



Precision Ag Successes

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&
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Farm goals

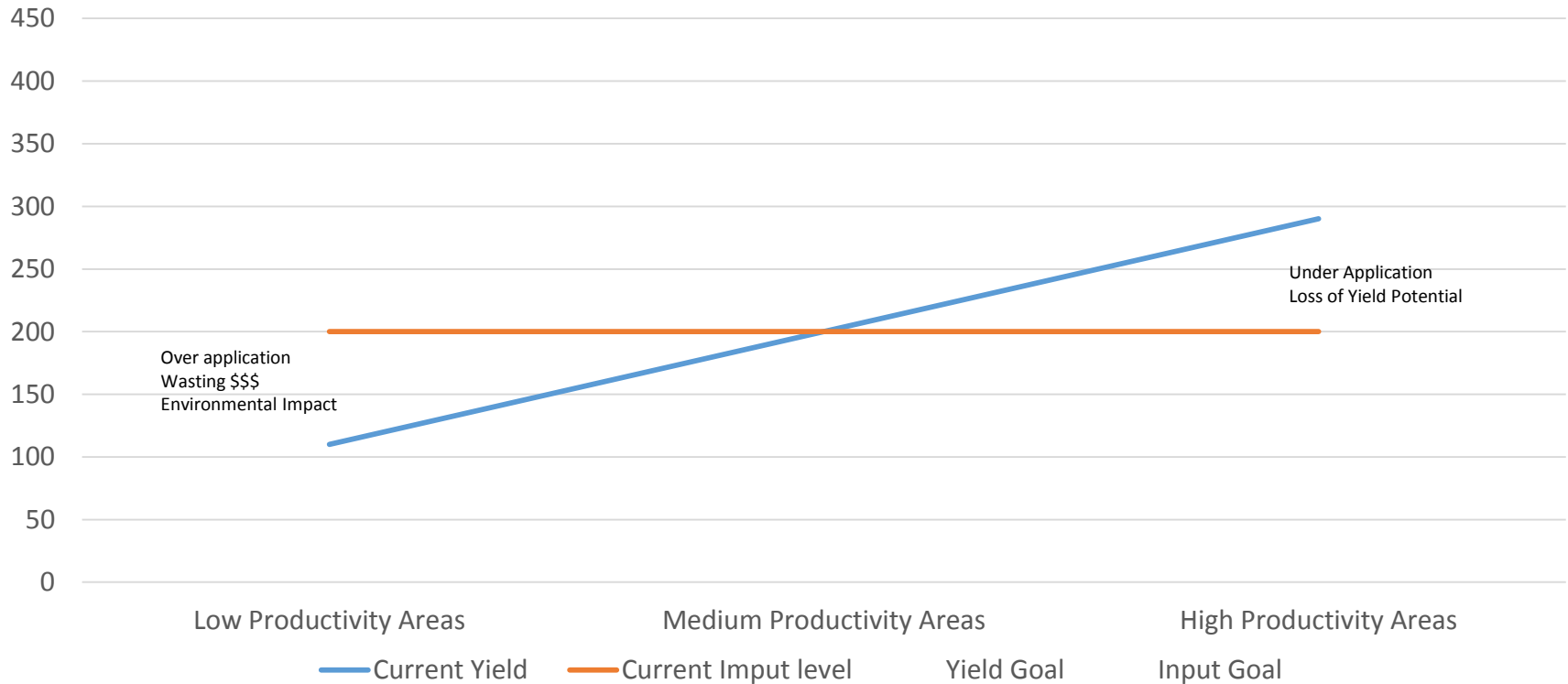
- Every field is unique to itself (soil type, drainage, contour)
- Each zone in each field is also unique to itself
- Must manage each zone in every field its fullest potential
- We can only manage what we can measure! (Record everything)
- Are no longer farming in bu/ac but in \$/ac
- Maximize profits, aim for a 15% ROI
- All well maintaining good farming practices, land stewardship and safety standards

Where we are at today?????

