

Texas Water Development Board List of Definitions

Definitions were obtained from the document "Texas Water Development Board Second Amended Exhibit C General Guidelines for Fifth Cycle of Regional Water Plan Development, April 2018." The terms and acronyms used in the guidance document as defined in 31 TAC §357.10 have the following meanings:

Agricultural Water Conservation – Defined in 31 Texas Administrative Code (TAC) §363.1302 (relating to Definition of Terms) as "those practices, techniques or technologies used in agriculture, as defined in Texas Agriculture Code, which will improve the efficiency of the use of water and further water conservation in the state, including but not limited to those programs or projects defined in Texas Water Code §§17.871 - 17.912."

Alternative Water Management Strategy – A fully evaluated water management strategy that may be substituted into a regional water plan in the event that a recommended water management strategy is no longer recommended.

Availability – The maximum amount of raw water that could be produced by a source during a repeat of the drought of record, regardless of whether the supply is physically connected to or legally accessible by water user groups.

Board (or TWDB) – The Texas Water Development Board.

Collective Reporting Unit (CRU) – A grouping of utilities located in a regional water planning area. Utilities within a Collective Reporting Unit must have a logical relationship, such as being served by common wholesale water providers, having common sources, or other appropriate associations.

Commission (or TCEQ) – The Texas Commission on Environmental Quality.

County-Other – An aggregation of utilities that provide less than an average of 100 acre-feet per year, as well as rural areas not served by a water utility in a given county.

Drought Contingency Plan (DCP) – A plan required from wholesale and retail public water suppliers and irrigation districts pursuant to Texas Water Code §11.1272 (relating to Drought Contingency Plans for Certain Applicants and Water Right Holders). The plan may consist of one or more strategies for temporary supply and demand management and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies as required by the Commission.

Drought Management Measures – Demand management activities to be implemented during drought that may be evaluated and included as water management strategies.

Drought Management Water Management Strategy – A drought management measure or measures evaluated and/or recommended in a state or regional water plan that quantifies temporary reductions in demand during drought conditions.

Drought of Record – The period of time when historical records indicate that natural hydrological conditions would have provided the least amount of water supply.

Executive Administrator (EA) – The executive administrator of the Texas Water Development Board or a designated representative.



Existing Water Supply – The maximum amount of water that is physically and legally accessible from existing sources for immediate use by a water user group under a repeat of drought of record conditions.

Firm Yield (reservoir availability) – The maximum water volume a reservoir can provide each year under a repeat of the drought of record using anticipated sedimentation rates and assuming that all senior water rights will be totally utilized and all applicable permit conditions met.

Initially Prepared Plan (IPP) – The draft regional water plan that is presented at a public hearing in accordance with 31 TAC §357.21(d) (relating to Notice and Public Participation) and submitted for Board review and comment.

Interbasin Transfer of Surface Water – Defined and governed in the Texas Water Code §11.085 (relating to Interbasin Transfers) as the diverting of any state water from a river basin and transfer of that water to any other river basin.

Interregional Conflict – An interregional conflict exists when:

- more than one regional water plan includes the same source of water supply for identified and quantified recommended water management strategies and there is insufficient water available to implement such water management strategies; or
- in the instance of a recommended water management strategy proposed to be supplied from a different regional water planning area, the regional water planning group with the location of the strategy has studied the impacts of the recommended water management strategy on its economic, agricultural, and natural resources, and demonstrates to the Board that there is a potential for a substantial adverse effect on the region as a result of those impacts.

Intraregional Conflict – A conflict between two or more identified, quantified, and recommended water management strategies in the same IPP that rely upon the same water source, so that there is not sufficient water available to fully implement all water management strategies and thereby creating an over-allocation of that source.

Major Water Provider (MWP) – A water user group or a wholesale water provider of particular significance to the region's water supply as determined by the regional water planning group. This may include public or private entities that provide water for any water use category.

Modeled Available Groundwater (MAG) Peak Factor – A percentage (e.g. greater than 100 percent) that is applied to a modeled available groundwater value reflecting the annual groundwater availability that, for planning purposes, shall be considered temporarily available for pumping consistent with desired future conditions. The approval of a MAG Peak Factor is not intended as a limit to permits or as guaranteed approval or pre-approval of any future permit application.

Planning Decades – Temporal snapshots of conditions anticipated to occur and presented at even intervals over the planning horizon used to present simultaneous demands, supplies, needs, and strategy volume data. A water management strategy that is shown as initially providing a supply in the 2040 decade, for example, is assumed to come online in the year 2040.

Political Subdivision – City, county, district, or authority created under the Texas Constitution, Article III, §52, or Article XVI, §59, any other political subdivision of the state, any interstate compact commission to which the state is a party, and any nonprofit water supply corporation created and operating under the Texas Water Code Chapter 67 (relating to Nonprofit Water Supply or Sewer Service Corporations).

Regional Water Plan (RWP) – The plan adopted or amended by a regional water planning group pursuant to the Texas Water Code §16.053 (relating to Regional Water Plans) and 31 TAC Chapter 357.



