



# **CAPACITY DEVELOPMENT PROGRAM ANNUAL REPORT FY2021**

1110 West Washington Street • Phoenix, Arizona 85007  
(602) 771-2300 • [www.azdeq.gov](http://www.azdeq.gov)

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## List of Acronyms

AAC	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
ADOC	Arizona Department of Corrections
ADWR	Arizona Department of Water Resources
AOC	Approval of Construction
ASPC	Arizona State Prison Complex
ATC	Approval to Construct
AWIA	America’s Water Infrastructure Act of 2018
CWS	Community Water System
DWID	Domestic Water Improvement District
DWSRF	Drinking Water State Revolving Fund
DWVS	Drinking Water Value Stream
EID	Environmental Information Document
EPDS	Entry Point to the Distribution System
ER	Environmental Report
ETT	Enforcement Tracking Tool
FY	Fiscal Year
KOUI	Known, Ongoing, Unauthorized Impact
LOS	Level of Service
MAP	Monitoring Assistance Program
MCL	Maximum Contaminant Level
MPL	Master Priority List
NTNCWS	Non-Transient Non-Community Water System
PCNR	Pima County Natural Resources
PER	Preliminary Engineering Report
PFA	Project Financing Application
PWS	Public Water System
SDWA	Safe Drinking Water Act
SDWSF	Small Drinking Water Systems Fund
TA	Technical Assistance
TMF	Technical, Managerial, Financial
TNC	Transient Non-Community Water System
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
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, 2020 – JUNE 30, 2021**

#### **1. INTRODUCTION**

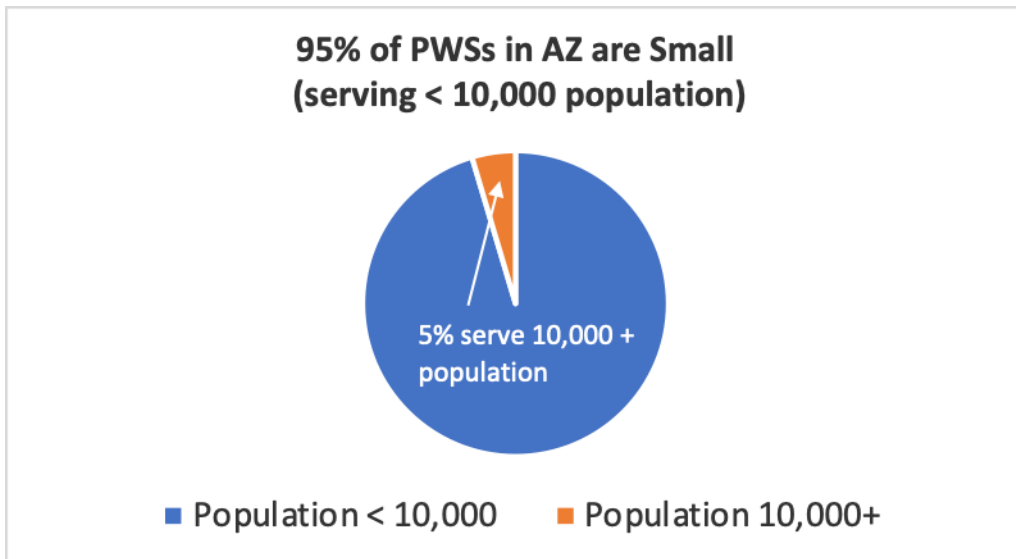
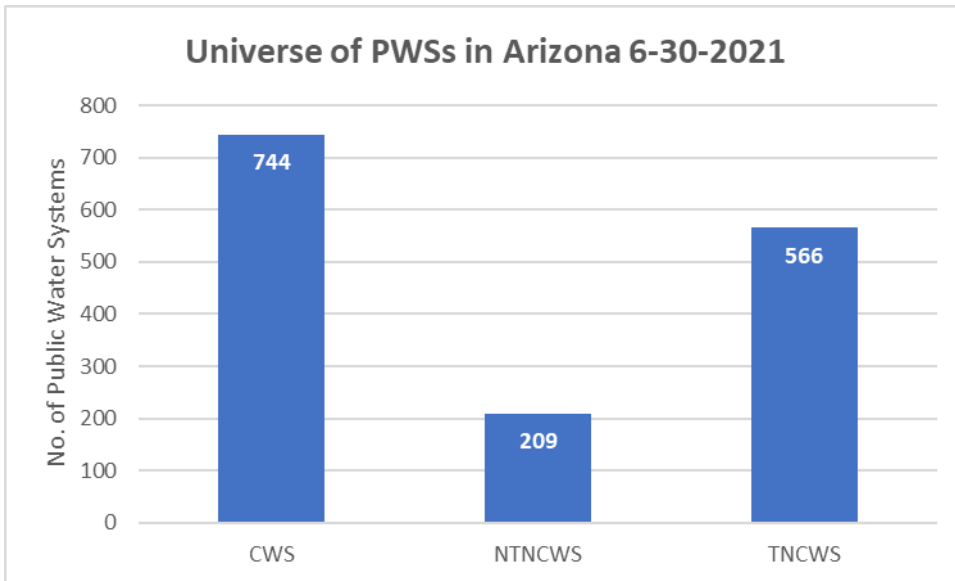
The objective of the 1996 amendments to the Safe Drinking Water Act (SDWA) is to ensure that public water systems (PWSs) have the ability to provide safe drinking water to the public. Water system capacity is the ability to plan for, achieve, and maintain compliance with all applicable state and federal 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 (USEPA) 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, 2020 through June 30, 2021 and provides responses to the memorandum from Cynthia C. Dougherty, Director, Office of Groundwater and Drinking Water, USEPA, 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’S WATER SYSTEM DEMOGRAPHICS