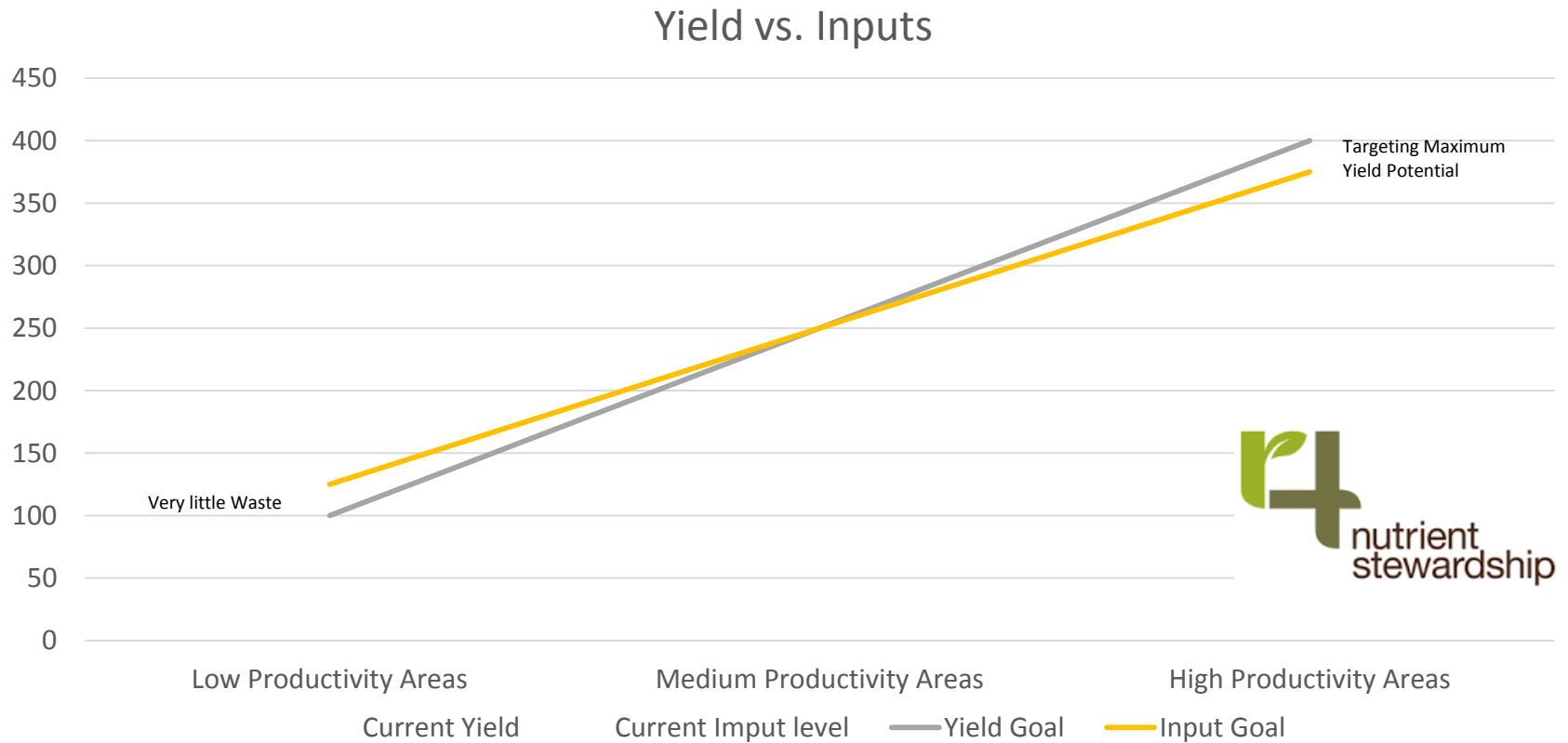
- Fully embraced, precision ag & zone management
- 8 years worth of yield data
- VR every input possible for last 4 years
- 20 years of Variable Rate Fertilizer and Site Specific Soil sampling
- Working with profitability to drive forward (\$/ac)
- Focused on poorest areas first; cutting cost to increase profit.
- Next step is to push the higher yielding areas to produce more, and find the economic threshold for each zone in each field.

