ADEQ Water Quality Division (WQD) SFY17 EOY Assessment
December 2017

The following summary reviews ADEQ's performance for State Fiscal Year 2017 (SFY17). The evaluation is based on commitments in the workplan, reports/submittals and information gathered during ongoing program conference calls.

A. Administration

Revenue

ADEQ Water Quality Division (WQD), hereafter "ADEQ", lost fiscal/general fund support from the state legislature in 2008 and relies heavily on federal funds to operate. Federal funds represent about 70% of ADEQ's operating budget. ADEQ receives approximately $6.3M annually through several EPA grants to implement water programs and approximately ~$24M in State Revolving Funds (SRF). ADEQ also collects permitting fees and operator certification fees.

Workplan and Grants

Excluding SRF, the bulk of federal funding is awarded annually through a Performance Partnership Grant (PPG) which combines Clean Water Act (CWA) 106, Public Water System Supervision (PWSS) and Non-point Source (NPS) funds. ADEQ also receives a separate monitoring grant and NPS projects grant. ADEQ develops an annual integrated workplan covering all activities and commitments for federally and non-federally funded tasks, based on a SFY (July 1- June 30). The draft workplan is reviewed by the relevant program leads and managers (Water and Enforcement), and followed by discussion/negotiations (in some cases, formal meetings). Previous year activities and commitments are considered to determine technical capacity and program successes and priorities. Priority setting amongst core program activities and collaboration across programs are often the focus of discussions. The integrated workplan provides a comprehensive look at the work being performed by ADEQ. The PPG also includes general and program-specific grant conditions, all of which ADEQ met in SFY17.

EPA and ADEQ have implemented several changes over the last few years to improve reporting and accountability. For example, ADEQ converted the integrated workplan into a database format to improve EPA and ADEQ's ability to track water quality program efforts. EPA and ADEQ have also agreed to work together in SFY18 to streamline the workplan review process.

Staffing

The ADEQ WQD has approximately 110 staff and is constantly recruiting to fill priority vacancies.

Rule Making

All agencies in Arizona have been bound by a Governor's rules moratorium since 2009. The Governor's Regulatory Review Council may grant an exception if the regulatory change lessens or eases a regulatory burden. Although this additional requirement creates delays in the rulemaking process, ADEQ has been successful in obtaining exceptions to the moratorium.

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EPA Oversight

EPA and ADEQ's partnership is formalized in the Performance Partnership Agreement, or PPA (formerly the "Arizona Accord"), which was revised and renewed on April 18, 2017. The PPA is an agreement describing our relationships and joint efforts to protect human health and the environment. This supplements MOAs associated with program approval and delegation. EPA program leads hold regular calls with ADEQ program counterparts as well as official midyear and end-of-year reviews. EPA Water Division and EPA Enforcement Division work together to oversee program implementation.

The workplan defines outputs and reporting. Review of outputs is by the program. Separate accountability tools are used as well to assess progress, e.g. monthly ICIS reports on permit issuance, or routine program calls. With multiple funding sources, the various grant project officers also coordinate efforts.

B. Clean Water Act

Water Quality Standards

ADEQ submitted a Triennial Review (TR) of water quality standards (WQS) for EPA review in October 2016. The WQS TR process required ADEQ to receive a waiver to the Arizona Governor's executive order aimed at reducing regulatory burden by preventing accretion of rules, an uncommon step for most states. The WQS TR, which focused on clarifying and standardizing language, was approved in late December 2016. A new WQS TR process was begun in the spring of 2017, with public involvement pursuant to Arizona regulations beginning in the summer of 2017. This effort is expected to culminate in a WQS TR submission to the EPA in the summer of 2018. The current TR process is being spearheaded by a senior hydrologist while the ADEQ seeks to fill a dedicated water quality standards coordinator position. Development of two nutrient standards is ongoing, Region 9 continues to coordinate this work with ADEQ and the EPA Nutrient Scientific Technical Exchange Partnership & Support (N-STEPS). The effort focused on rivers and streams is still in a review phase. An effort focused on lakes and reservoir standards is tied to earlier work from 2008. The lakes and reservoir standards are anticipated to be included in the summer 2018 WQS TR submission. The EPA regional office is working diligently with N-STEPS, ADEQ, and our federal counterparts to support maintaining this timeline.

Ambient & 106 Monitoring

In FFY17 ADEQ participated as the National Lakes Assessment (NLA) Arizona field sampling team for the National Aquatic Resource Survey (NARS). The NARS program currently rotates through resource types every five years; sampling is done by the state unless otherwise requested. ADEQ's involvement was appreciated and recognized by the EPA Office of Science and Technology and Office of Research and Development along with other states' agencies. ADEQ has raised concerns about: aspects of the NARS collection methods, analysis, and data dissemination as they relate to Integrated Report needs; workforce constraints; and other resource specific points. The department has withdrawn as a sampling partner for the upcoming, two-year long, rivers and streams field seasons. The Regional NARS coordinator will continue to

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advocate for and with the state at the national program coordination level to ensure the needs of arid Southwestern states are captured in the national survey.

