AMARIAN WATER GLOSSARY

Acre-foot: A water quantity measurement equal to 325,851 gallons (enough to cover one acre of land in water one foot deep).

Active Management Area (AMA):

A geographical area encompassing aquifers that is designated by the Arizona Department of Water Resources for the purpose of actively managing groundwater. Five AMAs currently exist in Prescott, Phoenix, Pinal, Tucson, and Santa Cruz regions. In general, groundwater use is subject to greater regulation and management in the AMAs.

Adequate Water Supply Program: A set of "buyer beware" regulations that apply statewide, outside of the five AMAs. Developers must disclose to the buyer of a lot within a new subdivision whether sufficient water supplies exist for 100 years. The disclosure is only required with the original sale of the lot. Homes can still be sold if there are inadequate water supplies, unless the city or county has chosen to adopt mandatory requirements that there be an Adequate water supply prior to sale of the lot.

Adjudication: A legal process that establishes the extent and priority of all the water rights for any river system and source. In Arizona, the General Stream Adjudications are massive court proceedings that have been ongoing for over 40 years, with tens of thousands of parties involved to secure the priority of their water rights.

Aquifer: An underground geological formation of sand, soil, gravel, and rock able to store and yield water.

Arizona Corporation Commission (ACC): An elected branch of State government responsible for the oversight of privately-owned utilities.

Arizona Department of Environmental Quality (ADEQ): The state agency responsible for oversight, regulation, and enforcement of Arizona's water quality regulations. ADEQ regulates groundwater, surface water, and recycled water.

Arizona Dept of Water Resources (ADWR): The state agency, created in 1980 by the Groundwater Management Act, designated to implement the State's water laws. ADWR oversees Arizona's water supplies and supports statewide and local water planning efforts.

Arizona Water Banking Authority (AWBA): A governmental entity created in 1996 to ensure Arizona utilized its full allocation of Colorado River water. The AWBA recharges CAP water underground primarily to provide backup supplies for municipal water providers in times of shortage.

Assured Water Supply Program (AWS): A set of consumer protection regulations that apply within the five AMAs. Before a developer can sell subdivision lots, they must meet the Assured Water Supply criteria, including having access to enough water to last 100 years. The AWS Program is the basis for Arizona's longterm, sustainable growth. See *Certificate* and *Designation*.

Augmentation: Efforts to supplement a water supply, typically by developing and acquiring additional sources.

AZ Water Association: AZ Water is a non-profit educational organization founded in 1928 with a membership of 2,700 water/wastewater professionals.

Beneficial Use: A water law concept that requires water to be used in a manner approved by the State. A water user can lose their water right under certain circumstances if water is not put to beneficial use.

Central Arizona Groundwater Replenishment District (CAGRD): Created by the State Legislature in 1993 to replenish groundwater in

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Phoenix, Pinal, and Tucson AMAs. CAGRD's purpose is to provide a mechanism for water providers and landowners who don't have access to renewable water supplies to meet the Assured Water Supply requirements. Operation of the CAGRD is the legal responsibility of the *Central Arizona Water Conservation District*.

Central Arizona Project (CAP): The 336-mile system of pump stations and concrete-lined canal that brings 1.5 million acre-feet of Arizona's Colorado River water from Lake Havasu to Maricopa, Pinal, and Pima counties. The CAP was built by the Federal Government in the 1970s and is operated and maintained by the *Central Arizona Water Conservation District*.

CAP Priority System: A legal system that determines the relative priority of CAP water users and who receives reduced deliveries if there is not enough Colorado River water to fulfill all CAP user demands.

Central Arizona Water Conservation District (CAWCD): A special governmental district of the State, established to manage the CAP system and levy a property tax to repay the federal government for construction of the CAP. The CAWCD is governed by a 15-member elected Board of Directors representing its service area of Maricopa, Pinal, and Pima counties.

Certificate of Assured Water Supply: A permit issued by ADWR for a subdivision within an AMA after the developer has met the criteria of a 100-year Assured Water Supply.

Certificate of Convenience & Necessity (CC&N):

The area that a private water utility has been granted and authorized by the ACC to serve.

Colorado River Shortage: A declaration by the Secretary of the Interior, based on the 2007 Interim Guidelines, that there is insufficient water in Lake Mead to meet the demands of all Lower Basin users. A *Tier 1 Shortage* is triggered at Lake Mead water elevation 1075', *Tier 2* at 1050', and *Tier 3* at 1025'. Each shortage tier requires greater cutbacks.

Colorado River Water: Water from the mainstem of the Colorado River. Arizona shares the Colorado River with California, Nevada, New Mexico, Utah, Wyoming, Colorado, and Mexico.

Designation of Assured Water Supply: A legal decision by ADWR that identifies a water provider has met the 100-year Assured Water Supply criteria and can supply water to current and future developments within its service area.

Drought Contingency Plan (DCP): An agreement between the seven Colorado River Basin States that adds additional water reductions on top of the 2007 Interim Guidelines in times of shortage.

Effluent: Generally refers to treated municipal wastewater. See *Recycled Water*.

Excess CAP Water: CAP water that remains after long-term contract holders have had their water orders fulfilled in any year.

Exempt Well: A non-regulated well in an AMA with a maximum pumping capacity of not more than 35 gallons per minute, used to withdraw groundwater for non-irrigation purposes.

