

SE MN GIS Users Group Meeting

April 28th-Fillmore County

- 9:30 Coffee and Rolls
10:00 Introductions
- 10:15 Tip and Tricks
11:45 Lunch
- 12:30 Host Presentation
- 2:30 -Round Table Discussion
- Leadership positions
 - group name
 - next meeting



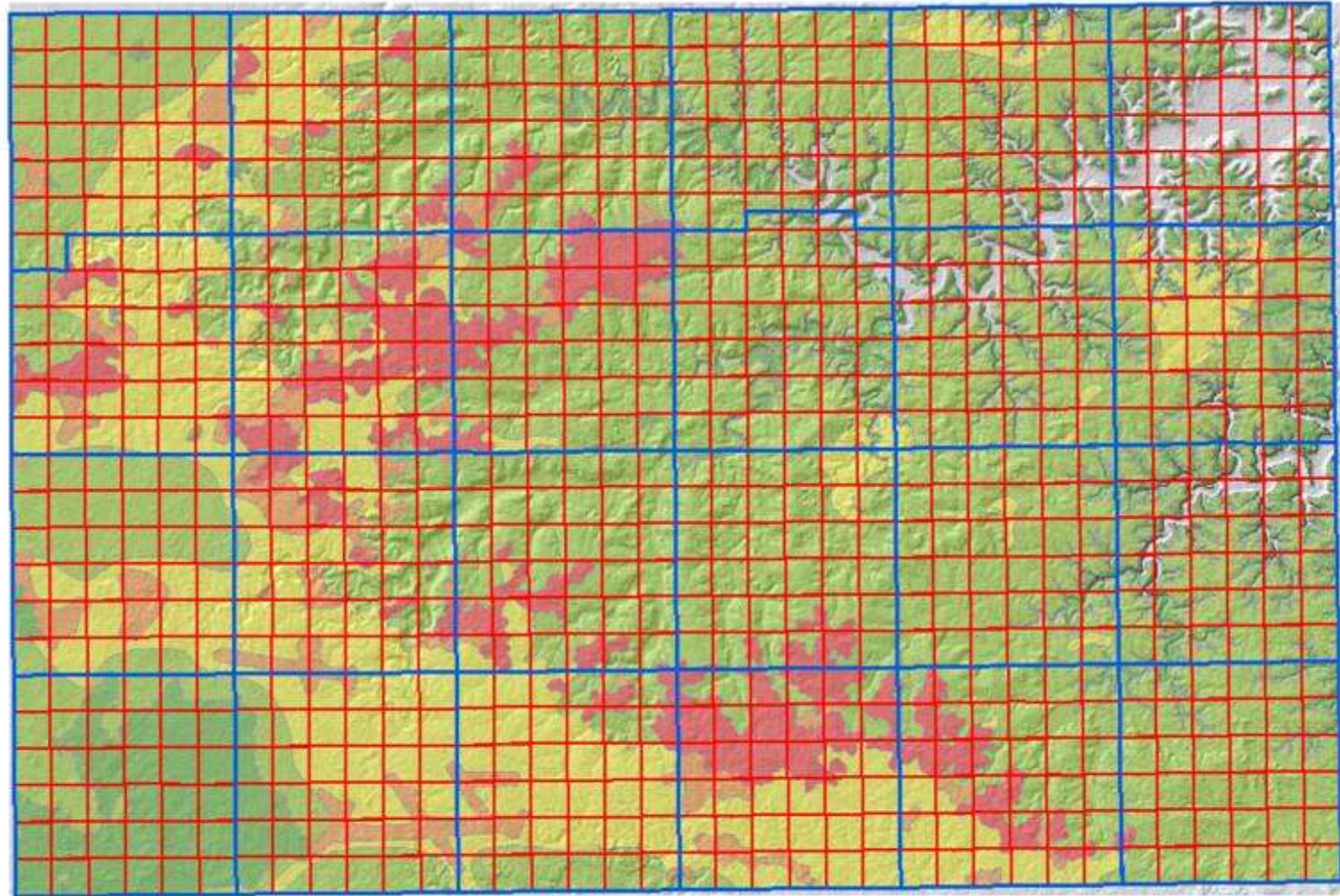
SE MN GIS Users Group Fillmore County-Host Presentation

Jeremy Maul-Fillmore SWCD
Jeff Cooper-Fillmore County IS Dept.
Dave Kiehne-Fillmore County Assessors Office

