

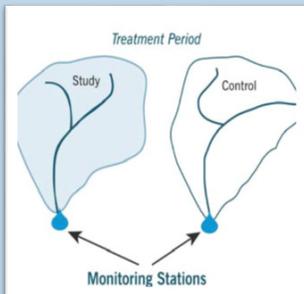
Agricultural Water Quality Monitoring Program

Measuring the effectiveness of voluntary soil and water conservation practices in Missouri.

Program Objectives and Outcomes

1. Evaluate the effectiveness of conservation practices.
2. Document benefit from investments in voluntary conservation.
3. Document grower's continual improvements.
4. Improve the performance of cropping systems in Missouri.

Conservation Practices



Water Quality Data

- Runoff flow/volume
- Sediment (TSS)
- Nitrate ($\text{NO}_2\text{-N} + \text{NO}_3\text{-N}$)
- Total Nitrogen (TKN)
- Total Phosphorus (TP)

Real Time/Continual Climate Data

- Wind speed and direction
- Precipitation
- Barometric pressure
- Temperature
- Relative humidity
- Solar radiation

17 monitoring stations in six counties

Case Studies

Livingston County Study

Crops: Continuous soybean
 Practice: Cover crops and tile drain terraces
 Control Area: No cover crop
 Study Area: Annual cover crop



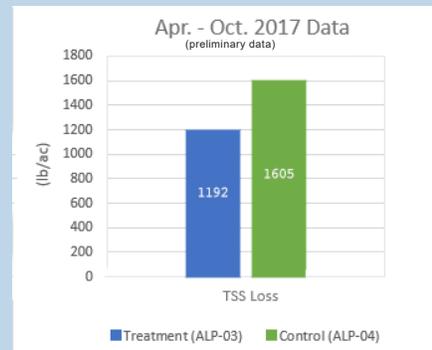
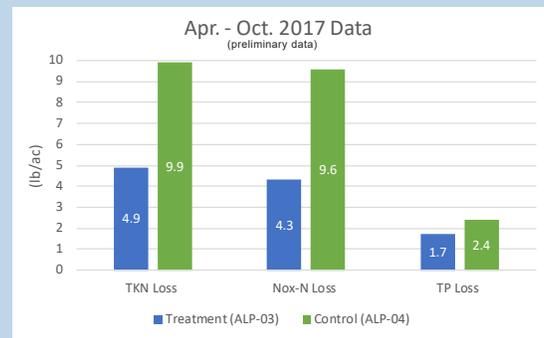
Marion County Study

Crops: Corn / soybean
 Practice: Cover crops and grass waterway
 Control Area: No soil conservation practice
 Study Area: Cover crop and grass waterway



Cooper County Study

Crops: Corn / soybean
 Practice: Terrace and grass waterway
 Control Area: In field at terrace outlet
 Study Area: In grass waterway



For more information please visit the Missouri Corn Growers Association website at mocorn.org/resources/water-quality.

Nothing in this document may be used to implement any enforcement action or levy any penalty unless promulgated by rule under chapter 536 or authorized by statute.

