



# Weather Station Network for Agriculture



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BC Ministry of Agriculture

# Climate Related Monitoring Program (CRMP)

## Partners:

- AGRI
- MOE – Snow Pillow
- MOE – River Forecast
- FLNRO – Fire Management
- FLNRO – Forest Ecosystem
- TRANS – Avalanche
- Environment Canada
- Rio Tinto Alcan – private mining
- BC Hydro
- Pacific Climate Impacts Consortium (PCIC)

The screenshot shows the British Columbia government website. The header includes the BC logo, a search bar, and navigation links for 'Careers & MyHR', 'Services A-Z', 'Organizations A-Z', 'Forms A-Z', 'News', and 'Contact Us'. A secondary navigation bar lists various environmental sectors: 'Climate Change', 'Pesticides & Pest Management', 'Plants, Animals & Ecosystems', 'Waste Management', 'Air, Land, & Water', 'Research, Monitoring & Reporting', and 'Natural Resource Stewardship'. Below this, a breadcrumb trail reads: 'Home / Environmental Protection & Sustainability / Research, Monitoring & Reporting / Monitoring /'. The main content area is titled 'Weather & Climate' and features a sub-section 'Weather & Climate' with links for 'Sampling, Methods & Quality Assurance' and 'Aerial Overview Surveys'. The main heading is 'Climate Related Monitoring Program (CRMP)'. The text explains that the page provides links to meteorological networks maintained by partners in the 'Province's Agreement on Management of Meteorological Networks'. It notes that climate data from Environment Canada and the Pacific Climate Impacts Consortium can be found in the related links. A paragraph states that under this agreement, the Ministries of Environment, Transportation and Infrastructure, Forests and Natural Resource Operations, and Agriculture are working together with BC Hydro and Rio Tinto ALCAN to make long-term meteorological data available for professional users involved in climate change analysis and adaptation through portals at the Pacific Climate Impacts Consortium. There are sections for 'Maps' and 'Data Key'. The 'Maps' section lists two links: 'Provincial Meteorological Networks - Adobe Reader Format (with meta data) (PDF, 5MB)' and 'Provincial Meteorological Networks - Google Earth Format (with meta data) (KMZ, 3MB)'. The 'Data Key' section explains that the following information is provided for each data point located on the map (where available):

