

# RECLAMATION

*Managing Water in the West*

## **Environmental Assessment**

# **Implementation of Groundwater Savings Facility Storage Agreement**

**Roosevelt Water Conservation District  
Maricopa County, Arizona**



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

**August 2012**

## **Mission Statements**

The U.S. Department of the Interior protects America's natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future.

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.

## **BACKGROUND**

The Bureau of Reclamation, working on behalf of the Secretary of the Interior (Secretary), has a statutory obligation to provide firming for a portion of Central Arizona Project (CAP) Non-Indian Agricultural (NIA) water supplies reallocated to Indian tribes for Indian water rights settlements. Section 105 of the Arizona Water Settlements Act (AWSA; P.L. 108-451) requires the Secretary to firm 36,924 acre-feet of reallocated CAP NIA priority water for a 100-year period (2008 – 2108).<sup>1</sup> This supply of “firmed” water would be made available to the Indian tribes during times of water shortage on the Colorado River in the same manner and priority as water with a municipal and industrial delivery priority in the CAP system.

On December 20, 2010, Reclamation executed a Groundwater Savings Facility (GSF) storage agreement (Agreement) with the Roosevelt Water Conservation District (RWCD). The objective of the Agreement is to authorize Reclamation to store CAP water at the RWCD GSF in order to earn long-term storage credits. The Agreement will terminate on December 31, 2020, unless Reclamation and RWCD agree in writing to extend the term. Reclamation has obtained a Water Storage Permit (No. 73-545695.1300) from the Arizona Department of Water Resources pursuant to Arizona Revised Statute § 45-831.01 to store water at the GSF.

## **PURPOSE AND NEED FOR ACTION**

The purpose and need for the proposed action is to implement the Agreement and provide Reclamation with a mechanism to earn long-term storage credits to firm NIA priority CAP water pursuant to Section 105 of AWSA.

## **PROPOSED ACTION**

Under the proposed action, Reclamation would submit an order to the Central Arizona Water Conservation District (CAWCD) for a quantity of excess water prior to October 1 of each year during the term of the Agreement. Delivery charges for the CAP water would be paid by Reclamation. RWCD would remit to Reclamation \$10 for each acre-foot of CAP water that Reclamation delivers to the GSF. The order for CAP water would be commensurate with the amount that RWCD is willing to receive. CAP water provided under the Agreement would be applied within the GSF only on a gallon-for-gallon substitute basis directly in lieu of groundwater that RWCD otherwise would have pumped from the Phoenix Active Management Area (AMA). Future recovery of stored water would occur in the Phoenix AMA. Reclamation could also sell the long-term storage credits and use the proceeds of the sale to firm other supplies of water for the benefit of the tribes. Reclamation anticipates 15,000 acre-feet of CAP would be conveyed to the GSF for storage in 2013. Similar quantities of CAP water could be stored by Reclamation on an annual basis until 2020. The proposed action would not require the construction of new facilities to deliver CAP water or result in ground-disturbing actions.

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<sup>1</sup> Section 105 of AWSA directs the Secretary to firm 28,200 acre-feet of agricultural priority water reallocated to the Tohono O’odham Nation and to firm 8,724 acre-feet of agricultural priority water reallocated to Arizona Indian tribes to resolve Indian water claims in Arizona.

## **NO ACTION ALTERNATIVE**

Under the no action alternative, the proposed action would not be implemented and Reclamation would not earn long-term storage credit at the GSF for the purpose of meeting the Secretary's firming obligation under AWSA. Reclamation would attempt to meet its obligation to firm water at other GSFs or by other means.

## **DESCRIPTION OF PROJECT AREA**

RWCD's service area encompasses approximately 40,000 acres in the eastern portion of the greater Phoenix metropolitan area and includes portions of Mesa, Chandler, and Gilbert (Figure 1). Approximately 14,400 acres are eligible to receive irrigation water from the CAP. Water supplied from the CAP, Salt River Project (SRP), and approximately 50 groundwater wells, is distributed through a network of main canals and laterals to landowners within the service area. More than half of the service area consists of residential, municipal, industrial, and commercial properties. The remaining portion of the service area is comprised of agricultural land.