Gallons Per Capita Per Day (GPCD): The average quantity of water each person uses in one day. ADWR sets GPCD targets for water providers in the five AMAs.

Grandfathered Right (GFR): A right to withdraw and use groundwater within an AMA. GFRs were "grandfathered" in upon passage of the 1980 GMA for entities that were already using groundwater at that time. A GFR is a permanent right to pump an allotted amount of groundwater on an annual basis.

Amvua ONE FOR WATER WATER GLOSSARY

Groundwater: Water under the earth's surface that fills the pore spaces between soil particles and fractured rock.

Groundwater Management Act (GMA):

Enacted by the legislature in 1980 to address the State's problem of groundwater depletion.

Groundwater Savings Facility (GSF): Irrigation districts that use renewable water from a storing partner (often a municipal water provider) instead of pumping groundwater. The amount of renewable water substituted for groundwater is credited to the storing partner for future use.

Incidental Recharge: The amount of water that percolates down to the water table after it is applied to the land surface, excluding water that is added to an aquifer pursuant to the underground storage, savings, and replenishment program.

Intentionally Created Surplus (ICS): The 2007 Guidelines allow certain entities to temporarily store water in Lake Mead to help avoid shortage elevations. DCP greatly expands this concept.

Irrigation District: A political subdivision established as a special taxing district for either agricultural improvement or irrigation and conservation purposes. Irrigation districts often manage water deliveries on behalf of numerous farmers.

Irrigation Non-Expansion Area (INA): A geographical area that has been designated by ADWR as having insufficient groundwater at current usage rates. Within INAs, new agricultural irrigation beyond current use is prohibited.

Long-Term Storage Credits (LTSC): Credits earned by storing CAP water or recycled water underground. These credits can be recovered at a later date. **Managed Underground Storage Facility**: A facility designed and managed to utilize the natural channel of a stream to intentionally store water underground. Surface water flowing in its natural channel is not a managed underground storage facility.

Management Plan: A regulatory document produced by ADWR that is designed to assist the AMAs in achieving their water management goals. The GMA requires ADWR to produce five Management Plans with each subsequent Plan containing more stringent water conservation requirements.

Member Land: An individual subdivision that has enrolled as a member of the CAGRD in order for the land to receive a Certificate of AWS.

Member Service Area: A designated water provider that has enrolled its entire service area as a member of the CAGRD in order to receive a Designation of AWS.

Municipal & Industrial (M&I) Priority: A class of water use within the CAP Priority System. M&I users have the highest priority, which is co-equal with the priority of Tribes that receive Indian priority.

Municipal Provider: A city, town, private water company, domestic water improvement district, or irrigation district that supplies water for municipal use.

Non-Indian Agricultural Water (NIA): A class of water use within the CAP Priority System that has relatively lower priority. NIA water was originally contracted to farmers but later transferred for tribal, municipal, and industrial use.

Overdraft: An unsustainable condition where more groundwater is being pumped than the amount of water recharged to the aquifer.



Potable: Water that is considered safe for human consumption.

Private Water Company: A private, investorowned municipal water provider regulated by the ACC.

Recharge: Storing renewable water supplies underground for a later date. Arizona worked for years to have underground storage recognized as a beneficial use, preventing California from taking Arizona's allocation of Colorado River water.

Reclaimed Water: Effluent that has been treated for applications such as turf irrigation, dust control, firefighting, industrial uses, and creating/supporting wildlife habitat. See *Recycled Water*

Recovery: The act of pumping or "recovering" water that was previously stored underground. Individual water users can Recover LTSC, and stakeholders are developing a plan to Recover the millions of acre-feet of water stored underground by the AWBA.

Recycled Water: Water sent down the drain that is treated to a very high quality to extend and expand its reuse. The term is used to convey the value of this water as an important water supply. *Also called reclaimed water*.

Renewable Water Supply: A water source that is continually renewed by normal hydrologic cycles. Renewable water supplies include CAP water, surface water, and effluent.

Replenishment: To restore water to the aquifer to replace withdrawn groundwater.

Riparian Area: Lands adjacent to a natural perennial or intermittent stream channel. They are distinct from surrounding lands because of the unique soil and vegetation characteristics strongly influenced by their proximity to water.

Safe-Yield: A water management concept in which the amount of water pumped out of the ground is the same as what goes back into underground aquifers. Safe-Yield is the management goal for the Phoenix, Prescott, and Tucson AMAs.

Service Area - Municipal: A geographical boundary that encompasses lands a water provider can offer water and wastewater service. Service Areas do not always line up with city limits and are not the same as a Certificate of Convenience & Necessity (CC&N).

Stored Water: Water that is stored underground for the purpose of recovery at a later time. See *Long-term Storage Credits*

Subsidence: The settling or lowering of the land surface which results from aquifer compaction after the withdrawal of groundwater.

Surface Water: Waters generally found in springs, streams, rivers, lakes, and ponds, canyons, ravines, or other natural channels above ground.

Underground Storage Facility (USF): A site where water is stored underground, typically through large basins or settling ponds where water percolates into the aquifer below.

Water Infrastructure Finance Authority of Arizona (WIFA): WIFA is a State Agency that provides financing assistance for the construction, rehabilitation, and/or improvement of drinking water, wastewater, wastewater reclamation, and other water infrastructure projects.

Water Resources Research Center (WRRC): The University of Arizona's Water Resources Research Center promotes understanding of critical state and regional water management and policy issues through research, community outreach, and public education.