

ISSUES REGARDING KANSAS WATER RESOURCE PLANNING

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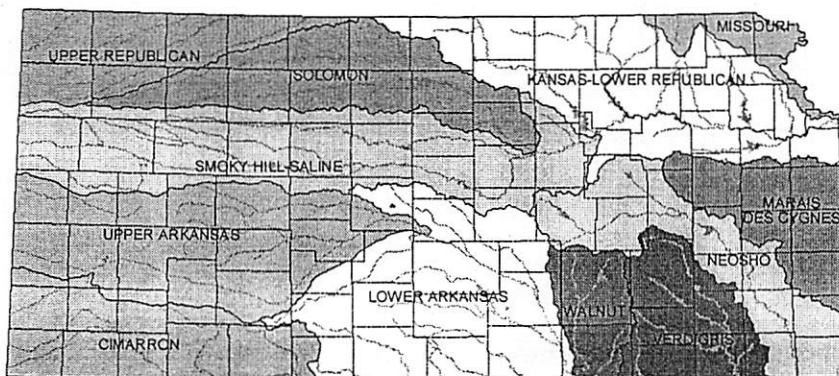
The Kansas Water Office/Kansas Water Authority is the water planning, policy and coordination agency for the State of Kansas. It prepares a state plan of water resources development, management, and conservation, reviews all water laws, and makes recommendations to the Governor and Legislature for new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

The Kansas Water Office, in cooperation with 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 now 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 (Figure 1). 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 excerpts from the proposed preliminary draft of the FY 2002 *Kansas Water Plan*. The focus will be on key irrigation issues in the major river basins that include the Kansas Central Plains.

MAJOR RIVER BASINS IN KANSAS



ANNUAL PLANNING PROCESS

The need to seek public input into the planning process is set out in K.S.A. 82a-903 and states that: "...The Kansas Water Office and the Kansas Water Authority shall seek advise from the general public and from committees consisting of individuals with knowledge of and interest in water issues and in the water planning areas." Basin advisory committees were formed in 1985 and represent the 12 hydrologic regions of the state. The committees meet at least quarterly in various locations throughout the basins. All meetings are publicized and the public is encouraged to attend. The Annual Planning Process is described by Figure 2.

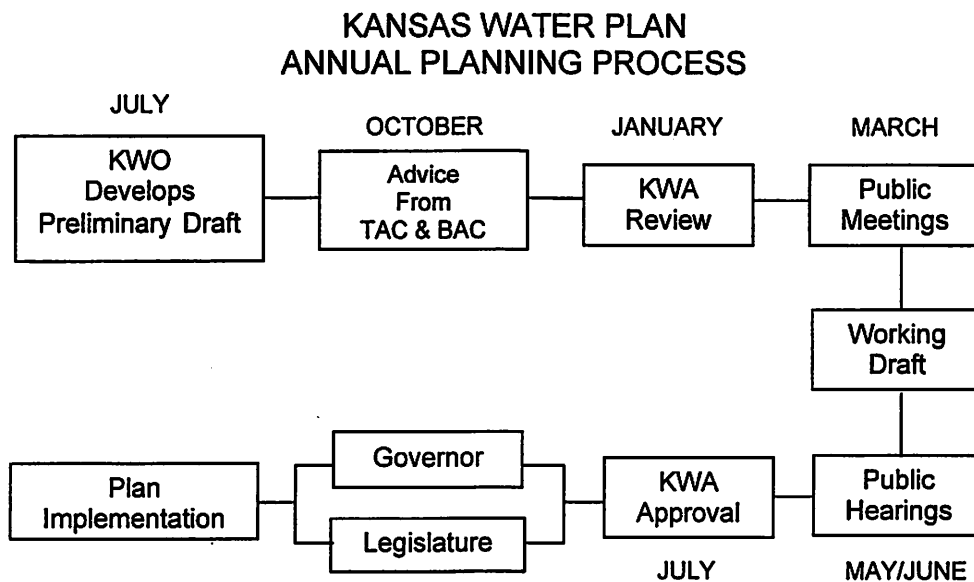


Figure 2

KWO = Kansas Water Office
 KWA = Kansas Water Authority
 BAC = Basin Advisory Committee
 TAC = Technical Advisory Committee

IRRIGATION RELATED OBJECTIVES FOR KANSAS

The following excerpts from the proposed preliminary draft of the FY 2002 *Kansas Water Plan* describing three objectives related to irrigation the State of Kansas plans to achieve by 2010. The excerpts also indicate how the State of Kansas will assess the objectives to determine whether the objective is actually achieved by 2010.

