Scatter Creek Aquifer - Septic System Management Project

Purpose: To make sure water in the Scatter Creek Aquifer is safe to drink now and in the future.

Citizen's Committee notes: January 8, 2014, 6:15-8:15 pm *Approved 2/5/14* Rochester Middle School Library, 9937 Highway 12 SW, Rochester, WA 98579

Attending: Marlene Hampton, Roger Max, Gene Weaver, Chanele Shaw, Tom Budsberg, Karen Deal, Sandra Adix, Lowell Deguise, Art Starry (staff), Nadine Romero (staff). Facilitator: Jane Mountjoy-Venning (staff). Note taker: Kateri Wimsett (staff). Excused: Maureen Pretell, Amanda Neice – alternate, Guests: Karen Johnson, Heather Saunders (staff). Absent: Bruce Morgan, Dave Dafoe, Scott Schimelfenig.

Introductions

Agenda review and approval: approved **Approve December notes:** approved

Other housekeeping:

Model Scenario Results: Nadine Romero presented the results of the latest computer groundwater modeling scenario. It shows the concentrations of nitrates in the aquifer from the Tenino sewer treatment plant operating at its current level and the aquifer area at full build-out, assuming current permitting requirements. In other words, any land that is able to be developed, given current standards, is developed. Areas that are in the Grand Mound sewer service area and lands that are in any type of conservation status were not included. Points raised during the discussion:

- The effluent or amount of treated liquid leaving the septic system that is being used for the model is 225 gallons per day, 60 ml/l nitrate, based on the average daily amount of effluent produced by a 3 bedroom home.
- No commercial septic was modeled as we assume new commercial wastewater will be in the area served by the Grand Mound sewer.
- Committee members are concerned about the levels of nitrate and other contaminants we are contributing to the Chehalis River, and the potential effects of those downstream.
- When considering impacts, we should keep in mind that old failing systems are being upgraded over time. Seems like some of that reduction in contribution might offset some of the contribution from new development?
- This modeling shows the contribution from septic systems and the Tenino sewer treatment plant only. It does not show contribution from manure, fertilizer, pesticides, etc.
- There was discussion about residential fertilizer application and the risk of increasing nitrates in groundwater from fertilizer. Tracking residential fertilizer use or misuse is not an option. The county stormwater program is working on a project to evaluate the most effective means of providing education to residents about appropriate fertilizer use.
- Puzzling how 2 wells in close proximity can have very different nitrate levels during sampling, that does not seem attributable to well construction/maintenance issues. Is there a way of telling if these differences are due to contaminant flows, corrosion of well

casing, pooling deeper in the aquifer, or ...?

Next Steps: Jane Mountjoy-Venning did a process check to help decide how we will move forward with developing recommendation options to present to the community for feedback and to the Board of Health/Commissioners. She noted that a wise friend said, "If there are 2 people in the room and they agree on everything, one of them is unnecessary." She encouraged committee members to share their ideas, thoughts, and concerns as we move into developing recommendations - especially if they seem to have a different viewpoint from others in the group.

The committee approved a general approach of:

- define the problem or opportunity that the recommendations are addressing
- develop a list of options
- explore most promising options in more depth (effectiveness, cost, feasible, etc)
- hold second community workshop to share and get community input into options
- further refine options
- present options to Board of Health/Commissioners

Committee members were asked how they wanted to initially proceed with developing recommendations. Suggestions included brainstorming, looking at past recommendations, looking at recommendations from other areas, quiet time to jot down one's own ideas and then share, or other ideas anyone wanted to propose.

There was strong interest in seeing other recommendations and seeing what worked and what did not work. Failures and problems are also instructive! Because the Scatter Creek Aquifer is unique in its geology, it will be helpful to know some of the characteristics of other areas so we can filter which recommendations might make sense for our aquifer. The committee still wants to be able to add their own ideas in addition to any that might come out of recommendations from other areas.

Other discussion points:

- Committee members wanted to know the framework they are operating in. Only regulation? No regulation? Only groundwater and septics? What about contaminants from stormwater, or non-septic contributions?
- How will we include the gopher issue and its impact on potential future development? Can
 we get information about the likely results of the Critical Areas Ordinance to include when
 developing our recommendations?
- Can we quantify the increasing water consumption rate as there is more development and see the impact of the aquifer?
- Recommendations must be based on water quality. Possibilities include establishing water quality thresholds for recommended actions that only take effect if needed.
- We can't ignore what has happened in growth management over the last 20 years, we don't have to re-invent the wheel.
- A list of criteria to help judge potential options and decide which to consider further might be useful.
- We can't assume there is a problem until we look at all the facts. There are many unknowns, some are likely to remain unknown. Perhaps we include a margin of error for safety?

- Is there data on the age of septics in this area?
- Continued concern for growth in Tenino and how its sewer treatment plant will affect the
 aquifer. Currently we are modeling with the sewer treatment plant at its current discharge
 level, we want to see what happens at its full permitted discharge level.

Public Comment: none

Wrap up

- Review any tasks/commitments & timeframe
- Review notes, capture any missing points

