

# **KANSAS PUBLIC WATER SUPPLY CAPACITY DEVELOPMENT PROGRAM**

## **Status Report**

For  
State Fiscal Year 2008  
EPA Capitalization Grant  
September 25, 2007



Kansas Department of Health and Environment  
Division of Environment  
Bureau of Water  
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## INTRODUCTION

This report is provided as required by Section 1420 of the 1996 Amendments to the Safe Drinking Water Act and to comply with EPA drinking water revolving loan fund Capitalization Grant requirements. Information is provided on activities conducted to implement the Kansas Capacity Development Assurance Program during State Fiscal Year 2007, for the 2008 grant.

The Kansas Capacity Development Assurance Program consists of two components: 1) New System Capacity Assurance reviews and permitting; and 2) Implementation of the Capacity Development Strategy for Existing Public Water Supply Systems. This report is organized by these two components. A copy of the Kansas Capacity Development Strategy and Report of Findings is available on the KDHE webpage: <http://www.kdhe.state.ks.us/pws/capdev.html>.

## NEW SYSTEM REVIEWS

During SFY 2007, 2 new system permit applications were submitted to the Kansas Department of Health and Environment (KDHE) for review. New system permit reviews were conducted for applications received in SFY 2003, SFY 2004 and SFY 2007. These systems and the status of the permit reviews are listed in Table 1.

The New System Permit Application consists of two parts. Part 1 is the engineering and design component, which is reviewed and approved by the Engineering and Permitting Unit. Upon approval of Part 1 and the budget section of Part 2, a conditional permit or a letter of approval is issued authorizing construction of the public water supply system. Part 2 of the permit application is the technical, financial and managerial capacity assurance component. Before the system begins operation, the elements in Part 2 of the application must be completed and approved. A final inspection must also be conducted and approval to initiate operations must be granted by KDHE. There were no changes to KDHE's statutory authority or new system permitting process during FY 2007.

**Table 1 – New System Permit Review Status**

<b>Public Water Supply System</b>	<b>Status</b>
Public Wholesale Water Supply Dist. #13 (SFY 2003)	Permit Issued (SFY 2007)
Public Wholesale Water Supply Dist. #23 (SFY 2004)	Under Review, Permit Not Issued
Phillips County RWD #1 (SFY 2007)	Under Review, Permit Not Issued
Marais des Cygnes Utility Authority (SFY 2007)	Under Review, Permit Not Issued

The Capacity Assurance Strategy for new systems includes a review and evaluation component that KDHE uses to determine if the review and permitting process is effective. Any new system appearing on either a significant non-compliance (SNC) listing, or a pre-SNC listing, will receive special review to ascertain why the new non-compliance is occurring. KDHE will evaluate whether the system's appearance on a SNC listing is because of any short-coming in the new system permitting process or whether the appearance is due to other reasons, such as not following a proposed budget or providing proper training for the system's certified operator. In accordance with EPA reporting criteria, KDHE evaluates compliance data for new systems permitted in the previous 3 state fiscal years. Table 2 lists the compliance data for systems permitted in SFY06 and SFY07. There were no new system permits issued in FY05. One of the three systems permitted during the reporting period had violations. KDHE has determined that these violations are due to a lack of willingness on the part of the system's management to implement the appropriate treatment process rather than a problem with the permitting process. Technical assistance and enforcement procedures were implemented to bring this system back into compliance.

**Table 2 – New System Compliance History**

<b>System</b>	<b>Permitted</b>	<b>Violations</b>	<b>Corrective Actions</b>
Public Wholesale Dist. #20	SFY 06	TTHM, HAA5, TOC	KDHE provides tech. asst. & pending enforcement action.
Wilsey, City of	SFY 06	None	N/A
Public Wholesale Dist. #13	SFY07	None	N/A

**CAPACITY DEVELOPMENT STRATEGY FOR EXISTING SYSTEMS**

**Strategy Background**

The Kansas Capacity Development Workgroup developed 15 recommendations for KDHE to consider in implementing the Kansas Capacity Development Strategy for Existing Systems (see Report of Findings). KDHE selected eight of these recommendations for the initial implementation of its strategy. These eight recommendations were considered to have the greatest potential to generate significant capacity gains in a relatively short time. Since EPA approval of the Strategy in September 2000, KDHE’s primary focus has been on implementation of these initial 8 recommendations. Table 3 summarizes the implementation status of the eight initial recommendations.

