



CAPACITY DEVELOPMENT PROGRAM ANNUAL REPORT FY2022

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List of Acronyms

AAC	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
AOC	Approval of Construction
ATC	Approval to Construct
AWIA	America's Water Infrastructure Act of 2018
CCR	Consumer Confidence Report
CWS	Community Water System
DWID	Domestic Water Improvement District
DWSRF	Drinking Water State Revolving Fund
DWVS	Drinking Water Value Stream
EID	Environmental Information Document
EPA	U.S. Environmental Protection Agency
ETT	Enforcement Tracking Tool
FY	Fiscal Year
GWR	Groundwater Rule
KOUI	Known, Ongoing, Unauthorized Impact
MAP	Monitoring Assistance Program
MCL	Maximum Contaminant Level
MPL	Master Priority List
MRDL	Maximum Disinfectant Residual Level
NTNCWS	Non-Transient Non-Community Water System
PER	Preliminary Engineering Report
PN	Public Notice
PWS	Public Water System
RCAC	Rural Community Assistance Corporation
SDWA	Safe Drinking Water Act
SDWSF	Small Drinking Water Systems Fund
SUDC	Small Underserved Disadvantaged Community
TA	Technical Assistance
TMF	Technical, Managerial, Financial
TNCWS	Transient Non-Community Water System
USDA	U.S. Department of Agriculture
WID	Water Improvement District
WIFA	Water Infrastructure Finance Authority of Arizona
WIIN	Water Infrastructure Improvements for the Nation Act

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY CAPACITY DEVELOPMENT ANNUAL REPORT JULY 1, 2021 – JUNE 30, 2022

1. INTRODUCTION

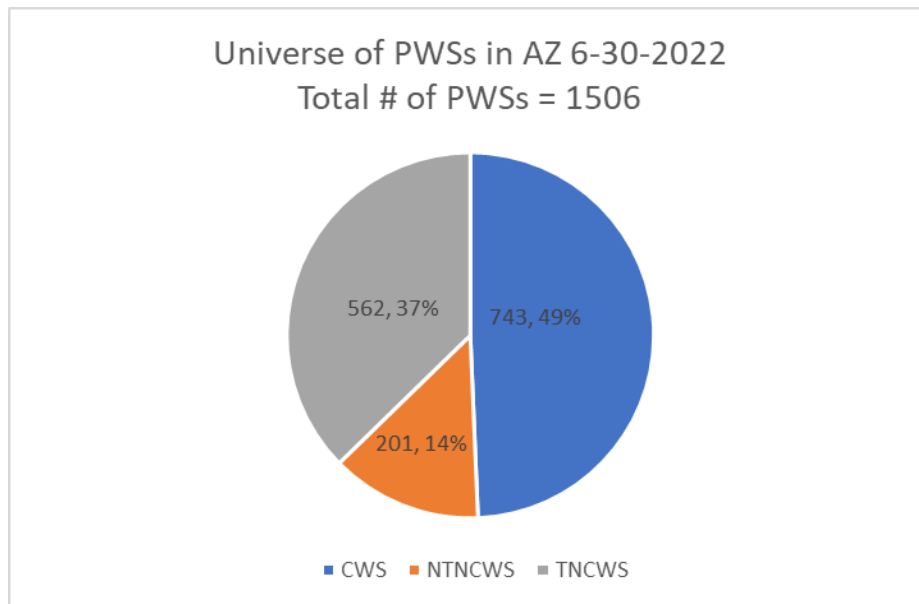
The objective of the 1996 amendments to the Safe Drinking Water Act (SDWA) is to ensure that public water systems (PWSs) have the ability to provide safe drinking water to the public. Water system capacity is the ability to plan for, achieve, and maintain compliance with all applicable state and federal drinking water standards and regulations. There are three components to capacity: technical, managerial and financial (TMF). States are to develop strategies and programs aimed at helping water systems acquire and maintain these capacities in order to properly operate, manage and finance their systems. Adequate capability in all three areas is necessary for the successful operation of a public water system. States are prohibited from providing Drinking Water State Revolving Fund (DWSRF) assistance to a PWS that lacks adequate capacity, unless that assistance is directly related to improving that system's technical, managerial or financial capabilities.

The Arizona Department of Environmental Quality's (ADEQ) Capacity Development Program works to ensure that new small community and non-transient, non-community water systems possess the technical, managerial, and financial capabilities to operate in accordance with all federal and state drinking water rules and regulations. In addition, the program also targets both new and existing community and non-transient, non-community PWSs serving 10,000 or fewer people, for technical assistance funded through set-aside monies from the U.S. Environmental Protection Agency (EPA) Capitalization Grant of the DWSRF.

The 1996 SDWA amendments also require states to prepare an annual report documenting the ongoing implementation of the Capacity Development Program for addressing capacity determinations for new systems and the application of the approved strategy for existing public water systems. This report reviews the activities conducted by ADEQ from July 1, 2021 through June 30, 2022 and includes responses to the memorandum from Cynthia C. Dougherty, Director, Office of Groundwater and Drinking Water, EPA, Washington, D.C., dated June 1, 2005 and the questions highlighted in the "Reporting Criteria for Annual State Capacity Development Program Implementation Reports".