Regional Water Planning Area (RWPA) – The area designated pursuant to the Texas Water Code §16.053.

Regional Water Planning Group (RWPG) – A group designated pursuant to the Texas Water Code §16.053.

RWPG-Estimated Groundwater Availability – The groundwater availability used for planning purposes as determined by RWPGs to which 31 TAC §357.32(d)(2) (relating to Water Supply Analysis) is applicable or where no desired future condition has been adopted.

Retail Public Utility – Defined in the Texas Water Code §13.002 (relating to Water Rates and Services) as "any person, corporation, public utility, water supply or sewer service corporation, municipality, political subdivision or agency operating, maintaining, or controlling in this state facilities for providing potable water service or sewer service, or both, for compensation."

Reuse – Defined in 31 TAC §363.1302 (relating to Definition of Terms) as "the beneficial use of groundwater or surface water that has already been beneficially used." For purposes of this document:

- Indirect reuse is process water that reenters a river or stream system and is diverted and used again downstream.
- Direct reuse is process water recirculated within a given system.

State Drought Preparedness Plan – A plan, separate from the state water plan, that is developed by the Drought Preparedness Council for the purpose of mitigating the effects of drought pursuant to the Texas Water Code §16.0551 (relating to State Drought Preparedness Plan).

State Drought Response Plan – A plan prepared and directed by the chief of the Texas Division of Emergency Management for the purpose of managing and coordinating the drought response component of the State Water Plan and the State Drought Preparedness Plan pursuant to the Texas Water Code §16.055 (relating to Drought Response Plan).

State Water Plan – The most recent state water plan adopted by the Board under the Texas Water Code §16.051 (relating to State Water Plan).

State Water Planning Database – The database maintained by TWDB that stores data related to population and Water Demand projections, water availability, existing water supplies, water management strategy supplies, and water management strategy projects. It is used to collect, analyze, and disseminate regional and statewide water planning data.

Technical Memorandum – Documentation of the RWPG's preliminary analysis of water demand projections, water availability, existing water supplies, and water needs and declaration of the RWPG's intent of whether or not to pursue simplified planning.

Unmet Water Need – The portion of an identified water need that is not met by recommended water management strategies.

Water Conservation Measures – Practices, techniques, programs, and technologies that will protect water resources, reduce the consumption of water, reduce the loss or waste of water, or improve the efficiency in the use of water that may be presented as water management strategies, so that a water supply is made available for future or alternative uses. For planning purposes, water conservation measures do not include reservoirs, aquifer storage and recovery, or other types of projects that develop new water supplies.



Water Conservation Plan – The most current plan required by the Texas Water Code §11.1271 (relating to Water Conservation Plans) from an applicant for a new or amended water rights permit and from any holder of a permit, certificate, etc. who is authorized to appropriate 1,000 acre-feet per year or more for municipal, industrial, and other non-irrigation uses and for those who are authorized to appropriate 10,000 acre-feet per year or more for irrigation; the most current plan required by the Texas Water Code §13.146 from a retail public utility that provides potable water service to 3,300 or more connections; and the most current plan required by the Texas Administrative Code §363.15 from an applicant for financial assistance. These plans must include specific, quantified 5-year and 10-year targets for water savings.

Water Conservation Strategy – A water management strategy with quantified volumes of water associated with water conservation measures.

Water Demand – The volume of water required to carry out the anticipated domestic, public, and/or economic activities of a water user group during drought conditions.

Water Management Strategy (WMS) – A plan to meet a need for additional water by a discrete water user group, which can mean increasing the total water supply or maximizing an existing supply, including through reducing demands. A WMS may or may not require an associated water management strategy project(s) to be implemented.

Water Management Strategy Project (WMSP) – A water project that has a non-zero capital cost and that when implemented, would develop, deliver, and/or treat additional water supply volumes, or conserve water for water user groups or wholesale water providers. One WMSP may be associated with multiple WMSs.

Water Need – A potential water supply shortage based on the difference between projected water demands and existing water supplies.

Water User Group (WUG) – Identified user or group of users for which water demands and existing water supplies have been identified and analyzed and plans developed to meet water needs. These include:

- privately-owned utilities that provide an average of more than 100 acre-feet per year for municipal use for all owned water systems,
- water systems serving institutions or facilities owned by the state or federal government that provide more than 100 acre-feet per year for municipal use;
- all other retail public utilities not covered in paragraphs (a) and (b) that provide more than 100 acre-feet per year for municipal use;
- collective reporting units, or groups of retail public utilities that have a common association and are requested for inclusion by the regional water planning group;
- municipal and domestic water use, referred to as county-other, not included in subparagraphs (a) – (d) of this subsection; and,
- non-municipal water use including manufacturing, irrigation, steam electric power generation, mining, and livestock watering for each county or portion of a county in a regional water planning area.

Wholesale Water Provider (WWP) – Any person or entity, including river authorities and irrigation districts, that delivers or sells water wholesale (treated or raw) to WUGs or other WWPs or that the RWPG expects or recommends to deliver or sell water wholesale to WUGs or other WWPs during the period covered by the plan. The RWPGs shall identify the WWPs within each region to be evaluated for plan development.



