



FY24

WATER QUALITY ASSURANCE REVOLVING FUND (WQARF)

ANNUAL REPORT



Clean Air, Safe Water,
Healthy Land for Everyone



FOREWORD

The WQARF program identifies, assesses and mitigates contamination of groundwater and overlying soil at sites throughout Arizona. This program is essential to protect and remediate Arizona's aquifers, which all are designated by state law as sources of drinking water. Many Arizona communities and families rely solely on groundwater as their drinking water source and look to Arizona Department of Environmental Quality (ADEQ) to safeguard it.

ADEQ carefully evaluates and lists new sites that require investigation and cleanup, working with affected communities to inform and engage them as WQARF sites are addressed throughout the cleanup and delisting process. WQARF funding also allows ADEQ to respond to emergencies that involve hazardous materials and evaluate the impacts of wildfires.

The dedicated team of experts at ADEQ who are responsible for implementing this program are making steady progress toward addressing sites listed on the WQARF Registry, working with partners in the private sector as well as fellow public agencies. The work is technically complex and requires long-term financial resources, but our team is committed to delivering results effectively and efficiently. To illustrate ADEQ's pursuit of technical excellence and commitment to public health and environmental benefits, highlights of our team's recent work at selected sites are included in this FY24 Annual Report. There is much more work to be done with new sites and additional regulated contaminants emerging.

I am grateful to all of our stakeholders for their steadfast support of this critical program. ADEQ redoubles its commitment to them and to all of the residents of our state. Our investment in WQARF helps to ensure Arizona's long-term water security and sustainability, and to fulfill ADEQ's mission to protect and enhance public health and the environment.

Karen Peters
Deputy Director



Our Mission and Vision

To protect and enhance public health and the environment in Arizona.

Through consistent, science-based environmental regulation; and clear, equitable engagement and communication;

With integrity, respect, and the highest standards of effectiveness and efficiency;

Because Arizonans treasure the unique environment of our state and its essential role in sustaining well-being and economic vitality, today and for future generations.

**Clean Air, Safe Water,
Healthy Land for Everyone**

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EXECUTIVE SUMMARY

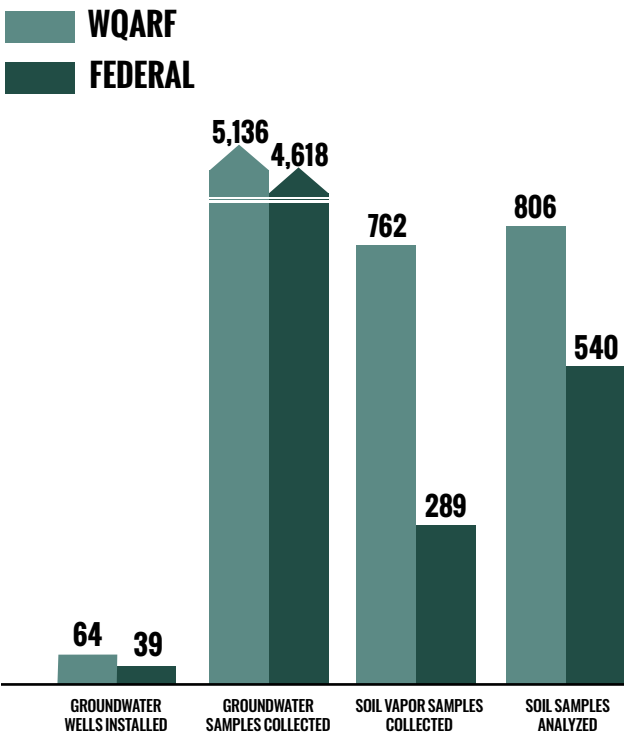
This report has been prepared for the WQARF as required by Arizona House Bill 2570 (Laws 2023, Section 31) and meets the requirements for both the September 1, 2024, and October 1, 2024, reporting deadlines.

Created under the Environmental Quality Act of 1986, the WQARF program, administered by ADEQ, is responsible for identifying, prioritizing, assessing and mitigating the public health and environmental threat of contaminants in groundwater and overlying soil at sites in the state. In 1997, the WQARF Program underwent significant legislative reform that included a change from joint and several to proportionate liability for the costs of site investigation and cleanup; mandated annual funding of \$18 million to pay for the orphan share created from the new proportionate liability; enhanced community involvement; more flexibility of cleanup methods and goals; and guidance for site prioritization.

38 of the state's worst contaminated sites are being cleaned up through WQARF

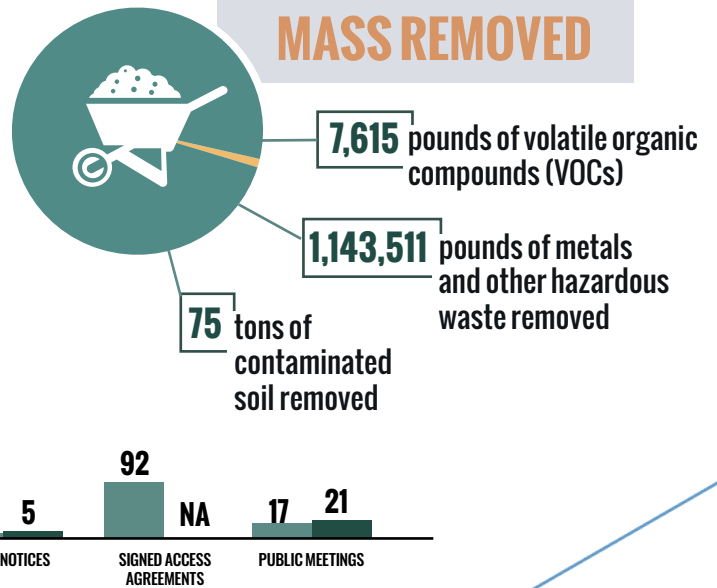
19 additional sites are being monitored or evaluated for WQARF listing

FY24 SUPPORTING ACTIVITIES FOR STATE AND FEDERAL SITES



FY24 MISSION OUTCOMES (OVERALL TOTALS)

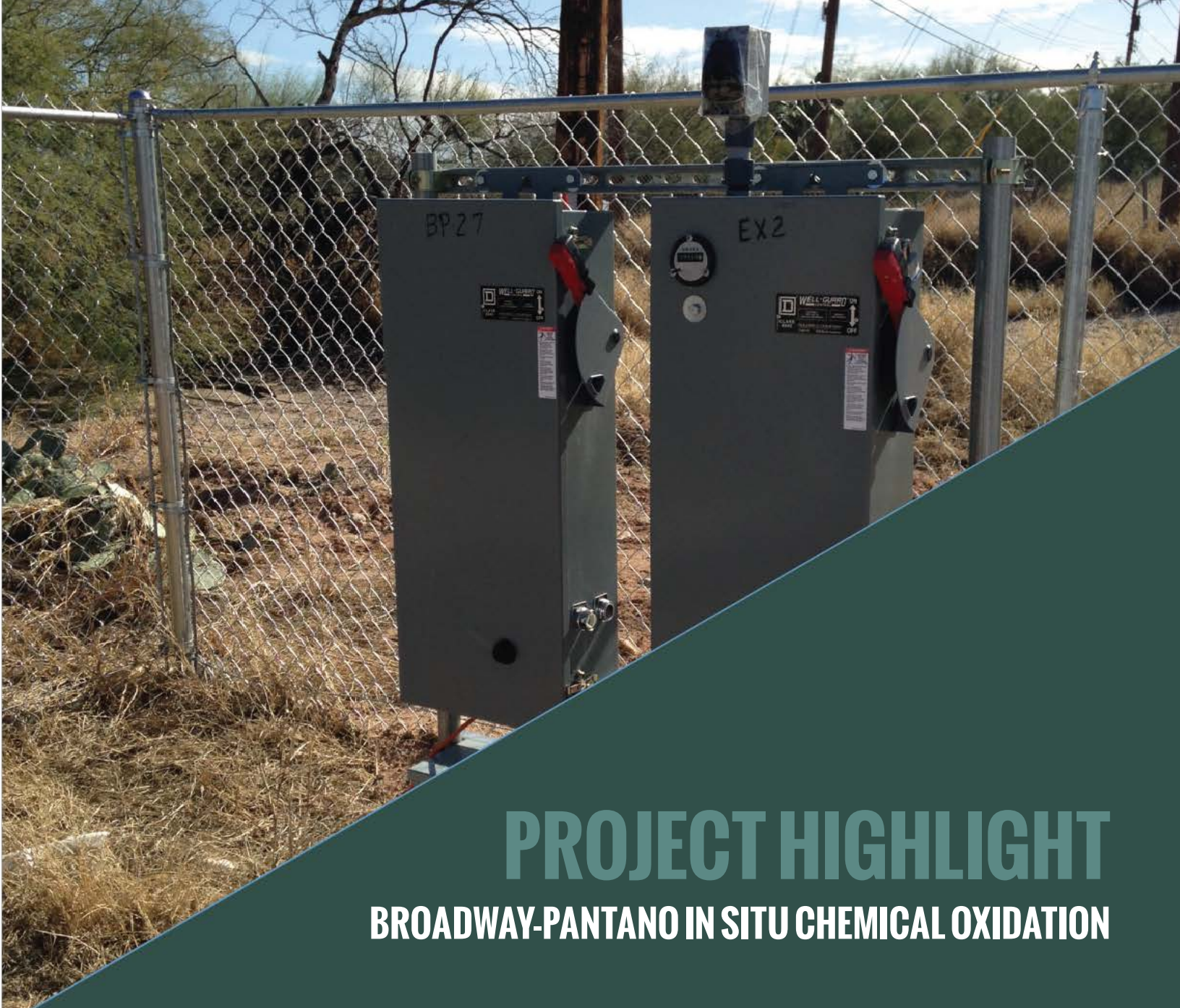
10 BILLION GALLONS of contaminated groundwater treated



FY24 MILESTONES

- Proposed Remedial Action Plan
- Early Response Actions

- Record of Decision



PROJECT HIGHLIGHT

BROADWAY-PANTANO IN SITU CHEMICAL OXIDATION

The Broadway-Pantano WQARF Site includes a groundwater plume impacted with tetrachloroethylene (PCE) at concentrations that exceed safe drinking water standards. The source of the contamination is two former landfills.

