
ARIZONA DEPARTMENT of WATER RESOURCES
EST. 1980

# OUR MISSION

Protecting and enhancing Arizona's water supplies for current and future generations

# OUR VISION

To safeguard the health, safety and economic welfare of the public by protecting, conserving and enhancing Arizona's water supplies in a bold, thoughtful and innovative manner

# OUR VALUES

### QUALITY

We commit to the highest standards of technical expertise and professionalism

### VIGILANCE

We are vigilant in protecting the State's water rights and supplies

### EMPOWERMENT

We encourage our employees to grow and become problem solvers

### INTEGRITY

We act with integrity

### LEADERSHIP & COLLABORATION

We engage with Arizona's water community and provide leadership in developing innovative solutions to conserve and augment the State's water supplies

### CONFIDENCE

We build confidence by providing timely services and accurate information, and by promoting consensus-based options that create water resiliency

### CONTINUOUS IMPROVEMENT

We strive to innovate, streamline processes, add value and increase productivity

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# Director's Welcome

## Tom Buschatzke

Director

Dear Governor Hobbs, President Petersen, and Speaker Montenegro:

The Arizona Department of Water Resources' mission is to protect, conserve and enhance Arizona's precious water supplies regardless of source and in Fiscal Year 2025 my team and I took significant steps in service of that vital duty.

Prominent among those efforts are our on-going efforts to help negotiate new guidelines for operating the Colorado River system, as well as steps we have taken to protect rapidly diminishing groundwater supplies in rural Arizona.

As in recent years past, the most urgent of our duties is to help stabilize the Colorado River system under new operating guidelines scheduled to go into effect after 2026.

We seek to do so in a way that equitably reflects the enormous value of the river to all those who benefit from it, including nearly 40 million people in seven states, two nations and dozens of sovereign Native tribes.

Our on-going work to conclude these challenging negotiations revolves around a simple, yet profound, principle of basic fairness: If you benefit from the river in times of relative plenty you must share in the responsibility to protect it in times of drought and scarcity.

We remain committed to concluding the negotiations with an agreement that fairly protects the water security of the people of Arizona, for whom the Colorado represents up to 40 percent of its water supplies.

In that same spirit of conservation and in recognition of my duties as Director of ADWR, I issued a Findings, Decision, and Order on December 19, 2024, to designate the Willcox Groundwater Basin as a subsequent Active Management Area. I came to that decision - to incorporate the Willcox basin among Arizona's regions regulated under the Groundwater Management Code - following a detailed review of the groundwater basin's seriously overtaxed hydrology and after providing ample opportunity for public input.

Over many decades, water level trends in the Willcox basin have shown widespread decline, with the most significant declines observed near pumping centers. Excessive groundwater mining and declining water levels have caused multiple wells in the Willcox basin to go dry and serious land subsidence to threaten roads and property.

Also, in FY2025, my Department adopted new rules creating the Alternative Designation of Assured Water Supply (ADAWS), which offers a pathway for certain water providers to receive a Designation of Assured Water Supply while reducing reliance on groundwater.

From ADWR's establishment in 1980, a primary duty of the department has been to collect data on Arizona's water supply. It is vital that those vast stores of data be available and comprehensible to the public. A years-long project to improve data storage at ADWR now is bearing fruit.

ADWR staff are nearing completion of the project we have dubbed the "WAVES Application Modernization Project," which resulted in the migration of legacy data from five Oracle databases to Salesforce.

ADWR used the WAVES Project as an opportunity to implement best practices regarding the storage and retrieval of business intelligence data by creating a new data warehouse for Salesforce data.

The Department continues to support efforts to secure congressional funding for two tribal water settlements completed with the State of Arizona in May 2024.

They included the Northeastern Arizona Indian Water Rights Settlement Agreement, which settled decades of negotiations with the Navajo Nation, the Hopi Tribe and the San Juan Southern Paiute Tribe, as well as an agreement with the Yavapai Apache Nation that will provide the north-central Arizona tribe with water from the C.C. Cragin Reservoir on the Mogollon Rim.

Governor Hobbs signed the two agreements on December 19.

Sincerely,

Tom Buschatzke
Director

# ADJUDICATION SUPPORT

Arizona's general stream adjudication efforts began in 1974, with the filing of lawsuits in the Maricopa County and Apache County Superior Courts. These lawsuits address water rights in two major regions of the State: the Gila River system and the Little Colorado River system. Together, these adjudications will determine the nature, extent, and relative priority of water rights claimed by tens of thousands of water users based on both state and federal law for approximately two-thirds of Arizona.

By statute, ADWR serves as the technical advisor to the adjudication court. The Adjudications Division investigates claims for water rights, publishes comprehensive Hydrographic Survey Reports (HSRs) for watersheds and federal reservations, and prepares technical reports on other matters as requested by the adjudication court. In FY2025, the Adjudication Division developed 24 reports and maps for the Court, 100 percent of which were filed within the initial deadline set by the Court. ADWR was granted an extension on a report that would have been due in August 2025 due to conflicting deadlines and timing of available resources from the Arizona Geological Survey.

In FY2024, the Groundwater Modeling Section released the Upper San Pedro Basin Model, a groundwater flow model, built in support of the Gila River stream adjudication. In FY2025 the Court ordered that the model be revised in response to comments from the parties. The Groundwater Modeling Section continues to work on these refinements.

The Division continues to actively manage a database of individual water rights claims to support the adjudication process. ADWR processes, maintains and updates information related to Statements of Claimant (SOCs) filed by water users. In FY2025, the Division processed more than 730 new SOC claims. In addition, the Division has processed over 172 SOC amendments and assignments. The Division mails New Use Summonses to new water users to notify them that the adjudication proceedings are underway and to provide information about how to participate in the court process. In FY2025, ADWR mailed more than 965 New Use Summonses and additional educational information to persons who may have initiated new water uses within the last year.

The Adjudications Division continues to implement process improvements and increased efficiencies to meet the growing complexities of the adjudication proceedings. Using these principles, the Adjudications Division has improved the use of technology to streamline processes, including the following advancements in FY2025:

- Participated in the Agency's rollout of the Salesforce platform in May of 2025. This improvement will decrease the time necessary to investigate water rights claims, will make the SOC filing process more user-friendly for Adjudication claimants, and will decrease the data entry necessary to process SOC claims and assignments.
- Realigned HSR boundaries to better coincide with hydrologic boundaries.
- Launched a web application to allow water service providers in the Phoenix metro area to more easily see their claimed rights within the boundaries of the Valley HSR.
- Launched a web application allowing the public to see the geographical location of water rights that have been approved with an abstract by the Special Master, as well as those that have been decreed.

As the adjudication proceeds, the Division works to provide the best technical advice to the Court. As part of the litigation process, the parties challenge portions of the Division's technical work, and the Division must defend and explain the work it does. This fiscal year:

- Adjudications Division spent hundreds of hours preparing for and undergoing depositions regarding the Division's Subflow report for the Verde River Watershed.
- Legal counsel representing the Adjudications Division spent an extensive amount of time defending the Division's work in the last year; responding to numerous motions, preparing Department staff for trial testimony, and arguing on the Department's behalf in Court.

ADWR staff surveyed springs and stockponds west of Humphreys Peak near the Hart Prairie Preserve

## Gila River Adjudication

In FY2025, ADWR continued to provide technical support for ongoing court proceedings surrounding the legal concept of subflow in the San Pedro River watershed. ADWR also supported the ongoing casework in the San Pedro River watershed by providing maps and abstracts at the request of the Court.

Adjudications staff continued their work in the Verde River watershed, working on Preliminary HSRs for the Sycamore subwatershed (approximately 1,882 claims to investigate) and Lower Verde Valley subwatershed (approximately 12,287 claims to investigate) of the Verde River. The Preliminary Sycamore HSR is currently due in March 2026, and the Preliminary Lower Verde Valley HSR is currently due in September 2027.

## Little Colorado River Adjudication

The ADWR Adjudications Division also provided technical support for ongoing casework in the Silver Creek subwatershed. ADWR staff is working on a subflow zone delineation for the Lower Little Colorado River subwatershed that is due in September 2025, and the subflow delineation for the Silver Creek subwatershed is due September 2026.

# Department Operations

ADWR administers the State's water laws and develops policies that promote conservation and protect water availability in the face of climate change. ADWR uses its technical, legal, administrative, and policy expertise to defend the integrity of Arizona water supplies. The Department compiles and analyzes water supply data, engages with stakeholders, and issues permits and licenses. ADWR collaborates and negotiates with national and international partners on behalf of the State and supports the general stream adjudication proceedings. ADWR protects Arizona against the loss of life and property through the implementation of the dam safety, flood warning, and floodplain management programs.

| Budget Fiscal Year 2025 | |
|---|---|
| Operating Appropriation | $15,248,800 |
| Adjudication Support Special Line Item (SLI) | $1,914,400 |
| SLI - Assured and Adequate Water Supply | $2,531,200 |
| SLI - Arizona Water Protection Fund Deposit | $750,000 |
| SLI - Rural Water Studies | $1,296,000 |
| SLI - Conservation and Drought | $433,500 |
| SLI - Automated Groundwater Monitoring | $421,100 |
| SLI - Colorado River Legal Expenses | $500,000 |
| SLI - Water Supply and Demand Assessment | $3,541,500 |
| Total | $26,636,500 |

# Continuous Improvement

The Arizona Department of Water Resources (ADWR) Office of Continuous Improvement (OCI) leads the change management effort for ADWR's application modernization journey by delivering change management recommendations, structured communication, and targeted stakeholder engagement to support a smooth transition to modern systems. OCI reinforces these efforts with regular newsletters, project update boards, training documentation and videos, and external stakeholder engagement activities. An OCI team member also actively manages overall project execution as the Information Technology project manager. By aligning technology upgrades with business goals, OCI prepares staff for new tools and processes through tailored training, user readiness activities, and ongoing support. The team drives transparency, collaboration, and proactive risk management, ensuring seamless coordination across technical, operational, and user-focused workstreams. Through each phase of modernization, OCI promotes a culture of adaptability and continuous improvement. The team thoughtfully coined the WAVES graphic, carefully designing it to capture the project's core message; this graphic now serves as the primary branding image, significantly enhancing project recognition and communication across stakeholders.


Since August 2024, OCI has played a key role in helping ADWR successfully submit more than twenty agency wins to the Excellence in Government statewide initiative, showcasing the department's innovation, leadership, and use of modern technology. OCI worked closely with teams across the agency to identify and craft compelling submissions, clearly communicating ADWR's accomplishments and aligning them with the program's goals. This proactive approach made ADWR one of the leading agencies across the state for submissions.

One standout submission highlighted the exceptional work of ADWR's Geographic Information Systems (GIS) team, which earned an Excellence in Arizona Management System (AMS) honorable mention and formal recognition from Governor Hobbs for their innovative use of geographic technology to support Arizona's water management. An OCI project coordinator actively supported the GIS team throughout the project, demonstrating the agency's commitment to cross-team collaboration and driving ongoing, active process improvement efforts. This recognition celebrated the team's achievements, elevated the department's visibility, and reinforced its leadership in enhancing access to critical water information through innovative solutions. Additionally, the project team discovered hidden talents among team members—an unexpected but valuable outcome—that enabled the agency to provide meaningful opportunities for professional growth within the organization.


# Stakeholder Engagement

One outreach mission of ADWR is to ensure that the largest possible audience receives up-to-date information about Arizona's hydrology, including Colorado River supplies, surface water and groundwater, the condition of the State's watersheds, summer monsoon and winter storm activity, and more. Further, ADWR is the repository of one of the nation's most comprehensive databases on ground subsidence and earth fissures. ADWR is committed to ensuring that the public is aware of helpful resources and can easily access them. The ADWR communications team employs various media platforms to pursue that mission. Our Communications Team produces a weekly ADWR newsletter – Arizona Water News – that includes timely information on the latest water-related developments in the State. Arizona Water News has increased from 100 subscribers in 2016 to over 8,501 in FY2025. In addition, ADWR's online blog, also known as Arizona Water News, features more in-depth stories on water topics and continues to attract readers from Arizona, the Southwest, and multiple countries across the world. We continue to aggressively expand our presence on social media. During FY2025, ADWR's Facebook Page, reached 1.4k followers and shared content that organically reached an audience of 52.2k. In addition, ADWR's YouTube channel has received over 11k views and over 1.4k hours watched. During FY2025, ADWR's Twitter account received over 7,329 impressions.

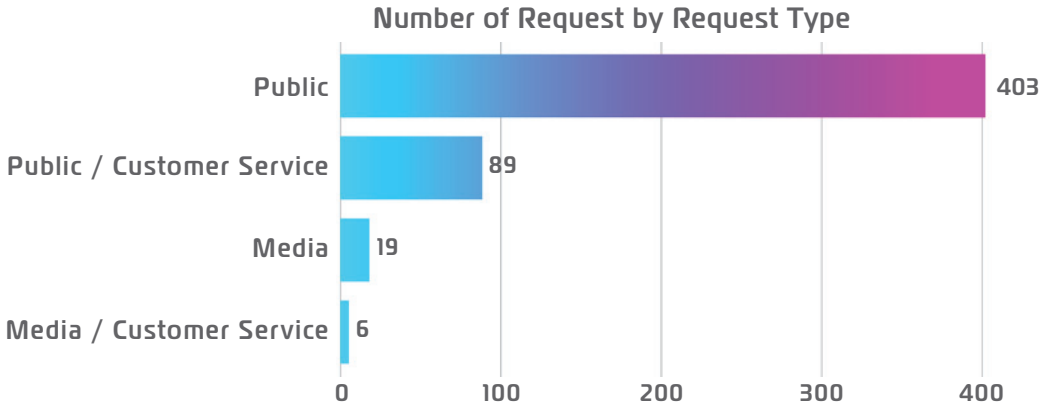
| | |
|---|---|
| 757K | Website pageviews |
| 90K | Minutes watched |
| 43 | Public meetings |
| 32 | Articles & releases |
| 35 | Email newsletters |

# PUBLIC RECORDS REQUESTS

- The Public Records Team is responsible for the review, redaction, and production of Departmental records in response to Public Records Requests (PRR).
- To provide a standard level of service, the Public Records Team has established time frames for each step of the PRR process. Depending on the size of the request, the Department strives to respond within 5, 10, or 80 business days of receiving the request. With the help of various Department programs, ADWR processed 516 PRRs in FY2025 with an average response time of 10.9 business days. In total, the Public Records Team has reviewed around 100,860 pages of records.

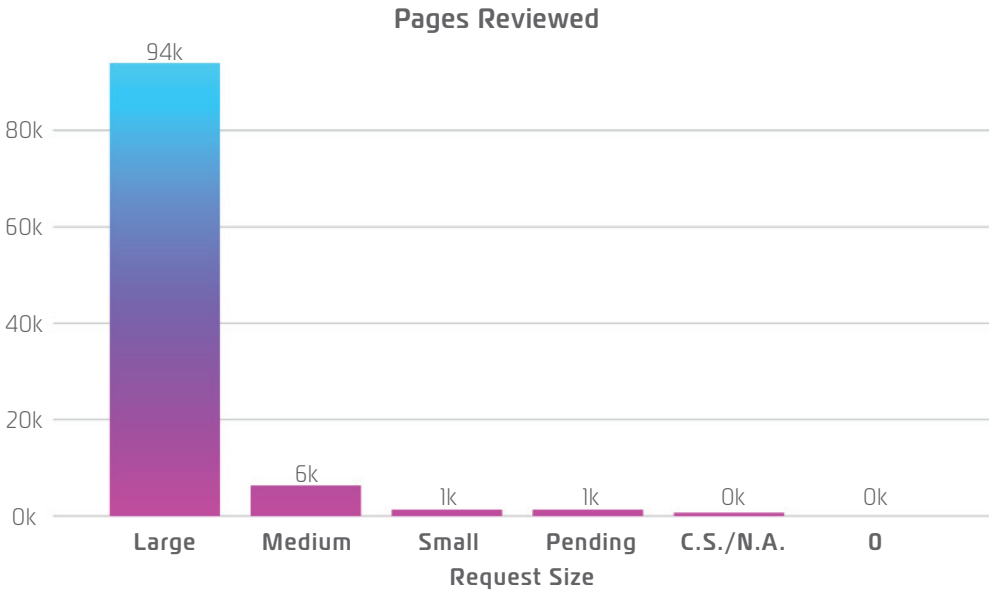
## ADWR'S AVERAGE RESPONSE TIME:

- 4.9 days for small requests (1-50 pages)
- 12.7 days for medium requests (51 - 300 pages)
- 15 days for large requests (301+ pages)




## HIGHLIGHTS

- The AMS response goal for small and large requests was met.
- The Department has been able to efficiently process requests despite the increased volume of requests and documents it reviews.



# Office of Data Management

The Office of Enterprise Data Management's (OEDM) mission is to move ADWR toward a culture of enterprise-wide data management by instituting best practices that provide clarity, confidence and consistency in the data the Department collects, creates and supplies. Additionally, staff in this office work with the water resource and supporting staff to develop more efficient ways to manage data, including the use of Business Intelligence (BI) tools, so that these professionals have more time to perform the mission of the agency.

## FY2025 Summary

This FY2025, OEDM staff focused on supporting the WAVES Application Modernization Project, which resulted in the migration of legacy data from five Oracle databases to Salesforce. The six critical areas OEDM staff helped with are outlined below.

