

# **Raising the Bar: Water Monitoring Standards and Success Stories Across Canada**

**Hoskin Scientific**

***Canada's National Distributor of Testing & Monitoring Instruments***

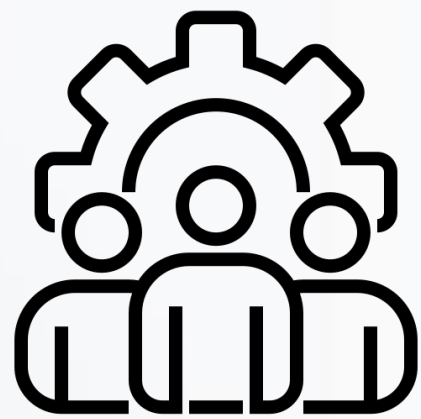
**Ashley Kaba**







Founded In  
**1946**



**200+**  
Team Members



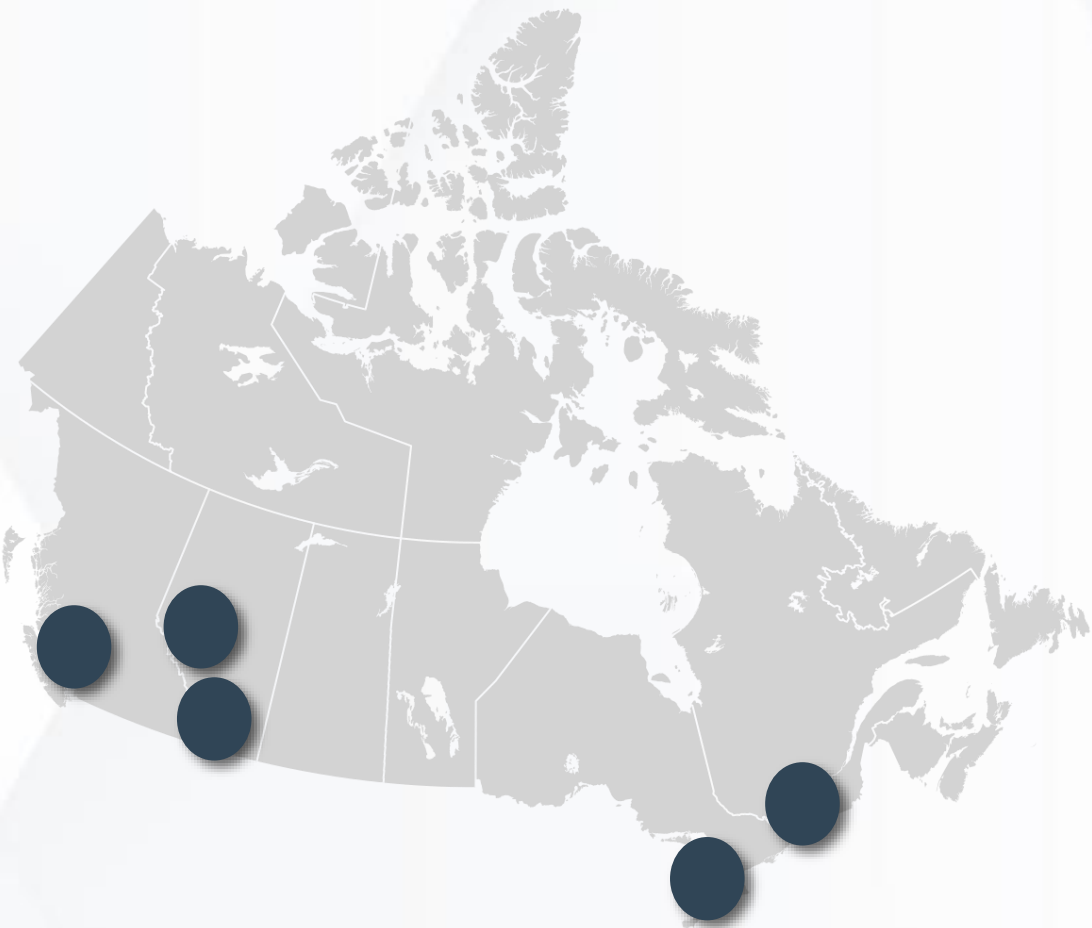
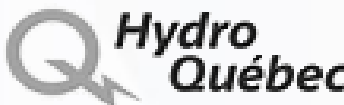
**100+** Sales, Service & Technical Support



