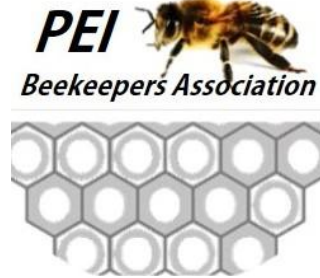


Water Act

Standing Committee of Natural Resources and Environmental Sustainability

September 17, 2020



Chicken Farmers of PEI

**PEI Fruit Tree Growers
Association**



PEI Fur Breeders Association



Economic Impact



- Largest individual sector in the Island's economy –
- Agriculture sector contributed \$561 million to Provincial GDP in 2019.
 - Multiplier Effect: Machinery, vehicles, supplies, inputs etc.
- \$3 billion industry in \$7 billion economy
- In 2019, Island farmers employed approximately 4900 Islanders and spent over \$70 million in wages

How We Value Water



- **PEIFA and PEI Watershed Alliance have created:**

PEI Agri-Watershed Partnership

- Mitigate (eliminate) fish kills and run off events
 - Keep soil on the fields
 - Develop Industry Standard that will increase sustainability measures and serve as basis for “Due Diligence”
- Industry Standard in near complete – soon to be public
 - Supported by PEIFA
 - Supported by PEI Potato Board
 - Before the PEI Water Alliance Board

How We Value Water

Great deal of work is being done to improve our industry:

- Millions in research and innovation – \$2.4 Million for Living Labs Project
- PEIFA Report on BMPs that reduce GHG emissions and improve soil health:
 - Cover crops,
 - Reduced tillage
 - Increased rotations
 - Alternate rotational crops
 - Tile drainage
- Environmental Farm Plan – over 500 in place
- 4R Nutrient Stewardship - PEIFA Chairs this initiative



Water Act Overall View



- **PEIFA supports the Water Act**
 - Safe and adequate water supply for future generations is paramount
 - Water monitoring is important
 - Adequate level of controls
- Continued access to adequate water supply for food production
- Prepared to work with Government on requested revisions to the regulations
 - Level the playing field for access to water across all industries
 - Singling out one industry is discriminatory

