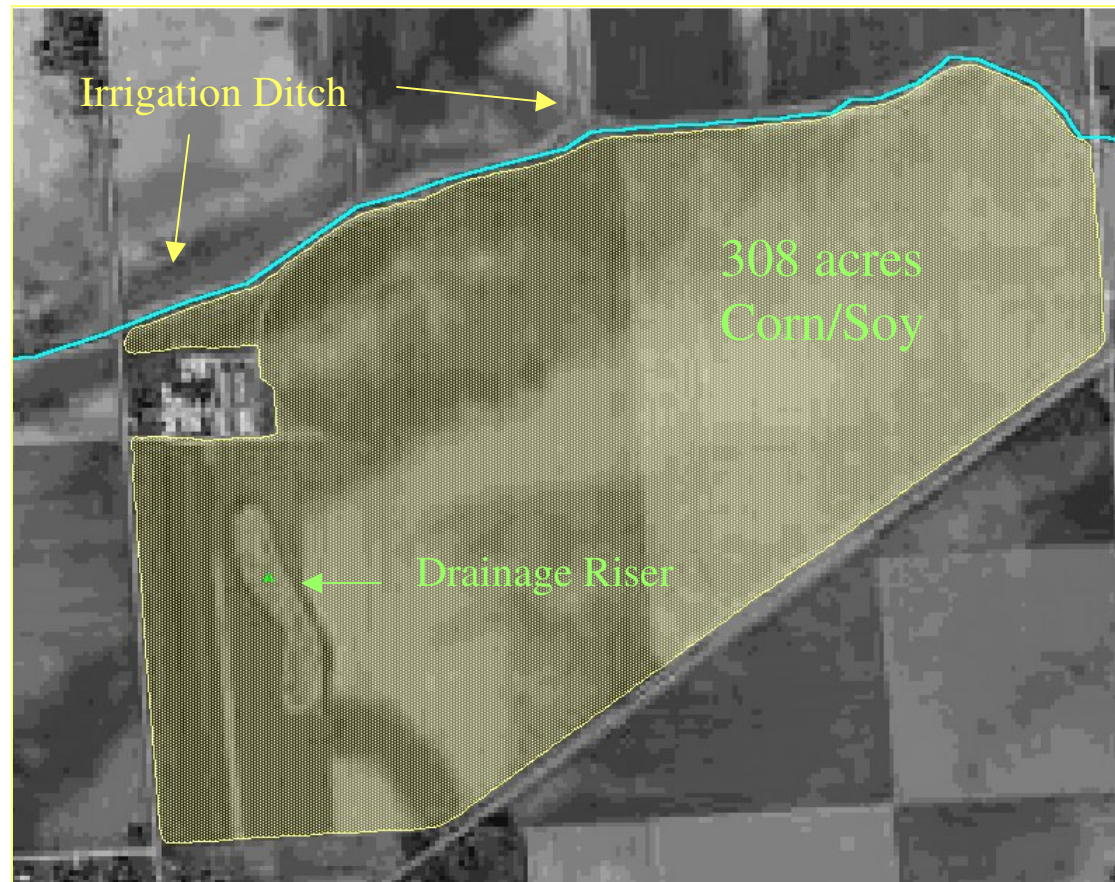




# Manure Management

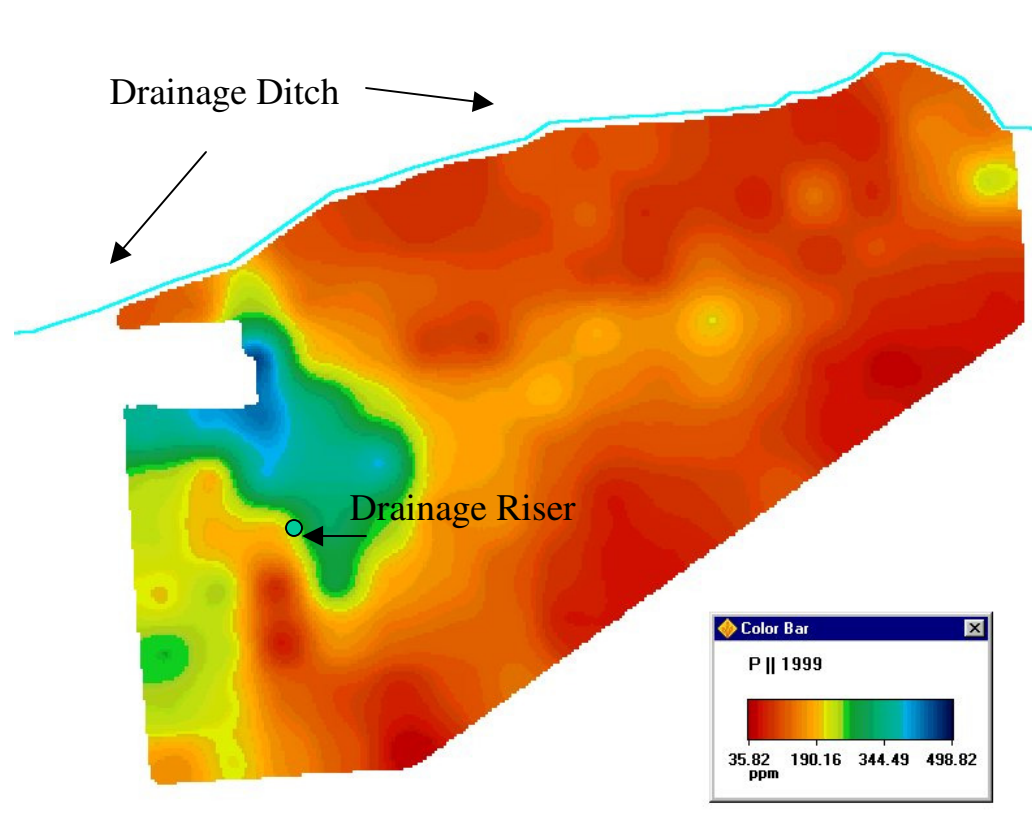
Approach to the Problem with AGIS

