

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

### Charge from Groundwater Management Area Advisory Committee

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#### Working Group Members

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Ryan Ibach, Chair (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), Dan DeGroot (Yakima Dairy Federation)

#### Meetings/Calls Dates

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Meeting: June 13, 2016, 2:00-4:00 PM  
Sunnyside School District Administration Building, 110 S. 6<sup>th</sup> Street, Conference Room 20,  
Sunnyside, WA 98944  
Call in: 509-574-2353 (pin 2353#)

#### Participants

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Present: Ryan Ibach, (Chair), Jim Davenport, Dan DeGroot, Steve George and Bobbie Brady (Yakima County Support Staff)

#### Key Discussion Points

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The meeting was called to order at 2:02 PM by Chair Ryan Ibach.

#### List potential solutions to high nitrates in the groundwater that are in the purview of the RCIM Working Group.

Jim Davenport suggested that the group begin by making septic tanks a primary point of discussion and encouraged everyone to be creative and list all possible strategies.

##### SEPTIC TANK/WELL DISCUSSION

A member suggested that it might be wise to bring in an expert to explain how existing and new septic tanks and drain fields work and explain what options might be available in lieu of a leaching drain field. The member felt he had a basic understanding, but no clear picture of potential solutions. He had heard about mound systems and sand filters used in Western Washington but was unclear as to what their purposes were. Ryan stated that these systems are used when there is either a high water table or when the soil drains poorly.

Jim pointed out that Vern was researching septic tanks and as an engineer would have a better understanding. Another member thought that in addition to hearing from an expert on septic tanks it might be good to look and see what options other GWMA's tried. He also believed that the group could ask PGG or other County personnel.

Dan thought that potentially the installation of hybrid treatment plants like found in Buena might be an option. This hybrid plant was put in by the County. They repaired the tanks that were corrupt, hooked them up to a County system and put the whole town on it. There are four cleaning tanks. There are no drain fields anymore. The County has a lot of information on this and could be a resource if the group desired more information. They also drilled a new community well and took control of that. Jim believed that Vern had been responsible for the installation of this when it was first put in. Jim also noted that he had just received a notice that the County was coming to pump the tanks in Buena this summer – regulations require that this be done every three years. Systems in Outlook and Crewport were installed as well.

A member said this could be put on the list of solutions for areas where there are larger clusters of homes but was concerned that the cost would be out-of-line and it would be difficult to fund. A concern was voiced too that in a rural economy this didn't seem like an economically viable option.

Dan wanted to know how many homes needed to be in an area to put together a treatment plant. This knowledge would allow the group to look at map and decide where to put them. He believed that this would help determine what percentage of septic drain fields could be taken out of play.

Jim pointed out that this solution would increase the number of treatment plants in the GWMA and wondered what level of treatment could safely then go in the river or drains. The group also asked if the liquids could be applied to agricultural lands in the same manner as irrigation water. If so, it would require additional lagoons and the ability to pump to appropriate locations. The group discussed as well how much storage would be required for approximately 200 days (as there would be approximately 165 days of application).

Another member suggested density limitations could be added to the urban growth plan as a possible solution option. The density limitation could require that if you desire to subdivide your land you must put in one septic system for all of the new parcels so that when a City structure expands to that region and sewer is made available there would only be one system to eliminate. A member pointed out density is a remedy but it doesn't fix the problem it just pushes it around. Density becomes an issue where there are clusters of houses causing cumulative loading. As long as there is enough acreage between systems there is less of an issue.

Another idea for a solution was a planning concept – push density to the UGA then you would be in a better position to set up a central system like they did in Buena.

A member noted another solution could be the restoration/retrofit of older septic systems or wells. Jim added that incentives or tax breaks could help make retrofitting wells and/or septic systems possible.

An additional item on the solution list could be drilling new deeper wells and wells away from drain fields. Wells could draw water from the deeper parts of the aquifer where lesser levels of nitrates are found. In addition, drilling wells farther away from drain fields may also be a solution. However, the group agreed these solutions don't address or help the nitrogen load at a

more shallow point in the aquifer nor do they solve the nitrate levels. Jim reminded everyone that the GWMA WAC asked the group to recommend best things but the group may also have to recommend ideas that are hard to do and may seem odd.

Jim suggested that a solution could be to require a builder to demonstrate that a septic design would not add to the nitrogen loading problem if they want to develop and build. This would be managed similar to the Groundwater Management Act where in order to issue a permit you must prove that there is a legal adequate supply of water.

Dan added another possible solution could be to require cities to take on the management of septic systems close to urban areas potentially with hybrid systems. He also pointed out that this would be a huge expense and might not be a popular solution with the County as it would affect their tax base. Another member noted that while there would be a decrease in the tax base, there would be less services to provide which would reduce costs.

