

11. WATER RESOURCES ELEMENT

The City of Peoria knows that planning for its future requires consideration of the current and future water supply and demand. Because of its value, the City's water resources will play an increasingly important role in Peoria's growth and development plans. Fiscally and environmentally, intertwining Peoria's water resource planning and development planning makes sense.



The Water Resources Element is organized in the following manner:

- 11.a. Introduction
- 11.b. Summary of Existing Water Supplies
- 11.c. Summary of Existing Water Resources
- 11.d. Goals, Objectives and Policies
- 11.e. Implementation Program (Strategies to Increase Capacity)
- 11.f. Implementation Program (*Table*)

11.a. INTRODUCTION

Water policy direction and goals are created within an environment that is ever-changing. The use of water supplies in Arizona is affected by state and federal regulations. There are increasing demands for limited water resources making it even more necessary for Peoria to remain active and informed on current water issues. In addition to the changing water supply arena,

regulations affecting the treatment and testing of water to meet water quality requirements are constantly changing.

Given the value of water in an arid environment, the Growing Smarter initiative included requirements for cities to recognize and plan for water supply constraints. For cities and counties that match certain criteria, Growing Smarter requires a summary of the current water supply. Components of the current water supply include surface water, groundwater, and reclaimed water. Although not referenced in the Growing Smarter legislation, water conservation can be considered a quasi-supply because it allows a city's water budget to serve more people. Water conservation ties into the next water component in Growing Smarter, which is an analysis of how future growth will be served by available water supplies or by a city's plan to obtain a larger supply. Growing Smarter recognizes that water planning and planning for future growth goes hand in hand.

At the state level, the Arizona Department of Water Resources (ADWR) adopted the final version of the Third Management Plan (TMP). The TMP is the latest management plan in the series of five that was mandated by the Groundwater Management Act of 1980 (GMA). The approval of the TMP brings with it regulatory requirements for municipalities, particularly in the area of water conservation. Peoria also abides by the Assured Water Supply (AWS) rules. The AWS rules require that water providers prove a 100-year supply of renewable water before any new residential growth occurs.

Due to the regulatory need to reduce groundwater mining, Peoria has converted to renewable water resources for the majority of its water supply. The primary sources of renewable water are Central Arizona Project (CAP) water, Salt River Project (SRP) water, and reclaimed water. In September 1998, Peoria began this conversion by using CAP water directly through the City of Glendale's Pyramid Peak Water Treatment Plant. In June 2002, Peoria's Greenway Water Treatment Plant began operating. This plant allows Peoria

to use SRP surface water as a potable source. In 1999, Peoria started to receive recharge credits for the highly treated reclaimed water being recharged back into the groundwater aquifer at the Beardsley Wastewater Treatment Plant. Also, the recharge of surface water at the Aqua Fria and Hieroglyphic Mountains recharge facilities was started in 2002. The credits earned for the recharged water can be redeemed by the City through the water supply wells.

Effective January 2006, the Environmental Protection Agency (EPA) lowered the maximum contaminant level (MCL) of arsenic across the nation. The EPA set the MCL for arsenic at 10µg/liter, whereas the past MCL had been set at 50µg/liter. This requirement primarily affects groundwater production and will require modifications to some existing wells and their delivery systems and possibly the drilling of new wells. Peoria is currently working to maximize the water production from existing and newly-constructed wells while meeting the MCL requirements for arsenic and other regulated constituents. Since much of Peoria's renewable supply utilization will occur as recovery through groundwater wells, it is important to continue to expand the capacity of the City's groundwater well infrastructure.

Peoria firmly believes in planning for future water needs and availability. In January 2006, a Water Resources Master Plan update was completed that outlined the City's options and strategies for meeting future water demands. The Water Resources Master Plan outlines both the legally and physically available supplies and the projected water demands as the City grows through build out. The City is currently updating the Water Infrastructure Master Plan report which will discuss the necessary treatment facilities and distribution systems required to treat and transport water to Peoria's customers.

The Water Resources Master Plan includes a surface water, groundwater, wastewater and a water quality component.

