MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

# Missouri's Targeted Watershed Projects

Using pilot programs, modeling, and alternative funding to further conservation goals in high priority areas

NASCA Annual Meeting
Oct, 28 2025
Fort Worth, Texas

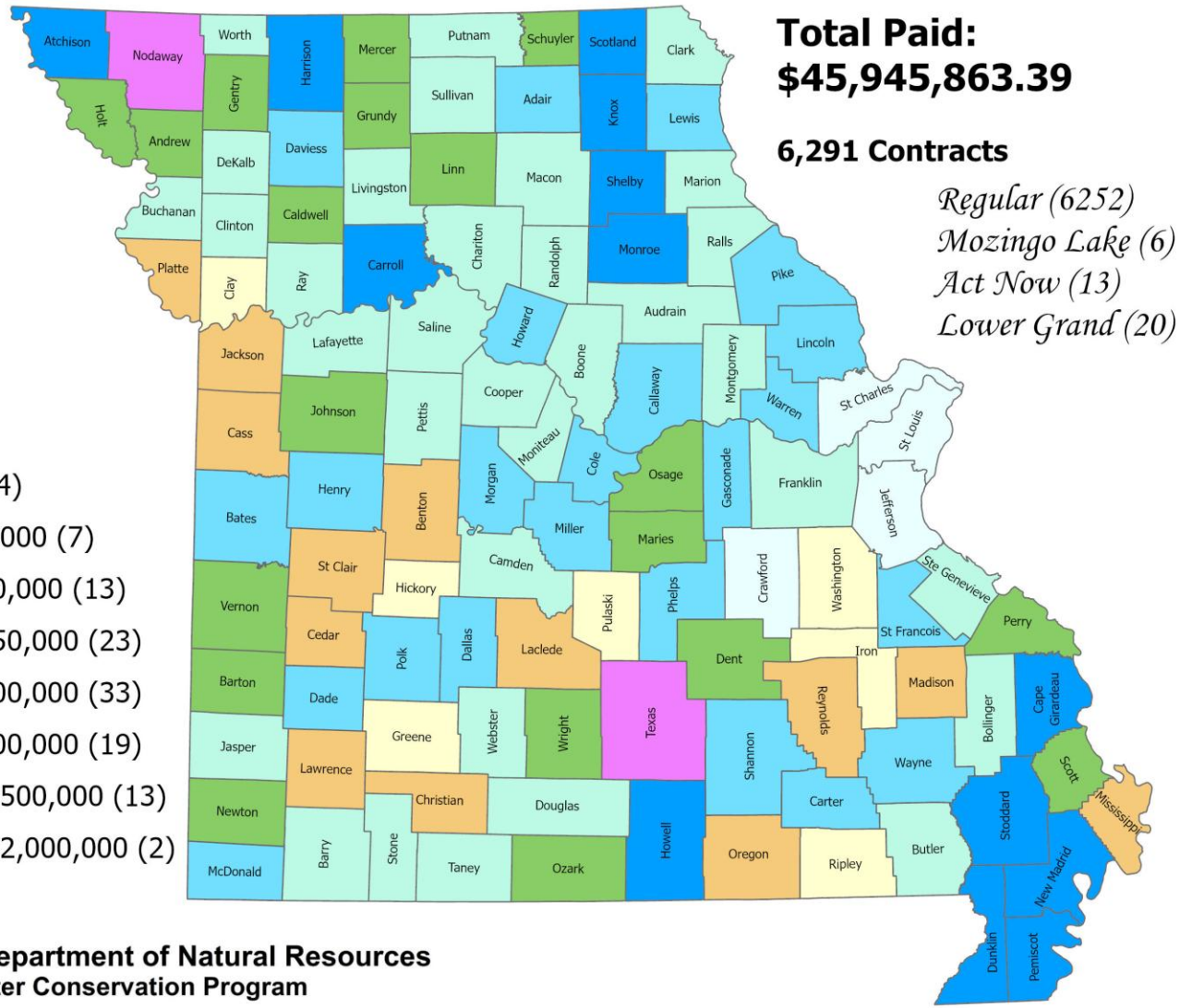
# Program Overview

- $50 million annual cost-share program
- 6,000+ contracts
- 55 available “practices”
- 114 SWCDs
- 65+ 8-digit, and nearly 2,000 12-digit HUCS
- Historically we only track tons of soil saved for practices in the SGE resource concern (29% of total available)
- Highly diverse state in terms of topography, soils, geology, agriculture, and associated water quality problems.

