RECLAMATION

Managing Water in the West

Environmental Assessment

CAP Water Lease from the San Carlos Apache Tribe to the Town of Gilbert

U. S. Department of the Interior
Bureau of Reclamation
Phoenix Area Office

November 2010

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Environmental Assessment

CAP Water Lease from the San Carlos Apache Tribe to the Town of Gilbert

U. S. Department of the Interior
Bureau of Reclamation
Phoenix Area Office

November 2010

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS iii

CHAPTER 1 – PURPOSE AND NEED 1
1.1 INTRODUCTION 1
1.2 BACKGROUND/ OVERVIEW OF FEDERAL AND STATE WATER REGULATIONS AND POLICIES DIRECTING CAP ENTITLEMENT TRANSFERS 1
1.3 PURPOSE AND NEED FOR ACTION 4
1.4 PROJECT LOCATION 4
1.4.1 San Carlos Apache Tribe 4
1.4.2 Town of Gilbert 5
1.5 SUMMARY OF PUBLIC INVOLVEMENT 5

CHAPTER 2 – PROPOSED ACTION AND NO ACTION ALTERNATIVE 7
2.1 No Action Alternative 7
2.2 THE PROPOSED ACTION 7
2.2.1 San Carlos Apache Tribe 7
2.2.2 Town of Gilbert 7

CHAPTER 3 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES 9
3.1 Water Resources 9
3.1.1 Affected Environment 9
3.1.2 Environmental Consequences 11
3.2 Land Use 11
3.2.1 Affected Environment 11
3.2.2 Environmental Consequences 12
3.3 Biological Resources 12
3.3.1 Affected Environment 12
3.2.2 Environmental Consequences 15
3.4 Cultural Resources 15
3.4.1 Affected Environment 16
3.4.2 Environmental Consequences 16
3.5 Socioeconomic considerations 17
3.5.1 Affected Environment 17
3.5.2 Environmental Consequences 19
3.6 Summary of Impacts 19

CHAPTER 4 – CONSULTATION AND COORDINATION 21

CHAPTER 5 – ENVIRONMENTAL LAWS AND DIRECTIVES CONSIDERED 23

CHAPTER 6 – LIST OF PREPARERS 27

CHAPTER 7 – LITERATURE CITED AND REFERENCES 29

LIST OF TABLES

Table 1. – Distribution of Water in the Lower Basin of the Colorado River 1

Table 2. – GIS Mapped Acreages within the Town of Gilbert's Service Area 13

Table 3. – USFWS' List of Endangered, Threatened, Proposed and Candidate Species for Maricopa County..... 14

Table 4. – 2009 Population Estimates for Arizona, Maricopa County and the Town of Gilbert 18

Table 5. – Comparative Population and Economic Characteristics for the Town of Gilbert, Maricopa County and the state of Arizona 18

APPENDIX A - FIGURES

Figure 1. – General Vicinity Map. A-1

Figure 2. – Direct Delivery Options for the Town of Gilbert's Additional CAP Water Supply. A-2

Figure 3. – Recharge Options for the Town of Gilbert's Additional CAP Water Supply..... A-3

ACRONYMS AND ABBREVIATIONS

ACT	San Carlos Apache Tribe Water Rights Settlement Act of 1992
ADWR	Arizona Department of Water Resources
AF	acre-feet
AFA	acre-feet/annually
AGFD	Arizona Game and Fish Department
AGREEMENT	San Carlos Apache Tribe Water Rights Settlement Agreement
AMA	Active Management Area
AFRP	Agua Fria Recharge Project
AWS	Assured Water Supply
CAGRD	Central Arizona Groundwater Replenishment District
CAP	Central Arizona Project
CAWCD	Central Arizona Water Conservation District
CAWS	Certificate of Assured Water Supply
CFR	Code of Federal Regulations
CFS	cubic feet per second
CRBPA	Colorado River Basin Project Act
CIF	CAP Interconnect Facility
CWA	Clean Water Act
DAWS	Designation of Assured Water Supply
EA	Environmental Assessment
ESA	Endangered Species Act of 1973, as amended
ESRVSB	East Salt River Valley Sub-Basin
EO	Executive Order
FONSI	Finding of No Significant Impact
FR	Federal Register
FWCA	Fish and Wildlife Coordination Act
GIS	Geographic Information System
HDMS	Heritage Database Management System
ITA	Indian Trust Asset
M&I	municipal and industrial
MAFA	million acre-feet annually
NIA	non-Indian Agriculture
NWTP	North Water Treatment Plant
O&M	Operation & Maintenance
OM&R	Operation, Maintenance and Replacement
NHPA	National Historic Preservation Act
NEPA	National Environmental Policy Act
PAMA	Phoenix Active Management Area
P.L.	Public Law
Reclamation	Bureau of Reclamation
RWCD	Roosevelt Water Conservation District
Secretary	Department of Interior
SHPO	State Historic Preservation Office
SRP	Salt River Project

SRPMIC	Salt River Pima Maricopa Indian Community
STVWTP	San Tan Vista Water Treatment Plant
TDRP	Tonopah Desert Recharge Project
T&E	Threatened and Endangered Species
TOWN	Town of Gilbert
TRIBE	San Carlos Apache Tribe
USFWS	U.S. Fish and Wildlife Service
WMAT	White Mountain Apache Tribe

CHAPTER 1 – PURPOSE AND NEED

1.1 INTRODUCTION

This Environmental Assessment (EA) describes the environmental effects of the proposed 100-year lease of 5,925 acre-feet annually (afa) of Central Arizona Project (CAP) water from the San Carlos Apache Tribe (Tribe) to the Town of Gilbert (Town) (Figure 1). Lease of this CAP water requires approval by the Bureau of Reclamation, acting on behalf of the Secretary of the Interior (Secretary), and constitutes a Federal action. This EA has been prepared in accordance with the requirements of the National Environmental Policy Act (NEPA), as amended, the Council on Environmental Quality's regulations for implementing NEPA (40 CFR 1500-1508), and the Department of the Interior's regulations implementing NEPA (43 CFR Part 46). This EA identifies impacts anticipated to result from Reclamation's signing of the agreement to lease a portion of the Tribe's CAP entitlement to the Town.

1.2 BACKGROUND/ OVERVIEW OF FEDERAL AND STATE WATER REGULATIONS AND POLICIES DIRECTING CAP ENTITLEMENT TRANSFERS

The rights to use water resources from the Colorado River are shared by seven Colorado River basin states, tribes, and Mexico. Water rights are determined by Federal legislation, court decisions, international treaty, and administrative decisions, which in combination create the "Law of the River." The Colorado River basin is divided into the Upper Basin, which has an entitlement of 7.5 million acre-feet/annually (mafa), and the Lower Basin, which is entitled to 7.5 mafa. Lee's Ferry, located about 18 miles downstream of Glen Canyon Dam in northern Arizona, divides the Upper and Lower Basins. By treaty, Mexico is entitled to 1.5 mafa. The Lower Basin entitlement by state is summarized in Table 1.

Table 1. – Distribution of Water in the Lower Basin of the Colorado River

State	Water Allotment
Arizona	2.8 mafa
California	4.4 mafa
Nevada	300,000 afa

The US Congress passed the Colorado River Basin Project Act (CRBPA) on September 30, 1968 (P.L. 90-537). The CRBPA authorized the Secretary, acting through Reclamation, to build, operate, and maintain the CAP to deliver Colorado River water to central and southern Arizona. Construction of the CAP began in 1973 and was completed 20 years later at a cost of more than $4 billion. The CAP conveys Colorado River water in Arizona through a 336-mile long system of pumping plants, aqueducts, dams, and reservoirs. Starting at Lake Havasu, the main aqueduct extends east to Phoenix then south to Tucson, where it terminates. The CAP has the physical capacity to deliver 2.2 mafa of Arizona's allotted 2.8 mafa, assuming the system is operating

24 hours per day, 7 days per week. However, the average delivery volume is lower, approximately 1.5 mafa, due to time offline for operational needs, such as pump and canal system maintenance and repair.