## Manure Plan Area



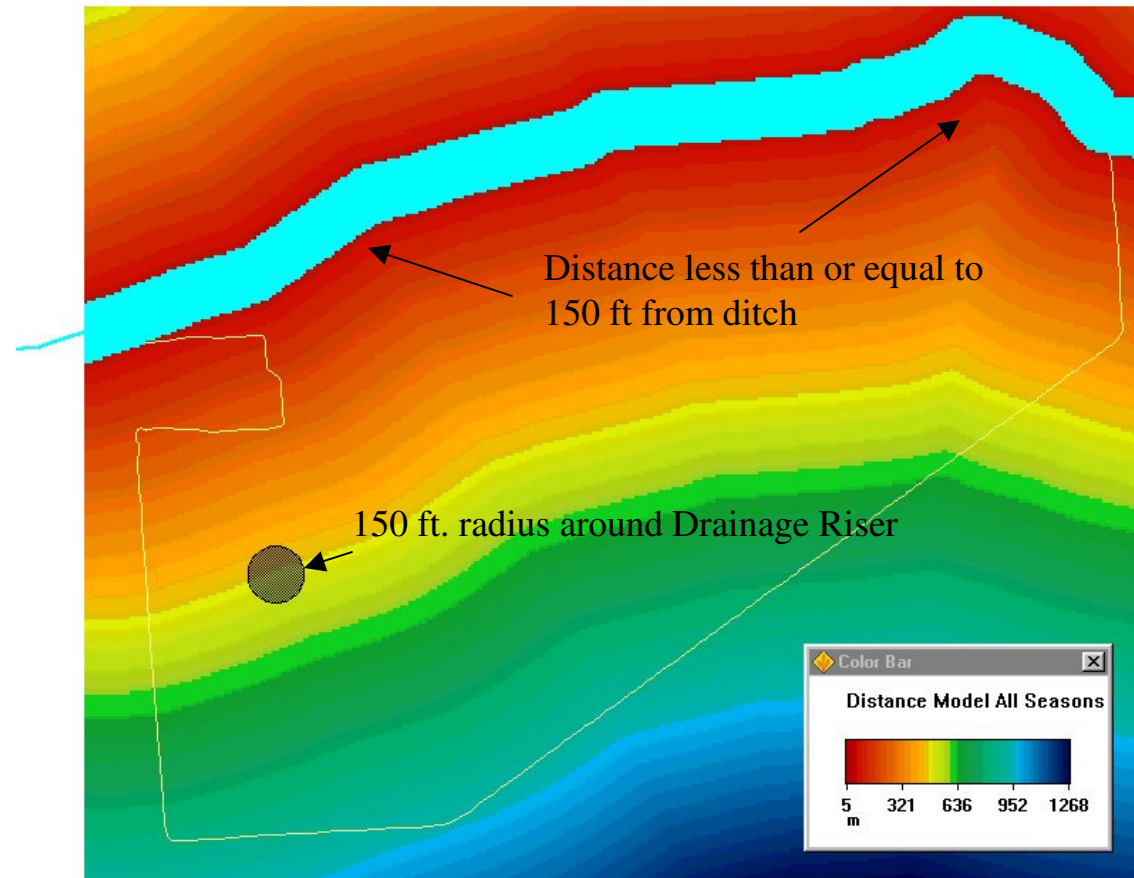
Proximity to Drainage Ditch and Drainage Riser are Manure Plan issues. No spread within 150 feet of Ditch or Riser.