In 2018, an in situ chemical oxidation (ISCO) pump and treat groundwater system was installed as an early response action in an area with PCE concentrations exceeding 120 parts per billion (ppb). The objectives of the remediation system were to reduce PCE concentrations and to prevent elevated PCE concentrations from migrating off the source property.

The system included four down-gradient extraction wells, four up-gradient injection wells, and an ISCO chemical system. Groundwater was extracted from the extraction wells, circulated through the ISCO chemical system where hydrogen peroxide was added to the extracted groundwater, and then pumped into the injection wells.

During system operation, groundwater samples were periodically collected to monitor system performance.

The system operated between January 2019 and June 2023. During that time, approximately 388,500 pounds of hydrogen peroxide were injected into the groundwater and recirculated through the treatment area. By June 2023, the maximum PCE concentrations were reduced from 120 ppb to 17 ppb. Successful implementation of this technology provided hot spot area remediation effectively mitigating contaminant impact to groundwater without the need for additional system infrastructure. No further active hot spot area treatment is required at this time and the system is scheduled to be decommissioned.

Implementation of the ISCO remediation system in place of a more traditional technology reduced the clean-up time of the site by several years.

REMOVED

ACTIVE

WQARF PROGRAM TIMELINE



FY98

FY03

FY08

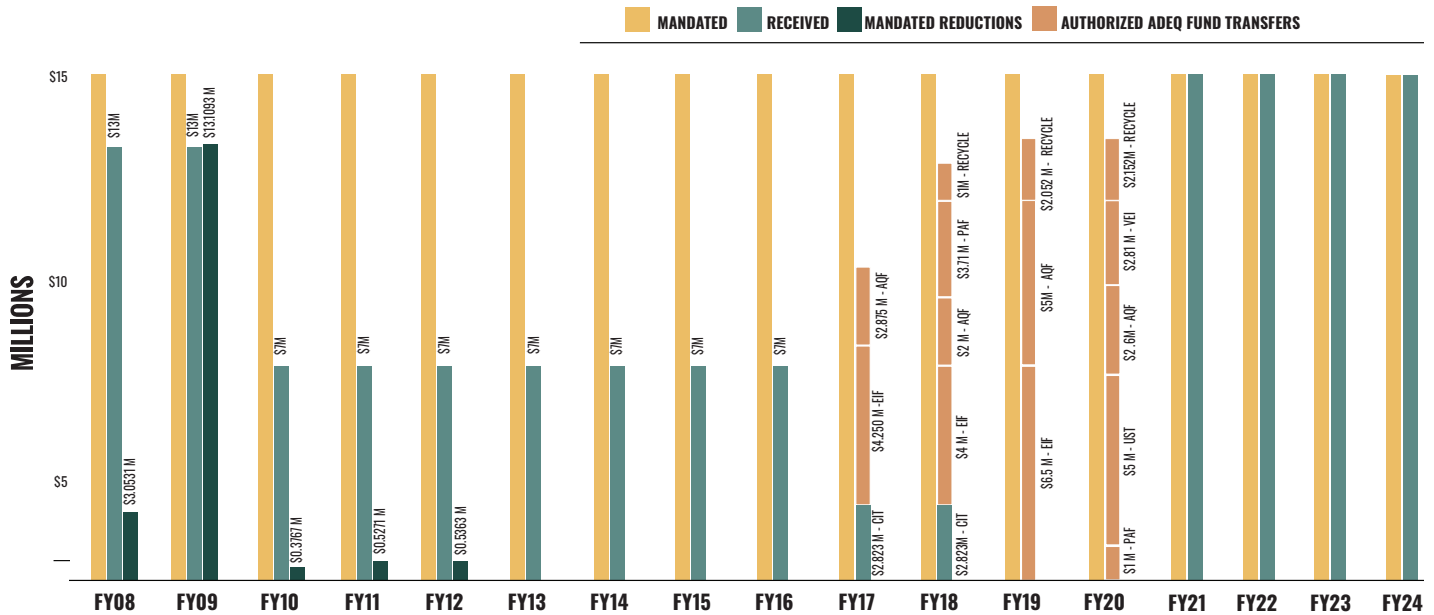
FY13

FY24

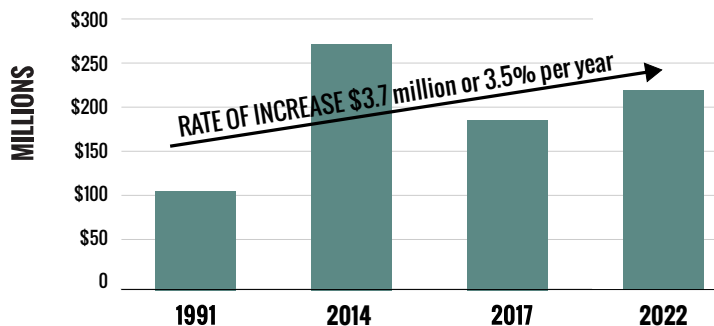
WQARF FUNDING

Arizona Revised Statutes (A.R.S) §49-282(B) specifies a cap of \$18 million annually with \$15 million of that coming from Corporate Income Tax (CIT) revenue. Since FY21, ADEQ has received the \$15 million that was statutorily mandated from the state's general fund.

CORPORATE INCOME TAX REVENUE COMPARISON FY08 - FY24



ESTIMATED STATE LIABILITY FOR ORPHAN SHARE



An "orphan share" is the percentage of total assessment and cleanup costs for a WQARF site that cannot be attributed to any viable responsible party. As a result of the 1997 legislative reforms, the State is responsible for paying the orphan share using WQARF funds. WQARF's orphan share liability estimate was modeled using Remedial Action Cost Engineering Requirements (RACER®) software, supported by AECOM Asset Management Division, an ADEQ contractor.

WQARF's orphan share increased from 35 percent of the total liability in 1991 to 62.5 percent in 2014. In 2024, it was estimated at 65 percent. This means the State remains liable for over two-thirds of the costs of cleanup currently needed due to a lack of a viable third party in place to address the contamination. Current estimates indicate State liability at \$214 million.

FUNDS ARE USED FOR:

- **WQARF Registry** | Conducting remedial actions at sites currently in the WQARF program
- **3rd Party Work** | Oversight of privately funded cleanup efforts at WQARF Registry sites
- **Cross-Program Remedial Action** | Cleanup of selected sites and/or water quality data gathering for projects led by other programs within ADEQ
- **Emergency Response** | Immediate action to address confirmed contamination or threat of contamination that could impact public health and/or the environment
- **Agency Partners** | Work conducted by other State agencies
- **Federal Oversight** | Review and oversight of work done by the Environmental Protection Agency (EPA) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 104
- **Voluntary Remediation Program** | Oversight of voluntary cleanup funded by property owners and other interested parties

FY24 WQARF SITE MISSION OUTCOMES

REMEDIATION:

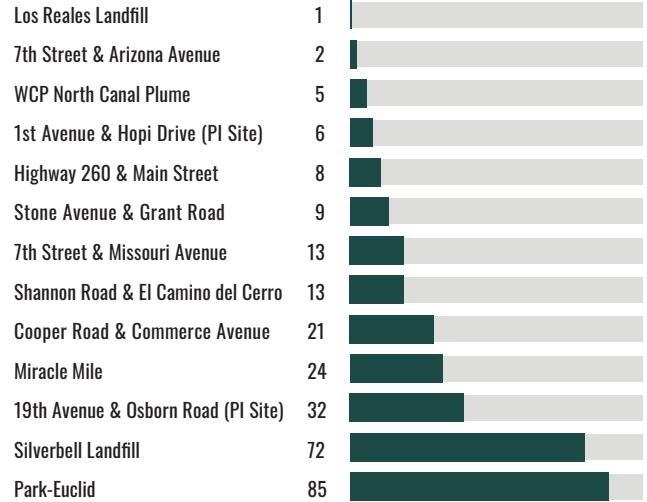
39 Remediation Systems Operated

37 | Existing Systems Operated
(Installed prior to FY24)