In addition to NLA involvement ADEQ also sampled 330+ times at over 75 sites, year-round, for the ambient monitoring program. Most of this year's sampling focused on streams with 210 stream samples from 60 sites. Additionally, ADEQ relaunched a site to collect water quality monitoring data from credible providers across the state, for review in drafting the 303(d) List. Looking forward, ADEQ is expanding and diversifying its monitoring efforts. In FFY17, the department worked with 12 citizen science groups to build capacity for water quality monitoring which will be used in grant effectiveness monitoring and Clean Water Partnership monitoring. The data collected by these groups is quality controlled by ADEQ directly. For the upcoming sampling season, ADEQ also secured a more thorough lab contract which will analyze samples for a broader spectrum of parameters. The department has also worked with Regional EPA staff and the state of California to begin remotely monitoring harmful algal blooms on Lake Havasu. ADEQ is working to expand this work via remote sensing and via mobile device app submissions using ESRI's Survey123 platform as part of a larger "one stop shop" for Arizonans. The EPA will continue to support this work by keeping our state partners in contact with upcoming opportunities and by highlighting their work to national workgroups.

Water Quality Assessment and Total Maximum Daily Load (TMDL) Development

In late December 2016, ADEQ submitted a 305(b) Integrated Report and 303(d) List of waters requiring a Total Maximum Daily Load (303(d) List) for review. The 303(d) List required additional information to be made complete. During these updates, ADEQ determined there was a need to amend some findings. EPA's partial approval and partial disapproval was finalized in September 2017. This action accommodated the state's amendments and accounted for impacts from the Governor's rule moratorium while providing opportunity for public comment. Going forward, the department is focusing on creating an updated Arizona Assessment Calculator (AzAC) to replace their current product. The updated AzAC will create the 2018 303(d) List and increase transparency while meeting EPA goals to move to ATTAINS. ADEQ indicated this change may hinder their ability to submit a full 305(b) Integrated Report, but will not impact the 303(d) List. The EPA will continue to support the state in meeting its Integrated Reporting requirements.

In FFY17, ADEQ made progress in drafting Total Maximum Daily Loads (TMDLs) for impaired waterbodies. Two TMDLs to address copper impairments were moved into the public comment process; both are slated to be submitted for EPA review in spring 2018. A Clean Water Partnership on the Upper Sant Cruz river includes a TMDL for E. coli which is also still in draft with the state. This effort was supported by CWA 319 funds for contract support. The TMDL component is anticipated for review in 2018. A similar path will be taken with the Upper San Pedro Watershed. TMDL work was delayed on this project due to workforce constraints, and it is now scheduled to be submitted in 2019. The EPA will continue to support TMDL efforts through responsive early engagement on difficult issues prior to final submission.

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NPDES Permitting

Highlights

In SFY17, ADEQ continued to issue good quality permits in a timely manner, meeting the national performance target of 90% current. As part of their LEAN effort, ADEQ has continued to reduce the time needed to reissue individual wastewater permits. In SFY17, they reduced this time to 167 days, a 61% reduction from their initial calculated time of 427 days, exceeding their goal of 180 days. They ascribe their success to providing more pre-application support and the ability to retrieve data electronically.

ADEQ's total % permits current is 90%, with a high of 100% current for major wastewater individual permits. This is an increase from the 88% current in SFY16. This estimate factors in majors, minors, Phase I MS4s, and general permits. According to the SFY17 output report, ADEQ reissued 26, modified 3, and revoked 5 individual permits. Most of the backlog is due to expired Phase I MS4 individual permits and 4 expired general permits.

ADEQ has also set up an impressive, user-friendly interface called "myDEQ" for general permit applicants to submit or change notices of intent (NOIs) or notices of termination (NOTs). ADEQ is working to set up this function for each general permit. Currently, myDEQ includes the construction general permit and multi-sector general permit interfaces, and ADEQ is working to include the *de minimus* general permit and the Phase II MS4 general permit interfaces. ADEQ has also created video tutorials to help permittees use the system.

Concerns

Multi-sector General Permit (MSGP): Reissuance of the multi-sector general permit was a priority for SFY16 and SFY17; however, it continues to be delayed. It was originally delayed due to workload associated with the controversial reissuance of the Phase II MS4 general permit, and milestones were renegotiated at the SFY17 midyear meetings. ADEQ has now missed the first milestone for SFY18 due to a lack of resources and a focus on setting up myDEQ. The Stormwater & General Permits Unit has only a couple of staff permit writers, recently losing another one to retirement, and these permit writers have not written a permit before. As a result, EPA offered ADEQ training and contractor assistance. EPA continues to encourage ADEQ to prioritize reissuance of this permit, which covers more than 1,000 permittees. If ADEQ is unable to meet the schedule set out in the FY18 workplan, EPA will consider including a grant condition in the next grant award.

Phase I MS4s: Seven (7) of the eight (8) Phase I MS4 permits continue to be expired. ADEQ plans to combine coverage of these dischargers into one (1) general permit after the MSGP is reissued. This high number of backlogged Phase I MS4 permits impacts ADEQ's ability to meet the national performance target of 90% permits current. We continue to encourage ADEQ to consider starting the process of reissuing these permits in parallel with reissuance of the MSGP, rather than waiting until after the MSGP is reissued.

ICIS Permit Status Information: As in SFY15 and SFY16, the ICIS database does not include a complete list of general permits with issuance dates. ADEQ began addressing this issue and identified a fatal flaw in the communications between their database and ICIS. They have been

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successful in flowing this information in test mode, and expect to soon resolve the flow in production mode. EPA encourages ADEQ to update this information so that ADEQ can receive national credit for their accomplishments.

