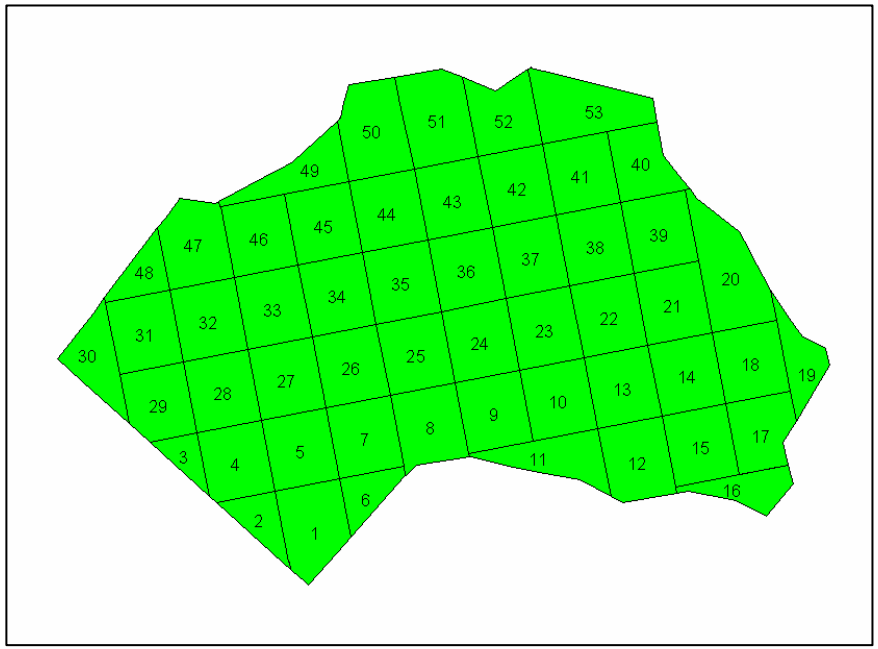
Optimizing Cotton Production

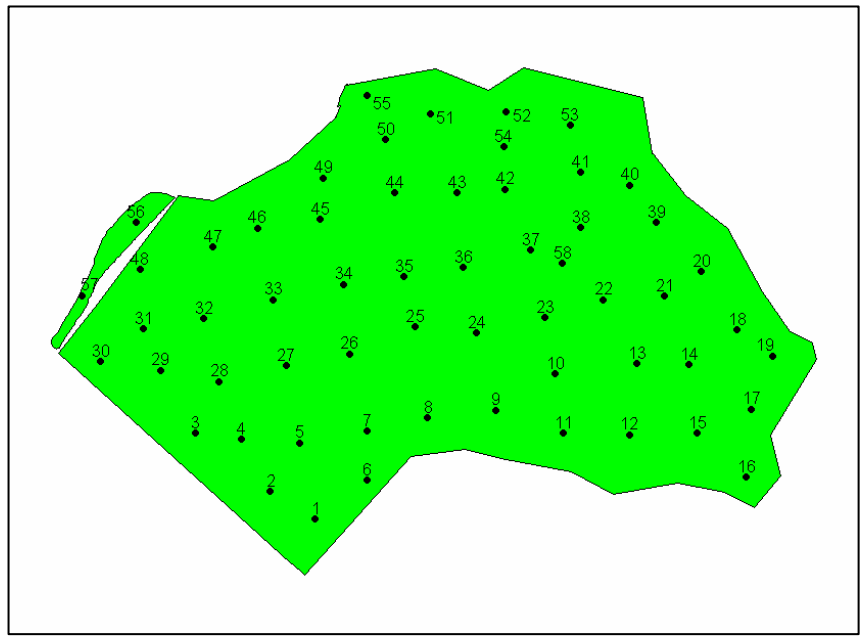
185 Acres → 32 Modules → 3.2 Bales/Ac

Soil Sampling

Grids

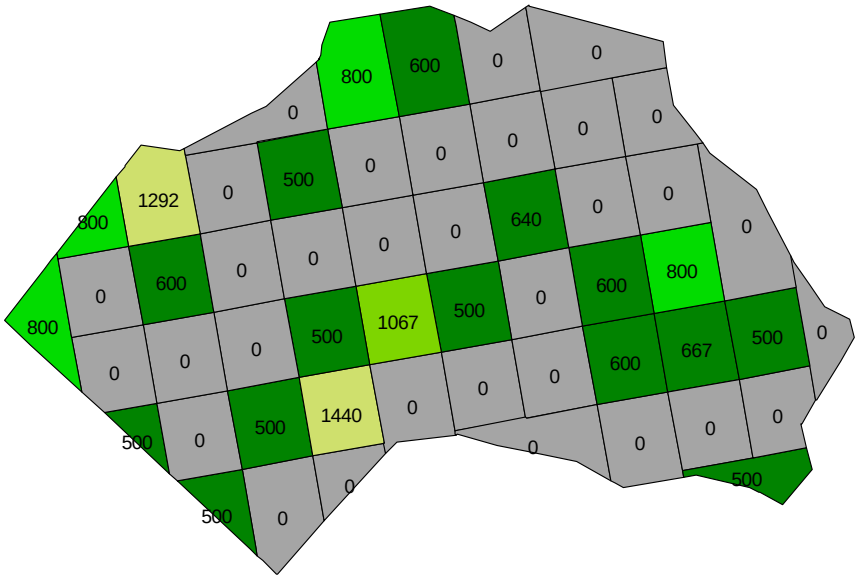


Grid Point Sampling



Lime Application

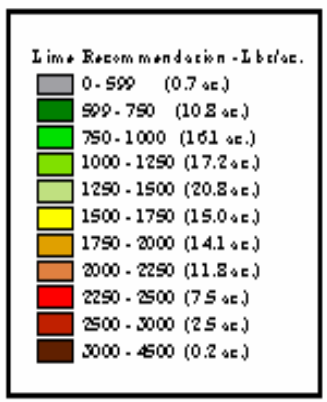
