WINTER RIVER - TRACADIE BAY WATERSHED ASSOCIATION

Supporting The Watershed,
So It Can Support You

Recommendations on Water Withdrawal Regulations – 2nd Draft

Overall we think the new draft is an improvement over the old draft. For example, the incorporation of drought planning, including the idea of conservation as a consideration, and changing many statements from "may" to shall". However, we still have some concerns, as outlined by section below.

	Regulation Text	**Comments/Concerns**
1(2)	In these regulations, a reference to the drilling, construction or reconstruction of, or the withdrawal of water from, a high capacity well for the purpose of agricultural irrigation, does not include the drilling, construction or reconstruction of, or the withdrawal of water from, a high capacity well for the **purpose of research** approved by the Minister in respect of agricultural irrigation.	How long can a research project continue? Will the research consider drought, soil health, precipitation, information specific to each watershed, etc., etc.?
5(2) 8(2) 9(2)	The Minister may require an applicant to do any of the following in support of an application: (a) conduct tests, collect data or obtain information; (b) submit test results, data or information to the Minister; (c) **submit a drought contingency plan,** acceptable to the Minister, for reduced water use during drought conditions.	How is "drought" defined? Using the ECCC drought monitor, Provincial precipitation records, stream levels? How will water users know we are in a drought? How does the Minister decide who needs a drought plan? REWRITE: C) If the applicant is requesting a large water withdrawal (defined as over ### cubic meters per day), that applicant shall submit a drought contingency plan for reduced water usage during drought conditions. i) Drought shall be defined using the Canadian Drought Monitor prepared by Environment and Climate Change Canada. The applicant's approved Drought protocols must be implemented within 7 days of an Extreme Drought (D3) or Exceptional Drought (D4) being reported for the area of Prince Edward Island where the water withdrawal takes place. ii) Since the drought monitor reports are issued monthly, water users are recommended to monitor additional sources of data if they anticipate that their drought protocol would be challenging to implement within 7 days. iii) The Drought Contingency Plan shall include the amount of water that will be reduced during an Extreme Drought (D3) and the greater amount of water which will be reduced during an Exceptional Drought (D4); how these reductions will be implemented if the user is a municipality (ex. surge pricing for water, a list of water users who are

		willing to reduce their consumption, enforcement activities for outdoor water use, etc.), and other information to a level of detail that is acceptable to the Minister.
5(5)	Notwithstanding subsection (4), the withdrawal of water is considered to have an unacceptable adverse effect where (a) the cumulative effect on a watershed of the withdrawal of water from all sources within the watershed results in the reduction of water flow in any watercourse or wetland in the watershed by an amount greater than the amount equal to 35% of the mean base flow in the watercourse or wetland during August and September; or (b) the cumulative amount of water withdrawn from a watercourse or wetland from a particular location and upstream of that location exceeds the amount equal to the difference between the monthly 70% flow duration and 70% of the median monthly flow in the watercourse or wetland, as the case may be.	How is it decided which method to use? If data is available for both methods, and one method shows there is an adverse effect and the other method shows there isn't, does the application get approved? For sites that are far from ECCC water flow monitoring sites (ex. southern Kings County) is pro-rating from another site accurate enough for this purpose? 70% Flow Duration in this context seems to be calculated differently than the way this term is often used. Clarify wording. How is the mean base flow calculated, that is does it require a certain length of time for averaging, such as 5 years, or 10 years? If climate change impacts the mean base flow and it becomes higher or lower, would the withdrawal permit be altered at its next 5-year reapplication? Clarify section (a) – does one need to see the result? REWRITE: (a) the cumulative effect on a watershed of the withdrawal of water from all sources within the watershed results in, OR IS MODELLED TO RESULT IN, the reduction of water flow in any watercourse …"
5(6)	Where there is insufficient water in a watershed to permit the withdrawal of water for all purposes and meet the environmental flow needs of the aquatic environment in the watershed, the Minister shall prioritize the purposes for which water may be withdrawn from the watershed in descending order as follows: (a) fire suppression; (b) domestic water use by individual household wells or through municipal water supply systems; (c) industrial, commercial or other water uses prioritized based on the degree to which the use serves the public interest.	Are commercial/industrial user within the City of Charlottetown considered to be lower priority than the Residential users within the City of Charlottetown? There is some mixed messaging in different government documents (Ex. REF #1 and REF 2). There *IS* insufficient water within Winter River. Charlottetown might be able to safely provide for domestic use, but supplying all commercial and industrial users is damaging the aquatic environment every year. Based on this rule, Charlottetown needs to find new water sources to supply their industrial and commercial customers or find ways to reduce total demand within the city. The province is permitting the municipality to allow their Industrial users to damage the environment, while the province is prohibiting other industrial users from doing the same. If private domestic wells within the watershed went dry, would the City of Charlottetown be forced to reduce their extraction? These prioritization rules need to be applied consistently, rather than favouring businesses within cities over businesses in rural areas. Are there criteria for defining public interest? Is every business that creates jobs considered to be in the public interest? Would there be a determination based on economic activity generated per unit of water used, or some other criteria?

Some general comments not specific to one section:

- While municipalities serve many domestic water users, they also serve many commercial and industrial users. There is clearly an adverse effect of all the water extraction taking place within the Winter River. Past use of water should not continually be "grandfathered in". While it is true that some municipalities and agricultural users have invested large amounts of money into infrastructure for providing water, at some point, the negative impact cannot be ignored anymore. So even if it means the municipality, agricultural producer, or any other user needs to spend additional money to become compliant with rules, these rules should eventually be followed, as long as they are based on sound scientific principles.
- Agricultural irrigation should be considered as a commercial or industrial use of water, and applications should be analysed on the merits of each individual proposal.
    - If this option was adopted, each proposal should include information on the soil health in the area where the farmer wishes to add irrigation. Does the field already have soil with sufficient soil organic matter to adequately hold moisture within the soil? Does the crop rotation in use continue to provide soil organic matter or is SOM decreasing over time due to unsustainable rotation types (whether they are short or long rotations).
    - We are not encouraging large scale irrigation of potato fields especially where other management is poor, but we don't think it is fair to prevent irrigation of food crops while allowing irrigation of golf courses, irrigation of residential lawns, operation of car washes, or any number of other industrial activities. It would seem that domestic food supply from agricultural irrigation would have a greater degree of public interest than golf course irrigation.
    - Perhaps people are more concerned about agricultural irrigation because they can see it happening out in the open, whereas water use within industrial facilities happens behind closed doors. Some parts of the agriculture industry also have other negative social and environmental impacts, so perhaps people are generalizing their negative feelings about parts of the industry onto the industry as a whole and any activities that they would like to carry out.
- Policies and permits should be written in a way that is adaptive to climate change, and written in a way so that water users can plan and prepare. For example, users might be told that if mean base flow in streams decreases, the maximum amount for their water withdrawal permit may be reduced by up to 10% on each renewal period, until their use is in line with the environmental conditions.

REF #1 https://www.princeedwardisland.ca/sites/default/files/publications/groundwater_usage_summary.pdf

This document groups commercial and industrial water use within a municipality as "drinking water"

however

REF 2 - https://www.onthelevelpei.ca/managing-water

The table "How we use groundwater on PEI" seems to have grouped municipal industrial water as Industrial rather than Domestic.

Submitted by Sarah Wheatley on behalf of the Winter River – Tracadie Bay Watershed Association board of directors, April 16, 2021.