Agriculture Workgroup (AgWG)

May 19th, 2016

10:00 AM – 3:00 PM

Draft Call Summary

USGS Offices in Baltimore, MD

5522 Research Park Dr., Catonsville MD 21228

Meeting materials: http://www.chesapeakebay.net/calendar/event/23294/

Actions & Decisions:

ACTION: The AgWG will have the opportunity to review Lewis Linker's research paper on Nitrogen air emissions for manure treatment technologies.

ACTION: The AgWG requests the CBP Modeling Team to run scenarios on manure that is treated versus not treated, comparing the net balance of Nitrogen.

ACTION: The chair of the AgWG and WQGIT will discuss trading issues related to BMP expert panels, and whether the decision on how states will use BMPs (specifically manure treatment technologies) in state trading trading programs will be made through the CBP partnership, or on a state level.

ACTION: The Management Board will developing process document on how policy issues will be discussed and handled by the partnership, and where this process will intersect with other groups.

DECISION: The AgWG reached consensus to approve the proposed panel membership of the Cropland Irrigation Panel, with Tim Sexton as the Chair, Matt Johnston as the Modeling Team Representative, and a Watershed Technical Workgroup Representative to be selected by the Watershed Technical Workgroup.

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DECISION: The AgWG reached consensus to approve the preliminary expert panel report presented by the Conservation Tillage Panel.

DECISION: The AgWG reached consensus to approve the preliminary report presented by the Manure Incorporation/Injection Panel.

ACTION: The Nutrient Management Panel will coordinate with jurisdictions, specifically WVa and PA, to address concerns related to non-formal nutrient management programs in order to capture scientifically

valid methods that can be credited as nutrient management in the definition of the BMP. The panel is also requested to provide state-specific guidance on unique elements in there so each state's manure/nutrient programs would match up with what the final report describes.

DECISION: The AgWG reached consensus to approve the Nutrient Management Panel's preliminary report, and the general structure of the BMP, with the understanding that there may be minor revisions as the panel continues their work, and to incorporate the panel's current recommendations in the Beta 3 calibration of the model.

ACTION: The AgWG should provide comments on the AWMS expert panel preliminary report to Jeremy Hanson (jchanson@vt.edu) by May 27th.

ACTION: The Bay program Modeling Workgroup should have regular correspondence with STAC, in consultation with the AgWG, to ensure that there is a continual oversight of the Modeling Team while they are implementing modeling changes according to workgroup and jurisdictional recommendations.

10:00 **Welcome, introductions, roll-call, review meeting minutes** Workgroup Chairs

- Roll-call of the governance body
- Roll-call of the meeting participants
- Meeting minutes from the April 21st meeting were approved.

10:10 **AgWG Roadmap** M. Dubin, L. Gordon

- Mark and Lindsey presented the 2016 timeline for the AgWG. This timeline will be routinely updated and posted to the AgWG website under the 'Projects and Resources' tab.
- Ed Kee notified the AgWG that the meetings for June, July, and August will be face-to-face meetings due to upcoming decisions and deadlines.

10:15 **Manure Treatment Technologies Panel Report** J. Hanson, D. Hamilton

- Doug and Jeremy presented the comments received from the partnership on the panel's draft recommendation report for manure treatment technologies during the 30-day open comment period, as well as the panel's responses. The report and associated presentations are available on the calendar event webpage.
- Dubin: The AgWG will be asked to approve this report on their June 16th meeting.
- All materials for the report will be posted to the panel's April 14th webinar page.
- Bevin Bucheister: Some technologies release NOX and ammonia which are environmentally harmful and we didn't think that there should be credit for transferring harmful pollutants. There was the option for direct monitored emissions, so we thought those types of thermochemical technologies should prove they're not creating NOX and ammonia.
    - Hamilton: Some questions regarding emissions, like thermochemical – those questions are being addressed to the members of the panel that have the expertise on that subject. We're asking them specifically to look at what they have in the nutrient transformation sections in the literature review and address those issues. I can't speak to giving credit beyond the work of this panel, but one of the issues is that we don't want to overly complicate the transfer efficiency for all of the technologies, because we just don't have the data. And

