

**State of Kansas
Capacity Development Strategy**

for

Existing Public Water Supply Systems

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

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Table of Contents

Preface	i
Part 1-Kansas’s Capacity Development Strategy	
A. Introduction	1
B. Public Involvement	1
C. The Five Required Elements	
C.1. Methods or criteria to prioritize	2
C.2. Factors which enhance or impair	3
C.3. Use of authority and resources	3
C.4. Baseline and improvements	5
C.5. Public input	6
D. Rationale for the Strategy	6
E. Resources	7
F. Implementation Schedule	7
G. Future Plans	9
Part 2-Report of Findings of the Capacity Development Citizens Advisory Workgroup	

Preface

This document is a demonstration of how the State of Kansas, Kansas Department of Health and Environment (KDHE) plans to implement a strategy to assist existing public water systems in improving their technical, financial, and managerial (TFM) capabilities. This initiative is a requirement imposed by the 1996 Amendments to the Safe Drinking Water Act (SDWA) on all states that wish to receive full funding from the Environmental Protection Agency (EPA) for their drinking water revolving loan programs. Section 1420 of the SDWA specifies five elements that a state must consider when preparing a strategy for helping existing public water systems to improve their TFM capacity. States are required to submit their strategies to EPA for review by August 6, 2000.

The State of Kansas is committed to improving the TFM capabilities of its public water systems. Each year, the Kansas Water Office prepares a comprehensive State Water Plan for the management, conservation, and development of the water resources of Kansas. The Public Water Supply Policy Section of *The Kansas Water Plan for FY 2002* contains the following objective: “By 2010, ensure that all public water suppliers have the technical, financial, and managerial capability to meet their needs and to meet Safe Drinking Water Act requirements.”. The Water Plan was approved on July 13, 2000, by the Kansas Water Authority.

In March of 1999, KDHE convened a Citizen’s Advisory Workgroup to advise the agency on how it should approach the SDWA capacity development provisions. This workgroup was composed of persons who represented a wide variety of groups with an interest in drinking water issues. Those persons who chose to participate in the process did so enthusiastically. Part 2 of this strategy contains the Workgroup’s *Report of Findings*. The Workgroup’s meetings were led by Bill Jarocki of the Boise State University Environmental Finance Center.

The *Report of Findings* is the basis for this Capacity Development Strategy. It describes in detail how the five elements required by the SDWA were considered in the course of the Advisory Workgroup’s work. It provides fifteen specific recommendations to KDHE on how the agency and state can assist public water systems in improving TFM capacity.

Part 1 of the strategy is a discussion of KDHE’s consideration of the Advisory Workgroup’s findings. It lists the recommendations that were chosen for implementation and the rationale behind those choices. It also discusses the resources that will be applied and the timetable that will be followed in implementing the Kansas Capacity Development Strategy.

Part 1–Kansas’s Capacity Development Strategy

A. Introduction

The *Report of Findings* submitted by Kansas’s Capacity Development Citizens Advisory Workgroup is a comprehensive document which provides a clear discussion of the five elements that a state is required to consider when preparing a Capacity Development Strategy. Part 1 of this document will provide a description of the process and rationale by which KDHE used the Workgroup’s recommendations to assemble a Capacity Development Strategy for the State of Kansas. The *Report of Findings* is included as Part 2 of the strategy.

B. Public Involvement

The Citizens Advisory Workgroup was the primary means for obtaining public involvement in developing a strategy. The Workgroup members represented a wide array of interests and brought their viewpoints and their associate’s viewpoints to the discussion. The work of the workgroup established a new level of public participation in an important element of the Kansas Public Water Supply Program.

KDHE undertook several actions intended to gain review and comment on the *Report of Findings* by the broader public. KDHE issued a statewide press release announcing the availability of the Workgroup’s *Report of Findings* and requesting public review and comment. The press release noted a copy of the *Report* could either be requested from KDHE or downloaded from the KDHE web site. A copy of the *Report* was also mailed to all of the state’s community public water supply systems with a request for review and comment. In addition, the *Report* was discussed during public meetings held in June at Garden City, Wichita, Hays, and Topeka, and at the March convention of the Kansas Rural Water Association. Announcement of the meetings was made in the press release and in the letter transmitting the *Report* to the water systems. No comments were received from the general public following these efforts.