**5** Brands



**5750** Customers



**5** Locations

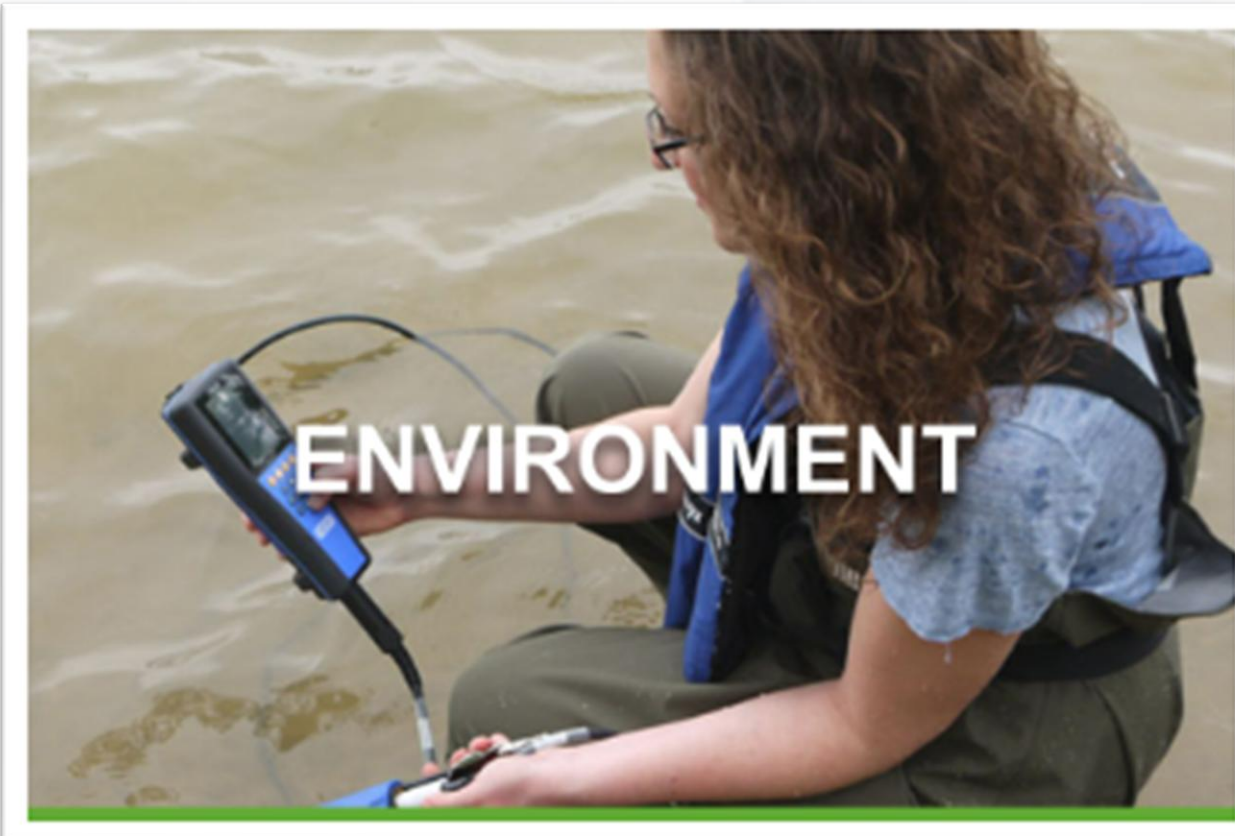


Conference representatives: Ashley Kaba, Carley Knox, Shawn Ternan, Claire Rethoret, Derek McKeown





# Hoskin Scientific Departments



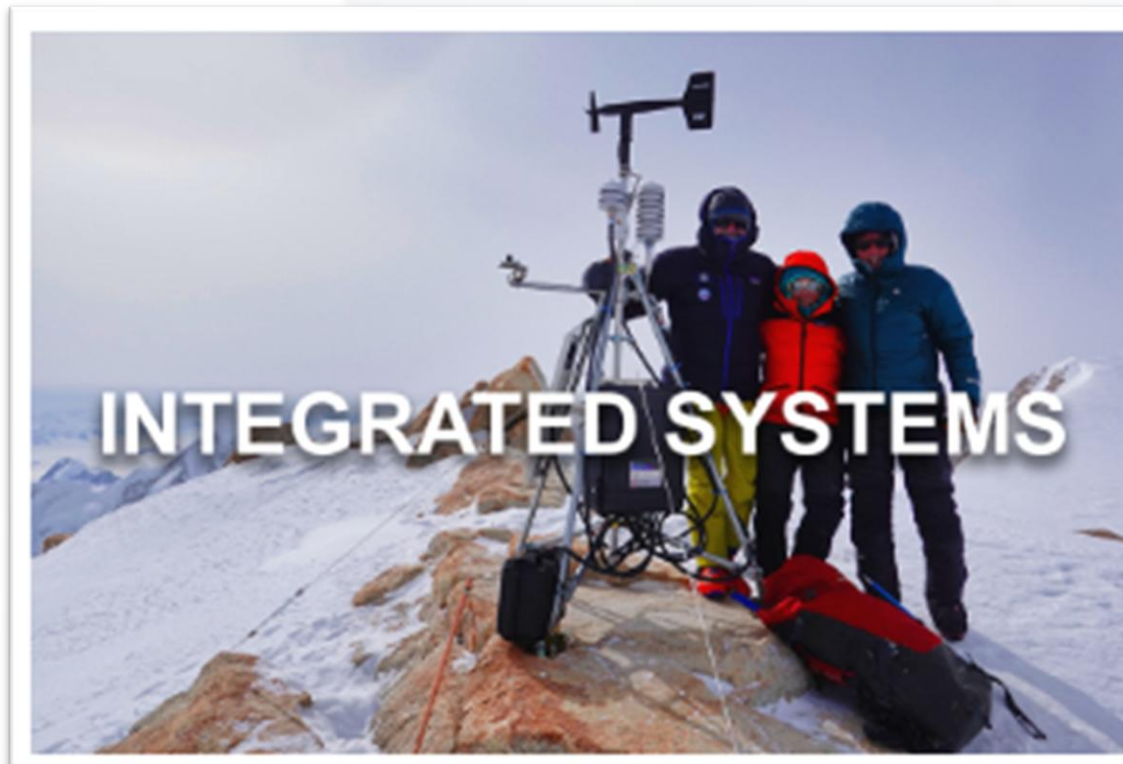
Sampling & monitoring of air, water & soil for the environmental, agricultural, mining & forestry markets.



