State of Arizona

DEPARTMENT OF WATER RESOURCES

ANNUAL REPORT

Fiscal Year 2013

ADWR'S OPERATIONS

In 1980, the Arizona Department of Water Resources (ADWR) was created to ensure dependable long-term water supplies for Arizona's growing communities. ADWR succeeded the "authority, powers, duties and responsibilities of the Arizona Water Commission and the State Water Engineer relating to surface water, groundwater and dams and reservoirs." A.R.S. § 45-103(A). The Director of ADWR "has general control and supervision of surface water, its appropriation and distribution, and of groundwater to the extent provided by this title, except distribution of water reserved to special officers appointed by courts under existing judgments or decrees." A.R.S. § 45-103(B). Further, the Director is authorized, for and on behalf of the State of Arizona, to consult, advise and cooperate with the United States on issues related to the Colorado River. A.R.S. § 45-107.

To carry out its statutory responsibilities, ADWR administers state water laws (except those related to water quality), explores methods of augmenting water supplies to meet future demands, and works to develop public policies that promote conservation and equitable distribution of water. ADWR oversees the use of surface and groundwater resources under state jurisdiction and negotiates with external political entities to protect and augment Arizona's water supply.

Arizona's water supplies consist of: Surface water, including Colorado River water and In-State rivers; groundwater; reclaimed water (also known as effluent).

Water Supply
Annual Water Budget

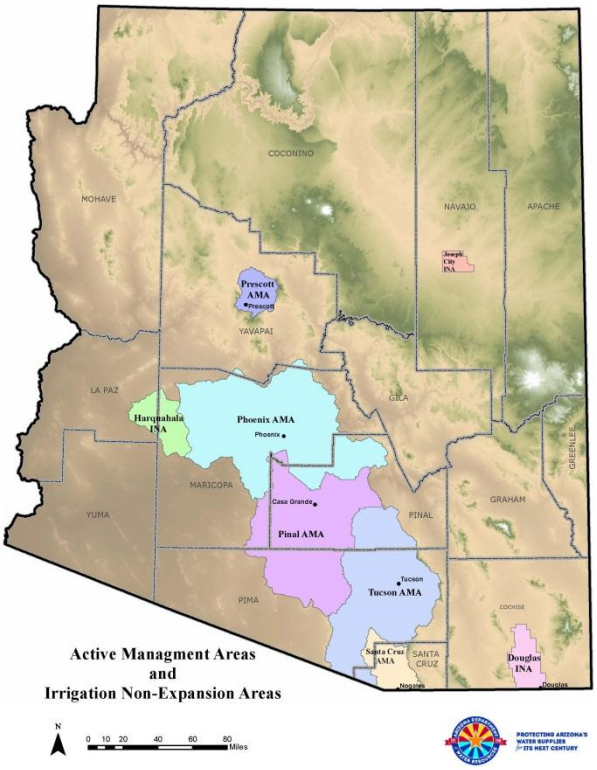
Water Source	Million Acre-Feet (maf)	% of Total Supply
SURFACE WATER		
Colorado River		
CAP	*1.6*	*22%*
On-River	*1.2*	*16%*
Subtotal	**2.8**	**38%**
In-State Rivers		
Salt-Verde	*1.0*	*14%*
Gila & others	*0.4*	*5%*
Subtotal	**1.4**	**19%**
SW Total	***4.2***	***57%***
GROUNDWATER		
GW Total	***2.9***	***39%***
RECLAIMED WATER		
RW Total	**0.3**	**4%**
TOTAL SUPPLY	**7.4**	**100%**

Groundwater Management

To address groundwater depletion in the state's most populous areas, the state Legislature enacted the Groundwater Code in 1980, and directed ADWR to implement its provisions. The goal of the Code is twofold: 1) to control severe groundwater depletion and 2) to provide the means for allocating Arizona's limited groundwater resources to most effectively meet the state's changing water needs.

Active Management Areas

Areas where groundwater depletion was most severe were designated as Active Management Areas (AMAs). There are five AMAs: Prescott, Phoenix, Pinal, Tucson, and Santa Cruz. These areas are subject to regulation pursuant to the Groundwater Code. To meet the statutory requirements of the Code, management goals were established for each AMA. In the Phoenix, Prescott, Tucson and Santa Cruz AMAs, the management goal is to achieve safe-yield by the year 2025. Safe-yield is accomplished when, on average no more groundwater is being withdrawn than is being replaced annually. In the Pinal AMA, where the economy is primarily agricultural, the management goal is to preserve that economy for as long as feasible, while considering the need to preserve groundwater for future non-irrigation uses. In addition to maintaining its safe-yield status, the Santa Cruz AMA goal is to prevent local water tables from experiencing long-term decline. Each AMA carries out its programs in a manner consistent with these goals while considering and incorporating the unique character of each AMA and its water users.



83% of the state's total population resides within the Active Management Areas

- Municipal Use - 86% of Statewide use is under mandatory conservation program requirements
- Industrial Use – 61% of Statewide use is under mandatory conservation program requirements
- Agricultural Use– 39% of Statewide use is under mandatory conservation program requirements

Irrigation Non-Expansion Areas

Areas where groundwater depletion was less severe were designated as Irrigation Non-Expansion Areas (INAs). These lands had been legally irrigated at any time between January 1, 1975 and January 1, 1980 may continue to be irrigated. There are three INAs: Joseph City INA, Douglas INA and the Harquahala INA.

Management Plans

Management plans reflect the evolution of regulation under the Groundwater Code, assisting in moving each AMA toward achieving their long-term water management goals. Through the Management Plans, ADWR establishes conservation goals for each water use sector: agriculture; municipal including cities, towns, and private water companies by statute; and industrial including mining, golf courses, electric power generation, dairies, and feedlots.

Assured and Adequate Water Supply Program

The Groundwater Code also established requirements to ensure that water supplies are adequate to meet the long-term needs of new development. The Assured Water Supply Program requires developers of new subdivisions within AMAs to demonstrate that sufficient water supplies of adequate quality are physically, continuously, and legally available for 100 years; that any groundwater use is consistent with the AMA's management plan and management goal; and the financial capability to construct the necessary transmission, delivery, and treatment facilities is available. Rules associated with this program require the use of renewable supplies, such as reclaimed water, surface water, and/or water delivered via the Central Arizona Project (CAP).

For areas outside AMAs, the Adequate Water Supply Program requires that the developer inform potential buyers of newly subdivided land of the availability of water for the property. The Adequate Water Supply Program does not prevent the sale of property when a 100-year supply is not available unless the city, town, or county in which the subdivision is located has adopted the mandatory water adequacy ordinance discussed later in this report. Requirements under these programs serve to advise consumers of subdivided land of the long-term available water supply.

Recharge Program

The Recharge Program allows injection or infiltration of surface water or reclaimed water into an aquifer for storage. The Recharge Program has proven to provide a cost effective way to both store water for future use and to provide an indirect mechanism to treat and deliver renewable supplies.

