# PEI WATER ACT SUBMISSION

# PRINCE EDWARD ISLAND FEDERATION OF AGRICLUTURE









Chicken Farmers of PEI

Dairy Farmers of PEI

Egg Farmers of PEI

Horticultural Council of PEI

Island Grains and Protein Council

PEI Beekeepers Association

PEI Cattle Producers

PEI Certified Organic Producers

PEI Hog Commodity Marketing Board

**PEI Fur Breeders Association** 

PEI Potato Board

PEI Strawberry Growers Association

PEI Wild Blueberry Growers Association

PEI Woodlots Association

**Sheep Breeders Association** 

Young Farmers of PEI











Chicken Farmers of PET

**PEI Fur Breeders Association** 







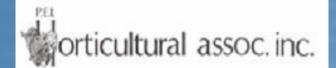






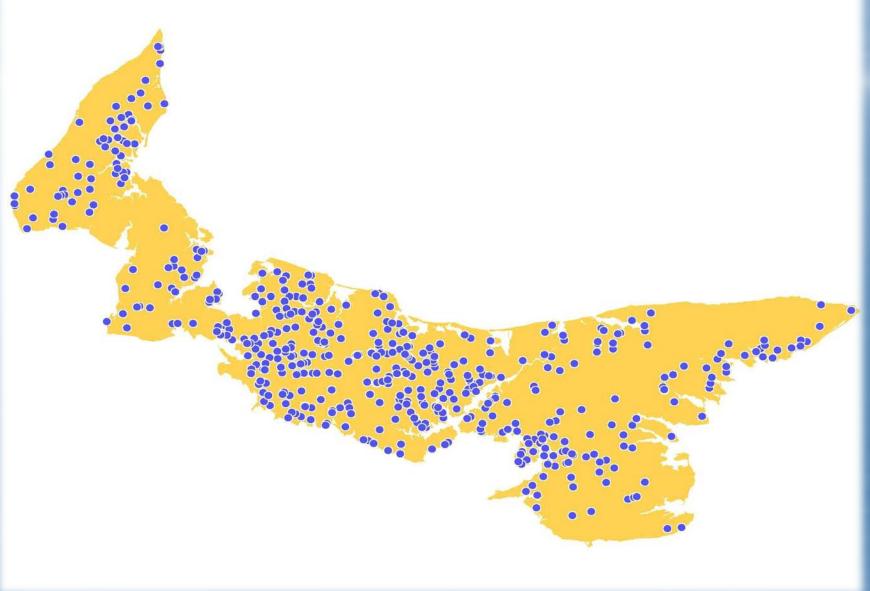




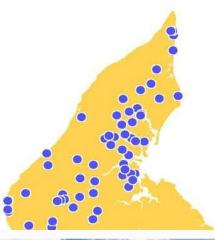


# PEIFA MEMBERS - LOCATION





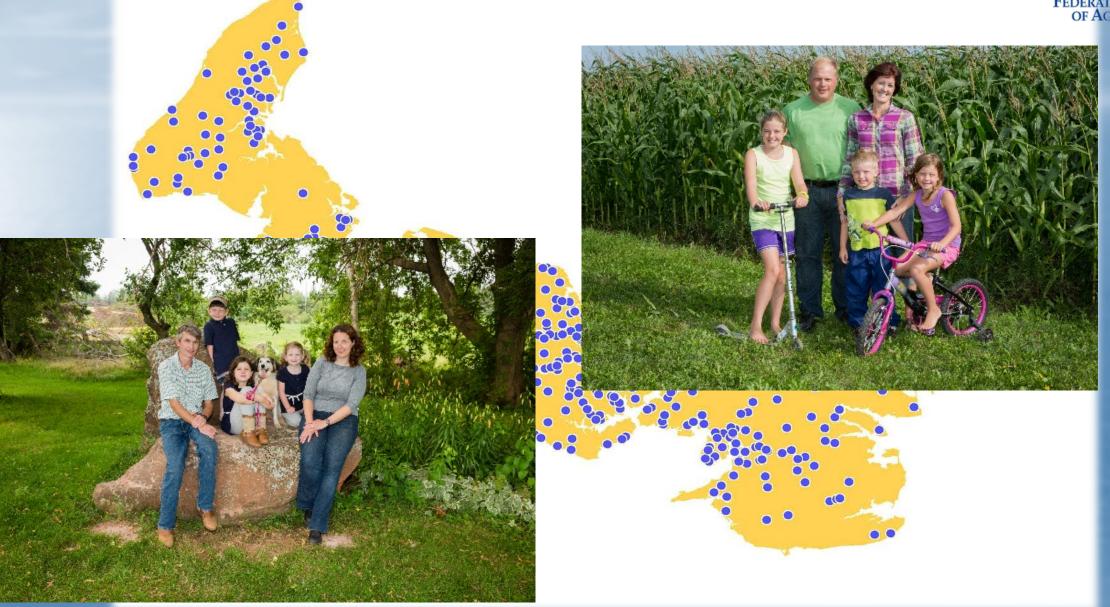














# **ECONOMIC IMPACT**



- PEIFA represents 85-90% of PEI's agricultural production
- Agriculture sector contributed almost \$450 million to Provincial GDP in 2014.
  - Multiplier Effect 6-7: Machinery, vehicles, supplies, seed, inputs, vets, wages, trucking professionals, etc.
- Island farms spent over \$435 million in operating expenses in 2014 almost all of it in rural PEI
- In 2014, Island farmers employed approximately 4000 Islanders and spent over \$70 million in wages

## HOW WE USE WATER



- Drinking water for livestock
- Drinking water for plants
  - Main source rainfall
  - Limited irrigation
- Wash lines potatoes, fruits and vegetables
- Biosecurity measures washing, sanitizing
- Crop protection (Cranberries)
- Fertigation
- Crop protectant application

## REACTION TO WHITE PAPER



- A lot at stake
- Farmers are stewards of the land and recognize our role in water stewardship