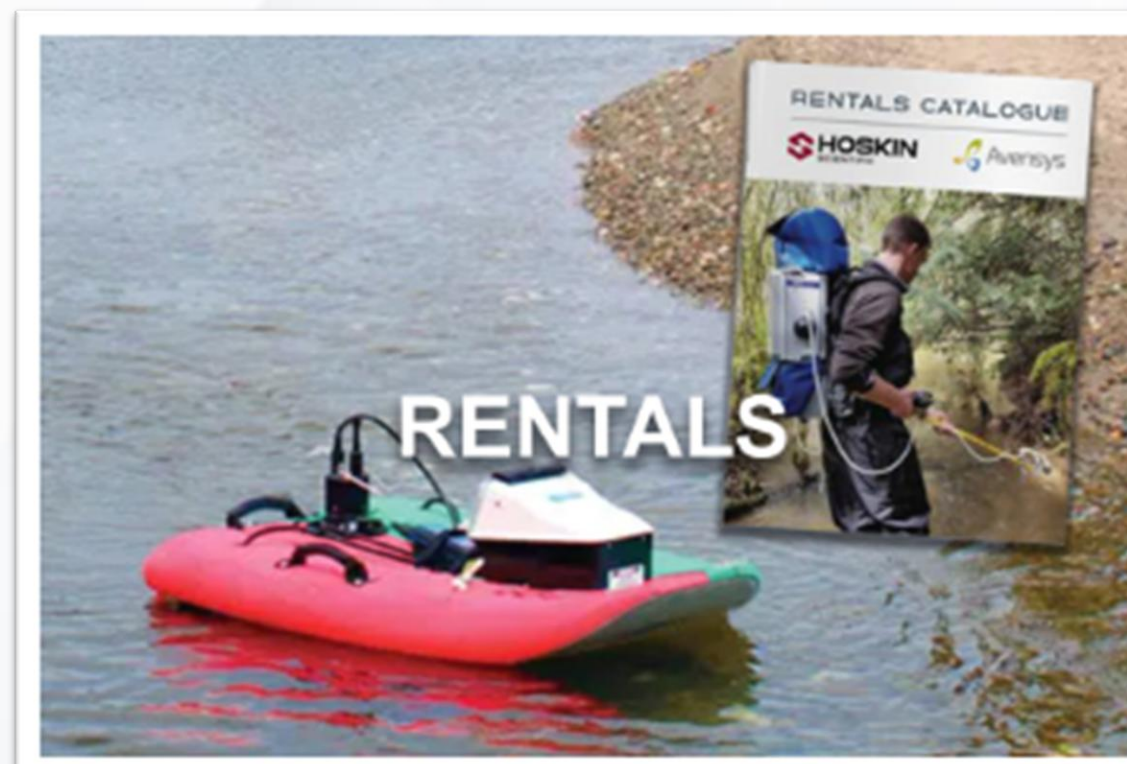
Materials & product testing for soil, asphalt, petroleum, concrete, mining, cement, & research



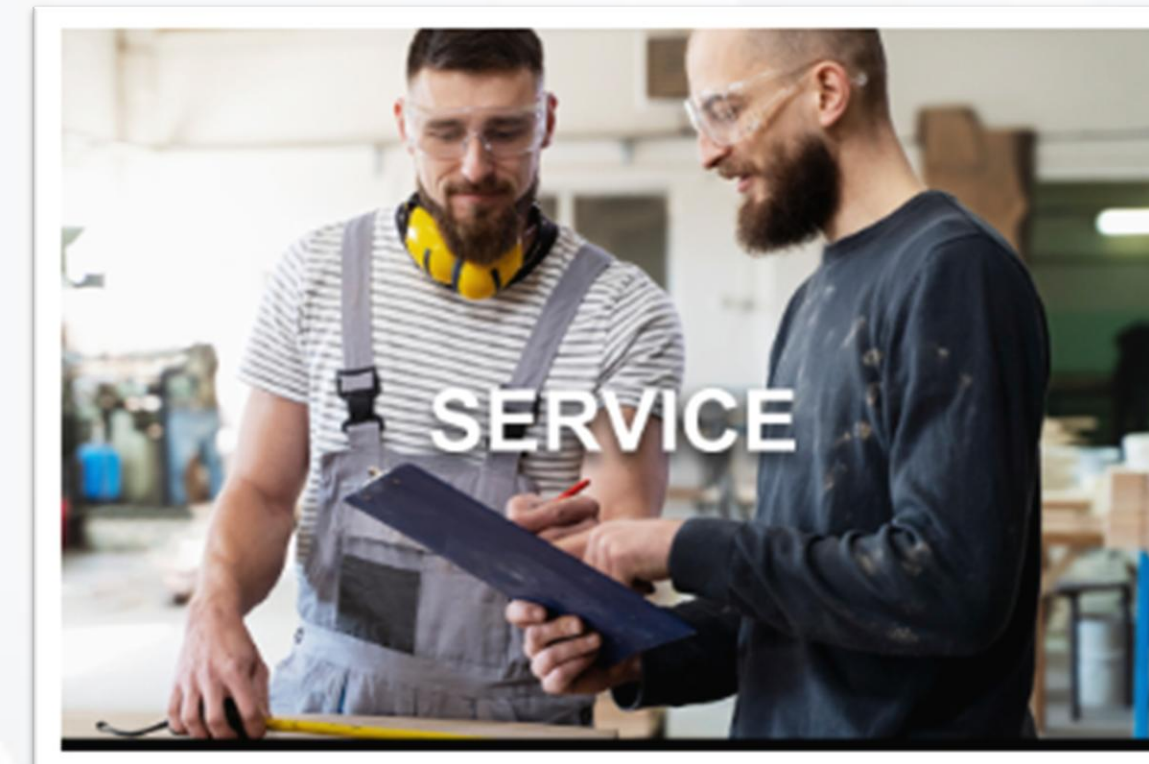
Sensors, transducers & instrumentation for manufacturing, research & factory automation.



Real-Time Remote Data using: Radio, Cellular, Satellite. Multiple parameters from any location.



A wide range of instrumentation: water quality, portable gas monitors, soil sampling instruments.



Test, calibrate, and repair. Technicians are factory-trained to meet the needs of customers.





# Hoskin Scientific Environmental

Sampling and monitoring instruments for air, water and soil for the environmental, agricultural, mining & forestry markets



- Water Quality
- Surface Water Hydrology
- Groundwater & Remediation
- Coastal & Oceanographic
- Limnology & Fisheries Equipment
- Soil Science
- Wildlife Acoustic Monitoring
- Plant Science
- Data Acquisition, Loggers & Software
- Air Quality
- Meteorology & Weather Monitoring
- General Laboratory







# Raising the Bar: Why Standards Matter







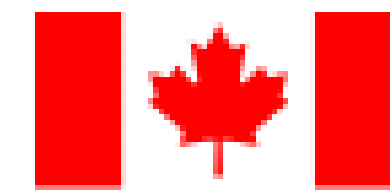
# Canadian Standards Landscapes

## Water Survey of Canada (WSC)

- National standard used across all provinces
- Equivalent to USGS in the U.S.