2 | Systems Installed in FY24

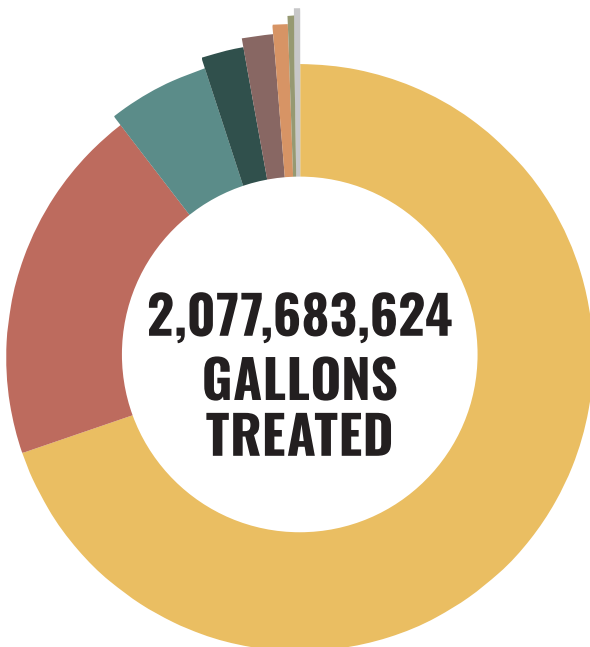


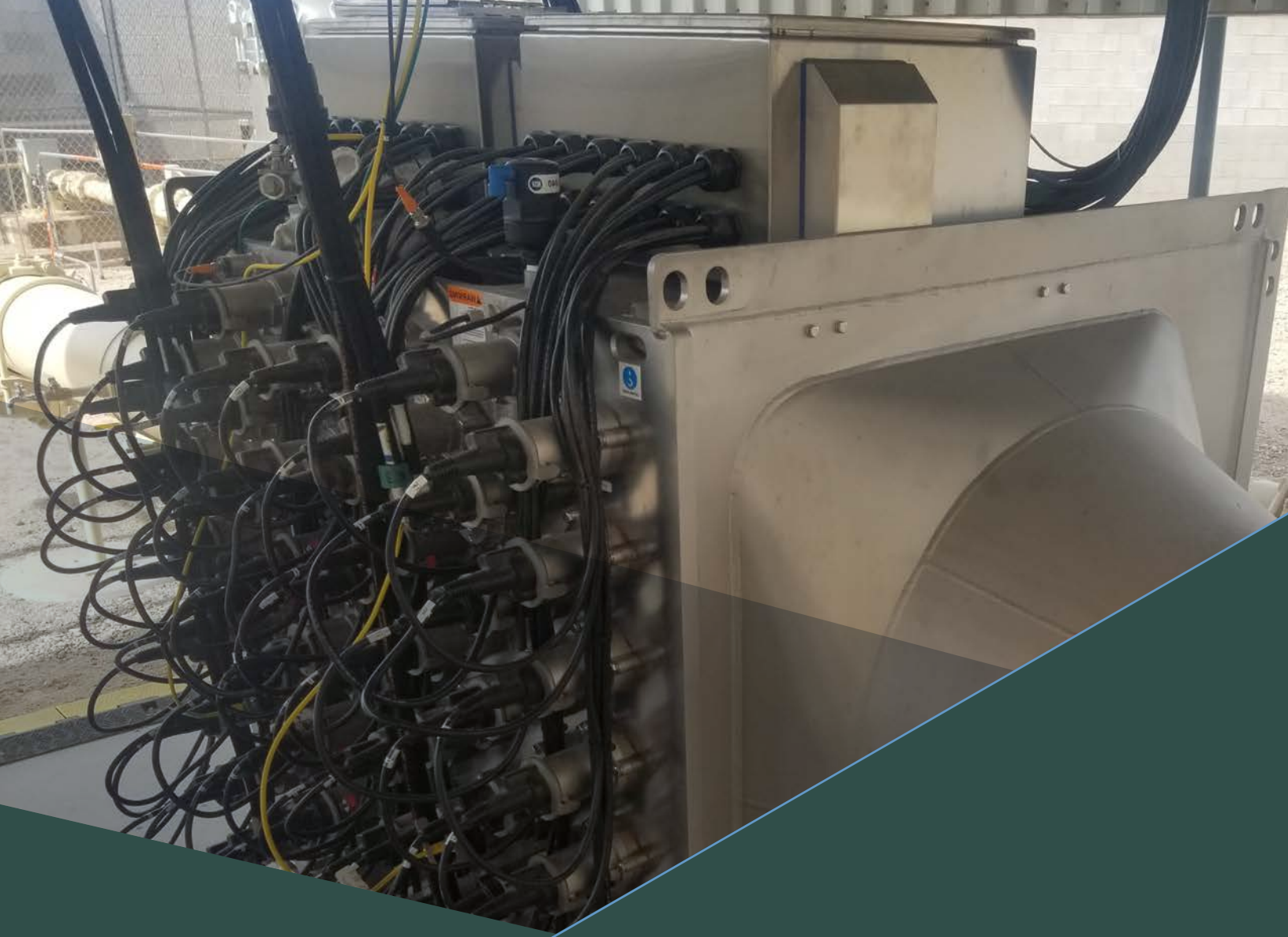
Pounds of VOCs Removed



TOTAL POUNDS: 291

Gallons of Groundwater Treated





PROJECT HIGHLIGHT

SHANNON ROAD & EL CAMINO DEL CERRO GROUNDWATER TREATMENT SYSTEM

The Shannon Road & El Camino del Cerro WQARF Site, located in Tucson, consists of a VOC groundwater contaminant plume that impacts the South Shannon Drinking Water Production Well (S Shannon Well), which is owned and operated by the Metropolitan Water District (Metro Water) in Tucson. The VOC contaminants that impact this well have historically been treated with granular activated carbon, allowing the well to continue providing safe drinking water to the local community. In recent years, an increase in 1,4-dioxane (a semi-VOC) concentrations has forced Metro Water to reduce the production rate of the South Shannon Well from over 600 gallons per minute (gpm) to approximately 200 gpm. The reduced pumping rate allowed Metro Water to use blending to treat the 1,4-dioxane, but reduced the amount of water that Metro Water could provide for the community and hindered

the control, capture, and treatment of the tetrachloroethene/trichloroethene (PCE/TCE) contaminant plume.

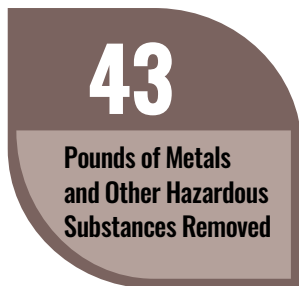
In 2024, ADEQ completed the construction and installation of an advanced oxidation treatment system for the South Shannon Well. The system uses ultraviolet light to both directly treat the water and create oxidizing radicals from hydrogen peroxide, which break down contaminants into their elemental components. Operation of the advanced oxidation treatment system allows Metro Water to resume a full production rate of safe drinking water from the well, which in turn better captures and controls the PCE/TCE contaminant plume. Maintaining control of the plume prevents it from migrating toward, and eventually impacting, other Metro Water production wells.

FY24 FEDERAL SITE MISSION OUTCOMES

REMEDIATION:

Volatile Organic Compounds (VOCs) Removed

Tucson Airport Property	3,136
North & South Indian Bend Wash	2,023
PGA North	588
Hassayampa Landfill	470
Motorola 52nd Street OU1	460
Motorola 52nd Street OU2	222
TARP	176
Air Force Plant 44	138
Williams AFB	59
PGA South/Western Avenue	50
Yuma Proving Ground	2



75 Tons Contaminated Soil Removed

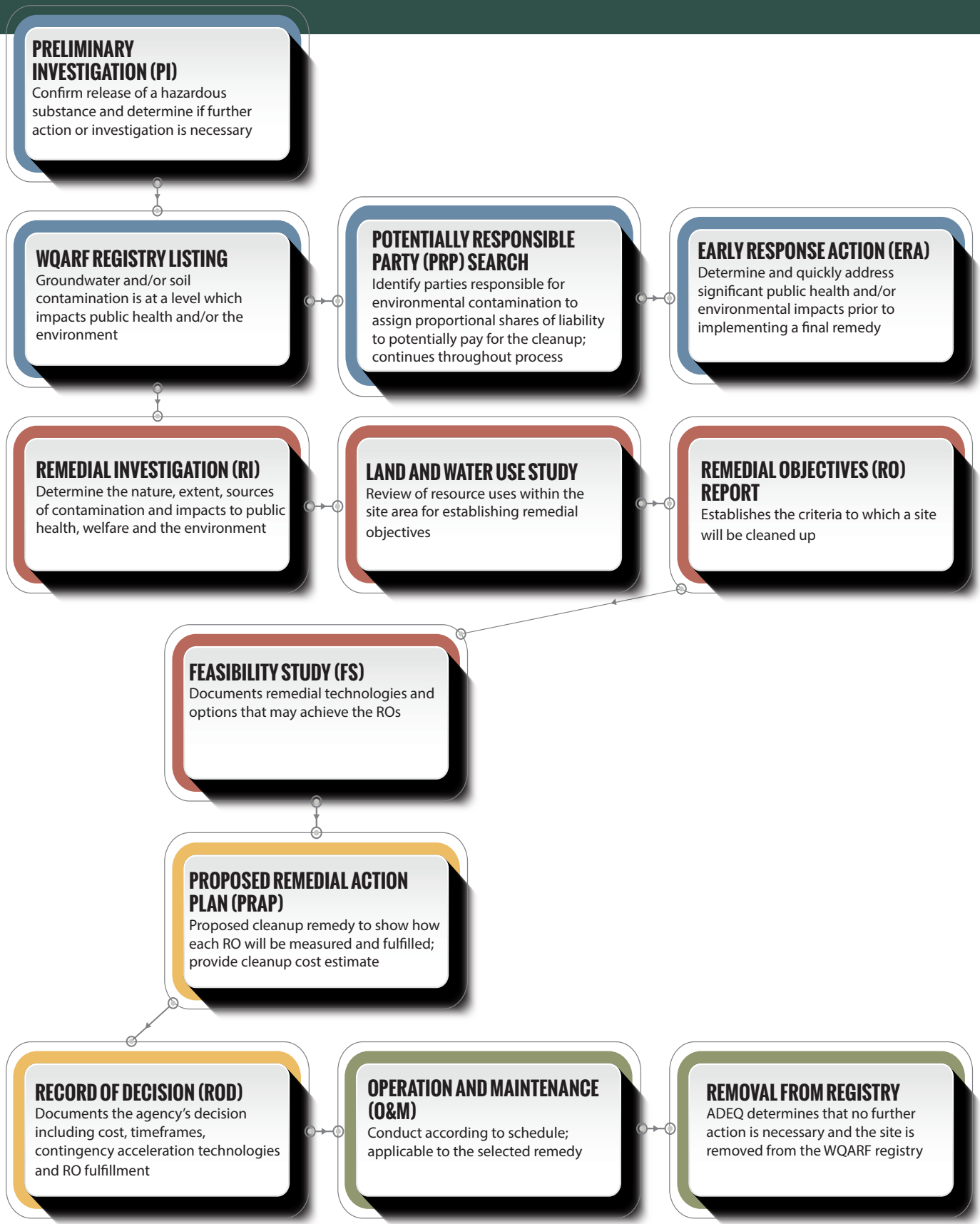
1	Yuma Proving Ground
74	PGA South/Western Avenue

Gallons of Groundwater Treated

North & South Indian Bend Wash	3,761,600,000
PGA North	2,340,000,000
Motorola 52nd St. OU2	768,500,000
Air Force Plant 44	437,887,243
PGA South/Western Avenue	388,200,000
Central Tucson PFAS	90,802,000
Motorola 52nd St. OU1	77,774,930
Apache Powder	49,249,926
Tucson Airport Property	6,699,430
TARP	2,251,611
Hassayampa Landfill	1,505,414



WQARF PHASES AND TERMS



FY24 WQARF REMEDIATION

PDF version available at azdeq.gov/wqarf/2024wqarf_annualreport.pdf. Click each of the following sites to visit associated webpages.