## Data Migration Support

OEDM staff attended data mapping and migration meetings and performed the following simplistic data-related to free up the Application Developers' time for more complex ones:

- Provided numerous code tables
- Assisted in data cleansing
- Met with water resource staff to gain clarity on specific data elements and business processes as requested by the Solution Architect

## Interim Product Owner Activities

The OEDM Manager acted as the Interim Product Owner for a period of time, performing the following tasks:

- Attended numerous user story refinement meetings to assist the Business Analyst
- Assisted Business Analyst in clarifying business requirements
- Approved user stories from three of the ten sprints

## Customer Record Deduplication

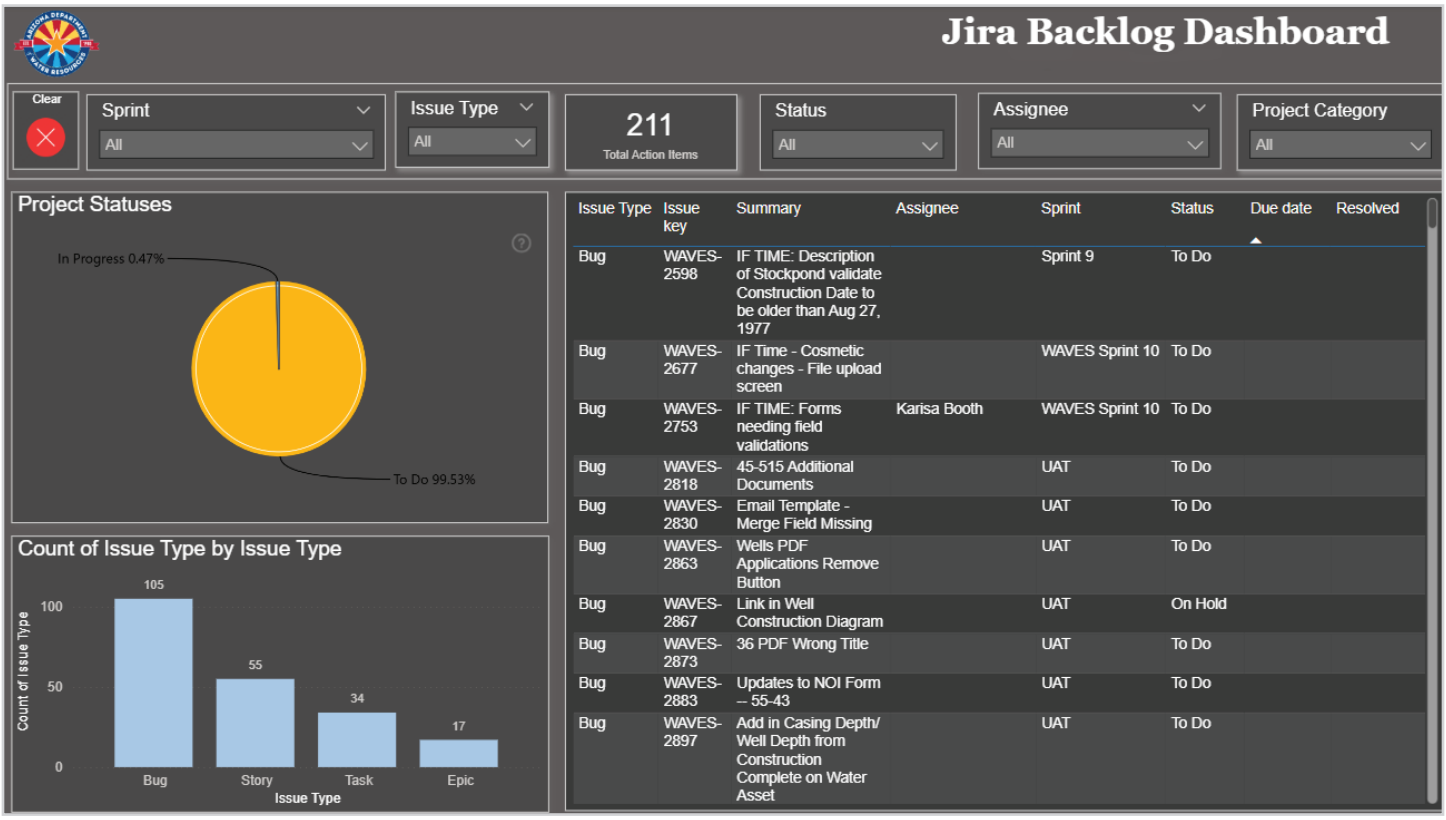
Given that the Surface Water Database has records that date back to before statehood, many customer records needed deduplication before migration. Over the many years, the same business might have been entered several times with the same or slightly different address. Deduplication whittles down the multiple records for one business to the one best current record, also known as a "golden" record.

- The OEDM Manager worked with the water resource staff and applications developers to deduplicate company customer records prior to migration
- The OEDM Manager created a complex scoring algorithm that incorporated related application, permit and certificate records, complete vs. incomplete addresses, file status date, and last action date to use automation to pick a "golden" record among the duplicate lists of customer records
- Application developers then migrated the golden record list to Salesforce

# Reporting and Analytics

The Business Intelligence Analyst created the following Power BI reports to support administration of the project:

- A JIRA Project tickets dashboard for the Project Manager and Product Owner
- A Power BI report to display the new Salesforce Data Warehouse tables and fields from the agency's data catalog
- A Power BI report to track documents collected via the new online Salesforce platform that were routed to Docushare




# Data Warehouse Activities

ADWR used the WAVES Project as an opportunity to implement best practices regarding the storage and retrieval of business intelligence data by creating a new data warehouse for Salesforce data. For that effort, OEDM staff:

- Created a new data warehouse table for each of the 56 Salesforce objects
- Used AI to convert a list of each object's Salesforce fields to SQL data types
- Used AI to write a draft SQL statement to create each data warehouse table
- Ingested the new data warehouse into the data catalog

# Change Management Activities

The Data Governance Lead assisted in project change management activities by:

- Collaboratively working with others to develop the WAVES Google Site
- Developing and maintaining the Change Management Calendar

# Metrics and Results

The following table summarizes key metrics related to Salesforce activities:

| Metric | Result | Description |
|---|---|---|
| Data Migration Meetings Hours | 190 | Time spent in Mapping and Migration meetings |
| Sprint Demo User Stories | 129 | Number of User stories approved in three sprints |
| Customer Records Deduplicated | 10% | Number of customer records deduplicated of total |
| Data Warehouse Tables | 69 | Number of new data warehouse tables created |
| Data Warehouse Fields | 1,122 | New data warehouse fields created |

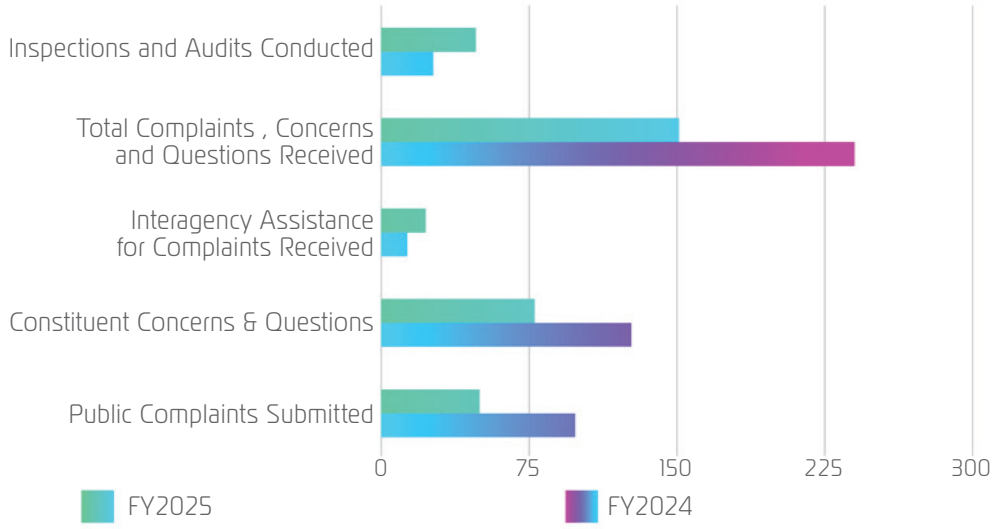
# Compliance Enforcement

In FY2025, ADWR's Compliance Enforcement staff worked with various Department sections and programs to investigate public complaints, potential violations of statutes and rules, and general compliance issues impacting the State's water resources. The agency-wide coordination enabled an efficient and effective process to promptly address public complaints, concerns, and potential violations.

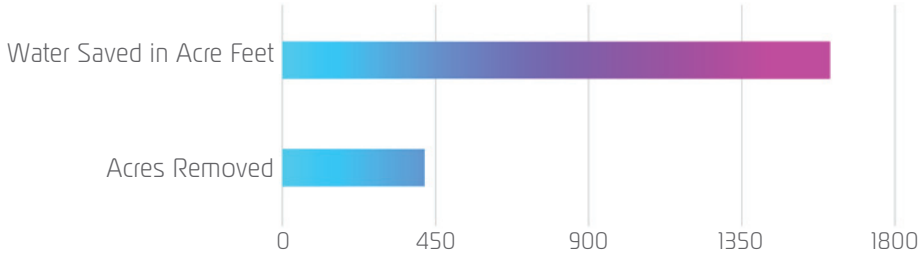
Often, the Department partnered with other local and State agencies such as the Arizona Department of Environmental Quality, Arizona State Land Department and the Registry of Contractors to review and resolve these complaints and concerns.

The Compliance Team has increased the number of inspections and audits conducted around the State with the goal of educating regulated parties, and taking appropriate enforcement actions as necessary. In FY2025 48 inspections and audits were completed, and 19 of these inspections resulted in the removal of approximately 416 acres of illegal irrigation that saved an estimated 1611 acre-feet of groundwater.

**Public Complaints, Concerns & Questions, Formal Inspections & Audits Conducted**
**July 1, 2024 - June 30, 2025**




**Illegal Irrigation Acres Removed - Acre Feet of Water Saved**
**July 1, 2024 - June 30, 2025**



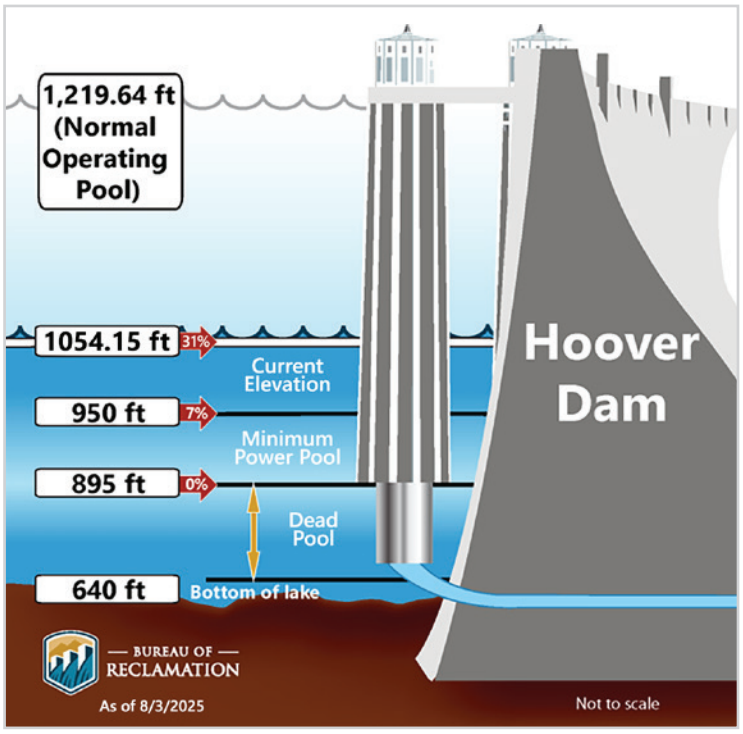
# Colorado River Management

The Colorado River is critical to Arizona, serving approximately 40 percent of the state's annual water demands. ADWR is responsible for the protection and comprehensive management of Arizona's annual Colorado River apportionment, which totals 2.8 million acre-feet (MAF). The ADWR Director represents Arizona on matters related to the Colorado River and is authorized to consult, advise, and cooperate with the Secretary of the Interior. The Colorado River Management Section (CRM) supports the Director through technical work and analysis such as hydrologic modeling and staffing a variety of working groups organized for the management and monitoring of the Colorado River and associated environmental resources.

## Entitlement Oversight

ADWR monitors entitlements of Colorado River water in the mainstream region of the River, as well as water deliveries through the Central Arizona Project (CAP) to irrigation districts, agricultural producers, and municipalities. ADWR makes recommendations to the Bureau of Reclamation (Reclamation) on proposed Colorado River entitlement assignments and transfers.

The CRM Section is processing several requests for consultation received in FY2025.




## Tier 1 Shortage

In August 2024, Reclamation declared a Tier 1 shortage condition on the lower Colorado River for Calendar Year 2025. The Tier 1 Shortage, as defined by the 2007 Interim Guidelines and the 2019 Drought Contingency Plan (DCP), required Arizona to reduce its water apportionment by 512,000 acre-feet. The Arizona DCP included mitigation resources for water users impacted by the Tier 1 Shortage, including both wet-water mitigation and financial mitigation.

## Planning and Operations

ADWR collaborates with the United States, the Republic of Mexico, other Colorado River Basin states, and intrastate entities to address and prepare for Arizona's long-term water needs. CRM staff model the impacts of management strategies – including DCP implementation, basin-wide hydrologic conditions and water demands throughout the basin.

Water Year 2025 (October 2024-September 2025) to date marked a continuation of dry conditions in the basin, following a near-average snowpack in the upper basin in 2024. Initial climate conditions and weather patterns resulted in a snow water equivalent (SWE) that peaked in late March at 91 percent of seasonal median. This was followed by relatively warm and dry conditions in April resulting in continued reductions in forecasted inflows. At the beginning of the water year, operational planning and modeling assumed 5.7 MAF in April-July unregulated inflows to Lake Powell (most probable scenario). With the first official forecast by the Colorado River Basin Forecasting Center, this had decreased to 5.2 MAF with subsequent forecasts continuing to decline throughout the early months of 2025. As of May 5, 2025, the April-July unregulated inflow forecast was 3.5 MAF; with a Water Year 2024 forecast of 5.9 MAF. However, despite the decline in projected inflows, the Bureau of Reclamation projected release volume from Lake Powell remains at 7.48 MAF in Water Year 2025, essentially unchanged from the initial assumption at the beginning of the water year.

## Supplemental Environmental Impact Statement Near-Term Colorado River Operations

In November 2022, the Secretary of the Interior directed the Bureau of Reclamation to prepare a Supplemental Environmental Impact Statement (SEIS) analysis. The purpose of the SEIS was to consider changes to the December 2007 Record of Decision for the Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (2007 Interim Guidelines) and the DCP. The Record of Decision implementing the Preferred Alternative was signed May 8, 2024.

Thanks to unprecedented levels of federal funding, Lower Basin water users met their goal to conserve 1.5 MAF in Lake Mead in 2023 and 2024. The remainder of the 3 MAF conservation target will be met in the subsequent interim years (2025-2026).

## Post-2026 Environmental Impact Statement

The Bureau of Reclamation announced a Notice of Intent to prepare an Environmental Impact Statement for post-2026 operations on June 16, 2023 and solicited public comments on the scope of specific operational guidelines, strategies, and any other related issues that should be considered in that EIS. In October, 2023, Reclamation published a Scoping Summary Report and announced a preliminary assessment of the proposed federal action and the anticipated purpose and need. ADWR worked with CAP, and other parties in the Lower Basin to develop a post-2026 operational alternative on behalf of the Lower Basin States. That alternative was submitted to Reclamation on March 6, 2024, following a press conference that included ADWR Director Buschatzke, Colorado River Board of California Chair JB Hamby, and Southern Nevada Water Authority General Manager John Entsminger. ADWR and CAP co-hosted an Arizona Reconsultation Committee meeting on March 6, 2024 to unveil the Lower Basin Alternative.

Following input from the Lower Basin States, Upper Basin States, and other stakeholders in the basin, Reclamation published an Alternatives Report in January 2025. This report outlined five possible alternatives: No Action, Federal Authorities, Federal Authorities Hybrid, Cooperative Conservation, and Basin Hybrid. Neither the Lower Basin States nor Upper Basin States proposed alternatives were included in the report. ADWR has submitted a letter, jointly with the Principals for California and Nevada, highlighting deficiencies in the Alternatives Report and urging Reclamation to fully analyze the Upper Basin's compliance with the Colorado River Compact.

At present, Reclamation is planning on the publication of a Draft EIS in Fall/Winter of 2025, followed by a Final EIS in Spring/Summer of 2026, and the final adoption of the Record of Decision in Summer/Fall of 2026.

ADWR and CAP continue to present to myriad stakeholders and across public and conference forums about the Lower Basin Alternative and other potential developments in the Post-2026 process.

## Colorado River Basin Salinity Control Program

The Colorado River Basin Salinity Control Program focuses on improving Colorado River water quality for water users by promoting efforts to reduce salinity levels in the Colorado River. These efforts mitigate environmental and economic impacts due to increased salt concentrations in the Colorado River Basin. ADWR fields one of three Arizona representatives appointed by the Governor to represent the State in the Salinity Control Program Forum. In FY 2023, ADWR participated in the development and review of the Triennial Review Report of the program. Additionally, the Department continued to provide technical expertise and policy guidance to proposed and existing Salinity Control Programs.

# Glen Canyon Dam Adaptive Management Program

ADWR represents Arizona in the Glen Canyon Dam Adaptive Management Program (GCDAMP). As a federal advisory committee, the GCDAMP was established in 1997 to facilitate compliance with the Grand Canyon Protection Act of 1992 and furthered through the issuance of the Long-Term Experimental and Management Plan Record of Decision (LTEMP ROD) in 2016. As the Governor's representative, ADWR provides policy guidance and technical expertise to the GCDAMP while representing Arizona's interests. ADWR primarily makes recommendations on the potential implementation of flow-related experiments from the LTEMP ROD.

Reclamation published the Final Supplemental Environmental Impact Statement to the 2016 LTEMP ROD (2024 SEIS) in May of 2024 followed by the Record of Decision in August. The SEIS evaluated flow options to reduce the potential for invasive warm water species to establish below Glen Canyon Dam and modified the High Flow Experiment Protocol. This provided Reclamation the compliance to implement the Cool Mix flow, as identified by the ROD as the preferred alternative, beginning on July 8th. The flow has since been deemed successful based on field data.

ADWR has provided guidance and recommendations on implementing the actions outlined in the 2024 SEIS, including deferring a Fall and Spring HFE Protocol in favor of implementing a summer of 2025 "Cool Mix" to prevent the establishment of invasive warm water species. ADWR has been heavily involved in the process and will continue to provide guidance and recommendations that will be forwarded to the Secretary of the Interior.

To aid in these efforts, the National Park Service, in partnership with Reclamation, initiated an Environmental Assessment to modify the -12 mile slough to limit downstream spawning habitat for invasive species. ADWR submitted comments of support for the modification in October of 2024.

ADWR also participates in the technical and ad hoc groups within GCDAMP. In FY2025, ADWR continued acting as chair of the Smallmouth Bass Ad Hoc Group to maintain the Strategic Plan that is being used by DOI agencies to address non-native fish in the Grand Canyon.

# Lower Colorado River Multi-Species Conservation Program

The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) provides 50 years of environmental compliance coverage for diversions of Colorado River water, primarily through the implementation of a Habitat Conservation Plan. The LCR MSCP was created to balance the use of Colorado River water resources with the conservation of native species and their habitats. ADWR represents Arizona on the MSCP's Steering Committee.

On December 9, 2022, U.S. Fish and Wildlife Service (USFWS) finalized the second Biological Opinion for an increased reduction in flow coverage between Hoover Dam and Imperial Dam (Reach 2-5), building on the 2022 BO, in the range of 1,574,000 acre-feet per year (AFY) to 2,083,000 AFY for the life of the program. Additional coverage and mitigation for reductions up to 3,000,000 AFY is included temporarily until January 31, 2028. This provided additional coverage for Reclamation and Endangered Species Act (ESA) Section 10 state permittees.

