

## 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, WA

When: February 21, 2017, from 1:30 pm to 3:30 pm.

Call: (509) 574-2353 – Pin # 2353

#### Participants

Troy Peters (Chair), Vern Redifer, Kathleen Rogers, Jean Mendoza, Jim Davenport, Laurie Crowe, Rodney Heit, Ron Cowin, Dave Cowan, Frank Lyall, Scott Stephen, Doug Simpson, Stuart Crane, Bobbie Brady (Yakima County Support Staff). No one was present via telephone.

#### Key Discussion Points

Jim Davenport called the meeting to order at 1:35 PM and had everyone introduce themselves. Jim let the group know that he was working with Troy on the draft Irrigated Agriculture Working Group Report to the GWAC and it will be available for the group's review shortly. The goal was to present this report to the GWAC at their April meeting. Troy arrived and the group focused on the first agenda item which was to complete the draft EPO Questionnaire. Troy went through the draft line by line and solicited the group's input and suggestions. The questionnaire is as follows. Items marked in yellow were added by the group. Other comments were deleted. A summary of discussion comments can be found on page 4 of this summary.

## GWAC Working Group Outline

Name of your Working Group: Irrigated Agriculture Working Group

1. Briefly state the mission/purpose of your working group (1-2 sentences).

Help solve the high nitrates in the groundwater issue as it relates to irrigated agriculture.

2. What has your working group accomplished to date? (List up to 5 items)

Accomplishment	Date
<ul style="list-style-type: none"> <li>Completed the deep soil sampling survey.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<ul style="list-style-type: none"> <li>Completed a review of the available BMP's related to irrigated agriculture and provided feedback to each of these and "bang-for-the-buck" review.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<ul style="list-style-type: none"> <li>Have done a lot of discussing to identify potential areas of impact.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

3. What discoveries or findings has your group identified?

<ul style="list-style-type: none"> <li>The deep soil sampling survey showed that some irrigated agricultural practices contribute at least partially to elevated nitrates in the groundwater. The extent of this is dependent on many variables including crop type, rooting zone depth, drainage, field slope, rainfall, soil type, plant vigor, source of nitrogen, depth to groundwater, crop yields, irrigation management practices which make it difficult to attribute nitrogen to particular sources.</li> </ul>
<ul style="list-style-type: none"> <li>Growers don't want to over-irrigate and definitely have financial disincentives to over-applying commercial fertilizers, bio-solids, or manure, compost, or organic fertilizers.</li> <li>Education and incentives to take in-field water and nutrient sampling and help with interpreting these measurements could reduce the amount of water and nutrients applied to many fields.</li> </ul>
<ul style="list-style-type: none"> <li>Fertilizer companies make many of the recommendations on how much fertilizer to apply. Engaging with this group will be key to affecting changes in the future.</li> <li>Educational institutions and crop consultants also make many of the fertilizer, dry and liquid manure and compost recommendations. Engaging with this group will also be important to affecting changes.</li> </ul>
<ul style="list-style-type: none"> <li>Additional regulations on irrigated agriculture have the potential to affect change depending on what regulations were implemented and how, but these would cause economic harm to</li> </ul>

growers, especially smaller to medium sized growers, and rural economies as a whole and are therefore not recommended by the committee.

4. What are your group’s anticipated products or recommendations?

Product/Recommendation	Due Date
<ul style="list-style-type: none"> <li>Increase funding to state conservation districts and WSU extension for nutrient management and irrigation water management in the Yakima Valley.</li> <li>1.0 FTE at CD office. Soil sampling and soil moisture monitoring.</li> </ul>	•
<ul style="list-style-type: none"> <li>Increase funding for cost share of IWM (irrigation water management) and education of these programs. 100% covering of costs is not recommended.</li> </ul>	•
<ul style="list-style-type: none"> <li>Increase funding for cost share of soil sampling and analysis (irrigation water management) and education of these programs.</li> </ul>	•

5. Who are your target audiences?

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| <ul style="list-style-type: none"> <li>Washington State Legislature.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Irrigated agricultural producers.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Crop and farm and livestock management consultants.</li> </ul>   |
| <ul style="list-style-type: none"> <li>Fertilizer sales companies, manure, compost, and bio solid providers.</li> <li>Universities and educational institutions including WSU and conservation districts.</li> <li>Environmental movement.</li> </ul> |

