



Watershed Water Quality

Assessment Tools

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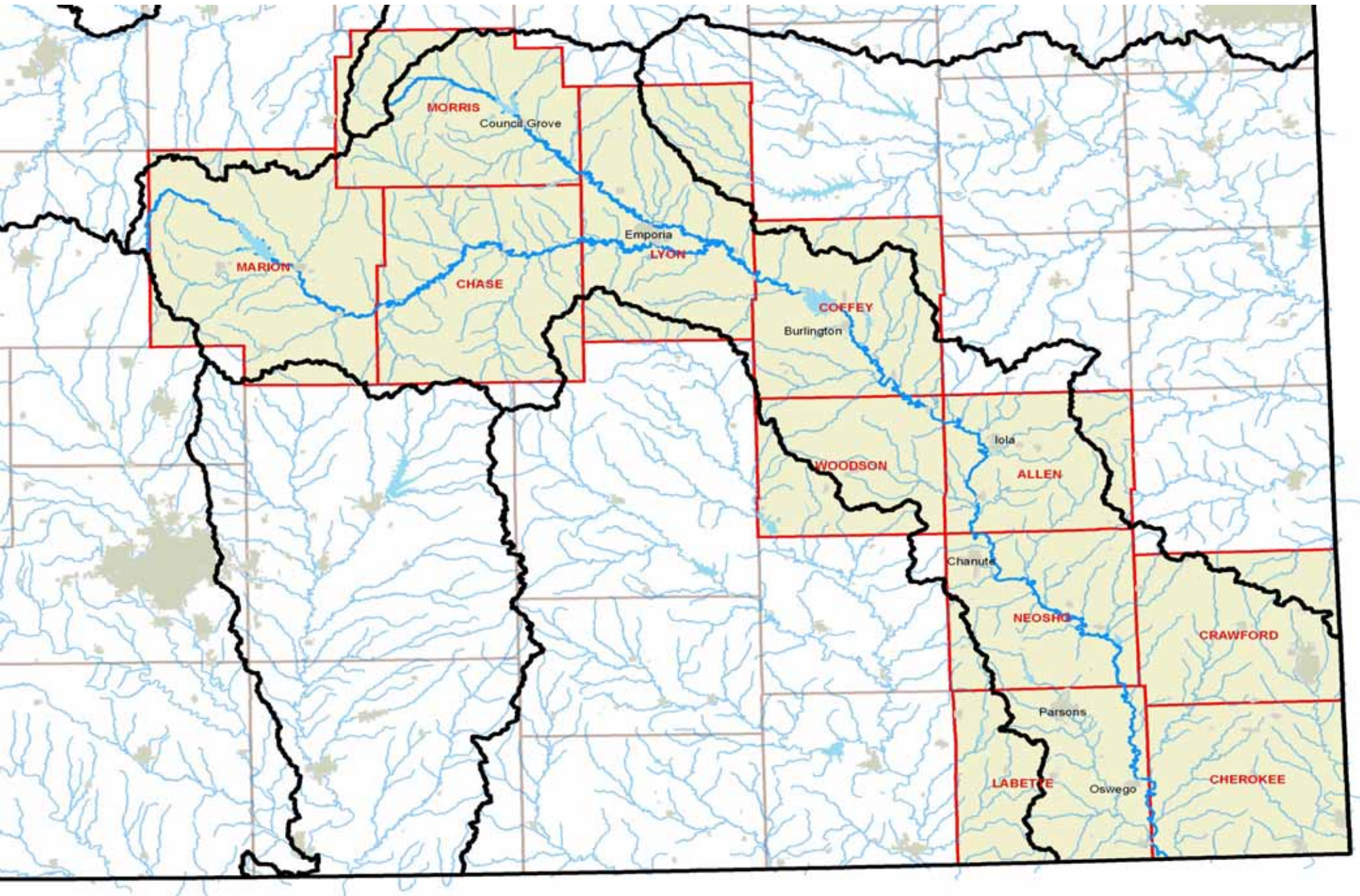
Kansas State University