11.b. SUMMARY OF EXISTING WATER SUPPLIES

The City has been actively engaged in obtaining and serving reliable and cost-effective water resources to its customers since 1954. At present, the City has a portfolio of supplies from which to serve its customers. Each water supply is discussed below.

SALT RIVER PROJECT WATER RIGHTS

Approximately 8,973 acres of land in the SRP water planning areas of the City of Peoria have SRP water rights. The City has a water delivery contract with SRP so that the City is the delivery agent for water rights appurtenant to urbanized SRP lands. As of 2005, approximately 7,596 acres had been urbanized. SRP estimates that approximately 15,192 acre-feet of SRP water are available to those urbanized lands (2005, SRP entitlement reports). This constitutes SRP's standard allocation of 2 acre-feet per acre and is considered a firm supply dependent upon SRP drought delivery scenario.

SRP estimates that at build out, all the lands in Peoria with SRP water rights will be urbanized. Assuming that happens, the City will become the delivery agent for 8,973 acres of land with SRP rights. Approximately 17,947 acre-feet annually (afa) of SRP water will be available for delivery to those lands based on SRP estimates. At present, according to federal law SRP water may not serve off project lands.

GROUNDWATER ALLOWANCE

The City has an established volume of groundwater that may be pumped as part of its AWS. This quantity was established in 1995 by the AWS rules and was computed to be 7.5 times the amount of water the City provided to its customers in 1994. In 1994, the City used approximately 14,634 afa. Therefore, the groundwater allowance is 109,800 afa ($7.5 \times 14,634$ rounded to nearest 100 afa). If used at a constant annual rate, the supply is equal to 1,098 afa for 100 years. Through 2005, the City has used a small portion of the allowance.

INCIDENTAL GROUNDWATER RECHARGE

The AWS rules established a standard incidental recharge factor to recognize that some of the water used in a municipal system returns to the subsurface. This recharge is return flow from water leaks, waste, excess and urban irrigation. This volume is calculated annually as four percent of the total water used by the City. In 2004, this amounted to approximately 928 afa. Incidental recharge is calculated annually and credited to the City's groundwater credit account.

CENTRAL ARIZONA PROJECT (CAP) ALLOCATION

The City has a subcontract for 19,709 afa. The allocation may be used anywhere within the City's service area, consistent with City policy. The supplies may be delivered from the CAP Aqueduct and any location approved by the Central Arizona Water Conservation District (CAWCD). The supply is highly reliable. However, it is likely that some shortages may occur in the future during severe droughts on the Colorado River and when the Upper Basin states begin to utilize their full entitlements.

The City has purchased 10 cfs capacity in the SRP-CAP interconnect facility. Therefore, approximately 7,240 afa of CAP water may be wheeled through SRP conveyance facilities to City facilities.

RECHARGE CREDITS

As of 2003, the City holds approximately 33,000 af of CAP recharge credits in accordance with ADWR. These credits were accrued through in-lieu recharge on SRP lands by providing SRP with a portion of Peoria's CAP allocation, CAP water recharged at the Agua Fria and Hieroglyphic Mountain Recharge Projects, and reclaimed water recharged at the Beardsley Water Reclamation Facility (WRF). The credits are available to be recovered through groundwater pumping and will help to off-set any groundwater use.

CAGR SERVICE AREA MEMBERSHIP

The City is a service area member of the Central Arizona Groundwater Replenishment District (CAGR). Under the current contract, the City may incur a minimum CAGR obligation of 500 afa beginning in 2001. For purposes of its AWS application, the City showed use of 12,149 af of groundwater use which would require replenishment. The service area membership is subject to physical availability of groundwater.

RECLAIMED WATER

The City produced approximately 2,300 afa (approximately 2.1 mgd) of reclaimed water in 2005. This production will increase over time as the City's population increases. At present, the City has a permit to recharge up to 4,480 afa of reclaimed water from the Beardsley WRF. The water may be recovered through groundwater pumping. The Butler Drive WRF is currently being designed for treatment, recharge, and reuse of reclaimed water for non-potable purposes in the southern planning area and should be on-line in 2009 providing an estimated 10,000 afa of reclaimed water. The City completed its first Reuse Master Plan in 2005 to guide the development of this valuable resource.

