From: Jan Thompson [mailto:Jan.Thompson@kpu.ca] Sent: Thursday, November 14, 2013 12:31 PM To: Living Water Smart ENV:EX Subject: comments on the Water Act

To whom it may concern:

Here are a few comments on the new Water Act, organized by section within the Act:

1) Protect stream health and aquatic environments

I would like to see more information on how 'low risk' will be defined. In one section it states that 'low risk' may include deep aquifers that are not 'connected' to surface streams. All aquifers are connected to the surface at some level; this is how aquifer levels are recharged and maintained. Additionally, we have only completely mapped a small proportion of aquifers in BC, and it is likely that some of the incompletely mapped ones would be connected at some spatial or temporal scale. My worry is that water use applicants in remote regions would be granted approval before completion of mapping and environmental assessments (or approved because the extent of the water supply is unknown).

I also wonder how the environmental flow needs are to be assessed. Although BC is a very diverse region, I would think that having overarching guidelines or best practices in place for determining environmental flow needs would be necessary for all regional water managers to follow. Yes, the specifics of the regional hydrologic characteristics need to be considered, but there should be a scientifically-based framework within which each regional manager should be working.

2) Regulate and protect groundwater use

Although I am pleased to finally see the incorporation of licencing for groundwater extraction, I am concerned about the definitions and exemptions that are being suggested. In particular, the statement that 'deep, saline aquifers would be expected to have minimal hydraulic connection with shallower groundwater' is very misleading. As mentioned above, we still do not have complete knowledge on where aquifers exist in the province, let alone whether or not they are connected to other aquifer systems. As well, there are many natural explanations for saline groundwater, including dissolution of salts from evaporites or local geothermal activity. The presence of saline groundwater below 600m does not necessarily mean that the groundwater is disconnected from other aquifers. The use of these definitions to exempt deep saline groundwater from the normal regulatory process is very dangerous and could lead to unnecessary contamination of water supplies and the overuse of existing supplies.

And one clarification from the document: Would an exempted groundwater user need to reapply for a change to their licence if they are removing higher volumes or drilling into a different aquifer? The document seems to suggest that this would only be required if they were moving from an exempted to a non-exempted use.

3) Measure and report

I found this section to be very short on detail. It has been shown that voluntary monitoring is not effective, so all water users must have a mandatory reporting requirement. This will not only assist with further licencing (given known cumulative effects on watersheds and aquifers), but it will allow scientists to better monitor our existing water resources. This will likely mean more support (in terms of more technicians) for monitoring, data analysis, and enforcement.

4) Enable a range of governance approaches

While it seems useful to allow other governing bodies and agencies to assist in these decisionmaking processes, one only needs to look at how moving the control of floodplain mapping from the provincial government to municipal authorities resulted in most mapping projects remaining incomplete. This was mainly due to the lack of monetary and technical support which municipalities needed to complete these projects. So, unless this support is supplied, and unless the whole process is transparent and not controlled by local interests, I do not think that this is a good idea.

Thanks,

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