Objective

By 2010, reduce the number of irrigation points of diversion for which the acre feet per acre (AFA) 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.

The primary database to be used in order to assess this objective will be the Water Rights Information System (WRIS) maintained by the KDA-DWR. Annual reported water use from 1991 to 1998 will be analyzed to identify both the number of the number of irrigation points of diversion for which the reported AF/A water use exceeded the respective regional AF/A standard and the number of water rights groups (overlapping water rights) which reported using more water than was authorized under their respective water right allocations. Trend lines to the year 2010 will be developed using a multiple regression equation based on several future precipitation and percent of metered water use data scenarios. The analysis will be conducted on a state-wide level and focused to sub areas of the state, such as, by basin, GMD, or other areas.

Objective

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

The primary database to be used in order to assess this objective will be the Kansas Geological Survey' WIZARD Water Information Storage and Retrieval Database. WIZARD is based on the United States Geological Survey Ground Water Site Inventory database and contains water level and other information for water wells in Kansas that are measured annually by the Kansas Geological Survey and Division of Water Resources. Based on ground water elevations, the rate of decline and both the actual and percent change in saturated thickness of the Ogallala aquifer will be identified. Using current measurement data from 1989 to 1999 that represents more current trends in the aquifer's water levels, regression projections to the year 2010 will be conducted. Analysis of the historic trends and the geographic locations of those changes on the rate of decline and saturated thickness of the aquifer will be dependent on the availability and location of the data monitoring points. At this time, the anticipated time period will be from pre-development to 1969, 1979, 1989, and 1999. When the data allows, the aquifer conditions will be characterized by Groundwater Management District, subbasin, and possibly township level.

Objective

By 2010, reduce the average concentration of dissolved solids, metals, nitrates, pesticides and volatile organic chemicals that adversely affect the water quality of Kansas ground water

This objective will be assessed statewide, by basin and by sub areas within basins, if possible. It is anticipated that the Kansas Department of Health and Environment's Groundwater Quality Monitoring Network will be used in the assessment. The data parameters to be used for the assessment are shown in Table 1. The time period to be utilized for the initial assessment is 1986 – 1999. It is anticipated that a regression analysis will be utilized to provide a projected average concentration of each data parameter for the year 2010 by sub basin, basin and statewide. This projected value for each data parameter would be the average concentration that might be expected in 2010, if the various agency programs and level of emphasis that were in operation from 1986 – 1999 continue through 2010. These projections should be useful in targeting agency programs to specific geographical areas.

Dissolved Solids	Chlorides Sulfates Total Dissolved Solids (TDS)
Metals	Selenium Iron Manganese Lead
Nitrates	Nitrate
Pesticides	Atrazine Alachlor Metolochlor
Volatile Organic Chemicals	Tetrachloromethane (carbon tet) Trichloroethylene

PROPOSED ACTIVITIES TO ACHIEVE IRRIGATION RELATED OBJECTIVES

The following excerpts for the proposed preliminary draft of the FY 2002 *Kansas Water Plan* describes proposed activities the State of Kansas will conduct in 6 river basins in FY 2002 to begin progress for the achievement of the three irrigation related objectives by 2010.

LOWER ARKANSAS BASIN

Objective

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.

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Water Office: Water Conservation Plan Program (Technical Assistance to Water Users.).** Target technical assistance for irrigators reporting water use over the regional standard. The priority areas include 6 points of diversion in the McPherson IGUCA and one in the Burrton IGUCA, and 251 points of diversion in the Rattlesnake Creek subbasin (preliminary 1998 water use data). Provide information on metering as a planning and conservation tool and technical assistance to irrigators that currently do not meter their water use.
- **Kansas State Cooperative Extension Service: Irrigation Scheduling Project.** Demonstrate irrigation scheduling methods utilizing weather stations to irrigators to increase irrigation efficiency. Work with County Extension offices, Groundwater Management Districts and others to provide information on irrigation scheduling, best management practices and other conservation measures and encourages their use.
- **State Conservation Commission: Water Resources Cost Share.** Target projects that enhance irrigation efficiency or soil moisture conservation. Give priority to projects located in the Rattlesnake Creek Subbasin, IGUCAs and areas of significant ground water declines. Provide assistance for retrofitting irrigation meters to read in standard units.
- **Department of Agriculture/Division of Water Resources: Water Appropriation Program.** Contact irrigators that appear to be blatant and recurring overpumpers beginning with those whose water use reports reflect the most blatant exceedence of authorized quantities. Provide consultation and compliance planning, implementation and enforcement.

