

Basic Water Terminology Glossary

Guadalupe – San Antonio Stakeholder Group

Acre-feet (acft) - A volume of water typically used in describing the storage in a reservoir. It is the equivalent to a 1 foot depth of water spread over an acre.

- **acft/mo of acft/yr** - A volume of water used or delivered over an entire month or year. These units are used for large volumes of water, typically used when describing water rights diversion amounts or amount of water right used within a given year.

Appropriations - The process or series of operations by which an appropriative right is acquired. A completed appropriation thus results in an appropriative right; the water to which a completed appropriation in good standing relates is appropriated water.

Appropriative right - The right to impound, divert, store, take, or use a specific quantity of state water acquired by law.

Aquatic community – An association of interacting populations of aquatic organisms in a given water body or habitat.

Aquatic ecosystem – The stream channel, lake or estuary bed, water, and/or biotic communities and the habitat features that occur therein.

Aquatic habitat – Environments characterized by the presence of standing or flowing water.

Aquifer Storage and Retrieval Project - A project with two phases that anticipates the use of a Class V aquifer storage well, as defined in '331.2 of this title (relating to Definitions), for injection into a geologic formation, group of formations, or part of a formation that is capable of underground storage of appropriated surface water for subsequent retrieval and beneficial use. Phase I of the project requires commission authorization by a temporary or term permit to determine feasibility for ultimate storage and retrieval for beneficial use. Phase II of the project requires commission authorization by permit or permit amendment after the commission has determined that Phase I of the project has been successful.

Baseflow or normal flow – Normal flow conditions between storm events. The portion of streamflow uninfluenced by recent rainfall or flood runoff and is comprised of springflow, seepage, discharge from artesian wells or other groundwater sources, and the delayed drainage of large lakes and swamps. (Accountable effluent discharges from municipal, industrial, agricultural, or other uses of ground or surface waters may be included at times.)

Beneficial inflows - Freshwater inflows providing for a salinity, nutrient, and sediment loading regime adequate to maintain an ecologically sound environment in the receiving bay and estuary that is necessary for the maintenance of productivity of economically important and ecologically characteristic sport or commercial fish and shellfish species and estuarine life upon which such fish and shellfish are dependent.

Beneficial use - Use of the amount of water which is economically necessary for a purpose authorized by law, when reasonable intelligence and reasonable diligence are used in applying the water to that purpose and shall include conserved water.

Benthic Macroinvertebrates – Benthic fauna large enough to see without the aid of a microscope.

Biological assessment – An evaluation of the biological condition of a water body by using biological surveys and other direct measurements of a resident biota in surface water.

Biological survey (or biosurvey) – Consists of collecting, processing, and analyzing representative portions of a resident aquatic community to determine the community structure and function.

Certificate of adjudication - An instrument evidencing a water right issued to each person adjudicated a water right in conformity with the provisions of Texas Water Code, '11.323, or the final judgment and decree in *State of Texas v. Hidalgo County Water Control and Improvement District No. 18*, 443 S.W.2d 728 (Texas Civil Appeals - Corpus Christi 1969, writ ref. n.r.e.).

Conservation - Those 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 uses.

Conserved water - That amount of water saved by a water right holder through practices, techniques, or technologies that would otherwise be irretrievably lost to all consumptive beneficial uses arising from the storage, transportation, distribution, or application of the water. Conserved water does not mean water made available simply through its non-use without the use of such practices, techniques, or technologies.

Consumptive use--that part of water withdrawn that is evaporated, transpired by plants, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment. Water removed from available supplies without return to a water resources system; water used in manufacturing, agriculture, and food preparation. Also referred to as water consumed.

Conveyance loss - Water that is lost in transit from a pipe, canal, or ditch by leakage or evaporation. Generally, the water is not available for further use; however, leakage from an irrigation ditch, for example, may percolate to a ground-water source and be available for further use.

Cubic feet per second (cfs) - A rate of flow typically used in measuring streamflow, to illustrate how a volume of water (a cubic foot) moves past a point over a period of time (seconds).