CRBPA also provided the Secretary with the authority to execute contracts for CAP water. Consistent with Federal reclamation laws, uses of CAP water are distributed to three main sectors: municipal and industrial (M&I), non-Indian agricultural (NIA), and Indian. Although the original intent of the CAP system was to distribute water primarily for agriculture, CAP management and purpose have shifted in response to population growth in central and southern Arizona and increased awareness of Indian water rights and needs. CAP management is now focused more on water uses for M&I and tribal entities than for NIA.

In 1971, the Arizona State Legislature authorized the formation of the Central Arizona Water Conservation District (CAWCD) to repay the Federal government for the construction cost of the CAP, to contract for delivery of Colorado River water, and to operate and maintain the CAP aqueduct. The CAP system is operated and maintained by the CAWCD under a 1987 Operation and Maintenance (O&M) transfer contract with Reclamation. Today, CAWCD is a municipal corporation governed by a 15-member board of directors with representation from Maricopa, Pinal, and Pima counties. A 1988 repayment contract between the Secretary and CAWCD established the process by which CAWCD and the system's users would repay the Federal government for costs associated with construction of the CAP.

In 1980, the Arizona legislature passed the Groundwater Management Act. It established Active Management Areas (AMAs) within which goals for managing groundwater withdrawals were identified. Within the Phoenix AMA (PAMA), the AMA that the Town is within, the goal is to obtain a safe-yield, or a balance between groundwater withdrawals out of, and natural and artificial recharge into, the basin. To achieve this, the assured water supply (AWS) rules require that a new residential development within the PAMA must demonstrate there are sufficient water supplies available to meet proposed uses for 100 years and those uses are consistent with achieving the goal of safe yield. Within an AMA, a new residential development can receive a Certificate of Assured Water Supply (CAWS) from ADWR or it can receive service from a water company that has received a Designation of AWS (DAWS) from ADWR, as has the Town. Under the AWS rules adopted by ADWR in 1995, the use of renewable water supplies, such as effluent, CAP water, or other surface water supplies, is required for new development within the service area. If renewable water supplies are not provided directly by the water provider, they may meet their replenishment requirements by enrolling in the Central Arizona Groundwater Replenishment District (CAGRD).

CAGRD was created by the Arizona State Legislature in 1993, and is operated by the CAWCD. Member lands (developments that have joined CAGRD to qualify for a CAWS) and member service areas (water providers that have joined CAGRD to obtain a DAWS) pay CAGRD to replenish groundwater they have pumped that is in excess of their ADWR groundwater allowance. The member lands or member service areas must report annually to CAGRD any groundwater pumped in excess of the maximum allowed by AWS rules. The total volume of excess groundwater reported for all CAGRD members within that AMA becomes the replenishment obligation for the CAGRD and must be recharged in that AMA within 3 years.

ADWR has authority and establishes regulatory requirements for groundwater use within the PAMA. CAGRD must report the replenishment obligation to ADWR and all replenishment completed in the previous year.

Title XXXVIII of Public Law 102-575 (106 Stat. 4740), the San Carlos Apache Tribe Water Rights Settlement Act of 1992 (Act), was enacted on October 30, 1992. The Act allocated certain water supplies to the Tribe, and in section 3710(c) approved, ratified and confirmed the San Carlos Apache Tribe Water Rights Settlement Agreement (Agreement) dated March 30, 1999. The Act also directed the Secretary to amend the Tribe's CAP water delivery contract to authorize the Tribe to lease its CAP water supplies.

The Tribe's CAP contract, as amended by Amendment No. 3, states at subarticle 4.3 (e) (2) that "The United States shall be a party to all lease agreements, amendments thereto, or options to lease Project Water entered into pursuant to this Contract." The Tribe's lease with the Town falls under this provision. Thus, the United States is a necessary party to this lease with Gilbert, in conformance with the Act, the Agreement, and the Tribe's CAP water delivery contract.

The Colorado River water available to the Tribe as part of the 1999 settlement for the San Carlos Apache Indian Reservation includes: 12,700 afa of CAP Indian priority water under a December 11,1980, CAP water delivery contract between the Secretary of the Interior and the Tribe; 14,665 afa of CAP M&I priority water previously allocated to the Phelps Dodge Corporation; 3,480 afa of CAP M&I priority water previously allocated to the town of Globe; and the excess water (unquantified) not required to be delivered to the Ak-Chin Indian Reservation under subsection (f)(2) of Section 2 of the Ak-Chin Water Rights Settlement Act of 1984 (Verburg 2010). Thus far, the Tribe has leased a portion of their entitlement to the City of Scottsdale, Phelps Dodge and to the Town. Specifically, the Tribe has leased 12,500 afa to the City of Scottsdale for a 100-year period beginning in 1999, and 14,000 afa to Phelps Dodge for 50 years beginning January 1, 1999. To facilitate the Phelps Dodge lease, the United States and the Tribe entered into an exchange agreement with the Salt River Project Agricultural Improvement and Power District and the Salt River Valley Water Users' Association on January 24, 2002. In addition, the Tribe entered into a 1 year lease in 2010 with the Town for 20,000 af of the Tribe's CAP entitlement.

The Town was allocated 7,235 afa of CAP water by the Secretary on February 10, 1983. The Town's original CAP water service subcontract was executed on April 7, 1992 (Contract No. 2-07-30-W0275) with a subsequent subcontract replacing it on March 25, 2007 (Contract No. 07-XX-30-W0497). The Town began to receive their 7,235 afa entitlement in October 1993. The Town has also acquired additional CAP entitlements through the Salt River Pima Maricopa Indian Community (SRPMIC) Water Rights Settlement Agreement, dated February 1988. Those entitlements include 6,762 afa of exchange water from the SRPMIC and 922 afa of the Roosevelt Water Conservation District's (RWCD) entitlement. In addition, they lease 4,088 afa from SRPMIC. With these additional CAP entitlements, the Town has a total of 19,007 afa of Colorado River water available to them.

1.3 PURPOSE AND NEED FOR ACTION

The Town has been issued a DAWS through 2025, based on current, committed and projected demands and available supplies consistent with ADWR's AWS rules (ADWR 2010). The Town is able to meet the water demands for current and anticipated population growth for the next 15 years based upon the renewable and reclaimed water supplies identified in their DAWS. To further offset their future potable water demand, the Town is proposing to lease 5,925 afa of CAP entitlement from the Tribe. The addition of this renewable water source would reduce the Town's dependence on groundwater within its service area, including the additional cost of the use of CAGRD's replenishment services and would lessen their reliance on excess CAP water, which may not always be available.

The Tribe does not have an immediate demand for its entire CAP water entitlement and would like to lease 5,925 afa of its entitlement; the Tribe would also benefit financially from leasing a portion of its unused entitlement.

The need for the project is to (1) meet the Town's future potable water demand, and (2) secure a long-term, economically feasible right to a renewable water supply for the Town.

1.4 PROJECT LOCATION

The project is located in Maricopa County, Arizona, and includes the Town's service area (Figure 1). The Town's service area is located within the PAMA. The existing CAP canal and associated infrastructure would be used to deliver the leased CAP water. The water will be diverted from the CAP canal at the Gilbert/Chandler turnout and will then be delivered via buried pipeline for treatment at the San Tan Vista Water Treatment Plant (STVWTP). STVWTP is located in the Town near Higley and Ocotillo Roads (Figure 2). Gilbert's CAP allocation can also be delivered to the North Water Treatment Plant (NWTP) located at Greenfield and Guadalupe Roads through the CAP Interconnect Facility (CIF) (Figure 2). Water may also be recharged within the Town's service area at the Riparian Preserve Recharge Facility located at Greenfield and Guadalupe, in addition to CAWCD's Tonopah Desert Recharge Project (TDRP) and Agua Fria Recharge Project (AFRP) (Figure 3). TDRP is located in western Maricopa County, approximately 7 miles northwest of Tonopah, Arizona, while AFRP is located near the City of Peoria in Maricopa County, approximately 4 miles downstream of New Waddell Dam. The water can also be delivered to the Town's in-lieu partners; Queen Creek Irrigation District, New Magma Irrigation District, Salt River Project (SRP), and RWCD, all of which are located within the East Salt River Valley Sub Basin (ESRVSB) (Figure 3). Under any of these water use options, existing infrastructure will be used to either directly deliver or recharge the leased water.

