



Assured and Adequate Water Supply 101

Office of Assured and Adequate Water
Supply
Arizona Department of Water Resources

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 - 💧 Preparation for Flooding Begins Immediately Following Wallow Fire
 - 💧 June 16th - Assured and Adequate Water Supply 101 Seminar
 - 💧 Proposed Transfer of 50 Acre-Feet of Arizona Colorado River Entitlement
 - 💧 Restoration of Extinguished Grandfathered Rights Rule Proposal
 - 💧 Just Released: Pinal AMA Demand and Supply Assessment
 - 💧 New Fee Rules To Become Effective June 4, 2011
 - 💧 WRDC InfoShare Site
 - 💧 Water Resource Development Commission (HB2661)
 - 💧 Assured and Adequate Water Supply (AAWS) Web Application
 - 💧 Upper San Pedro Water District
 - 💧 Blue Ribbon Panel on Water Sustainability
- 💧 Groundwater Site Inventory (GWSI)

Adequate Water Supply Program Background

- Statewide Water Adequacy statute passed in 1973
- Done in response to incidents of land fraud involving the sale of subdivided lots without available water
- It only required disclosure of water availability (as determined by the state) but did not prevent the sale of lots without available water
- Existing Water Adequacy (or “Inadequacy”) requirements are still in effect for areas outside of Active Management Areas (AMAs) except those jurisdictions that have adopted adequacy requirements pursuant to SB 1575

Assured Water Supply Program Background

- The program is an integral component of Arizona's 1980 Groundwater Code, which was designed to address severe groundwater level decline rates in major urban and agricultural areas called Active Management Areas.
- The Assured Water Supply Program only applies to the Active Management Areas.
- Regulations mandate the demonstration of 100 year water supplies for new subdivisions.
- Is more restrictive than the Adequacy Program

Assured Water Supply Program Purpose

To sustain the State's economic health by preserving groundwater resources and promoting long-term water supply planning.

