



CAPACITY DEVELOPMENT PROGRAM ANNUAL REPORT FY2012

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Table of Contents

Introduction	1
3. Existing System Strategy	2
Table 1. List of public water systems approved for Capacity Development between July 1, 2009 through June 30, 2012	

FY12 CAPACITY DEVELOPMENT ANNUAL REPORT

1. INTRODUCTION

The Arizona Department of Environmental Quality's (ADEQ) Capacity Development Program works to ensure that new public water systems and existing small and medium water systems possess technical, managerial, and financial capabilities to operate in accordance with all federal and state drinking water rules and regulations. In accordance with Title 18, Chapter 4, Article 6 of the Arizona Administrative Code (A.A.C.), new community and non-transient, non-community water systems must submit an elementary business plan for review and approval prior to commencing operations. However, the Capacity Development Program also targets existing public water systems (community and non-transient, non-community) in Arizona serving 10,000 or fewer people for technical assistance.

As of the date of this report, there were 1,552 public water systems currently in operation in Arizona. Of these water systems, 973 are classified as either community or non-transient, non-community with 95% of those serving 10,000 or fewer persons. Historically, these small-and medium-sized public water systems have accrued the vast majority of Arizona's reported drinking water violations (e.g., missed monitoring and exceedance violations).

This report describes the tasks completed by the ADEQ, Drinking Water Section (DWS), from July 1, 2011 through June 30, 2012, in the administration of the Capacity Development Program. In developing and implementing this program, the DWS accomplished tasks in the following areas:

- New Systems Program Annual Reporting Criteria
- Existing System Strategy
- Program Objectives Summary

2. NEW SYSTEMS PROGRAM ANNUAL REPORTING CRITERIA

The EPA developed the following list of questions to ensure that all new community water systems (CWSs) and non-transient, non-community water systems (NTNCWSs) demonstrate technical, managerial, and financial (TMF) capacity with respect to each national primary drinking water regulation in effect, or likely to be in effect, on the date of commencement of operations.

2.1 Has the states's legal authority to implement the new systems Program changed within the previous reporting year? If so, please explain and identify how this has affected or impacted the implementation of the New Systems Program. If not, no additional information on legal authority is necessary.

The legal authority to implement ADEQ's Capacity Development Program has not changed since the inception of the capacity development rule in 1999 (applicable to new CWSs and NTNCWSs that begin operation on, or after, Oct. 1, 1999). Primacy for this program resides with ADEQ and the state rule citation is as follows: AAC, Title 18, Chapter 4, Article 6 – Capacity Development Requirements for a New Public Drinking Water System.

2.2 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.

No, the control points used to ensure the demonstration of a new public water system's (PWS) capacity have not changed since the inception of the capacity development rule in 1999.

2.3 List new systems (PWSID & Name) in the state within the past three years, and indicate whether those systems have been on any of the annual Significant Noncompliers (SNC) list (as generated annually by EPA's Office of Enforcement and Compliance Assurance).

Please see Table 1 for a compilation of public water systems that have been approved for capacity development from July 1, 2009 through June 30, 2012. None of the PWSs approved for capacity development during this period are currently on EPA's Enforcement Targeting Tool (ETT) list with a score of 11 points or higher.

Table 1. List of PWSs approved for Capacity Development from July 1, 2009 through June 30, 2012.

PWS NAME	CLASSIFICATION	COUNTY	DATE	
Buckeye Armed Forces	NTNCWS	Maricopa	02/19/10	
St Phillip's Plaza	NTNCWS	Pima	04/08/10	
Cruise in Corner	NTNCWS	Pima	04/07/11	
Valle Escondido DWID	CWS	Pinal	09/13/11	

3. EXISTING SYSTEM STRATEGY

EPA developed the following list of questions to determine how states are implementing strategies to assist PWSs in acquiring and maintaining TMF capacity.

3.1 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.