ADWR has been participating in the LCR MSCP Steering Committee and Technical Work Group to amend the Habitat Conservation Plan to provide additional compliance for the Post-2026 changes in operations. This includes coordinating with stakeholders within the state and providing comments on the Species Sub Group. The amendment will require an Environmental Impact Statement in order for the Service to issue a new ESA Section 10 Permit for non-federal water users.







"It is essential that our state continues to play a prominent role protecting Arizona's Colorado River Supply, managing operation and allocation issues and protecting Arizona's groundwater and surface water supplies for future generations."
ADWR Director Tom Buschatzke
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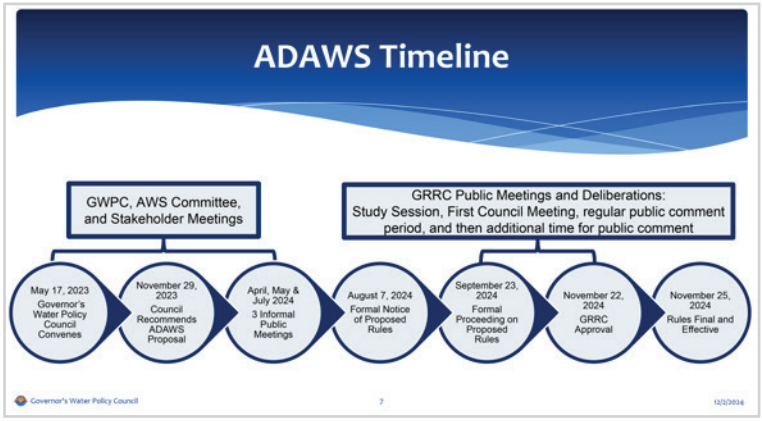
¥ 18118.51394

# Governor's Water Policy Council

On January 9, 2023, Governor Hobbs issued an Executive Order to establish the Governor's Water Policy Council (the "Council"). The Council encompasses a diverse group of stakeholders with representation from agriculture, water providers, Tribes, executive agency cabinet officers, cities, the business community, industry, conservation organizations, university experts, and the Arizona Legislature. The Director of the Department of Water Resources serves as the Chair of the Council.

Based on support from the Council, five policy recommendations were sent to the Governor's Office in November 2023. In 2024, the Council met twice to receive updates on the status of those policy recommendations and to review other potential water policies being discussed in other venues. On June 18, 2024, the Council met to receive an update on rural groundwater management legislation discussions and to review the Department's initial analysis of a potential ag-to-urban program. On December 2, 2024, the Council met to receive an update on the Alternative Pathway to Designation of Assured Water Supply (ADAWS) rulemaking process and to further discuss a potential ag-to-urban program, during which the Department announced an informal ag-to-urban stakeholder process.




# Statewide Planning

## Drought Program

Arizona experienced two severe and sustained droughts in the first half of the 20th century, one in the 1900s and one in the 1950s. Arizona is experiencing a third modern-era drought that began in the mid-1990s, prompting a Drought Emergency Declaration, which has been in effect since 1999.

In 2003, a Governor's Drought Task Force was established, marking the beginning of a collaborative journey to refine Arizona's drought monitoring process, understand drought impacts, and develop mechanisms for limiting future vulnerability. The Arizona Drought Preparedness Plan, a product of this collective effort, was adopted in 2004. It established the Drought Monitoring Technical Committee (MTC), the Interagency Coordinating Group (ICG), and Local Drought Impact Groups (LDIGs). The plan also mandated the compilation of all related drought activities and efforts for the water year (October 1-September 30) in the Arizona Drought Preparedness Annual Report (ADPAR); the 2024 ADPAR was produced during FY2025.

ADWR's Drought Program provides drought resources to the public and facilitates the meetings and activities of the MTC and ICG. The MTC meets quarterly and is responsible for gathering drought, climate, and weather data and preparing the short- and long-term drought status reports, which are disseminated to resource managers, decision-makers, and the public. During FY2025, the Drought Program hosted four MTC meetings and two ICG meetings. Since 2006, the ICG has met biannually to advise the Governor on drought status, impacts, and necessary preparedness and response actions. Since its inception, the ICG has continued to recommend to the Governor that the Drought Declaration be maintained. The Spring 2025 ICG meeting was hosted as a hybrid meeting with the option to attend in person or virtually; there were about 45 attendees. Based on the presentations and discussion, the ICG recommended maintaining the Drought Declarations (PCA 99006 and EO 2007-10) currently in place.

During FY2025, the Drought Program created a Tribal Drought Resources webpage containing statewide drought and climate resources specific to Tribal communities, as well as funding and resources that are available to Tribal governments to help mitigate drought impacts and adapt to drought conditions. In a hotter, drier future, the Drought Program is focused on continuing efforts to increase resources and technical assistance to rural and Tribal communities throughout Arizona.

# ADWR Drought Presentations & Outreach During FY2025

## Events and Presentations:

Drought Program staff presented at three in-person Community Water Systems Workshops in Mohave/La Paz Counties, Yavapai County, and Pima/Pinal Counties, presenting on drought topics and providing tools and resources for water providers to complete the Drought Preparedness Plan within their System Water Plans. The Drought Coordinator presented at five Pima Local Drought Impact Group (LDIG) meetings. LDIG's are county-level groups that coordinate drought public awareness, provide impact assessment information to local and state leaders, and implement and initiate local mitigation and response options. Drought Programs staff also contributed to discussions on local Drought planning activities with rural watershed groups.

## ADWR News Drought Program & MTC in the News:

- A "glimmer of hope" brightens Arizona's moisture outlook following a very dry winter season
  Arizona Water News, May 22, 2025
- Arizona's current long-term drought among worst on record
  Arizona's Family, April 10, 2025
- 'Worst Case Scenario': Arizona remains hottest and driest in recent history
  Tucson Sentinel April 10, 2025
- Nearly half of Arizona under 'extreme' drought conditions
  February 18, 2025
- Here we go again: Drought Coordinating Group concludes we're not out of the clutches of long-term drought just yet
  Arizona Water News, November 14, 2024

# Conservation Program

The declaration of a Tier 1 water shortage on the Colorado River has increased focus and urgency around water conservation education and messaging in Arizona. The Statewide Planning Conservation Program recognizes that water conservation actions are more vital than ever, and has continued to promote the wise and efficient use of water through the development and distribution of conservation resources and tools, water conservation assistance to individuals and communities, increased participation in outreach activities, management of the ADWR Low Water Use & Drought Tolerant Plant Lists (LWUPL), as well as collaboration with regional and national conservation partners.

In FY2025, Conservation staff attended several public outreach events focused on creating awareness of water issues and conservation strategies through community education. At these events, conservation staff provided residents with free educational materials on water conservation and used an interactive watershed demonstration model to educate residents on watersheds and to explore best management practices.

| ADWR Conservation Outreach Events during FY2025 | |
|---|---|
| November 20, 2024 | Apache Junction One Water Series |
| January 15, 2025 | Indian Nations and Tribes Legislative Day |
| May 23, 2025 | Northern Arizona's Water Utility Leadership Forum (WULF) |

Conservation Program staff also presented at three in-person Community Water Systems Workshops in Mohave/La Paz Counties, Yavapai County, and Pima/Pinal Counties, presenting on conservation topics and providing tools and resources for water providers to complete the Water Conservation Plan within their System Water Plans.

April was first designated as Water Awareness Month in Arizona in 2008 by Executive Order. Since then, ADWR has worked with the Arizona Department of Environmental Quality (ADEQ) to have the Governor update the proclamation three years in a row, including in FY2025. This effort further emphasizes Arizona's continued commitment to water conservation.

In FY2025, Conservation staff completed a significant update to the Phoenix Active Management Area (AMA) 5th Management Plan Low Water Use Plant Lists (LWUPLs), after much input and collaboration with the Arizona Municipal Water Users Association and the Phoenix AMA Landscape Technical Advisory Committee. The LWUPLs were developed by plant experts and are used to regulate groundwater used for landscaping in public medians and rights-of-way irrigated by groundwater in Arizona's six Active Management Areas (AMAs), as described in the AMA Management Plans. The list is often referenced by residents, HOAs, businesses and landscape professionals as a guide to implement low-water landscaping.

With the creation of the new Douglas Active Management Area, Conservation staff sought input from plant experts within the Douglas AMA to create the first Douglas AMA Low Water Use Plant List in FY2025. Staff also focused on increasing the accessibility and usability of all AMA LWUPLs on ADWR's Conservation webpage by creating searchable lists, organized by AMA, botanical name, common name, and plant type. By request, Conservation staff mailed copies of LWUPLs and xeriscape materials to numerous HOAs, landscape companies, and other members of the public to help spread awareness and educate customers and neighbors.

## Community Water System Public Outreach

The Community Water Systems (CWS) Program regulates water providers across the State that serve water to at least 15 service connections or 25 year-round residents. In FY2025, approximately 758 water systems serving 6.7 million Arizonans were active within the program. Community Water Systems (CWSs) within the state of Arizona are required to report their annual water usage to ADWR as well as provide a system water plan every 5 years pursuant to A.R.S. § 45-341 - 343. These reporting requirements were part of a larger set of recommendations made in 2004 by the Governor's Drought Task Force, established by Executive Order 2003-12 on March 20, 2003. The recommendations were intended to reduce water providers' vulnerability to drought and ensure they are prepared to mitigate and respond to drought or water shortage conditions. ADWR assists water providers in meeting these requirements through web-based resources, online reporting tools, and phone consultations.

In FY2025, CWS Program staff updated publicly available tools on the CWS webpage, including the Service Area Map and PowerBI dashboards, which help to visualize essential data collected from water systems around the state. Additionally, staff worked to add new data queries, making it easier for the public to access and analyze specific CWS data.

In FY2025, the CWS program continued to focus on building relationships with water providers, connecting them with resources and technical assistance, and increasing reporting compliance to support accurate data collection on groundwater pumping outside the Active Management Areas. Building on the FY2024 compliance project, which entailed developing a heat map and issuing a survey to water providers to identify needs, ADWR program staff hosted three in-person Community Water System Workshops in Yavapai County, Mohave/La Paz Counties, and Pinal/Pima Counties. The workshops provided resources, technical assistance, and education to water providers on topics such as CWS reporting and compliance, drought, funding, and water conservation. Across all five counties,

the workshops served 76+ water providers and had participation from numerous agency partners, including the Arizona Department of Environmental Quality, Water Infrastructure Finance Authority, local watershed groups Friends of the Verde River and the Santa Cruz Watershed Collaborative, and Rural Community Assistance Partnership Incorporated (RCAP). ADWR issued a feedback survey to all workshop participants and received responses from roughly 20%, with feedback being overwhelmingly positive. Participants noted that they took away new information, learned about available resources not previously known, and that the workshop provided opportunities to network and share best practices with one another as a region.

In FY2026, the CWS Program plans to focus on expanding the workshops to include virtual offerings, increase partner participation and offerings, and identify new target areas of the state for in-person workshops.

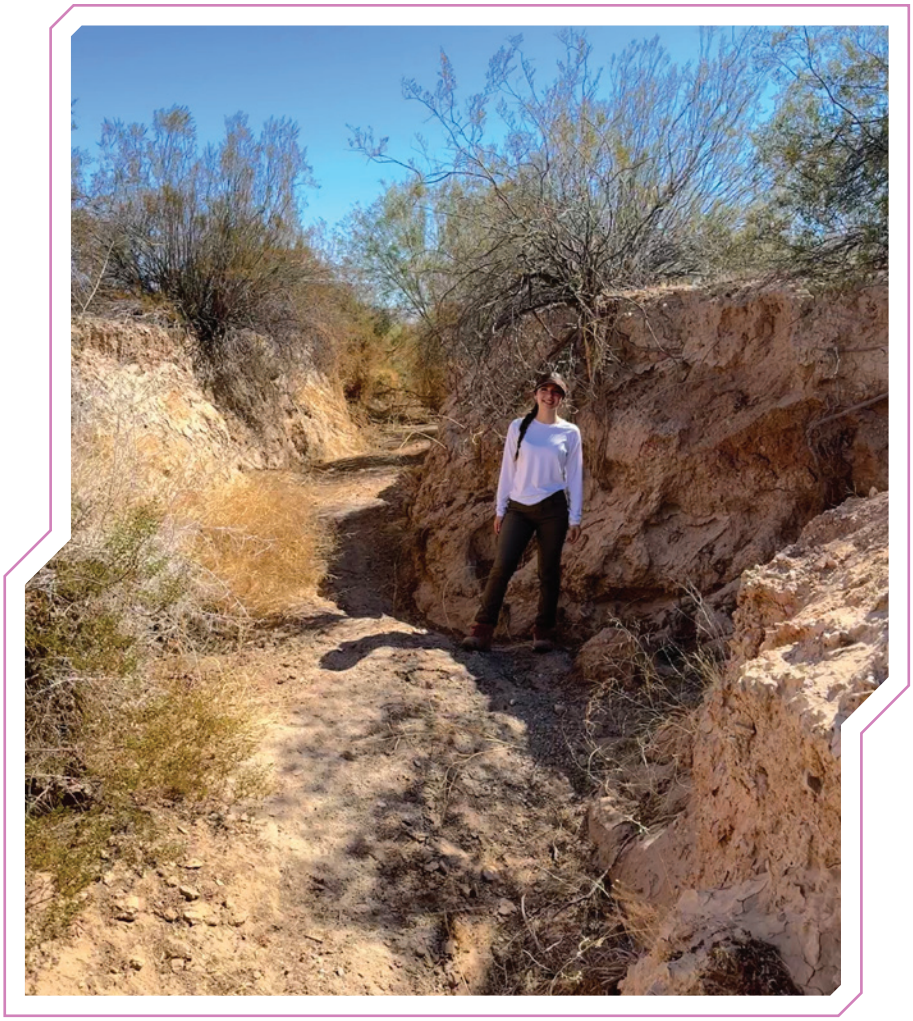

## Rural Partnerships & Stakeholder Outreach

The Statewide Planning Section provides resources and assistance to numerous rural partnerships and communities across the state. Through the Rural Partnerships program within the Statewide Planning Section, ADWR participates in multiple yearly meetings with associated governing bodies, executive committees, and technical advisory committees. These efforts continue the work initiated as part of the 1999 Rural Watershed Initiative, which aimed to connect rural communities across Arizona with the technical assistance and resources they needed to conserve and manage their water supply. The Rural Partnership program is currently engaged with eight active watershed groups around the state, and in FY2025 ADWR staff delivered five presentations to partner watershed groups, sharing the results of the 2024 Supply and Demand assessments with stakeholders working in associated basins. The Rural Partnerships Program staff serve on the Arizona Cross Watershed Network (AZXWN)'s Statewide Advisory Committee, the Rural Water Infrastructure Committee, and the Arizona Water Innovation Initiatives's Advisory Committee on Rural Groundwater Resiliency Workshops.

Through the Rural Partnerships Program, ADWR disseminates information to rural stakeholders on state and federal funding opportunities. A key part of this effort is the distribution of the Stakeholder Funding Newsletter, which shares information on funding opportunities, ADWR updates, and partner updates, playing a vital role in ensuring rural communities have access to the resources they need to protect and conserve their water supplies. The distribution list grew to 12,136 in FY2025. Additionally, beginning in FY2025, staff co-led a Sustainable Funding Action team with two partner organizations, AZXWN and The Theodore Roosevelt Conservation Partnership, focused on collectively addressing

barriers to funding for watershed groups and projects, as a part of the Rural Partnerships Program. The team is currently focused on establishing quarterly Funding Forums, bringing together project proponents, agencies, and funders to help workshop projects contributing to watershed health and water conservation.

ADWR's planning activities in FY2025 included data collection and technical studies conducted by ADWR and by the U.S. Geological Survey (USGS) through contractual agreements. ADWR and the USGS entered into a Joint Funding Agreement to collect data and estimate annual water irrigation withdrawals in several groundwater basins in the state. A portion of this USGS and ADWR joint funding agreement includes the continued funding and operations of stream flow gaging stations for the Santa Cruz River near Lochiel, Arizona, Chevelon Canyon, Havasu Creek near Supai, AZ, and a newly funded station along the Santa Cruz River, near Tubac, AZ.



## SUPPLY & DEMAND

In 2022, Senate Bill 1740 was passed, a significant development that expanded the funding and role of the Water Infrastructure Finance Authority (WIFA). It also introduced a new requirement for ADWR to develop Supply and Demand Assessments (assessments) for each of Arizona's 51 groundwater basins at least once every five years (A.R.S.§45-105(14)), with a minimum of six assessments issued each year. This requirement, which is crucial for our water resource management, also empowers WIFA to determine the allocation of funds. The assessment deadline is December 1 of each year, and the first 5-year report cycle is 2023 - 2028.