Non-Point Source (NPS) Program and Project (CWA 319) Management

The Watersheds Protection Unit (WPU) in the Surface Water Section contains the majority of the Nonpoint Source Program (NPS) under its scope, such as, managing the NPS projects funds, watershed outreach, watershed plans, etc. There are other sections of ADEQ's Water Division utilizing portions of the CWA 319 funds to operate NPS-related work. The WPU is comprised of program implementation and project oversight. Program implementation is based on the State NPS Management Plan (SMP), which establishes goals, objectives, activities, and milestones. NPS program accomplishments are detailed in an Annual Nonpoint Source Program Report and an end of year integrated Water Division report. Project oversight includes the solicitation for project proposals, awarding projects, and oversight of projects that improve water quality.

This past year EPA and ADEQ completed a longstanding project in Boulder Creek at the Hillside Lower Tailings Pile. We expect to see improved water quality results within 30 months from this project, as this was the trend from the BLM project on the Upper Tailings Pile at Hillside Mine, completed in January 2016. The project at Hillside Mine was a long and complicated venture. Congratulations to all agencies involved. Other successes include: utilizing canines to track E. coli, new protection NPS grant solicitation, Christopher Creek success story, approval to use a portion of the FFY2017 NPS funds in Nogales, Mexico to reduce NPS pollution flowing into the United States, four NPS EPA grants have been closed out, and a decreased (32%) ULO for ADEQ's NPS grants (46% the previous year). Overall, ADEQ WPU was 71% on track in meeting its SFY 2017 NPS 5-year Plan deliverables. Some of the off-track deliverables were the Upper Santa Cruz and Upper San Pedro Clean Water Plan (TMDL/WIP), Miller Creek restoration, and NWQI coordination with NRCS. These were mostly off-track due to lack of resources, or in the case of Miller Creek, difficulty identifying on-the-ground projects.

EPA commends ADEQ's work to complete the EPA Performance Measure reporting for SP-12 and WQ-10. EPA approved 14 SP-12's and 14 WQ-10's in SFY 2017.

ADEQ has a well thought out plan for tracking its performance measure "to improve water quality in 50% of monitored waters over the next five years" (SFY 2014-2018): 1) Waterbody is removed from 303(d) list, 2) Order of magnitude decrease in pollutant concentrations, or 3) Increase in Water Quality Index Score (WQI). The state exceeded their goal by 7%, where 57% of the state's waters showed improvement.

Overall, the Watersheds Protection Unit continues to strive to meet its performance measure, checking that the goals are being worked towards, and that the supporting milestones are completed. EPA looks forward to completing the USCR and USPR Clean Water Plans to formulate specific plans on improving water quality in those watersheds. We also expect to receive two more success stories (SP12) in SFY 2018 (Tonto and Pinto Creeks), and two more in SFY 2019 (Boulder and Turkey Creeks).

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Clean Water Act 604(b)

In SFY 2017, nearly all the Clean Water Act 604(b) grant funds were used to update Clean Water Act 208 Water Quality Management Plans (WQMP) and fund one ADEQ staff person. During the mid-year discussions, we decided to shift the 604(b) funds to an open bid process to fund the best ideas in the state. At the same time, ADEQ shifted the funds from the FTE to using it towards planning. To facilitate the change in direction, EPA amended the SFY 2017 604(b) grant by adding FFY 2018 funds and a one year extension. This grant amendment allowed the state flexibility to adapt to the change and plan long-term with the planning agencies. We expect to see alignment with CWSRF funds and significant interest from new planning agencies applying for these funds with an eye on stormwater infiltration, green infrastructure, and low impact design.

Wetlands and 401

EPA reviewed the SFY17 Final Output Report regarding 401 CWA actions. There is one Task, 3.2: CWA 401 Certification Review of Federal Permits and Licenses. The deliverables require a table of the 401 certifications processed including the type of permit, project name, action and date of action. ADEQ complied with Task 3.2 and provided a table of 401 actions.

To improve interagency coordination and collaboration, a condition in the SFY17 grant required ADEQ to contact EPA prior to 401 certification on projects where EPA has identified water quality concerns through written or phone correspondence to ADEQ. This condition has been continued in the SFY18 grant. Implementation of the grant condition to date has resulted in improved interagency coordination through sharing of project specific information and expertise. This has resulted in better informed decision-making at the state and federal level.

Border

In FY17, ADEQ continued to be an effective EPA partner on water quality issues in the Arizona border region. Staff made regular presentations summarizing wastewater quality monitoring results at IBWC Binational Committee meetings, and at meetings of the Nogales, Sonora Association of Environmental Health Professionals (APSA). Staff presented data showing a high correlation between loadings of heavy metals in wastewater at the border with Mexico and impacts on the operational efficiency of the Nogales International Wastewater Treatment Plant and on water quality in the plant's discharges to the Santa Cruz River. ADEQ effectively communicated that chromium, copper, nickel and zinc have posed chronic challenges for the plant and the river, and advocated for pretreatment actions that lead to long-term solutions to this problem. ADEQ also helped EPA disseminate an EPA-funded pretreatment toolkit by making the documents available on its website.