1999



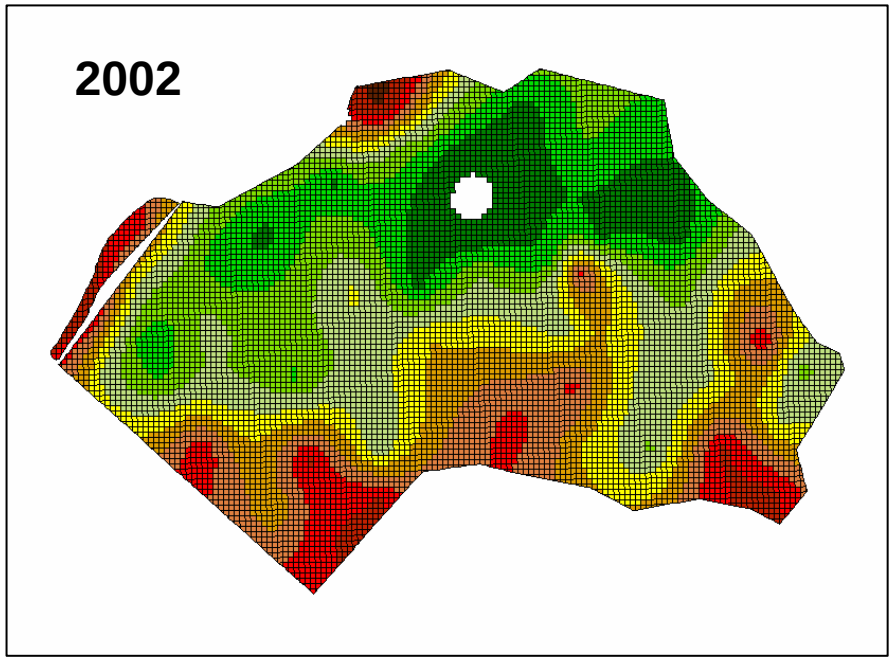
Target pH 6.0

Conventional Lime = 0 tons

VRT Lime = 15 Tons



2002



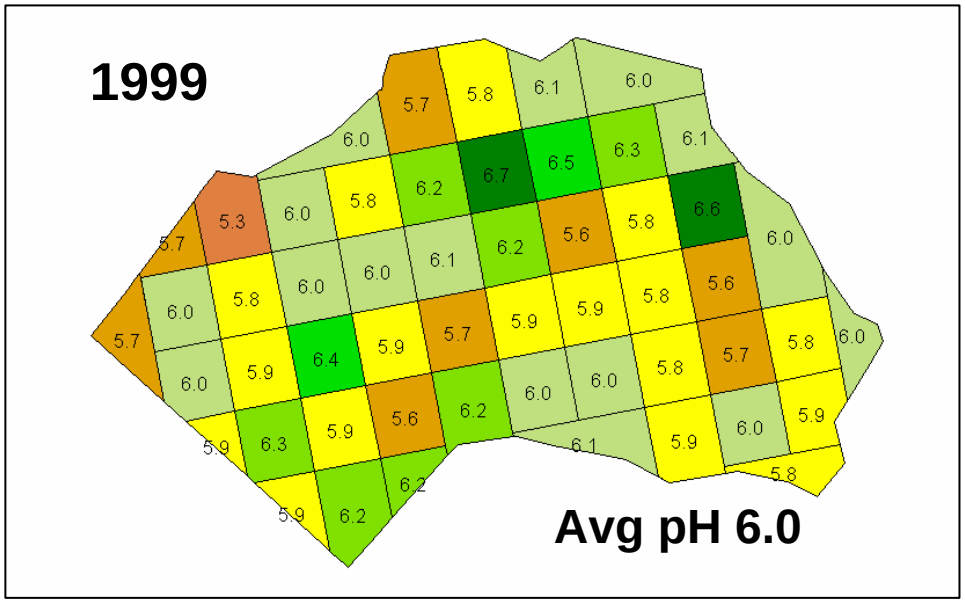
Target pH 6.5

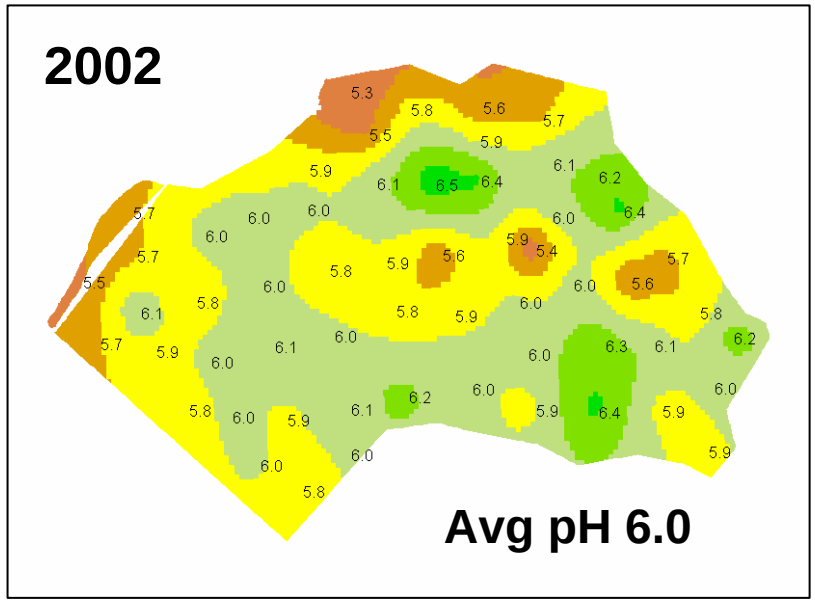
Conventional Lime = 99 Tons $2277

