

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

### Charge from Groundwater Management Area Advisory Committee

#### **Working Group Members**

Robert Farrell, Chair (Port of Sunnyside), Elizabeth Sanchez (Yakama Nation), Ryan Ibach (Yakima Health District,) 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**

Meeting: March 26, 2015 10:00 AM – 12:15 PM

#### **Participants**

Present : Robert Farrell, Chair (Port of Sunnyside), Avery Richardson (Department of Ecology), Ryan Ibach (Yakima Health District), Kathleen Rogers (Citizen Rep), Jim Davenport (Yakima County), Dan DeGroot (Yakima Dairy Federation), Lisa Freund (Yakima County), Vern Redifer (Yakima County), Lee Murdock (Yakima County); Yakima County Support Staff – Erica Naasz

#### **Key Discussion Points**

- Speaker: Avery Richardson (Ecology) Abandoned Wells and Decommissioned Wells
  - Educational Public Outreach regarding Abandoned and Decommissioned Wells
  - How to locate Abandoned Wells
- GWMA Plan timeline regarding RCIM

Avery Richardson, Ecology hydro-geologist, defined Abandoned and properly Decommissioned Wells and explained the challenges associated with decommissioning wells.

The main reason wells are abandoned rather than properly decommissioned is due to the cost to decommission, which can be up to 50% of the cost to construct a new well. Home owners believe (or state) that they may reuse the well at a later date, or simply do not want to decommission them. Most properly decommissioned wells are a result of land use actions or property owner changes.

A discussion followed regarding available well records and how to conduct online searches for new, decommissioned, or replaced wells.

Avery noted that a couple hundred new wells are drilled each year in Yakima County. Ecology is notified of every new well drilled, excluding the Yakama Nation.

Online searches: Ecology maintains online well drilling records. Pre 2007 records can be searched by section, Township and Range. Post 2007 by parcel search. One cannot search for replacement wells on the Ecology database — one would have to look at all entries.

Avery added that private wells are not permitted per se – however, a Notice of Intent is required, and the property owner must complete the well within thirty days.

The group suggested that one could determine the number of replacement wells by searching new well records and subtracting any known knowledge of other types of wells. The County's aerial records could also be used to identify parcels that had a home on them at one time.

Avery observed that drilling a new well, decommissioning without a license, or sawing the top off to cover up a well is a Class B Felony.

Property owner's fear of litigation was discussed. Avery clarified that Ecology reserves that action for more serious, problematic abandoned wells, e.g., a well that is a threat to the environment or poses potential injury to humans or animals. All in all it is the property owner's responsibility to decommission their well; if the owner states they plan to reuse the well, Ecology cannot act on it.

A member mentioned a possible rumor stating he/she had heard a dairy was putting liquid manure down an old well. Avery concluded that was most likely false information as solids would instantly plug up a well.

Jim Davenport asked the group to quantify how important abandoned wells are to overall nitrogen loading. After lengthy discussion, Jim observed that identifying abandoned wells are a "cart and horse" issue: overall nitrogen loading by source can be best quantified after a groundwater monitoring system is in place.

### **Education and Public Outreach**

A comment was made that raising public awareness is the most important part of the project. Lisa observed that the EPO is prepared to provide the public education. The EPO needs to know who to target and what the messages are.

Vern mentioned when old structures are being torn down it is a requirement of the County to obtain a demolition permit and it is the Counties process to ask the property owners about any old septic systems. However, the only time the planning department would know about an old well or septic is during land segregation.

Jim asked if there is a timeline for Abandoned Wells as the group is to be in compliance with the monitoring program, receiving an answer of, soon.

Avery added that the highest nitrate areas are those related to anhydrous ammonia because it moves through the soil quicker. This is used mostly in wheat, lentil farming, and row crops.

The group discussed grant funding to pay for well decommissioning. Vern observed that grant funders would require us to quantify the problem. Another member suggested finding a small area with high nitrates, complete a thorough investigation of the area, and document the findings to determine a broader area. Vern replied that through the High Risk Well Assessment survey, we

found 30 wells out of 172 that had high nitrates. None of the data gave defining answers to the problem.

### GWMA Timeline

The group reviewed the 1-29-15 GWMA Timeline related to RCIM assignments. It was observed that each working group is expected to review the timeline, and provide additions and/or comments back to the GWAC by its April meeting.

- [1. Area Characterization-Define Existing and Future Groundwater Uses-RCIM] the group discussed whether the Area Characterization work was complete. A question was posed regarding who was going to complete this work. Jim Davenport reported that he has collected literature but has yet to receive information from the RCIM.

[2. Problem Definition-Nitrogen Loading Assessment-Septic Systems-Lines 59-60] A broad discussion took place regarding how the RCIM can capture data to measure the amount of nitrogen loading from septic systems. Bob stated that Gordon Kelly, Yakima Health District, had provided information concerning the number of septic systems in its database, dating back to the early 1970's. The number of septic systems is available by Township and range. Bob added that the Data Working Group needs to take this information, along with an estimate of nitrogen loading from each system, to estimate the nitrogen loading to the aquifer from septic systems.

He concluded that it will take significant research time to arrive at a defensible estimate of nitrogen moving out of septic systems.

- Vern suggested that the County has the ability to retrieve number of systems based on residential use on the Assessor's database (GIS.) The loading [from each system] would depend on household size, location, soil, and volume of water draining through the system.
- New time line date May 25, 2015
- [4.3 Develop Nitrogen Loading Estimates for Municipal Underground Injection Control (UIC) Devices-Line 77] This information was already provided to the County (Don Gatchalian).
- Line 83 Residential Fertilizer 3/2/15 – 5/1/15 the group will survey municipal sources and use them as a substitute for residential sources. It was determined that gathering residential data would be extremely difficult; however, information from municipal sources would be easier to collect and could be used as a substitute for residential sources. There is a complex list of potential sources: watering lawns, golf courses, domestic uses, fruit processing centers. Water quantity is only important if being used to make quality better such as diluting.

- When a member asked if this timeline is doable, the answer was "no." Avery reminded the group to be careful of expectations, that nitrates take time to clean up.

**Actions:**

- Confirm which members and participates would like to continue to receive emails and/or information regarding meeting.
  - No response will indicate that person is no longer interested in participating.
- Kathleen agreed to contact the Sunnyside City Manager to find out how much fertilizer is applied to municipal locations such as parks, school grounds, and golf courses.
- Kathleen agreed to research data pertaining to discharge from septic systems, given guidelines.
  - Kathleen will bring preliminary data to the RCIM meeting on April 23, 2015 and have final data by May 28, 2015.
- EPO - Abandoned wells – Education and information strategy. Avery suggest a quote such as "If you have an old well, do not cut it down. Call the Department of Ecology." He also noted that, Lisa F could meet with him to have a public announcement printed in both English and Spanish.
- EPO - The outreach campaign will use existing materials and determine who and where to distribute documents. Potential audiences are farms and fertilizer distributors. Bob will get with Jim Trull to discuss distributing the information through the Sunnyside Valley Irrigation District.

**Resources Requested**

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**Recommendations for GWAC**

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**Deliverables/Products Status**

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**Proposed Next Steps**

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- RCIM Group to review preliminary data researched by Kathleen on April 23, 2015.
- Have final data by May 28, 2015.
- Next RCIM Meeting scheduled for April 23<sup>rd</sup> 2015.

