



SOUTH NATION  
**CONSERVATION**  
DE LA NATION SUD

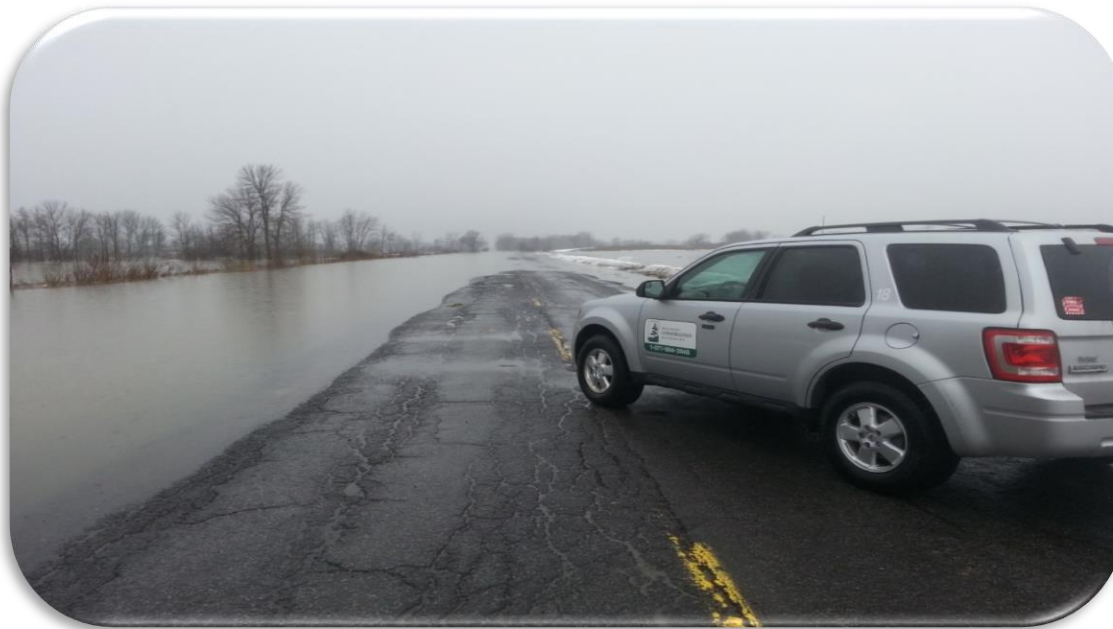
# Monitoring Tools and Decision Making

June 2, 2020



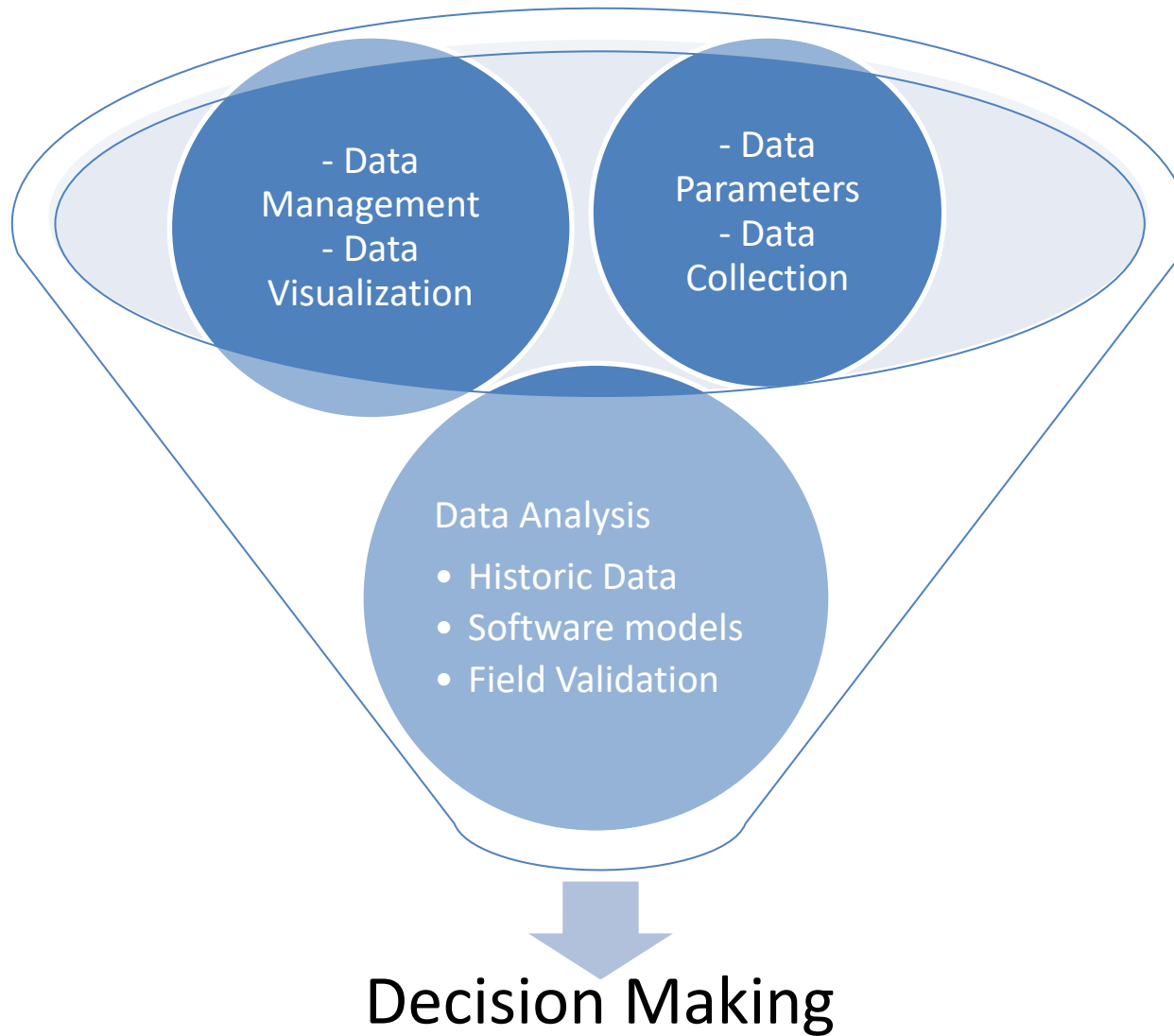


- How gauges are used in our decision making process