WATER CONSERVATION PROGRAM

While not a water supply in the traditional sense, the City water conservation program is an important compliment to the existing water resource portfolio of the City. Water conservation reduces water demands, which saves considerable capital and operating costs for the City and its customers and gives the City flexibility when planning for the future. At present, the City provides water conservation information and assistance to its residents through various utility efforts, financial incentives, and public awareness and education.

LAKE PLEASANT

Lake Pleasant is a significant recreational resource for the City. It provides regulatory storage for CAP and conservation storage for

Maricopa Water District (MWD). As such, Lake Pleasant is not a direct water resource for the City.

11.c. SUMMARY OF EXISTING WATER INFRASTRUCTURE

INFRASTRUCTURE

The City currently operates a wide array of water resource treatment and production facilities. These include a water treatment plants (WTPs), wells, recharge facilities, recovery wells, and wastewater reclamation facilities (WRFs). The facilities are discussed below.

WATER TREATMENT PLANTS

The City owns capacity in Glendale's Pyramid Peak WTP and has completed the Greenway WTP. The Pyramid Peak WTP serves CAP water while the Greenway WTP treats SRP water mainly and can also serve CAP water. The first phase of the Greenway plant was constructed to have 17,936 afa (16.0 mgd) of capacity.

WELLS

The City currently has 31 wells for water production. In addition, SRP has pledged three wells to serve the SRP planning area of the City. In total, the City has approximately 37,400 afa (33.4 mgd) of production capacity from existing wells. The production capacity assumes City wells are operating at 75 percent of their pumping capacity. The production wells are also permitted as recovery wells for the purpose of pumping recharge credits.

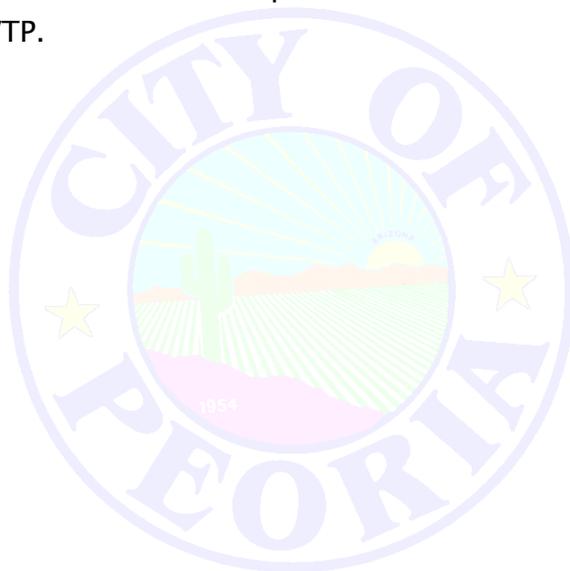
RECHARGE FACILITIES

The City has constructed 22.9 acres of spreading basins to recharge reclaimed water produced at the Beardsley WWTP. The basins have a capacity to recharge approximately 4,500 afa. Approximately 2,200 af of reclaimed water was recharged in 2005. At present, the City has a permit to recharge up to 4,480 afa from the treatment plant. The permit number for this recharge facility is 71-552497.0002. The permit period is June 21, 2006 to June

21, 2011. The City also has a permit for the indirect recharge of 40,000 afa of CAP water within the SRP boundaries. The permit number is 73-553133.0201, and the permit period is effective from July 17, 2006 through the permit period for the facility which is June 21, 2011. The City also owns capacity and recharges CAP water at the Central Arizona Project's Agua Fria and Hieroglyphic Mountains Recharge Facilities.

WASTEWATER TREATMENT PLANTS

The City owns and operates the Beardsley WRF. The plant has a treatment capacity of 4.0 mgd. The Jomax WRF, also owned and operated by the City, was started in December 2004 with an initial capacity of 0.75 mgd. Additionally, Peoria also owns 9.4 mgd of capacity in the Tolleson WWTP. The City is currently designing the Butler Drive WRF which will replace the need for capacity in the Tolleson WWTP.



