



Friends of Toppenish Creek

December 11, 2017

David Bowen
WA State Dept. of Ecology
Central Washington Regional Office
1250 West Alder Street
Union Gap, WA 98903-0009

Dear Mr. Bowen,

Since 2012 the Lower Yakima Valley Groundwater Management Area (LYV GWMA) has wrestled with the problem of elevated nitrates in groundwater. Why? Because poor and not so poor people in the area spend over \$1 million per year on bottled water. Their only source of drinking water is not safe. What a powerful statement of need.

The legislature saw this great need and appropriated \$2.3 million for the GWMA program. But . . . at the same time . . . certain opportunists and a few bureaucratic entrepreneurs saw a golden opportunity. There was money to be made for those with the right connections.

At the end of five years, who has benefited and who has lost ground due to ongoing pollution and the LYV GWMA? Here are some facts.

In 2011 Yakima County told policy makers what the GWMA would accomplish. The GWMA would demonstrate improved water quality within five years. In 2012 the advisory committee agreed upon certain necessary, supporting tasks.

- The GWMA needed a system of monitoring wells in order to analyze whether water quality is improving. Those wells have still not been drilled, although the GWMA has spent over \$240,000 on planning the system.
- The GWMA needed data from deep soil sampling in order to study the movement of nitrates from the land surface to the aquifer. At a cost of \$1,400 per site the GWMA took samples down to six feet on 175 fields. That data has not yet been analyzed or even shared with the public.

- The GWMA contracted with the Yakima Health District to sample domestic wells and to survey well owners. The results of the questionnaire are still not available, even to members of the advisory committee.
- The GWMA paid a group of engineers to summarize all applicable rules and regulations. For \$10,000 that group delivered an eight page document that a college freshman could have written in a few days using google.
- The GWMA paid a group of engineers \$76,000 to compile and analyze a list of Best Management Practices designed to protect the groundwater. They cut and pasted work from another group's study. That work is not being used.
- The GWMA needed to determine how much people know about nitrates in groundwater. Students from Heritage University conducted a survey in 2013 that showed only half of the people in the area were aware of the problems. There is no follow up survey to tell us whether education and public outreach has been successful.

From the outset the GWMA advisory committee agreed that a Nitrogen Loading Assessment or Nitrogen Availability Assessment (NAA) was needed in order to identify the major sources of nitrate pollution. In order to address the problem the group needed to know, with reasonable certainty, what was causing it.

The Washington State Department of Agriculture and Yakima County collaborated on the NAA project with a delivery date of July, 2015. This gave the advisory committee plenty of time to analyze sources and propose targeted solutions. But . . . that delivery date was moved back to December 2015, and moved back again to 2016 and moved back again to whenever the authors cared to share.

Finally the document arrived in April 2017. There were some surprises.

- The authors ignored cropland that receives bio-solids
- The authors ignored drain fields for municipal and industrial waste water treatment
- The authors ignored leaching from composting operations
- The authors ignored nitrogen fixing from alfalfa
- The authors ignored the results from GWMA Deep Soil Sampling
- The authors ignored input from farmers on the GWMA Irrigated Agriculture Work Group
- The authors found that 77% of nitrate available for leaching on irrigated cropland came from orchards and vineyards

No kidding. For years the advisory committee had been talking about nitrate pollution from animal agriculture, a familiar, worldwide problem. But in the Yakima Valley, according to WSDA, the biggest culprit is all those polluting apples and grapes.

The NAA stated that on average an apple orchardist applies about 60 pounds of nitrogen per acre at the beginning of harvest. (This is not a large amount. Some crops receive over 250 lbs per acre.) The NAA calculated that on average, in the fall after a crop is harvested, there is an excess of 90 lbs of nitrogen per acre on apple orchards. This makes no sense. But this calculation led the WSDA to identify apple orchards as the largest contributor to the problem of nitrates in groundwater.

Local farmers on the GWMA Irrigated Agriculture Work Group had provided the WSDA with on the ground information. For the most part the WSDA ignored local farmers and relied on anonymous sources to develop a convoluted model that no thinking person believes. Members of the GWMA advisory committee pointed out problems to WSDA in April 2017. At the time of this writing, eight months later, WSDA and Yakima County have not made corrections to the study and have inputted the data into a GIS system that maps available nitrate for the target area. The GIS is available at <http://arcg.is/1ie9mP>

Last week Ecology gave the GWMA a one year extension to complete its work. This is a one time, last chance to get things right. The agencies and contractors who will complete the GWMA research and final plan must be held accountable for the accuracy and timeliness of their work.

