rather than a percentage.
  - CBC: Recommend that states can choose to do the statistical significance.
  - AgWG members were supportive of offering the option of statistical approach, and of prioritizing BMPs based on vulnerability.
  - JR: The ad hoc group will re-convene and develop recommendations for the AgWG two weeks in advance of the next meeting.
3. Request that AgWG discuss the schedule and timeline for subgroup tasks and other related projects.
- AgWG will discuss schedule and timeline in July.

## **Adjourned**

## **Participants**

Mark Dubin, UMD  
 Hannah Martin, CRC  
 Amanda H, PA  
 Dorsey Plunk, NRCS  
 Bill Markin, NRCS  
 Greg Albrecht, NY Dept Ag  
 Kristen Saacke Blunk, Headwaters LLC  
 Dave Kindig, VADCR  
 Jason Keppler, MDA  
 Chris Brosch, VT- VADCR  
 Connie Musgrove, UMCES  
 Rich Simms, NRCS  
 Steve Tagland, PADEP  
 Andy Zemba, PADEP  
 Ted Tesler, PADEP  
 Bob Ensor, Howard County Soil Conservation District  
 Denise Coleman, NRCS

Susan Marquart, NRCS  
Tim Sexton, VADCR  
Lyndsay Dodd, MASCD  
Jim Cropper, Northeast Pasture Consortium  
Bryan Bloch, DE DNREC  
Bill Keeling, VA DEQ  
Roy Hoagland, Hope Impacts  
Patrick Flannigan, NRCS  
Dan Good, NRCS  
Bill Angstadt, DMAA  
Bevin Buchheister, CBC  
Dana York, MDA  
Tony Kimmet, NRCS  
Javier Ruiz, NRCS  
Matt Johnston, UMD  
Jim Glancey, UD  
Emma Giese, CRC  
John Rhoderick, MDA