

RECLAMATION

Managing Water in the West

Final Finding of No Significant Impact and Environmental Assessment

Exchange of Central Arizona Project Water between Tohono O'odham Nation and New Magma Irrigation and Drainage District for Storage at a Groundwater Savings Facility and In Lieu of Groundwater Pumping Use for Irrigation



U.S. Department of the Interior
Bureau of Reclamation
Environmental Resource Management Division
Phoenix Area Office

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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.

Final

FINDING OF NO SIGNIFICANT IMPACT

Exchange of Central Arizona Project Water between Tohono O'odham Nation and New Magma Irrigation and Drainage District for Storage at a Groundwater Savings Facility and In Lieu of Groundwater Pumping Use for Irrigation

Approved: _____


Leslie A. Meyers, Area Manager
Phoenix Area Office
Bureau of Reclamation

Date: _____



FONSI No.: PXAO 16-03

Final- Finding of No Significant Impact (FONSI)

National Environmental Policy Act – Introduction

In accordance with the National Environmental Policy Act (NEPA) of 1969 (Public Law [P.L.] 91-190), Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508), and Department of the Interior NEPA regulations (43 CFR 46), the Bureau of Reclamation as the lead Federal agency, has issued the attached EA to disclose the potential environmental impacts that will result from the approval of an Exchange Agreement between the Tohono O’odham Nation (Nation), a federally recognized Indian tribe and the New Magma Irrigation and Drainage District (NMIDD) for delivery of the Nation’s Central Arizona Project (CAP) Water for storage at a Groundwater Savings Facility (GSF). The new Exchange Agreement would begin in 2016 and expire upon Tribal request. An amount ranging from zero to 25,000 acre-feet of the Nation’s CAP allocation would be delivered to a GSF. The EA analyzes the impacts of the initial agreement and all subsequent agreements, should they be renewed, as long as there are no changes to environmental conditions that would have an impact on environmental resources.

The purpose of the Agreement is to provide NMIDD with a renewable surface water resource to use in lieu of pumping groundwater and to provide the Nation with Long Term Storage Credits (LTSC) pursuant to Arizona Revised Statute § 45-852.01. According to the provisions of the Arizona Water Settlements Act (P.L. 108-451) the United States considers the Agreement to be an exchange and requires the approval of the Secretary of the Interior (Secretary), in accordance with Section 309(c)(4)(C) of the Arizona Water Settlements Act (P.L. 108-451)

Public Involvement and Comment

The draft EA and FONSI were posted June 27, 2016, on the Reclamation website for a 14-day public review. Digital copies were provided to the Arizona Department of Water Resources, Central Arizona Water Conservation District, Bureau of Indian Affairs, and the United States Fish and Wildlife Service. Copies were also provided to the San Xavier District of the Tohono O’odham Nation, Hopi Tribe, the Shuck Toak District of the Tohono O’odham Nation, and the San Xavier Allottees Association. No comments were received. The final EA and FONSI will be posted and available to the public at <http://www.usbr.gov/lc/phoenix>.

FONSI

Based upon the consideration of the effects presented in the attached EA, the Area Manager of the Bureau of Reclamation’s Phoenix Area Office has determined that the Proposed Action does not qualify as a “major Federal action” under NEPA and would not significantly impact the quality of the human environment. Therefore, an environmental impact statement is not warranted. The decision was made based on information presented in the attached EA.

The impacts of the proposed action are not significant for the following reasons:

1. Land use, air quality, and soils will not be affected.
2. There will be no impact to historic properties, traditional cultural properties, or sacred sites.
3. The proposed action will not adversely affect Indian trust assets.
4. There will be no impact to unique ecological areas or other rare or unique characteristics of the landscape.
5. Biological resources, including federally listed or sensitive species, will not be affected.
6. The proposed action is not related to other actions which are individually insignificant, but when considered collectively will result in cumulatively significant effects.
7. Low income or minority populations as defined in Executive Order 12898 will not be affected.
8. The proposed action will not have highly controversial environmental impacts or involve unresolved conflicts concerning alternative uses of available resources. In addition, the action will not have highly uncertain environmental impacts or involve unique or unknown environmental risks.
9. The proposed action would not establish a precedent for future actions or represent a decision in principle about future actions with potentially significant effects.
10. The proposed action will not result in cumulatively significant effects.

Final Environmental Assessment

**Exchange of Central Arizona Project
between Tohono O'odham Nation and
New Magma Irrigation and Drainage
District for Storage at a Groundwater
Savings Facility and In Lieu of
Groundwater Pumping Use for Irrigation**

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1.0 Introduction and Background

1.1 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to add water to an already permitted Groundwater Savings Facility (GSF). New Magma Irrigation and Drainage District (NMIDD) seeks to use the Tohono O’odham Nation’s (Nation) Central Arizona Project (CAP) water in lieu of pumping groundwater and the Nation desires to obtain LTSC. The project will also help reduce groundwater pumping in the Phoenix Active Management Area.