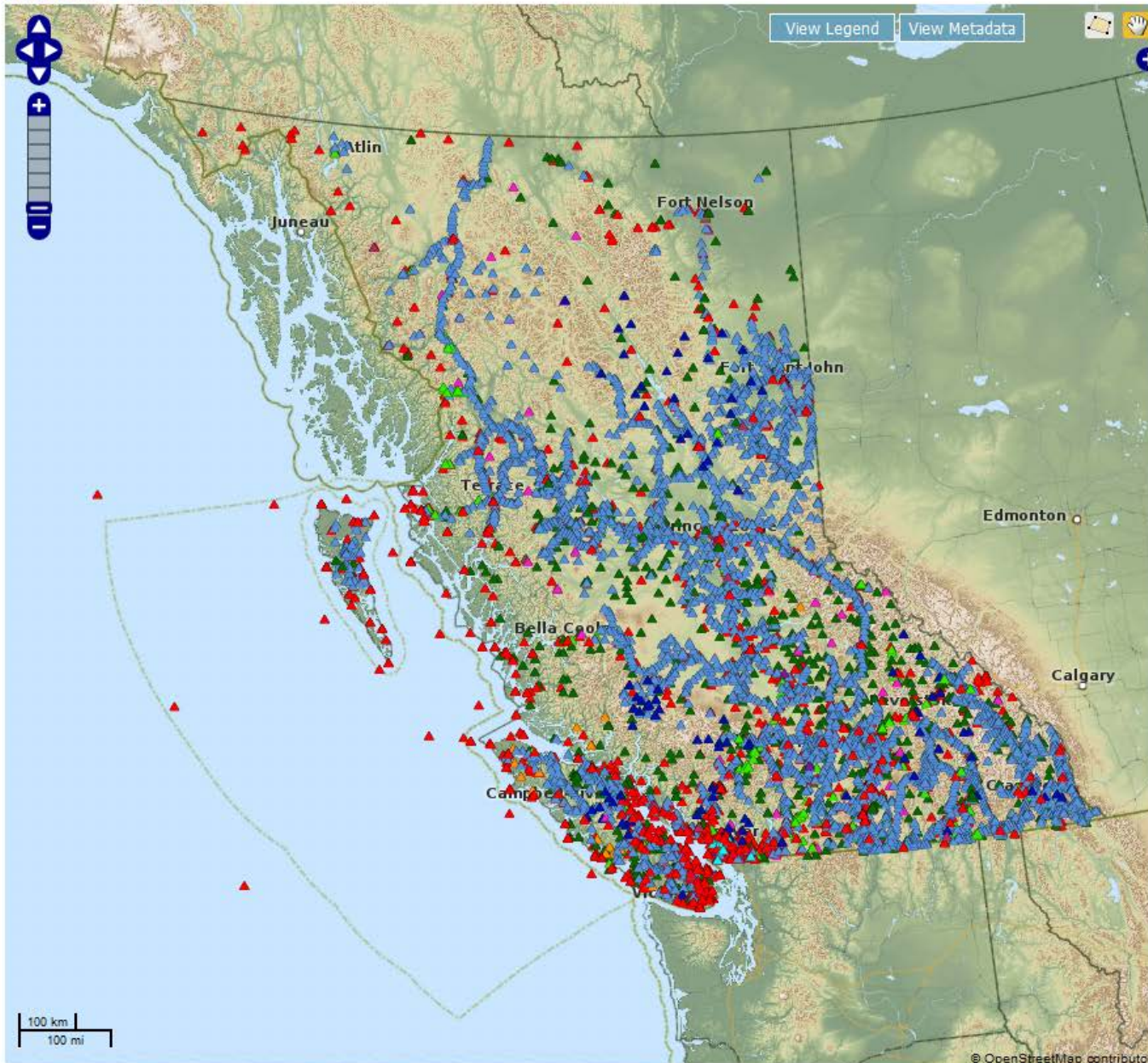
- Latitude/Longitude - decimal degrees
- Ministry/Agency - Responsible agency for a particular station. Agencies participating include:
  - ENV-WSD - Ministry of Environment, Automated Snow Pillow Network
  - ENV-EPD - Ministry of Environment, Air Quality (Meteorological) Network
  - ENR(NMoFR) - Ministry of Forests, Lands and Natural Resource Operations – B.C. Wildfire Service
  - BC Hydro
  - MoT - Ministry of Transportation and Infrastructure Avalanche and Weather Program
  - MAL - Ministry of Agriculture in partnership with GS (Growers Supply Co. Ltd.), and FBC (Fraser Basin Council)

On the right side of the page, there are two sections: 'Related Links' and 'Environment Canada Related Links'. The 'Related Links' section includes:

- [Avalanche and Weather Program](#)
- [Drive BC](#)
- [B.C. Wildfire Service](#)
- [Agriculture Weather Forecasting \(Farmwest\)](#)
- [BC Hydro Hydrometeorological Networks](#)
- [Pacific Climate Impacts Consortium](#)
- [Pacific Climate Data Set](#)

The 'Environment Canada Related Links' section includes:

- [Daily Climate Stations & Surface Weather Sites](#)
- [Marine Buoys](#)
- [Real Time Hydrometric Information](#)
- [Hydrometric Archive](#)



### Filter Options

Date Range  
 YYYY/MM/DD to YYYY/MM/DD

Climate Variables  
 All [?]

Network Name  
 All [?]

Observation Frequency  
 Any [?]

