

**From:** Junko Harbord [REDACTED]  
**Sent:** Tuesday, July 03, 2012 1:16 PM  
**To:** Wessel, Ann (ECY)  
**Subject:** Dungeness water rule

Hello,

Just finished reading the text of the new water rule for the dungeness water basin. I understand ecology's attempt to regulate water use in this basin but have a few questions.

1. How are surface waters (streams and lakes) connected to underground aquifers, and thus connected by this rule? Geologically speaking, I understand that surface water percolates into the ground to recharge aquifers, but I do not understand how surface water closure should effect how many wells are allowed to be connected to an underground aquifer. Increased withdrawal from an aquifer does not change the amount or rate of water percolating into the aquifer from surface water sources. Yet the two seem to be related via the management rule. If they are not related should that not be clearly stated by the rule? Is this rule attempting to address two separate water issues with one water exchange? Realistically it seems that there should be a more prescriptive definition of how aquifer water will be "banked," "exchanged" and "mitigated." Why all the focus on stream flow alone?

2. How can ecology say that irrigation of surface soils, ie. watering lawns or gardens, results in 100% consumption, but that domestic use attached to an on site septic system results in only 10% consumption? An OSS just concentrates the area where the water is applied. In fact evaporation of the water is a large portion of how a septic system works, that is why you are supposed to keep the grass growing over a drainfield mound, and also why above ground (mound) systems exist, to increase the amount of surface area that can evaporate water used in the household. If evaporation through a drainfield is considered non-consumptive, transpiration and evaporation due to irrigation of landscapes/gardens should also be considered non consumptive.

3. What of the fact that the glaciers that feed our streams, rivers and lakes are slowly dissipating? The rule does not acknowledge this, nor does it have a "mitigation" plan for the lower stream levels due to disappearance of glaciers in the mountains. Should this exchange in fact have a water right uptake rule? Where it has a set goal to take back over appropriated water, due to the shrinkage of "water storage" at the peaks of our mountains? If this reality lies in our future, then this rule should address the possibility and have an action plan for it.

Thank you,  
Junko