## WATER ISSUES IN THE KANSAS CENTRAL PLAINS

Clark Duffy
Assistant Director
Kansas Water Office
Topeka, Kansas
Voice: 785-296-3185 Fax: 785-296-0878

Email: cduffy@kwo.state.ks.us

The Kansas Water Office/Kansas Water Authority is the water planning, policy, and coordination agency for the State of Kansas. It prepares a state plan of water resources development, management, and conservation, reviews all water laws, and makes recommendations to the Governor and Legislature for new or amendatory legislation.

The Kansas Water Office, in cooperation with several other agencies that have water related responsibilities, prepared the state's first comprehensive plan for the management, conservation and development of Kansas' water and related land resources in 1984. The *Kansas Water Plan*, is updated annually and provides the framework for addressing the state's water problems, issues and concerns.

The Kansas Water Plan also includes plans for each of the 12 major river basins in Kansas. Basin planning is a 3-step process that: (1) Identifies the priority water problems in each of the river basins; (2) Selects state programs that can address those problems and; (3) Recommends proposed guidelines for the operation of those programs.

This paper will highlight the recent state water planning activities of the Kansas Water Office and focus on key water issues in the major river basins that include the Kansas Central Plains.

#### **A VISION FOR 2010**

In November 1997 Governor Bill Graves sponsored "The Water 2010: A Kansas Water Plan Vision Summit." This Vision Summit solicited input from interested parties to determine the direction the Kansas Water Plan and the priorities it should address by the year 2010. The Vision Summit affirmed the value of the state water planning process and the key role of public participation within the process.

On January 23, 1998 a "Report on Recommended Direction of Activities Under the *Kansas Water Plan*" was submitted to the Kansas Legislature. This report summarized the input received from the Vision Summit and presented preliminary goals for the *Kansas Water Plan* for the year 2010.

The information in this report served as the framework for development of the Kansas Water Plan Objectives. These objectives were developed to define targets to quantify achievements of the Kansas Water Plan long-range goals contained in K.S.A. 82a-927. These objectives will be used as guidance: for development of measurable objectives for each basin; for a review of the Kansas Water Plan to identify and clarify priority issues; and for evaluation of the condition of the water resources of the state and evaluation of the effectiveness of water programs. Objectives may periodically be revised through the state water planning process as new information becomes available in future years.

The following *Kansas Water Plan* objectives were approved on October 30, 1998, after extensive public input.

## **Public Water Supply**

- By 2010, ensure that sufficient surface water storage is available to meet projected year 2040 public water supply needs.
- By 2010, over 95 percent of public water suppliers dependent upon surface water supplies and alluvial aquifers shall have a source of supply sufficient to meet their needs during a drought having a 2 percent chance of occurrence.
- By 2010, ensure that all public water suppliers have adequate water treatment, storage and distribution systems and the managerial, operational and financial capability to meet Safe Drinking Water Act regulations.

## **Water Conservation**

- By 2010, reduce the number of public water suppliers with excessive "unaccounted for" water by first targeting those with 30 percent or more.
- By 2010, reduce the number of irrigation points of diversion for which the
  acre feet per acre (AF/A) water use exceeds the respective regional AF/A
  standard (1.0 AF/A in eastern Kansas, 1.5 AF/A in central Kansas, 2.0
  AF/A in western Kansas) and those that overpump the amount authorized
  by their water rights.

## **Water Right Management**

 By 2010, reduce water level decline rates within the Ogallala Aquifer and implement enhanced water management in targeted areas.

## **Water Quality Protection**

 By 2010, significantly increase the percentage of stream miles and lake acres as recommended by the basin advisory committees which fully support their designated uses as identified in the Kansas Surface Water Quality Standards.

#### **Water Quality Remediation**

 By 2010, significantly reduce the percentage of monitoring network wells (all networks) contaminated by nitrate, chlorides, sulfates or volatile organic chemicals caused by human activity.

## **Flood Management**

 By 2010, reduce the risk of damage from floods within identified priority communities or areas.

# **Wetland and Riparian Management**

 By 2010, maintain, enhance or restore priority wetlands and riparian areas.

#### **Recreation**

By 2010, increase recreational opportunities at public lakes and streams.

#### **Data and Research**

 By 2010, target data collection, research projects, and information sharing activities to address specific water resource issues as identified in the Kansas water planning process and to support and guide state water resource program operations.

#### **Public Information and Education**

- By 2010, focus public information dissemination activities to provide current and reliable information on the status of water resources in Kansas.
- By 2010, provide educational activities to ensure that all Kansans have the knowledge necessary to understand the hydrologic cycle and to have an appreciation for demands and influences upon the state's water resources.

#### **KANSAS WATER PLANNING ACTIVITIES FOR FY 2000**

The following are key State Water Plan activities for FY 2000. The focus for these activities occurred as a result of the Governors' Vision Summit.

# **Comprehensive Review of Policy Sections**

A review of all policy sections of the *Kansas Water Plan* will be initiated. The *Kansas Water Plan* Objectives will serve as guidance to identify and clarify priority issues in the existing water plan. This effort should result in a better understanding of the *Kansas Water Plan* and the actions necessary to implement the plan.

## Comprehensive Review of Basin Sections

A review of all 12 basin sections will be initiated. The *Kansas Water Plan* Objectives will serve as guidance to basin advisory committees in the development of basin specific objectives. The Basin Plan will then be reviewed for the identification and clarification of priority issues. This action should result in a better understanding of the priority issues in the basin and the actions necessary to address those issues through the state water planning process.

