

Data Collection, Characterization, Monitoring

Charge from Groundwater Management Area Advisory Committee

Working Group Members

Melanie Redding (Chair); Andres Cervantes; Bob Stevens; Charles (Pony) Ellingson; David Bowen; Chelsea Durfey; Dave Cowan; Doug Simpson; Elizabeth Sanchez; Frank Lyall; Ginny Stern; Jaclyn Hancock; Jan Whitefoot; Jean Mendoza, John Van Wingerden, Kevin Lindsey; Laurie Crowe; Lino Guerra; Mike Shuttleworth; Ralph Fisher; Robert Farrell; Ron Cowin; Scott Stephen; Steve Swope; Stuart Turner; Dr. Troy Peters

Meetings/Calls Dates

Meeting: Wednesday, January 11, 2017, 1:00-3:00 PM

Call Number: 509-574-2353 pin: 2353#

Participants

Present: Melanie Redding (Chair)*, Steve George, Jean Mendoza, David Bowen, Jim Davenport, Vern Redifer, Steve Swope*, Margaret Drennan (WSDA, filling in for Gary Bahr)*, Chris Saunders (County support staff) *via phone.

Key Discussion Points

The meeting convened at 1:03pm. After the customary introductions, Melanie thanked the group for keeping flexible schedules as two prior meetings had been cancelled due to bad weather.

Monitoring Initiatives Status: Vern briefly reviewed the decisions made at the November and December GWAC meetings to proceed with Pacific Groundwater Group's (PGG's) ambient monitoring network of purpose-built wells, and to allocate money for its implementation, along with other monitoring initiatives involving drinking water wells and drains.

Moving forward, Vern is talking with PGG about modifications to the Quality Assurance Project Plan (QAPP) in order to accommodate some members' previously-expressed concerns. Bid packages for installing purpose-built wells will need to be completed in short order. The United States Geological Survey (USGS) is helping the County put a program together to identify drinking wells to sample. They're aiming for 160 wells to monitor six times in 2017, although the final number may be something different than 160. Starting with the 450 existing drinking wells the County has already sampled, the intent is to look for people willing to be part of the proposed monitoring network, making sure they're fairly dispersed geographically across the GWMA. Combined with the 30 purpose-built wells in PGG's plan, the long-term monitoring program would need to be in place by September 2017 to get through the State Environmental Policy Act (SEPA) process.

Outstanding Issues with Groundwater Monitoring: The biggest unresolved question, in Vern's view, was what to do with the data that's gathered through these initiatives. There were two factors he considered important to look at: 1) short-term seasonal variations in nitrate concentrations over the next year or two, which could help track how changes in nutrient application over the agricultural cycle were affecting things; and, 2) long-term trends that develop over several years, to track whether the overall picture was getting better, and whether the changes recommended by the GWMA were having an impact. He also wanted to be able to zoom in and look at data by geographic areas within the GWMA.

A member asked whether there was a protocol on how and when information would be gathered from drain monitoring, and what purpose this information would serve. The GWAC had authorized \$60,000 for this endeavor, but at present, there was no implementation plan. Drains don't fit with the protocols that USGS uses, and while PGG's QAPP had a couple sections on conceptual drain stations, it did not address the issue of surface drains. This would require an addendum to the QAPP. Melanie stated that the purpose of this program was to develop an ambient picture of drinking water in the GWMA, not to find sources. That would be a different study. The member requested that this be clarified in the goals statement upfront.

A member asked for clarification on who would be gathering and analyzing the data gathered through the combined monitoring network. At present, Vern was talking with Matt Bachmann about the logistics of sampling existing drinking water wells, and determining USGS' willingness to support such a mission. Vern has also had very preliminary discussions with the Yakima Health District about continuing monitoring beyond 2017, within their existing revenue. Melanie pointed out that PGG had made suggestions on how to analyze data similar to methods she had seen in Whatcom County. Since USGS is looking at sampling the 160 drinking water wells, and PGG the 30 purpose-built wells, it would be important to minimize any differences in sampling methods.

A member suggested that the items discussed above be combined into a single document for future reference of the GWMA and any successor agencies. The group agreed. Melanie added that if USGS was to be out taking field samples in February, this would need to be a high priority.

A member asked whether the EPA dairy cluster would be included in the ambient network. Vern stated that the dairy cluster area would be sampled as part of the drinking water study. The EPA had installed its own wells in that area, but their sampling methods were different. While their data would likely still be useful, integrating it into the ambient network would be difficult, since it would be open to challenge as "comparing apples to pears."

The member also asked whether the October 2015 USGS flow-path study would be incorporated into the final monitoring effort. Vern and Steve Swope stated that, at present, there were no plans to do so as the only purpose of looking at flow-paths would be to see what's up-gradient, not to create a picture of ambient drinking water quality.