7TH STREET & ARIZONA AVENUE

Continued operation of soil vapor extraction (SVE) system

7TH AVENUE & BETHANY HOME ROAD



Continued groundwater monitored natural attenuation (MNA) and enhanced reductive chlorination (ERD) system evaluation

16TH STREET & CAMELBACK ROAD



Continued groundwater MNA

20TH STREET & FACTOR AVENUE

Continued groundwater MNA and engineered CAP maintenance

7TH STREET & MISSOURI AVENUE



Continued operation of an in situ groundwater treatment system, operation of SVE system, and groundwater MNA

51ST AVENUE & CAMELBACK ROAD



Continued remedial investigation and continued work on Draft Remedial Investigation Report

56TH STREET & EARLL DRIVE

Installation of arsenic wellhead treatment system and continued work on Proposed Remedial Action Plan

BAHAMA AVENUE & BIMINI LANE



Continued remedial investigation; SVE installation and system start-up as an Early Response Action; and continued work on Draft Remedial Investigation Report

WQARF REMEDIATION CONTINUED

BROADWAY-PANTANO



Engineered cap maintenance, groundwater monitoring, ISCO system evaluation, and continued work on Record of Decision

CENTRAL AVENUE & CAMELBACK ROAD

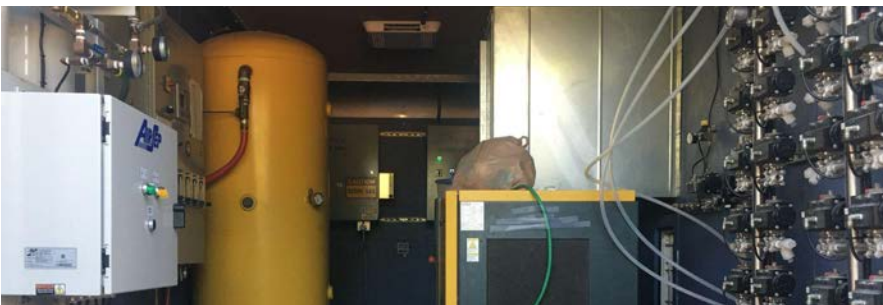
Continued operation of the SVE system including in-situ treatment of the soil; decommissioned groundwater extraction treatment system

COOPER ROAD & COMMERCE AVENUE



Conducted MNA and optimization of SVE system

ECP - 24TH STREET & GRAND CANAL



Continued groundwater MNA and continued work on Record of Decision

ECP - 32ND STREET & INDIAN SCHOOL ROAD

Continued groundwater MNA and continued work on Record of Decision

ECP - 38TH STREET & INDIAN SCHOOL

Conducted additional characterization of the groundwater plume and continued work on Proposed Remedial Action Plan

ECP - 40TH STREET & OSBORN ROAD

Continued groundwater monitoring and continued work on Proposed Remedial Action Plan

ECP - 48TH STREET & INDIAN SCHOOL ROAD

Continued groundwater monitoring and completed Proposed Remedial Action Plan

ESTES LANDFILL

Continued groundwater MNA

HIGHWAY 260 & JOHNSON LANE

Continued operation of 3 wellhead treatment systems

HIGHWAY 260 & MAIN STREET



Continued operation of 12 wellhead treatment systems, operation of SVE system, groundwater MNA, and continued work on Proposed Remedial Action Plan

KLONDYKE TAILINGS PROJECT



Maintenance of engineered repository

LAKE HAVASU AVENUE & HOLLY AVENUE



Continued operation of ERD groundwater treatment pilot test, monitoring and continued work on Proposed Remedial Action Plan

WQARF REMEDIATION CONTINUED

LOS REALES LANDFILL

Continued operation of pump and treat system

MILLER VALLEY & HILLSIDE AVENUE



Conducted in-situ groundwater treatment pilot study, monitoring and continued work on Proposed Remedial Action Plan

MIRACLE MILE



Continued operation of two wellhead treatment systems, groundwater monitoring and continued work on Record of Decision

PARK-EUCLID

Continued operation of SVE system and groundwater and soil vapor MNA

PAYSON PCE



Continued operation of groundwater treatment system and MNA

PINAL CREEK

Continued source control, groundwater remediation, and groundwater monitoring

SHANNON ROAD & EL CAMINO DEL CERRO

Continued operation of a groundwater treatment system for Metro Water to supply drinking water to residents, groundwater MNA, and continued work on Record of Decision

SILVERBELL LANDFILL



Continued operation of groundwater extraction and treatment system

SOUTH MESA

Continued groundwater MNA

STONE AVENUE AND GRANT ROAD



Continued operation of two SVE systems

VULTURE MILL

Continued source control, groundwater remediation, and groundwater monitoring

WCP - EAST GRAND AVENUE

Continued groundwater monitoring and completed Record of Decision

WCP - NORTH CANAL PLUME



Continued operation of SVE system, groundwater monitoring, and continued work on Record of Decision

WCP - NORTH PLUME

Continued optimization of SVE system and groundwater MNA

WCP - WEST OSBORN COMPLEX

Continued groundwater monitoring and continued work on Record of Decision

WESTERN AVENUE PLUME

Continued operation of groundwater treatment system and MNA

WEST VAN BUREN

Groundwater monitoring and continued work on Proposed Remedial Action Plan



PROJECT HIGHLIGHT

20TH STREET & FACTOR AVENUE ENHANCED REDUCTIVE DECHLORINATION

The 20th Street & Factor Avenue WQARF Site located in Yuma, Arizona includes a groundwater plume impacted with VOCs at concentrations that exceed safe drinking water standards. The source of the contamination is a former photographic and motion picture processing and manufacturing facility.

In May 2018, enhanced reductive dechlorination (ERD) groundwater injections were implemented at the site to remediate PCE-impacted groundwater. The injection system included 26 injection wells completed at multiple depths and seven performance groundwater wells. The objective of the ERD injections was to reduce VOC concentrations to levels that could be managed utilizing monitored natural attenuation (MNA) groundwater treatment.

The system operated between May 2018 and December 2022. During that time, approximately 3,350 tons of food grade corn syrup was injected into the groundwater. By June 2023, the VOC concentrations had been reduced to concentrations that could effectively be managed utilizing MNA. No further treatment is required at this time.

Implementation of the ERD remediation system versus using a more traditional technology reduced the clean-up time of the site by more than five years.

WQARF REMEDIATION CONTINUED

REMOVED FROM REGISTRY (SINCE 2014)

1. Harrison Road & Millmar Road Dross (Tucson) | FY20
2. WCP - West Grand Avenue (Phoenix) | FY17
3. ECP - 40th Street & Indian School Road (Phoenix) | FY17
4. Tyson Wash (Quartzite) | FY17
5. Tonto & Cherry (Payson) | FY14
6. East Washington Fluff (Phoenix) | FY13

REMEDIATION ACRONYMS

- ERD** | Enhanced Reductive Dechlorination
- GAC** | Granulated Activated Carbon
- ISCO** | In Situ Chemical Oxidation
- MNA** | Monitored Natural Attenuation
- SVE** | Soil Vapor Extraction

WQARF PROGRAM COMMUNITY INVOLVEMENT

The WQARF program includes robust community involvement requirements. ADEQ staff recruit and manage Community Advisory Boards (CABs) for each site on the WQARF Registry, provide regular site updates via CAB meetings and the ADEQ website, maintain up-to-date Community Involvement Plans, interact with community members and elected officials, and seek opportunities to inform and engage stakeholders via presentations, public notices, and fact sheets.

"After more than 30 years working with ADEQ on Tucson remediation efforts ... I am very thankful for the work ADEQ has done and is continuing to do."

- Jacky Turchick, retired Park-Euclid CAB member

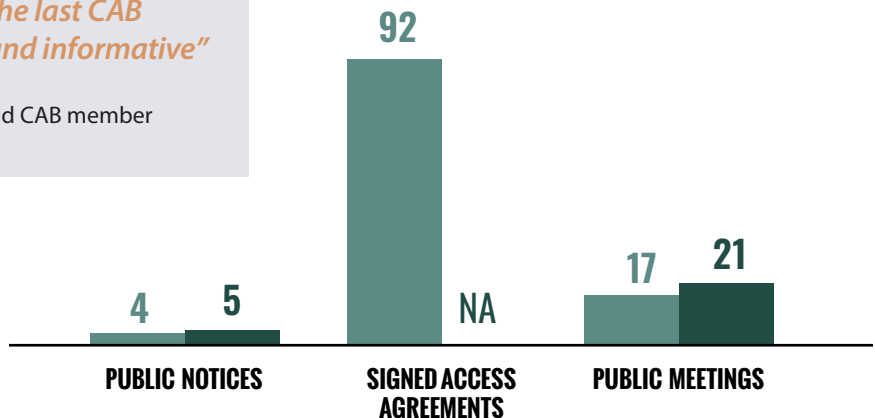
"We appreciate having state employees doing their jobs in a way that helps us stay informed. Over the years we've had a lot of ADEQ people work hard on this project and I appreciate that."

