

*Power up your farm business*



# VERITAS

CROPS

MARKETING

Technology

Business

Knowledge

Farm & Food Care - Guelph

April 7<sup>th</sup>, 2016

# What or who is VERITAS?

- Adding value through information
  - 6 years of operations
- 2 offices (Chatham and Parkhill)
  - Focus on research, education, business, agronomy, precision ag

# How VERITAS Thinks

- Innovate

- *“A good hockey player plays where the puck is. A great hockey player plays where the puck is going to be.”*

**Wayne Gretzky**

- Make it easy

- *“Simple can be harder than complex: You have to work hard to get your thinking clean to make it simple. But it’s worth it in the end because once you get there, you can move mountains.”*

**Steve Jobs**

- Measure the value

- *“What gets measured, gets managed”*

**Peter Drucker**



# Sustainable Cropping Systems

- Nitrogen Use Efficiency
- Utilizing Cover-crops
- Measuring the benefit of Strip-till
  - Phosphate management
  - Best Management Practices development
  - ROI for farmers
- NOT equipment brand specific
- Understanding the science of strip tilling
- A bit more about strip till ...



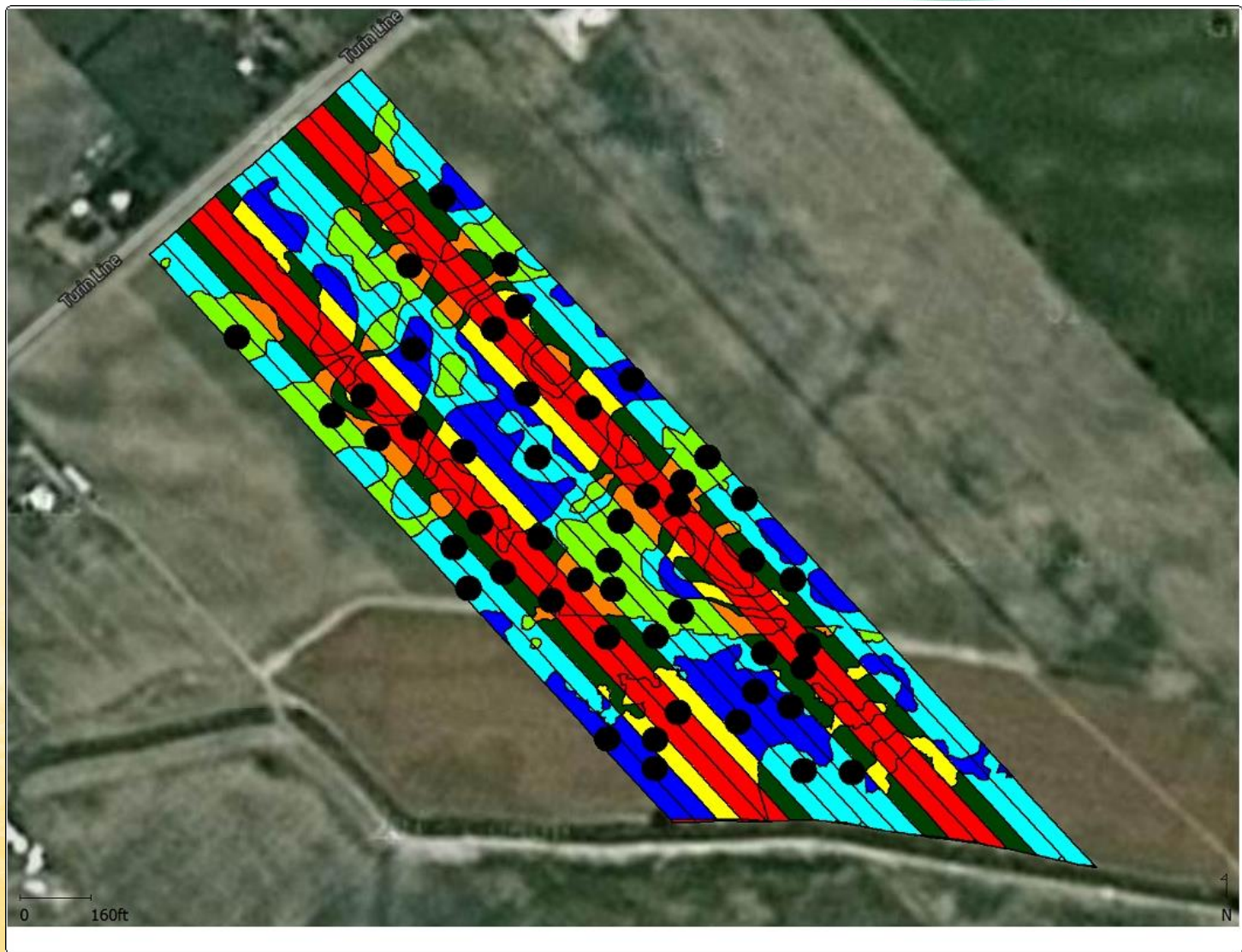
# Research Objectives

- Does strip till impact nutrient availability?
  - Phosphate & Potassium
- Can strip till improve nutrient used efficiency?
  - What is NUE?
- Does strip till make economic sense?
- How does strip till impact phosphate mobility?
  - Within the soil
  - Over time
  - Within the environment