- How hydrometric data is used when collaborating with other agencies
- How hydrometric data helps answer questions that we receive from municipalities/public during different weather events



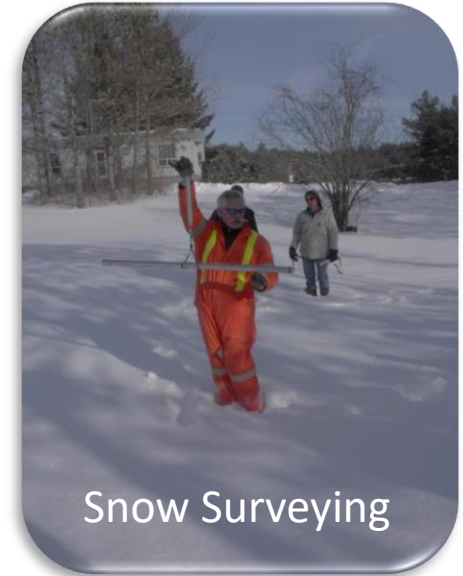
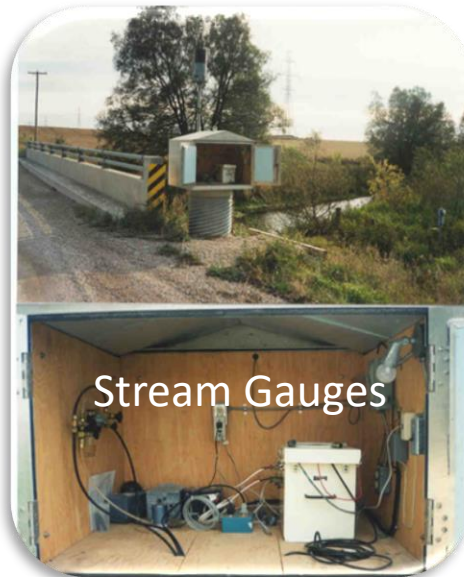


