

Kansas Administrative Regulations

Kansas Department of Agriculture—Division of Water Resources

Article 22.—Equus Beds Groundwater Management District No. 2

5-22-1. Definitions.

As used in article 22 of these regulations, by the Equus Beds groundwater management district no. 2 in the implementation of the groundwater management district act and by the division of water resources in the administration of the Kansas water appropriation act, the following terms shall have the meanings ascribed to them in this regulation, unless the context clearly requires otherwise.

(a) "Above-baseflow stage" means streamflow that is in response to a significant runoff event during which period the water-level elevation of the stream is greater than the elevation of the adjacent water table.

(b) "Aquifer" means any geologic formation capable of yielding water in sufficient quantities that it can be diverted for beneficial use.

(c) "Aquifer storage" means the act of storing water in the unsaturated portion of an aquifer by artificial recharge for subsequent diversion and beneficial use.

(d) "Aquifer storage and recovery system" means a physical infrastructure that meets the following conditions:

(1) Is constructed and operated for artificial recharge, storage, and recovery of source water; and

(2) consists of apparatus for diversion, treatment, recharge, storage, extraction, and distribution.

(e) "Area of consideration" means the two-mile-radius circle whose center is the location of the proposed point of diversion. The area of consideration equals 8,042 acres minus the area of the circle that meets the following conditions:

(1) Is outside the district boundary;

(2) is inside an intensive groundwater use control area with a declining water table;
and

(3) is in an area where the bedrock is not overlain by an aquifer.

(f) "Artificial recharge" means the use of source water to artificially replenish the water supply in an aquifer.

(g) "Bank storage" means water absorbed by and temporarily stored in the banks and bed of a stream during above-baseflow stage.

(h) "Bank storage well" means a well used to divert or withdraw water from bank storage.

(i) "Baseflow" means groundwater that seeps, flows, or is otherwise naturally discharged from an aquifer into a stream.

(j) "Baseflow allocation" means the annual quantity of water assigned to a baseflow node expressed in acre-feet per calendar year. The natural discharge to the stream shall be assumed to be equivalent to the rate of flow in the stream that is equaled or exceeded 90 percent of the time.

(k) "Baseflow node" means an artificial point located in the channel of a watercourse for the purpose of allocating a proportional amount of the baseflow.

(l) "Basin storage area" means the portion of the aquifer's unsaturated zone used for aquifer storage that has defined horizontal boundaries and is delimited by the highest and lowest index water levels.

(m) "Basin storage loss" means that portion of artificial recharge naturally flowing or discharging from the basin storage area.

(n) "Battery of wells" means either of the following:

(1) A group of two or more wells that meets the following conditions:

(A) Withdraws water from the same local source of supply;

(B) is connected to a common pump by a manifold or piping; and

(C) supplies water to a common distribution system; or

(2) a group of not more than four wells that meets the following conditions:

(A) Withdraws water from the same local source of supply;

(B) is located within a 300-foot-radius circle of the geographic center of the battery of wells;

(C) supplies water to a common distribution system;

(D) does not exceed a combined capacity of 800 gallons per minute; and

(E) has an individual pump installed in each well with a maximum capacity of 400 gallons per minute.

A battery of wells shall be considered to be one point of diversion.

(o) "Board" means the board of directors constituting the governing body of the Equus Beds groundwater management district no. 2.

(p) "Completed substantially as shown on aerial photograph, topographic map, or plat" means within 300 feet of the location as shown on the aerial photograph, topographic map, or plat accompanying the application.

(q) "Confined aquifer" means either of the following:

(1) An aquifer overlain and underlain by impermeable layers; or

(2) an aquifer in which the groundwater is under pressure greater than atmospheric pressure and will rise in a well above the elevation at which groundwater is first encountered.

(r) "Conjunctive use" means the management of the aquifer to achieve safe yield and the operation of the aquifer in coordination with a surface water system to enhance the use of the total water supply availability, in accordance with the provisions of the Kansas water appropriation act.

(s) "Consumptive use" means gross diversion minus the following:

(1) Waste of water; and

(2) return flows to the source of water supply by at least one of the following:

(A) Through the surface water runoff that is not waste; and

(B) by deep percolation.

(t) "District" means the Equus Beds groundwater management district no. 2.

