

## Residential, Commercial, Industrial, Municipal (RCIM) Work Group

### Charge from Groundwater Management Area Advisory Committee

#### Working Group Members

Dan DeGroot, Chair (Yakima Dairy Federation), Dave Cole (Yakima Health District), Elizabeth Sanchez (Yakama Nation), Jan Whitefoot (Concerned Citizens of Yakama Reservation), John Van Wingerden (Port of Sunnyside), Stuart Turner (Turner & Co.), Tom Ring (Yakama Nation), Kathleen Rogers (Citizen Rep), Sanjay Barik (Ecology)

#### Meetings/Calls Dates

Meeting: March 13, 2017  
Sunnyside School District Administration Building, 1110 S. 6<sup>th</sup> Street, Conference Room 23,  
Sunnyside, WA 98944  
Call in: 509-574-2353 (pin 2353#)

#### Participants

Present: Dan DeGroot (Chair), Kathleen Rogers, Steve George, Dave Cole, Jim Davenport and Bobbie Brady (Yakima County Support Staff). No one was present by phone.

#### Key Discussion Points

The meeting was called to order by Chair Dan DeGroot at 3:00 PM. Dan asked the group to begin the meeting with its discussion on the second agenda item as Jim Davenport had not arrived.

Yakima Health District Plan Required by WAC 246-272: Dave Cole thanked the group for their work on the nitrate contribution to the groundwater and said his participation in the discussions were enlightening. He felt the group's recommendations represented progress towards solutions particularly the recommendation that cities extend sewer service to those areas inside their urban growth areas because 100 percent of the septic waste would then be sent to a treatment plant.

Dan explained that he was interested in the Yakima Health District's (YHD) development of an operations and maintenance (O&M) plan and wondered if it could actually prohibit things like high density development or bring about required changes to failing septic systems. Dave's concern was that at present there are only seven staff in the environmental health services division of YHD. Their priorities are public health, surfacing sewage and mandated responsibilities, i.e., public food vendor and pool inspections and the facilitation of installation of septic systems; therefore, they have a limited capacity to plan and develop plans except in the winter. A member asked what costs would be involved in developing an O&M plan. Dave thought that discussions would reveal the need for legal counsel, i.e., the requirement for some to install special systems or denying the installation of a septic system because of density issues. There would also be a personnel/time cost to have discussions and put together a plan. Dan said

that the WAC required the Department of Health to provide guidance to the environmental health group on developing a plan and also mentioned that the WAC provides the authority to charge fees that could help with these costs. He reminded everyone that the WAC indicated that this should have been done in 2008/09. Dave pointed out that YHD has not had the funding to prepare and/or implement an O&M plan as has been the case for most of eastern Washington. Dave also said that while the Department of Health was supposed to give counties guidance on how to develop a plan adopting a “one size fits all” plan was difficult because health districts in each county in Washington State are autonomous and there is a great deal of variation in health districts county-to-county. Dave agreed that an O&M plan is important and said that he had spoken with Ryan Ibach (YHD Chief Operating Officer and a member of the GWAC) and Andre Fresco (YHD Administrator) about this and YHD is on board as well. He added that he would like a GWAC recommendation to be the impetus to the official start of a plan. Dave did not feel the process would be simple and would take time, thought and expense – funding would be needed to make it possible. A member thought the group should recommend to the GWAC that YHD put together a plan within a specified number of years and request funding for the project. Jim said normally it takes two to three years to complete a plan and public input is normal as well. A member explained that the recommendation to the GWAC would come from RCIM. If agreed upon the GWAC would make the recommendation to the Department of Ecology. Dan wanted to know if the RCIM recommendation was in line with YHD. Dave thought it was and indicated that he wanted a plan to be pursued that best addresses nitrates in the GWMA and to take into account densities, etc. Jim said he drafted a paragraph on this in the RCIM Draft Report (page 6) which the group reviewed. A member felt that it was suitably generic and didn’t tie down YHD to specifics which would allow them the full capacity of authority. Dave agreed it should follow the format of public plan making and agreed with the recommendations as written in the paragraph.

A member added that his recommendation would be for YHD to take the O&M plan to the GWMA first which would give a basis for taking it countywide. Dan liked that suggestion but pointed out that the code applies to the entire County and added that even in the County the O&M could vary because of distance to groundwater, density and soil type. Dave indicated that there was no map which indicated the distance to well water which would be useful in light of the potential GWMA recommendation to determine septic system types. Jim indicated that the County GIS department had prepared density maps. Dave thought that perhaps the Department of Health personnel on the GWAC could help with this. Another member wondered if the counties on the west side of the State who had already prepared O&M’s might have this information.