# FY25 FINAL Cost-Share Payments
# All Resource Concerns

*295,845 Acres Served*

*1,065,405 Tons of Soil Saved over Practice Life Span*




**Total Paid: $45,945,863.39**

**6,291 Contracts**

*Regular (6252)*
*Mozingo Lake (6)*
*Act Now (13)*
*Lower Grand (20)*

**YearlyTotal**

- $0 - $25,000 (4)
- $25,001 - $50,000 (7)
- $50,001 - $100,000 (13)
- $100,001 - $250,000 (23)
- $250,001 - $500,000 (33)
- $500,001 - $800,000 (19)
- $800,001 - $1,500,000 (13)
- $1,500,001 - $2,000,000 (2)

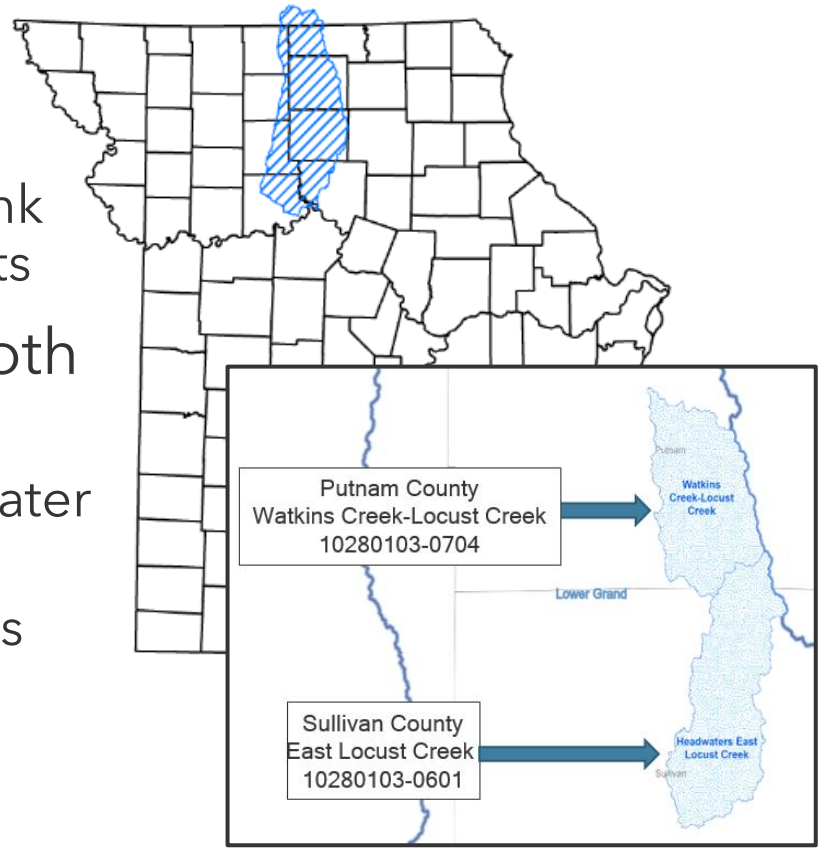
**Missouri Department of Natural Resources**
**Soil and Water Conservation Program**
07/16/2025

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# Lower Grand Targeted Cost-share Pilot

- Two HUC12 watersheds in northern Missouri were selected for a targeted cost-share pilot initiative
  - Selected streams are 303(d) listed with a long history of bank erosion, sedimentation, and nutrient/nonpoint contaminants
- Monitoring and modeling are being conducted for both chosen watersheds by USGS and Program Staff
  - Water-quality and hydrologic data from six USGS surface-water monitoring sites located in selected streams
  - Program staff modeling of nutrient and sediment reductions based on installed practices

Lower Grand Watershed




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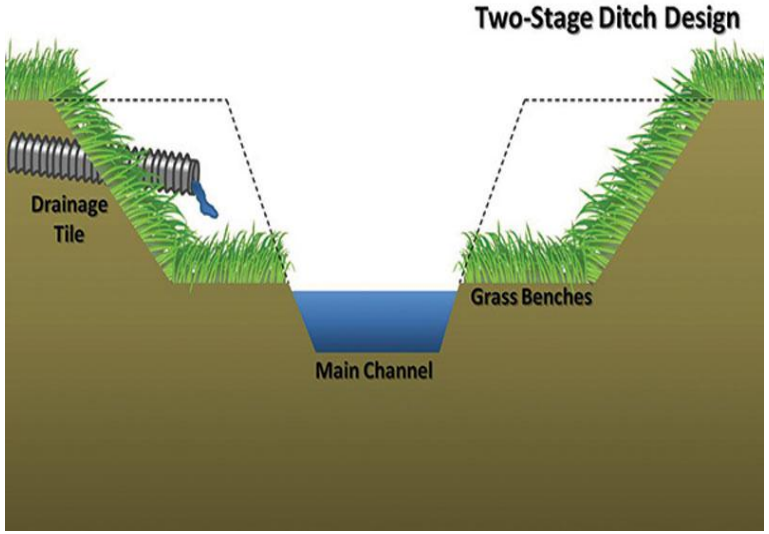
# Lower Grand Targeted Cost-share Pilot