Current Situation

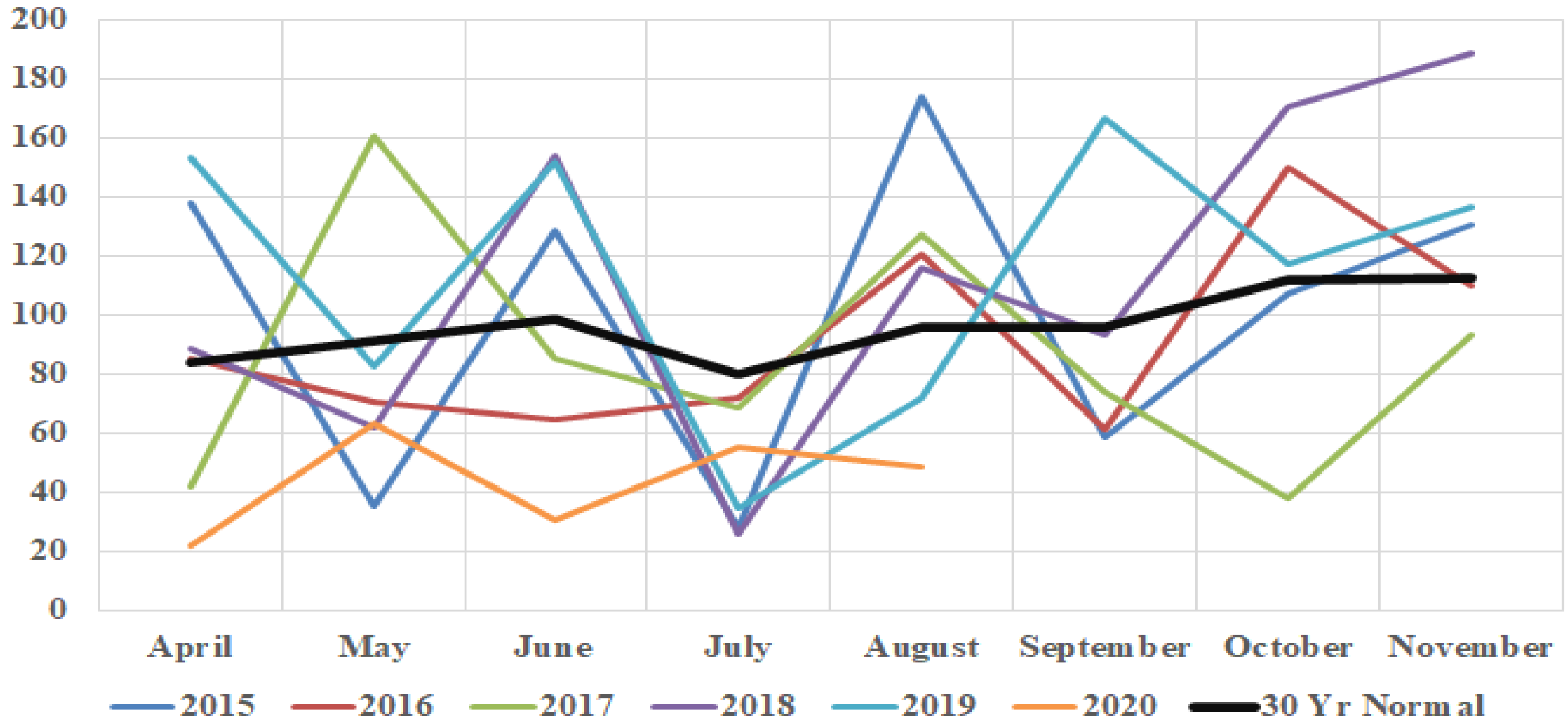


- Agriculture is cornerstone of who we are, our economy, our communities and our food supply
- COVID-19 has shifted the Island's economic outlook
 - Robust agriculture industry is needed – will drive the recovery
- Climate Change has produced significant drought in recent years
- We are facing potential crisis:
 - In danger of losing family farms
 - In danger of not having reliable access to safe, healthy, local food

We can stop this trend, but action is Needed Now!

Charlottetown Airport Growing Season Rainfall in mm

compiled by DE Jardine (In 2020, some Winsloe South data was used as Charlottetown Station had missing data during May to August)



Action Needed

- **Supplemental Irrigation**

- During the growing season, some wish to irrigate when needed
- Benefits include:
 - Increased marketable yield per acre / improvement in product quality
 - Less stress equal less disease
 - This reduces the use of pesticides
 - Increased efficiency of fertilizers – reduce nitrate leaching
 - **In August, granular fertilizer still sitting in fields – no rain, no uptake**
 - **Rain in fall, winter mean this fertilizer has nowhere to go but down**
 - Irrigation promotes plant growth - a great contributor towards soil health and organic matter

Positive environmental impact

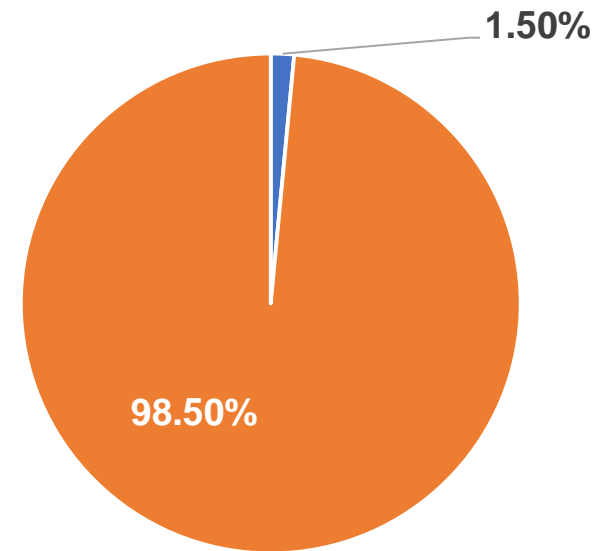
We have the Resources

PEI has substantial groundwater resources, with an average replenish rate double the rest of the Maritimes.

PEI Groundwater Use*

- 2.4 Billion cubic meters of water is replenished annually.
- PEI uses a total of 1.5% of the replenish rate.
- Only 2% of the 1.5% of used groundwater is used for irrigation, a portion of which is used for golf courses.