A member suggested aquifer protection area districts. This would need to be put to a vote and would create a tax on the property owner's tax bills every year similar to a flood tax or noxious weed tax. People could be exempt from this for behaviors that would reduce nitrates like pumping your septic system every two or three years. This kind of program has been utilized in King and Snohomish Counties. The program would allow the group to provide incentives and raise money at the same time. The income could help fund education, county systems, consultants to advise people and so on. There was a concern that this wouldn't pass but Jim pointed out that lots of education would get done in the process. Another member said that they didn't favor tax structures and preferred voluntary incentives with payoffs.

The group also discussed improperly constructed wells and abandoned wells. Jim said abandoned wells were difficult to locate, but thought that if a recent permit had been issued to construct a well on an older site, it would be safe to assume that there was an abandoned well on the property. A search could be performed and the property owners could be contacted. This would require an administrative person to do this. He went on to say that people don't usually know if there is an abandoned well on their property. There could also be a voluntary program with incentives to have a well inspected and retrofitted or to report an abandoned well. Another member pointed out that people are required by law to decommission their wells and this would have to be addressed. Others felt that if enough exemptions were provided to give people the incentive to take corrective action they would respond.

It was suggested that the group acquire more information and data on each well reported to have a high nitrate problem, i.e., how old is the well, how it was built, are they cased above and below the ground, and the well's depth. Someone asked if GIS could provide this information as good data like this may help provide better solutions.

Another person wondered if pumping or cleaning out the sand filter more frequently would make a difference.

One last solution was offered - don't farm around a well.

### LAWN DISCUSSION

Dan is still concerned about the 2 lbs. per acre loading number adopted in the RCIM piece. Dan felt the number should be higher. He looked at some websites and determined that mulching adds 75 lbs. of nitrogen. He knew that Kathleen called maintenance people at schools, parks and golf courses. One member noted that there weren't many golf courses in the GWMA – just the one in Sunnyside. Another member felt that over-application was probably not a huge problem on public areas but might be an issue with private lawns. They did feel that overwatering might be an issue.

Jim said that in Las Vegas they gave a money incentive to property owners to change to a yard that used less water. The program worked quite well. Another member thought that it was important to educate people about nitrogen applications to lawns and to cut back on watering.

The group agreed that it was also important to amend the “use it or lose it” watering program in high nitrate areas. It was suggested that someone could talk to Senator Honeyford and talk about this. It would also be important to think through Irrigation District and Tribal issues but the group felt the solution warrants talking about it.

### Status of RCIM component of Nitrogen Loading Assessment

Dan wanted to know if the report included information from the Port District for their processing plants. Jim said that the Department of Ecology was going to try to get the information and pass it on to GIS as the Port is regulated – Ecology has this information.

Jim mentioned that Vern had indicated in the latest Data working group meeting that the RCIM component would be to WSDA by the end of June.

### Discuss Septic Study in the GWMA

Stu Turner had proposed a study of septic systems to this working group. Recently, at another working group meeting he volunteered that a study that had been privately funded was under way. Not everyone agreed that this private study should stand in lieu of one done by the RCIM working group. Jim liked Dan's idea to bring in an expert with known credentials into one of the RCIM working group meetings so that the group could ask questions specific to the GWMA about septic systems. Jim felt that this would allow the group to better determine if they needed to do a septic study. The group felt it was critical to find an expert who could help explain how septic systems work and help with strategies to mend the problem.

### Review Section 2.3 of the Work Plan to determine progress.

Dan proposed this agenda item as he believed it gives the group a “to do” list as it moves forward. He felt like most of section one was done. Dan pointed out that the group had never put together a purpose statement and he wondered if it was necessary. Jim said that would depend on his personal approach and the ability to prioritize the work that needs to get done.

### Selecting a new chairperson

Jim let the group know that Dan had volunteered to be the new chairman. He said that the procedure for replacing a chairperson in a working group was for the meeting participants to

decide. The group agreed that Dan would be the new chairman. Ryan said his replacement at the Yakima Health District will become a member of the working group. Both will attend next month's meeting so that Ryan can make introductions.

**Conclusions. Review of Action items**

Commercial septic systems are not a part of the RCIM piece of the nitrogen loading assessment. Dan felt it was important to think about this some more as he felt the piece would be incomplete without it.

The group agreed that Jim Davenport should find a septic engineer who could bring expert advice to the next meeting to help the group better understand how septic systems work and to talk about possible solutions. They also asked Jim to make sure the Department of Ecology turned in the information on septic loading.

Several members had conflicts with next month's meeting date and suggested it be moved from July 11 to July 18 at the same time (2:00-4:00 PM) and location (Sunnyside School District Administration Building). Bobbie Brady, Yakima County Support Personnel, will work on the logistics and rescheduling the meeting.

**Resources Requested****Recommendations for GWAC****Deliverables/Products Status****Proposed Next Steps**

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