There must be tools for enforcement. There must be a watchdog. The advisory committee was supposed to perform this function but agencies have arrogantly ignored members' questions and concerns. The Friends of Toppenish Creek respectfully ask Ecology to modify the amendment to Interagency Agreement, IAA No. C1200235, so that:

- Yakima County will provide a detailed balance sheet of GWMA debits and credits on a monthly basis to members of the advisory group.
- Yakima County will re-write the GWMA timeline using the list of tasks from the *GWMA Plan Timeline* that was submitted to Ecology in the 2015 First Quarter Report. Yakima County will report compliance with the new timeline to the advisory committee on a monthly basis.
- Failure to meet 80% of the benchmarks in the revised timeline for two consecutive months will require formal discussions with GWAC participation.
- Failure to meet 80% of the benchmarks in the revised timeline for three consecutive months will require revision and/or cancellation of the interlocal agreement and that revision and/or cancellation will require approval from the GWAC.
- The purpose built wells approved by the GWMA advisory committee will be drilled and in place by February 28, 2018. If there is insufficient funding to drill all 30 wells Yakima County will consult with the GWMA advisory committee regarding selection of the most important wells.

- Agencies that send staff to the GWMA meetings (Ecology, DOH, WSDA, EPA USGS, SYCD, SVID, YHD, Port of Sunnyside, Yakima County, and WSU) will provide documentation of their costs for time spent reviewing material, meeting time and travel. These reports will be due on April 15, 2018; July 15, 2018 and Dec. 31, 2018.
- Yakima County, Ecology and WSDA will re-write the Nitrogen Availability Assessment (NAA) and comply with the Scope of Work (SOW) as much as possible. This will be completed by February 28, 2018.
- Yakima County, Ecology and WSDA will provide documentation of staff time and costs for revising the NAA. This report will be due on March 15, 2018,
- Yakima County, Ecology and WSDA will document the input from growers and producers from the Irrigated Ag Work Group. WSDA will give that data equal or greater weight than the opinions of fertilizer salesmen and agronomists in the revision of the NAA. If necessary WSDA will meet again with the Irrigated Ag Work Group and verify the information.
- Yakima County, Ecology and WSDA will incorporate data from the GWMA Deep Soil Sampling into the NAA as required in the SOW.
- Experts who contribute to further data gathering and research analysis for the NAA and the GWMA plan will be clearly identified by name and credentials
- Those who supervise and/or conduct further research for the NAA and the GWMA plan will be clearly identified by name and credentials. There will be a clearly stated chain of command and confirmation of accountability for any work done after December 31, 2017.
- Those who write the GWMA plan will be clearly identified by name and credentials.
- Yakima County and agencies that participate in the writing of the GWMA plan will provide documentation of staff time and hourly rates for work on that document. This information will be shared with the GWMA advisory committee on a monthly basis.
- Members of the GWMA advisory committee will be allowed to challenge any supervisor, any expert or any staff person who does not possess the necessary expertise to perform a job or gives out false information. Such a challenge will be formally addressed by the GWAC. Decisions will require a formal vote by participating members.
- Ecology will find two new members for the advisory group to represent the Hispanic population of the Lower Yakima Valley and will consult with these representatives on the most effective ways to engage this population.
- Education and Public Outreach required to inform the public about the GWMA plan will be based on sound and clearly referenced principles of adult education.
- Names and credentials of staff and others who design and deliver the Education and Public Outreach component of the final GWMA plan will be clearly stated.

- Either in cooperation with the GWMA Funding Work Group or through a contract with a qualified expert, Yakima County will provide the advisory group with cost estimates for each of the proposed solutions to the Lower Yakima Valley groundwater nitrate problem.
- No solutions will be approved until the advisory committee has agreed upon the level of contribution from major sources, has evaluated the likely impact of proposed solutions, has received estimates of cost for implementation and has ensured that there are solutions targeting each of the major contributing factors.
- Any paid individual found responsible for failure to comply with the terms of any GWMA contract or interlocal agreement will provide the advisory committee with a rationale for the lack of compliance. If the committee finds the rationale to be unsatisfactory the responsible individual will be immediately removed from his/her position of authority in the GWMA work.

Thank you for your time and attention. We look forward to hearing from you at your earliest convenience.

Sincerely,

Jean Mendoza

Jean Mendoza

Executive Director, Friends of Toppenish Creek
3142 Signal Peak Road
White Swan, WA 98952

cc.

Maia Bellon, Ecology

Heather Bartlett, Ecology

Sage Park, Ecology

Rand Elliott, Yakima County

Vern Redifer, Yakima County

Governor Jay Inslee

Members of the Groundwater Advisor Committee

WA State Legislators

Yakima Herald Republic

Yakama Nation

Attachments:

Calculation of Nitrogen Balance for Apples in the Lower Yakima Valley

WSDA Irrigated Crops Mass Balance table from the LYV GWMA Nitrogen Availability Assessment