Previous Farming Practices

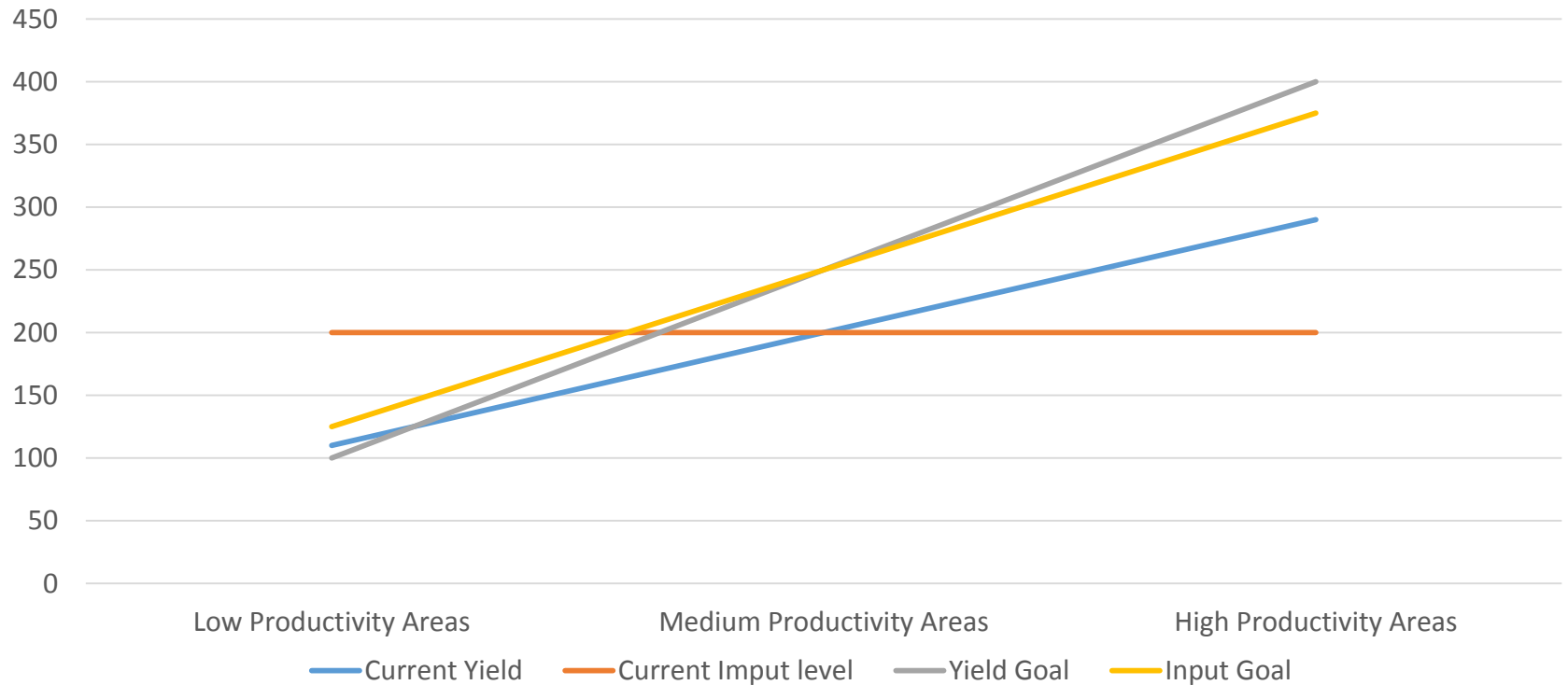
Yield vs. Inputs (Farming with Average's)