1.4.1 San Carlos Apache Tribe

The San Carlos Apache Reservation is located in southeastern Arizona within Gila, Graham, and Pinal Counties and encompasses over 1,834,781 acres. The Tribe currently does not have the infrastructure needed to take, treat, and serve CAP water to its customers.

1.4.2 Town of Gilbert

The Town, located in the southeast Phoenix valley, was incorporated in 1920. The original incorporation of less than one square mile has grown into a 72.6 square mile planning area in Maricopa County. The Town's planning area is not yet fully incorporated or developed. In fact, there are numerous pockets of unincorporated land in the planning area, some entirely surrounded by the Town (Town of Gilbert 2005). The Town's northern boundary for the most part is Baseline Road; the eastern boundary is generally along Power Road; the southern boundary is Hunt Highway; and the western boundary is along several roads as it jogs between Arizona Avenue and Val Vista Road (Town of Gilbert 2005).

Approximately 46,462 acres of developed areas are currently served by the Town. The developed areas represent approximately 82 percent of the analysis area. Approximately 10,220 acres of undeveloped lands within the analysis area include open space and agricultural areas.

The Town provides potable water service to approximately 66,599 residential-single and multi-family connections and 3,943 commercial connections (Kathy Rall, Town of Gilbert, pers. comm.). The Town actively serves a population of approximately 220,000 people within its water service area (MAG 2009). The Town's water service area is described as the Town's boundaries. The Town currently is capable of delivering groundwater from 18 production wells. The Town also holds a recovery well permit for 58 wells, some of which are owned by Gilbert and the remaining are owned by other entities that convey the right to recover stored water to the Town In addition, there are 15 reservoirs and associated booster stations that are used to deliver drinking water to customers.

1.5 SUMMARY OF PUBLIC INVOLVEMENT

Reclamation distributed a notice of availability of the EA to interested Federal, state, county and local agencies on November 17, 2010. Concurrent with this notice, the EA was posted to Reclamation's website (http://www.usbr.gov/lc/phoenix/) for a 15 day review.

CHAPTER 2 – PROPOSED ACTION AND NO ACTION ALTERNATIVE

2.1 NO ACTION ALTERNATIVE

Under the no action alternative, the Town would continue to be responsible for delivery of potable water to its service area in accordance with the requirements of its DAWS and other applicable state and Federal regulations. The Town would also continue to purchase excess CAP water from CAWCD's Access to Excess Program as well as potentially purchasing water from CAWCD's future Project Acquisition, Development, and Delivery (ADD) Water Program, and would continue to earn Long Term Storage Credits through recharge of CAP supplies and unused reclaimed water developed within the Town's service area. Another viable option for the Town would be to pursue other CAP lease agreements with other Native American communities. In the event that water is not leased to the Town from the Tribe and/or excess CAP water is not available for purchase, the Town would recover through existing permitted recovery wells or extinguish its Long Term Storage Credits earned through the recharge of excess and unused CAP water as well as reclaimed water to offset any ground water pumping over the legal limit. New development would be served by the Town under its current DAWS. A modification to the Town's DAWS would be submitted to ADWR prior to exceeding its current limit.

2.2 THE PROPOSED ACTION

2.2.1 San Carlos Apache Tribe

The infrastructure necessary to take, treat, and serve CAP water to the Tribe has not yet been developed. All undelivered CAP entitlements of the Tribe become excess water and is distributed in accordance with CAP's Access to Excess Program. The Tribe has determined that 5,925 afa is excess to their needs and would like to lease it to the Town in order to capitalize on their CAP entitlement.

Under the proposed action, the Regional Director of Reclamation's Lower Colorado Region would sign the lease for 5,925 afa of CAP water to the Town from the Tribe for a 100-year period. An initial payment of $9,331,875 will be paid to the Tribe and annual payments of $93,318.75 will begin on January 1, 2021, and January 1 each year thereafter, to and including January 1, 2110, for a total of 90 annual payments. The lease would commit 5,925 afa of the Tribe's CAP water entitlement to the Town for a 100-year term. The Town would pay the operation, maintenance and replacement (OM&R) costs to the United States or the operating agency for the 5,925 afa of leased water delivered.

2.2.2 Town of Gilbert

The 5,925 afa leased water would be added to the existing CAP water supplies available to the Town. As with its existing CAP supplies, the Town intends to convey the leased CAP water to its customers using the existing infrastructure. The water would be received from the CAP canal

at the Gilbert/Chandler turnout and would then be directed for treatment at STVWTP or NWTP through the CIF. Colorado River water is treated to drinking water standards at both the treatment plants, and can be used anywhere throughout the Town's water service area. The lease would also allow for the Town to convey the leased CAP water to recharge facilities within its service area, such as Gilbert's Riparian Preserve Recharge Facility, or at CAWCD's TDRP and AFRP for the purpose of annual storage and recovery to meet current demands or earning long term storage credits. The Town could earn Long Term Storage Credits to offset future ground water pumping. Gilbert's total permitted recharge capacity is over 100,000 afa at CAWCD's recharge facilities within the PAMA. The water could also be delivered to Gilbert's in-lieu partners; Queen Creek Irrigation District, New Magma Irrigation District, SRP, and RWCD. Under this option, an in-lieu partner (i.e., irrigation district) would schedule and receive a certain amount of CAP water that the irrigation district would deliver to its customer's in-lieu of pumping groundwater. The Town would then earn long term storage credits for the amount of water delivered to the irrigation district. No modification to the existing facilities would be required to handle the additional 5,925 afa. In accordance with the contract, Gilbert shall not sell, sublease, transfer or otherwise dispose of or permit the use of any leased water for golf courses or mining purposes nor are they permitted to sell, sublease, transfer or otherwise dispose of the leased water outside of the Town's service area.

CHAPTER 3 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the affected environment and likely environmental consequences of the proposed lease of 5,925 afa of the Tribe's CAP water entitlement to the Town. Because no new infrastructure is required to treat, deliver, and store the additional CAP water, no ground-disturbing activities would take place and there would be no direct impacts to resources. A number of resource areas are not expected to be affected to any measureable degree, either directly or indirectly; therefore, are not included in this analysis. These include air quality, recreation, and geology and soils.

3.1 WATER RESOURCES

3.1.1 Affected Environment

The Town is located within the ESRVSB in the PAMA. The main water drainage within the PAMA is the Gila River and four principal tributaries: the Salt, Verde, Agua Fria and Hassayampa Rivers. The Salt River is the closest tributary to the Town's boundary. Other tributaries associated with the Town are Queen Creek Wash and Sonoqui Wash. These drainages are ephemeral and flow only in response to rainfall events.

Historical records indicate impacts from agricultural irrigation have considerably altered the groundwater levels within the Town's water service area. Fissuring and land subsidence have also been attributed to aquifer dewatering in the southern portion of the ESRVSB. However, there has been some recovery of groundwater levels within the Town's water service area due to the urbanization of former agricultural lands resulting in a decrease in groundwater pumping. In fact, in some areas the groundwater level has risen 125 feet (Kathy Rall, Town of Gilbert, pers. comm.). The use of CAP water for agriculture in lieu of groundwater has also contributed to rising groundwater levels. The Town participates in-lieu with multiple entities, including Queen Creek Irrigation District, New Magma Irrigation District, SRP, and RWCD, in the ESRVSB. The stability of the water supply relies on the management of renewable water supplies as demand continues to increase.

The Town relies primarily on renewable supplies for its potable water source. The Town's municipal wells also supplement its potable supply. Gilbert serves a population of approximately 220,000 people through a total of approximately 70,000 residential, municipal and commercial meter connections (Kathy Rall, Town of Gilbert, pers. comm.). The quality of water delivered by the Town consistently meets or exceeds the Safe Drinking Water Standards established by the Environmental Protection Agency, Arizona Department of Environmental Quality and Maricopa County (Public Water System PWA-07-092).