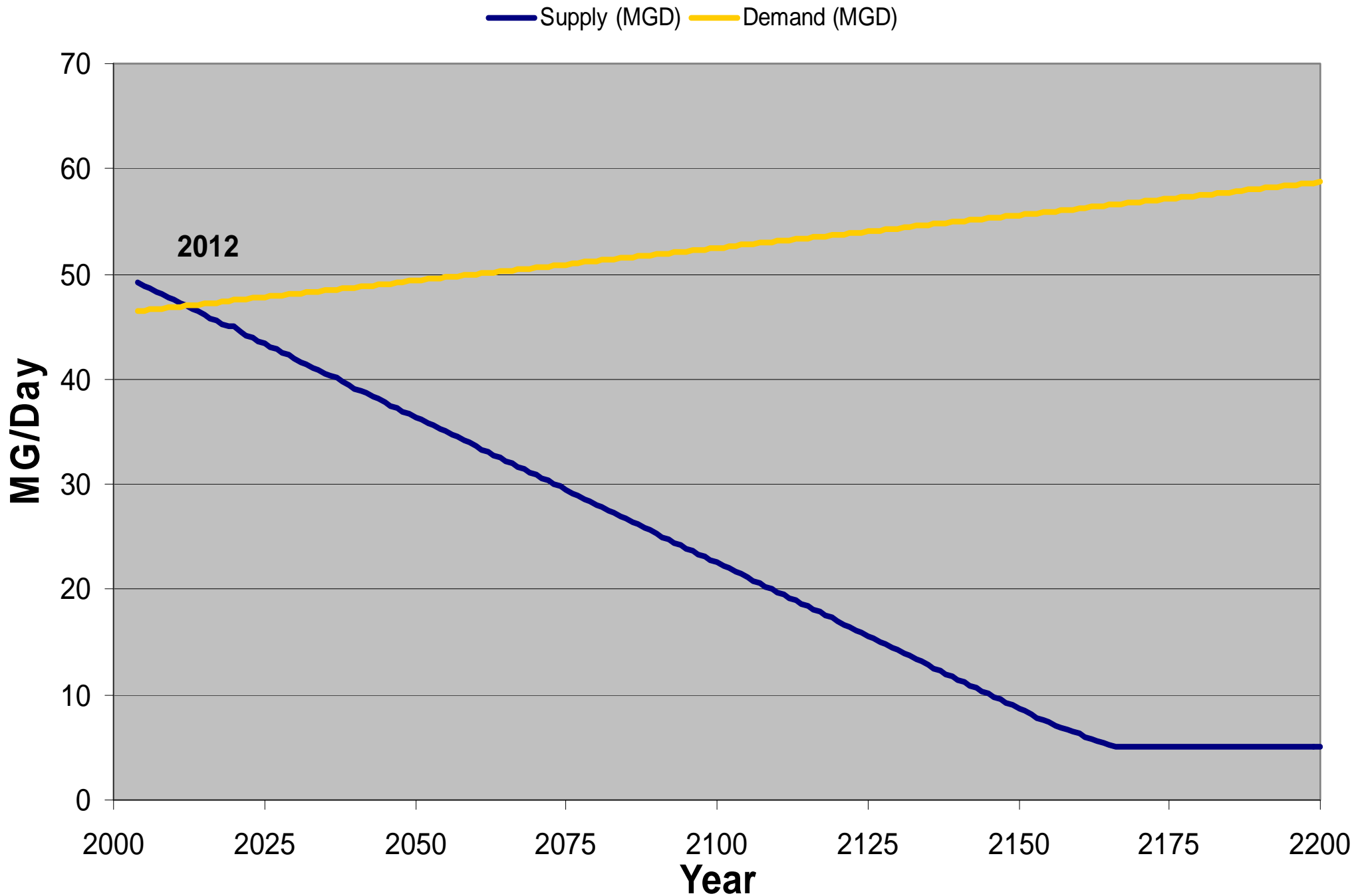
TOPICS

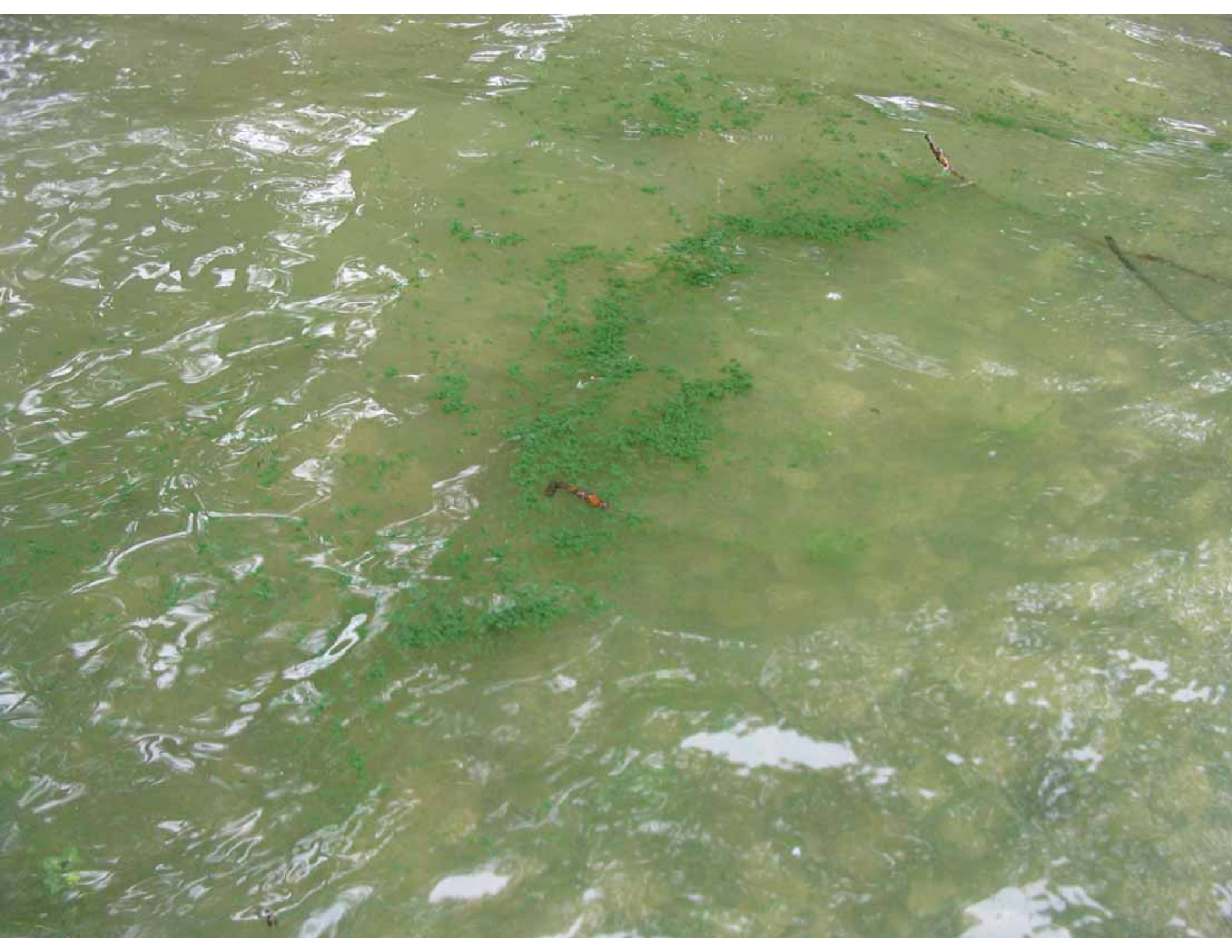
- 1. Water Quality Problems in Watersheds**
- 2. Methods and Materials**
- 3. Results and Discussion**
- 4. Conclusions**