1.2 Description of the Proposed Action and Alternatives

In accordance with the National Environmental Policy Act of 1969, (P.L. 91-190) the Bureau of Reclamation has prepared an Environmental Assessment to analyze the potential environmental impacts as a result of a proposed exchange between the Nation and NMIDD for the delivery, storage, and banking at a GSF owned and operated by NMIDD.

The Nation could choose delivery amounts from zero to 25,000 acre-feet annually (AFA) delivered in accordance with the agreement. NMIDD would use the Nation’s CAP allocation in lieu of pumping groundwater for their irrigation customers. Pursuant to Arizona state law, the Nation would receive pumping credits for the groundwater “saved” (not pumped) as a result of the agreement. Those credits can be then sold or “recovered” at a later time. The time period covered under this analysis lasts until environmental conditions or contractual language change such that subsequent analysis would be required.

NMIDD has been issued a Facility Permit from the Arizona Department of Water Resources (ADWR) that authorizes storage of CAP water at its GSF. The Nation has an existing CAP allocation, and has a permit for storage of its water at the NMIDD GSF. The point of delivery would use existing NMIDD turnouts and no new infrastructure would be required in order for the exchange to occur.

NMIDD desires to use the Nation’s CAP water in lieu of pumping groundwater and the Nation desires to deliver its CAP water to the GSF to obtain LTSC. In accordance with the provisions of the Arizona Water Settlements Act (AWSA) (Public Law 108-451), the United States considers the agreement to be an exchange of the Nation’s CAP water and requires the approval of the Secretary to comply with section 309(c)(4)(C) of the Act.

As part of the exchange, an annual scheduling agreement would be required between the two parties. However, for each year during the term of the Exchange Agreement, NMIDD would not be obligated to accept and the Nation would not be obligated to deliver any of the Nation’s CAP water unless the agreement is mutual as to the quantities.

The annual scheduling agreement would designate quantities for water delivery on a monthly basis, and would be submitted to the Central Arizona Water Control District to schedule deliveries of water.

1.3 No Action Alternative

Under the No Action alternative, there would be no impact to environmental resources, since no action would be implemented but the long-term viability of groundwater resources could be compromised. Anticipated future urban growth will likely continue to displace agricultural land, shifting the emphasis from irrigated agriculture to irrigated urban landscapes. As future supplies of excess CAP water will become smaller, an increase in groundwater pumping would occur to irrigate remaining fields and landscapes. The ability to offset pumping of groundwater resources would not be achieved.

1.4 Description of the Project Area

The project is located in Maricopa and Pinal counties. NMIDD's existing water service area encompasses 27,410 acres in the southeastern part of the Phoenix Active Management Area between Queen Creek and the Gila River. CAP water is delivered from a turnout on the Salt-Gila reach of the CAP Aqueduct and conveyed to agricultural fields through existing irrigation infrastructure. Figure 1 is a map of the NMIDD service area and turnouts. No new infrastructure or turnouts would be required as a result of the proposed exchange. The green oval-shaped area indicates the proposed project area.