Designated Segment - A water body which has been assigned specific uses, such as a contact recreation use, by the State of Texas and which has specific surface water quality criteria assigned to that water body.

Designated Use - Are specific categories of utilization that have been assigned to individual water bodies. Concentration criteria for specific constituents are evaluated to determine if the use is being met. Designated uses evaluated are overall use, aquatic life use, contact recreation, and public water supply.

Diffused surface water - Water on the surface of the land in places other than watercourses. Diffused water may flow vagrantly over broad areas coming to rest in natural depressions, playa lakes, bogs, or marshes. (An essential characteristic of diffused water is that its flow is short-lived.)

Direct Reuse - The delivery of treated wastewater from a wastewater treatment plant to place of use via pipeline

- Sometimes called “flange-to-flange”
- Typically used for irrigation, industrial processes, and cooling

Dissolved Oxygen (DO) - Dissolved oxygen refers to the amount of oxygen molecules dissolved in a water body. The amount of dissolved oxygen determines which aquatic organisms will be favored, and will also determine the rate and direction of many chemical reactions

Diversion - A turning aside or alteration of the natural course of a flow of water, normally considered physically to leave the natural channel. In some States, this can be a consumptive use direct from another stream, such as by livestock watering. In other States, a diversion must consist of such actions as taking water through a canal, pipe, or conduit.

Diversity - A collection of different kinds of organisms in a specific area. A diverse aquatic community is usually an indication of good water quality and habitat.

Domestic use - Use of water by an individual or a household to support domestic activity. Such use may include water for drinking, washing, or culinary purposes; for irrigation of lawns, or of a family garden and/or orchard; for watering of domestic animals; and for water recreation including aquatic and wildlife enjoyment. If the water is diverted, it must be diverted solely through the efforts of the user. Domestic use does not include water used to support activities for which consideration is given or received or for which the product of the activity is sold.

Drainage Basin – The area that drains all precipitation received as runoff and base flow (from ground water sources) into a river or stream system that has a common outlet such as a lake or sea.

Drought of record - The historic period of record for a watershed in which the lowest flows were known to have occurred based on naturalized streamflow.

Ecoregions (or regions of ecological similarity) – A homogeneous area defined by similarity of climate, landform, soil, potential natural vegetation, hydrology, or other ecologically relevant variable. Regions of ecological similarity help define the potential designated use classifications of specific water bodies.

Ecosystem – A system that is made up of a community of animals, plants, and bacteria and its interrelated physical and chemical environment.

Effluent - Treated or untreated waste water that flows out of a treatment plant or industrial outfall, prior to entering a water body.

Endangered species –

- A. Any species in danger of extinction throughout all or a significant portion of its range.
- B. Animals, birds, fish, plants or other living organisms that are threatened with extinction by manmade or natural changes in their environment. Requirements for declaring a species endangered are contained in Endangered Species Act.

Environmental Flows or Freshwater Inflows - The amount of river and other flows of freshwater needed to maintain acceptable conditions in the estuarine areas that support marine life and other species. Freshwater inflows help control salinity levels and supply critical nutrients and sediments.

Environmental Flow Regime – A schedule of flow quantities that reflects seasonal and yearly fluctuations that typically would vary geographically, by a specific location in a watershed, and that are shown to be adequate to support a sound ecological environment and to maintain the productivity, extent, and persistence of key aquatic habitats in and along the affected water.

E. coli (Escherichia coli) Bacteria - These bacteria are common in the human intestinal tract and are used as an indicator of fecal contamination. E. coli are the current choice of bacteria in determining if the contact recreation use of a water body is being met because they are more specific to humans contamination (and therefore possible diseases causing organisms) than fecal coliform bacteria.

Estuarine wetlands - Tidal wetlands in low-wave-energy environments where the salinity of the water is greater than 0.5 part per thousand and is variable owing to evaporation and the mixing of seawater and freshwater; tidal wetlands of coastal rivers and embayments, salty tidal marshes, mangrove swamps, and tidal flats.

Estuary - Area where the current of a stream meets the ocean and where tidal effects are evident; an arm of the ocean at the lower end of a river.

