From: macraej
Sent: Friday, July 10, 2009 4:58 PM
To: Wessel, Ann (ECY)
Subject: Comments on Proposed WRIA 17 Quilcene-Snow Water Resource Management Program Rule

Anne:

Once again, I would like to express my appreciation for the inclusion of rainwater catchment in the proposed rule.

I have a few comments/questions relating to the proposed rule.

To repeat a comment I made orally during one of the Ft. Worden sessions, I would request that Ecology explain the analysis and assumptions that lead to the conclusion that well-water withdrawals will have a negative impact on streamflows.
Given a typical rural 20-acre lot in the Quilcene area, I estimate that almost 30 Million gallons of rainwater fall on such a lot per year.
A well completely utilizing at the level specified in the proposed rule of 350 gallons/day would draw less than ½ of 1% of this rainfall per year.
Does ecology think that a consumptive pattern representing a small fraction of a percentage point of the volume of rain falling on the land served by the well represents a threat to streamflow? If so , how?

Ecology has referenced the concept of hydraulic continuity in defending previous assertions that water removals directly impact streamflows in a negative manner.
Has ecology considered the possibility that well removals from deeper aquifers might well AUGMENT streamflows by shifting water from deeper aquifers, more likely to directly empty to the ocean to surface use that would be expected (through reintroduction through septic and/or irrigation or other non-consumptive uses) to introduce additional water for eventual seepage into nearby streams and rivers?
A well drawing the average 350 gallons/day allowed under the proposed rule would draw almost 128,000 gallons of water per year. If this water was fed back into the land through a septic system, this would introduce almost 95,000 gallons annually into the shallow aquifer to seep into the streams and rivers. During the lowest flow months (summer), if we assumed the well to be drawing its maximum allowed 500 gallons, then the daily introduction of water into the shallow aquifer would approximate 370 gallons per well.
Even in the worst-case scenario of all of the withdrawn water being used for a purpose that does not involve septic introduction of water into the shallow aquifer, such as irrigation, assuming a 75% rate of evaporative loss of the water would still yield daily volumes of water introduced to the shallow aquifer on the order of 125 gallons per day per well. Such flows would be expected to augment stream flows … and at the time of year when such augmentation would be most beneficial to instream flows.

In valuing adult returning spawners at $5000.00 over a 16-year span, has ecology considered the average lifespan of the fish species in question?
More explanation of the $5000.00 figure would be helpful.

The Maximum Net Benefit section of your submission appears to be missing quantification. Will Ecology be completing a Maximum Net Benefit Analysis for the proposed rule?

There appear to be a number of costs missing from your cost-benefit and related financial workups. Will Ecology be including loss of county property tax income and loss of individual property values related to this rule as costs in the final analysis?

I am disappointed to see the inclusion of the well-metering requirement for new wells, following numerous public input sessions over the years where statements such as “we will not require monitoring of wells” were made by Ecology staff.

I look forward to your answers.

Thank-you.

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