Objective

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

Applicable State Programs and Guidelines for FY 2002:

- **Division of Water Resources: Water Appropriation Program.** Describe the use, extent and distribution of water resources in the area south and southwest of Wichita; an area that includes all or parts of Sedgwick, Sumner, Kingman, Cowley, and Harper Counties and City of Wichita.

Objective

By 2010, reduce the average concentration of chloride, metals, nitrate, pesticides, sulfate and volatile organic chemicals that adversely affect the water quality of Kansas ground water.

Applicable State Programs and Guidelines for FY 2002:

- Kansas Department of Health and Environment: Local Environmental Protection Program. Provide technical assistance for the local development and implementation of Source Water Protection plans.
- Kansas Corporation Commission: Oil and Gas Remediation Program. Continue to remediate the Burrton, French Harbough, McPherson, South Wichita, Galva City and Arkansas River sites. Target plugging of abandoned oil and gas wells to high priority Total Maximum Daily Load watersheds where chlorides are a contaminant of concern.
- Kansas Department of Health and Environment: Environmental Remediation Program. Initiate corrective action for the Village of Yoder, Big Chief Mobile Home Park, Belle Plaine, Hutchinson Hide site, Lyons volatile organic compounds site and the Wellington Former Manufacturing Gas Plant sites, if necessary (based on 1999 data.) Continue remediation at Lyons chloride site, Hutchinson Air Base Industrial Tract and Clearwater, as necessary (based on 1999 data.) Continue investigation of Argonia, Colwich and Kiowa, if necessary (based on 1999 data.)

UPPER ARKANSAS BASIN

Objective

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.

Applicable State Programs and Guidelines for FY 2002:

- Kansas Water Office: Water Conservation Program (Technical Assistance to Water Users.). Target technical assistance for irrigators reporting water use over the regional standard. The priority areas include 207 points of diversion in the Arkansas IGUCA, 32 in the Pawnee Valley IGUCA, and 15 in the Wet Walnut IGUCA (preliminary 1998 water use data). Provide information on metering as a planning and conservation tool and technical assistance to irrigators that currently do not meter their water use.

- **Kansas State University: Kansas Agricultural Experiment Station.** The Sandhills Irrigation Research Unit should be established to research more efficient irrigation methods in this region.
- **Kansas State Cooperative Extension Service: Irrigation Scheduling Project and Extension Education.** Work with County Extension offices, Groundwater Management Districts and others to provide information on irrigation scheduling, best management practices and other conservation measures and encourages their use.
- **State Conservation Commission: Water Resources Cost Share Program.** Target projects that enhance irrigation efficiency or soil moisture conservation to areas. Give priority to projects located within the Arkansas IGUCA or Pawnee-Buckner Subbasin and other areas of significant ground water decline. Provide assistance for retrofitting irrigation meters to read in standard units.
- **Department of Agriculture/Division of Water Resources: Water Appropriation Program.** Contact irrigators that appear to be blatant and recurring overpumpers beginning with those whose water use reports reflect the most blatant exceedence of authorized quantities. Provide consultation and compliance planning, implementation and enforcement.
- **Kansas Water Office: Weather Modification Program.** Funding is to be provided for the Western Kansas Weather Modification project to conduct cloud seeding for hail suppression. An evaluation of the program is to be conducted in FY 2002.

Objective

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

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Department of Agriculture, Division of Water Resources: Subbasin Water Resources Management Program.** Develop a comprehensive, long-term water resource management plan for the Upper Arkansas Subbasin collaboratively with the Upper Arkansas working group, for submission to the Chief Engineer. Management strategies should address concerns with ground water declines, reduced streamflow, surface water/ground water interaction and related water quality concerns. Establish an implementation schedule. Coordinate and provide assistance to a working group of interested water users in the area, Groundwater Management District #5, the district water commissioner, and others knowledgeable on water resources to address concerns in the Middle Arkansas Subbasin. Collect and compile

existing data and obtain additional hydrologic information, as needed to understand the system in Middle Arkansas Subbasin. Present this information to water users in the area to provide a basis for developing long-term resource management strategies. Work with the local group to develop strategies to address ground water declines, surface water/ground water interaction and related water quality concerns in the Middle Arkansas Subbasin. Assist the Division of Water Resources Water Appropriation program and other appropriate partners in the implement the Pawnee-Buckner Subbasin water resource management plan.

