

**MEETING MINUTES**  
**GWMA Committee Meeting**  
**Thursday, June 23rd 8:00 AM**  
**Harrisburg City Hall**

**COMMITTEE MEMBERS PRESENT:** Cliff Wooten (Linn County Commissioner), Annabelle Jaramillo (Benton County Commissioner), Dennis Boeger (Poage Engineering), George Pugh (Linn County Farmer), Lanny Zoeller (Realtor), Roger Haffner (Wilbur-Ellis Farm Supplements), Tim Bunnell (City Public Water Supply Operator), Jerry Marguth (Farmer), Sue Lurie (Pending member - Natural Resources Representative)

**COMMITTEE MEMBERS ABSENT:** Pat Straube (Citizen and CAFO Representative), Mike Warner (Marathon Coach), Mayor Judy Volta (Coburg), Frank Wright (Citizen and Small Business Representative), Rich Margerum (Long Tom Watershed Council), Karen Strohmeier (Cascade Pacific RC&D)

**STAFF AND GUESTS:** Rick Partipilo, Irene Rolston, Stephanie Schulz, Steve Michaels, George Ehlers, Ryan Ho, Brett Borgeson, Jeremy Craner, Glenn Mutto, Tom Pattee, Barbara Rich, Bill Emminger, Gail Andrews, Denise Kalakay, Scott Shine, Kathi Wiederhold, Audrey Eldridge

*Meeting started at 8:00 AM*

**Introductions, Announcements, Adjustments to Agenda**

The Chair of the Southern Willamette Valley Groundwater Management Area (GWMA) Committee, Tim Bunnell, called the meeting to order. Mr. Bunnell asked if there were any announcements. Audrey Eldridge introduced a potential new member of the committee, Sue Lurie. Ms. Lurie could be taking the place of Travis Williams, Willamette Riverkeepers, who has been unable to fulfill the responsibilities of the committee. Ms. Lurie will not be an official member of the committee until the Director of the Department of Environmental Quality (DEQ) appoints her.

Mr. Bunnell asked if there were any adjustments to the agenda. There were no adjustments to the agenda and Mr. Bunnell continued by asking for public comment

**Public Comment**

There was no public comment.

**GWMA Committee Action Plan Considerations**

Mr. Bunnell introduced this agenda item and Denise Kalakay started the discussion. Ms. Kalakay began by reviewing the considerations that were brought up in the previous GWMA Committee meeting relating to the Action Plan. She gave an overview of the four major considerations as well as a synopsis of the Committee's input from the May 26<sup>th</sup> meeting. Ms. Kalakay indicated that after she was finished reviewing the four considerations and the Committee's input on those considerations, Kathi Wiederhold, facilitator, would ask the Committee if there was consensus on how to move forward.

Ms. Kalakay began by displaying a poster of the four considerations and a continuum for each exhibiting potential ways to approach the issue (Attachment One). The four considerations include determining if the Committee wants to develop ‘overarching goals’ to help guide the working groups and provide an overall picture of the GWMA Committee’s mission. Ms. Kalakay stated that staff got the impression during the last meeting that the Committee would like to develop overarching goals. Another consideration is the ‘level of detail’ that the Committee feels is necessary to include in the Action Plan and what ‘format’ is most appropriate for the Action Plan. Ms. Kalakay stated that there seemed to be an agreement at the last meeting that it would be best for staff to prepare some suggested formats and bring these before the Committee for review and modification.

The third consideration brought before the Committee at the last meeting was in relation to the definition of ‘voluntary’ as it relates to the recommendations that will be included in the Action Plan. Ms. Kalakay said that voluntary could mean only including actions that encourage individuals to make a certain change, but in no way requires the changes to be made. Ms. Kalakay also noted that making suggestions to regulatory bodies can be seen as voluntary if the agencies are not mandated to implement the suggestions. Voluntary might also mean anything that the “local” area wants to implement even if it is of a regulatory nature. Ms. Kalakay stated that the Committee indicated at the May 26<sup>th</sup> meeting that they would like to leave this definition open for now and see what comes out of the working groups. At that point, the Committee would be able to more clearly define their definition of ‘voluntary’ and choose strategy recommendations that fit within that definition.

