

COBRE VALLEY WATER - SMALL TOWN FORUM September 6, 2018

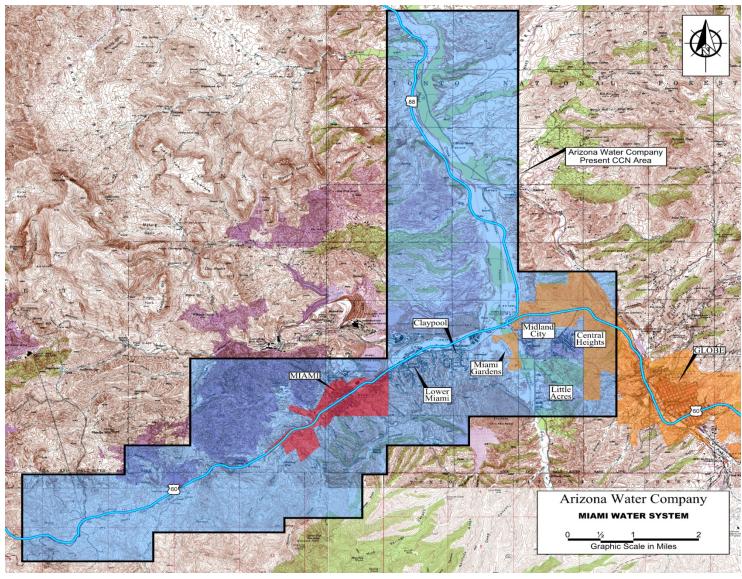
SECTION 2: WATERSHED VISION

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Arizona Water Company – Miami/Globe Arizona History of Water System

- 1955 Arizona Water Company purchases Miami Water System from Arizona Public Service Company
- 1958 Arizona Water Company leases Central Heights Water System from Citizens Utilities
- 1967 Arizona Water Company purchases Central Heights Water System from Citizens Utilities
- 1967 Arizona Water Company purchases Claypool Water System
- 1973 Arizona Water Company purchases Bandy Heights Water System



 1954 – Report on Water Supply and Water Adequacy shows one supply for Miami comes from a dug shaft 67 feet deep with 2 drifts 200 feet north and 200 feet south, in addition to 5 drilled wells (one of which is named the Van Dyke Well, one is named the Fredericks Well, one is named the Claypool Well), none of which produced more than 250 gallons per minute.



- 1967 Report on Water Availability identifies a need to develop additional supplies of water for AWC's Miami Water System.
- The 1967 Report discusses efforts by Arizona Water Company in 1958 to seek interest from copper mining companies and neighboring communities in jointly developing new water supplies. That effort did not succeed. Subsequently, in 1960-1961 the City of Globe developed a water supply 8 miles east of Globe known as the Cutter Wellfield.
- Interconnection of the AWC's Miami, Claypool, Central Heights, and Bandy Heights Water Systems and development of nearly 30 wells since 1955 have helped to provide sufficient supplies of water to these communities.



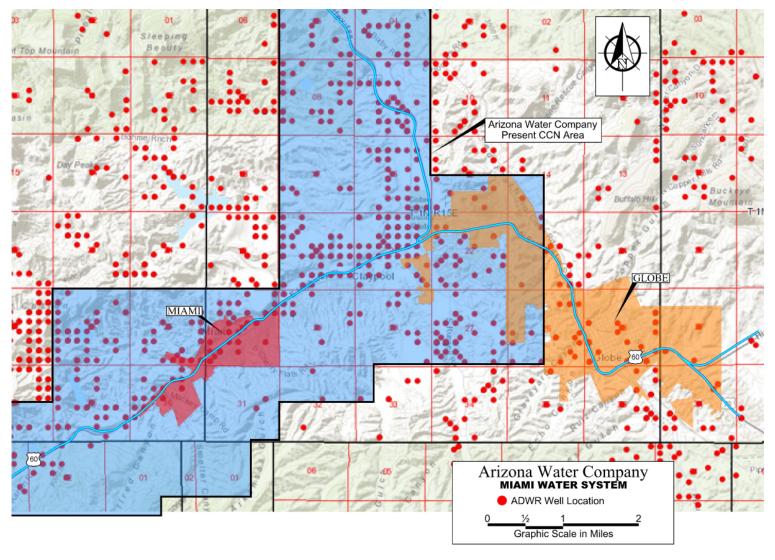
- For the most part, water supplies within the alluvium along Bloody Tanks
 Wash and Miami Wash, as well as parts of Pinal Creek are not useable due
 to poor water quality, although groundwater cleanup is underway in these
 areas.
- Active public water supply wells are deep wells drilled into the Gila Conglomerate, are typically lower producing wells, produce good quality water, but can show signs of decline in capacity over a long time period.
- Arizona Water Company recently constructed a water treatment plant to remove arsenic, a naturally occurring constituent commonly found in groundwater, in the north central part of Arizona Water Company's service area.



