Concerns Regarding Alternatives Solutions:

WA Department of Health, Yakima Health District, and Yakima County should collaboratively:
PHS 1: Develop a bilingual, health-risk education and outreach campaign. (28)

Establish a public education program regarding nitrate pollution and health risk over a 5-10-year period. Partner with UW Pediatric Environmental Health Specialty Unit (PEHSU) to continue training local healthcare providers to recognize and address Nitrate risk in their patients (pregnant women and infants up to six months).

This is not the alternative solution that the GWAC voted on. That document reads:

Develop a health-risk education and outreach campaign

Establish a public education program regarding nitrate pollution and health risk over a 5-10-year period. Broaden the pool of people GWMA is educating or communicating with. Provide all materials distributed to the public in English and Spanish. Provide education about concepts that people can understand. Billboard campaign – urging well testing. Partner with UW Pediatric Environmental Health Specialty Unit (PEHSU) to continue training local healthcare providers to recognize and address Nitrate risk in their patients (pregnant women and infants up to six months)

The Cost Description reads:

$50K; $100K (5 Year plan) with funding coming from Ecology, Legislature

Questions:

- The changes to the alternative solution are significant. Why were they made and by whom?
- Is $50,000 to $100,000 the total appropriation? Does this mean $10,000 to $20,000 per year?
- Who will design the campaign and what are their qualifications?
- Why does the funding come through Ecology but implementation comes through DOH and Yakima County?

- The Yakima Health District never sent a representative to the GMW Education and Public Outreach Work Group. They have not conducted information and outreach campaigns regarding nitrates in the past. Does this agency have the capacity or desire to make an impact in this area?
- In 2014 – 2015 Yakima County returned $150,000 in state funds designated for treatment of contaminated water from domestic wells in the LYV. Does this agency have the capacity or desire to make a difference in peoples' lives?
- Why is there only one Alternative Solution to help the people who live in the LYV and pay out approximately $1 million per year for bottled water?

Yakima Health District should:

RCIM 5: Study potential nitrate contamination attributable to improperly operated septic systems. (32) Consider restoration/retrofit of older septic systems through incentives or county property tax breaks. Require nitrogen reducing technologies for onsite septic systems where appropriate. Assist hobby farmers to locate ROSS drain fields on their property so as to avoid animal farming over the drain field.

The Cost Description reads:

$700 per applicant for system repair permit application fee. 100 applicants subsidized = $70K; subsidize cost of reconstruction = $500K

Questions:

- Is this a study or just a project to fix individual failing septic systems?
- Will there be a campaign to inform the public and how will that be financed?
- What do people get for $700?
- The description says the costs will be subsidized. Where will the subsidies come from? (In the FOTC analyses we assigned the subsidies to the legislature)

South Yakima Conservation District and WA Department of Agriculture should collaboratively:
DATA 2: Monitor changes occurring in agricultural operations. Evaluate whether those changes positively affect improvement in groundwater quality. (25)

Requires cooperation of producers & landowners, multi-year effort to account for crop rotation, dry vs. wet years, changing technology, decades to monitor groundwater quality change. WSDA: prepare report to Legislature and Department of Ecology.

The Cost Description reads:

$100 K at SYCD; $50 K at WSDA

Question:

- Monitoring is a long term process. What does a one-time expenditure of $150,000 buy?
- How will costs in later years be covered?
- Who will design the monitoring system? What are their qualifications?
- What are the evaluation criteria for this proposed project?
- SYCD and WSDA had difficulties engaging farmers during the Deep Soil Sampling study and the Nitrogen Availability Assessment. How will they address this problem?

Department of Ecology and WA Department of Health should collaboratively:

DATA 6: Establish time-based performance objectives against which well-monitoring data can be compared. (16) E.g., number of at risk wells, BMP implementation, funding success, reduction in number of underperforming farming practices. Use both method-based measurement and performance-based measurement.

The Cost Description reads:

DB: $200-250K / Yr; GS 25 K, 1/4 FTE. DOE, DOH Operating Budget

Questions:

- This is not very clear. What exactly will DOH and Ecology do for ¼ million dollars?
- Why only ¼ FTE ?
- What are the qualifications for the people who will do the work?