# Research Protocol

- 2 crop years (Autumn 2015 – Autumn 2017)
- 10 sites across 7 counties
- Farmer standard vs strip (2 reps of each)
- 4 fertilizer application rates
- 3 Management zones per replication
  - Based on yield potential
  - Developed from historical yield data & imagery
- Georeferenced & calibrated yield data







# Testing Schedule

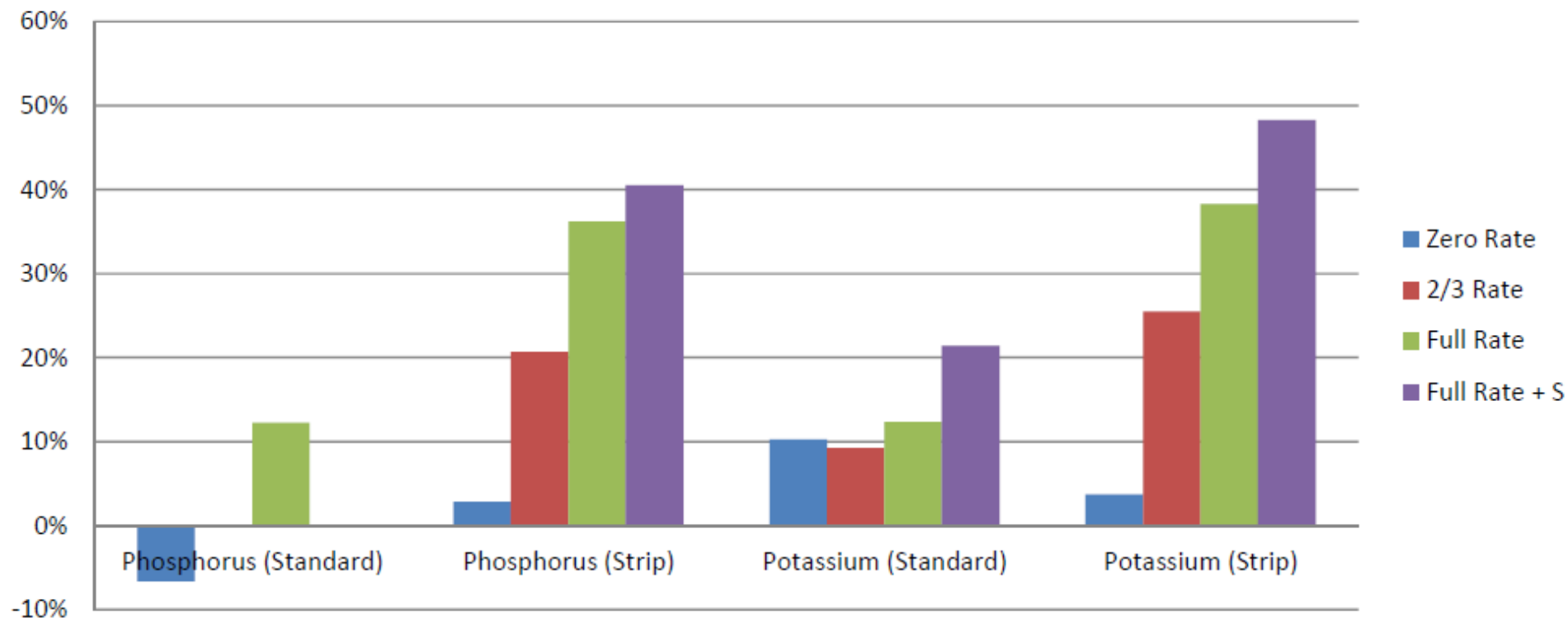
- Geo-referenced points to reduce spatial variation
  - 5 ac zone sampling (one time only)
  - Solvita soil health – 48 samples/site/year
  - Pre-application soil nutrient baseline – 48 samples/site/year
  - 3 week post application soil nutrient – 72 samples/site/year
  - Pre-planting soil nutrient – 72 samples/site/year
  - Post planting soil nutrient – 72 samples/site/year
  - Post planting tissue testing – 48 samples/site/year
  - Physiological maturity soil nutrient – 72 samples/site/year
  - Physiological maturity tissue testing – 96 samples/site/year

# Total Testing Data Points

- 960 Solvita soil health tests
- 4800 soil nutrient tests
- 1440 tissue tests
- Comprehensive statistical analysis
  - Paired t-test
  - Toukey test
  - ANOVA analysis

# Results to Date

% Change in Baseline vs 3 Week Levels





# Thank you to project supporters

This project was funded in part through *Growing Forward 2 (GF2)*, a federal-provincial-territorial initiative. The Agricultural Adaptation Council assists in the delivery of *GF2* in Ontario.



Grain Farmers of Ontario

Middlesex Soil & Crop Improvement Association



[myveritas.ca](http://myveritas.ca)



# Questions?

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