(u) "Free-water surface" means water that is exposed to the atmosphere, including lakes, ponds, and pits that intercept the water table.

(v) "Geographic center" means either of the following:

(1) The arithmetic mean of the northing and westing coordinates or measurements for each well in a battery of wells; or

(2) the apparent center of a groundwater pit.

(w) "Groundwater" means water below the surface of the earth.

(x) "Groundwater pit" means an excavation in the earth that meets all of the following criteria:

- (1) Exposes the current or historic groundwater table;
- (2) has caused, or will likely cause, annual evaporation of groundwater; and
- (3) has a perimeter equal to or greater than the depth of the excavation.

(y) "Index water level" means water-level elevations established spatially throughout a basin storage area to be used to represent the maximum volume of a basin storage area and the volume of stored water available for recovery, based upon accounting methodology and the conditions of the permit.

(z) "Non-consumptive use" means the beneficial use of water in which essentially all of the water diverted from the source of supply is returned to the source of supply.

(aa) "Person" means a natural person, a partnership, an organization, a corporation, a municipality, and any agency of the state or federal government.

(bb) "Point of diversion" means the point at which water is diverted or withdrawn from a source of water supply.

(cc) "Primary well" means a well equipped with a flowmeter for which a standby well is available.

(dd) "Recharge" means the natural infiltration of surface water or rainfall into an aquifer from its catchment area.

(ee) "Recharge credit" means the quantity of water that is stored in a basin storage area and that is available for subsequent appropriation for beneficial use by the operator of the aquifer storage and recovery system.

(ff) "Safe yield" means the total quantity of groundwater meeting the following conditions:

- (1) Can be artificially withdrawn from an aquifer; and
- (2) naturally discharges to a stream without exceeding the aquifer recharge value for the area of consideration and without impairing the water rights diverting from the aquifer.

(gg) "Standby well" means a well that meets the following conditions:

- (1) Is used to provide water for any of the following:
 - (A) Fire protection;

(B) emergency purposes; or

(C) any period during which the primary well has mechanical failure, maintenance, or power failure;

(2) is maintained in good operating condition;

(3) withdraws water from the same source of supply as the primary well;

(4) is located within 300 feet of the primary well;

(5) is limited to the same rate and quantity authorized by the primary well's appropriation or vested right;

(6) is equipped with a flowmeter; and

(7) is operated only when water is temporarily unavailable from the primary well or wells, except when water is needed for fire protection or a similar type of emergency.

(hh) "Stream" means any watercourse that has a well-defined bed and well-defined banks, and that flows continuously during the calendar year, except during periods of drought.

(ii) "Surface water" means water in creeks, rivers, or other watercourses, and in reservoirs, lakes, and ponds. This term shall not include water in groundwater pits.

(jj) "Thermal exchange" means the use of water for climate control in a nondomestic building and in a manner that is essentially nonconsumptive to the source of supply.

(kk) "Unconfined aquifer" means an aquifer with a water table at atmospheric pressure.

(ll) "Waste of water" means any act or omission that causes any of the following:

(1) The diversion or withdrawal of water from a source of supply that is not used or reapplied to a beneficial use on or in connection with the place of use authorized by a vested right, an appropriation right, or an approval of application for a permit to appropriate water for beneficial use;

(2) the unreasonable deterioration of the quality of water in any source of supply, thereby causing impairment of a person's right to the use of water;

(3) the escaping and draining of water intended for irrigation use from the authorized place of use; or

(4) the application of water to an authorized beneficial use in excess of the needs for this use. (mm) "Water balance" means the method of determining the amount of water

in storage in a basin storage area by accounting for inflow to, outflow from, and changes in storage in that basin storage area.

(nn) "Water table" means the top or surface of an unconfined or confined aquifer at which the pore water pressure is atmospheric.

(oo) "Well" means any excavation that is drilled, cored, bored, washed, driven, dug, or otherwise constructed if the intended use of the excavation is for the acquisition, diversion, or artificial recharge of groundwater.

(Authorized by and implementing K.S.A. 82a-706a and K.S.A. 2003 Supp. 82a-1028; effective May 1, 1979; amended Oct. 15, 1990; amended March 7, 1994; amended Nov. 12, 2004.)

***** Authenticated Kansas Administrative Regulation *****