**Table 3 – Initial 8 Strategy Recommendations**

<b>Recommendation</b>	<b>Implementation Status</b>
TFM Surveys for all community water systems	Implemented – Conducted every 3 years
Require water use reports from all systems	Implemented – Required annually By DWR
Develop a PWS business planning guidebook	Implemented – Part of KanCap
Develop PWS finance training program	Implemented – KanCap/EFC Financial Tools
Require all systems to install customer meters	Under Development – Table 7, p.8
Expand KDHE “Survival Guides” for PWS systems	Implemented – TCR, CCR, DBPR1, LT1ESWTR, IESWTR, FBRR, PNR <a href="http://www.kdhe.state.ks.us/pws/survival.html">http://www.kdhe.state.ks.us/pws/survival.html</a> Capacity Development Fact Sheets: <a href="http://www.kdheks.gov/pws/capdev.html">http://www.kdheks.gov/pws/capdev.html</a>
Develop facilities management plan guidelines (Asset Management)	Under Development
Develop board/council member education program	Implemented – KanCap

The remaining seven recommendations were retained for implementation as need and resources allowed. These 7 recommendations are summarized in Table 4. Some of these 7 have been implemented through incorporation into one of the initial 8 and some have been implemented as opportunity occurred.

**Table 4 – Remaining 7 Strategy Recommendations**

<b>Recommendation</b>	<b>Implementation Status</b>
Kansas Lawmakers information packets	Not Implemented
“As Built” mapping assistance program	Partially Implemented – PWS GIS Database of RWD service areas, distribution system, interconnects, and storage facilities
Encourage partnerships among PWS systems	Implemented – Planning Grant Program, Participate in KWO and/or locally sponsored regional PWS planning activities
Develop drinking water public information program	Not Implemented
Develop program to help select engineers/consultants	Implemented – Part of KanCap
Develop newsletter – KDHE spending, compliance, etc.	Not Implemented
Third-party assessment of KDHE resource needs	Not Implemented

In addition to state agency implementation activities, 3<sup>rd</sup> party technical assistance providers help public water supply systems address capacity development challenges. KDHE contracts with the Kansas Rural Water Association (KRWA) using the Small System Technical Assistance 2% Set Aside to provide assistance to small systems to help achieve Safe Drinking Water Act compliance, develop and maintain proper operation and maintenance procedures, develop appropriate financial and management procedures and provide technical assistance to systems using surface water as their source of supply. The goal of technical assistance provided under this contract is to help prevent Safe Drinking Water Act compliance problems before they occur. It is anticipated that this contract will be renewed with KRWA annually. Additionally, KDHE contracts with Ranson Financial Consultants, LLC to provide on-site financial planning assistance including rate setting, budget review and capital improvement planning with priority given to systems in SNC. This contract will also be renewed annually.

Other technical assistance providers, including the Midwest Assistance Program (MAP), League of Kansas Municipalities (LKM), and Kansas Section American Water Works Association (KsAWWA) provide a variety of assistance to public water suppliers as part of their ongoing activities. These organizations are not under contract with KDHE. Their funding comes from a variety of sources including EPA, USDA Rural Development, and membership fees. Their activities do support the goals of the Kansas New and Existing system strategies. All of the organizations mentioned above participated in development of the Kansas strategies and continue to provide input on KDHE implementation activities. Their activities are important to the overall success of the Capacity Development Program.

MAP primarily provides assistance to water system governing bodies seeking funding from the USDA Rural Development loan and grant programs for water and wastewater systems. KsAWWA provides training to water system operators through its Operator Training Committee (OTC) and works with KDHE’s Operator Certification Program to coordinate training activities. LKM provides training for city council/commission members, city managers/administrators and city clerks through the Municipal Leadership Academy. LKM also provides legal advice and sample ordinances for cities in Kansas.

