

## Livestock/CAFO Working Group

### Charge from Groundwater Management Area Advisory Committee

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Discussion of data sources and remaining Work Plan Items

### Working Group Members

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David Bowen, Chair (Department of Ecology), Gary Bahr (Department of Agriculture), Elizabeth Sanchez (Yakama Nation), Jason Sheehan (Dairy Federation), Jim Newhouse (South Yakima Conservation District), Laurie Crowe (South Yakima Conservation District), Sue Wedam (LV Community Rep.), Patricia Newhouse (Community Rep Position #2), Steve George (Yakima County Farm Bureau), Stuart Turner (Turner & Co., Inc.), Jean Mendoza (Friends of Toppenish Creek), Jim Dyjak (Concerned Citizens of the Yakama reservation)

### Meetings/Calls Dates

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Meeting: Thursday, May 4, 2017, 5:00 – 7:00 PM

### Participants

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David Bowen, Jean Mendoza, Larry Fendell, Stuart Crane, Kathleen Rogers, Bud Rogers, Steve George, Jason Sheehan, Ginny Prest, Sandy Braden, Jim Davenport and Bobbie Brady (Yakima County Support Services).

### Key Discussion Points

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David Bowen opened the meeting at 5:05 PM, welcomed everyone and reviewed the agenda.

Nitrogen Availability Assessment: David passed out pages 71 and 72 which he believed summed up the assessment and reminded everyone the assessment wasn't meant to direct, but to inform. David added that it stated "the large contribution to available nitrogen from irrigated agriculture is largely due to the high acreage of irrigated agriculture." David felt it was important to instead look at the estimated nitrogen available per acre which had been highlighted in the assessment at Table 32, Page 71. According to the chart, lagoons had the most concentrated potential, pens were next and then residential onsite septic systems especially where the density of systems was larger. David added the exactness of the numbers wasn't important to him; instead he felt the assessment clearly indicated where the group should focus and get the most bang for their buck. Ginny stated that Ecology's new CAFO permit allowed her group to take a closer look at lagoons and rate them on a risk scale when inspected. A three on the risk scale would require corrective actions. Failure to correct would result in discontinued use until corrected. Four on the risk scale would immediately discontinue use until the issues were corrected. A member asked who would do the inspections. Ginny indicated that WSDA and Ecology would need to work that out but the Conservation District will be involved in the review as well.

A member indicated she thought the NAA was nicely written but she (and others) were bothered that it said that the NPDES permit was effective and could go a long way to solve the problem.

Since a group disagrees with this statement she wondered if those concerns should be a part of this report. David indicated he had spoken with Bill Moore who stated that the permit was protective of the environment. David thought the NPDES permit would go a long way to solve the problem and would collect a lot of information. The member indicated she had spoken with Bill as well and didn't think everyone would sign up. David thought some would sign up right away, others would roll over and visits would be made to those who didn't volunteer. He added that NPDES permits are issued for five years in order to make improvements from what has been learned during the previous term. The member said she also thought the NAA was inadequate and faulty as it didn't look at ponds, composting and math for the lagoon or silage. She noted that her comments had been submitted to the authors for review. Another member said the NAA didn't include bio-solids either. Ginny said that the RCIM component was being updated by the Department of Ecology and Yakima County to include bio-solids. Another member asked if the comments made to the NAA were important to the document Livestock/CAFO was discussing today.

Jim thought irrigated agriculture was weighted heavily due to reliance on survey feedback which produced a disproportionate number of acres as it increased some numbers while playing down others. This made him cautious about relying on the pie chart. On the other hand he felt that data was much more precisely gathered in the livestock piece. David noted that he was less concerned about the optical appearance of the pie chart and didn't believe it was worth fighting about. Jim was concerned that the group hadn't yet identified what they were going to do to solve the problem.

EPO Outreach Spreadsheet: David mentioned that he had received feedback from two members adding two items to Question No. 6 on the EPO questionnaire which David passed out to the group. A member was concerned that the recommendations would result in asking the taxpayers for more money. Another member responded and said that the funding could come from grants, industry money or commission funding if an infrastructure was set up to receive it for researchers. Another member said they had spoken with Kirk Robinson about getting check-off dollars from commodity assessments which are typically used for marketing, but could be used for research and development. The member agreed, but stated that it is a big challenge to reallocate funding and that a recommendation from the GWAC might help. Jim Davenport was interested to learn more about this funding source.