Other definitions pertinent to regional water planning:

Aquifer – Geologic formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs. The formation could be sand, gravel, limestone, sandstone, or fractured igneous rocks.

Aquifer Recharge – Water that infiltrates to the water table of an aquifer.

Aquifer Storage and Recovery – The practice of injecting water, when available, into an aquifer where it is stored for later use.

Brackish Water – Water containing total dissolved solids between 1,000 and 10,000 milligrams per liter.

Capital Cost – Portion of the estimated cost of a water management strategy that includes both the direct costs of constructing facilities, such as materials, labor, and equipment, and the indirect costs associated with construction activities, such as engineering studies, legal counsel, land acquisition, contingencies, environmental mitigation, interest during construction, and permitting.

Conjunctive Use – Combined use of surface water, groundwater and/or reuse sources that optimizes the beneficial characteristics of each source.

Desalination – Process of removing salt and other dissolved solids from seawater or brackish water.

Desired Future Condition (DFC) – The desired, quantified condition of groundwater resources (such as water levels, spring flows, or volumes) within a management area at one or more specified future times as defined by participating groundwater conservation districts within a groundwater management area as part of the joint planning process.

Drought – Generally applied to periods of less than average precipitation over a certain period of time. Associated definitions include meteorological drought (abnormally dry weather), agricultural drought (adverse impact on crop or range production), and hydrologic drought (below-average water content in aquifers and/or reservoirs).

Environmental flows – An environmental flow is an amount of water that should remain in a stream or river for the benefit of the environment of the river, bay, and estuary, while balancing human needs.

Estuary – A bay or inlet, often at the mouth of a river and may be bounded by barrier islands, where freshwater and seawater mix together providing for economically and ecologically important habitats and species and which also yield essential ecosystem services.

Firm Diversion (run of river availability) – Evaluated for municipal sole-source water use (i.e. not firmed up with other sources) is defined as the minimum monthly diversion amount that is available 100 percent of the time during a repeat of the drought of record. Evaluated for all other water users, the 'firm diversion' is defined as the minimum annual diversion, which is the lowest annual summation of the monthly diversions reported by the WAM over the simulation period (lowest annual summation being the calendar year within the simulation that represents the lowest diversion available).

Groundwater Availability Model (GAM) – A regional groundwater flow model approved by the Executive Administrator.

Groundwater Management Area (GMA) – Geographical region of Texas designated and delineated by the TWDB as an area suitable for management of groundwater resources.

Infrastructure – Physical means for meeting water and wastewater needs, such as dams, wells, conveyance systems, and water treatment plants.



Instream Flow – Water flow and water quality regime adequate to maintain an ecologically sound environment in streams and rivers.

Local Groundwater Supplies – Supplies found in local groundwater areas usually not associated with a major, minor, or other aquifer (e.g., a small local alluvial aquifer) that may still be used as a nonmunicipal water supply source (e.g., for livestock use), but that the GMA determined to be small enough to not go through the DFC process.

Local Surface Water Supplies – Limited, unnamed individual surface water supplies that, separately, are available only to particular non-municipal WUGs, such as livestock.

Major Aquifer – An aquifer that produces large amounts of water over a large area.

Minor Aquifer – An aquifer that produces minor amounts of water over a large area or large amounts of water over small area.

Modeled Available Groundwater (MAG) – The amount of water that the executive administrator determines may be produced on an average annual basis to achieve a desired future condition.

Non-relevant Aquifer – An Aquifer/Region/County/Basin geographic unit or a sub-portion of such a geographic aquifer unit where the GMA did not assign a DFC. This results in this geographic unit (or subportion) not having an associated availability MAG volume. In addition, this means that the associated Aquifer/Region/County/Basin geographic unit may or may not have a non-MAG groundwater availability volume (as determined by the RWPG) associated with it.

Other Aquifer – An aquifer that has not been designated as major or minor.

Rainwater Harvesting – An ancient practice involving the capture, diversion, and storage of rainwater for landscape irrigation, drinking and domestic use, aquifer recharge, and in modern times, stormwater abatement.

Relevant Aquifer – Aquifers or parts of aquifers for which groundwater conservation districts have defined desired future conditions.

Seawater – Water typically containing total dissolved solids of 35,000 milligrams per liter or greater. The volume of total dissolved solids may be lower than 35,000 milligrams per liter.

Sedimentation – Action or process of depositing sediment in a reservoir, usually silts, sands, or gravel.

Storage – Natural or artificial impoundment and accumulation of water in surface or underground reservoirs, usually for later withdrawal or release.

System Gain – The amount of permitted water a system creates that would otherwise be unavailable if the reservoirs were operated independently and this volume must be reported separately. For multireservoir systems, the minimum system gain during drought of record conditions may be considered additional water available, if permitted.

Water Availability Model (WAM) – Numerical computer program used to determine the availability of surface water within each river basin for permitting in the state.