Regional Planning

ADWR continues to be active in regional water resource planning. Regional planning efforts include technical studies of specific areas throughout the State, conducted through contractual agreements with the United States Bureau of Reclamation (BOR) and the United States Geological Survey (USGS). During the last fiscal year the BOR along with the seven Colorado River basin states (including Arizona) released a study on the future supply and demand projections of the Colorado River. ADWR continues to work with the BOR, the basin states, and other interested parties planning for the impacts predicted in the study. ADWR is also actively involved with in-state planning assessing potential demand and supply challenges in rural areas of

the state as well as within the AMA's.

Rural Water Initiative

ADWR actively participates in, or facilitates, 7 rural watershed partnership groups that represent water interests outside of the AMAs. ADWR provides technical and policy advice and assistance to these groups and attends multiple meetings per month associated with the governing bodies, executive committees and technical advisory committees associated with the watershed partnerships. The activities of the different rural watershed groups vary greatly. In areas such as the Upper San Pedro (Sierra Vista area), Coconino Plateau (Flagstaff and surrounding areas), Verde River (Cottonwood to Camp Verde), Yuma, Bullhead City and Lake Havasu City, significant water resources planning and development is either proposed or underway to meet the current and projected water supply needs of the area. Substantial changes in water law and programs have been made through the efforts of these rural watershed groups in recent years. In addition to participation with the rural watershed partnership groups, ADWR also participated in various studies, analyses and data collection activities in rural areas. ADWR has a Special Line Item Appropriation that funds personnel and water resources data collection and investigation assisting the rural communities with long-term planning and management programs.

Colorado River Management

The Colorado River is a vital resource to the desert southwest, serving seven states – including Arizona, several Indian tribes and Mexico. ADWR is the state entity charged with promoting, protecting, and comprehensively managing Arizona's annual apportionment of 2.8 million acre-feet of Colorado River water. This apportionment is important to Arizona's current and future economic development and is critical to the state's water management policies.

Engineering and Permits

ADWR engineering and permitting activities are focused in three areas: Water Rights Administration, Adjudications Support, and Flood Hazard Management.

Water Rights Administration

Water Rights Administration programs promote the fair and equitable use of water through the issuance of permits for surface water use and groundwater withdrawal; and also reduce risk to health and groundwater quality through issuance of well drilling permits.

In AMAs, groundwater pumping from non-exempt wells requires a groundwater right or withdrawal authority from ADWR. State law assesses withdrawal fees[1] and requires annual groundwater withdrawal and use reports to be filed for pumping from non-exempt wells within AMAs. Exempt wells[2] are not subject to these requirements. Groundwater use outside of AMAs does not require a groundwater right. However, drilling a well anywhere in the state requires that a Notice of Intent to Drill be filed with ADWR and also requires the well to be constructed in conformance with ADWR's

[1] Withdrawal fees are statutorily required to fund ADWR's Conservation and Augmentation Assistance Programs and the Arizona Water Banking Authority.
[2] Wells having a maximum pumping capacity of 35 gallons per minute or less.

minimum well construction standards. The Groundwater and Wells Program issues groundwater withdrawal permits, processes conveyances of groundwater rights and notices of intent to drill or modify wells, issues well driller licenses, and manages and maintains a registry of groundwater rights and wells information.

Surface water is subject to the "doctrine of prior appropriation," meaning that the first person to legally put the water to beneficial and reasonable use has a right senior to later appropriators. Under statutes that have been in place since 1919, rights to use surface water primarily are obtained through a permitting process at ADWR that may result in a certificate of water right after the water has been put to beneficial use. Surface water rights may be used to support claims in the adjudication process. The Surface Water Program issues permits and certificates for rights to use surface water within the State of Arizona, excluding the Colorado River, processes assignments of surface water rights and claims, and manages and maintains a registry of rights and claims. This program also maintains records related to water rights in both computer and physical files, which are available to the public.

Adjudications Support

The State of Arizona is conducting general stream adjudications of surface water rights in two major portions of the state: the Gila River System and Little Colorado River System. Adjudications are judicial proceedings conducted in State Superior Court for Maricopa and Apache Counties to determine the nature, extent and relative priority of the water rights of all persons in each river system and source. This includes surface water rights and claims to surface water based upon both state and federal law. The Adjudication Support Program investigates claims for water rights; publishes comprehensive Hydrographic Survey Reports for watersheds and federal reservations, and prepares technical reports on other issues and factual matters as requested by the adjudication court. This program also processes, maintains and updates information related to statements of claimant (SOC) filed by water users in the adjudication court proceeding. In addition, based on information in ADWR's records, this program notifies new water users that the adjudication proceedings are underway and provides information about how to participate in the court process through the mailing of new use summons.

Flood Hazard Management

Flood Hazard Management programs reduce risk to life and property by supervising the safe construction and operation of non-federal dams and assisting local flood control and floodplain management efforts. The Dam Safety Program supervises the safety of jurisdictional dams in Arizona by reviewing and approving permits for construction of new dams and repairs to existing dams, inspecting dams and working with dam owners to remediate safety deficiencies. The Flood Warning Program coordinates with local communities, state and federal agencies for the planning, design, construction and operation of flood warning systems, operates and maintains field equipment, hosts the statewide flood warning website (www.afws.org). The Floodplain Management Program coordinates the National Floodplain Insurance Program (NFIP) in Arizona, assists local communities participating in the NFIP through implementation of the federally-funded Community Assistance and RiskMAP programs, and publishes state criteria for floodplain delineations at the local level.

Hydrology Support

ADWR hydrologists serve as the technical arm of the Department, collecting and analyzing statewide water resource data and maintaining the state's Groundwater Site Inventory (GWSI) database. Hydrologic conditions are calculated and analyzed in preparing reports in response to legislative and judicial requests, public inquiries and water management planning efforts. ADWR hydrologists are often assigned to work on the scientific components of specific research projects and are also consulted in making determinations on permit applications. ADWR prepares regional groundwater models that frequently serve as the basis for evaluating water management alternatives and the projected impacts of proposed development in the State. These models are provided to the water using community, their technical representatives, and the public and commonly serve as the foundations for applications under the Assured and Adequate Water Supply Program. Additionally, the state Legislature has supported ADWR efforts to obtain more groundwater data around the state through the Automated Monitoring Initiative. This groundwater data collection effort relies on satellite technology to obtain water level measurements in areas of the state where groundwater information is lacking.

