

Livestock/CAFO Working Group

Charge from Groundwater Management Area Advisory Committee

Discussion of data sources and remaining Work Plan Items

Working Group Members

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

Meeting: Thursday, September 1, 2016, 5:00 – 7:00 PM

Participants

David Bowen, Dan McCarty, Jim Dyjak, Jean Mendoza, Steve George, Jason Sheehan, Stuart Turner, Stuart Crane, Larry Fendell, Sandy Braden, Merivet Lombera, Bobbie Brady (Yakima County Support Services).

Key Discussion Points

Chair David Bowen opened the meeting at 5:10 PM. He welcomed everyone and had them introduce themselves.

Updates from Previous Agenda Items: The Department of Ecology CAFO General Permit comment period had been extended to August 31 due to an online glitch and is now closed. Ecology received approximately 3,600 comments which they are now processing.

BMP Discussion/Regulatory Framework: These two agenda items were meshed together in the discussion. David made sure that the participants all received the three handouts produced at the meeting: 1) Stu Turner's list of NRCS (Natural Resources Conservation Service) Citations on BMP's; Jim Dyjak's copy of the Conservation Programs Manual, Section 515.141 Conservation Practices and Practice Service Life; and, 3) Jean Mendoza's contributions to the BMP discussion. A member asked if Laurie Crowe had provided information on the level of NRCS implementation in Yakima County; David said he had not received this information.

David asked Jean to talk first about her BMP concerns. Jean's list included the following:

- Silage is not addressed;
- There are no BMP's that give credit for monitoring well water;
- There is a need to identify BMP's that contribute to air pollution; and,
- The BMP's for composting are not well enough developed.

A discussion ensued on the topics as follows: Jean didn't believe silage leachate had been addressed. A member explained that all of the dairy plans he is monitoring give consideration to silage leachate as it is a liquid and is pumped. Jean wondered if Laurie Crowe could provide an estimate of how many dairies in the GWMA make use of a pump. The member responded that most dairies (2,000+) have pumps. Further, another member added that since 1998 the RCW's requirement for Dairy Nutrient Management Plans (DNMP's) is zero discharge. A discussion ensued about both the DNMP and 590 Plan. The 590 Plan (if a dairy is following it) requires every dairy to readjust its nutrient plan every year and applications and yields are reported yearly to the Department of Agriculture. DMNP's are updated less frequently unless there is an animal increase by ten percent or a land decrease by 10 percent. Further, members went on to say that the DNMP requires zero discharge which takes care of the leakage on the surface and that while it may not be addressed in the NRCS, it is a State law. David pointed out that there is some leakage and that this is not 100 percent foolproof. Jean desired to see a BMP regarding silage to show that the group is addressing all of the issues. It was requested that David get a copy of the current State DNMP from the Conservation District as Jean's handout indicated that she was utilizing the one from 2012 and the DNMP had been updated since then.

The concern regarding air pollution primarily centered around two areas – when manure was left in stacks in weather conditions that caused an increased percentage of volatilization and also when it is applied to frozen fields during an inversion. David pointed out that the group can't stop anomalies but that there could be a BMP that sprinkler systems are not to be used in the winter months during inversions. Others were concerned that there was no need for this as cooler temperatures come with low vapor pressure which means less is lost to the air. Jean added that she desired to flag those BMP's that cause more air emissions. A member went on to say that he felt it was important for the group to focus on the low hanging fruit rather than those making less contribution. It was his belief that aerosol deposition contributed less and that land contribution was a far greater issue. He also believed that when there were infringements on a large body of people there was a greater need on the part of the working group to find solutions.

Jean brought up a concern that Dan DeGroot (Chair of the RCIM Working Group) had initially voiced about abandoned wells. She noted that the chart on page 7 of her handout "Attachment 2 – Table 10-4 from the Agricultural Waste Management Field Handbook" recommends that when lagoons are lined with clay or synthetic liners a search be done for abandoned wells and no lagoon should be built within a 1,000 foot radius of an abandoned well. The group agreed that this should be put on the checklist. It was further noted that the Department of Ecology has setbacks for domestic wells from lagoons as well.

David asked the group where they wanted to go with the list of BMP's as it was his goal to deliver the group's work product to the GWAC at its scheduled December meeting. Another member spoke up and said that he preferred a cafeteria style approach to BMP's so that each dairy could choose the BMP's it desired to use. He also thought that a minimum score could be established but wondered how the group would rank the BMP's. Several members voiced concerns that BMP's were not being followed already and more stringent efforts would be required. The discussion became volatile and Chair, David Bowen asked the group to take a break.