The Town has a DAWS from ADWR. ADWR's Decision and Order, dated September 29, 2010, states that 96,282.49 af are physically, legally and continuously available to the Town to support its AWS designation. These water supplies are comprised of renewable water including 19,295 afa of CAP water, 32,849 afa of SRP allocation, 7,794 afa of RWCD allocation, and

29,347 afa of reclaimed water. While the Town's 2007 DAWS did demonstrate a reliance on CAGRD, the Town's current DAWS no longer relies on CAGRD. Based upon the reduction in growth that the Town has experienced, in conjunction with changes to land use planning, reduction in water demand, the recharge of over 250,000 acre-feet of renewable supplies, and the completion of their jointly owned CAP water treatment plant, the Town was able to prove a DAWS for 100 years without reliance on the CAGRD. The Town must meet the depth to groundwater criteria established in the AWS Rules and has the legal right to withdraw groundwater from the identified point(s) of withdrawal.

As a municipal provider Gilbert obtains authority to annually store and recover or earn long-term storage credits through the recharge of renewable water supplies. Gilbert currently has an excess of 300,000 af of long-term storage credits as a result of recharging its current CAP entitlement, leases, and excess CAP purchases, as well as unused reclaimed water.

The Town is entitled to Colorado River water labeled as subcontract water, RWCD assignment water, Wellton-Mohawk exchange water, and SRPMIC lease water. Additionally, Gilbert intends to enter into an agreement with the White Mountain Apache Tribe (WMAT) for lease water obtained through an exchange of SRP and RWCD surface water if and when the WMAT's Settlement Act is approved by Congress. The Town also has excess CAP water when it is available.

The Town also receives renewable surface water supplies from the 11,600 acres of SRP lands within the Town's service area, and 20,815 acres that have water rights from the RWCD. These rights are legally deemed appurtenant to the land, which means the water is "attached" to that portion of land and cannot be used elsewhere. The amount of water received by the Town is dependent upon the amount of lands within these service areas that have been urbanized, or taken out of agricultural production. The Town's lands located within SRP's service area are entitled to an allocation of surface water and groundwater that is quantified on an annual basis by SRP, taking into account the quantity of water stored and flows on the Salt and Verde River systems. During a normal precipitation year, this entitlement is comprised of two acre-feet of surface water and one acre-foot of groundwater per acre of land. An acre-foot of water is equal to 325,851 gallons or enough to meet the average water demands for two families of four for one year. The Town's lands located within RWCD's service area are also entitled to an allocation of surface and groundwater. The Town only utilizes the surface water component of RWCD water, which during a normal water year varies from 0.2 to 0.6 af of water per acre of land. This water, as well as the surface water received from SRP, is treated to drinking water standards at the North Water Treatment Plant and delivered to its customers.

The Town has Underground Storage Facility Permits issued by ADWR for the recharge facilities located within its service area. The Town also possesses the Water Storage Permits issued from ADWR for all of the recharge facilities where the Town recharges. ADWR has also issued a Recovery Well Permit to allow the recovery of recharged water from the Town's designated wells.

3.1.2 Environmental Consequences

No Action

Under the no action alternative, the Town would continue to purchase excess CAP water from CAWCD's Access to Excess Program as well as CAWCD's future ADD water Program, and will continue to earn Long Term Storage Credits through recharge of unused reclaimed water developed within Gilbert's service area. The Town would also continue to pursue a number of long term water supply options to meet its potable demands, such as acquiring additional renewable water resources for direct use (e.g., CAP water leases with Native American communities), recharging available reclaimed water, or acquiring additional CAP water supplies.

Proposed Action

No new CAP water delivery, recharge or storage facilities would be constructed under the proposed action. All water deliveries would be made through existing infrastructure. Consequently, there would be no identifiable impacts to the CAP or the Town operations as a result of this lease; thus, no significant impacts resulting from this lease are anticipated.

The recharge of an additional 5,925 afa of CAP water is not anticipated to result in substantial changes to the current local groundwater quality. This determination is based upon the lack of reported adverse water quality impacts and the assumption that water from the Town's wells already draws some percentage of recharged CAP water. The acquisition of additional lease water would enable the Town to reduce its existing annual groundwater use. The cumulative effect of recharge with CAP water from all sources is a gradual blending of water qualities of ambient groundwater.

By leasing 5,925 afa of CAP entitlement from the Tribe, the Town would contribute to meeting groundwater reduction obligations under the AWS program. The increased CAP water availability for the Town would reduce its reliance on groundwater resources and would be consistent with PAMA water management goals.

3.2 LAND USE

3.2.1 Affected Environment.

For purposes of this EA, the project area is defined as the lands within the Town's limits. The project area covers about 72.6 square miles or 44,464 acres, of which approximately 82 percent are developed and receive water from the Town's Utility Department. The major land uses of developed areas within the Town that currently are served potable water consist of residential, commercial/industrial, and public/institutional/recreational. Approximately 18 percent of the project area consists of agricultural, vacant, and/or undeveloped land (Jon Powell, Town of Gilbert, pers. comm.).

The Town is currently updating its General Plan which provides direction for future growth and development of the community (Town of Gilbert 2010). The General Plan is a dynamic

document, reviewed annually, and amended every 3 to 5 years as deemed appropriate. The General Plan was adopted in 2001, ratified by the public in November 2001, amended in 2005 and approved by the Town Council in April 2006 (Town of Gilbert 2005). In addition, the Town is in the process of developing a Strategic Plan, to address goals and objectives for the future appearance and theme of the community and to prioritize major projects for the Town.

3.2.2 Environmental Consequences

No Action

Based on its DAWS from ADWR, the Town has the capacity to provide water to anticipated users within the service area. The Town would continue to serve the area and is not dependent upon the lease of CAP water from the Tribe. In the absence of the proposed lease agreement, current and anticipated land use would not be affected within the Town. Growth and development within the Town would continue to be guided by the General Plan.

Proposed Action

The Town has obtained a DAWS from ADWR and has the ability to provide water to future users within its service area. The Town would continue to be developed based upon the demand for residential and commercial development and other market conditions. Development patterns are expected to be the same under either the no action or proposed action. Thus, the additional CAP water availability would have no direct, indirect or cumulative effect on land growth patterns within the Town's service area; growth would continue to be guided by the General Plan. The additional CAP water would either be directly distributed to its customers or would be recharged and recovered using existing facilities.

3.3 BIOLOGICAL RESOURCES

3.3.1 Affected Environment

Vegetation and Wildlife Habitat

The Town is not fully developed with portions of the planning area remaining as vacant and undeveloped land. Vegetation in the undisturbed portions of the Town's service area is typical of both the Lower Colorado River Valley and Arizona upland subdivisions of the Sonoran desertscrub biotic community described in Biotic Communities of the Southwestern United States and Northwestern Mexico (Brown 1994). The Lower Colorado River Valley subdivision is characterized by creosotebush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), ocotillo (*Fouquieria splendens*), brittlebush (*Encelia farinosa*), Foothill palo verde (*Cercidium microphyllum*), saguaro (*Carnegiea gigantea*) and ironwood (*Olneya tesota*). The composition of the Arizona upland subdivision consists of the palo verde-cacti-mixed scrub community (Brown 1994). Predominate species represented include saguaro, mesquite (*Prosopis* spp.), blue palo verde (*Cercidium floridum*), triangle-leaf bursage (*Ambrosia deltoidea*), prickly pear (*Opuntia phaeacantha*), and barrel cacti (*Ferocactus wislizenii*). Another biotic community represented within the Town's limits is manmade wetlands. These wetlands consist

predominately of Fremont cottonwood (*Populus fremontii*), salt cedar (*Tamarix* spp.), velvet mesquite (*Prosopis velutina*), willow (*Salix* spp.) and cattail (*Typha* sp.).

Three general habitat types are present within the Town's service area including upland, xeroriparian, and wetland vegetation communities. The approximate percentages of habitat types found within the Town's service area are founded in Table 2.