11.d. GOALS, OBJECTIVES AND POLICIES

The goals, objectives and policies in this section provide the fundamental guidance for addressing a water resource issues. Policies in this element advocate careful management in order to assure an adequate and reliable supply of water resources.

GOAL	MANAGE A COORDINATED SYSTEM OF WATER AND WASTEWATER UTILITY SERVICE FACILITIES AND RESOURCES TO ADEQUATELY SERVE BUSINESS, HOUSING AND OTHER USES.
11.1:	

Objective 11.1.A:

Enhance and extend public wastewater service including collection and treatment systems to urbanized and newly developing areas of the City.

Policy 11.1.A.1:

The City shall continuously maintain a Wastewater Master Plan and undertake comprehensive revisions on a five-year cycle.

Policy 11.1.A.2:

The Wastewater Master Plan shall support the General Plan.

Policy 11.1.A.3:

The City shall continuously maintain a Wastewater Reuse Plan as a component of the Wastewater Master Plan to maximize the beneficial use of reclaimed water.

Policy 11.1.A.4:

The City shall utilize the Wastewater Expansion fee for new development as a component of the funding required for the Capital Improvement Program.

Objective 11.1.B:

Satisfy current and future water demands through sustainable and renewable water resources for the next 100 years.

Policy 11.1.B.1:

The City shall continuously maintain a Water Resource Master Plan and undertake comprehensive revisions on a five-year cycle concurrent with the General Plan Update.

Policy 11.1.B.2:

The Water Resource Master Plan shall support the General Plan.

Policy 11.1.B.3:

The City shall comply with the provisions of its Assured Water Supply designation by the Arizona Department of Water Resources.

Policy 11.1.B.4:

The City shall continue its conversion from a primarily groundwater-based (non-renewable) supply system to a surface water-based (renewable) supply system.

*See Policy
10.1.B.2.*

Policy 11.1.B.5:

The City shall continue to pursue the acquisition of additional renewable water resources such as groundwater recharge programs, reclaimed water, stormwater and various CAP allocations.

Policy 11.1.B.6:

The City shall utilize a Water Resource Expansion Fee for new development as a component of the funding required for new water resources.

Objective 11.1.C:

Enhance and extend public water service including distribution and potable treatment systems in both urbanized and newly developing areas of the City.

Policy 11.1.C.1:

The City shall continuously maintain a Water Infrastructure Master Plan and undertake comprehensive revisions on a five-year cycle.

Policy 11.1.C.2:

The Water Infrastructure Master Plan shall conform to and support the General Plan.

Policy 11.1.C.3:

The City shall continue to meet and exceed the water quality requirements of the Safe Drinking Water Act and all other regulatory requirements. The City will place a priority on the aesthetic quality of the water it produces and delivers.

Policy 11.1.C.4:

The City shall utilize the Water Expansion Fee for new development as a component of the funding required for the Capital Improvement Program.

Policy 11.1.C.5:

The City shall continue to build and maintain a water distribution system which supports adequate fire suppression and enhances life safety and property protection.

11.e. IMPLEMENTATION PROGRAM (STRATEGIES TO INCREASE CAPACITY)

This section summarizes the conclusions which have been reached as a result of the analysis of the water supplies and demands for the City of Peoria. The strategies the City should pursue in order to assure an adequate and reliable supply are identified.

Conclusions are segregated into those related to water resource availability (which takes into account legal and physical availability) and those related to infrastructure capacity. The conclusions are based on the following general assumptions:

- City total per capita water use is approximately 165 gallons per day;
- Average annual population growth rate of four percent over the next 25 years;
- City build out occurs at approximately year 2060; and
- Water demands within private water companies are not included.

WATER RESOURCE AVAILABILITY

Summarized below are the major conclusions and issues relating to water resource availability:

1. SRP water supplies are more than adequate to serve on-project water demands and impacts from drought. However, due to canal dry-up and peaking demands, groundwater must be a component of the supply. At present, there is no apparent way to utilize any potential excess SRP water to meet water demands in the off-project portions of the City. Due to the projected excess availability of water supplies in the SRP service area, planning of water-intensive development would be more favorable in this area.