2. ARIZONA WATER SYSTEM DEMOGRAPHICS

As of June 30, 2022, there are 1,506 regulated PWSs currently operating in Arizona: 743 are classified as community water systems (CWS) (49%), 201 are non-transient, non-community water systems (NTNCWS) (14%) and 562 are transient non-community water systems (TNCWS) (37%). Over 95% of Arizona’s public water systems are classified as “small water systems” serving fewer than 10,000 persons, based on EPA's classification of drinking water systems by population served. ADEQ’s Capacity Development Program is designed to help address the needs of these small water systems.



3. NEW SYSTEMS PROGRAM ANNUAL REPORTING CRITERIA

3.1 *Has the state’s legal authority to implement the program changed in previous year?*

The legal authority to implement ADEQ’s Capacity Development Program has not changed since the adoption of the capacity development rule in 1999. The Department’s capacity development regulations are codified in the Arizona Administrative Code (A.A.C.) Title 18, Chapter 4, Article 6 – Capacity Development Requirements for a New Public Drinking Water System.

3.2 *Have there been any modifications to the state’s control points? If so, describe the modifications and any impacts these modifications have had on implementation of the new systems program. If not, no additional information on control points is necessary.*

In its updated Capacity Development Strategy, finalized in April, 2022, ADEQ clarified the state’s control points as: 1) an Elementary Business Plan must be approved prior to the issuance of an “approval of construction” (AOC) of a new public water system; and 2) the submittal of the AOC application must include a complete Operations & Maintenance (O&M) Manual and all required sampling plans (e.g., microbiological site sampling plan (MSSP), lead and copper sampling plan, Stage 2 disinfection by-products monitoring plan). See Section 4.1.4 for discussion on Capacity Development Strategy.

3.3 List new systems (PWSID & Name) in the state within the past three years, and indicate whether those systems have been on EPA’s Enforcement Targeting Tool (ETT) list.

Table 1 lists the thirty-six PWSs that were activated or reactivated as a public water system between July 1, 2019 and June 30, 2022. Eleven of these systems were reactivated during this period and therefore are not “new”. They are denoted with an asterisk next to the PWS number. One public water system, City of Phoenix - Anthem (AZ0407522) was reactivated on April 1, 2022 but inactivated on August 2, 2022 when it was connected to the main City of Phoenix water system (AZ0407025).

Table 1. List of PWSs Activated from July 1, 2019 through June 30, 2022

PWS NO.	PWS NAME	PWS TYPE	COUNTY	POP	DATE ACTIVATED
AZ0413437*	CHAUNCEY RANCH YMCA	NC	YAVAPAI	160	7/2/2019
AZ0411411	3C GUEST RANCH WATER SYSTEM	NC	PINAL	36	7/12/2019
AZ0414108	TACNA TRAVEL CENTER	NC	YUMA	25	7/13/2019
AZ0401076	SHOW LOW PINES WELL 3	C	APACHE	57	8/1/2019
AZ0401801	SANDERS DOLLAR GENERAL	NC	APACHE	25	9/13/2019
AZ0415801	VICKSBURG FARM	C	LA PAZ	197	10/1/2019
AZ0404020*	PONDEROSA WATER, L.L.C	C	GILA	117	10/26/2019
AZ0408193	LV PETROLEUM	NC	MOHAVE	25	11/25/2019
AZ0410011	RIO VIEJO WATER	C	PIMA	272	1/17/2020
AZ0408191	RIVERBOUND CUSTOM STORAGE AND RV PARK	NTNC	MOHAVE	210	2/27/2020
AZ0420368*	GREENFIELDS COUNTRY DAY SCHOOL	NTNC	PIMA	4	5/11/2020
AZ0408804	LAST STOP ADVENTURE - TRUCK STOP	NC	MOHAVE	25	7/24/2020
AZ0413198*	BLAZIN M RANCH	NC	YAVAPAI	25	8/5/2020
AZ0408802	THE BUNKER BAR	NC	MOHAVE	25	9/15/2020
AZ0413458	D A RANCH	NC	YAVAPAI	30	10/28/2020
AZ0413382*	MULBERRY PARK MHP	NC	YAVAPAI	28	12/1/2020
AZ0410154*	TORTOLITA WATER COMPANY	C	PIMA	55	12/22/2020
AZ0413486	LOVES TRAVEL STOP NO 722	NTNC	YAVAPAI	475	1/8/2021