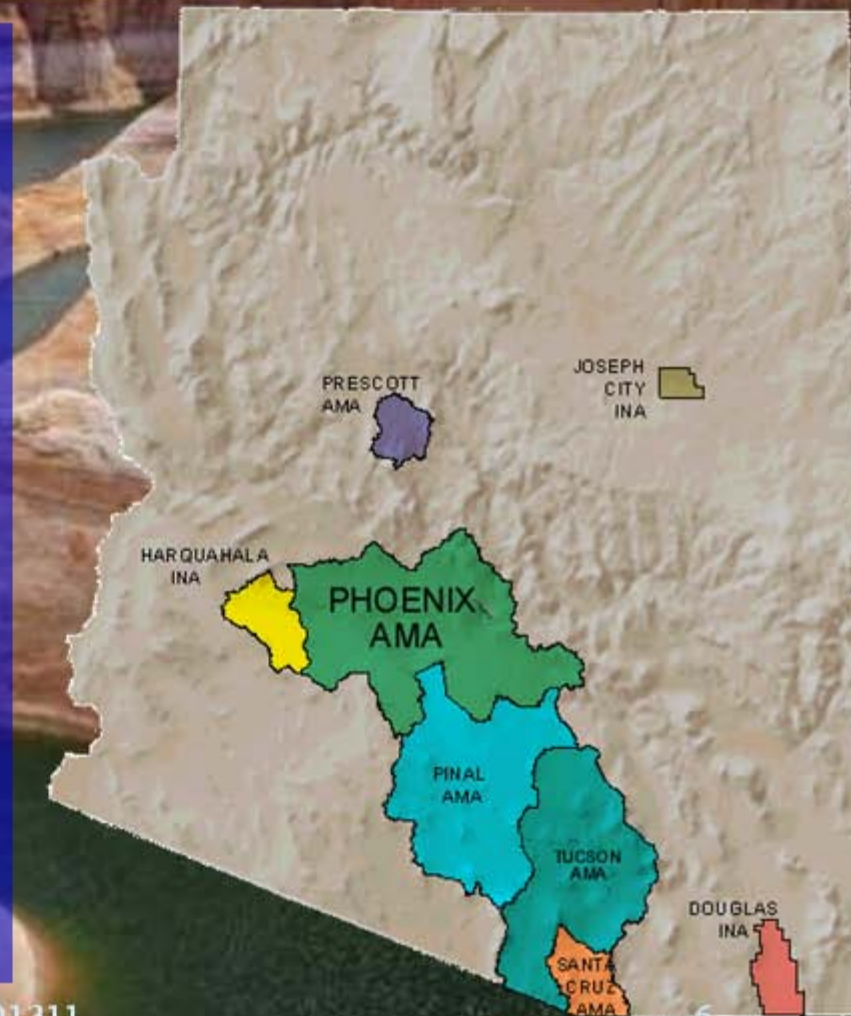
Adequate Water Supply Program Purpose

Consumer advisory measure – developers are required to disclose “inadequacy” only to first buyer. The purpose changed with SB 1575 – a jurisdiction can now require adequacy.

Active Management Areas

Areas which experienced the most significant depletion of groundwater

- **Established 4 (now 5) Active Management Areas**
 - Phoenix (1980)
 - Pinal (1980)
 - Prescott (1980)
 - Tucson (1980)
 - Santa Cruz (1994 – formerly part of Tucson AMA)
- **Established 3 Irrigation Non-Expansion Areas**



Subdivision Requirements for Assured or Adequate Water Supply

- An assured or adequate (or inadequate) water supply determination by ADWR is required for the following:
 - To gain approval of a subdivision plat by cities, towns and counties.
 - To obtain authorization to sell lots from the Department of Real Estate (subdivision public report).

Subdivision Requirements for Assured or Adequate Water Supply

- A subdivision is defined as land divided into six or more parcels where at least one parcel is less than 36 acres, which is offered for sale or lease for more than one year
- Short-term leases (12 months or less) and subdivisions where all parcels are greater than 36 acres in size do not fall under this definition.
- Applies to residential AND commercial subdivisions.

Assured and Adequate Water Supply Application Types

Assured Program (Inside AMAs)

- **Designated Provider** Designation of Assured Water Supply for centralized delivery systems.
- **Physical Availability Demonstration** (PAD) for the provider. Developers do not apply for PADs.
- **Analysis of Assured Water Supply** For Master Planned Communities reserves water for 10 years plus 2 five year extensions. Most choose to demonstrate physical availability only. Will need Certificate to sell lots. Preliminary general use plan not specific plat.
- **Certificate of Assured Water Supply** Any development that is not served by a designated provider will require a certificate application. Must have a Certificate to subdivide and sell. (Tentative or Preliminary Plat)

Assured and Adequate Water Supply Application Types

Adequacy Program (Outside AMAs)

- **Designated Provider** Designation of Adequate Water Supply for centralized delivery systems
- **Physical Availability Demonstration** (PAD) for centralized providers. Developers do not apply for PADs.
- **Analysis of Adequate Water Supply** For Master Planned Communities reserves water for 10 years plus 2 five year extensions. Most choose to demonstrate physical availability only. Will need Water Adequacy Report to sell lots. Preliminary general use plan not specific plat.
- **Water Adequacy Report** Any development that is not served by a designated provider will require a Water Report to subdivide and sell. Even if inadequate, they can still subdivide and sell (except in mandatory adequacy jurisdictions) but it must be disclosed in the public report. (Tentative or Preliminary Plat).

To obtain an Assured or Adequate Water Supply 5 criteria must be met:

1. Physical availability for 100 years
2. Continuous availability for 100 years
3. Legal availability for 100 years
4. Water quality
5. Financial capability

Assured Water Supply must meet 2 additional criteria:

6. Consistency with AMA Management Goal
7. Consistency with AMA Management Plan

How to meet the criteria:

1. **Physical availability** – typically demonstrated through a new hydrologic study unless a valid study for the area has already been approved by ADWR. Sources may include groundwater, surface water or effluent.