A member asked what the group would do with these recommendations if they weren't given to EPO as they must have something to educate with. Another member thought the EPO group needed to understand basic concepts (leaching and the groundwater cycle for example) before they could do anything else. Ginny stated that she had recently discovered a 7<sup>th</sup> and 8<sup>th</sup> grade curriculum on growing food which included the nitrogen cycle. She thought the curriculum could be added to schools in the GWMA and suggested EPO get the books for schools before they ran out of funding. The books come from the American Society of Agronomy. A member indicated that Joye Redfield-Wilder had recommended this as well. Another member knew the science teacher in Sunnyside and would mention it to her and provide Ginny's contact information. Jim thought that the concept of agronomic rates was central to the work of the GWMA and was an important part of public education. Ginny indicated that in recent years there had been a great deal of education amongst dairymen and farmers on agronomic rates. Another member thought it was more widely understood by dairy farmers as a result of the GWMA. A member also stated that serious farmers take samples. Steve George indicated that he would be interested in working on school education

funding as he had sponsored some in the past. The members eventually concluded that they would be interested in EPO preparing a fact sheet that explains agronomic rates. They would also recommend that EPO look at the school curriculum and explore its use. The additions made by the members in response to EPO's Question No. 6 were accepted as well.

Draft Schedule: David indicated that if the group didn't complete its work tonight he was looking at scheduling another meeting for either May 22 or 23 in order to stay on schedule. The group agreed to complete it.

Draft Comments from Jim Davenport: David explained that he had sent the group the draft Livestock/CAFO Work Group Summary that Jim Davenport had written. There had been one set of comments in response which Jim and David had addressed. The group was invited to comment now as well. A member had the following concerns: on page 2, last sentence in paragraph 1 there was a concern that the following sentence may not be consistent with the NAA: "Losses due to volatilization or denitrification during storage are estimated at 35%." Ginny stated that this came from the NRCS Waste Ag Handbook and she would send Jim/David the citation as the information had already been provided to the authors of the NAA. The next concern was on page 1 in the second paragraph, first sentence "The Livestock/CAFO Working Group defers to the WSDA's Nitrogen Availability Study . . ." because the member couldn't agree with it. Jim noted that the work group hasn't defined or quantified the available source contributions. A member suggested that perhaps something could be added here that says that dairy nutrient management plans are not publicly available and cannot be verified. In the last sentence of that paragraph there was a concern that the "identification of areas where other sources or forms of contamination primarily bacteria, overlap with or are related to nitrate sources" was being dumped on the Data Working Group. On page 5, first sentence in paragraph 3, the member was concerned that this sentence belonged in the IAWG piece. Ginny thought it was suitable here because it is pertinent and part of the requirements for AFO's and CAFO's. The member was also concerned about the first sentence in paragraph 2 on page 6 ("The distinction between a lagoon, a settling basin, a settling pond, or a pond can be hard to clarify") because she felt that if ponds weren't addressed in the NAA they shouldn't be cited in this report either. Ginny stated that it might be helpful to define the word "pond" as irrigation ponds or settling ponds. Another member wanted to know what this sentence meant. Ginny said it meant clarification was difficult due to different practice standards.

The member was also concerned about the description of pens and composting areas on page 7. Another member responded and said he wasn't willing to say pens and lagoons leak if it wasn't noted that there were safeguards which prevent pens and lagoons from leaking. Other members disagreed with this characterization and there was additional discussion. Ginny suggested that this was not done purposefully and that regulators are taking a closer look at composting to make sure it was meeting the true spirit of solid waste rules as this was addressed in the CAFO permit and NPDES. The member explained that she had attempted to read the report as someone who was new to the topic. She also asked that Jim reference the citations. Jim indicated that he would do that when all of the revisions were complete. Ginny complimented Jim on the job he had done.

Draft Livestock/CAFO Work Group Report: David reminded everyone that they had left off at 2C in their review of the document at the last meeting. He read each comment and the portion of the document each comment referred to. The following is a brief summary of the discussion that

ensued on each item: 2C) and 2D) The comments explain the references. 2E) David stated that TMDL's showed that implementation of BMP's can make changes. A member stated that there was a need to improve implementation.

3A) A member had learned from a public disclosure request that the average inspection consisted of 1.6 hours. Ginny explained that additional time was actually spent prior to the visit reviewing the producer's file and reviewing records after the visit. She believes, therefore, that each inspection takes six to seven hours not including drive time. Ginny added that nothing directs a standard time and that when travelling they will schedule inspections every two to three hours. Ginny suggested that the group might recommend the DNMP evaluate their inspection protocols. 3B) There was concern about including a complete dairy nutrient management plan in the document as it could be two to three inches thick in size (rather than the outline of the plan that exists presently). Ginny suggested that she provide a template of the summary document. David and Ginny will team together to see what can be done.