## Manure Plan Fertility- Phosphorous Map



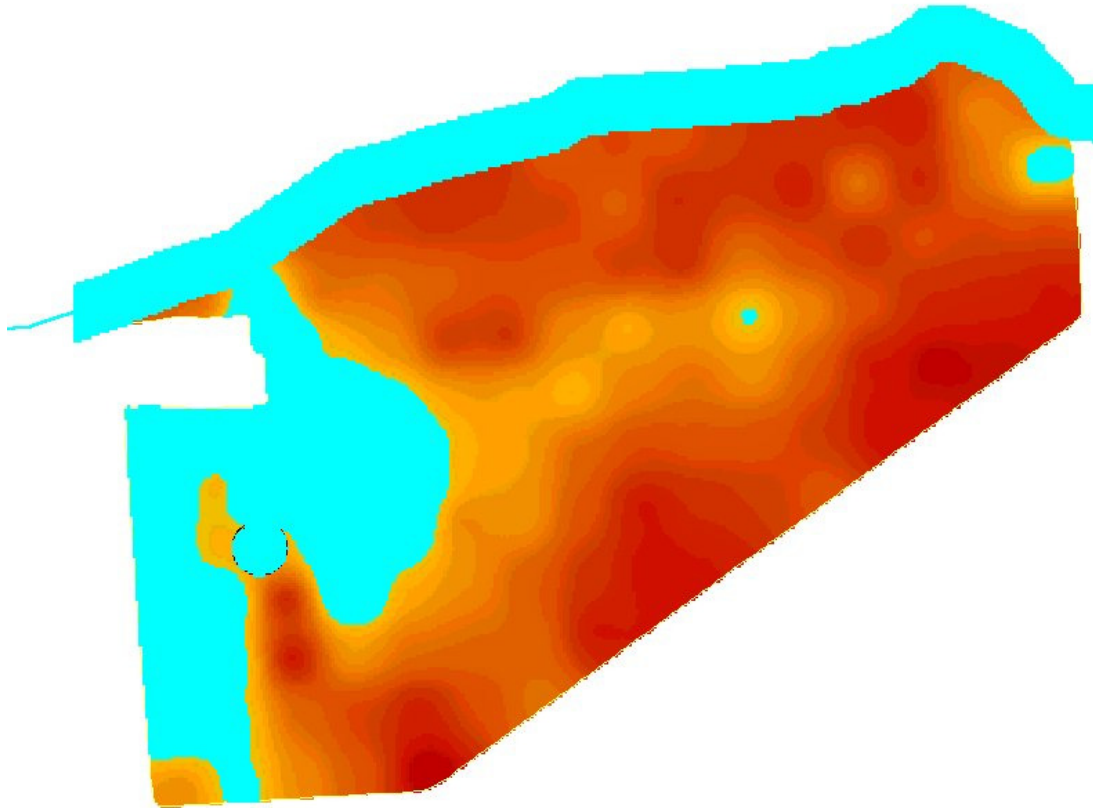
Variability of Phosphorous is a Manure Plan issue. No spread on areas with P levels greater than 200 units.

Plan exclusion areas from distance models.



Areas where no manure can be spread regardless of nutrient level.

## Plan Exclusion Zone



Areas within disallowed proximity and with P levels above 200 units amount to 74 acres of the 308 total field acres.

