

APPENDIX A – Definitions, Acronyms and Abbreviations

DEFINITIONS

- **Abandoned well** – a well that has not been used for six consecutive months. A well is considered to be in use in the following cases:
 - A non-deteriorated well which contains casing, pump, and pump column in good condition; or,
 - A non-deteriorated well which has been capped.
- **Acre-foot** – the volume of water necessary to cover one acre of land one foot deep. Equivalent to about 325,851 gallons.
- **Alluvium** – an unconsolidated terrestrial sediment composed of sorted or unsorted sand, gravel, and clay deposited by water from rivers, streams or tributaries.
- **Aquifer** – a geologic formation that contains sufficient saturated permeable material to yield water to a spring or well in sufficient quantities to make the production of water from this formation feasible for beneficial use. The formation could be sand, gravel, limestone, sandstone, or fracture igneous rocks. **
- **Beneficial purpose** – use for:
 - Agriculture, gardening, domestic, stock raising, municipal, mining, manufacturing, industrial, commercial, recreational, or pleasure purposes;
 - Exploring for, producing, handling, or treating oil, gas, sulfur, or other minerals;
 - Any other purpose that is useful and beneficial to the user. *
- **Board** – the board of directors of the CCGCD unless otherwise specified.
- **Brush control** – the select control, removal, or reduction of noxious brush that consume water to a degree that is detrimental to water conservation.
- **Confining unit (or layer)** – a hydrogeologic unit of impermeable or distinctly less permeable material bounding one or more aquifers.
- **Conjunctive use** – the combined use of groundwater and surface water sources that optimize the beneficial characteristics of each source. *
- **Conservation** – those water saving practices, techniques, and technologies that will reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative use. **
- **Desired future conditions (DFC)** – the desired, quantified conditions of groundwater resources (such as water levels, water quality, spring flows, or volumes), adopted in accordance with Section 36.108 of the Texas Water Code, at a specified time or times in the future or in perpetuity. *
- **Director** – a member of the CCGCD Board unless otherwise specified.
- **Discharge** – the amount of water that leaves an aquifer by natural or artificial means.
- **Disposal well** – see injection well.

- **Domestic use** – the use of water not delivered through a public water system for personal hygiene needs or for household purposes such as drinking, bathing, heating, cooking, or cleaning in a residence, including pleasure uses, landscape irrigation, and non-commercial gardening use so long as no more than 50% of the garden product is sold or leased.
- **Drawdown** – a lowering of the groundwater surface (potentiometric surface) caused by withdrawal or pumping of water from a well. At the well, it is the difference between the static water level and the pumping water level in a well pumped at a constant flow rate.
- **Drought** – generally applied to periods of less than average precipitation over a certain period of time.
- **Drought of record (DOR)** – period of time during recorded history when natural hydrological conditions provided the least amount of water supply. For Texas as a whole, the drought of record is generally considered to be from about 1950 to 1957. #
- **Exempt well** – a well that is exempt from the requirements to obtain a permit. In the CCGCD, this includes most domestic, livestock, mining (excluding gravel), rig supply and abandoned wells.
- **Fluvial** – of or pertaining to a river.
- **Formation** – the basic unit for the naming of rocks in lithostratigraphy; a set of rocks that are or once were, horizontally continuous, that share some distinctive feature of lithology, and that are large enough to be mapped.
- **Fracking (also hydraulic fracturing)** – a method used by oil and gas operators to artificially ‘fracture’ the hydrocarbon reservoir in order to enhance production. The method may consume relatively large quantities of water.
- **General Manager** – an individual employed by the Board of Directors of a district that is the chief administrator of the office and who has full authority to manage and operate the affairs of the district subject to Board approval.
- **Groundwater** – water located beneath the earth’s surface.
- **Groundwater availability model (GAM)** – numerical groundwater flow models used by the TWDB to determine groundwater availability of the major and minor aquifers in Texas. #
- **Groundwater management area (GMA)** – a group of district representatives covering an area designated by the TWDB, that have the task of, at least every five years, considering groundwater availability models and other data or information for the management area and establishing desired future conditions for the relevant aquifers within the area. CCGCD is within GMA 15.
- **Highland Lakes** – lake system composed of two major storage reservoirs – Lake Buchanan and Travis – which are owned and operated by LCRA. In addition, the system contains three intermediary lakes owned and operated by the LCRA – Inks Lake, Lake LBJ,

and Lake Marble Falls. Lake Austin is owned by the City of Austin and is operated by the LCRA through an agreement.

