## Other plans in the works

Yates Center is working closely with the Woodson County Conservation District to implement a Nonpoint Source (NPS) Pollution Control Plan. Implementation of the NPS Pollution Control Plan will provide additional assurance that the watershed will continue to deliver good quality runoff to the lake.

An Emergency Preparedness Plan also is being developed to ensure that proper containment actions are taken in the event of an unexpected spill of contaminants.

Through acting together at the beginning of the lake's life, the Yates Center and Woodson County communities have cooperatively developed a water supply protection plan that benefits their community now and will have long term benefits for the future.

## For more information about watershed protection options or if you have questions about the Yates Center City Lake Watershed Protection Program please contact:

- City of Yates Center — (316) 625-2118.
- Woodson County Conservation District, Nonpoint Source Coordinator — 704 South Fry, Yates Center, KS 66783-1612. (316) 625-3292.
- See-Kan Resource Conservation and Development Office—Rt. 2, Box 293-A, Chanute, KS, 66720. (316) 431-6180.
- KDHE, Division of Environment, Bureau of Water, Nonpoint Source Section—Bldg. 283, Forbes Field, Topeka, KS 66620. (785) 296-4195.
- National Watershed Network, Know Your Watershed, CTIC — 1220 Potter Drive, Room 170, West Lafayette, IN 47906. (317) 494-9555

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**Prepared by KDHE in cooperation with**
**Kansas State University**
**Agricultural Experiment Station**
**and Cooperative Extension Service**

MF-2330 March 1998



File code: Environment and Polution Control-9 MS3-98—200

PROTECT DRINKING WATER
EMPOWERING LOCAL DECISION MAKERS
IN KANSAS

# Protecting Water Supplies

## YATES CENTER CITY LAKE

K-STATE
Kansas State University

## A TOOL TO HELP ASSURE QUALITY OF LIFE IN LOCAL COMMUNITIES

## Yates Center Lake shows local planning can result in clean water

The Yates Center City Lake project is an example of how cooperative efforts between city and county officials and private landowners can result in long-term protection of public water supplies.

A dam, built in 1989, created the Yates Center City Lake to provide the town's public water supply. Located in the tallgrass prairie of southeastern Kansas, agriculture is the most important activity for this rural community of less that 2,000 people.

Government agencies that cooperated to make the dam possible urged Yates Center and Woodson County to establish a protection plan that would accomplish two goals: 1) manage highly polluting activities such as residential developments, and 2) reduce the 1991 level of pollutant production.

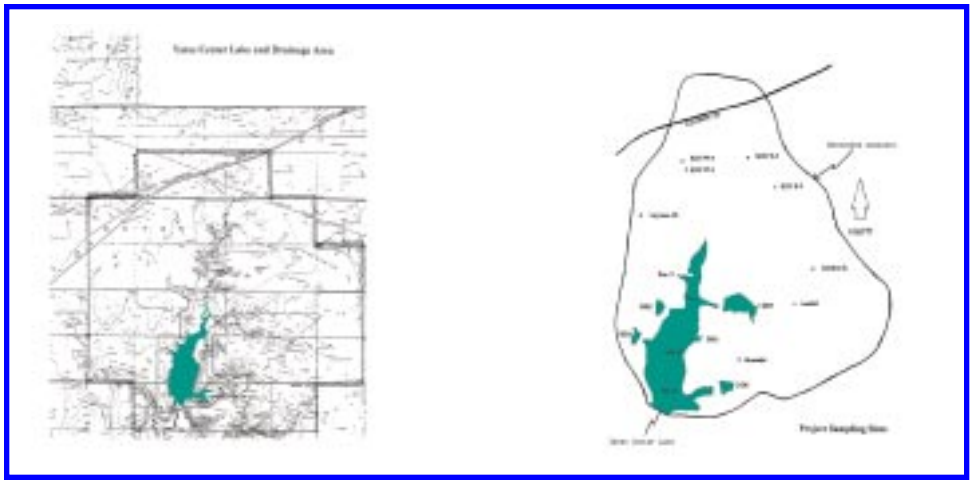
In 1991, all interested parties conferred at a public meeting to discuss water quality goals for the lake. Topics included water quality monitoring, roads, hazardous spill control, recreational activities, urban development, and agricultural land use. This was the beginning of a 3½ year Watershed Protection Demonstration Project to protect the lake's water quality.

The management plan is preventive. To ensure long-term protection, the city and county implemented measures to prevent land uses in the watershed from being converted to uses that may have a higher pollution potential.

## Grazing styles evaluated

Most of the land around the lake is privately owned grassland used for livestock grazing. Resource managers wanted to determine if varying grazing management styles and beef production activities would impact the quality of runoff from the upland pastures that enters the lake.

Runoff samples were collected from upland pasture sites, detention ponds in the watershed, and from within the lake to evaluate these impacts and form a long-term protection plan. The samples were tested for such water quality parameters as dissolved oxygen, phosphorus, and nitrate.



Results show that Yates Center Lake has excellent water quality and that detention dams have been highly effective in collecting sediment before it enters the lake. The data also indicated that good quality runoff water is obtained from well managed grassland.

In looking at recreational activities, results of water quality monitoring indicated that recreational uses are having an acceptable level of effect on the lake at this time.

Overall, results indicate that as long as the lake continues to receive good quality runoff and the land remains in the present agricultural use, water quality should not decline.

## Zoning ordinance developed

To make sure the Yates Center Lake continues to enjoy improved water quality, the parties developed a Model Zoning Ordinance. In this ordinance, they agreed on long-term acceptable management practices that would benefit the lake.

For example the ordinance includes special requirements for onsite wastewater systems in the watershed. This will help ensure that wastewater is properly managed and the potential for pollutants is minimized.

This successful strategy is directed toward voluntary landowner acceptance of a conservation easement designed to discourage future developments such as housing, feedlots, and landfills, that have a higher pollution potential. Instead, it encourages continued managed livestock grazing.