AZ0413298	RETREAT AT OAK CREEK DWID	C	YAVAPAI	52	4/30/2021
AZ0404400	RIM COUNTRY ESTATES MHP	C	GILA	36	5/19/2021
AZ0408803	YUCCA PRIDE TRAVEL CENTER	NC	MOHAVE	100	5/20/2021
AZ0409091	CANYON VISTA ESTATES	C	NAVAJO	75	5/20/2021
AZ0413487	WHISPERING WINDS APARTMENTS	C	YAVAPAI	60	5/22/2021
AZ0403120	CLEAR SKY RESORTS GRAND CANYON	NC	COCONINO	125	5/27/2021
AZ0402965	CHEVRON FREEWAY	NC	COCHISE	25	6/2/2021
AZ0411747	GWR - PICACHO COVE WATER COMPANY, INC.	NTNC	PINAL	35	6/24/2021
AZ0410810	WILDCAT ONE WELL COOP	C	PIMA	54	6/25/2021
AZ0412012*	SANTA CRUZ WATER CO	NTNC	SANTA CRUZ	30	7/7/2021
AZ0403087	A1 RANCH HOMEOWNERS ASSOCIATION INC.	C	COCONINO	45	7/20/2021
AZ0403175	LOCKETT ESTATES	C	COCONINO	30	12/2/2021
AZ0408160*	BEAVER DAM RANCH LLC	NC	MOHAVE	60	12/2/2021
AZ0409101	ROCKY RIM RESORT CABINS	NC	NAVAJO	200	1/4/2022
AZ0401704*	PETRIFIED FOREST NP	C	APACHE	1742	2/17/2022
AZ0408177	BEAVER DAM WC SYSTEM 3	C	MOHAVE	35	2/24/2022
AZ0407522*	PHOENIX CITY OF - ANTHEM	C	MARICOPA	5000	4/1/2022
AZ0402396*	DAIRY QUEEN	NC	COCHISE	50	6/6/2022

Table 2 shows the ETT score for each of the thirty-six systems, number of violations and an explanation of the violations. ADEQ's compliance assistance coordinators are working with each of these water systems to achieve compliance. None of the new or reactivated public water systems, in the three-year window, have a score of 11 or more on the ETT list.

Table 2: List of PWSs, ETT Score, Violations and Violation Explanation

PWS NO.	PWS NAME	ETT SCORE	VIOLATIONS	STATUS OF ASSISTANCE
AZ0413437*	CHAUNCEY RANCH YMCA	0	0	
AZ0411411	3C GUEST RANCH WATER SYSTEM	0	0	
AZ0414108	TACNA TRAVEL CENTER	0	0	
AZ0401076	SHOW LOW PINES WELL 3	0	0	
AZ0401801	SANDERS DOLLAR GENERAL	0	0	
AZ0415801	VICKSBURG FARM	0	0	
AZ0404020*	PONDEROSA WATER, L.L.C	4	5	Missing CCR (x3), PN, GWR (2020)
AZ0408193	LV PETROLEUM	0	0	
AZ0410011	RIO VIEJO WATER	0	0	

AZ0408191	RIVERBOUND CUSTOM STORAGE AND RV PARK	0	0	
AZ0420368*	GREENFIELDS COUNTRY DAY SCHOOL	1	1	Missing PN
AZ0408804	LAST STOP ADVENTURE - TRUCK STOP	0	0	
AZ0413198*	BLAZIN M RANCH	0	0	
AZ0408802	THE BUNKER BAR	0	0	
AZ0413458	D A RANCH	1	1	Missing PN
AZ0413382*	MULBERRY PARK MHP	10	7	GWR (x3), Nitrate (x2), Level 2 (x2)
AZ0410154*	TORTOLITA WATER COMPANY	0	0	
AZ0413486	LOVES TRAVEL STOP NO 722	0	0	
AZ0413298	RETREAT AT OAK CREEK DWID	1	1	Missing CCR 2021
AZ0404400	RIM COUNTRY ESTATES MHP	0	0	
AZ0408803	YUCCA PRIDE TRAVEL CENTER	0	0	
AZ0409091	CANYON VISTA ESTATES	7	12	Missed 1Q and 2Q-2022 RADS & VOCs (MAP schedule error), 2021 CCR
AZ0413487	WHISPERING WINDS APARTMENTS	0	0	
AZ0403120	CLEAR SKY RESORTS GRAND CANYON	0	0	
AZ0402965	CHEVRON FREEWAY	0	0	
AZ0411747	GWR - PICACHO COVE WATER COMPANY, INC.	0	0	
AZ0410810	WILDCAT ONE WELL COOP	0	0	
AZ0412012*	SANTA CRUZ WATER CO	0	0	
AZ0403087	A1 RANCH HOMEOWNERS ASSOCIATION INC.	0	0	
AZ0403175	LOCKETT ESTATES	0	0	
AZ0408160*	BEAVER DAM RANCH LLC	0	0	
AZ0409101	ROCKY RIM RESORT CABINS	0	0	
AZ0401704*	PETRIFIED FOREST NP	0	0	
AZ0408177	BEAVER DAM WC SYSTEM 3	1	3	Missing MRDL 2Q-2022
AZ0407522*	PHOENIX CITY OF - ANTHEM	0	0	
AZ0402396*	DAIRY QUEEN	0	0	

In FY22, ADEQ approved five Elementary Business Plans, in accordance with A.A.C. R18-4-602, for the following water systems: City of Buckeye Public Works Facility (not yet activated), Lockett Estates, Love's Travel Stop #722, Scotts Miracle Gro, and the Sheraton Phoenix Downtown.

ADEQ is working with system owners to complete the elementary business plan requirements for the following water systems that were either discovered operating without permits and/or plan approval, or where permitting was approved by ADEQ before the elementary business plan was received and approved. These systems include: Show Low Pines Well 3, Vicksburg Farm, Rim Country Estates MHP, Canyon Vista Estates, Whispering Winds Apartments, and Beaver Dam WC System 3.