# Data Transmission and Decision Making

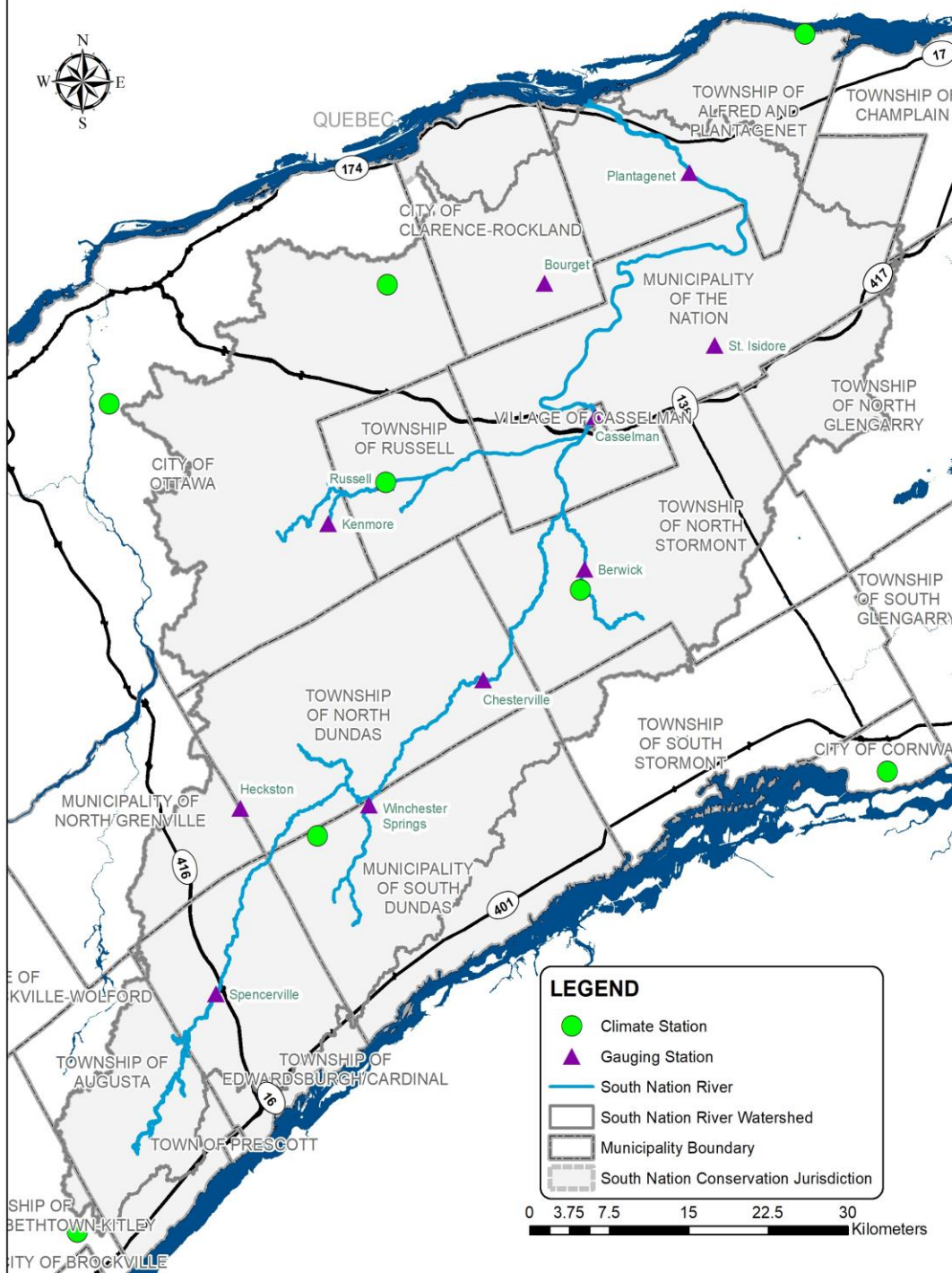




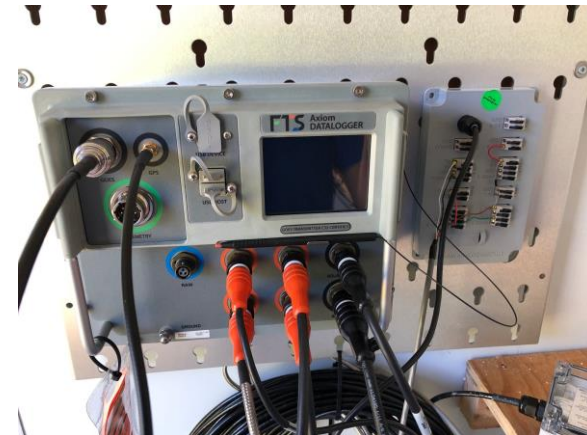
# Data Parameters and Collection







# Data Collection



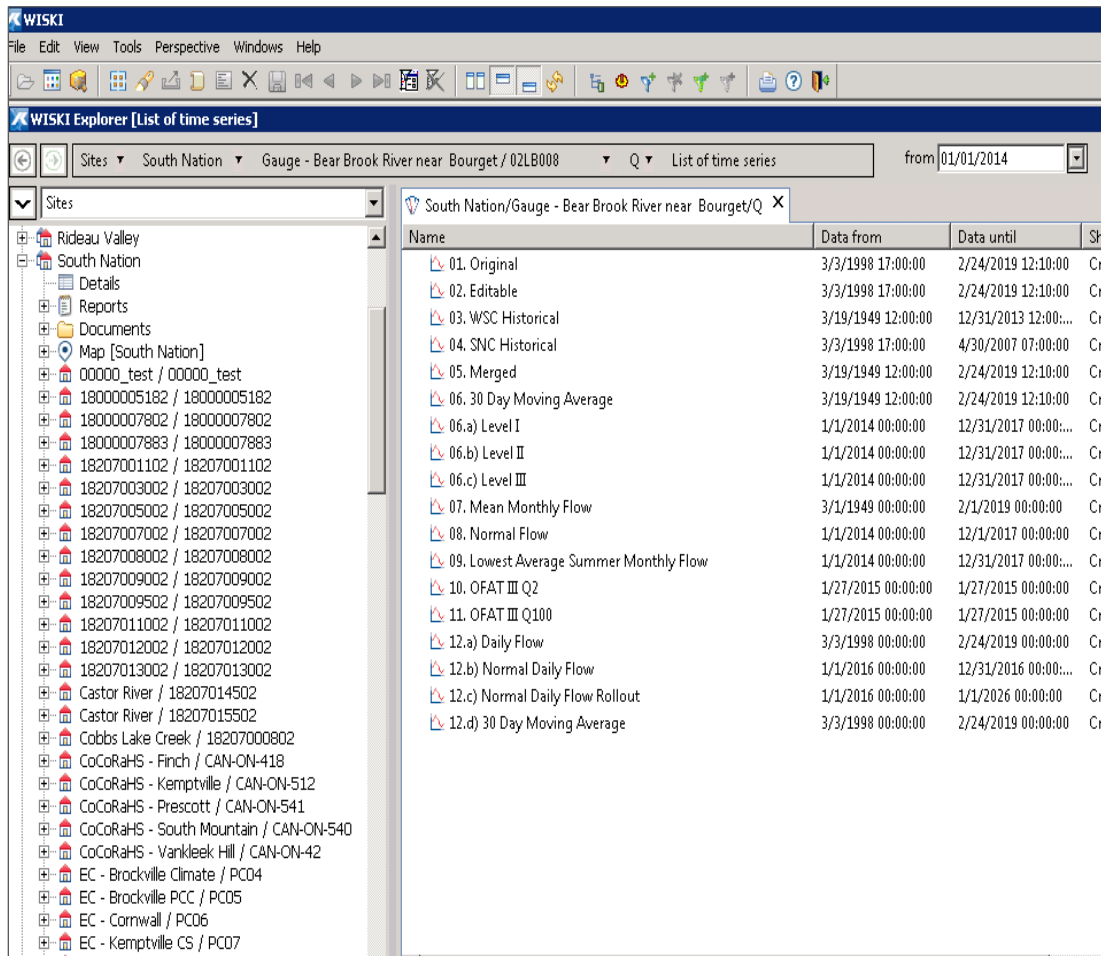
Data Logger



Climate Station



# Data Management



Data Management WISKI software interface

## Water Information Systems by KISTERS (WISKI):

Tool to store, manage, analyze, visualize, and export datasets.

