

Department of Environment, Energy and Climate Action

*Water Act Regulations –
Assessment of
Agricultural Irrigation
Research Projects:
Policy Criteria*

Assessment of Agricultural Irrigation Research Projects
Policy Criteria
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Introduction

The draft *Water Act* Water Withdrawal Regulations propose to permit the construction of and water withdrawal from new high capacity wells for the purpose of research on agricultural irrigation. In order to be eligible for exploration and extraction permits, the agricultural irrigation research must be approved by the Minister of the Department of Environment, Energy and Climate Action (EECA). This policy describes the criteria that EECA would utilize to assess and make the approval decisions.

This policy only applies to new high capacity wells to be used for agricultural irrigation research. It does not apply to groundwater research without an explicit agricultural irrigation research component nor does it apply to agricultural irrigation research that utilizes a water source other than a new high capacity well (such as existing agricultural irrigation wells or surface water extraction). The water extraction for such research would be subject to the normal permitting process utilized by EECA.

It should also be noted, that in addition to the criteria listed below, new high capacity wells to be used for agricultural irrigation research will also be subject to the normal permitting process for high capacity wells other than the prohibition for the construction of new high capacity wells for agricultural irrigation. This means, for example, that the wells must be constructed according to the Water Well Construction Regulations; both exploration and extraction permits must be obtained; extraction must not affect other nearby wells; extraction must be within the watershed extraction criteria; extraction must not have an unacceptable impact on aquatic ecosystems; etc.

Criteria and Process

In order for a proposed activity to be eligible for approval as agricultural irrigation research, it must meet the following criteria:

1. Academic, Institutional, Government
 - a. Research must be undertaken by scientific researchers established within the auspices of an academic institution, scientific research institute, government or by student researchers under their direction.
2. Independent
 - a. Funding must not be contingent upon the outcome of the research.
 - b. Lead researchers must have relevant academic qualifications and expertise to the research being proposed.

- c. An academic institution must be a recognized post-secondary educational institution. A scientific research institute must regularly conduct scientific research and be independent from corporations involved in the business of agricultural production. Government researchers must be engaged in research as a main component of their employment for government.
- d. Research assistance, farming activities and crop practices may be undertaken by an agricultural business but must be under the overarching direction of the lead researchers.

3. Public Results

- a. All results of the research must be publically released. The release must occur both at a reasonable time intervals during the research and within one year of the completion of the research. The time intervals will be part of the approval of the research.
- b. Reports of the outcomes of the research must be prepared including any results that may not be favourable to the use of agricultural irrigation.
- c. Preferably, all results of the research would be published in a peer reviewed scientific journal. While this is preferable, it is recognized that some research may not be providing sufficient new information to warrant journal publication but still fills a valuable need for PEI agriculture.
 - i. When the research results are not published in a peer reviewed scientific journal, they must be peer reviewed. The peer review must be completed by experts selected by EWCC.

4. Unique

- a. Research must not duplicate work that has already been completed except where this is required to confirm previous results. 'Confirming previous results' must not be used as an excuse to continuously expand or extend the use of agricultural irrigation.

5. New Knowledge

- a. The questions to be answered by the research must be clear and well stated.
- b. The expected knowledge to be gained by the research must contribute in a meaningful way to the advancement of scientific knowledge surrounding the use of agricultural irrigation in PEI.

6. Environmental Impacts

- a. Goals of the research must include assessing how the use of irrigation
 - i. affects the impacts of agriculture on the environment, and
 - ii. fits with a goal to achieve sustainable agricultural practices.

7. Well(s) Decommissioned

- a. Research must be time limited and the time frame must be provided at the inception.
- b. Wells must be properly abandoned and decommissioned as per the *Water Act* Well Construction Regulations when the research has finished.
- c. A requirement for well abandonment will be placed in permits with a date by which time this must be completed.

8. Public Interest

- a. All projects must be in the public interest in the opinion of the Minister of EWCC having regard to the benefits provided to environmental protection, efficient water use and agricultural production. Projects that are not deemed in the public interest will not be approved.

Research proposals must be submitted to EECA separately from an application for an exploration permit for the construction of a high capacity well. While not required, it is preferable that the proponent receive approval from EECA for the research project prior to the application for an exploration permit. No permit for exploration or extraction will be approved unless the research proposal has already been approved.

There is no application form at this time. Proposals must be provided in writing and contain sufficient information to understand the work of the research as well as making it clear that the research will meet the criteria above. Information regarding meeting the criteria above must be detailed. It is not sufficient to simply state that the criteria will be met. If an application form is developed in the future, the form must be utilized.

The assessment of the applications above will be undertaken by EECA. At the discretion of EECA, scientific advice may be sought on whether the proposed research meets the criteria. The decision of EECA, whether approval, approved with modifications or denial, will be in writing to the proponent. Both the application and the decision of EECA will be public information.