- How much do people in the Globe-Miami area rely on groundwater for their water supplies?
- The area depends on groundwater for its supplies as you can see in the next slide by the number of registered wells in the Globe-Miami area.



Arizona Water Company – Miami/Globe Arizona Registered Wells in the Globe-Miami Area





Effective Strategies to Ensure a Reliable and Adequate Supply of Water Could Include the Following:

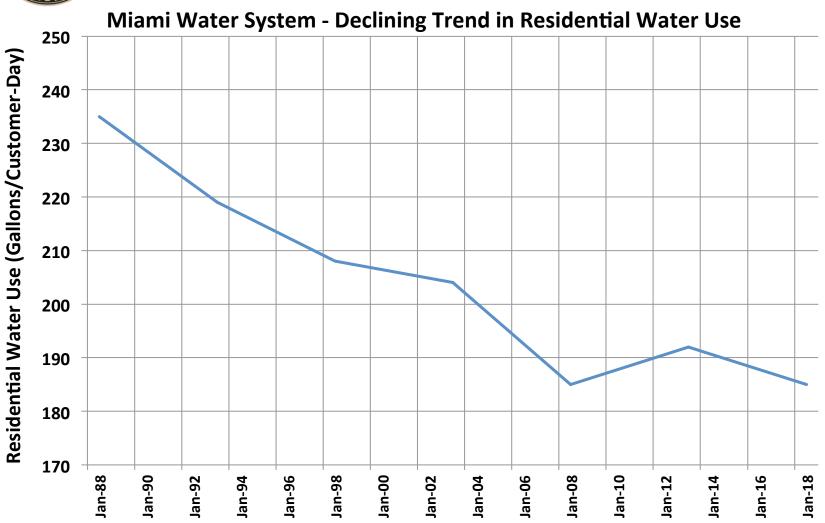
- 1. Implement Conservation Measures to Make More Efficient Use of Water and Reduce Overall Water Use
- Maintain and Replace Water Distribution System Infrastructure to minimize water losses
- 3. Maintain Meter accuracies at effective levels to ensure customers billed for all water received
- 4. Implement AWWA's M36 method of water loss control
- 5. Maximize the beneficial use of reclaimed water to offset current uses of groundwater or to recharge the area's water supplies (Reclaimed water from Town of Miami Wastewater Treatment Plant currently used for mining purposes, recharge, and for Cobre Valley golf course)



- Have customers been using less water, and if so, how much have they conserved?
- The following graph shows a marked decline in customer use over the past 30 years of nearly 25%.



Arizona Water Company – Miami/Globe Arizona How much water can we conserve?





Additional Actions to Consider to Improve Reliability and Sustainability of Water Supplies:

- 1. Conduct Regional Water Supply Analyses
- 2. Work with local water providers to identify alternative water supplies
- 3. Partner with local water providers in developing new water supplies

Note: Arizona Water Company and the City of Globe have already installed two interconnections between each of their water systems to improve reliability, especially for fire fighting purposes



Questions?