**State Fiscal Year 2007 Programs and Implementation Activities**

General Activities and Assistance

In addition to activities directly related to implementation of the recommendations in the State Capacity Development Strategy, the Capacity Development Program provides a variety of assistance to public water supply systems.

This assistance includes presentations at workshops and conferences, attendance at board/council meetings, telephone, FAX and email consultations. KDHE tracks the number of systems that receive this assistance. This tracking information is sent to EPA's National Information Management System (NIMS). In SFY 2007 the Capacity Development Program reported to NIMS that assistance was provided to 341 public water supply systems. Other general activities include coordination with the Source Water Protection and Operator Certification programs.

The KDHE Capacity Development Program also maintains a webpage that provides information on Capacity Development Program initiatives, documents for download, and links to technical assistance providers. The webpage is periodically updated. The webpage is located at: <http://www.kdheks.gov/pws/capdev.html>.

### KanCap

The KanCap program is a combination interactive CD and manual that will accommodate a variety of learning preferences ranging from formal classroom training to computer self-study. SFY 2007 was the second full year of KanCap implementation. KDHE's focus during SFY 2007 was on providing classroom training to board and councils across the state. KanCap is designed to provide water system governing bodies with the information they need to make decisions that help protect the public health. Special emphasis is placed on managerial and financial responsibilities.

KDHE encourages participation in the program by providing incentives for board and council participation. These incentives include additional credit in the ranking system for SRF loans and 3 levels of certification based on the number participants from an individual water system. An incentive added in SFY 2007 provides 5 hours of operator credit for the Operator-in-Responsible Charge for attendance at all 3 sessions with a majority of the board or council. During SFY 2007, 132 individuals, representing 47 public water supply systems participated in KanCap classroom training.

### Regional PWS Planning Grants

The Regional PWS Planning Grant Program provides 50% matching funds for preliminary engineering studies that evaluate regional solutions to address public water supply system needs and challenges. KDHE uses a portion of the 1452(k) capitalization grant set-aside to provide up to \$12,500.00 to match funding provided by the project sponsors for these studies. Two new grant applications were received in SFY 2007. Funding for these two projects will be provided in SFY 2008. Table 5 lists the studies that were completed in SFY 2005 as well as the two new applications for SFY 2007. KDHE budgets cost-share funding for approximately 4 regional PWS studies per year. The planning grant application and program instructions are available on KDHE's capacity development webpage: <http://www.kdhe.state.ks.us/pws/capdev.html>.

**Table 5 – Regional PWS Planning Grant Projects**

<b>Project Sponsors</b>	<b>Systems Benefiting</b>	<b>Status</b>	<b>SFY</b>
Hillsboro-Marion Water Cooperative	Hillsboro, Marion, Peabody, Marion Water Improvement Dist. #2	Study Complete – will not construct joint system	2005
Elk River PWWSD #24 (Elk City, Howard, Longton, Severy, & Moline)	Elk City, Howard, Longton, Moline, Severy, EK Co RWD #1, MG Co RWDs #9 & #13	Study Complete – PWWSD #24 is pursuing consolidation with PWWSD #20 as the best solution. Project dependent upon agreement by #20 and USDA/RD funding. Construction of this project will result in decommission of 5 small surface water treatment plants.	2005
Pomona Lake Water Cooperative	DG Co RWDs #2, #3, & #5, OS Co RWDs #2 & #8, SN Co RWD #8 and Overbrook	Study Complete – Most feasible option is to pursue development of 2 wholesale water systems: DG 2&5, OS 2&5 and Overbrook will pursue KS R. east of Lawrence and DG 3 and SN 8 will pursue KS R between Topeka & Lawrence.	2005
Sunflower H2O	34 PWS systems in Barber, Comanche, Harper, Kingman, Kiowa & Pratt Counties in Kansas and 9 PWS systems in Oklahoma	Application complete in SFY 2007, funding provided in SFY 2008. Engineers selected and contracts signed.	2007
PWWSD #25	Douglas Co. RWDs 2 & 5, Osage Co. RWD 5	Application complete in SFY 2007, funding provided in SFY 2008. This project is a result of the findings from the Pomona Lake Water Cooperative Study.	2007