- ***Injection well (also disposal well)*** – an artificial excavation or opening in the ground made by digging, boring, drilling, jetting, driving, or some other method, and used to inject, transmit, or dispose of industrial and municipal waste or oil and gas waste into a subsurface stratum; or a well initially drilled to produce oil and gas which is used to transmit, inject, or dispose of industrial and municipal waste or oil and gas waste into a subsurface stratum; or a well used for the injection of any other fluid; but the term does not include any surface pit, surface excavation, or natural depression used to dispose of industrial and municipal waste or oil and gas waste.
- ***Interruptible supply*** – water that is supplied only on an annual basis as water is available that is subject to interruption or curtailment such as during droughts.
- ***Irrigation use*** – the use of water for the purpose of providing water to crops with the intent of growing and sustaining those crops for the consumption by humans or other domestic animals. In Colorado County, rice-growers are the heaviest users of irrigation water.
- ***Irrigation districts*** – LCRA-owned irrigation systems consisting of hundreds of miles of canals that can divert water from the Colorado River to individual farmers. LCRA has senior water rights for direct diversion of water from the Colorado River thereby relieving LCRA from responsibility of releasing water from storage in the Highland Lakes.
- ***Lithology*** – the physical characteristics of a rock based in part on texture and composition.
- ***Management plan*** – a plan approved by the TWDB Executive Administrator, that addresses the efficiency of groundwater use, the prevention of waste and subsidence, the conjunctive use of surface water, natural resource issues, drought conditions and conservation. The plan identifies a district's performance standards and management objectives under which it will operate, and includes groundwater availability and use estimates. Regional water planning groups are required to consider these plans in developing their regional plans.
- ***Meter*** – A device used to measure water flow. On well, it typically measures rate of flow in gallons per minute and cumulative production in gallons or acre-feet.
- ***Modeled available groundwater (MAG)*** – the amount of water that the TWDB determines may be produced on an average annual basis to achieve a desired future condition as established under Section 36.108 of the Texas Water Code. *
- ***Monitor well*** – a well that is used to measure or monitor the level, quality, quantity, or movement of subsurface waters.
- ***Needs*** – projected water demands in excess of existing water supplies for a water user group or a wholesale water provider.

- **Non-exempt well** – a well required to obtain a permit for the production of groundwater from within the District.
- **Permit** – an authorization issued by the District allowing the withdrawal of a specific amount of groundwater from a non-exempt well for a designated period of time, generally in the form of millions of gallons or acre-feet per year.
- **Plug** – to close a well permanently in accordance with approved District standards.
- **Rainwater harvesting** – accumulation and use of water from precipitation as a supplement to normal water usage.
- **Recharge** – the amount of water that infiltrates to the water table of an aquifer. #
- **Regional Water Planning Group** – a quasi-governmental body representing regional interests and having voting as well as nonvoting members who develop a regional water plan. It provides direction and guidance, determines policy issues, and oversees the progress of the regional plan. The interests presented generally include counties, municipalities, industries, the public, agriculture, environmental interests, small businesses, electric generating utilities, river authorities, water districts, water utilities and groundwater management areas. CCGCD is wholly within Region K Regional Water Planning Group. The TWDB is the lead state agency for coordinating the regional water planning process and developing a comprehensive state water plan.
- **Registration** – basic information provided to the groundwater District by the well or landowner usually containing information about the well location, type of use, well capacity and depth. A well identification number is designated by the District for reference purposes. Registration provides the owner or operator of the well with spacing protection and allows for notification in case of spills or accidents.
- **Return Flows** – that portion of water diverted from a water supply and beneficially used that is not consumed as a consequence of that use and returns to a watercourse. Return flows include sewage effluent. **
- **Reuse** – use of surface water that has already been beneficially used once under a water right or the use of groundwater that has already been used. #
- **Riparian rights** – the right to use the riverbed by one who owns river frontage land.
- **ROR (run-of-river) water rights** – water right permit that allows the permit holder to divert water directly out of a stream or river.
- **Rules** – standards and regulations promulgated by the District.
- **Spacing** – a mandated distance between wells implemented to conserve the aquifer.
- **Texas Administrative Code** – the codified body of laws that define the processes and operations of state agencies and their rulemaking authority. TWDB and TCEQ are generally governed by Title 30, Environmental Quality, and Title 31, Natural Resources and Conservation, of the Code.
- **Texas Water Code** – the codified portion of state water laws. It is the public policy of the state to provide for the conservation and development of the state’s natural resources.

