The National Farmers Union District 1, Region 1

Submission concerning The Threat of Lifting the Moratorium on Permits for High Capacity Wells

Presented to the

Standing Committee on Agriculture, Environment, Energy and Forestry of the Legislative Assembly of Prince Edward Island

The members of the generation which is in power must not treat the earth as something given by their parents, but rather as something borrowed from their children. (National Farmers Union Policy G-6 #1)

> Charlottetown PEI March 6, 2014

Introduction

The National Farmers Union-NFU (see profile in Appendix #1) appreciates this opportunity, and is proud once again, to make public our position on the central role of stewardship of the land, water, air, and all inhabitants of this planet. It is a great pleasure to hear so many new voices in addition to ours. It is obvious that the threat of lifting the moratorium on high capacity wells has stirred a new level of passionate awareness among a wide range of Islanders, who have never before been heard. Over the years, the NFU has found support for stewardship among insightful environmentalists, social justice organizations, and especially the constant message of the Mi'kmaq people.

We appreciate the openness of the Standing Committee on Agriculture, Environment, Energy and Forestry to hear from as many groups and individuals as possible on the threat of lifting the moratorium on high capacity wells. It does not go unnoticed in the community that you have extended your hours of the hearings to make way for as many submissions as possible.

It is no surprise to the NFU that Islanders, given an opportunity, will rise up with strong feelings when our land and water are threatened in any way.

The NFU holds that the earth, all its elements and inhabitants do not belong to us. They are borrowed from future generations. It is in the context of one of our original 1969 policy statements that we address the current concern about high capacity wells.

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Land and water are connected. Any time the NFU speaks of farmland, we make it clear that we are also speaking about <u>all</u> land, the water, woodlands, and the air we breathe. We are more convinced than ever that these are non-renewable natural resources which must be protected. They are not commodities to be exploited. Since our founding as a national organization, we have declared that these natural gifts were never meant to be bought and sold in the marketplace. They are meant to be cherished and protected for present and future generations.

In this submission we will address the following points:

- 1.0 The Need for the 2002 Moratorium: What has Changed?
- 2.0 Not About all Farmers; Not About all Potato Farmers
- 3.0 The Driving Force behind the Request to Lift the Moratorium on High Capacity Wells
- 4.0 Lack of Believable Science
- 5.0 Need for Wide Ranging Community Involvement

1.0 The Need for the 2002 Moratorium: What has Changed?

In 2002, the Government of Prince Edward Island imposed a moratorium on the granting of permits for high capacity wells. This moratorium was put in place because of widespread anxiety about the extraction of excessive amounts of groundwater for use in irrigation. The moratorium was based on the precautionary principle, which at the time meant halting the granting of permits at least until there would be assurance that no harm would be done to the water supply and quality. It was understood at that time that intensive hydrological assessments would be done to determine the impact of high capacity wells on Island groundwater. Although some groundwater models were developed for specific areas of the province to test extraction results, the Canadian Council of Academies as late as 2009 state that: *Even with these more detailed hydrological studies the moratorium on high-capacity irrigation wells remains in effect because there is currently*

insufficient information to determine the instream flow requirements for aquatic ecosystem viability and integrity.

(The Sustainable Management of Groundwater in Canada, *based on personal communication with the PEI Department of Environment*, *Energy and Forestry*).

There is still no indication that extensive hydrological studies have been done in recent years. The NFU is left with the conclusion that the original factors which prompted the moratorium twelve years ago remain as serious as they were in 2002, if not more serious today.

2.0 Not About all Farmers; Not About all Potato Farmers

The National Farmers Union finds it necessary to say that we reject the statements of various people and organizations who imply that *all farmers* are misusing the land and water. Only *some farmers* carry out unacceptable and damaging production strategies and farm practices. Some people in their frustration with the denial of harm, and the protection of concentrated potato production, imply that *all potato farmers* are ruining land and pouring nitrates and other noxious chemicals into Island water. We acknowledge that *some potato farmers* for a variety of reasons and/or pressures can be accused of all manner of irreversible environmental damage. The NFU, however, reminds everybody that *not all potato farmers* do this. *It is grossly unfair to paint all the farmers or potato producers with the same brush.*

We are proud to have daily contact with many farmers, including potato growers, who are models of stewardship of the land, water and air. Most of us are committed environmentalists. We are proud of the high percentage of farmers who prefer forms of mixed farming which add organic matter to the soil. Many others wish that they could be free to farm in this respectful way. Among those who are caught up in the potato (or other) monoculture cycle, many would get out of it, if they could do it without suffering ruin. Most Islanders cannot even imagine the levels of debt that ordinary farmers are carrying, much of it unwillingly and out of their control.