- Michael Evans, Cooper Road & Commerce CAB Co-Chairperson

"Thank you for making the last CAB meeting well managed and informative"

- Jonathan Salvateirra, Park-Euclid CAB member

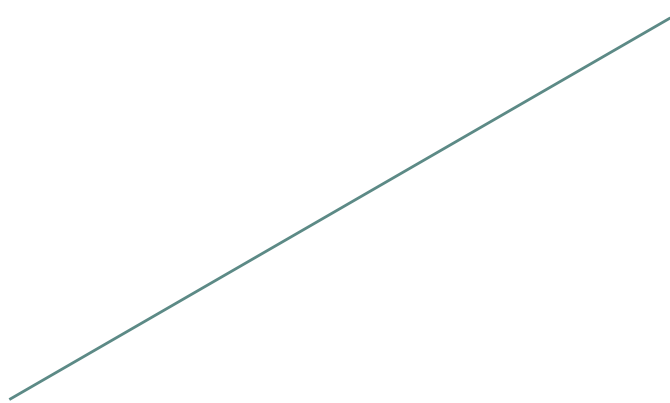
WQARF
FEDERAL

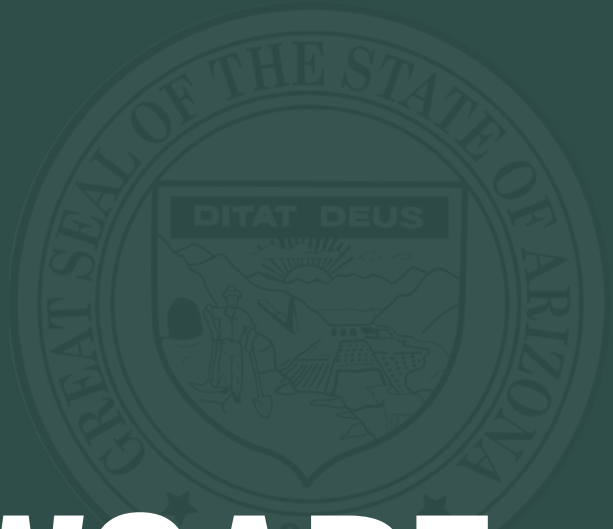


WQARF STATUS

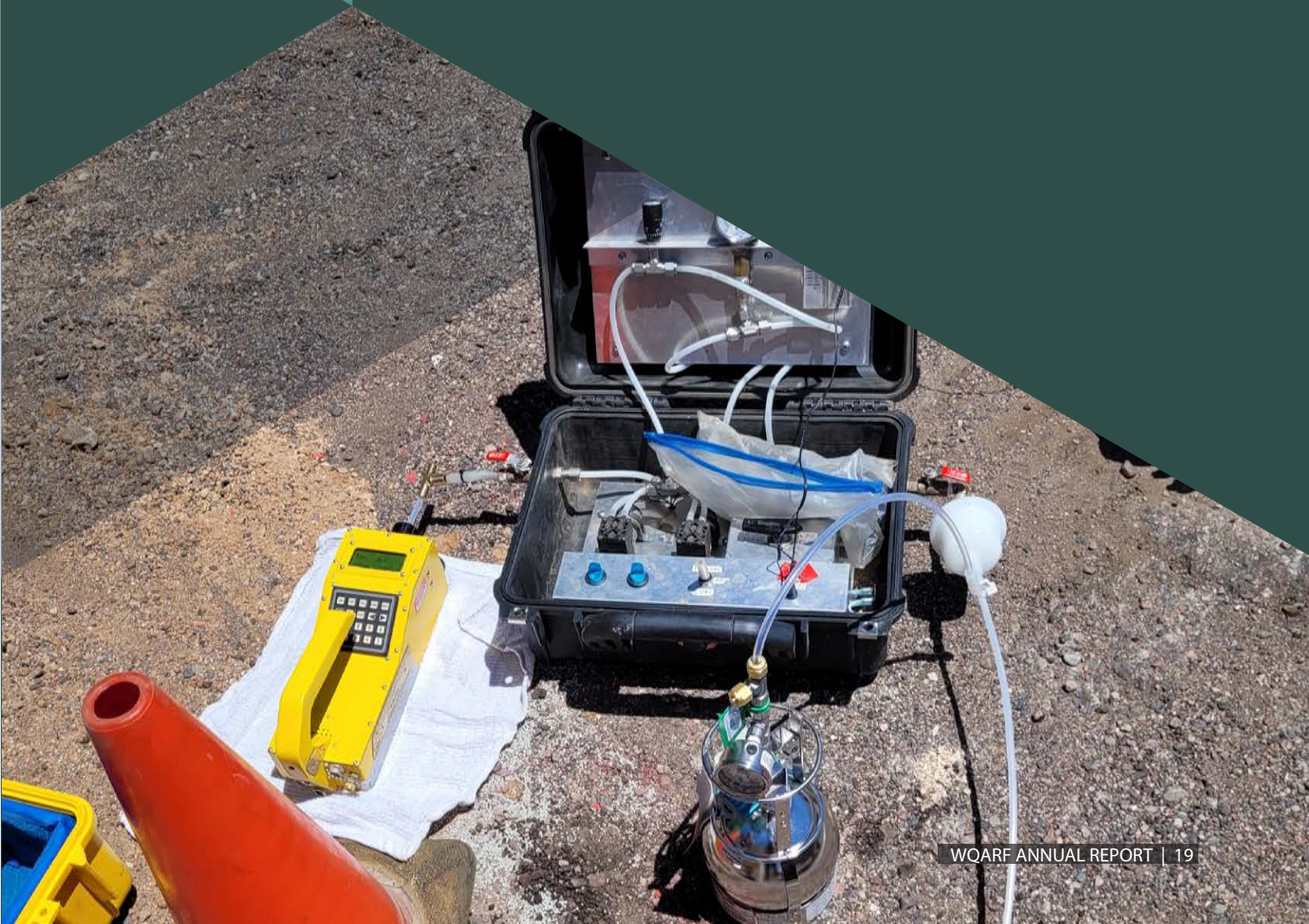
SITE	ERA			RI			FS			PRAP			ROD			O&M		
	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24	FY22	FY23	FY24
<i>An 'X' indicates the WQARF phase the Site was in during the fiscal year displayed at the top of the column.</i>																		
7th Avenue & Arizona Avenue													X	X	X	X	X	X
7th Street & Bethany Home Road													X	X	X	X	X	X
7th Street & Missouri Avenue													X	X	X	X	X	X
16th Street & Camelback Road													X	X	X	X	X	X
20th Street & Factor Avenue													X	X	X	X	X	X
51st Avenue & Camelback Road				X	X	X												
56th Street & Earll Drive	X	X	X							X	X	X			X			
Bahama Avenue & Bimini Lane	X	X	X	X	X	X												
Broadway-Pantano	X	X	X							X	X	X			X			
Central Avenue & Camelback Road	X	X	X										X	X	X			
Cooper Road & Commerce Avenue													X	X	X	X	X	X
ECP – 24th Street & Grand Canal	X	X	X										X	X	X			
ECP – 32nd Street & Indian School Road	X	X	X										X	X	X			
ECP – 38nd Street & Indian School Road							X	X	X									
ECP – 40th Street & Osborn Road										X	X	X			X			
ECP – 48th Street & Indian School Road										X	X	X			X			
Estes Landfill													X	X	X	X	X	X
Highway 260 & Johnson Lane													X	X	X	X	X	X
Highway 260 & Main Street	X	X	X							X	X	X			X			
Klondyke Tailings Project													X	X	X	X	X	X
Lake Havasu Avenue & Holly Avenue	X	X	X				X				X	X						
Los Reales Landfill (Pre-1997 WQARF*)													X	X	X	X	X	X
Miller Valley & Hillside Avenue	X	X	X				X				X	X						
Miracle Mile	X	X	X							X	X				X			
Park-Euclid													X	X	X	X	X	X
Payson PCE													X	X	X	X	X	X
Pinal Creek (Pre-1997 WQARF*)													X	X	X	X	X	X
Shannon Road & El Camino del Cerro	X	X	X							X	X				X			
Silverbell Landfill (Pre-1997 WQARF*)													X	X	X	X	X	X
South Mesa													X	X	X	X	X	X
Stone Avenue & Grant Road													X	X	X	X	X	X
Vulture Mill													X	X	X	X	X	X
WCP – East Grand Avenue										X	X				X			X
WCP – North Canal Plume	X	X	X							X	X				X			
WCP – North Plume													X	X	X	X	X	X
WCP – West Osborn Complex										X	X				X			
Western Avenue Plume													X	X	X	X	X	X
West Van Buren										X	X	X						

* Under Pre-1997 WQARF, Remedial Action Plans (RAPs) are equivalent to RODs





FY24 WQARF PROGRESS



WQARF PHASES COMPLETED

PI

8

In Progress

11

Periodic Monitoring

2

No Further Investigation or Action (NFIA)
and/or referred to other program(s)

0

Listed as WQARF Site

PRAP

- ECP - 48th Street & Indian School (Phoenix)

ROD

- WCP - East Grand Avenue (Phoenix)

ERA

- 19th Avenue & Osborn Road (Phoenix)
- Broadway-Pantano (Tucson)

THIRD-PARTY WORK

ADEQ also oversees WQARF site investigation and remedial activities that cooperating parties pay for and conduct. Costs ADEQ incurs for this oversight are recoverable.

Site	Third-Party	Terms of Activity
56th Street & Earll Drive	NXP USA, Inc. (formerly Freescale Semiconductor, Inc.)	Consent Order
Los Reales Landfill	City of Tucson	Remedial Action Plan
Pinal Creek	Freeport McMoRan Inc. as successors of interest under a Consent Decree; BHP and Pinal Creek Working Group	Consent Decree
Silverbell Landfill	City of Tucson	Remedial Action Plan
West Central Phoenix (WCP) - East Grand Avenue	Univar	Working Agreement
West Van Buren	ChemResearch	Working Agreement
West Van Buren	Western Area Power Administration	Working Agreement
West Van Buren	West Van Buren Working Group	Working Agreement

PROJECT HIGHLIGHT 56TH STREET & EARLL ROAD WQARF SITE

NXP USA, Inc. (NXP) has been operating a groundwater pump and treatment system to remediate a groundwater contaminant plume associated with a former Motorola manufacturing facility. The system began operation in November 2013 and includes two extraction wells and a groundwater treatment plant. Since operation began, the system has treated over 1.14 billion gallons of groundwater and removed over 275 pounds of VOCs from the environment. The treated groundwater is discharged into a nearby canal for beneficial reuse. This project demonstrates how stakeholders work with ADEQ and how working together benefits public health and the environment.



CROSS-PROGRAM REMEDIAL ACTION

WQARF funds can also be used to perform Remedial Actions pursuant to A.R.S. §49-281(12) and §49-282(E)(2)(a), as well as to fund cleanup of selected sites to protect public health and the environment from a release or threat of release of a hazardous substance or pollutant under authority of A.R.S. §49-282.02. Under this authority, the WQARF program conducted work at the following sites:

CENTRAL TUCSON PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CHARACTERIZATION AND DEMONSTRATION TREATMENT PROJECT

Program monies were used to support characterization and treatment of PFAS in groundwater in central Tucson as well as operation of a wellhead treatment system to treat PFAS-impacted drinking water at Tucson Water Well C-007A.