Only include stations with 1971-2000 climatology

Selection Information

7019 stations  
 447M observations  
 53k climatologies

Reset Filters

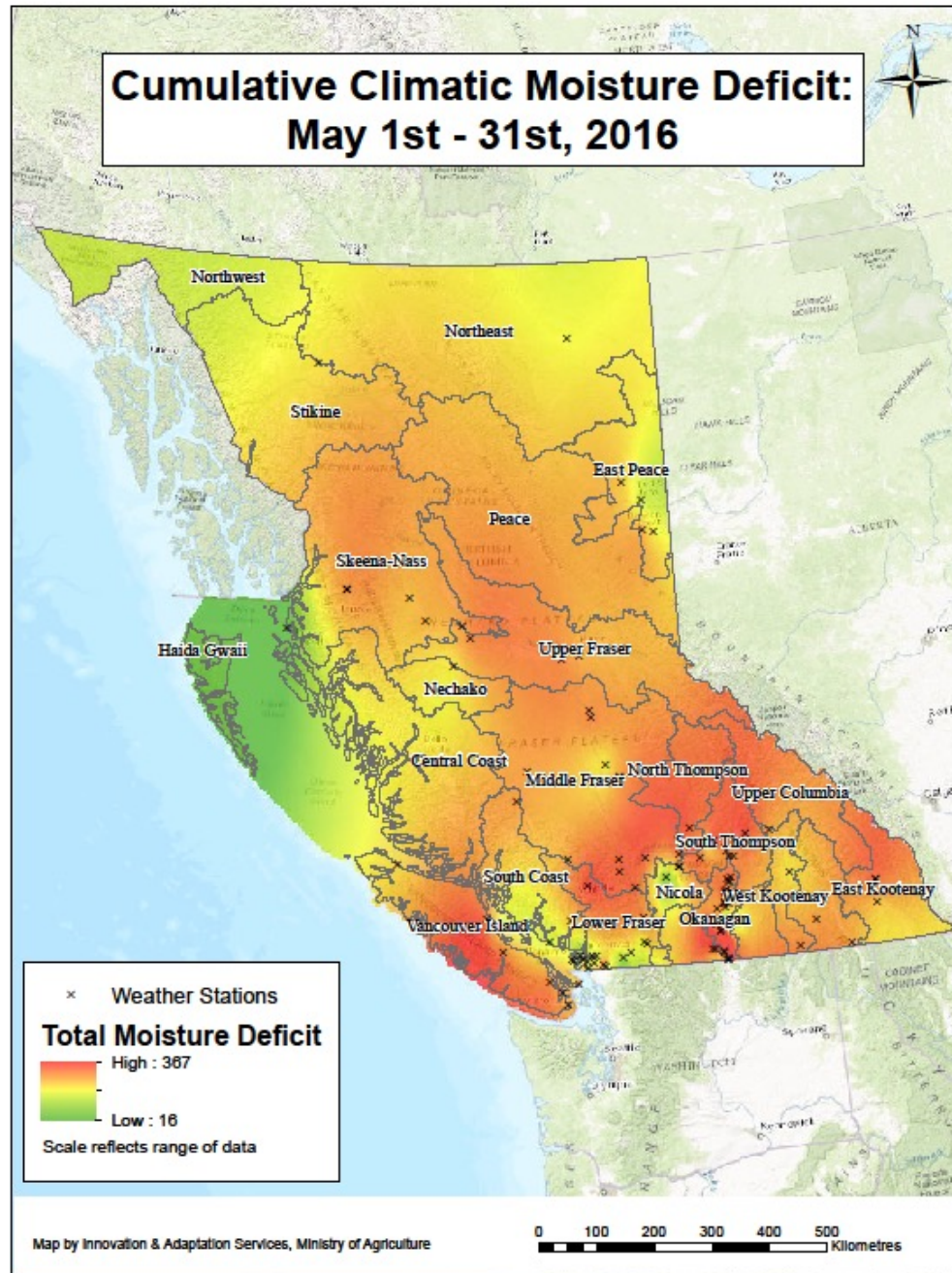
### Download Data

Output Format  
 NetCDF [?]