County Assignment Neosho River

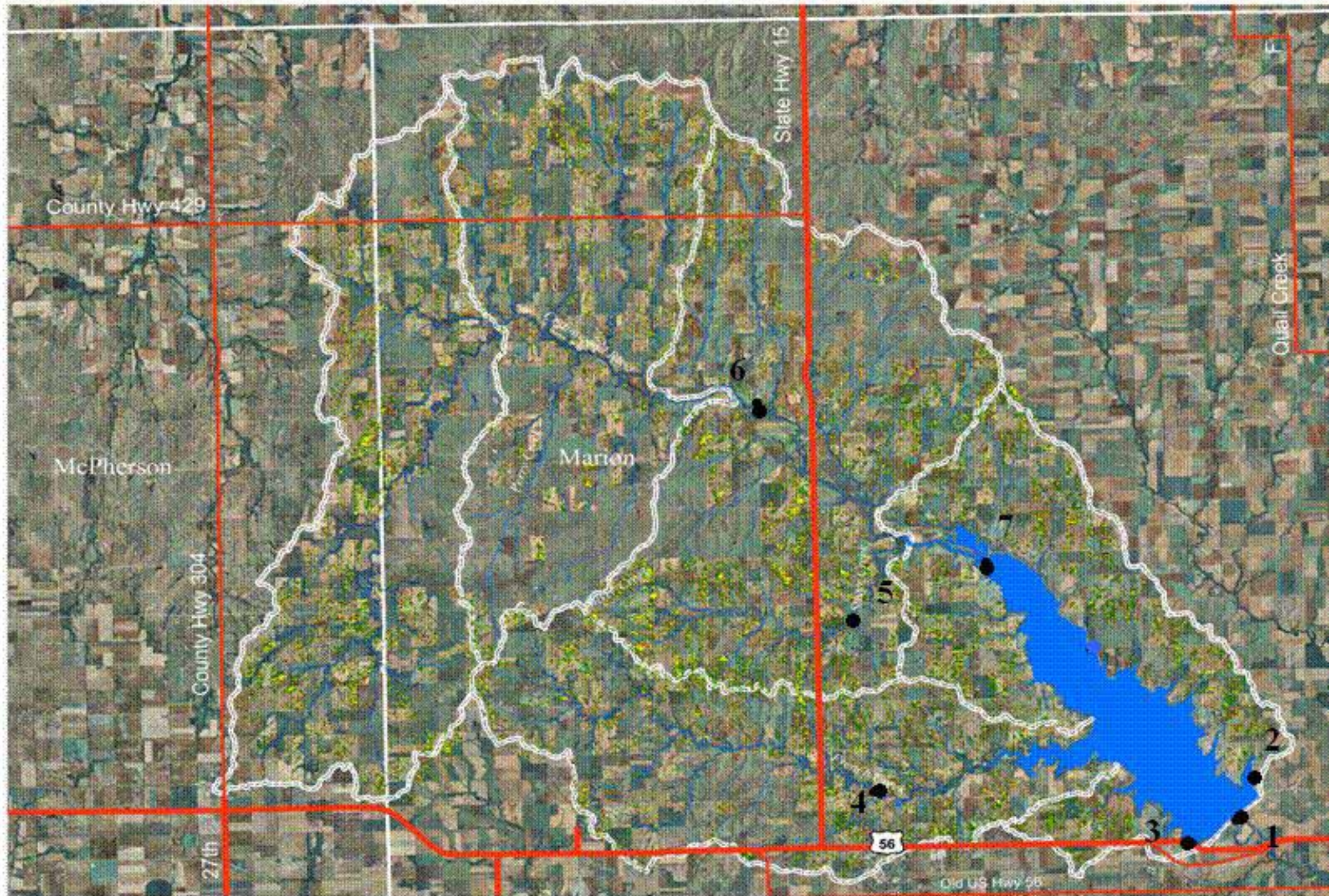


Neosho Basin Projected Water Supply Storage and Demand









Erosion Potential

Low

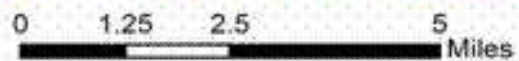
Moderate

High

Very High

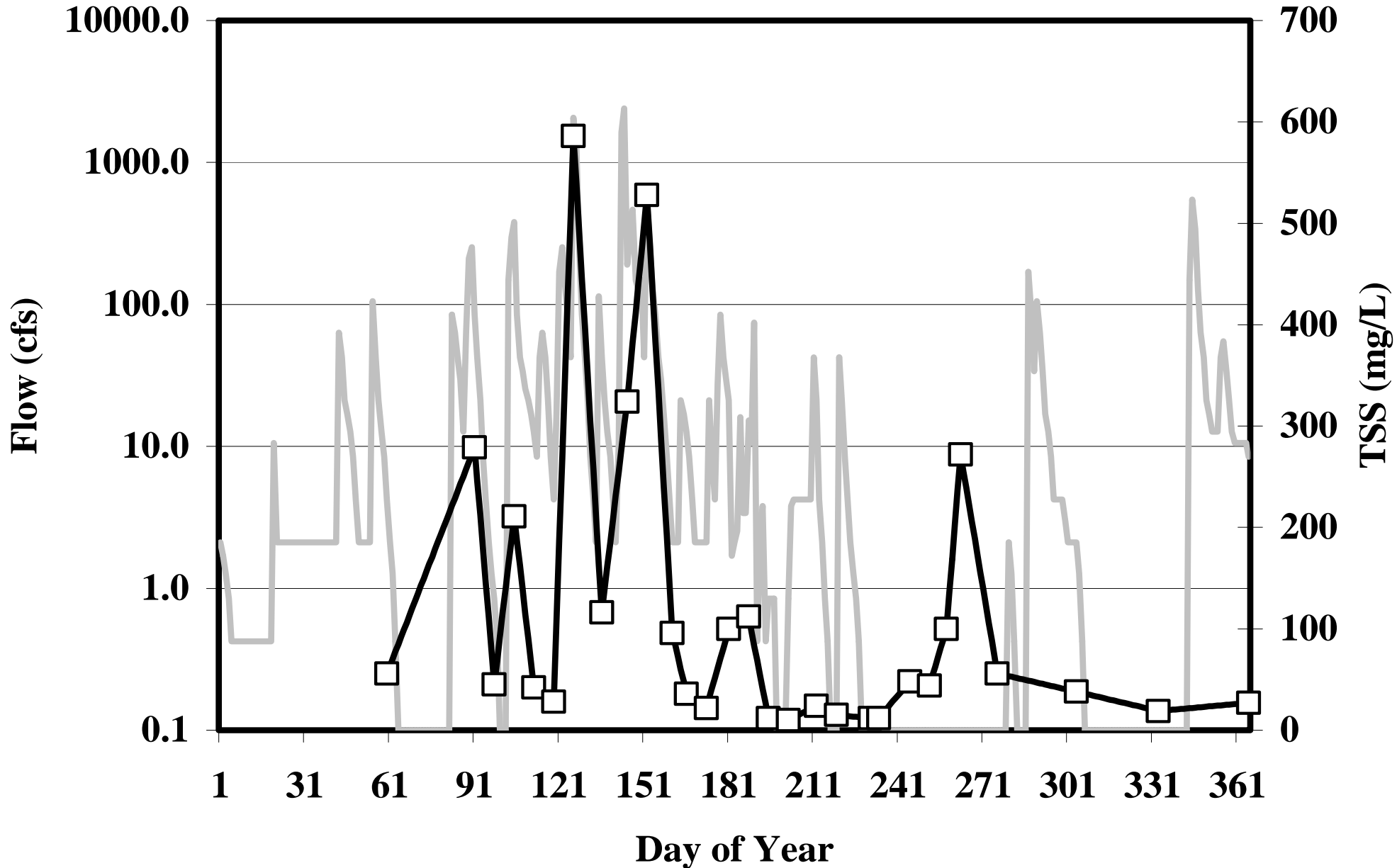