2. The City's current CAP subcontract of 19,709 afa should meet the water demands of the off-project portions of the City until about year 2010.
3. Assuming that additional CAP water supplies are secured from the reallocation of uncontracted CAP M&I water and leasing of CAP water from the Gila River Indian Community (GRIC), the City should have sufficient water resource supplies to satisfy off-project demands until about year 2020.
4. Reclaimed water will be available from the City's WRFs to augment water supplies. This water resource is needed to provide an additional 10 years' supply. In order to maximize this resource, continued analysis and implementation of recharge/recovery opportunities, as well as opportunities for direct deliveries to turfed areas, are necessary.
5. The CAGR D water supplies are available to provide groundwater as a back-up resource. Due to the high cost of replenishment, CAGR D membership should not be used unless less expensive alternatives are not available to meet demands. Direct delivery membership may be an alternative for lands currently outside the City service area that require a supply immediately.
6. Imported water resources such as non-CAP Colorado River water may be necessary, especially if additional CAP water is not available. The imported water resources are the highest cost resources currently available to the City.
7. Long-term groundwater pumping from adjacent cities and private water companies may impact the physical availability of groundwater in the City as well as recharge and recovery plans. The Utilities Department groundwater monitoring plan should be continued and expanded. A groundwater

model has been undertaken to track changes in the groundwater conditions within the City.

8. Groundwater is not physically available in the northwestern portion of the study area. As a result, CAP water must be treated and served directly and/or groundwater imported from other City areas to meet these demands.
9. While there is currently abundant groundwater physically available under the currently developed portion of the City, its legal availability is limited. Recharge of reclaimed water and CAP water will be necessary to use this valuable supply. A sufficient network of wells will be required to access this stored water and the legal authorization to pump these wells will need to be obtained.

INFRASTRUCTURE CAPACITY

Summarized below are the major conclusions and issues related to the infrastructure required for delivery of water to users in the City.

1. The Greenway WTP is critical in providing treatment capacity to serve SRP water directly.
2. As the need for recovery of recharge credits increases, as the City experiences additional growth, and as older wells need replacement, new wells will be required to meet water demands.
3. Wells developed off-project should be located where a physically available supply is assured (e.g., adjacent to the Agua Fria recharge site).
4. Additional infrastructure will be required to make use of both CAP and reclaimed water supplies. For CAP supplies, consideration must be made to balance recharge/recovery and direct use from WTPs. In some northern portions of the

City, direct use of CAP supplies will be necessary because groundwater availability is limited due to hydrogeologic conditions. Siting additional WTPs should include evaluation of hydrogeologic conditions and location of demands.

5. Recharge of either reclaimed water or CAP supplies will be necessary to have groundwater capacity to meet peaking demands and also to provide redundancy in the system in case of emergency or drought.

STRATEGIES

Strategies have been prepared that, when implemented, should provide the City with a reliable, sustainable, and economical supply to meet current and future water demands. The strategies are based on a review, in conjunction with Utilities Department staff, of the water demands, supplies, and available alternatives. In summary, the strategies continue the City's focus on providing renewable water resources balanced with groundwater resources and are based on the following underlying concepts:

- Locally available, renewable water supplies such as the unused portion of the City's CAP allocation and reclaimed water should be developed before imported water resources such as non-CAP Colorado River water or imported groundwater;
- CAGR membership provides a back-up supply but is more expensive than CAP water supplies and reclaimed water; and
- Additional CAP water available through reallocation and GRIC water rights settlements should become available by 2008.

The strategies will initiate the reuse of reclaimed water primarily through recharge and recovery programs, while modifying the existing CAP recharge program to include recharge and recovery as a near- and mid-term alternative to construction of additional

WTP capacity. The strategies will require periodic review to determine if they remain viable and if they are the most appropriate methods to meet the City's needs and planning goals. Summarized below are the strategies that the City should initiate or continue in order to assure that adequate water resources are available now and in the future. These activities have been segregated into near-term, mid-term, long-term and build-out strategies. The near-term strategy is composed of actions the City needs to pursue to assure that economical and adequate resources are in place through 2010. Mid-term strategy is for the period ending in 2020. The long-term strategy is for the period ending 2040. The build-out strategy is for full development of the City through approximately 2060. The strategies are designed to satisfy regulatory requirements for AWS and to fit with the existing regulatory framework.