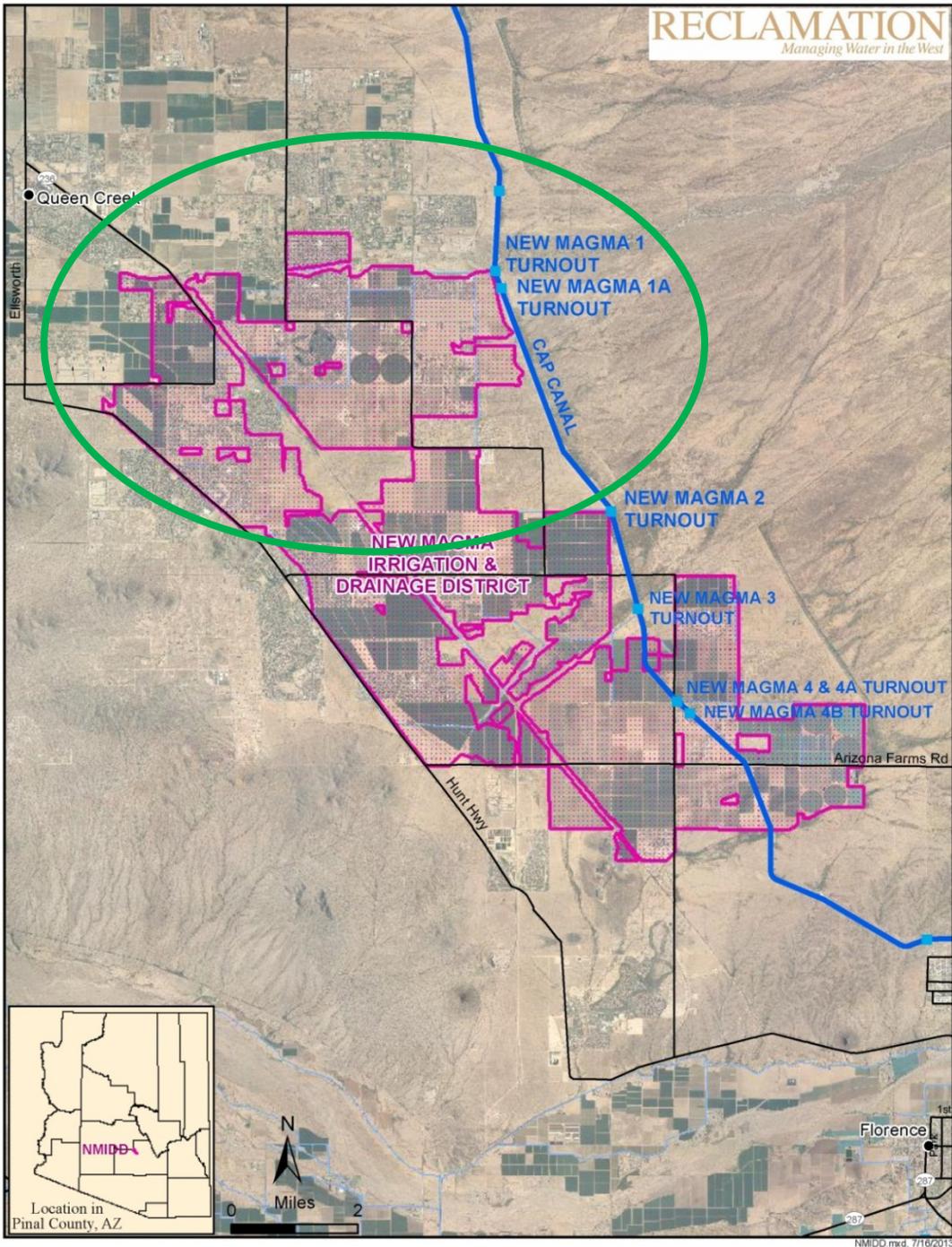


Figure 1 Map of the Entire NMIDD Service Area

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2.0 Environmental Consequences

No Action

Under the no action alternative, there would be no impact to environmental resources from the proposed action since the exchange agreement would not be implemented. However, it is anticipated that future urban growth will likely displace a portion of the remaining agricultural lands in NMIDD's service area, shifting the emphasis from agricultural to urban landscape. As the reliability of excess CAP water reduces over time, NMIDD may become more reliant on leased CAP water and other surface water supplies to meet their water supply demand. Further, the continued pumping of groundwater would deplete an already dwindling resource. Groundwater depletion is a serious issue with numerous adverse effects including, but not limited to, subsidence and earth fissuring, aquifer compaction leading to decreased aquifer storage space, and economic impacts caused by increases in pumping costs and deepening wells. Decreased aquifer storage space also could lead to the loss of available groundwater that is suitable for agriculture, economic development, and human consumption. Therefore, the no action alternative could result in adverse effects to the natural and human environment.

Proposed Action

The proposed action would not result in any new construction or change in land use. CAP water would be delivered through existing infrastructure to CAP-eligible agricultural lands within NMIDD's service area. The exchange would not cause additional growth and development beyond what was described in the no action alternative.

There are no wildlife refuges, national parks, aquatic resources, wetlands, sole source aquifers, floodplains, wilderness areas, unique ecological areas, or other unique or rare characteristics of the land that occur in the project area; consequently, there would be no effect to 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 Determinations for Environmental Issues

Environmental Issue	No	Yes	Uncertain
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 establish a precedent for future actions or represent a decision in principle about future actions with potentially substantial effects.	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.	X		
This action would 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 contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or result in actions that may promote the introduction, growth, or expansion of the range of such species.	X		

2.1 Environmental Resources Examined Closely

The potential environmental effects associated with implementation of the proposed action necessitated examination of the following issues in greater detail.

2.1.1 Indian Trust Assets

Indian trust assets are legal interests in property held in trust by the United States for Native American tribes or individuals. The Nation's CAP water is a trust asset. The proposed agreement would provide the Nation a means for accruing LTSCs that can be recovered or reassigned in accordance with Arizona state law. There would be no adverse effects to trust assets of the Nation or any other tribe.

2.1.2 Water Resources

According to NMIDD, there is sufficient permitted capacity in the GSF to store supplies of CAP water provided by the Nation under the exchange agreement. Once the permitted storage capacity is reached, the Nation would need to secure other water storage opportunities to earn LTSCs.