we don't want to alter the way we're doing the volatilization. Those emissions can be re-deposited later, and we want to note that in the report but we're not prepared to separate the total N volatilizations into separate efficiencies. That may be the work of a future panel.
    - Hanson: And there's other BMPs that this could affect that do consider volatilization. The Modeling Team is digging into this to explore how much NOX or ammonia will then come back down and be re-deposited to the Bay. There's also some data out there in terms of how much is released as NOX from a thermochemical system, but if they have any emissions data, they probably won't have ammonia.
- Jason Keppler: Maryland appreciates the panel's work in quantifying reductions associated with black box technology. It's difficult for us and other jurisdictions to relate that to water quality benefits, and how those technologies improve the Bay. It's even more complicated in terms of nutrient trading programs and how we develop policy to deal with these technologies for load reductions to the Bay.
    - Batiuk: Given that there's a set of technical issues and policy issues, the Management Board is looking at specific ways to deal with policy issues. I would say Doug and Jeremy can ask the AgWG to focus on the technical and scientific aspect of this panel's work, and then to identify the appropriate group to handle the policy issues so that we don't get stuck trying to make decisions in the wrong group.
    - Keppler: I'm concerned the purveyor of these technologies comes to the states looking for approval and trading credits. We just need to figure out how we'll be able to incorporate this information in our trading program.
    - Bill Angstadt: At one point the workgroup approved the science report, we also have to look at the Modeling Team outputs. It would be helpful to see some scenarios comparing how using this technology affects water quality against not using this technology. Additionally, the policy issue of whether air volatilization is a water quality benefit. And trading, which is a state by state issue – are we generating in the final report an efficiency that's directly proportional to be used in state trading programs? So we need clear delineation of who's going to take what authority on these different aspects of the report.
- Kee: Great points from everyone. This panel report is up for approval in June. And as several people have suggested, the science from that panel has to be blended to the policy, and that's something that has to happen correctly.
- Sexton: Some of the thoughts of the panel at this point don't necessarily fit the NEIEN reporting schema as it is. As we go through these processes, would NEIEN reporting schema be changed to reflect how the technologies are grouped and reported?
    - Johnston: Most definitely. It'll be a change for states, but if states can't track this, you still have the same manure transport availability in NEIEN. This would just give you another tool to track.
- Batiuk: As soon as that's approved, we have to figure out how to keep the technical scientific piece going, and finished. But we also have to build the policy pieces around that, and we can accept the fact that a report is accepted, but not ready for implementation on the whole.
    - Bucheister: Are you saying this is more of a proper subject for the Modeling Workgroup to look at the credit for different emissions and differences in NOX and ammonia?

    - Batiuk: I think eventually it'll be in the policy realm. But we need to figure out if it's a true reduction, or if it's just moving it from one place to another.
    - Hanson: Regarding air deposition and other issues, those are areas that are outside the initial treatment evaluation that the panel did, and we need to be aware of where the panel's information can inform things. But we also have to work with states and modelers to help answer the questions.
- Batiuk: Bill's point was a good one though – we need to keep looking at the mass balance, and yes we may need help from the Modeling Team.
- Bucheister: If one was emitting NOX and that's not being deposed locally, do we still give credit that still creates a worldwide pollution problem?
- Ted Tesler: The manure injection panel is also wrestling with the volatilization problem. The expert panels are not going to touch into that discovered ancillary issue based on time available. Has it been decided if that will be done by a separate panel, or anything like that?
    - Hanson: Kristen's initiative did some comparisons on gassifiers and combustion systems.
    - Tesler: It'll be difficult – differences of scale will only exacerbate that. These systems may be microscopic compared to the airshed model.
- Angstadt: I hear 4 action items here: 1) The Expert panel should complete the report and deliver it to us for the June meeting to approve. 2) We get an opportunity to review the paper that Lew Linker has been writing on N air emissions on this technology that could be added back into the watershed model. 3) We ask Matt Johnston to do scenarios for SB on manure that is treated versus not treated, and comparing the net balance of N. And 4) that the chair of AgWG and WQGIT have a dialogue on these trading issues – whether it will be a partnership decision or individual states on how to use this BMP in state trading programs.