4A) The group discussed the comments at great length. Ultimately Jean (who had made the comment that BMP's have been in place for years and have not succeeded in preventing the high levels of nitrates in LYV groundwater that we see today) agreed to delete her comments on BMP's. 4B) Again, these comments caused a great deal of discussion as RCRA has an agriculture exemption and is federal law not state law even though it has been used to address overapplication to cropland. Ginny suggested that there be a reference to WAC 173-350 solid waste rule. David indicated he would add more clarification and reference.

5A) Comments were accepted as written. 5B) David will reflect on both of the comments. 5C) Both Ginny and David agreed Eastern Washington needs more DNMP inspectors. A member agreed since the percentage of cows are higher in this area than Western Washington. 5D) Jean will send Steve the figures verifying the statistic she quoted. Steve indicated that \$900 million was pumped back in to the economy by dairies who are second only to fruit in farmgate in Yakima County and the State. 5E) David indicated that he didn't believe the comments were adding to the document and said he had merely identified organizations that could carry the project forward. 5F) David stated that when people get on the new permit there will be better tracking and thought that end users should provide their own reporting. David added that there was an incentive in the permit to do so. A member didn't think composting was a big part of the CAFO permit. David will look into it.

6A and B) David spoke with Melanie Redding about the adaptive management plan in the permit and noted soil testing took up two-thirds of a page. He added it was normal to put a plan in place before adapting. Jim agreed and believed that the general statement David made was appropriate. His interpretation was that the group was agreeing to use an adaptive management approach which he defined as: the more you learn, the more you adapt and do better. 6C) David stated the group could discuss the new CAFO permit at the group's June meeting if desired. No one responded. 6D and F) David indicated he used the opinion about a County ordinance generally shared by the group and based on his own experience. David added that he didn't think an ordinance could be done in time for this plan so it was his opinion that the group should spend time on what could be done. 6G) No additional comments. 6E) David asked and yes, it is at the discretion of the regulatory agency involved. 6H) Steve once again noted that AKART is not backed up by science.

7A) David looked it up and the topic was discussed at the December meeting and the consensus was that they were short on resources. 7B) David said that there were examples of unfounded complaints. 7C) David doesn't know that the GWMA was asked to do this, but it has already been started and will be a part of the implementation. 8A) David explained he had provided publications everyone was familiar with that could help guide. 8B) David stated that he was trying to expand beyond dairies – the agricultural community can assist a lot as we go forward. Some programs already exist and could use a boost. David will clarify some more but there are a lot of other sources of funding. 8C) David thought the group had a good conversation on this earlier in the meeting. Ginny and David are already communicating in order to understand and coordinate better. 8D) David said his reference to unfounded complaints was not meant to be insulting and added that the new CAFO permit plays a part in this as well.

9A) The lead entity is currently Yakima County but eventually it will be someone else, most likely Yakima Health District or another entity. The ambient monitoring network and well testing by USGS and PGG will monitor and collect data. The member noted that those were GWMA-wide monitoring systems and not specific for Livestock/CAFO's. David said that data from these wells will reflect CAFO's influence. The member added that if the group says BMP's are the solution she wanted to know how those would be monitored. Ginny indicated that they would be monitored through the new CAFO permit, and dairy nutrient management plans. She added that there was more transparency in the CAFO permit, including a manure pollution prevention plan. David said a combination of entities will take this on – the Conservation District, Ecology, WSDA, and the entity that takes on the plan.

Jim said David will now work on finalizing the documents the group reviewed. These documents will be consolidated with all of the working group reports and everyone will have a chance to review them again at a GWAC meeting. The meeting concluded at 8:00 PM.

### **Resources Requested**

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#### **Recommendations for GWAC**

#### **Deliverables/Products Status**

#### **Proposed Next Steps**

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- Recommend that EPO request a fact sheet that explains agronomic rates.
- Recommend that EPO explore and purchase the 7-8<sup>th</sup> grade school curriculum Ginny Prest identified on growing food which included the nitrogen cycle.
- Recommend the additional responses to EPO Questionnaire No. 6: 1) Promote on-going research for managing animal nutrients and 2) Promote new products that are found through research. Promote markets for those products.
- Ginny will provide Jim Davenport and David Bowen with the citation from the NRCS Waste Ag Handbook for the statistic found in the sentence "Losses due to volatilization or denitrification during storage are estimated at 35%.