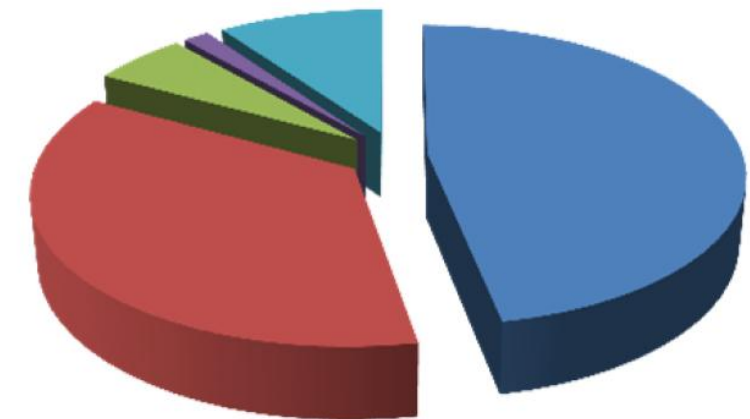
How Much of our Groundwater do we use?



- Total groundwater use (freshwater only)
- Remaining recharge

How We Use Groundwater*

- Residential 47%
- Industrial 36%
- Livestock 6%
- Irrigation 2%
- Heat Transfer 10%



* Excluding salt water wells

*Source: Government of PEI
November 2017

Results



Irrigated
14.6% moisture
439 cwt/ac



Dry land
4.6% moisture
214 cwt/ac



Irrigated
12.5% moisture
284 cwt/ac



Dry land
5.3% moisture
170 cwt/ac

Federation Position



Passed at PEIFA AGM in January 2014 following presentation by Bruce Raymond – a Government water expert – who spoke about water availability on PEI:

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 [Water Act] provides the adequate controls for the siting and operation of any new wells.**

Research

- Independent research team has a proposal
 - Led by Research Chair of Canadian Rivers Institute – Dr. Van Den Heuvel
 - Credible and reliable research by an independent body
- Four farms, four watershed groups to participate
- Science based proposal
 - Prove (or disprove) existing science

Research



- Research project will investigate the impact of new, modern high capacity wells on local groundwater flows as well as agronomic impact of supplemental irrigation.
- Commitment to open data, full transparency. This includes monitoring water usage rates and local stream monitoring.

Science-Based Decisions



- Government has made it clear that they support science-based, data-informed decision making
- The Green and Liberal parties of PEI have also made it clear that they too support science based decisions
- PEIFA shares this goal. An important concept when dealing with a resource as important to all Islanders as water.

Science-Based Decisions



- Access and allocation should be made using the science based methodologies developed by independent experts
- PEIFA prepared to help in anyway to further the study of water to ensure all Islanders are given equitable access
- Approve the Research as a pilot project