Fillmore County Overview

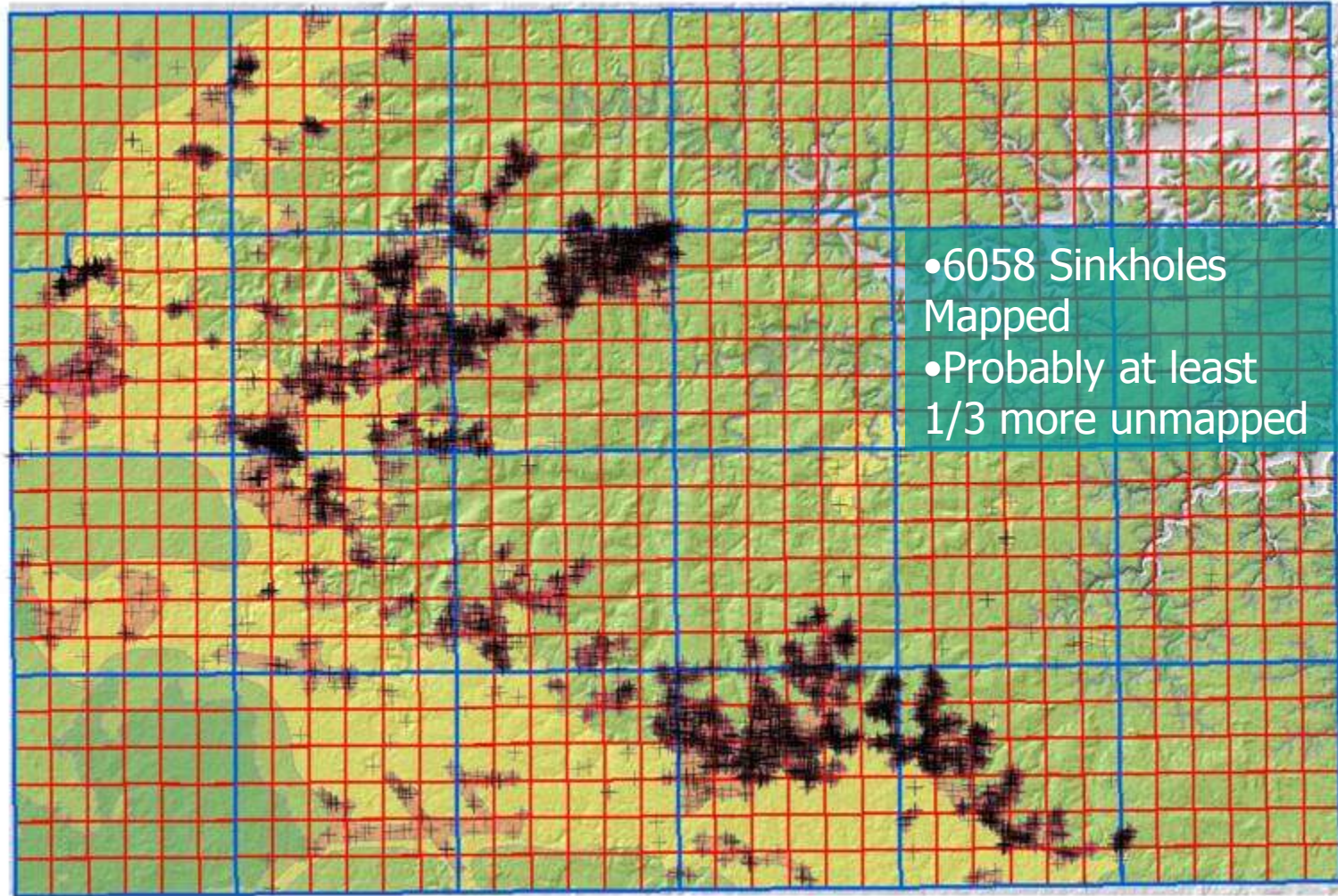


GeoAtlas-Sinkhole Probability



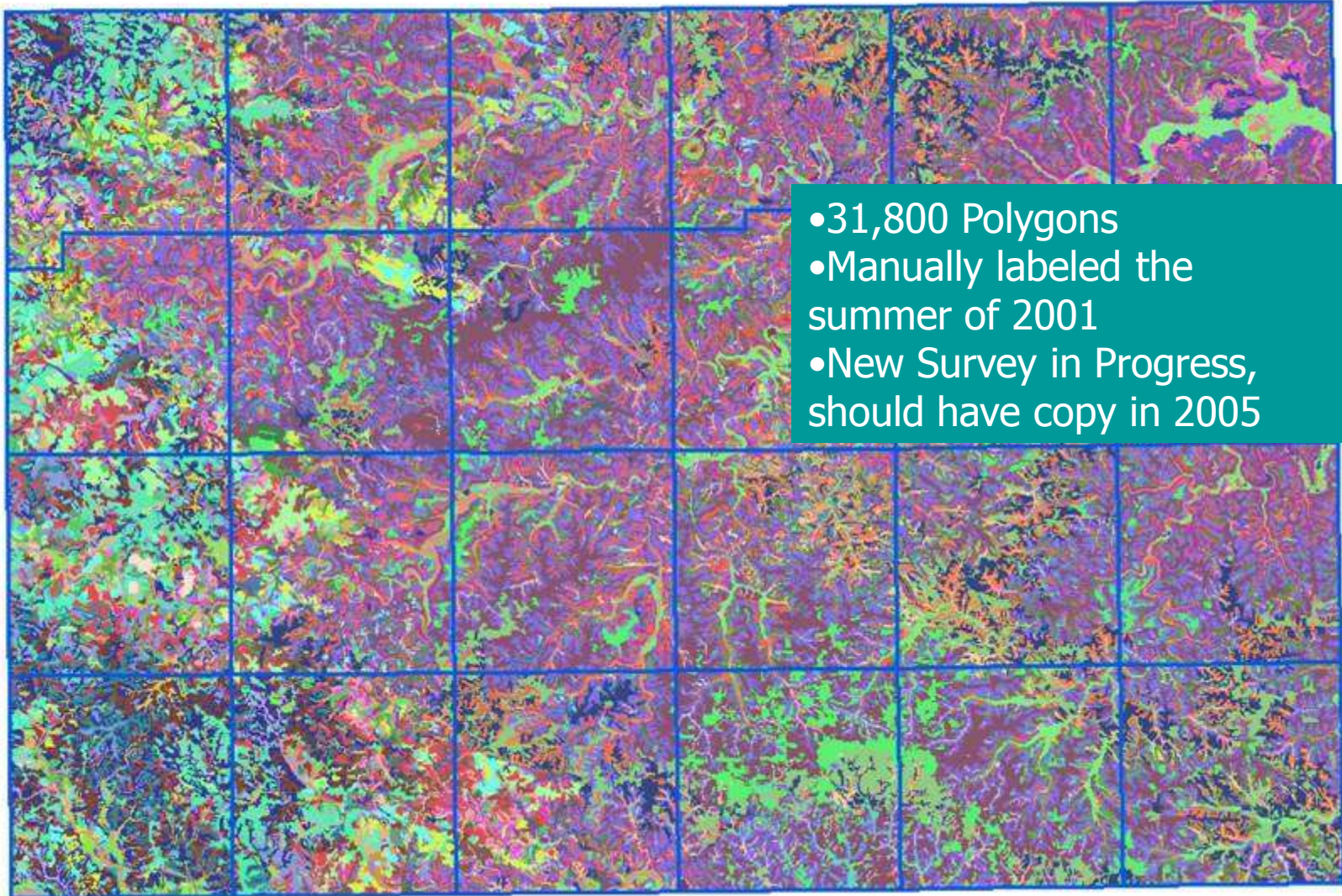
None Very Low Low Moderate High Sinkhole Plains