- Supportive of the need for a Water Act
- Industry is heavily regulated today
- Want to continue to work with government and stakeholders to ensure the long term sustainability of our sector while protecting the environment
  - The two co-exist today and must in the future
  - Balanced science based approach is needed



# **ENVIRONMENTAL CHALLENGES**

- Fish Kills
- Nitrates in surface and ground water
- Erosion (wind & water)
- Organic Matter Levels
- Increasing resistance of the public to science-based solutions

## **INDUSTRY RESPONSES**



- Partnering with industry stakeholders and government to address our issues
  - 4R Nutrient Stewardship Farming 4R Island
  - Environmental Farm Planning
  - Action Committee on Sustainable Land Management Watershed projects
    - Barclay Brook
    - Carruthers
    - North River
    - Dunk River
  - Sprayer Calibration Program
  - Alternate Land Use System



# Farming 4R Island

Supporting farmers and communities with practical tools to implement Beneficial Management Practices that protect soil quality and grow agriculture.



4R Nutrient Stewardship encompasses:
Right Source | Right Rate | Right Time | Right Place

















### **ACTIVITIES**

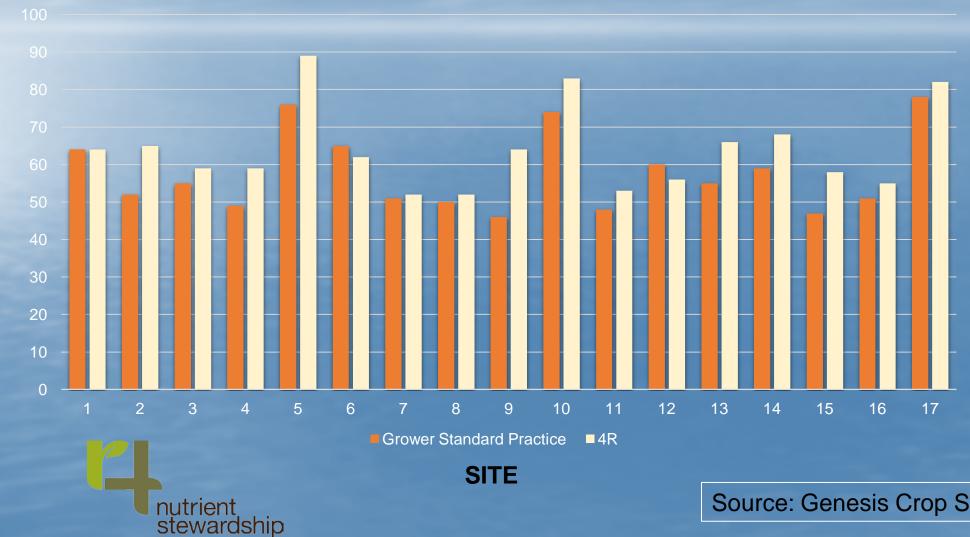


- Large split-field demo trials with farmers across PEI focused on potato production
  - Full time agrologist hired to conduct trials
  - Works with growers existing program
  - Encourages the efficient use of fertilizer products, including nitrogen application
- Training for farmers and crop advisors on the 4Rs
- Communications to industry and public outreach
  - Three regional demo presentations this past fall
  - Heavily attended by the growing community and covered by the media

