

MINIMUM DESIRABLE STREAMFLOWS

Fact Sheet No. 12

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Kansas Water Office

Background

Minimum desirable streamflows were first identified within the State Water Resources Planning Act in 1981 as a policy of the State to achieve long-range goals. K.S.A. 82a-928(i) establishes this policy as “the identification of minimum desirable streamflows to preserve, maintain or enhance baseflows for in-stream water uses relative to water quality, fish, wildlife, aquatic life, recreation, general aesthetics and domestic uses and for the protection of existing waters rights”.

The Water Appropriation Act was amended in 1984 to protect waters necessary to preserve and maintain streamflows at or above the minimum desired levels. The 1984 amendment also established a priority date of April 12, 1984, giving minimum desirable streamflows many of the same properties associated with a water right. Any stream on which minimum desirable streamflows were established before July 1, 1990, has the same 1984 priority date.

The 1984 amendments to the Water Appropriation Act established minimum desirable streamflows on the Marais des Cygnes, Neosho, Cottonwood and Little Arkansas Rivers. Before the July 1990 deadline, another 19 streams and rivers were added to the statutory list. In all there are 33 sites on 23 streams and rivers for which minimum desirable streamflow have been established. There have been no additional minimum desirable streamflows established since the 1989 revisions.

Purpose

The purpose of minimum desirable streamflows is to preserve, maintain or enhance baseflows for in-stream water uses relative to water quality, fish, wildlife, aquatic life, recreation, general aesthetics and domestic uses and for the protection of existing waters rights.

Overview

The Kansas Water Office has two main functions related to minimum desirable streamflow. The first function is to serve as the coordinating agency for recommendation of minimum desirable streamflows to the Kansas Water Authority and Legislature. The second is monitoring streamflow to insure minimum desirable streamflows are being met.

Coordination of Recommendations

While there have been no additional streams added since 1989, more could be added if a need was identified. Addition of more streams would require legislation to establish the minimum desirable streamflow and identify a priority date within the Water Appropriation Act. If additional streams were recommended for consideration, the Kansas Water Office would coordinate evaluation and analysis to recommend appropriate levels.

The Kansas Water Office uses an interagency advisory committee for advice and establishment of minimum desirable streamflows. The committee includes representatives from:

- Division of Water Resources
- Department of Health & Environment
- Kansas Department of Wildlife & Parks

Recommendations of the committee are taken under consideration by the Office on the basis of:

Needs – The habitat for fish and aquatic life support, ability of the stream to maintain adequate water quality, recreation potential, maintenance of riparian areas, and overall aesthetic values.

Constraints – Senior appropriations of surface water, regional groundwater appropriations, conservation practices, economic development, interstate compacts and administrative costs.

Hydrology – The ability of the stream to provide water from runoff and baseflow for minimum desirable streamflows (especially in

drought conditions) and flow enhancement by releases from reservoir storage.

Flow recommendations are discussed at public meetings and hearings in the basins where the streams are located. After considering comments and testimony, the Office submits the minimum desirable streamflows to the Kansas Water Authority. If approved, they are forwarded to the Legislature for approval and enactment.

Monitoring

Typically, the recommendations committee has established minimum desirable streamflows at established U.S. Geological Survey gaging stations. Under a 1984 memorandum of understanding, the Kansas Water Office monitors these U.S. Geological Survey stream gages, and reviews reports from field personnel of other agencies to track minimum desirable streamflows. If the gages and reports indicate that actual flow has been below statutory minimum desirable streamflows for a period of seven days, a request for administration is made to the Chief Engineer of the Kansas Department of Agriculture, Division of

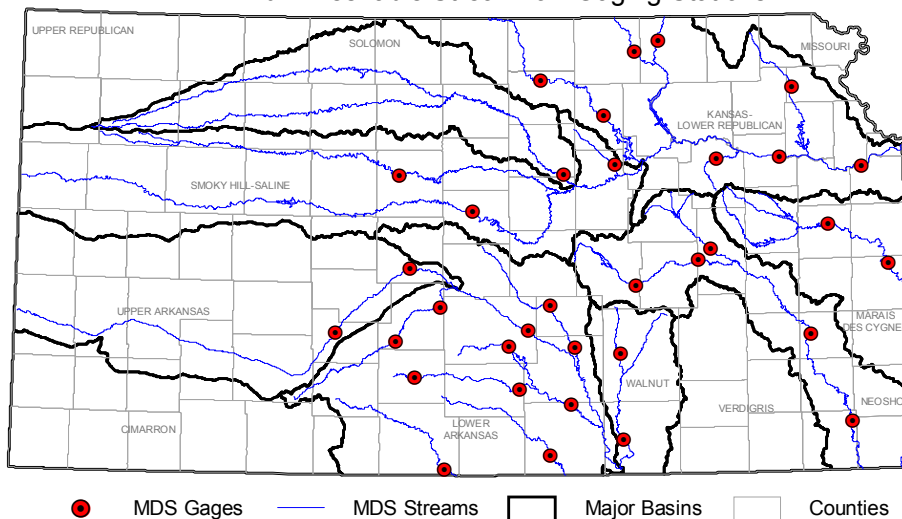
Once a request for administration has been made, the Chief Engineer checks for unauthorized use, compliance with existing permits, and, if necessary, initiates administration of any junior water rights. This may mean that owners of water rights granted after April 12, 1984 will not be able to divert water until the stream has recovered and minimum desirable streamflows are being met. Under severe drought conditions, even with administration of water rights, minimum desirable streamflows may not be met.

A number of minimum desirable streamflows have been established on streams that have federal lakes. In these situations, the Kansas Water Office may request that releases from water quality storage in the lakes be made to meet the minimum desirable streamflow.

During water quality releases, a request is made of the Chief Engineer to protect the releases from storage from diversion. The chief engineer would then investigate diversions below the reservoir and insure that no water user was taking water coming from storage.

The end goal of each of these methods of administration is to insure that the instream needs as established in the Water Resources Planning Act

Minimum Desirable Streamflow Gaging Stations



Water Resources. Seven days is allowed to substantiate flow trends and check the accuracy of the reported flows.

are being met.

Additional Information

Further information on this subject or on many other *Kansas Water Plan* related programs can be obtained from: Kansas Water Office, 901 S. Kansas Avenue, Topeka, KS 66612-1249, phone (785-296-3185), toll free (888-KAN-WATER) or check our WEB site at www.kwo.org.