For the systems discovered to be providing potable water to their customers and where no alternative sources are available, system inactivation may not be in the public interest. Staff has conducted sanitary surveys and ADEQ is working closely to get these systems permitted and verify their capacity to be a sustainable provider. For systems where there is pressure to issue the approval to construct permits before water system capacity is established, staff is also working with the system to document capacity before the approval of construction is issued and they are allowed to use the infrastructure.

4. EXISTING SYSTEM STRATEGY

4.1 In referencing the state's approved existing systems strategy, which programs, tools, and/or activities were used, and how did each assist existing PWS's in acquiring and maintaining TMF capacity? Discuss the target audience these activities have been directed towards.

The major focus of the Capacity Development Program is on small community and non-transient, non-community systems. Costs for water system operations and maintenance can be significant and have a major impact on the ability of small system operators, often with volunteer or part-time staff, to maintain the system in compliance with the ever increasing and more complex federal and state regulatory requirements. Therefore, the capacity development program is focused primarily on those systems most in need of assistance, which tend to be small rural water systems and schools that are public water systems. Primary tools used to help them acquire and maintain capacity include the monitoring assistance program; the technical assistance program; training workshops for water system representatives including owners, managers, or operators; and coordination with other technical & financial assistance partners to get funding for necessary improvements.

In addition, in FY22:

- technical assistance contractors designed plans for five small water systems to consolidate with an adjacent, larger water system with better TMF capacity;
 - Mi Casa RV Campground consolidated with Valle Verde East Water Co
 - NACOG Headstart consolidated with Chino Valley Town Complex
 - Valley Vista Water Co consolidated with City of Somerton
 - Lagoon Estates Unit 2 to consolidate with Lagoon Estates Unit 7
 - Ranches at Maricopa to consolidate with Papago Butte DWID

- the Drinking Water Value Stream utilized its predictive analytics program to help identify and offer technical assistance to water systems that were deemed likely to exceed the arsenic maximum contaminant level (MCL) before actually exceeding the MCL (see section 4.1.6).

4.1.1 Monitoring Assistance Program

All community and non-transient, non-community public water systems, that are not federally or state-owned, and that serve 10,000 or less people are required to participate in ADEQ’s Monitoring Assistance Program (MAP). For a base fee of \$250 per year and an additional \$2.57 charge per meter or service connection, MAP conducts all baseline monitoring for regulated inorganic contaminants, volatile organic contaminants, synthetic organic contaminants, nitrate, nitrite, asbestos, nickel and radionuclides. MAP does not currently monitor for copper, lead, disinfection byproducts, microbiological contaminants and any increased monitoring. These remain the responsibility of the PWS. MAP has dramatically reduced the number of PWSs that would otherwise be in noncompliance with monitoring and reporting requirements for the various rules which increases their technical and managerial capacity. The program currently assists over 825 small PWSs. For FY23, the program will continue providing this valuable and cost-effective service to small PWSs.

4.1.2 Technical Assistance Program

Funded by set-asides from the DWSRF Capitalization Grant, the Safe Drinking Water Program Fund and the Performance Partnership Grant, the technical assistance (TA) program continues to expand the services it offers to small PWSs. In FY22, the TA program was able to provide technical assistance to 56 small PWSs.

Table 3: Technical Assistance Program Results FY20-FY22

	<i>FY20</i>	<i>FY21</i>	<i>FY22</i>
Total # of projects completed	55	80	76
# of individual PWSs assisted	45	62	56
# of projects completed for PWSs*	54	72	75
Projects not specific to a PWS	1	8	1

*additional phases or efforts at one or more PWSs in the same fiscal year

The type of assistance provided included: compliance options reports to help the PWS determine the best path forward to address MCL exceedances; design of drinking water infrastructure and preparing permit applications to make necessary system improvements or to install treatment; help with funding applications; reviewing water rates; preparing asset management plans; and conducting well evaluations.

As detailed in the revised Capacity Development Strategy, ADEQ started its asset management initiative by helping 28 small public water systems develop asset management plans. The next step after the plans are developed is to review the water system’s finances to ensure their rates and finances are sufficient to

make the water system operations sustainable. ADEQ plans to continue this work in FY23 using the results of the TMF assessment to prioritize water systems for assistance.

Table 4 contains a listing of the technical assistance projects completed in FY22 for PWSs:

Table 4: PWSs Receiving Technical Assistance in FY22

PWS Name	PWS No.	Technical Assistance Provided
A-1 Ranch HOA	03-087	ATC for AdEdge As treatment system
American Indian Christian Mission	09-074	Design & ATC for new waterline to loop system
Cactus Stellar	20-801	AOC for distribution system
Cedar Grove Water Co	01-049	Created asset management plan & conducted TMF assessment
Centennial Park - Salome	15-060	ATC for new well - well funded by SDWSF
Chieftain Inn	01-062	ATC for water softener
Cibola Mutual Water Co	15-123	Created asset management plan & conducted TMF assessment
Cochise Elementary School	02-072	ATC/AOC for school PWS infrastructure
Coldwater Canyon 2	13-192	ATC/AOC for unpermitted well #5 and hydro tank
Coldwater Canyon 2	13-192	ATC/AOC for blending plan
Dateland Public Service Co.	14-003	Created asset management plan
Desert Gardens RV Resort	11-129	Created asset management plan & conducted TMF assessment
Desert Shores RV MHP	20-033	Created asset management plan & conducted TMF assessment
Desert Star Community School	13-277	Compare (2) small As treatment systems, O&M costs & disposal needs
Desert Star Community School	13-277	ATC for AdEdge As treatment system
Desert Star Community School	13-277	Pre-construction assistance to complete ATC
DS Water Co	08-072	Created asset management plan & conducted TMF assessment