GeoAtlas-Sinkhole Probability



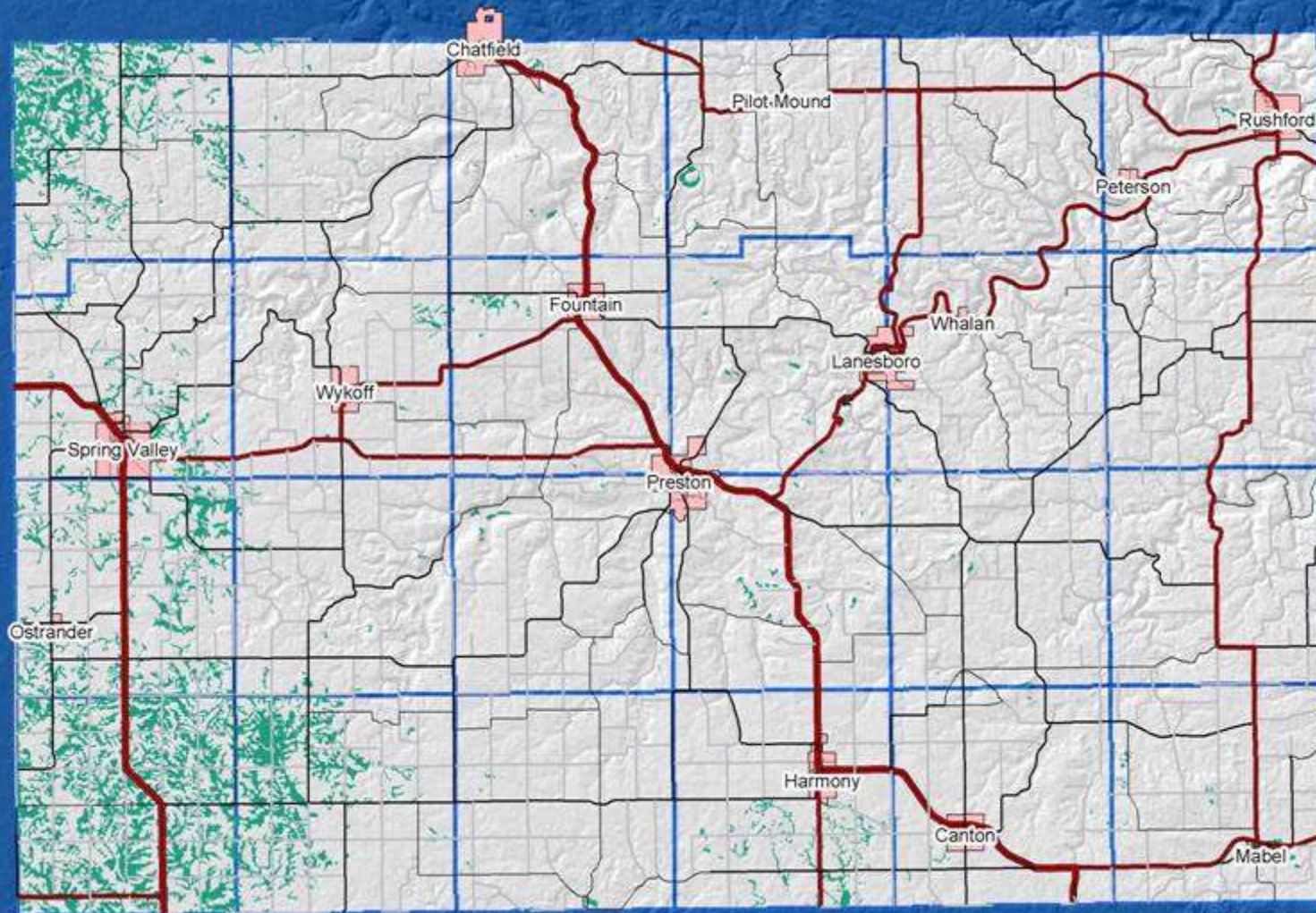
+ Sinkholes None Very Low Low Moderate High Sinkhole Plains

Soils



- 31,800 Polygons
- Manually labeled the summer of 2001
- New Survey in Progress, should have copy in 2005

