

AQUIFER VULNERABILITY ASSESSMENT

SHOREACRES – JANUARY 27, 2020

QUESTIONS

- What happens next and how will RDCK use this information:
 - Land use and density
 - Industrial use
 - Old 1984 study
 - How will this be incorporated into the OCP process?
 - How are the improvement districts impacted or contribute to the issue?
 - Aggregate operations – are they still active and what are their requirements?
- Would RDCK consider subsidizing water testing – would require Board consideration
- What tools are available? Land use regulation, DP guidelines, liquid waste management plan
- Septic depends on a professional reliance model with Interior Health Authority
- Does the aquifer have good flows? Yes
- Do the rivers contribute to recharge? Yes
- Concern the data is interpolated
- Individual testing onus is on the property owner and data not readily available regarding water testing
- Community has history of buried oil tanks and grease pits as old heating resource
- Historic contributions of Nelson sewage treatment system
- How fast do things flush through? Unknown
- Where do septic standards come from? Based on historic knowledge of an area and specific to soil types and percolation tests
- How does Voykin impact Shoreacres
- How does the fluctuating water levels caused by the dams influence the water table?
- How can the RDCK regulate septic? (see note to discuss options with CRD Tara Stott – Liquid Waste Management Bylaw
- How does cemetery impact aquifer?

NEXT STEPS

- All septic installations were recorded when we built in 1965 – should be a record of location and proximity to well at RDCK
- Gather more data through community engagement and Shoreacres Neighborhood Community Association (SANCA)
- Water testing first step to inform next steps
- Pursue community water testing and septic mapping “Septic Overview Assessment”
- Investigate existing septic systems to insure they meet current standards

- Initiate subsidies to increase well water testing to be shared by the owner and RDCK/Interior Health

HOPES AND FEARS

HOPES

- Community engagement to collect data needed for more accurate assessment of THREAT. Volunteer/subsidized water testing
- Community water and septic testing
- No subdividing
- No further densification desired!

FEARS

- Increased density
- Contamination from neighborhood industry, railroad, buried tanks of oil
- Further densification - threat of increased number of septic systems
- Fear using water quality issues to increase density ergo increase tax revenues

CRESCENT VALLEY – JANUARY 29, 2020

QUESTIONS

- What would make an aquifer in the green zone? Depth of water below ground surface? Kootenay area has similar geology so difficult to answer
- Conductivity flow – how is this determined? Often mimics ground topography and interaction with river flow. High elevation and low elevation areas will have different pressures. Would require monitoring wells where you could measure water direction and speed
- Do you know the water quality results for the water systems in the study area? There are no water quality concerns with the existing systems in the area. Brent Kennedy is on a do not consume order due to potential contaminants in their infrastructure but this has not been verified
- How much does water testing cost? The local lab charges \$50 per test. Other labs may cost up to \$600 for a comprehensive test
- How do farm animals impact water quality? Dependent on manure storage and distance from wells and drainage
- How do you look after septic? Discuss with a ROWP or ask one to make an assessment. Can often tell if working based on grass cover and whether there are brown areas where it is not settling. IHA to attend future meetings to present more on this issue.

- Can RDCK try to obtain more information instead of private well testing? Issue with obtaining the information due to privacy and the information not being available. Water testing is done by private companies.
- Can contaminants go upstream? It depends on the contaminant and whether it is lighter or heavier than the water. They can go laterally if heavy but generally do not move upstream of groundwater flow
- This is a make work project – does this lead to a community water system? The report in 1984 deemed a water system not feasible but that was a long time ago and was not the intent of this study
- What are the next steps? How does this guide decision making?
- Further detail in school system – what has contributed to the do not consume order?
- Mines permits – do they have to stop at a certain depth? Do they consider the aquifer?

NEXT STEPS

- Community information session on how to best maintain septic systems and wells

HOPES AND FEARS

- Topography near Playmor Pit moves downhill toward Webb Road
- Want more information on Playmor Pit – Management Plan and the training of contractors. Spill contingency. I would like more assurance these plans are in place and are enforced
- Existing activities at gravel pit, such as: burning creosote timbers, burying dead animals, storage and importing materials that could contaminate the aquifer

ONLINE SURVEY

EXPECTATIONS - What do you want to learn more about?

- what is the actual water quality of the water in Shoreacres - want to see 1 years worth of sample testing done.