Emergency Response Training		Emergency response training & tabletop exercise
G&L MHP	14-463	ATC for chlorinator
Green Valley MHP	13-348	ATC for pH adjustment system, chlorinator & media change from Metsorb to E-33
Holbrook, City of	09-015	Created asset management plan & conducted TMF assessment
Kelvin Simmons	11-035	Well evaluation & sampling of private wells to determine best location for new PWS well
Lagoon Estates Water Co Unit 2 (LEWCO)	08-064	Design & ATC for 2-mile waterline to connect Units 7 and 2 at LEWCO (Unit 2 will be inactivated once waterline is constructed)
Lakewood Estates Water Co	10-063	Created asset management plan & conducted TMF assessment
Lord Water Winchester Trails	01-047	Created asset management plan & conducted TMF assessment
Maricopa Consolidated DWID dba New Saddleback Vista	11-036	Prepared PER for NO3 treatment for USDA funding
Maricopa Mtn DWID	11-087	Video well to see if worth pursuing as water source - pump stuck in well - non-viable
Maricopa Mtn DWID	11-087	Prepared PER for USDA funding for new source
Mayer DWID	13-039	Created asset management plan & conducted TMF assessment
Mayer DWID - Racetrack AOC	13-039	AOC for well - delayed due to BLM coordination
Mi Casa RVP	12-305	Plans & exemption letter to connect Mi Casa to Valle Verde East (MI Casa will be inactivated once the connection is complete) - connection funded by SDWSF
Mogollon Capital LLC dba Creekside Restaurant	04-113	AOC for chlorinator
Mt Lemmon DWID	10-140	Created asset management plan & conducted TMF assessment
Mt. Tipton Water Co	08-059	Created asset management plan & conducted TMF assessment
NACOG Headstart	13-240	AOC for waterline to connect to the Town of Chino Valley (NACOG will be inactivated once the waterline is constructed - SDWSF provided 50% of the cost for the connection)
Old Concho	01-011	Finalizing PER & EID for new distribution system - for USDA funding
Old Concho	01-011	Cultural resources survey to finalize PER & EID

Pantano Properties HOA	10-281	ATC/AOC for new well
Papago Butte DWID	11-097	Design NO3 treatment system & disposal, ATC permit & APP permit applications
PCNR - Gilbert Ray TMP	20-114	AOC for storage tank
PCNR - Three Points	20-608	AOC for storage tank
PFAS Sampling		PFAS sampling at 103 public water system wells
Pomerene DWID	02-012	Created asset management plan & conducted TMF assessment
Pomerene DWID	02-012	Optimize existing As treatment system operations
Ponderosa Water LLC	04-020	AOC for interconnect (Ponderosa will remain a consecutive connection to Pine Strawberry WID)
Ranches at Maricopa (R@M)	11-132	Design & ATC for 0.5 mile pipeline connecting R@M to PBDWID (Ranches will be inactivated once the waterline is completed)
Rancho del Conejo	10-142	Created asset management plan & conducted TMF assessment
Rancho Sierrita Well Association	10-286	Created asset management plan & conducted TMF assessment
Red Rock Acres	12-321	Created asset management plan & rate review
Sasabe Border Village	10-047	ATC for new unpermitted well
ShangriLa Ranch Resort	07-660	Pilot study, design & ATC permitting of radium & arsenic treatment facilities
ShangriLa Ranch Resort	07-660	ATC for unpermitted well #6
ShangriLa Ranch Resort	07-660	Created asset management plan & conducted TMF assessment
Sierra Vista RVP	11-383	Pulled pump and videoed well
Sierra Vista RVP	11-383	Well evaluation & sampling
Sierra Vista RVP	11-383	ATC/AOC for new well
Sun Valley Utilities	09-001	Created asset management plan & conducted TMF assessment
Tierra Linda HOA Water Co	10-411	Created asset management plan & conducted TMF assessment

Timberland Acres	09-005	Created asset management plan & conducted TMF assessment
Timberland Acres	09-005	Created layout plans for new booster pumps, water system access, cost estimate to pursue WIFA funding
TMF Assessment Assistance		Conducted TMF assessments for 157 water systems
TMF template & query tool		Create TMF template & query tool
Town of Wellton	14-022	Created asset management plan & conducted TMF assessment
Town of Wellton	14-022	Compliance Options Report for TTHM issues
Valle Escondido DWID	11-409	Created asset management plan & conducted TMF assessment
Valley Vista Water Co.	14-009	AOC for waterline construction (Valley Vista will be inactivated once waterline is constructed) - SDWSF provided 24% of the project cost as match to the WIIN grant
Verde Glen DWID	04-040	Created asset management plan & conducted TMF assessment
Via Verde West MHP	20-420	ATC for chlorinator
Watco Water	09-049	Created asset management plan & conducted TMF assessment
West Salome Water Assoc	15-015	Created asset management plan
Wildcat One Well	10-810	Created asset management plan & rate review; assisted PWS in forming a nonprofit corporation
Wildcat Well One	10-810	ATC/AOC for unpermitted well, booster pumps & storage tank
Wildflower Water Co-op	10-265	Created asset management plan & conducted TMF assessment

In FY23, the TA program will continue to implement the newly revised Capacity Development Strategy. Efforts will be focussed on those PWSs needing technical assistance to resolve public health related issues; continuing the asset management program initiative for small PWSs; and helping small PWSs with capacity needs especially in the areas of fiscal sufficiency and corporate structure. Another new initiative will be the lead service line and plumbing materials inventory project to help small systems identify and inventory their service lines as required under the lead and copper rule revisions.

