



February 23, 2018

Honourable George Heyman
MLA and Minister of Environment and Climate Change Strategy
Room 112 Parliament Buildings
Victoria, BC
Via Email: George.heyman.mla@leg.bc.ca

Re: Water Sustainability Act - proposed livestock watering regulations

Dear Minister Heyman,

BC Nature (Federation of British Columbia Naturalists, www.bcnature.ca) represents 53 local nature clubs throughout BC, with approximately 6300 members. The health and sustainability of our water and the species that depend on it are very important to us.

The purpose of this letter is to provide you with our comments on the proposed livestock water regulations outlined in the Province's intentions paper, under BC's Water Sustainability Act.

Our members, many of whom own ranch lands, are aware that livestock, cattle in particular, can have negative impacts on water bodies, by:

- a) eroding the shorelines and decreasing the water quality of streams, rivers, dugouts, lakes, and wetlands;
- b) polluting streams and other water bodies with their feces;
- c) trampling and grazing riparian vegetation, which in turn leads to reduced plant cover and diversity necessary for bank stability, stable water temperatures, and habitat for fish and wildlife; and
- d) contributing to the loss of valuable farmland (e.g., increasing erosion during high water events).

Fish and many other aquatic organisms depend on clean, cold, and sustained stream flows and may be negatively impacted by low flows caused by water diversions. Furthermore, the timing of those diversions can lead to increased stream temperatures and reduced oxygen levels. This can be detrimental to the distribution, abundance, and survival of species, especially under current and future climate change scenarios.

We strongly agree with the first proposed policy objective, namely to improve water management and the protection of the environment by facilitating the development of managed direct access sites and off-stream watering systems for livestock. However, in our opinion it is critical that the Province provide strong leadership by directing the livestock

industry to adopt greater shared responsibility to protect and conserve our water resources and associated environmental values, which this intentions paper does not do. As an example, we found the publication *Livestock, Drinking Water and Fish* published by the BC Cattlemen's Association a valuable resource that speaks to best management practices. These need to be implemented in order to effectively manage the direct and indirect effects of livestock on water bodies and water. Additional resources/information are readily available for use.

Authorizations - Throughout this intentions paper, it is unclear why the Province is not continuing to require an authorization (i.e., licence or use approval) for all types of water diversions and/or uses of surface or ground water sources under the Water Sustainability Act. We do not believe a partial approach, such as the one proposed, will allow the Province to meet its goals of improving water management and ensuring water and associated environmental protection.

Examples where not requiring consistency with authorizations may be problematic include:

- managing the effects from cumulative water uses (e.g., access, diversions or withdrawals), and
- accounting for site specific concerns (e.g., sensitive soils and ecosystems, steep terrain).

If authorizations are not required for certain activities, then what assurances (e.g., information from a qualified environmental professional) is a proponent required to provide the Province to ensure its staff can make appropriate decisions with regards to the sustainable management of water and the environment?

Under the proposed regulations, the construction of managed direct access sites and off-stream watering systems for livestock watering will be added to the list of 'authorized changes'. The notification process will provide an opportunity for a habitat officer to consider the particular circumstances of the stream in respect of notified changes and also allow for additional requirements to be specified to protect aquatic ecosystems.

We are concerned about allowing proponents to construct direct access sites and off-stream watering systems without authorization. This is especially important if proposals lack key baseline and site specific information, and Provincial resources (e.g., best management practices, staffing) are not adequate to ensure proposed changes are reviewed and completed appropriately.

For streams where water use does not require an authorization, we are uncertain how the Province will be ensuring water is managed appropriately (e.g., for healthy aquatic ecosystems and fish habitat) during a water shortage or drought. We are also concerned that these regulations do not mention the need for proponents to ensure the protection of Species at Risk and ecological communities, especially where authorizations are not required.

Water Diversions & Dugouts - As stated in the intentions paper, construction of minor diversion works would be exempted from the notification requirements of Part 3, but subject to specified conditions to protect aquatic habitat. We believe it would be prudent to specify which minor diversion works would be exempted so that this is clear to proponents and Provincial staff.

Regarding the construction of dugouts, we are unclear of the following circumstances:

- Are there any existing regulations under the Water Sustainability Act or other Act covering the construction of dugouts and, if so, how and why do the new regulations differ from these existing regulations?
- Why are existing dugouts, constructed before this regulation takes effect, exempted from it, in particular the following criteria: it is not constructed on a perennial stream, or on an ephemeral stream tributary to a perennial stream? We believe these existing dugouts should be reviewed to ensure they are meeting the legal objectives and standards of the Water Sustainability Act, especially if there is a possibility that they are contravening the Act and will likely continue to do so.
- What is the basis/rationale for exempting an authorization if the dugout does not have a volume greater than 2500 cubic metres? From our understanding, 2500 cubic metres is approximately the size of an Olympic pool, which seems like an extensive dugout for watering livestock and could result in a considerable amount of water being diverted from a stream, especially streams with naturally low water volume .

With regards to limitations on water storage in a livestock dugout, we are uncertain why the Province is not requiring authorizations for diversion and use of water from a stream or an aquifer for storage in a livestock dugout provided that: the diverted water is unrecorded water, the water is diverted only during periods of snowmelt or rainfall freshet flow, and the water is only used for livestock watering purpose.

Unrecorded water - We reviewed the meaning of unrecorded water (i.e., water in a stream or aquifer that is not licensed or reserved for other purposes) and from this definition we do not believe unrecorded water is any less important than other categories of water in terms of its environmental/ecological values. Thus, we do not understand why the Province would not insist that an authorization is required to appropriately manage unrecorded water that is being diverted and used.

We also think that the wording periods of “snowmelt” or “rainfall freshet flow” is vague and/or subject to misinterpretation, potentially leading to water mismanagement (e.g., during times when water should not be diverted because of the needs of species or maintenance of ecological processes).

Protecting Streams - Under the proposed regulations in the intentions paper, livestock may be allowed to consume water directly from a stream or water may be diverted from a stream or aquifer to an off-stream watering system, provided that the water is not from a “sensitive stream”.

When we reviewed the sensitive streams listed under Schedule B of the Water Sustainability Act

(http://www.bclaws.ca/civix/document/id/complete/statreg/36_2016#ScheduleB) we were very surprised to read that only seventeen streams are listed as sensitive. To manage water and the environment sustainably, we would assume that all streams would be considered sensitive, as water is critical to life in terms of the species, ecosystems and processes it supports. As such, we believe livestock should not be allowed to consume water directly from any stream, nor water be diverted from any stream or aquifer to an off-stream watering system, until the proponent has done due diligence to ensure the stream and its water and associated environmental values are protected.

In this intentions paper there is no mention of what size of the stream water can be accessed or diverted from. We understand that as stream size decreases the sensitivity of the stream to either direct or indirect uses of water by or for livestock would increase. Stream size should therefore be a criterion that informs these water use regulations (e.g., greater protection of the stream and its water as stream size decreases).

Overall - We are very concerned that the Province, through this intentions paper, is not showing adequate leadership nor proposing effective regulations that will manage livestock, in particular cattle, to meet appropriate water quality and quantity objectives and protect the environmental values of all water bodies with regards to all forms of access to and use of water by livestock in BC.

We thank you for the opportunity to provide our input and look forward to regulations that ensure the health and sustainability of our water and the species that depend on it is achieved with regards to its use by livestock.

Yours truly,



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