3.0 Driving Force behind the Request to Lift the Moratorium

It is public knowledge that very few people and organizations are promoting the lifting of the moratorium on permits for high capacity wells. The National Farmers Union recognizes that these people and organizations are merely spokespersons for the *system* of industrial agriculture, which is the driving force. The system is not a faceless entity. It is made up of sectors whose players are well known to Islanders.

The industrial model of agriculture predominant in PEI is called "industrial," <u>not</u> because some farms have become larger and some family farms are now incorporated. It is more sinister than that. It is an industrial model in which low level players, in this case farmers, serve to fulfill the single-minded goal of profit and the accumulation of capital of the corporate sector. This is the sector which owns and controls both the agricultural inputs and the food products which eventually go to the marketplace. This is the sector which has long been noted for utilizing the land, water, forest without regard for their depletion. It is this sector which treats farmer-produced food merely as raw product for its own enterprises. It is the sector which requires increased and more uniform "raw product", grown by fewer farmers.

It is significant that as proponents of high capacity wells say that in order to remain more competitive, PEI needs to produce more potatoes. At the same time it is coming out that there is an over-production of potatoes in North America. Following the laws of supply and demand, we fear that increased production capacity will result in lower prices to producers. At the same time we see

another risk for growers: it is quite possible that those who get the permits will be the first to get the contracts with processors.

Successive governments of PEI have supported and promoted production based on an imaginary dollar contribution to the "economy". How often have we heard government spokespersons try to impress us with the data that the potato "industry" contributes over one billion dollars to the PEI economy. The NFU continues to point out that it cannot be considered a contribution, if the costs are greater than the so-called financial benefit. It cannot be considered a healthy economic asset, if the majority of potato producers are not doing well under the system. Monoculture is very expensive when we consider the loss of a high percentage of good farmers, the loss of organic matter, the loss of soil, and the loss and/or the contamination of groundwater.

4.0 Lack of Believable Science

The Coalition for the Protection of PEI Water, of which the NFU is a member, presented to you on February 27, 2014. The NFU supports the Coalition's positions. When addressing the presence or absence of believable and transparent science, the coalition stated that "good science is public, unbiased, evidence-based, and peer-reviewed."

If "the Science is there" and transparent, we wonder why is it so difficult to get our hands on the information generated. Being kept in the dark, does not relieve our uneasiness about what seems like a premature readiness to justify lifting the ban on new high capacity wells. We need to be sure that this is based on real science and that it is not just the opinions of "interested" parties.

The NFU has tried to get from the Department of the Environment some evidence of believable hydrological studies concerning water extraction. We presented a few straightforward questions to Mr. Jim Young on February 15 and have not received any answers:

- How many high capacity well permits have been issued each year over the past 10 years for processors, municipalities, and farmers? What is the total amount of water taken out of each well during each year?
- When you say there is sufficient water to allow for additional agricultural irrigation to take place, are these comments based on the scientific studies that were conducted using an irrigation pump which pumps certain amounts of water for given periods of time in order to observe the change in the stream flow?
- If there are other parts of the scientific study to indicate that there is sufficient water in addition to the above question, please let us know where we might find this information.

The NFU made a number of requests for the scientific studies to indicate that there is ample water available to support more high capacity wells.

We thank the Dept of Environment for making these documents available to us so that we could study them. From the information received, it appears that the only scientific experiment to determine if there is sufficient water was one conducted in 2006 when an irrigation pump was used to withdraw water at two different spots – one for twenty-nine hours and one for twenty hours. Water was withdrawn in another spot in 2007 but the number of pumping hours was not reported. If this is the scientific data on which is based the statement that there is an ample supply of water, the NFU strongly states that this type of scientific study is not sufficient to arrive at this conclusion. We have discovered in the PEI study more questions than answers.