As of June 30, 2021, there are 1,519 regulated PWSs currently operating in Arizona: 744 are classified as community water systems (CWS) (49%), 209 are non-transient, non-community water systems (NTNCWS) (14%) and 566 are transient non-community water systems (TNCWS) (37%). Over 95% of Arizona’s public water systems are classified as “small water systems” serving less than 10,000 persons, based on USEPA’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 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.***

There have been no modifications to the state’s control points in FY21.

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

Table 1 lists the thirty PWSs that were activated as a new public water system between July 1, 2018 and June 30, 2021. None of the PWSs approved during this period have been on USEPA’s ETT list with a score of 11 points or higher. An additional 16 public water systems were re-activated during this period but are not “new” public water systems.

**Table 1. List of PWSs Activated from July 1, 2018 through June 30, 2021**

<b>PWS No.</b>	<b>PWS Name</b>	<b>PWS Type</b>	<b>County</b>	<b>Date Activated</b>
AZ0413379	DANNY B'S FISH AND CHIPS RESTAURANT	NC	Yavapai	1-Sep-18
AZ0403101	STAR CHARTER SCHOOL	NTNC	Coconino	25-Oct-18
AZ0408190	WEST RIM GAS & MINI MART	NC	Mohave	28-Dec-18
AZ0413325	CASTLE HOT SPRINGS RESORT	NC	Yavapai	5-Feb-19
AZ0410200	MONSANTO GREENHOUSE - MARANA	NTNC	Pima	7-Feb-19
AZ0412101	AMADO MANAGEMENT LLC	NTNC	Santa Cruz	15-Feb-19
AZ0413484	JACKSON ENERGY STORE #6791	NC	Yavapai	8-Mar-19
AZ0404113	CREEKSIDE RESTAURANT	NC	Gila	1-May-19
AZ0404114	LAZY J.R. RANCH TOO	NC	Gila	8-May-19
AZ0408192	WHITE HILLS TRAVEL CENTER	NC	Mohave	4-Jun-19
AZ0411411	3C GUEST RANCH WATER SYSTEM	NC	Pinal	12-Jul-19
AZ0414108	TACNA TRAVEL CENTER	NC	Yuma	13-Jul-19
AZ0401076	SHOW LOW PINES WELL 3	C	Apache	1-Aug-19
AZ0401801	SANDERS DOLLAR GENERAL	NC	Apache	13-Sep-19
AZ0415801	VICKSBURG FARM	C	La Paz	1-Oct-19