SRF TFM Reviews

In addition to the financial reviews conducted by KRWFA for all SRF loans, KDHE conducts reviews using the Capacity Development Survey to ensure that all loan recipients demonstrate TFM capacity. KDHE can require water systems to correct any deficiencies identified on the survey as a condition of the loan. For example, a water system that did not adequately conduct routine maintenance on its surface water treatment plant was required to submit an operations and maintenance plan and then submit quarterly reports on the activities conducted to implement the plan. This requirement can remain in place for the life of the loan if necessary. During State Fiscal Year 2007, KRWFA conducted 22 new loan reviews and 3 supplemental reviews for increased loan amendments.

Financial Planning Assistance

KDHE contracted with the Environmental Finance Center (EFC) at Boise State University to develop a Kansas specific rate-setting and financial planning tool that is available via the internet to all Kansas water systems. Under the contract, the EFC provides a statewide license for CapFinance (asset inventory and financial analysis), included with this license purchase is Rate Check-up (rate analysis). As part of the contract the EFC developed a website that will enable water systems to log on and download the software tools.

Water systems can use the software to review budgets, rates and financial planning procedures. The software generates reports that will help the system achieve and maintain financial capacity, including a rate analysis that illustrates the rates required to maintain long-term financial health and keep the system in compliance.

## TFM Capacity Development Survey

The TFM Capacity Development Survey is conducted every 3 years. The next survey will be completed during SFY 2008 in preparation for the 2008 Governor's Report. The first survey was conducted in 2002 and provided the baseline set of data that future progress will be measured against. KDHE uses the survey for several purposes: 1) to measure water system capacity building progress; 2) identify and prioritize systems in need of technical assistance; 3) to help measure the success and identify weaknesses of the Capacity Development Program; and 4) provides a self-assessment tool for water systems to use as a capacity building tool. An analysis of the survey data will be included in the 2008 Governor's Report.

## Special Capacity Concerns

Compliance with the Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR or LT1) and the Stage 1 Disinfectants and Disinfection Byproducts Rule (D/DBPR) continues to be a concern for small surface water systems. Approximately 53 community water systems located in the eastern half of Kansas were in violation of one or both of these rules during SFY 2007 (see Table 6). Some of these 53 water systems have already returned to compliance either through changes in operations and/or modifications to their treatment plants. For those systems still out of compliance, KDHE has conducted or is currently conducting special inspections to help identify improvements that could be made in operations or treatment process. These inspections result in recommendations that water systems can implement to achieve compliance. Where feasible, small water systems are encouraged to consolidate and construct new regional wholesale water supply systems. KDHE continues to provide assistance to these systems by providing ongoing technical assistance and funding for regional water supply studies. In addition, Consent Orders are issued outlining the actions water systems are required to take and establishing the time frames in which compliance will be achieved. KDHE anticipates that compliance with Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 D/DBPR) and Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) will be an ongoing concern. The number of systems impacted will be determined at the conclusion of the monitoring period. KDHE will use the same approach for Stage 2 and LT2 as was used for Stage 1 and LT1.

Uranium and Arsenic MCL violations are also an area of special concern. During SFY 2007, 10 public water supply systems reported violations (1-Arsenic, 9-Uranium). These numbers are expected to increase during SFY 2008.

**Table 6 – SFY 2007 LT1 & D/DBPR Violations**

<b>Nbr. PWS</b>	<b>Rule Description</b>
53	Total of PWS systems in violation TTHM/HAA5/TOC/LT1 Monitoring (1 or more)
3	LT1 Monitoring – LT1ESWTR
38	Total Trihalomethanes (TTHM) – D/DBPR
30	5 Haloacetic Acids (HAA5) – D/DBPR
33	Total Organic Carbon (TOC) – D/DBPR

Other Related Activities

KDHE recognizes that other state agencies and non-governmental organizations play an important role in helping water systems achieve and maintain TFM capacity. Two that KDHE frequently partner with are the Kansas Water Office (KWO) and KRWA. KDHE provided funding in cooperation with the KWO and KRWA to develop a Geographic Information System Public Water Supply Database. This database includes service area boundaries, location of facilities (treatment plants, interconnects, storage, intakes, and pumping stations) and main distribution system pipelines for rural water districts in Kansas. The database was completed in SFY 2007.