Table 2. – GIS Mapped Acreages within the Town of Gilbert's Service Area

Habitat Type	Percent
Upland Habitat	0.6
Xeroriparian	0.8
Wetland	0.2
Developed, agriculture (active) or golf course	98.4

*Source: Jon Powell, GIS Specialist, Town of Gilbert, personal communication, 2010

Upland habitat is typically found in the southern portion of the Town's service area, where development has not occurred. Drainages that cross the Town's service area include Queen Creek and Sonoqui Washes. These drainages often support xeroriparian habitat which typically develop denser vegetation and larger individual trees than the surrounding upland desert. The wetland habitat is found in small patches surrounding recharge basins within the Town's Riparian Preserve Recharge Facility.

Sparse native habitat and extensive development have resulted in a lower overall diversity. However, the increased plant density and/or structural diversity along the xeroriparian drainages provides increased forage and cover resources for wildlife including reptiles, birds, small mammals, and large mammals, such as the coyote (*Canis latrans*) and javelina (*Pecari tajacu*). Most of these species utilize both upland and wash habitat for movement and are not strictly dependent on washes as movement corridors. With less cover in the adjacent upland habitat, larger wildlife species do tend to move along washes.

The remaining lands within the Town are highly disturbed due to residential, commercial, and municipal growth. Agriculture is also present with the service area and can provide limited habitat for wildlife, such as reptiles, birds, small mammals, and some large mammals.

This analysis was based on a literature review, knowledge of the range and habitat requirements of known species and aerial photography of the area.

Special-Status Species

Special-status species include Federally listed species and species tracked by the Arizona Game and Fish Department (AGFD) in its Heritage Data Management System (HDMS)1 (AGFD 2010). The potential for the occurrence of an adverse impact to U.S. Fish & Wildlife Service (USFWS) endangered, threatened, proposed, or candidate species occurring within the water service areas was evaluated. The USFWS currently identifies 17 special-status species that are known or have the potential to occur in Maricopa County, where the Town is located. The list includes one plant, five fish, one reptile, eight birds, and two mammal species (Table 3). The AGFD's HDMS was also accessed and species with known records of occurrence within 2 miles of the project area were identified. Only two species were identified, the western burrowing owl (Athene cunicularia hypugaea) and the black-bellied whistling duck (Dendrocygna autumnalis).

Table 3. – USFWS' List of Endangered, Threatened, Proposed and Candidate Species for Maricopa County

Species	Status
Arizona cliffrose (*Purshia subintegra*)	Endangered
bald eagle (*Haliaeetus leucocephalus*)	Threatened
California least tern (*Sterna antillarum browni*)	Endangered
desert pupfish (*Cyprinodon macularius*)	Endangered
Gila topminnow (*Poeciliopsis occidentalis occidentalis*)	Endangered
lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*)	Endangered
Mexican spotted owl (*Strix occidentalis lucida*)	Threatened
mountain plover (*Charadrius montanus*)	Proposed Threatened
razorback sucker (*Xyrauchen texanus*)	Endangered
roundtail chub (*Gila robusta*)	Candidate
Sonoran pronghorn (*Antilocapra americana sonoriensis*)	Endangered
Southwestern willow flycatcher (*Empidonax traillii extimus*)	Endangered
Sprague's pipit (*Anthus spragueii*)	Candidate
Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)	Candidate
woundfin (*Plagopterus argentissimus*)	Endangered
yellow-billed cuckoo (*Coccyzus americanus*)	Candidate
Yuma clapper rail (*Rallus longirostris yumanensis*)	Endangered

Based on the nature of the proposed action and the size of the project area, species-specific surveys were not conducted. Determinations of species' potential to occur within the service areas were based on habitat types and species ranges. All listed species within Maricopa County

[1] The AGFD maintains the HDMS, which is used to track species of concern in Arizona. The HDMS includes information on wildlife species' locations, so that presence (but not absence) in proximity to a selected site can be confirmed. The HDMS was accessed September 24, 2010 for occurrence records of special-status species within 2 miles of the Town's general project vicinity.

were excluded from further examination because (1) the range of the species was outside of the project area, or (2) there is no suitable habitat for the species in the project area.

3.2.2 Environmental Consequences

No Action Alternative

Under the no action alternative, on-going development may convert undisturbed habitat and active agricultural fields into residential, municipal and commercial properties. This conversion of marginal or quality habitat would have an adverse effect on local wildlife. However, there would be no impact to any T&E or candidate species. On-going development within the Town's service area would be subject to compliance with local, state, and Federal laws and ordinances to protect biological resources, as required.

Proposed Action

There would be no new construction or expansion of existing infrastructure for the delivery, storage, or recharge of CAP water. The lease would not cause additional development and subsequent loss of habitat as a result. New development can occur within the Town's service area with or without the lease of this CAP water and would be subject to compliance with local, state, and Federal laws and ordinances protecting biological resources. The leasing of a portion of the Tribe's CAP water entitlement to the Town would have similar effects to biological resources within or adjacent to the area as that of the no action alternative. However, additional groundwater recharge would help to reduce groundwater overdraft and could result in a beneficial effect on riparian vegetation dependent on groundwater supplies in certain areas. There would be no impacts to any T&E or candidate species or to the western burrowing owl and black-bellied whistling duck.

3.4 CULTURAL RESOURCES

The following history of the Town was produced and provided by Archaeological Consulting Services (ACS 2010).

> "Early settlers were in the Gilbert area as early as the 1890s, but the history of Gilbert as a population and commercial center begins in 1902 when the Arizona Eastern Railway established a rail siding on property owned or donated by Robert Gilbert to serve its rail line between Phoenix and Florence (Granger 1979: 182); although this person is also identified as William "Bobby" Gilbert (Town of Gilbert 2010a). The siding and the town that sprung up around it eventually became known as Gilbert. A post office was established on August 22, 1912 (Granger 1979:182), which generally signifies the Post Office's recognition of a new town or population center. The early town became the beneficiary of a reliable source of irrigation water after the completion of Roosevelt Dam in 1911 and the Eastern (1909) and Consolidated canals (1891) that brought water to the area. Because of the area's rich land and available water, Gilbert became a center for growing and shipping cattle, sheep, dairy products, grains, melons, cotton, and alfalfa

> hay. As a result, Gilbert became known as the "Hay Capital of the World" (Town of Gilbert 2010a).
>
> In 1920, the town's 500 citizens incorporated, and Gilbert was officially born. It grew slowly over the next 50 years, but in 1970 annexed 53 square miles of adjacent county land in anticipation of future growth; at this time, Gilbert had a population of just 1,971 persons (Town of Gilbert 2010b). Rapid growth eventually arrived—beginning in 1980, Gilbert experienced a population boom. In the last several decades, Gilbert has grown at a pace unparalleled by most communities in the United States, increasing its population from 5,717 in 1980 to 206,363 in 2009 (Town of Gilbert 2010b). Although originally dependent upon the railroads and an agricultural base, Gilbert has expanded its economic base and infrastructure, including new multi-lane highways that link the town to the rest of the East Valley and Phoenix. However, Gilbert has maintained the historic character of its original downtown area, which remains a destination magnet based on its restaurants, stores, and 1920s-era architecture" (Town of Gilbert 2010c).

The Town's General Plan states that cultural and historic resources consist of historic structures and agricultural implements (2005). Most historic structures are located within the Heritage District and are a part of the Redevelopment Plan (Town of Gilbert 2010). Most archaeological remains that have been found, cataloged and analyzed to date have been determined to be insignificant by the State Historic Preservation Office (SHPO) (Town of Gilbert 2010).

Reclamation has determined that no ground disturbing activities or infrastructure alterations are expected as part of the proposed action, which would entail leasing 5,925 afa of CAP entitlement from the San Carlos Apache Tribe to the Town. As a result, evaluation of cultural resources was limited to a cultural history review of the area and the consideration of the known historic properties in the Town's water service area.

3.4.1 Affected Environment.

Archaeological projects conducted within the Town's water service area are mainly related to commercial and residential development. As indicated in the cultural history, at least one historic district has been identified within the current service area.

