

St. Francis & Lee County Larkin Creek Sediment Prevention Demonstration Project 08-800



Patricia Perry, St. Francis County
Conservation District

Project Area

- L'Anguille River Watershed
- Lateral 1-A of Larkin Creek
- Western St. Francis & Lee Counties



END PROJECT
STA. 327+65.79

SFC 854

STA. 284+00

SFC 839

SEDIMENT POND

SFC 839

STA. 197+00

BRADSHAW ROAD

STATE HWY. 261

ST. FRANCIS CO
LEE CO

LEE CO. 803

ST. FRANCIS CO
LEE CO

STA. 44+50

BEGIN PROJECT
STA. 0+00

**LARKIN CREEK LATERAL 1-A
LOCATION MAP
SCALE: 1"=1/2 MILE**

LEE CO. 810



Problem: Sediment Loading









Flooding & Loss of Crops



Damage to Timber & Riparian Zone





Project Goals & Objectives

- Reduce Sediment Loading of Lateral 1-A
- Remove sediment from existing channel
- Restore channel to natural design
- Create protective riparian area
- Install filter strips along cropland areas

Restoration Design



Corps of Engineers Permit

- Nationwide Permit #27 – Aquatic Habitat Restoration
- Sediment removed from channel placed outside wetland areas
- A few spoil piles allowed to remain in wet area
- Damaged timber and wetland areas along channel reforested to bottomland hardwoods
- Sharp meanders planted to silt fences

Landowner Easements

- Landowners Along Channel Grant Easements
- Easement for Construction & Maintenance
- Easement Includes 180' Filter Strip
- Filter Strips Remain in Place Permanently



During the Past Year



- Area required specialized equipment
- Environmentally Sensitive
- Big Machine – Light Footprint



From Thisto This in 5 Months



Phase II

- Remove Spoil & Spread on Buffer Areas
- Tree Planting in Wetland Zone
- Demonstrations and Tours of the Project Area

Final Product

- Functional Drain for 8000 acres of cropland (6 linear miles)
- Forested Riparian area to stabilize banks, and provide wildlife habitat (315 ac)
- Permanent filter strips along cropland areas to diffuse runoff & filter out sediment (220 ac)





Long Term Maintenance

- Drainage District Taxation for Maintenance
- Annual Inspections
- Beaver Control
- Maintain Drainage Structures

Partners

- Landowners
- St. Francis County Conservation District
- Lee County Conservation District
- Lateral 1-A of Larkin Creek Drainage District
- Arkansas Natural Resources Commission & EPA 319 Program
- Ducks Unlimited
- Arkansas Game & Fish Commission
- Corp of Engineers

Costs

- \$800,000 in 319 Funds
- Over \$300,000 In-Kind Land Easements
- \$500,000 Tax Generated Dollars
- Total Cost = \$1,600,000

Results

- Protect Approximately 8,000 Acres of Cropland From Erosion & Flooding
- Restore Damaged Timber
- Protect Roads From Flooding
- Demonstrate Successful Conservation Practices
- Exemplify the Success of Partnerships & Secure Trust of Landowners

Watershed Work at the 12 Digit Level

- Mississippi River Basin Initiative
- Outlet Larkin Creek Watershed Project Selected
- 14,800 Acres with over 75% in Cropland
- Incentives for Cover Crops & Mulch Till
- 75% Cost Share for Erosion Control Practices

- To Date - \$1,800,000 in Applications
- Funds Paid - \$700,000

- Applications on over 7,800 acres

Phase II

- All Restoration Work in Phase I is Complete
- Drainage District Assumes all Responsibility for Phase II
- Drainage District Using SRF Loan
- Loan Paid with Funds Generated by Tax
- Tax Generates Money for Phase II and to Perform Long Term Maintenance

Conclusion

- Complex & Difficult Project
- Changing Economy – Soaring Expenses
- Working with Various Groups & Agencies

- Good Design
- Good Relationships
- The Right Contractor
- SUCCESS & Everyone is Happy.....almost

Questions