Fecal Coliform Bacteria - Until a few years ago fecal coliform was the indicator of choice for bacterial contamination of a water body. Fecal coliform bacteria are found in the intestinal tracts of warm blooded animals.

Firm Yield - That amount of water that the reservoir could have produced annually if it had been in place during the worst drought of record. In performing this simulation, naturalized streamflows will be modified as appropriate to account for the full exercise of upstream senior water rights is assumed as well as the passage of sufficient water to satisfy all downstream senior water rights valued at their full authorized amounts and conditions as well as the passage of flows needed to meet all applicable permit conditions relating to instream and freshwater inflow requirements.

Fixed Station Monitoring – The repeated long-term sampling or measurement of parameters at representative points for the purpose of determining environmental quality characteristics and trends.

Floodplain – The land areas adjacent to rivers and streams that are subject to recurring inundation.

Forbs - Herbaceous non woody plants other than grasses.

Freshwater Inflows or Environmental Flows - The amount of river and other flows of freshwater needed to maintain acceptable conditions in the estuarine areas that support marine life and other species. Freshwater inflows help control salinity levels and supply critical nutrients and sediments.

Gallons Per Minute (GPM) - A rate of water used or delivered within a minute's time. This unit is used for large volumes of water, typically used when describing treated water rates (both in water treatment plants and wastewater treatment plants).

Geographic information system (GIS) – A computerized system for combining, displaying, and analyzing geographic data. GIS produces maps for environmental planning and management by integrating physical and biological information (soils, vegetation, hydrology, living resources, and so forth) and cultural information (population, political boundaries, roads, bank and shoreline development, and so forth).

Geomorphology - The science that treats the general configuration of the Earth's surface; the description of landforms.

Glide - Portion of the water column in which the flow is characterized by slow moving laminar flow, similar to that which would be found in a shallow canal. A glide is too shallow to be a pool but the water velocity is too slow to be a run.

Gravel - Type of substrate 0.7 to 6 centimeters (0.3 to 2.4 inches) in size.

Groundwater - Water under the surface of the ground other than underflow of a stream and underground streams, whatever may be the geologic structure in which it is standing or moving.

Habitat – A place where the physical and biological elements of ecosystems provide a suitable environment and the food, cover, and space resources needed for the plant and animal existence.

Habitat Mitigation - Actions taken to off-set anticipated adverse environmental impacts from a proposed project. Such actions and their sequence include:

(A) Avoiding the impact altogether by not taking a certain action or parts of an action or pursuing a reasonably practicable alternative;

(B) Minimizing impacts by limiting the degree or magnitude of the action and its implementation;

(C) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

(D) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project; and

(E) Compensating for the impact by replacing or providing substitute resources or environments.

High flow Pulses – Short duration, in-channel, high flow events following storm events. Short-duration flows confined to the stream channel and occur during or immediately after storms. High-flow pulses flush fine-sediment deposits and waste products from the system, restore normal water quality following prolonged low flows.

Hydrology - The science that deals with water as it occurs in the atmosphere, on the surface of the ground, and underground.

Hydropower use - The use of water for hydroelectric and hydromechanical power and for other mechanical devices of like nature.

Impact – A change in the chemical, physical, or biological quality or condition of a water body caused by external sources.

Impairment – A detrimental effect on the biological integrity of a water body caused by impact that prevents attainment of the designated use.

Indicator species – A species of plant or animal where the presence or absence indicates the general health of the community upon which the species is most dependent. Generally, providing for the needs of the indicator species will also meet the needs of most other organisms in the community.

Indirect Reuse - The discharge of treated wastewater into a river, stream, or lake for subsequent diversion downstream.

- Sometimes called “Bed and Banks transfer”

Industrial use - The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, including commercial fish and

shellfish production and the development of power by means other than hydroelectric, but does not include agricultural use.

Instream flow - An amount of water running in a river, usually measured by the volume moving down the channel in a specified amount of time (discharge). A variety of instream flows are required to maintain a healthy river.