Objective

By 2010, reduce the average concentration of chloride, metals, nitrate, pesticides, sulfate and volatile organic chemicals that adversely affect the water quality of Kansas ground water.

Applicable State Programs and Guidelines for FY 2002:

- Kansas Department of Health & Environment: Local Environmental Protection Program. Provide technical assistance to local development and implementation of Source Water Protection plans.
- Kansas Corporation Commission: Oil and Gas Remediation Program. Target plugging of abandoned oil and gas wells with priority TMDL watersheds a heavily weighted factor, along with protection of human health.
- Kansas Department of Health and Environment: Water Quality Assessment Program. Expand the agency's current water quality monitoring network to include the wells in and along the Arkansas River Corridor that are part of the Groundwater Management District's network. Coordinate the sampling, assessment and reporting of water quality data from this network with the Groundwater Management District and the Kansas Geological Survey to establish the links between water quality, river flows, and declining aquifer levels.
- Kansas Department of Health & Environment: Environmental Remediation Program. Continue investigation of the Dighton Public Water Supply No. 1, if necessary (based on 1999 data.)

CIMARRON BASIN

Objective

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.

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Water Office: Water Conservation Program (Technical Assistance to Water Users.).** Target technical assistance to irrigators reporting water use over the regional standard with priority to those in Seward, Meade, Gray, Haskell, Grant and Stevens counties. Basinwide there were 361 points of diversion with reported water use over the regional standard (preliminary 1998 water use data). Provide information on metering as a planning and conservation tool and technical assistance to irrigators that currently do not meter their water use.
- **Kansas State University: Kansas Agricultural Experiment Station.** The Sandhills Irrigation Research Unit should be established to research more efficient irrigation methods in this region.
- **Kansas State Cooperative Extension Service: Irrigation Scheduling Project and Extension Education.** Demonstrate irrigation scheduling methods utilizing weather stations to irrigators to increase irrigation efficiency. Work with County Extension offices, Groundwater Management Districts and others to provide information on irrigation scheduling, best management practices and other conservation measures and encourages their use.
- **State Conservation Commission: Water Resources Cost Share Program.** Target projects that enhance irrigation efficiency or soil moisture conservation to areas where water use exceeds regional averages and/or has significant groundwater declines. Provide assistance for retrofitting irrigation meters to read in standard units.
- **Department of Agriculture/Division of Water Resources: Water Appropriation Program.** Contact irrigators that appear to be blatant and recurring overpumpers beginning with those whose water use reports reflect the most blatant exceedence of authorized quantities. Provide consultation and compliance planning, implementation and enforcement.
- **Kansas Water Office: Weather Modification Program.** Funding is to be provided for the Western Kansas Weather Modification project to conduct cloud seeding for hail suppression. An evaluation of the program is to be conducted in FY 2002.

Objective

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

Applicable State Programs and Guidelines for FY 2002

- Kansas Department of Agriculture, Division of Water Resources: Water Appropriation Program. With advice and assistance from the groundwater management district and others with appropriate knowledge, continue to explore ways of reducing groundwater withdrawals. Possible mechanisms to be used include: (1) mandatory metering; (2) aggressive enforcement of water right limitations with special emphasis on accurate water use reporting; (3) shutting down wells which cannot be permitted; (4) reassessing limits of water available for appropriation; (5) mandatory conservation plans; (6) education regarding efficiency; (7) reduction in annual allocation; (8) imposition of 5-year allocations; and (9) long term phase out of junior water rights. Public input will be solicited and considered in formulating any changes in regulations and procedures.

Objective

By 2010, reduce the average concentration of chloride, metals, nitrate, pesticides, sulfate and volatile organic chemicals that adversely affect the water quality of Kansas ground water.