ADEQ coordinated with EPA and its contractor to host an in-person training workshop in October 2016 for wastewater operators and managers to help increase participants' skills and knowledge in the operation of wastewater treatment systems. The training, intended for wastewater system operators, utility managers, and leaders involved with wastewater utility management, included modules on wastewater collection system management, wastewater treatment system operation and maintenance, operator and management roles and responsibilities, and asset management to ensure system sustainability.

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CWA Enforcement and Compliance

Inspections: The Water Quality Surface Water Section is responsible for all surface water enforcement and compliance work for the Division. EPA's 2014 Compliance Monitoring Strategy (CMS) requires the inspection of majors once every two years (50%) and the inspection of all minors once every five years (20%). Since ADEQ inspected more than 50% of its 57 majors in SFY16, ADEQ set a lower target of 19 majors in SFY17 to meet the overall goal of inspecting all majors once every two years. ADEQ exceeded this target by conducting 25 major inspections, thus exceeding the CMS inspection goals for major facilities. Similarly, ADEQ inspected more than 20% of its 78 minors in SFY16, so it set a lower target of 11 minors to meet the overall goal of inspecting 40% of its minors over two years (20% per year over 5 years). ADEQ exceeded this target by conducting 19 minor inspections, thus exceeding the CMS inspection goals for minor facilities. Additionally, ADEQ responded to 20 citizen complaints related to the Clean Water Act, resulting in 4 non-routine inspections. Just as in SFY16, ADEQ had a target of conducting 6 sanitary sewer inspections in the workplan, but failed to conduct the inspections because their sanitary sewer inspection program was still under development. In SFY17, ADEQ began a more formal effort to develop their sanitary sewer inspection program by conducting meetings with EPA and other stakeholders. ADEQ hopes to begin sanitary sewer inspections in SFY18. ADEQ has developed an internal risk-based approach for targeting inspections in response to the AZ Auditor General's Report citing non-compliance by minors. ADEQ no longer plans to submit a formal request for a risk-based Alternative CMS to EPA.

In SFY17 ADEQ exceeded its stormwater inspection targets of 50 industrial and 37 construction (30 Phase 1 and 7 Phase 2) inspections by conducting 61 industrial and 71 construction inspections (51 Phase 1 and 20 Phase 2). Not only did they exceed SFY17 target goals, they also exceeded SFY 2016 inspection numbers for these source categories. Although EPA's CMS sets goals of 10% of all industrial facilities and 5-10% CMS goals for construction facilities, EPA has agreed to lower commitments given the resource limitations at ADEQ. The CMS goals for the stormwater programs also include audits of MS4s. The state met their target of 8 MS4 Phase II audits in SFY17, and based on conversations with ADEQ, we understand they are already taking formal or informal action on 7 of those 8 cities recently audited (follow-up actions would be counted in SFY18).

AZ has roughly 100 CAFOs statewide covered by AZ APP permits and 1 CAFO subject to AZPDES permits (requiring inspection once in a 5-year cycle). Since the AZPDES permitted facility did not require inspection in SFY17, ADEQ set its target to zero CAFO inspections.

ADEQ met its SFY17 inspection targets for the biosolids program of 11 inspections. It inspected one less POTW than targeted (4 instead of 5), but inspected one additional large land application site (5 instead of 4, plus 2 small sites), which is acceptable to EPA. ADEQ exceeded its target of 28 annual report reviews submitted under the biosolids rule by conducting 93 reviews. ADEQ will keep their hard-copy biosolids annual report format for the near future. California POTWs that send biosolids to Arizona filed hard copy reports with ADEQ, and electronic reports with EPA. ADEQ did not identify any biosolids violations or reasons to take enforcement actions in SFY17.

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Pretreatment Program: Arizona has delegated authority to implement the federal pretreatment regulations. Core regulatory duties are as follows:

1) Review all annual and semi-annual reports submitted by POTWs with approved pretreatment programs.
2) Conduct pretreatment compliance audits (at least once every five years for each approved POTW pretreatment program).
3) Conduct pretreatment compliance inspections (at least twice every five years for each approved POTW pretreatment program).
4) Perform annual inspections of POTWs with SIU-oversight-only pretreatment programs (at least once every five years for each program).
5) Review and approve pretreatment program submittals and modifications.

Additionally, there is a specific PPG target for ADEQ to support pretreatment work in the Ambos Nogales border region, as industrial wastewater from Mexico has caused or contributed to NPDES permit violations at the Nogales International Wastewater Treatment Plant (NIWTP). During SFY17, ADEQ continued enforcement efforts to compel the International Boundary and Water Commission to meet the pretreatment requirements in the NIWTP NPDES permit, and continued to work with wastewater representatives in Nogales, Arizona, and Nogales, Sonora, to support implementation of the pretreatment conditions in the NIWTP NPDES permit.

During SFY17, Arizona met all pretreatment targets. Specifically, ADEQ met its inspection targets (8 compliance inspections), auditing targets (4 pretreatment audits of approved pretreatment programs), and report review targets (19 annual/semi-annual reports). ADEQ also coordinated closely with EPA on pretreatment enforcement actions and EPA's industrial user inspections in Arizona.

In SFY18, EPA looks forward to ADEQ's continued progress in pretreatment commensurate with its target numbers.