Instream use - The beneficial use of instream flows for such purposes including, but not limited to, navigation, recreation, hydropower, fisheries, game preserves, stock raising, park purposes, aesthetics, water quality protection, aquatic and riparian wildlife habitat, freshwater inflows for bays and estuaries, and any other instream use recognized by law. An instream use is a beneficial use of water. Water necessary to protect instream uses for water quality, aquatic and riparian wildlife habitat, recreation, navigation, bays and estuaries, and other public purposes may be reserved from appropriation by the commission.

Intolerant Species - Species of organisms that do not have the capacity to grow and thrive when subjected to unfavorable environmental factors.

Irrigation - The use of water for the irrigation of crops, trees, and pasture land, including, but not limited to, golf courses and parks which do not receive water through a municipal distribution system.

Irrigation water efficiency - The percentage of that amount of irrigation water which is beneficially used by agriculture crops or other vegetation relative to the amount of water diverted from the source(s) of supply. Beneficial uses of water for irrigation purposes include but are not limited to evapotranspiration needs for vegetative maintenance and growth and salinity management and leaching requirements associated with irrigation.

Leaching - the process by which soluble materials in the soil, such as salts, nutrients, pesticide chemicals or contaminants, are washed into a lower layer of soil or are dissolved and carried away by water.

Listed species – Any species of fish, wildlife, or plant officially designated by an agency as being endangered or threatened.

Livestock use - The use of water for the open-range watering of livestock, exotic livestock, game animals or fur-bearing animals. For purposes of this definition, the terms livestock and exotic livestock are to be used as defined in '142.001 of the Agriculture Code, and the terms game animals and fur-bearing animals are to be used as defined in '63.001 and 71.001, respectively, of the Parks and Wildlife Code.

Main Stem – The principal waterway of a river, excluding its tributaries.

Mariculture - The propagation and rearing of aquatic species, including shrimp, other crustaceans, finfish, mollusks, and other similar creatures in a controlled environment using brackish or marine water.

Metadata – Information that describes the content, quality, condition, and other characteristics of data.

Million Gallons per Day (MGD) - A volume of water used or delivered over a day. This unit is used for large volumes of water, typically used when describing treated water amounts (both in water treatment plants and wastewater treatment plants).

Mining use - The use of water for mining processes including hydraulic use, drilling, washing sand and gravel, and oil field repressuring.

Monitoring –

- A. The repeated measurement of some parameters to assess the current status and changes over time of the parameters measured.
- B. Periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements and/or pollutant levels in various media or in humans, animals, and other living things.

Municipal per capita water use - The sum total of water diverted into a water supply system for residential, commercial, and public and institutional uses divided by actual population served.

Municipal use - The use of potable water within a community or municipality and its environs for domestic, recreational, commercial, or industrial purposes or for the watering of golf courses, parks and parkways, or the use of reclaimed water in lieu of potable water for the preceding purposes or the application of municipal sewage effluent on land, under a Texas Water Code, Chapter 26, permit where:

- (A) The application site is land owned or leased by the Chapter 26 permit holder; or
- (B) The application site is within an area for which the commission has adopted a no-discharge rule.

Native species – Any animal and plant species originally found in the United States.

Navigable stream - By law, Natural Resources Code, '21.001(3), any stream or streambed as long as it maintains from its mouth upstream an average width of 30 feet or more, at which point it becomes statutorily nonnavigable.

Non-point source pollution – A contributory factor to water pollution that cannot be traced to a specific spot; for example, pollution that results from water runoff from urban areas, construction sites, agricultural and silvicultural operations, and so forth.

Nutrient - A nutrient is any substance used by an organism for maintaining life and growth.

One-hundred-year flood - The flood peak discharge of a stream, based upon statistical data, which would have a 1.0% chance of occurring in any given year.

Outfall - the place where a sewer, drain, or stream discharges; the outlet or structure through which reclaimed water or treated effluent is finally discharged to a receiving water body.