AZ0408193	LV PETROLEUM	NC	Mohave	25-Nov-19
AZ0410011	RIO VIEJO WATER	C	Pima	17-Jan-20
AZ0408191	RIVERBOUND CUSTOM STORAGE AND RV PARK	NTNC	Mohave	27-Feb-20
AZ0408804	LAST STOP ADVENTURE - TRUCK STOP	NC	Mohave	24-Jul-20
AZ0408802	THE BUNKER BAR	NC	Mohave	15-Sep-20
AZ0413486	LOVES TRAVEL STOP NO 722	NC	Yavapai	8-Jan-21
AZ0413298	RETREAT AT OAK CREEK DWID	C	Yavapai	30-Apr-21
AZ0404400	RIM COUNTRY ESTATES MHP	C	Gila	19-May-21
AZ0408803	YUCCA PRIDE TRAVEL CENTER	NC	Mohave	20-May-21
AZ0409091	CANYON VISTA ESTATES	C	Navajo	20-May-21
AZ0413487	WHISPERING WINDS APARTMENTS	C	Yavapai	22-May-21
AZ0403120	CLEAR SKY RESORTS GRAND CANYON	NC	Coconino	27-May-21
AZ0402965	CHEVRON FREEWAY	NC	Cochise	2-Jun-21
AZ0411747	GWR - PICACHO COVE WATER COMPANY, INC.	NTNC	Pinal	24-Jun-21
AZ0410810	WILDCAT ONE WELL COOP	C	Pima	25-Jun-21

In FY21, ADEQ approved an Elementary Business Plan, in accordance with A.A.C. R18-4-602, for the following water system: Retreat at Oak Creek DWID.

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 or plan approval, or where permitting was approved by ADEQ before the elementary business plan was received and approved: Amado Management LLC, Show Low Pines Well 3, Vicksburg Farm, Rim Country Estates MHP, Canyon Vista Estates, Whispering Winds Apartments, Picacho Cove Water Co, Inc., and Wildcat One Well Coop.

For the systems discovered to be providing potable water to their customers and where no alternative sources are available, system inactivation is not 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 systems in compliance with the ever increasing and more complex federal and state regulatory requirements. Therefore, the program is focused primarily on those small water systems most in need of assistance, which tend to be small rural communities 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.

In addition, in FY21, ADEQ was also able to:

- leverage construction dollars for several small PWSs from the Water Infrastructure Improvements for the Nation Act (WIIN) funds and/or the state Small Drinking Water Systems Fund (SDWSF);
- assist over two dozen small PWSs in complying with the new risk & resiliency requirements of the America’s Water Infrastructure Act (AWIA) of 2018; and
- utilize the Water Quality Division’s 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.

**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 826 small PWSs. For FY 22, 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 technical assistance (TA) program continues to expand services it offers to small PWSs. In FY21, the TA program was able to provide technical assistance to 62 small PWSs.

**Table 2: Technical Assistance Program Results FY19-FY21**

	<i>FY19</i>	<i>FY20</i>	<i>FY21</i>
Total # of projects completed	30	55	80
# of individual PWSs assisted	23	45	62
# of projects completed for PWSs*	30	54	72
Projects not specific to a PWS	0	1	8

\*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 and preparation of permitting applications in order to make necessary system improvements or to install treatment; help with funding applications; and well evaluations to help determine whether non-treatment options may be successful or, if treatment is required, what other analytes might need to be addressed.

