



WATER QUALITY ASSURANCE REVOLVING FUND (WQARF)

FY17 ANNUAL REPORT



OUR MISSION AND VISION

Arizona Department of Environmental Quality's (ADEQ) mission is to protect and enhance public health and the unique environment in Arizona. The Department achieves this mission by administering the state's environmental laws and delegated federal programs to prevent pollution of the air, water and land, and to ensure clean up of such pollution when it occurs.

ADEQ's vision is to be the No. 1 state in the nation in:

- Balanced, leading edge environmental protection
- Technical and operational excellence
- Radical simplicity for customers and staff

The Department helps Arizonans respect the balance between the natural world and the people who depend on it for sustenance, prosperity and a fulfilling quality of life.

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FOREWORD



Consistent with our Mission to protect public health and the environment, ADEQ’s Water Quality Assurance Revolving Fund (WQARF) Program achieved record progress toward mission outcomes through a renewed focus on Performance Measures. FY17 achievements showcase the WQARF Program’s dedication to process improvement, which is well-aligned with Governor Ducey’s desire for Arizona to have safe communities, a strong, innovative economy and efficient, effective, accountable government.

Contaminated Sites Closed, an Agency Performance Measure that includes the WQARF Program, focused the Program on removing sites from the Registry – particularly sites where applying an alternative remedial technology can accelerate an existing remedy, shaving many years off the time needed to attain cleanup goals, which achieves tremendous cost savings.

– THREE SITES WERE REMOVED FROM THE REGISTRY –

Time to First Remedy, a Performance Measure for the WQARF Program and the Agency as a whole, focused the Program on implementing Early Response Actions, particularly at newly listed sites, as early as possible in the WQARF process – the sooner source control measures are started, the shorter the time needed to complete the remedy, which protects our communities and environment and saves money.

The WQARF Program embraces accelerating site cleanups through engaging responsible parties and ultimately reducing overall remediation costs. In FY17, WQARF Program staff aggressively reevaluated Preliminary Investigation sites, listing four new sites and bringing the original list of about 70 Preliminary Investigation sites close to resolution with only four left to evaluate in FY18.

– FOUR SITES WERE ADDED TO THE REGISTRY –

Using the approximately \$14 million from a combination of legislative transfers and appropriations in FY17, the WQARF Program embodied the ADEQ Mission. Looking forward to FY18, we will once again have available approximately \$14 million from a series of legislative transfers and appropriations. However, the FY17/18 funding structure for WQARF cannot be sustained in the future.

ADEQ currently is convening a series of stakeholder meetings to permanently address the funding shortfalls that have impacted this critically important program.

As our positive mission outcomes grow, so does total WQARF liability including the state’s orphan share. By embracing the complexities of our current situation and working closely with our stakeholders, we are working toward balanced solutions that benefit Arizona’s unique environment, communities, businesses and economy.

Misael Cabrera
Director

This annual report was prepared pursuant to HB1522/HB2702 making appropriations for the different departments of the state, for state institutions and for public schools; providing for certain reporting requirements. These bills require submittal of an annual report to Joint Legislative Budget Committee members on or before September 1, on WQARF activity, which also includes FY18 site-specific budgets.

WQARF PROGRAM AT-A-GLANCE

The Arizona Department of Environmental Quality (ADEQ) Waste Programs Division is committed to safeguarding public health and protecting and restoring Arizona’s unique environment and natural resources, with emphasis on precious groundwater, through the Water Quality Assurance Revolving Fund (WQARF) Program.

Created under the Environmental Quality Act of 1986, the WQARF Program (Program) was revised significantly in the WQARF Reform Legislation of 1997 (Laws 1997, Chapter 287).

The Program identifies, prioritizes, assesses, manages and remediates threats and impacts to public health and the environment from hazardous materials. Additionally, WQARF monies may be used to mitigate pollutants creating an imminent threat to public health. The Program funds:

The WQARF Registry

Maintain a list of Arizona sites that may pose a risk to public health or the environment due to hazardous substances and where investigation and/or cleanup work is ongoing or planned. As of June 2017, 36 sites are listed on the WQARF Registry (see Appendix I for a full description of WQARF phases).

Federal Oversight

Review and oversee Environmental Protection Agency work at National Priorities List (NPL) sites and work at Department of Defense sites. The NPL is the list of hazardous waste sites in the United States eligible for long-term cleanup financed under the federal Super-fund program.

WQARF Registry Third-Party Work

Oversee privately funded WQARF Registry site clean-up efforts. Where applicable, ADEQ identifies and notifies responsible parties and then gathers legal and technical evidence to recover costs and enforce cleanup requirements.

Emergency Response

Address release or threat of release of a hazardous substance or pollutant that presents an emergency to the public health or the environment.

Voluntary Remediation Program

Provide funding for Third-Party oversight of volunteers’ remedial actions, which encourages property owners and other interested parties to invest resources voluntarily in recovering contaminated sites as quickly as possible to healthful standards.

Water Quality Assessment and Management

Provide Surface Water Quality Improvement with the data necessary to evaluate the quality of Arizona’s waterbodies, develop watershed improvement plans, assess projects implemented and improve water quality throughout Arizona.

Complementary work conducted by the Arizona Department of Health Services (ADHS) and the Arizona Department of Water Resources (ADWR):

- ADHS – Provides independent, site-specific health studies by the Environmental Toxicology Program to analyze, evaluate and address potential risks to public health from environmental exposures, and assess and evaluate the effect of a release or a threat of release of hazardous substances to public health, welfare or the environment.
- ADWR – Provides technical review and consultation with ADEQ for new groundwater wells, abandonments and modifications near remedial action sites. Performs well inspections and reviews remedial actions necessary to prevent vertical cross-contamination.

WQARF FUNDING

Continued funding of the Program is critical to protecting and enhancing public health and the environment in Arizona, while supporting future development and fostering economic growth. Water is a precious resource in Arizona and protecting it from impairment and remediating contaminated waters is vital!

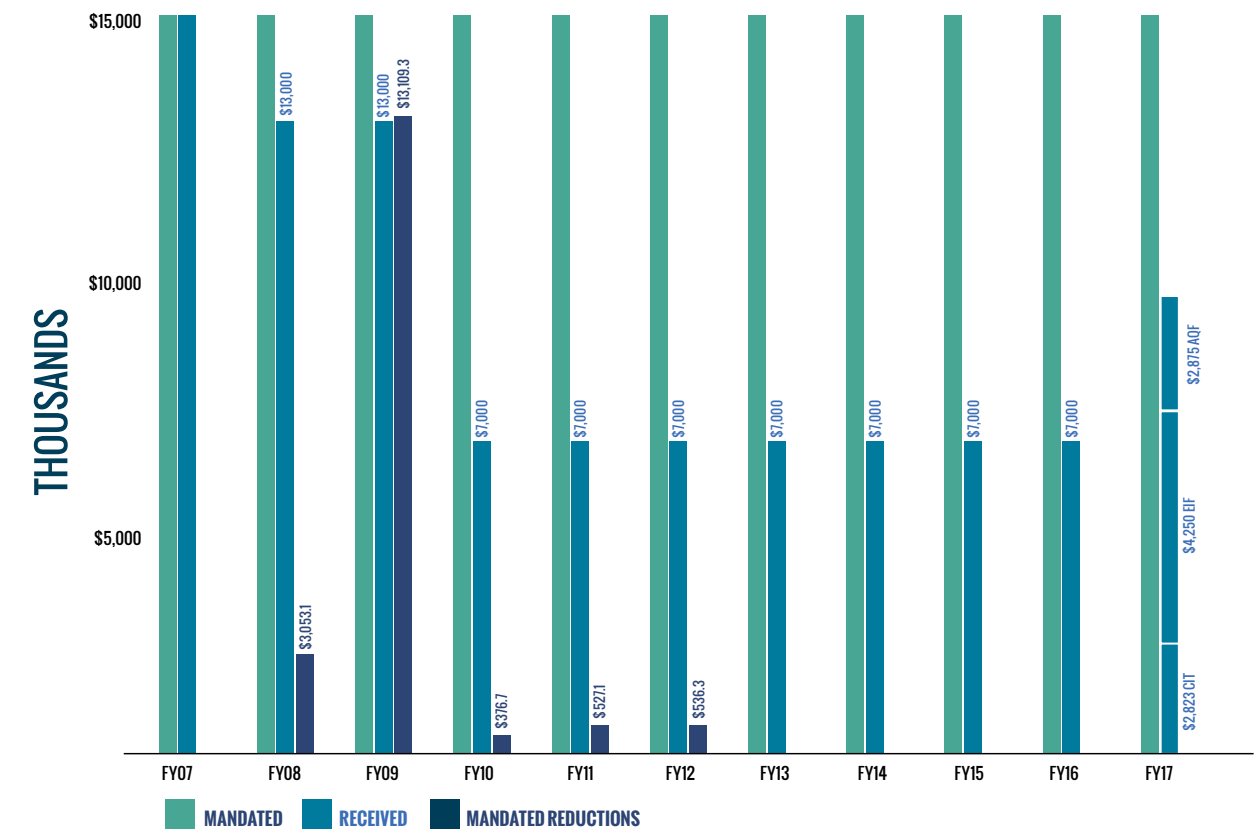
ADEQ’s ability to fully administer and implement the Program relies on \$18 million annual funding authorized by Arizona Revised Statutes (A.R.S.) § 49-282(B), which specifies Corporate Income Tax (CIT) revenue as the funding source for \$15 million. In FY17, WQARF received only \$2.82 million from CIT revenue. To offset this significant reduction in funding, ADEQ appropriated funds from other sources including \$4.25 million and \$2.87 million from the emissions inspection (EIF) and air quality funds (AQF), respectively. During the last 10 fiscal years, Program funds experienced a deficit of \$72.2 million in CIT revenue alone.

The Program continues to face significant funding challenges, both known and potential. These include state budget restructuring, additional project needs to conduct critical actions to protect Arizona’s children, communities and environment, and legislative fund transfers.