## **ENVIRONMENTAL CONSEQUENCES**

### **No Action**

Under the no action alternative, there would be no impact to environmental resources since no action would be implemented. Anticipated future urban growth will likely displace a significant portion of the remaining agricultural land in the RWCD service area, shifting the emphasis from irrigated agriculture to irrigated urban landscapes. As future supplies of excess CAP water are allocated, RWCD will become more reliant on leased CAP water and other supplies of surface water to meet irrigation demand.

### **Proposed Action**

There are no wildlife refuges, national parks, aquatic resources, wetlands, wilderness areas, unique ecological areas, or other unique or rare characteristics of the land that occur in the project area; consequently, the proposed action would have no effect on these resources. In addition, there would be no effect to biological resources, land use, air quality, or soils. Other environmental issues for which Reclamation has made a no effect determination are listed in Table 1.

Table 1. Effects determination for specified environmental issues.

<b>Environmental Issues</b>	<b>No</b>	<b>Yes</b>	<b>Uncertain</b>
This action would have an effect on public health or safety.	X		
This action or group of actions would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources.	X		
This action would have highly uncertain environmental effects or involve unique or unknown environmental risks.	X		
This action would violate Federal, State, local, or tribal law or requirements imposed for protection of the environment.	X		
This action would have socioeconomic effects, or a disproportionately high and adverse effect on low income or minority populations (EO 12898).	X		
This action would adversely impact traditional cultural properties or limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or substantially adversely affect the physical integrity of such sacred sites.	X		
This action would adversely affect a species listed, or proposed to be listed, as endangered or threatened.	X		
This action is related to other actions which are individually insignificant, but collectively will result in cumulatively significant effects.	X		
This action would affect Indian trust assets.	X		

***Effect to Water Resources.*** RWCD presently takes delivery of 5,000 acre-feet per annum of excess CAP water through a connection with the Hayden-Rhodes Aqueduct to supplement existing supplies of irrigation water (primarily from SRP and groundwater wells) within the service area. In addition, CAP water from other entities (e.g. the town of Gilbert and the Gila River Indian Community) is supplied through the Granite Reef Aqueduct connection for storage in the GSF. According to RWCD, there is sufficient permitted capacity in the GSF to store supplies of CAP water provided by Reclamation under the Agreement for the next 7 years to 10 years. Once the permitted storage capacity is reached, Reclamation would need to secure other water storage opportunities to meet its firming obligation pursuant to AWSA.

Implementation of the Agreement would reduce groundwater withdrawals in the GSF by an amount equivalent to the quantity of CAP water that Reclamation would store. Upon recovery of the long-term storage credits 5 percent of the stored water would be retained in the aquifer for the purpose of recharge. The long-term effect would be to conserve groundwater supplies that otherwise would be reduced in the absence of the proposed action.

## **AGENCIES AND PERSONS CONSULTED**

An electronic copy of this EA has been posted for public viewing on Reclamation's Phoenix Area Office web site at [www.usbr.gov/lc/phoenix](http://www.usbr.gov/lc/phoenix). Paper copies of the Notice of Availability memorandum and EA were distributed to the following entities:

- Arizona Department of Water Resources
- Central Arizona Water Conservation District
- Tohono O'odham Nation
- Arizona Game and Fish Department
- Roosevelt Water Conservation District
- U.S. Fish and Wildlife Service

## **Environmental Laws and Directives Considered**

This section presents a summary of selected federal laws, regulations, and Executive Orders considered in preparation of this EA.

### **National Environmental Policy Act (NEPA) of 1969, as amended (Public Law [P.L.] 91-190)**

This law requires federal agencies to evaluate the potential environmental consequences of major federal actions. NEPA also requires full public disclosure about the Proposed Action, accompanying alternatives, impacts, and mitigation.