MOUNTAIN VIEW ESTATES (GLOBE)

Performed operation and maintenance of a soil cap for this former Federal Superfund site.

FY24 SURFACE WATER QUALITY ASSESSMENT AND MANAGEMENT

The WQARF program also helped provide the ADEQ Surface Water Quality Improvement Section with data necessary to evaluate the quality of Arizona's water bodies, develop watershed improvement plans, assess projects implemented, and improve water quality throughout Arizona.

- Internal staff and contractors collected and analyzed 275 samples from 117 stream sites.
- Volunteers collected and analyzed 733 samples from 128 stream sites.
- Internal staff and contractors collected and analyzed two samples from one lake.
- Completed 45 Streamflow Duration Assessment Method sites in support of the new Waters of Arizona Program.
- WQARF funding supported staff in the Watershed Improvement Unit to complete remediation at three abandoned mine sites, conducting site investigations at four sites, and performing post-remediation stream sampling at nine abandoned mine sites.

FY24 EMERGENCY RESPONSE UNIT (ERU) ACTIONS

WQARF funds are used for a wide array of critical remedial response actions taken by the ADEQ ERU to protect public health and the environment from a release or threat of release of a hazardous substance or pollutant through A.R.S. 49-282(E)(8).

These actions included:

- Responding to chemical spills
- Coordinating statewide emergency response actions (e.g., wildfires)
- Serving on multi-agency taskforces to address potential statewide health risks
- Monitoring air quality during unplanned or emergency events (e.g., industrial facility fires)
- Detecting and identifying potentially harmful chemicals for fire departments and public safety personnel

PREPAREDNESS RESPONSE SUMMARY

10

Responded to 10 incidents.

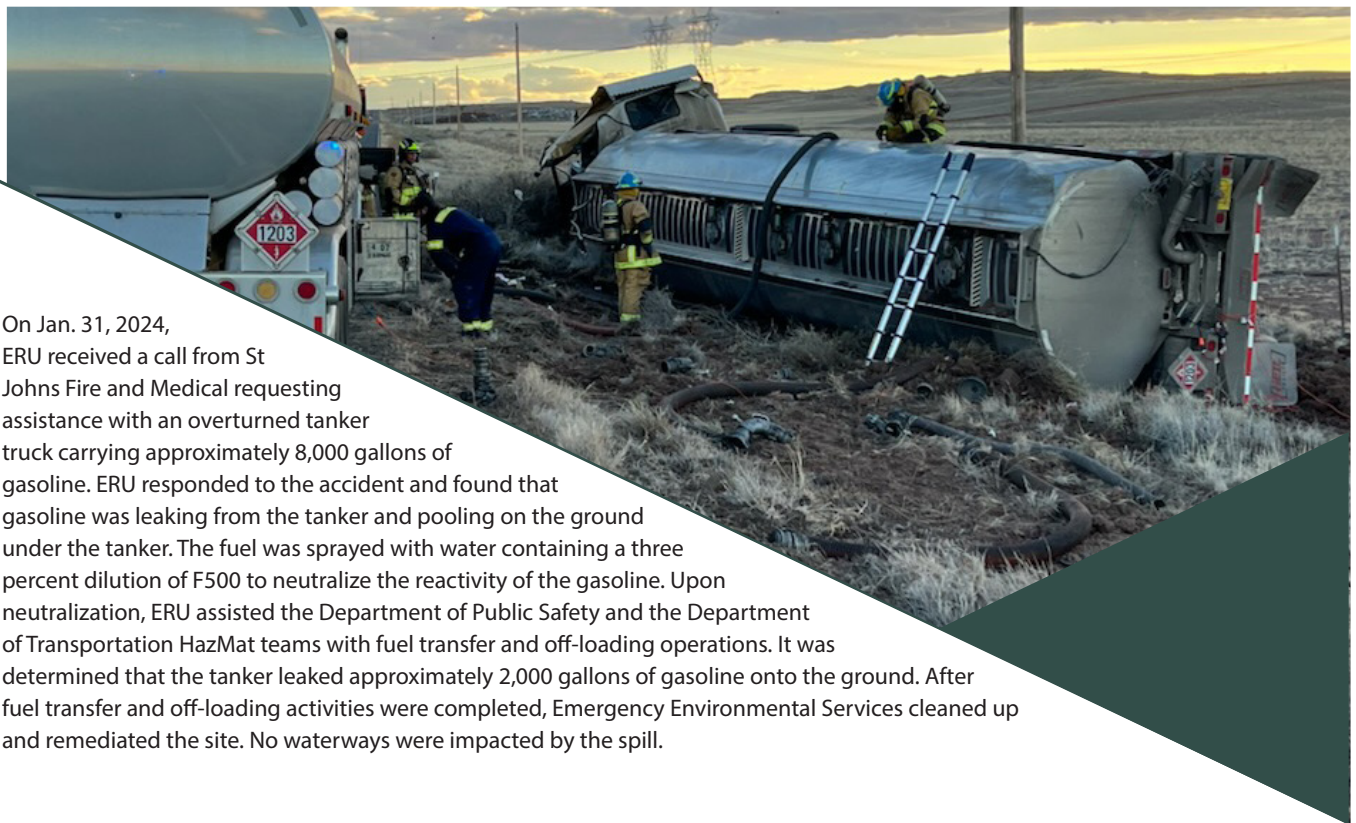
7

Provided technical assistance to outside agencies at seven on-scene responses.

5

Participated in five statewide preparedness drills and training exercises.

EMERGENCY RESPONSE SPOTLIGHT



On Jan. 31, 2024, ERU received a call from St Johns Fire and Medical requesting assistance with an overturned tanker truck carrying approximately 8,000 gallons of gasoline. ERU responded to the accident and found that gasoline was leaking from the tanker and pooling on the ground under the tanker. The fuel was sprayed with water containing a three percent dilution of F500 to neutralize the reactivity of the gasoline. Upon neutralization, ERU assisted the Department of Public Safety and the Department of Transportation HazMat teams with fuel transfer and off-loading operations. It was determined that the tanker leaked approximately 2,000 gallons of gasoline onto the ground. After fuel transfer and off-loading activities were completed, Emergency Environmental Services cleaned up and remediated the site. No waterways were impacted by the spill.

AIR QUALITY MONITORING SUPPORT FOR EMERGENCY RESPONSE

ERU has partnered with Maricopa County Air Quality Department as the emergency response provider for incidents that occur after business hours. This initiative includes assisting public safety personnel with air quality monitoring during incidents with high impact to communities in metropolitan areas in Maricopa County.

In FY24, ERU provided support for three incident responses for air quality monitoring in the Phoenix metropolitan area.

AGENCY PARTNERS

ARIZONA DEPARTMENT OF WATER RESOURCES (ADWR)

Program monies can be used to fund support services to WQARF by ADWR pursuant to A.R.S. §49-282(C) and §49-282(E)(12).

These services are part of the Arizona Water Quality Fund Program and include, but are not limited to:

- Performing technical review of well applications, such as Notices of Intent (NOIs) to Drill/Abandon/Deepen/Modify/Replace a Well, Applications to Drill and Operate a Non-Exempt Well, and Groundwater Withdrawal Permits* and consult with ADEQ regarding new wells, abandonments, modifications to wells near remedial action sites.
- Conducting well inventories to support the WQARF program, as requested.*
- Coordinating with ADEQ regarding database needs in support of the WQARF program.**
- Establishing a mechanism to exchange verified well locations and GPS measurements within ADWR's Well Registry (WELLS55) database.*
- Performing other WQARF and water quality activities as required by statute, rule or Interagency Service Agreement (ISA).

*Recommended by Groundwater Cleanup Task Force

** Required by statute or law

Over the last five years, ADWR successfully designed and employed a more efficient process for collaborative review of NOIs near remedial action sites and selected the project as a Lean Transformation in Government project.

FY24 ARIZONA WATER QUALITY FUND PROGRAM ACCOMPLISHMENTS

3,702 *Reviews of NOIs to Drill/Abandon/Deepen/Modify/Replace wells for proximity to WQARF/CERCLA or other remedial action sites*

465 *Reviews of NOIs to Drill/Abandon/Deepen/Modify/Replace wells near or within WQARF/CERCLA or other remedial action sites for water quality concerns, potential contaminant plume migration and well construction*

219 *Reviews of permit applications to withdraw groundwater for proximity to WQARF/CERCLA or other remedial action sites*

21 *Technical reviews of well permit applications near or within WQARF/ CERCLA or other remedial action sites for water quality concerns, potential contaminant plume migration, well construction, and well impacts. These permits included Poor Quality Groundwater Withdrawal Permits for remediation projects.*

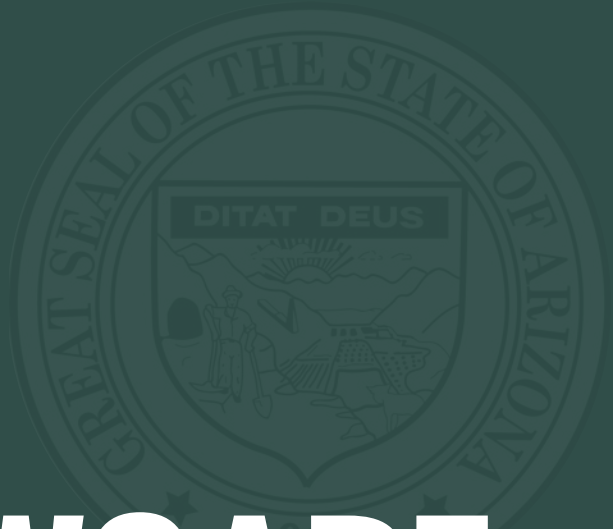
4 *Quarterly reports submitted to ADEQ as required by ISA*

1 *Annual FY24 report on ADWR WQARF activities submitted to the Governor and Legislature*

ARIZONA DEPARTMENT OF HEALTH SERVICES (ADHS)

WQARF funds can be used for assessment and evaluation of the effects to public health of hazardous substances releases or threatened releases by the ADHS pursuant to A.R.S. §49-282(E)(15).

