

## 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 approved notes:** September 18, 2013, 6:15-8:15 pm. *Approved 10/2/13*

Rochester School District Board Room, 10140 Highway 12 SW, Rochester, WA 98579

**Attending:** Gene Weaver, Chanele Shaw, Tom Budsberg, Roger Max, Marlene Hampton, Maureen Pretell, Karen Deal, Sandra Adix, Bruce Morgan, Art Starry (staff). **Facilitator:** Jane Mountjoy-Venning (staff). **Note taker:** Lesley Wigen (staff). **Excused:** Lowell Deguise. **Guests:** Amanda Neice. **Absent:** Dave Dafoe, Scott Schimelfenig.

### Introductions

**Agenda review and approval:** Approved with addition of brief presentation by Gene and an announcement by Art during public comment time.

**Approve August notes:** Approved.

**Other housekeeping:** Several committee members were interviewed for the TCTV show County Connections. The segment featuring the Scatter Creek project will be part of a show on county water quality projects. It will first show on Thursday, Oct. 17 at 7 pm on Comcast cable channel 3. It repeats each Thursday at 7:00 pm, Saturdays at 11 am, and Sundays at 8 pm for the following month. Get your popcorn ready!

**Preliminary Model Results:** Nadine Romero described the process of calibrating the computer groundwater model and the initial modeling results. Her presentation is posted on the website.

- The model started with zero level of nitrate. Preliminarily it appears that current septic systems raise the nitrate level by about 2 ppm.
- The model can be used in several ways.
  - It can predict using current conditions and run at steady-state for 20 years out.
  - It can predict using possible future conditions, or scenarios, and run at steady-state for 20 years out.
  - We can use the model to "predict" today's nitrate concentrations using current/past or historical information (this is a calibrated model.)
  - A more complex approach is to place the model in "transient" mode and add homes at various times (for example at 5 years, 10 years, and 15 years). The easier way is to make all the "adds" at once. This also provides a worse-case scenario.

### Initial discussion of model results

- Need to get clarification on background levels of nitrate in groundwater.
- Contribution from the Tenino Wastewater Treatment Plant was not included in this preliminary model results. We now have a copy of their permit, and so can now input accurate numbers into the model.
- There was a question about data available on the number of old septic systems compared to newer mound or pressure distribution systems. Staff noted that neither the older gravity

or newer systems significantly reduce nitrates.

- The committee would like to see modeling over 20 years assuming different levels of land-use practices, specifically assume 50% available lots are developed, and assume full build-out, ie 100% available lots developed.
- If work can be done to realistically estimate where growth is likely to happen, and then can be placed in the appropriate location in the model, that will give us a look at possible future “hot-spots.”
- Note that some past hot-spots were due to poor wellhead management practices.
- The committee would like to look at the effect of clustered homes with open space vs. the same number of homes spread out more evenly. Also the effect of 1:20 zoning vs ¼ acre lots.
- It was pointed out that while nitrates and other contamination might dilute in the aquifer, it still goes somewhere. Committee members did not want to “dump” a problem somewhere else downstream. Nadine stated that the Chehalis River gains its largest groundwater contribution from the Scatter Creek aquifer as the river journeys through the 2700 square mile basin on the way to the Pacific Ocean.
- It was pointed out that the contaminant color scale on the different model scenario maps varied. The committee requests that one color scale be adopted, with red reserved for nitrate levels at about 5 or 6 ppm.
- The committee was encouraged to consider alternatives to septic systems for handling the waste, especially methods that treat waste as a resource such as fertilizers and fuels. Any alternative would need to adequately protect human health and be cost effective.

**Public Comment:** There were no guests, but both Art Starry and Gene Weaver made requests to address the committee during this time.

Art Starry let the committee know that the county is in the process of updating the onsite sewage system (septic system) management plan. They will be creating a stakeholders group, similar to the Scatter Creek Citizens Advisory Committee. It is anticipated that there will be about 6-8 meetings beginning in November. He asked if anyone on the Scatter Creek committee might be interested in also serving on the onsite sewage system management plan committee. If folks were interested in getting more information, they were asked to indicate so on the meeting sign-in form or to contact Art, 867-2587.

Gene Weaver shared a concern in a letter he had written with the committee. The letter is posted on the website. The concern has to do with the lack of historical perspective on past efforts and accomplishments to protect the aquifer. He is concerned that many in the public are not aware of this previous work, and that we should publicize and acknowledge earlier efforts. The resulting down-zoning has already reduced the number of homes and septic systems in the area, and based on current nitrate levels, he believes this is working to protect the aquifer. He requests that the committee ask for county staff to help verify his calculations and analysis to better present an accurate history of past aquifer protection efforts.

### **Wrap up**

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