4.1.3 Training

ADEQ conducts technical workshops statewide, both independently and in partnership with private consulting firms and nonprofit organizations, to improve the technical, managerial, and financial capacity of existing PWSs. Given the COVID-19 pandemic, in FY22 most of the trainings were held virtually using a variety of platforms. ADEQ held five webinars:

- July 2021, a webinar on technical assistance available to small PWSs; 10
- August 2021, a funding workshop that focused on planning and financing for water infrastructure projects through the Water Infrastructure Finance Authority of Arizona (WIFA), U.S. Department of Agriculture - Rural Development (USDA), U.S. Bureau of Reclamation and other funding agencies;
- November 2021, ADEQ partnered with the Environmental Finance Center Network (EFCN) to hold a brown bag on free tools for financial decision making including rate setting models;
- April 2022, ADEQ partnered with Rural Community Assistance Corporation (RCAC) to hold a training on groundwater well operations and maintenance; and
- June 2022, ADEQ partnered with both EFCN and RCAC to train on rate setting and long-term planning for small water systems. The training focused on asset management and how to align rates and revenue with long-term fiscal needs.

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ADEQ also held a day-long, in person training in March 2022 on security readiness and emergency preparedness for water and wastewater utilities, in partnership with AZWarn, a statewide mutual assistance program. The training included a tabletop exercise where the participants discussed impacts and responses to a mock cyber-attack on a water system.

In addition to offering training, ADEQ presented at events organized by other agencies and associations - topics included capacity development, the technical assistance program and LCRR materials inventory.

In FY23, the program will continue to focus on training for: board training on long-term planning, financial management, rates, corporate structure, and roles & responsibilities, asset management; consolidation, partnerships & collaboration; risk assessment and emergency preparedness.

4.1.4 Capacity Development Strategy

ADEQ kicked off its capacity development strategy effort in early November, 2020 and held four virtual stakeholder meetings between November and April, 2021. A draft of the strategy and implementation plan was presented to stakeholders in late August and to EPA in September, 2021. The final Strategy was sent to EPA on April 6, 2022 for review and approval. As of August 31, 2022, EPA has not provided comments or a final decision.

The goal of the capacity development strategy is to improve TMF capacity for public water systems. ADEQ's revised strategy includes a five-year implementation plan that utilizes all of the programs within the drinking water value stream. Going forward, ADEQ will continue to implement its core

programs but also seeks to expand services to assist small PWSs in attaining and maintaining capacity. The Strategy also outlines program changes discussed with stakeholders but would require rule or statute changes. These changes would require approval from the Governor's Office to proceed, so it is estimated that these items may take from three to five years to implement.

As part of the capacity development strategy implementation plan and in response to the requirements added by America's Water Infrastructure of 2018 (AWIA), in FY22, ADEQ kicked off an asset management planning initiative to assist approximately 30 small PWSs in developing asset management plans and setting up their asset management program. ADEQ will continue to offer training to underscore the importance of an asset management program in capital planning and TMF capacity in FY23 and beyond.

Another outcome of the strategy discussion was the development of a TMF assessment and query tool that ADEQ can use to assess the capacity of a PWS at various points in time including: as a new system, an existing system during a sanitary survey, recently discovered system, and complaint investigations. ADEQ management set a goal of assessing all 1500+ public water systems by June 30, 2022. ADEQ completed approximately 98% of the assessments and will use the results of the assessment to help prioritize water systems for technical assistance in FY23. It is anticipated that ADEQ will re-assess each water system on or before their routine sanitary survey if not sooner.

4.1.5: Leveraging Construction Funds

In FY20, the WIIN Act allocated Arizona \$763,000, in federal grant dollars, to assist in building capacity for small and disadvantaged PWSs. Four projects were completed in FY20: Monte Vista Water Co, White Hills Water Co. Unit 1, Cibola Mutual Water Co., and the Town of Springerville.

Bids for the remaining project, the City of Somerton's waterline to connect the Valley Vista Apartment Complex to the City's potable water system, came in significantly over budget. ADEQ was able to help close the funding gap by increasing the Small Drinking Water System Fund (SDWSF) grant given to the City of Somerton for the project. Construction was slated to be completed by December, 2021 but was delayed due to pipe availability. Construction commenced in December and was substantially completed by June 30, 2022. Once the AOC is approved, Valley Vista Water Co., which has served the housing complex, will be inactivated as a public water system.