Hydric Soils



GPS Uses



Orthorectification of 1939 Photos



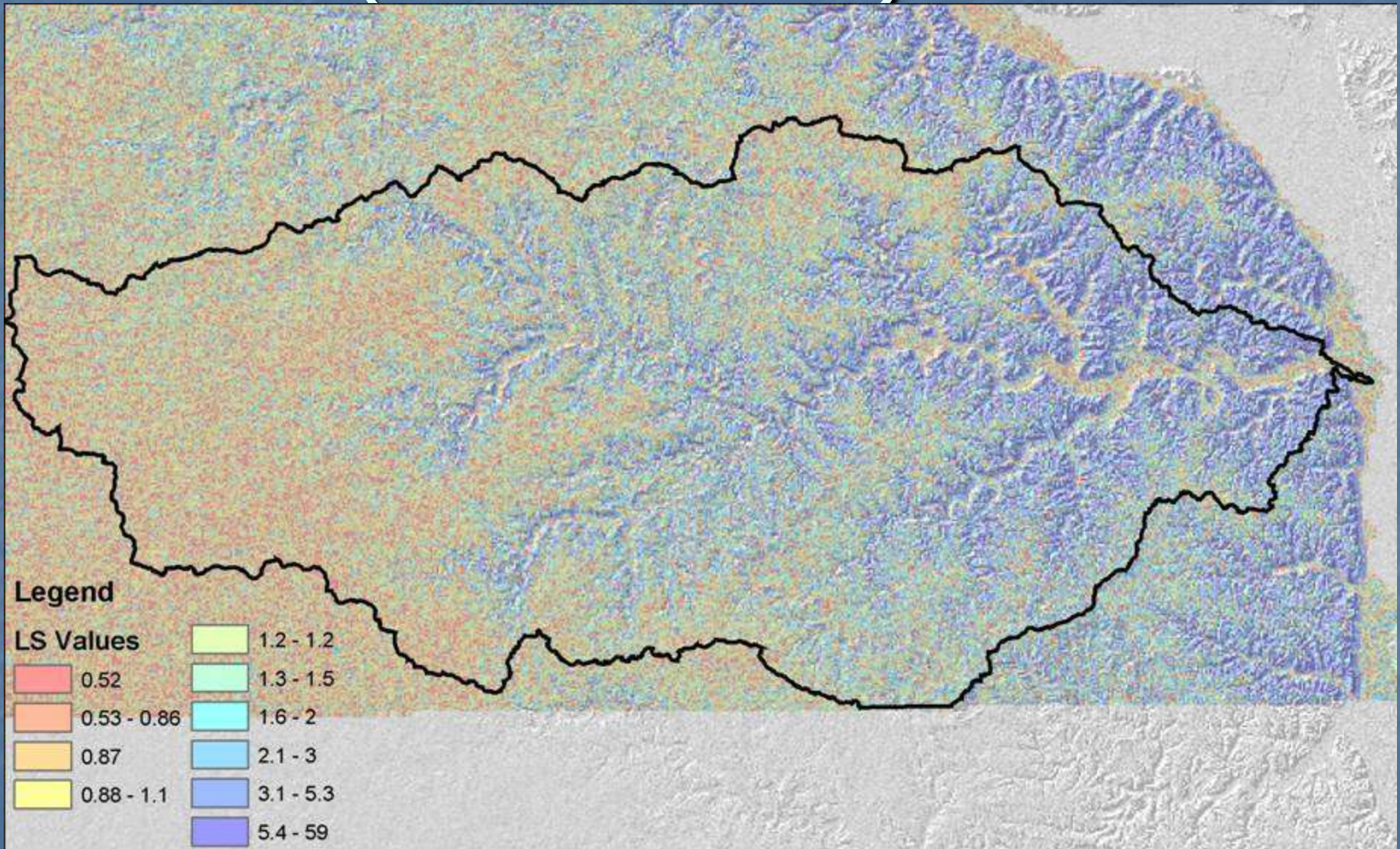
Orthorectification of 1939 Photos



