

# 1 Executive Summary

The Santa Cruz River Heritage Project (Heritage Project) in Tucson, Arizona, is a three-phase project with a design operational life of 50 years. Phase 1 starts at Silverlake Road and flow will be bounded on the north by Congress Street. The outfall location for Phase 1 is approximately 0.25 mile north of Silverlake Road along the Santa Cruz River. The City of Tucson has zoned the Heritage Project parcel as Residential – Single Family (R-1) Zone.

The main components of Phase 1 include the installation of the Silverlake Road Control Valve Station, site piping, and outfall vault modifications for the treatment of the water before discharge into the Santa Cruz River. It is expected that Phase 1 of the Heritage Project would operate continuously, except during summer peak reclaimed use, when rainfall generates natural flows in the river, or when the *de minimis* discharge location is in use. The Heritage Project Phase 1 has been designed to recharge up to 4,000 AF/YR

The facility will receive water directly from the Tucson Water reclaimed water distribution system. Tucson Water receives its source water from Pima County's Agua Nueva Water Reclamation Facility (ANWRF), which produces Class B+ effluent (APP number P-100655 and AZPDES number AZ0026107), prior to supplemental treatment at the Tucson RWTP. The source water for the Heritage Project will meet the discharge requirements of the governing water permit program: APP Permit No. P-100147, based on the Reclaimed Water Quality Standards for Class A (A.A.C Title 18, Chapter 11, Article 3).

A hydrogeological study was completed as part of the permitting process. Unreasonable harm and hydrologic feasibility were evaluated. The investigations conducted for the Heritage Project indicate that the project is both technically and hydrologically feasible. The results indicate that the full permitted volume can be stored without adversely affecting nearby land or water uses.

A monitoring plan for the Heritage Project has been developed to meet water quality and water level objectives. A monitoring well located at the end of the recharge reach will be constructed with a screened interval at the levels indicated by the hydrogeologic study.

An updated 208 Consistency Review Form and letter will be provided from the Pima Association of Governments (PAG) to ADEQ, documenting consistency with the existing regional Water Quality Management Plan (WQMP).

Tucson Water has the technical capability to operate and maintain the Heritage Project. Tucson Water is operated and maintained as a self-supporting, municipally owned utility of the City of Tucson. Tucson Water has approximately 490 employees, organized into six divisions under a director and two deputy directors, and director's office staff. Tucson Water is the largest municipal and industrial water provider in southeastern Arizona, serving approximately 722,700 people within a 390-square-mile service area.

Tucson Water has incorporated the project's construction, operation, and maintenance into its Capital Improvement Program budget for both the near- and long-term.

This application provides thorough and comprehensive information to fulfill the requirements to issue Aquifer Protection Permit Application and Arizona Pollutant Discharge Elimination System Application for the Heritage Project facility. This information demonstrates that this project is feasible and that no unreasonable harm will be caused by its operation. Therefore, issuance of the requested permits are justified.