## BC RISC

- Provincial standard
- Adopted due to industry demand and changes within the Provinces Hydrometric Division (forestry, mining, hydro, fisheries)
- Provides multi-disciplinary coverage



Government  
of Canada

Gouvernement  
du Canada



BRITISH  
COLUMBIA



**HOSKIN**  
SCIENTIFIC





# Why RISC Standards Exists in BC

- “Resources Information Standards Committee”
- First RISC Manual 1998
- Updated 2018 to include data grading and focus on instrumentation
- Same playbook across industry and government



Test day with BC Ministry

## Manual of British Columbia Hydrometric Standards

Prepared by  
Ministry of Environment and Climate Change Strategy  
Knowledge Management Branch  
for the  
Resources Information Standards Committee



Not just a salesperson!







# Supporting Organization

- NASH – North American Stream Hydrographers
- Promoters of FlowTracker2's



NASH – Introduction of Surfbee



## PREVIOUS EVENTS

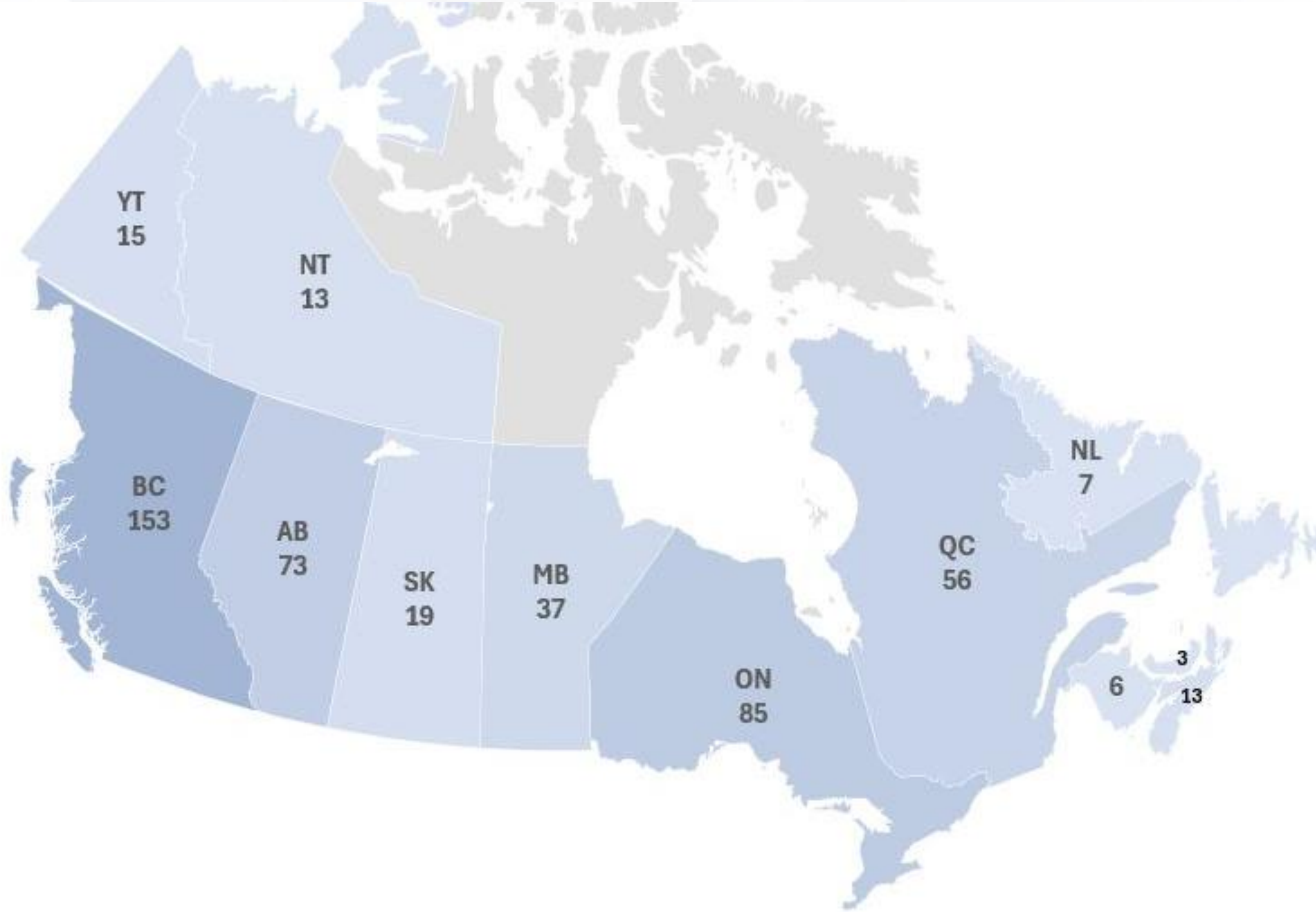
Event	Date
Introduction to Hydrometric Monitoring and Flow Regatta, Halifax, NS	June 18 & 22, 2023
Flow Regatta Training Event, Lethbridge, AB	July 12, 2023
ADCP Training Event, Richmond, BC	October, 2023
Salt Dilution Hydrometric Workshop, Kelowna, BC	March 12, 2024
Intro to Hydrometrics and Flow Regatta, Saskatoon, SK	June 20-21, 2024