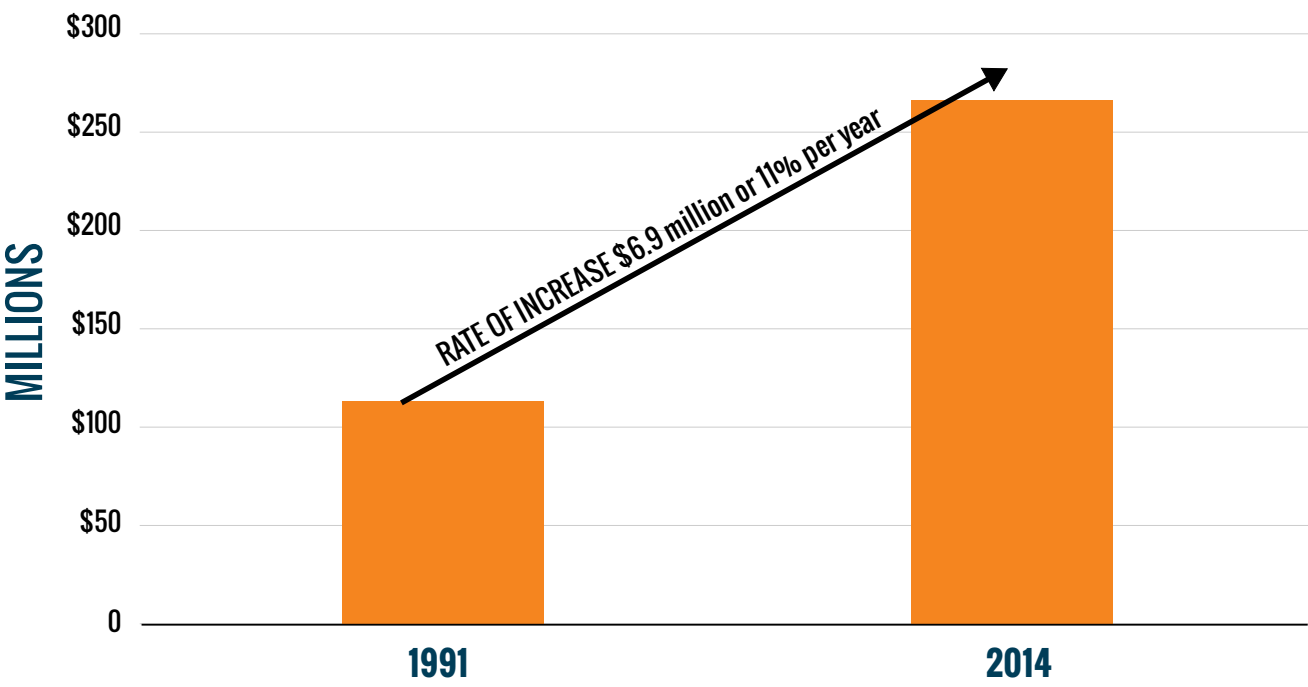
This funding structure cannot be sustained into FY19 or beyond for the Program to continue to achieve necessary state environmental protection and benefits.

Accelerated cleanups through increased efficiencies and increased funding will reduce overall long-term costs and the state’s orphan share, which has grown to more than 60 percent of all WQARF liability. ADEQ has adopted a continuous improvement philosophy through its implementation of a lean management system. This systematic approach to problem solving is resulting in the achievements highlighted in this report.

CORPORATE INCOME TAX REVENUE COMPARISON FY08 – FY17



ORPHAN SHARE ESTIMATE BASED ON MODELED TOTAL WQARF LIABILITY



WQARF’s liability was first modeled by ADEQ in 1991, and then again in 2014, using RACER® (Remedial Action Cost Engineering Requirements) software, now supported by AECOM Asset Management Division. In 1991, WQARF cleanup costs were estimated at \$300 million, of which the state’s liability or orphan share was estimated at nearly \$105 million or 35 percent. To determine current site costs, the RACER® model was re-run in 2014, at which time, WQARF’s total liability was estimated at nearly \$424 million. Based on current site numbers, WQARF’s orphan share is estimated at nearly 61 percent or \$262 million. This equates to a \$6.9 million or 11 percent increase of the orphan share per year.

Identifying a sufficient, long-term WQARF funding solution is critical to moving sites to remediation before the state’s orphan share costs increase.

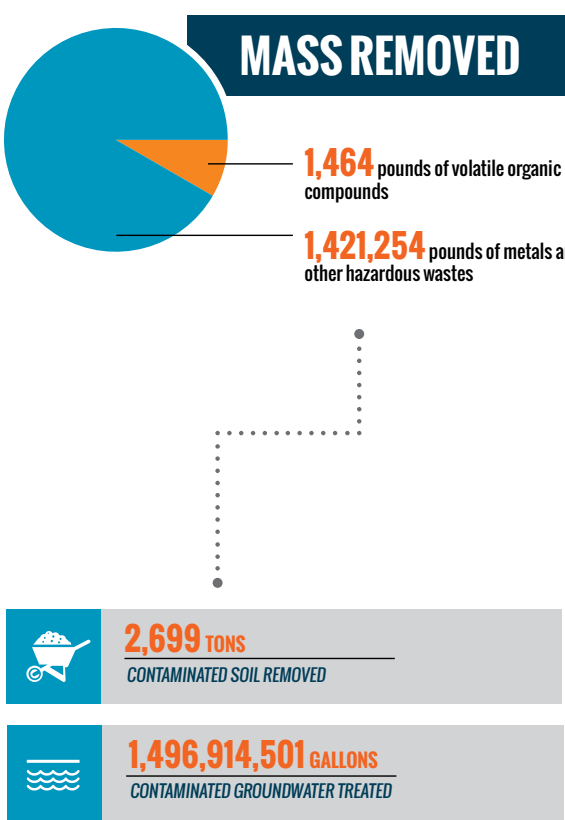
FY17 MAJOR PROGRAM ACCOMPLISHMENTS

ADEQ’s vision is to deliver balanced, leading-edge environmental protection, through radical simplicity for customers and staff and technical and operational excellence. The WQARF program has engaged in many process improvements to drive towards greater mission outcomes.

Highlights

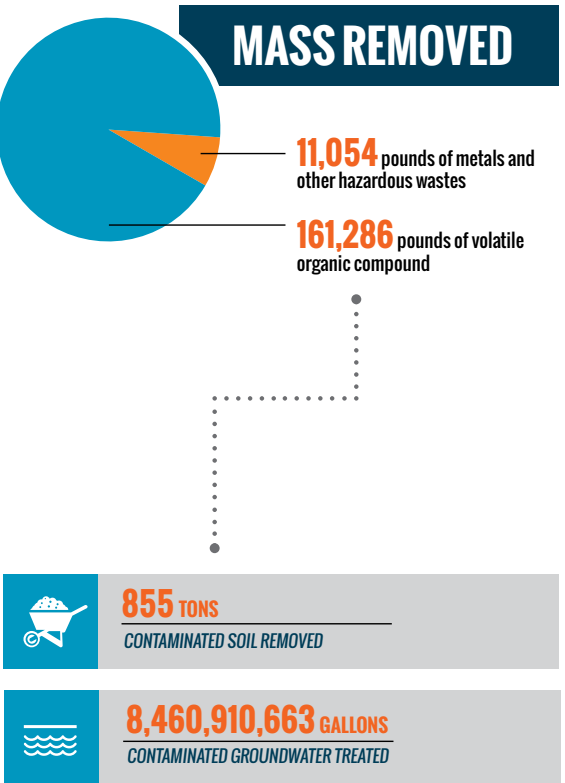
- Delisted three WQARF sites from the Registry, bringing the total number of sites removed from the Registry to five.
- ADEQ chose four sites with existing selected remedies to accelerate cleanups, which are yielding positive results and expected to reduce overall cleanup time significantly.
- ADEQ conducted Early Response Actions (ERAs) (10) and Interim Remedial Actions (IRAs) (2) to protect public health by decreasing potential exposure pathways, limiting the spread of contamination, speeding clean-up time and lowering overall cleanup costs.
- Due to years of WQARF funding deficits, the Preliminary Investigation (PI) list grew to approximately 70 sites. To better balance use of WQARF funding and estimate additional Program liabilities, ADEQ neared completion of its comprehensive re-analysis of all PI sites initiated in FY15 – only four of the original 70 PI sites remain to be evaluated in FY18.
- Added four new WQARF sites to the Registry.
- Many milestones were achieved for existing Registry sites, moving them through the WQARF phases closer to Records of Decision (RODs): one Remedial Investigation (RI), five Feasibility Studies (FS), five Proposed Remedial Action Plans (PRAP), and two RODs were completed.
- Conducted 36 Community Advisory Board (CAB) public meetings, engaging stakeholders in discussions about site activities.
- ADEQ continues to fund ongoing and necessary WQARF site operation and maintenance (O&M) activities at 11 sites.
- At seven sites, ADEQ project managers oversee WQARF site investigation and remedial activities that cooperating third parties pay for and conduct.
- Executed one Prospective Purchaser Agreement (PPA) and received four new PPA applications. PPA's support environmentally responsible economic growth by removing liability barriers for eligible parties that could be associated with buying, selling or developing real property contaminated by hazardous substances that they did not cause or contamination to which they did not contribute.

WQARF



FEDERAL

Review and oversight of 11 NPL sites and 12 Department of Defense sites. This work included participation in 42 public meetings.



EMERGENCY RESPONSE

Program monies fund a wide array of critical remedial response actions taken to protect public health and the environment from a release or threat of release of a hazardous substance or pollutant (ARS 49-282(E)(8)). These actions range from isolated chemical spills that threaten motorists’ safety and the environment, to coordinated statewide emergency response actions (e.g., wildfire), to multi-agency task-force work to address potential statewide health risks associated with various exposure pathways.

Statewide Public Schools Mercury Flooring Project & Other School Response

ADEQ served a key role in a multi-agency task force with the Arizona School Facilities Board (SFB) and the ADHS to conduct a statewide assessment for potential health effects to children, school staff and the public associated with possible exposure to mercury vapor from rubberized flooring in school buildings. This first-of-its-kind statewide assessment produced a comprehensive database of school floors, including current condition, potential concern and recommended actions to mitigate potential exposure risk.

Initiated in November 2015 and funded in FY16, the project successfully assessed flooring in 220 Arizona school districts. Of the total of 181 floors assessed, 64 warranted further evaluation for health risks. Flooring risk assessments for potential mercury vapor off-gassing determined:

- 36 did not pose a health concern
- 25 had levels unlikely to produce long-term harm
- Three required immediate response action; further assessment led to complete removal and replacement of the floors by SFB

ADEQ also removed and ensured proper disposal of mercury and chemicals from Seligman Public School, located in Seligman, Arizona.

Wildfire Smoke Monitoring — Yuma/Cocopah Indian Reservation

At the request of the Cocopah Emergency Manager and Tribal Officials, responded to Cocopah Indian Reservation to conduct smoke monitoring and provide data to the Reservation and Yuma County Emergency managers so they could make decisions regarding residents’ safety.

Preparedness and Response Summary

- Engaged in 190 reported incidents. (An event or occurrence involving hazardous materials, fire, smoke and spilled chemicals that may endanger the public or environment).
- Handled more than 170 calls/complaints to the ADEQ Spill Report Line.
- Participated in approximately 20 statewide preparedness/drills and training exercises.
- Provided on-scene and technical assistance to outside agency state incident response efforts for at least 15 matters.

WATER QUALITY ASSESSMENT AND MANAGEMENT (SEE APPENDIX 4 FOR DETAILS)

- ADEQ completed and submitted to EPA Region 9 for approval (December 2016) Arizona’s draft Clean Water Act Assessment that identifies impaired waters in Arizona.
- Collected and analyzed more than 400 statewide water samples to support planning and development for healthy surface waters and evaluate grant project effectiveness.

ADHS (SEE APPENDIX 5 FOR DETAILS)

- Performed health consultations/profiles for six communities in Arizona.
- Provided risk assessment reports for 54 public schools in Arizona and other technical support for the Statewide Public Schools Mercury Flooring Project.
- Reviewed and provided technical consultation to ADEQ, its contractors and/or EPA for three risk assessments and two is-sue-specific air and water contaminant exposure concerns.