NEAR-TERM STRATEGY

The near-term strategy is focused on developing surface water treatment facilities and securing recharge capacity (infrastructure) and recharge credits (legal availability of groundwater resources) as a continued bridge from mined groundwater use to the direct delivery of surface water supplies (e.g., CAP and SRP). The recharge components (legal availability and infrastructure) will serve to provide groundwater to meet shortages in treatment plant capacity, peaking demands, system redundancy, and canal outages. The City will also need to extend the AWS Designation within this timeframe.

The implementation steps are outlined below:

1. Use existing groundwater credits (groundwater allowance, CAP credits, incidental recharge, and IGFR credit) for groundwater pumping until all possible wells are permitted as recovery wells. This will permit Peoria to minimize replenishment obligations to CAGR.

2. Maximize the use of CAP recharge facilities that the City partners in the ownership. The City owns 15% of the capacity at both the Agua Fria and Hieroglyphic Mountain recharge facilities with 9,000 afa capacity available at the Agua Fria and 4,000 afa available at Hieroglyphic Mountain. These capacities secured in the sites are available for lease or assignment by the City to a third party in order to provide maximum flexibility to the City.
3. Continue to actively pursue the acquisition of the CAP reallocation and lease of the GRIC settlement water. These additional CAP resources are a key component of the City's future renewable water supplies and may provide up to 12,500 afa. Apart from reclaimed water, the additional CAP water is the most economical renewable resource available. These supplies provide more flexibility in that they can be served to areas without groundwater physically available such as the northern portions of the City. In addition, this CAP water must be contracted when offered or the opportunity will be lost.
4. Evaluate and implement programs to improve data collection and reporting on water production and water delivered and billed to customers. Obtain updated City data that may be used to assess residential and non-residential water uses by location. The billing, water use, and population data should be used to re-evaluate the water resource strategies.
5. Continue to evaluate and develop water conservation programs to achieve permanent reductions in indoor and outdoor water use. Residential water use may offer the greatest opportunity for water demand reductions.
6. Utilize the recharge capacity for the Beardsley WRF. Update and extend the ADWR recharge permit for the facility as necessary.

7. Continue to permit service area water supply wells as recovery wells.
8. Evaluate and construct, if feasible, projects which use reclaimed water directly to replace groundwater as the supply for non-potable uses such as lakes, turf facilities, golf courses and highway landscaping.
9. Prepare and submit an application to ADWR to extend the City's AWS Designation by 2010.

Continue and expand a program to monitor and define groundwater quantity and quality within the City planning area.

MID-TERM STRATEGY

The mid-term strategy (2011 -2020) focuses on implementation of recharge and recovery opportunities and extending the City's Designation of AWS. During this time period, the planning and development of WTPs may be necessary for northern portions of the City where groundwater is not available. The implementation steps are outlined below.

1. Recharge CAP water at the Agua Fria and Hieroglyphic Mountain recharge facilities in order to maintain a reserve of groundwater credits. The City should maintain a minimum groundwater credit balance of 40,000 af which is equal to 50 percent of the maximum year City water demand. Undertake reliability evaluations in order to determine an appropriate quantity to be reserved.
2. Continue to recharge and directly use effluent to develop groundwater credits and allow for long-term supplies and groundwater pumping to firm supplies and meet peaking demands.

3. Continue the groundwater quantity and quality monitoring program initiated in the earlier strategy. Water quantity and quality trends should be used to update or modify water resource strategies.
4. If they become available, evaluate the feasibility or purchase of low priority CAP supplies (non-Indian agricultural priority water).
5. Evaluate participation in Arizona Water Banking Authority (AWBA)/CAP groundwater recovery programs if the City continues to have groundwater available and if the impacts of Agua Fria and Hieroglyphic Mountain recharge activities support participation.
6. Assess whether the CAP-SRP interconnect capacity (10 cfs) is necessary to meet City water supply goals. If the capacity is not necessary, evaluate alternative uses for the capacity such as developing Salt River resources for use in the northern City water planning areas.
7. Develop infrastructure that is compatible with the available water resources and location of water demands. Evaluate the location and timing of construction of a treatment plant for CAP water to serve the northern service areas of the City. These areas have limited quantities of groundwater available and may require direct delivery of CAP water for long-term reliability.
8. Update the water resources master plan to include updates in population and growth projections and changes in water resources management and availability. The population data should be updated based on the 2010 census. City water use and billing data should be re-evaluated to analyze water use assumptions and conservation programs.