ADHS declined funding in FY24.



FY24 WQARF FINANCIALS



FY24 WQARF COST RECOVERY ACTIVITY

Pursuant to A.R.S. § 49-282(E)(1), WQARF can be used to provide state matching funds or to meet other obligations as prescribed by §104 of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). WQARF funds are also used for oversight activities at state-lead CERCLA sites, which are reimbursed by the responsible parties. Cost reimbursement activities at WQARF and CERCLA sites supported by ADEQ are provided below.

SITE CODE	SITE NAME	NUMBER OF COST RECOVERY PACKAGES	AMOUNT (IN DOLLARS)
030016-99	Camp Navajo DEMA	5	\$7,760.72
040010-00	Pinal Creek	2	\$17,366.61
040042-00	Copper Cities Unit	2	\$10,781.26
040050-00	Miami Tailings Reprocessing	2	\$3,705.36
040098-00	Magma Copper Old Dominion Mine	1	\$703.14
400000-04	North Indian Bend Wash	1	\$21,289.51
509216-00	56th Street & Earll Drive	2	\$2,478.73
512051-00	Maroon Crater	5	\$6,128.81
512357-00	Honeywell 34th Street	4	\$25,621.09
512820-00	Kingman Range NDNODS	4	\$301.78
501146-00	WAPA	3	\$2,967.03
030016-15	Camp Navajo	2	\$477.39
501170-00	Silverbell Army Heliport	1	\$331.14
513284-00	Fort Tuthill	4	\$1,655.93
260000-00	West Van Buren	2	\$124,906.45
Total Reimbursement Requested		40	\$226,474.95
Total Payments Received*			\$178,218.10

FY24 WQARF REVENUES AND EXPENDITURES

Note: All figures expressed
in thousands.

BALANCE	FY23 ACTUAL	FY24 PROJECTION	FY24 ACTUAL
Beginning Fund Balance - WQARF & Priority Sites	\$8,288.1	\$8,492.5	\$8,492.5
Beginning Fund Balance - Site-Specific Account	\$967.5	\$658.2	\$658.2
Subtotal: Funds Available	\$9,255.6	\$9,150.7	\$9,150.7
Prior Year Corporate Income Tax Reversion	\$0	\$0	\$0
Total Balance from Prior Year	\$9,255.6	\$9,150.7	\$9,150.7
REVENUE SUBJECT TO 18M CAP	FY23 ACTUAL	FY24 PROJECTION	FY24 ACTUAL
Corporate Income Tax (CIT)	\$15,000	\$15,000	\$15,000
Emissions Inspection Fund	\$0	\$0	\$0
Air Quality Fund	\$0	\$0	\$0
Underground Storage Tank Fund	\$0	\$0	\$0
Permit Administration Fund	\$0	\$0	\$0
Recycling Fund	\$0	\$0	\$0
FEES:			
Municipal Water (A.R.S. 42-5302) (4199)	\$607.3	\$627.5	\$753
Fertilizer Registration (A.R.S. 3-272)	\$78	\$63.7	\$103.3
HW Facility Registration Fee (A.R.S. 49-929/49-930)	\$166.6	\$185.3	\$186.1
HW Manifest Re-submittal Fee (A.R.S. 49-922.01)	\$0	\$0	\$0
Industrial Discharge Permit Fee (A.R.S. 49-209)	\$27.6	\$30.4	\$28.8
Pesticide Registration (A.R.S. 3-351)	\$1,067.6	\$1,017.6	\$1,045.4
Quality Assurance Fee (A.R.S. 45-616)	\$0	\$0	\$0
Subtotal: Fees	\$1,947.1	\$1,924.5	\$2,116.6
Total Revenue Subject to 18M Cap	\$16,947.1	\$16,924.5	\$17,116.6
REVENUE NOT SUBJECT TO 18M CAP	FY23 ACTUAL	FY24 PROJECTION	FY24 ACTUAL
Consent Decrees	\$263.1	\$0	\$0
Cost Recovery (A.R.S. 49-282)*	\$183.1	\$0	\$352.9
Responsible Parties	\$385.4	\$0	\$352.9
<i>*Includes revenue from prior year packets</i>			
Prospective Purchaser Agreement (A.R.S. 49-285.01)	\$14.7	\$0	\$42.5
Interest (A.R.S. 49-282)	\$449.9	\$51.9	\$695.4
Other Income	\$0	\$0	\$0
Other Revenue	\$464.6	\$51.9	\$737.9
Total: Revenue Not Subject to 18M Cap	\$850	\$51.9	\$1,090.8
Beginning Balance and Revenue	\$27,052.7	\$26,127.1	\$27,487.2
EXPENDITURES	FY23 ACTUAL	FY24 PROJECTION	FY24 ACTUAL
Non-Site Expenditures	\$7,831.5	\$7,973.4	\$7,754.2
Site Expenditures	\$9,774.5	\$10,460.0	\$7,621.1
Transfers Out	\$140	\$140	\$140
General Fund Sweep	\$0	\$0	\$0
Total Expenditures	\$17,746	\$18,573.4	\$15,515.3

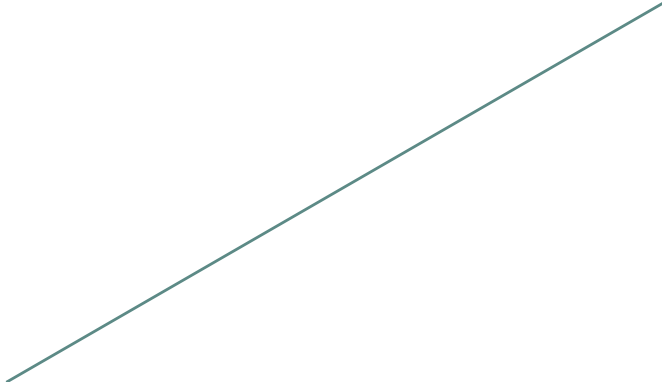
FY24 WQARF EXPENDITURE STATEMENT

Note: All figures expressed in thousands.

CORE EXPENDITURES		FY25 SPENDING PLAN
WQARF Professional & Support Staff		\$7,820
Professional & Outside - Remedial Projects		\$100
Hydrologic Support & Assessment		\$1,630.9
Professional & Outside Hydrologic Support & Assessment		\$0
Emergency Response		\$221.6
Attorney General's Office		\$300
PRP Identification/Liability		\$125
Litigation		\$0
Appeals		\$0
Advisory Board		\$0
Rule Development		\$0
Community Involvement/General WQARF		\$0
Core Expenditures		\$10,197.5
REGISTRY SITES AND PRELIMINARY INVESTIGATIONS (PI)		FY25 SPENDING PLAN
RI/FS - Site-Specific WQARF		\$7,600
Clean up - Site-Specific WQARF		\$1,580
ERA		\$2,100
O&M		\$1,650
Community Involvement		\$0
Preliminary Investigations (PI)		\$1,700
Registry Sites & PI		\$14,630
Subtotal: WQARF Program		\$24,827.5
TRANSFERS AND DISBURSEMENTS		FY25 SPENDING PLAN
Department of Health Services - Risk Assessment		\$0
Department of Water Resources - Appropriation Transfer Out		\$140
Aid to Municipalities		\$0
Voluntary Program		\$0
Subtotal: Transfers & Disbursements		\$140
Total Disbursements		\$24,967.5

FY25 WQARF SITE BUDGET

SITE	FY25 PROJECTED BUDGET
16TH STREET & CAMELBACK RD	\$35,000
20TH STREET & FACTOR AVENUE	\$250,000
51ST AVENUE & CAMELBACK	\$500,000
56TH STREET & EARLL DRIVE	\$0
7TH AVE & BETHANY HOME RD	\$170,000
7TH STREET & ARIZONA AVE	\$200,000
7TH STREET & MISSOURI AVE	\$250,000
BAHAMA & BIMINI	\$400,000
BROADWAY-PANTANO	\$250,000
CENTRAL AVENUE & CAMELBACK ROAD	\$175,000
COOPER ROAD & COMMERCE AVENUE	\$50,000
ECP - 24TH & GRAND CANAL	\$150,000
ECP - 32ND & INDIAN SCHOOL RD	\$150,000
ECP - 38TH & INDIAN SCHOOL RD	\$100,000
ECP - 40TH & OSBORN RD	\$150,000
ECP - 48TH & INDIAN SCHOOL RD	\$150,000
ESTES LANDFILL	\$25,000
HIGHWAY 260 & JOHNSON LANE	\$50,000
HIGHWAY 260 & MAIN STREET	\$250,000
KLONDYKE MINE TAILINGS	\$10,000
LAKE HAVASU & HOLLY AVE	\$450,000
LOS REALES LANDFILL (pre-1997 WQARF)	\$0
MILLER VALLEY RD & HILLSIDE AVE	\$250,000
MIRACLE MILE	\$500,000
PARK-EUCLID	\$220,000
PAYSON PCE (Town of Payson)	\$50,000
PINAL CREEK (pre-1997 WQARF)	\$0
SHANNON RD/EL CAMINO DEL CERRO (+ METRO WATER)	\$450,000
SILVERBELL LANDFILL	\$0
SOUTH MESA	\$25,000
STONE AVE & GRANT RD	\$75,000
VULTURE MILL	\$25,000
WCP - EAST GRAND AVENUE	\$50,000
WCP - NORTH CANAL PLUME	\$175,000
WCP - NORTH PLUME	\$50,000
WCP - WEST OSBORN COMPLEX	\$150,000
WEST VAN BUREN	\$100,000
WESTERN AVENUE	\$30,000
VARIOUS PFAS SITES	\$7,000,000
VARIOUS PRELIMINARY INVESTIGATIONS	\$1,700,000
WQARF SITE BUDGETS FY 2024	\$14,630,000