ADWR (SEE APPENDIX 6 FOR DETAILS)

- Performed technical review related to water quality concerns, potential contaminant plume migration and well construction matters for a combined total of more than 4,000 Notices of Intent and permit applications related to groundwater wells near or within WQARF and federal sites or other remedial action sites.

WQARF REGISTRY DELISTING

For the first time since 2013, the WQARF Program removed three sites from the Registry. The following sites, each added to the Registry in 1998, were delisted when ADEQ confirmed groundwater contaminants met applicable Aquifer Water Quality Standards (AWQS) and that groundwater quality was restored according to clean-up goals.

East Central Phoenix - 40th Street & Indian School (Phoenix)

“Clean drinking water is something we can never take for granted, and I am very pleased at this most recent report. ADEQ has made tremendous progress ensuring everyone in Phoenix has access to safe, clean drinking water now and into the future.”

- Phoenix District 6 Councilman Sal DiCiccio

West Central Phoenix - West Grand Avenue (Phoenix)

“Salt River Project (SRP) supports ADEQ and the WQARF program and the Agency’s efforts to clean up contamination throughout the Phoenix area,”
“Groundwater is a valuable resource to SRP, and protecting our wells used for municipal water supply and irrigation is a priority. SRP looks forward to our continued partnership with ADEQ in support of the WQARF program.”

- SRP Chief Sustainability & Compliance Executive, Kelly Barr

Tyson Wash (Quartzsite)

...We appreciate the assistance that the State of Arizona has given in removing this site from the registry, as it benefits both the quality and availability of the precious water in our desert state and our environment. It has been 19 years of commitment by ADEQ to this effort that has brought it to a successful conclusion and 15 years earlier than anticipated.”

— Quartzsite Town Manager Jim Ferguson

EFFORTS TO ACCELERATE CLEANUPS

ADEQ is emphasizing efforts to accelerate cleanups at WQARF sites. Remedies proposed in PRAPs and in new and existing RODs, incorporate contingencies that allow augmentation of selected remedial technologies.

16th Street and Camelback (Phoenix)

A 2017 ROD specified MNA as the selected remedy to address site groundwater contamination and estimated clean-up efforts to continue into 2029. ADEQ evaluated Enhanced Reductive Dechlorination (ERD) to determine if it could expedite clean-up time. Groundwater sampling results show that implementing this contingency will have favorable results.

Estes Landfill (Phoenix)

A 2017 ROD specified MNA as the selected remedy to address site groundwater contamination and estimated clean-up efforts to continue into 2031. ADEQ is evaluating options to expedite cleanup. Currently, In-Situ Chemical Oxidation (ISCO) is being considered as a probable option to accelerate clean-up timeframe, pending evaluation of geochemical groundwater parameters in FY18. Augmentation of MNA with ISCO is expected to substantially decrease overall clean-up time and cost.

Payson PCE (Payson)

A 2007 ROD specified groundwater pump and treat and monitoring as the selected remedy to address site groundwater contamination and estimated cleanup work to continue into 2036. ADEQ evaluated options to expedite the cleanup and selected ERD as the optimal method. Initiated in FY16, ERD injections showed groundwater contaminant levels decreasing significantly both at, and downgradient of, the source. A combination of ERD and bioaugmentation, consisting of microbial enhancement, continues and is expected to reduce overall clean-up time by decades.

West Central Phoenix — North Plume (Phoenix)

ADEQ initiated an ERD study to isolate zones within the aquifer for treatability. Operating since 2001, the existing soil vapor extraction (SVE) system has been extremely effective in removing mass. Efforts to further enhance this system have proven successful and ERD enhancement is now included in the PRAP. ADEQ will continue to expand the ERD application to other zones within the aquifer to further expedite the cleanup.

EARLY RESPONSE ACTION (ERA)

The Program continues to place a high priority on ERAs at sites where public health is potentially impacted, where sources of contamination can cause significant environmental impact or where early action can reduce potential future costs by limiting the spread of contamination.

7th Street & Arizona Avenue (Tucson)

An additional source area for tetrachloroethylene (PCE) was identified in late FY16. Soil-gas investigations in FY17 resulted in concentrations near residential buildings exceeding the residential indoor air EPA Region XI screening levels. Infrastructure for a SVE system was partially installed in FY17. The remainder of the system construction and startup are scheduled for completion in early FY18, as additional investigation continues to define the extent of contamination.

East Central Phoenix — 24th Street and Grand Canal (Phoenix)

To address contaminated source soils, a SVE system was designed and installed in FY16 to remove PCE. The SVE system began operating in FY17 and has removed nearly 73 pounds of contaminants from the environment. RI completion is expected in FY18 as additional investigation is conducted to define the extent of contamination.

East Central Phoenix — 32nd Street and Indian School Road (Phoenix)

To address contaminated soils, SVE systems have been operating behind Maroney’s Cleaners and the former Viking Cleaners. Both SVE systems were optimized in FY17 and have removed a total of 134 pounds of contaminants from the environment. RI completion is expected in FY18 as additional investigation is conducted to define the extent of contamination.

East Central Phoenix — 40th Street & Indian School (Phoenix)

Groundwater monitoring in February 2017 showed contaminant levels higher than applicable AWQS in only one well near the former source. In March, 2017, ISCO treatment of this well was conducted. April 2017 groundwater tests show this treatment effectively reduced PCE and trichloroethylene (TCE) concentrations to levels either much lower than their respective AWQSs. Based on these data no further action was necessary and the site was removed from the WQARF Registry.

Harrison Road and Millmar (Tucson)

ADEQ conducted a consolidation action to address an existing threat of residents’ exposure to hazardous substances from an aluminum dross disposal area. ADEQ sampled and tested the dross and nearby residential yards to characterize conditions. In FY18, a final remedy will be conducted and the Program will complete statutorily required milestone reports to document the remedy.

Highway 260 & Main (Cottonwood)

In response to elevated PCE levels in residential, private well drinking water during the PI, ADEQ initiated temporary bottled water delivery to one residence and a trailer park with 14 individual hookups. Initial investigations indicate two local dry cleaning operations, where elevated PCE levels were detected in groundwater and soil gas, likely are the primary sources of contamination. The RI planned for FY18 will determine the source(s) of PCE.

Hwy 260 and Johnson Lane (Pinetop-Lakeside)

As a result of FY17 PI sampling, ADEQ initiated temporary bottled water delivery to one residence with elevated PCE levels in their private drinking water well. RI activities, initiated in FY17, are ongoing.

Klondyke Tailings Project (Klondyke)

In FY17, ADEQ continued ERA activities and completed removal of lead-impacted soil resulting from abandoned mine tailings at two residential properties and along a section of Klondyke Road. Approximately 2,379 cubic yards of impacted soil were placed on the lower tailings pile in FY17, which will be capped and armored as part of the final remedy.

Stone and Grant (Tucson)

The site was formerly a dry cleaning facility that operated from 1946 until the mid-1970s. In December 2014, as part of the Grant Road widening project, the City of Tucson performed a preliminary site assessment that confirmed elevated PCE in soil and soil-gas beneath the site. A SVE system is being installed as part of an ERA to remove contamination. ADEQ leaking underground storage tank (UST) investigations also show PCE in perched groundwater higher than the AWQS directly across Grant Road to the north of the site. The RI scheduled for FY18 will determine whether PCE has impacted the regional aquifer.

West Central Phoenix — North Canal Plume (Phoenix)

The RI completed in FY17, identified several areas of soil gas impact higher than the industrial commercial indoor air EPA Region XI screening levels. To decrease possible exposure pathways, a SVE system was installed and began operating in late FY17 at a source property. Operation of the system commenced on June 13 and within one week, the SVE system removed approximately 53 pounds of Volatile Organic Compounds (VOCs). Continued vertical and lateral definition of PCE impacts will be part of data gap investigation to complete the FS.

INTERIM REMEDIAL ACTION (IRA)

IRAs, are implemented at a Registry site to protect water supply wells, provide an alternative water supply, replace a well or to treat water. ADEQ has been working with Flowing Wells Irrigation District (FWID) and the Metropolitan Domestic Water Improvement District (Metro Water) to implement water treatment at the Miracle Mile and Shannon Road/El Camino del Cerro WQARF sites, respectively.

These two critical water treatment projects treat more than 220 million gallons of drinking water for nearly 66,000 residents living in these Tucson communities.

Miracle Mile (Tucson)

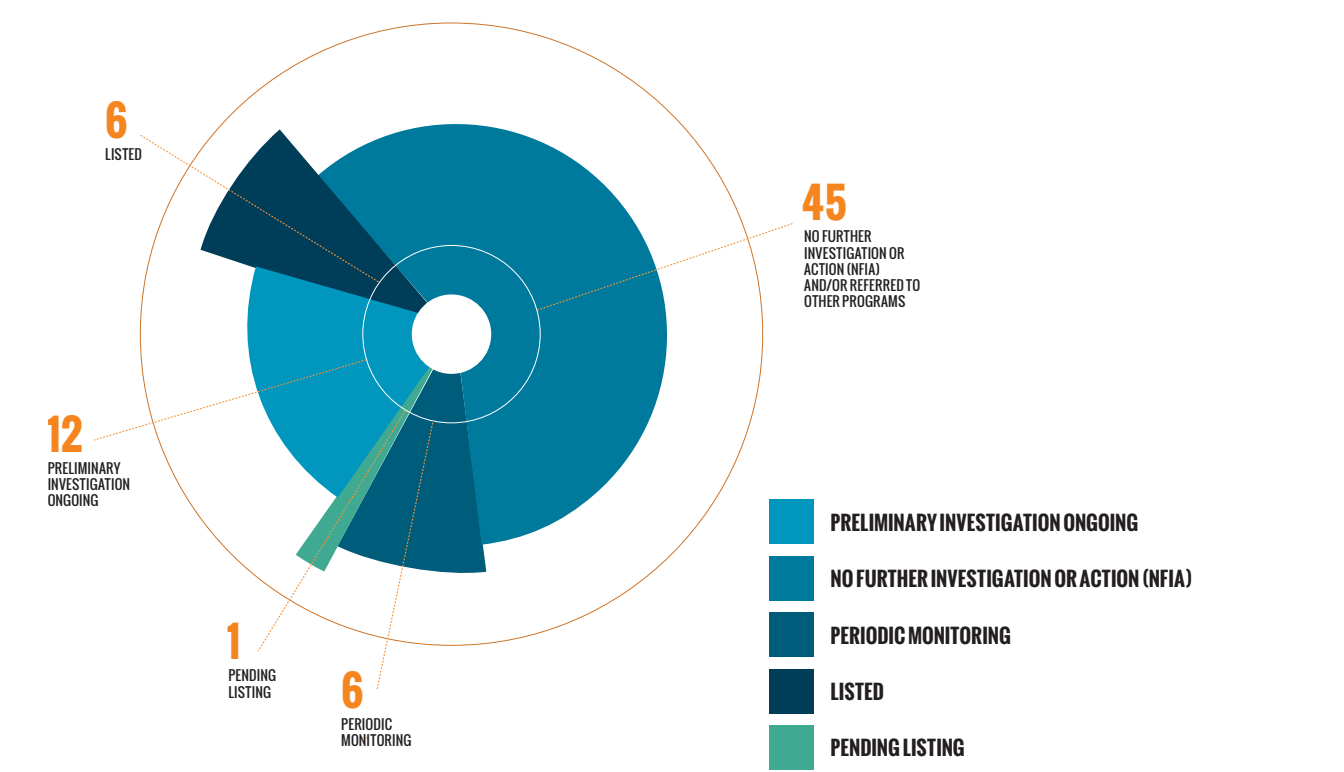
ADEQ entered into an Intergovernmental Service Agreement (IGA) with FWID to provide wellhead treatment to remove VOCs at two FWID production wells. ADEQ and FWID jointly designed and constructed the treatment system, which incorporates FWID’s existing arsenic treatment system. The 900-gallon per minute (gpm) system began operating in January 2007 and treated approximately 103 million gallons of water in FY17. Treated water is distributed to FWID customers for drinking water use.