Technology improved our Farming Practices

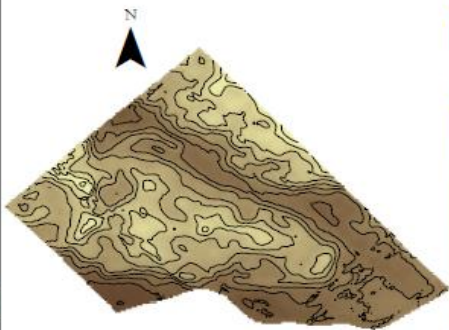


Yesterday vs. Today

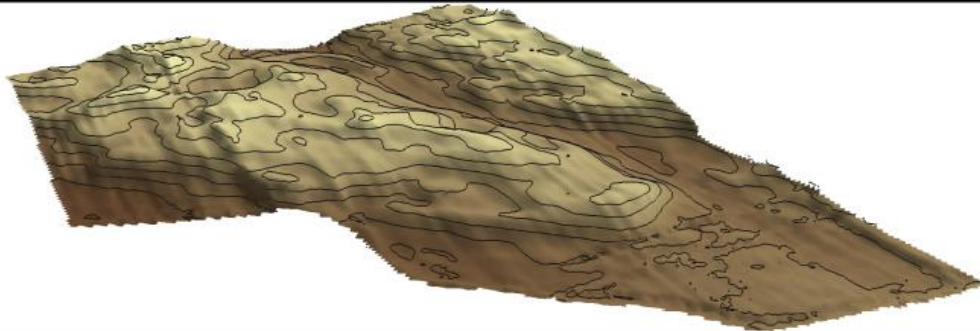


Every field has variability.
Are you managing yours?

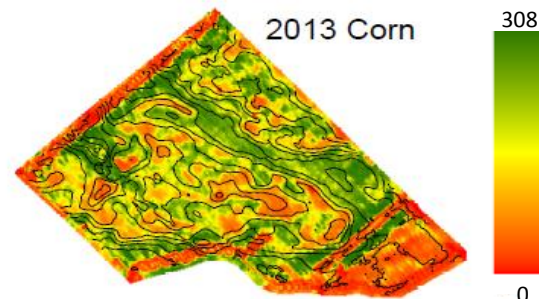
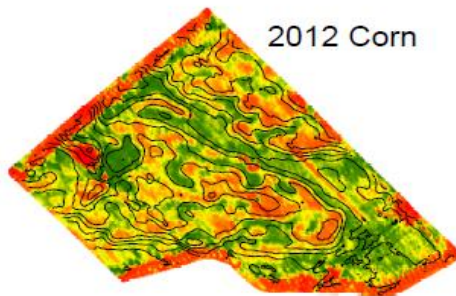
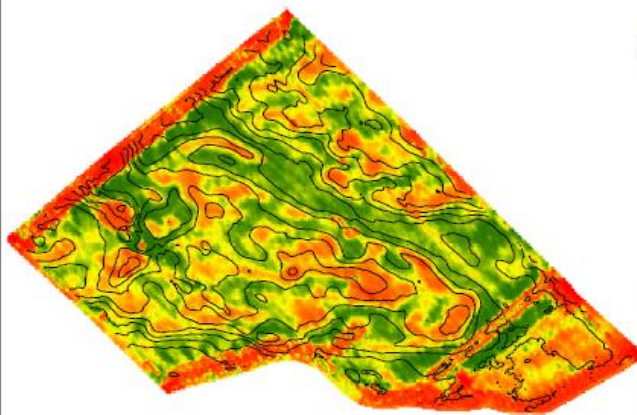
Surface Analysis