### ACHIEVEMENTS DURING FISCAL YEAR 2024

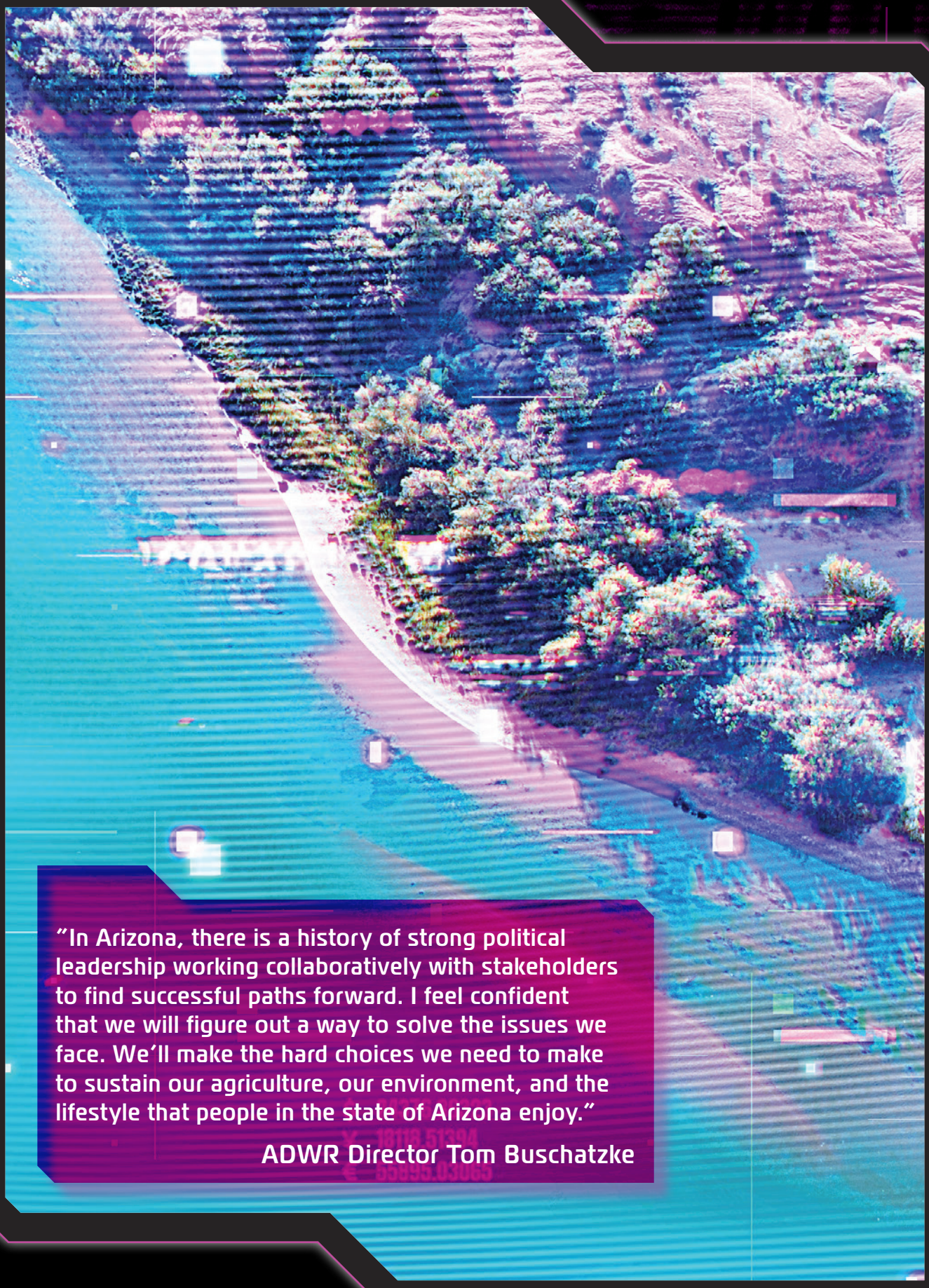
In FY2025, the second round of Supply and Demand Reports was published, a significant milestone in improving the understanding of the current and future water conditions and assisting in future planning throughout the state. To meet the statutory requirement of completing all 51 reports within 5 years, staff doubled the amount of reports produced in the second round, an increase from 7 to 14 reports. Staff made continuous improvements to the methods by expanding climate projections and municipal technology projections. Additionally, staff enhanced the interactive PowerBI dashboard on the Supply and Demand webpage. It now highlights different sector demands, basin supply components contributions, and maps the basin assessment schedule in the 5-year report cycle. Statewide Planning staff delivered presentations to six watershed groups and rural stakeholders on the results of the assessments, including the Cienega Creek Flood and Flow Committee, Growing Water Smart Clarkdale, Santa Cruz County Board of Supervisors, Upper Agua Fria Watershed Partnership, Upper San Pedro Technical Committee, and the Northern Arizona Water Utility Leadership Forum Conference.

In FY2025, the team has analyzed and completed reports on 13 more basins: Aravaipa Canyon, Bill William, Bonita Creek, Coconino Plateau, Dripping Spring Wash, Duncan Valley, Hualapai Valley, Little Colorado Plateau, Morenci, Sacramento Valley, Safford, Salt River, and San Simon Wash.

In order to continue improving methods and obtain robust data, Supply & Demand maintained and developed new partnerships with fellow state agencies, industry water users, and other stakeholders. Staff continued partnering with ADEQ for its self-reported Effluent data. Supply team members hosted several discussions with ADEQ colleagues about the Effluent data and potential future process improvements. Several members of the Supply and Demand team toured the copper Cactus Mine to gain a better understanding of industrial water demand. Staff continued working across divisions with most teams in the agency on data collection and analysis.

## Future Plans

In FY2025, ADWR contracted with private firm LandIQ to acquire robust field-level agricultural data, such as crop type, acreage, irrigation method, and evapotranspiration values. This data will first be available for use during assessment of the FY2026 reports. Multiple teams across the agency will be using this new data source. Efforts to provide presentations and help disseminate information on report findings to stakeholders statewide will continue to be a priority for future reports. The team is still in the first five-year cycle of reports for the Supply & Demand assessments, and is focused on establishing a strong baseline to build upon for future reports. Once all 51 basins have been assessed during the first report cycle, the team will be able to dive deeper into iterating and incorporating analyses that weren't yet fully developed, as well as improving existing methods and projections. The team is looking to explore the possibilities of multiple variable projections, and the capabilities of AI and automation to be integrated into existing processes in the future.



"In Arizona, there is a history of strong political leadership working collaboratively with stakeholders to find successful paths forward. I feel confident that we will figure out a way to solve the issues we face. We'll make the hard choices we need to make to sustain our agriculture, our environment, and the lifestyle that people in the state of Arizona enjoy."

ADWR Director Tom Buschatzke

# Groundwater Management

## AMAs & INAs

The 1980 Arizona Groundwater Management Act (GMA) recognized the need to provide long-term management and conservation of the State's finite groundwater resources to support the well-being and livelihood of Arizona's growing population. Areas with heavy reliance on groundwater were identified and designated as initial Active Management Areas, in which the highest degree of groundwater regulation in the State is currently imposed. These regulations include a prohibition on new irrigation acres, mandatory water conservation programs, and annual water-use reporting requirements. Irrigation Non-expansion Areas (INAs) were established in some rural areas with the intent of preserving existing irrigation of cultivated lands, but under a lower level of regulation than the AMAs. The GMA also included provisions allowing the creation of additional INAs or AMAs, with procedures that could be initiated by ADWR's Director or by local petition.

The 1980 GMA created four AMAs - Prescott, Phoenix, Pinal, Tucson - and two INAs - Douglas and Joseph City. The Harquahala INA was created by designation of ADWR's Director in 1981 and was the first subsequent INA. The Santa Cruz AMA was split out from the footprint of the Tucson AMA in 1995, but it is not considered a subsequent AMA since that geographic area was included as a part of the initial AMAs.

The GMA established management goals for the initial AMAs that recognized the unique character of each AMA and its water users. In addition, the GMA required ADWR to adopt and implement a series of five Management Plans for the initial AMAs, each unique to a particular AMA, between 1980 and 2025. The plans include mandatory conservation requirements for agricultural, municipal, and industrial water users and are intended to become progressively more rigorous with each plan. The AMA Section is responsible for administering many provisions of the GMA, specifically the management of groundwater withdrawal authorities and their use, the implementation of mandatory conservation programs in the AMAs, and the enforcement of various requirements within the AMAs and INAs.

## Fifth Management Plans for the Initial AMAs

From July 2019 through the end of 2021, ADWR led an extensive series of public meetings to evaluate the mandatory conservation programs from previous management plans and to formulate new and updated conservation requirements for the Fifth Management Plans for the initial AMAs (5MPs).

All five 5MPs were adopted in 2022, and their conservation requirements went into effect on January 1, 2025. In accordance with A.R.S. § 45-568(C), these requirements remain in effect unless and until the Legislature determines otherwise. Some of the regulatory changes from the 4MP to the 5MP include:

- Agricultural Sector:
  - Updated the Base Program to have the potential to reduce the top 25% of water duties in each area of similar farming conditions (AFSC) by up to 5%
  - Implemented the newly created Integrated Farm Program (IFP)
  - Expanded and updated the BMPs to reflect current technologies and practices with increased minimum point requirements
- Municipal Sector:
  - Added a new Planning category to the BMP program
  - Updated the BMP tiers and point requirements to ensure a more balanced distribution of providers across tiers
  - Expanded and updated the BMPs to reflect current technologies and practices and encourage BMP diversity
  - Revised the gallons per capita per day (GPCD) program with updated calculations and flexibility provisions for consistency across AMAs
- Industrial Sector:
  - Updated the maximum annual allotment calculation and the Establishment of Newly Turfed Area and Revegetation allotment additions in the Turf (Golf and Non-Golf) program
  - Updated low water use (LWU) density requirements from 50% to 30%
  - Established a new alternative BMP-based conservation program for mining

Alongside the 5MPs, ADWR has also published online dashboards and datasets, which provide detailed, interactive data for each sector. This allows greater access to data in a usable format, as well as access to raw data that was previously only available by public record requests.

## Newly Regulated Areas

The GMA included provisions for subsequent AMAs and INAs. Subsequent INAs can be created by local initiation pursuant to A.R.S. § 45-433 or by designation of ADWR's Director pursuant to A.R.S. § 45-432. Subsequent AMAs can be created by local initiation pursuant to A.R.S. § 45-415 or by designation of ADWR's Director pursuant to A.R.S. § 45-412.

In December 2022, the geographic footprint of the AMAs and INAs changed for the first time since 1981, with the creation of the Douglas AMA by local initiation and election and with the creation of the Hualapai Valley INA by designation of the Director. In January 2025, the first Director-designated AMA was created with the Willcox AMA.

# DOUGLAS AMA

In Summer 2022, a petition was submitted pursuant to A.R.S. § 45-415 to Cochise County regarding the creation of a subsequent AMA in the Douglas Groundwater Basin. On August 30, 2022, Cochise County issued a call for election, which would include questions on whether to establish an AMA in the Douglas basin. The election was held on November 8, 2022, with citizens voting to establish an AMA. Upon the certification of the election on December 1, 2022, the Douglas Groundwater Basin was designated as an AMA.

The establishment of the Douglas AMA also requires the appointment of members to a Douglas AMA Groundwater Users Advisory Council (GUAC). Governor Hobbs appointed a five-member council on March 25, 2024. The first meeting of the Douglas GUAC was May 23, 2024.

Since the designation of the Douglas AMA, the AMA Establishment team made eight trips to Douglas to host meetings with stakeholders regarding the management goal and the 1st management plan development. These meetings involved discussions regarding agricultural, municipal, and industrial conservation requirements. The Department worked extensively to develop sensible and functional conservation strategies for the 1st management plan. In addition to these meetings on the management plan, multiple additional trips were made to Douglas to explain the application process for IGFRs to interested parties.

The first informal draft of the Douglas AMA 1st management plan was published online August 22, 2024. The Department accepted comments on the draft plan until September 9, 2024. A GUAC meeting was held on August 28, 2024 for the Department to explain and discuss the draft management plan, and to receive any comments.

On November 6, 2024 a public hearing was held to present the proposed Douglas 1st management plan. On November 27, 2024 the Douglas AMA 1st management plan was adopted pursuant to A.R.S. §45-571. Conservation requirements go into effect in January of 2027.

After the application deadline of September 3, 2025, a registry of applications was created for the Douglas AMA for the purpose of public objection to applications on the basis of fact, consistent with A.R.S. § 45-479. The objection period was for 180 days pursuant to A.R.S. § 45-479(B), and ended on April 1, 2025. The Department is continuing application processing and grandfathered right issuance on a rolling basis.

## Hualapai Valley INA

The Hualapai Valley INA was created on December 19, 2022 by initiation and decision of the Director.

In an INA, those withdrawing more than 10 acre-feet of water for a non-irrigation use and those irrigating two or more acres of land are required to measure and report their water use to ADWR on an annual basis. Irrigation, as described in A.R.S. § 45-402.18, means "to apply water to two or more acres of land to produce plants or parts of plants for sale or human consumption, or for use as feed for livestock, range livestock or poultry [...]".

Additionally, those irrigating two or more acres of land in the Hualapai Valley INA are required to obtain an irrigation authority in order to continue irrigating legally. Applications for Irrigation Authorities are available at azwater.gov/ama/ina/hualapai-ina. There is no application deadline, but anyone irrigating without an authority may be subject to compliance action and civil penalties.

## Willcox INA

On October 23, 2024, following an informal public meeting on September 26, 2024, and a review of a technical memorandum issued by ADWR's Chief Hydrologist, the Director of the Department issued an Order initiating the proceedings to designate the Willcox Groundwater Basin as a subsequent AMA, pursuant to A.R.S. §45-414. A public hearing was held on November 22, 2024 to present factual data as well as to receive public comments and evidence on whether the Director should designate the Willcox Groundwater Basin as a subsequent AMA.

On December 19, 2024, after reviewing factual evidence and public comment, the Director issued a Findings, Decision, and Order to designate the Willcox Groundwater Basin as a subsequent AMA. The Designation order was published in the Sierra Vista Herald Review on January 1, 2025 and January 8, 2025 and Eastern Arizona Courier on December 25, 2024 and January 1, 2025. The date of designation, as defined in A.R.S. § 45-402, is January 8, 2025.

The establishment of the Willcox AMA includes three major concurrent timelines:

1. The adoption of a management goal
2. The adoption of a management plan. "The plans shall include a continuing mandatory conservation program for all persons withdrawing, distributing or receiving groundwater designed to achieve reductions in withdrawals of groundwater," pursuant to A.R.S. § 45-563 (A).
3. The issuance of Irrigation Grandfathered Rights (IGFRs) in the Willcox basin, which includes statutory timelines for applications, objections, and issuance.

The establishment of the Willcox AMA also requires the appointment of members to a Willcox AMA Groundwater Users Advisory Council. The applications for the Willcox GUAC can be found on the Arizona Boards and Commissions website. The appointment of members is carried out by the Governor.

## Management Goal

ADWR is currently working to develop and adopt the management goal for the Willcox AMA, The draft management goal of the Willcox AMA is "to support the long-term viability of the regional economy, mitigate land subsidence, and extend the life of the aquifer by reducing groundwater overdraft by at least 50% by 2075". The Department is committed to creating a realistic and inclusive management goal and plan for the Willcox AMA, based on both the hydrologic realities of the basin, and stakeholder input.

# Management Plan

ADWR is currently working to develop the Willcox AMA 1st Management Plan (1MP). This development process has and will continue to involve multiple public workshops and brainstorming sessions with the shareholders of the Willcox basin, considering the unique challenges of the basin and its shareholders. In tandem with the management goal, the conservation programs contained within the management plan are "designed to achieve reductions in withdrawals of groundwater", pursuant to A.R.S. § 45-563 (A). Willcox has unique hydrologic challenges, and has very limited access to alternatives to groundwater to aid in reducing overdraft. As such, crafting a management plan that is grounded in those hydrologic realities is vital.

| | | | | |
|---|---|---|---|---|
| **2025-26** | Conservation Program Workshops | Program Analysis | Community Engagement | Program Development |
| **2026** | Drafting of the Plan | Document Structure & Content | Implementation & Strategy | Informal Draft |
| **2026** | Adoption Process 12/1/2026 | Present to GUAC & Stakeholders | Director holds hearing & issues Order of Adoption | Conservation Programs become effective 1/1/2029 |

## Outreach

Outreach in Willcox has been a priority for AMA Staff. Multiple public meetings have been held to explain the hydrologic conditions of the basin, as well as an introduction into management plans and the management goal. AMA staff have also held an application workshop. Many more public meetings will be announced in the future. ADWR values the opinions and the unique hydrologic conditions of the Willcox basin and, as such, has been crafting a management plan tailor-made for the Willcox AMA. Stakeholder input is paramount in the development process of this plan. Future meetings will be announced to further discuss specific conservation programs for agricultural, municipal, and industrial users.

## Additional AMA Achievements During Fiscal Year 2025

In January 2019, SB1227 appropriated $2,000,000 from the State General Fund to ADWR as part of Arizona's Drought Contingency Plan (DCP) legislation for the purpose of providing grant monies to support groundwater conservation and reduce groundwater withdrawals in the Active Management Areas. This fund is referred to as the Groundwater Conservation Grant (Grant).

The Grant fund was allocated to programs and projects located within the five AMAs that demonstrate the ability to conserve groundwater either directly or indirectly. More information regarding the Grant can be viewed on the WMAP page on the Department website.

Of the 17 awarded projects, 10 projects have been completed:

- The Esser Design L.L.C.'s project "Bringing the Groundwater System to Light through an Education Outreach Campaign/Video Series Targeting Youth and Adults" finished their video series in July 2022.
- Gary Woodard's project "Water Efficiency Audits for HOA Common Areas and Other Irrigation Customers" completed in July 2023.
- Cortaro-Marana Irrigation District's "Automated Gate for Marana Road Canal" completed in February 2024.
- Town of Marana's project "Water Citizens' Water Academy" completed in July 2023.
- Town of Prescott Valley's "Water Smart Customer Portal" completed in September 2023.
- City of Nogales' project "Water Conservation Education and Technology" project came to an end in February 2024.
- University of Arizona's project "Using Project-Based STEM Education to Enhance Groundwater Conservation in Maricopa County Schools" completed in July 2024.
- Upper Verde River Watershed Protection Coalition (UVRWPC)'s project "Rainwater Harvesting for Aquifer Recharge" completed October 2024.
- City of Tucson's project "Expanding a Water Loss Control Program throughout Tucson Water's Distribution System" completed June 2024.
- Arizona Department of Transportation's project "SR 89 Stormwater Recharge Pilot Project" completed October 2024.

In addition to the Groundwater Conservation Grants, the WMAP also facilitates and funds 9 projects with the WMAP fund. The AMA Section continues to maintain an extensive AMA data webpage, in support of agency-wide efforts to increase transparency and improve public access to ADWR data.

The AMA Annual Reporting Team, in collaboration with ADWR's IT Division, continues to make improvements to the AMA Annual Water Use Online Reporting Tool to improve its usability and make it more intuitive for users. Additionally, AMA staff received training to efficiently manage customer inquiries via phone and email, ensuring timely and effective support throughout the peak reporting season. These key improvements, along with several smaller refinements, contributed to a significantly smoother and more efficient reporting year compared to previous cycles. Key insights include:

- 51% of the over 6,000 Annual Reports for 2024 were submitted online; 49% were submitted physically.
- Groundwater withdrawal fees across all AMAs totaled $4,562,477.94 as of May 27, 2025.
  - Phoenix and Pinal AMAs accounted for 86% of total fees collected.
- TD, in coordination with the Arizona Department of Administration (ADOA), implemented a detailed receipt system for successful report payments.

The Agricultural Conservation Program staff implemented the requirements of the 5MP by developing new applications and updating existing ones to support both new and ongoing conservation programs. In addition, staff focused on improving internal implementation by streamlining and standardizing annual tasks to increase efficiency. This included updating procedures for Groundwater Savings Facility (GSF) and Southside Protection Zone (SSPZ) calculations, compiling statewide water use data, and refining conveyance processes for the Best Management Practices (BMP) program. Furthermore, staff developed automated queries to support compliance efforts related to lost and unaccounted-for water (L&U), GSF calculations, and the issuance of notices for completed Flex Credit Transfers.

