

Intensive Groundwater Use Control Areas

In 1978, the Kansas Legislature amended statutes to enable the chief engineer to designate certain areas as intensive groundwater use control areas, or IGUCAs.

An IGUCA is a groundwater management tool that works in conjunction with the Kansas Water Appropriation Act. Administering water rights strictly by priority date can result in harsh and inflexible enforcement in groundwater systems. The IGUCA provisions provide for extensive public input and for flexible solutions to the complex problem of groundwater declines.

The IGUCA statutes allow the chief engineer to implement an IGUCA when local conditions require it, or when local stakeholders request it.

The chief engineer may designate an IGUCA if a Division of Water Resources investigation reveals that any one or more of the five conditions exist in a particular area: 1) significant groundwater declines are occurring; 2) groundwater withdrawals equal or exceed recharge to the aquifer; 3) preventable waste of water is occurring; 4) water quality is deteriorating at an unreasonable rate or may deteriorate; or 5) any other condition that requires additional regulation in the public interest.

If a groundwater management district board recommends an IGUCA, or enough eligible voters in a groundwater management district petition for one, the chief engineer may initiate proceedings to designate an IGUCA. Eight IGUCAs have been designated to date.

Upon designating a particular area an IGUCA, the chief engineer may implement one or more

corrective control provisions to address area problems: 1) close the area to further water appropriation; 2) determine the sustainable limit of groundwater withdrawals and apportion that amount among water rights holders according to relative dates of priority; 3) administer the permissible withdrawal of groundwater; 4) require and specify a system of rotating the use of groundwater rights; or 5) require any other measures that may be needed to protect the public interest.

The chief engineer is adopting regulations to clarify and enhance procedural requirements to initiate and review IGUCAs.

Locations of IGUCAs in Kansas

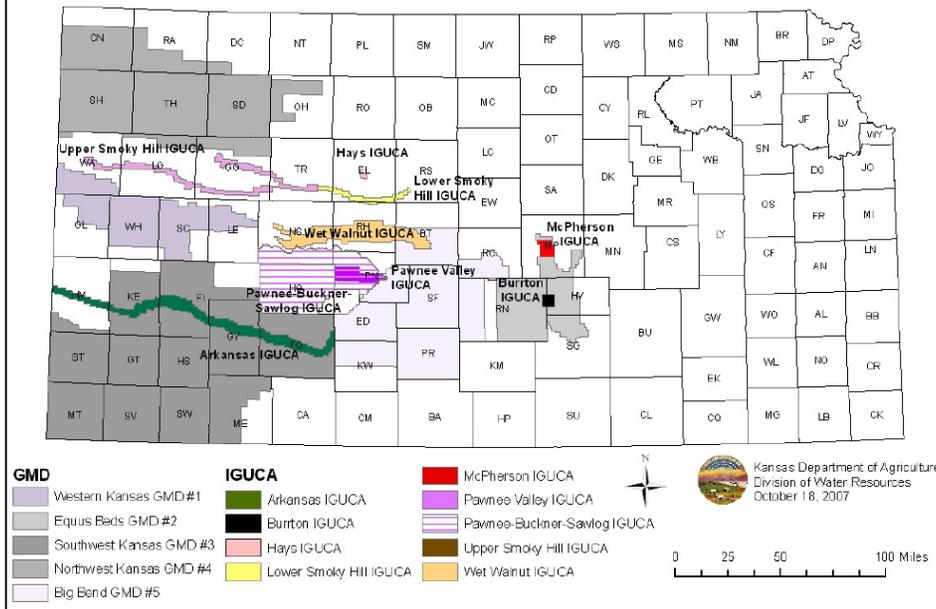
McPherson IGUCA: Initiated February 13, 1979, by the Equus Beds Groundwater Management District No. 2 board of directors. **Reason:** Groundwater levels were in decline and had declined excessively. Rate of groundwater withdrawal in that area appeared to exceed rate of recharge.

Pawnee Valley IGUCA: Initiated June 12, 1980, by the Groundwater Management District No. 5 board of directors. **Reason:** Gradual decline of water levels since 1943.

Burrton IGUCA: Initiated June 11, 1982, by Equus Beds Groundwater Management District No. 2 board of directors. **Reason:** Deteriorating groundwater quality due to high chloride concentration.

Lower Smoky Hill IGUCA: Initiated November 30, 1983, by the chief engineer **Reason:** Conditions existed in the groundwater

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Cedar Bluff Reservoir was declining, or had declined excessively, and conditions existed that might require regulation in the public interest.

Hays IGUCA: Initiated February 26, 1985, by the City of Hays and the chief engineer. **Reason:** To address the issue of private domestic water wells and their use for outside discretionary activities. Waste of water and other conditions required regulation in the public interest.

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Arkansas IGUCA: Initiated April 12, 1984, by the chief engineer and Groundwater Management District No. 3. **Reason:** The chief engineer requested a hydrologic study of the area to resolve a longstanding moratorium on approving new applications in place since January 21, 1977. A USGS study of the area in 1983, together with information in the office of the chief engineer, indicated excessive declines in groundwater levels, groundwater withdrawal rates equal to or in excess of the rate of recharge and the need for further regulation in the public interest.

Upper Smoky Hill IGUCA: Initiated May 31, 1984, by the chief engineer. **Reason:** Declining inflow of water into Cedar Bluff Reservoir contributed to declining water levels and water flow below the reservoir. Streamflow in the Smoky Hill River and Hackberry Creek above

Walnut Creek IGUCA: Initiated March 13, 1990, by the chief engineer and Groundwater Management District No. 5. **Reason:** In 1989, the Division of Water Resources studied water availability in Walnut Creek, its tributaries, valley alluviums and hydraulically connected aquifers. The Kansas Department of Wildlife and Parks asked the chief engineer to initiate proceedings in areas where groundwater withdrawals affected the water right held by the Kansas Department of Wildlife and Parks for Cheyenne Bottoms in the Walnut Creek drainage basin. The DWR study showed that groundwater levels appeared to be declining or had declined excessively, that the rate of groundwater withdrawals in the area equaled or exceeded rate of recharge, and that other conditions existed requiring regulation in the public interest. Big Bend Groundwater Management District No. 5 asked the chief engineer to initiate proceedings in Walnut Creek in Barton County.