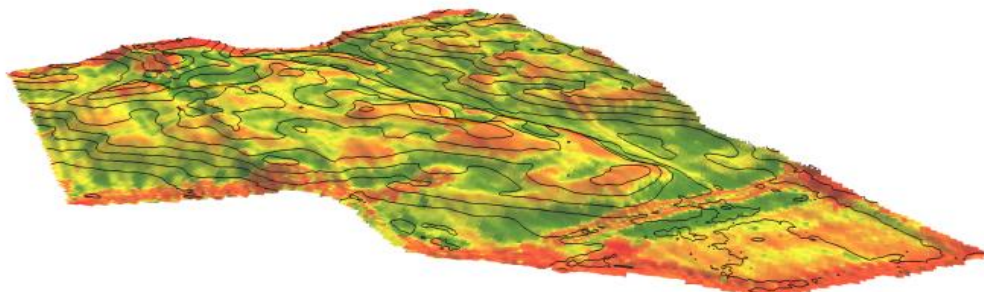
Elevation



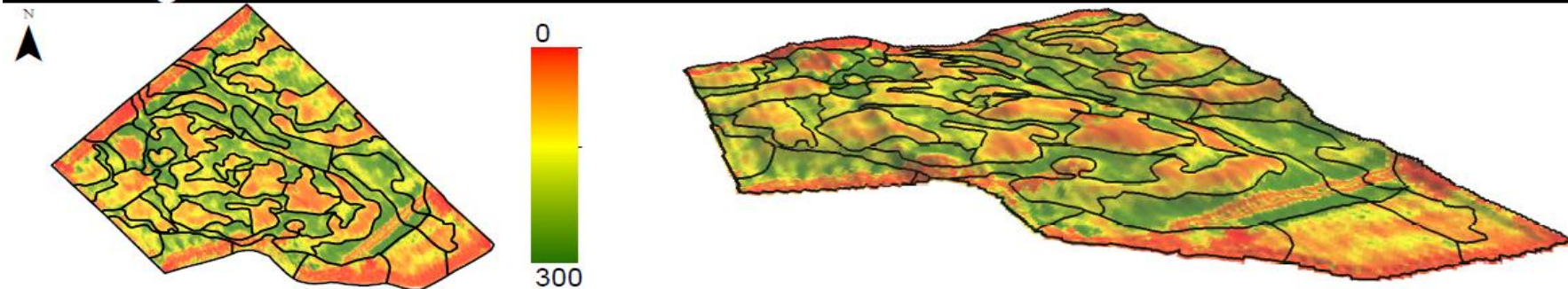
Yield



Yield: Normalized Average

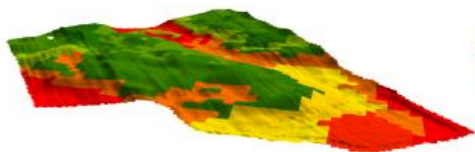


Management Zones

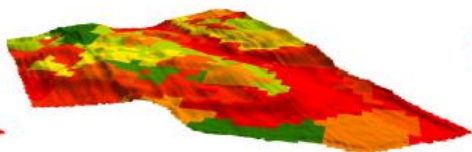


Soil Sample Analysis Layers

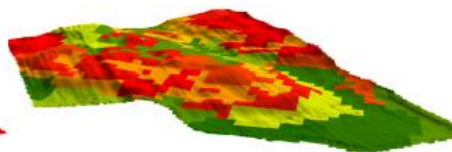
Bray Phosphorous



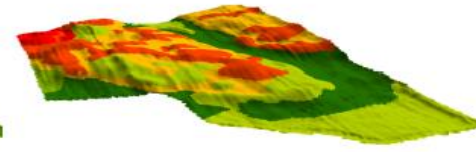
Potassium



Magnesium

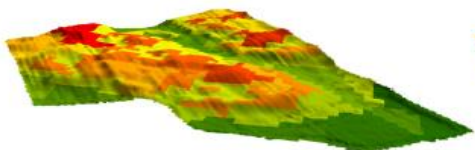


Productivity by Zone

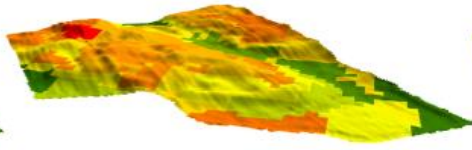


Recommendations

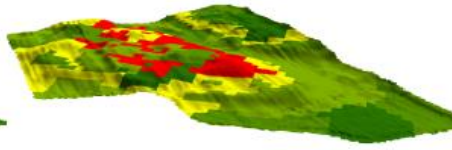
MAP



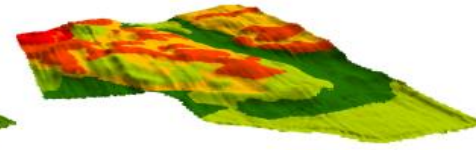
Potash



KMAG



Nitrogen/Seed



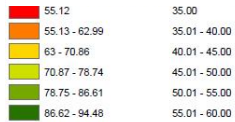
Profitability: Field Records (Straight Rate Info)

We must accurately track all Operations performed on a field

- Tillage
- Planting
- Chemical Applications
 - Herbicide
 - Fungicide
 - Insecticide
- Fertilizer Application
 - Fall or Spring Broadcast
 - Planter Starter
 - Side Dress N (Early or Late)
- Agronomy Services
 - Prescription Fee
 - Scouting
 - Imagery
 - Yield Processing
 - Profitability Mapping
- Harvest Costs
 - Combining
 - Trucking
 - Drying
 - Elevation

The list continues!

