

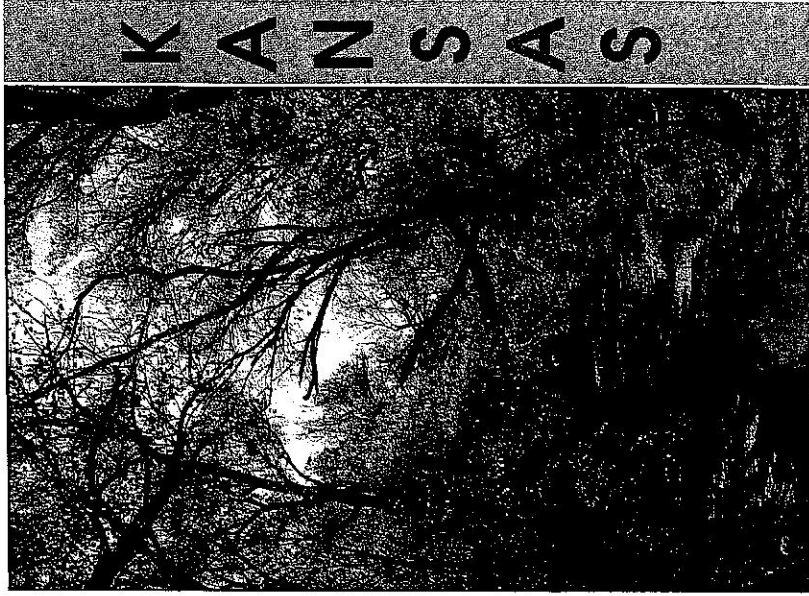
WRAP AGENCIES

- *Kansas Biological Society
- *Kansas Department of Health & Environment
- *Kansas Department of Wildlife & Parks
- *Kansas State University
 - *Department of Landscape Architecture
 - *Department of Regional Community Planning
 - *State and Extension Forestry
- *Kansas Water Office
- *State Board of Agriculture
- *State Conservation Commission
- *U.S. Army Corps of Engineers
- *U.S. Department of Agriculture,
 - *Soil Conservation Service
- *U.S. Department of Interior
 - *Fish & Wildlife Service
- *U.S. Environmental Protection Agency

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RIPARIAN AREA



MANAGEMENT



Equal opportunity to participate in and benefit from programs described herein is available to all individuals without regard to their race, color, religion, national origin or ancestry, sex, age, sexual preference, mental or physical handicap or disability status, or political affiliation. Complaints of discrimination should be sent to the Office of the Secretary, Kansas Department of Wildlife and Parks, 900 Jackson St., Suite 502, Topeka, KS 66612 or to the Department of Interior, 1849 C. St., N.W., Washington, D.C., 20240.

RIPARIAN AREA MANAGEMENT

"Riparian" refers to the banks of streams and rivers. Riparian areas include the stream bank and part of the adjoining floodplain. The wet and fertile soils of riparian areas support lush plant communities. These characteristics distinguish riparian areas from drier uplands.

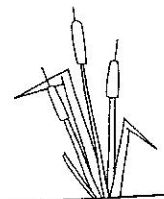
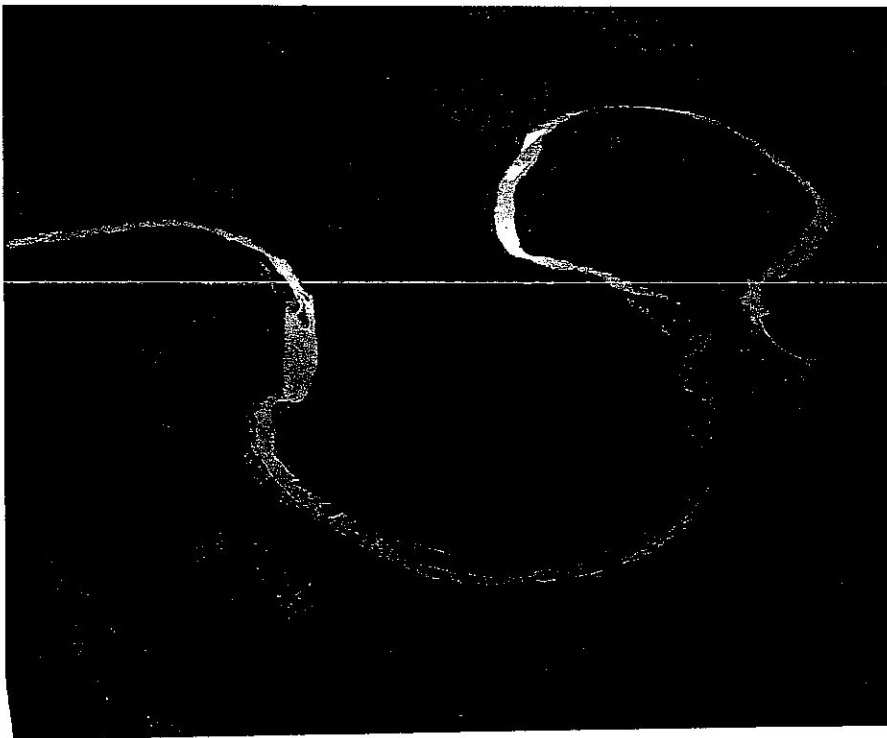
Riparian areas are valuable components of the total natural resource picture. Understanding

