

City/County Water and Wastewater Infrastructure Supply and Planning Study
ACTION PLAN FOR WATER SUSTAINABILITY
Mid-Year Update – August 2011

Summary

Overview

The City of Tucson and Pima County are pleased to provide a mid-year progress report on implementation of the City/County Water and Wastewater Infrastructure Supply and Planning Study Action Plan for Water Sustainability (Action Plan) which was adopted by both governing bodies last November. Significant progress has been made and highlights are summarized below. Detailed descriptions of all the projects underway or completed are provided in a separate report posted online at www.tucsonpimawaterstudy.com.

The Action Plan for Water Sustainability (2010-2015) includes a total of 88 action items across four elements:

- Comprehensive Integrated Planning
- Respect for Environment
- Water Supply
- Demand Management

A total of 57 action items were scheduled to be initiated in 2011. Of these, 11 have been completed and/or are in the implementation stage and 41 are still underway. A few items are on hold due to time and budget constraints or lack of anticipated grant funding.

Some of the projects are led by both jurisdictions jointly, but most are being led by either the City or County with all projects involving on-going coordination and communication across the two jurisdictions. Semi-annual joint City/County meetings are held to review all projects and project-specific team meetings are held as needed.

Highlights of Success

The following action items have been successfully completed and/or are in the implementation stage:

- **Conservation Effluent Pool Agreement - “CEP” (Respect for Environment Item # 1):** City and County elected officials adopted an Intergovernmental Agreement (IGA) establishing the process and procedures for allocating the CEP. This action, along with the Conserve to Enhance accomplishments described below, contributes significantly to achieving the WISP goal of developing a water supply for the environment.
- **Southeast Houghton Area Recharge Project - “SHARP” (Water Supply Item #7):** Pima County and the City of Tucson reached agreement on jointly constructing a recharge facility in the southeast area of Tucson in order for both parties to physically store water in this vicinity for replenishment of the aquifer and for potential future use. They also established an Oversight Committee to evaluate site selection, design, construction and operation. The targeted minimum recharge capacity is approximately 4,000 acre feet per year and the County and City will each contribute up to 2,000 acre feet of effluent. This cooperative effort to increase recharge capacity supports the WISP objective to balance the allocation of effluent resources among various non-potable water supply needs.

- **Regional Optimization Master Plan (Water Supply Item # 10):** Pima County completed the Design Build Operate (DBO) contract and plant interconnect. ROMP is on track to provide significant water quality improvements which will create greater flexibility in optimizing use of this locally renewable water supply for economic, environmental, aquifer replenishment and reclaimed (landscape irrigation) purposes. ROMP is also a showcase of water and energy efficiency as described in the FY 2010-2011 Pima County Sustainability Report Card. The completion of the DBO and interconnect support the WISP goal of maximizing and making efficient use of effluent and other locally renewable water supplies. Achieving this goal will result in reduced demands on non-renewable groundwater resources and increased progress towards achieving the region’s state mandated goal of “safe yield” by 2025.
- **Water Service Area Policy (Comprehensive Integrated Planning Action Items #13, #21):** In August, 2010 the Mayor and Council formally adopted a Water Service Area Policy establishing a water service boundary for Tucson Water. As recognized in the WISP Study, a water service area for Tucson Water is a critical element in creating a sustainable water future because it defines where water resources and infrastructure will be directed based on social, economic, and environmental goals. The City is in the process of conducting its first annual review of the service area policy to determine if refinements are necessary. One of the areas being reviewed is whether the policy is in-line with economic goals for the region (as called for in action item #13). A refinement already made in August 2011 in response to stakeholder feedback was the extension of the water assurance letter from one to two years to provide greater certainty for property owners/developers. The Citizen’s Water Advisory Committee (CWAC) is seeking comments from stakeholders and is expected to make recommendations to the Mayor and Council on additional refinements to the policy in early 2012.
- **Wheeling Agreements (Comprehensive Integrated Planning Item #19):** Tucson Water has entered into ‘wheeling agreements’ with other water providers to deliver renewable wet water resources to areas that currently rely on groundwater. Wheeling agreements help solve the problem of the hydrologic disconnect that exists between where groundwater pumping occurs and where it is recharged, which is a significant regional problem, especially outside the Tucson Water Service Area. In the past six months, potable water wheeling agreements have been successfully negotiated with Oro Valley and with the Pasqua Yaqui Tribe which will mean that these entities will begin delivering their CAP allocations to customers rather than relying solely on groundwater. Similar agreements are being negotiated and/or explored with Metro Water and Vail Water Company.
- **Conserve To Enhance –“C2E” (Respect for Environment Item #7):** The checkbox feature was approved by the City of Tucson Mayor and Council and added to the Tucson Water bills enabling customers to donate money saved from water conservation efforts to a fund environmental restoration projects. The C2E Advisory Board, which consists of City and County representatives as well as representatives from private sector, university and non-profit stakeholder groups, also selected their first project for funding.
- **Lee Moore Basin Management Plan (Respect for Environment #8):** This is an integrated land use, environmental and stormwater management plan prepared by the Regional Flood Control District. It is based on a comprehensive and cooperative study of a 198 square mile watershed in the Lee Moore Wash area south of the Tucson

