

## **Linn County Soil & Water Conservation District Needs Assessment**

This needs assessment has been prepared by the Linn County Board of Supervisor's as a way to express the District's need for cost-share funding for the upcoming fiscal years. The first section identifies the farm demographics which include the number and size of the farms with further breakdown based on farms having livestock or harvested crops with the information being obtained from the 2007 census and University of Missouri Cares program.

The number of farms in the county is 1077 and comprised of 397,025 acres. Average farm size is 306 acres. The size break down is as follows:

1-9 acre farm	43
10-49 acre farm	181
50-69 acre farm	51
70-99 acre farm	121
100-139 acre farm	106
140-179 acre farm	97
180-219 acre farm	56
220-259 acre farm	65
260-499 acre farm	185
500-999 acre farm	104
1000-1999 acre farm	50
2000 or more acre farm	18

Total cropland acres = 103,288.18  
Total grassland acres = 199,871.38  
Total Forest acres = 54,896.40  
Total Wetland acres = 21,079.70  
Total Urban acres = 12,382.51  
Total Water acres = 5,744.01

### Farm Breakdown Numbers by Livestock

Cows and or Calves – 499  
Milk Cows – 14  
Hogs and Pigs – 24  
Sheep and Lambs – 28  
Horses and Ponies – 149  
Poultry – 36

### Farm Breakdown Numbers by Harvested Crops

Corn for Grain – 150  
Sorghum – 11  
Wheat – 88  
Popcorn – 1  
Hay or Haylage – 548  
Soybeans – 242  
Oats – 24  
Orchards – 2

## Streams

<u>Stream Name</u>	<u>Stream Length (Miles)</u>
Badger Creek	6.81
Bear Branch	10.87
Bear Creek	11.89
Big Turkey Creek	6.54
Brushy Branch	3.25
Bull Branch	5.07
Center Branch	1.24
Clarks Creek	6.57
Clear Creek	2.19
Coal Creek	3.09
Coon Creek	13.45
Couch Branch	4.21
East Yellow Creek	29.99
Elk Creek	14.03
Halls Branch	0.13
Hamilton Branch	7.49
Hickory Branch	10.78
Kemper Branch	6.36
Lewis Creek	9.10
Lick Branch	3.47
Linn Branch	4.46
Little Muddy Creek	6.92
Little Parson Creek	7.51
Little Turkey Creek	12.25
Locust Branch	4.04
Locust Creek	31.59
Long Branch	30.23
Lousy Creek	6.52
Lowes Branch	5.89
Mairs Branch	4.25
Muddy Creek	21.75
Mussel Fork	5.45
New Boston Branch	2.69
Onion Branch	4.47
Painter Creek	2.99
Parson Creek	34.10
Patterson Branch	1.87
Pin Oak Branch	3.70
Plumb Branch	3.05
Sam Branch	2.70
Sights Branch	9.72
Smoky Creek	12.43
Spring Branch	4.05
Strawberry Branch	5.85
Turkey Creek	25.02
Unnamed	1,492.61
Van Dorsen Creek	9.69
West Locust Creek	5.85
West Yellow Creek	31.69
Winigan Creek	14.45
Wolf Branch	7.07
Total	1,971.39

## **Land Slope**

<u>slope category</u>	<u>acres</u>	<u>percent</u>
0-3%	125,710	31.64%
3-6%	110,562	27.83%
6-10%	93,737	23.60%
10-15%	50,153	12.62%
> 15%	17,112	4.31%

## **County Resource Concerns**

The Linn County Board of Supervisors and employees have determined what resource concerns need to be addressed in our county. To make this determination we reviewed the Missouri County Profile map on the CARES website to determine land use as well as the census data. We also reviewed current and previous requests made by landowners for cost share practices as well as increase/decrease trends over the past years to help in our determination. At this time, we believe that our county has a need for 4 of the 11 resource concerns.

### **1. Sheet and Rill Erosion**

After reviewing the trends for previous years on sheet and rill erosion control practices, we have determined there was a continual increase in requests for these practices up until fiscal year 2011 sign up. Fiscal year 2011 sign up showed a 22% decrease from fiscal year 2010. We believe this could be partially due to the sign up period being held much earlier than previous years.

The Board of Supervisors and employees with the Linn County SWCD have taken this decrease, previous year's increases and the man power available at the District into account when completing our projected need in this resource concern. Based on our sign up held for fiscal year 2011, we are requesting \$405,000 for sheet and rill erosion for approximately 540 acres of erosion control. At this time, our projected need for future years will remain at treating 540 acres per year to determine if the need for these practices is down or if the timing of sign up caused some problems. An increase beginning in fiscal year 2013 was figured in based on the possibility of county maximums increasing at that time.

### **2. Gully Erosion**

After reviewing the trends for previous years on gully erosion control practices, we have determined that the decrease shown in the previous needs assessment seems to have slowed. Fiscal year 2011 sign up showed only a 1% decrease from fiscal year 2010. It is also possible this resource concern was affected, like sheet and rill, by the sign up being held much earlier. This being taken into account, the Board of Supervisors and employees have evaluated the previous year's requests along with fiscal year 2011 sign up in requesting \$ 317,500 for gully erosion practices. At this time, the projected need for these practices will remain comparable to fiscal year 2011 requests and will be reevaluated next year when landowners have a chance to get used to the earlier sign up dates. This will give the board a much more accurate idea of landowner needs in the county.

### **3. Grazing Management**

After reviewing the requests from the sign up held for fiscal year 2011, the Board of Supervisors is requesting \$20,000 to complete 4 grazing practices for fiscal year 2011. We are also projecting the need for additional funds in future years to complete grazing system requirements.

#### 4. Sensitive Area

Based on the review of requests made for fiscal year 2011, the Board of Supervisors is requesting \$5,000 to complete 1 sensitive area practice. This is the first year the county has requested funds for this resource concern.