## Eastern Ontario WISKI Hub Committee:

forum to exchange data, tools, and information between CA's (10)



- Pulls data from monitoring network in to one workbook
- Compiled Daily
- Fully automated

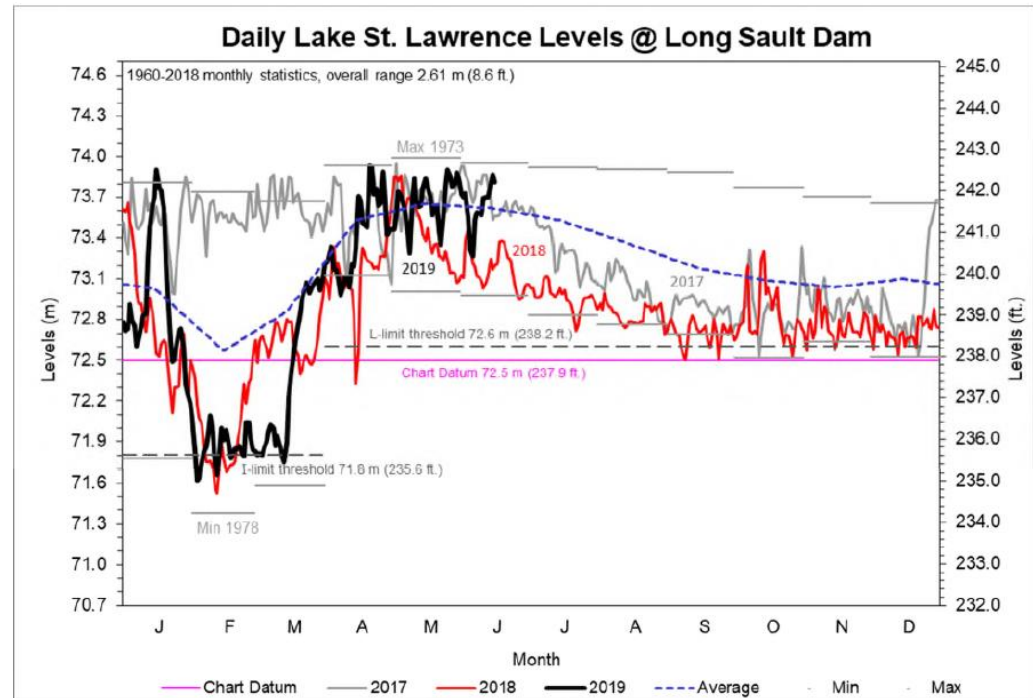
[illegible]

## Snapshot of the DPC





## Current Conditions Vs. Historic Data



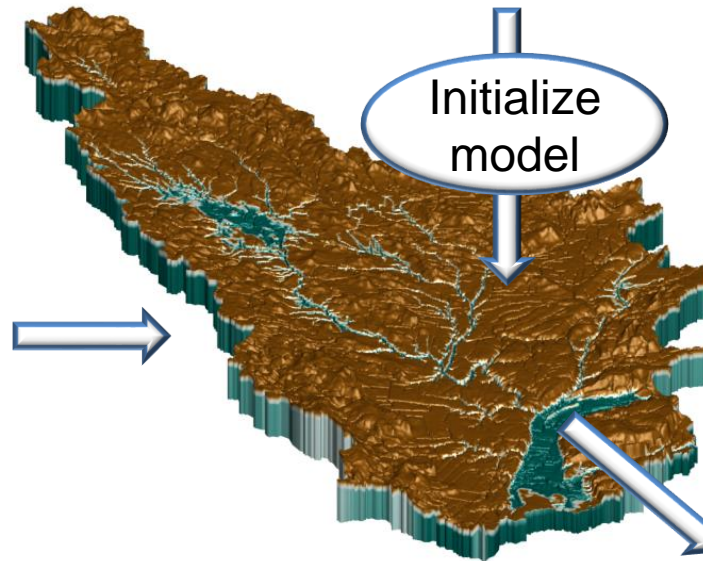




Weather Forecast  
(2 week)

