

**As requested by the House Committee on Agriculture & Natural Resources  
February 7, 2011**

**A Quick Reference on Water Rights and Water Terms**

**Groundwater:** Water that exists below the water table and fills the pore space in the rock or sediment. Groundwater moves slowly in the same direction that the water table slopes.

**Surface water:** Water that is on the earth's surface, such as in a stream, river, lake or reservoir.

**Aquifer:** A subsurface rock, soil or sediment unit that is porous and permeable that stores and transmits useful quantities of water. Buried river sands ("alluvium"), sandstones and the Ogallala Formation are some of the best water-producing layers in Kansas.

**Water Right:** A Kansas water right provides the owner the right to use water, if available. It is limited to: 1) a maximum annual quantity of water; 2) a maximum rate of diversion; 3) a beneficial use authorized by the Chief Engineer; 4) the authorized place of use; and 5) diverted only from the authorized point(s) of diversion.

**Vested Water Rights:** Water rights developed for beneficial use prior to the Water Appropriation Act adoption (1945). A vested water right does not have an individual priority date as do the water rights issued after the adoption of the Water Appropriation Act. In times of shortages, vested water rights are protected before appropriated water rights.

**Kansas Water Appropriation Act:** (K.S.A. 82a-701 *et seq*) passed in 1945. The Act provides a basic framework of water law in Kansas which allows water users the right to use water in accordance with the principal of the prior appropriation doctrine. The Division of Water Resources (DWR) of the Kansas Dept. of Agriculture is charged with the administration and enforcement of the Act. When there isn't enough to meet all water rights, use is based on "first in time, first in right". A water right does not guarantee the water, just the right to use it when it is available. The date of priority of a water right, and not the type of use (domestic, municipal, irrigation, industrial, recreational and water power) determines the right to use water when there is not enough to satisfy all water rights. All water in the state of Kansas, both groundwater and surface water, are administered under a single priority system.

**Appropriation Water Right:** To use water for any purpose within the State of Kansas, except for domestic use, one must first apply to the Chief Engineer, DWR, Kansas Department of Agriculture for a permit. Once a permit is granted, the holder has a limited period of time to build the diversion works (well or pump site). The permit holder must then "perfect" (use) the right by applying water under the terms of the permit. The quantity of the water right used in the time and terms provided becomes the measure of the real property right.

**Senior Water Right:** A water right that was issued under the Water Appropriation Act. Its priority date is relative to all the other water right priority dates. It is senior to water rights that were applied for later, and junior to water rights that have earlier priority dates.

**Junior Water Right:** A water right that was issued under the Water Appropriation Act and has a priority date issued after other "senior" water rights. It is a relative term.

**IGUCA:** The Intensive Groundwater Use Control Area (IGUCA) statutes (K.S.A. 82a-1036 *et seq*) define when the Chief Engineer may initiate proceedings to designate an area an IGUCA. An IGUCA allows more flexibility in possible solutions to address on-going groundwater declines or water quality deterioration than is permitted under strict prior administration of the Water Appropriation Act alone. The priority dates of water rights may be taken into consideration in setting IGUCA corrective measures. Once an IGUCA order is finalized it has the force and function of law.

**Walnut Creek IGUCA:** An IGUCA that was that was ordered in the Walnut Creek subbasin in 1992 and amended in 1996, 1998, and 2001. To restore long term sustainability to the groundwater system, the Chief Engineer, DWR, Kansas Department of Agriculture, identified when the region appears to have become fully developed. He then grouped the water rights into three divisions: vested water rights (those developed prior to Kansas Water Appropriation Act), senior water rights (acquired on or prior to October 1, 1965 – the date when the subbasin became fully developed) and junior water rights (those acquired after October 1, 1965). Vested water rights retained their full authorization. Reductions made to appropriated water rights were based on seniority (senior or junior grouping), maximum acres irrigated 1985 to 1990, and county of use (Barton, Rush or Ness). Water quantity reductions are set in five-year allocations. The area was also closed to any future new water right development.

**High Plains aquifer:** In Kansas, three hydraulically connected, but distinct aquifers form the High Plains aquifer: the Ogallala, the Big Bend Prairie, and the Equus Beds aquifers. The Ogallala aquifer is the largest portion, underlying roughly the western 1/3 of Kansas (shown in blue below). The Big Bend Prairie and Equus Bed aquifers are geologically younger, are not as deep as the Ogallala aquifer, and receive more recharge. The High Plains aquifer is the most important water source in western Kansas; an area that lacks significant surface water sources. Groundwater flow in the High Plains aquifer in Kansas is slow moving; typically it is measured in inches per day.