The state’s official water planning document, *The Kansas Water Plan*, includes an objective for the year 2010, for all of the state’s public water supply systems to demonstrate the technical, financial, and managerial ability to meet their needs and comply with drinking water standards. *The Kansas Water Plan* has been adopted by the Kansas Water Authority, which includes among its members individuals representing state agencies, water systems, other groups with an interest in state water issues, and the general public. *The Kansas Water Plan* was also reviewed by twelve 10-member Basin Advisory Committees, which were established by the Kansas Water Authority to gather public input on the *Water Plan*.

It is possible the general public and water systems have been deluged by requests from KDHE and other state agencies to review and comment on various initiatives, programs, and regulatory

packages. KDHE and other agencies have become more progressive in soliciting public involvement and input into their regulatory and technical assistance programs. Several representatives of stakeholder groups expressed their frustration with the challenge of keeping up with these agency requests for review and comment. It is expected interest from the public and from water systems will increase as the Strategy is implemented and assistance efforts begin to have a direct impact on systems and their customers.

C. The Five Required Elements

The SDWA requires the State to consider five elements when preparing its strategy:

1. Methods or criteria to prioritize systems in needing TFM assistance,
2. Factors operating in the State which enhance or impair TFM capacity,
3. How the State will use the authority and resources of the SDWA to help water systems improve their TFM capacity,
4. How the State will establish a capacity baseline and measure improvements, and
5. How the State will identify persons interested in Capacity Development and receive their input.

The Citizens Advisory Workgroup considered these five elements in detail and the results of their deliberations are included in the *Report of Findings* contained in Part 2 of this Strategy. This section of the Strategy will be limited to how KDHE evaluated the Workgroup's findings in these five areas and its decisions on which elements to include in the final Strategy.

C.1. Methods or criteria to prioritize systems needing TFM assistance.

KDHE will adopt the scheme developed by the Advisory Workgroup, which is discussed on pages five through seven of the *Report of Findings*. Since one of the objectives of the capacity program is to assist water systems in complying with drinking water regulations, systems in violation of the regulations, are obvious candidates for assistance. The Workgroup recommended KDHE look beyond its own compliance data, however, to identify systems in potential need of assistance. Information from other state agencies, third party technical assistance providers, consulting engineers, and customer complaints will all be used to identify water systems potentially in need of assistance. Technical assistance which helps a water system avoid a compliance problem is just as valuable as assistance which resolves an existing compliance problem.

The Workgroup recommended use of a water system survey to gather information which could be used to identify systems in need of assistance. The concept of a TFM survey is included in the *Kansas Water Plan* and will be adopted by KDHE. It is anticipated information collected from these surveys will be invaluable in targeting systems for assistance. KDHE will proceed with adoption of administrative regulations requiring participation in the TFM surveys by water systems.

The purpose of a prioritization scheme is to target assistance efforts in a manner that recognizes

resource limitations. In the longer term, it is hoped TFM assistance will be available to any water system with a need and a willingness to cooperate with KDHE or other assistance providers.

C.2. Factors operating in the State which enhance or impair TFM capacity.

The Advisory Workgroup committed a significant amount of time to delineating these factors. In its review of all factors identified, the group selected a subset for consideration when developing the fifteen recommendations listed on pages 23 through 26 of the *Report of Findings*. Several factors, such as those requiring changes in national legislation or those which are more resource intensive, are not included in the fifteen recommendations. Those factors remain in the *Findings Report* for future consideration if an opportunity for meaningful input presents itself, or if the resource picture changes.

KDHE studied the factors listed in the *Findings Report* and concurred with the Workgroup's choices of those which improve capacity development efforts in the immediate future.

C.3. How the State will use the authority and resources of the SDWA to help water systems improve their TFM capacity.

The SDWA requires the state to apply its authorities and resources in three general areas.