Data Management and Reporting: While ADEQ met the Phase 1 e-reporting deadlines for individual permits, ADEQ was unable to meet the e-reporting deadlines for general permits due to their AZPDES program application development requirements. Therefore, EPA and ADEQ agreed to include a programmatic grant condition in the SFY17 Work Plan:

> AZPDES General Permit e-Reporting
>
> ADEQ will develop and launch a new AZPDES storm water web tool by June 1, 2017. This web tool will allow users to submit new applications (Notice of Intent to Discharge or NOI), waivers from coverage, notice of termination (NOT) and inform users of the DMRs required for compliance with their permit and the Federal NPDES e-reporting rule. The AZPDES permits available for this web tool will be Construction General Permit, Multi-Sector General Permit and De Minimis General Permit. ADEQ is developing the AZPDES storm water web tool to facilitate its ultimate goal of transferring general permittee DMR data to EPA's Integrated Compliance Information System (ICIS) database and meeting the Phase I e-reporting requirements for general permit dischargers by January 1, 2018.

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(a) ADEQ will develop new permitting tools for NOI, Waiver and NOT for the AZPDES storm water web tool by June 1, 2017.

(b) ADEQ will provide monthly written progress update reports to EPA starting August 1, 2016 on the AZPDES storm water web tool tasks in parts (a) and (b) above and (c)(1),(2).
   1) Development of tools for customers to submit e-DMR.
   2) Transmittal of DMR and permit data to ICIS.

(c) ADEQ will provide EPA with written notification upon completion of each milestone in part (b) and completion of the new AZPDES storm water web tool (part (a)).

ADEQ completed development of the Construction and Multi-Sector General Permit applications on schedule by June 1, 2017. ADEQ expects to complete the development of the De Minimis General Permit application on schedule by January 1, 2018. ADEQ also provides EPA with a well written and easy-to-follow monthly progress report.

Enforcement: EPA continued generating automated Quarterly Noncompliance Reports (QNCR) in SFY17. The QNCR provides detailed NPDES compliance status for major permittees. Major facilities are flagged as being in Significant Noncompliance (SNC) if they have acute or chronic effluent limit violations that exceed EPA's criteria for magnitude and duration. Major facilities may also be flagged as SNC for late submittal of discharge monitoring reports. Flagging SNC violations is an important tool for targeting enforcement to the highest priority violations. State enforcement response to SNC violations is a critical measure that EPA uses in our oversight of State NPDES enforcement programs. ADEQ worked cooperatively to address the SNC facilities flagged in quarterly letters from EPA and the number of facilities that are in SNC has decreased significantly. The 2014 State Review Framework had an outstanding action item (entering Single Event Violations into ICIS) that was included in the SFY17 workplan. ADEQ had a target date of July 29, 2016 to discuss ICIS entry options for SEVs with EPA. ADEQ did not meet this target, but did agree to manually enter SEVS into ICIS on January 27, 2017.

In SFY17, ADEQ issued 6 Administrative Orders (AO), closed 1 AO, issued 49 Notices of Opportunity to Correct (NOCs) and Notices of Violation (NOVs) and closed 38 NOCs and NOVs. While the SFY16 enforcement numbers (1 AO issued, 3 closed, 22 NOCs/NOVs issued, 35 closed) represented a decline from ADEQ's SFY15 numbers (5 AOs issued, 6 closed; 44 NOCs/NOVs issued, 37 closed), ADEQ's SFY17 enforcement compliance bounced back to SFY15 levels as expected given that ADEQ's SFY16 internal enforcement reorganization is now complete.

C. Safe Drinking Water Act

Summary of State Drinking Water Program

The EPA conducted an end-of-year evaluation of the FY2017 of Public Water System Supervision (PWSS) program, administered by the Arizona Department of Environmental Quality (ADEQ) in their Drinking Water (DW) Section. State Fiscal year 2017 began July 1, 2016 through June 30, 2017. ADEQ regulates 1522 public water systems serving 6.4 million

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citizens of Arizona. These water systems are divided into 752 community water systems (CWS), 197 non-transient non-community water systems and 573 transient water systems. Based on this review, the Department continues to implement an effective drinking water program although they have room for improvement in meeting all the Regional targets for EPA National Water Program Measures (see table below).

ACS Code	EPA National Water Program Measures	State Results	FY17 EPA National Target	FY17 EPA Region 9 Target
2.1.1	Percent of the population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.	88.5%	92%	95%
SP-1	Percent of community water systems that meet all applicable health-based standards through approaches that include effective treatment and source water protection.	90.3%	90%	88%
SP-2	Percent of "person months" (i.e. all persons served by community water systems times 12 months) during which community water systems provide drinking water that meets all applicable health-based drinking water standards.	94.4%	95%	98%

State Resources

The State currently implements the PWSS program using the EPA PWSS grant and the required state match (see table below). The state funds 34 FTEs to support the PWSS program.

FY2017 EPA PWSS Grant Award	$1,426,000
FY2017 State Share	$ 475,333
FY2017 Total Funds Available	$1,901,333

As of September 30, 2017, Arizona expended 100% of the total public water system supervision grant award of $3.9M in the performance partnership grant.

In addition, ADEQ requested, and received, funding for all available DWSRF set-asides, including the 2% Small System Technical Assistance Set-aside; the 10% State Program Management Set-aside (which requires a 1:1 match); and the 15% Local Assistance Set-aside (for Wellhead Protection, and Capacity Development (see table below).