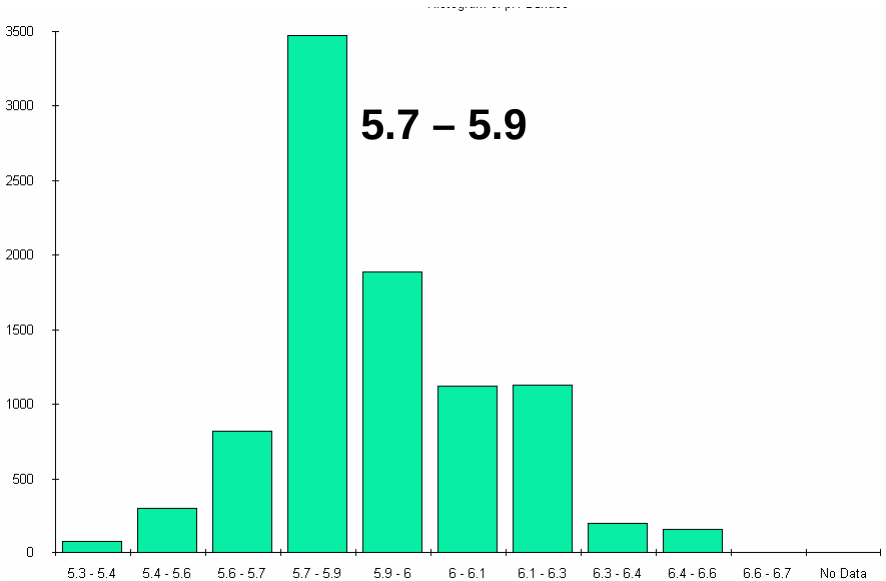
VRT Lime = 85 Tons $1955

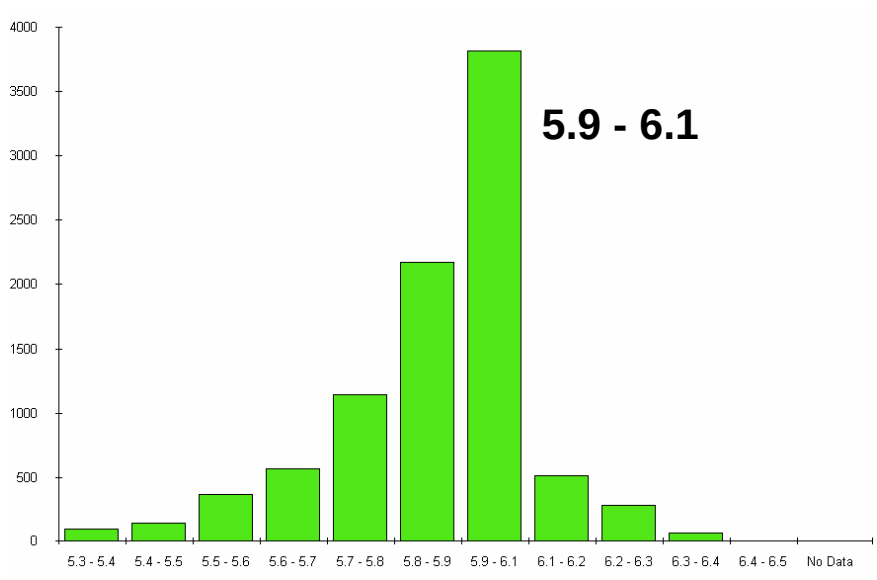
Savings $322

pH Maps


1999
Avg pH 6.0

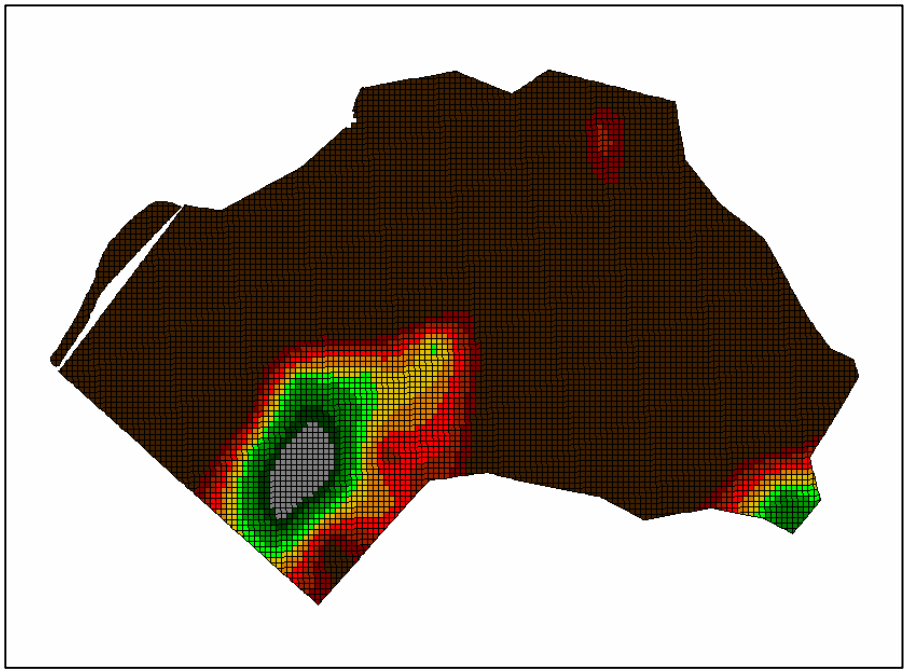

2002
Avg pH 6.0

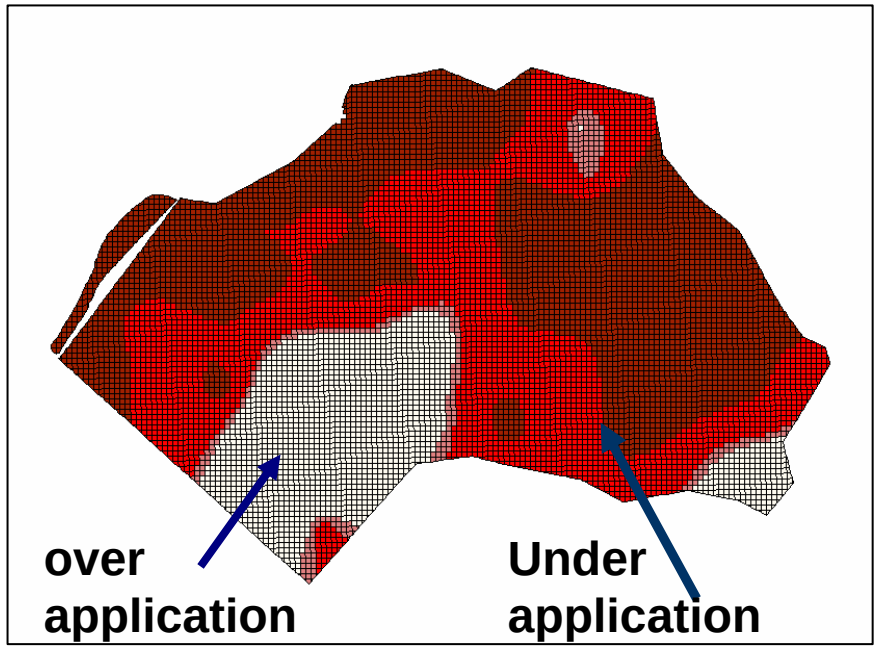

5.7 – 5.9
3500
3000
2500
2000
1500
1000
500
0
5.3 - 5.4
5.4 - 5.6
5.6 - 5.7
5.7 - 5.9
5.9 - 6
6 - 6.1
6.1 - 6.3
6.3 - 6.4
6.4 - 6.6
6.6 - 6.7
No Data


5.9 - 6.1
4000
3500
3000
2500
2000
1500
1000
500
0
5.3 - 5.4
5.4 - 5.5
5.5 - 5.6
5.6 - 5.7
5.7 - 5.8
5.8 - 5.9
5.9 - 6.1
6.1 - 6.2
6.2 - 6.3
6.3 - 6.4
6.4 - 6.5
No Data