Overbank flows – Infrequent, high-flow events that breach riverbanks. Overbank flows may restructure the channel and floodplain, recharge groundwater tables, deliver nutrients to riparian vegetation and connect the channel to floodplain habitats that provide additional food and space for aquatic organisms.

Peak flow - the maximum instantaneous discharge of a stream or river at a given location. It usually occurs at or near the time of maximum stage.

Perennial streams – Permanently inundated surface stream courses. Surface water flows throughout the year except in years of infrequent drought.

Permit - The authorization by the commission to a person whose application for a permit has been granted. A permit also means any water right issued, amended, or otherwise administered by the commission unless the context clearly indicates that the water right being referenced is being limited to a certificate of adjudication, certified filing, or unadjudicated claim.

Point-source pollution – Pollution discharged through a pipe or some other discrete source from municipal water-treatment plants, factories, confined animal feedlots, or combined sewers (does not include septic tanks).

Point-source pollution – Pollution discharged through a pipe or some other discrete source from municipal water-treatment plants, factories, confined animal feedlots, or combined sewers (does not include septic tanks).

Population –

- A. For the purposes of natural-resource planning, the set of individuals of the same species that occurs within the natural resource of interest.
- B. An aggregate of inbreeding individuals of a biological species within a specified location.

Priority - As between appropriators, the first in time is the first in right, Texas Water Code, '11.027, unless determined otherwise by an appropriate court or state law.

Prior appropriation doctrine--the system for allocating water to private individuals used in most Western states. The doctrine of Prior Appropriation was in common use throughout the arid West as early settlers and miners began to develop the land. The prior appropriation doctrine is based on the concept of "First in Time, First in Right." The first person to take a quantity of water and put it to beneficial use has a higher priority of right than a subsequent user. The rights can be lost through nonuse; they can also be sold or transferred apart from the land.

Reclaimed water - Municipal or industrial wastewater or process water that is under the direct control of the treatment plant owner/operator, or agricultural tailwater that has been collected for reuse, and which has been treated to a quality suitable for the authorized beneficial use.

Recreational use - The use of water impounded in or diverted or released from a reservoir or watercourse for fishing, swimming, water skiing, boating, hunting, and other forms of water recreation, including aquatic and wildlife enjoyment, and aesthetic land enhancement of a subdivision, golf course, or similar development.

Return flows or Return water - That portion of state water diverted from a water supply and beneficially used which is not consumed as a consequence of that use and returns to a watercourse. Return flow includes sewage effluent.

Reuse - The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other body of state-owned water.

Riffle - A shallow portion of the stream extending across a stream bed characterized by relatively fast moving turbulent water.

Riparian – Of, pertaining to, or situated or dwelling on the bank of a river or other water body. Generally includes the area of the stream and out onto the flood plain which is periodically inundated by the flood water from the stream.

Riparian habitat - The transition zone between aquatic and upland habitat. These habitats are related to and influenced by surface or subsurface waters, especially the margins of streams, lakes, ponds, wetlands, seeps and ditches.

Riparian water rights--the rights of an owner whose land abuts water. They differ from state to state and often depend on whether the water is a river, lake, or ocean. The doctrine of riparian rights is an old one, having its origins in English common law. Specifically, persons who own land adjacent to a stream have the right to make reasonable use of the stream. Riparian users of a stream share the streamflow among themselves, and the concept of priority of use (Prior Appropriation Doctrine) is not applicable. Riparian rights cannot be sold or transferred for use on nonriparian land.

Riparian Zone – The vegetated corridor along streams and rivers.

Riprap - Chunks of concrete and other material thrown together on an embankment slope to prevent erosion.

River basin - A river or coastal basin designated by the Texas Water Development Board as a river basin under Texas Water Code, '16.051. The term does not include waters originating in bays or arms of the Gulf of Mexico.

River Channel – The clearly defined path a stream flows down. This path is defined by a bed and banks.

River reach – A river or stream segment of a specified length.

Run - A relatively shallow portion of a stream characterized by relatively fast moving non-turbulent flow. A run is usually too deep to be considered a riffle and too shallow to be considered a pool.

