



# STREAMBANK STABILIZATION

**Kansas Department of Agriculture, Division of Conservation**

Kristin Kloft, Riparian & Wetlands Program Manager

# Large Streambank Stabilization Projects

Governed by an Inter-Agency Streamteam consisting of KS Dept of Health & Environment, KS Water Office, Kansas Forest Service and KS Dept of Agriculture.

Currently focused on reducing sedimentation in Tuttle Creek, Perry and John Redmond reservoirs.

“Hotspots” are ranked based on the amount of sediment they are contributing annually.

The inter-agency streamteam selects sites based on ranking, landowner interest, project cost, etc.

KS Dept of Agriculture then puts the projects out for bid and supervises the construction of the stabilization projects.

# Interactive Kansas Streambank Assessment Map

- <https://ksdot.maps.arcgis.com/apps/webappviewer/index.html?id=7a6d137e497b40a7aa2c846d3daf0261>

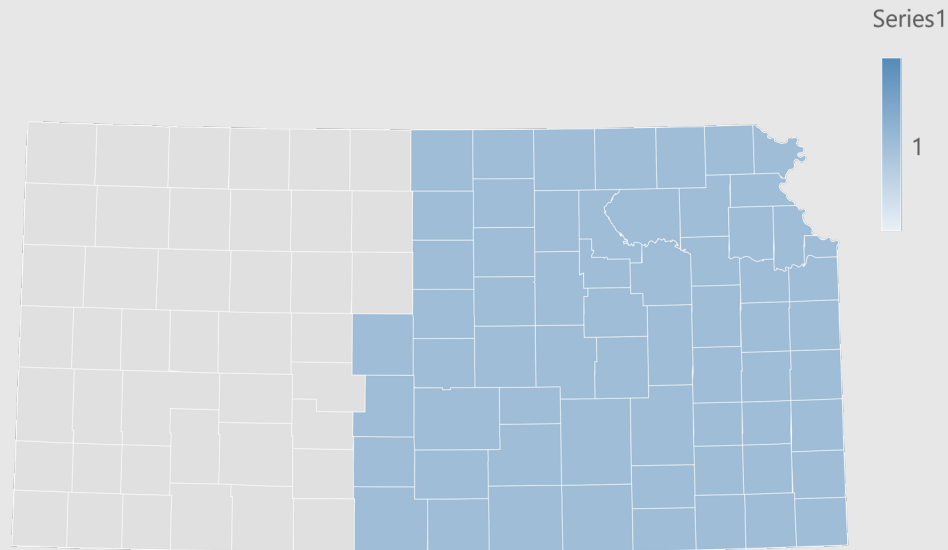


# Woody Revetment Monitoring in the Upper Lower Smoky River Watershed

- Research was done by Kari Bigham, KSU in conjunction with KDHE/Upper Smoky WRAPS on the effectiveness of using woody revetments to stabilize streambanks along the Smoky Hill River.
- Six streambank stabilization projects were installed in 2015 and 2016 then monitored until 2020.
- Deciduous trees, cable with duck bill anchors and bank sloping were used on the sites.
- Sites were monitored over several years and compared to other control sites.
- Both prolonged releases from Kanopolis Lake and flooding in 2019 produced elevated erosive conditions.
- Several stabilization sites failed to hold the sandy soil banks.
- More research is needed to design stabilization structures that may be more successful in these conditions.
- There is currently renewed interest in performing more streambank stabilization work in the area.

# Riparian Quality Enhancement Initiative (RQEI) 80% Cost Share up to \$10,000

RQEI ELIGIBLE COUNTIES



- Counties within the Solomon-Republican RAC area:
- Jewell
- Republic
- Cloud
- Clay
- Mitchell

# RQEI Small Stream Stabilization Projects Pilot Project Status Only



RQEI is a Division of Conservation program that works closely with the Kansas Forest Service to implement various conservation projects focusing on improving riparian areas.



Small stream stabilization projects has been a primary focus of RQEI this past year.



DOC cost shared on two small stream projects this past summer and are currently working on a third small stream project.



DOC is working in partnership with Kansas Forest Service to develop design templates to aide landowners in providing cost effective solutions to their eroding small streambank issues.

# Site Selection Parameters

Streams with less than 100 CFS annual mean flow

Limit project size to under 500 feet in length

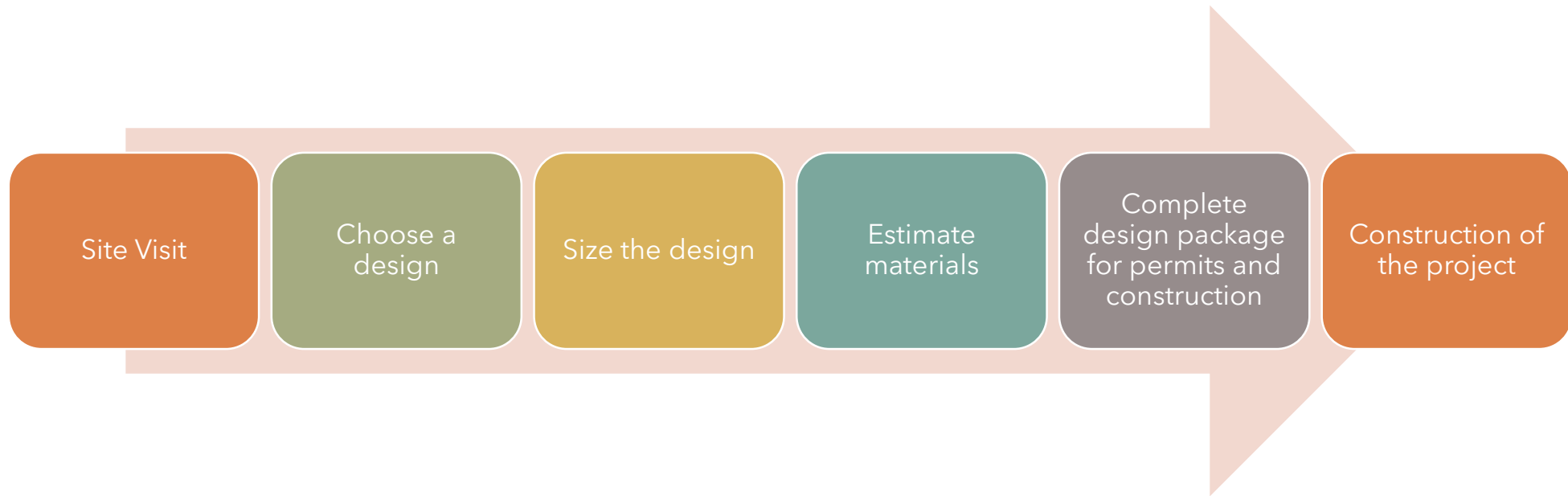
Banks of 15 feet in height or less

Stream water depth or no more than 6 feet

Availability of suitable woody materials on site

# Steps of the Process

For Demonstration Purposes Only  
(Not ready for applications yet)





# Washington County Project

**Eroding stream bank along field edge**



**Post streambank stabilization project**