The final consideration is how to ‘measure effectiveness’ once the Action Plan begins to be implemented. Ms. Kalakay gave an example of one potential strategy. The Committee could decide that it wants to encourage landowners to cover their manure piles by mailing brochures. One way to measure if this is effective is by counting the number of brochures mailed. Another approach is to conduct a survey to see if landowners actually began covering their manure piles after receiving the brochures. A more quantitative approach is to research the amount of nitrate that a typical livestock animal’s manure contributes, and use the logic model to calculate the reduction in nitrate expected if a given percentage of homeowners covered their manure piles. Further effectiveness measurement might mean installing a monitoring well under each plot of land that receives a brochure and test to see if nitrate loading is reduced. Ms. Kalakay noted that there was not a lot of discussion surrounding the ‘measuring effectiveness’ consideration and staff felt it would be important to revisit it at a later Committee meeting.

Commissioner Annabelle Jaramillo raised a question regarding the ‘voluntary’ continuum. She asked whether or not the option in the middle was deliberately placed further to one side or if it was a graphic mistake. Ms. Kalakay clarified that it was probably there on purpose, but the Committee was free to choose a stance anywhere along the continuum.

Ms. Wiederhold explained to the group that her role was to ensure the Committee was operating on consensus and that the staff conclusions from the last meeting were in line with the direction of the Committee. She asked the Committee to indicate by thumbs up, down, or sideways, on whether they agreed with Ms. Kalakay’s interpretation of how Committee members wanted to proceed with the four considerations. The Committee agreed by consensus on the staff conclusions for all four of the considerations: formulate overarching goals; discuss Action Plan

format and level of detail; deal with “voluntary” as it comes up in the process; and discuss measuring effectiveness at a future time.

Lanny Zoeller noted that the information related to this discussion was in the notes from the last meeting and the Committee had plenty of time to review them before the meeting.

Denise Kalakay began a discussion on the ‘overarching goals’ consideration. Ms. Kalakay said that it would be helpful to get the Committee’s input on potential goals. The Committee had been asked to send in goal ideas to Ms. Kalakay before the meeting and bring ideas to discuss. Two members of the Committee, Sue Lurie and Roger Haffner provided ideas and received prizes as promised. The two goal ideas submitted were:

- Maintain traditional and/or locally appropriate land uses while preserving and enhancing the health of the aquifer.
- Instead of general guidelines have specific strategies as how to avoid leaching nitrates to drinking water. This needs to be suggestions without a hint of regulations. The emphasis should be on these strategies and not on how to measure results. Measuring results is going to be a very long term (maybe decades) and expensive project that this committee should not try to address at this time.

Ms. Wiederhold asked if any other Committee members brought goal ideas with them or if anyone had comments on overarching goals. Gail Andrews, OSU Extension, stated that it may be helpful if the working groups have some guidance from the main Committee in order to efficiently develop strategy recommendations that will be considered by the Committee. Commissioner Cliff Wooten offered a comment on the non-regulatory nature of this Committee. He referred to strategies dealing with CAFOs. He pointed out that a state agency has authority over that land use and this Committee does not have the power to tell CAFOs how to run their operation. Mr. Zoeller stated that he felt goals would ‘handcuff’ the Committee as work proceeded and he didn’t want that. George Pugh liked Sue Lurie’s goal and its reference to ‘maintaining traditional/appropriate land uses’. Commissioner Wooten liked Mr. Haffner’s comment regarding ‘non-regulatory’ approaches. Jerry Marguth thought it was a good concept to construct goals as targets, but did not want to be firmly held to hitting those targets.

