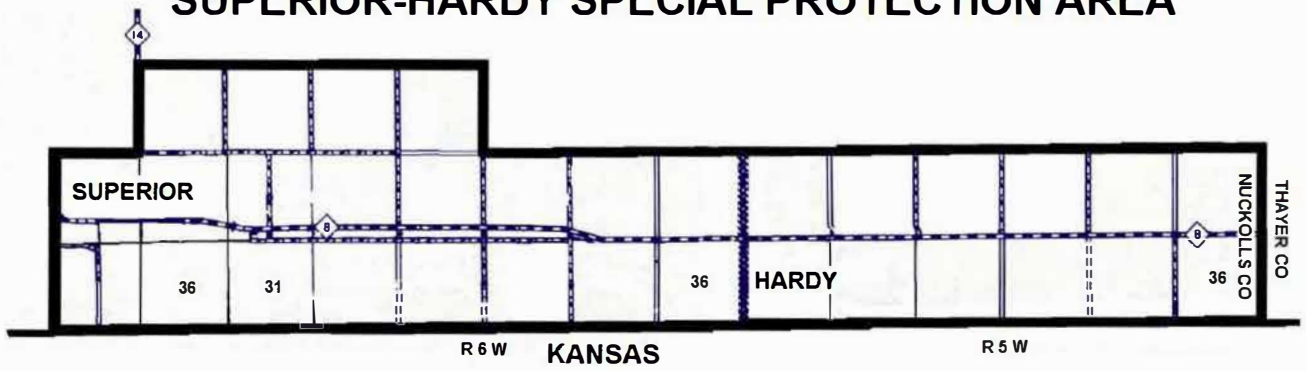
SUPERIOR-HARDY SPECIAL PROTECTION AREA



SUPERIOR-HARDY WATER QUALITY SUB-AREA

PHASE 2

- **All operators must attend** nitrogen and or irrigation management training work-shops every four years.
- Fall & Winter applications of commercial N fertilizer are prohibited **prior to March 1st** or row crop ground for the ensuing year.
- Each operator is **required to take soil samples from all** planned corn or milo fields, (**irrigated tracts 5 acres or larger and dryland tracts 10 acres or larger**) which they farm **prior to spring applying N fertilizer**. Rates to be applied to these fields shall not exceed the UNL recommendations.
- Irrigation scheduling will re required on **all irrigated fields that are 5 acres or greater.**
- The annual reporting of operator's field data will be required for all fields, **that meet the required acreage. Due December 31st,** send to Little Blue NRD.

NITROGEN TABLES for CORN and GRAIN SORGHUM

Table 1. Nitrogen Fertilizer Suggestions for Corn

Soil Organic Matter (%)	Residual Nitrate - N ppm (avg)	lb/acre 3 ft	Expected Yield (bu/acre) 60	80	100	120	140	160	180	200	220	240
3	3	32	60	75	90	105	120	135	150	165	185	200
	6	65	35	50	65	80	95	110	125	145	160	175
	9	97	0	25	40	55	70	90	105	120	135	150
	12	130		0	15	35	50	65	80	95	110	125
	15	162			0	0	25	40	55	70	85	100
	18	194					0	15	30	45	65	80
	21	227						0	0	25	40	55
	24	259								0	15	30
	27	292									0	0
2	3	32	65	85	105	120	140	160	175	195	215	230
	6	65	40	60	80	95	115	135	155	170	190	210
	9	97	20	35	55	75	90	110	130	145	165	185
	12	130	0	15	30	50	70	85	105	125	140	160
	15	162		0	0	25	45	60	80	100	115	135
	18	194				0	20	40	55	75	95	110
	21	227					0	15	35	50	70	90
	24	259						0	0	25	45	65
	27	292								0	20	40
1	3	32	75	95	115	140	160	180	200	225	245	265
	6	65	50	70	95	115	135	155	180	200	220	240
	9	97	25	50	70	90	110	135	155	175	195	215
	12	130	0	25	45	65	85	110	130	150	170	195
	15	162		0	20	40	65	85	105	125	150	170
	18	194			0	20	40	60	80	105	125	145
	21	227				0	15	35	60	80	100	120
	24	259					0	15	35	55	75	95
	27	292						0	0	30	50	75

Table 2. Nitrogen Fertilizer Suggestions for Grain Sorghum

Soil Organic Matter (%)	Residual Nitrate - N ppm (avg)	lb/acre 3 ft	Expected Yield (bu/acre) 40	60	80	100	120	140	160	180	200
3	3	32	15	35	60	80	100	125	145	170	190
	6	65	0	0	20	40	60	85	105	130	150
	9	97			0	0	20	45	65	90	110
	12	130					0	5	25	50	70
	15	162						0	0	10	30
	18	194								0	0
	21	227									
2	3	32	35	55	80	100	120	145	165	190	210
	6	65	0	15	40	60	80	105	125	150	170
	9	97		0	0	20	40	65	85	110	130
	12	130				0	0	25	45	70	90
	15	162					0	0	5	30	50
	18	194							0	0	10
	21	227									0
1	3	32	55	75	100	120	140	165	185	210	230
	6	65	15	35	60	80	100	125	145	170	190
	9	97	0	0	20	40	60	85	105	130	150
	12	130			0	0	20	45	65	90	110
	15	162					0	5	25	50	70
	18	194						0	0	10	30
	21	227								0	0

Table 3. Estimated Apparent N Contributions from Legumes

Legume Crop	Nitrogen Fertilizer Reduction (lb/acre) Medium & Fine Textured Soils	Sandy Soils
Soybean	45	45
Alfalfa (70-100% stand, > 4 plants/ft 2)	150	100
Alfalfa (30-69% stand, 1.5-4 plants/ft 2)	120	70
Alfalfa (0-29% stand, < 1.5 plants/ft 2)	90	40
Sweet Clover and Red Clover	80% of credit allowed for alfalfa	

Table 4. Estimated N Contributions from Manures and Other Waste Materials for the First Crop After Application

Dry Materials	lb N/ton	Liquid Materials	lb N/1000 gal
Beef Feedlot Manure	4-5	Swine - Liquid Pit	10-15
Dairy Manure	3	Swine - Lagoon	2-5
Sheep Manure	5	Beef - Li Liquid Pit	10-12
Poultry Manure	12-17	Beef - Lagoon	1-2
Composted Beef Feedlot Manure	10-14	Dairy - Liquid Pit	7-8
Sewage Sludge	2-3	Dairy - Lagoon	1-2
Horse Manure	3	Cheese Whey	1-2

Waste material credits shown in Table 4 can vary considerably depending on how waste materials are handled and applied. For more credit, have a sample of the waste material analyzed.