



**National Farmers Union**  
**Union Nationale des Fermiers**



# **The National Farmers Union District 1, Region 1**

**Submission concerning  
The Development of the PEI Water Act**

Presented to the

**PEI Environmental Advisory Council**

*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)

**Montague PEI  
November 3, 2015**

## Introduction

The National Farmers Union (NFU) appreciates this opportunity to add our voice to many others concerning the intent and content of the PEI Water Act. We compliment the PEI Environmental Advisory Council for conducting an open process to receive the input of many groups and individuals. It has been a great relief and a joy to hear Islanders from many diverse sectors expressing what we have promoted since our founding in 1969. These sectors include long-time associates such the environmental movement and social justice organizations, all of us inspired by the teachings of the Mi'kmaq people.

Our key point over the years, which we are hearing from many groups is the central role of the land, water, air, and all inhabitants of this planet. In 2014, many new voices were raised, loud and clear, about the unacceptability of lifting the moratorium on high capacity wells. It is clear once again this year that Islanders are passionate about water. They expect a Water Act which **protects** water.

In this submission we will address the following points:

- 1.0 The Act must identify water as a living and unifying element
- 2.0 The Act must acknowledge that water is a common trust
- 3.0 The Act must consider water in the context of the current economic system
- 4.0 The Act must identify the lack of, and necessity for, believable science
- 5.0 The Act must outline reprisals for the abuse of water quality and quantity
- 6.0 Need for wide ranging community involvement in the formation of the act, the policies, and regulations

### 1.0 The Act Must Identify Water as a Living and Unifying Element

Together with many others we are clear that water, land and air are more than components of our ecosystem: they are one and interdependent, just as plants, animals and humans are one with them. We know that we are stewards of the land, air and water on behalf of the human family and of the animal and plant realms. Land and water are one. Any time the NFU speaks of farmland, we make it clear that we are also speaking about all land, the water, woodlands, and the air we breathe.

The theme of the NFU National Convention November 26-28, 2015 in London, Ontario is **Soil: Our Common Ground**. The statement of the theme is *“Healthy soil is the foundation of the food system. Soil filters our water, provides essential nutrients to our forests and crops, and helps regulate the Earth’s temperature and greenhouse gases”*

One of the mysteries of nature which we know is that plants have the most direct access to water, usually growing downward toward the water supply. Animals and humans either access water already on the surface in rivers and streams or by pumping the water to the surface. Nature functions best when there is a balance. If either of the three, plants, animals or humans use more than their regular requirements, the balance is upset. Which is the case of course when there is extensive mono-culture. It is possible that intensive cropping can proportionally absorb abnormal quantities of water. All elements of life must be in balance and unified to create the harmony which nature demands.

## 2.0 The Act must acknowledge that Water is a Common Trust

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 submit our concerns about the direction and substance of the PEI Water Act:

***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)

We are more convinced now than ever before that land, water, and air are non-renewable natural gifts which must be protected. They are not commodities to be exploited. Nor are they resources to be extracted. 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.

Common ownership is a difficult concept for cultures where the major system, the economic system and all its offshoots, are based so firmly on private ownership. We have long ago lost sight of land as a common heritage. The explosion of “land grabbing” as an accepted and “brilliant” investment practice, is a climax of this loss. As for water, our trade agreements are doing all in their power to present water as an attractive commodity of trade.

It is customary for people at various stages in their relationship to land, water, and air to insist that we want to be good “stewards”. Often they mean taking good care of what they own and control. We put emphasis on the Merriam-Webster Dictionary definition of stewardship as ***the careful and responsible management of something entrusted to one's care***. Stewardship implies the care of what is not our own. We can only be stewards of land air and water only if we accept that in reality they are not our own. No deed or inheritance can override that.

## 3.0 The Act Must Consider Water in the Context of the Current Economic System

The NFU points out the economic context in which the Act is being created not because we expect the Act to correct the damaging aspects of the market system under which we operate. We all just need to be aware that this system has limitations in relation to sustainable use of land or water and to healthy air. In particular, the growth-in-profit goals of this system are mainly at odds with the sustainable use of water.