Extreme

● Monitoring Sites Events



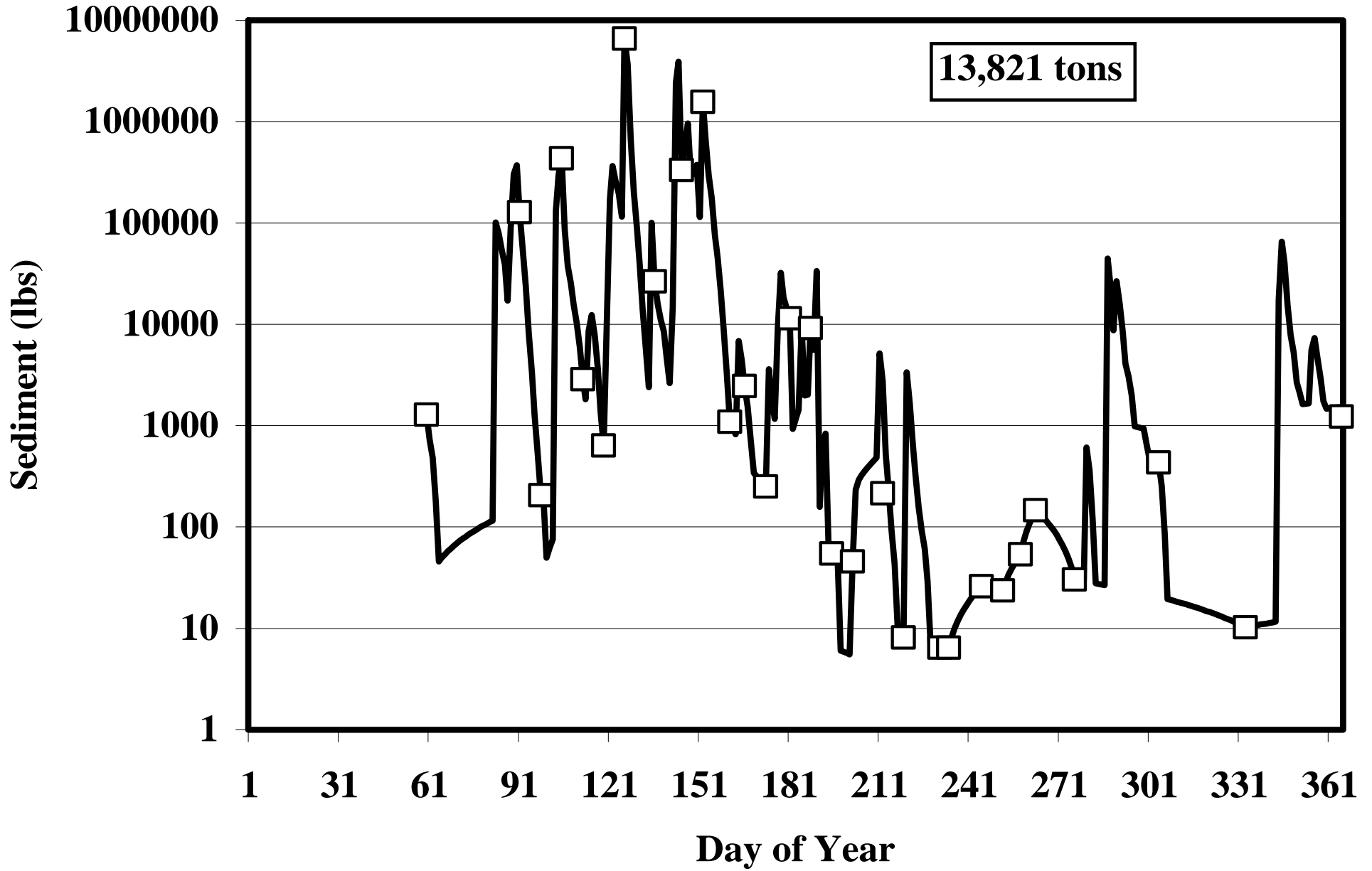
Data Sources:
 USDA-NRCS SSURGO Soils
 USDA-NRCS Field Office Technical Guide KS-25
 USGS 2001 National Land Cover Dataset
 USGS National Hydrography Dataset
 USGS 10 m Digital Elevation Model