BUDGET- FISCAL YEAR 2013

The total ADWR State appropriation for FY 2013-2014 is $12,940,500. This appropriation is restricted to special line items as follows:

Operating lump sum appropriation	$7,361,700
Adjudication support	1,212,900
Assured and adequate water supply administration	1,929,500
Rural water studies	1,139,600
Conservation and drought program	395,700
Automated groundwater monitoring	401,100
Lower Colorado River Litigation Expenses	500,000
TOTAL:	**$12,940,500**

Prior years' budgets are presented below:

Fiscal Year	Total Appropriation	Actual FTEs
2005-2006	$18,796,600	227
2006-2007	$20,789,700	239
2007-2008	$22,763,100	236
2008-2009	$21,401,600	235
2009-2010	$16,879,800	157
2010-2011	$7,360,300	97
2011-2012	$12,363,800	100
2012-2013	$12,400,500	110
2013-2014	$12,940,500	125

ACCOMPLISHMENTS IN FY 2012-2013

Agency Wide

Water Resources Development Commission

In September of 2012, the Water Resources Development Commission (WRDC) completed their final task of making recommendations that will assist Arizonans in meeting future water demands. In its Report, the WRDC recommended the formation of Regional Water Augmentation Authorities to assist communities in developing future water supplies and water infrastructure. Membership in the Regional Water Augmentation Authorities is proposed to be voluntary and may include Arizona cities, towns, private water utilities, other statutorily defined water providers, private entities, counties and State, Tribal and Federal entities. The WRDC also identified current funding options available to the Regional Water Augmentation Authorities to meet the needs of their members.

In October 2011, the WRDC completed the legislated task of analyzing Arizona's water needs for the next 100 years and submitted their final report to the Governor, Speaker of the House, the Senate President and the Secretary of State. The WRDC concluded that without proactive and localized water management strategies future water supply and demand imbalances may exist throughout the state, and, therefore, there is a need to acquire additional water supplies and develop infrastructure to access new and existing unused water supplies. The WRDC continued discussions through August of 2012 to develop recommendations aimed at providing local communities with the tools necessary to reduce or prevent future water supply and demand imbalances. The WRDC Supplemental Report is a result of these discussions.

The WRDC was formed by HB 2661 (2010) for the purpose of assessing the current and future water needs of Arizona with greater focus on meeting the water needs in rural Arizona. Commission members were selected to represent statewide water users and water use sectors.

The WRDC was tasked to: (1) compile and consider the projected water needs of each county in Arizona in the next 25, 50 and 100 years; (2) identify and quantify the water supplies currently available in each county; (3) identify potential water supplies to meet additional demands in the same time frame, and the legal and technical issues associated with using them; (4) identify potential mechanisms for financing the acquisition, treatment and delivery of water supplies; and (5) make recommendations regarding further studies or necessary legislation required for implementation.

To achieve its objectives, the WRDC formed five committees: Population; Water Supply and Demand; Environmental; Finance; and Recommendations. The WRDC reports, along with the data contained in five committee reports will continue to be updated and evaluated by ADWR and will serve as a foundation for continued and proactive water management planning for communities throughout the State.

Continuing Efforts to Enhance Public Access to our Data

The Groundwater Code requires that persons with grandfathered rights, withdrawal or recharge permits, or those designated as individual users must file an annual water use report of groundwater withdrawals and use to ADWR. Approximately 7,000 reports are filed with ADWR annually.

This year ADWR's Planning and Information Technology staff worked together to streamline external and internal processes for accepting Annual Water Use Reports and inputting the data contained in them.

Staff removed the requirement for individuals filing their Annual Water use Reports on line to have a login and password. This greatly reduced the number of phone calls from the public, which allowed staff to focus inputting data as reports were submitted. This also resulted in a higher number of online filings. There were 2,136 reports filed online in 2013 versus 1,938 reports filed in the previous year.

Information Technology staff created an email program that enabled staff to automatically convert a hard copy report to a digital image, by simply scanning the report through a standard copy machine, and immediately upload to ADWR's website for public viewing. This greatly reduced the internal agency "touch time" of the annual reports and made them available to the public within the first few days after submittal.

The end result was that the majority of the data filed on the annual reports were entered almost three months earlier, and with fewer staff resources, than previous years.

Also, to better assist our customers, ADWR physically staffed a temporary office in Casa Grande for a portion of the annual reporting season. This provided customers the ability to get direct assistance and file their annual water use reports and payments directly with ADWR staff without having to make the commute into Phoenix.

Water Planning Division

Recovery Planning for Water Banking Credits

ADWR, the Central Arizona Water Conservation District (CAWCD) and the Arizona Water Banking Authority (AWBA) created an Interagency Working Group to develop a collaborative plan to address recovery of water bank credits when a Colorado River shortage is declared by the U.S. Secretary of the Interior. The plan will provide a blueprint for recovery that provides certainty of those stakeholders who are beneficiaries of firming services (back-up water supplies) provided by the AWBA. Those entities include the Central Arizona Project (CAP) municipal and industrial subcontractors, municipal water providers located along the Colorado River, Arizona Indian Tribes, and the Southern Nevada Water Authority. ADWR has also created an AD Hoc Recovery Planning Group consisting of stakeholder representatives within the CAP service area that are providing valuable input into the recovery planning process. A recovery plan is expected to be completed by the late fall in 2013.

Engineering & Permits Division

Groundwater and Wells Program

Highlights for FY 2013 include:

- Mailed 280 renewal applications for Full-Time Well Driller License in advance of a June 30, 2013 expiration date. In compliance with A.R.S. § 41-1080, the applications included requirement for proof of the applicant's lawful presence in the United States under Federal law.
- Processed more than 1,556 notices of intent to drill and more than 1,025 notices of intent to abandon wells.
- Processed more than 213 conveyances of groundwater rights due to changes in property ownership.
- Issued more than 165 new and renewal well driller licenses and administered eight applicants drilling exams.
- Performed nearly 174 well inspections statewide to verify minimum well construction standards and obtained other factual data in Maricopa County, Navajo County, Pinal County, Gila County, La Paz County, Yuma County, Mohave County, Yavapai County, Coconino County, Pima County, and Apache County.

Surface Water Program

Highlights for FY 2013 include:

- Revised application forms for permits to appropriate water for instream flow maintenance to improve clarity for applicants and to ensure compliance with A.R.S. § 45-152.01, which was adopted in 2012.
- Participated with the Arizona Department of Administration Government Transformation Office(GTO) in a project identifying possible efficiency and customer service improvements to the existing processes for assigning changes in ownership of surface water rights and permits. The project resulted in revisions to the assignment forms, which improved clarity for the applicant. Additional possible actions for reducing processing times were identified with pending implementations.
- Issued public notices concerning 33 applications to appropriate public water, including claims for stockponds, instream flow maintenance, and severance and transfer of water rights.
- Processed and issued 80 permits or claims for appropriation of public water, certificates of water rights and claims of water rights.
- Processed and issued letters of completion for 381 assignments of surface water rights and claims due to changes in property ownership.
- Performed 19 field inspections statewide in preparation for issuing certificates of water rights.
- Reviewed and processed 32 assessment reports filed in support of permits to appropriate water for instream flow maintenance.

Adjudication Support

- On December 19, 2012, met with the Honorable Mark H. Brain, newly appointed

adjudications judge, and presented a tutorial primer on hydrology and an overview of the progress of the adjudications.

