

US EPA ARCHIVE DOCUMENT

Marais des Cygnes Basin, KS and MO



Watershed education activities at Hillsdale Reservoir.



The basin forester works with landowners to maintain healthy riparian areas.

Photo courtesy Marais des Cygnes Riparian Forestry Project.



Cattle with unlimited access to streams will be addressed through Best Management Practices.

Photo courtesy Marais des Cygnes Livestock Project.

Kansas Department of Health and Environment

The Watershed

The Marais des Cygnes watershed, located near Kansas City in the Osage Plains, spans the border of Kansas and Missouri. Three major rivers—the Marais des Cygnes, the Marmaton, and the Little Osage—drain the watershed. This flat to gently rolling unglaciated prairie plain is characterized by increasing development that is expanding outward from Kansas City. Growing recreational demands, municipal needs, and intense agricultural production, including feed grain production, grazing, and confined animal feeding operations, threaten water quality. The watershed supports 11 federally listed threatened and endangered species, including the American Burying Beetle, Bald Eagle, Least Tern, Piping Plover and Whooping Crane. The Marais des Cygnes Wildlife Area and the Marais des Cygnes National Wildlife Refuge lie within the basin. Truman Lake Reservoir, an outlet for the basin, was completed 27 years ago.

Issues

The Truman Lake Reservoir suffers from eutrophication, excessive biomass, and excess sediment. Streams in the basin are impaired by low dissolved oxygen, nutrient loading and fecal coliform bacteria. Suspected sources of impairments include livestock, waste treatment systems, agricultural land, and stormwater runoff.

Project Activities

The Kansas Department of Health and Environment, in partnership with the Kansas-Missouri Marais des Cygnes Watershed Interstate Cooperative will address the water quality impairments through several innovative strategies.

- **Market-based Reverse Auctions for Livestock Producers:**

Livestock producers will submit bids to the state to implement Best Management Practices on their land. The producer who can offer water quality improvements at the lowest price is contracted with first. Additionally, field sign ups will be offered for some conservation practices, such as the conversion of cropland to buffer strips, so producers do not have to visit a state office to sign up.



Marias des Cygnes Watershed

Project Partners:

- **Lake Region Resource Conservation and Development, Inc.**
- **Osage Valley Resource Conservation and Development, Inc.**
- **Hillsdale Water Quality Project, Inc.**
13 County Conservation Districts
- **Kansas State University**
- **Marais des Cygnes Riparian Forestry Management Committee**
- **University of Missouri Extension Water Quality Program**
- **Army Corps of Engineers**
- **Kaysinger Basin Regional Planning Commission**
- **Missouri Department of Natural Resources**
- **Marais des Cygnes, Marmaton and Little Osage Rivers Citizens Watershed Committee**

Leveraged Resources:

EPA Grant: \$900,000

Match in non-federal funds and in-kind services: \$300,000

- **Cost-Share Programs for Best Management Practices (BMPs) to Reduce Nutrients and Sediments:** Several cost-share programs will be implemented to reduce sedimentation and nutrient loading, including the installation of riparian buffers, restoration of forested riparian areas, plantings of specialty forest products in riparian areas, and stream-bank stabilization.
- **Septic System Cost-Share Program:** Septic system cost-share opportunities will be implemented to reduce bacterial contamination.
- **Education and Outreach:** The Kansas-Missouri Marais des Cygnes Watershed Interstate Cooperative will also hold training seminars to educate landowners and conduct field demonstrations of BMPs.



EPA's Targeted Watersheds Grant program is a competitive grant program designed to encourage collaborative, community-driven approaches to meet clean water goals.

For more information about the selected watersheds, please visit:
<http://www.epa.gov/twg>

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www.kdheks.gov/nps/index.html