ACTION: The AgWG will have the opportunity to review Lewis Linker's research paper on Nitrogen air emissions for manure treatment technologies.

ACTION: The AgWG requests the CBP Modeling Team to run scenarios on manure that is treated versus not treated, comparing the net balance of Nitrogen.

ACTION: The chair of the AgWG and WQGIT will discuss trading issues related to BMP expert panels, and whether the decision on how states will use BMPs (specifically manure treatment technologies) in state trading trading programs will be made through the CBP partnership, or on a state level.

- Kee: So we will make a decision at our June 16th meeting on the science, and that will blend into policy discussions. The only thing I would say for DE – trading is pretty academic but we will work towards that with everyone else.
- Keppler: I suggest that the discussions we've had here today and how the partnership intends to deal with WQ issues and other policy type issues be addressed in the report somehow, whether it's a statement of what the partnership intends to do to address these issues, so folks can refer to that as well.

ACTION: The Management Board will developing process document on how policy issues will be discussed and handled by the partnership, and where this process will intersect with other groups.

- Sexton: Can we get a timeline of how all these policy issues would be applied, and what the ramifications will be?
- Dubin: Well we should hear back from the MB today.
- Batiuk: We can work within the partnership office to map those out and bring them back to you and other connected/affected parties.

10:35 **Update on Cropland Irrigation Panel Membership** M. Dubin

- Mark updated on the Cropland Irrigation Panel membership. Nominees, their CVs and conflict of interest disclosure forms have been posted to the calendar event page.
- Dubin: Matt Johnston will be the Modeling Team representative for this group, but we still need to identify a Watershed Technical Workgroup representative.
- Kee: Will this panel be able to incorporate its information into the Phase 6 model?
  - Dubin: If the panel represents this as a BMP, then we could get it into the model. However if they want to create a new land use, then it's unlikely. We have an interim BMP looking at the difference between dry and irrigated cropland.

DECISION: The AgWG reached consensus to approve the proposed panel membership of the Cropland Irrigation Panel, with Tim Sexton as the Chair, Matt Johnston as the Modeling Team Representative, and a Watershed Technical Workgroup Representative to be selected by the Watershed Technical Workgroup.

- Dubin: We would anticipate having this panel begin in June. And of course we will send out the membership for full partnership review.

10:45 **Waste Water Treatment Workgroup Biosolids Reporting** M. Johnston, K. Berger

- Matt presented the Biosolids Task Force's recommendations on tracking and reporting biosolid nutrient sources applied to agricultural land uses in the Phase 6 models.
- Sexton: When do you need this from the states?
  - Johnston: We have the data from VA already.
- Robin Pellicano: Do you foresee that the state will provide you the data every year? And when do you think the CBP would want it every year?
  - Johnston: I perceive that once biosolids becomes an input to the Phase 6 model, we'll put it in the grant guidance that we'll need that data every year. There'll have to be a rule where if data isn't submitted, you default back to last year's number or something similar.
- Bucheister: If biosolids are not septage, then what are they? I'm assuming septage is from septic tanks, so are other biosolids from water water treatment plants?
  - Johnston: Correct.
- Johnston: So is the AgWG comfortable to test the approach with the percentages laid out in the July beta calibration of the model?
- Sexton: I don't have an issue with it being run, but if we find incorrect percentages, we would like to make sure that our data is reflected properly.

DECISION: The AgWG reached consensus to approve allowing the Modeling Team to test out biosolids reporting data in the July calibration using the proposed percentages from the Biosolids Task Force.