- On January 10, 2013, participated in an evidentiary hearing before the Maricopa County Superior Court on matters related to ADWR's report titled "Subflow Zone Delineation Methodology for the San Pedro River Watershed" filed with the Court in April 2012. Work on a revised subflow zone delineation methodology report in accordance with a January 15, 2013 court order is underway. This report is due on or before April 1, 2014.
- On April 15, 2013, at the request of the Court, filed a memorandum concerning possible improvements to the working procedures and priorities of the ongoing adjudications including comments on the suggestions filed by parties to the case. On April 25, 2013, ADWR participated in a status conference held in Maricopa County Superior Court where the court considered the comments and suggestions received by the court.
- As requested by the court, on July 15, 2013, a report will be filed that analyzes the federal claims asserted by the forest service for uses of water at the Powers Garden administrative site in the San Pedro River Watershed.
- Throughout 2012 and 2013, ADWR has been working on two reports that address issues related to the implementation of certain provisions of the Gila River Indian Community water rights settlement. It is anticipated that these reports will be completed by the end of calendar year 2013.
- Served new use summons by certified mail to 1,045 potential claimants for the Gila River adjudication and 63 for the Little Colorado River adjudication that may have initiated new water uses between January 1, 2011 and December 31, 2012. The summons indicates that the appropriate court-approved statement of claimant forms must be filed for any water rights that are claimed. It is anticipated that additional summons will be sent out by the end of calendar year 2013. ADWR provided support to the summons recipients.
- In 2012, updated the address and ownership information in the statement of claimant database in order to facilitate the settlement of the water rights claims of the White Mountain Apache Tribe. This settlement has been approved by Congress and also must be approved by the adjudication court. As part of that process, certain notices must be sent to claimants throughout both of the adjudications. It is anticipated that this address and ownership information will need to be revised again.

Dam Safety

Highlights for FY 2013 include:

- Award of $64,000 federal grant from the U.S. Department of Homeland Security – FEMA in support of the State Dam Safety Program.
- Inspection of 113 dams including: 85 with high potential downstream consequences in the unlikely event of failure, including probable loss of life; 10 with significant potential downstream economic consequences; 18 dams with relatively low potential economic losses, and one dam to determine hazard potential classification. ADWR identified safety deficiencies requiring correction at 48 dams with either high or significant potential downstream consequences.
- Approval of construction permits for modifications/repairs to four dams owned by the City of Phoenix which serve as reservoirs for municipal water supplies.
- Approval of construction permits for removing Ash Lagoon located in Navajo County

owned by Pink Cliffs Land Company, LLC and for Slurry Pond #1 located in Yavapai County owned by Black Mesa Pipeline from jurisdiction. The dams were constructed in 1979 and 1970, respectively, and no longer served useful purposes.

- Approval of construction permit to repair the spillway at Little Hell's Canyon located in Yavapai County and owned by the Arizona Department of Transportation. The dam was constructed in 1951.
- Approval of permits for altering one dam and removal of another dam. Both dams are located in Coconino County and owned by the Salt River Project (SRP). The dams were constructed in 1979 and 1980, respectively.
- Provided observation and oversight of multiple construction activities at dams statewide including: Magma Dam and Powerline FRS in Pinal County, White Tanks Nos. 3 & 4 Dams in Maricopa County, Park Avenue Detention Dam in Pima County, Little Hell's Canyon Dam in Yavapai County, Clay Avenue Detention Basin in Coconino County, Evaporation Pond No. 1 at the Palo Verde Nuclear Generating Station, Plains LPG Brine Ponds, South Mountain Reservoir, Hedgpeth Hills Reservoir, 64th Street Reservoirs 1-ES1-1, 1-ES1-2, and 1-ES1-4 in Maricopa County; BHP Copper's Gold Gulch No. 1A Dam in Gila County; Pan Dam in Coconino County; and Slurry Pond #1, Upper Goldwater, Lower Goldwater, and Granite Creek in Yavapai County.

Flood Warning

Highlights for FY 2013 include:

- Completed the infrastructure move that supports the Automated Flood Warning System (AFWS) central database and web-based portal from servers at SRP to ADWR. Modified the user interface of the www.afws.org and updated the web-based portal content management framework. The upgraded website is currently in beta test form.
- Completed the AFWS Data Access and Network Optimization and Management Planning Study - Phase II. This planning document outlines ways to increase the accessibility, accuracy, reliability and long-term management of real time data available through the system. ADWR was awarded a $115,000 federal cost-share grant from the U.S. Army Corps of Engineers through their Planning Assistance to the State (PAS) program.
- Awarded a $10,000 federal grant from the U.S. Department of Interior – Bureau of Reclamation in support of the Arizona Statewide Flood Warning System.
- Continue role as chair of the biannual Arizona Flood Warning System (AFWS) Multi-Agency Task Force (MATF) group meetings. The MATF includes staff from local, state and federal agencies involved in flood warning activities. The purpose of the meetings is to share flood warning information and to retain coordination among agencies.
- Aided the National Weather Service office in Tucson by making changes to the Mt. Lemmon repeater configuration and with the installation of an updated base station system at its Tucson office.
- Enhanced flood warning monitoring within Santa Cruz County by installing a new flood warning base station system at the Santa Cruz County Flood Control District building in Rio Rico and provided training to Santa Cruz County staff.
- Performed routine maintenance of ADWR-owned flood warning gages located in Apache, Greenlee, Graham, Cochise, Santa Cruz and Yuma counties.

Floodplain Management

Highlights for FY 2013 include:

- Continuing to meet with the Arizona Department of Fire, Building and Life Safety – Office of Manufactured Housing about permitting for manufactured homes in Arizona. As coordinating agency for the National Flood Insurance Program, ADWR works to ensure agencies are aware of local, state and federal floodplain regulations.
- On behalf of FEMA, presented to the Mohave County Board of Supervisors and the Yavapai County Board of Supervisors a Community Rating System (CRS) plaque that acknowledges their participation in the National Flood Insurance Program's (NFIP) CRS program. CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community's actions.
- Provided technical assistance to the Town of Tusayan staff prior to the Town submitting paperwork to join the National Flood Insurance Program.
- Awarded $120,000 federal grant from the U.S. Department of Homeland Security – FEMA in support of the Risk Mapping, Assessment, and Planning (Risk MAP) program intended to increase public awareness and reduce risk to life and property from flooding.
- Participated in a series of public meetings with community and county floodplain management staff and residents to present information related to new and future flood insurance rate maps. Meetings included: Cochise County and City of Douglas, La Paz County, Maricopa County, City of Tucson, Yavapai County, Town of Clarkdale and Town of Cottonwood.
- At FEMA's request, staff assisted 25 communities in Maricopa County with review of their floodplain management regulations to ensure compliance with the NFIP prior to new Flood Insurance Rate Maps being issued in late 2013.
- Participated in meetings and planning exercises pertaining to ADWR's role and involvement in possible emergency management situations with respect to dams, levees, and secure water supplies. Partners include the Department of Homeland Security (DHS), U.S. Bureau of Reclamation (USBR), and AZ Division of Emergency Management.
- Awarded $154,500 federal cost-share from the U.S. Department of Homeland Security – FEMA in support of the Community Assistance Program for comprehensive assessments of community floodplain management programs.
- Conducted community assistance visits (CAVs), including field tours of recent development in the FEMA 100-year floodplain and face-to-face meetings with floodplain management and building permit staff, for: Cochise County, Gila County, Goodyear, La Paz County, Parker, Oro Valley, Pinal County, and Winslow.
- Initiated community assistance contacts (CACs), including brief meetings to help NFIP communities evaluate their floodplain management programs, and to offer training and other assistance, for: Casa Grande, Douglas, Quartzsite, and Sierra Vista.
- Completed floodplain reviews for Community Development Block Grant (CDBG) applications and provided general technical assistance for: Cochise County, Coconino County, Colorado City, Flagstaff, Globe, Navajo County, Patagonia, Payson, Pima County, Scottsdale, Sedona, Tucson, and Tusayan.