Applicable State Programs and Guidelines for FY 2002:

- Kansas Department of Health & Environment: Local Environmental Protection Program. Provide technical assistance to the local development and implementation of Source Water Protection plans.
- Kansas Department of Health & Environment: Environmental Remediation Program. Continue to remediate the 8th and County Estate Road site, Liberal (based on 1999 data.) Continue investigation at Montezuma Public Water Supply Wells No. 5 & 8, if necessary (based on 1999 data.)
- Kansas Corporation Commission: Oil & Gas Remediation Program. Remediate the Clawson and Smith-Finn sites.

UPPER REPUBLICAN BASIN

Objective

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.

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Water Office: Water Conservation Plan Program (Technical Assistance to Water Users).** Target technical assistance for irrigators reporting water use over the regional standard with priority given to those located in those located in the Prairie Dog from Creek Subbasin (36 points of diversion; preliminary 1998 water use data). Provide information on metering as a planning and conservation tool and technical assistance to irrigators that currently do not meter their water use.
- **Department of Agriculture/Division of Water Resources: Water Appropriation Program.** Contact irrigators that appear to be blatant and recurring overpumpers beginning with those whose water use reports reflect the most blatant exceedence of authorized quantities. Provide consultation and compliance planning, implementation and enforcement.
- **State Conservation Commission: Water Resources Cost Share Program.** Target practices that enhance irrigation efficiency or soil moisture conservation with priority to areas identified with significant ground water declines. Provide assistance in retrofitting irrigation well meters to record in standard units.
- **Kansas Water Office: Weather Modification Program.** Funding is to be provided for the Western Kansas Weather Modification project to conduct cloud seeding for hail suppression in the Groundwater Management District #4 area, with the exception of Cheyenne and Rawlins Counties. An evaluation of the program is to be conducted in FY 2002.

Objective

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

Applicable State Programs and Guidelines for FY 2002:

- **State Conservation Commission: Water Resources Cost-Share.** Target cost share assistance on water conservation projects in areas identified as having significant Ogallala Aquifer declines.

Objective

By 2010, reduce the average concentration of chloride, metals, nitrate, pesticides, sulfate and volatile organic chemicals that adversely affect the water quality of Kansas ground water.

Applicable State Programs and Guidelines for FY 2002:

- Kansas Corporation Commission: Oil and Gas Remediation Program. Target plugging of abandoned oil and gas wells to unified watershed assessment Category I areas

SMOKY HILL-SALINE BASIN

Objective

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.

Applicable State Programs and Guidelines for FY 2002:

- Kansas Water Office: Water Conservation Plan Program (Technical Assistance to Water Users). Provide technical assistance to irrigators reporting water use over the regional standard, first contacting those in IGUCAs (one in the Lower Smoky Hill IGUCA and 5 in the Upper Smoky Hill IGUCA, preliminary 1998 water use data) and those in areas of significant ground water decline. Provide information on metering as a planning and conservation tool and technical assistance to irrigators that currently do not meter their water use.
- State Conservation Commission: Water Resources Cost-Share Program. State cost-share funds will be targeted to areas of greatest ground water decline. Target projects that enhance irrigation efficiency or soil moisture conservation. Give priority to projects in the Upper and Lower Smoky Hill IGUCAs. Provide assistance for retrofitting irrigation meters to read in standard units.
- Kansas Department of Agriculture, Division of Water Resources: Water Appropriation Program. Contact irrigators that appear to be blatant and recurring overpumpers beginning with those whose water use reports reflect the most blatant exceedence of authorized quantities. Provide consultation and compliance planning, implementation and enforcement.
- Kansas Water Office: Weather Modification Program. Funding is to be provided for the Western Kansas Weather Modification project to conduct cloud seeding for hail suppression. An evaluation of the program is to be conducted in FY 2002.

Objective

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

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Department of Agriculture, Division of Water Resources: Subbasin Water Resources Management Program.** Evaluate the water resource management issues in the Smoky Hill Subbasin for possible need of comprehensive management strategies. Evaluate the long-term stability of Cedar Bluffs reservoir, streamflow, the alluvial aquifers, and the surface water/ ground water interaction to determine long-term stability of water resources. Coordinate this effort with the Kansas Water Office, Public Water Supply program's study of Cedar Bluffs Reservoir.
- **Kansas Water Office and Kansas Geological Survey.** Report findings of the High Plains Aquifer Evaluation and the Ogallala Decline Study

Objective

By 2010, reduce the average concentration of chloride, metals, nitrate, pesticides, sulfate and volatile organic chemicals that adversely affect the water quality of Kansas's ground water.