Continuing its support of the AWIA requirements, the TA program also assisted 26 water systems, with populations between 3,300 and 10,000 persons, to complete a risk and resilience assessment of their operations and update or prepare an emergency response plan. The water system then provided a certification to the USEPA.

USEPA has 135 PWSs on its list that are required to comply with these AWIA requirements. Below is the summary of AWIA compliance as of September 15, 2021.

- 129 (95.6%) have completed and certified their RRAs
- 6 ( 4.4%) have yet to certify

For water systems that were not eligible for this assistance, ADEQ held a training webinar and sent out information about AWIA requirements, on-line workshops and certification deadlines.

Table 3 contains a listing of the technical assistance projects completed in FY21 for PWSs:

**Table 3: PWSs Receiving Technical Assistance in FY21**

	<b>PWS Name</b>	<b>PWS #</b>	<b>Technical Assistance Provided</b>
1	ADOC Eyman Unit	11-705	Conduct risk & resilience assessment and update/create emergency operations plan
2	ADOC Florence ASP	11-066	Conduct risk & resilience assessment and update/create emergency operations plan
3	ADOC Tucson	20-557	Conduct risk & resilience assessment and update/create emergency operations plan
4	ASPC Lewis Complex Water System	07-555	Conduct risk & resilience assessment and update/create emergency operations plan
5	ASPC Yuma	14-099	Conduct risk & resilience assessment and update/create emergency operations plan
6	Avra Water Coop Inc	10-006	Conduct risk & resilience assessment and update/create emergency operations plan
7	Cactus Stellar	20-801	Design of new distribution system
8	Camp Verde Water System	13-015	Conduct risk & resilience assessment and update/create emergency operations plan

9	Carefree Water Co	07-015	Conduct risk & resilience assessment and update/create emergency operations plan
10	Citrus Park Water Co	14-107	ATC/AOC for new well, treatment, treatment building, upgraded electrical, & disposal
11	City of Eloy	11-030	Conduct risk & resilience assessment and update/create emergency operations plan
12	City of Globe	04-008	Conduct risk & resilience assessment and update/create emergency operations plan
13	City of Holbrook	09-015	Conduct risk & resilience assessment and update/create emergency operations plan
14	City of St Johns	01-012	Conduct risk & resilience assessment and update/create emergency operations plan
15	City of Tolleson	07-101	Conduct risk & resilience assessment and update/create emergency operations plan
16	City of Winslow	09-035	Conduct risk & resilience assessment and update/create emergency operations plan
17	Clarkdale Municipal Water	13-024	Conduct risk & resilience assessment and update/create emergency operations plan
18	Cochise Jr College	02-063	Determining LOS, demand, alternatives & costs to address arsenic
19	Desert Gardens RVP Phase 1	11-129	Contractor to perform flow and chemistry sampling in the well with pump running; prepare report & recommendation
20	Desert Gardens RVP Phase 2	11-129	Permitting for new, smaller pump and bentonite seal of lower 15 ft of well
21	Desert Gardens RVP Phase 3	11-129	Contractor re-sampling & compliance options for arsenic
22	Desert Star Community School	13-277	Determining LOS, demand, alternatives & costs to address arsenic
23	Golden Valley Improvement District	08-081	Conduct risk & resilience assessment and update/create emergency operations plan
24	Great Prairie Oasis dba Sunland Water Co Phase 1	11-334	Video, zonal south well for arsenic & nitrate

