Southern Agriculture BMPs

In Southern agricultural landscapes, a conducive climate, accessible groundwater, nutrient-rich alluvial sediments, and abundant, but variable rainfall allow a suite of row-crops to be cultivated (corn, soybeans, rice, cotton). These variables factor in when creating conservation practices to aid in resource stewardship of agricultural landscapes.

**CONTROLLED SURFACE DRAINAGE is the central tenet of conservation practices**

Reasons for controlled surface drainage:

**SURFACE DRAINAGE** = poor drainage of subsoils, and capping of soils during intense rain (there are no tile drains in southern landscapes)

**SEDIMENT LOSS** = no underlying bedrock geology, and fine particles results in the highest sediment loss rates in the United States

**NATURALLY HIGH PHOSPHORUS** = alluvial sediments are naturally high in phosphorus as is the groundwater

**Mississippi solutions for nutrient reductions:**

- Input management
- Edge-of-field
- Water Capture
- Drainage Ditch
Southern Agriculture BMPs

Keys to Nutrient Management in Southern Landscapes

Water Management

- Structural practices that increase water residence
- Water conservation

BMPs

- Structural practices that retain and slow the transport of sediment
- Effectiveness for nutrient concentration/load reductions
- Creating scaled management of BMPs

Scaled Management of Controlled Surface Drainage

Stovall Farm Example

- Pads and slotted pipes
- Low grade weirs
- On farm storage
- Tailwater recovery system