RCIM Draft Report: Dan wanted the group to go over the draft report that had been compiled by Vern, Jim and Dan. His goal was to finish the report at the April RCIM meeting. Jim thought that the group might want to review the Nitrogen Loading Assessment before it finalized its recommendations to the GWAC via the report.

A member wanted to know how it was determined that 6,044 residential households within the GWMA were discharging wastewater to an onsite sewage system as he had commissioned a study that indicated there were 6,180 systems. Jim explained that Vern had calculated the number with information from GIS. Steve will furnish Jim with a copy of the report he had commissioned which included detailed information on how the calculation was derived. Jim thought it was

important that the report and the Nitrogen Loading Assessment have the same number and felt it should be accurate.

A member suggested that page numbers be added to the report. It was also suggested that in the second paragraph on page 2, the acronym “ROSS” be added after 0-10, 11-40 and 40. In the paragraph starting “Conventional ROSS technology” (page 2) Dan wondered if denitrification could be brought up from 15% to 50% in high density areas. And, in the next paragraph starting “The predominant soil types” Dan wondered if there was a desire to identify the depth of the other 10 percent. Jim said this would be hard to do and added that if the group accepts the report he would suggest Dave go through it and assure its validity.

With regard to large onsite septic systems (page 3) Dan noted that the group had learned there were two in the Valley and that they had to file annual reports with the Department of Health – Dan was still trying to get copies of these reports from Ginny Stern. Under Commercial Onsite Septic Systems the group thought “and public facilities” should be added to the first sentence after the words “operates year-round.” A member wanted to know if anyone knew how many there were. Jim said no. Steve said his report said there were 157 and explained how that number was calculated. Steve will send Jim a copy of this information.

Dan summarized Residential Lawn Fertilizers and Hobby Farms and said that while the information is short on numbers it reflects the group’s view of their minor impact, but reflect the groups’ due diligence. Dan added that abandoned wells could be an issue on hobby farms. As for bio-solids the group noted there were two major users – the County which dealt with the majority of the product in the area and Natural Selection Farms which dealt mostly with imports into the area on preapproved sites and added that this was highly regulated with numerous reports.

The group also discussed discharges to surface water (page 4) and whether or not to include the list of current SWDP/NPDES permit holders. After some discussion the group agreed to leave the list in with the caveat that it reflects a snapshot in time, can vary and may or may not be all inclusive.

The group agreed that the second paragraph on page 5 which begins “The Department of Ecology maintains a Well Construction and Licensing System” should become the first paragraph in the section entitled “Water Wells” on page 4. The group asked how many of the estimated 3,853 notices of intent to drill a water well in Yakima County resulted in drilled wells and how many of those were actually inspected. Dave said YHD contracts with the Department of Ecology (Ecology) to inspect 50 percent of the newly drilled wells and added that YHD sends everything back to Ecology once they are done and so he was unable to furnish this information. He did add that actual reports were generated over the last few years. Jim Davenport will check with Ecology and see if he can obtain this information. Dave added that an inspection included tagging the well through GPS and insuring that there was a good bentonite seal.

In the first paragraph on page 5 beginning “Any improperly decommissioned wells” a member suggested the word “waste” be changed to “nutrients.”

The next few paragraphs on decommissioning wells caused the group to discuss whether YHD enforces decommissioning wells when there is new development. A member’s perception from