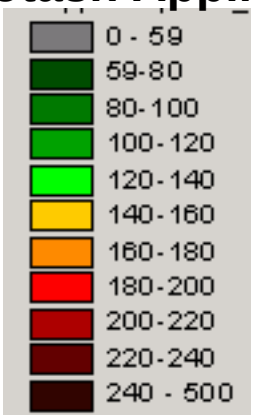
Potash Application

2002





Potash Application lbs/Ac



17.7 Tons VRT

13 Tons Conv

Straight rate 225 lbs/Ac

VRT Application

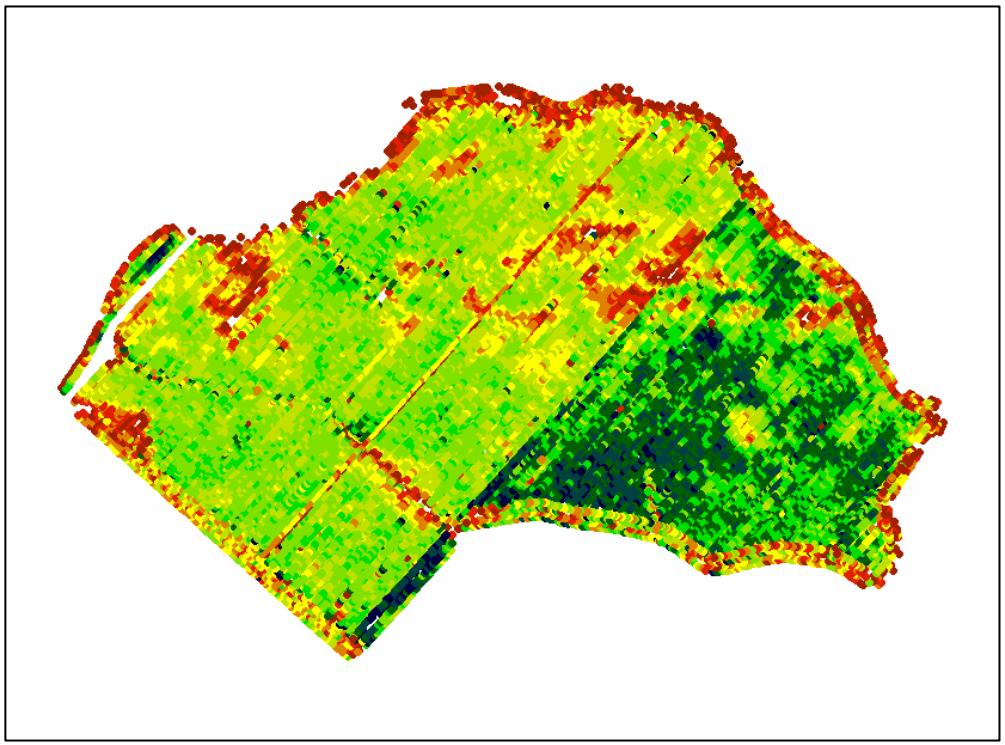
Min Rate 60 lbs

Max Rate 470 lbs

Avg Rate 330 lbs

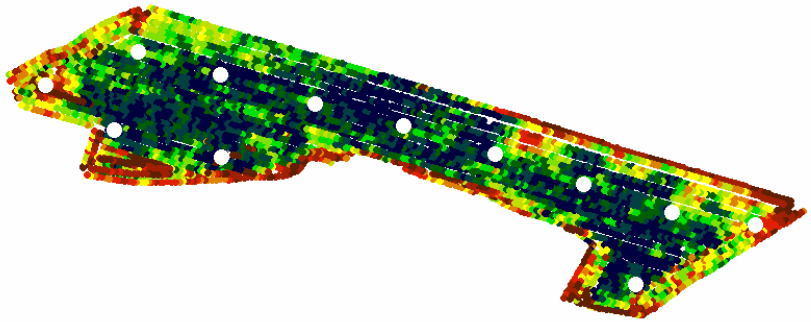
Yield Monitoring