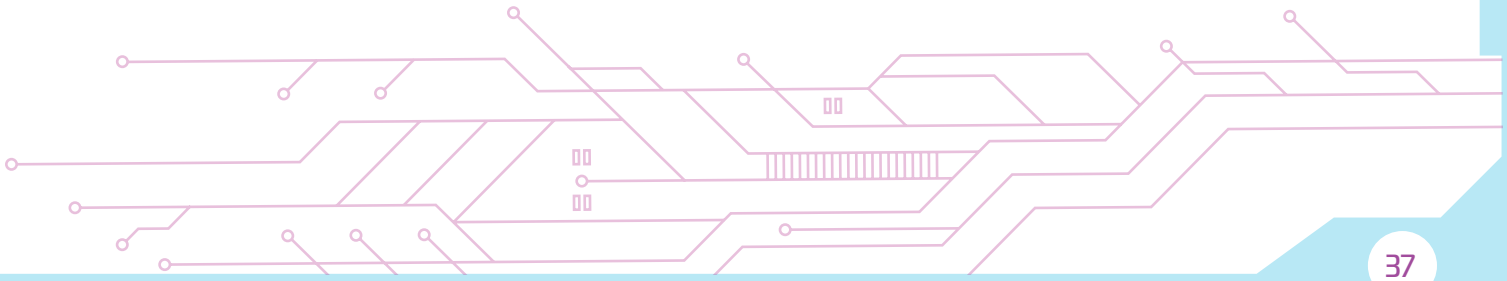
The Municipal Conservation Program staff worked closely with both Small and Large Providers to support the implementation of conservation requirements under the 5MP. Over the past year, staff increased communication efforts with providers and successfully completed updates to Service Area boundaries by June. In collaboration with the Compliance Program, staff took proactive steps to address noncompliance with lost and unaccounted-for water (L&U) requirements, resulting in the issuance of nine Notices of Violation and the receipt of six Remedial Action Plans. These efforts are expected to continue into the foreseeable future as part of a broader focus on program improvement. Staff have also identified additional opportunities to strengthen compliance measures and enhance the overall effectiveness of the program.

The Industrial Conservation Program staff focused on optimizing program operations while implementing the conservation initiatives outlined in the 5MP. Efforts included developing conservation plan templates, managing the notification and processing of submitted plans, and creating templates for the Alternative Mining Conservation Program. Staff also issued Flexibility Account Balance notifications to applicable users.

The AMA section completed 399 total conveyance applications and 62 extinguishment applications throughout this fiscal year. The section's three full-time staff completed roughly 153 applications each. The AMA section took over extinguishments in the last 5 months before the extinguishment deadline of December 31, 2024.

Staff organized and held a successful Groundwater Users Advisory Council (GUAC) meeting for five of the AMAs, including Phoenix, Pinal, Tucson, Santa Cruz, and Douglas. The Prescott AMA did not have enough members to hold a meeting. Water Management Assistance Program Presentations, updates from the different sections at ADWR, and useful timelines and data were all presented across all six GUAC meetings.

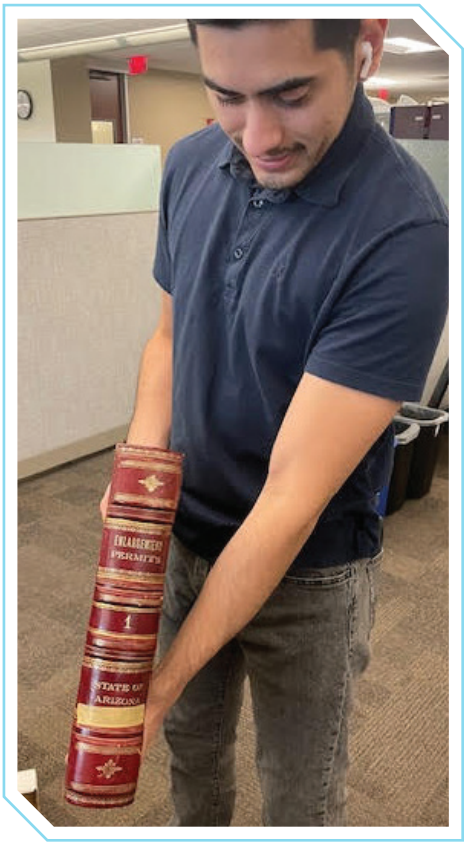
The Establishment Team has processed 200+ applications between the Hualapai INA and the Douglas AMA for irrigation authorities and grandfathered rights certificates.



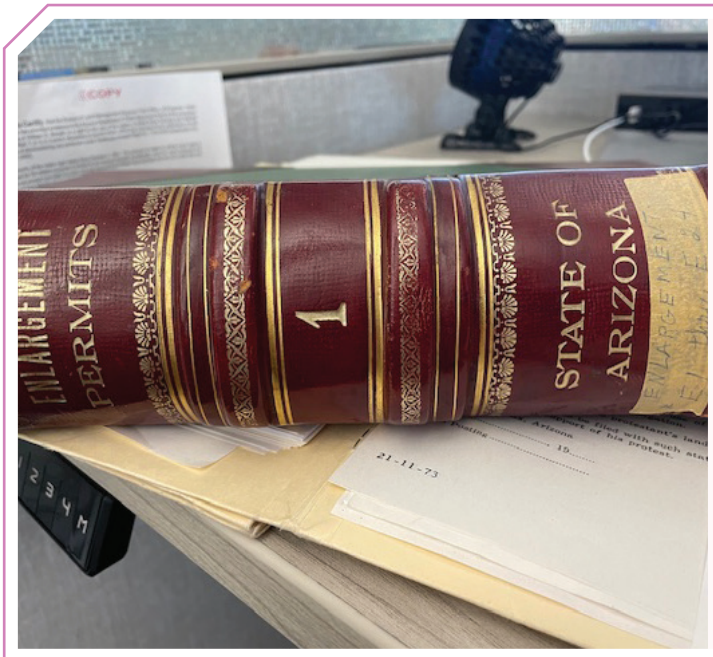
# Surface Water

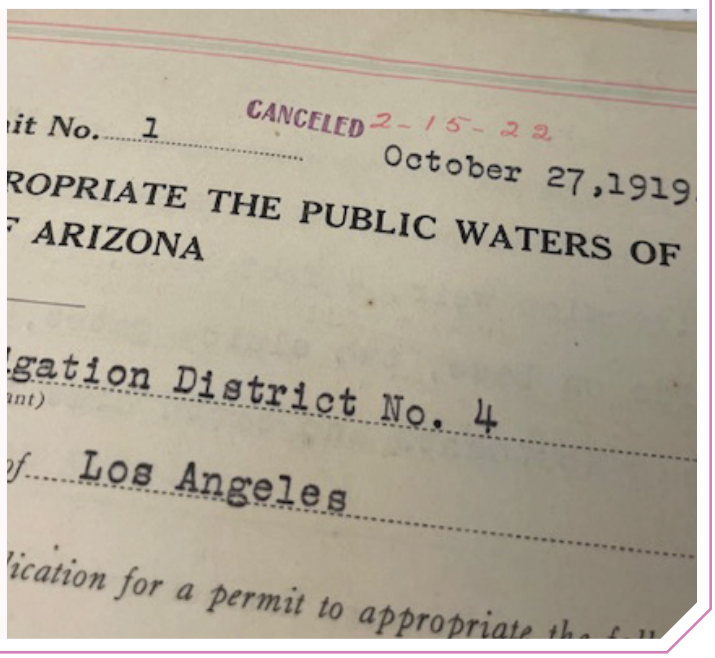
Through the Surface Water Program, ADWR issues permits, certificates, and claims to the use of surface water within Arizona, with the exception of the Lower Colorado River. Additionally, the program processes transfers of ownership, applications, and claims for surface water rights; manages and maintains the surface water right registry and other Departmental historical records; and provides technical assistance to private, state, and federal entities in surface water matters. The mission of the Surface Water section of ADWR is to ensure a long-term, sufficient, and secure water supply for the State by promoting, allocating, and comprehensively managing, in an environmentally and economically sound manner, the rights and interests of the State's surface water resources for the citizens of Arizona.

The Surface Water Section maintains some of the oldest documents and records at ADWR, some of which date back to Arizona's territorial days. Early in its history, Arizona adopted the doctrine of prior appropriation to govern the use of surface water. This doctrine is based on the tenet of "first in time, first in right" which means the person who first puts the water to a beneficial use acquires a right that is senior to later appropriators of the water. On June 12, 1919, the Arizona Surface Water Code was enacted. Now known as the Public Water Code, this law provides that a person must apply for and obtain a permit and certificate to appropriate surface water and that beneficial use shall be the basis, measure, and limit to the use of water within the state.



In FY2025, the section continued a project initiated in FY2024 to confirm its physical records were properly located, manifested, and digitized. Over the course of the year, staff consolidated, manifested, and scanned files to a digital format. As staff called back boxes from storage and reviewed them, they discovered some of the first applications, permits and certificates of water right that were issued by the State Water Commissioner after June 12, 1919. Since the beginning of the project, of the 982 boxes containing surface water records, 405 (41.24%) of those boxes have been quality checked, and 50 boxes have been consolidated. During FY2025, approximately 227 boxes were quality checked, 2,481 digital records were created, and 1,407 of those records were stored in new acid-free calcium carbonate reinforced files for protection.



The section's Instream Flow Program, which processes applications for permits to appropriate public water for purposes of maintaining flows within a specific stream reach to support recreation or wildlife, continued to progress in FY2025. Outreach from the Department prompted two major water users to withdraw protests against instream flow applications on Frye Creek and Tonto Creek, allowing these long-outstanding applications to move forward allowing the issuance of two new permits. Three Proof of Appropriation applications were received, and three Certificates of Instream Flow Water Right were issued, perfecting water rights along California Gulch, Cave Creek, and Pumphouse Wash for recreation and wildlife. Additionally two pre-application meetings have been held with tribal and federal entities preparing new applications, which is promising for the future of the program.

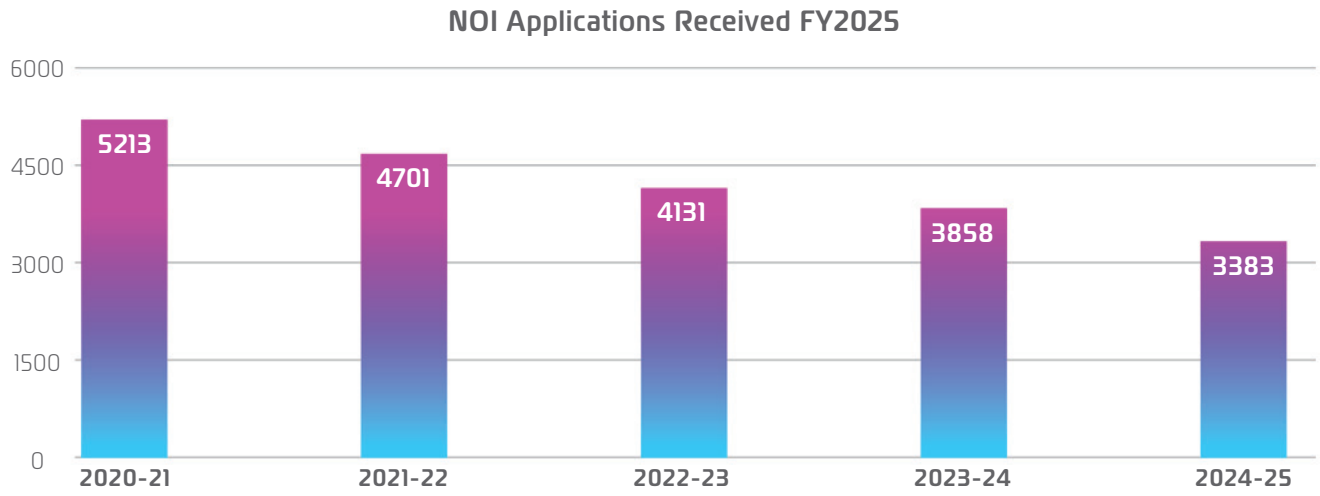
The section's Stockpond Program, which processes, publicly notices, inspects and issues certificates for stockpond water rights to basins that are less than 15 acre-feet in capacity and were constructed between June 12, 1919 and August 27, 1977. Working in conjunction with the U.S. Department of Agriculture Kaibab National Forest and private land owners, the section's program was able to organize, finalize and process 28 legacy applications that had languished for more than 40 years. The section issued 26 Certificates of Stockpond Water Right for the Kaibab National Forest and two Certificates of Stockpond Water Right for private land owners in FY2025.

Notably, the Surface Water Section received the State's first applications for a License for Weather Control or Cloud Modification Project and a License for Weather Control or Cloud Modification Equipment for a project slated to occur during the 2025 monsoon season. Arizona's weather modification statutes were originally enacted in 1951 and administered by the Arizona State Land Department before becoming the responsibility of ADWR in 1980. Staff received only the occasional question about these licenses through the decades until interest picked up in the last several years, leading to the issuance of the first weather modification licenses in June of 2025.

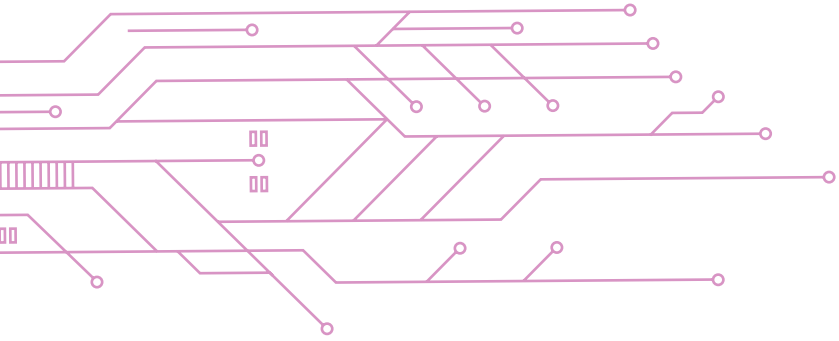
Surface Water was one of four business units in the Department to participate in the first phase of the development of ADWR's Constituent Portal. The new platform modernizes the agency's 18 Delphi applications and Oracle databases (some dating back 28 years), replacing at-risk legacy technology and taking business processes online. It was a multi-year effort, culminating in months of full-time focus for many of the section's small team in spring 2025. Surface water customers are now able to submit their applications and payments online and can access information through their account portal.

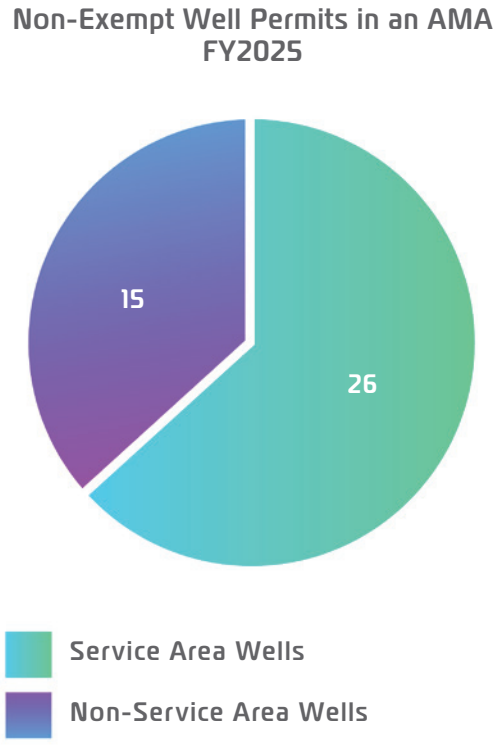
# Groundwater Permitting & Wells

The Groundwater Permitting and Wells Section (Section) has successfully received, reviewed, and issued 3,383 Notices of Intention (NOI) to Drill, Deepen, Modify, Replace, and Abandon Applications for fiscal year FY2024-FY2025. Following the receipt of the NOI application, a decision was made within five business days whether to grant or deny the application. According to the statute, determination must be made within fifteen calendar days. This represents a decrease in the number of applications of NOIs by 12.31% when compared to the last fiscal year. Compared to five years ago, ADWR has observed a steady decline of just over 35% in NOI applications.



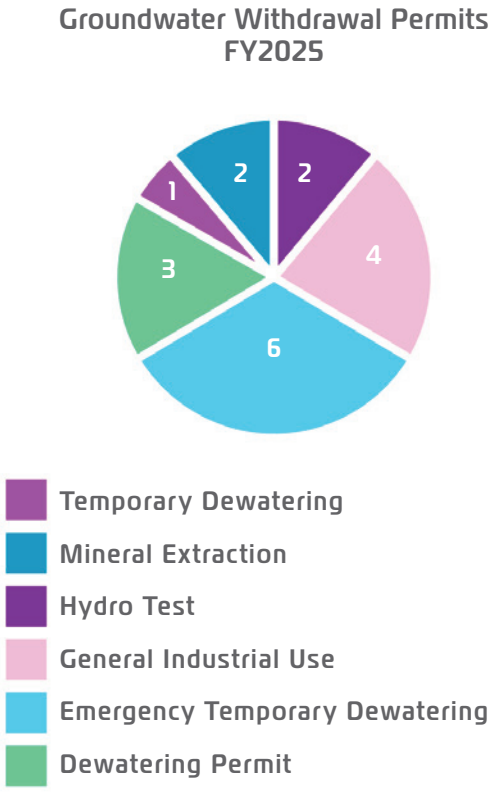

The Section is also responsible for the issuance of Non-Exempt Well Permits. In total, 41 Non-Exempt Service Area & Non-Service Areas wells located in an Active Management Area (AMA) Permits were issued.