Clip time series to filter date range

Climatology Timeseries

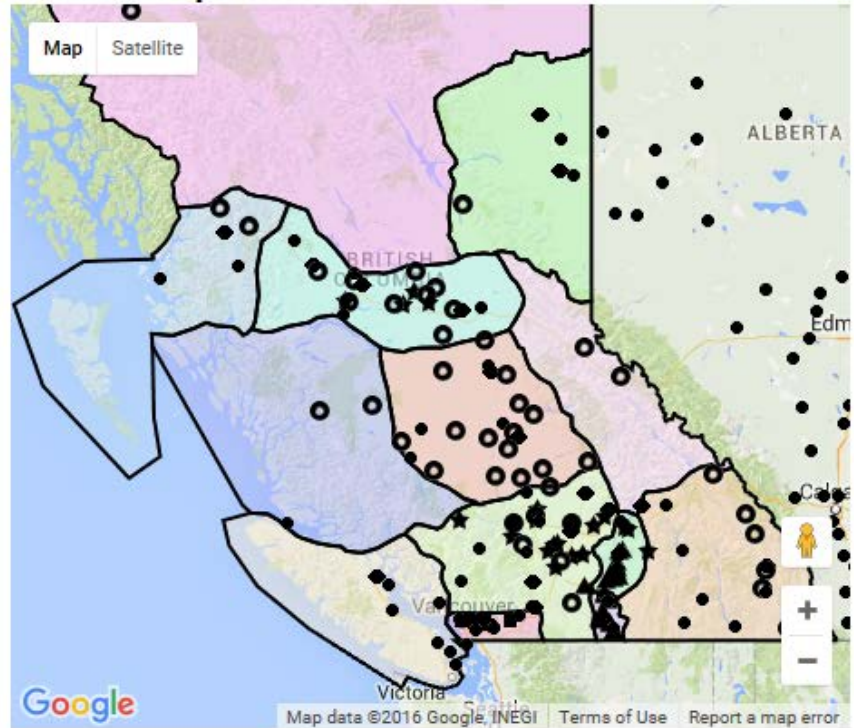
# Cumulative Climatic Moisture Deficit: May 1st - 31st, 2016



[Home](#)