Runoff - That portion of streamflow comprised of surface drainage or rainwater from land or other surfaces during or immediately following a rainfall.

Secondary use - The reuse of state water for a purpose after the original, authorized use.

Sensitive species – Those animal and plant species for which population variability is a concern. Plant or animal species which are susceptible to habitat changes or impacts from activities.

Sewage or sewage effluent - Water-carried human or animal wastes from residences, buildings, industrial establishments, cities, towns, or other places, together with any groundwater infiltration and surface waters with which it may be commingled.

Species – A group of plants or animals having common characteristics and able to breed together to produce fertile offspring, so that they maintain their ‘separateness’ from other groups.

State water - The water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the stormwater, floodwater, and rainwater of every river, natural stream, and watercourse in the state. State water also includes water which is imported from any source outside the boundaries of the state for use in the state and which is transported through the beds and banks of any navigable stream within the state or by utilizing any facilities owned or operated by the state. Additionally, state water injected into the ground for an aquifer storage and recovery project remains state water. State water does not include percolating groundwater; nor does it include diffuse surface rainfall runoff, groundwater seepage, or springwater before it reaches a watercourse.

Stormwater or floodwater - Water flowing in a watercourse as the result of recent rainfall.

Streamflow - The water flowing within a watercourse.

Substrate - This is the material (gravel, sand, silt, etc.) that makes up the stream bottom.

Subsistence flows – Infrequent, seasonal periods of low flow. The minimum stream flow needed during critical drought periods to maintain tolerable water-quality conditions and to provide minimal aquatic habitat space for the survival of aquatic organisms.

Surplus water - Water taken from any source in excess of the initial or continued beneficial use of the appropriator for the purpose or purposes authorized by law. Water that is recirculated within a reservoir for cooling purposes shall not be considered to be surplus water.

Taxonomic features - A hierarchical (description of a structure) system used for classifying organisms to the species level.

Tolerant Species - Species of organisms that have the capacity to grow and thrive when subjected to unfavorable environmental factors.

Total dissolved solids – The amount of salt and other solids that are dissolved in water is commonly expressed in units of salinity or total dissolved solids. These units all measure the concentration of solids in water.

A) **Units of salinity** are typically expressed as parts per thousand (PPT) where a salinity of 1 means there is 1 part of dissolved solids for each 1,000 parts of water.

B) **Units of total dissolved solids** are typically expressed as parts per million (PPM) or milligrams per liter (mg/L). These units mean the same thing where 1 PPM has the same concentration of solids as 1 mg/L.

- *Drinking water standard is 500 mg/L (0.5 PPT or 500 PPM)*
- *Estuarine salinity is typically between 5 and 30 PPT (5,000 and 30,000 PPM or 5,000 and 30,000 mg/L)*
- *Seawater salinity is typically ~35 PPT (~35,000 PPM or ~35,000 mg/L)*

Total Maximum Daily Load (TMDL) – The total allowable pollutant load to a receiving water such that any additional loading will produce a violation of water quality standards.

Transects - A straight line, perpendicular to stream flow between two points on opposite stream banks.

Tributary – A smaller stream that flows into a larger stream or river to which it contributes water.

Unappropriated water - The amount of state water remaining in a watercourse or other source of supply after taking into account complete satisfaction of all existing water rights valued at their full authorized amounts and conditions.

Undercut Banks - Are stream banks which are not vertical. Typically, the surface edge of these banks extends out over the stream. These banks normally have bank angles greater than 90 degrees.

Underflow of a stream - Water in sand, soil, and gravel below the bed of the watercourse, together with the water in the lateral extensions of the water-bearing material on each side of the surface channel, such that the surface flows are in contact with the subsurface flows, the latter flows being confined within a space reasonably defined and having a direction corresponding to that of the surface flow.