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Corporation Commission: Oil and Gas Remediation Program.** Target plugging of abandoned oil and gas wells to unified watershed assessment Category I watersheds in the priority areas. Continue remediation of Codell and Ruder Creek Sites.
- **Kansas Department of Health & Environment: Environmental Remediation Program.** Continue to remediate the Bird-Feldt and Kanopolis ground water contamination sites, and initiate corrective action at West South Street (Salina), if needed (based on 1999 data.) Continue investigation at the Schmidt private well site (Oakley), Oakley carbon tetrachloride site, and Ramona site, if necessary (based on 1999 data.)

SOLOMON BASIN

Objective

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.

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Water Office: Water Conservation Plan Program (Technical Assistance to Water Users).** Provide information on metering as a planning and conservation tool and technical assistance to irrigators that currently do not meter their customers' use. Target technical assistance for irrigators reporting water use over the regional standard with priority to those in areas of significant ground water decline.
- **State Conservation Commission: Water Resource Cost-Share Program.** Target Irrigation Initiative Allocation to identified groundwater depletion areas. Target projects that enhance irrigation efficiency or soil moisture conservation to areas where water use exceeds regional averages and/or has significant groundwater declines. Provide assistance for retrofitting irrigation meters to read in standard units.
- **Kansas Department of Agriculture, Division of Water Resources: Water Appropriation Program.** Target implementation of the water right overpumping administrative procedure to those areas in the Upper Solomon Subbasin experiencing the greatest water table decline or declines as a percentage of saturated thickness. Contact irrigators that appear to be blatant and recurring overpumpers beginning with those whose water use reports reflect the most blatant exceedence of authorized quantities. Provide consultation and compliance planning, implementation and enforcement.
- **Kansas Water Office: Weather Modification Program.** Funding is to be provided for the Western Kansas Weather Modification project to conduct cloud seeding for hail suppression. An evaluation of the program is to be conducted in FY 2002.

Objective

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

Applicable State Programs and Guidelines for FY 2002:

- **Kansas Department of Agriculture, Division of Water Resources: Subbasin Water Resources Management Program.** Continue or initiate analysis of priority water management issues in the Upper Solomon Subbasin. Priority issues include ground water declines, cumulative effects of moisture conservation practices, streamflow depletion and reservoir inflows. With advice and assistance from Groundwater Management District No. 4 and others with appropriate knowledge, evaluate the feasibility of establishing a safe-yield policy for groundwater management in the basin. If previous evaluation indicates there are continuing significant ground water decline issues, continue analysis of water resources and potential management strategies. Issues to evaluate in addition to ground water declines are reduced runoff due to changes in land treatment, streamflow depletion,

reservoir inflows and the ground water /surface water interaction. With advice and assistance from Groundwater Management District No. 4 and others with appropriate knowledge, evaluate the feasibility of establishing a safe-yield policy for groundwater management in the basin.

Objective

By 2010, reduce the average concentration of chloride, metals, nitrate, pesticides, sulfate and volatile organic chemicals that adversely affect the water quality of Kansas ground water.

Applicable State Programs and Guidelines for FY 2002:

- Kansas Corporation Commission: Oil and Gas Remediation Program. Continue corrective action at the Balthazor and Elm Creek sites, if necessary. Target plugging of abandoned oil and gas wells to Category 1 watersheds identified in the Unified Watershed Assessment. Give priority to wells in the Upper North Fork and Upper South Fork Solomon subbasins.
- Kansas Department of Health and Environment: Environmental Remediation Program. Continue corrective action at the Kirwin and Portis sites, if necessary (based on 1999 data.) Initiate corrective action, if necessary, at the Royal Acid site, Graham County (based on 1999 data.) Continue investigations at Alton, Cawker City, Gaylord, Glasco, Kensington, Logan and Randall, as needed (based on 1999 data.)

CONCLUSION

Continued public participation in the Kansas Water Planning Process is critical to the development of an effective *Kansas Water Plan*. All Kansans are encouraged to participate. For a schedule of upcoming public meetings and public hearings please contact the Kansas Water Office.

For a copy of the approved FY 2001 *Kansas Water Plan* or the Preliminary Draft of the Proposed FY 2002 *Kansas Water Plan* please contact the Kansas Water Office.

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