Shannon Road/El Camino del Cerro (Tucson)

Through a cooperative agreement with Metro Water, ADEQ has been funding wellhead treatment and O&M costs associated with a water treatment system for VOC-contaminated groundwater. The treatment system pumping wells capture and contain the groundwater contaminant plume. This system treated approximately 117 million gallons of water and removed nearly 20 pounds of VOCs in FY17. Treated water is distributed to Metro Water customers for drinking water use.

PRELIMINARY INVESTIGATION (PI) SITE RESOLUTION

Sites are often referred to the Program by other Agency Value Streams, including Hazardous Waste Compliance and Underground Storage Tank Corrective Action. These referrals trigger the Program to begin assessment through a PI. Over the years, the PI list had grown to approximately 70 sites. In FY17, the Program made significant strides in addressing these PI sites. PI results and status follow:



NEWLY LISTED WQARF REGISTRY SITES

After adding two PI sites to the WQARF Registry in FY16 for the first time since 2004, ADEQ added the following four sites in FY17:

- Harrison Road and Millmar Road Dross (Tucson)
- Highway 260 and Main Street (Cottonwood)
- Miller Valley Road and Hillside Avenue (Prescott)
- Stone Avenue and Grant Road (Tucson)

OPERATION & MAINTENANCE (O&M)

In FY17, ADEQ continues to fund ongoing and necessary O&M activities at the following WQARF sites:

WQARF SITE	WORK CONDUCTED
20th Street and Factor Avenue	Engineered cap placement/maintenance
Central Avenue and Camelback Road	Groundwater pump-and-treat and SVE system
East Central Phoenix (ECP) – 24th Street and Grand Canal	SVE system
East Central Phoenix (ECP) – 32nd Street and Indian School Road	Dual SVE systems
Klondyke Tailings	Upper tailings cap protection
Miracle Mile	FWID wellhead treatment
Mountain View Estates (<i>former NPL site</i>)	Soil cap maintenance
Payson PCE	Groundwater pump-and-treat/ERD
Shannon Road/El Camino del Cerro	Metro Water wellhead treatment
Vulture Mill	Soil cap maintenance
West Central Phoenix (WCP) – North Plume	SVE system

ADEQ OVERSIGHT OF THIRD-PARTY WQARF SITE CLEAN-UP WORK

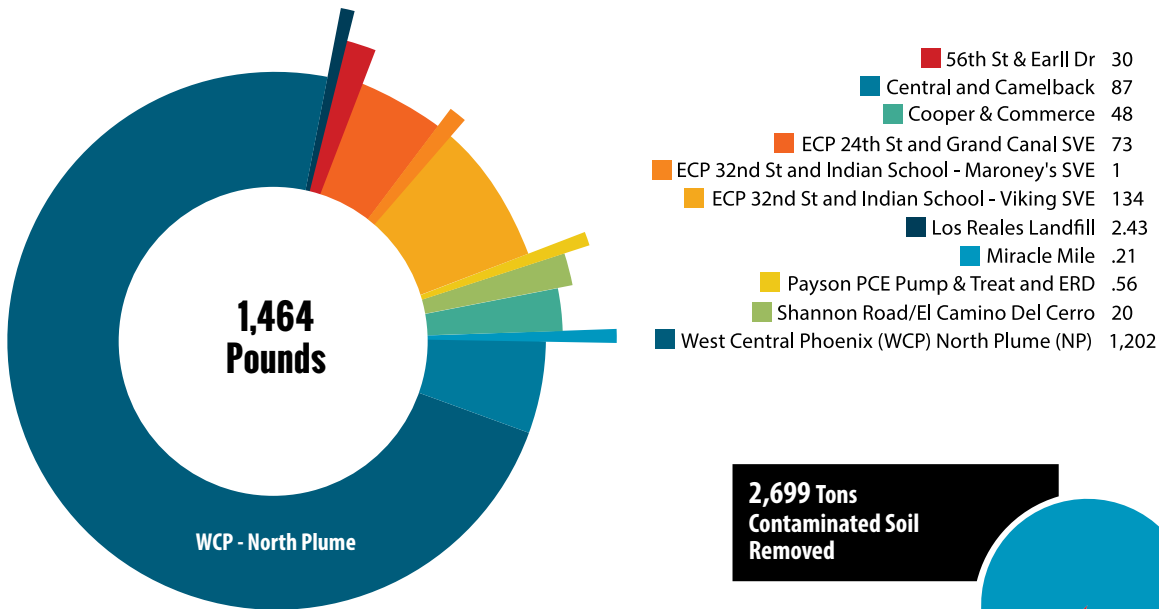
ADEQ project managers also oversee WQARF site investigation and remedial activities that cooperating third parties pay for and conduct. Costs ADEQ incurs for this oversight are recoverable.

WQARF SITE	THIRD-PARTY
56th Street and Earll Drive	<i>Freescale Semiconductor, Inc.</i> under a Consent Order
Los Reales Landfill	<i>City of Tucson</i> under a Remedial Action Plan
Park-Euclid	<i>Park-Euclid Group</i> under a working agreement
Pinal Creek	<i>Freeport McMoRan Inc.</i> as successors of interest under a Consent Decree <i>BHP</i> and <i>Pinal Creek Working Group</i> under a Consent Decree
Silverbell Jail Annex Landfill	<i>City of Tucson</i> under a Remedial Action Plan
West Central Phoenix (WCP) - East Grand Avenue	<i>Univar</i> under a working agreement
West Van Buren	<i>Air Liquide America Specialty Gases LLC</i> and <i>Prudential Overall Supply</i> under an Amended Consent Order

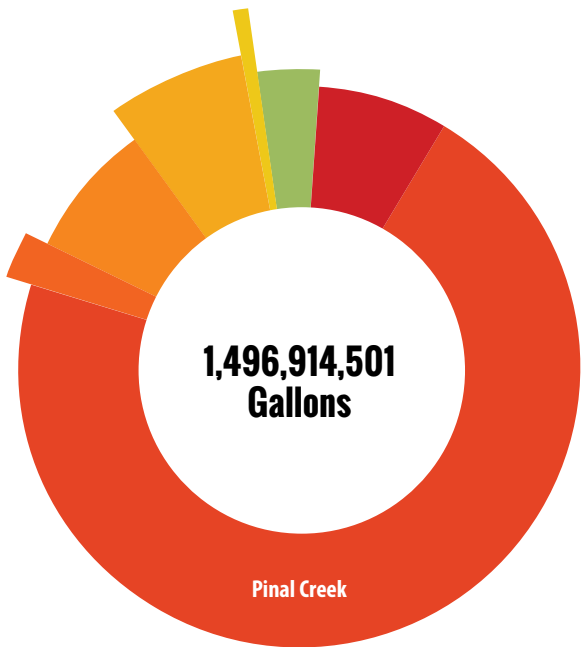
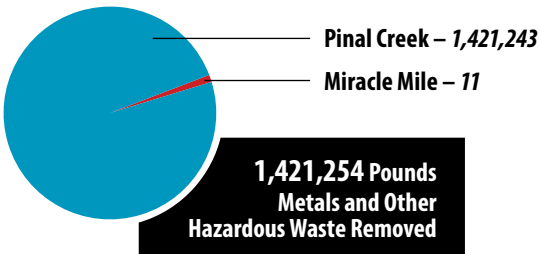
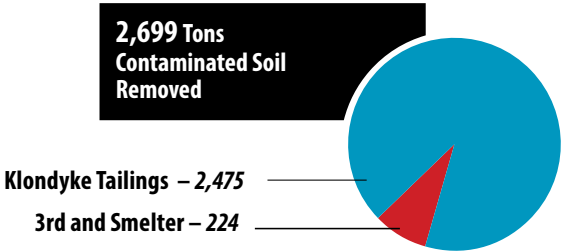
A.R.S. §49-282(E)(11) also provides for reimbursement to political subdivisions for the costs incurred in response to a release or a threat of a release of a hazardous substance or pollutant that presents an immediate and substantial endangerment to public health or the environment. No applications were processed in FY17.

WQARF SITE MISSION OUTCOME DETAIL

REMEDIATION:



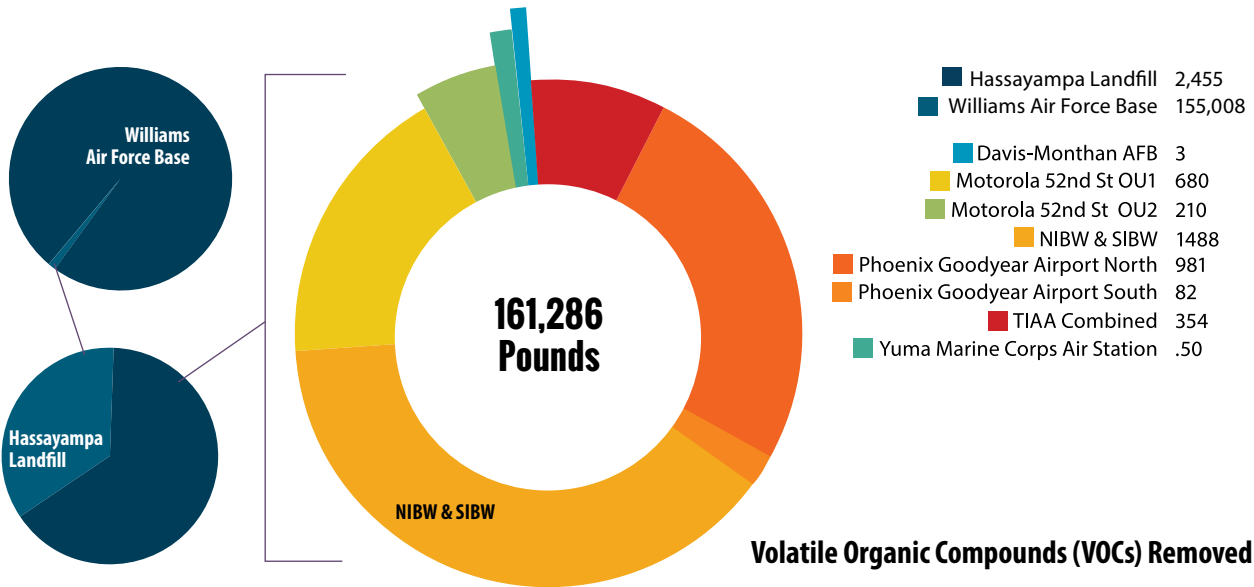
Volatile Organic Compounds (VOCs) Removed