- Why is this an annual cost? Is this an ongoing evaluation program?
- How will DOH and Ecology evaluate underperforming farming practices?
- What are the criteria for underperforming farming practices?
- How will DOH and Ecology collect the data?
- What is method based measurement?
- Will DOH and Ecology do a formative evaluation?
- Why is there no outcome evaluation?
- When did the GWAC select a performance based evaluation?
- There needs to be objective measurement of nitrate levels and a correlation with performance objectives. We cannot just assume that implementation of BMPs will make a difference.
- Why is there no evaluation of the impact that elevated nitrates have on the people who live in the LYV?

Yakima County should:
DATA 11: Contract with USGS to do particle tracking model study to indicate where groundwater moves faster (permeability). (9)
USGS Particle Tracking Model Overview--potentially combined with MT3D MODFLOW application to the vadose zone.

Question:

- Where will the funds come from to pay for this?
- Will this clarify what happens in the vadose zone?

Yakima County should:
DATA 3: Adopt and Implement an Adaptive Management Plan. (22)

Utilizing data collected, progress made, or lack of progress, to inform the community on adjustments that need to be implemented. Plan would incorporate necessary adjustments to availability of technology, education and outreach, tracking exports, land use regulations, treatment systems, and other changes to inform decision makers regarding management changes necessary for a successful Program.

Cost $100,000 per year from the legislature

It appears that the success of an Adaptive Management Plan depends on data collection and that the potential data is:

- Data 8: Well monitoring - $20,000 per year
- Data 2: Changes in agricultural operations - $150,000 (one time?)
- Data 4: Deep soil sampling - $250,000 per year x 5 years
- Data 5: Trends from reports – NPDES and SWD (already being done)
- Data 6: Time based performance objectives - $200,000 to $250,000 per year
- Data 9: Nitrate concentrations at head gates - $30,000 (one time?)
- Data 10: Domestic well testing - $300,000 (one time?)
- Data 11: USGS particle tracking - $50,000 (one time?)
- Data 12: Nitrogen Loading Assessment - $1,250,000
    - Hire a consultant for literature review of most relevant information and accurate factors
    - Periodically repeat grower survey
    - Data on how much commercial fertilizer, how much manure
    - Percentage of acreage in various crops
    - Triticale acreage
    - Commercial fertilizer tonnage
    - Nitrogen leaching from wasteways and drains
    - Study atmospheric deposition

Questions:

- Who was involved in the formative discussions regarding an Adaptive Management Plan?
- What happens to the plan if one or two pieces are not funded?
- How will the plan go about informing the community? Who is the community?
- Who are the decision makers who need to know about management changes?
- Which decisions might potentially be influenced?
- Why is there no data for public health?
- Why is there no data for adverse side effects/costs to the community?
- WSDA and Yakima County struggled with access to information during the GWMA Nitrogen Availability Assessment. How will the people who develop this project address those problems?
- What are the qualifications for the people who will implement this project?
- Are there opportunities for public oversight?

WA Department of Agriculture should:
IA 2: Design and implement pilot studies focusing on innovative farm techniques which reduce nitrogen loading to crops and monitor results. (34)
Cost $25,000 from the WSDA Operating Budget:

Question:

- In her comments, the Director for the WSDA Dairy Nutrient Management Program suggested that this is more appropriate for WSU. What do you think?
- What exactly would such a pilot study look like?
- How do you define innovative farm techniques?
- Don't think you can do more than one pilot study for $25,000

Producers should:
LC 4: Make capital improvements. (2)
Install liners in liquid waste storage lagoons. Install impervious surfaces beneath silage storage.

The Cost Description reads:

$10 million Cost-share/ producers & WSDA (Legislature)

Questions:

- Does this mean that representatives from the GWMA will go to the legislature and ask for millions of dollars to make improvements on dairies?
- Isn't it illegal for government to give money to private individuals or corporations?

Environmental Protection Agency, WA Department of Agriculture and Department of Ecology should collaboratively:
REG 1: Streamline current regulatory enforcement activities. (25)
Improve customer service and protocols, increase clarity of process, escalate enforcement for facilities not following management practices, identify methods to discourage repeatedly unfounded complaints, and improve overall transparency.