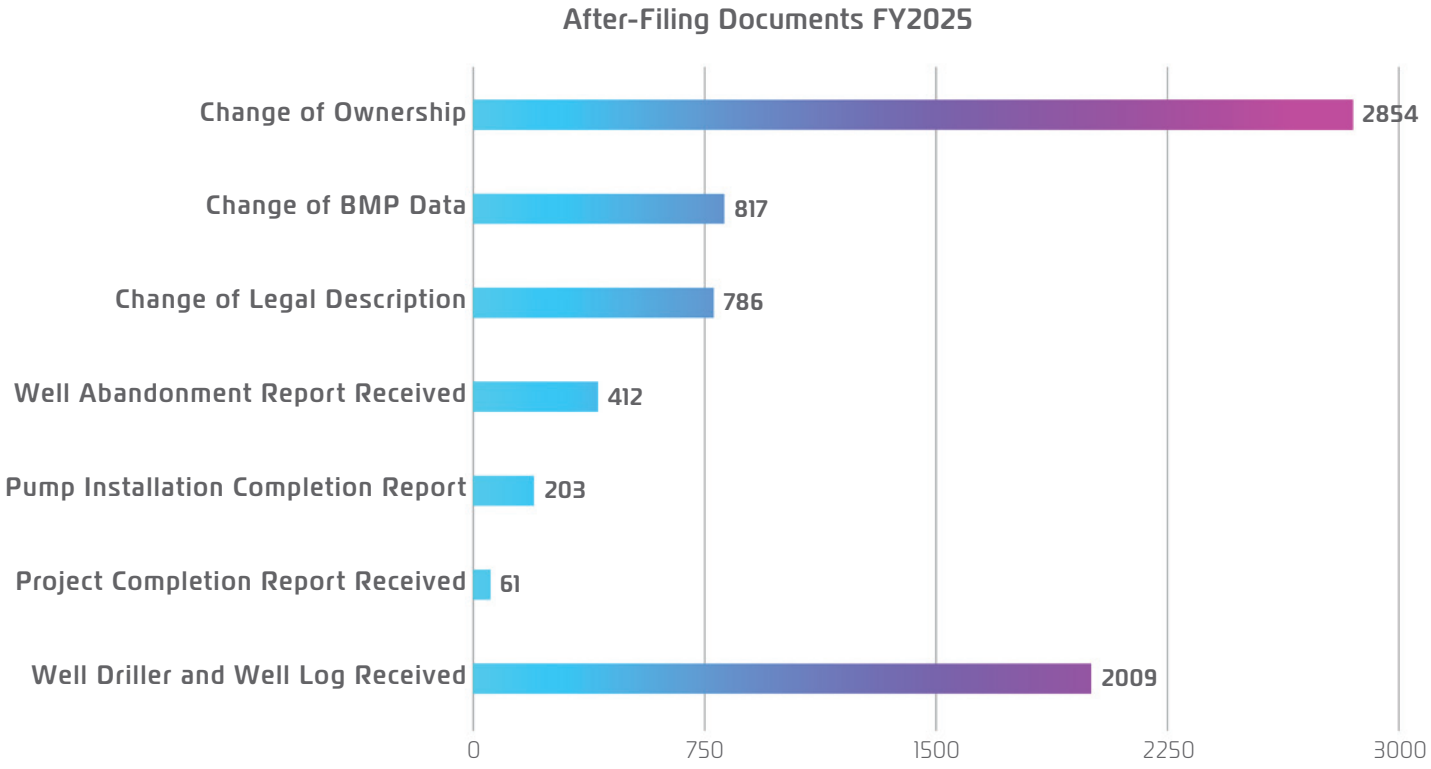




In the current fiscal year, 18 Groundwater Withdrawal Permits were issued, covering a variety of permit types.

The Well Driller or Well Owner must submit certain forms to the Department after the construction, abandonment, or transfer of ownership of a parcel where a well is located. ADWR must receive these forms to ensure it has the most current and accurate information about the well. Staff must input the data into ADWR's Wells55 database. These After-Filing documents must be manually uploaded to the well record for public viewing, even though there is no specific timeframe for completing the forms; staff will process them as time permits. A large number of these forms are received daily, with Change of Well Information forms accounting for the largest number. There were 7,618 after-filing documents processed for FY2025. Below is a graph that provides a breakdown of the highest volume of several After-Filing document types and their corresponding totals.



Upon completing the drilling of a well in Arizona, the authorized licensed driller is required to file a well driller report and log with ADWR, which includes all information related to the well construction, including the well casing. In total, 59 compliance notices for outstanding well driller logs and reports were sent to Arizona-licensed well drillers who had failed to submit a report indicating whether their well construction was complete.

ADWR administers the well driller exam, which is part of the process to become an Arizona-licensed well driller. To become a Licensed Well Driller this fiscal year, 44 individuals took the Arizona Well Drillers Exam.

In accordance with the law, all wells that are not abandoned or destroyed must be registered with ADWR. ADWR received thirty Late Registration Applications for wells that had not been registered with ADWR as required.

Following three years of dedicated work, the Arizona Department of Water Resources implemented its new online application portal, WAVES, on May 12, 2025. As a result, it will facilitate the process within the Groundwater Permitting and Wells Section by making it easier for applicants to apply for Notices of Intention to Drill a Well and Groundwater Withdrawal Permits. The process will be streamlined for the Department, and the Department's decision on whether or not to approve NOI applications will be made more quickly. It will result in significant savings for ADWR in time, both for the application process and in eliminating the need for paper documents. As a result, paper documents will no longer be stored in storage facilities, and storage costs will be reduced. Mailing paper documents to well drillers and customers will be reduced, so the cost of mailing documents will also be reduced. All After-filing documents can be submitted electronically. This will enable well drillers and customers to submit these documents online, thereby reducing staff time spent manually inputting them.

# Assured & Adequate Water Supply

The Assured and Adequate Water Supply Programs define the assured water supply requirements within Arizona's seven Active Management Areas (AMAs) and the adequate water supply requirements outside the AMAs. These requirements are designed to provide consumer protection for buyers of homes in new subdivisions within the state. Arizona's Assured Water Supply Program conserves groundwater resources and promotes long-term water supply planning. Established by the Groundwater Management Code of 1980, the Assured Water Supply Program requires that new developments and designated providers within AMAs demonstrate an assured water supply. In areas outside AMAs, the Adequate Water Supply Program requires developers to demonstrate an adequate supply or disclose an inadequate one to potential buyers before sale. Rules associated with the programs encourage the use of renewable supplies, such as reclaimed water, surface water, or Colorado River water, which are delivered via the Central Arizona Project.

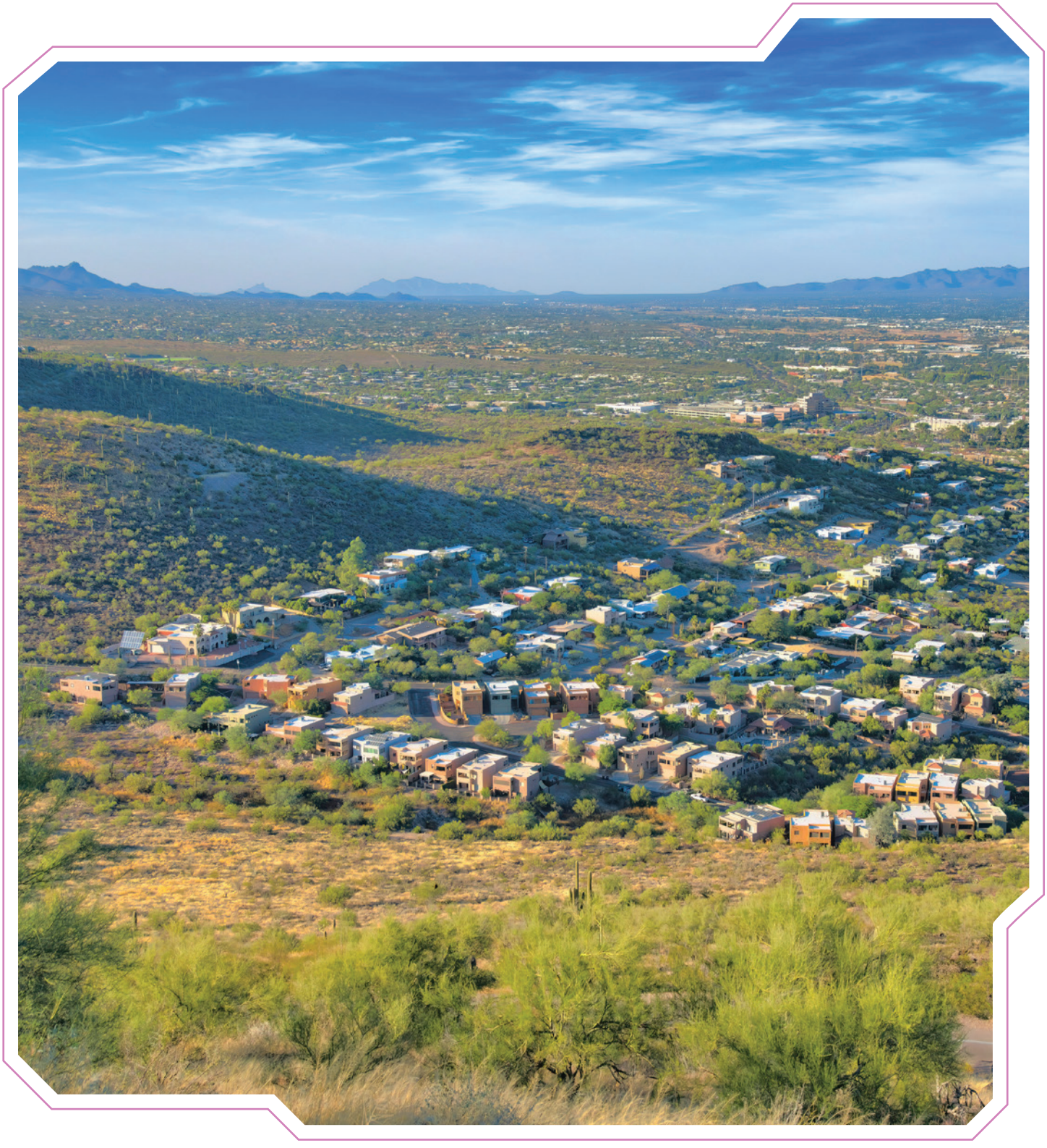
Assured Water Supply requirements mandate that developers of new subdivisions in AMAs demonstrate to ADWR that there is a 100-year assured water supply for their subdivision before obtaining plat approval or selling lots. A developer can comply with this requirement by demonstrating that the water supply for the subdivision meets the criteria in ADWR's rules for a 100-year assured water supply, which results in ADWR issuing a Certificate of Assured Water Supply for the subdivision, or by obtaining a commitment of water service from a water provider that ADWR has designated as having a 100-year assured water supply.

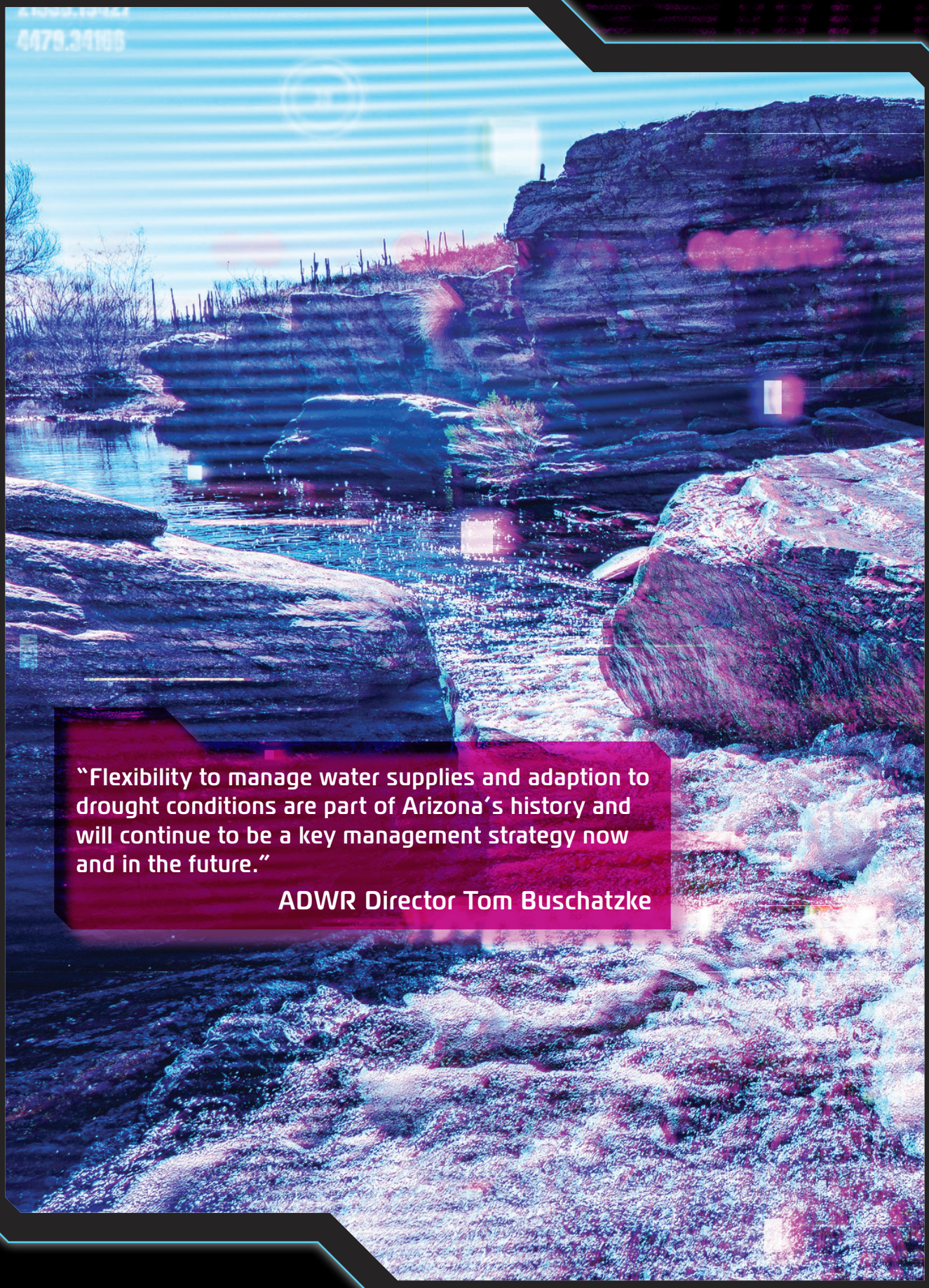
One of the requirements for demonstrating an assured water supply is that any groundwater use by the subdivision or water provider must be consistent with the AMA's management goal. This requirement is designed to conserve and extend groundwater supplies in the AMAs by requiring new subdivisions to use renewable supplies, such as Central Arizona Project water, effluent, or surface water rights. In the Phoenix, Pinal, and Tucson AMAs, a subdivision or water provider can meet this requirement by becoming a member of the Central Arizona Groundwater Replenishment District, which replenishes the groundwater its members use with renewable water supplies. Another effective alternative to meeting replenishment requirements established by the management goal is through the pledge of extinguishment credits.

In FY2025, ADWR adopted new rules creating the Alternative Designation of Assured Water Supply (ADAWS), which offers a pathway for certain water providers to receive a Designation of Assured Water Supply while reducing reliance on groundwater. These rules were a significant policy milestone. As of the end of the fiscal year, ADWR is reviewing three ADAWS applications. If approved, these will represent the first new designations in the Phoenix AMA in over two decades. Given the potential impact on long-term water planning and development in the region, these applications are a high-priority project for the Governor's Office.

The Adequate Water Supply Program requires developers of new subdivisions outside of AMAs to apply for and obtain a water report from ADWR, determining whether there is a 100-year adequate water supply for the subdivision. Developers must disclose the results of the report to prospective buyers or obtain a commitment of water service from a water provider designated by ADWR as having an adequate water supply. In most areas outside of AMAs, the developer is not required to demonstrate a 100-year adequate water supply before obtaining plat approval or selling lots. However, because of legislation enacted by the Arizona Legislature in 2007, cities, towns, and counties outside of AMAs are authorized to enact an ordinance requiring that developers of new subdivisions demonstrate to ADWR that there is a 100-year adequate water supply before obtaining plat approval or selling lots. Some local jurisdictions, including Cochise County, Yuma County, Clarkdale, and Patagonia, require a 100-year water adequacy determination from ADWR before completing the final plat approval process. Unlike the Assured Water Supply Program, the Adequate Water Supply Program does not require using renewable water supplies or replenishing groundwater by new subdivisions.

ADWR issued 172 assured and adequate water supply determinations during FY2025. This is an increase of 48% over FY2024. These included: 4 analyses of adequate water supply, 3 analyses of assured water supply, 7 analysis renewals, 56 assignments, 8 new Certificates of Assured Water Supply (CAWS), 1 new Designation of Assured Water Supply (DAWS), 1 classification, 42 "J" exemptions, 15 "K" exemptions, 1 material plat change review, 12 reissuances, and 21 water reports. The section held 43 pre-application and technical meetings with applicants and responded to 119 public records requests during the fiscal year. As of the end of FY2025, 25 designation and designation modification applications remain under review.




"Flexibility to manage water supplies and adaption to drought conditions are part of Arizona's history and will continue to be a key management strategy now and in the future."
ADWR Director Tom Buschatzke

# Recharge & Recovery Program

The Underground Water Storage, Savings, & Replenishment (Recharge & Recovery) Program promotes the use of renewable water supplies, particularly Arizona's entitlement to Colorado River water while preserving groundwater through a flexible and effective regulatory program for the underground storage, savings, and replenishment of water. The Recharge Program is responsible for:

- Issuing permits for constructing and operating water storage facilities,
- Issuing permits to store water at those facilities,
- Permitting wells to pump (recover) stored water out of the ground,
- Tracking how much water a given permittee has stored and recovered, and
- Maintaining long-term storage accounts.

## Permits and Totals

The Recharge Program issued the following underground storage facility (USF), water storage (WS), groundwater savings facility (GSF), and recovery well (RW) permits in FY2025:

- 4 new underground storage facility permits and six permit modifications were issued.
- The Gila River Indian Community Gila Butte Managed USF, 71-239140.0000, was permitted in the Phoenix AMA to store up to a maximum annual volume of 10,000 acre-feet of CAP water.
- The City of Buckeye Wagner Wash Constructed USF, 71-237451.0000, was permitted in the Phoenix AMA to store up to a maximum annual volume of 3,700 acre-feet of CAP water and effluent.
- The City of Tempe's Well 6 Constructed USF, 71-237448.0000, was permitted in the Phoenix AMA to store up to a maximum annual volume of 967.8 acre-feet of CAP water and surface water.
- The Global Water–Hassayampa Utilities Company Campus 2 Constructed USF, 71-237450.0000, was permitted in the Phoenix AMA to store up to a maximum annual volume of 135 acre-feet of effluent.
- 4 groundwater savings facility permits were modified or renewed.
- Fifteen water storage permits were issued, modified, or renewed.
- 10 new recovery well permits were issued and seven were modified.

## Recovered Water

A recovery well permit allows the permit holder to recover long-term storage credits or recover stored water annually. During times of shortage, recharge and recovery will shift from storing excess water to recovering stored water. Aquifer storage and recovery, in conjunction with other water management techniques, is an effective tool for using existing water resources to meet future water demands. While recovery of stored water gives water providers a flexible and cost-effective alternative to reuse water, it is important to consider the hydrologic connection between the location of storage and the location of recovery. It is more important than ever to ensure that recovery of stored water within active management areas meets the recovery siting criteria in the management plans and helps to achieve the management goal. Optimizing water resource strategies will improve Arizona's resilience to changing conditions and ensure sustainable water supplies for the future.

Total volume of water delivered for storage and recovered during the 2024 calendar year:

- 571,590 acre-feet of renewable water supplies were delivered for storage,
- 170,240 acre-feet of renewable water supplies were recovered annually, and
- 39,550 acre-feet of long-term storage credits were recovered.

## Long-Term Storage Credits

- 173 long-term storage accounts were updated and certified in FY2025.
- These accounts hold long-term storage credit balances ranging from a few credits to over a million credits, with more than 14.6 million acre-feet of credits stored since the inception of the Recharge Program.
- A total of 73 long-term storage credit transfers were processed in FY2025.