6. What are your key messages or top three take-away messages/recommendations?

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| <ul style="list-style-type: none"> <li>Increase education and outreach efforts to help growers do a better job of nutrient and water management. This should be an ongoing effort and likely associated with, or led by WSU extension and/or the state conservation districts.</li> </ul> |
| <ul style="list-style-type: none"> <li>Increase the financial incentives and education related to irrigation water management. This could take the form of cost</li> </ul>  |

share for irrigation management services, or education workshops and/or a mobile irrigation lab that would come do irrigation system evaluations and education. **Growers don't have incentives to over-irrigate.**

- Increase the financial incentives and education related to nutrient management. This might take the form of cost share for soil sampling or nutrient management services. Possibly a service that would spot-check, or give a second opinion of fertilizer recommendations from other companies, who might then be asked to justify their recommendations.
- Outreach to Fertilizer Companies to solicit their help in doing a better and more conservative job of nutrient applications and management.

A member was concerned that it was difficult to determine the amount of leaching from a specific source. Jim Davenport reminded everyone that the nitrogen loading assessment would indicate that at least a portion of the nitrogen was attributable to irrigated agriculture.

Several members were concerned with the sentence that read “fertilizer companies . . . have financial disincentives to be conservative with their recommendations (they prefer to sell more fertilizer).” This portion of the sentence was removed. They also recognized that educational institutions and crop consultants make recommendations to growers and agreed these groups should be engaged as well. A member indicated that she had spoken with a representative of the fertilizer industry. He agreed to come to the next meeting to help the group better understand the industry’s practices. Another member was concerned that manure was not addressed separately from commercial fertilizers and discussion on this topic ensued.

As the group worked its way through the questionnaire several members also voiced concern about economic harm to smaller and medium sized growers if additional regulations were recommended. Another member noted a recent article in the Capital Press about the Umatilla, Oregon GWMA. She said that it indicated voluntary measures were not sufficient and that there was a need for regulation. The group also discussed soil moisture monitors – their cost and effectiveness, and how many were needed in each field. Several members stated that they had used them and found them helpful. Laurie Crowe believed that the South Yakima Conservation District would need a full time employee to help with the educational and work components the group was suggesting. Several members added that in that their experience 100 percent cost share of irrigation water management should not be recommended. One member stated that it was important for growers to have “skin in the game” because when growers shared the cost and the program stopped, the value of the program was better recognized and growers continued the efforts long-term after the program funding ended.

Jim Davenport mentioned that the group had not addressed growers’ application of manure at an agronomic rate on crop lands in the same manner as dairies. A member felt that there were a lot of differences in the application of manure as opposed to fertilizer. Members felt that since the hauling manure was expensive, application abuses would be minimal. Another member felt the

list of target audiences should include environmentalists. The group discussed this – Troy felt it was important to do a better job helping environmentalists understand the work and needs of the grower as it may help the groups work together better in the future.

A member indicated that there were no regulations addressing agronomic applications of fertilizers for growers. Jim Davenport suggested that perhaps RCRA did this. A member said that there were so many variables between crops/locations that it would make it difficult to regulate – there is not a cut and dried agronomic rate. Another member felt that regulations would reduce the competitiveness of agriculture in valley and the result would be that there would be less of it. A member also stated that in reality the tools exist to get growers to the right place which was a win/win for both sides and they should be allowed to decide their preferred tools and style. Troy believed that a recommendation like this should be approved by the legislature as they consider these recommendations were made as a result of both environmentalists and growers meeting and making decisions in the same room.

Vern passed out the final draft report of the deep soil sampling. It was agreed that he would send it to Troy as a data base in an Access file. Troy had a soil scientist who was interested in looking at it and analyzing it and would work with the group. Vern said that the size of the file may require it be provided on a thumb drive.

#### **Recommendations for GWAC**

#### **Resources Requested**

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

#### **Proposed Next Steps**

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Vern will provide Troy with the data base for the deep soil sampling in an Access file.