LONG-TERM STRATEGY

The long-term strategy (2021-2040) continues the focus on investment in renewable supplies. In addition, the strategy begins evaluation of potential imported supplies if City population growth continues at present (2005) rates.

1. Evaluate need for imported supplies. Population data from the 2020 census should be evaluated along with population growth rate projections and City water use trends. If the growth rates and water use trends indicate that the build-out projections used in the 2006 water resources plan will be exceeded, imported water supplies must be considered.
2. Continue evaluation of need for WTPs to serve the northern areas of the City that lack groundwater availability.
3. Participate in development and implementation of CAP wheeling policies. These policies will be the likely mechanism to import additional water supplies.
4. Participate in the development of additional groundwater management rules and regulations. The goal of safe yield is supposed to be met by 2025. It is likely that to meet that goal, additional regulations may be developed. City staff should continue to participate in these issues.
5. Continue the groundwater quantity and quality monitoring program initiated in the earlier strategy. Water quantity and quality trends should be used to update or modify water resource strategies.

BUILD-OUT STRATEGY

The build-out strategy (2041-2060) shifts toward monitoring and maintenance of the City's resources unless additional growth is anticipated. If additional growth is projected, then imported supplies must be secured in this time frame.

1. Evaluate need for imported supplies. Population data from the 2040 census should be evaluated along with population growth rate projections and City water use trends. If the growth rates and water use trends indicate that the build-out projections used in the 2006 water resources plan will be exceeded, imported water supplies must be considered.
2. Continue the groundwater quantity and quality monitoring program initiated in the earlier strategy. Water quantity and quality trends should be used to update or modify water resource strategies.

11.f. IMPLEMENTATION PROGRAM

The Implementation Program for the Water Resources Element of the Peoria General Plan is presented in Table 11-1, *Water Implementation Program*. The table is presented under the following four headings:

- Implementation Measure** Lists the action necessary to carry out the Water Resources Element of the General Plan.
- Lead Department/Agency** Identifies the responsible City department for accomplishing that particular measure.
- Projected Timeframe** Identifies and prioritizes the timeframe for the measure to be initiated.
- Potential Resources** Lists the potential funding, City staff, volunteer or other community resource necessary to carry out the implementation action.

**TABLE 11-1
WATER IMPLEMENTATION PROGRAM**

Implementation Measure	Lead Department / Agency	Projected Timeframe (Years)	Potential Funding Sources
1. Use existing groundwater credits.	Utilities	0-5	▪ Water Operations Funds
2. Continue to actively pursue the acquisition of the CAP reallocation and lease of the GRIC settlement water.	Utilities	0-5	▪ Water Operations Funds
3. The design and construction of the Butler Drive WRF to replace the need for capacity at the Tolleson WWTP. Develop the recharge capacity and reuse opportunities for the reclaimed water that will be produced.	Utilities	0-5	▪ Water and Wastewater Operations Funds
4. Evaluate and implement programs to improve data collection and reporting on water production and water delivered and billed to customers.	Utilities	0-5	▪ Water Operations Funds

TABLE 11-1
WATER IMPLEMENTATION PROGRAM
(CONTINUED)