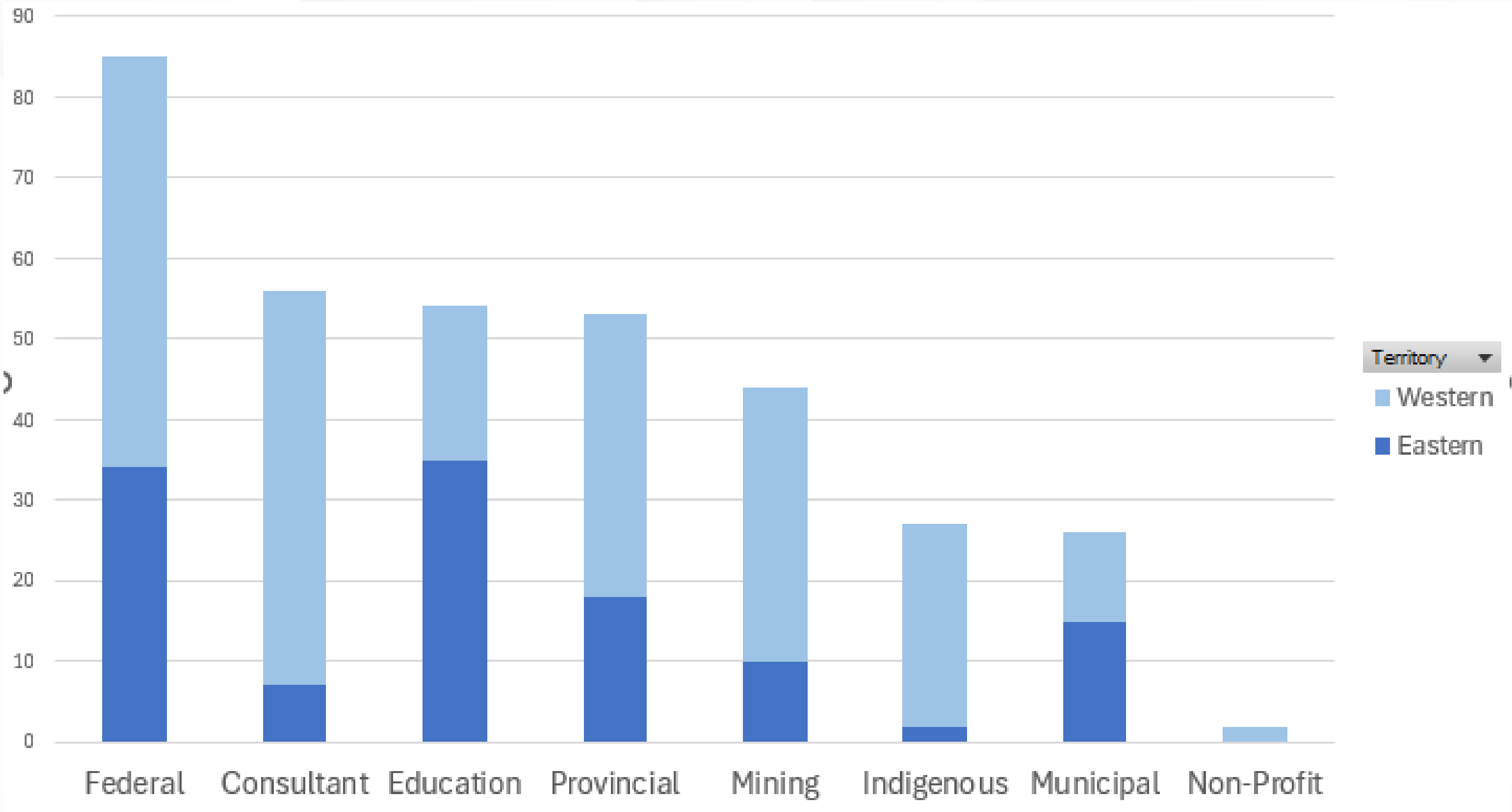
# FlowTracker Sales Across Canada







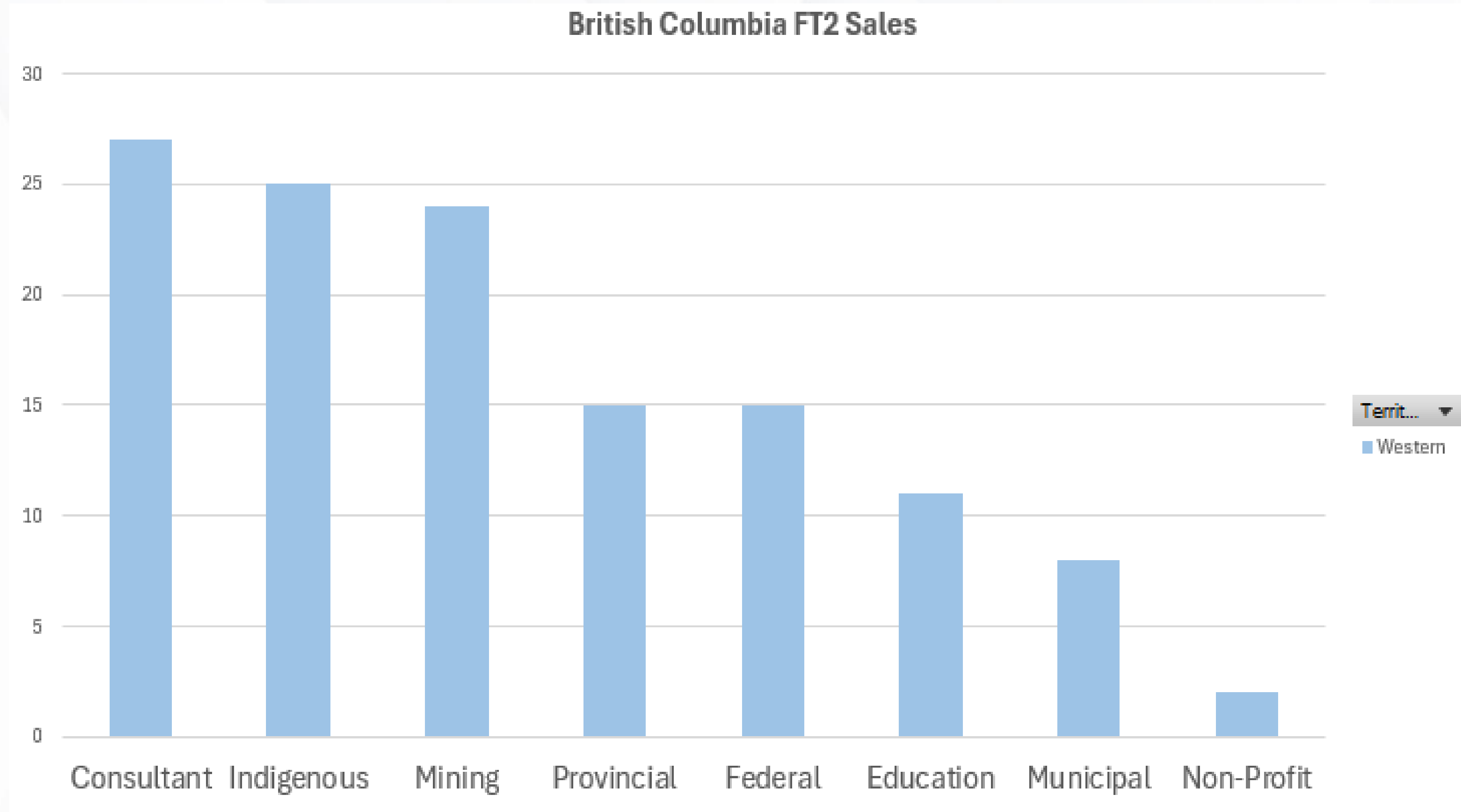
# FlowTracker Sales By Industry: Western vs. Eastern