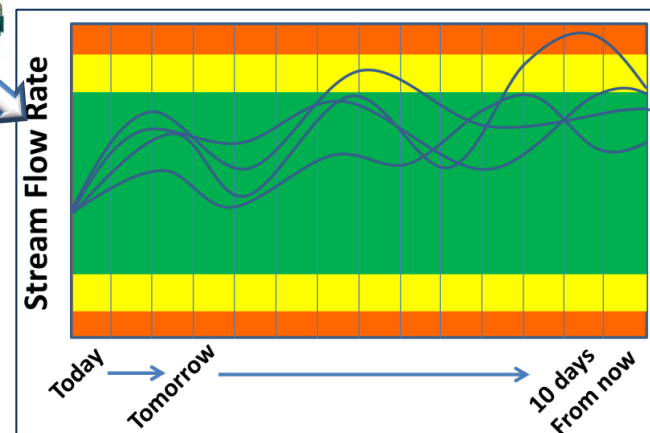
Estimated Current  
Watershed Condition

Initialize  
model



Simulated Conditions  
Over Next 2 weeks

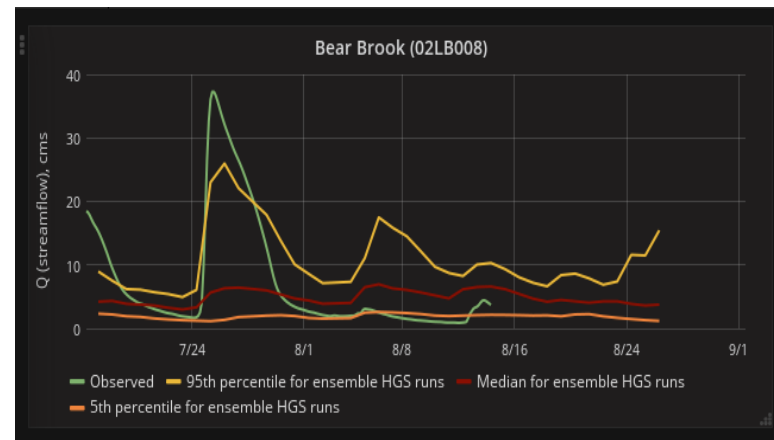
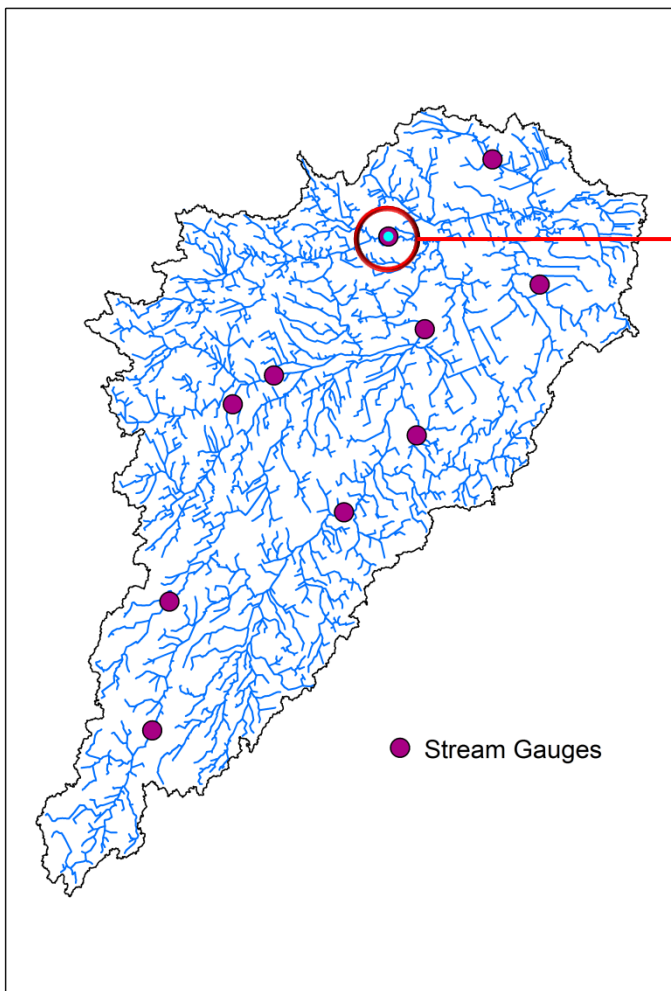
## The Hydro Geosphere Prediction Model