FY2017 EPA Set Aside Utilized	$1,500,800
FY2017 State Share	$1,500,800
FY2017 Total Funds Available	$3,001,600

Arizona manages their set-aside funds well, keeping less than $27K (2%) in set-aside "Unliquidated Obligations" (ULOs) from past years. ADEQ has no outstanding unliquidated obligations from prior fiscal years. They use their set-aside funds in a timely manner.

State funds come from the Water Quality Fee Fund which includes engineering review fees and operator certification fees and the Monitoring Assistance Program fee fund. In addition, the

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Water Quality Division has requested from the Legislature and received an allocation from the Vehicle Emission Inventory.

Status of Rule Adoption

Arizona has regulatory authority for all federal rules promulgated to date. Arizona adopted the Revised Total Coliform Rule (RTCR) effective April 2, 2016, one day after the RTCR federal effective date due to a long approval process. Nevertheless, Arizona was prepared to implement the provisions of the federal rule beginning April 1, 2016. ADEQ is actively working on developing the special primacy provisions for the RTCR. They submitted an incomplete Attorney General statement on January 14, 2016 and need to respond to EPA comments on their next submittal for RTCR and Lead and Copper Rule (LCR) including the LCR short-term revisions. They have submitted a primacy package in response to EPA rule-bundled package on the Stage 1 and Stage 2 Disinfection Byproducts Rules.

In 2012, EPA Region 9 provided comments to ADEQ on the following previously submitted primacy packages: Consumer Confidence Report (CCR) Rule, Public Notice (PN) Rule, and LCR. In 2014, the Administrative penalty authority package was submitted. This past July, ADEQ renewed its commitment to finalize these revised primacy packages. EPA Region 9's Office of Regional Counsel is working with ADEQ and their state Attorney General's office to draft an Attorney General certification to finalize these Primacy revision packages for EPA approval. The status of SDWA rule adoption and primacy packages is summarized below.

Rule	Adopted (by reference)	Primacy Package Status
Lead & Copper Rule Short-Term Revisions	4/2/16	Draft primacy revision package submitted to EPA R9; needs updated Attorney General statement to make final
Ground Water Rule	8/30/08	Updated primacy revision package due to EPA R9
Stage 2 Disinfectant By-product Rule	8/30/08	Draft primacy revision package submitted to EPA R9 for review
LT2 Enhanced Surface Water Treatment Rule	8/30/08	Updated primacy revision package due to EPA R9
Phase II/V	8/30/08	Updated primacy revision package due to EPA R9
Consumer Confidence Report	8/30/08	Draft primacy revision package submitted to EPA R9; needs updated Attorney General statement to make final
Interim Enhanced Surface Water Treatment Rule	8/30/08	Updated primacy revision package due to EPA R9
Stage 1 Disinfectant By-product Rule	8/30/08	Draft primacy revision package submitted to EPA R9 for review
Public Notification Rule	8/30/08	Draft primacy revision package submitted to EPA R9; needs updated Attorney General statement to make final
Lead & Copper Rule and LCR Minor Revisions	8/30/08	Draft primacy revision package submitted to EPA R9; needs updated

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Rule	Adopted (by reference)	Primacy Package Status
		Attorney General statement to make final
Radionuclides Rule	8/30/08	Updated primacy revision package due to EPA R9
Arsenic Rule	8/30/08	Updated primacy revision package due to EPA R9
Filter Backwash Rule	8/30/08	Updated primacy revision package due to EPA R9
LT1 Enhanced Surface Water Treatment Rule	8/30/08	Updated primacy revision package due to EPA R9
Variances and Exemptions	8/30/08	Updated primacy revision package due to EPA R9
New PWSS Definition	8/30/08	Updated primacy revision package due to EPA R9
Administrative Penalty Authority	1/1/97	Draft primacy revision package submitted to EPA R9; needs updated Attorney General statement to make final
ADHS Regulations Review (Analytical requirements for SDWA rules)	12/5/06	Updated primacy revision package due to EPA R9
Revised Total Coliform Rule	4/2/16	Draft primacy revision package submitted to EPA R9 for review

Sanitary Surveys

The DW Section of ADEQ conducts sanitary surveys for community water systems every three years, and every five years for systems designated as outstanding performers. In FY 2017, 221 sanitary surveys were conducted in Arizona, which did not meet the target for CWS sanitary surveys (90% as of 6/30/17). Surveys for non-community water systems (NCWS) are required once every five years, for which ADEQ's compliance rate is 99%. Pima County (PDEQ) is behind all other agencies in the number of sanitary surveys conducted for CWS. They have been able to perform all surveys for NCWS and have room to improve on the frequency of sanitary surveys. ADEQ should include a sanitary survey performance standard in the agreements with delegated counties and perform regular oversight reviews of county delegated PWSS programs. Arizona sanitary surveys, broken down by source (Surface water, SW or Groundwater, GW) and agency (ADEQ, Maricopa County, MCESD or PDEQ), are summarized in the table below.