**Thompson River University**  
 Applied Sustainable Ranching [SPEAKER SERIES](#)








### Station Map



### Regions in BC

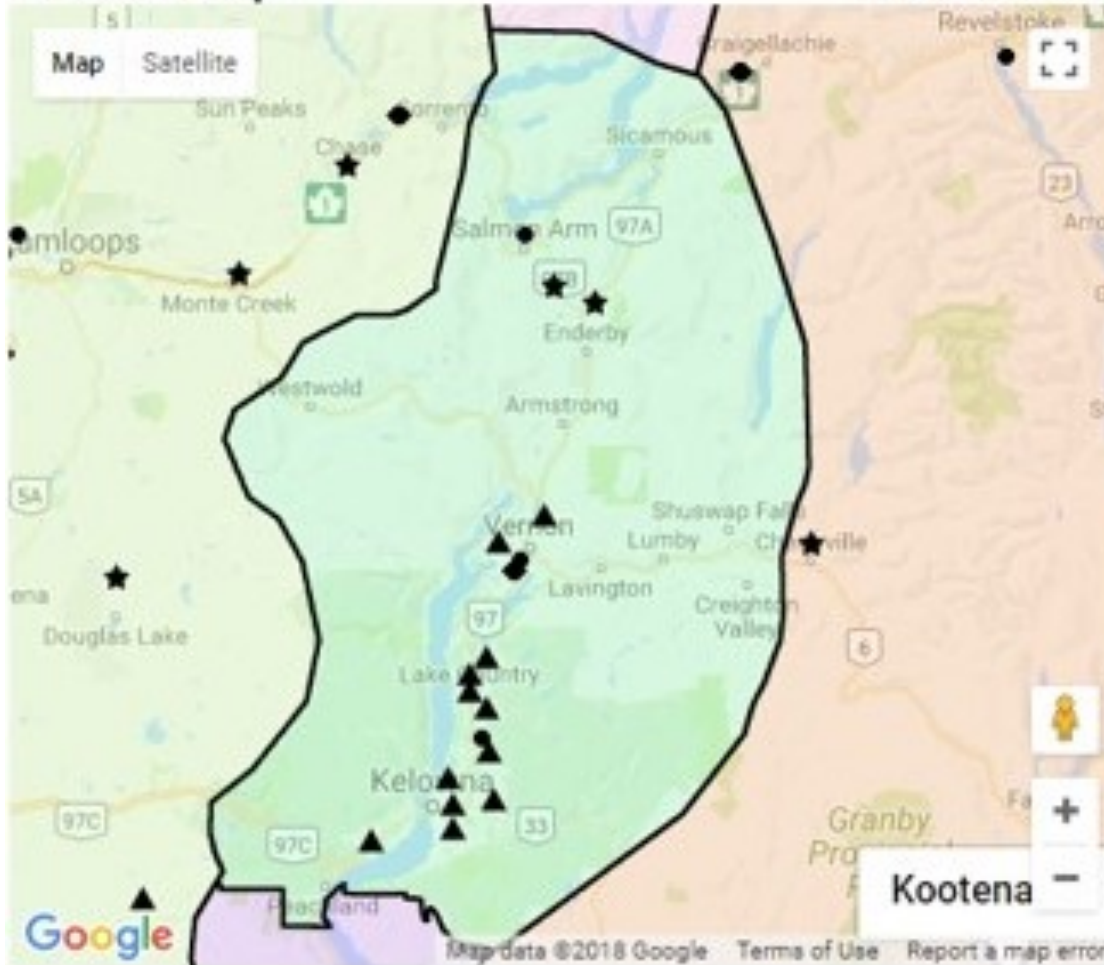
 Cariboo	 Central Coast	 Kootenays
 Lower Mainland	 Northern BC	 Prince Rupert
 North Okanagan	 Peace River	 Nechako
 Rockies	 South Okanagan	 Southwest Interior
 Vancouver Island		

### Station Legend

 Environment Canada Stations	 Grower Supply Co. Ltd. Stations
 Private Stations	 Metro Vancouver Stations
 Agriculture & Agri-Food Canada	 Ministry of Transportation
 Ministry of Forests, Land and Natural Resource Operations	