## **Development of an Evaluation Subsection**

A subsection within the Management Section of the *Kansas Water Plan* will be developed to establish the protocol and methodology for evaluation of the condition of the water resources of the state and evaluation of state water programs. The *Kansas Water Plan* Objectives will serve as guidance for the development of this section. The outcome of this effort should result in a periodic report on the condition of the water resources of the state and the condition of water within each basin. It is anticipated that evaluation of specific water programs would be conducted as a part of the existing Kansas budget process for each state agency.

## **Determine Priority Water Issues**

The 1997 Vision Summit resulted in a long list of water issues which need to be addressed by the state. These issues are:

#### **Agriculture**

- Agriculture's emphasis must be on water conservation
- As a result of the 1996 Farm Bill, the increased focus should be on developing management practices.
- Kansas must avoid divisions (East/West, Urban/Rural) and litigation.
- Farmers must consider diversification and de-intensification.
- Education is extremely important especially as it relates to best farm practices.
- More research needs to be completed before determining which policy options to take.
- Research should also address cost/benefits of proposed policies.
- Local and regional solutions are preferable to state and federal regulations.
- Incentives work better than regulations.
- Dispense with "use it or lose it" water rights.

#### Public Water Supply

- Attention must be given to modern economics and management practices to insure safe drinking water.
- Banking of water rights and surface water storage are important management concepts.
- Needs of improvements in rural water districts far outstrip the available money.
- Reclamation and reuse of water using technology to reclaim wastewater needs to be considered as an alternative supply.
- Desalination of marginal water (Dakota Aquifer) and the use of "gray" water should also be considered as water source alternatives.
- Water supply storage alternatives, transportation alternatives, treated water pricing policies, the use of water demonstration projects, and conservation alternatives need to be developed.
- Mismatches of water needs and availability should be resolvable through a process that redistributes or reallocates water rights to those in need of greater water supply allocations from those holding excess allocations.

#### **Economic Development**

- The need to build a consensus even though this consensus may be difficult to erect.
- More regulation on water use will not be successful unless it is supported by economic incentives.
- Eliminate the "use it or lose it" regulations.
- Determine the role of water quality in economic development.
- Educate the public.
- Emphasize returning water to systems in good condition.

#### **Environmental Protection**

- Non-point pollution will continue to be one of the most serious pollution problems.
- Future water plan must provide comprehensive and long-term (25 to 100 years) strategies to effectively address non point source pollution.
- Education about water issues is an extremely important task if we are going to resolve many of the water issues.
- Accurate data and information analysis is important in creating water policies.
- The best policymaking and enforcement will likely come from local, state, and federal agencies equally.
- Legal structures, non-point pollution, and the need for a consensus on policy direction were the most frequently discussed issues.
- Even though the water summit was a good start at forming a consensus about water issues, more consensus building and goal setting is needed.

Each of these issues will be further analyzed as a part of the review of the *Kansas Water Plan*. This should result in the identification of priority water issues which need to be addressed through the state water planning process in future planning cycles.

## Potential New Subsection on Water Quality

The highest priority issue identified at the Vision Summit is related to water quality. The Kansas Department of Health and Environment is currently developing a "continuing planning process" as required by the Clean Water Act. The Kansas Water Office and Kansas Department of Health and Environment will work on a collaborative effort to ensure the public fully participates in the implementation of the requirements of the Clean Water Act, including water quality standards, designated uses, total maximum daily loads and revisions to the State Water Quality Management Plan. This effort may result in the development of a policy subsection of the *Kansas Water Plan*.

## Potential Subsection on Public Water Supplies

The Vision Summit identified a number of interrelated issues regarding public water supplies. The Kansas Water Office has almost completed water demand projections to the year 2040 for all public water suppliers in the state. In addition, a pilot regional strategy as developed for the area in south central Kansas. The Kansas Water Office will complete an analysis to determine if existing state policies and programs are sufficient to comprehensively address the issues. This outcome may result in the development of a subsection of the Management Section of the *Kansas Water Plan* on public water supply issues.

# Implementation of Public Education, Information and Water Based Recreation Subsections

The Kansas Water Authority adopted three new subsections of the *Kansas Water Plan* for FY 1999. The Kansas Water Office will provide the leadership to coordinate the implementation of these subsections of the *Kansas Water Plan* during the FY 2000 planning cycle.

#### PRIORITY ISSUES OF THE KANSAS CENTRAL PLAINS

Twelve Basin Advisory Committees (BACs) provide the working link between the Kansas Water Office/Kansas Water Authority, and the public in formulating and implementing the *Kansas Water Plan*. The Basin Advisory Committees: (1) Identify water-related problems, issues, and concerns within the basin and help identify goals and objectives that can be used to direct subsequent planning efforts; (2) Advise and assist the Kansas Water Office in the formulation of revisions to the *Kansas Water Plan*; (3) Serve as a liaison between residents of the basin and the Kansas Water Office by encouraging an awareness of the importance of the basin's water resources; (4) Provide input on water plan implementation priorities and encourage local action necessary to implement the basin plan.

The Basin Advisory Committees of the Kansas Central Plains have identified the following water issues as priorities for their Basin.

- Groundwater declines
- Non Point Source Pollution
- Weather Modification
- Nitrates in wells
- TMDL's
- Water management issues
- Water Conservation
- Corporate Hogs

- Declines in Hugoton gas field
- Lawsuits with Colorado and Nebraska

#### CONCLUSION

Each of the above issues can be addressed by 2010. However, it will require an intensive effort and commitment by everyone involved. If success is achieved it will be because of the value of the State Water Planning Process and the key role of public participation in that process. A process that was reaffirmed at the 1997 Governors Vision Summit.