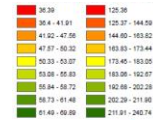
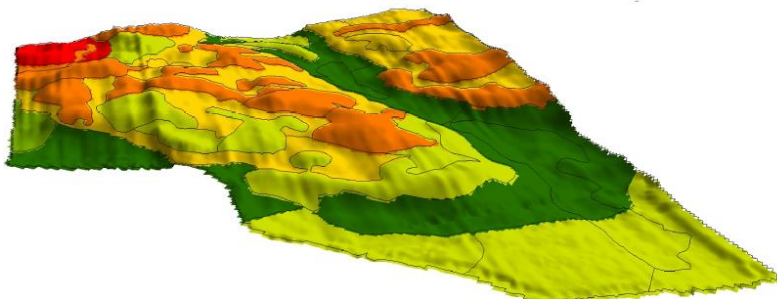
Profitability: As-Applied Data (Variable Rate Info)



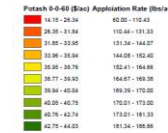
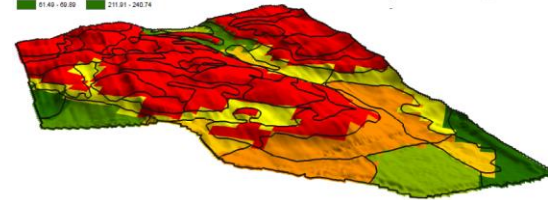
28-0-0



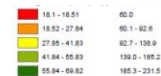
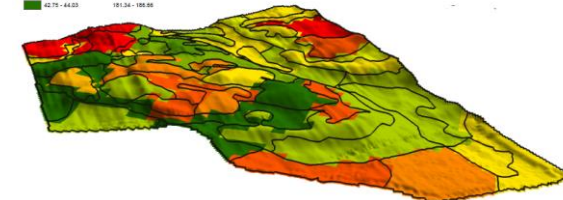
Population



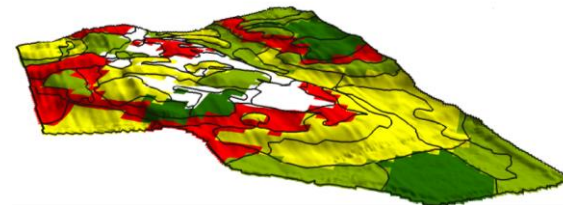
MAP



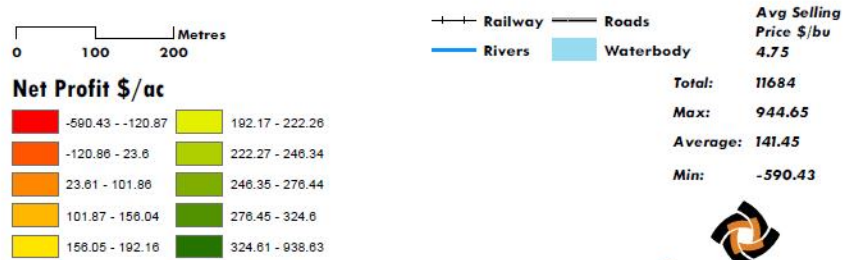
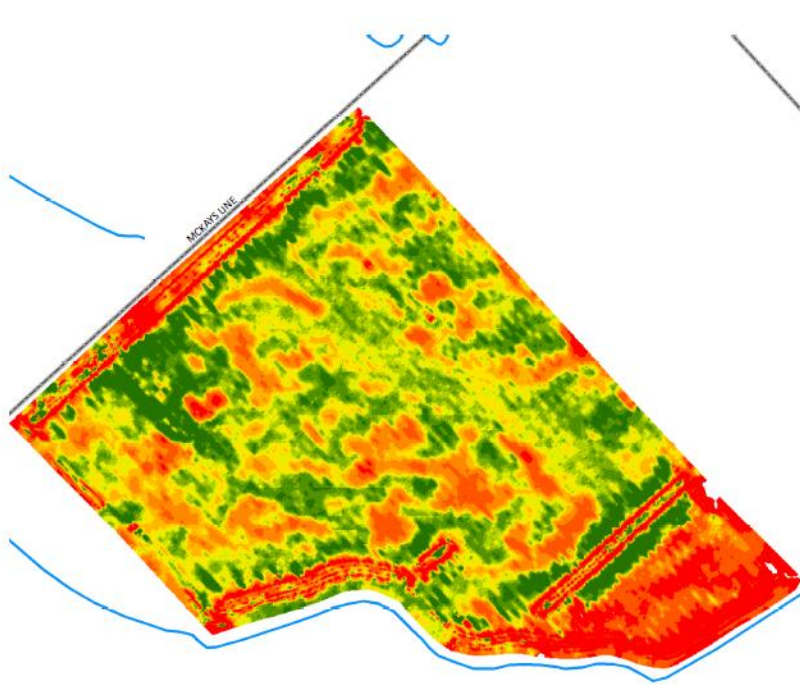
Potash