David Bowen redirected the group from its philosophical discussion to focus on the following questions: Why are things the way they are and what can be done to stop it – specifically what

physical, operational, and/or emotional changes need to be made. A member said that the group needed to stop the blame game as there were too many tangent conversations and focus on what the working group was really about.

A member suggested the group narrow down a handful of less than five NRCS standards that would do 90 percent of the job. He encouraged the group to come back to dealing with the low hanging fruit – focus on those BMP's that affect the practices that are most prevalent. Another member agreed that the central issue was the amount of nutrients applied, what kind of nutrients were being applied and what was pushing the nutrients through – the hammer and the nail.

A member noted that it can be hard to pick just one BMP and he liked the idea of a cafeteria style approach that would allow him to focus on the endpoint. Another member said that a California study called this cafeteria style a “cluster of practices” and wondered how the group could get a description of a cluster of practices down on paper.

David asked those at the table who work in the livestock/CAFO industry for input and the discussion about lagoons at dairies leaking resumed. A member felt that the group should establish a performance standard such as “nothing from the lagoon can get into the groundwater” rather than come up with a long list of BMP's as BMP's are continuously evolving. There was discussion about a zero standard or a de minimis standard. A member asked how the standard would be measured. Another member responded and said that the current law is that the Department of Ecology must prove there is leakage and he felt there would be a requirement in the new Ecology permit for an engineering process that would help as well.

Jean asked the group to look at the type of liners recommended on her handout, page 7, 10-4. A member commented that he was not opposed to this but also voiced concern about the cost estimates on retrofits and felt the group should know first the costs attributable to any requirement they were contemplating which is why he preferred a performance standard of no nitrates to groundwater. Further, he did not agree that synthetic liners were better than clay and pointed out that synthetic liners have more of a potential to get damaged in the dairy industry because of the use of pumps. It would be his preference to see synthetic and clay liners used simultaneously. He also pointed out most owners will also install a fence around their lagoon(s) which is another large cost. A member wanted to know if liners deteriorate and what the shelf life was. Another member said that inspections reveal any deterioration.

A member asked why NRCS standards couldn't be enforced on the lagoons, corrals, composting areas and silage. Another member suggested that the group get a list of BMP's from Laurie Crowe with the percentage of people using them. Then the group could look at the low numbers and if they're not doing those cut those out and concentrate on the ones with the bigger percentage of users. Scoring will reveal the low hanging fruit. Another member disagreed as he felt it would be as if they were saying one practice is better than another. Jean said she would agree to setting a performance standard if there was a way to monitor to determine that the nitrates weren't going to groundwater.

Next Steps:

- One member felt that the CAFO permit would include engineering requirements; another member didn't feel like the group could wait for that.

- HDR's list of BMP's - should they be rated or not?
- David hadn't heard anyone comment about what was missing from the list of BMP's except the ideas Jean brought forward on air pollution and silage leachate and encouraged people to make written comment.
- Jean wanted to find a way to credit those who were practicing the BMP of monitoring their well water with something more significant than a "checkmark." Several rewards were suggested. Some agreed with this concept and the rewards while others disagreed.
- A member recommended to the group that dairies be required to do a nitrate test on their domestic wells which are used for potable water. Testing could be done simultaneously with the other samples/testing they are already required to do through the Department of Health. Several members agreed.
- A member thought voluntary recommendations weren't working and mandatory requirements should be considered.
- A member again suggested that the group look at a performance standard rather than create arbitrary BMP's as he felt BMP's would evolve over time. David noted that the group was required to produce BMP's by the GWAC in order to meet the requirements of the RCW's/WAC. In addition, the concern was voiced about how to monitor this performance standard.
- A member reminded the group of the need for education.
- A member noted he had more faith in the NRCS standards than BMP's because the NRCS standards were reviewed, vetted and backed up by science. He wondered if they could be adopted. It made sense to David to use these as well.

The group was given two weeks to respond further.

Resources Requested

Recommendations for GWAC

Deliverables/Products Status

Proposed Next Steps

- David get a copy of the current State DNMP from the Conservation District as Jean's handout indicated that she was utilizing the one from 2012 and it had been updated.
- The group was given two weeks to respond further to the items listed in "Next Steps."