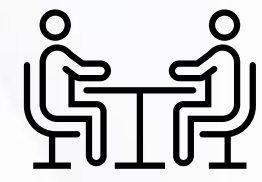
# FlowTracker Sales By Industry: British Columbia







# Success Story: From Swoffer to FlowTracker2



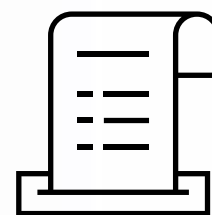
**Client Request**  
*Swoffer requested*



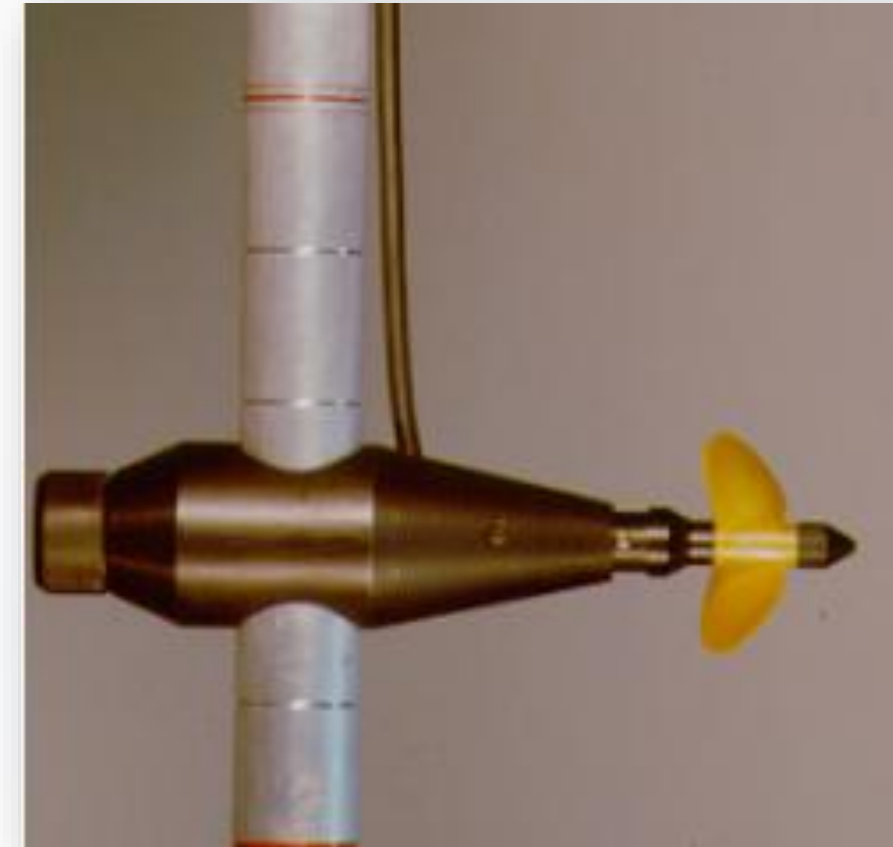
**Education**  
*Educated on RISC & new technology*