the discussion was that YHD's intervention was hit and miss. Another member wanted to know if the County permit to build might include a requirement to decommission any abandoned wells. The group thought that both the building and demolitions permit might ask if there are any existing wells on the property. A member thought that when people realized the cost of decommissioning a well they would simply cut it off at the ground or below the surface so it wouldn't be found. The group thought this kind of action was an indicator of why it was important to reduce the cost to decommission. The recommendation was made to permit the repair or decommissioning of wells by general contractors, rather than exclusively by well drillers so as to diminish the costs of decommissioning. Ultimately, Dan also recommended that the County, Ecology or YHD search for abandoned wells before a building or demolition permit is issued. A member added that the search include looking at the history of the parcel as it would reveal whether or not there had been any buildings on the land which would be indicative of a well on the property. Jim added that if the group made this recommendation the County would ask the property owner to hire a contractor who would inspect for wells. He felt that the decision came down to cost vs. risk and thought someone would charge \$1,000 to prepare a report, to look at the records and to check property. Dave suggested that since Ecology regulates abandoned wells the group instead could recommend that they put together a plan to locate and decommission wells. Dan added that Ecology estimated 10,000 abandoned wells in the State. A member asked who had jurisdiction of abandoned wells; Dave said Ecology. Jim said he will take the group's comments, incorporate them into the next draft for discussion at the April meeting. A member mentioned she had observed several homes being demolished in her neighborhood and wondered if they had properly decommissioned their wells. The group suggested that she speak with David Bowen to see what could be done and then report back to the group on her findings.

In the paragraph beginning "a relatively small number of existing water wells" (page 5) said that "no analysis of well data has been performed" Jim Davenport noted that USGS has information on those wells the GWAC is testing. Dan added that the group knows very little about poorly constructed wells.

The group then reviewed the report's recommendations. A member asked about the recommendation to "encourage connection of residences within urban growth zones to sewer systems." Jim indicated that he had attempted to summarize Vern and the larger group conversations that there would be fewer systems areas with large densities of homes were put on one large system. Dave stated that this could create other problems and nitrogen contribution focus would be in one spot. He added that one home could cause the failure of the whole system. Jim noted that this concept doesn't have a treatment plan like Buena. Dan said that if common systems like this were installed it would encourage cities to extend their sewer system because of the ease of hook up. Dave agreed.

Jim brought up a discussion David Bowen started at last week's Livestock/CAFO working group wherein David suggested that the group could focus on the cost of addressing the symptom – Jim wondered if this should be included in the RCIM report. David had estimated that if a three stage whole house filter system at \$1,800-2,500 per system was installed at approximately 870 homes with wells that were potentially impacted the cost would be approximately \$2 million; annual maintenance for each would be \$200-250 or about \$200,000 per year. The five year approximate cost would be \$3 million. This recommendation would take care of the issue but not take care of

the problem. A member thought that this information could be misleading unless the numbers were verified by an expert and suggested that it required a qualified report. Dan suggested that Jim talk to Vern about getting this on the next GWAC meeting agenda.

In the recommendation starting: "Request that the Yakima Health District prepare a plan, as contemplated," members suggested the word contemplated be replaced by either "stated" or "described." In addition, it was suggested that a recommendation be made that YHD investigate types of system upgrades that could be beneficial for OSS for the GWMA. In the recommendation paragraphs starting with "request the Yakima Health District add the nitrate density element to the pathogen element" (page 6) the group wanted the words "to the pathogen element" deleted. In the next recommendation starting with "promote use of technologies" the group wanted to insert "by YHD to planning departments." The group then decided that it would like these two paragraphs combined. Jim said that during the course of permitting the planning department could look at the density of systems and types of soils. Jim added that he had tucked into these requests the information from the articles Dan had forward to him.

Under the next to the last recommendation "educate the public regarding the importance of the integrity of wells" the group added "more funding was needed to decommission wells" and it was suggested that additional funding be requested so that homeowners with questions could get an inspection at a low cost if they have a concern. Dave added that he liked the recommendations in principle/theory but was concerned that eyes would be focused on YHD to do a lot of the work when groundwater quality was ultimately the responsibility of Ecology. Dan thought that people would see the YHD as the helping agency. Dave added that in that case ongoing and extended resources need to be made available as YHD's responsibilities were primarily health related and he was not aware of a case of blue baby syndrome in the County.

Jim pointed out that he had listed the recommendations in random order. He will redraft the report to include the group's recommendations and combine like recommendations for review at the group's next meeting which is scheduled for April 10 at 2:00 PM. Dan asked that any further recommendations be emailed either to Dan, Bobbie or Jim. The meeting adjourned at 5:08 PM.

## **Resources Requested**

### **Recommendations for GWAC**

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The group asked Jim to talk to Vern about presenting David Bowen's temporary solution (as explained in the Livestock/CAFO Working Group meeting) to the GWAC in one of its meetings.

### **Deliverables/Products Status**

### **Proposed Next Steps**

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Steve will send Jim a copy of the report he had commissioned.

Kathleen will report on how her calls to Ecology regarding potential abandoned wells were handled at the next meeting.