In June, 2022, WIFA, in coordination with ADEQ, applied to EPA for an additional WIIN allotment of \$665,000 available to Arizona. This allocation does not require state match. The workplan outlines five potential projects:

- Desert Star Community School (AZ0413277)- installation of point-of-entry arsenic treatment system
- Desert Gardens RV Resort (AZ0411129) - installation of a 30,000 gallon storage tank

- Green Valley MH Park (AZ0413348)- installation of pH adjustment, chlorinator & change in arsenic adsorption media
- Kelvin Simmons Water Co-op (AZ0411035) - drilling a new potable water well and installing new water system components
- Sierra Vista RV Park (AZ0411383)- installation of point-of-entry arsenic treatment system

However, with the current supply chain shortages and delays and escalating construction costs, it is likely that the workplan will need to be amended and funding reallocated as needed. With the passage of the Infrastructure Investment and Jobs Act in 2021, Arizona anticipates receiving additional WIIN-type funding, under the newly named Small Underserved Disadvantaged Communities (SUDC) Program, in the fall for the next five years.

WIIN or SUDC funding is one of only two funding sources that ADEQ has access to for construction or to purchase needed supplies or equipment to help small water systems. Often these funding requests are to address an emergency situation like a failed pump or well, sudden water loss, unexpected cost overruns, or to install treatment.

The other funding source is the Small Drinking Water Systems Fund (SDWSF). Established under A.R.S. 49-355, the SDWSF consists of monies appropriated by the Legislature to provide grants to owners of small water systems to repair, replace or upgrade water infrastructure to comply with rules and regulations. In FY22, ADEQ was able to assist 19 small water systems with emergency issues and repairs. Total amount of grants provided in FY22 was \$909,092. Since FY18, ADEQ, with concurrence from the ACC, has aided 29 small water systems with SDWSF funding totaling \$2,020,088. Unfortunately, in FY23, the Legislature did not allocate any monies to the SDWSF which currently has a balance of approximately \$11,000.

Using these funds to help small systems with construction costs improves their TMF capacity. But beyond construction, ADEQ wants to ensure these systems have adequate capacity in all three areas to maintain these capital improvements over time.

4.1.6: Analytics Program for Systems Predicted to Exceed the Arsenic MCL

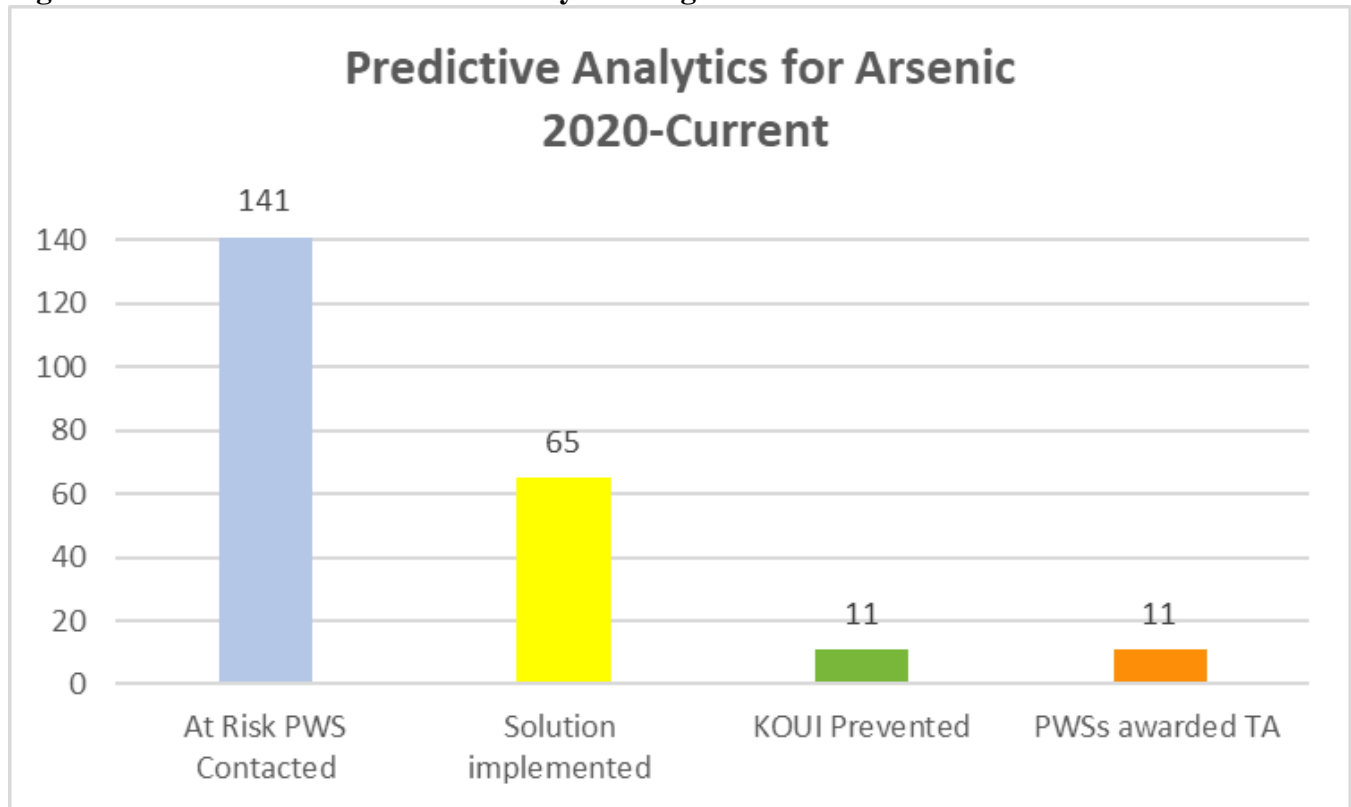
Arsenic is one of the most common drinking water contaminants for PWSs in Arizona and small water systems often lack the TMF resources to address an unexpected MCL exceedance. To assist PWSs in filling this gap, ADEQ developed a model that predicts when a public water system may exceed the arsenic MCL. Using this information, ADEQ has been conducting compliance consultations at at-risk systems to identify conditions causing changes to water quality and to provide insight into how these water systems can avoid a future arsenic MCL violation. Early intervention also allows ADEQ to identify any TMF capacity gaps the public water systems may have.

