

# **REPORT OF FINDINGS**

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## **ON IMPROVING THE TECHNICAL, FINANCIAL AND MANAGERIAL CAPACITY OF KANSAS' PUBLIC WATER SYSTEMS**

**by the**

**Capacity Development Workgroup**

**to the**

**KANSAS DEPARTMENT OF HEALTH AND  
ENVIRONMENT**

**JULY 2000**

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## **EXECUTIVE SUMMARY**

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During 1998 and 1999, the Capacity Development Workgroup to the Kansas Department of Health and the Environment (KDHE) considered the challenge of improving the technical, financial and management (TFM) capabilities of public water systems. This *Report of Findings* presents the work of the Workgroup for consideration by the general public and KDHE management. Guidance for the Workgroup in preparing this report came generally from the Safe Drinking Water Act (SDWA) Amendments of 1996. At the heart of this report are the Workgroup's recommendations regarding the programs that The KDHE Water Supply Section could strengthen or establish that would assist water systems in building capabilities to achieve compliance with the requirements of the SDWA.

The body of the report is presented in five sections, labeled alphabetically. This is an intentional correspondence with the language in the SDWA, which lays out the five elements that a state must consider when preparing a capacity development strategy.

### **Section A: Identifying Water Systems in Need of Technical, Financial and Managerial Assistance**

In Kansas, there are currently a variety of reliable sources of information about the status of public drinking water systems. Included among these sources are compliance information maintained by the Kansas Department of Health and Environment, information from stakeholder organizations, and other official records of water system status. The Kansas Water Office (KWO) is also responsible for reviewing the capabilities of water systems. Section A envisions a process whereby the variety of information about the current and future operations of water systems can be used to develop statewide benchmarking and can also be reviewed to determine which systems are most in need of technical, financial and management capacity building assistance. The process, generally described in illustration A, will initially utilize available information from multiple sources. Over time, as the KWO survey all water systems, the survey information will be the primary source of determining systems most in need of assistance.

### **Section B: Factors That Enhance or Impair Water System Capacity development**

Factors operating at the Federal, State, and local level that enhance or impair water system capacity are presented in this section of the report. These factors were drawn from the experience of Workgroup members, and from knowledge gained by the KDHE in administering the drinking water program over the years.

The Workgroup identified 119 factors at the Federal, State and local levels that are either enhancements or impairments to public water system TFM capacity. Enhancements and

impairments were further divided into six categories: Institutional, Regulatory, Financial, Tax, Legal and Other.

*TABLE B1: FEDERAL, STATE AND LOCAL FACTORS THAT AFFECT WATER SYSTEM TECHNICAL, FINANCIAL, AND MANAGERIAL CAPACITY*

| FACTORS       | ENHANCEMENTS | IMPAIRMENTS |
|---------------|--------------|-------------|
| INSTITUTIONAL | 18           | 29          |
| REGULATORY    | 7            | 17          |
| FINANCIAL     | 15           | 16          |
| TAX           | 3            | 6           |
| LEGAL         | 3            | 1           |
| OTHER         | 1            | 3           |
| TOTAL         | 47           | 72          |

### **Section C: Recommendations on How the State can use its Authority and Resources to Help Water Systems Improve Capacity**

In developing the conclusions drawn from analyzing the enhancements and impairments noted in Section B, the workgroup identified fifteen recommendations as to how the resources of the State and other stakeholders could be utilized to help water systems improve TFM capabilities. The fifteen non-prioritized elements are outlined below, and presented in full within the *Report of Findings*.

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.
2. Provide State lawmakers with an information package detailing TFM and why the State is promoting capacity assessment and improvement for public water systems.
3. Annual submittal by all public water systems of a water use report to the Kansas Division of Water Resources.
4. KDHE should investigate the feasibility of developing a water system “as built” mapping assistance program.