Hydrology Division

Publications and Reports

The Hydrology Division completed and published the following in FY 2013:

- Regional Groundwater Flow Model of the Tucson Active Management Area, Arizona Model Update and Final Calibration. ADWR Modeling Report No. 24.
- Evaluation of Available Scientific Data Related to the Possible Delineation of a Bowie Sub-Basin of the Safford Groundwater Basin. ADWR Open-File Report No. 12.
- Land Subsidence and Earth Fissure Risk Analysis for the Hawk Rock Area of the Fannin McFarland Reaches 1 through 3 of the Central Arizona Project Canal Maricopa and Pinal Counties, Arizona.
- INSAR Land Subsidence Images of Various Subsidence Features in Arizona Published on the Department's Land Subsidence Unit Homepage

Stakeholder Outreach

- Hydrology-Field Services staff met and worked with the Arizona Municipal Water Users Association cities to coordinate field data collection efforts for the Phoenix AMA mini-sweep of water levels to begin in late 2013
- Modeling and Field Services staff worked with City of Prescott, Prescott Valley, Salt River Project and the U.S. Geological Survey on the location of potential new stream gage sites in the Big Chino sub-basin
- Modeling section staff met with Groundwater Users Advisory Council members from all AMAs over the to discuss the progress that has been made on groundwater models and water budget information
- Modeling section staff worked on a joint project with Arizona State University School of Sustainability/Decision for a Desert City to update and enhance the ASU Water-SIM model with links to the ADWR SRV model
- Modeling section staff met with members of Tucson AMA Safe-yield task force to discuss future scenario runs
- Field Services Survey Unit staff met with various stakeholder groups in Phoenix and Tucson and with national groups in San Diego, CA, Carlsbad NM, and Washington D.C. to make presentations and discuss results of INSAR subsidence and earth fissure monitoring.

Groundwater Modeling

The Groundwater Modeling Section worked on the following groundwater models and projects in FY 2013:

- Updated and improved the Tucson AMA Groundwater Model and the AMA's Water Budget Information
- Continued calibrating and documenting the Pinal AMA Groundwater Model
- Updated and improved the Prescott AMA Groundwater Model
- Continued building and incorporating new data into the Phoenix AMA Groundwater Model (combined the Salt River Valley and Hassayampa Models)
- Provided support for groundwater budget development for all five Active Management

Areas and Hydrologic Chapters of 4th Management Plan Reports For Prescott and Tucson AMAs

Field Services
The Basic Data Unit conducted approximately 1,800 water level measurements statewide at ADWR-Groundwater Site Inventory Index well locations, and at special monitoring network locations in the Coconino Plateau, Big Chino basin, Payson/Tonto basin area, Queen Valley and Santa Cruz AMA.

Staff performed maintenance, repairs and downloads at approximately 120 automated water level monitoring sites throughout the state and installed new automated equipment at sites in the Globe and Flagstaff areas.

- Completed quarterly stream gaging surveys in the Verde River headwaters area and the Santa Cruz AMA area.
- Conducted gravity surveys and GPS surveys in Cochise County, Prescott, Santa Cruz, Tucson, Green Valley, Pinal, Holbrook and in other areas of the state.
- Provided training to Arizona State Land Department (ASLD) staff on water level data collection technique. Staff also assisted ASLD and Arizona Geological Survey with aquifer test in the Butler Valley.
- Continued work on developing 3rd party water level data collection program
- Conducted more research and site evaluation for establishment of additional monitoring locations in the Buckeye Waterlogging area

Colorado River Management

Comprehensive Water Management - Shortage Sharing Agreement with Mexico

In November 2012, the United States and Mexico entered into a landmark binational agreement to guide future management of the Colorado River, Minute 319. This agreement provides a framework for increased cooperation to create benefits among all users of the Colorado River in both the United States and Mexico. It will serve as a tool to ensure that the Colorado River system is able to continue to meet the needs of all users reliant on its flows. Minute 319 allows Mexico to have access to additional water during high reservoir conditions, documents Mexico's voluntarily curtailment of deliveries during low reservoir conditions, and dedicates some of Mexico's conserved water to the environment. The agreement creates benefits and greater certainty for both nations and their water users. This agreement is effective for a five year period and will remain in force until December 31, 2017. The Department has participated in this a process, along with the Inter Boundary and Water Commission, the Bureau of Reclamation, the other Basin States, and Mexico.

Minute 319 also allows Mexico to continue to receive the benefits created by Minute 318 entered into in December 2010 following a major earthquake damaged vital irrigation systems in the Mexicali Valley. Minute 318 granted the emergency storage of a portion of Mexico's allocation in

Lake Mead for later use and benefits Arizona as storage of Mexico's water in Lake Mead reduces the probability of shortages within the Colorado River system.

Minute 319 addresses significant Colorado River issues shared by water users in both the United States and Mexico. This agreement provides unprecedented water supply flexibility to Mexico, protection for Arizona from potential shortages and provides a framework for development of additional sources of water from joint United States-Mexico water development projects.

Colorado River Basin Water Supply and Demand Study

In December of 2012, the U.S. Bureau of Reclamation (BOR) released a study which concludes that by the year 2060, and in some cases by 2025, projected future demands on Colorado River water may exceed the available supplies. The Colorado River Basin Water Supply and Demand Study (Study) is the most recent collaboration between the Seven Colorado River Basin States, Arizona represented by the Arizona Department of Water Resources, California, Colorado, New Mexico, Nevada, Utah and Wyoming, the Bureau of Reclamation, Native American Indian Tribes, multiple water users in the Basin, including the CAP and other key water agencies to address Colorado River demand and supply issues.

The Study is the result of a three-year cooperative effort in developing a comprehensive plan to quantify and address the risks posed by imbalances between Colorado River water supply and needs throughout the Basin, including water needs for a healthy river. This study is the first that considers the possible impact of climate change as one of the variables in projecting the availability of the Colorado River's future supplies.