KDHE is also participating in the South Central Kansas Water Coalition study initiated in SFY 2006. This regional study is jointly sponsored by the Coalition, U.S. Bureau of Reclamation and the State of Kansas through the KWO. The study area includes a 9 county area in south central Kansas with the potential to impact approximately 118 public water supply systems. It is anticipated this study will be completed in SFY 2008.

During SFY 2007, KRWA provided technical assistance to 179 small public water supply systems under the 2% Small System Technical Assistance Set Aside contract discussed in the Strategy Background Section. Assistance provided under this contract addressed many technical issues including surface water treatment, well testing, new operator training, nitrate compliance and record keeping. Technical assistance was also provided to address managerial issues such as personnel policies and line extension and new service connection policies.

**Strategy Review and Modification**

KDHE recognizes that periodic review and modification of the Strategy for Existing Systems is vital in keeping KDHE’s Capacity Development Program current and relevant to the needs of Kansas public water supply systems. The changes made in SFY 2007 are summarized in Table 7. A new component added to the Strategy in SFY 2007 is the Capacity Development Awards Program. KDHE presented awards to 7 public water supply systems for excellence in achieving and maintaining technical, financial, and managerial capacity. Please see Attachment A for the SFY 2007 Amendment 1 to the Kansas Capacity Development Strategy for Existing Systems.

**Table 7 – Strategy Recommendations Revision**

<b>Recommendation</b>	<b>Action Recommended</b>
Require all systems to install customer meters	Change from a requirement to a recommendation for all systems. This impacts approximately 17 community water systems. This will be addressed in the new Water Conservation Plan Guidelines
Kansas Lawmakers information packets	KDHE should make the Report to the Governor available to interested lawmakers. Provide notification to appropriate committee chairs or send postcard notification to all legislators (KDHE will determine which approach to take).
“As Built” mapping assistance program	Financial resources only allow for the update of RWD boundaries and facilities currently under development. “As Built” maps should be the responsibility of the individual water systems.
Develop newsletter – KDHE spending, compliance, etc.	Provide articles for stakeholders’ publications and the annual KDHE Operator Newsletter
Third-party assessment of KDHE resource needs	Remove from strategy. Legislature approved additional staffing requests for the public water supply supervision program and the PWS Fee Fund. An evaluation of resource needs is no longer necessary.
Triennial Capacity Development Survey	Responsibility for implementation of the Survey changed from KWO to KDHE.

## **Future Activities**

The implementation activities scheduled for FY 2008 will focus on 3 areas: 1) the 2008 Capacity Development Survey; 2) continue to promote and provide KanCap training sessions; and 3) promote and deliver the EFC financial planning tools to boards and councils. Other ongoing activities include TFM reviews related to enforcement actions and SRF applications, presentation of the Capacity Development Achievement Awards, new system application review and approval, and coordination on public water supply issues and projects with the KWO. KDHE will also continue to award Regional Public Water Supply Planning grants as applications are received and approved.

**Attachment A**  
**Capacity Development Strategy**  
**For**  
**Existing Water Supply Systems**  
**Amendment 1**

**State of Kansas  
Capacity Development Strategy**

**for**

**Existing Public Water Supply Systems**

**Amendment 1**



**Kansas Department of Health and Environment  
Division of Environment  
Bureau of Water**

**State Fiscal Year 2007**

## Introduction

The Kansas Capacity Development Strategy for Existing Public Water Supply Systems was approved by the U.S. Environmental Protection Agency in September 2000. This Amendment to the Strategy modifies some of the original 15 recommendations made by the Capacity Development Workgroup to the Kansas Department of Health and Environment (KDHE). In most instances these modifications involve only minor changes that reflect more accurately how KDHE is implementing the Existing Public Water Supply Systems Strategy. Only the recommendations that are changed or removed are discussed in this Amendment. The original recommendation is shown in regular font and the change is in italics.