Source type (Compliance Period)	Total # of Systems	Total Complete Sanitary Surveys	Percent Complete
SW CWS (CY2014-2016)	**44**	**43**	**97%**
ADEQ	29	28	97%
MCESD	15	15	100%
GW CWS (CY2014-2016)	**699**	**626**	**90%**
ADEQ	497	447	90%
MCESD	85	83	98%
PDEQ	117	96	82%
NCWS (CY2012-2016)	**733**	**723**	**99%**

ED_001697_00001852-00012

Source type (Compliance Period)	Total # of Systems	Total Complete Sanitary Surveys	Percent Complete
ADEQ	599	590	98%
MCESD	98	97	99%
PDEQ	36	36	100%

DWSRF Program Integration: Capacity Development and Small System Support

ADEQ has developed a strategy (Small Water Systems Compliance Assistance Plan) to assist small systems that need capacity development assistance to achieve and maintain sustainable compliance with SDWA requirements. ADEQ began implementing their Small Water System Compliance plan in FY17. ADEQ reports the number of small PWSs in compliance: 1202 systems or 83% of a universe of 1454 small water systems are in compliance. One of ADEQ's chosen metrics of the Plan, decrease in missed LCR monitoring violations for lead and copper, did not show improvement from CY2015 to CY2016 (the latest year data is available). ADEQ expects improvement in this metric in CY2017 due to increased outreach. This Plan metric did not demonstrate the full benefit of training with its interim measure focused on lead and copper rule monitoring violations. ADEQ could show the improvements in monitoring from their training efforts by tracking the decrease in monitoring violations for all distribution system samples.

In FY 2017, ADEQ staff provided assistance to 19 PWSs with a focus on system capacity and treatment evaluations. ADEQ staff conducted 22 trainings, conferences, and outreach events. ADEQ identified low water rates as a cause of small water systems noncompliance. Arizona Corporation Commission (ACC), which regulates many of the small privately-owned water systems, and the Arizona Water Infrastructure Finance Authority may have more resources to support rate case development. ADEQ is working with these co-regulators to support small systems that could benefit from an adjusted water rate structure.

ADEQ has used their 2% DWSRF funding to maintain a free training program for operators of small systems. They have been very successful providing training to operators and owners around the state. Using their operator listserv, ADEQ provided extensive outreach to water systems for their RTCR implementation. ADEQ staff and managers attended a Small System compliance workshop, a Capacity Development/Operator Certification workshop, and ASDWA Fall and Spring workshops.

DWSRF Program Integration: Operator Certification

For operator certification, 2 staff continue to coordinate exam sessions with the major training provider organizations, including the Arizona Water Association, Rural Water Association of Arizona, Rural Community Assistance Corporation, and Gateway Community College. Every year, ADEQ staff provide instruction at statewide training events to discuss the operator certification process and provide training on a variety of SDWA rule implementation topics.

The Operator Certification Program achieves excellent compliance rates with ensuring there is a certified operator in charge and it is effective getting new operators to take and pass the exam. In FY17, a total of 2,289 water and wastewater operator examinations were proctored at

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approximately 150 testing sessions held across the state of Arizona. A total of 1,388 operator examinations were for drinking water distribution and treatment. ADEQ should continue to evaluate the process for development of exam questions and study materials specific to operators that work at plants that use specialized treatment processes, like ultrafiltration, microfiltration, reverse osmosis, and ultraviolet disinfection.

Year	Number of Systems		Number of Systems with Certified Operators		Percentage of Systems with Certified Operators	
	CWS	*NTNCWS*	*CWS*	*NTNCWS*	*CWS*	*NTNCWS*
2017	750	197	749	197	99.9%	100%
2016	754	200	753	200	99.9%	100%

Rule Implementation

In 2017, ADEQ continued its focus on compliance with the LCR. They report quarterly to EPA on follow up actions required for systems that exceed the lead action level. The DW section began to require monitoring for water quality parameters and make recommendations on optimized corrosion control for systems that have exceeded the lead action level. ADEQ completed a lead screening program that focused on schools not monitored under LCR. The screening program made schools aware of lead levels that exceeded the lead action level where water is being consumed. ADEQ provided messaging for schools to send to stakeholders. Schools in Arizona are now informed and able to make decisions about eliminating taps with elevated lead. The DW section was not able to make proper compliance determinations on the newer surface water rules (including Interim Enhanced and Long Term 2 surface water rules) due to a staff vacancy which has now been successfully filled. ADEQ changed the position of rule specialist to prevent SDWA rule expertise from concentrating in one staff person, which leaves a gap when that person separates from ADEQ. The new compliance assistance coordinators can focus on implementation of all rules in a region.

Data Management and Reliability

ADEQ uses the Safe Drinking Water Information System, State version (SDWIS/State), release 3.33, the EPA-developed data management system for managing PWSS program information including PWS inventory and compliance data. ADEQ uses FedRep version 3.52 for extracting the federally required subset of SDWIS/State data and submitting it to EPA HQ. These are the most current versions of SDWIS/State and FedRep, ensuring ADEQ's ability to report on compliance with all drinking water rules. ADEQ reports that they determine compliance using the Compliance Decision Support (CDS) module of SDWIS/State, which supports timeliness of violation reporting and helps ensure consistency among PWSS programs. The rate of errors reported during the migration of ADEQ's SDWIS/State data into SDWIS/Fed is consistently low.

ADEQ reports that many of its small water systems and labs have minimal information technology capacity. Nevertheless, ADEQ has engaged with EPA HQ on implementing an EPA-provided solution for electronic submission of laboratory results to PWSs and ADEQ, the

ED_001697_00001852-00014

Compliance Monitoring Data Portal (CMDP), which is the first phase of SDWIS modernization. Early adopters report that the CMDP reduces the hours previously spent manually entering data, identifying data-entry errors, and issuing data resubmittal requests. This should free up time for ADEQ to focus on preventing and responding to public health issues in their communities.