Legend

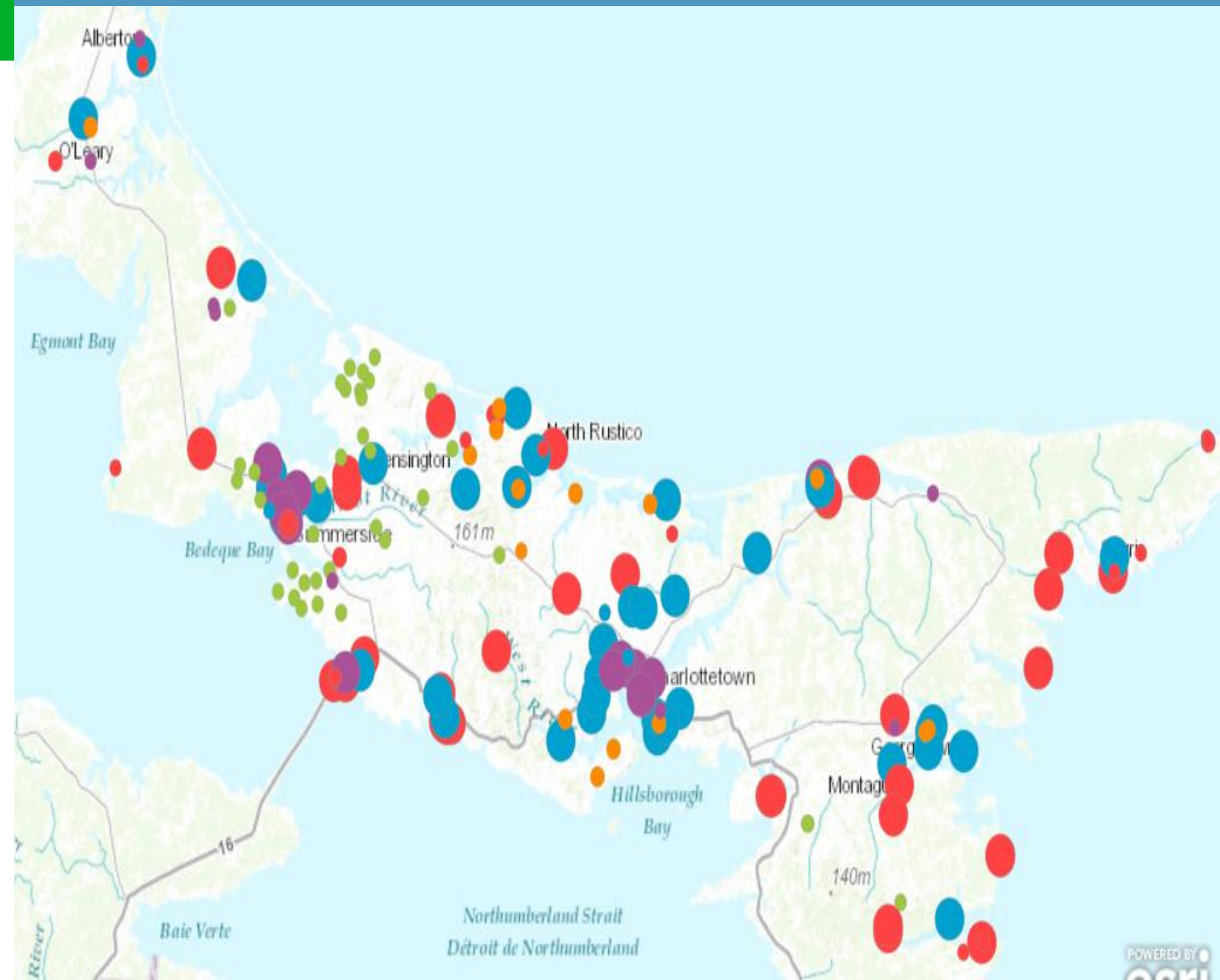
High Capacity Wells / Wellfields

Purpose

- Central Supply
- Industrial Commercial
- Irrigation - Agriculture
- Irrigation - Recreation
- Other (Heat/Fire)

Months of Use

- > 10
- 8
- 6.5



- **Water Withdrawal Permit – Section 7**
 - Expand this section
 - Public database
 - Show who is drawing down water and by how much
 - Show the contrast between the farming community and others

Holding Ponds

- **Need to be a part of a larger Irrigation Strategy – based on the Research**
 - Passing another moratorium targeting agriculture further exacerbates the discrimination towards water access for the industry
 - Government Departments of Agriculture and Environment work with Industry to develop a responsible approach to the construction and operation of holding ponds
- They can act as catchment basins to prevent run-off and collect water through rain and snow melt – as well a source for irrigation. They have a purpose.
- **Grandfather Section 5, paragraph 7**
 - The ponds were constructed legally
 - Significant capital investment made by the farmer
- **Include use of Holding Ponds within a broader irrigation strategy**

Summary



- **The Water Act needs to work for all industries**
 - Level the playing field and end the discrimination
 - Enshrine the moratorium in the regulations legislates discrimination
- **Science-based decision making needs to be paramount**
 - Dr. Van Den Heuvel and team ready to move forward – Approve the project as a pilot
- **Irrigation is not a silver bullet – but it is one important tool within a large toolbox that farmers need to grow safe and accessible local food**
- **We are willing and eager to develop strong partnerships with research, government and industry to protect our water resource and preserve the viability of our industry.**



PRINCE EDWARD ISLAND
FEDERATION OF
AGRICULTURE