25	Great Prairie Oasis dba Sunland Water Co Phase 2	11-334	System evaluation, optimizing blending plan & sizing of south well pump
26	Green Valley DWID	10-157	Conduct risk & resilience assessment and update/create emergency operations plan
27	Kelvin Simmons Water Co-op	11-035	Asset management plan for current & needed improvements
28	Kelvin Simmons Water Co-op	11-035	Sample & sound existing well, search for other viable wells
29	Krause Investments LC dba Shangri-La Ranch	07-660	Evaluate best treatment options for 5 well system with multiple contaminants
30	Lagoon Estates Unit 2	08-064	Determining LOS, demand, alternatives & costs to address arsenic
31	Las Quintas Serenas Water Co	10-064	Conduct risk & resilience assessment and update/create emergency operations plan
32	Marana Municipal - Hartman Vistas	10-329	Conduct risk & resilience assessment and update/create emergency operations plan
33	Marana Municipal - Picture Rocks	10-092	Conduct risk & resilience assessment and update/create emergency operations plan
34	Mayer DWID	13-039	ATC/AOC for Roberts Well
35	Mayer DWID	13-039	ATC for Racetrack Well
36	Mayer DWID	13-039	ATC/AOC for Oak Hills Well
37	McNeal Water Co	02-016	ATC/AOC for new 10,000 gallons storage tank
38	Mogollon Capital LLC dba Creekside Restaurant	04-113	ATC/AOC for unpermitted well and storage tank
39	Mt. Tipton Water Co	08-059	AOC on well
40	Mulberry RVP	13-382	Video, zonal and test pump well

41	NACOG Headstart	13-240	Design service line to connect NACOG Headstart to Chino Valley Town Complex (13-218)
42	Oak Creek DWID	13-041	Pilot testing of 3 different arsenic adsorption media
43	Old Concho	01-011	Preparing PER & ER for USDA funding
44	Papago Butte DWID	11-097	Preparing PER & EID for USDA funding
45	PCNR Gilbert Ray	20-114	ATC for unpermitted storage tank
46	PCNR Three Points	20-608	ATC for unpermitted storage tank
47	Picacho WID	11-042	Update cost estimate to proceed with WIFA funding for wellsite improvements
48	Pine Strawberry DWID	04-034	Conduct risk & resilience assessment and update/create emergency operations plan
49	Pinedale Estates DWID	09-040	Aerial survey, mapping for surveyor & well drilling specifications
50	Ponderosa Water LLC	04-020	Oversee surveying, ROW determination and local permitting for the PSWID interconnect
51	Ponderosa Water LLC Phase 2	04-020	ATC for interconnect to Pine Strawberry WID
52	Pueblo Heights MHP	04-314	System evaluation and recommendations for improved resiliency
53	Q Mountain Mobile Home Park dba Q Mountain Vista	15-509	Hydrologic assessment for new well, nitrate treatment specs & distribution system
54	Ray Water Co	10-095	Conduct risk & resilience assessment and update/create emergency operations plan
55	Red Rock Crossing Mobile Village	13-074	Arsenic treatment options report
56	Rose Valley Water Co	07-065	Conduct risk & resilience assessment and update/create emergency operations plan

57	San Simon DWID	02-027	Prepare USDA-RD EID checklist & report, prepare WIFA PFA application & ADWR reports
58	San Simon Phase 2 EID	02-027	Phase 2 EID for USDA requested additions to PER - new well, storage and replacing distribution system
59	Shepherd's Canyon Retreat, Inc dba Standing Stones Retreat Center	07-550	Compliance options for nitrate, arsenic & fluoride treatment
60	Sierra Vista RVP	11-383	Contractor sampling & compliance options for arsenic & nitrate
61	Silverbell IDD Phase 1	11-005	Well video & zonal sampling to address arsenic
62	Silverbell IDD Phase 2	11-005	Rehabilitation of well #3 and additional zonal sampling at well #3, well #4 & EPDS
63	Star Vale Leisure Living	04-104	ATC/AOC for well & 200,000 gallons storage tank
64	Tierra Mesa Estates Phase 2	14-080	Zonal sample, well video, zonal, east well video
65	Tierra Mesa Estates Phase 3	14-080	Zonal sample, well video, zonal, west well video
66	Town of Snowflake	09-029	Conduct risk & resilience assessment and update/create emergency operations plan
67	Valley Utilities Water Co - Glendale	07-079	Conduct risk & resilience assessment and update/create emergency operations plan
68	Valley Vista Water Co - City of Somerton	14-009	Finish waterline design, provide bid & construction support & AOC with record documents
69	Verde Lakes Water Co - Dinky Creek	13-059	AOC for unpermitted storage tank
70	Voyager Water Co	10-035	Conduct risk & resilience assessment and update/create emergency operations plan
71	White Hills Water Co Unit 1 Phase 3	08-149	Start-up monitoring for AOC