The study served as a call to action, along with the release of the Study, the leaders of the seven states within the Colorado River Basin committed to taking further steps to address the projected imbalances. Possible actions include: identifying and implementing additional conservation and reuse programs, investing in new infrastructure projects, conducting feasibility studies, pursuing legislation and the development of new policies. These efforts will require that the Basin States, water agencies, Native American Tribes and private stakeholders continue to work together to protect and enhance the Colorado River and its supplies.

In October 2012, the Arizona Department of Water Resources, along with other cooperating partners in the Study, was presented with the Department of Interior's "Partners in Conservation Award". Deputy Secretary of the Interior, David J. Hayes presented this award in recognition of conservation achievements that include collaborative activity among a diverse range of entities, including federal, state, local and tribal governments, and individuals.

As part of the next steps phase, the Department has continued working with the Bureau of Reclamation, Colorado River Basin States and other stakeholders to form four working groups (Coordination Team, Municipal and Industrial Conservation, Agricultural Conservation and Healthy Flows) to address issues identified in the Study.

Non-Indian Agricultural Priority Central Arizona Project Water Reallocation

The Department has developed a process and drafted criteria for the reallocation of 96,295 acre-feet of Non-Indian Agricultural (NIA) Priority Central Arizona Project water as required by the Arizona Water Settlements Act. The Department's process will reallocate this NIA Priority CAP water in periodic intervals and will recommend reallocation of a portion of this water by 2014. The Central Arizona Water Conservation District (CAWCD) developed proposed pricing components for this reallocation and BOR drafted a review process for receiving the Department's recommendation for the allocation. A public meeting was held in October of 2012 at the Department's offices to present the background of this reallocation and these proposed components. The Department accepted questions and comments regarding the proposed reallocation through the comment period.

In December 2004, the Arizona Water Settlements Act, Public Law 108-451 (Settlements Act), was enacted. The Settlements Act ratified the Arizona Water Settlement Agreement (Agreement) between the United States, ADWR, and the CAWCD and provided for the reallocation of 96,295 acre-feet of Non-Indian Agricultural Priority Central Arizona Project Water (NIA Priority CAP water) for municipal and industrial uses in the state of Arizona.

Both the Settlements Act and the Agreement required the Secretary of the Interior (Secretary) to reallocate the 96,295 acre-feet of NIA Priority water to the Department "to be held under contract in trust for further allocation." Both the Settlements Act and the Agreement also specified that the Director of the Department submit a recommendation for reallocation to the Secretary, and any reallocation shall be based on the Director's recommendation or revised recommendation. The Agreement further provided that the Department develop eligibility criteria and make the NIA Priority water available for reallocation "at periodic intervals, starting in 2010." On August 22, 2006, the Secretary reallocated the 96,295 acre-feet of NIA Priority water to the Department acknowledging that "before the water may be further allocated the Director of ADWR shall submit to the Secretary of the Interior a recommendation for reallocation."

Department staff is currently reviewing applications submitted and will make a recommendation for reallocation to the U.S. Secretary of Interior in late 2013.

Indian Settlement Negotiations

White Mountain Apache Tribe

On January 13, 2009, the White Mountain Apache Tribe, the United States, the State of Arizona and a number of other state parties executed the White Mountain Apache Tribe Water Rights Quantification Agreement ("Quantification Agreement"). Federal legislation approving and authorizing the agreement was passed by Congress and signed into law by the President on December 8, 2010. The Quantification Agreement quantifies the water rights of the Tribe within the Gila River Adjudication and the Little Colorado River Adjudication areas. As part of the settlement, the federal government will construct the White Mountain Apache Tribe Rural Water System to divert, store and distribute water from the White River to communities within the Tribe's

reservation. Also, the Tribe will receive an allocation of 25,000 acre-feet per year (AFY) of Non-Indian Agricultural priority Central Arizona Project ("CAP") water and will lease the water to various municipalities in the Phoenix Active Management Area and the Central Arizona Groundwater Replenishment District. The State of Arizona will firm 3,750 AFY of the CAP water to Municipal and Industrial CAP priority until 2108. The settlement will not become effective until several conditions are satisfied, including: (1) revising the Quantification Agreement to conform to the federal legislation and execution of the revised agreement by the parties; (2) approval of the Quantification Agreement by the Gila River and Little Colorado River adjudication courts; and (3) the State of Arizona must contribute $2 million toward the construction of the White Mountain Apache Tribe Rural Water System. During the past year, ADWR has worked with the parties to revise the Quantification Agreement. The revised Quantification Agreement has been executed by the White Mountain Apache Tribe and all of the state parties, including Governor Brewer on behalf of the State of Arizona. It is expected that the Quantification Agreement will be submitted to the adjudication courts for approval in the second half of 2013.

Hualapai Tribe

During the past year, ADWR has been involved in negotiations with the Hualapai Tribe, the United States and certain state parties for a settlement of the water rights claims of the Tribe, including the Tribe's claims to the Colorado River. Those negotiations are on-going and confidential.

Navajo Nation and Hopi Tribe

During the past year, ADWR participated in discussions with the Navajo Nation, the Hopi Tribe, the United States and a number of state parties on a settlement of the tribes' claims to the Little Colorado River. The last settlement discussions occurred in December 2012.

CRITICAL CHALLENGES/OPPORTUNITIES

Issue 1: Continuation of Groundwater Management in the Five Active Management Areas - Development of the Fourth Management Plan

The Groundwater Code establishes management goals for each of the AMAs. For the Prescott, Phoenix, and Tucson AMAs, the goal is to reach safe-yield by 2025. Safe-yield is accomplished when no more groundwater is withdrawn from the aquifer than is annually replaced. The consequence of not achieving safe-yield will be to threaten the long-term availability of water supplies for existing homes, industries and communities in AMAs. The Pinal AMA management goal is to allow development of non-irrigation uses and to preserve existing agricultural economies for as long as feasible, consistent with the necessity to preserve future water supplies for non-irrigation uses. The Santa Cruz AMA management goal is to maintain a safe-yield condition in the AMA and the additional requirement to prevent local water tables from experiencing long-term declines.

One tool to assist the AMAs to achieve their goal is the adaption of a series of five groundwater management plans to be implemented in sequence from 1980 through 2025. This past year, ADWR began the development process of the Fourth Management Plan (Plan). As part of that development, ADWR completed Assessments of the current conditions of each of the five AMA's. This information, along with stakeholder input, will provide the frame work for the development of the Fourth Management Plan.