To date, the project has:

- prevented eleven (11) public water systems from exceeding the arsenic MCL,
- has protected 330,108 people from receiving unhealthy drinking water, and
- has awarded technical assistance grants to assist 11 public water systems in addressing arsenic issues

In FY23, the program will continue the arsenic MCL program. In addition, ADEQ is going to use the lessons learned from this project to apply a similar model to prevent nitrate exceedances.

Figure 1: Results for the Predictive Analytics Program



4.2 Based on the existing system strategy, how has the state continued to identify systems in need of capacity development assistance?

In rule, public water systems are initially identified for capacity development assistance based on the Master Priority List (MPL) outlined in A.A.C. R18-4-803. The criteria used to determine need are similar to the criteria used in determining existing PWS capacity prior to developing the new TMF assessment tool. These criteria include EPA's ETT score, system classification type, population served, and violation history. The FY23 MPL was updated in the spring and published on April 15, 2022 for a 30-day comment period. As required by rule, an oral proceeding was held on May 16, 2022 to accept comments from the public. There were no comments received on the record so the FY23 MPL was finalized following the close of the oral proceeding and posted on the ADEQ website. In addition to

identifying systems in need of technical assistance, WIFA uses the MPL to identify possible candidates for additional financial assistance (e.g., low interest loans, principal forgiveness). Once the MPL is final, ADEQ contacts the highest-ranking systems to offer technical assistance and works down the list.

ADEQ finds the MPL to be of limited value as it provides a snapshot in time. As part of the updated capacity development strategy, ADEQ is proposing to request approval to revise the technical assistance rules to replace the MPL with a prioritization scheme based primarily on protection of public health followed by TMF capacity building and ensuring compliance.

As a part of the Arizona Management System, ADEQ has developed a process to identify and prioritize mitigation and resolution of sites with *known, ongoing, unauthorized* impacts to public health and the environment known as KOUIs (pronounced KOO-EE). In drinking water, KOUIs are public water systems that are not meeting primary drinking water standards (e.g., Maximum Contaminant Levels). The agency prioritizes KOUi sites and allocates resources, such as staff time, funding and external contractors, to quickly identify the root-cause of the problem(s) and implement a remedy(s) to bring the systems back into compliance.

If authorization is granted to revise the technical assistance rules, ADEQ will propose to prioritize water systems for technical assistance based on the following:

- health-based standards violations with consideration given to factors such as: acute versus chronic pollutant, concentration level, age of the violation, and population sensitivity (KOUi based);
- treatment technique violations;
- projected exceedances of a health-based standard based on predictive modeling;
- need for TMF capacity building (e.g., optimization, aging/failing infrastructure, water loss, rate review, corporate structure);
- enforcement actions requiring technical support to resolve (e.g., design, permitting, funding); or
- other TMF needs

4.3 During the reporting period, if statewide PWS capacity concerns or capacity development needs (TMF) have been identified, what was the state's approach in offering and/or providing assistance?

When capacity needs and/or concerns are identified that may affect several water systems regionally or statewide, ADEQ offers support and assistance primarily through training, compliance assistance, the technical assistance program and partnering with funding and other technical assistance partners, often using the quarterly Rural Water Infrastructure Committee meetings for discussion and planning.

4.4 If the state performed a review of implementation of the existing systems strategy during the previous year, discuss the review and how findings have been or may be addressed.

In November, 2020, ADEQ initiated its stakeholder process to begin the review and revise its Capacity Development Strategy. ADEQ's original strategy was adopted in 2000 and has not been updated since.

Various regulatory requirements, drinking water industry standards, practices and the economy have changed significantly over the last 20 years. Therefore, ADEQ chose to revisit each of the elements to capture the current state of issues and opportunities for public water systems.

ADEQ held four stakeholder meetings to get input on revising the Strategy. The core of the revised Strategy is a five-year Implementation Plan of activities aimed at improving the TMF capacity of both new and existing public water systems. Arizona's revised Capacity Development Strategy for New and Existing Public Water Systems was submitted to EPA on April 6, 2022. See Section 4.1.4.

4.5 Did the state make any modifications to the existing system strategy? If so, describe.

No modifications were made to the existing system strategy. A number of possible changes are discussed in the strategy but require rule making which requires the Governor's Office approval. ADEQ will continue to monitor the climate for proposing such changes in the future. In the meantime, ADEQ continues to use all the current tools available to help existing systems achieve and maintain capacity. Programs such as the monitoring assistance program, technical assistance, asset management, and predictive analytics among others.