**Adoption**  
*Client adopts FlowTracker2*



**Outcome**  
*Higher accuracy, built-in QA/QC, defensible reporting. Meets RISC Standards*



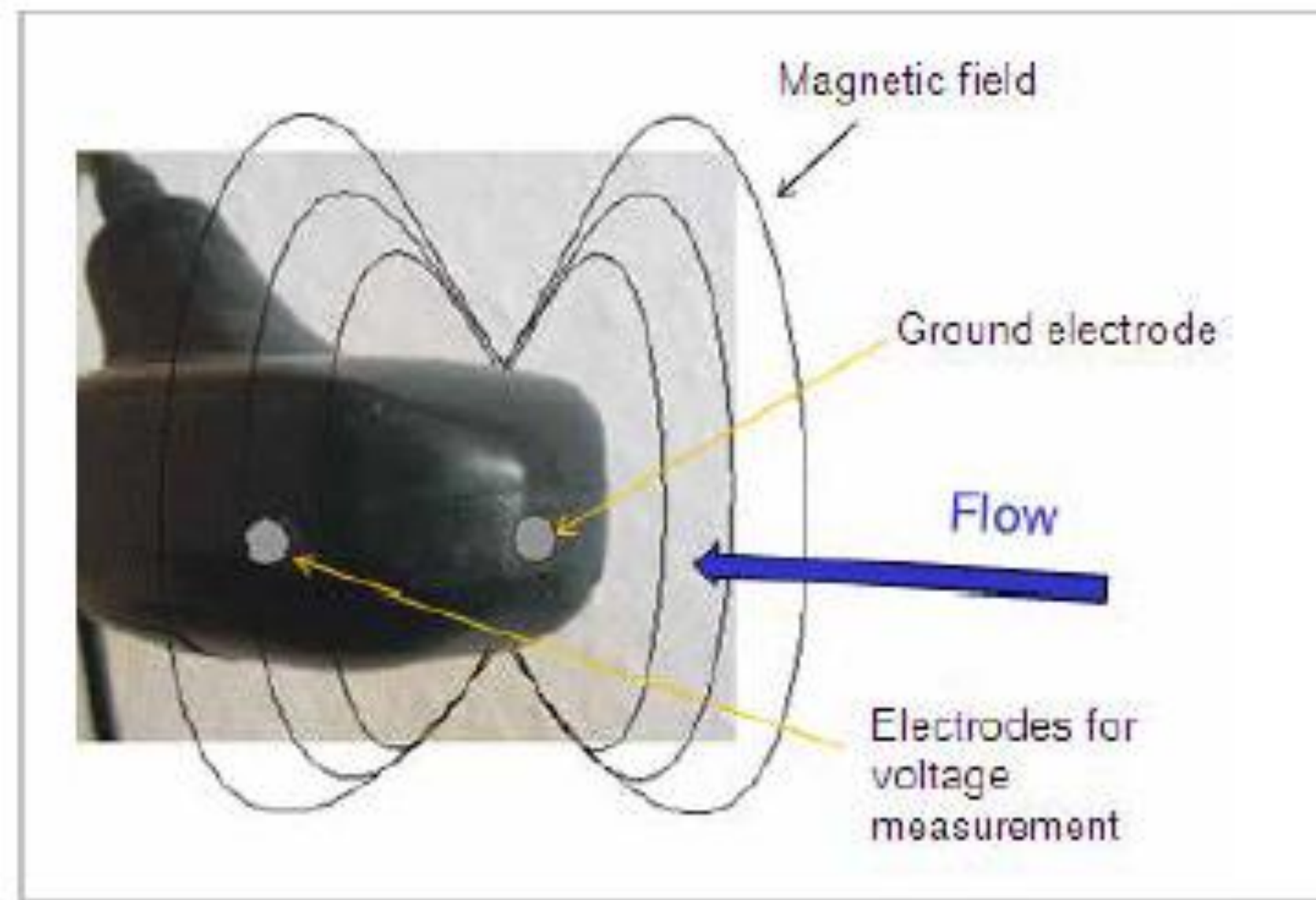




# The EM Meter Challenge

## Electromagnetic (EM)

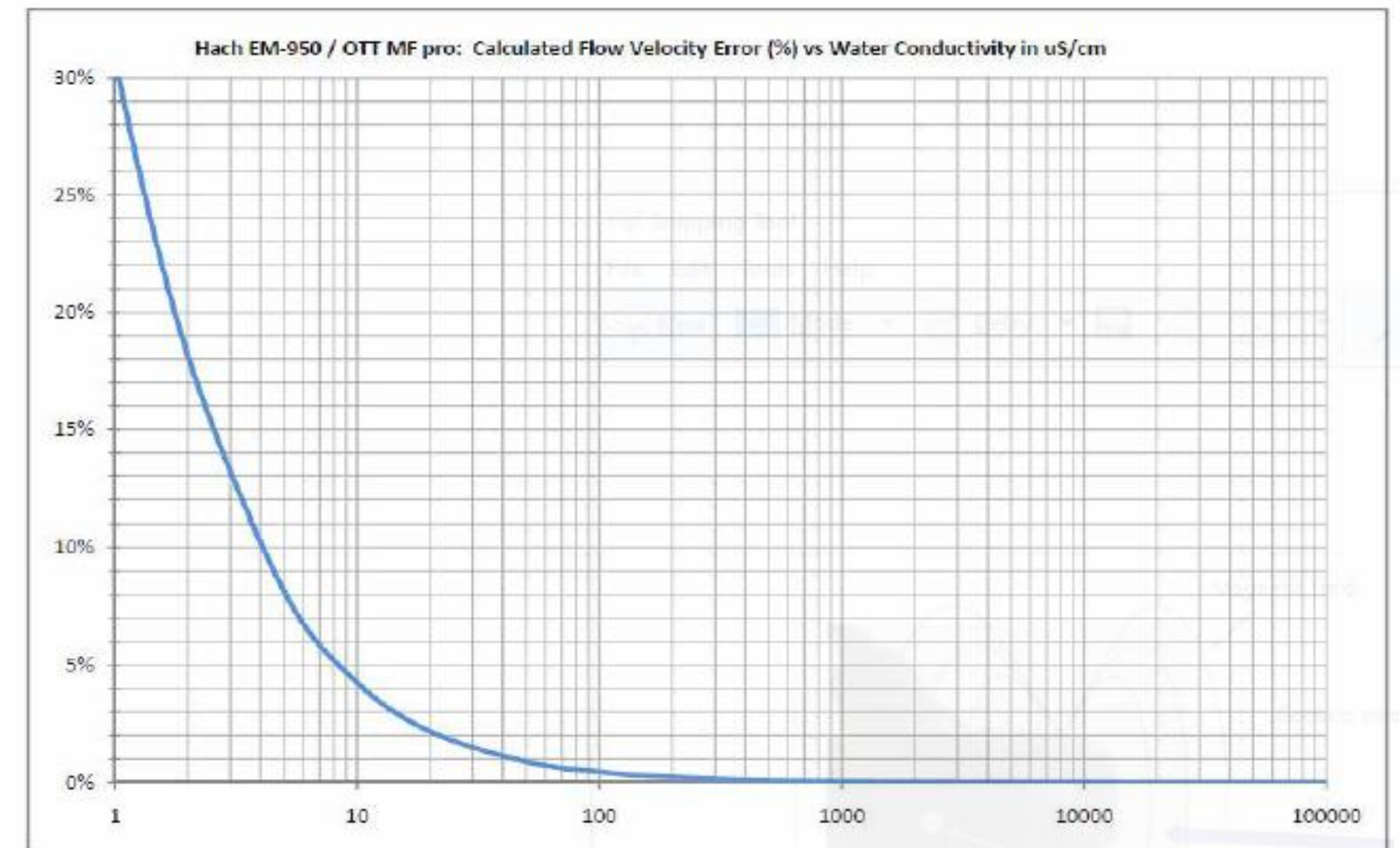
- Measures induced voltage
- Accuracy highly dependent on conductivity – below  $200\mu\text{S}/\text{cm}$ , BC waters between  $10\text{-}25\mu\text{S}/\text{cm}$
- No built-in QC  $\rightarrow$  higher risk of false confidence