11:00 **Agricultural Modeling Subcommittee Update** C. Dell, M. Johnston

- Matt and Curt presented the results of the two different methods for representing nutrient spread in Phase 6 Scenario Builder, as well as additional decisions for representation in the Beta-3 version of the Phase 6 model.
- Sexton: When you say beta B – we're going to revise the tables to reflect the LGU recommendations?
    - Dell: Correct. Those tables are very important, and influence manure calculations and other pieces.
    - Johnston: That'll be for beta A and B.
    - Sexton: The tables used in the first 2 were wacky, so we'll make sure that the inputs to those have been corrected.
- Sexton: The June 3rd deadline – with my timeline and other people's, we probably won't make June 3rd, but we might make the 17th.
    - Dell: That deadline might've been a bit optimistic, so you may have more time to work through the approach.
- Meisinger: Suggestion – you should put low hay and pasture into the low specialty crop, because that fits as far as N inputs.
    - Johnston: If you're suggesting the application rate on pasture should be similar to low specialty crops, but moving those acres to another land use isn't a good idea because of direct deposition, BMPs on pasture, and everything else that goes into the analysis.
    - Meisinger: Otherwise we might have to make another land use and I thought that was off the table.
    - Sexton: We were looking at that option, but if we could just broaden the definition, then that was an idea Jack came up with to make your life easier. We would report it in that land use, and we're not trying to screw anything up by having a low-intensity hay and pasture land use created at this point in time.
    - Johnston: I don't think mechanistically it'll work well, but I would recommend doubling the amount of pasture and hay crops. You could give us the acres – a low intensity v. a high intensity crops where you give us the acres and application rate. That way, it's not a land use change, but it's a crop change. And it's a lot easier to do that.
    - Batiuk: We need to resolve this issue mechanistically, and we want to resolve it and bring it back to you guys so when you're discussing with your producers, it makes sense.
    - Dubin: If we could have that figured out for the June 16th AgWG meeting. I know that messes up the 17th deadline for Tim, but could we hit that deadline?
        - Agreement from the workgroup.
- Meisinger: I also think it'd be good to identify the state representatives so they are accountable for the amount of work they have to do.
- Angstadt: What Curt is proposing is a beta A and B. Is beta a similar to what nutrient spread has been in the first and second runs?
    - Jophnston: It's similar, but with an improved crop application table. Beta B also has improved application tables, but is more similar with Phase 5.
    - Angstadt: I would be more comfortable if beta A was run, and then if a separate shadow run wants to be done with beta B for us or the states, that we stay

consistent as best we can between the first 3 beta runs because we've got so many other moving parts here in beta 3.
    - Brosch: We heard that message loud and clear in our meeting yesterday, and that's why beta A is being maintained.
- Steve Taglang: The redistribution of fertilizer data from fertilizer sales that has to go somewhere in the Bay – why?
    - Johnston: Only with that method. If you say that the amount of fertilizer can go down in the watershed, it has to go somewhere else. That's method A. Method B is very different. But in both of them, PA, with fewer NM Acres, will have higher applications.
    - Taglang: Because of the data to say it's not happening?
- Sexton: This is one reason for our discussion yesterday – when we look at these giant spreads in counties, then that's the reason we're against fertilizer sales approach as it currently exists. There's some obvious outliers here that don't seem to match before we even have a run. And this is what the states have agreed – that we'll meet amongst ourselves to discuss what we've discovered, and how we will develop a cohesive resolution.
- Johnston: There are other parameters here at play – dollars spent on fertilizer from the ag census helps distribute fertilizer, and then crop application goal. So this is just one parameter that helps do that.
- Dubin: By changing the application table, this is almost irrelevant since these numbers will change.
- Dubin: On behalf of Frank Coale, I don't see the panel's recommendation reflected in those directly.
    - Johnston: We will be running revised application rate tables with NM and non-NM. The cap-idea is kind of thrown out because beta A and B are essentially doing the exact same thing.
- Batiuk: I've heard concerns that people don't see how certain agreements get implemented into the Scenario Builder model. I'll be asking modelers and jurisdictions to come in every so often to ensure that there's a clear communication going on of these decisions.
- Taglang: When was the table with the non-NM multiplier to crop goal table created?
    - Meisinger: I made that table after our last NMP meeting. We need something to run the model with, so several of us got together to draft up these values.
- Dave Montali: Yesterday I participated in the meeting, and I thought we had also decided to say that we need to true everything up with the 3B scenario with unlimited fertilizer. I think that should be included as a bullet in your proposal slide.
    - Brosch: That's a fair interpretation. The group agreed we don't want to be considering anything limitless. Beta A represents fertilizer limited by sales data, and beta B represents fertilizer limited by LGU data.
- Thompson: From a messaging standpoint, I want to make sure we're all clear that we're not looking at these options and picking the one we like better. With all of these different elements coming together, there's always unintended consequences, so we want to review the results and evaluate for that. Everything will come back for review.
    - Sexton: I want the numbers to be as accurate as possible – good or bad.
- Dell: What we had put forward as that cap; that's getting towards this. I'm a little worried about running it two ways and picking one. And communicating that to the

public can be difficult. So using one approach to do quality control on the other is probably more defensible at the end.