3.4.2 Environmental Consequences

No Action Alternative

There would be no change in existing conditions within the Town as a result of the no action alternative. Environmental factors, including surface and channel erosion, would continue to affect any cultural resources within the area. It is assumed that anticipated growth would continue within the region and would be served by existing water sources. The Town's General Plan (2010) stipulates that during any new ground disturbing activities where artifacts are identified "SHPO must be notified and appropriate procedures followed."

Proposed Action

The leasing of a portion of the Tribe's CAP water entitlement to the Town would not involve any ground-disturbing activities because it does not require the construction of new infrastructure or expansion of the existing recharge facilities; as a result, there would be no direct impacts and no effect to cultural resources. Current and anticipated growth within the Town's existing and future service areas can be supported by the current water supply and is not dependent on this water lease. Therefore, there would be no indirect temporal or spatial impacts due to growth resulting from the proposed action. The Town's General Plan (2010) stipulates that during any new ground disturbing activities where artifacts are identified "SHPO must be notified and appropriate procedures followed." The environmental impacts to cultural resources from the proposed action would be the same as for the no action alternative. No direct, indirect or cumulative effects to cultural resources would be anticipated as the result of implementing the proposed action.

3.5 SOCIOECONOMIC CONSIDERATIONS

3.5.1 Affected Environment

Demographics, Employment and Income Patterns

An analysis was conducted by evaluating census data obtained from the U.S. Census Bureau. The Census 2000 documents demographic characteristics including population, racial, economic, and employment. The American Community Survey from 2007 through 2009 was also used in order to obtain a more accurate description of the socioeconomic situation of the Town.
The Town's active service area generally includes the developed portions within the incorporated limits of the Town. The Town's Utility Department will be responsible for providing service for future development within the town limits as well. According to the 2010 DAWS, the Town is prepared to provide water to its current population estimate for the next 100 years. This population estimate is aggressive given that the Town is the 4th fastest growing municipality in the United States (Town of Gilbert 2010). In fact, from April 1, 2000 to July 1, 2009, there has been a 98.3 percent growth in the population within the Town of Gilbert (Figure 4). The Town has a higher percentage of non-whites than Maricopa County and the state of Arizona, according to the 2009 population estimates. The median household income for the Town was also higher than that of Maricopa County and the state of Arizona. Census data for 2007 also indicated the Town had reported a lower unemployment rate as well. The estimated census data for 2009 indicated a higher unemployment rate than that of 2007. Table 5 summarizes the census data for the Town, Maricopa County and the state of Arizona for comparative purposes.

Table 4. – 2009 Population Estimates for Arizona, Maricopa County and the Town of Gilbert

Area	Commerce Estimate: July 1, 2009	2000 Census: April 1, 2000	Population Change	Percent Change
Arizona	6,683,129	5,130,632	1,552,497	30.3%
Maricopa County	4,023,331	3,072,149	951,182	31.0%
Gilbert	217,521	109,697	107,824	98.3%
Arizona	6,683,129	5,130,632	1,552,497	30.3%

Source: Arizona Department of Commerce 2009.

Table 5. – Comparative Population and Economic Characteristics for the Town of Gilbert, Maricopa County and the state of Arizona

Socioeconomic Characteristics	Gilbert	Maricopa County	Arizona
Population Characteristics			
Population, 2009 estimate	222,092	4,023,132	6,595,778
Percent White Population, 2009 estimate	80.60%	87.3%	86.1%
Percent Non-white of Population, 2009 estimate	19.40%	12.70%	13.90%
Economic Characteristics			
Median Household Income, 1 2008 and 2 2009 estimates	$74,957 2	$56,511 1	$51,009 1
Unemployment Rate, 1 2007 and 2 2009 estimates	2.1% 1 or 5.8% 2	3.1% 1	3.7% 1
Persons Below Poverty, 1 2008 and 2 2009 estimates	7% 2	13.4% 1	14.7% 1

*Source: U.S. Census Bureau: Census 2000 and 2007 - 2009 American Community Survey

The Town's General Plan incorporates the practice of environmental justice. Environmental Justice is defined as the fair treatment, equal opportunity and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies (Town of Gilbert 2010). The Town's General Plan ensures that no group of people, including a racial, ethnic or a socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations or the execution of Federal, state, local and tribal programs and policies (2010). Ways in which they ensure this is by reviewing and inspecting all construction plans proposed, limiting all areas designated for industrial and commercial use to existing and planned traffic corridors and encouraging mixed housing within residential development areas (Gilbert 2010). Gilbert also believes that "participation of all residents on planning matters through the public involvement and public hearing process adds to the quality and results in the improved outcome of all planning and development cases" (Gilbert 2010).

3.5.2 Environmental Consequences

No Action Alternative

Under the no action alternative, the Town would continue to purchase excess CAP water from CAWCD's Access to Excess Program as well as CAWCD's potential future ADD Water Program, and would continue to pay the required fees to recharge reclaimed or CAP water supplies. The Town would also continue to pursue other long term water supply options to meet its potable demands, such as acquiring additional renewable water resources for direct use (e.g., CAP water leases with Native American communities). These options would occur in the anticipation of a reduced availability of excess CAP water.

Proposed Action

The proposed lease would have no direct, indirect and cumulative effect to the current trends in demographics, income, or employment within the Town's service area.

Under the proposed action, the Town would assume responsibility for paying the OM&R fees to CAWCD for the delivery of the additional CAP water until December 31, 2110, when the lease terminates. The Town may also recharge the CAP water to accumulate CAP recharge credits. If this occurs, the Town would pay the required fees for recharging the water. Those fees would cover the underground storage costs of direct recharge. In addition, the financial impact of acquiring any additional water supply has the ability to impact Gilbert's future water rates.

3.6 SUMMARY OF IMPACTS

The proposed action primarily impacts the financial obligations for the use of the CAP water entitlement for distribution and recharge. Since the Tribe is currently unable to utilize its CAP water entitlement, it would like to lease 5,925 afa of its entitlement to the Town. The Tribe would benefit financially from leasing a portion of its unused entitlement as The Town will pay the Tribe a sum of $17,730,562.50 for the lease of 5,925 afa of CAP water over the 100-year term.

The Town would also incur the annual OM&R costs for the 5,925 afa of leased water. Potential uses of the leased water would incur the same costs for treatment and delivery, and/or storage and recovery, as CAP water that was acquired from any other source, including the Access to Excess Program or other leases the Town would enter into to meet its needs.

The proposed action does not require construction of any new facilities or expansion of existing systems in order to delivery, store, and recharge the water as planned. The lease would not induce growth and no indirect impacts associated with new development with the service areas are anticipated.

CHAPTER 4 – CONSULTATION AND COORDINATION

List of Agencies Contacted

Reclamation submitted information on the proposed action to the following entities during development of the EA. The names of individuals are retained in the administrative record.

County and Local

Town of Gilbert
San Carlos Apache Tribe
Central Arizona Water Conservation District

CHAPTER 5 – ENVIRONMENTAL LAWS AND DIRECTIVES CONSIDERED

National Environmental Policy Act of 1969, as amended (NEPA) (P.L. 91-190)

This law requires Federal agencies to evaluate the potential consequences of major Federal actions. An action becomes "Federalized" when it is implemented by a Federal agency, wholly or partially funded with Federal monies, or requires authorization from a Federal agency. The intent of NEPA is to promote consideration of environmental impacts in the planning and decision-making processes prior to project implementation. NEPA also encourages full public disclosure of the proposed action, any action alternatives, potential environmental effects, and mitigation.

This EA was prepared in accordance with the requirements of NEPA. Reclamation distributed a notice of availability to interested Indian tribes and Federal, state, county and local agencies on November 16, 2010. The Environmental Assessment along with the draft finding of no significant impact (FONSI) was posted to Reclamation's website (http://www.usbr.gov/lc/phoenix/) for a 15-day review.

Fish and Wildlife Coordination Act (FWCA) (P.L. 85-624)

This act requires coordination with Federal and state wildlife agencies (USFWS and AGFD) for the purpose of mitigating project-caused losses to wildlife resources from water development projects.

The proposed project is not a new water development project. In addition, the proposed action would not impact or divert surface water in the Town of Gilbert or the San Carlos Apache Tribe's service areas.