The SDWIS/Prime application, due for pilot release in March 2018, moves SDWIS to a centralized system, facilitating improved information exchange between primacy agencies, water utilities, EPA regional offices, and EPA HQ. SDWIS Prime will:

- Update and centralize the information technology infrastructure that supports SDWIS/Prime, reducing system operations and maintenance cost;
- Use modern decision support technology to assess compliance with national primary drinking water regulations (including functions such as compliance decision audit trail reports and electronic data verification); and
- Improve the user experience and facilitate more efficient business processes.

EPA will discontinue technical support for the SDWIS/State application a year after it releases the fully functional version of SDWIS/Prime, now scheduled for September 2018, although agencies will have an option to purchase another year of support through the SDWIS Support contract. That would suggest moving over to SDWIS/Prime by the end of 2018 or in 2019 at the latest. While ADEQ has not yet committed to a schedule for transitioning to SDWIS/Prime, their adoption of the CMDP, which they have discussed with EPA-HQ, would be a good first step in that direction. We encourage ADEQ to begin developing their SDWIS/Prime transition plan now, to facilitate a smooth transition over the many activities and months that will be needed to fully implement SDWIS/Prime.

Lab Certification and Quality Assurance

The Arizona Department of Health Services (ADHS) certifies laboratories in the state. EPA Region 9 conducted an on-site evaluation of AZ's State Certifying Laboratory in FY2017. The audit report has been issued and Region 9 laboratory made a certification decision for microbial analysis that will stay in effect until November 6, 2020. Through the analytical capabilities of the AZ State Laboratory certified to analyze drinking water, the Drinking Water Program has full capacity for analyzing all drinking water contaminants. ADEQ submitted to EPA their annual letter to certify that Test America Laboratories has replaced the ADHS as the principal state lab through a contract expiring in FY2019.

Source Water Protection

The ADEQ Source Water Protection Program had another very successful year in FY17 despite staff needing to redirect their efforts to the Lead in Schools Program for months. Staff worked with their Clean Water Act colleagues to evaluate watershed plans' potential to protect drinking water sources. Source water protection areas were added to the ADEQ's watershed GIS. Compiled GIS nitrate layers will aid in targeting nonpoint source funding to aquifers with elevated nitrate levels. The program requested their UST/LUST colleagues follow-up on six sites that, based on UST/LUST monitoring data, potentially threaten nearby sources of drinking water. Source water protection plans were completed for four public water systems in FY17. Since the

ED_001697_00001852-00015

program's inception, plans have been completed for 11 community water systems (not schools), two non-transient non-community system (not schools), two school community water systems, and 38 non-transient non-community school systems. Although the Lead in Schools Program prevented staff from achieving their target of six outreach events, they conducted three outreach events including the AZ Rural Water Conference, the ADEQ Division Workshop, and several site visits/presentations at community water systems and schools.

Ground Water Program

ADEQ does not have an EPA-approved Underground Injection Control (UIC) State permitting program. EPA and ADEQ are in the early stage of working on UIC State primacy development. During the EOY discussion, we discussed providing input on a proposed legislative concept for a State UIC program. We will continue this work with ADEQ, considering potential State legislative changes and provide input with more involvement from our Office of Regional Counsel.

Because EPA directly implements the UIC permit program, ADEQ's Aquifer Protection Permit (APP) program shares information with EPA's UIC program on UIC regulated sites that are also subject to state APP permitting. Sharing of information and regular updates allows EPA to improve on the Federal oversight and our permitting process, where appropriate.

ADEQ and EPA have shared information specifically on the permitted Morton Salt facility, proposed Excelsior Gunnison Copper Project, and the recently permitted Florence Copper Production Test Facility (PTF). The proposed Gunnison Project is under consideration for a federal UIC permit and has a recently issued APP permit. During our EOY discussion, we discussed the permitting actions for these projects and other potential projects.

ADEQ also evaluates potential for adverse impacts to groundwater quality from recharge injection wells or recharge basins. Recharge is a means of storing excess water supplies underground so that they may be used in the future. Arizona Department of Water Resources (ADWR) encourages treated wastewater to be reused in this way to replenish groundwater supplies. Both ADWR and ADEQ's APP program have permitting requirements for injection of treated wastewater used for aquifer recharge and recovery. ADEQ's APP program evaluates these projects and requires an APP, unless exempted, to protect the receiving aquifer from potential contaminants. EPA's UIC program receives information from ADEQ on the reviews of these recharge projects to ensure that the injection of treated wastewater meets our UIC requirements for Class V injection wells.

In addition to coordinating on permitting projects, ADEQ has provided annual updates to EPA of its drywell (Class V injection wells) database for EPA's national UIC database. Owners of an existing or proposed drywell in Arizona must register the drywell with ADEQ. ADEQ's APP Program evaluates these wells to determine the need for a general APP to protect Arizona aquifers that serve as drinking water sources. EPA also requires owners/operators of injection wells (i.e., drywells or any other Class V injection well), which are "authorized by rule" pursuant to the Class V UIC requirements, to submit inventory information for the federal database. The drywell update from ADEQ ensures that our UIC database is up-to-date for this type of well.

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