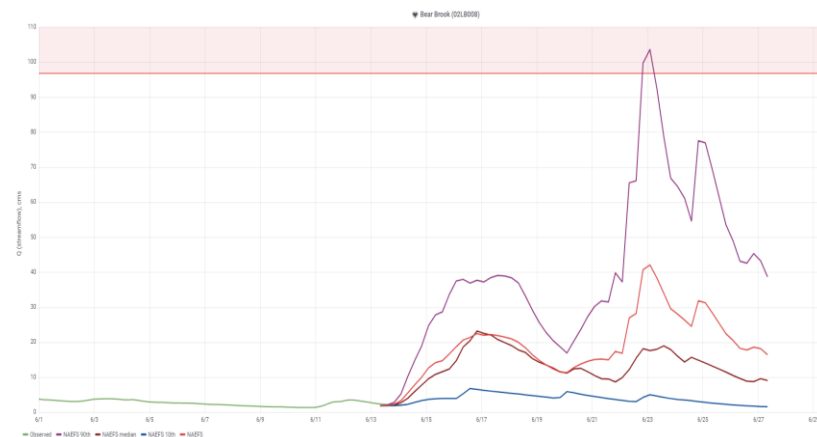


# Forecasting Results

Statistical presentation (median, 10<sup>th</sup> & 90<sup>th</sup> percentile)

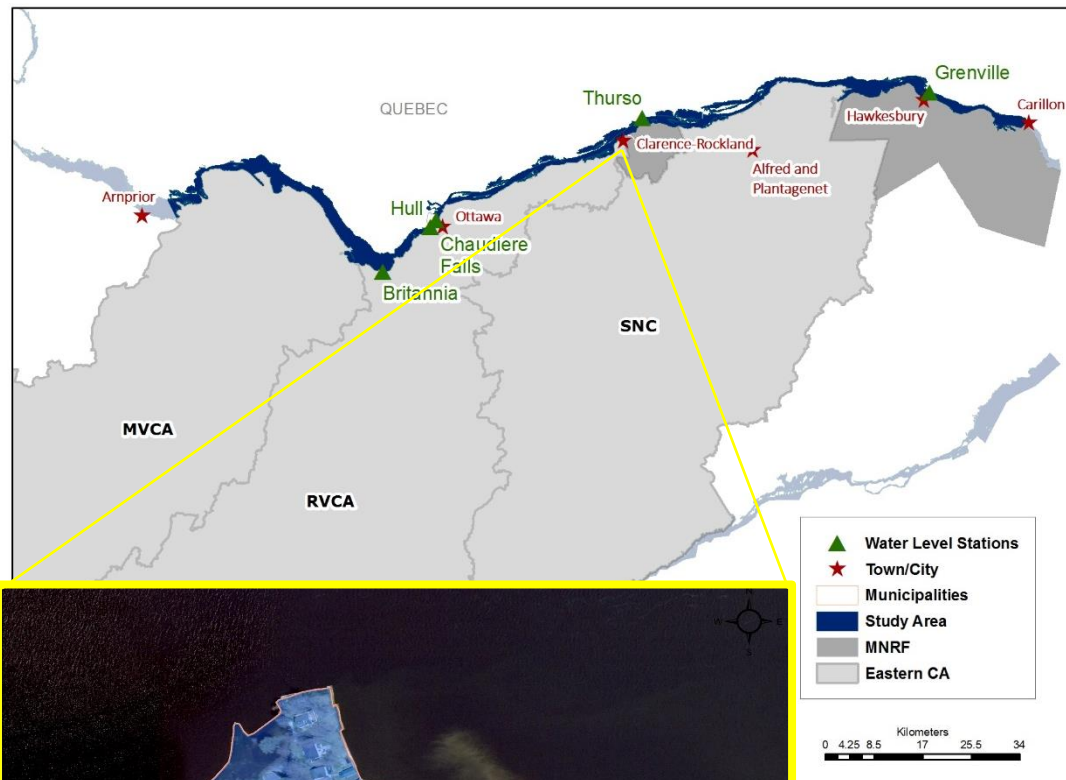


## Threshold Alert System





# Hydrometric Data and Collaboration with Agencies



- Gauge stations along the Ottawa River provide crucial information for CAs, MNRF, and the ORRPB to make flood-based decisions
- Association between water levels and areas of concern

## FLOOD WARNING: Ottawa River – Arnprior to Hawkesbury – Update #14

May 28, 2019

**Flood Warning**

### Weather Forecast:

There are no significant weather systems expected this week.