Implementation of the exchange agreement would reduce groundwater withdrawals in the GSF by an amount equivalent to the quantity of CAP water that the Nation would store. According to current state law, upon recovery of the LTSC, five 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.

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3.0 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 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 Fish and Wildlife Service (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 of 1973 (ESA) (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 would 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. No migratory bird species are anticipated to be affected since no land disturbance will occur as part of this action.

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. 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. The Act applies to waters designated, or eligible for designation, as wild and scenic. There are no rivers designated or proposed for designation as wild or scenic within or near NMIDD’s service areas.

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

This act established the 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 (CWA) (P.L. 92-500, as amended)

This law established 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. In addition, a Section 401 water quality certification and 402 Arizona Pollutant Discharge Elimination System permit are required for activities that discharge pollutants to waters of the U.S. However, no additional construction of infrastructure or delivery system features are proposed; thus, the project does not require authorization under a CWA 401 water quality certification, 402 or 404 permit.

National Historic Preservation Act of 1966, as amended (NHPA) (P.L. 89-665)

All areas to be served CAP water as a result of this proposed action already have been subjugated and have been subject to irrigation. The proposed action would not result in changes to existing land use; therefore no effect to cultural resources is expected to occur.

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 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. There will be no changes to current agricultural activities as a result of this proposed action; therefore, no effect to any lands classified as prime and unique farmlands are expected to occur.

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; and restore and preserve the natural and beneficial values served by floodplains in carrying out agency responsibility. The proposed action would not affect floodplains or increase the risk of floods.

Executive Order 12898 (Environmental Justice)

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.

No adverse effects to low income or minority populations are expected as a result of the implementation of the proposed action.

Executive Order 11990 (Wetlands) (EO 11990)

EO 11990 requires federal agencies, in carrying out their land management responsibilities, to take action that would minimize the destruction, 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 Native American tribes or individuals. 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 Nation's CAP water entitlement is a trust asset. The proposed action would benefit the Nation through the accrual of LTSC that would result from this exchange agreement. There are no known ITAs within NMIDD's service area. This resource was analyzed in Section 2.1.1 of this document.

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4.0 Preparer

Kimberly Musser, Environmental Protection Specialist, Department of the Interior, Bureau of Reclamation; Lower Colorado Region, Phoenix Area Office.

4.1 Agencies and Persons Consulted

4.1.1 Persons Consulted:

James Beadnell, Contract and Repayment Specialist, Bureau of Reclamation
Lawrence Marquez, Native American Affairs Office Manager, Bureau of Reclamation
Nichole Olsker, Biologist, Bureau of Reclamation
Sandra Eto, Environmental Protection Specialist, Bureau of Reclamation

4.1.2 Agencies Consulted:

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

- Bureau of Indian Affairs Western Region, Environmental Quality Services
- U.S. Fish and Wildlife Service, Arizona Ecological Services Field Office
- Central Arizona Water Conservation District
- Arizona Department of Water Resources
- Arizona Department of Environmental Quality
- Tohono O'odham Nation
- Tohono O'odham Nation Cultural Preservation Office
- San Xavier District, Tohono O'odham Nation
- San Xavier Allottee Association
- Hopi Tribe
- Hopi Cultural Preservation Office
- Schuk Toak District, Tohono O'odham Nation
- New Magma Irrigation and Drainage District

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5.0 References

Reference List

- 40 CFR Part 1500-1508 Regulations for the Implementation of the National Environmental Policy Act, 2005.
- 43 CFR Part 46 Department of the Interior Office of the Secretary. Implementation of the national Environmental Policy Act (NEPA) of 1969.
- Arizona Water Settlements Act, P.L. 108-451, December 2004
- Bureau of Reclamation Departmental Manual Part 516. Protection and Enhancement of Environmental Quality.
- Bureau of Reclamation Draft Exchange Agreement, February, 2014.
- Bureau of Reclamation, Letter to Tohono O’odham Nation ; Subject: Payment of Fixed Operation, Maintenance and Repair (OM&R) for Delivery to Underground Water Savings Facility (USF); April 26, 2012.
- Bureau of Reclamation, Letter to Gila River Indian Nation; Subject: Payment of Fixed Operation, Maintenance and Repair (OM&R) for Delivery to Groundwater Savings Facilities; April 25, 2012.
- National Environmental Policy Act of 1969, as amended, Pub. L. 91-190, ELR STAT. NEPA §§2-209 codified as amended at 42 U.S.C. §§4321-4370h.
- U.S. Department of the Interior, Bureau of Reclamation. NEPA Handbook. February 2002.
- US. Department of the Interior, Bureau of Reclamation. Agreement Between New Magma Irrigation and Drainage District and the Tohono O’odham Nation Providing for the Delivery of the Nation’s CAP Water for Water Storage at a Ground Water Savings Facility. January 2014.