Along with the PEI study, we were given access to a massive study of the Minnesota Water Resource Coalition (2011) on the impact of agricultural water use in the quantity and quality of that states water (See Appendix #2 for summary points). This report, compiled after years of study, showed in a large area under irrigation that there were serious nitrate problems in ground water. In fact the nitrate level on irrigated land averaged 17mg/litre which was over three times as high as the

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nitrate level on non-irrigated land, which was 5.4 mg/litre. According to Health Canada the safe level of nitrate in ground water for drinking purposes is 10 mg. per litre.

We note the following serious flaws in the PEI study and plans.

- The PEI science as presented, deals with quite small areas, when considering the wide variety of water conditions across the Island. What is needed is widespread observation over a long time period, beginning with established baselines. It also must be done in conjunction with ancient knowledge.
- There is inconsistency in reporting some measurements; when attempting to show that there an ample supply of water the studies estimate that only 2% 7% of the existing recharge is being utilized, which is not the recharge data for the "monitored" areas, but rather from the whole Island.
- The reality of the impact of climate change does not seem to be factored in.
- In setting limits on the permitted reduction in stream flow, the suggested range of reduction being 15-35%, it seems that PEI has choosen the maximum, 35%, for all waterways–not much sign of the precautionary principle in this
- Current studies and plans tend to minimize the nitrate problem in Island water despite the findings of the 2008 Commission on Nitrates in Groundwater (See Appendix #3 for Nitrate Map)
- There is a misleading notion that irrigation dissolves surface nitrates, making it more usable for plants. The fact is that as the water goes down to the substrata it takes the chemicals and nitrates with it.

5.0 Need for Wide Ranging Community Involvement

During the past year the National Farmers Union spent long hours preparing for a presentation to the Horace Carver Commission on the Lands Protection Act. The resulting document, *The Gift of Jurisdiction: Our Island Province* is a symbol of what can be accomplished when opportunities are opened for Islanders to speak out. The title of the report in itself is an encouragement.

The NFU sees this troublesome high capacity well issue not as a low point or a discouragement, but as an opportunity to carve out a new course in which the people can direct policies and plans not only for water, but for a new system of farming, based on the soil's organic matter, sane crop rotation, food security/sovereignty and honouring and paying cost of production to food producers.

The NFU contacted Environment Minister Sherry on Jan. 23 to ask that meaningful public consultations be held on the high capacity well issue before any decision would be made by Government. On Feb. 13 we received her "form letter" with no mention made at all about our request for public meetings.

Public consultations would bring some light to many of the "science" mysteries indicated above. There are also many unanswered ecological and ethical question related to the current and future use of our precious water supply which must be reflected in a comprehensive and enforceable PEI water policy. Public Consultations would allow for discussion of some practical concerns like the actual capital and operating costs to potato farmers who would opt for an irrigation system and the liability for the potential loss of water supply to the surrounding community.

There is no way around this: if the PEI Government wants to come out of this water debate with any credibility, it must set up a Commission to consult openly with all Islanders.

6.0 **Recommendations**

The National Farmers Union District 1, Region 1 strongly urges the Standing Committee on Agriculture, Environment, Energy and Forestry to recommend the following:

6.1 that the Government of Prince Edward Island steadfastly maintain the moratorium on permits for high capacity wells in PEI

- 6.2 that the Government of Prince Edward Island in all its public communications recognize the value to PEI of all types of farming, not just potato production
- 6.3 that the Government of Prince Edward Island promote mixed farming systems for PEI to gradually replace mono-culture production and thus increasing organic matter in the soil and protecting the water supply and quality
- 6.4 that the Government of Prince Edward Island direct the development of an enforceable water policy, which truly protects PEI water for the current and future generations (based on true science and the present and future reality of climate change)
- 6.5 that the Government of Prince Edward Island create a Commission on water, to involve Islanders from every walk of life to contribute to new paths for the protection of PEI water

Conclusion

The National Farmers Union District 1, Region 1 again thanks the Standing Committee on Agriculture, Environment, Energy and Forestry for providing us and many other groups and individuals with the opportunity to present our concerns to you about the moratorium on permits for high capacity wells in PEI.

Respectfully submitted,

National Farmers Union, District 1, Region 1