them and how they function has led to a greater appreciation of the benefits they provide. These include *economic benefits* by reducing flood damage, filtering pollutants, controlling soil erosion, and supplying wood products; *ecological values* by supplying habitat for many plants and animals; and *social benefits* by way of open spaces that support recreation and aesthetic appreciation.

Interest in Kansas' riparian areas extends beyond the state's borders. Riparian areas safeguard water quality for downstream states. They serve as important migration corridors and provide breeding habitat for many species of birds and other animals.

Many government agencies are interested and involved in riparian area management because of the variety of benefits they provide. In addition, private organizations play an active role in riparian area conservation.

The Wetland and Riparian Area Project (WRAP) was developed to help coordinate state wetland and riparian area programs and promote public awareness of these valuable areas. A goal of WRAP is to provide a foundation for interagency cooperation and public education for the conservation of riparian areas in Kansas.



RIPARIAN AREA BENEFITS

WATER QUALITY BENEFITS

One of the most important benefits of healthy riparian areas is clean water. Located between uplands and water, riparian areas serve as filters for silt, chemicals, and other pollutants. The lush vegetation of riparian areas slow run-off waters allowing suspended particles to settle out. Many riparian plants have extensive roots that stabilize stream banks and thereby prevent soil erosion.

WATER QUANTITY BENEFITS

Riparian areas can have a dramatic effect on regional water quantity. Well vegetated riparian areas slow flood water when streams

overflow their banks. Oxbows and other wetlands situated in these areas, store flood waters and then slowly release them. This decreases flooding and helps maintain consistent stream flow during dry periods.

ECONOMIC BENEFITS

Timber is often the first economic product people associate with riparian areas. Properly managed riparian woodlands can provide a sustained income from wood products. Wet meadows along streams can be used for livestock pasture or hay production. If carefully managed, such uses are compatible with good

riparian zone management, and produce direct economic gains for landowners.

The aesthetic benefits of riparian areas are an important, yet often overlooked, economic value. Property values are higher near open scenic areas. Riparian greenways increase the value and marketability of adjoining lands.

BIOLOGICAL BENEFITS

Riparian areas are important to many animals and plants. In Kansas, such areas provide some of the last remnants of native areas for wild animals and plants. Riparian corridors allow wildlife to travel freely across the Kansas landscape. Fish benefit from the shade, food, and cover provided by overhanging vegetation along stream banks. A wide variety of unique flowers and trees are found only in riparian areas.



RIPARIAN AREAS IN KANSAS

Riparian areas are divided into four categories based on the type of vegetation present. These categories follow the natural progression of open grassland (meadows) filling in with shrubs (shrubland), then scattered trees (woodland), and finally dense stands of larger trees (forest).

RIPARIAN MEADOW Riparian meadows have plant communities dominated by grasses such as foxtail, prairie cordgrass, and switchgrass. Wildflowers also may be common. Bulrushes, cattail, and spikerush occur in wetter areas. Shrubs and trees are sparse or absent.



RIPARIAN SHRUBLAND Riparian shrublands are dominated by shorter shrubby vegetation such as sandbar willow, salt cedar, and dogwood. These natural riparian areas have few or no tall trees because of soils, climate, or flood conditions.

RIPARIAN WOODLANDS These areas are in the transition between grassland or shrubland, and forest. They have plant communities consisting of grasses, shrubs, and scattered trees. Other names include savanna, woodlot, and orchard.



RIPARIAN FOREST Forests grow along most streams in eastern Kansas and along many streams in western Kansas. The kinds of trees that grow in riparian areas differ across the state, but common species are cottonwood, ash, sycamore, silver maple, black walnut, and willow. Shrubs, vines, grasses, and wildflowers also are present in riparian forests.



MANAGING RIPARIAN AREAS

The best management option for many riparian areas that have not been greatly disturbed is to leave them alone. Riparian areas that are wide and have stable banks only need to be protected. Riparian areas that have been damaged by cropping, overgrazing, or stream channelization should be restored and carefully managed. With proper management, riparian forest areas can provide valuable wood products, without diminishing other benefits.

REPLANTING VEGETATION

In areas where the vegetation has been cleared or overgrazed, it may be beneficial to re-establish the vegetation that was destroyed. It is important to consider what kind of plants naturally occurred at the location. A site that once supported a wet meadow may not support



trees. Advice on whether to replant an area, what species to plant, and when to do the planting is readily available from the contacts listed in this pamphlet.