# Hydrology

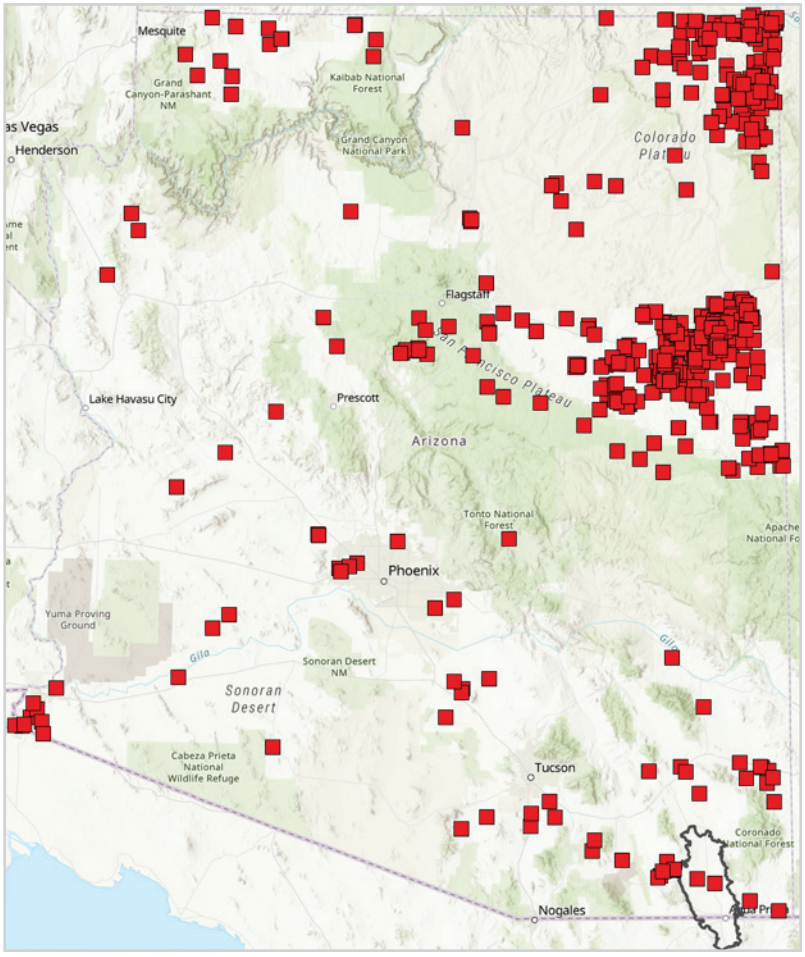
The Hydrology Division collects and analyzes statewide water resources data, maintains a groundwater database, and develops and updates groundwater models. The Hydrology Division consists of two sections: Groundwater Modeling and Field Services.

## Groundwater Modeling

The Groundwater Modeling Section builds and maintains regional-scale numerical groundwater flow models for groundwater basins in Arizona. Our mission is to support water management policies and decisions by providing high-quality scientific tools that can be used by ADWR and the general public.

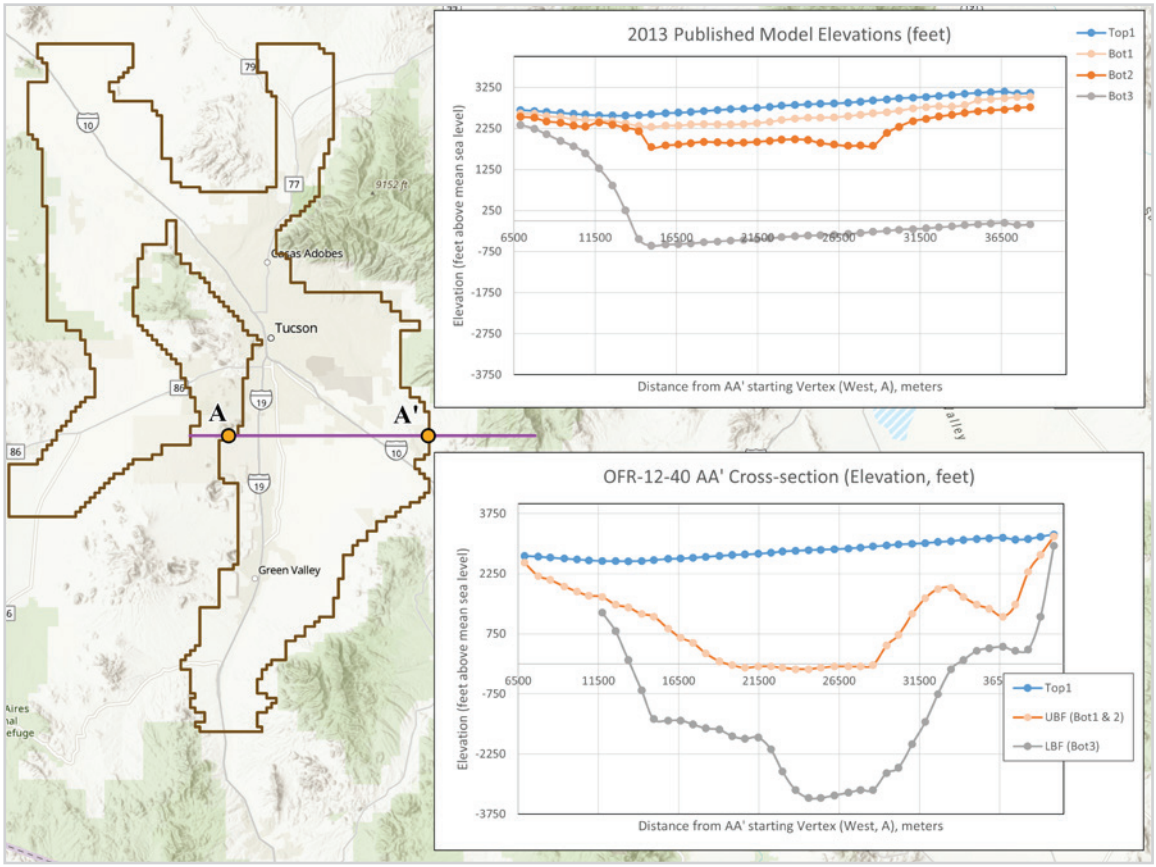
In FY2025, the section has been focused on developing a groundwater flow model for the Douglas AMA, responding to court-ordered deadlines related to the Upper San Pedro groundwater flow model, updating the Tucson AMA groundwater flow model, and streamlining our existing modeling products for consistency and clarity. This includes regular annual updates of the Phoenix AMA groundwater model and 100-year Assured Water Supply Projection, the most recent of which was released in November 2024.

The Douglas AMA was established by local vote in 2022. ADWR is developing a groundwater model for the basin as none exists. The contract with the US Geological Survey to obtain subsurface imaging continued throughout FY2025. A portion of the funding provided to ADWR through the American Rescue Plan Act federal legislation is being used to drill exploratory boreholes in areas of the Douglas AMA where there are data gaps. This field project was staffed and went out to bid in FY2025 and will be completed in the next fiscal year. Lithologic information from the drilling project will be used to better understand the Douglas AMA aquifer system. Although the subsurface work has not yet been completed, the modeling section finished building and calibrating a steady-state, pre-development groundwater flow model for the Douglas AMA. This steady-state simulation will provide the starting point for the larger transient simulation.

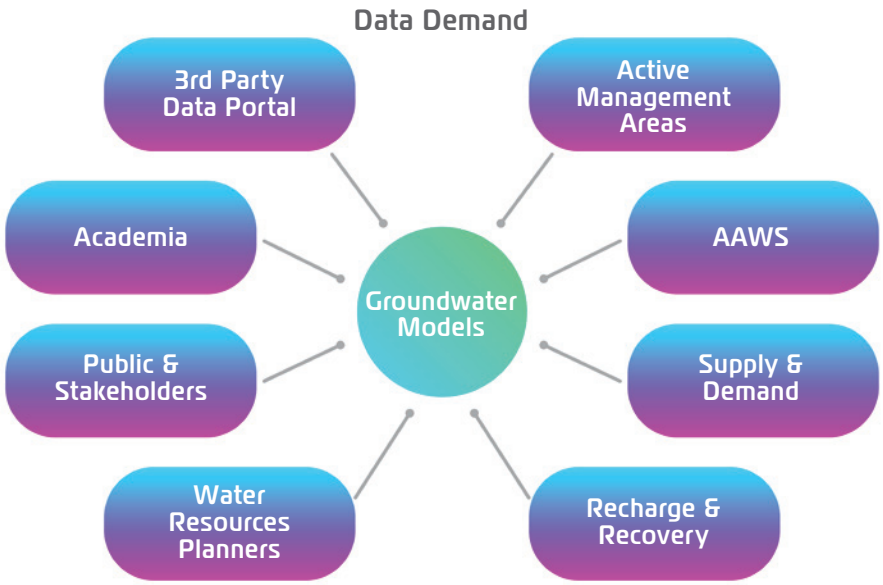



Last year's release of the Upper San Pedro Basin Model prompted extensive review and comment by parties to the adjudication. The modeling section examined all of the comments and, at the request of the Special Master, published a written response and proposed timeline to complete the recommended revisions. In response to ADWR's timeline, the Special Master established a technical working committee to assist ADWR in completion of the revised model. The committee will convene monthly throughout 2025.

The Tucson AMA is one of the original AMAs and has a groundwater model that was last updated in 2013. The modeling section is working to update this model with over ten years of observation data and reported pumping, improved simulation of pumping wells, and new geological information provided by stakeholders. Modeling software has advanced since the Tucson AMA model was last released, and so the calibration process will also take advantage of improved parameter estimation codes and processes.




A standing goal of the modeling section is to continuously improve our products, and towards that goal, we have reviewed the existing ADWR groundwater models for ease of use, clarity, and consistency. One of the challenges the group has faced in the past is lack of structured work flows and loss of institutional knowledge when employees leave the section. To address this deficiency we have developed standard work for the various tasks and subtasks associated with regional groundwater modeling. The "data demand" graphic illustrates the broad scope of data that goes into the modeling work.



# Field Services

The primary duties of the Field Services Section encompass collecting, analyzing, and interpreting hydrologic data. Field Services prepares and publishes numerous reports and maps based on the collected data by the Section. The data collected by Field Services play a vital role in supporting the mission of the Department and are relied upon by all Divisions and Sections within ADWR.

Field Services comprises three units: the Basic Data Unit, the Automated Groundwater Monitoring Unit, and the Geophysics/Surveying Unit.

Basic Data staff collect groundwater level data from wells and conduct well inventories throughout the state. They also collect stream flow and discharge data to support various projects. Collected data is recorded and stored online in the Department's Groundwater Site Inventory (GWSI) database, which is maintained by Field Services staff.

The Automated Groundwater Monitoring Unit installs and maintains automated groundwater monitoring devices in wells to continuously record water levels at specific intervals. Some of these wells are equipped with telemetry systems that transmit real-time data to ADWR via satellite.

The Geophysics and Surveying Unit is responsible for collecting, processing and interpreting data related to land subsidence and aquifer storage, and operating and managing the Arizona Continuously Operating Reference Station (AZCORS) Network. This information is crucial for effectively managing the state's water resources.

## Field Services

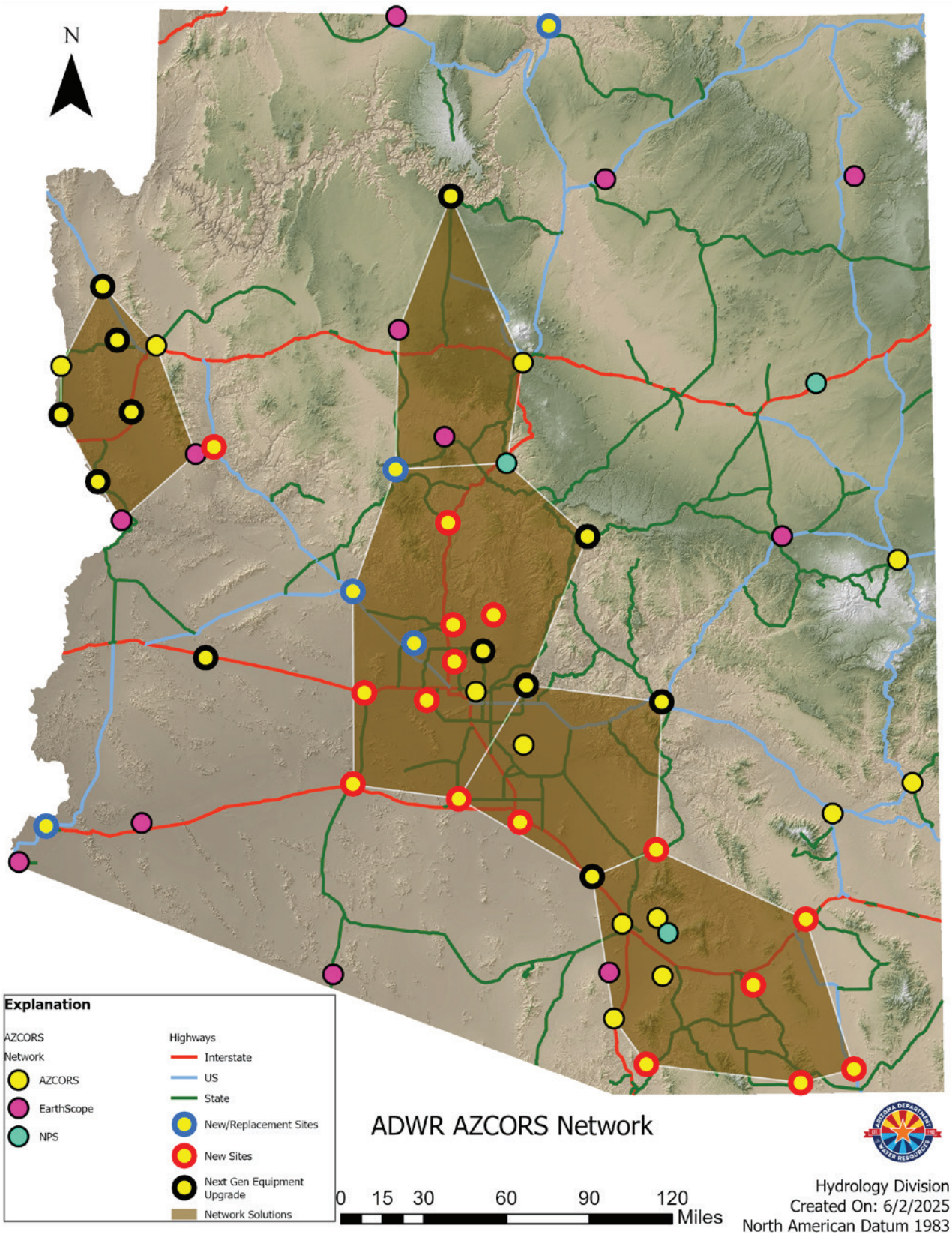
- In cooperation with other ADWR staff, field staff continues to manage the open wells project to identify, report, notify, and cap open (uncapped) wells within the state. Staff identified 24 wells, temporarily capping 12 and permanently capping 12 open wells.
- Published three hydrologic reports available on the Hydrology Publications and Data webpage:
  - WLCMS No. 14: Water Level Conditions in the Willcox Groundwater Basin, Arizona, 1990-2021, 2015-2021
  - WLCMS No. 15: Water Level Conditions in the Phoenix Active Management Area, Arizona, 1998-2023, 2018-2023
  - WLCMS No. 16: Water Level Conditions in the San Simon Valley and San Bernardino Valley Groundwater Subbasins, Arizona, 1987-2021, 2015-2021
- Continued to work toward reducing the number of "unable to measure" (UTM) water levels, discharge streamflow, GPS, gravity measurements, and site visits at index wells as part of standard work and process improvement. Over 720 UTMs were recorded during this fiscal year across all site visits. Field Services created and distributed a UTM follow-up guide to reduce the number of UTMs further in the future.

## Basic Data Unit

- Completed two basin sweeps, Tucson/Santa Cruz AMA (Avra Valley, Upper Santa Cruz, Cienega Creek, San Rafael), as well as Eastern Arizona (San Carlos Valley, Gila Valley, Bonita Creek, Morenci, Duncan Valley) collecting depth to water measurements and adding new wells to the Groundwater Sites Inventory database.
- Collected approximately 2,400 water-level measurements at over 1,500 index wells across the state and over 4,000 water levels in all wells statewide.
- Conducted quarterly streamflow flow measurements in the Verde Rivers headwaters area, Big Chino Sub-basin, and Santa Cruz River, Santa Cruz AMA, supporting Modeling efforts.

## Automated Groundwater Modeling Unit

- Completed standard operations and maintenance site visits at over 138 well sites with automated monitoring equipment three times each this fiscal year. Collected and uploaded into GWSI over 185,000 water levels (hourly to daily) from automated monitoring sites.
- Installed three new telemetry-enabled automated groundwater monitoring sites in the Willcox AMA.



## GEOPHYSICS AND SURVEY UNIT

- Arizona Continuously Operating Reference Station Network (AZCORS):
  - Constructed 20 new braced monument CORS site; 15 new sites and 5 replacement sites
  - Turned on 4 new Network Solution Clusters covering areas of Maricopa, Pinal, Cochise, Gila, Yavapai, and Coconino Counties; providing a more accurate and robust dataset.
  - AZCORS Network now has 60 CORS sites available for end-users (45 sites managed by ADWR, 12 sites managed by EarthScope (Plate Boundary Observatory), and 3 sites managed by National Park Service.
- Completed 103 Global Navigation Satellite System (GNSS) surveys for land subsidence monitoring throughout Arizona in the following groundwater basins:
  - Phoenix AMA, Pinal AMA, Tucson AMA, Douglas AMA, Harquahala INA, Ranegras Plain, McMullen Valley, Lower Gila, Safford, Willcox, & San Simon Valley
- Delivered InSAR/land subsidence data to InSAR cooperators:
  - Flood Control District of Maricopa County, City of Scottsdale, Pinal County Flood Control District, Central Arizona Water Conservation District, Salt River Project, Metropolitan Domestic Water Improvement District, and Arizona Department of Environmental Quality
- Published 58 new land subsidence maps on the ADWR website/Hydrology Publications; 869 maps are available for download.
- Public presentations at professional meetings/conferences:
  - Arizona Geographic Information Council, Arizona Professional Land Surveyors, California Spatial Reference Center, American Society of Photogrammetry and Remote Sensing


# Engineering

The mission of the Engineering Division is to minimize the risk of loss of life and property resulting from flooding or dam failure by providing jurisdictional oversight for dams, and by providing technical and regulatory support for floodplain management programs across Arizona. The Engineering Division consists of two programs – Flood Warning and Floodplain Management, and Dam Safety.

## Dam Safety

The mission of the Dam Safety Program is to maximize the protection of human life and property against dam failure by providing regulatory oversight for 239 jurisdictional dams in Arizona. ADWR does this 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..