Cottonwood River 2007

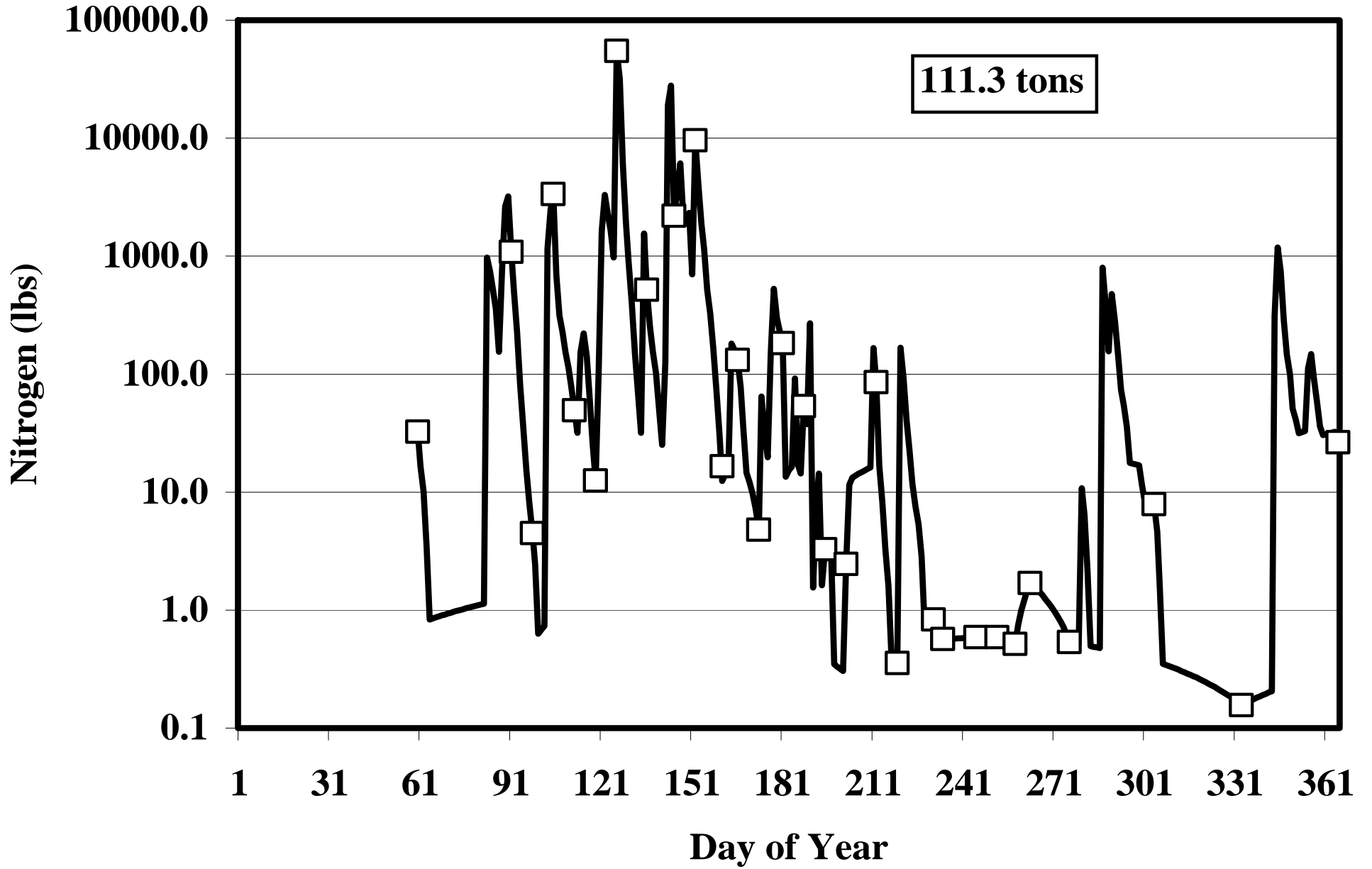


— Flow — Est. TSS □ Mea TSS

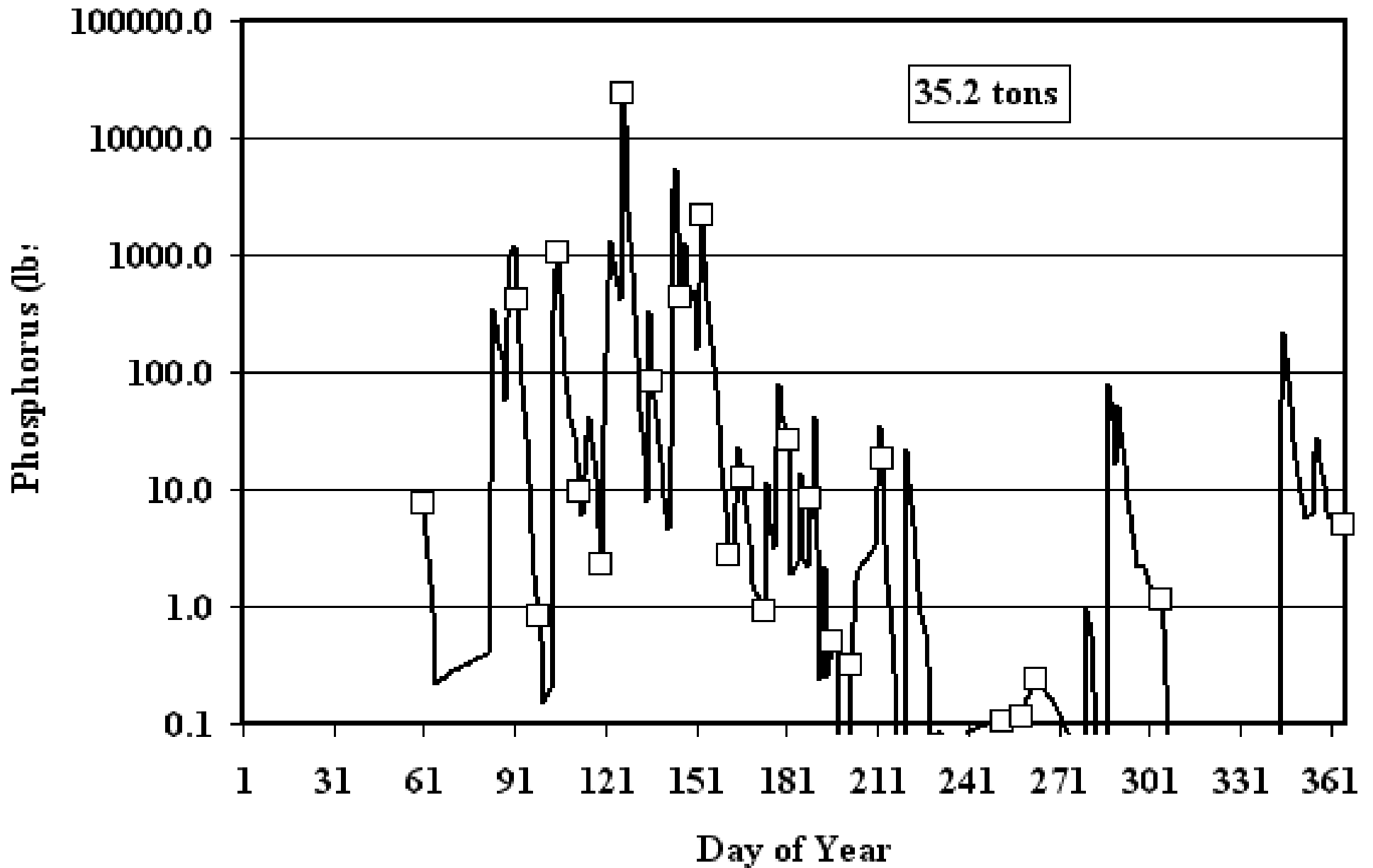
Cottonwood River 2007



Cottonwood River 2007



Cottonwood River 2007



Schematic of the artificial recharge process



Schematic of the artificial recharge process. (USGS, 2001)