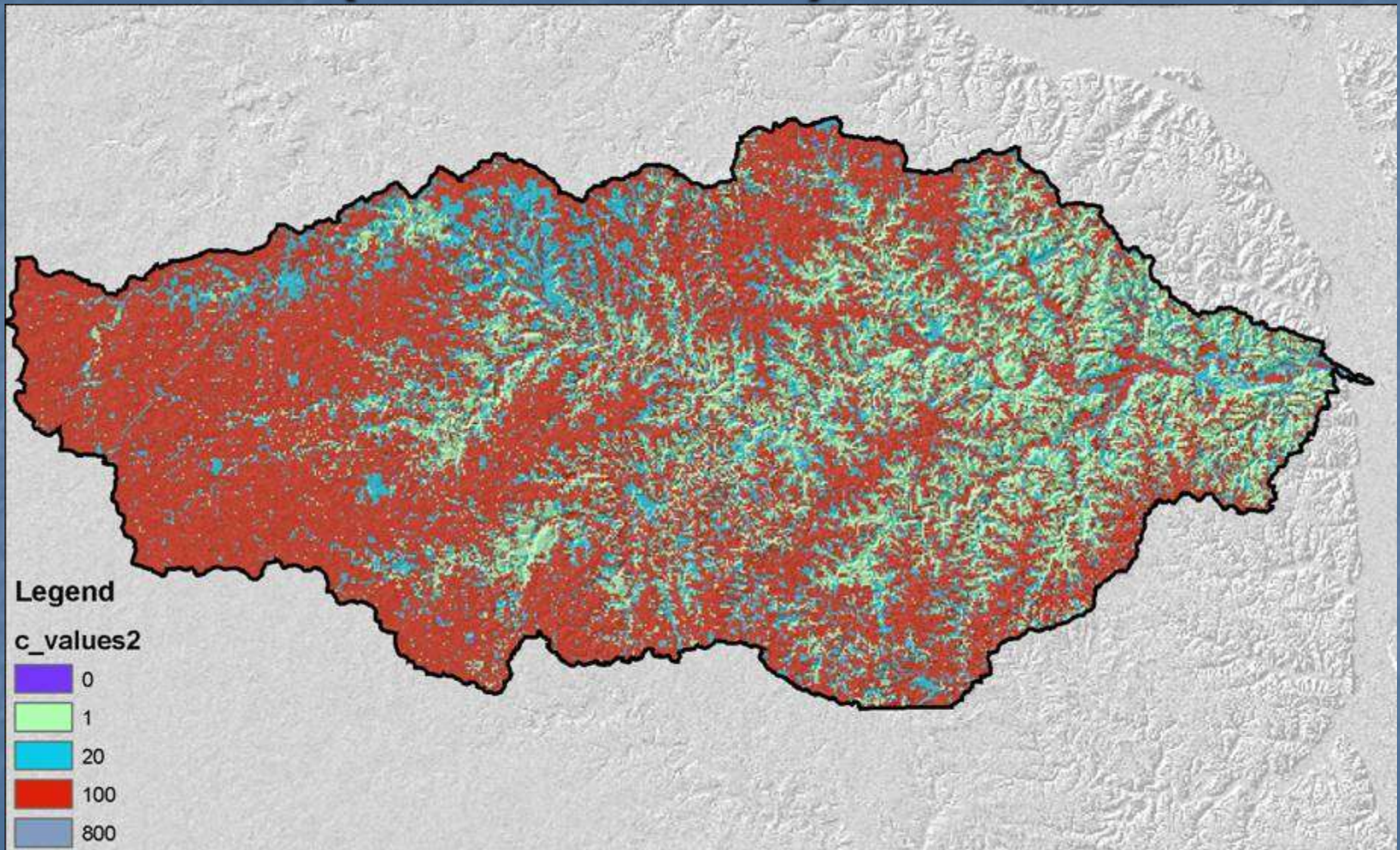
Root River Watershed Erosion Analysis



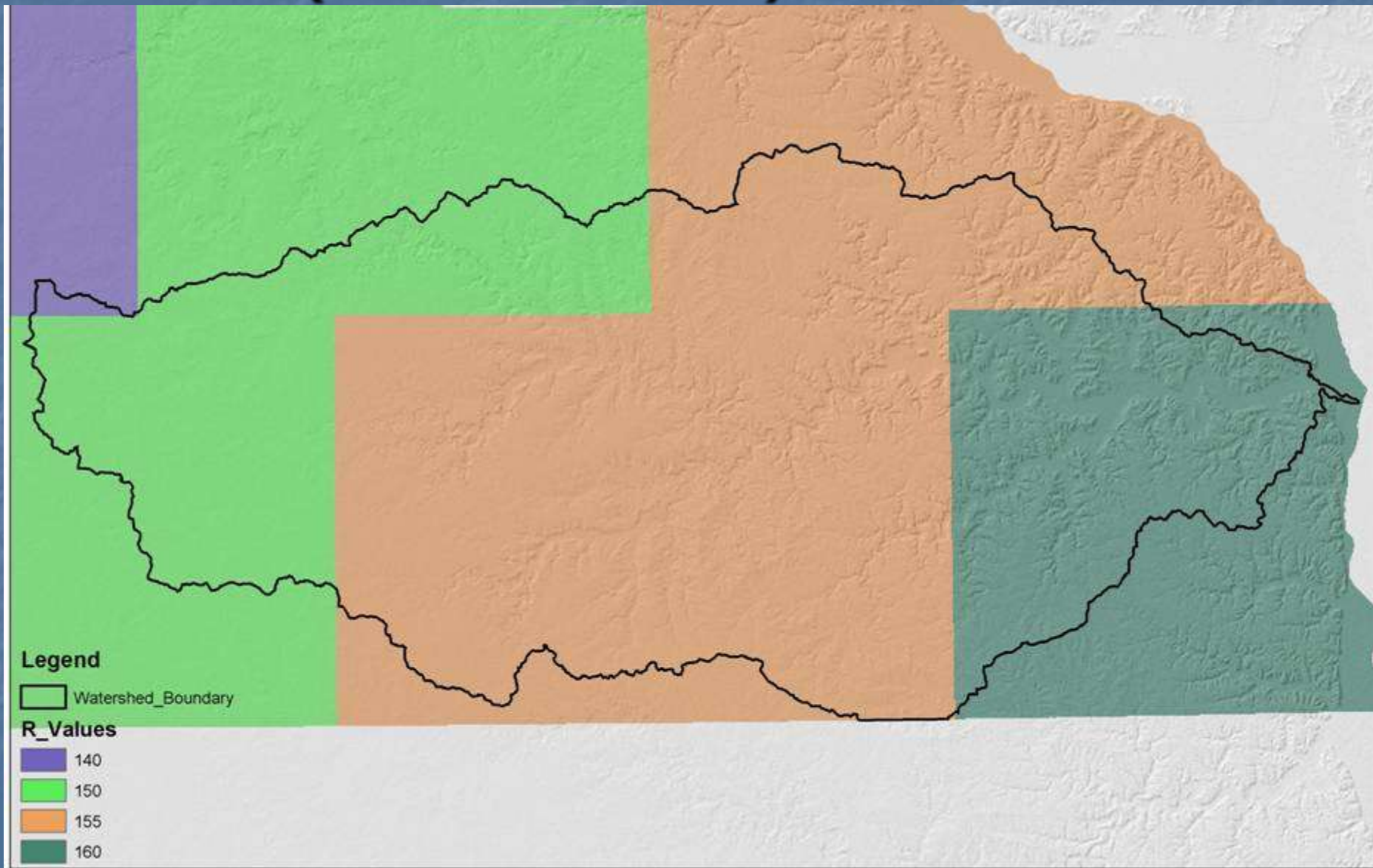
RUSLE ($R \cdot k \cdot LS \cdot C \cdot P$)-LS Values