# NITROGEN USE EFFICIENCY (NUE)

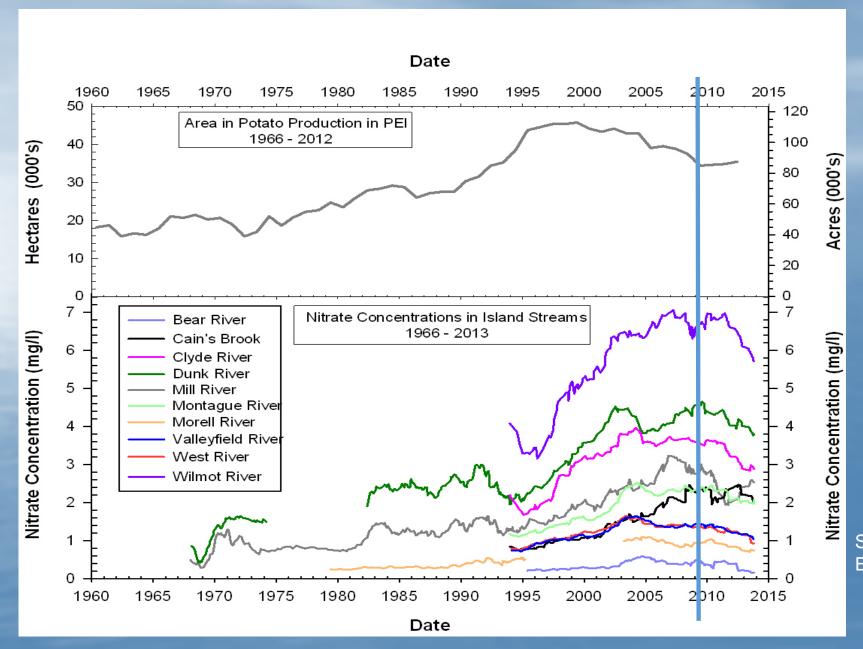


(lbs removed/lbs applied) **2013-14 PEI 4R Trials** 



% NUE

Source: Genesis Crop Systems Inc.





# Potato Production & Nitrate Concentrations in Island Streams

Source: PEI Department of Communities Land a Environment, October 2015

# ENVIRONMENTAL FARM PROGRAM



- Assessment to help farmers develop a practical plan for operating their farm in a environmentally sustainable, socially acceptable, and economically viable way
- Categories include:
  - water management, nutrient management, energy management, storage management, soil management, buffer riparian zone management and pest management.
  - Pesticides use, fertilizer use, well and septic condition, farmstead, grain and forage storage, fuel storage, woodlot management, manure storage, buffer zones, wetlands, livestock housing, etc.
- Approximately 300 EFPs in place across PEI amounting to a total of 250,000 acres
  - Since 2008, through to this past April, Island farmers have implemented:
    - 231,725 (70 km) feet of terraces
    - 317,741 feet (97 km) of constructed grassland waterways
    - 98,264 feet (30 km) of farmable berms
  - Another 100 up for renewal this year they must be renewed every 5 years
  - Goal of 100 a year with overall goal of eventually having all PEIFA members operating under an EFP

# ACTION COMMITTEE ON SUSTAINABLE LAND MANAGEMENT



- Goal: reduce/eliminate risk of fish kills on PEI
- 2014 saw major changes in Barclay Brook
  - Soil conservation plan,
  - Sensitive land taken out of production
  - Development of Code of Practice for potato production
  - Implementation of new sustainable practices
- 2015 Three high-priority watersheds identified
  - Carruthers Brook (Western PEI)
  - North River (due to 2014 kill)
  - Dunk River
    - Coordinators assigned to each
    - Water testing done
    - Working together to improve water quality in these watersheds
    - Work continues North River watershed report due in March 2016

