

IMPROVING OUR STATE'S WATER QUALITY

Issue Statement

Water quality conditions within Kansas affect users at local, regional, and national scales. To minimize negative social, economic, and environmental impacts resulting from poor water quality, a primary goal of the State Water Plan is the protection and improvement of the quality of waters of the State.

Importance

The availability of high quality water for commercial, industrial and residential uses is significant for the water users of Kansas. Activities to further protect and improve the water quality of Kansas to avoid degradation of the State's water resources are imperative for current and future water users. As water quality conditions degrade within a water body, use of water from that source as well as downstream uses can be negatively impacted. Negative impacts from degrading/poor water quality conditions include but are not limited to:

- Increased costs to treat and/or acquire water to meet public water supply needs for commercial, industrial, and residential users (example: elevated nitrate)
- Decreased yields for agricultural producers in support of crop and livestock production (example: salt accumulation on cropland, algal byproducts harmful to livestock)
- Decreased recreational opportunities (example: harmful algal blooms/bacteria)
- Fish consumption advisories/warnings for fish from impairments such as PCB's, mercury, or perchlorate
- Diminished biological diversity in streams and lakes (example: fish kills)

Needs to be Addressed to Meet Goal

In order to most efficiently and effectively improve the water quality of Kansas, implementation of best management practices (BMPs) to reduce nutrients, sediment, and bacteria concentrations of surface water bodies needs to occur within identified targeted or priority areas of the state. The following items are the highest priority needs to be addressed to improve the water quality of the state:

- Participation by pollution sources to address point and nonpoint source pollutant loading of the waters of Kansas

- Programs which decrease pollutant loading to water bodies from point and nonpoint source pollution through appropriate controls and management

Other needs to be addressed in support of improving the water quality of Kansas include the following:

- Determination of acceptable concentrations of water quality parameters in lakes and streams to support designated uses
- Water quality monitoring data to evaluate water bodies in relation to acceptable standards of water quality
- Evaluation techniques to determine point and nonpoint source load contributions to water quality conditions observed in water bodies
- Evaluation techniques to determine the necessary reductions in point and nonpoint source load contributions which negatively impact water body designated uses
- Evaluation of data to determine the effectiveness of point and nonpoint source reduction strategies

Overall Approach to Address Needs

Any approach to improve the water quality of Kansas must first satisfy the current statutory and regulatory framework present in the State. This includes administration of the Kansas Water Resources Planning Act, the Clean Water Act (CWA), the Resource Conservation and Recovery Act of 1976 (RCRA), the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), the Superfund Amendments and Reauthorization Act of 1986, and the Safe Drinking Water Act (SDWA).

Implementation of the Kansas Nutrient Reduction Strategy shall be a key element in working towards improved water quality for the waters of the State. Components of the Kansas Nutrient Reduction Strategy shall include continued work to facilitate implementation of BMPs for non-point source pollution control via programs such as Watershed Restoration and Protection Strategies (WRAPS) and Kansas Department of Agriculture – Division of Conservation financial incentive programs as well as leveraging other outside funding sources to promote establishment of BMPs. BMP implementation shall also occur within targeted areas outlined within WRAPS 9-Element watershed plans and within the sixteen Hydrologic Unit Code (HUC) 8-level watersheds which have been identified by the Kansas Department of Health and Environment (KDHE) as watersheds which nutrient-reduction efforts should be focused in support of the Kansas Nutrient Reduction Strategy. Point source pollution sources shall continue to be ad-

dressed through National Pollutant Discharge Elimination System (NPDES) permitting as well as wastewater, stormwater, and large confined livestock feeding operation control. Continued development of water quality standards for the state and administration of the Total Maximum Daily Load (TMDL) program at KDHE shall also carry on in support of implementation of the Kansas Nutrient Reduction Strategy.

Efforts to improve the water quality of Kansas must also include continued work on source water protection, groundwater remediation, and oil/gas production. Focus on these areas as well as those previously mentioned in this section provides the framework to help minimize negative social, economic, and environmental impacts incurred as a result of poor water quality, thus improving the quality of waters of the State.

Improvements in surface water quality monitoring and assessment activities within Kansas can also play a significant role in better characterizing overall water quality conditions of the state as well as guide targeted BMP implementation on a watershed scale. Recommendations to improve monitoring and assessment activities within Kansas through 2015 are noted on pages v-vi within the Executive Summary of the *Kansas Water Quality Monitoring and Assessment Strategy, 2011-2015*.