RUSLE Revised Universal Soil Loss Equation

$$A=R.K.L.S.C.P$$

A=Average Soil Loss (Mg/ha) per year

K=Soil Erodibility Factor

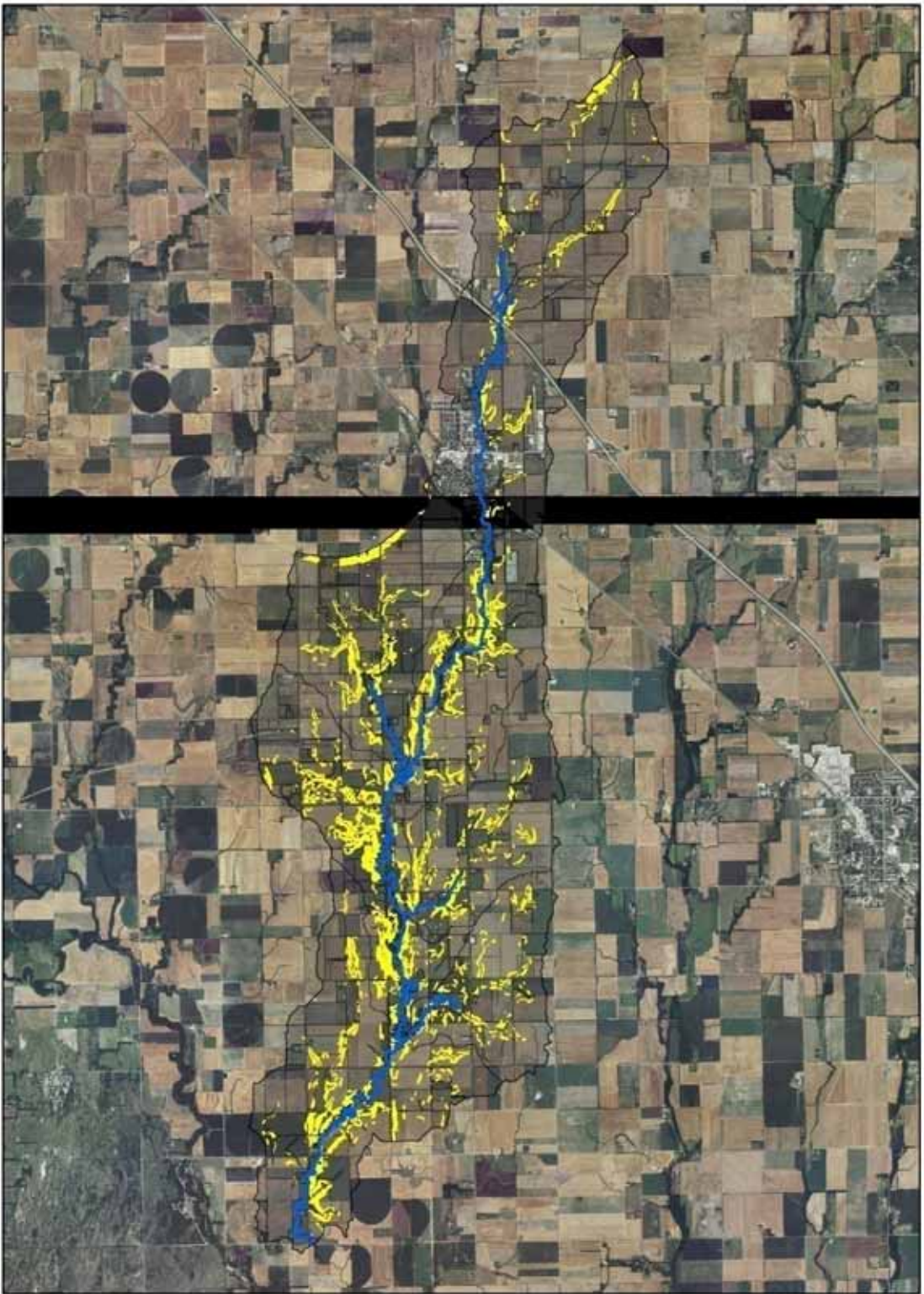
R=Rainfall Erosivity Factor(Mg h/MJ/mm)