Ms. Wiederhold asked the Committee if they thought it was appropriate for staff to develop goals based on the guidance received at this meeting and the meeting in May. Stephanie Schulz, Lane County Land Management, thought it would be good to clearly define goals, strategies, and objectives and asked if it would be helpful for the group to discuss these definitions. Gail Andrews said that staff would develop those definitions and put a reference document on the website in order to avoid getting bogged down in details at this Committee meeting. Ms. Wiederhold followed-up on her original question and asked that the Committee show their level of agreement to having staff prepare some goal examples. Committee members agreed by consensus to have staff prepare a few goal ideas for the Committee to consider.

Mr. Zoeller pointed out that meeting attendance was very marginal and he was concerned about making decisions with such a small group. Ms. Wiederhold referred to the Committee’s ground rule that 50% of the Committee needed to be present for quorum. Eight out of 15 members were present, thereby establishing quorum. This began a general discussion on Committee participation. Mr. Bunnell said he was also concerned about those Committee members who

have been consistently missing meetings. Audrey Eldridge brought up the point that the Committee established the rule that members were not allowed to send sit-ins if they were unable to attend. She said this makes it difficult to get consistent representation and thought that the Committee may want to revisit this decision. Mr. Bunnell said that those members who had not been attending should be contacted and asked if they are still able to perform the duties of the Committee. He said they should be given the chance to reaffirm their commitment, but if unable to put the amount of time into the efforts of the Committee necessary to get the job done, they should be replaced.

**Agreements reached** during this discussion include:

- Staff will prepare examples of potential goals and potential plan format. These will be presented to the Committee at a later meeting
- Staff will create a brief document that differentiates between a goal, strategy, and action as it relates to the Action Plan
- The Committee will have a discussion on ‘measuring effectiveness’ at a later meeting
- Staff conclusions from the May 26<sup>th</sup> discussion on Action Plan considerations are consistent with the direction of the committee
- The Committee indicated that those who have not been attending should be contacted and asked about their commitment to this Committee

### **Background Information on Septic Systems**

Mr. Bunnell introduced Rick Partipilo, Linn County Environmental Health. Mr. Partipilo preceded his presentation by saying he wanted to touch on three items that would help the Committee think about appropriate strategies to include in the Action Plan. These three items are the nature of nitrogen in the environment, soil properties, and the on-site treatment rules administered by the Oregon Department of Environmental Quality (DEQ).

Mr. Partipilo said that nitrification (the conversion of ammonia to nitrate) is a natural process. There are two ways to affect overall nitrate levels in groundwater: limit nitrogen inputs (fertilizers and organics) and/or encourage the conversion of nitrate to nitrogen gas (denitrification). High nitrate levels occur in groundwater when excess nitrogen in the system undergoes nitrification and is transported through the soil. He stated that soils do a lot to treat wastewater as it percolates but that nitrogen, in the form of nitrate, literally slips through the cracks due to its slight negative charge. Because soil particles also are slightly negatively charged, the nitrate cannot be trapped in the soil column.

Mr. Partipilo handed out a summary of his comments to the Committee (Attachment 2). He presented an overview of nitrate inputs by household and by acre of annual ryegrass. The household data is from the LaPine study and the ryegrass data is based on the OSU Extension Service fertilizer guide. The data indicates that one household with an on-site wastewater treatment system adds about 40 pounds of nitrogen per year. This is equivalent to one acre of annual ryegrass.

Mr. Partipilo referenced a map that has been produced by LCOG GIS Department that displays tax parcels and land use within the GMWA. He pointed out that western Linn County is

predominantly under agricultural use. Elsewhere in the GWMA, there are areas of high density residential development.

Mr. Partipilo noted potential strategies that could be pursued to address the nitrate issues in the GWMA.

- Zoning and land use patterns may help prioritize and direct nitrate reduction efforts in the GWMA..
- A ‘Geographic Rule’ could be implemented by DEQ that requires special consideration such as higher treatment standards or lower development density in all or part of the GWMA.
- The Committee may want to ask the DEQ to look at the LaPine data and consider appropriate revisions and updates of the on-site rules. He expressed the feeling that the nitrate assumptions in the DEQ’s on-site rules are outdated.

