

ACRD Council for the Agricultural Supply of Water

Tropospheric Measurement Systems

Nov. 22nd 2022

ACRD's impetus for convening the Council for Agricultural Water Supply

In 2014 a survey of producers showed that water was the number one priority

In 2017 report made recommendation that a water council should be formed

A successful grant to the Real Estate Foundation of BC was received in 2019

Unique project in which agriculture is a leverage point for regional water management

Intention of council is to bring together various stakeholders and find solutions that are feasible, impactful and support producers here and then further abroad

Projected outcomes include policy recommendations, developing long-term structure and mandate for a regional watershed governance program

Subsequent addition of Producer-Led Monitoring component

Climate & Agriculture Initiative BC (CAI)- support climate adaptation projects across the province and Vancouver Island

Series of workshops in 2019 years ago showed water was top concern

Vancouver Island experiences summer drought and then extreme rainfall events

An obvious overlap with the water council initiative

Producer led data collection can add to the planning process of increasing capacity

Council members include:

Ag producers

Ministry of
Agriculture

Department
of Fisheries

Biologist

Tseshaht First
Nation

Mosaic

Climate
Adaptation
Initiative

ACRD

Outreach & Engagement Summary for Producer led Monitoring



Collate historic and currently collected data for the region and create summary



Look at historic trends to date



Provide a measurement system for expanding the data for decision making for localized use



Create an inventory of all meteorological stations/data that are present and functioning in the Alberni Valley



Determine the availability of monitoring equipment



Set the parameters of what will be measured



The basis of underlying network objectives regarding geographic representation and the elements that need to be measured will help to determine what type of weather station equipment is suitable. These objectives will influence the type of equipment that is used, the types of sensors, and how the data is collected.

Monitoring Plan

- The Alberni Valley has a lack of observation wells and to fill that data gap, equipment was purchased for well depth measurement
- Alberni Farmers' Institute is the holder of the equipment
- Staff from the BC Observation Well network came in July and put on a training session on how to measure ground water well depth
- A template document was created for producers to collect information; which can subsequently be uploaded to the BC wells database or alternatively Aquarius. This will provide the valley with baseline data.
- ACRD has determined a \$50 honoraria for producers/measurement.
- To date: producer uptake is very low on this offering.

Workplan for Council for Agricultural Water Supply

ITEM

Development of a Coordinator Work Plan (co-developed)

Terms of Reference
(co-developed)

6 council meetings

Council meeting recruitment

Meetings with stakeholders

Agreement in Principle re. Delivery of water

Development of protocol for ACRD community water license

Integration of Anecdotal and Storyform summary

Submission to the Watershed Security Strategy Fund

Events: Hosting/logistics for a day long water workshop; Participating at the World Rivers Day

Other Communications, Interim Report, Final Report including policy recommendations

Policy Recommendations for the Alberni-Clayoquot Regional District (ACRD):

1. Permanent establishment of the ACRD Council for Agricultural Water Supply
2. Include agriculture considerations in upstream rezoning applications
3. Implement no-wake zones on vulnerable shoreline of Somass River



1.1 Permanent establishment of the ACRD Council for Agricultural Water Supply

RATIONALE

A long-term interjurisdictional water council will help ensure there is a legitimate, efficient, and effective platform for lobbying watershed planning and management processes. End of current grant term is January 2023.

There is need for consistent long-term funding with long term mechanisms to ensure continuity, connections and community.

Farmers lack a voice when speaking to industry. An opportunity exists for a single producer to come forward with specific concerns and have endorsement from the water council.

Climate change brings significant risks of drought, flooding, and inconsistent water resources.

POLICY DETAILS

Dedicated staff time for facilitation of council.

Further research into models being used in other jurisdictions to ensure long-term access to groundwater for producers. I.e. Arizona and California Water Districts, or the South East Irrigation District in the Okanagan, or the Quincy-Columbia Basin Irrigation District.