### Highlights

#### Focus on High Hazard Potential Dams Classified as "Unsafe" and/or Having Safety Deficiencies:

1. Staff has collaborated with the Owner of Jacques Dam, a High Hazard potential dam located in Navajo County, to begin a Dam Safety Analysis to assess the geotechnical, hydrologic and hydraulic, and structural conditions at the dam, as well as to prepare a Potential Failure Modes and Effects Analysis (PFMEA) and overall Structure Assessment Report for the dam. The dam has been classified as "Unsafe" with the identified safety deficiency of "Inability to safely pass the required Inflow Design Flood (IDF)". The Owner is currently reviewing the Inter Government Agreement (IGA) Contract in conjunction with their engineering consultant's scope of work for the project. ADWR will fund some or all of the assessment with the Dam Repair Fund.

2. ADWR is using monies from the FEMA National Dam Safety Program Grant to assist the City of Holbrook in hiring an engineering consultant to perform hydrologic and hydraulic assessments and develop an Emergency Action Plan for the North Ponding Dam. This is a high hazard potential dam with safety deficiencies.

3. ADWR is also assisting (via the FEMA National Dam Safety Program Grant) the Silver Creek Irrigation District to hire an engineering consultant to develop an Emergency Action Plan for Daggs Dam. The existing EAP is outdated and is not adequate to guide the required planning for responses that are required in case of emergency.

4. ADWR is collaborating with Graham County and the landowner to perform engineering assessment of existing conditions and associated risk at Central Detention Dam. This is a high-hazard potential dam that has been classified as "Unsafe" by ADWR since May 1986. No corrective actions were taken during this time because the landowner and Graham County were unable to come to an understanding on roles and responsibilities related to the dam. ADWR facilitated discussions between both parties, resulting in a Memorandum of Understanding between the landowner and Graham County. Under this agreement, Graham County will hire an engineering consultant to assess existing conditions at the dam, evaluate risk under these existing conditions, and develop alternatives to mitigate risk. Graham County is currently reviewing an IGA under which ADWR will fund this first phase of the project with monies from the Dam Repair Fund.

5. The Arizona Statewide Probable Maximum Precipitation (PMP) Study was completed and published in 2013 and is a tool that is used to determine the Inflow Design Flood for dams in Arizona. Since 2013, the original storm dataset has become outdated and methodologies for determining PMP depths and distributions have been updated. ADWR has initiated a project to update the 2013 Study to include more recent data, methodologies, and tools.

## Dam Safety Inspections:

Dam safety inspections by knowledgeable and experienced individuals have long been recognized as effective steps to identify and manage risks associated with dams. These inspections take on critical importance as these dams continue to remain in service for decades, often well past the intended design life of the structures. These dam safety inspections allow staff to identify safety deficiencies at dams and downstream hazard/risk creep and allow the Department staff to interact directly with the dam owners to provide technical outreach and explain the conditions and potential risks associated with their dams. This public outreach is particularly important with dam owners who may not possess the technical skills and resources to fully understand the responsibilities and risks associated with owning a dam.

Dam Safety developed a Huddle Visual Management Dashboard to assist with weekly in-person huddles. The dashboard allows staff to visualize and discuss upcoming inspections, inspection report status as well as status on application review timeframes, upcoming training, standard work expiration, and the Records Inventory Project. The dashboard allows staff to collaborate effectively and identify any potential missed targets. Dam Safety staff completed inspections of all high and significant hazard dams in accordance with the required regulatory inspection frequency.

## Dam Safety Applications & Construction Oversight:

### Applications

Staff continues to work with dam owners seeking to perform feasibility studies, construct new dams, repair/modify existing jurisdictional dams, or remove dams from our jurisdiction. Our activities included regulatory oversight during construction, review and approval of applications to construct, modify, or remove jurisdictional dams, and pre-applications reviews. Pre-application reviews allow ADWR staff and the dam owners and their engineering consultants to interact early in the design phase so that both parties develop a good understanding of the project requirements and constraints.

Dam Safety staff reviewed and approved 3 dam safety applications during this reporting period. All applications were reviewed and approved within licensing timeframes. In addition, staff was involved in pre-application reviews for McMicken Dam, Powerline Flood Retarding Structure (FRS), Vineyard FRS, Golden Eagle Park Dam, and Cholla Bottom Ash Dam.

1. Dam Safety staff reviewed and approved the Application for Removal from Jurisdiction for ASARCO 82 Dam, a Significant Hazard potential dam located in Gila County, in March of 2025. The Administrative Review was completed with 37 of the available 120 days remaining, and the Substantive Review was completed with 15 days of the available 60 days remaining. Construction is tentatively scheduled to begin in July 2025.
2. Dam Safety staff received an Application of Repair for Continental Dam No. 2 in April 2025. The review included a Design Report, a Construction Quality Assurance Plan, Technical Specifications, and engineering drawings for the proposed repairs to the high hazard dam. The application is currently in the Administrative Review and is on target to be completed within the required Licensing Timeframes.
3. Dam Safety staff received an application to re-line a water reservoir owned by the City of Phoenix. The application is currently in Administrative Review and is on target to be completed within the required Licensing Timeframes.
4. Dam Safety staff also participated in pre-application meetings and site visits requested by the Owner (Freeport McMoRan) for two planned dams - Producer and Columbine No. 2 Dam in Morenci. Applications are expected to be submitted in 2025.

## Staff provided regulatory oversight for construction at the following jurisdictional dams:

1. Thunderbird Reservoir Dam located in Maricopa County. The liner within the tank deteriorated earlier than anticipated and the owner (City of Glendale) decided to replace the liner. This work required the submission of an application package for our review and approval prior to the beginning of construction. Construction began in April 2024 and was completed by August 2024.

2. Construction of the McMicken Dam Rehabilitation Project, Phase 1, started in September 2021 and was substantially completed in October 2024. The project consists of a new 1900-ft-long emergency spillway and new principal outlet structure. Since the start of construction, the Department has received 300 construction submittals, request-for-information, request-for-variation with an average review and response time of 1.2 days, 1.2 days, and 2.1 days, respectively, easily beating the specification requirements of 5-day review timeframes. This is important to help the dam owner and construction contractor avoid costly delays in construction.

3. Dam Safety staff continued to provide regulatory oversight and review construction closeout documentation for the Guadalupe FRS Intake Structure demolition and modification project. Demolition and modification efforts were largely completed in FY2024, and the Owner worked with their engineering consultant to prepare closeout documents for the demolition and design efforts for the intake structure modification.

4. Dam Safety staff reviewed construction closeout documentation for the Buckeye No. 1 Dam Rehabilitation Project Phase 2B. Once the closeout documentation is approved, this high-hazard dam will no longer be classified as unsafe.

5. Dam Safety staff continued to provide construction oversight and review of construction documents for the rehabilitation of a high hazard dam for City of Phoenix. Construction is in the process to be completed for the installation of a new liner for a water reservoir owned by the City of Phoenix. The new liner replaces the previous liner which was installed about 20 years ago.

6. Dam Safety staff continues to provide regulatory oversight, foundation inspection, review submittals and RFIs and attend construction-related meetings and activities for the ongoing construction of the Smucker Park Detention Basin project in Yuma.

## Staff Training:

Technical training is vitally important so that staff keeps abreast with technical and regulatory developments in the field of dam engineering. In addition, State Employee Engagement Surveys have consistently ranked training opportunities as a priority with Arizona State employees. The Dam Safety Section continues to focus on increasing opportunities for staff training. These training opportunities included both technical sessions related to dam safety, as well as internal training related to our work and AMS. Grants from FEMA funded most of the external training for Dam Safety staff.

1. Dam Safety staff participated in tabletop exercises to exercise Emergency Action Plans for different high hazard dams. The dams included: Lynx Lake in Yavapai County, Pena Blanca Dam in Santa Cruz County, Parker Canyon Dam in Cochise County, Cluff Ranch Dam and Roper Lake Dam in Graham County, and Fool Hollow Lake and Black Canyon Lake Dam located in Navajo County. The table-top exercises included different potential emergency scenarios with the dams and coordination efforts with the various agencies and personnel.

2. Staff attended multiple ASDSO-hosted online webinars through the ASDSO Dam Safety Learning Center, which included:
   - Hydraulic Tour of Standard NRCS Inlet Risers, Tools for Designing and Assessing Spillways,
   - Easy and Quick Determination of the PMF from the PMP Using Free Tools,
   - The History of Seepage Technology Development,
   - Introduction to Computational Fluid Dynamics (CFD) modeling for Dam and Levee Safety,
   - The South Fork Dam Breach and Johnstown Flood of 1889.

3. Staff attended multiple in-person technical seminars and conferences including:
   - Dam Construction Inspection seminar in Greenwood Village, CO, in October 2024.
   - The Annual ASDSO Conference in Denver, in September 2024.
   - Concrete Dam Design and Analysis seminar in Phoenix in May 2025.
   - ASDSO West Regional Conference in Glendale.

# Flood Warning & Floodplain Management

Floodplain Management and Flood Warning programs reduce risk to life and property by assisting local flood control and floodplain management efforts. The Flood Warning program coordinates with local communities, and state and federal agencies for the planning, design, construction, and operation of flood warning systems. In addition, it operates and maintains field equipment and hosts the statewide flood warning website (afws.org). The Floodplain Management program coordinates the National Flood Insurance Program (NFIP) in Arizona, assists local communities participating in the NFIP through the implementation of the federally funded Community Assistance and cooperating Technical Partners programs, and publishes state criteria for floodplain delineations at the local level.

## Highlights

1. Staff led Community Assistance Visits (CAVs) and Community Assistance Contacts (CACs) with 22 NFIP communities in the State. These community contacts allow ADWR staff to interact with floodplain management staff from the local communities, provide communities with the latest information on the NFIP, audit the communities' floodplain management programs, and provide the communities with information on available funding and training opportunities at the state and federal levels.

2. In other community outreach activities, ADWR staff provided General Technical Assistance related to floodplain management to 71 of the 106 NFIP communities in the State. Assistance was also given to concerned communities about flood-after-fire events during the monsoon season.

3. Staff participated in Department of Homeland Security's Federal Emergency Management Agency (FEMA) Consultation Coordination Officer meeting (CCO), which provided Cochise County and Navajo County with Preliminary copies of the revised Flood Insurance Rate Maps (FIRM) and Flood Insurance Study (FIS) reports.

4. Staff participated in the AFMA Roadshow with emphasis training on Floodplain 101 and grants. Approximately 40 floodplain management staff attended from around the State.

5. Staff performed routine maintenance of ADWR-owned flood warning equipment located in Apache and Graham counties.

6. Staff hired consultant JE Fuller to perform scheduled maintenance of ADWR's base station server and to update the Arizona Flood Warning System website.

7. ADWR received two grants from the Federal Emergency Management Agency: Community Assistance Program – State Support Services Element (CAP-SSSE) grant and a Cooperating Technical Partners (CTP) grant. Together, these grants support over 2.5 FTEs in the Floodplain Management program. Both grants have primary objectives to assist local communities in Arizona with their floodplain mapping and management programs, and for ADWR to serve as a liaison between these local communities and FEMA.

8. Staff conducted three training workshops on key elements of the NFIP. The audience typically includes local floodplain administrators, community building officials, consultants, and registered land surveyors. These sessions were virtual, to allow floodplain management professionals from remote communities to take advantage of this training without incurring travel expenses.

9. ADWR is a participating agency in the U.S. Army Corps of Engineers (USACE) Silver Jackets program. Through Sliver Jackets, ADWR staff proposed a Flood Risk Report for Arizona City which would identify potential flood hazards and ways to mitigate them.

10. Staff applied for a Hazard Mitigation Grant Program (HMGP) to modernize the flood warning technology in ADWR owned equipment from the legacy ALERT system to ALERT 2.

# Tribal Engagement

As part of ADWR's continued commitment to protect and preserve Arizona's water resources, the Department consults and engages with the state's 22 Indigenous Tribes and Nations in pursuit of our mutually beneficial goals. In FY2025, ADWR saw the completion of tribal water settlements with four tribes, successfully submitting these agreements to Congress for approval.

As we work with the first peoples of Arizona in our ongoing efforts to secure and protect Arizona's water supplies, we recognize tribal sovereignty, and that water knows no boundaries. Our collaborative partnerships with Tribes as sovereign water users in Arizona are crucial to our agency goals.

# Tribal Water Settlement Negotiations

ADWR represents the State of Arizona in negotiations for the settlement of tribal water rights claims. Eleven of Arizona's 22 federally recognized Indian tribes have outstanding water rights claims. Resolution of these claims through settlement rather than litigation is a priority for the State of Arizona. Settlement avoids the significant costs associated with litigation, benefits both tribal and non-tribal water users, and provides greater certainty to all Arizonans regarding available water supplies.

During FY2025, the following tribal settlement activities occurred:

## Hualapai Tribe

The Bill Williams River Water Rights Settlement Act of 2014 approved a settlement of the Hualapai Tribe's water rights claims in the Bill Williams River Watershed between the Tribe, the United States and Freeport Minerals Corporation ("Freeport"). The settlement did not settle the Tribe's other water rights claims in the state, including its claims to groundwater and Colorado River water for its main reservation.

The Hualapai Tribe, the State of Arizona, the Central Arizona Project, the Salt River Project and Freeport agreed to the terms of a comprehensive settlement of the Tribe's water rights claims in 2016. Federal legislation approving the settlement was introduced in Congress in 2016, 2017 and 2019, but the legislation was not enacted into law, due in part to concerns raised by the Department of the Interior (DOI) regarding several provisions in the settlement. The parties resolved the concerns raised by DOI by making several changes to the settlement. Legislation approving the revised settlement was introduced on April 28, 2022. A hearing on S. 4104 was held before the Committee on Indian Affairs on July 20, 2022. Director Buschatzke submitted written testimony to the Committee in support of the settlement. On January 5, 2023, President Biden signed the Hualapai Tribe Water Rights Settlement Act of 2022 (S. 4104) into

law. The Act approves and ratifies the settlement agreement negotiated by the parties and settles the Tribe's water rights claims in Arizona, including the right to divert, use, and store 4,000 acre-feet of agricultural priority water of the Central Arizona Project. It establishes a trust fund of $312 million that the Tribe can use to develop water infrastructure reservation in a project designed to divert, treat, and convey up to 3,414 acre-feet of water per year from the Colorado River for municipal, commercial, and industrial uses on the Hualapai Reservation. The parties have now finished the process of conforming the settlement agreement to the legislation as enacted. A signing ceremony will be scheduled during FY2025.

Photo courtesy of the Navajo Nation - Office of the President

## Navajo Nation, Hopi Tribe, and San Juan Southern Paiute Tribe

In October of 2023, discussions between the Navajo Nation, the Hopi Tribe, ADWR, the United States, the Arizona Game and Fish Commission, the Arizona State Land Department, the Arizona Department of Transportation, several Northern Arizona municipalities, the Central Arizona Water Conservation District, the Salt River Project and several other private party water users began, in order to negotiate an agreement to settle all of the water rights claims in Arizona for the Navajo Nation and the Hopi Tribe. In March 2024, the San Juan Southern Paiute Tribe joined the negotiations.

The Parties have reached agreement for a settlement of all water rights claims in Arizona for the Navajo Nation, Hopi Tribe, and San Juan Southern Paiute Tribe. The Northeastern Arizona Indian Water Rights Settlement Agreement (NAIWRS Agreement) became effective on November 19, 2024, when Governor Hobbs executed the agreement. In addition to settling the three Tribes' water rights in Arizona, the NAIWRS Agreement also creates the San Juan Southern Paiute Tribe Reservation, located in Arizona and Utah. The terms of the settlement are included in the NAIWRS Agreement and proposed federal legislation named the Northeastern Arizona Indian Water Rights Settlement Act of 2024 (NAIWRS Act) introduced in both the U.S. Senate and U.S. House of Representatives in 2024. A congressional hearing in a subcommittee of the House of Representative was held on July 23, 2024.

Because the NAIWRS Act was not passed in 2024, it was reintroduced on March 11, 2025 in both the Senate and the House. No congressional hearings have been scheduled this year. The parties are hopeful that congressional hearings on the NAIWRS Act will be held this summer. ADWR continues to discuss outstanding issues raised by Upper Colorado River Basin States related to the NAIWRS Act. If the Act is passed, the parties will need to amend the

NAIWRS Agreement to conform to the NAIWRS Act. Since October of 2023, ADWR staff has spent well over 4,392 working hours on this settlement.

## Tohono O'odham Nation

Federal legislation enacted in 1982, 1986 and 2004 settled the Tohono O'odham Nation's water rights claims for some, but not all, of the Nation's lands. Discussions to settle the Nation's remaining water rights claims have been ongoing for a number of years, and have included representatives of the Nation, ADWR, the U.S. and several non-tribal State water users. ADWR anticipates that settlement discussions will continue during the next fiscal year.

## Tonto Apache Tribe

Discussions to settle the Tonto Apache Tribe's water rights claims have been ongoing for several years and have included representatives of the Tonto Apache Tribe, ADWR, the U.S. and several non-tribal State water users. Several meetings between representatives of the Tonto Apache Tribe, ADWR, the U.S. and several non-tribal State water users were held during FY2023 and 2024 to discuss settlement of the Tribe's water rights claims. ADWR anticipates that these settlement discussions will continue during the next fiscal year. The settlement discussions will be confidential.

## Yavapai-Apache Nation

Discussions to settle the Yavapai-Apache Nation's water rights claims have been ongoing for several years, and have included representatives of the Nation, ADWR, the U.S. and non-tribal State water users. In FY2024, the parties reached a settlement that was introduced through federal legislation in the House of Representatives and Senate. After reaching settlement in June, ADWR supported the legislation by providing written statements in support of the settlements to Congress before hearings and traveling to Washington D.C. alongside other settling parties to advocate for its passage. ADWR also continued meeting with settling parties, and on November 20, 2024, Governor Hobbs signed the Yavapai-Apache Nation Water Rights Settlement Agreement (YANWRSA). YANWRSA was not voted on prior to the culmination of the 118th Congress. Since then, the parties have continued meeting and are working towards reintroduction of the federal legislation in the 119th Congress. ADWR anticipates advocating for its passage in FY2026 through written statements, in-person congressional testimony if requested, and travel to Washington D.C. to meet with House representatives and Senators. In addition to the work done on YANWRSA, ADWR held a pre-application meeting with the Yavapai-Apache Nation related to its state-based instream flow claim that it is a key piece of YANWRSA, and anticipates continuing to meet regarding this application throughout FY2026.

## Pascua Yaqui Tribe

Discussions to settle the Pascua Yaqui Tribe's water rights claims have been ongoing since August 2024 and have included representatives of the Pascua Yaqui Tribe, ADWR, the U.S. and several non-tribal State water users. ADWR anticipates that these settlement discussions will continue during the next fiscal year.


"Challenges bring opportunity."
ADWR Director Tom Buschatzke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