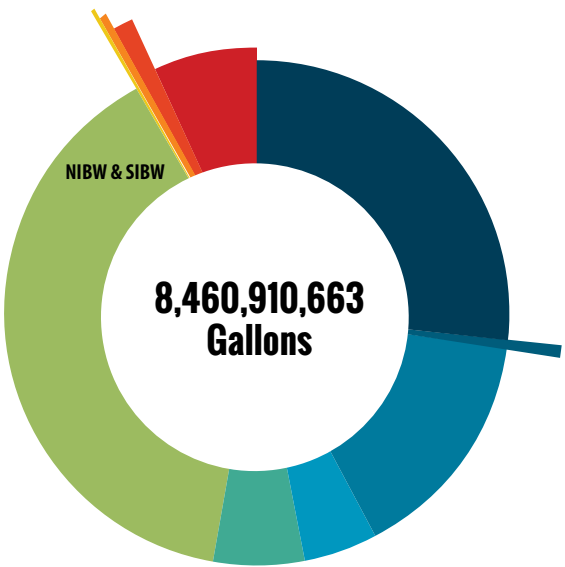
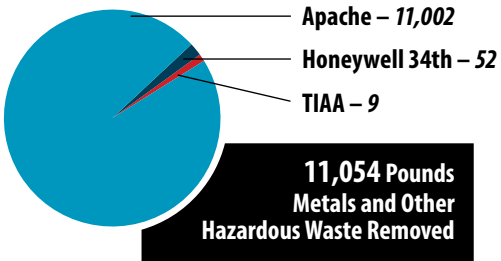
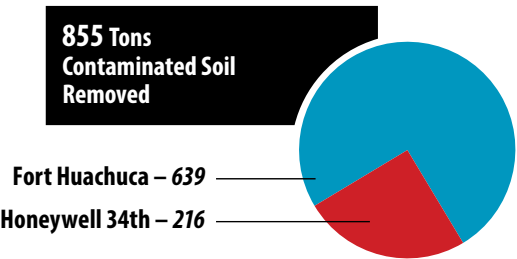
Gallons of Groundwater Treated

FEDERAL SITE MISSION OUTCOME DETAIL

REMEDIATION:



Volatile Organic Compounds (VOCs) Removed



Gallons of Groundwater Treated

FY17 WQARF STATUS CHART

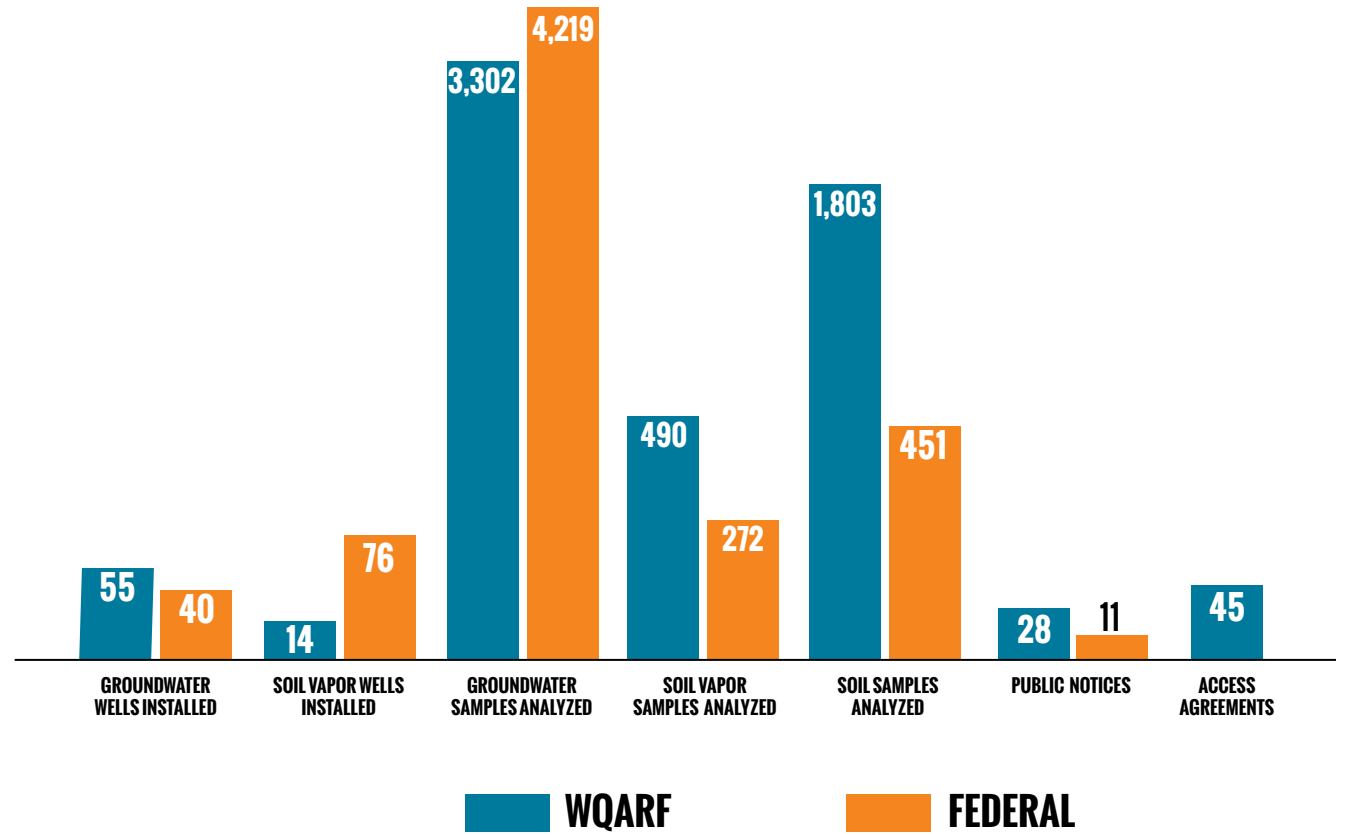
SITES	EARLY RESPONSE ACTION	REMEDIAL INVESTIGATION	FEASIBILITY STUDY	PROPOSED REMEDIAL ACTION PLAN	RECORD OF DECISION	REMEDY IMPLEMENTATION	OPERATION AND MAINTENANCE	REMOVAL FROM REGISTRY
7TH AVENUE AND BETHANY HOME ROAD								
7TH STREET AND ARIZONA AVENUE								
7TH STREET AND MISSOURI								
16TH STREET AND CAMELBACK ROAD								
20TH STREET AND FACTOR AVENUE								
56TH STREET AND EARLL DRIVE								
BROADWAY–PANTANO								
CENTRAL AVENUE AND CAMELBACK ROAD								
COOPER ROAD AND COMMERCE AVENUE								
ECP - 24th STREET AND GRAND CANAL								
ECP - 32nd STREET AND INDIAN SCHOOL ROAD								
ECP - 38th STREET AND INDIAN SCHOOL ROAD								
ECP - 40th STREET AND INDIAN SCHOOL ROAD								
ECP - 40th STREET AND OSBORN ROAD								
ECP - 48th STREET AND INDIAN SCHOOL ROAD								
ESTES LANDFILL								
GRANT RD AND STONE AVE								
HARRISON RD AND MILLMAR RD								
HIGHWAY 260 & MAIN								
HWY 260 & JOHNSON LANE								
KLONDYKE TAILINGS								
LAKE HAVASU AVE AND HOLLY AVE ***								
LOS REALES LANDFILL*								
MILLER VALLEY RD & HILLSIDE AVE								
MIRACLE MILE								
MOUNTAIN VIEW ESTATES**								
PARK – EUCLID								
PAYSON PCE								
PINAL CREEK*								
SHANNON RD/El CAMINO del CERRO								
SILVERBELL LANDFILL*								
SOUTH MESA								
STONE AVENUE AND GRANT ROAD								
TYSON WASH								
VULTURE MILL								
WCP - EAST GRAND AVENUE								
WCP - NORTH CANAL PLUME								
WCP - NORTH PLUME								
WCP - WEST GRAND AVENUE								
WCP - WEST OSBORN COMPLEX								
WESTERN AVENUE								
WEST VAN BUREN								

Notes:
Operating systems initiated as ERA or IRA or as a final remedy are considered in the operation and maintenance phase.

* Long-term operation and maintenance - Old WQARF Program
** Former National Priority List site, only ongoing long-term monitoring and upkeep
*** Registry listing pending – Formerly titled State Route 95 & Kiowa Blvd.

SUPPORTING ACTIVITIES FOR STATE AND FEDERAL SITES

ADEQ conducted the following environmental investigation, community outreach and legal activities to support the Program.



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 also are used for oversight activities at state-lead CERCLA sites, which are reimbursed by the responsible parties. Cost reimbursement activities at CERCLA sites supported by ADEQ are provided below.

