



WHITEPAPER
addressing
ARIZONA GROUNDWATER MANAGEMENT ACT OF 1980
and its effect on the implementation of
Alternative Point of Use Atmospheric Water Generators

BACKGROUND

Arizona's Groundwater Management Act, passed by state lawmakers in 1980, remains one of the most stringent groundwater codes in the county. It addresses concerns about how to support water supply needs for economic development and residents' quality of life in areas of the state with a high reliance on groundwater.

Recognizing continued depletion of finite groundwater supplies as a threat to prosperity and quality of life, the Arizona Legislature created the framework **to manage the state's water supply for the future.**

The Act established the Department of Water Resources as the state regulatory agency charged with overseeing management of groundwater resources and progress toward reaching identified water management goals identified for each active management area.

To assist communities in reaching their identified water management goals, the act mandated development of a series of five management plans through 2025. Each plan is tailored to the specific active management area, and the 4th Management Plan currently is in effect for the PrAMA.

The Act also prohibits the expansion of irrigated agriculture supported by groundwater and requires residential developers to demonstrate to Arizona Department of Water Resources (ADWR) that they have a 100-year assured water supply before lots can be sold. It set up mandatory reporting requirements for large water providers, such as municipalities, and authorized incentives for water reuse and effluent recharge. Large water providers must use ADWR Best Management Practices to support water



conservation and conduct public education. Citation source: <https://www.signalsaz.com/articles/1980-groundwater-management-act/>

GOVERNOR DOUG DUCEY'S ARIZONA WATER INITIATIVE

On October 5, 2015, Governor Ducey announced his water planning initiative for the state. The Arizona Water Initiative is based off of and continues the work published in the [Strategic Vision for Water Supply Sustainability](#), which identified key priorities, timelines and action items needed to maintain sustainable water supplies for Arizona's future. The Arizona Water Initiative was implemented with the signing of [Executive Order](#) 2015-13 on December 16, 2015. Through this initiative, the Arizona Department of Water Resources (ADWR) will work closely with key stakeholders statewide on two parallel tracks.

The Council will investigate the long-term augmentation strategies for the State, as well as explore additional water conservation opportunities, identify infrastructure needs and, report policy direction or statutory changes to take Arizona into the future.

<https://new.azwater.gov/water-initiative>

Note that the Initiative only addresses Water Loss, Conservation and Desalination and Recycled Water but No Other Water Production Technologies (i.e. Water from Air Atmospheric Water Generators).



HOW TO DEMONSTRATE TO ARIZONA DEPARTMENT OF WATER RESOURCES SECURING A 100-YEAR SUPPLY OF WATER TO OBTAIN LAND ACQUISITION AND BUILDING PERMITS

- Making the case to remove dependence upon existing and diminishing groundwater resources without sacrificing water purity.
In the short term, augment existing water resources (groundwater, rainwater, dug wells) until full independence can be obtained via scaling up the number of Atmospheric Water Generators.
- Ensuring a continuous and sustainable alternative supply of fresh, healthy and tasty drinking water.
- Removing the exposure of people, animals and crops to contaminated groundwater that contains impurities, disease, pharmaceuticals, or other health hazards.
- Eliminating dependence upon municipal/utility delivery services to filter/purify and then deliver water to Point of Use Subscribers thereby reducing line-item expenses enabling redeployment of tax dollars to other purposes.
- Educating government officials on Alternative Point of Use Water from Air Atmospheric Water Generators as an evolving technology.

WHAT IS AN ATMOSPHERIC WATER GENERATOR?

21st Century Technology enables intake of moisture from the air converted to droplets of water at dew point then processed via a multi-stage filtration system to create fresh drinking water that meets or exceeds World Health Organization Standards.

ADVANTAGES

- 100% Environmentally friendly Green Technology.
- Has Zero Impact on existing and diminishing water resources.
- Renewable and Sustainable water production 24 x 7 x 365
- Free of groundwater pollutants, pharmaceuticals, harmful contaminants (i.e. lead) and disease that constitutes a health hazard
- Enables water production directly at Point of Use



- No need to pipe through infrastructure or process water in utility filtration plants.
- Eliminates trucking water to locations with no available utility service.

- Individual units scale from consumer countertop 10L per day up to multiples of 10000L per day industrial units that can be clustered with No Single Point of Failure.
- Offers Small Industrial units capable of servicing essential Household Water Needs (100L to 1000L daily production) including drinking water, cooking, shower, toilet, laundry, and even household gardens.
- Attractive Return on Investment vs replacing aging Utility Plant Facilities, corroded and tainted pipe infrastructure.
- Eliminates the use of plastic bottled water that poses an environmental threat of PFAS and plastics that cannot readily be recycled.
- Can be powered by the electrical grid, solar, wind or green energy generators.
- AWGs can be used to provide fresh water for Controlled Growth Agriculture employing hydroponics that produces organic crops. This technology enables growth cycles over 12 months and eliminates fluctuations in temperature, relative humidity and soil conditions.