DECISION: The AgWG reached consensus to approve the proposal laid out by the AMS to test two July beta runs with differing approaches to representing nutrient spread. One approach would utilize fertilizer sales data, and the other would employ land grant university recommendations.

12:00 **Break for Lunch**

12:45 **Preliminary BMP Expert Panel Reports** AgWG BMP Panel Chairs

- **Mark Dubin presented the Cover Crops Panel Preliminary Report. The report draft is not ready for AgWG approval yet, and will be presented again during the June monthly meeting.**
    - Meisinger: In the 5.3.2 panel, mixtures got discounted heavily because we didn't have any data. So we averaged legume and grass, but in reality the grass will be higher when you look at it in the field.
    - Sexton: There's also something from VT that suggests what portions those nutrients should be. Perhaps that's something that could come out of the report so we know how to advise what should be planted.
    - Sexton: You could call it a trap crop. I don't know what other states call it, but it allows for applications of manure for these people with storage issues. If you're just going to re-draw the definition, you could include trap in there to not create a new BMP. I'm a purist in not allowing nutrient applications before March, because that's not a true cover crop.
    - Karl Brown: We call cover crops, crops that have manure on them regardless. It's traditional terminology used in PA. It's only the exception of the CBP that we got into a concept of N sponges. Cover Crops have nothing to do with nutrients applied or not applied.
        - Albrecht: That's the same in NY as well.
    - Albrecht: So one line of thought is that it would be a new set of cover crops in the existing table. They may have a modifier in the name with their own unique efficiency?
        - Dubin: Correct.
    - Batiuk: I know you've been concerned about this. Does this get at your concern here?
        - Brown: I don't care what you call it, as long as you allow for manure being applied.
    - Keppler: So the Cover Crop BMP would apply to a specific land use then?
        - Dubin: Correct.
    - Sexton: I believe Wade Thomason has some research that looks at this at the management system level.
        - Dubin: Yes – and I believe we have good information looking at the fall scavenging period.
    - Keppler: If a jurisdiction doesn't know if manure is being applied, will this default to manure being applied?
        - Dubin: We haven't determined that yet, so we'll have to figure that out in our future meeting.

- Dubin: We're hoping to post the draft report in early June for the AgWG to review.
- Sexton: Have you given any thought to a field that's planted and grows as weeds?
  - Meisinger/Dubin: Great question.
- Brown: I would encourage the group to do whatever they can to find some way to recognize and credit the bullet on P.
  - Dubin: It might be a lot more of best professional judgement for those P values, but they will be considering it.
  - Sexton: There is some new research out on P and movement.
- Kristen Saacke Blunk: How will the research needs this (and other panels) identify be conveyed to entities that can help fund additional research needs? Is there a way to bring together the lists of research needs - and formerly convey them to potential funders? USDA especially? Or is there another mechanism through which this is conveyed?

- **Mark Dubin presented the Conservation Tillage Panel Preliminary Report.**

DECISION: The AgWG reached consensus to approve the preliminary expert panel report presented by the Conservation Tillage Panel.

