

# **Critical Areas Ordinance Revision and Best Available Science Review**

**Meeting date: December 17, 2003**

Location: Silverdale Community Center, Silverdale WA

Attendance:

**Technical Review Committee (TRC) Members:**

Art Castle, Home Builders Association of Kitsap County,

John Nantz, West Sound Conservation Council

Michael Gustavson, Kitsap County Planning Commission

Tom Ostrom, Suquamish Tribe

Ted Labbe, Port Gamble S'Klallam Tribe

**Kitsap County Department of Community Development Staff:** Jim Bolger, Natural Resources, Rick Kimball, Environmental Review, Deanna Jacobsen, Natural Resources, Keith Folkerts, Natural Resources

**Other:** Bill Hahn, Kitsap PUD, Mike Means, KCHD, Art Schick, Suquamish Tribe Dave Fuller, Port Gamble S'Klallam Tribe Don Flora, Kitsap Alliance of Property Owners, Samantha Torpey, Home Builders Association of Kitsap

The meeting convened at 2:15 with introductions by attendees; Special guests Bill Hahn of the Kitsap PUD and Mike Means of Kitsap County Health District kindly sat in for this second of two CAO-BAS review meetings concerning Critical Aquifer Recharge Areas.

The TRC discussed the Kitsap County CARA BAS and review presented at the Dec. 3 meeting.

Some concerns discussed:

How can existing data (soils, aquifers, Well Head Protection Areas, other studies, purveyor reports, etc.) be synthesized in a way that is appropriately weighted and presented scientifically enough to make it useful for CAO-BAS decisions at present  
What additional studies and improved data are necessary to upgrade and increase the accuracy of CARA maps, for example: looking at Increasing Nitrate Trends, Salt water intrusion, Maps of the class A well system

Can Vulnerability studies be added to the CAO

Quality and Quantity of water resource in aquifer recharge and use

Concern for criteria used in sighting land development relative to natural resources/critical areas, i.e. decreasing risk to natural functions and values

Stronger consideration for shallow aquifer protection, i.e. exempt wells in shallow aquifers - effects on anadromous fish via H<sub>2</sub>O quantity and quality

Methods used to determine WHPAs and travel times, example: WHPAs versus the actual extent of the aquifers, especially the shallow ones.

Apparent Need for improved geological mapping and understanding of aquifers

Following are Discussion Notes from the Dec. 17 meeting (from which the above key notes were compiled):

Bill Hahn cited that, according to the U.S. Corp of Engineer data (from draft of their water system plan being reviewed by the Water Coordinating Utility Council) 65 to 75% of water pumped into houses is put back into water recharge cycle. (This draft also has the current System of Kitsap County Water supplies and a projection of future use.)

Question concerning exempt wells. Nitrates from septic tanks are a key factor in Nitrate levels. Counties do not have total jurisdiction...i.e. DCD doesn't prove a well, but the county does have responsibility over area resource protection.

Bill H., KPUD, in process of gathering information on locations of public water system wells.

Mike M., KCHD, stated that "Group A" wellhead maps are complete at this time.

Doug Fuller, PGST, claimed that travel time, or the so called 'bull's eyes,' as shown on the WHPA maps, may be of questionable use, stating that "...anything bigger than a 50ft to 100ft radius is not useful".

Keith pointed out that WHPAs are included for modeling purposes.

Bill H., stated that so called "aquatards" (commonly called hardpans) shield many of these WHPAs from contamination. It was asked if we should be protecting the actual aquifers. It was also stated that one of the most difficult schemes to come up with, is one for protecting aquifer recharge areas. Also that shallow domestic wells are not shielded by these aquatards.

Much discussion ensued concerning "industrial" wells (much of what follows pertains to this discussion/concern), water supply and water waste (septic vs. sewer), and criteria for siting land developments while protecting the water supply, especially concerning industrial development. It was suggested that wells more susceptible to contamination should be identified and mapped. Dave F. suggested that CARA BAS development should look at impervious surface soils interfering with water's ability to recharge and look at risk of contamination.

Rick Kimball, DCD, stated that proposals are coordinated through DCD, PUD and Health District, but how can what is learned here be used to identify the appropriate process.

Mike M.: mitigating alternatives are only as good as the people implementing them.

Question asked, if an aquifer is at risk, will mitigating circumstances or best management practices be enough.

Keith F., DCD, stated that King County draft ordinances simply prohibit activities that are found to compromise CARAs.

Mike M. stated that Health District is not certain as to where CARAs are

Bill H. stated that a good place to site industrial areas is where there are good aquatard layers. Rick K. added that existing industries in Kitsap County were sited before these issues were examined, or even thought of. "We're stuck with an existing situation." Tom Ostrom asked how many industrial areas are on septic system. Mike M. stated that most

are on septic and that much protection of well depends on the construction of the well. It wasn't until 1988 that surface seals were required by the State (to 18ft depth) and implemented by the County.

Bill H. stated that the type of soil is not considered in the "Dixie Cup" method.

Should we deal with problems as they occur, or should we have a process with which to deal with problems as they occur.

Jim B., DCD, asked if any jurisdiction uses something other than "dixie cup" method.

Dave F. answered that a calculation of best guess of travel time is used elsewhere, the horizontal travel time versus the time it takes a contaminate to travel vertically..however, this method is difficult to develop.

Keith reminds everyone that WHPAs are only one element used by the US Geological Service for determining land use, ground water supply and recharge areas. And Vulnerability is more realistic data, based on what we, in Kitsap County, should be looking at.

Bill H. questions how land use will be managed so that we do not contaminate the water supply. What works best for Kitsap County?

Rick K. asked whether a policy with Health or PUD is in place to get purveyors to change from shallow to deep aquifers. -Department of Ecology has a "Water Trust" program that provides funding to change.- Tom Ostrom stated that single family and exempt wells are not protected in the CAO. Mike M. stated that Health does stipulate for secondary well systems. And most incentive to change from shallow to deep comes from the Health District, i.e. if water is unhealthy.

The remaining discussion revolved around main points bulleted at beginning of this summary. **Meeting adjourned around 4 pm. Next meeting on January 7, 2004.**