Sectors which many consider vital for the future of economic well being on the Island will want to convince us that it would be good for all Islanders, if those sectors have unbridled access to water and to unbinding legislation which permits the indiscriminate use of pollutants, such as nitrate-based fertilizers, and pesticides.

We are proud of the high percentage of farmers who prefer forms of mixed farming which add organic matter and humus to the soil. Many of our members are proud to identify themselves as environmentalists. 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 so without losing their farms. Most Islanders cannot even imagine the levels of debt that ordinary farmers are carrying, much of it unwillingly and out of their control.

Everyday we learn from farmers that the soil and the water cannot withstand much more stress. The soil is deteriorating. It is fragile and sandy. We need a robust aquifer just simply to keep the soil from “shrinking”. We are surrounded by salt water, and we have to do all in our power to prevent salt water intrusion. Any damage caused by excess use of water or of pollution is next to irreversible. If we get it wrong once, it is gone.

Human beings, the land, plants and animals have the right to have clean water sufficient for their needs. No more no less. Humans who are excessive users of water, for either personal or commercial use, are guilty of upsetting the natural balance in the ecosystem. Some jurisdictions are making an effort to curb excess personal use.

When it come to commercial use, PEI is on a hazardous path. There are 237 high capacity wells on Prince Edward Island: serving golf courses (4%), industrial and commercial operations (24%), agricultural production (15%) and aquaculture (11%). The latter uses mainly salt water. It is clear from available data that municipalities are the big users of high capacity wells (29%). Whatever the usage, we face a threat from any increase in the number of these wells. It is necessary for PEI to maintain the moratorium on high capacity wells for many years to come (at least 10 years to provide for proper hydrological testing).

For the protection of water and of inhabitants of PEI, there must be a total ban on fracking. We note that in the environmental forum held before the 2015 PEI Election, Liberal leader, Wade MacLauchlan, now Premier of the province, answered most of the questions on the environment deferring to the proposed PEI Water Act. The deferred questions, by the way, included issues about prolonging the moratorium on high capacity wells, support for the development of sustainable and organic farming, fracking, banning of pesticides, and climate change.

In all of these areas it is essential that the PEI Water Act provide answers to these basic questions as they refer to water quantity and quality.

#### **4.0 The Act Must Identify the Lack of, and Necessity for, Believable Science**

The NFU continues to be shocked by what appears to be a lack of effort on the part of the Department of the Environment to convince us that there had been, or will be, systematic and coherent ongoing scientific studies about the quantity or quality of PEI water. The 2015 Backgrounder paper provides us with some general guidelines but does not convince us that serious methodical testing of water quality and quantity have been done.

As a national farm organization, the NFU across the country is expressing concern about the bias in so called “believable science”. While acknowledging that every scientific study has a bias, identified in the statement of the research questions, our leaders/members across the country identify some disturbing realities which unfortunately (though they refer to actions of the past Federal Government) also affect approaches to research and therefore decisions in PEI legislation. Ann Slater, NFU 1st Vice President (Policy) expresses some of our general concerns:

***On a daily basis our federal government touts the need to make “science-based” decisions, while at the same time, it is quickly dismantling Canada's public research infrastructure and undermining the ability of our globally respected public scientists to do their research. World-renowned public libraries, like the Freshwater Institute library in Winnipeg, have been closed, with much of the invaluable materials kept there carted off to dumpsters, according to scientists who observed the closures.***

*The destruction of this critical environmental and cultural baseline data, which was gathered in the public interest with public funding, represents a tremendous loss of knowledge. This 'lost' information could potentially have helped us better understand how our climate is changing, how agricultural practices are affecting our water and our natural ecosystems, and whether various industrial and agricultural chemicals are accumulating in our ecosystems.*

*Today, any public funds that are available for scientific research are being handed over to private industry to support commercialization of those discoveries. The May 7, 2013 issue of the Globe and Mail, which covered the change in mandate of the National Research Council, stated: "The National Research Council, which gave the country canola and the atomic clock, will now be taking its scientific cues from Canadian industry as part of a make over of the country's flagship research labs." Where is the public interest when the government proclaims it is making "science-based" decisions?*

We are still asking some of the same questions that we presented on high capacity wells on March 6, 2014: It had been understood at that time that intensive hydrological assessments had been done to determine the impact of high capacity wells on the Island's 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 stated 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 yet.