**Figure 1.** MF pro sensor illustrating magnetic field and position of electrodes used for measuring voltage.

## FlowTracker2 (Acoustic Doppler)

- Uses sound waves (not conductivity-dependent)
- Able to measure in more pristine conditions
- Built-in QC features ensure data confidence



**Figure 3.** Calculated flow velocity error (%) versus water conductivity in  $\mu\text{S}/\text{cm}$ .





## Looking Ahead: Surfbee

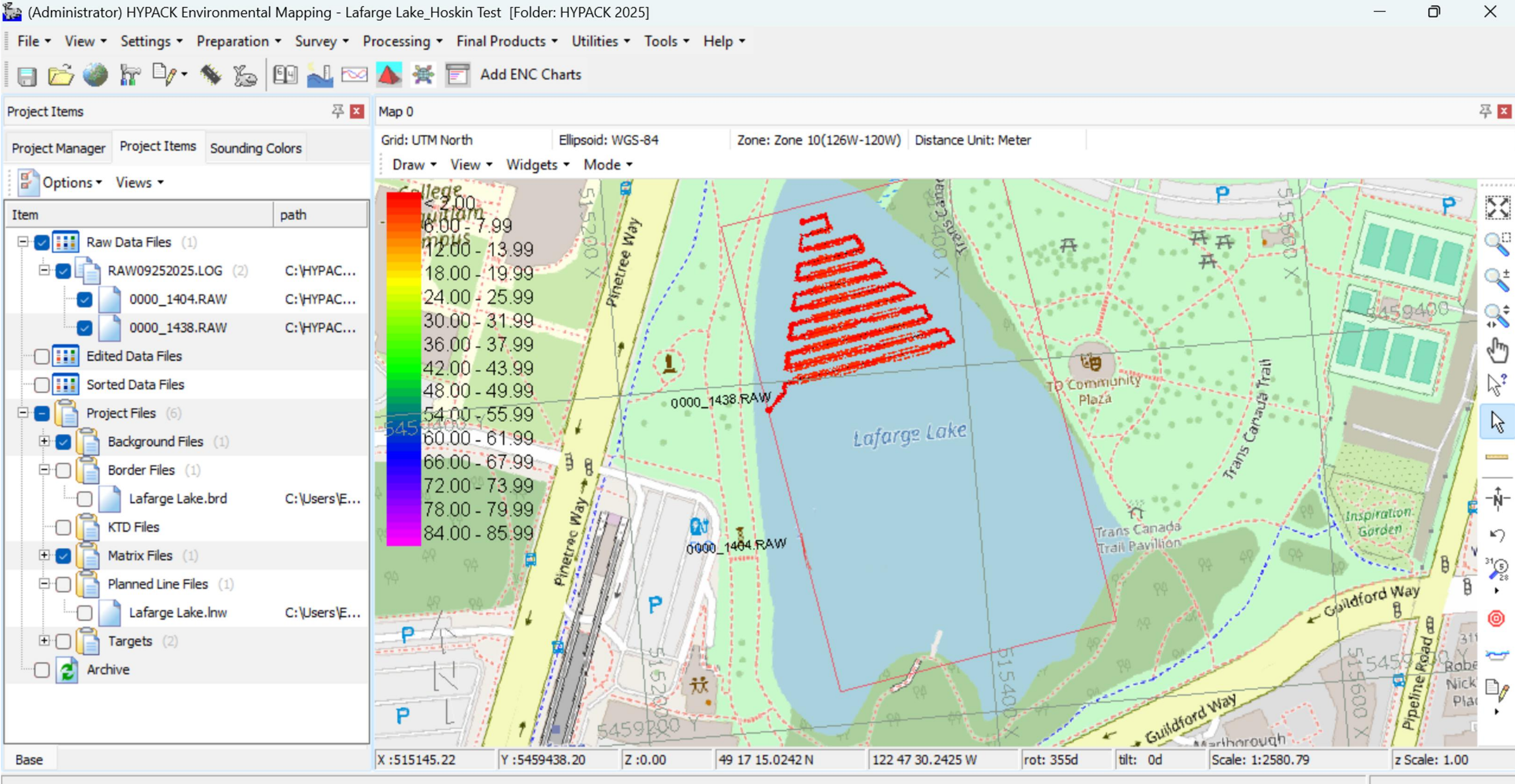
- Reliant, repeatable measurements
- Ease of operation
- Bathymetry Opportunities
- Ease of transportation







# Looking Ahead: Surfbee + SonTek







## Closing: Raising the Bar Together

Stronger Together:

- Building Trust.
- Driving Accuracy.
- Creating Opportunities.



Hoskin Scientific, Xylem Inc., and our dealer partners deliver consistent, reliable solutions for better results.





# Questions & Answers



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