72	Why DWID	10-118	Arsenic treatment system evaluation & optimization, sampling plan and system report
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The TA program also contracted for eight non-PWS specific but capacity building projects including: developed a quality assurance project plan for the lead and copper rule revisions; developed template for OCCT recommendations; held three contractor led, capacity-based trainings; contracted for a review of ADEQ’s backflow prevention program requirements; and requested a contractor survey of operator mentorship programs in other states and elementary business plan requirements in other states. In FY22, the TA program will continue focusing its efforts on those PWSs needing technical assistance to resolve public health related issues; starting an asset management program initiative for small PWSs; and helping small PWSs with capacity needs especially in the areas of fiscal sufficiency and corporate structure.

**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 FY21 all training was virtual. ADEQ held four webinars: in August and November, 2020, ADEQ hosted beginning and intermediate asset management training, respectively. In February, 2021, ADEQ held a two-day financial management training that focused on basic financial tools, budgeting and rate setting. In June 2021, a training was held on lessons learned from conducting the AWIA risk & resilience assessments and risk mitigation measures. In addition to offering training, ADEQ presented at events organized by other agencies and associations. In FY22, the program will continue to focus on training for: basic and intermediate asset management; budgets, rates and finances; creating the appropriate corporate structure; and how to successfully seek out and apply for project funding.

**4.1.4 Capacity Development Strategy**

ADEQ kicked off its capacity development strategy in early November, 2020 and held four virtual stakeholder meetings between November and June 30, 2021. A draft of the strategy and implementation plan was presented to stakeholders in late August and to USEPA in September. ADEQ does not anticipate any issues meeting the December 30, 2021 deadline.

As part of the capacity development strategy implementation plan and in response to the requirements added by AWIA, in FY22, ADEQ is funding 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.

Another outcome of the strategy discussion is 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: new system, existing system, recently discovered system, and complaint investigations. The tool will be available in fall, 2021 and ADEQ will pilot through the end of the calendar year. The goal is to conduct these assessments on the majority of the PWSs by June 30, 2022.

#### ***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.

The TA team originally identified eight small PWS construction projects to utilize the WIIN funding. That list was later revised to five projects due to escalating construction costs. Four projects were completed in FY20: Monte Vista Water Co, White Hills Water Co. Unit 1, Cibola Mutual Water Co., and Town of Springerville. The remaining project, the City of Somerton's Valley Vista waterline, will be completed in FY22. Construction was slated to be completed by December, 2021 but has been delayed due to pipe availability. Construction should commence in December, be completed in spring, 2022 and Valley Vista Water Co. will be inactivated as a public water system.

The construction costs for all five projects, both WIIN grant and match, is estimated at \$1.39 million. Approximately \$332,000 in technical assistance funds were spent on design and construction management for these projects bringing total project investment to over \$1.72 million. Using WIIN funds to help small systems with construction costs can improve their TMF capacity. ADEQ wants to ensure these systems have adequate capacity in all three areas to maintain these capital improvements over time. USEPA has informed ADEQ that there is an additional \$473,000 in WIIN grant funding available to the State in FY22.

ADEQ was also able to help two small water systems through the SDWSF. In June, 2021, the well pump at Wildflower Water Coop (AZ0410265) failed. The need to haul water quickly depleted the PWS's reserves. The SDWSF was able to provide an \$18,000 grant to replace the pump, motor, wiring in less than six days. In FY22, ADEQ will conduct a system evaluation, TMF assessment and prepare an asset management plan for the existing infrastructure to help determine this water system's capacity and where it needs additional assistance.