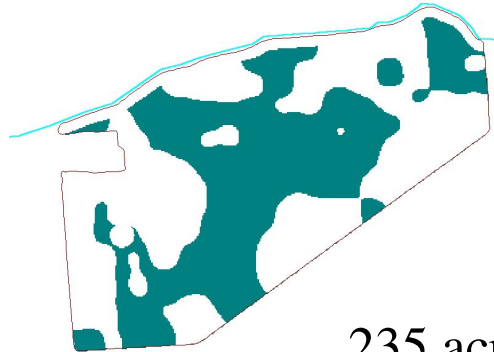
## Vary the manure application in the allowable area.

If P level is less than or equal to 100 units, run at 2 mph.



94.5 acres

If P level is greater than 100 units and less than 200 units, run at 4 mph.



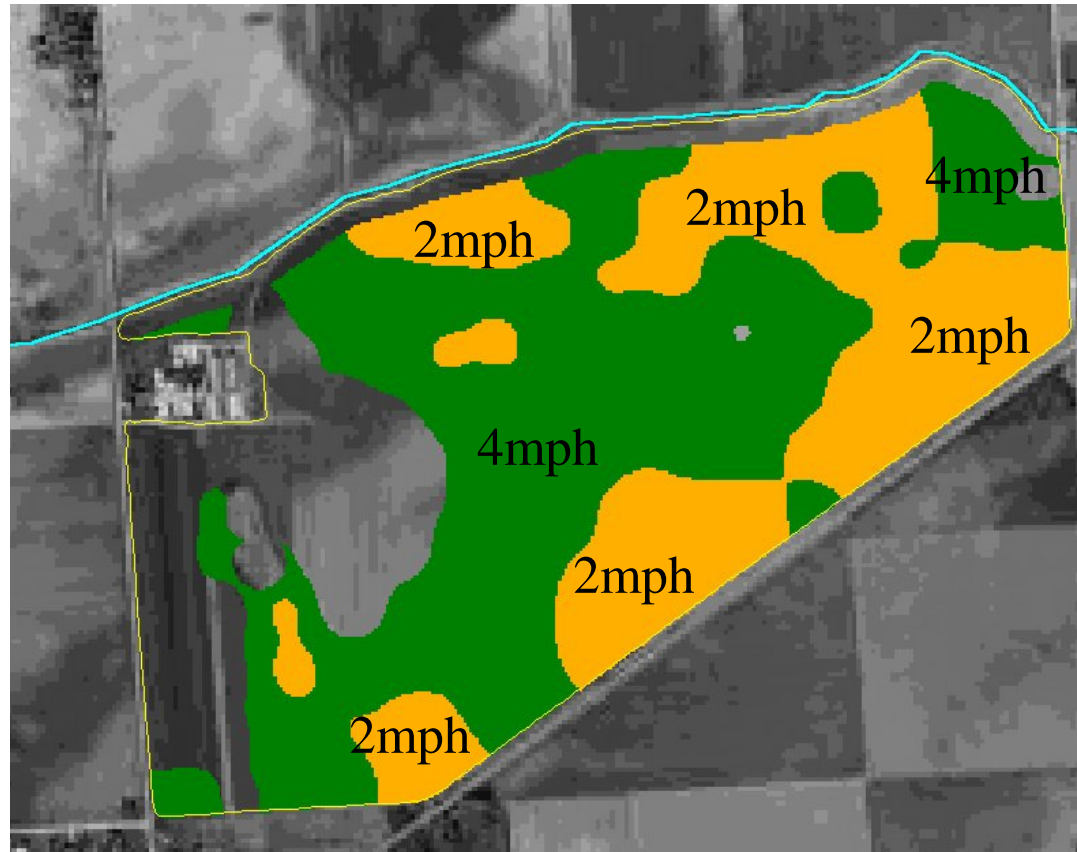
140.5 acres

235 acres to spread at two rates.

## Image Algebra Logic

```
if ( Layer( P )==NO_DATA ||
Layer( P)>200 ||
Layer( Irrigation Circle, DRAWING_AREA )>0 ||
Layer( Distance Model)<=46 ) {
OD = NO_DATA; //set exclusion conditions
} else {
if ( Layer( P)>=0 && Layer( P)<=100 ) {
OD = 2; // set high rate
} else if( Layer( P)>100&&Layer( P )<=200 ) {
OD = 4; // set low rate
}
}
}
```

Here is the final manure application plan



This prescription can be used visually in the field or it could be sent as a digital prescription file to a machine control device.