Regional Conservation Partnership Program (RCPP) - Interstate

Middle and Lower Neosho River Basin RCPP Project

Addressing Water Quality Issues

Partners:

- Natural Resources Conservation Service
- Oklahoma Conservation Commission
- Grand River Dam Authority
- Kansas Department of Agriculture
- Kansas Department of Health and Environment
- Middle Neosho Watershed Restoration and Protection Strategy (WRAPS) Program
- Kansas State University
- Kansas Forest Service
- Craig, Delaware, and Ottawa County Conservation Districts in Oklahoma
- Cherokee, Labette, and Neosho County Conservation Districts in Kansas

Grand Lake is one of OK's premier reservoirs, providing a large region with necessary water supply, flood water retention, electrical power generation, and recreation. The lake has been formally listed for multiple water quality impairments over the years. Within the past three years, the lake has manifested particular problems from blue-green algae blooms in 2011 to bacteria outbreaks at swim beaches in 2014.

Both OK and KS have been working independently to address these issues but until now have lacked resources to develop a significant, cooperative implementation effort. Both states have identified subwatersheds in the Neosho basin (Figure 2) that appear to contribute significantly to water quality problems.

Partners in the Middle and Lower Neosho River Basin RCPP will work with landowners in these watershed to install conservation measures (Figure 3) that reduce delivery of pollutants (nutrients, sediment, bacteria) contributing to problems in the lake.

Each state will work cooperatively with other partners to conduct water quality monitoring to measure the effectiveness of program actions in reducing water pollution delivered to the lake.

A total of $8.1 million is projected to be spent by partners through 2020, generating a potential for 1-2 times this in impact to the local economy through installation of conservation measures.

Figure 1. Blue-green algae bloom in Grand Lake, June 2011.

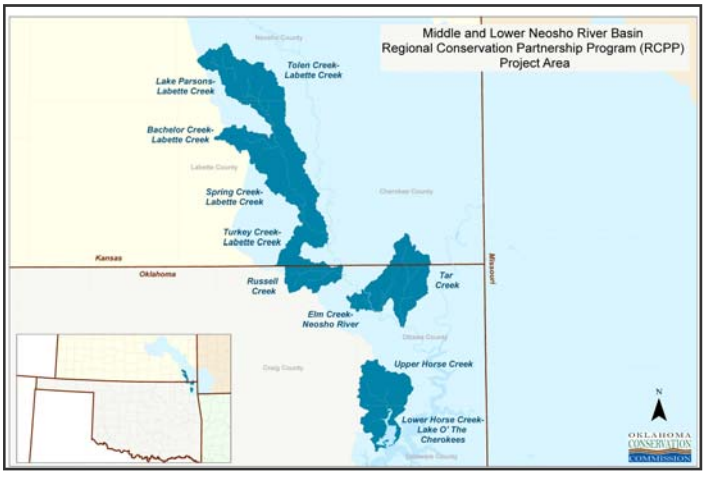

Figure 2. Middle and Lower Neosho River Basin RCPP Project watersheds.

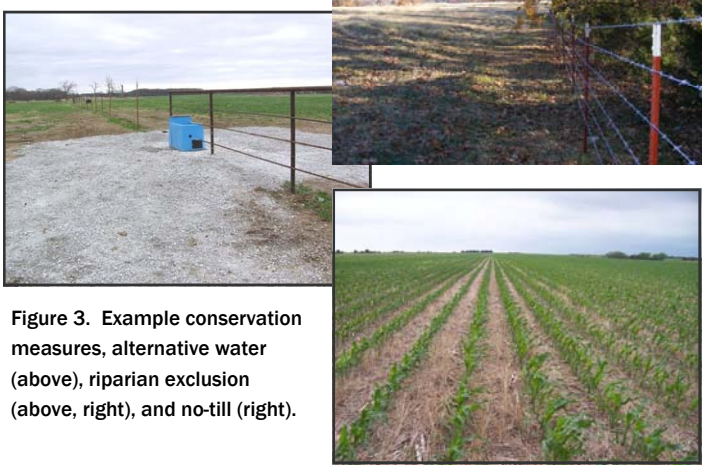

Figure 3. Example conservation measures, alternative water (above), riparian exclusion (above, right), and no-till (right).