Kim Clarkin

Please see attached word document

Thank you for setting reduced limits for new permit-exempt well withdrawals for domestic indoor uses and outdoor gardening. If I understand correctly, the purpose of these limits along with 'retiming' projects is to constrain the total impact of all such new wells so that Nooksack River low flows will not be reduced. I believe you are being much too timid in your effort to protect Nooksack flows. This is no time to minimize our protective efforts when we know summer flows will decrease as the climate warms.

My comments on the draft rule follow below.

- 1. I see no way you can enforce the water use limits if you do not require metering. Even well-meaning householders will not be able to comply if they do not know how much water they are using. I have left my garden hose running for an extended period by mistake---but I have had to pay the City for the error, and that is a great incentive to not repeat it. There is no incentive to improve your water conservation if you don't even know how much water you've wasted.
- 2. How do you propose to evaluate the effectiveness of your overall program without metering? Unless we know how much water is actually being withdrawn, how can we interpret any changes we might observe in reach-scale flows? This is especially true since you are not limiting stockwater use at all and business withdrawals can vastly outweigh the domestic uses you are regulating here. Metering households' total use is essential for interpreting permit-exempt well impacts on flows.
- 3. As Eric Hirst has advocated for a long time, this rule should include strong water use efficiency standards and incentives. Coupled with metering and public education, such a program would help people identify wasted water and correct their system to eliminate it. This kind of water conservation would offset some of the additional water withdrawals you are permitting in this rule in a much more convincing way than some of the listed habitat projects. I believe you should place much more emphasis on this strategy.
- 4. Coldstream Dairy water offset: the volume of water that would be returned to the river is trivial in comparison to flow in the river in late summer. Unless the dairy's supply is a deeper, confined aquifer, this project should not be considered a benefit to low summer flows. I do, however, thoroughly support the project for its other benefits.
- 5. I urge you to search out and focus on wetland restoration and floodplain/fan reconnection projects that will increase groundwater recharge and storage. These are the types of natural recharge areas we have lost by occupying, draining and levee-ing our floodplains and fans. Such projects would not require pumping and artificially moving water between basins, so they would be less likely to have unforeseen negative consequences to other resources and habitats.

Thank you for receiving and considering my comments.

Kim Clarkin Happy Valley