The Coalition for the Protection of PEI Water, of which the NFU is a member, presented to the Standing Committee on Agriculture, Environment, Energy and Forestry 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 is the current grounding of the Water Act. Islanders need to be sure that the proposed Water Act is based on real science and not just on the opinions of "interested" parties.

It is still a mystery that the PEI Department of the Environment lacks the evidence of believable hydrological studies concerning water extraction. We need to know the amount of water extracted by every high capacity well in PEI. When promoters of the notion of increased water extraction tell us that there is sufficient water to allow for additional agricultural irrigation, for example, we ask on what scientific basis are you saying this? We need Island-wide and watershed-specific studies of all extractions and the varied rates of re-charge. We note for example that in 2015, the Cornwall reservoir did not recover at night to a level that was predicted early in the summer. Where else in PEI is this kind of misjudgement happening?

We repeat our concern about whether or not the Department of the Environment is seriously using studies from other jurisdictions. We are referring especially 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 state's water. This massive report, compiled after years of study, showed in a large

area under irrigation that there were serious nitrate problems in groundwater. In fact the nitrate level on irrigated land averaged 17mg/litre which was over three times as high as the nitrate level on non-irrigated land, which was 5.4 mg/litre. We need to note that the “safe “ level of nitrate in groundwater for drinking purposes is 10 mg. per litre. PEI has serious problem of nitrate infiltration in our water. We have heard during your consultations that one incorporated area of PEI has experienced nitrate levels of 9. That is a serious health problem and should by rights trigger a system shut down.

Has the Department searched out solid research relating to the causes and effects of the current water crisis in California? The disastrous situation in that state demonstrates how quickly and completely water can disappear when unreasonable pressures are exercised on the source.

## **5.0 The Act Must Outline Reprisals for the Abuse of Water Quality and Quantity**

The National Farmers Union, makes a necessary clarification before discussing the need for the Water Act to protect PEI water by putting limits on the actions of some groups and individuals. The NFU wants to emphasize that many people already have a commitment to appropriate high standards in all aspects of their lives, including caring for the ecosystem, with or without legislation. We know many farmers, whether our members or not, who have opted for agroecological farming. Around the world, all across Canada, and here in PEI, farmers are cooperating and learning from each other how to farm according to the principles of agroecology. This is a significant movement which gives hope to us all. Unfortunately, while this is happening, there is still need for a protective Water Act.

The NFU believes that public legislation must act as a protector of the common good. A legislation must convince the population that the act in question is strong enough protection in the areas of concern. It means setting standards which go beyond identifying what is sufficient, but to clearly outline what is necessary for high quality protection. PEI residents know when acts permit certain actions rather than prohibit or regulate them. Our main question is: what is necessary in order to protect PEI water quantity and quality? It means renouncing the attitude of “how much can we get away with” without raising alarms and/or causing visible damage in the present moment? Sometimes, PEI justifies its low environmental and health standards based on low national standards.

Here are some general principles for setting water quantity and quality standards for PEI. For those which are quantifiable, Department scientists must identify a quantity to indicate what is the real ecological health ideal, and the “acceptable” point (erring on the side of caution) below which water users must be considered in violation:

- No watershed in PEI will be subjected to the drainage of its headwater rivers and streams, even on an intermittent basis
- No estimation of water recharge can be done without incorporating the projections of the expected effects of climate change on water recharge: there are probably no longer many normal or predictable seasonal events.
- All studies of the quantity of groundwater in PEI must be geographically extensive enough to take into consideration the wide variations in the structure of the aquifer across PEI, plus the fact that some local areas of PEI share the same aquifer as New Brunswick and Nova Scotia
- All “allowable” limits for nitrate concentration must be re-examined and strengthened to ensure healthy drinking water and to avoid anoxic events in estuaries: ensuring health, rather than avoiding sickness and even death
- There must be ongoing strict monitoring of the levels of fertilizer and pesticide-based

contaminants in all watersheds

- PEI people, the land, water, animals, and fish are already vulnerable to excess exposure to nitrates and many poisonous materials and need the assurance that any destructive practices will be eliminated.