- **Transmissivity** – the capacity of an aquifer to transmit water and is dependent on the water-transmitting characteristics of the saturated formation and the saturated thickness.
- **Unconformity** – a surface that separates two strata and represents an interval of time in which deposition stopped, erosion removed some sediment and rock, and then deposition resumed.
- **Waste** – any one or more of the following:
 - Withdrawal of groundwater from a groundwater reservoir at a rate and in an amount that causes or threatens to cause intrusion into the reservoir of water unsuitable for agriculture, gardening, domestic, or stock raising purposes;
 - The flowing or producing of wells from a groundwater reservoir if the water produced is not used for a beneficial purpose;
 - Escape of groundwater from a groundwater reservoir to any other reservoir or geologic strata that does not contain groundwater;
 - Pollution or harmful alteration of groundwater in a groundwater reservoir by saltwater or by other deleterious matter admitted from another stratum or from the surface of the ground;
 - Willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the commission under Chapter 26;
 - Groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the owner of the well unless permission has been granted by the occupant of the land receiving the discharge; or,
 - For water produced from an artesian well, “waste” has the meaning assigned by Section 11.205.
- **Water budget** – an accounting of the water that enters and leaves an aquifer.
- **Water demand** – quantity of water projected to meet the overall necessities of a water user group in a specific future year.
- **Water management strategy** – a strategy or specific project identified in a water plan whose purpose is to provide water to meet a demand or identified need. These water management strategies must be specific and provide sufficient detail to allow state agencies to make financial or regulatory decisions.
- **Water needs** – see Needs.
- **Water table** – the upper boundary of the saturated zone in an unconfined aquifer.
- **Water-user group (WUG)** – identified user or group of users for which water demands and water supplies have been identified and analyzed and plans developed to meet water needs. Water user groups are defined at the county level for the manufacturing, irrigation, steam-electric power generation, mining and municipal water use categories. #

- **Well** – any artificial excavation or borehole constructed for the purpose of exploring for or producing groundwater, or for injection, monitoring, or dewatering purposes.

* Definitions taken from Chapter 36 of the Texas Water Code

**Definitions were taken from the “Texas Water Law Glossary” (Flores and Wasinger, 2005)

#Definitions taken from 2012 State Water Plan (TWDB, 2012)

##Definitions taken from Chapter 27 of the Texas Water Code

ACRONYMS AND ABBREVIATIONS

- **CCGCD** – Colorado County Groundwater Conservation District
- **COA** – City of Austin
- **DOR** – drought of record
- **GAM** – groundwater availability model
- **GCD** – groundwater conservation district
- **GMA** – groundwater management area
- **LCRA** – Lower Colorado River Authority
- **LCRPG** – Lower Colorado River Planning Group (Region K)
- **MAG** – modeled available groundwater
- **ROR** – run-of-river
- **RRC** – Texas Railroad Commission
- **RWPG** – regional water planning group
- **TAGD** – Texas Alliance of Groundwater Districts
- **TCEQ** – Texas Commission on Environmental Quality
- **TWDB** – Texas Water Development Board
- **WUG** – water user group