- **Curt Dell presented the Manure Incorporation/Injection Panel Preliminary Report.**
  - Sexton: Do you have efficiencies developed yet?
    - Dell: Not yet. We're still wrapping up our literature review, but we should have that done soon. We only have 6 efficiencies in total so we should be able knock those out relatively quickly.
  - Meisinger: Didn't Tetra Tech do a detailed literature summary for 5.3.2?
    - Dell: Yes – we have their work for the NMP, but they did not include any impact on ammonia volatilization in their data. So we have to revisit those and check if there are new papers that have been published since then.
  - Angstadt: Talk about the ammonia – because you're going to reduce ammonia volatilization and add the N as a negative BMP, I believe Lew Linker will also address that factor in the watershed model to give credit back for that N. But what's your thinking on this negative impact of reducing ammonia volatilization?
    - Sexton: I think it better allows us to balance N and P ratios and the whole mass balance.
    - Dell: We're not emitting it as ammonia. We're cutting down on the indirect or the secondary.
  - Rhoderick: For this particular BMP, it sounds like it's a two-component BMP. There's a factor in the airshed model as well as the potential reduction for runoff because you're incorporating. Unlike some other BMPs, it's a simple efficiency, but this has two prongs to it.
  - Meisinger: If the manure treatment technologies panel will rely on other CBP pieces, this is where this should fit in as well. So there's two candidates that need to tie in.

- Dell: These would be separate efficiencies for N and P. the runoff, we're mostly looking at P. For volatilization, we're mostly looking at N. So maybe having separate N and P efficiencies would be good.
    - Dubin: I would think Lew Linker should come meet with the panel.

DECISION: The AgWG reached consensus to approve the preliminary report presented by the Manure Incorporation/Injection Panel.

- **Jack Meisinger presented the Nutrient Management Panel Preliminary Report.**
    - Brown: In your core practices, have you considered crop level instead of field level?
        - Meisinger: We're not really looking at 'within-field' measurements. Field level is the unit that you manage on.
    - Sexton: And these core practices are a part of the verification of the implementation of a nutrient management plan.
    - Taglang: The language that doesn't necessarily reference a plan in here has a lot to do with commercial fertilizer. So if you don't land apply manure, you don't need a plan.
    - Sexton: But if you have a manure plan, and you put down manure at or before planting at side-dress time, do you have to have that fertilizer application? As far as I understand, we're all equal there. You're difference is that if they aren't deal with manure, they're not required to have a state plan.
    - Matt Monroe: So where can I come in and say that I don't want to be locked down to some of the elements in this? When we're looking at definitions, these are very lock-down definitions. For us, we can't say that because a farmer didn't have a specific record, that he's not doing nutrient management.
        - Dubin: The intent of the panel is to go through each of these components and have a full definition.
        - Meisinger: This is what the panel has to wrestle with, is these partial implementations.
        - Dubin: I talked to Frank about this, and he agrees that the panel will have to delve into each one of those and clearly describe what they're talking about. And there's also some equivalencies that the panel will take into consideration.
        - Significant discussion on state concerns regarding crediting for core nutrient management based on differences in state-level nutrient management and verification. Concerns raised by WVA and PA.

ACTION: The Nutrient Management Panel will coordinate with jurisdictions, specifically WVa and PA, to address concerns related to non-formal nutrient management programs in order to capture scientifically valid methods that can be credited as nutrient management in the definition of the BMP. The panel is also requested to provide state-specific guidance on unique elements in there so each state's manure/nutrient programs would match up with what the final report describes.

- Montali: If there was a period of NM planning consistent with Tier 1 of the previous panel, would that be excluded from this crediting system?
    - Meisinger: That's to be determined, really.
- Dell: This CEAP data that you're presenting is self-reported, correct?