In addition to the modifications to the original recommendations, KDHE added one new program to the Capacity Development Strategy for Existing Systems during State Fiscal Year 2007. This program is the Capacity Development Achievement Awards and is discussed at the end of this document. For additional information on the Awards Program please refer to the KDHE Capacity Development Webpage: <http://www.kdheks.gov/pws/capdev.html>

## Changes to the Strategy for Existing Public Water Supply Systems

1. Statewide benchmarking that can be used to identify general positive and negative trends developing in Kansas water systems. The Kansas Water Office in conjunction with other agencies and technical assistance providers will create a voluntary survey designed to incorporate TFM criteria. The results will help the State analyze how to utilize limited technical assistance to best aid water systems. Initial discussions were that the survey would be conducted on a voluntary basis. After further discussion, the workgroup agreed that the survey should be mandatory and that the survey should be repeated every three years.

*Change: The Kansas Department of Health and Environment (KDHE) and the Kansas Water Office agreed that KDHE should conduct the surveys. The KDHE conducted surveys in 2002 and 2005 with a response rate of 97% in both years. Based on this response rate, the KDHE has determined that a regulation requiring mandatory completion of the survey is not necessary.*

2. Provide State lawmakers with an information package detailing TFM and why the State is promoting capacity assessment and improvement for public water systems.

*Change: The Report to the Governor provides information regarding the Capacity Development Strategies for the State of Kansas. A separate information package for lawmakers would be redundant. The KDHE will make the Report to the Governor available to all interested lawmakers. In addition, notification of the Report to the Governor will be sent to the appropriate committee chairs.*

3. KDHE should investigate the feasibility of developing a water system “as built” mapping assistance program.

*Change: The KDHE provided funding to the Kansas Water Office (KWO) to update rural water district boundary maps that were previously developed. "As Built" maps should be the responsibility of the individual water systems.*

4. Establish rules relative to water meter use. This information is critical for rate setting and for daily system operations.

*Change: This recommendation required the State of Kansas to develop rules and regulations requiring customer meters at all public water supply systems. The KDHE or the Department of Agriculture, Division of Water Resources (DWR) does not have the necessary authority to require public water supply systems to install customer meters. The KDHE, KWO, and DWR strongly recommend customer meters for all public water supply systems. The new 2007 Water Conservation Plan Guidelines indicate that customer meters are needed for approval of Water Conservation Plans.*

5. The KDHE should take a proactive approach in providing information to public water systems that is accurate and understandable. The workgroup recommended ideas such as a periodic newsletter and a CCR-style report that would include an accounting of how water supply fees were spent in addition to a summary of annual compliance data and KDHE activities.

*Change: The KDHE publishes Capacity Development Program articles in the Operator Newsletter, provides information for technical assistance provider publications and posts information on the KDHE webpage. In addition information relating to the use of capitalization grant funds is provided in the Annual Work Plan for the SRF program. Creating and publishing an additional newsletter would be redundant and would require resources that can be better used elsewhere.*

6. The Workgroup recommends a third-party assessment of current and future program resource needs to provide information to overcome the perception that KDHE personnel resources have not kept pace with the new responsibilities of the State Drinking Water Protection Program.

*Remove: The Kansas Legislature approved additional staffing requests for the public water supply supervision program and the PWS Fee Fund. An evaluation of resources need is no longer necessary.*

### **Addition to the Strategy for Existing Public Water Supply Systems**

During State Fiscal Year 2007 the KDHE added the Capacity Development Achievement Award Program to the Strategy for Existing Public Water Supply Systems. The Award Program is designed to recognize public water supply systems that demonstrate excellence in achieving and maintaining technical, financial and managerial capacity. The awards are given annually. Up to 5 awards will be given to systems serving a population of 500 or less. Up to five additional awards will be given for systems serving a population between 501 and 3,300. One award each will be granted for systems serving between 3,301 and 10,000; and for 10,001 or more. One public wholesale water supply district will be also be given an award each year.