Mr. Zoeller mentioned that the information related to on-site treatment systems was too general to base decisions on. George Eilers, Lane County, asked if Mr. Partipilo had a sense of how many of the systems in Linn County pre-date the DEQ’s on-site rules. Mr. Partipilo noted that Linn County has nearly 670 addresses and 60,000 acres in the GWMA and it is difficult to track that information, but he would look into what data is available. Mr. Bunnell thanked Mr. Partipilo and moved to the next agenda item.

### **The La Pine Story**

Audrey Eldridge introduced Barbara Rich, DEQ/Deschutes County. Ms. Eldridge said that Ms. Rich has been working on the LaPine National Demonstration Project, a joint effort between the DEQ, U.S. Geological Survey, and Deschutes County. The project is researching the effectiveness of alternate on-site treatment technologies and was brought about because of a problem with nitrate contamination in the aquifer underlying southern Deschutes County and northern Klamath County.

Ms. Rich provided the Committee with some background information on the area and the project.

The project includes four main tasks:

1. Field test innovative onsite sewage treatment systems
2. Develop a 3-D groundwater/nitrogen fate and transport model
3. Develop a long-term maintenance program
4. Develop a low interest loan program

See project website for more information: <http://marx.deschutes.org/deq/lapineindex.htm>

While going through a summary of the results from the different systems tested, she displayed a number graphs that portrayed the effectiveness of the different technologies in reducing nitrate inputs. As one graph was being displayed, Mr. Zoeller asked why the curves that indicate successful denitrification became incongruent. Ms. Rich said this was an important point to be understood by the Committee. Several of the disparities in the denitrification processes of the alternate treatment technologies were a result of maintenance failures. Ms. Rich concluded that

this strongly demonstrates the need for homeowner education as a component of any alternate treatment technology program. Education and maintenance are the keys to effective alternate treatment technology operation.

Ms. Rich presented the Committee with some options to address high nitrate levels in the groundwater. A Geographic Rule could be implemented with place-specific measures to protect public health. County Environmental Health ordinances and land use ordinances are also potential tools. Ms. Rich noted that land use ordinances would be a particularly effective tool and would be exempt from Measure 37 claims because the ordinances would be instituted as a public health safeguard.

Commissioner Wooten asked about the costs of the different systems. Ms. Rich gave an overview of the costs of the different systems indicating that alternative systems tend to be more expensive than standard systems. Roger Haffner asked about the costs of sand filters in comparison and Ms. Rich noted that the alternate treatment technologies were not much more expensive than a sand filter treatment system. Tom Patte, Department of Human Services-Drinking Water Program, brought up the question of how to institute maintenance programs and encourage on-going maintenance to be performed by the homeowner or a maintenance provider. Ms. Rich commented that the DEQ is beginning to develop a program to train and certify maintenance providers.

Barbara Rich provided the Committee with her contact information ([barbarar@co.deschutes.or.us](mailto:barbarar@co.deschutes.or.us)) and project websites for more information.

### **Discussion about Septic Systems with a Panel of Experts**

Ms. Wiederhold introduced the panel, Barbara Rich-DEQ/Deschutes County, Rick Partipilo-Linn County Environmental Health, and Gail Andrews-OSU Extension. Ms. Wiederhold explained that each of these experts have background in different areas and were asked to come up with three main points for the Committee to consider as they develop suggestions on how to manage nitrate from residential on-site treatment systems.

Rick Partipilo pointed out that he comes from a regulatory agency and said that his points are contained in the handout he distributed earlier. The Geographic Rule consideration, more in-depth land use analysis, and revision and update of the on-site rules were Mr. Partipilo's three main points. Commissioner Wooten mentioned that costs continue to go up for the homeowner and he is concerned about initiating new programs that require permits and inspections that will increase the cost to the homeowner.

Gail Andrews stated that she comes from an educational background and she has worked with many homeowners on proper well and septic maintenance. Ms. Andrews said she has interacted with a wide spectrum of homeowners. She said it is most difficult to reach the lowest end of the spectrum, those who are often the biggest contributors, due to lack of interest and motivation. Those homeowners who are maintaining their systems well are often the ones who are most receptive to educational efforts. Ms. Andrews also pointed out that it often takes a catastrophic event, such as a system failing, to encourage homeowners to learn about how to maintain their system. A main point from Ms. Andrews' perspective is that any educational effort needs to be well planned and more involved than simply mailing a brochure.