## North Okanagan Stations

Station Map

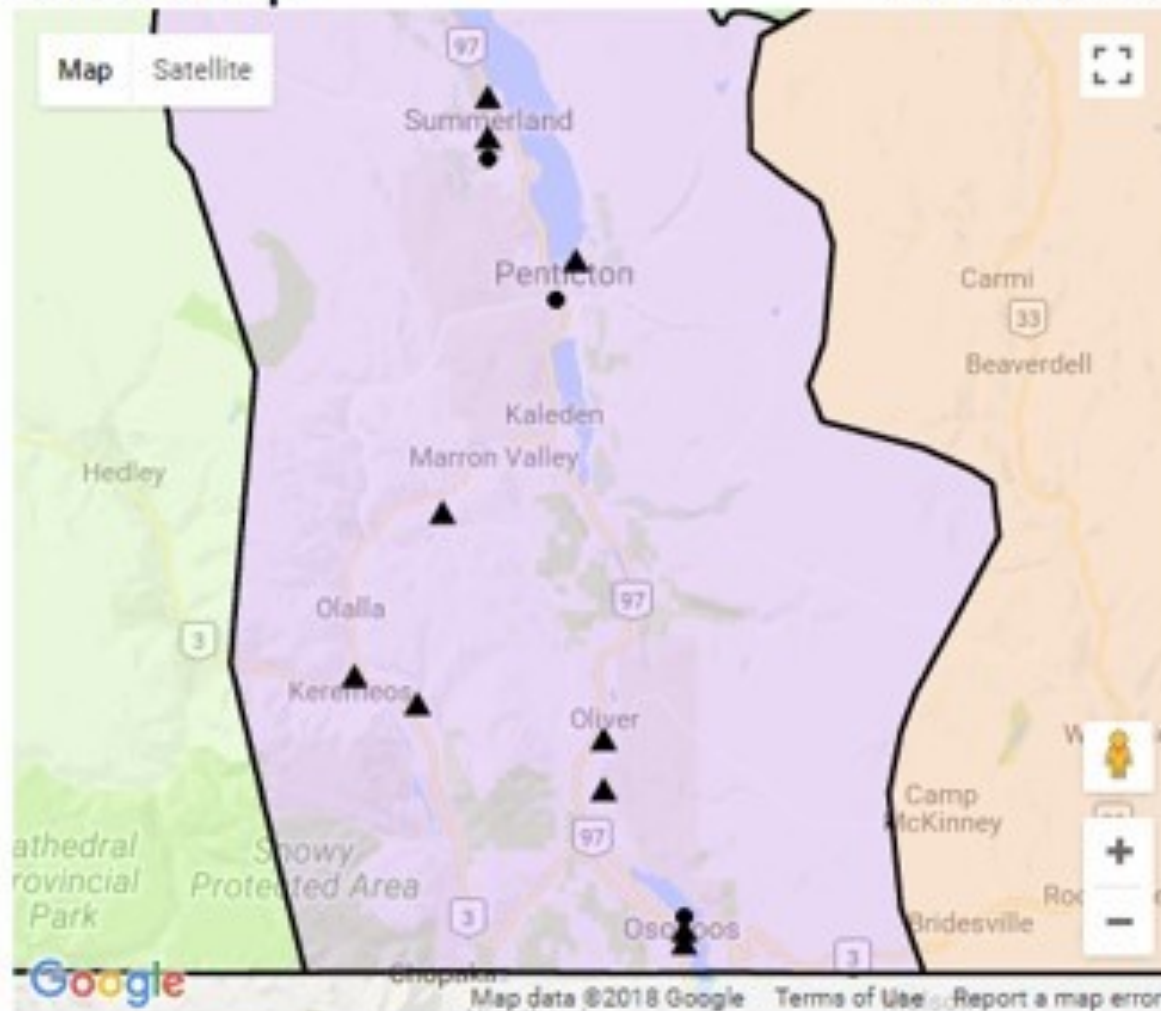


- 3 - Environment Canada
- 12 - Grower Supply
- 3 - Private Stations
- 1 – Ministry of Transportation

## South Okanagan Stations

Station Map

All Stations



- 3 - Environment Canada
- 10 - Grower Supply
- 3 of the 10 Grower Supply stations are provided through OBWB funding – no agreement for maintenance

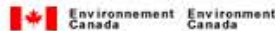


### Weather Forecast for: Abbotsford Airport

Updated: Jun 02, 2016 at 12:05 PM

Customize to  
Your Location

View All  
Forecasts



Thu Jun 02	Thu PM Jun 02	Fri Jun 03	Sat Jun 04	Sun Jun 05	Mon Jun 06
High: 18 °C	Low: 13 °C POP: 30%	High: 24 °C Low: 13 °C POP: 30%	High: 29 °C Low: 15 °C	High: 30 °C Low: 15 °C	High: 27 °C Low: 12 °C

### Weather Based Farm Calculators

- PEST DEGREE DAYS
- MANURE
- TEMPERATURE MONITOR
- GROWING DEGREE DAYS
- EVAPOTRANSPIRATION**
- CORN HEAT UNITS
- T-SUM CALCULATOR

### BC Forage Council



#### BCFC Home

- [2016 Membership Form](#)
- [2016 Sponsorship Form](#)
- [2016 Board of Directors](#)
- AGM September 17, 2016

Thompson River  
University

## PFCA PROJECT: STRATEGIES TO IMPROVE FORAGE YIELD AND QUALITY WHILE ADAPTING TO CLIMATE CHANGE (2015-2018)

**Project Summary:** This project will help the dairy sector and other producers of forages in the Fraser Valley and Vancouver Island by providing a modern tool-kit of practical adaptive management strategies to improve yield and quality of the forage crops under future scenarios of changing climate and increasingly variable weather. Efficient forage production is at the heart of profitable cattle operations.