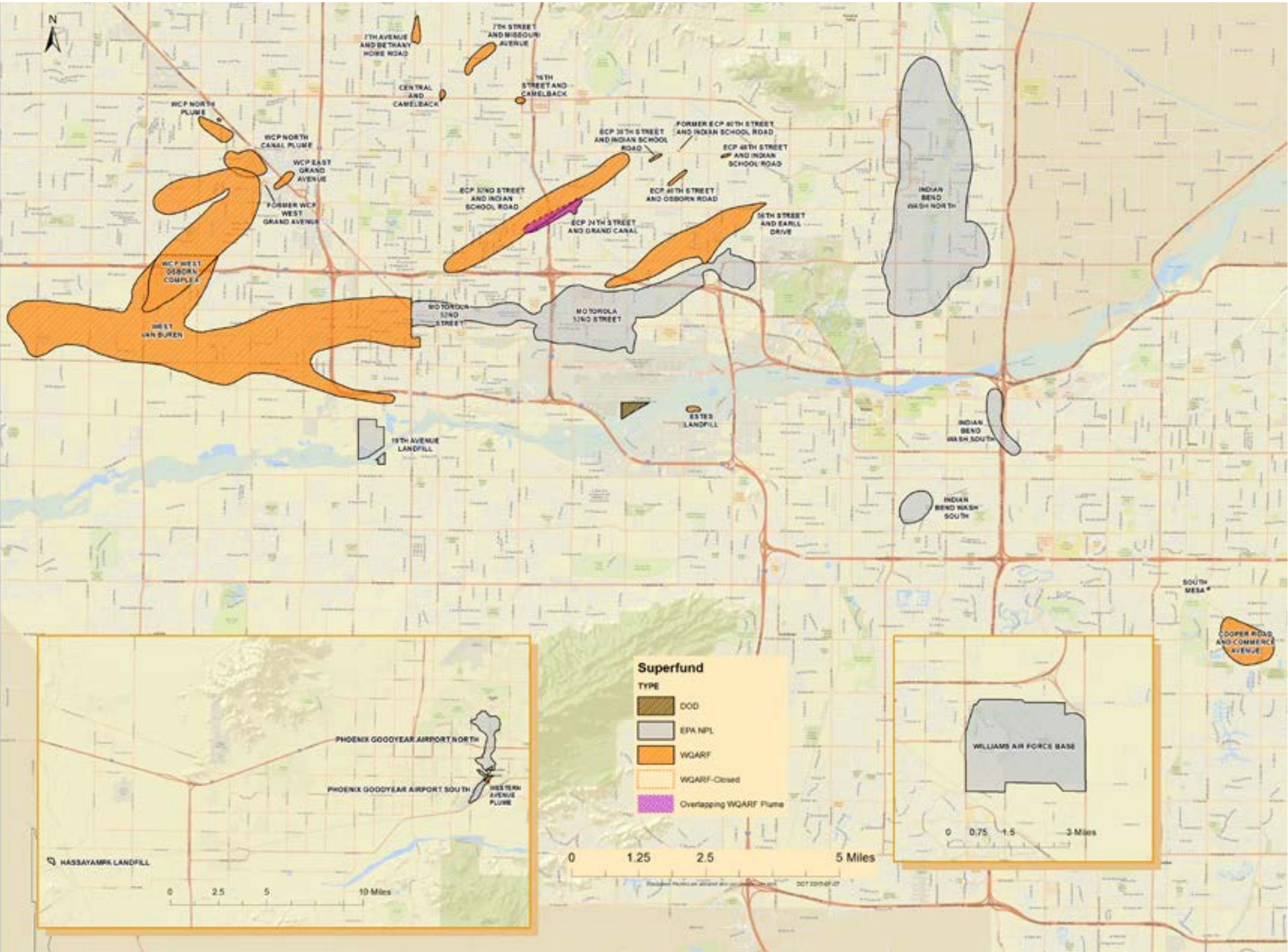
	NO. OF PACKAGES	AMOUNT
19th Avenue Landfill	4	\$3,519.79
Asarco-Hayden	4	\$20,270.06
Camp Navajo DEMA	5	\$8,091.33
Honeywell 34th St	5	\$8,783.29
Honeywell Area 21	4	\$4,956.62
M52 OU 1	4	\$36,666.52
M52 OU2 - RI/FS Account	3	\$3,290.00
Motorola 56th Street Plant	4	3,642.81
Motorola OU 2	4	\$26,163.54
North Indian Bend Wash	1	\$18,565.79
PGA North Crane Co	1	\$14,521.22
Phoenix Goodyear Airport South	2	\$34,764.01
TIAA Area B	7	\$6,860.52
Total	48	\$190,095.50

Note:
Packages are cost recovery and pre-paid account statements.

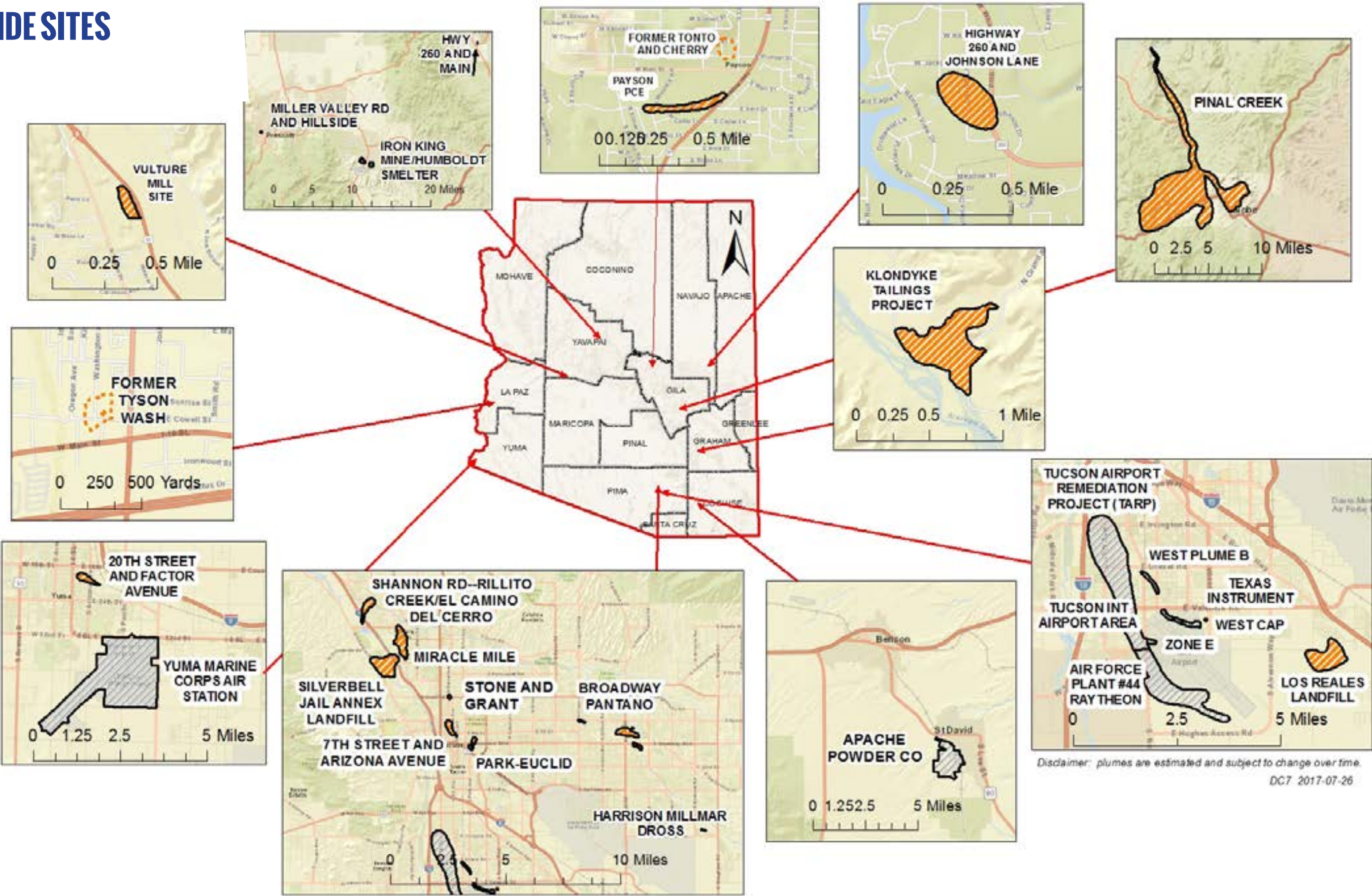
FIGURES



METROPOLITAN PHOENIX SITES



STATEWIDE SITES



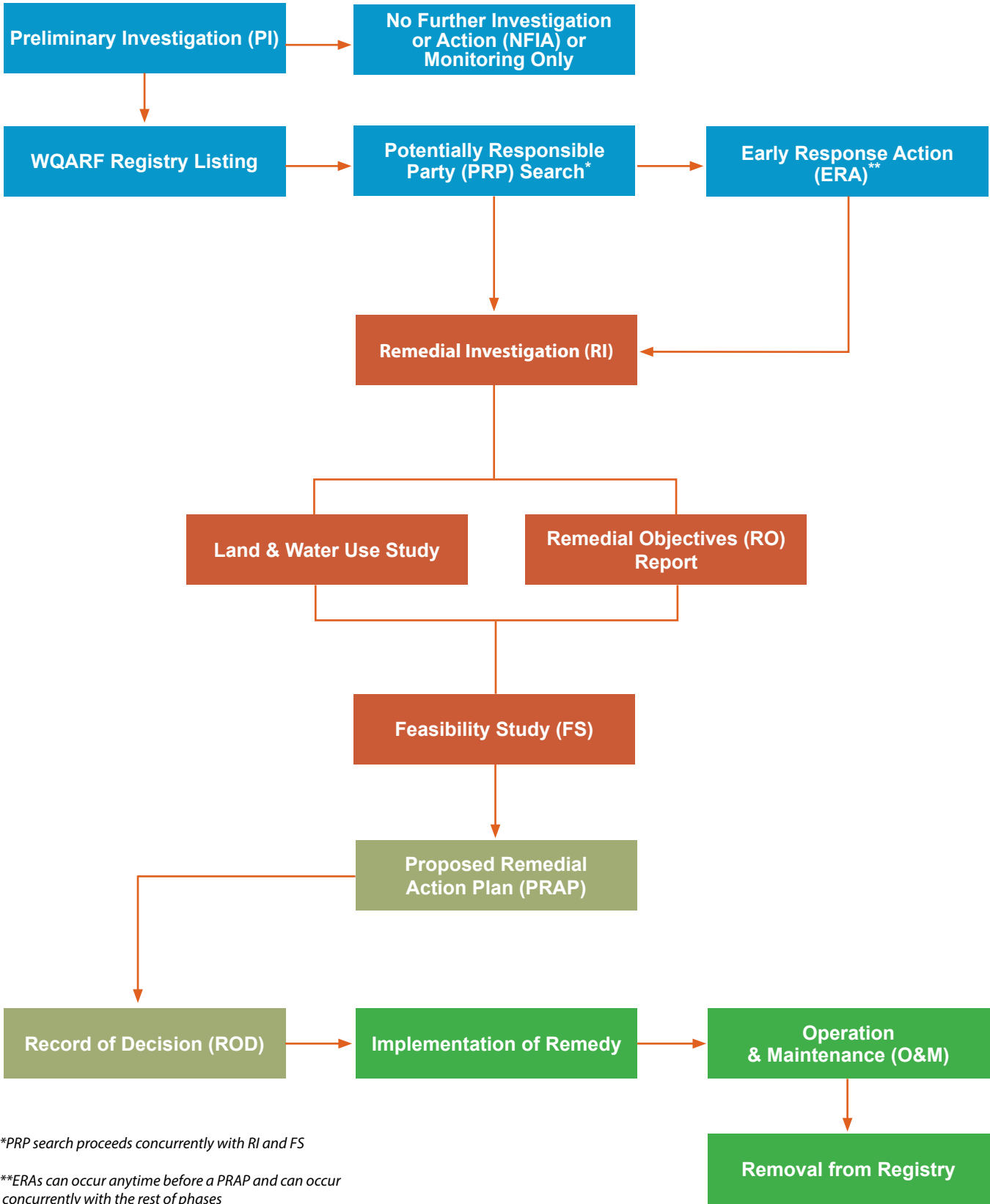
APPENDICES



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APPENDIX 1

WQARF PHASES



APPENDIX 1

DESCRIPTION OF WQARF PHASES

PRELIMINARY INVESTIGATION (PI)

The WQARF process begins when ADEQ receives information about a release or potential release of a hazardous substance to the environment. This information may come from a citizen complaint, an investigation conducted by ADEQ or an investigation conducted by an outside party. ADEQ assesses whether the information is credible, another regulatory program has jurisdiction or the site already is being cleaned up voluntarily. If a potential release has occurred and no other regulatory program has jurisdiction, a WQARF PI is initiated.