ADWR will approach the Fourth Management Plans more as Plans for success, rather than a document that simply identifies the statutory requirements for the primary water using sectors. In this Plan, ADWR, in cooperation with regulated communities and the public, will build on past successes but recognize that additional observations should be considered, including:

1. Conservation will only get us so far. We will continue to address meaningful conservation requirements, but also will review the "incentives" for utilization of renewable water supplies, reduce the complexity and the administrative workload necessary to implement these programs, and be diligent in their enforcement.
2. Continue discussions regarding the AMA goals and the implications to the State of not reaching them.
3. Consider different approaches to water management among the AMAs, recognizing local conditions, economic, and community values.
4. Address the limitations of the Management Plans and underlying authorities as we determine what course of action to follow.
5. Recognize sub-area issues and consider alternative management strategies to address areas where groundwater conditions are positive and where conditions are negative.
6. Develop, in cooperation with local water users and other water resource entities (CAWCD, AWBA, CAGRD, etc), a long-term water management strategy, tailored to each AMA, identifying specific actions and resources that will be required to accomplish this strategy.

Each AMA's Groundwater User Advisory Councils (GUACs) have been the forum in which the public can participate to obtain information and submit comments on the Fourth Management Plan. During this past year, ADWR has hosted several GUAC meetings in the Prescott, Phoenix, Pinal, Tucson, and Santa Cruz AMAs to discuss the direction of the Plan. ADWR has solicited input from not only the GUAC members but also the water users and stakeholders within each of the AMAs. ADWR anticipates release of the draft Prescott AMA Fourth Management Plan this summer, and the remaining AMA's shortly thereafter.

The Code mandates the inclusion of progressively more restrictive groundwater conservation requirements and methods to supplement groundwater supplies from the First Management Plans through the Third Management Plans. The Code is specific as to what programs must be included in each sequential management plan and ADWR has met the statutory mandates requiring the establishment of a water rights system and the continuing development and refinement of mandatory conservation requirements for industrial, municipal, and agricultural water users. For subsequent management plans, the statutory requirements are more vague, which implies the need to conduct a thorough assessment of the status of each AMA prior to the development of the Fourth Management Plan.

Phoenix AMA

The Phoenix AMA is currently in safe-yield, which is a significant achievement in the largest populated section in the state. In addition to reducing groundwater pumping, communities and individuals have made substantial investments in the utilization of renewable water supplies in this AMA, both directly and through recharge and recovery, water banking, water recycling, and utilization of renewable water supplies. ADWR and its regulated community have made large strides in ensuring there are sufficient supplies for future development and to provide back-up supplies for times when surface water supplies are limited. After review of the Phoenix AMA Assessment, it is clear that the challenge is to maintain safe-yield in this AMA. Facilitating the delivery of renewable water supplies into areas where historic groundwater declines have occurred will be an important focus of ADWR's efforts in this basin and will assist in ensuring that current and future citizens will have a long-term assured water supply.

Tucson AMA

The Tucson AMA has been a model for the efficient use of water supplies, which is important in light of limited availability and direct utilization of renewable supplies. While the recycling of water is an important element of the Tucson AMA nearly achieving safe-yield, more can be done to increase the use of renewable water supplies both for direct uses and recharge and recovery efforts. The focus of ADWR's efforts in this AMA will be to proffer and enact policies that increase the direct use of Central Arizona Project water and recycled water. This will be the key to achieving and maintaining safe-yield in this AMA.

Pinal AMA

The goal of the Pinal AMA is unique; there is recognition of the importance of agriculture to the economy of this region. However, there is also a need to preserve water for current and future

non-agricultural uses. In 2007, a major effort was culminated to recognize the need to preserve water supplies for future municipal and industrial uses in the modifications to the Pinal AMA Assured Water Supply Rules.

These modifications were a community-driven effort of local water leaders, supported by the findings of the Governor's Water Management Commission and the Third Management Plan water budget and analysis. A key provision of this rule change is due to take effect in 2014. Recently, local Casa Grande news media have reported on concerns expressed by members of the farming community regarding these changes. ADWR has been working diligently to correct and clarify the record on this matter. ADWR will continue to work with the Pinal GUAC, local water leaders, and others to ensure the public has a correct understanding of the facts regarding this rule change.

If the general consensus is that further adjustments to the assured water supply rules in the Pinal AMA are needed, ADWR will work with the community to accommodate local interest, and will work to ensure that any changes will not result in additional harm to the aquifer, which would be detrimental to both the agricultural and development economies of the AMA contrary to the statutorily mandated goal of the AMA. Future efforts should be focused on ensuring there are continued opportunities for the direct use of renewable water supplies in the agricultural sector as well as securing additional renewable water supplies for future municipal and industrial development.

Santa Cruz AMA

The Santa Cruz AMA was split from the Tucson AMA in 1994 in recognition of its unique hydrology and the importance of the Santa Cruz River to its economy. The goal of this AMA is to maintain its current safe-yield status and protect the local water levels within its boundaries. With significant residential development in this area, and without Assured Water Supply Rules that reflect its unique goal, the ability to achieve this management goal will be in jeopardy. The Fourth Management Plan for this AMA will be focused on developing mechanisms such as recharge of underutilized reclaimed water and well spacing requirements that leverage locally available resources and reflect the goal of protecting existing water levels.

Prescott AMA

The Prescott AMA was declared to be out of safe-yield by ADWR in 1999. The management goal is for this AMA the same as the Phoenix and Tucson AMAs, which is to achieve safe-yield by 2025. The availability of renewable water supplies is limited in this AMA, although opportunities do exist for the use of renewable water supplies and reclaimed water through aquifer augmentation, direct delivery or through recharge and recovery. The proliferation of exempt wells in this AMA is also a challenge to maintaining the availability of groundwater supplies. The importation of water from the Big Chino sub-basin of the Verde River groundwater basin is a tool provided in statute to assist this AMA in achieving its management goal. Efforts should be focused on developing long-term reliable renewable water supplies, including water reuse, and increased efficiencies of existing uses of water in this AMA. ADWR analysis indicates that by using all of the tools and supplies currently available in the AMA (Big Chino importation, surface water use, use of reclaimed water, and maximized efficiencies), safe yield can be attained. ADWR will facilitate discussions with the local community through the GUAC regarding the costs and impacts of following this strategy.

Issue 2: Ensuring Long-term Water Supplies for Future Generations; a State-wide Strategic Vision.

Two recently released reports (Water Resources Development Commission Final Report and Colorado River Basin Water Supply and Demand Study (Basin Study)) exhibited the challenges facing Arizona. While it came as no surprise to water managers in the state that we will face water management challenges in the future, both reports quantified the magnitude of the issue to a greater degree than ever before. The state will face several related issues some of which are associated with the current regulatory framework, some financial, and some physical availability issues that will require infrastructure upgrades and, may require augmentation of supplies from outside of the state.

While specific issues are outlined below, what has become clear to the Department is that a clear statewide strategic vision is required to assist local communities and regions within the state in their water planning efforts, and to provide our state policy makers (the State Legislature and the Governor) options for wise water management to support Arizona into its second century. The Department is embarking on a comprehensive review of local and regional issues facing our communities and seeking community feedback in identifying potential problems, and options for solutions with multiple beneficiaries. The Department will work to identify emerging issues and potential solutions in the near term (10 - 20 years), medium term (50 - 60 years), and long term (100 years plus). These regional issues, solution options, barriers to those solutions, and associated costs will be presented in a comprehensive plan presented to our state policy makers. This plan is intended to be an open and flexible guidance document to assist the legislative and the executive branches of the state as they develop water management policy for Arizona's future. The Department also expects that this plan will need to be periodically updated as growth, the economy, and water supply technologies change. The Department anticipates this plan will be available to the legislature prior to the start of the next legislative session.