# SPRAYER CALIBRATION PROGRAM



- Initiated in 2007
- Objective: Ensure sprayers properly calibrated and working efficiently to ensure proper coverage and to reduce drift
- Project led by Ken Lingley, expert on spray equipment
  - Discuss with growers new technologies like band spraying and low flow, low pressure nozzles
  - Efficient use of product
    - Many farmers are now practicing band spraying 40% reduction in spray before row closure in potatoes
- No cost to growers
- GPS equipment is almost standard and ensures products are applied accurately

### ALTERNATE LAND USE SYSTEM



- Voluntary program for PEI farmers and landowners with the goals to:
  - reduce soil erosion and siltation of watercourses and wetlands
  - improve water quality
  - improve and increase wildlife habitat
  - Reduce the impacts of climate change
- Farmers receive financial compensation annually from Government to remove land from agricultural
  production or to establish/maintain beneficial management practices that protect soil and water quality or
  improve fish and wildlife habitat.
- The length of the agreement will depend upon the year of application. All agreements will expire on March 31, 2018 at which time the agreements will be reviewed.
- Goal of improving the environment while keeping your best farmland working.
- This program could be used to identify and remove land at risk but will require additional funding to do
   so

### **FUTURE WATER NEEDS**



- Continued access to access to safe, secure, affordable and adequate water supply for agriculture and food production across the Province
  - Water is a building block in the growing of living organisms plants, animals, fish, people etc.
  - Farmers are in the business of growing plants and animals and need water everyday

#### Supplemental Irrigation

- During the growing season, some crops producers wish the ability to irrigate when needed
- Benefits:
  - Improvement in product quality
  - Increased efficiency of fertilizers
  - Reduction in spray application less stress on the crop

#### Federation Resolution:

- Whereas the Department of Environment has reviewed all available scientific data and determined that there is adequate water available for long term sustainability;
- Be it resolved that the PEI Federation of Agriculture request the Department of Environment remove the
  moratorium on new wells for supplemental agricultural irrigation provided that the scientific data
  shows that it will not negatively impact the environment and that the PEI Water Extraction Policy
  provides the adequate controls for the siting and operation of any new wells.

# CONCERNS ABOUT A WATER ACT



- Over regulation let industry lead
  - Work with farmers, watershed groups to further improvements
- Risk of overly prescriptive legislation
- Allocation and rates Overly broad definitions
  - Today's legislation already has definitions that need clarity need to be fixed/avoided
    - Examples: wetlands, wetland plants and water courses

- Farmers need access to safe, secure, affordable and adequate water supply for agriculture and food production across the Province
- Do not want to be put in an uncompetitive position
- Authority
  - Empowerment of municipal governments to impose water laws

### RECOMMENDATIONS



- 1. Extend the timeline for the introduction of legislation
  - Concern about the need for additional science and monitoring

 PEIFA and the farming community want to work with the government to "get it right" on this piece of legislation

 British Columbia took 4 years to bring forward an Act and worked closely with their agriculture industry to ensure sustainable farm practices were resulting in an improved environment that also kept farms profitable

### RECOMMENDATIONS



#### 2. Take this time to conduct a scientific review of PEI farm water use

- 5 farms and 5 commodities on volunteer basis utilized by government to gather scientific data
- Local reliable data that can be used to make informed decisions
- This should include the use of supplemental irrigation

### 3. Should the review allow for supplemental irrigation:

- the granting of permits should be incremental with a small number of permits granted at the outset and strictly monitored. A stepped approach.
- Perm /\*its take into consideration soil management of the fields to be irrigated with an emphasis on nutrient management, soil conservation and appropriate organic matter levels.
- A Code of Practice for water use could be developed with input from water and irrigation specialist

### RECOMMENDATIONS

- 4. The Act provide the agriculture community with the continued access to safe, secure, affordable and adequate water supply for agriculture and food production across the Province
- 5. Existing Buffer zone regulations remain unchanged. If the decision is made to proceed with further regulation, additional funding must be provided to the ALUS program to compensate farmers for land lost to production
- 6. The Act not be prescriptive in nature nor so broad that there is a lack of clarity.
- 7. The Act ensures the authority for application of related regulations on land in agriculture use, regardless of zoning, is retained by the Provincial Government only
- 8. That the Act ensures any municipality decision cannot supersede Provincial legislation or regulation with respect to agriculture
- 9. That municipalities, communities, advisory groups or others are not delegated authority over water management in PEI as it pertains to agriculture