The purpose of the PI is to confirm the release or potential release and determine whether further investigation or action is necessary. The PI is not a full investigation to determine the extent of contamination nor is its purpose to identify the parties potentially responsible for contamination. If ADEQ determines that no additional investigation or action is necessary, the site is removed from further consideration and will not be added to the WQARF Registry. If ADEQ determines that additional investigation or action is necessary, the site is scored using the eligibility and evaluation model and is eligible WQARF Registry listing.

WQARF REGISTRY LISTING

The WQARF Registry provides public access to information about WQARF sites. The Registry replaces the former WQARF Priority List and provides a list of sites where groundwater and/or soil are contaminated. Sites listed on the WQARF Registry qualify for WQARF funds for investigation and/or clean-up. The WQARF Registry contains a brief description of each site, the site’s score and the current status of the cleanup.

POTENTIALLY RESPONSIBLE PARTY (PRP) SEARCH

If ADEQ determines that site cost recovery may be appropriate, ADEQ initiates a PRP search that proceeds concurrently with the RI. ADEQ uses information gathered in the PRP search to determine the financial viability and legal liability of PRPs. Identifying PRPs positions ADEQ to allocate and assign proportional shares of liability to finance the remedy.

EARLY RESPONSE ACTION (ERA)

Several years may be needed to conduct a full site investigation and work with the community to select a remedy. ADEQ developed the ERA process to quickly address contamination where public health or the environment is potentially impacted, where sources of contamination can cause significant environmental impact or where swift action can save significant WQARF funds by limiting the spread of contamination. ERAs range from relatively inexpensive short-term actions, such as fencing and providing alternative water supplies, to expensive large-scale groundwater and/or soil treatment systems.

An initial evaluation (ERA evaluation) of site risks occurs immediately after a site is listed on the WQARF Registry. If a current or potential risk to public health or the environment exists through direct contact with a hazardous substance, an ERA may be implemented immediately. If there is no risk, ADEQ collects information about a site to determine if an ERA is appropriate to protect a water supply or to prevent the spread of contamination. A site is continuously reevaluated as more data become available and an ERA can be implemented at any time prior to the final remedy selection. Just as with the selection of a final remedy, the implementation of an ERA includes design and construction and may include a period of O&M.

REMEDIAL INVESTIGATION (RI)

The purpose of a RI is to collect enough information to determine the appropriate clean-up actions needed at a WQARF site. The information collected includes site physical characteristics; the nature, extent and sources of contamination and the actual and potential impacts of site contaminants to public health, welfare and the environment. The RI also identifies present and reasonably foreseeable uses of land and waters of the state that have been or may be impacted by the contamination.

After site conditions are known, ADEQ holds public meetings and works with site-specific community advisory boards to establish remedial objectives (ROs). ADEQ invites land owners, local governments, water providers and the public to discuss land and water uses impaired or lost due to the contamination, as well as future uses, which could be impacted by the contamination. Based on this input, ADEQ prepares a report of proposed site ROs that lists uses, time frames when completion of cleanup is required to protect or provide for the use and the duration of the required actions.

FEASIBILITY STUDY (FS)

Using information collected in the RI, the FS documents technologies and options that may achieve the ROs. Various options are identified and compared to facilitate selection of the most feasible and cost-effective clean-up method for the site.

PROPOSED REMEDIAL ACTION PLAN (PRAP)

After the FS is completed, ADEQ prepares a PRAP to document the proposed cleanup or remedy. The plan describes the means by which the proposed remedy will meet each of the ROs identified in the RI and how accomplishing the ROs will be measured. The plan also provides a clean-up cost.

If ADEQ intends to seek recovery of costs from PRPs, notice is provided to these parties of the opportunity to submit an accounting of clean-up costs they may have incurred at the site and object to costs submitted by other PRPs. Any costs ADEQ approves as reasonable and necessary may be used as a credit against potential liability in a settlement or allocation.

RECORD OF DECISION (ROD)

The ROD documents the selected remedy. The ROD includes an estimated cost, time frames for beginning and completing the clean-up process and a demonstration that the selected remedy meets the ROs. After the ROD is signed, an allocation process follows in which past and future costs are assigned among responsible parties.

IMPLEMENTATION OF REMEDY

The design and implementation stage includes the development of the engineered design of the selected remedy and implementation of the remedy through construction. A period of O&M may follow design and construction activities.

OPERATION AND MAINTENANCE (O&M)

O&M is conducted according to the schedule applicable to the type and performance of the completed remedy.

REMOVAL FROM REGISTRY

Once the remedy meets the site-specific clean-up criteria, or ADEQ determines that no further investigation or clean-up work is needed, the site is eligible for delisting from the WQARF Registry.

APPENDIX 2
WQARF REVENUES AND
EXPENDITURES

BALANCE	FY16 ACTUAL	FY17 PROJECTION	FY17 ACTUAL
Beginning Fund Balance - WQARF & Priority Sites	4,794.3	1,482.9	2,371.8
Beginning Fund Balance - Site Specific Account	887.8	1,283.5	1,283.5
Subtotal: Funds Available	5,682.1	2,766.4	3,655.3
Prior Year Corporate Income Tax Reversion	0.0	0.0	0.0
Total Balance from Prior Year	5,682.1	2,766.4	3,655.3

REVENUE SUBJECT TO 18M CAP	FY16 ACTUAL	FY17 PROJECTION	FY17 ACTUAL
Corporate Income Tax	7,000.0	2,823.6	2,823.6
Emissions (VEI)	0.0	4,250.0	4,250.0
AQF	0.0	2,875.0	2,875.0
FEES:			
Municipal Water (A.R.S. 42-5302)	2,232.9	2,200.0	2,472.7
Fertilizer Registration (A.R.S. 3-272)	81.7	54.1	76.3
HW Facility Registration Fee (A.R.S. 49-929/49-930)	157.9	144.0	203.1
HW Manifest Re-submittal Fee (A.R.S. 49-922.01)	1.0	0.0	0.0
Industrial Discharge Permit Fee (A.R.S. 49-209)	35.0	20.8	29.3
Pesticide Registration (A.R.S. 3-351)	927.4	781.1	1,299.1
Quality Assurance Fee (A.R.S. 45-616)	0.0	0.0	0.0
Subtotal: Fees	3,435.9	3,200.0	4,080.5
Total: Revenue Subject to 18M Cap	10,435.9	13,148.6	14,029.1

REVENUE NOT SUBJECT TO 18M CAP	FY16 ACTUAL	FY17 PROJECTION	FY17 ACTUAL
Consent Decrees	0.0	0.0	215.8
Cost Recovery (A.R.S. 49-282)	378.4	0.0	398.7
Responsible Parties	378.4	0.0	614.5
*Includes revenue from prior year packets			
Prospective Purchaser Agreement (A.R.S. 49-285.01)	0.0	0.0	16.1
Interest (A.R.S. 49-282)	38.1	35.7	52.1
Other Income	3.6	0.0	0.0
Other Revenue	41.7	35.7	68.2
Total: Revenue Not Subject to 18M Cap	420.1	35.7	682.7

Beginning Balance and Revenue	16,538.1	15,950.7	18,367.1
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EXPENDITURES	FY16 ACTUAL	FY17 PROJECTION	FY17 ACTUAL
Non-Site Expenditures	6,581.9	6,771.5	4,647.0
Site Expenditures	7,059.8	8,300.0	7,314.8
Transfers Out	130.0	190.0	153.0
General Fund Sweep	0.0	0.0	0.0
Total Expenditures	13,771.7	15,261.5	12,114.8

Note: All figures expressed in thousands.

APPENDIX 2

WQARF EXPENDITURE STATEMENT

CORE EXPENDITURES	FY18 SPENDING PLAN
WQARF Professional & Support Staff	3,615.1
Professional & Outside - Remedial Projects	1,353.8
Hydrologic Support & Assessment	921.4
Professional & Outside - Hydrologic Support & Assessment	44.7
Emergency Response	480.9
Attorney General's Office	650.0
PRP Identification/Liability	350.0
Litigation	0.0
Appeals	0.0
Advisory Board	0.0
Rule Development	0.0
Community Involvement/General WQARF	0.0
Core Expenditures	7,415.9

REGISTRY SITES AND PRELIMINARY INVESTIGATIONS (PI)	FY18 SPENDING PLAN
Proposed New Sites	3,750.0
RI/FS - Site Specific WQARF	2,010.0
Clean up - Site Specific WQARF	1,220.0
ERA	335.0
O&M	660.0
Community Involvement	25.0
Preliminary Investigations	300.0
Registry Sites & PI	8,300.0

Subtotal: WQARF Program	15,715.9
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TRANSFERS AND DISBURSEMENTS	FY18 SPENDING PLAN
Department of Health Services - Risk Assessment	60.0
Department of Water Resources - Appropriation Transfer Out	130.0
Aid to Municipalities	250.0
Voluntary Program	0.0
Subtotal: Transfers & Disbursements	440.0

Total Disbursements	16,155.9
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* Money reimbursed by Federal Project Unit for cost recovery not included in sites total

APPENDIX 3

WQARF SITE BUDGET

SITE	FY18 PROJECTED BUDGET
7th Street and Arizona Avenue	\$175,000
7th Avenue and Bethany Home Road	\$150,000
7th Avenue and Missouri Avenue	\$150,000
16th Street and Camelback Road	\$125,000
20th Street and Factor Avenue	\$100,000
56th Street and Earll Drive	\$0
Highway 260 and Johnson Lane	\$275,000
Highway 260 and Main	\$250,000
Broadway–Pantano	\$200,000
Central Avenue and Camelback Road	\$150,000
Cooper Road and Commerce Avenue	\$75,000
ECP - 24th Street and Grand Canal	\$250,000
ECP - 32nd Street and Indian School Road	\$250,000
ECP - 38th Street and Indian School Road	\$100,000
ECP - 40th Street and Osborn	\$100,000
ECP - 48th Street and Indian School Road	\$110,000
Estes Landfill	\$150,000
Harrison Road and Millmar	\$50,000
Klondyke Tailings	\$0
Los Reales Landfill	\$0
Miller Valley Road	\$325,000
Miracle Mile	\$250,000
Mountain View Estates	\$15,000
Park–Euclid	\$0
Payson PCE	\$75,000
Pinal Creek	\$0
Shannon Road–Rillito Creek/El Camino del Cerro	\$100,000
Silverbell Landfill	\$0
South Mesa	\$150,000
Stone Avenue and Grant Road	\$260,000
Tyson Wash	\$55,000
Vulture Mill	\$0
WCP - East Grand Avenue	\$0
WCP - North Canal Plume	\$100,000
WCP - North Plume	\$110,000
WCP - West Osborn Complex	\$75,000
West Van Buren	\$0
Western Avenue	\$50,000
Hillside Mine; 27th Avenue; Patagonia	\$3,750,000
Community Involvement	\$25,000
Preliminary Investigations	\$300,000
WQARF Sites Budget FY17	\$8,300,000

APPENDIX 4

WATER QUALITY ASSESSMENT AND MANAGEMENT

WQARF money helps provide the Surface Water Quality Improvement Value Stream with the data necessary to evaluate the quality of Arizona’s waterbodies, develop watershed improvement plans, assess projects implemented and improve water quality throughout Arizona.