Barbara Rich said her points were contained within her presentation. In addition, she said that her experience with a number of different committees has shown that it is important to stay open to new ideas and be flexible. She said oftentimes there is a resistance to taking regulatory steps, but over time and through better understanding about the issue, groups come to the point where they decide that the problem is too big and unwieldy to leave it completely up to voluntary measures.

Ms. Wiederhold opened up the floor for input and guidance on how the Committee wants to address residential septic system issues in the GWMA. George Pugh thought it was a good first step to try and educate the owners of existing systems. Commissioner Jaramillo thought it would be beneficial for the group to explore what land use ordinances could be implemented to protect groundwater. Dennis Boeger would like the Committee to consider a Geographic Rule and overlay zones. George Pugh asked for more information on existing regulations and whether or not existing ordinances are adequate. Mr. Pugh also thought it was important to evaluate all potential sources and not put a lot of energy into one source of contamination, such as septic systems, and ignore other potential sources, such as wells. Commissioner Wooten noted that the area will see a lot of growth, specifically Harrisburg, and it is important to get out in front of the growth and prevent problems. Mr. Bunnell said he was concerned about the existing systems in the ground that are not performing well and he thought it would be a good idea to offer assistance to those homeowners.

Commissioner Jaramillo said she would like to know more about grants and other incentives for installing alternate treatment systems. Gail Andrews said staff has been looking into low-interest loan programs as well as tax credits. Ms. Andrews asked if the County Commissioners in the room felt this project was important enough to dedicate staff time to evaluate existing data and research potential strategies. Commissioner Wooten explained that budgets are very tight as things are right now and he trusts his department managers to allocate staff time toward projects that are the most important. Commissioner Jaramillo also noted that staff members are involved in many projects and Commissioners are reluctant to allocate more work for them to do. Ms. Kalakay suggested to Ms. Andrews that they coordinate data efforts since LCOG is already working with County staff to compile some of the data.

Ms. Wiederhold asked if the Committee was open to suggestions from staff as long as they fit within the guidance from the Committee. The Committee indicated that they would like to hear some suggestions as well as learn more about what types of incentives there are for homeowners. The Committee also indicated that they would prefer that suggestions originating from the Committee be kept separate from staff suggestions. Mr. Boeger said he is looking forward to the goals that staff brings before the Committee.

### **Public Drinking Water Working Group Update**

Mr. Bunnell introduced this agenda item and gave a brief introduction. He said that the Public Drinking Water Working Group has been working hard and getting a lot done. He recognized the hard work of staff and thanked them. Mr. Bunnell introduced Scott Shine, LCOG, to present the results of the most recent working group meeting.

Mr. Shine handed out a draft summary of the working group's goals and strategy recommendations. Mr. Shine explained that the working group is taking a break over the summer while staff prepares a draft report based on input from the three working group meetings. The group will reconvene in mid-September and review the draft report in order to have materials ready for the Committee meeting at the end of September. Mr. Shine asked for Committee approval of this timeline and process. No Committee members displayed any disagreement. Ms. Kalakay suggested that Mr. Shine send the working group goals and strategies out for Committee member review and input prior to completing the draft working group report.

### **Wrap-Up**

Denise Kalakay mentioned that a team from the U.S. Environmental Protection Agency (EPA) will be visiting in September and would like to observe projects, such as the GWMA, that are funded through the 319 Non-Point Source Pollution Grants Program.

Mr. Bunnell thanked the Committee members and guests for coming. He asked Committee members for input on when the next meeting should be. The Committee tentatively scheduled the next meeting to be on Thursday, September 29<sup>th</sup>.

*The meeting adjourned at approximately 10:10 AM*

### **ATTACHMENTS:**

- 1. Continuums**
- 2. Rick Partipilo's Handout**