

LTWAF Needs Assessment – Executive Summary

Purpose

The purpose of this document is to develop a path forward to advance the needs assessment and offtake agreement processes. This document will be used as a basis for internal discussions and then be modified as needed to facilitate briefings with the LTWAF Committee and the WIFA board.

Background and Process

WIFA’s Long-Term Water Augmentation Fund (LTWAF) was created in anticipation of significant demand for additional sustainable water resources in Arizona. Some, but not necessarily all, of that additional demand may be met by WIFA-funded projects. To invest our resources in a responsible and effective way, WIFA is creating a competitive process to develop the best project(s) to augment water through in-state and out-of-state projects.

Recognizing that it is unrealistic to assume that every supply-demand gap statewide for all sectors can or should be closed with water augmentation projects, WIFA first sought to determine the extent of potential demand for augmented water. In 2023, WIFA and its consultants reviewed existing supply and demand projections (a “top-down” approach) and held conversations with a wide array of water providers (a “bottom-up” approach) to determine an appropriate scale for an imported water project or projects.

WIFA identified an interest for between **100,000 and 500,000 acre feet per year of augmented water over a 5-15 year timeframe**. This does not represent Arizona’s overall water needs, but rather, the portion of those water needs that utilities and water users believe could be effectively met through relatively expensive imported water sources. Water users continue to pursue their own strategies including acquiring additional in-state surface and groundwater supplies, pursuing advanced water recycling projects, and increasing mandatory water efficiency measures.

While this range reflects a high level of price elasticity, it also affirms that reliable new supplies will play an important role for a large number of water users across all sectors. It is WIFA’s intent to identify the project(s) that best address the technical, financial, environmental, regulatory, legal, and political challenges associated with such projects by conducting a rigorous competitive process.

Moreover, WIFA recognizes that augmentation projects previously considered have been expensive and complex. Although Arizona statutes focus WIFA’s efforts on importing water from out of state, they do provide for significant WIFA funds to be used on in-state projects as well. This flexibility allows WIFA to pursue a portfolio of projects in a range of locations if such a portfolio meets identified needs better than one single project.

The feedback gained from WIFA’s Water Needs Assessment will be incorporated into the evaluation criteria used during the procurement process for long-term water augmentation projects and will help ensure the future needs of Arizona water users are met.

Key Takeaways

- 100kAF to 500kAF annual near-term (5-15 years) annual augmentation demand, with high price/demand elasticity
- Economics, rather than project type or water source, is a primary driver
- Additional water supply is currently needed, but, in the case of groundwater management, additional near-term use should not compromise the security of supplies in the long term
- Support for WIFA's LTWAF mission is strong among the water supply community

Other Takeaways

- Prior confidence in medium-term (30-50 year) supply is being compromised by concerns over reliability, resiliency and sustainability of current and near-term supplies
- Future demand projections are highly dependent on growth rates and per capita demand projections
- Regional, Basin, and Statewide planning documents are mostly dated now. ADWR has new demand projections in preparation that are expected to be completed in coming years.
- Demand projections are highly dependent on dated information on:
 - Municipal per-capita demand efficiencies
 - Agricultural use and efficiencies

Arizona's Need for Augmented Water



Statement of Need

The most recent assessment of future statewide water use prepared by the Arizona Department of Water Resources (ADWR) projects Arizona's water demand in 2060 will be at least 1.5 MAF/year greater than the State's current usage. General input from Arizona municipal water suppliers indicates a near-term (10-15 years) water demand in excess of their planned future projects and programs of 100,000 to 500,000 AF/year depending on many factors, notably the State's future allocations of Colorado River supplies.

Statement of Purpose

State statute establishes WIFA for the benefit of current and future residents, the economy and the environment of the state. Furthermore, it directs WIFA to investigate the feasibility of entering into agreements with public or private entities for projects to import water into this state. WIFA, through the LTWAF program, and working collaboratively with water users in Arizona and out-of-state, will identify and pursue a project, or combination of projects, that can reliably and sustainably import up to 500,000 AF/year of additional supply in the near-term (10-15 years) to complement other on-going in-state water supply development projects and to enhance the resiliency and security of the State's water supplies.