The Cost Description reads:

$ 0 - $ 300 K / yr, WSDA $100 K from the legislature

Questions:

- The WA Legislature cannot pay the EPA to streamline procedures. Where will the money come from to streamline procedures at the EPA?
- Which specific regulations do you have in mind?
- Could this address the concerns that people had in 2008-2010 regarding a bureaucratic runaround when they asked for help with nitrates in their wells?

WA Department of Agriculture should:
REG 5: Document and publish regulatory compliance for dairies within the GWMA that are completing and implementing Dairy Nutrient Management Plans (DNMP). (7) Explore the possibility of disclosing non-proprietary data produced through the DNMP process. Summarize the DNMP reporting and provide information that would disclose the amount of manure the CAFO's in the GWMA create and where it is distributed.

The Cost Description reads:

$50,000 WSDA / DNMP operating budget

Question:

- Is this a one-time expenditure or an annual expenditure?

Yakima Health District should:
REG 6: Issue permits for agricultural composting operations, to appropriately inspect composting operations and to enforce regulations that protect public health and the environment, per WAC 173.350.040. (4)

The Cost Description reads:

$10,000 depends upon number of composting facilities. Funded by the legislature, balance funded by permit applicant.

Questions:

- Is this a one-time expenditure or an annual expenditure?

Yakima Health District should:
REG 7: Require new developments outside towns to address potential impacts on groundwater quality. (19)
Work with Yakima County Planning and Building Divisions' permit program to identify methods of permitting while reducing impacts to groundwater
Requires BOCC approval

The Cost Description reads:

Approx. $25-50 K Costly for developer & purchaser.

Questions:

- Have we documented that new developments cause increased nitrates in groundwater?
- Is this a function of sewer density?
- What is BOCC?
- Is this $25,000 to $50,000 per new development?

There are three Alternative Solutions that are very similar:

Environmental Protection Agency and WA Department of Ecology should collaboratively:
ADM 2: Identify and support opportunities, including educational research institutions, for private, public, and industry investment in technology specific to addressing nitrate contamination in groundwater. (20)

WA Department of Agriculture should:
LC 2: Identify and support opportunities, including education research institutions for private, public and industry investment in technology and management of fertilizers and manures, including separation of solid and liquid wastes. (17)
WSDA construct LYVGWMA administrative program.

Washington Conservation Commission should:
LC 9: Identify and support opportunities, including education research institutions for private, public and industry investment in technology and management of fertilizers and manures, including separation of solid and liquid wastes. (26)

The wording has changed since the GWAC screened alternative solutions in May, 2018. That screening required Ecology and EPA to "construct a LYVGWMA Program for coordinated implementation". This component has now been deleted.

These are the solutions the GWAC voted on:

EPA & Ecology: Identify and support opportunities, including educational research institutions, for private, public, and industry investment in technology specific to addressing nitrate contamination in groundwater.
EPA & DOE construct a LYVGWMA Program for coordinated implementation.
Cost: $100,000 to $250,000. Agency Budgets

WSDA: Identify and support opportunities, including education research institutions for private, public and industry investment in technology and management of fertilizers and manures, including separation of solid and liquid wastes.
WSDA construct LYVGWMA administrative program.
Cost: $1.75-$4 million, WSDA $10 million. WSDA Capital Budget

WCC: Identify and support opportunities, including education research institutions for private, public and industry investment in technology and management of fertilizers and manures, including separation of solid and liquid wastes.
Cost $1 million WCC Capital Budget

Questions:

- Why isn't LC2 categorized under Administration since it authorizes the WSDA to construct LYVGWMA administrative program?
- Why did you remove the statement that EPA and Ecology would construct a LYVGWMA Program for coordinated implementation?
- Why is there such a huge discrepancy in proposed funding for the four agencies?
- It is inappropriate to inter-mingle alternatives that "identify and support opportunities, including education research institutions for private, public and industry investment in technology" with "construction of LYVGWMA programs". These are completely separate endeavors that require different skill sets and resources. Why was this done?

- Please explain how WSDA has the expertise to construct the LYVGWMA administrative program.
- Can the GWMA tap into the WSDA Capital Budget? How?

Thanks for Reading.

Friends of Toppenish Creek

Last updated August 24, 2018 by Jean Mendoza