        - Meisinger: Correct, though it is under a confidentiality agreement.
    - Brown: I thought there was an enumerator collecting this data from a producer?
        - Meisinger: Correct.
    - Angstadt: Are you suggesting that the CEAP data be used as a statistical sample, or how are you proposing to use this data?
        - Meisinger: I'm not proposing at this point – the panel will have to decide how we use this data. It's a valuable source that we'll have to keep on hand. You wouldn't want to make credits for implementation 90% in 2010 if you had this kind of data for the watershed.
        - Dubin: We're also looking at historic data, and this is another source int hat pot. It's described in the preliminary report as well.
    - Meisinger: We want to use this HUC4 data from CEAP and we would crunch the numbers and present it back to the AgWG for your review.
    - Brosch: So these percentages are reflective of all acres in agriculture, but in order to participate in the survey and answer questions, there needs to be documentation to back it up. So the 1.4 multiplier that CEAP used to determine the proper rate is not the same as what NM planners use to write those plans.
        - Dubin: Right, and this report doesn't include pasture or hayland.
    - Batiuk: Has this efficiency table moved the panel forward in any significant way?
        - Dubin: The thought is we want to use these values for the back-end runs of Scenario Builder that Matt will be running.
    - Keppler: I hear that supplementals may also be considered for beta 3? So jurisdictions could report supplementals as well, through NEIEN?
        - Dubin: My understanding is we have the core N laid out, but not the core P yet.
        - Brosch: I don't think that's to go in the model beta runs quite yet, and keep in mind that the supplemental practices have only been implemented for a handful of years.
    - Keppler: Mechanically, how will the supplementals be handled if a jurisdiction is reporting two or three together?
        - Dubin: It'll be stackable. The core N and P would be adjusting the application rate. The supplemental practices would adjust the transfer from EOF to EOS; in the delivery mechanism. It's additive.
    - Taglang: If we don't report any NM acres, conceptually the model would determine we have 20% more manure than we generate?
        - Dubin: You would be open for additional fertilizer from sales, and backfilling. You'd get a bigger piece of the pie, essentially.
        - Thompson: It depends on what method we ultimately go with from beta 3 – A or B. One includes commercial fertilizer, and one uses LGU recommendations. If we choose LGU recommendations, the non-NM would receive 1.2 times the LGU recommendations for N.
    - Thompson: I think we're trying to make this model as close to reality as possible, but the argument that we don't know what it'll look like because we don't have the data is the reason we're running the beta 2 ways. We just need to move forward with something we can live with for beta 3, with the understanding that there will be the opportunity to review that.

- Concerns raised by Bill Angstadt on whether the AgWG is locking itself into specifics of how the BMP will be simulated, without the option to revise alter on.
    - Agriculture Workgroup noted that the approval of the report today will leave the option open for revisions by the panel to be made in the future.

DECISION: The AgWG reached consensus to approve the Nutrient Management Panel's preliminary report, and the general structure of the BMP, with the understanding that there may be minor revisions as the panel continues their work, and to incorporate the panel's current recommendations in the Beta 3 calibration of the model.

2:40 **AWMS Preliminary BMP Expert Panel Preliminary Report** J. Hanson

- Jeremy presented the initial draft of the Animal Waste Management System Panels Preliminary Report, which outlines the proposed structure, definition, and applicable land uses for each AgWG Phase 6 BMP. Comments and questions on the draft preliminary report will be requested from the workgroup prior to the panel submitting a draft final preliminary report for the June 16th meeting.
- Rhoderick: With a baseline year of 1997, there were a lot of AWMSs out there prior to 1997.
    - Hanson: The NRCS document only assumed there was a lot less of the AWMSs before 1997, not that it didn't exist.
- Keppler: In Md, we have a standard 359 waste treatment lagoon – will that also be considered? There's also a waste water treatment strip.
    - Dubin: The vegetative strip was listed in there, but we're also looking at waste water tanks and storage ponds. The group doesn't think there are lagoons in the region that necessitate a separate efficiency. So just make sure that the 359s get listed in the BMP efficiency.

ACTION: The AgWG should provide comments on the AWMS expert panel preliminary report to Jeremy Hanson (jchanson@vt.edu) by May 27th.

ACTION: The Bay program Modeling Workgroup should have regular correspondence with STAC, in consultation with the AgWG, to ensure that there is a continual oversight of the Modeling Team while they are implementing modeling changes according to workgroup and jurisdictional recommendations.

2:55 **Wrap-Up/Review of Action and Decision Items/Announcements** Workgroup Chairs/M. Dubin/L. Gordon

- Lindsey reviewed the actions and decisions from the meeting.

3:00 **Adjourn**

Next meeting: Thursday, June 16th Location TBD

Participants:

Lindsey Gordon, CRC
Mark Dubin, UMD, AgWG Coordinator
Ed Kee, DDA, AgWG Chair
Lindsay Thompson, DE-MD Agribusiness Association, AgWG Vice-Chair
Jeremy Hanson, Virginia Tech
Chris Brosch, DDA
Clint Gill, DDA
Karl Brown, PA DEP
Ted Tesler, PA DEP
Steve Taglang, PA DEP
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