PEI Natural History Society Comments on the Draft PEI Water Act April 17, 2017

The PEI Natural History Society is pleased to see the Provincial Government taking action to protect one of our most precious natural resources upon which all human, animal and plant life depend for existence. In response to the public invitation for comments on the draft Water Act, executive members have reviewed the proposal and offer comments as follows:

- 1. The time allowed for an in depth review and meaningful comments on the draft Water Act is not sufficient. This Act, if passed, will guide our use and protection of water in our province for the next generation and the time for review should be extended by at least 2 months to June 30th.
- 2. In the "Inside the Water Act Consultant Draft" it states in paragraph 3 that Part II of the draft Act reflects government's commitment to transparency regarding the state of the province's water resources. This needs to include availability for public comment on any draft regulations which are proposed under this Act to avoid passing of regulations which may have serious consequences for our water resources without public ability to comment prior to being proclaimed.
- 3. The Act needs to address a broad safety margin, seasonality of withdrawal, and obligation of high capacity users to address other alternatives first (water collection dams) and total farm management water infiltration within a water recharge area should be a prerequisite. Otherwise, farmers can continue to remove hedgerows and woodlands that are primary recharge elements. Prohibit all new high capacity wells for agricultural purposes, If this is not possible, have high capacity wells trigger an EIA.
- 4. Section 39 of the draft Act restricts water withdrawal rates per day to 25 cubic metres per day or 3.8 imperial gallons per minute, except as permitted by the regulations. This needs to be applied to all existing wells which exceed this capacity if the province is serious about managing the withdrawal of water. In relation to this, the province should require properly calibrated water metres to be installed on all high capacity wells which exceed 346 cubic metres per day. Technology is available to today to have withdrawal rates from metered high capacity wells in real time on the internet. This would certainly provide the transparency that is mentioned in the Discussion Draft.
- 5. In the discussion draft for Part II of the new Act it mentions that "A report on the status of the province's for the previous 12 month period will be available online". This should be made available within 6 months of the end of each year to enable the public to assess

- the state of the province's water supply. This report could include the water withdrawal rates obtained from the water metres suggested under point # 3.
- 6. Some watersheds in the province such as Winter River Watershed and the Barbara Weit River Watershed appear to have unsustainable groundwater withdrawal rates at certain times of the year. Each watershed in the province needs to have a water budget or inventory conducted to properly assess the water which is available for withdrawal. Thus when a proponent proposes to have a medium or high capacity well drilled, the water budget information would enable an informed decision regarding the proposal. The local watershed groups should be part of the review process for these applications as they have local knowledge which would be invaluable in the decision making process. With regard to high capacity wells, an environmental impact assessment review should also be required to assess all potential environmental impacts. This process also needs to include a hydrogeological assessment under the direction of a qualified hydrogeologist.
- 7. The Discussion Draft states in Part II paragraph 2 that "Where water withdrawal poses a conflict between various water uses and users, priorities for water use will emphasize the prime importance of domestic use and ecosystem health ahead of industrial and commercial use. "It needs to be clear how this will apply to existing wells, such as in the Winter River Watershed, where fish and wildlife habitat is being lost due to heavy water withdrawal rates at certain times of the year. This is a prime example where water metering would enable proper assessment of the situation. This also suggests that water withdrawal rates may need to be modified during the different seasons such as the fall when the water table is at its lowest and stream flow is also at a minimum.
- 8. There are a number of high capacity salt water wells already in use in the province with a demand for more on the horizon. These wells, by nature, are located in coastal areas, which leads to conflicts in water allocation and use. The fresh water zones in the aquifer need to be protected from saline water intrusion. The situation is further complicated by sea level rise as the result of climate change. There have been a number of private wells already impacted by salt water intrusion and this again stresses the need for hydrogeological evaluation of each case.
- 9. There have been cases where the fracking procedure used in the oil and natural gas industry has led to contamination of drinking water and a loss of drinking water well capacity in other jurisdictions. There is no mention of a ban of the fracking procedure in the draft Act and it is our opinion that a ban should be spelled out in the new Act.
- 10. There are examples of farming operations which have constructed ponds to collect storm water runoff which could then be used to irrigate crops during the dry times of the year. This practise should be encouraged in the new Act as it would reduce the need for applications for high capacity wells. The capturing of runoff water flowing off fields via impoundments could reduce siltation and sedimentation of downstream water courses.
- 11. Storm water runoff in developed areas from large buildings, parking lots, roads and other developments is creating intensive storm water flow during intense precipitation events,

storm surges and periods of snow melt. Developers, business owners, government organizations and institutions need to incorporate green storm water methods to reduce storm water runoff and enhance infiltration in the design of structures. This should also apply to municipalities who replace natural grassed ditches by installing pipes and infilling practises. Hard surfaces such as flat roofed buildings and paved asphalt surfaces reduce natural infiltration to ground water thus reducing recharge to the underlying aquifer. Some climate change experts are predicting more intense storms, which will exasperate this problem. Prince Edward Island has already experienced some of these storms on September 8, 2008, December 21, 2010 and December 14, 2014.