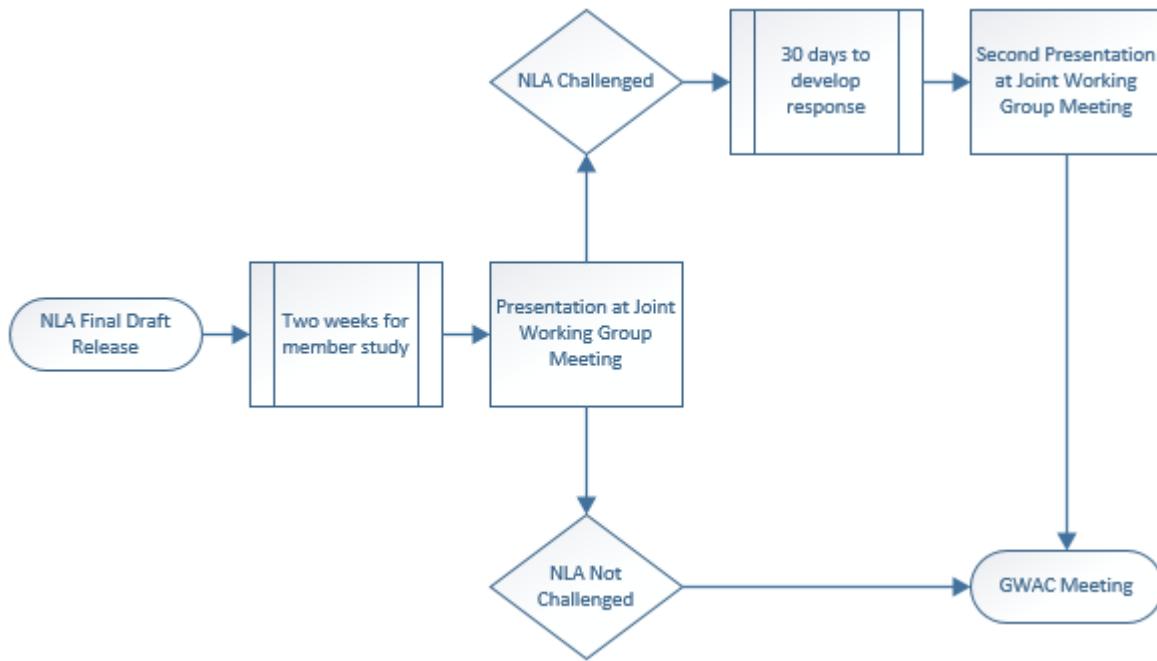
Nitrogen Loading Assessment (NLA): Melanie informed the group that the Department of Agriculture (WSDA) and the County were close to producing a final document in the "near future." WSDA has committed to giving a presentation on the Livestock/CAFO and Irrigated Ag portions to a consolidated working group once the final draft is produced, and another

presentation to the GWAC afterwards. Vern Redifer and Yakima County GIS would likely be giving the presentation on the RCIM portion to the same groups.

Some members expressed frustration at the lack of a firm timeline for the NLA's release. Melanie sympathized, but felt it was important the final product was done right, because if anything was found to be wrong, it would set the process back even further. Vern stated he felt "pretty confident" that a final document would come together no later than March 1st.

Having a completed NLA, which would explain how much of the nitrate problem was coming from each sector, would be necessary for working groups to assess the cost-effectiveness of various mitigation alternatives. Working group recommendations would need to be consolidated into one document, to be approved by the GWAC no later than October 1st to have adequate time to make it through the SEPA process for agency comments.

A member asked what would happen if working group members had problems with the NLA, and how they would be dealt with between April and October. After some discussion, members arrived at a rough timeframe that would allow the WSDA and the County time to respond to members' concerns, while leaving adequate time to produce a final document to inform working group recommendations:



Melanie added that information is always being updated, and that even after the final document is completed, it will likely be a "living document" as more information comes to light over the ensuing years.

Other Technical Issues/Next Steps: The group discussed a variety of outstanding issues, listed in the "Proposed Next Steps" section below. Given the number of topics, it was agreed that the Data working group would meet again, as scheduled, on February 8th.

The meeting adjourned at 2:40pm.

Resources Requested

Recommendations for GWAC

Deliverables/Products Status

The final draft of the Nitrogen Loading Assessment is nearing completion. WSDA and Yakima County are responding to comments from peer reviewers, and consolidating the different documents so they're consistent and read as one document. A combined working group meeting will be scheduled roughly two weeks after the release of the final draft NLA, whenever that occurs. If necessary, a second meeting will be scheduled 30 days after the initial meeting to address member concerns.

Proposed Next Steps

The following topics will be discussed at the February 8th Data meeting:

Progress on creating a single document, under the auspices of the Data Collection Working Group, clarifying 1) who's going to be doing what in terms of implementing the groundwater monitoring network and analyzing the data; 2) how the data will be gathered and analyzed; 3) the intent of this program is to create an ambient picture of groundwater quality in the GWMA, not to track sources; and, 4) the protocols on how drains were to be monitored. No firm deadline was attached to this, although if USGS is going to begin sampling in February, it will need to be as soon as possible.

The "no-action" scenario (what will water conditions look like in the GWMA in ten years if no action is taken?).

The location of purpose-built wells, in response to concerns by members at prior Data and GWAC meetings.

The question of how to analyze existing well assessment data, and deep soil sampling data, and who will be analyzing it. Vern will contact Dr. Troy Peters in this regard, as he had expressed a willingness to look at deep soil sampling data at a prior Irrigated Ag meeting.

The status of the contract with PGG on installing purpose-built wells, with the hope of making a recommendation to the February 16th GWAC meeting.