### Environmental Conditions:

Water levels along the lower Ottawa River from Gatineau to the Grenville/Hawkesbury area are expected to remain stable and should resume declining on Wednesday, May 29, 2019. No additional increase in water levels is expected.

### Risks:

**All flood-prone areas along the Ottawa River from Lac Coulange down to the Montreal Archipelago are at risk as spring runoff continues along the upper**



# Addressing FAQ from Municipalities and the Public

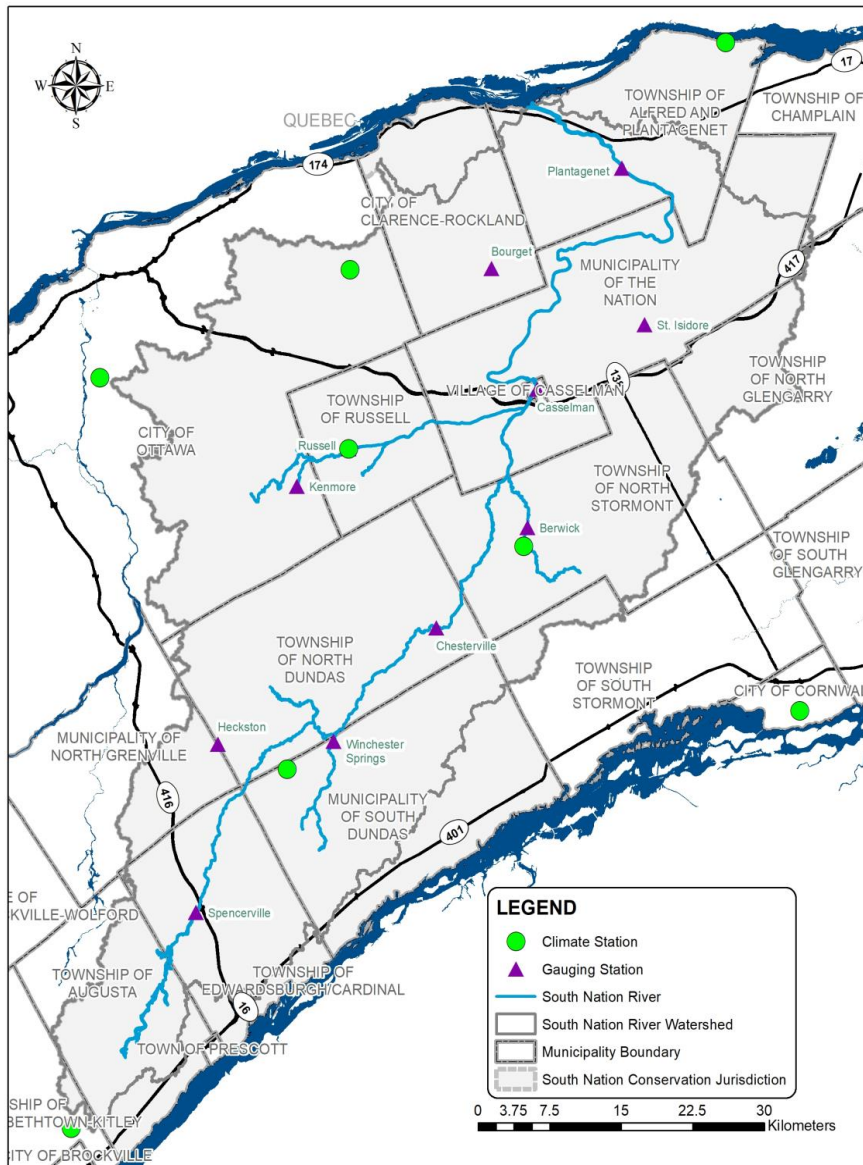


- On Call Flood Duty Officers
- Press Releases and Flood Statements
- Accessible online real-time watershed data
- Provide information sessions to partners and the public





# Importance of Gauge Data



- 11 stream gauges within the SNC jurisdiction
- Reference to floodplain products to identify affected areas, roads, and infrastructure
- The need of more data to enhance monitoring network on a local level

Our Local Environment, We're in it Together.



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