

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: February 13, 2017
SSD Administration Building, 1110 S. 6th Street, Conference Room 23, Sunnyside, WA 98944
Call in: 509-574-2353 (pin 2353#)

Participants

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

Key Discussion Points

The meeting was called to order at 2:04 PM. Everyone introduced themselves. Dan gave an overview of the information provided to the group by David Bowen from supplemental questions posed to him and the Department of Ecology (Ecology) at the November RCIM meeting. Jim Davenport was going to integrate the information David provided into the draft RCIM report to the GWAC. Review of the draft report will be the focus of the group's March meeting as noted further below.

Dan asked Jim to update the group on the well improvement funding and Ecology concerns about drilling "new" wells. Jim said funding would be investigated after recommendations were made by the group to the legislature. Dan was concerned whether funding could be procured. Jim said drilling any new wells was complex and the State and Ecology were currently discussing this topic. He suggested that the group emphasize the repair and reconstruction of existing wells as a potential alternative to newly constructed ones when it proposed the replacement of old at-risk wells as a possible alternative solution. Dan added that in some areas it wouldn't make sense to drill ten new wells, but to replace them with one community well and wondered if Ecology would allow this. Jim thought the suggestion should be made as part of the group's strategy to improve water and believed community wells made good sense. He added that it would require long-range planning and funding, but would be good to suggest. The group also discussed an issue that Avery Richardson from Ecology had spoken about in the meeting on abandoned wells. Avery had said that cities acquired tiny water rights under city municipal code when cities decommissioned people's wells in urban growth areas as they hooked up to city water. Jim did

not believe that everyone was required to hook-up if they were a certain number of feet away from city water and that such a requirement should be added to a list of possible solutions so that wells that were not well cased, sealed or no longer in use could be properly dealt with. The group agreed to add this and recognized that it was a good suggestion because of the building density in urban growth areas.

A member wanted to know if she could determine the number of wells applications in Yakima County over the past year. Dave Cole explained that Ecology permits exempt wells as part of the County building permitting process. Yakima Health District then performs random inspections of approximately 50 percent of the new wells added in Yakima County. He added that the information the member was looking for could be found on the Ecology website.

Jim suggested that the group also recommend community wells were advisable where there were larger concentrations of homes (15-20) and where nitrate concentrations were over 10PPM. The recommendation would need to include that the County perform an engineering study of areas to determine if community wells were feasible and/or a better option.

Dan then invited Dave Cole (Yakima Health District) to report on the information the group had requested in its October meeting. Dave reported WAC 246-272A governs onsite sewage systems (OSS) and in particular operation and maintenance plans in WAC 246-272A-0015. Subsection (1) requires all counties bordering the Puget Sound to develop a written operations and maintenance (O&M) plan and Section 5 requires an O&M plan be developed by local health officers for all other jurisdictions not required under subsection (1). However, Dave learned that not a single county in eastern Washington had actually done this.

Dave believed that there could be two approaches to a plan the Yakima Health District might consider under this WAC. The first would be enforcement and the second education. He believed that the enforcement component would require dedicated easements from each property owner with an onsite sewage system to the Health District to inspect and pump every three to four years for gravity fed systems and more frequently for alternative systems. There was a discussion about the viability of obtaining easements from property owners, whether an easement could be acquired retroactively or if the requirement would need to be limited to those requesting a permit by making it a requirement before a permit was issued. The group also discussed whether the easement would "hang over" the entire property or be for a specific route. Dave felt a "hang over" easement would be more useful. Another member suggested that an easement could be required at the time of sale. The members also discussed deputizing inspectors, or possibly an ordinance requiring access but Dave felt (and had also discussed with the attorney for the Health District) that they needed an easement in order to do an adequate job. Jim suggested obtaining a license to access the property which is a privilege granted to a person; as opposed to an easement, which would grant permission to touch and concern the ground (not a real property interest). Jim felt both had the same result, but perhaps homeowners would be more accepting of the term "licensed" access. Dave wanted to know if the group had considered application of these requirements within the GWMA boundaries only or countywide. Jim thought that the WAC may authorize limiting the requirement to GWMA boundaries where the groundwater is sensitive as WAC at Section 5 read "within the jurisdiction."

Dave pointed out that the WAC also provided for: 1) A notice to be placed on home titles identifying operational requirement for maintenance; 2) An OSS inspection requirement at the time of sale which some banks are doing now. Dave said that he thought half of the residences in Yakima County were on septic systems. He looked at Zillow and found that there were 5,000 sales in the last year and 2,500 mortgage reviews. Yakima Health District only did 100 mortgage reviews last year which included septic pump and site inspection. He believed an OSS inspection requirement would require an estimated addition of five staff; 3) Required pumping every one to four years depending on the type of system; and, 4) Required alternative septic systems with the ability to reduce nitrates at a cost of \$15-20,000 per system as opposed to the norm of approximately \$5,000. Dave said that conventional gravity systems if operating properly and everything is right (e.g., if the soil is not saturated) will reduce nitrates by 20 percent but the most common is 10 to 15 percent and that nitrate reducing systems can reduce by 50 percent if operating properly. He also pointed out the increase in cost for maintenance and additional effort to operate. There was some discussion that the information provided by Leslie Gordon (Department of Health) indicated at a previous meeting that the nitrate reduction could be higher in some alternative systems. The group discussed that these sorts of systems could be required either countywide or within the boundaries of the GWMA when current OSS have failed.

