

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: March 6, 2013, 6:15-8:15 pm. *Approved 4/3/13.*

Rochester Middle School; 9937 Highway 12 SW, Rochester, WA 98579

Attending: Sandra Adix, Marlene Hampton, Lowell Deguise, Maureen Pretell, Amanda Neice (alternate), Roger Max, Gene Weaver, Tom Budsberg, Bruce Morgan, Art Starry (staff), Scott Schimelfenig (staff). **Speakers:** Steve Petersen (staff), Nancy Darling, DOH, John Eliasson, DOH. **Facilitator:** Jane Mountjoy-Venning (staff). **Note taker:** Jane Mountjoy-Venning. **Guests:** Karen Johnson. **Excused:** Karen Deal, Chanele Shaw.

Introductions

Agenda review and approval

Approve February notes: approved

Other housekeeping: The April meeting will be at the Violet Prairie Grange, 17104 Violet Prairie Road SE; Tenino, WA.

Report on any community input, questions, etc.: none

Septic system basics: Steve Petersen, Thurston County Public Health gave a presentation which is posted on the website.

Major points:

- In the Scatter Creek Aquifer study area there are approximately 18,000 residents and the potential to produce over 1,000,000 gallons of sewage each day.
- Presentation covers the basics of how a septic system functions.
- The septic tank is designed to settle the wastewater, separating solids (sludge), liquids, and scum. The solids and scum should stay in the tank, until pumped. Only the liquid should move to the drainfield.
- Newer systems have an effluent filter in the septic tank which helps prevent solids and scum from getting into the drainfield. The filter should be evaluated and cleaned at least yearly.
- After the septic tank the effluent goes to the drainfield, either right away or via a pressure distribution chamber, or sand filter, depending on the type of system.
- Factors that help determine the type of septic system permitted today, are soil type, depth of the water table, and sewage strength.
- If a septic alarm sounds, check the system. Often something that would have been a small repair turns into a large repair or failure because an alarm was turned off and ignored.
- Septic systems should be inspected regularly (recommend annually) and pumped when needed.

Nitrate contribution to groundwater from septic systems: Nancy Darling, from the Washington Department of Health gave a presentation which is posted on the website.

Major points:

- Septic systems are one source of nitrogen in groundwater, and nitrogen is one of several contaminants that can come from wastewater. Nitrogen from septic systems is the focus of the presentation.
- Different septic systems, such as one for a home, a school, or an RV park will vary in their wastewater volume and wastewater strength.
- Soil can provide some treatment for wastewater contaminants, but most nitrate leaches into groundwater.
- Scatter Creek aquifer soils ...
 - ...the good: excellent for disposing of wastewater because of the high volume of water,
 - ...the bad: rocky, coarse soils provide very little treatment,
 - ---the ugly: high rainfall leaches nitrates and other contaminants not retained in the soil into the shallow groundwater.

Nitrogen-reducing technology in septic systems: John Eliasson, Washington Department of Health, gave a presentation that is also posted on the website.

Major points:

- Nitrogen is a concern due to human health impacts and because excess nitrogen can contribute to aquatic algae blooms.
- Sources of nitrogen in home wastewater are about 12% kitchen, especially garbage disposals; and about 80% toilet waste – 80-90% of that is from urine.
- Removing nitrogen from wastewater is a 2-step process dependent on microbes. One stage requires conditions with air (aerobic), the other stage requires no oxygen (anoxic)
- There are 3 major approaches to reducing nitrogen in wastewater:
 - Source diversion such as composting food waste and toilets which divert urine to a separate holding tank.
 - Additional treatment after the septic tank
 - Different design to the drainfield
- There are issues that must be examined including reliability, effectiveness, and expense with the various technologies available.
- Washington Department of Health and University of Washington have teamed up to test nitrogen- reducing technologies in our region and offer guidance on their uses. The tests are expected to conclude in December 2013.

Questions: Apologies – the note taker was so wrapped up in the presentations and Q&A, she forgot to take any notes.

Public Comment: none

Wrap up

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

DRAFT