1. *Assist systems in complying with the national primary drinking water regulations.* All of the selected recommendations will enhance the ability of water system managers and operators to understand and comply with the regulations. The prioritization scheme chosen to target systems for TFM assistance will emphasize systems experiencing compliance problems.
2. *Encourage the development of partnerships between public water systems.* Recommendation number seven of the *Findings Report* identified the need to encourage partnerships and communications between agencies and among water systems. Although this recommendation was not chosen by KDHE for immediate pursuit in the implementation of its capacity strategy, this issue will receive attention through the Public Water Supply Policy Section of *The Kansas Water Plan*, which calls for development of a regional public water supply assistance program. Under this initiative, the Kansas Water Office will adopt guidelines for the development of regional water supply strategies, and develop a program to provide financial, technical, and planning assistance to water suppliers interested in developing a regional strategy.
3. *Assist public water systems in the training and certification of operators.* KDHE and other Kansas technical assistance providers have conducted a strong operator training and certification program for years and will continue to do so. The recommendations selected for implementation will benefit operator training efforts directly, and will

also provide support for operator training and certification by better informing water system managers of the requirements their water systems and their operators are required to meet.

The *Findings Report* lists fifteen recommendations for KDHE to consider in implementing a Capacity Development Strategy. KDHE will pursue eight of these recommendations in the initial implementation of its strategy, as discussed below.

- 1) TFM surveys. The workgroup suggested mandatory surveys to establish a TFM benchmark, and to make periodic assessments of water system TFM progress. The survey concept is also supported in the Public Water Supply Policy Section of the *Kansas Water Plan*. KDHE legal staff have provided an informal opinion that the agency has adequate statutory authority to adopt regulations requiring public water supply systems to participate in a TFM survey. KDHE will pursue adoption of regulations requiring participation in TFM surveys every three years.
- 2) Water use reports. The workgroup recommended all water systems be required to submit annual water use reports. Currently, water systems who purchase their water from another public water supply system are not required to submit annual water use reports to the Division of Water Resources. KDHE will approach the Kansas Water Office and the Division of Water Resources about seeking any additional statutory authority necessary to require reports from all water systems.
- 3) Business planning guidebook. The workgroup recommended development of TFM guidance tools such as a business planning guidebook which could be used to water systems to prepare for completion of the triennial survey. KDHE agrees this material would be useful to water system managers.
- 4) Water system finance training. The workgroup identified the need for training to assist water system managers in setting water rates and in financial management. KDHE also agrees this recommendation is important to improving water system capacity.
- 5) Water meters. The workgroup recommended all water systems be required to meter their customers for water use. Some Kansas water systems charge a flat water rate and do not meter their customers for actual consumption. KDHE will approach the Kansas Water Office and the Division of Water Resources to determine if enabling legislation is needed to require use of water meters, or if either agency has the authority to require metering already.
- 6) Review current guidance materials. The workgroup recommended KDHE expand its series of regulation specific “survival guides” to include federal and state statutes and regulations applicable to public water systems. KDHE agrees these survival guides are useful in providing plain English information to water system managers and will adopt this recommendation.

- 7) Facilities Management Plans. The workgroup thought guidance on the value of preventive maintenance and preparing regular maintenance schedules, equipment replacement schedules, and the importance of meeting specified debt service coverage ratios and financial operating ratios to accumulate cash reserves was important to the capacity concept. KDHE agrees and will pursue this recommendation.
- 8) Board/Council Member Training. The workgroup took note of high turnover rates in city council and rural water district board members. The high turnover rates result in a loss of managerial capacity and continuity. KDHE agrees with the recommendation to develop training materials for new board/council members to help them understand their role and meet their responsibilities.

The remaining seven workgroup recommendations are not being discarded or ignored. KDHE recognizes implementation of a capacity strategy is a long term commitment. As the capacity assurance program develops, these recommendations will be considered along with other capacity limiting factors that will surely emerge. The availability of resources to implement the workgroup recommendations is a major factor in choosing which recommendations to adopt. Several of the activities chosen for initial implementation can be accomplished by contracting with service providers outside the agency. These service providers are available within the state and area and should provide excellent support for the capacity development program. Also, many of the impairments to water system capacity dealt with the knowledge possessed by water system operators and managers. Improvements in these areas have the potential to generate significant capacity gains in a relatively short time.

