



USDA-CSREES 2006 National Water Quality Conference

[Measuring Success of a TMDL Implementation Plan: Land, Stream, and Economic Responses to Targeted Stakeholder Actions](#)

Over 20,000 individual river segments, lakes, and estuaries in the U.S. do not meet designated uses. The Clean Water Act requires states to develop total maximum daily loads (TMDLs) that describe the impairment(s) for each water body and set a course of action for remediation. However, success stories for the process of TMDL planning, development, implementation, and evaluation are rare and appear to require new strategies for integrating collaborative partnerships and technical guidance. This project proposes to demonstrate a model collaboration leading to effective TMDL implementation.

Our test watershed is the Little Arkansas River watershed located in central Kansas. This watershed provides drinking water to 205 public water suppliers, recreational and aquatic life habitat, ground water recharge as well as irrigation, livestock and industrial uses. During 2005, five sub-watersheds were instrumented to collect water quality samples and measure flow rate to calculate contaminate daily loading. During 2006, three of the sub-watersheds will have best management practices (bmps) implemented while the remaining two will use existing farm practices. A watershed extension specialist will work with individual farmers to implement bmps.

Author: Philip Barnes

Coauthor(s): D. L. Devlin, K. R. Mankin, T. Keane, and M. R. Langemeir