It is essential that the Water Act indicate: (a) warnings for users of high capacity wells who are falling below real ecological health ideal standards, with respect for example to nitrate levels, pesticide pollution, soil degradation, etc. (b) penalties for users who fall below the “acceptable” standards for human, animal, plant, land, air and water health; and (c) the point at which a user or a system must be shut down.

The NFU, speaking of farming practices to the UN Special Rapporteur *On The Right To Food*, Mr. Olivier De Schutter, Mission to Canada, May 2012 said: ***Governments should provide incentives and support for land stewardship practices that maintain the land’s productivity for the long term along with corresponding penalties for using farming practices designed to extract maximum (benefits) in the short term at the expense of soil health, biodiversity, water quality and other environmental benefits.***

## **6.0 Need for Wide Ranging Community Involvement in the Formation of the Act, the Policies and Regulations**

It has been clear from the beginning of this consultation, facilitated by the PEI Environmental Advisory Council, that in this round and probably in another number of consultations we are dealing with the Water Act only. The National Farmers Union has had sufficient experience with acts and regulations over the years to know that the “danger” areas are found in the policies and regulations following from the Act. Policies and Regulations are most often developed in Departments or behind Cabinet Meeting closed doors. It is our understanding that policy and regulations must all be covered by the Act, and be seen to flow from it and must be within the spirit and letter of the Act.

Public consultations and oversight of the formation of water policies and regulations would bring some light to many of the unanswered ecological and ethical questions related to the current and future use of our precious water supply which must be reflected in a comprehensive and enforceable PEI water policy.

The NFU is insisting that if the PEI Government is to come out of this process looking “transparent and accountable”, it must carry out open consultations at every stage (the Act; Policies; and Regulations) even if it will take time.

## **7.0 Recommendations**

The National Farmers Union District 1, Region 1 recommends that the PEI Environmental Advisory Council urge the Department of the Environment and/or the Department of Agriculture & Fisheries, with the backing of the Government of Prince Edward Island to:

- 7.1 build the Water Act around the principle of the unity of land, air, and water, with the acknowledgment of the life-giving connection to humans, plants and animals***
- 7.2 apply the precautionary principle to every aspect of the Water Act; permit nothing until and unless it can be proven that it will do no harm***
- 7.3 incorporate into the Act a permanent ban on fracking***
- 7.4 extend the moratorium on high capacity wells for ten years (or longer if the science has not satisfied the precautionary principle), with exceptions for human consumption***
- 7.5 incorporate a vision for the development of organic farming in PEI accompanied by land distribution making organic farming possible for beginning farmers***
- 7.6 set goals for research and market support for farmers moving away from pesticide use and GMO production***
- 7.7 imply throughout the Water Act that water is a common trust: water cannot be owned, nor used to satisfy either individual or corporate greed***
- 7.8 direct the development of a Water Act which is enforceable, which truly protects PEI water for the current and future generations***
- 7.9 respond to the community's expectation that the provisions of the Act are to be based on true science***
- 7.10 factor into the Act the present and future threats of climate change.***
- 7.11 create a transparent process by which the Island community can influence the progress of creation of the Act and continue an ongoing process for the development of policy and regulations.***

## **Conclusion**

The National Farmers Union District 1 Region 1, again thanks the PEI Environmental Advisory Council for providing us, and many other groups and individuals, with the opportunity to present our concerns to you about the development of the PEI Water Act. We wish you well as you proceed to make recommendations for the context and content of the Act.

Respectfully submitted,

National Farmers Union, District 1, Region 1