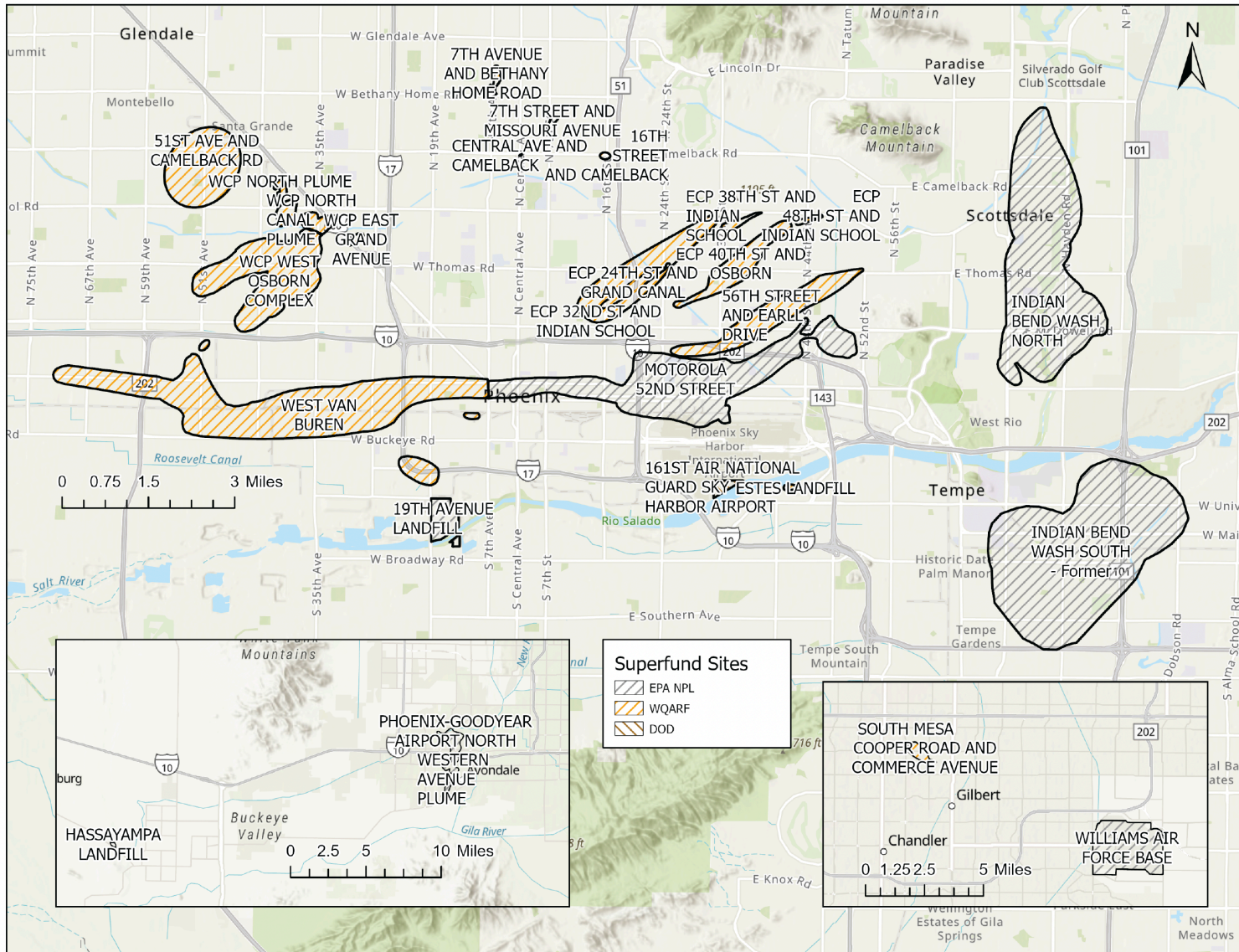




FY24 FIGURES

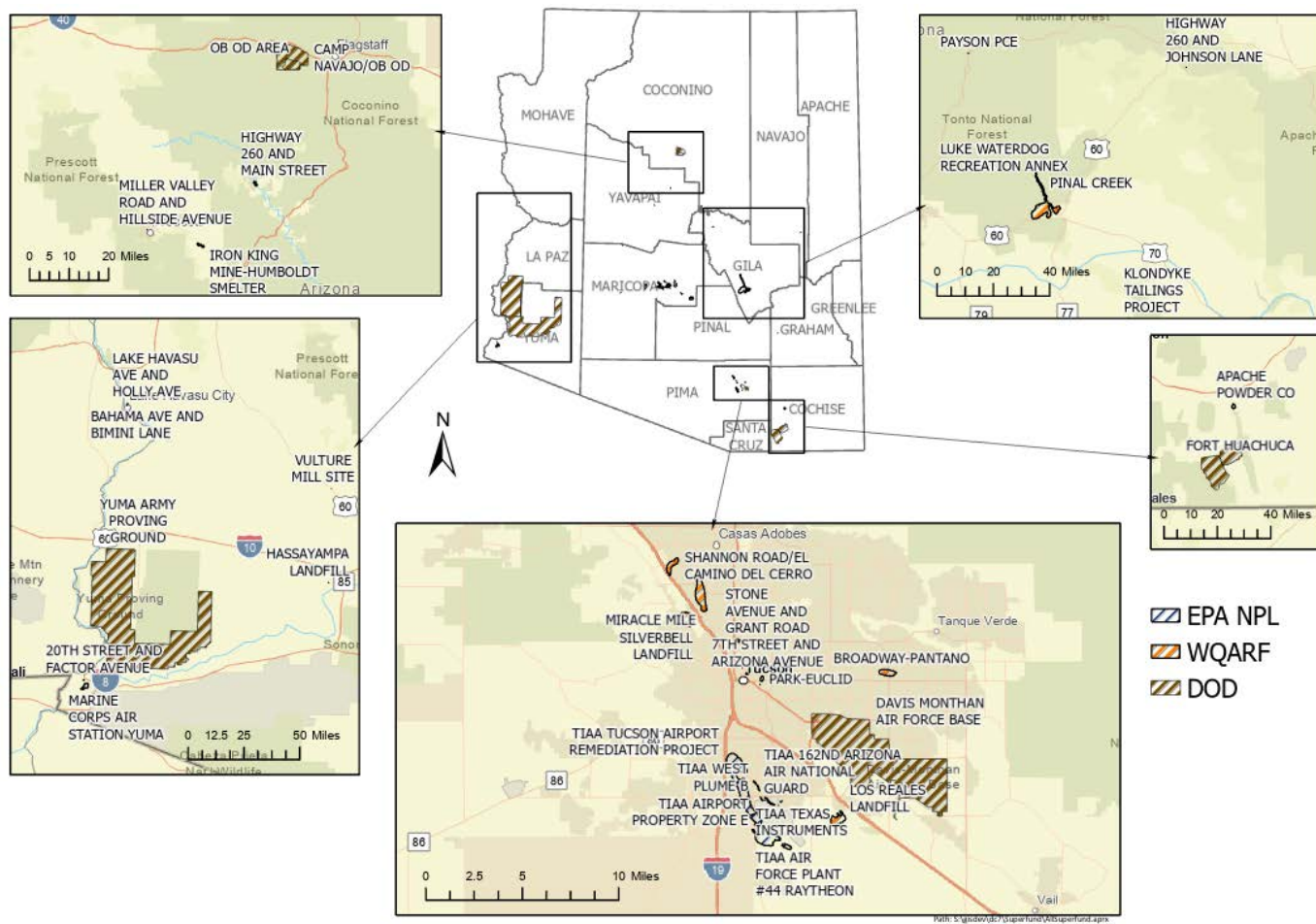


METROPOLITAN PHOENIX SITES

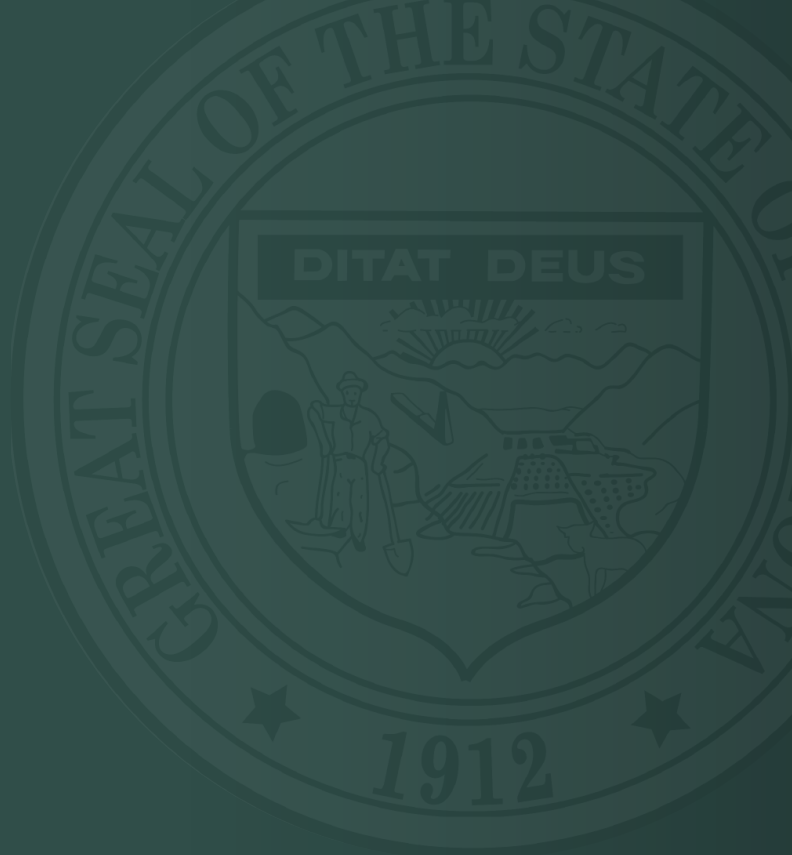


The boundaries for these sites are subject to change in the future as new information becomes available.

STATEWIDE SITES



The boundaries for these sites are subject to change in the future as new information becomes available.



Clean Air, Safe Water,
Healthy Land for Everyone

WATER QUALITY ASSURANCE REVOLVING FUND FY24 ANNUAL REPORT

Sept. 1, 2024

EQR-24-13

Cover photo:

*Granular activated carbon treatment system at
Shannon Road & El Camino del Cerro WQARF Site -
Tucson, Ariz.*