Physical Availability of Groundwater

- Must consider current and committed demand.
- Inside the Phoenix, Tucson and Prescott AMAs, the depth to water after one-hundred years cannot exceed 1,000 feet.
- Inside the Pinal AMA, the depth to water cannot exceed 1,100 feet.
- The depth to water requirements have not yet been established by rule in the Santa Cruz AMA. ADWR policy is 1,000 feet.
- Outside AMAs, the depth to water cannot exceed 1,200 feet, except with specific exemption. (hardrock aquifer & financial capability)
- The depth to water after one-hundred years cannot exceed 400 feet for dry lot subdivisions.

Physical Availability of Surface Water

- Allocation to a Right Holder:
(via Salt River Project and/or CAP for example)
- Non-Allocation Sources:
120% of Firm Yield or 100% of Median Flow based on 20 years of data
- Firm Yield: The minimum annual diversion for the period of record which may include run off and releases from storage reservoirs.
- Median Flow: The flow which is represented by the middle value of a set of flow data which are ranked in order of magnitude.

How to meet the criteria:

2. Continuous availability:

- Groundwater is considered continuously available
- Surface Water

Proof of Adequate back up supplies:

- Artificial Storage (Lakes, Tanks)
- Recharge/Recovery
- Backup supply (groundwater)
- Drought Response Plan

How to meet the criteria:

3. **Legal availability** – Legal right to the water supply or supplies must be demonstrated.

Legal Availability of Groundwater

- Service Area right
- Certificate of Convenience & Necessity (CC&N)
- Establishing Service Area Right
 - Type I
 - Type II
 - Recovery Well

Volume must meet first year build out demand plus any committed demand for provider.

Legal Availability of Surface Water

- Allocation to a Right Holder:
(via Salt River Project and/or CAP for example)
- Non Allocation:
 - Certificated Right
 - Decreed Right
 - Pre- 1919 Claim
 - Proof of Non-abandonmentVolume taken at face value of claim.

How to meet the criteria:

4. Water Quality

- Must meet ADEQ – Safe Drinking Water Act Requirements (SDWA) Existing providers with PWS are assumed to be in compliance.
- Will look at future migration of known groundwater contamination plumes, i.e. WQARF, Superfund sites.
- Dry Lots and New Service Areas must submit sample results that pass SDWA- “new source approval”.

How to meet the criteria:

5. Financial Capability

- Adequate delivery, storage and treatment works must either be in place or financed.
- Acceptable to use a qualified platting authority otherwise applicant must demonstrate financial capability on their own.

How to meet the criteria:

1. Consistency with AMA Management Goal

Safe Yield Definition

A groundwater management goal which attempts to achieve and thereafter maintain a long-term balance between the annual amount of groundwater withdrawn in an active management area and the annual amount of natural and artificial groundwater recharge in the active management area

Methods of Meeting Goal Requirement

- Use of renewable supplies
 - Surface water
 - Effluent
 - Can be direct use or storage and recovery
- Membership in the Central Arizona Groundwater Replenishment District
- Dry lot subdivisions of less than 20 lots are exempt

Central Arizona Groundwater Replenishment District (CAGRD)

- A mechanism for new subdivisions within an AMA to meet the goal requirement
- The CAGRD acquires renewable supplies to replace groundwater pumped by its members
- The replacement water is then recharged into aquifers within the AMA
- This results in less depletion of groundwater

How to meet the criteria:

7. Consistency with AMA Management Plan

- Only required for subdivisions with more than 50 lots.
- Simple conservation measures:
 - Low flow plumbing, limit turf use, etc.
 - Use of ADWR's low water use plant list for ROW & common areas.

Office of Assured and Adequate Water Supply

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THANK YOU