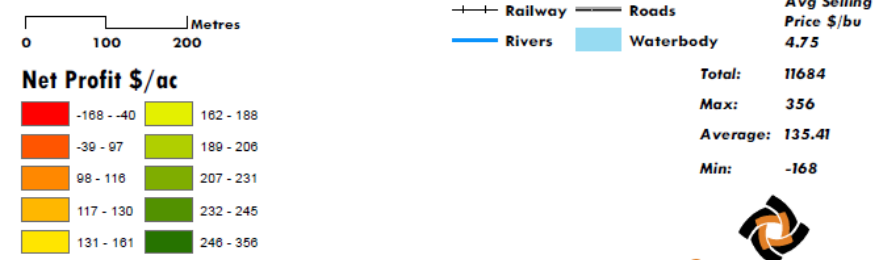
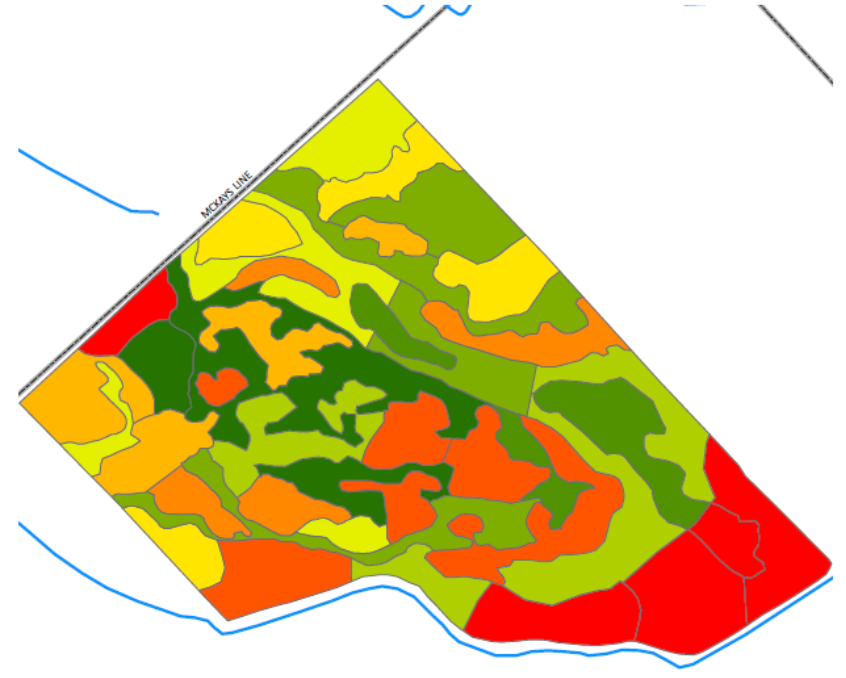
K-MAG



