



**MISSOURI**  
DEPARTMENT OF  
NATURAL RESOURCES

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# C650 Streambank Stabilization and WQ10 Stream Protection

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Jake Wilson  
MASWCD Training Conference  
Nov. 28, 2018

# Streams in Missouri

- Missouri has 115,000 miles of streams
- 66 unique watersheds



# Current Utilization

- WQ10 Stream Protection
  - 972 contracts paid since 2007
  - 2,472,371 feet of stream excluded (St. Joseph to Cape Girardeau)
  - 10,018 acres of buffer
  - \$9,890,067.69
    - 161 miles of pipeline
    - 644 miles of fence
    - 1,406 alternative watering points



# 2016 Resolution

- In November 2016 the MASWCD passed a resolution urging the commission to further address streambank erosion in MO
  - “**Whereas**, the Soil and Water Conservation Districts Commission can identify the austerly of streambank erosion through the account of aerial photography, landowner input, farm visits and stream tours.”
  - “**Therefore, be it resolved:** that MASWCD urge the Missouri Soil and Water Commission to identify the character of erosion in Missouri Counties and assess the areas in which they are experiencing the greatest amount of soil erosion and depositing of sediment directly into the waters of the state through severe streambank erosion.

# Current Utilization Cont.

- **C650 Regular Cost-share**
  - 16 practices completed since 2009
  - 75% of cost = \$220,136
  - \$73,724.05 in cost-share paid
  - **Averages**
    - \$13,000 per practice
    - \$4,600 paid per practice = 33% cost-share
      - These projects include no design/engineering costs.

# Lower Loutre, Montgomery County



# Lower Loutre, Montgomery County



# Bourbeuse River, Gasconade County



Before



After

May 30, 2017





# Former C650 Policy

- A district must work with the Missouri Department of Conservation (MDC) and NRCS staff to determine eligibility and whether technical assistance can be provided.
  - Partners have other priorities or unable to provide the necessary technical assistance in the form of design/engineering work.

# Former C650 Policy

- **Maximum State Cost-Share**
  1. Not to exceed \$5,000 per landowner and/or farm.
    - Average project cost is \$13,000

# Former C650 Policy

## ***Cost-share is authorized for:***

- a. Components necessary for cedar tree revetments, rock riprap, and bioengineering materials.
  - Do not have good cost data for these, i.e. rootwads, biodegradable erosion control fabric, live branch layering.
  - Bioengineering and/or natural channel design have seen very limited implementation within the state and therefore are not “proven” techniques in the eyes of some.

# NRD funded projects

- Increased limit to \$25,000.
- Using private sector technical partners.
- Increased cost-share percent.
- Using bioengineering/natural channel design where possible.

# NRD funded projects

- 15 contracts completed.
- Some using Bioengineering/Natural Channel Design.
- Others using rock weirs and stone toe protection.
- Allowing cost-share on some of the design/engineering cost.

# NRD funded projects

- C650 NRD
  - 3,584 feet stabilized
  - \$265,011 in cost share paid @90%
  - 75% = \$223,659



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# Black River, Reynolds County



# Brock Creek, Washington County





# Where We Are Now

- Regular cost -share policy amended at September 2018 commission meeting.
  - Practice Maximum \$25,000 annually
- The technical determination and oversight of the practice was changed to include a SWCD engineer and Missouri Licensed Professional Engineer in addition to NRCS and MDC staff.

# Where We Are Now

- If a landowner hires an engineer to design and oversee a project, cost-share assistance can be provided for the engineering assistance not-to-exceed \$5,000.



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# Questions?

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