2001 Cotton Yield

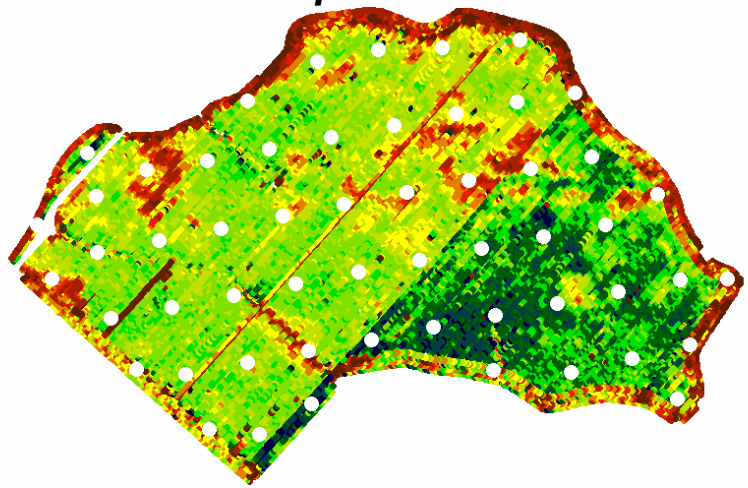


Using the Information

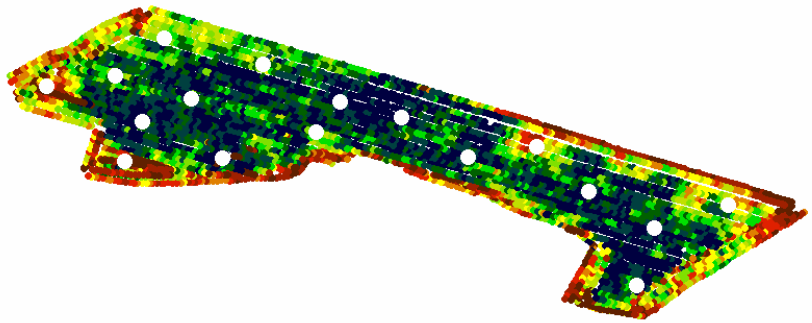
Initial Grid Sample



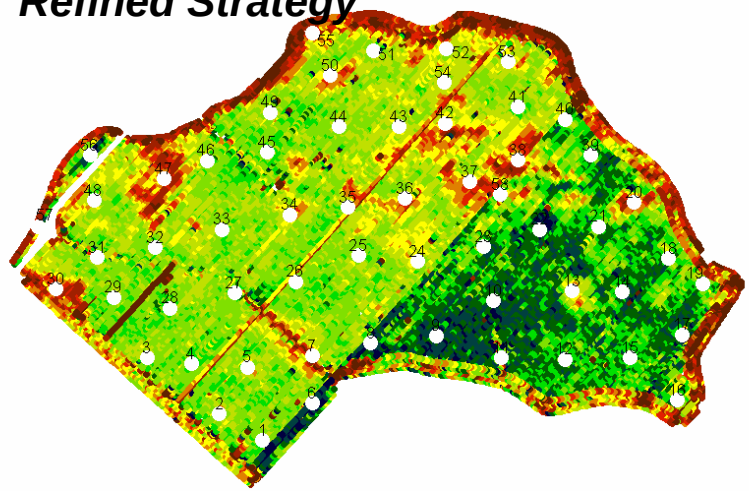
Initial Grid Sample



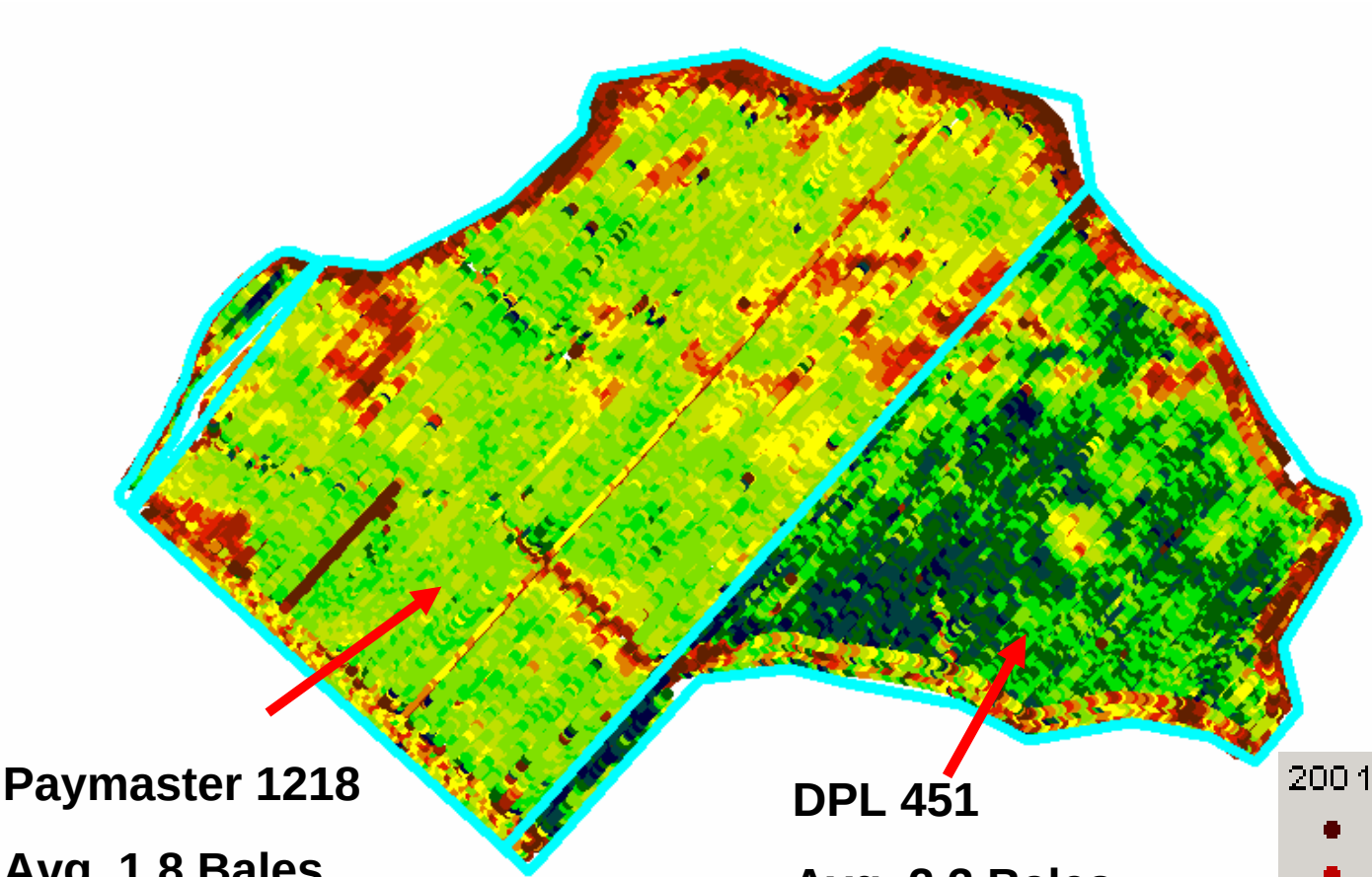
Refined Strategy



Refined Strategy

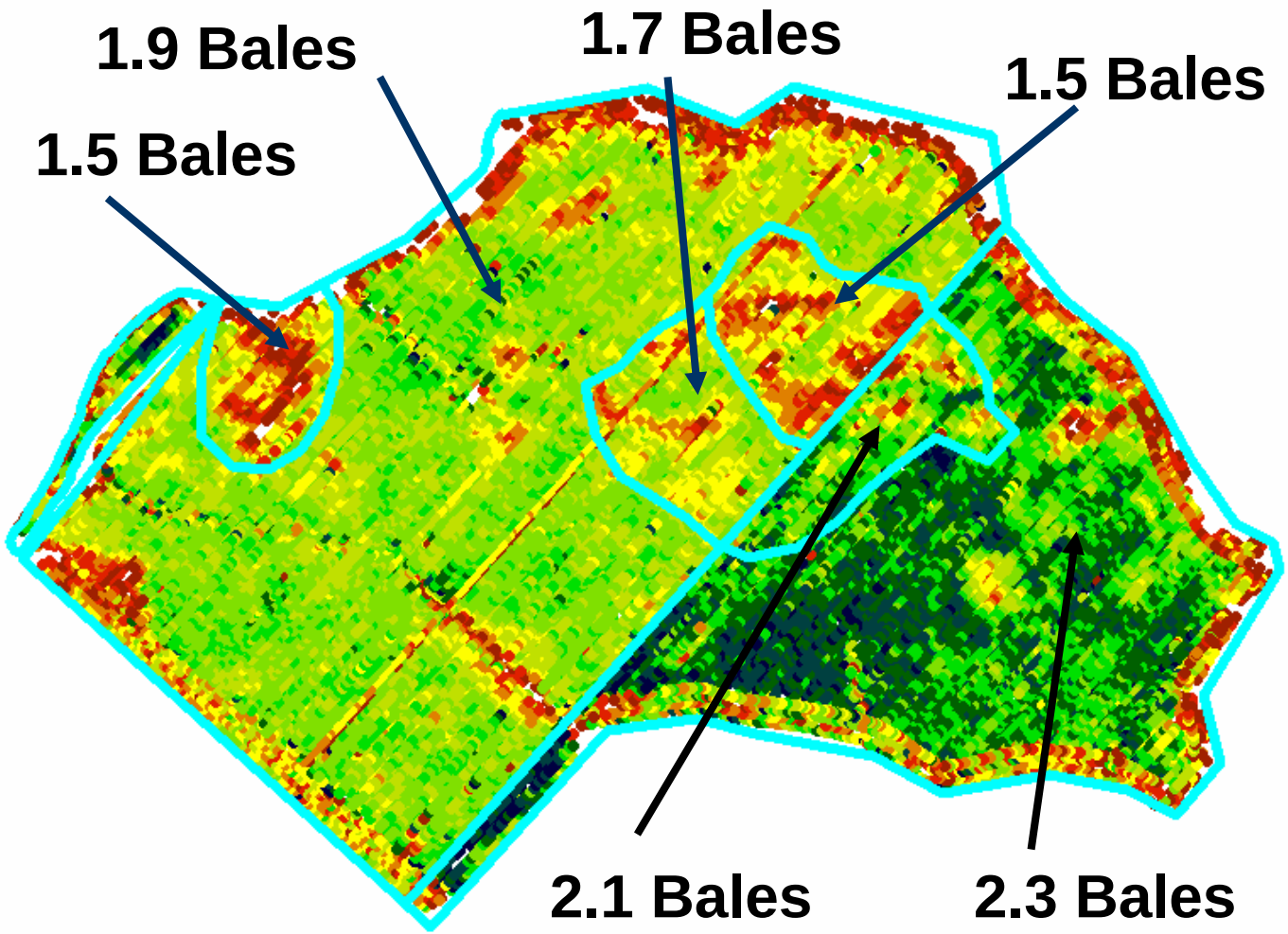