[Read Full Story Here](#)

## Field Crop and Forage Pests and their Natural Enemies in Western Canada (2015)

NEW! Field Guide to Support Integrated Pest Management (IPM) in Field

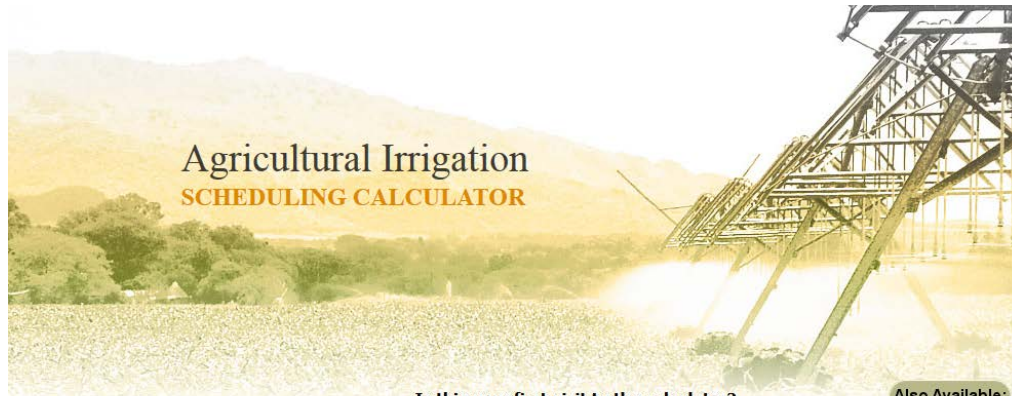
**NOW AVAILABLE**  
Order Here

**Investment Agriculture Foundation**  
*of British Columbia*

**Advanced Silage Corn Management**  
Order Your Book Here!



# Agricultural Irrigation Scheduling Calculator



**Agricultural Irrigation SCHEDULING CALCULATOR**

**Is this your first visit to the calculator?**

This Irrigation Scheduling Calculator uses real-time daily Evapotranspiration (ET) rates determined from climate stations that are linked to [www.Farmwest.com](http://www.Farmwest.com).

However, climate stations in the Province of Quebec are provided by MDDEP (Environment Quebec) and Environment Canada through AgWeather Quebec.

For cases where climate stations are not available, the Calculator allows users to input local ET data that reflects the climate conditions at their specific location.

**Returning Users**

Username:

Password:


**Login**

[Forgotten Username/Password](#) [Help](#)


[Register New Account](#)