Ponderosa Water LLC (AZ0404020) is a small PWS serving 49 homes in Strawberry, AZ. The water system was developed in the early 1950s and consists of undersized galvanized pipes, no storage and a poorly maintained well. While there are no MCL violations, the system has significant secondary standard issues including high manganese, iron and sulfides causing odor, taste, staining and corrosivity problems. After numerous complaints, ADEQ was able to award ponderosa with a \$115,625 grant to install meters at each of the customer lots and construct an interconnect to the Pine Strawberry WID distribution system. Short-term, the availability of Pine Strawberry WID water will clear the distribution pipes and provide the customers with safe drinking water. Long term, Ponderosa Water LLC will need to seek funding to replace the distribution system at which time Pine Strawberry WID will annex them into the larger service area and Ponderosa Water will no longer be a PWS.

In FY22, the Legislature did allocate monies to the SDWSF which ADEQ will use to address needs of small PWSs.

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

Small water systems often lack the technical, managerial, and financial resources to unexpectedly address an MCL exceedance. To assist PWSs with filling this gap, ADEQ has been piloting a predictive

modeling tool that can identify when a PWS is at risk of exceeding the arsenic MCL. Using this information, ADEQ is conducting a compliance consultation with identified systems statewide, visiting systems forecasted to have arsenic exceedances, and identifying conditions causing changes to water quality at the impacted sites. This voluntary consultation program is at no cost to water systems and may provide insight into how water systems can avoid a future arsenic MCL violation.

To better leverage staff knowledge and experience, this program includes staff from all the units in the Drinking Water Value Stream (DWVS) - TA, source water protection, engineering review, monitoring and protection, inspections and enforcement. The project has prevented five (5) public water systems from exceeding the arsenic MCL and has protected thousands of people from unhealthy drinking water. In FY22, the program will continue to monitor and reach out to PWSs predicted to have quality issues.

**Table 4: Results for the Predictive Analytics Program**

<i>Calendar Year</i>	<i>2019</i>	<i>2020</i>	<i>2021*</i>
# of water systems contacted	7	74	36
# of site visits completed	1	14	6
# of water systems referred to TA Program	0	4	8
Outreach hours	27	222	108
Site Visit hours	12	168	72

\*Through 6/30/2021

**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. These criteria include USEPA’s ETT score, system classification type, population served, and violation history. The FY22 MPL was updated in the spring and published on June 4, 2021 for a 30-day comment period. As required by rule, an oral proceeding was held on July 6, 2021 to accept comments from the public. There were no comments made on the record so the FY22 MPL was finalized following the close of the 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.

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 more agile method of prioritizing water systems needing assistance.

More useful than the MPL, ADEQ has created a unique process for targeting water systems in need: KOUI (pronounced COO-EE). KOUI is an acronym that stands for “Known, On-going, Unauthorized Impact” to public health and/or the environment. In the DWVS, KOUI sites are those water systems serving water above a federal national drinking water standard, including sites that have a treatment technique violation or exceed an action level. These KOUIs are a high priority for problem solving to determine the root cause of the impact so that a remedy can be devised and implemented.



KOUI sites have created visibility, transparency, and accountability throughout the agency. From staff to the director, all known environmental or public health problems are captured into one metric or one universe and are worked on daily. Other units in the DWVS can refer current KOUIs to the TA program to determine the need for contractor support in evaluation, design, system optimization and/or funding.

***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 and the technical assistance program.

***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 revision of its existing systems strategy as required under AWIA. Findings of this effort and the state's implementation plan will be presented in the revised capacity development strategy.

***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 in FY21. However, Arizona's Capacity Development Strategy has been in place for nearly two decades. While many of the issues facing small PWSs have not changed dramatically, the regulatory environment certainly has with many new rules and regulations. As noted above, ADEQ initiated its strategy revision effort in November, 2021 and anticipates submitting its new, revised strategy for both new and existing water systems to USEPA by the December 31, 2021 deadline.