

Irrigated Ag Working Group (IAWG)

Charge from Groundwater Management Area Advisory Committee

Working Group Members

Dr. Troy Peters (GWAC-WSU); Bob Stevens (interested party) Bud Rogers (GWAC-Citizen), Chelsea Durfey (GWAC), Dan McCarty (interested party), Dave Cowan (interested party), Dave Fraser (Interested Party - Simplot Agronomist), Donald Jameson (interested party), Doug Simpson (GWAC-Farmer), Frank Lyall (GWAC-Farm Bureau), Ginny Prest (GWAC-Dept. of Ag), Jean Mendoza (GWAC-Friends of Toppenish Creek), Jim Newhouse (GWAC), Kevin Lindsey (interested party), Kirk Cook (GWAC-WSDA), Laurie Crowe (GWAC-South Yakima Conservation District), Melanie Redding (Ecology), Mike Shuttleworth (interested party), Ralph Fisher (EPA), Ron Cowin (GWAC-SVID), Scott Stephen (interested party), Stuart Turner (GWAC-Turner & Co.), Tom Tebb (GWAC-Department of Ecology), Rosalio Brambila (interested party), Vern Redifer, Jim Davenport.

Meetings/Calls Dates

Meeting: Sunnyside Valley Irrigation District Office, 120 S. Eleventh Street, Sunnyside

When: September 27, 2016, from 1:30 pm to 3:30 pm.

Call: (509) 574-2353 – Pin # 2353

Participants

Troy Peters (Chair), Vern Redifer, Kathleen Rogers, Frank Lyall, Doug Simpson, Ginny Prest, Stu Turner, Perry Beale, Jean Mendoza, Scott Stephen, Laurie Crowe,* and Bobbie Brady(Yakima County Support Staff) *via telephone

Key Discussion Points

Chair Troy Peters opened the meeting and stated his goal was to receive the presentation from the Regulatory Framework Working Group (Regulatory) and discuss ideas and solutions. One member desired to discuss how to bring the commercial fertilizer industry to the meetings to learn more about their current practices in comparison to practices common five or ten years ago since it is a source of nitrate contribution. A member agreed. Another member pointed out that they had participated early on in the GWAC discussions.

Regulatory Framework Working Group (Regulatory) Presentation: Jean began by reading the group's purpose statement from the "Analysis of Regulatory Statutes, Voluntary Incentives and Regulatory Assistance Programs Lower Yakima Valley GWMA Regulatory Work Group – August, 2016" which had been provided to the group and included Ginny's comments. She noted that it was the responsibility of the Irrigated Ag Working Group (IAWG) to recommend changes or

identify gaps/weaknesses that need improvement as they pertain to irrigated agriculture which would include the application of manures and synthetic fertilizers to agricultural lands.

In items 1 and 2 (EPA under the Safe Drinking Water Act – groundwater and EPA under the Clean Water Act - surface water) Jean noted that the Environmental Protection Agency (EPA) directs the Department of Ecology (Ecology) as to how to regulate the waters of the State and EPA has the power to withhold funding. Jean stated that the Clean Water Act is effective as it pertains to point source pollution, but non-point source pollution has not been as effective. The State of Washington is working on a regulating plan for non-point source pollution but is unhappy with the agriculture portion.

No. 3 (Ecology under RCW 90.48 Water Pollution Control and WAC 173-200. WA Department of Health under RCW 43.20). Jean said these were carrot types of regulation. A discussion ensued about EPA's requirement for Ecology to develop BMP's for non-point source pollution. Vern wanted to know if EPA gave Ecology a deadline as the task is similar to what this group is doing. Jean and Ginny could not remember the deadline but Ginny will follow up on this. Ginny noted that ag in particular doesn't want mandatory BMP's because they are not site specific whereas the NRCS is. Another member agreed that all BMP's are not effective for all operators as some are seasonal, some specific to soil and crop types, and would like to see the NRCS utilized instead.

No. 4 a (Ecology discharge permitting under WAC 173-0216). David Bowen from Ecology provided the group with a status update (emailed to the group the previous day) on the Draft CAFO General Permit. A member said that he believed that Ecology promised to have the permit out by the end of the year.

Jean believed that everyone was familiar with 4b, 5 and 6 and moved on to No. 7 (Washington State Department of Agriculture (WSDA) Dairy Nutrient Management Program (DNMP)) which Ginny Prest from the WSDA was present to discuss. The group had already received her comments on this section (which had been updated from the time of the last Regulatory meeting). In addition, Ginny brought a copy of an inspection report. Ginny explained that WSDA relies on the record-keeping piece which includes soil samples and information on land application. She reiterated that while the DNMP is not enforceable, if an issue is identified during the inspection process, the DNMP does have enforcement options. Ginny added the caveat that their current soil test is only for the top foot which she explained was the common practice at the point it was implemented. She went on to say the CAFO permit currently under consideration samples at two feet. Troy asked how long the WSDA had been working with the DNMP. A member explained that it came to the WSDA in 2003 and took about three years to get up and organized. Troy asked if Ginny had any evidence that the DNMPs have made an impact. Ginny referred him to page 4 of the sample inspection report and added that she had seen operators make changes to their land balance and even decreased the number of cows in their operation in response. Another member commented that the EPA's presence and environmental groups like Jean's caused producers to change their practices as well.