- *Sub-regional Management within AMA's*
  The current regulatory framework has managed the regional aquifers within the AMA's over all quite successfully. However, the groundwater within specific sub-basins or sub-regions within AMA's has become so heavily relied upon that physical availability is projected to become an issue for 100-year assured water supply applicants. While the over-all health of the larger regional (AMA-wide) aquifer remains good, additional management is expected to be needed in these specific locations. ADWR is developing, with the input of stakeholders, enhanced aquifer management policies that will help encourage more direct use of renewable supplies and encourage recharge and replenishment closer to the areas of groundwater use to lessen the possibility of isolated incidents of physical availability shortages.

- *Greater Assurance of Sufficient Water*
  Outside of the AMA's under the water adequacy program, developers are free to move forward with subdivisions without a 100-year water supply, as long as they provide notice of inadequacy to the initial potential home buyers of that subdivided land. Some

developers do seek to demonstrate the 100-year water supplies, ensuring that their customers have that security for their real estate investment. However, subsequent developers of nearby land are free to move forward without the 100-year supply, not only leaving their own subdivision vulnerable, but endangering the supply of existing residents. In 2007, SB 1575 was enacted and allowed local jurisdictions to require all new development to obtain the 100-year water adequacy determination. The state-wide assessment may indicate that more local jurisdictions should adopt such a requirement, depending upon the local potential for growth and availability of water supplies.

Issue 3: Surface Water Permitting

ADWR lacks authority to bring administrative enforcement actions for violations of the state's surface water laws; manage the use of surface water resources pursuant to water rights or claims; or resolve disputes between surface water users. When ADWR receives a complaint that a person is violating surface water laws, it attempts to persuade the violator to comply. If that fails, ADWR requests the appropriate County Attorney or the Attorney General investigate and take appropriate enforcement action. Certain violations of the surface water laws have been classified as class 2 or 3 misdemeanors and may be prosecuted by local law enforcement agencies, the county attorney or the Attorney General. See A.R.S. §§ 45-112 and 45-190. Frequently, aggrieved parties and the public are frustrated by ADWR's inability to administer the law and resolve surface water complaints.

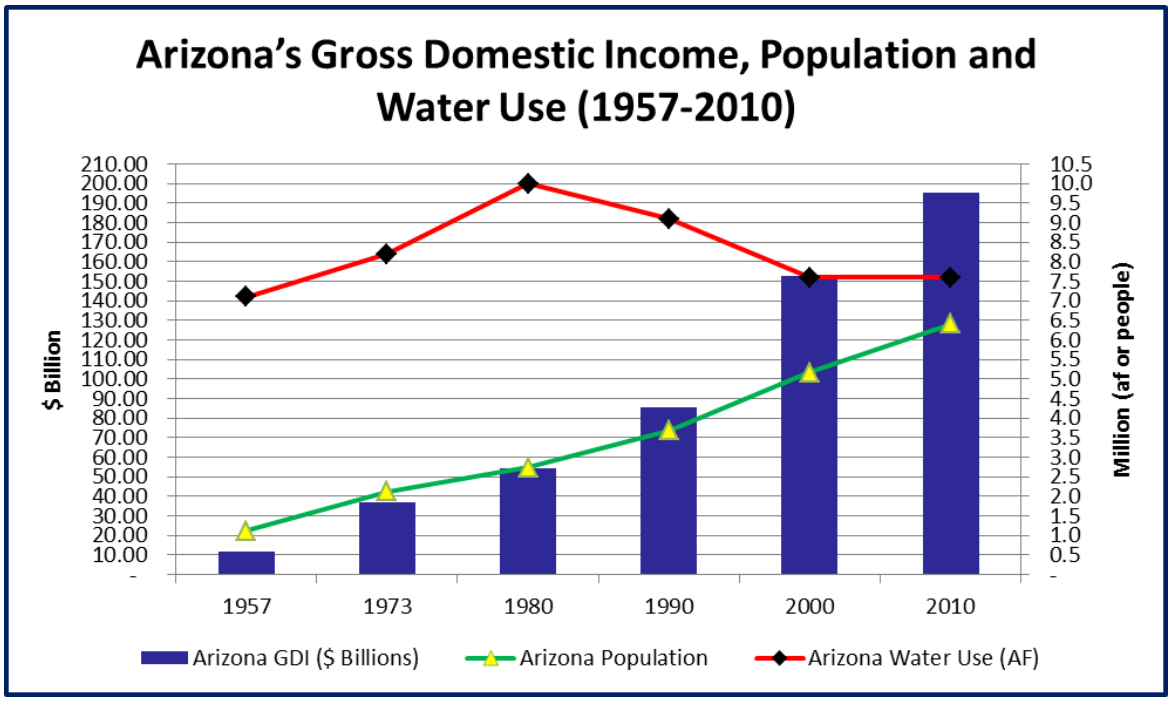
CONCLUSION

ADWR has continued to make progress to secure long-term dependable water supplies for Arizona's future, despite challenges presented by past budget limitations and the associated reduction in staffing. Funding stabilization has allowed ADWR to prioritize projects and move toward securing long-term water supplies.

While challenges to providing sustainable water supplies are numerous, ADWR continues to make progress toward this goal. Competition for water throughout the Southwest continues to increase, as neighboring states experience similar rates of growth. Arizona must continue to be vigilant to protect its water rights, particularly its rights to Colorado River water. It is essential that our State continue to play a prominent role in Colorado River water supply, operations and allocation issues.

Arizona's water is also used or claimed by a number of Indian tribes whose legal rights to quantities of water currently are the subject of settlement negotiations or litigation as part of the adjudication of water rights within the State. The outcome of these proposed settlements and settlement negotiations will significantly impact the State's water budget. In addition to water supply needs for human use, environmental protection issues such as appropriate range land and forest management are of substantial concern and may affect Arizona's future water supply availability.

The water needs of Arizona continue to evolve. Substantial progress has been made within Arizona in developing a sustainable water future. Since 1957, the state's population has increased by 470% and its gross domestic income has increased by 1528% and yet the total annual water use has increased only 7%. This limited increase in water use includes incorporation of full utilization of the CAP Supply, which has largely displaced groundwater pumping in the CAP Service Area.



ADWR's plan to conduct comprehensive review of water management needs, building on the work of the Water Development Commission formed by HB 2661 (2010) and the Colorado River Basin Supply and Demand Study will provide a solution oriented strategic vision for our elected leadership. Although challenges will continue to arise, ADWR's long-term view of water management needs has served the State well and will continue to do so as we move into Arizona's second century.