Endangered Species Act of 1973 (ESA) (P.L. 93-205)

Section 7 of the ESA requires Federal agencies to consult with USFWS to ensure that undertaking, funding, permitting or authorizing an action is not likely to jeopardize the continued existence of listed plant or animal species or destroy or adversely modify designated critical habitat. The list of species maintained by USFWS for Maricopa County was reviewed and no listed or candidate species are known or likely to occur within the water service areas.

The proposed action does not include any construction of infrastructure or ground disturbing activities, nor would it result in changes in land use patterns. There were no Federally listed or candidate species or critical habitat identified within the project area. Therefore, no biological assessment was prepared.

Wild and Scenic Rivers Act of 1968 (Act) (P.L. 90-542)

This act designated the initial components of the National Wild and Scenic River System. It established procedures for including other rivers or reaches of rivers that possess outstanding scenic, recreational, geologic, fish-and-wildlife, historic, cultural, or other similar resources, and preserving these rivers in a free-flowing condition.

There are no rivers designated or proposed for designation as wild or scenic within or near the Town of Gilbert service areas.

Wilderness Act of 1964 (P.L. 88-577, as amended)

This act established the National Wilderness Preservation System to preserve certain Federal lands for the public purposes of recreation, scenic, scientific, educational, conservation, and historical use by current and future generations of Americans. There are no lands designated or proposed for designation as wilderness areas within or near the Town of Gilbert's service areas.

Clean Water Act (CWA) (P.L. 92-500, as amended)

The CWA is intended to direct the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters by controlling the discharge of pollutants. The basic means to achieving the goals of the CWA is through a system of water quality standards, discharge limitations, and permits. Section 404 of the CWA identifies conditions under which a permit is required for actions that result in placement of fill or dredged material into waters of the U.S. In addition, a 401 water quality certification and 402 Arizona Pollutant Discharge Elimination System permit are required for activities that discharge pollutants to waters of the US.

There would be no construction of infrastructure or delivery system features as part of the proposed action and it would not require authorization under a CWA 401 water quality certification and 402 or 404 permit.

National Historic Preservation Act (NHPA) (P.L. 89-665)

NHPA establishes as Federal policy the protection of historic sites and values in cooperation with states, tribes, and local governments.

The proposed project does not involve land-disturbing activities; therefore, it does not have the potential to cause effects to historic properties.

Farmland Protection Policy Act (P.L. 97-98)

This act requires identification of proposed actions that would adversely affect any lands classified as prime and unique farmlands and minimizes the unnecessary and irreversible conversion of farmland to nonagricultural uses. The U.S. Department of Agriculture's Natural Resources and Conservation Service administers this act. The proposed action would not

directly impact lands classified as prime and unique farmlands. Agricultural land within the Town of Gilbert's service areas, some of which are classified as prime and unique, would continue to be developed based upon the demand for residential and commercial development and other market conditions.

The proposed action would not result in changes to land use or affect prime or unique farmland.

Executive Order 11988 (Floodplain Management)

This Presidential directive encourages Federal agencies to avoid, where practicable alternatives exist, the short- and long-term adverse impacts associated with floodplain development. Federal agencies are required to reduce the risk of flood loss and minimize the impacts of floods on human safety, health and welfare. In carrying out their responsibilities, agencies must also restore and preserve the natural and beneficial values served by floodplains.

The 100-year floodplain for the Salt River extends into the Town of Gilbert. The 5,925 afa of CAP water might be recharged at the TDRP, which is located within the PAMA. This facility has the capacity to accept these flows with no required expansion of the site. The proposed action would not affect floodplain capacity.

Executive Order 12898 (Environmental Justice) (EO 12898)

This executive order requires Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of Federal actions on minority and/or low-income populations. Low-income populations include communities or individuals living in proximity to one another and meeting the U.S. Census Bureau statistical thresholds for poverty. Minority populations are identified where the percentage of minorities in the affected area exceeds 50 percent, or where the minority population percentage of the affected area is meaningfully greater than the minority population's percentage of a much broader area.

The Census 2000 data was reviewed for the Town of Gilbert. No disproportionately high or adverse human health or environmental effects on minority and/or low-income populations would result from the proposed action.

Executive Order 11990 (Wetlands) (EO 11990)

This executive order requires Federal agencies, in carrying out their land management responsibilities, to take action that will minimize the destruction, loss, or degradation of wetlands, and take action to preserve and enhance the natural and beneficial values of wetlands.

There are no wetlands in the project area that would be affected.

Department of Interior, Secretarial Order, Indian Trust Assets (ITAs)

ITAs are legal interests in assets held in trust by the U.S. government for Indian tribes or individual Indians. These assets can be real property or intangible rights and include water

rights, hunting rights, money, lands, minerals, and other natural resources. The trust responsibility requires that all Federal agencies take actions reasonably necessary to protect ITAs.

The Tribe's CAP water entitlement is a trust asset. The proposed action would have a positive benefit to the Tribe through income earned as a result of leasing the water to the Town.

CHAPTER 6 – LIST OF PREPARERS

Preparer

Bureau of Reclamation:
Nichole Olsker, Biologist

Other Contributors/Reviewers

Bureau of Reclamation:
Bruce Ellis, Supervisor of the Environmental Resource Management Division
John McGlothlen, National Environmental Policy Act Compliance Specialist
Bryan Lausten, Archaeologist
Don Reiff, GIS Team Lead
Jim Beadnell, Contract and Repayment Specialist
Brenda Paquette, Management and Program Analyst
John Bodenchuk, Geologist
Diane Laush, Wildlife Biologist

Town of Gilbert:
Kathy Rall, Water Resource Administrator

CHAPTER 7 – LITERATURE CITED AND REFERENCES

Archaeological Consulting Services, LTD (ACS). 2010. Town of Gilbert History. ACS, Tempe.

Arizona Department of Commerce. 2009. http://www.azcommerce.com/econinfo/demographics/Population+Estimates.html. Accessed October 1, 2010.

Arizona Department of Water Resources (ADWR). 2010. Town of Gilbert's Assured Water Supply Designation: Decision & Order 86-402208.001 and AWS 2010-006, September 29, 2010.

Arizona Game and Fish Department (AGFD). 2010. Arizona's Natural Heritage Program. Heritage Data Management System (HDMS). Environmental Review On-Line Tool. http://www.azgfd.-gov/hgis/, accessed on September 24, 2010.

Brown, D.E. 1994. Biotic Communities of the Southwest. University of Utah Press, Salt Lake City. 342 pp.

Granger, Byrd H. 1979. Will C. Barnes' Arizona Place Names, Revised and Enlarged, 7th Edition. University of Arizona Press, Tucson.

Maricopa Association of Governments (MAG). 2009. Municipality Population and Housing Unit Update. http://www.mag.maricopa.gov/detail.cms?item=11203. Accessed October 28, 2010.

Town of Gilbert. 2005. Gilbert General Plan. http://www.gilbertaz.gov/generalplan/default.cfm. Accessed September 28, 2010.

Town of Gilbert. 2010. Draft General Plan 2011. http://www.gilbertaz.gov/planning/GenPlan2011.cfm.

Town of Gilbert. 2010a. http://www.gilbertaz.gov/busdev/profile/history.cfm. Accessed October 2010.

Town of Gilbert. 2010b. http://www.gilbertaz.gov/busdev/profile/glance.cfm. Accessed October 2010.

Town of Gilbert. 2010c. http://www.gilbertaz.gov/busdev/heritage/heritagedistrict.cfm. Accessed October 2010.

U.S. Census Bureau. Census 2000. http://quickfacts.census.gov/qfd/states/04/0427400.html. Accessed September 28, 2010.

U.S. Census Bureau. 2007 - 2009. American Community Survey. http://www.census.gov/prod/www/abs/pop-acs.html. Accessed September 28, 2010.

U.S. Fish and Wildlife Service. 2010. Arizona counties species lists. http://www.fws.gov/southwest/es/arizona, accessed September 24, 2010.

Verburg, Katherine Ott. 2010. The Colorado River Documents 2008. U.S. Department of the Interior, Bureau of Reclamation, Lower Colorado Region. Forthcoming document.