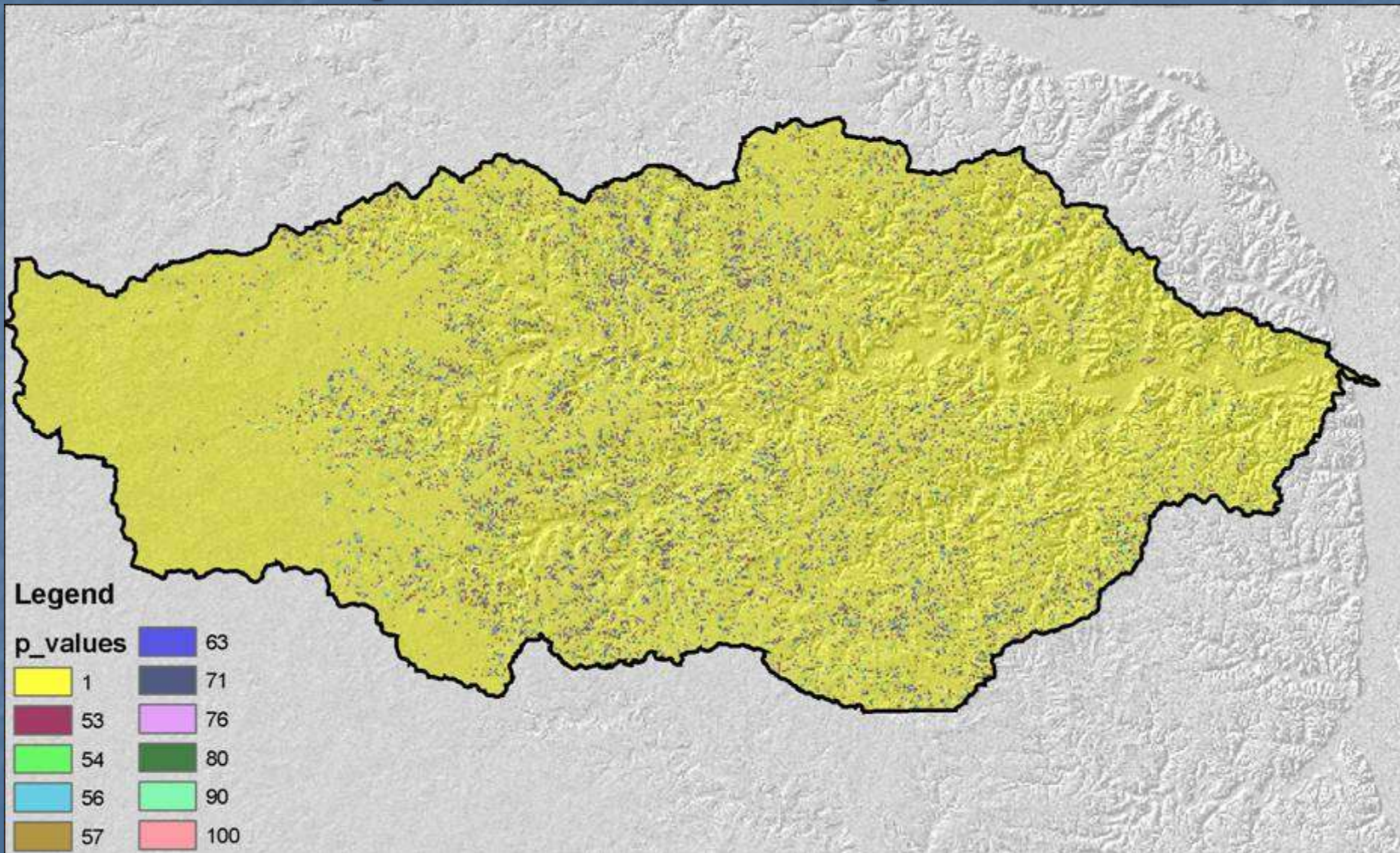
RUSLE ($R \cdot k \cdot LS \cdot C \cdot P$)-C Values



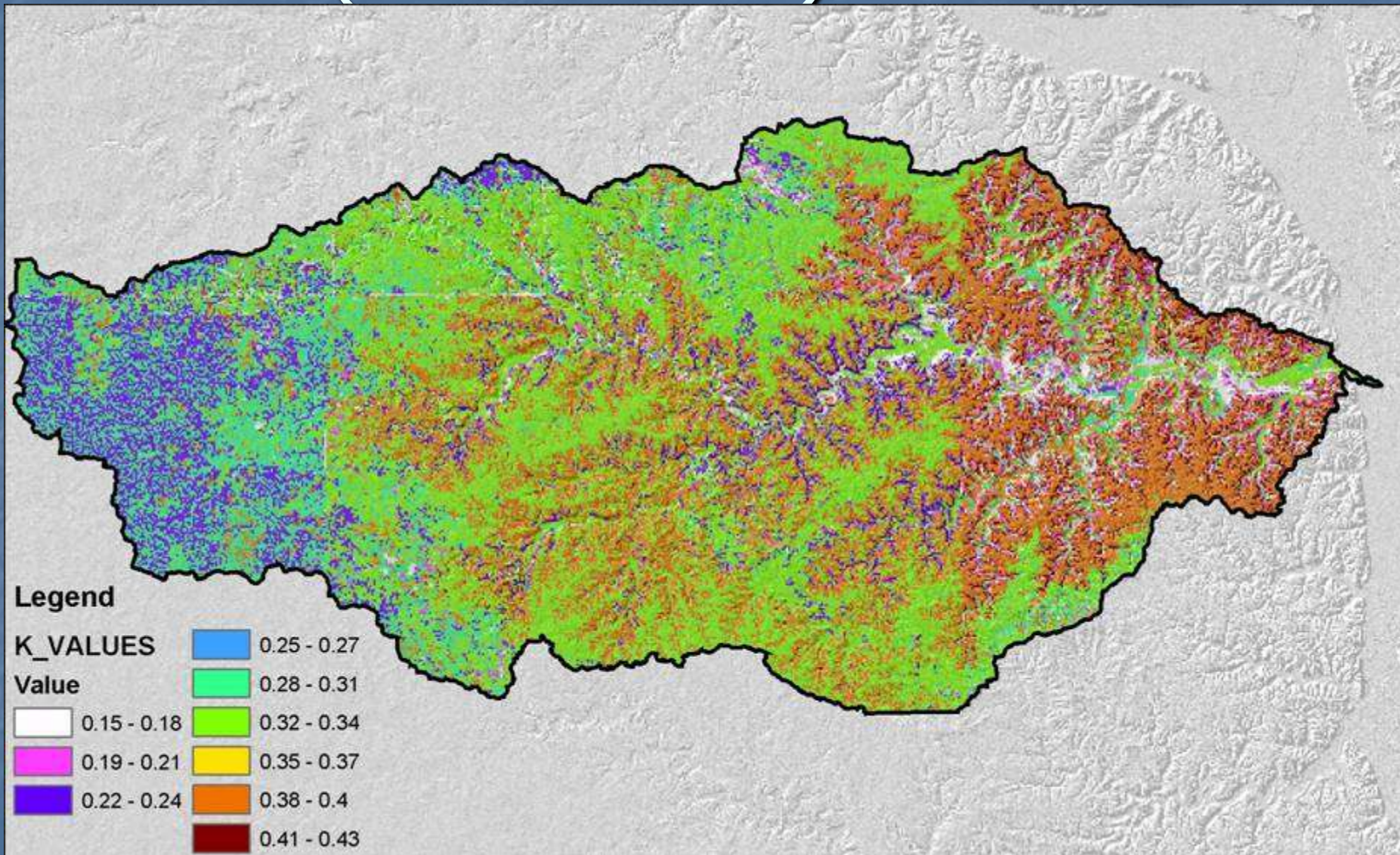
RUSLE ($R \cdot k \cdot LS \cdot C \cdot P$)-Rainfall Values