Implementation Measure	Lead Department / Agency	Projected Timeframe (Years)	Potential Funding Sources
5. Continue to develop water conservation programs to achieve permanent reductions in water demands.	Utilities	0-5	<ul style="list-style-type: none"> ▪ Water Operations Funds
6. Continue to expand the recharge capacity for the Beardsley WRF.	Utilities	0-5	<ul style="list-style-type: none"> ▪ Development Impact Fees ▪ Wastewater Operations Funds
7. Permit service area water supply wells as recovery wells.	Utilities	0-5	<ul style="list-style-type: none"> ▪ Water Operations Funds
8. Prepare and submit an application to ADWR to renew the City's AWS Designation.	Utilities	0-5	<ul style="list-style-type: none"> ▪ Water Operations Fund
9. Recharge CAP water at the Agua Fria and Hieroglyphic Mountain recharge facilities in order to maintain a reserve of groundwater credits.	Utilities	0-10	<ul style="list-style-type: none"> ▪ Development Impact Fees ▪ Water Operations Funds
10. Continue to recharge and directly use effluent to develop groundwater credits and allow for long-term supplies.	Utilities	0-10	<ul style="list-style-type: none"> ▪ Development Impact Fees ▪ Water / Wastewater Operating Fees

**TABLE 11-1
WATER IMPLEMENTATION PROGRAM
(CONTINUED)**

Implementation Measure	Lead Department / Agency	Projected Timeframe (Years)	Potential Funding Sources
11. Continue the groundwater quantity and quality monitoring program initiated in the earlier strategy.	Utilities	0-10	<ul style="list-style-type: none"> ▪ Water Operations Funds
12. If they become available, evaluate the feasibility or purchase of low priority CAP supplies.	Utilities	0-10	<ul style="list-style-type: none"> ▪ Water Operations Funds ▪ Development Impact Fees
13. Evaluate participation in Arizona Water Banking Authority (AWBA) and CAP groundwater recovery programs.	Utilities	0-10	<ul style="list-style-type: none"> ▪ Water Operations Funds
14. Assess whether the CAP-SRP interconnect capacity (10 cfs) is necessary to meet City water supply goals.	Utilities	6-10	<ul style="list-style-type: none"> ▪ Water Operations Funds
15. Develop infrastructure that is compatible with the available water resources and location of water demands.	Utilities	6-10	<ul style="list-style-type: none"> ▪ Development Impact Fees
16. Continue evaluation of the need for WTPs to serve the needs of the northern areas of the City that lack groundwater availability.	Utilities	6-10	<ul style="list-style-type: none"> ▪ Development Impact Fees ▪ Water Operations Funds

TABLE 11-1
WATER IMPLEMENTATION PROGRAM
(CONTINUED)

17. Update the water resources master plan to include updates to population and growth projections and changes in water resources management and availability.	Utilities	6-10	<ul style="list-style-type: none"> ▪ Development Impact Fees ▪ Water Operations Funds
18. Evaluate need for imported supplies.	Utilities	10-25	<ul style="list-style-type: none"> ▪ Water Operations Funds
19. Continue evaluation of need for WTPs to serve the northern areas of the City that lack groundwater availability.	Utilities	10-25	<ul style="list-style-type: none"> ▪ Water Operations Funds ▪ Development Impact Fees
20. Participate in development and implementation of CAP wheeling policies.	Utilities	10-25	<ul style="list-style-type: none"> ▪ Water Operations Funds
21. Participate in the development of additional groundwater management rules and regulations.	Utilities	10-25	<ul style="list-style-type: none"> ▪ Water Operations Funds
22. Continue the groundwater quantity and quality monitoring program initiated in the earlier strategy.	Utilities	10-25	<ul style="list-style-type: none"> ▪ Water Operations Funds
23. Evaluate need for imported supplies.	Utilities	26-40	<ul style="list-style-type: none"> ▪ Water Operations Funds
24. Continue the groundwater quantity and quality monitoring program initiated in the earlier strategy.	Utilities	26-40	<ul style="list-style-type: none"> ▪ Water Operations Funds

Source: City of Peoria, 2001; Amended 2006

The Planning and Zoning Commission should review and provide recommendations to the City Council for revisions to the Implementation Program on an annual basis in order to continue to pursue implementation of the Peoria General Plan. The Director of the Community Development Department and staff persons responsible for the General Plan implementation should monitor the status of each implementation action throughout the year and provide a general recommended framework to the Planning and Zoning Commission for annually updating the General Plan's Implementation Program.