APPENDIX A - FIGURES

Figure 1. – General Vicinity Map.

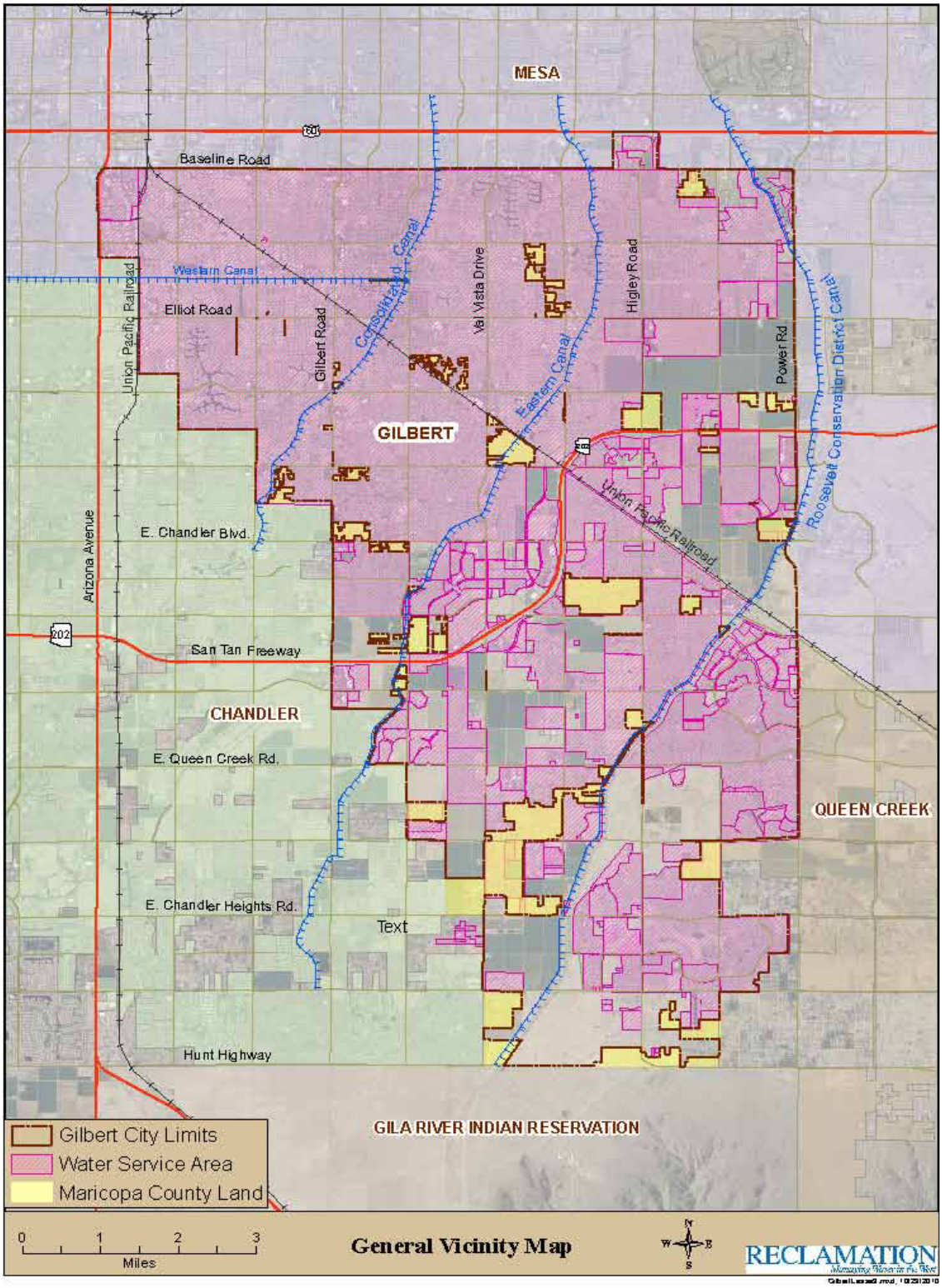

Figure 2. – Direct Delivery Options for the Town of Gilbert's Additional CAP Water Supply.

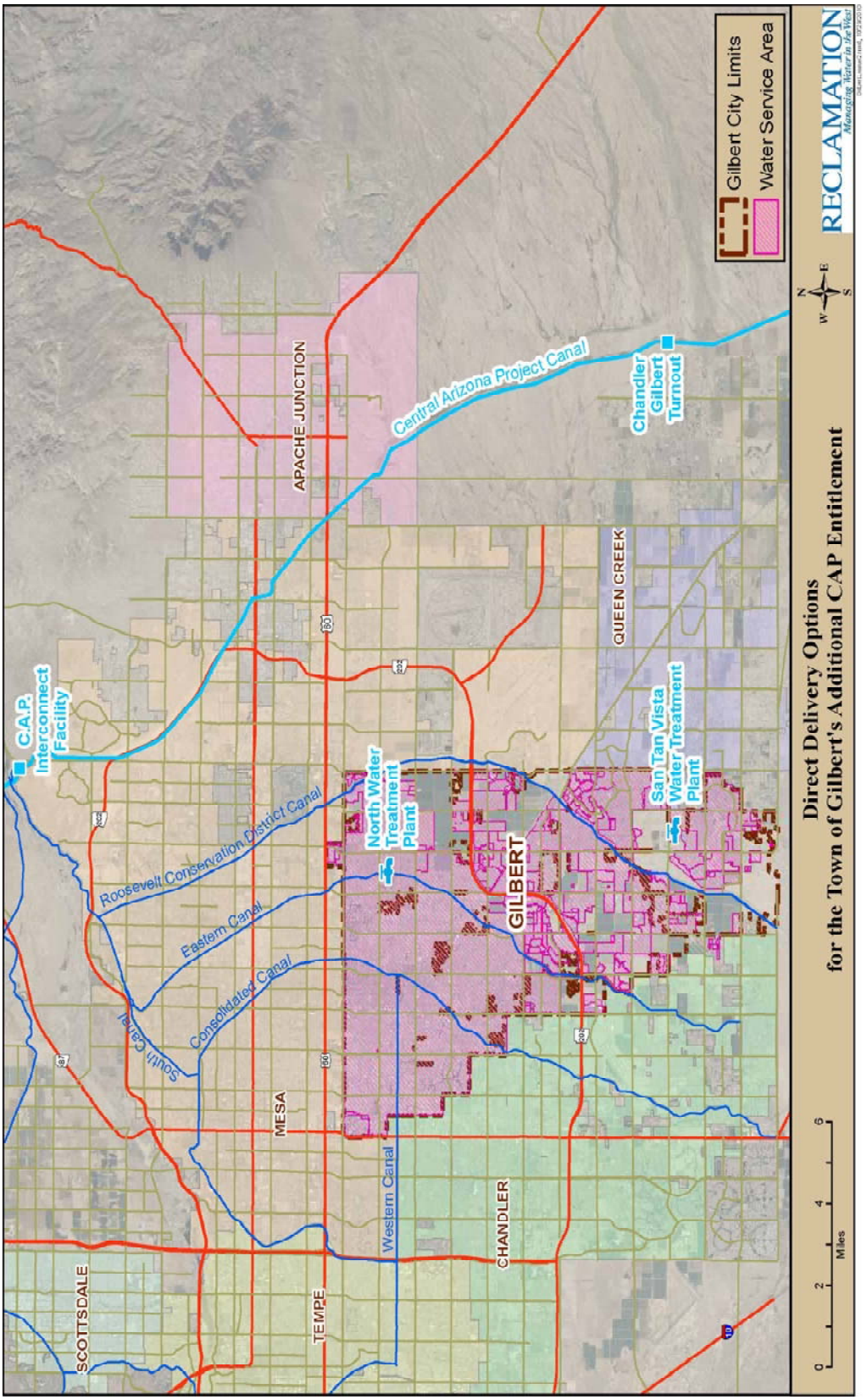

Figure 3. – Recharge Options for the Town of Gilbert's Additional CAP Water Supply