International Airport in Pima County. The goal of the study was to give regulatory authority and guidance to foster appropriate development in this region. The Board of Supervisors and the Mayor and Council both adopted the Plan. The Plan policies have already been integrated into the County's Comprehensive Plan and will be integrated into the City of Tucson's General Plan update.

- **Demonstration Recharge Projects in the Santa Cruz River (Water Supply Action Item #9):** The City and County worked with the Bureau of Reclamation on a demonstration project in the Santa Cruz to make better use of the effluent being discharged there. Recharge occurs along a 17-mile stretch of relatively narrow, incised channel. The facility typically recharges less than half of its permitted annual recharge volume and receives only 50% of available storage credit. The Enhanced Recharge Demonstration project was conceived to spread river flows across a broad, 5.6-acre gravel bar to effectively increase infiltration area and allow testing of in-channel recharge methods under existing permits. Information from the Enhanced Recharge Demonstration project will be used for planning low-cost effective ways to achieve constructed recharge projects that will qualify for 100% recharge credit in the river in the future.
- **CAP Order (Water Supply Action Item #4):** Tucson Water's adopted financial plan includes funding for the phased-in purchase of the full CAP allocation over the next two fiscal years. The full CAP order will be placed on October 1, 2011 for delivery to Tucson recharge facilities in 2012, thus further securing the allocation of this important water resource for Tucson into the future. The water will be delivered to Tucson Water's recharge and recovery facilities in the Avra Valley and at Pima Mine Road.

Regional Water Assessment

Following completion of Phase II of the City/County Water Study, the Pima County Administrator and the Tucson City Manager recommended that Pima Association of Governments (PAG) convene an expanded regional water and wastewater study process. Subsequently, the PAG Regional Council directed staff to proceed with an exploration of interest in convening a regional water process which led to the formation of the Regional Water Assessment Task Force comprised of representatives from PAG, the University of Arizona, the Southern Arizona Water Users Association and the business and environmental communities. The Task Force undertook a "think tank" in which they surveyed over 60 members of the regional water community on a variety of water sustainability planning topics. The results are now published in the "Regional Water Assessment Task Force ThinkTank Report" dated August 2011 and available on the PAG website: www.pagnet.org. The report summarizes the consensus ideas and recommends a path for moving forward including the creation of four working groups to focus on the themes of supply, infrastructure, conservation/demand management, and reliability, sustainability and aquifer health. The next step in the regional process will consist of an open public meeting to review the results and obtain further input on how to move forward. The report reflects many of the themes that emerged in the City/County Water Study and staff from the City and County will continue to be engaged in the on-going regional dialogue.