- 12. One of the outcomes of a changing climate for Prince Edward Island is forecast to be hotter, drier summers which can lead to more periods of drought as was experienced to a certain extent in 2016. The province needs to ensure that there are provisions in the Act which enable implementation of water conservation measures during a drought or low water table event. Non-essential activities such as washing vehicles, road and street washing, watering lawns, filling swimming pools should be banned during at these times.
- 13. Section 40 of the draft Act prohibits the export of water from the province with some exceptions. One of the exceptions appears to be ships, including cruise ships which enter our ports. The amount of water required to supply cruise ships could be quite substantial and this information should be made available to the public to provide transparency. There may be some times of the year such as the fall when water use is under a conservation measure that ship supply is not acceptable. This section appears to prohibit the export of bottled water from the province but it is not clear if this includes bottled juices, beer and other water containing alcoholic drinks which are manufactured within the province. There is no mention in the Act of importing water and associated water containing drinks into the province. It seems inconsistent that we would ban the export of water and not the import.
- 14. The province should insure that they receive input from a qualified hydrogeologist in the review of the policies and procedures related to the management of our groundwater resources.
- 15. There are a number of comments on definitions in the draft Act.

The Water Act which powers mirror the Environmental Protection Act and in many cases use the same definitions. Perhaps the Act should just state what those definitions are rather then refer to another Act. This would make it easier for everyone, including general public, officers and the judge.

"environmental flow need" definition is too subjective. Should be more specific and measurable.

There is a need for a definition of "animal". This is referred to under adverse effects and under contaminant. What animals does it include? Domestic, wildlife, insects, anthropods etc. Could it include invasive species?

"groundwater" definition "is a little confusing. Does it include water in pipes? What is meant by "occurring below the surface". So when it is brought to the surface is it still ground water? What about the water contained in a potato, is this groundwater? This may lead to some problems in court with this definition.

"motor vehicle" should define it here as discussed

"water" as a noun includes water in both liquid or solid (not frozen) state in a watercourse.....

Need to define guardianship in respect to this act;

- 1(d) Clarity required on banks or shores
- V (iv) Why use "a person". Does this include corporation;
- 16. Comments on other sections of the Act

Section2 (b) "is essential for adequate standard of living. Sound very subjective and perhaps just removing it would make more sense as the points are made before it. This whole subsection is poorly written.

- 2(b) Limit application as population density can preclude the ability to supply water within these terms;
- 2(g) Add quantity;
- 2(h) Add open access online monitoring (instantaneous for high capacity wells)
- 2(i) There is an issue with open ended "science based". We simply don't have the information available and models by definition meet probability based science

Aboriginal Treaty Rights and constitution

3. Better check the constitution on this one. The control of many of our water resources is by the Federal Government indirectly through the Fisheries Act and directly over the tidal and marine Environments. This gives the federal government sweeping powers in dictating to the province what it can and cannot do around water. The province appears to have jurisdiction generally over freshwater or inland waters and groundwater but even then it might be argued that federal law takes precedent over the provincial in regards to federal lands covered under federal Acts such as Parks and Lands covered by the Indian Act.

Sections 4, 7, + others Curtail the Ministerial powers by inserting limiting clause(s) stating that he/she can only do so when they comply with the Act's purpose & goals;

Section 8 (b)"environmental flow needs" should be specific and measurable. Perhaps a schedule in the new Regulations that can be referred to. This may differ depending on the time of year

Section 11. (d) ... which may include but is not limited to an affect...

- (f) the end of the paragraph should change "and " to "or" unless you mean both
- (g) should take out the word "be"

Section 16(1) Clarify regions - watersheds/infiltration areas

18 Registry needs to be online and orders-changes to it need to be flagged so they don't fall through the cracks.

18(4) "shall" not "may"

21(1)(c) Why would a previous owner be the responsible party?

21(1)(3) Post into open system GIS maps to identify orders

Divisions: Make consultations obligatory for high capacity wells. What about multiple wells on one property so that collective capacity is much higher?

Section 32 (2)(a) ..rare, endangered or uncommon aquatic species... What is the definition of rare, endangered or uncommon aquatic species. Should refer to existing definitions under the Wildlife Conservation Act and get busy listing them. Also a many non-aquatic species impacted by watershed that should be taken under consideration.

- (b) same argument
- (c) contains "unusual" need definition. Do you mean "unique" or "significant". Still too subjective. A list would be nice.
- (d) exceptionally high populations Again too subjective and in some cases could be a bad thing ie sea lettuce
- (e) words like "exceptional" are too subjective. Every active beaver dam exhibits exceptional biological diversity.
- 33(2) Why does this not apply to other divisions

35(b) This appears to be non-compliant with the goals. Municipalities must limit their water use.

Section 36 (2)(a) "representative of Government or another person" Do you mean a Government employee or another person? Understand that a person can be a corporation. Do you need this at all or perhaps you want both a representative of government and another person?

40(3) There is no limitation to vehicle capacity. What about ice making use?

Section 45(2) ...adverse effect "or" to the... This whole section is a bit messy. Can more than one person be ordered?" or "is used a lot rather than "and". Just needs to be clarified.

46(1) Appears to be a way to overcome any objections on water use Who or what is Environmental Industrial Services Inc.

Section 48 and 49 "A person responsible" should be more precise. The owner? Contractor? Even government could be considered the "person responsible"

Section 55(3) (b) should use "or" not "and" Probably don't need (3) (c) at all. Officer should get a warrant even if entry might be granted.

- (4) An Environment officer may already be a peace officer ie RCMP, Conservation Officer.
- (5) Don't need peace officer. Who would be enforcing this Act besides an Environment Officer?
- 69(3) This leaves a big loop hole for a violator. If the person who commits the offence and self dicloses or gives information, they cannot be prosecuted.

The Prince Edward Island Natural History Society is pleased to be able to offer the above comments on the draft PEI Water Act. We would be pleased to offer additional information if requested.

On behalf of the PEI Natural History Society