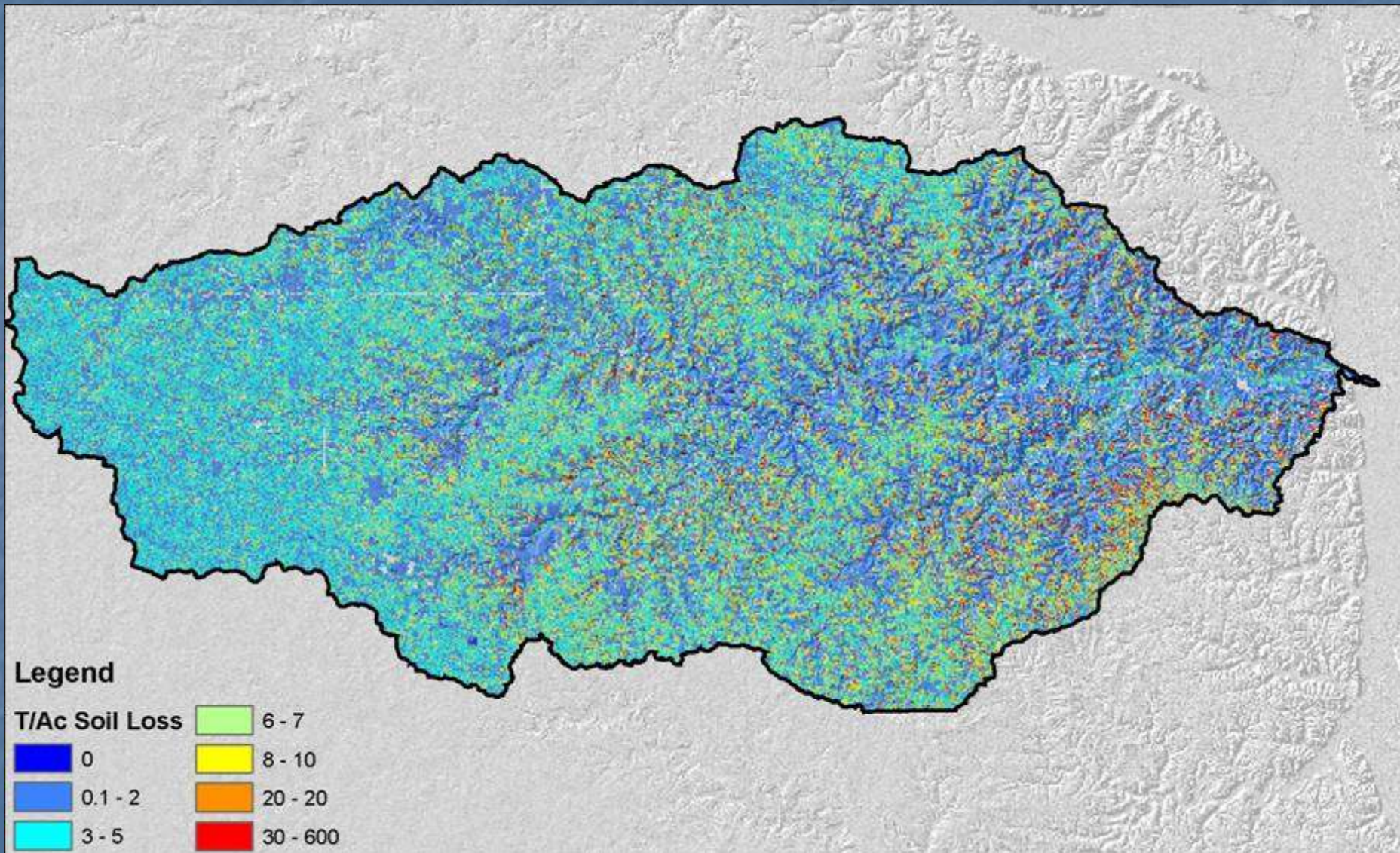
RUSLE (R*k*LS*C*P)-P Values



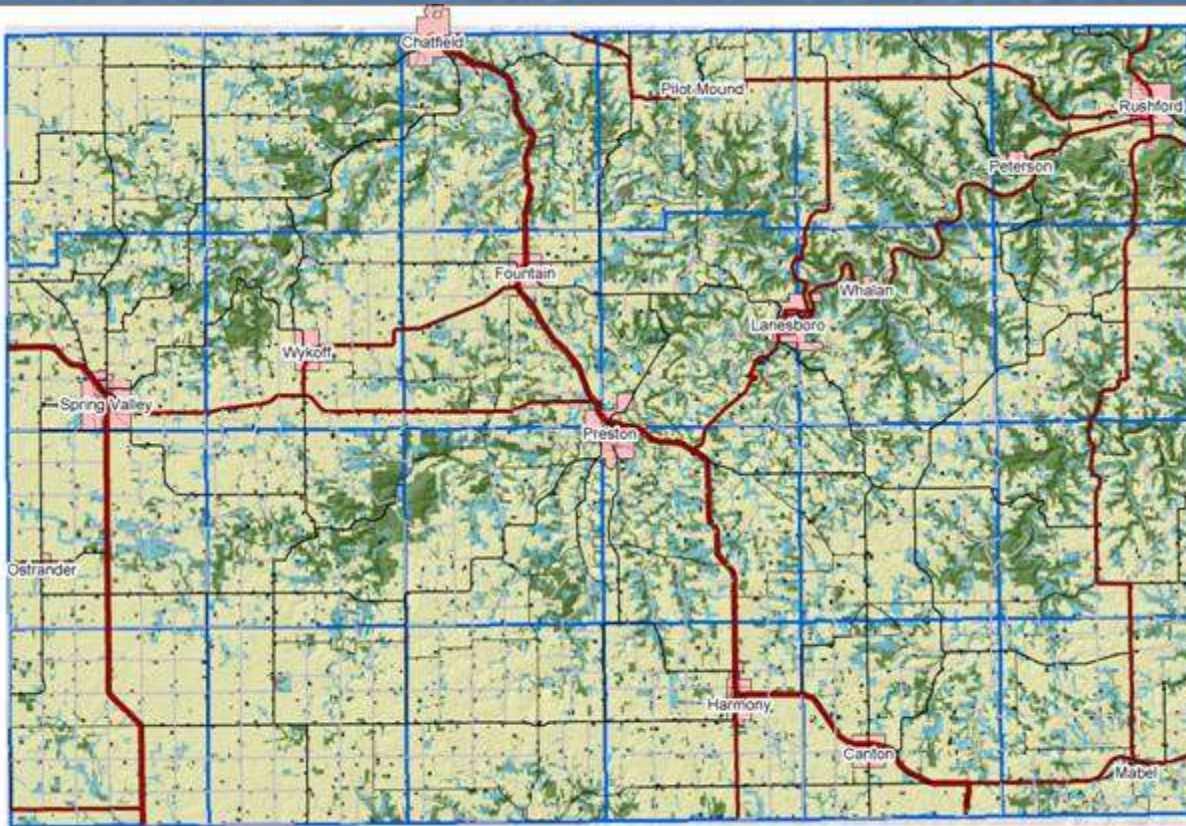
RUSLE ($R \cdot k \cdot LS \cdot C \cdot P$)-K Values



RUSLE Soil Loss Tons/Acre Soil Loss



Land Use Land Cover

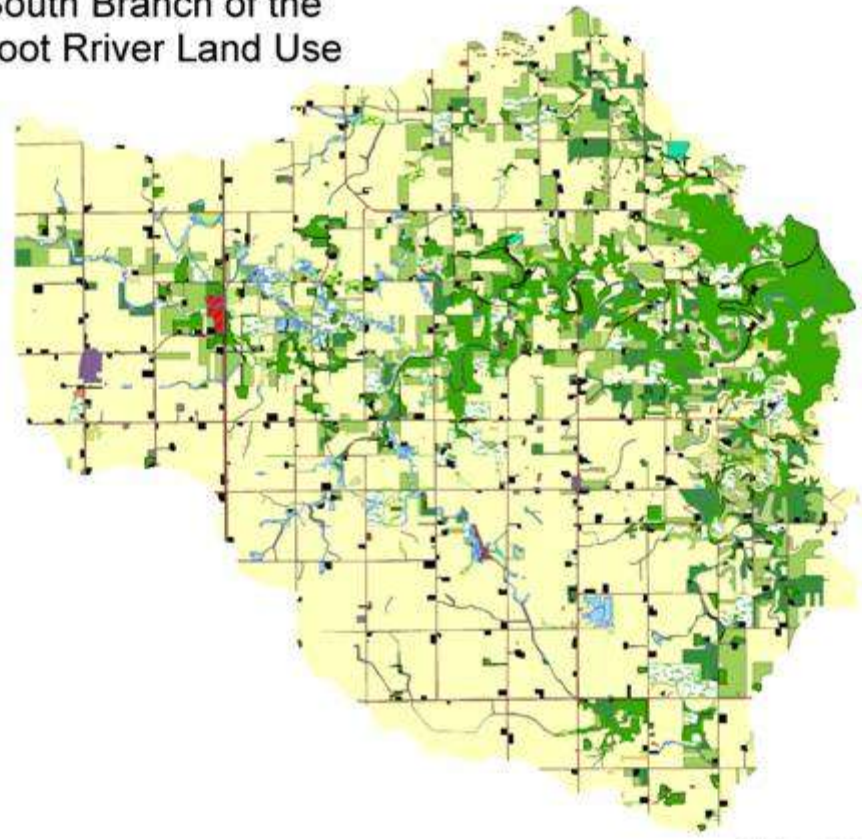


DESCRIPTION	ACRES
Cultivated Land	345,195
Deciduous Forest	111,084
Grassland	78,383
Farmstead / Rural Residence	9,362
Urban / Industrial	3,933
Water	1,281
Grassland-Shrub-Tree (decid)	938
Other Rural Development	562
Gravel Pits / Open Mines	239
Wetlands	143
Transitional Agricultural Land	107
Rural Residential Complex	104
Exposed Soil/Sandbar/Dune	35
Unclassified	7
Bare Rock	5
	551,378

South Branch of the Root River

- Watershed specific land use land cover data
- Had hoped to expand and do county wide
- This information may be used to model the effects of CREP on the water quality of SBRR
- Extensive monitoring as part of a Clean Water Partnership.
- Received a 319 Grant in 2004 more detailed GIS work written into the grant.
- Hope to use 1939 aerials to track changes in watershed and look at effects.

South Branch of the Root River Land Use



1 inch equals 9,449 feet

Legend

Land Use

Abandoned Farm	Grassed Waterway	Sinkhole Complex
Abandoned Road	Grassland	Transitional Forest
Commercial	Gravel Pit	Transportation
Drainage Ditch	Hay ground	Water
Fallow	Industrial	Waterway Slough
Farm pond	Pasture	Wetland
Feedlot	Recreational	Wooded Coniferous
Fence line	Residential	Wooded Deciduous
	Rural Residential Comp	Wooded Wetland
		Cropland



0 0.5 1 2 3 4 Miles