C.4. How the State will establish a capacity baseline and measure improvements.

KDHE will adopt the three recommendations in the *Report of Findings*, and use one additional tool to establish a water system TFM baseline and measure improvements. The *Report* included the following three recommendations.

- 1) Compliance tracking. Since one of the primary goals of a capacity development program is to help water systems comply with drinking water regulations, violations of regulations are an obvious assessment tool. The number of water systems in significant non-compliance and the triennial report on water systems with a history of non-compliance required by the SDWA, will be used to monitor trends in compliance.

It is important to realize that absolute compliance numbers may not deliver a completely accurate picture of capacity improvements when drinking water regulations are becoming more stringent. A water system with adequate TFM capabilities will ideally anticipate changing regulations, plan necessary improvements, make financing arrangements, and complete any necessary

construction ahead of the compliance deadline. However, there are significant changes occurring in several drinking water regulations whose cumulative impact may stretch the ability of even well managed, financed, and operated water systems to remain in compliance. These increasingly stringent regulations must be considered when reviewing absolute compliance numbers.

- 2) Outreach and Assistance. This involves tracking the number of capacity related site visits on an annual basis. KDHE will also use its periodic inspections or sanitary surveys to measure TFM gains.
- 3) Planning Activities. KDHE will track the number of water systems engaging in capital planning, business or financial planning, and self assessment activities.

The periodic TFM survey will also be essential in establishing a baseline of water system capacity in the state of Kansas, and in measuring capacity gains. In fact, much of the information on planning activities, can be collected through this survey. KDHE will adopt regulations requiring participation in the TFM surveys on a triennial basis.

In addition to establishing a baseline and measuring capacity gains, the surveys will be useful in identification of issues where a number of systems could benefit from training.

C.5. How the State will identify persons interested in Capacity Development and receive their input.

KDHE believes the Citizen's Advisory Workgroup did an adequate job of identifying persons and interest groups expected to have an interest in public drinking water issues. Although some invited parties did not participate in the discussions, a broad spectrum of interest groups was given the opportunity to do so. Similarly, KDHE believes an adequate effort was made to inform the public of the Workgroup's *Report of Findings* and to gather input. KDHE will continue to make information about capacity development efforts available to the public through the KDHE web site, association newsletters, press releases, and workshops.

D. Rationale for the Strategy

All five of the SDWA required elements are included in the Kansas Capacity Development Strategy.

1. The strategy uses a prioritization scheme which centers on water system compliance and information collected from mandatory TFM surveys.
2. The recommendations chosen for initial implementation are a direct result of an analysis of the factors that either enhance or impair water system capacity in Kansas.
3. KDHE will use funding available to the state through set-asides from the revolving loan fund

capitalization grants to support the costs of the program.

4. KDHE will measure individual water system responses to capacity assistance efforts and will track overall compliance trends within the state. The mandatory, periodic TFM survey previously discussed will also be used to evaluate progress in water system capacity and to identify areas for further efforts. KDHE will track other specific activities carried out under the strategy.
5. KDHE has encouraged public participation and involvement in the preparation of this capacity development strategy and will continue to do so during its implementation.

Implementation of this strategy will provide lasting benefits to existing public water systems by expanding and targeting training as needed to improve the knowledge base of water system operators and managers.

E. Resources

As mentioned in Section C.3., page five, KDHE lacks permanent staff to dedicate to developing the training documents and programs recommended by the Workgroup to implement this strategy. Resources needed to fully implement the capacity program will be considered in Department efforts to develop a stable, long term mechanism for meeting the resource needs of the drinking water program.

KDHE will prepare descriptions of various products needed for the strategy and seek proposals from suitable service providers for development and delivery of these products. KDHE has interviewed for an unclassified, special project officer (Environmental Scientist) to begin implementation of the strategy. The employee will also review the many excellent TFM materials being developed around the country for potential adaption to the Kansas program.