Waste - The diversion of water if the water is not used for a beneficial purpose; the use of that amount of water in excess of that which is economically reasonable for an authorized purpose when reasonable intelligence and reasonable diligence are used in applying the water to that purpose. Waste may include, but not be limited to, the unreasonable loss of water through faulty design or negligent operation of a water delivery, distribution or application system, or the diversion or use of water in any manner that causes or threatens to cause pollution of water. Waste does not include the beneficial use of water where the water may become polluted because of the nature of its use, such as domestic or residential use, but is subsequently treated in accordance with all applicable rules and standards prior to its discharge into or adjacent to water in the state so that it may be subsequently beneficially used.

Water conservation plan - A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for preventing or reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate planning document or may be contained within another water management document(s).

Water in the state - Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.

Watercourse - A definite channel of a stream in which water flows within a defined bed and banks, originating from a definite source or sources. (The water may flow continuously or intermittently, and if the latter with some degree of regularity, depending on the characteristics of the sources.)

Water right - A right or any amendment thereto acquired under the laws of this state to impound, divert, store, convey, take, or use state water.

Junior – Senior Water Rights -

- The terms “Junior” and “Senior” are relative terms, and qualitatively assess the ranking of water rights under the law of prior appropriation.
- Prior Appropriation = “First in Right, First in Time”
- It is based on a water rights priority date.
- The terms can be used in discussing an individual water right, when describing it’s relation to another water right.

- For example, a water right with a 1952 priority date is senior to a water right with a 1984 priority date.
- The terms can also be used to describe a group of water rights as they relate to a significant change. For example:
 - Development of a major reservoir: a group of water rights are “junior” to the reservoir, meaning their relative priority is junior to the reservoir.
 - Appropriation Doctrine: there are water rights (“Senior”) that existed prior to the Appropriation process (early-1980s) and those (“Junior”) that have been permitted since the Appropriation process.
 - The addition of instream flow restrictions on water rights: “Senior” water rights typically do not have instream flow provisions. “Junior” water rights typically do have instream flow provisions.

Water quality criteria – The *Criteria* that comprise numerical and narrative *criteria*. Numerical criteria are scientifically derived ambient concentrations developed by the USEPA or the States for various pollutants of concern so that human health and aquatic life can be protected. Narrative criteria are statements that describe the desired water-quality goal.

Water-quality data – Chemical, biological, and physical measurements or observations of the characteristics of surface and ground waters, atmospheric deposition, potable water, treated effluents, and waste water and of the immediate environment in which the water exists.

Water-quality information – Derived through analysis, interpretation, and presentation of water-quality and ancillary data.

Watershed - A term used to designate the area drained by a stream and its tributaries, or the drainage area upstream from a specified point on a stream. A watershed is an area that drains to a single point or “outlet” and is defined by topography.

Water supply - Any body of water, whether static or moving, either on or under the surface of the ground, available for beneficial use on a reasonably dependable basis.

Wetland - An area (including a swamp, marsh, bog, prairie pothole, playa, or similar area) having a predominance of hydric soils that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and that under normal circumstances supports the growth and regeneration of hydrophytic vegetation. The term "hydric soil" means soil that, in its undrained condition is saturated, flooded, or ponded long enough during a growing season to develop an anaerobic condition that supports the growth and regeneration of hydrophytic vegetation.

The term "hydrophytic vegetation" means a plant growing in water or a substrate that is at least periodically deficient in oxygen during a growing season as a result of excessive water content.

The term "wetland" does not include:

- (A) Irrigated acreage used as farmland;
- (B) Man-made wetlands of less than one acre; or
- (C) Man-made wetlands not constructed with wetland creation as a stated objective, including, but not limited to, impoundments made for the purpose of soil and water

conservation which have been approved or requested by soil and water conservation districts. This definition does not apply to man-made wetlands described under this subparagraph constructed or created on or after August 28, 1989. If this definition conflicts with the federal definition in any manner, the federal definition prevails.

Wetlands – Habitat that is transitional between terrestrial and aquatic where the water table is usually at or near the land surface or land that is covered by shallow water. Wetlands have one or more of the following characteristics: at least periodically, the land supports predominantly hydrophytic (water loving) plants; the substrate is predominantly un-drained hydric (wet) soils; and the substrate is nonsolid and is saturated with water or covered by shallow water at sometime during the yearly growing season.