This EA is being made available for public review and comment. Based upon the assessment, Reclamation has made a preliminary determination that a Finding of No Significant Impact is appropriate. However, any public comments received during the public review comment period will be carefully considered before a final decision is made that an environmental impact statement is not warranted. This EA was prepared in accordance with NEPA requirements.

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

The FWCA provides a procedural framework for the consideration of fish and wildlife conservation measures in federal water resource development projects. Coordination with the FWS is required on all federal water development projects. The effects of the CAP were originally addressed in an amended FWCA report prepared by the FWS in 1989. This proposed project results in no new water diversions or impoundments, nor does it result in development of or diversion of water into a water body. No further coordination pursuant to the FWCA is anticipated.

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

The ESA provides protection for plants and animals that are currently in danger of extinction (endangered) and those that may become extinct in the foreseeable future (threatened). Section 7 of this law requires federal agencies to ensure that all federally associated activities do not have adverse impacts on the continued existence of threatened or endangered species or designated areas (critical habitat) that are important in conserving those species. No changes to vegetation or current ongoing agricultural practices will result from this proposed action. Reclamation has concluded the Proposed Action would not affect any federally listed species and that a separate Biological Assessment does not need to be prepared.

### **The Migratory Bird Treaty Act (MBTA) of 1918, as amended**

The MBTA implements various treaties and conventions between the United States and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. The MBTA prohibits the take, possession, import, export, transport, selling, or purchase of any migratory bird, their eggs, parts, or nests. There will be no changes to current ongoing agricultural practices within the RWCD service area.

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

This law designated the initial components of the National Wild and Scenic River System, and established procedures for including other rivers or reaches of rivers that possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, and preserving them in a free-flowing condition. The Act applies to waters designated, or eligible for designation, as wild and scenic. There are no rivers or reaches of rivers within the project area.

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

This law established a National Wilderness Preservation System to be comprised of federally owned areas designated by Congress as “wilderness areas,” to be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and provide for the protection of these areas and preserve the wilderness character. The project area contains no areas that are designated wilderness areas, or are eligible for designation.

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

This law establishes the basic structure for regulating discharges of pollutants into the nation’s rivers, lakes, estuaries, and coastal waters. Under Section 404 of the CWA, the U.S. Army Corps of Engineers (Corps) regulates the discharge of dredged and/or fill material into waters of the U.S. including wetlands. There will be no changes to current ongoing agricultural activities which would be subject to the CWA.

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

All areas to be served CAP water as a result of this proposed action already have been subjugated and have been subject to irrigation. No impacts to cultural resources are anticipated.

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

This law requires identification of proposed actions that would adversely affect any lands classified as prime and unique farmlands to minimize the unnecessary and irreversible conversion of farmland to nonagricultural uses. The U.S. Department of Agriculture’s Natural Resources and Conservation Service administers this law. There will be no changes to current agricultural activities as a result of this proposed project; therefore, no adverse effects to any lands classified as prime and unique farmlands are expected to occur.

**Executive Order (EO) 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; minimize the impacts of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains in carrying out agency responsibility. It is not anticipated that use of CAP water in lieu of groundwater within the RWCD service area will affect any floodplains that may be within or adjacent to the service area.

**Executive Order 12898 (Environmental Justice)**

EO 12898 requires federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of federal actions on minority populations and low-income populations. No adverse human health or environmental effects are anticipated to result from the proposed.

**Executive Order 11990 (Wetlands)**

EO 11990 requires federal agencies, in carrying out their land management responsibilities, to take action that would minimize the destruction, loss, or degradation of wetlands; and take action to preserve and enhance the natural and beneficial values of wetlands. No wetlands are anticipated to be affected by the Proposed Action.

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

ITAs are legal interests in assets held in trust by the U.S. Government for Native American tribes or individual Native Americans. These assets can be real property or intangible rights including lands, minerals, water rights, hunting rights, money, and other natural resources. The trust responsibility requires that all federal agencies take actions reasonably necessary to protect ITAs. There are no known ITAs within the RWCD service area.