- Practices offered at 90% cost-share
  - Promoting practices not conventionally utilized within the watershed
  - Selected practices that provide the most significant reductions of sediment and nutrients
  - Pilot began in September of FY24
  - Currently runs through the end of FY26
- Twenty-nine practices completed or currently in-progress for a total of $358,471
  - 13 - WQ10
  - 12 - DWC-01
  - 3 - N472
  - 1 - DSL-01

| Available Practices | |
|---|---|
| C650 | Streambank Stabilization |
| DSL-01 | Permanent Cover Establishment |
| DSL-11 | Permanent Cover - Critical Area |
| N386 | Field Border |
| N391 | Riparian Forest Buffer |
| N393 | Filter Strip |
| WQ10 | Stream Protection |
| DWC-01 | Water Impoundment Reservoir |
| N472 | Livestock Exclusion |
| N340 | Cover crop (lifetime max lifted) |

# Gulf Hypoxia

- Gulf Hypoxia Task Force Grant from EPA
  - Two Stage Ditch
    - Southeast MO
    - Evaluate water quality benefits and ditch stabilization
  - Filter strips and field borders
    - Lower Grand Watershed – Northcentral MO
    - Adjustment to OPI to increase utilization
  - Blind inlets for terrace systems statewide
    - Additionally doing a research project with Mizzou on water quality benefits and costs






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# NLR Modeling

- The SWCP invested in a position focused on NLR modeling with the goals of:
  - Better communicating the benefits of the PSWST
  - Determine the best, most efficient practices for a given scenario
  - Support the states Nutrient Loss Reduction Strategy
- Cost-share conservation practices are modeled to determine potential water quality benefits of these practices beyond the soil savings currently tracked
  - EPA's PLET model
- Purpose is to provide CALCULATED estimates of reduction in the following:
  - Nitrogen
  - Phosphorus
  - Sediment
  - Biological Oxygen Demand (BOD)
- Focused first on Targeted Project Watersheds (HUC 12)

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# Compilation of Previous Modeling performed

| Type of practice | N Reduction (lbs/year) AVERAGE PER ACRE | P Reduction (lbs/year) AVERAGE PER ACRE | Sediment Reduction (tons/year) AVERAGE PER ACRE | 2014-2024 C-S # Contracts | 2014-2024 Acres served | N Reduction (lbs/year) STATEWIDE (based on per acre FY2014-2024) | P Reduction (lbs/year) STATEWIDE (based on per acre FY2014-2024) | Sediment Reduction (tons/year) STATEWIDE (based on per acre FY2014-2024) |
|---|---|---|---|---|---|---|---|---|
| Cover Crop Total | 5.22 | 1.38 | 0.50 | 21,922 | 1,400,040 | 7,310,620.8 | 1,928,393.3 | 693,393.1 |
| DSL-01 Total | 1.06 | 0.07 | 0.00 | 4,379 | 113,851 | 120,226.8 | 7,481.6 | - |
| DSL-11 Total | 1.93 | 0.33 | 0.11 | 296 | 550 | 1,060.6 | 180.7 | 62.8 |
| DSP-02/DSL-02 Total | 1.43 | 0.09 | 0.00 | 1,757 | 49,610 | 71,168.2 | 4,420.4 | - |
| Fld Border Total | 6.10 | 1.35 | 0.47 | 160 | 6,872 | 41,922.3 | 9,272.1 | 3,257.3 |
| N410 Total | 3.08 | 0.73 | 0.24 | 4,057 | 223,067 | 687,788.4 | 163,244.1 | 54,414.7 |
| N472 Total | 8.01 | 1.47 | 0.53 | 2,324 | 62,917 | 504,210.8 | 92,408.8 | 33,564.9 |
| Pond Total | 3.62 | 0.57 | 0.21 | 2,784 | 53,084 | 192,243.3 | 30,123.2 | 11,251.0 |
| Terrace Total | 3.50 | 1.04 | 0.39 | 9,760 | 166,111 | 580,559.1 | 172,313.4 | 64,585.7 |
| WASCoB Total | 6.20 | 0.94 | 0.30 | 2,878 | 33,922 | 210,217.1 | 31,814.2 | 10,030.8 |
| Waterway Total | 2.98 | 0.87 | 0.32 | 3,635 | 120,322 | 358,419.8 | 104,338.9 | 38,471.5 |
| WQ10 (Use Excl + Stream Protect) Total | 5.85 | 0.69 | 0.30 | 964 | 8,135 | 47,577.3 | 5,600.0 | 2,408.2 |
| **Grand Total** | **234.08** | **61.76** | **0.47** | **54,916** | **2,238,481** | **10,126,014.4** | **2,549,590.8** | **911,440.1** |

# Questions?

More Information:

https://dnr.mo.gov/land-geology/soil-water-conservation

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