ADEQ conducts technical workshops statewide, both independently and in partnership with other government regulators and nonprofit organizations, to improve the capacity of existing PWSs. Topics include (but are not limited to): arsenic treatment, operator

certification, emergency response, workplace safety, chemistry, pumps and motors, disinfection, drinking water rule updates, Source Water Protection Program, Wellhead Protection Program, Capacity Development, and ADEQ's Monitoring Assistance Program. A total of 15 outreach events were conducted statewide during FY12. Although the workshops are primarily attended by certified operators and facility managers, ADEQ also targets and encourages PWS owners, PWS staff and PWS board members to attend. In FY12, 852 people attended these workshops.

All community and non-transient, non-community public water systems, which are not federally or state-owned, and that serve 10,000 or less people are enrolled in ADEQ's Monitoring Assistance Program (MAP). For a modest base fee and an additional charge per service connection, MAP conducts all baseline monitoring for regulated volatile organic (VOC), synthetic organic (SOC), and inorganic (IOC) chemicals in addition to nitrate, nitrite, asbestos, and radionuclides. This program has significantly reduced the number of PWSs that would otherwise be in noncompliance with monitoring and reporting requirements for these rules.

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

Public water systems are identified for assistance on the basis of the 2012 Master Priority List (MPL). The criteria used to determine PWS need are the same criteria used in determining existing PWS capacity. These criteria include components such as system classification type, population served, and violation history. The MPL is updated annually so that prioritization can be based off the most recently available data. In addition, the Water Infrastructure Financing Authority (WIFA) uses the MPL to identify possible candidates for additional technical assistance and/or financial assistance (e.g., low interest loans, grants, etc.). During WIFA's evaluation, a recommendation is often made for ADEQ to conduct a system evaluation and/or operations and maintenance evaluation.

3.3 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?

Drinking Water Program Unit (DWPU) staff developed a PWS System Evaluation (SE) questionnaire-type form, for use by third-party contractors, to evaluate PWSs assigned from the MPL. The SE form is a compilation of technical questions derived from the Drinking Water Section's existing baseline sanitary survey and capacity assessment checklists, in addition to other general questions developed by ADEQ field engineers and program staff covering technical, managerial, financial, and security operations of a PWS. Additional details on the SE can also be obtained in ADEQ's <u>CAPACITY</u> <u>DEVELOPMENT PROGRAM</u>, <u>GOVERNOR'S REPORT</u>, <u>FY 2009 – 2011</u>, submitted September 2011.

In FY 2012, 18 SEs were completed and two of those PWSs also received a Nitrate Treatment Evaluation (NTE). The approved contractors provided summary reports with prioritized recommendations for the operators and owners, facility schematics, facility photos, and SE forms containing supporting documentation. The NTE consists of an examination of feasible treatment options for the PWSs, as well as estimated initial and long-term operational and maintenance costs associated with each treatment option. One additional SE was initiated in FY12 and will be completed in FY13. With prior ADEQ approval, additional funds may be allotted for the contractors to prepare facility-specific Operation and Maintenance (O&M) packages. The O&M packages include the following tools for Arizona facilities:

- Facility Schematic and Description
- Site Sampling Plan
- Organization Chart
- List of Operator Tasks
- Operations and Maintenance Plan
- Emergency Operation Plan
- Vulnerability Assessment/Emergency Response Plan
- Backflow Prevention and Cross-Connection Control Program Plan.

PWSs selected to undergo an O&M review will receive both electronic and hard copies of the above documents for immediate use and updating as needed.

An Operations and Maintenance Manual Template development task was awarded in FY11 and was completed in FY12. This Operations and Maintenance Manual Template will be disseminated during training sessions to system operators and managers for use by system employees to create baseline operating documents

3.4 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.

ADEQ reviews the "existing systems strategy" on a continual/routine basis including but not limited to:

- A review of work plans and accomplishments on a quarterly and annual basis,
- An ongoing evaluation of staff and third-party contractor performance goals regarding the capacity development program, and
- An ongoing analysis of the technical and managerial options including recommendations for management action and program implementation.
- 3.5 Did the state make any modifications to the existing system strategy? If so, describe.

No modifications were made during this reporting period. The current existing system strategy is applied with the assumption that flexibility is required to adapt to potential drinking water regulatory changes.