- ADEQ completed and submitted to EPA Region 9 for approval (December 2016) Arizona’s draft Clean Water Act Assessment that identifies impaired waters in Arizona.
- Collected and analyzed 210 samples from 60 stream sites. Completed probabilistic monitoring for more than 30 sites as part of a two-year study to assess intermittent stream conditions in Arizona.
- Collected and analyzed 21 samples from eight lakes.
- Conducted 13 sampling events at 11 wetland sites across the state in support of EPA’s National Wetland Survey.
- Collected 60 samples for Watershed Plan development on the San Pedro River.
- Trained 103 volunteers in five watershed areas to collect credible water quality data to help fill data gaps and meet ADEQ assessment, effectiveness monitoring and delisting goals.
- Collected and analyzed approximately 100 water quality samples and/or evaluated best management practices for 28 Water Quality Improvement Grant projects in 5 watersheds.

APPENDIX 5

ARIZONA DEPARTMENT OF HEALTH SERVICES (ADHS)

The following provides an overview of the ADHS/ADEQ ISA project work for risk assessment consultation services with ADEQ in FY17. The performance period, site location, contaminants of concern (COCs), activities and ADHS recommendation(s) are provided in the following table.

EAST CENTRAL PHOENIX, 32ND ST. AND INDIAN SCHOOL RD. (WQARF SITE) - JULY 1, 2016 – DECEMBER 19, 2016		
Contaminant(s) of Concern	Activity	Recommendations
Tetrachloroethylene (PCE), trichloroethylene (TCE)	<ul style="list-style-type: none">• Health Consultation Report	There is a potential public health concern because the TCE in-door air concentrations were highly variable and the averaged concentrations were above the health guideline. However, the elevated TCE concentrations are not likely to be due to vapor intrusion.
MERCURY VAPOR IN SCHOOL GYMS – JULY 1, 2016 – MAY 26, 2017		
Mercury vapor	<ul style="list-style-type: none">• Provide support to SFB and school flooring taskforce• Sampling Protocol Assistance• Risk assessment reports for 54 schools• Public Education – Community Meeting• Post risk assessments for Blue Ridge and Seligman High Schools	<ul style="list-style-type: none">• The mercury flooring at two schools (Blue Ridge and Seligman High Schools) posed potential health concerns to the school students and staff. The rubber floors were removed and post risk assessments indicate there are no public health concerns.• The mercury vapors are not posing public health concerns at the other schools assessed.
HAYDEN/WINKELMAN (EPA SUPERFUND ALTERNATIVE SITE DESIGNATION) – SEPTEMBER 30, 2016 – JULY 7, 2017		
As, Pb	<ul style="list-style-type: none">• Request by ADEQ’s Federal Projects Unit to review a human health risk assessment report developed by an ASARCO contractor, as part of the remedial investigation for the site. Comments were submitted to ADEQ. ADEQ then reviewed the work and then submitted combined comments to EPA.• ADEQ requested ADHS to evaluate the potential health concerns associated with the exposures to SO2 and lead in ambient air.	<ul style="list-style-type: none">• Reevaluate site-specific exposure scenario (exposure duration and exposure frequency).• ADHS completed a draft health consultation. Submitted to ATSDR for review because it’s a certified health consultation.
MOTOROLA 52ND (EPA SUPERFUND SITE) - JULY 1, 2016 – JUNE 28, 2017		
TCE, PCE	<ul style="list-style-type: none">• Health Consultation Report	In the past, residents at several homes might have been exposed to TCE at levels that could harm their health. The greatest concern is the potential for health defects in children whose mothers were exposed to elevated levels of TCE during the first trimester of their pregnancies. In homes that have systems installed to reduce the level of TCE in indoor air, current indoor TCE levels are not expected to harm residents’ health.
SUPERIOR, AZ - JULY 1, 2016 – DECEMBER 29, 2016		
As	<ul style="list-style-type: none">• Community Health Profile	Superior/Kearny has higher morbidity rates in total cancer, brain cancer, cervical cancer, child leukemia, colorectal cancer, female breast cancer, kidney/renal/pelvis cancer, myeloma, oral cancer, and prostate cancer compared to the Arizona state average.
KLONDYKE MINE TAILINGS (WQARF SITE) – JULY 1, 2016 – JUNE 2, 2017		
Sb, As, Cd, Cu, Pb, Mn, Hg, V, Zn	<ul style="list-style-type: none">• Review of September 2016 Draft Human Health Risk Assessment Work Plan Addendum• Review of March 2017 Human Health Risk Assessment in Support of the Feasibility Study	The toxicity assessment section should refer to the reference value of 5 µg/dL established by the CDC. All children living in high risk zip codes should be tested for lead at 12 months and 24 months of age.

APPENDIX 5
ADHS CONT.

IRON KING MINE AND HUMBOLDT SMELTER (DEWEY-HUMBOLDT, AZ) (EPA SUPERFUND SITE) - OCTOBER 1, 2013 – JUNE 30, 2016		
As	<ul style="list-style-type: none">Health Consultation Report on WaterReview of September 2016 Remedial Investigation Report	Exposure to arsenic levels found in public drinking water before 2015 could harm the health of adults and children. Exposure to public drinking water after 2015 is not expected to harm the health of adults and children. Exposure to arsenic, lead, magnesium, manganese, nitrate and/or sulfate in some of the groundwater wells could harm the health of children and adults.
OATMAN WATER COMPANY - JULY 1, 2016 – NOVEMBER 14, 2016		
PFAS, PFOA	<ul style="list-style-type: none">Health Consultation Report	Consuming the drinking water at the reported PFAS concentrations, especially for infants and young children, combined with other sources of exposure, and pre-existing risk factors could increase the risk for health effects. Detection of PFHpA and PFHxS at this site adds additional risk to the PFAS exposure.
PARK EUCLID (WQARF SITE) – NOVEMBER 7, 2016 – FEBRUARY 14, 2017		
PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, vinyl chloride	<ul style="list-style-type: none">Review of Future Vapor Intrusion Risk Tech Memorandum	Provide a discussion on how the petroleum layer would affect the current assumption for groundwater input and future vapor intrusion risks. Discuss ATSDR's intermediate EMG for trans-1,2-DCE in the screening evaluation.
TOXIC ALGAE BLOOM - JUNE 23, 2017 – JUNE 29, 2017		
Microcystin	<ul style="list-style-type: none">ADEQ had concerns with exposures to toxic algae bloom discovered at Lake Havasu.ADHS assessed the potential health concerns based on the detected microcystin levels and provided recommendations.	No health concerns with the microcystin levels detected.

ADHS FY17 BUDGET AND EXPENDITURES

Funds Available		
Beginning Balance		\$60,000
FY17 Expenditures		\$48,078
Funds Unused		\$11,922

Contracts	\$30,806	\$27,390
Travel	\$500	\$60
Operations	\$8,747	\$8,037
Direct & Indirect Costs	\$3,331	\$3,265
Salary	\$10,751	\$5,575
Benefits	\$3,345	\$1,235
Equipment	\$2,520	\$2,516
Total – Expenditures	\$60,000	\$48,078

APPENDIX 6

ARIZONA DEPARTMENT OF WATER RESOURCES (ADWR)

The following provides an overview the ADEQ/ADWR ISA work.

- Reviewed 3,252 Notices of Intent (NOI) to Drill/Abandon/Deepen/Modify/Replace a well for proximity to WQARF/CERCLA or other remedial action sites.
- Performed technical review of 828 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.
- Reviewed 98 permit applications to withdraw groundwater for proximity to WQARF/CERCLA or other remedial action sites.
- Performed further technical review of five 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 include Poor Quality Ground Water Withdraw Permits for remediation projects.
- Submitted quarterly reports to ADEQ as required by ADEQ-ADWR ISA.
- Submitted FY16 annual report on ADWR WQARF activities to the Governor, Legislature and WQARF Advisory Board.
- ADWR selected the Groundwater Permitting and Wells Section as a Lean Transformation in Government project. Initiated in FY16 and fully implemented in FY17 with changes in the ADEQ/ADWR collaborative review process for NOIs near remedial action sites. This new process has continued successfully throughout FY17.

APPENDIX 6

ADWR: FY17 REVENUES AND EXPENDITURES & FY18 BUDGET

FY17 REVENUE AND EXPENDITURES	REMAINING BALANCE
Funds Available	
Beginning Balance, (7/1/16)	510,283.00
Transfer from ADEQ	130,000 .00
Earnings on Investments	4,783 .00
Total – Funds Available	\$645,065.00

Expenditures	
Personal Services	80,620.00
Employee related Expenditures	24,316.00
Professional and Outside Services	
Travel – In State	
Travel – Out of State	
Other Operating Expenditures	
Capital Equipment	
Non-Capital Equipment	
Indirect Costs	42,739.00
Transfers Out – Legislative Actions	

Total – Expenditures	\$147,676.00
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Cash Balance	\$467,419.00
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Less: Outstanding Encumbrances	
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Fund Balance	\$497,391.00
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FY18 BUDGET	REMAINING BALANCE
Funds Available	
Beginning Balance, (7/1/17)	497,391
Transfer from ADEQ	130,000
Total – Funds Available	\$627,391

Expenditures	
Personal Services	180,000
Employee related Expenditures	72,000
Travel – In State	2,000
Other Operating Expenditures	17,000
Non-Capital Equipment	0
Indirect Costs	113,400

Total – Expenditures	\$384,400
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Fund Balance (06/30/18 estimate)	\$242,991
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THE WQARF TEAM

ADEQ DIRECTORS



Misael Cabrera, P.E.
*Director,
ADEQ*



Bret Parke
*Deputy Director,
ADEQ*

WASTE PROGRAMS DIVISION



Laura L. Malone
*Waste Programs
Director*



Ana I. Vargas
*Waste Programs
Deputy Director*

REMEDIAL PROJECTS SECTION



Tina L. LePage
Section Manager



Debra Crouse
GIS Support



Jessica Lange
Administrative Support



Javier Reyes
*Business Operations
Specialist*

REMEDIAL PROJECTS UNIT



Scott R. Green, R.G.
Unit Manager



Donald Atkinson
Project Manager



Mel Bunkers, R.G.
Project Manager



Kyle Johnson, P.E.
Project Manager



Nichole Osuch
Project Manager



Kevin Snyder, R.G.
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Thomas Titus
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**Mathew Narter, Ph.D,
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Hydrologeologist



William Ellett, R.G.
Hydrologeologist



Gretchen Wagensellar
Project Manager



Hazel Cox, Ph.D, R.G.
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REMEDIAL PROJECTS SUPPORT UNIT



Wendy Flood
Unit Manager



Isabel Gutierrez
*Community
Involvement*



Cathy Brock-Charney
Administrative Support



Mary Hessler
Legal Support



Christina Silva
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Brian Stonebrink
Unit Manager



Laura Fischer, R.G.
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Wayne Miller, R.G., P.E.
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Karin Harker
Project Manager



Sara Benovic
Project Manager