Troy then asked what could be done if someone refused to change. Ginny responded and said there is an annual record-keeping cap in RCW 90.64 of \$5,000 and only one violation has been issued in the Yakima Valley. A member asked Ginny the cost per acre for her to administer the program. Ginny said that the dairies bear the cost of sampling and the State general fund bears

the cost of Ginny's group (she has four personnel across the State – one of whom is in eastern Washington). Troy asked what it cost a dairy to write their annual nutrient plans and do testing. Another member responded and said approximately \$5,000 for a smaller dairy and \$45-50,000 for a larger dairy. They believed that number would go up because regulations continue to increase. Ginny expressed her opinion that all of the tools for dairies to do a great job exist and the problem is implementation. Other members agreed and said that application of the NRCS works as well. Ginny believes that cost and education are the two greatest priorities. Jean voiced that Ecology doesn't have sufficient staff for oversight as well.

Troy asked another member if he saw a way for the public sector to strengthen incentives to do a better job at nutrient/water management. He responded and said that when the cost of fertilizers is low, then the use of fertilizers increase, but when the cost is high, less is spent on nutrients. Troy noted that the government had implemented a tax on gas with the hope that high prices would decrease consumption and would make money available for associated costs. A member commented that if there was an increase in fees it would drive the smaller guys out. This concerned the members. Another member said that when a target number is issued it may work well for regulatory purposes, but it doesn't necessarily mean success as success can vary from field to field. However, consistent records over time can make for good decisions.

Jean noted that dairies have control over 28,000 acres in the Yakima Valley and the DNMP reviews land application records for those fields. She voiced a concern that there is therefore a large amount of additional acreage with no oversight. A member believed that producers self-regulate if they desire to grow a crop as they would limit the amount of nutrient applications or be subject to lower crop yields. Another member stated that producers are looking for a maximum economic yield and over-application would decrease the yield to the point of a declining return. Troy vocalized that he did not believe it would be good for the committee to come to the conclusion that "yeah, that's a hard problem, but not a good recommendation for the committee to make." Ginny added that everyone has an interest but she wasn't hearing the group come up with solutions. Another member believed the solution is embodied in the education and outreach efforts by groups like WSU, the Conservation District and WSDA. Others agreed. A member desired that the commercial fertilizer groups be brought back into the meetings to be a part of the process.

At this point Troy began to summarize the solutions he was hearing. The following represents solutions previously discussed at other meetings (per the recommendation by Kathleen Rogers to include the group's May 17 list) and solutions raised during the meeting. Troy included those items he believed had already received universal support by the working group under "Recommendations for GWAC" found below and while they may need cost estimates and implementation details, those things can be worked out after the GWAC supports moving forward on each particular item. The items below represent ideas discussed that NOT everybody supports:

1. Dilution through artificial recharge using SVID and Roza canals during the winter.
2. Additional regulations (these can be effective, but can have large negative economic impacts to farmers).
 - Limits on time and amounts and also database tracking of what, how much, and when it is applied (Jean said this many times).

3. Well monitoring program.
4. Irrigation districts require nutrient management for water delivery.
5. Establish aquifer protection area (property tax) to fund these programs.
6. Tax commercial fertilizers – raises costs of nitrogen and increases the incentives to conserve and the demand and economic drivers to transport CAFO manure. Use funds for nutrient and water management incentives. (Growers hate this).
7. A 10 year study of various nutrient management scenarios.

Troy also began summarizing guiding principles the group agreed on:

1. There are various regulatory vehicles that exist on CAFO's that are effective at an expense to the State and regressively expensive to growers. The targets that are used are somewhat arbitrary and oftentimes more cumbersome.
2. It is possible to effect change by regulation but that may not be the most effective route and will cause collateral damage.
3. Policies and regulations could be added to those already in place, but may not be necessary and the existing policies and regulations "need time to cook."
4. Solutions must consider the economic impact to the grower.
5. Agriculture is complex and highly variable and is affected by a large number of variables. This must be taken into account.

Jean noted that she had not been able to complete her presentation which included information about atmospheric deposition. This was important as atmospheric deposition will be left to the Irrigated Ag group to deal with. Jean added that the group had agreed its contribution was 4 percent but Jean believed the number is higher. However, both Vern and Perry Beale pointed out that the number was derived from the experts at Ecology.

Troy said that the group would continue to discuss options at its next meeting and adjourned at 3:40 pm.

Recommendations for GWAC

1. IAWG fully endorses support for increased education and outreach (ideas include Water on Wheels or mobile irrigation lab).
2. Cost share or help with soil sampling and nutrient management.
3. Cost share for irrigation scheduling to limit deep percolation (may include soil moisture sensors).
4. Encourage NRCS to focus their funding on nutrient and water management in the valley.

Resources Requested

Deliverables/Products Status

Proposed Next Steps

Ginny will follow up and find out the deadline EPA gave to Ecology to develop BMP's for non-point source pollution.