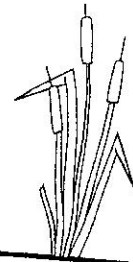
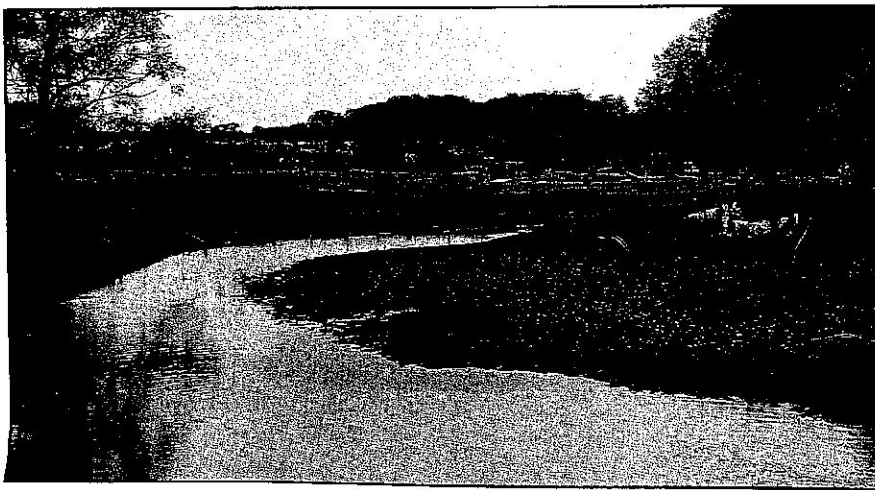
STABILIZING STREAM BANKS

Stable stream banks generally ensure a quality stream and greater riparian area benefits. One way to stabilize a damaged stream bank is to plant live willow posts into the bank. They will sprout, grow roots, and help support the bank. Another

method is to use cut cedar trees to deflect water away from eroding banks, allowing natural re-vegetation to occur.

FENCING

Some riparian meadows and shrublands may produce high-quality forage. These areas can be used for pasture, if properly managed. Land managers must prevent livestock from causing erosion. Forested riparian areas with little ground cover are particularly prone to livestock induced erosion. Erosion can be minimized by fencing livestock out of areas that have steep banks and only allowing them access to the stream where the banks are more gently sloped. Recently planted areas should be fenced until they are well established.



WHERE DO I GET HELP?

COUNTY CONSERVATION DISTRICTS

Each county has its own district office. The county conservation districts administer the state Riparian and Wetland Protection Program. Each conservation district develops a plan to protect and restore riparian and wetland areas. Cost-share assistance to Kansas landowners is available for long-term conservation practices, such as tree planting, critical area planting, and fencing.

STATE AND EXTENSION FORESTRY

State Office
2610 Claflin Road
Manhattan, Kansas 66502
Phone: 913-537-7050
State and Extension

Forestry provides technical and financial assistance to landowners for management of forested riparian areas. The program focuses on

proper management and water quality improvement, erosion reduction, and other benefits that riparian forests can provide. Assistance is also provided in planning tree and shrub planting.

KANSAS DEPARTMENT OF WILDLIFE AND PARKS

Route 2, Box 54A
Pratt, Kansas 67124
Phone: 316-672-5911

Wildlife and Parks helps landowners improve wildlife habitat on their lands. Funds are available for grass seed, forb seed, trees, and shrubs. Field staff provide technical assistance, and sometimes labor and equipment.

Landowners can voluntarily enroll their riparian areas into Wildlife and Parks conservation easements.

Easements can be short-term or perpetual arrangements.

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

Nonpoint Source Section
Forbes Field, Bldg. 740

Topeka, Kansas 66620
Phone: 913-296-5573

Health and Environment provides public information and technical assistance in using vegetative management and land management practices to protect water resources from nonpoint source pollution. Information on evaluating and designating riparian corridors is available.

U.S. FISH AND WILDLIFE SERVICE

Kansas State Office
315 Houston St., Suite E.
Manhattan, Kansas 66502
Phone: 913-539-3474

OR

Flint Hills NWR,
P.O. Box 128
Hartford, Kansas 66854
Phone: 316-392-5553

The USFWS Partners for Wildlife program is designed to provide landowners with opportunities to restore, enhance, or create wetlands and riparian areas at minimal cost. Technical advice and partial payment for construction is provided. Recommendations are made for enhancing habitats. Information is

supplied to the public on natural resources.

U.S. SOIL CONSERVATION SERVICE

760 S. Broadway
Salina, Kansas 67401
Phone: 913-823-4569

The Soil Conservation Service provides technical assistance to land users who develop and apply soil and water conservation plans. These plans offer land users alternatives that enhance riparian and wetland areas. Financial assistance may be available from USDA ASCS.

ACKNOWLEDGMENT

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