Funding will be provided by an annual set-aside from the Kansas capitalization grant for the drinking water revolving loan fund. KDHE has reserved \$485,000 from each of its first four capitalization grants for a total of \$1,940,000, to support the capacity development program. A decision whether to add to this significant sum of money from future capitalization grants has not been made. Any funds reserved for capacity development and not used may be returned to the loan fund.

Work plans and budgets for use of the set-aside funds will be prepared following EPA's review of this strategy. Increasing workloads on the drinking water program resulting from several new primary drinking water regulations recently adopted and scheduled for adoption during the next few years, may divert support for the capacity development program from permanent staff to contract service providers.

F. Implementation Schedule

This Section describes how KDHE will pursue implementation of the eight workgroup recommendations discussed in Section C.3. As discussed in Section C.3 and Section E above, a lack of resources prevents KDHE from pursuing all fifteen of the workgroup recommendations. Several of the selected recommendations are suitable for assistance from outside service providers.

TFM Surveys. Mandatory TFM surveys are a key component of the Kansas Capacity Development Strategy. The surveys will provide a benchmark of water supply TFM capacity, and will allow the state to make periodic measurements of water supply TFM gains. Implementation of this recommendation has two key components, adoption of administrative regulations requiring public water supply participation in the survey, and completion of the survey form. Development of the TFM survey form has already begun. Joint discussions with the Kansas Water Office, Kansas Rural Water Association, Kansas Rural Water Finance Authority, and KDHE resulted in a draft TFM Survey Form. Field testing began in April 2000 when the KWO mailed copies of the Draft Form to all public water supply systems in Shawnee County. At the end of June 2000, the response rate was approximately 50%. Comments from the water suppliers and the form responses will be used to refine the Survey Form. It is important to develop a Survey Form which will remain relatively stable for subsequent years, since it will be difficult to measure progress against the initial TFM baseline if significant changes in the Survey Form are made at a later date.

KDHE will take the following actions to place the regulation into effect.

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|----------------------|--------------|
| • Regulation drafted | Fall 2000 |
| • Regulation final | June 2001 |
| • First surveys due | January 2002 |

The Survey Form will be completed by June 2001, when the regulation becomes effective.

Water Meters and Water Use Reports. Implementation of these two recommendations (#3 and #9) will take place concurrently. Cooperation and action from other state agencies will be needed to require water systems who purchase their water from another public water supplier to complete annual water use reports and to require water systems to meter their customers. KDHE will raise these issues in the fall meetings of the Kansas Water Office Public Water Supply Technical Advisory committee, which are attended by representatives of the Division of Water Resources, Kansas Water Office, and KDHE, among others. The necessity of seeking statutory amendments will also be discussed.

Water System Training Materials. Recommendation numbers five, six, ten, twelve, and fifteen all deal with the development and delivery of training materials to water system operators and managers, and will be grouped together for the purposes of implementation.

Recommendations for some or all of these training materials will likely be common to many state

capacity development strategies. Rather than attempting to develop each of these components independently, KDHE will prepare a request for proposals to catalogue information and training tools developed by other states, EPA, Environmental Finance Centers, and other assistance providers such as rural water associations and regional community assistance providers (RCAP). These training tools will be reviewed for adaptability to Kansas. Where possible, the Kansas Capacity Program will take advantage of already existing materials in lieu of developing training materials from scratch. When pre-existing training materials are not available, additional requests for proposals will be prepared for appropriate documents. A tentative schedule to review existing materials and develop needed materials is provided below.

- Develop RFP to catalogue and review existing materials Fall 2000
- Execute contract Spring 2001
- Delivery of Report Spring 2002
- Develop RFP for remaining materials Summer 2002
- Execute contracts Fall 2002
- Delivery of training materials Fall 2003

G. Future Plans

Information gathered from the mandatory TFM surveys will be used to identify capacity shortcomings which occur frequently enough to develop training tools not already identified and under development. Results from the initial round of surveys will be available in the year 2002. KDHE will continue to utilize the citizen advisory workgroup organized for preparation of this strategy, to provide ongoing guidance in the initial stages of program development. Implementation of the Capacity Development Program will also receive input and review from the Kansas Water Authority through its oversight of the Kansas Water Plan.