Profitability: Net Income Map



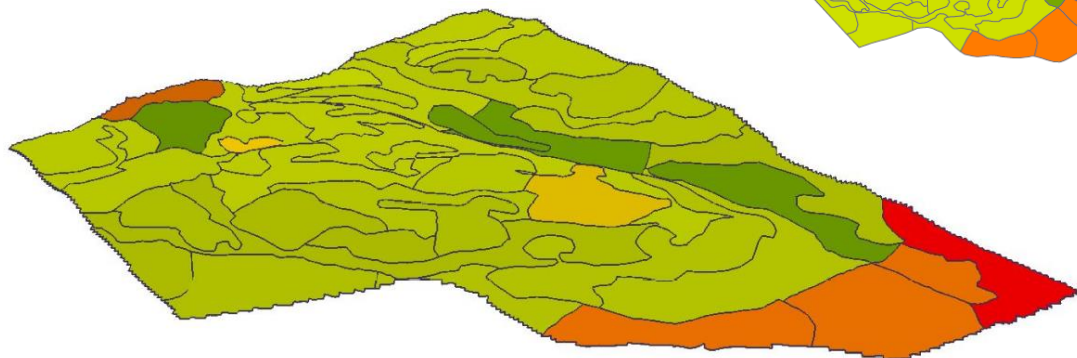
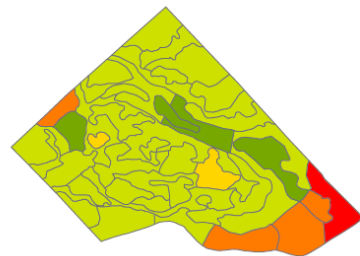
Basedata Source: ESRI Canada Prepared by Thompsons Limited



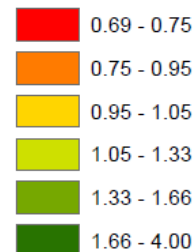
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A long-term Investment in Precision Ag = A Positive Change Over Time

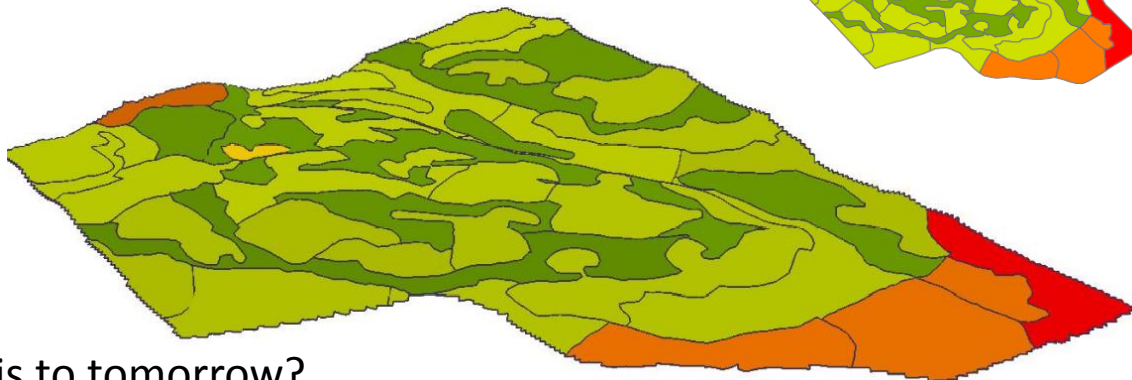
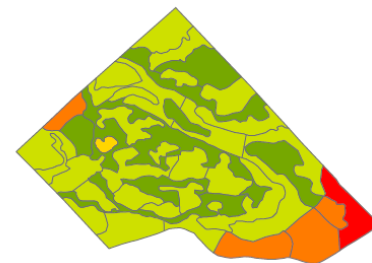
15% ROI from program 5 years ago
(Grid Sampling and VR Fertilizer only)



Variable Rate - Return on Investment



20% ROI from today's program
(Zone Sampling, VR Fertilizer/Seed/Nitrogen, Profitability Mapping)



What can we push this to tomorrow?

Conclusions:

- **We have stopped farming based on bushels per acre and now measure our performance with dollars per acre and with calculated return on investment numbers.**
- **If we continue to farm based on our farm average, we will continue to harvest average yields.**
- **Precision Ag has allowed us to measure more about our operation and also so manage it more effectively.**
- **We have tackled the easier low producing areas first reducing costs to increase profitability. Over the next few years we look to economically increase yield in the high producing areas to produce more.**
- **You don't have to tackle this alone. There many ways to start this process. Ask for help from someone with experience.**

Thank You

Jason Boersma – @RVFboys
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