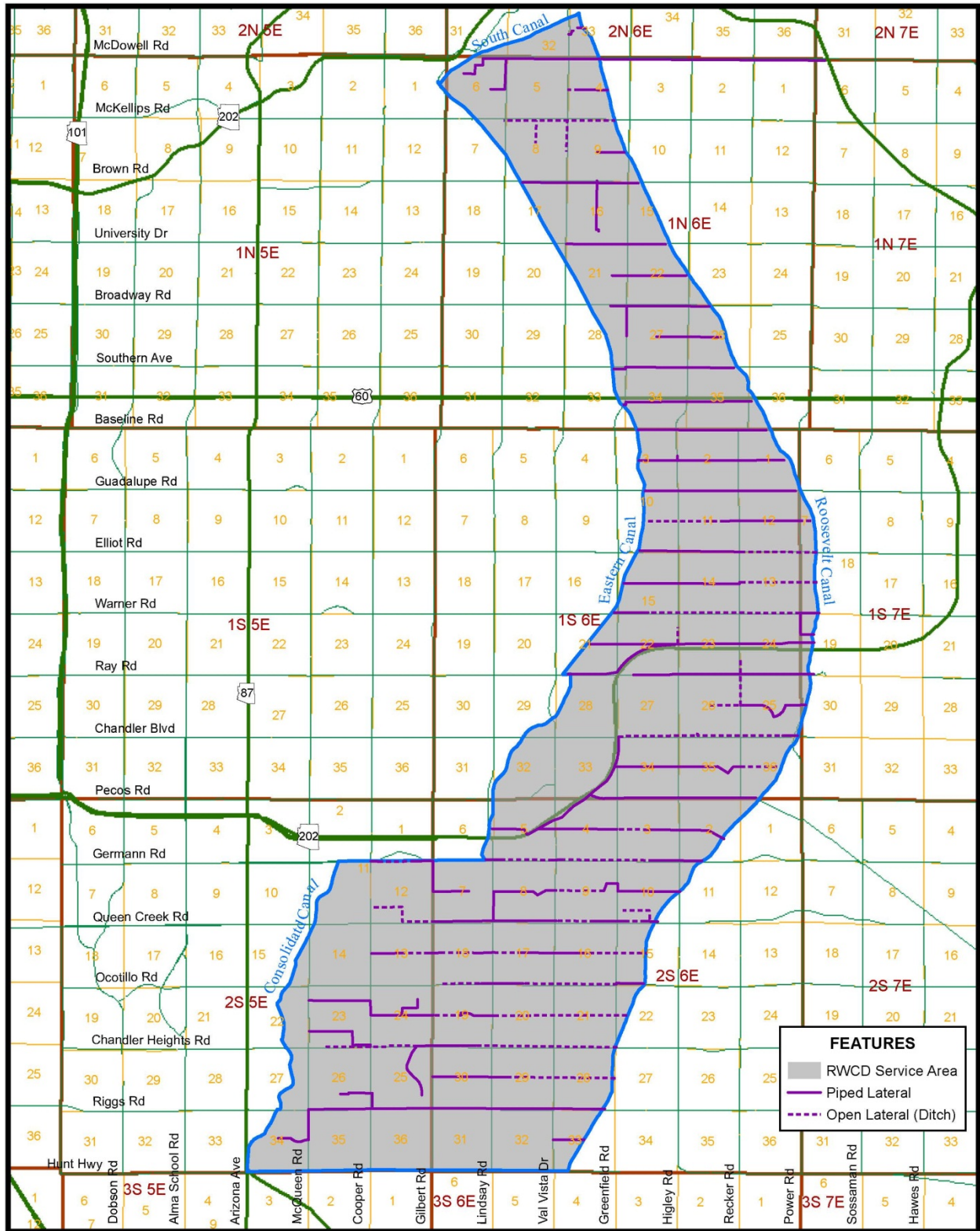


Figure 1. RWCD Service Area