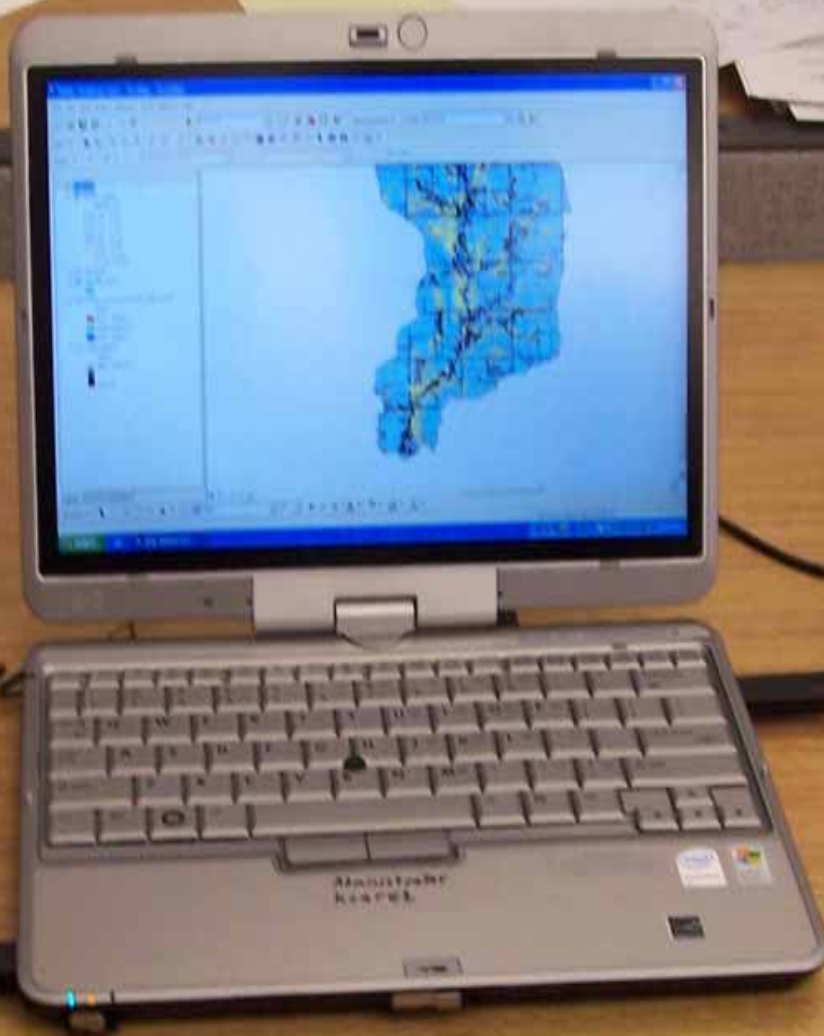
L=Slope Length Factor

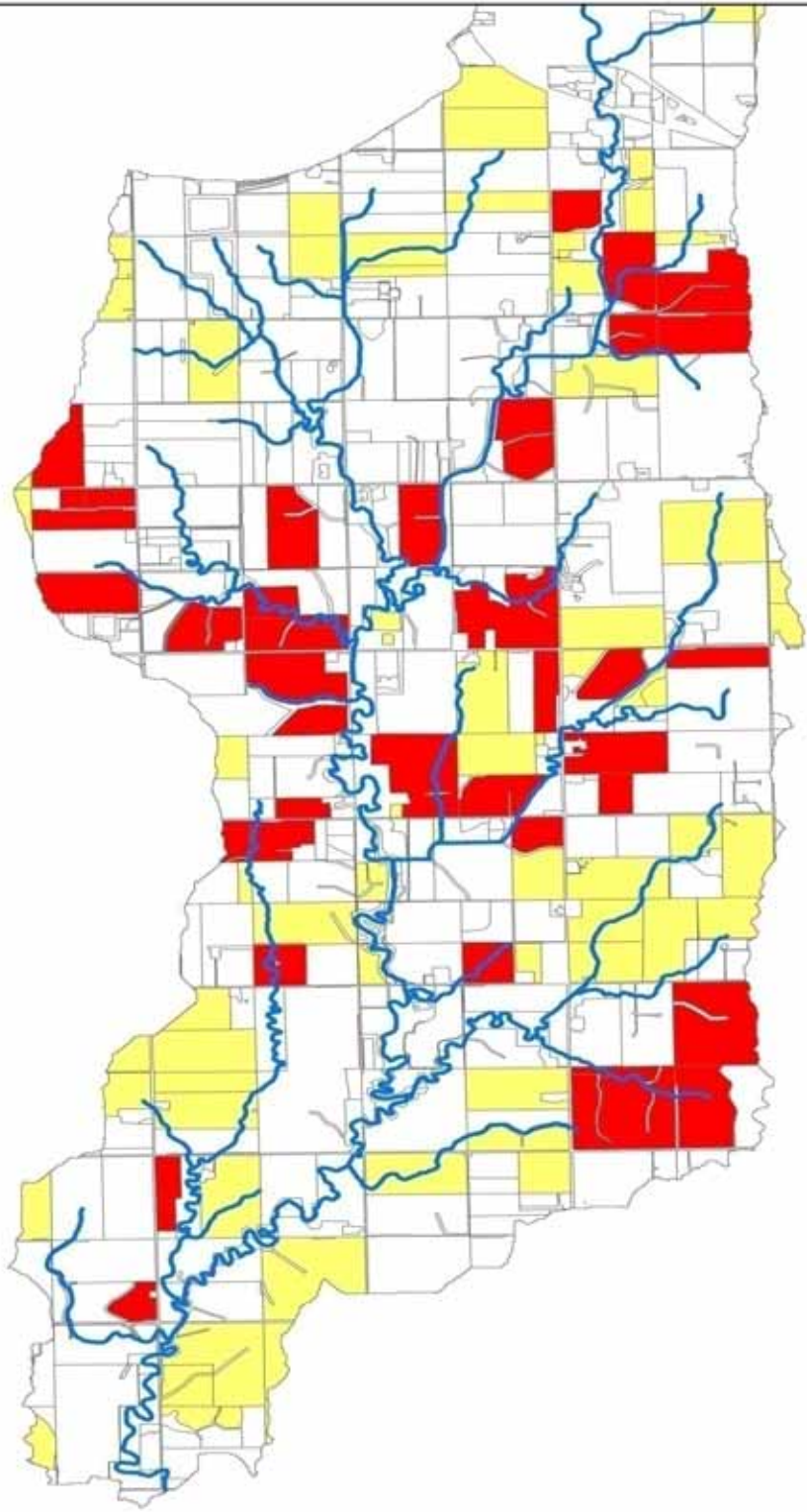
S=Slope Steepness Factor

C=Cover and Management Factor

P=Support Practice Factor







ACKNOWLEDGMENTS

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Questions?