Cooper Field Cotton Yield 2001



Whole Field Average Yield = 2.0 Bales

Determining lost yield potential

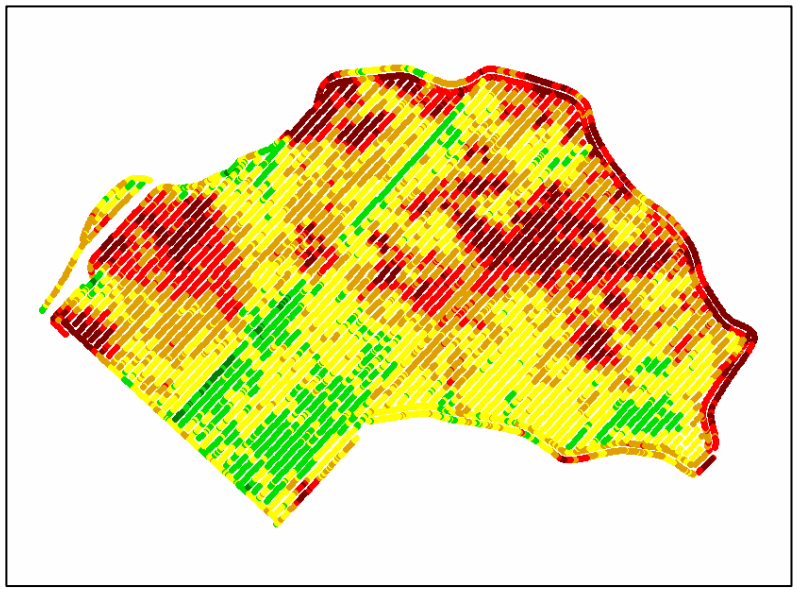


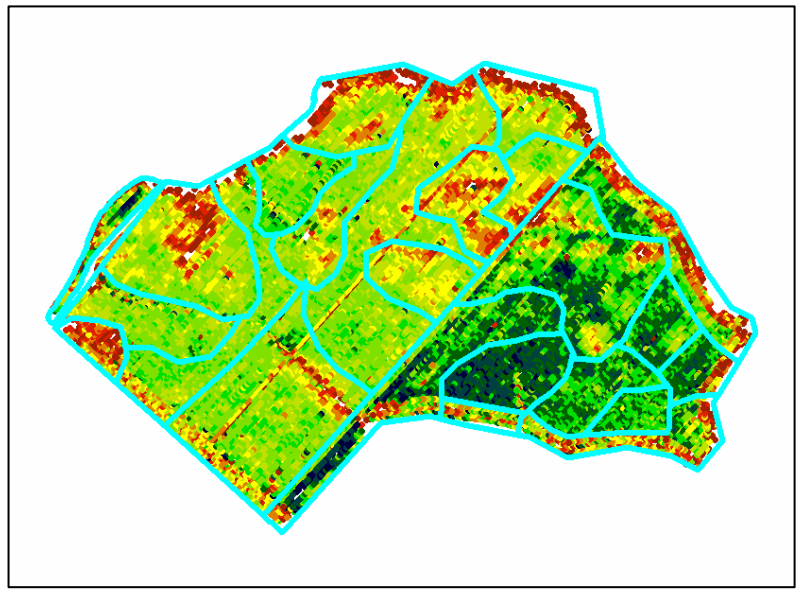
Hydro Agri's N Sensor

Sensors

In Cab Screen

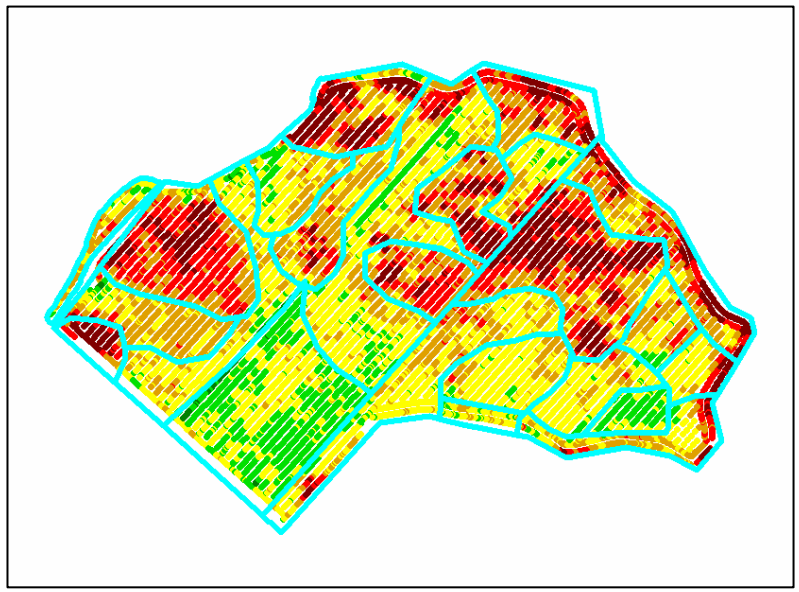
N Rate Determined from Sensor