**Also Available:**

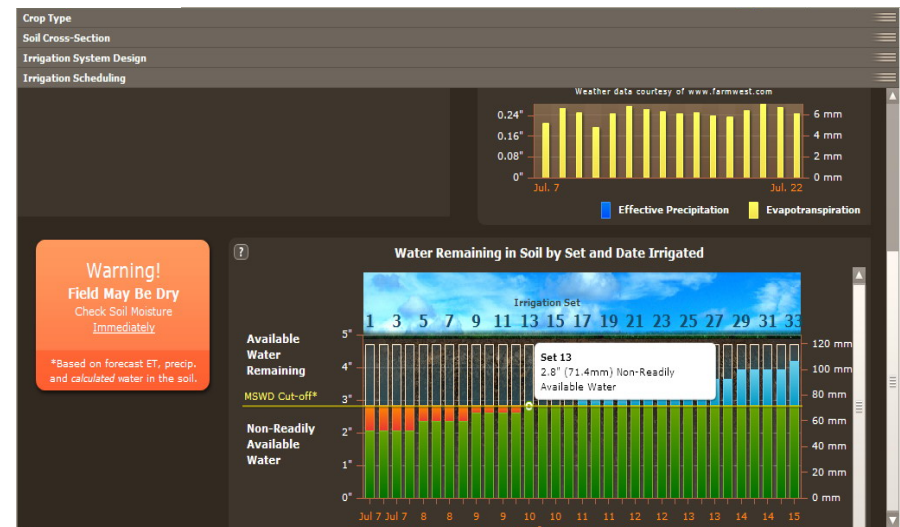
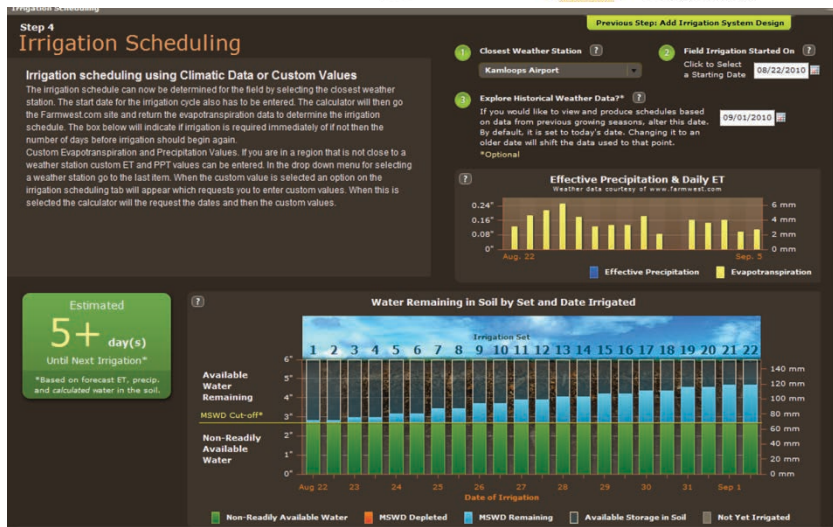
Landscape Irrigation Scheduling Calculator



**Click to Switch!**



System failed when EC changed the rainfall data outputs





## Climate Network

- **Growers Supply Stations**
  - Originally funded by Agriculture Environment Partnership Initiative (AEPI)
  - Agreement for maintaining stations expired after 10 years of service.
  - Business Risk Management (AGRI has provided funding to GS after the 10 year funding agreement with AEPI ended
- **Private Stations**
  - Station data is fed to Farmwest through ROM communications
  - Data transmission costs are funded by BCAC funds that was established as a one time grant
  - No coordinated method of station maintenance
- **Other networks**
  - Grape industry has a number of stations that could be connected to farmwest
  - OBWB has three stations are connected to farmwest
  - Other private stations scattered through the Okanagan that are not connected to farmwest



## Climate Data Issues

- CRMP
  - The current 7 year agreement is ending and an new 7 year MOU is being planned
  - Metro Vancouver is a new CRMP Partner
  - Partners are primarily government agencies except Rio Tinto Alcan, BC Hydro and Pacific Field Corn Association (Farmwest)
  - Working on a network of networks
  - With PCIC, by March 2018 conduct a gap analysis of stations in agricultural areas in BC
- Farmwest
  - GS has refused to provide data to Farmwest for free after agreement ended
  - Only the IIABC sponsors Farmwest at the current time (\$1000/year)
  - Farmwest (as the AGRI website) does not obtain base funding from the province
  - Peace River network is asking to join Farmwest



## Climate Data Issues

- Farmwest
  - Ongoing support in the Okanagan is based on an agreement with Grower's Supply. (They are owned by the Fruit Growers Association)
  - Grower's Supply (GS) received funding to upgrade stations for pest and disease modelling from AEI – the agreement did not required future commitment to supply Farmwest with data.
  - SIR program provided funding to GS to obtain weather data support disease modelling in mid 2000's SIR has collaborated with Washington State to improve the disease modelling. GS was interested in the improved disease modelling and now offers the data to SIR for free.
  - Work with ECCC is underway to integrate the 18 agricultural stations (private stations) into a centralized data processing system



## Coordinating Agricultural Data

- BC Tree Fruit Coop owns Growers Supply
- SIR program is partly funded for farmers and is in the best interest of farmers
- Growers Supply weather data should be made available to all farmers through SIR, OBWB and Farmwest for all purposes, including water management.