Research into options and generation of long-term funding, including parcel tax, for related programs, such as:

- Honoraria for producer participation in monitoring programs and Council meetings
- Reduced rates for agricultural users of community water systems
- Rebates for water storage options, cisterns, etc.
- Funding avenues could include parcel tax, endowments, operating budgets, grants, gas tax revenue
- The above should fall under the purview of the ACRD Grant Coordinator and Asset Management

Facilitation of an information-sharing network within the region, such as for advising all participants when flood gates are being opened or key data is available

1.2 Develop criteria that considers agriculture in rezoning applications.

RATIONALE

With the ACRD currently updating its bylaws it is pertinent to include language that provides special consideration for any rezoning applications developments which may result in downstream impacts to agriculture.

Rezoning application are the critical juncture whereby the ACRD can intersect to ensure appropriate precautions are taken.

Protection on water sources is critical and crucial.

POLICY DETAILS

Enact policy (with zoning, development permits, or otherwise) to ensure agriculture is explicitly considered within rezoning applications upstream of agricultural lands. Language is important: farm use needs to stay in bylaws.

Must include a professional assessment to identify impacts and restrictions.

Working with the Water Council the ACRD develop criteria to evaluate future developments requiring OCP and zoning bylaw amendments to minimize impacts to surface water and groundwater supplies on ALR lands and operating farms. Ie. Runoff, or if a new subdivision what is the water usage, impact on the aquifer. Blockage of natural drainage. Ie. Holly's golf course.

1.3 Implement no-wake zones on vulnerable shoreline of Somass River

RATIONALE

The increase of bank erosion due to higher river flows.

One farm along the Somass River would attribute 10 feet of bank erosion in 40 years due to wakes.

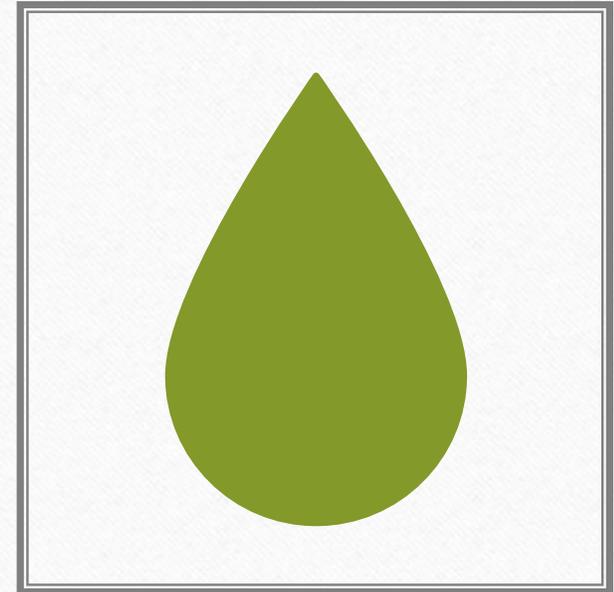
Increasing marine traffic is reported (jet boats ripping by) and there is currently no posted guidelines for safe operations in sensitive zones, such as Paper Mill Dam and the confluence of the Stamp and Sproat Rivers.

POLICY DETAILS

Coordinate with Provincial and Federal bodies in order to put up signage along riverbank in identified vulnerable areas “No Wake Zone” and communicate this to the public.

Other Recommendations for the ACRD:

1. Explore options for agricultural usage of the ACRD Stamp River water license
2. Apply for funding for feasibility of irrigation district and twinning of water lines
3. Support of the identification and placement of at least one observation well within the Alberni Valley
4. Tie in existing weather station at the AV Sort'nGo Centre to the provincial Farmwest site.



Policy Recommendations for Industry:

-
- 2.1 Employ independent hydrologist in areas with licensed downstream water intakes
- 2.2 Include 'agriculture' as a key consideration in planning processes
- 2.3 Have a defined communication strategy for interacting with agricultural producers and the ACRD

Policy Recommendations for Provincial Government:

- 3.1 Enact mandatory protective buffer from agricultural intakes and water sources
- 3.2 Require industry to provide compensation for downstream infrastructure damage
- 3.3 Increase funding sources for water storage
- 3.4 Require that independent hydrologists are utilized by industry in areas with licensed water intakes
- 3.5 Change rate and length of cut cycles
- 3.6 Support regional governments to take a more active role in local watershed management
- 3.7 Ensure priority of use for agricultural users in water allocation

Questions?