The second approach Dave suggested was educational encouragement. He suggested developing brochures and flyers dispensed at time of permitting, in the Health District office and on its website, at title companies for closings, building departments, septic pumping companies, and media outlets. "How To" videos could be created for the County's oral learning culture. A manual could be written and provided to new homeowners so that OSS are not "out of sight out of mind." Dave felt this approach should be attempted first and could have a positive effect on the whole valley not just the GWMA and this approach would be far cheaper than the enforcement track. He understood that the GWAC would test water through purpose built wells or private wells in order to assess the trend of nitrates and felt that waiting for the trends would alleviate the invasiveness of the enforcement (both the level of energy and possible costs). This approach would allow time to build public understanding of the issues before a more invasive approach was taken. He also pointed out that in its initial findings the nitrogen loading assessment attributed a two to four percent nitrate contribution to onsite sewage systems. Dan felt this was a misleading perception. Jim pointed out that everyone could agree that onsite sewage systems don't apply nitrates at agronomic rates and that everything goes directly to the aquifer versus a cropping system which is designed to uptake. He also agreed that it was important to address every contribution even if it's small. Dan added that density of systems must be added in as a factor for onsite sewage systems. Jim said that the County GIS could identify the dense areas.

The group agreed that the GWAC should recommend to the legislature that the Yakima Health District put together its O&M plan and provide funding for the District to carry out the plan. The group also agreed that they wanted to wait on an enforcement plan until the data for well testing was in; they wanted proceed with the education component plan first.

The group wanted to know what was included in an inspection. Dave estimated it would require 20 to 25 minutes on each property and include drawing a sketch if there was no as-built on file. No probing is involved. They would check the pump for backflow or surfacing to ensure it was in proper working order. The group wanted to know if they looked at density when approving new

systems. Dave said they only look at minimum setbacks – five feet to the property line; the distance from structure and foundations; and the reserve area which was required. Most systems in Yakima County are on property that is an acre in size. He added that nitrates are never considered in the Code (except in Puget Sound cities) – pathogens are the issue. It was suggested that the RCIM recommend that approval of onsite sewage systems take into consideration nitrate contamination before they are approved.

The group moved on to completing the EPO questionnaire and the answers are as follows:

1. Examine residential, commercial, industrial and municipal operations and their contributions to N loading in the aquifer.
2. 1) Significant research on onsite sewage systems; listed large onsite sewage systems; 2) Ecology explained its NPDES permitting system to the group; 3) Defined hobby farms and their contributions; 4) Determination of residential and commercial application of fertilizers – information was conveyed to the Nitrogen Loading Assessment; and, 5) Assessment of golf courses, port districts and fertilizer distribution facilities.
3. 1) The NPDES permitting system through Ecology covers the “CIM” sections of this group’s purview; 2) Onsite sewage systems are a direct source to groundwater as they are systems with no uptake – the full load goes directly to groundwater; 3) Hobby farms, golf courses, municipal, commercial and residential areas need to know not to overload fertilizer or water applications and remember that mulch is fertilizer; 4) Hobby farms should be aware of where their onsite sewage system is located and should not build a corral over a well or on top of a drain field.
4. 1) Community wells (outside urban growth areas) where there is rural density and a greater nitrate concentration is present; 2) Extension of municipal sewer systems within the urban growth areas; 3) Development of an operations and maintenance plan by Yakima Health District as prescribed in WAC 246-272A focusing on education first and then enforcement if testing data declines; 4) Ecology to do a trend analysis of nitrate data (actually charting the numbers) on NPDES permits.
5. Hobby farms, golf courses, municipal, commercial and residential properties with lawns, owners and renters of properties with onsite sewage systems.
6. The group felt that the new EPO brochures generally provided this information although some items that can disturb the function of onsite sewage systems were not addressed in detail, e.g., garbage disposals, feminine products, leaky faucets and toilets.

Jim will add the group’s input to the draft RCIM report and forward it to everyone for review at least a week prior to the March 13 RCIM meeting. It will be discussed at that time. The goal was to complete the report at the April 10 RCIM meeting. The meeting was adjourned at 4:00 PM.

Resources Requested

Recommendations for GWAC

Deliverables/Products Status

Proposed Next Steps

Jim will revise the draft RCIM report.