N Rate

- 0 - 20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100
- 100 - 120

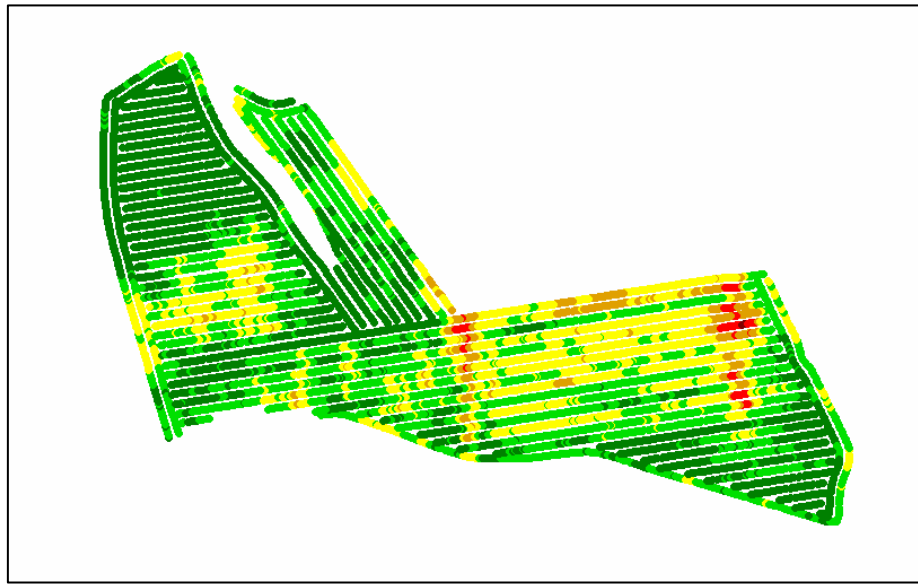


Cotton Yield 2001

2001 Cotton Yield

- 0 - 0.5
- 0.5 - 1
- 1 - 1.5
- 1.5 - 2
- 2 - 2.5
- 2.5 - 3
- 3 - 4

N Sensor June 2001



N Rate

- 0 - 20
- 20 - 40
- 40 - 60
- 60 - 80
- 80 - 100
- 100 - 120