5. KDHE should develop TFM guidance development tools that a system can use to prepare for the triennial survey, or that can be used by a certified technical assistance provider to help a system complete the survey.
6. Fiscal capacity and financial management training should be provided to water system personnel and elected officials.
7. Encourage partnerships and communication between agencies and among water systems.
8. KDHE should work with stakeholder groups and others to provide information to the public to improve the general knowledge of drinking water issues.
9. Establish rules relative to water meter use. This information is critical for rate setting and for daily system operations.
10. Develop a user-friendly guide on statutes and regulations relative to public drinking water systems and distribute for use by water system operators, managers, consultants, and customers.
11. KDHE should develop a training program designed to increase the capacity of water system board members to solicit appropriate engineering services for system expansion and improvements.
12. Assist systems in developing Facilities Management Plans that focus on preventive maintenance and establishing regular maintenance schedules, include repair/replacement guidelines for key components in a system, and plan for investment in the physical facilities of the system.
13. 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.
14. 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.
15. Review available training material, and develop supplemental training material as needed for new board/council members that would help them understand their role in the oversight of the water system, and in helping their system acquire and maintain TMF capacity.

## **Section D: Measuring the Success of Kansas' Capacity Development Strategy**

In fashioning its capacity development strategy, the Workgroup noted in Section D how the KDHE might assess the performance of capacity building efforts. Four general measures of success were developed. First, the KDHE could note changes in compliance performance, both statewide and on a system-specific basis. Second, the KDHE could track the number of TFM assistance site visits and use enhanced sanitary surveys conducted by program personnel to review TFM measures. The number of water systems that complete self-assessments of capacity could also be recorded. Third, by conducting "customer surveys" to obtain feedback from water systems that receive assistance under the strategy, the KDHE could learn more about the effectiveness of its programs. Finally, the KDHE could keep track of the number of water systems that prepare capital facility management plans, water system plans, and other activities that contribute directly to enhanced capacity.

## **Section E: Public Involvement in preparing The Kansas Capacity Development Report of Findings**

The final section of the Workgroup's *Report of Findings* provides a description on how the Capacity Development Workgroup was formed and describes how the broadest possible involvement by citizens and stakeholders was obtained.

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## **GLOSSARY OF TERMS AND ACRONYMS USED IN THIS REPORT**

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**AWWA:** American Water Works Association – This organization of water professionals is dedicated to providing leadership to the drinking water profession in the areas of drinking water quality, water resource policy, and water related planning.

**Capacity:** Refers to the capabilities required of a public water system in order to achieve and maintain compliance with the drinking water rules. It has three elements:

**Technical:** Technical capacity or capability means that the water system meets standards of engineering and structural integrity necessary to serve customer needs. Technically capable water systems are constructed, operated, and maintained according to accepted quality standards.

**Financial:** Financial capacity or capability means that the water system can raise and properly manage the money it needs to operate efficiently over the long term.

**Managerial:** Managerial capacity or capability means that the water system’s management structure is capable of providing proper stewardship of the system. Governing boards or authorities are actively involved in oversight of system operations.

**CCR:** Consumer Confidence Report – An annual water quality report required by the 1996 SDWA amendments, which summarizes information on source water, levels of any detected contaminants, compliance with drinking water rules, and educational material.

**CEU:** Continuing Education Unit – Formal credit for participation in education and training programs, often necessary for maintaining certification or licensing status.

**DWSRF:** The Drinking Water State Revolving Loan Fund - Congress authorized this fund in 1996. The Kansas Department of Health and Environment administers the DWSRF.

**EFC:** The Environmental Finance Center at Boise State University - This organization operates under a US EPA charter to provide assistance to States and communities on matters concerned with financial management and access to financial assistance.

- KDHE:** Kansas Department of Health and the Environment – This agency is responsible for administering the drinking water standards in Kansas through a primacy agreement with US EPA.
- KRWA:** Kansas Rural Water Association. This organization provides technical and other assistance to Kansas communities and rural water districts in utility operation and management.
- LKM:** League of Kansas Municipalities. This is an organization of Kansas’s municipal government officials.
- MAP:** Midwest assistance programs. MAP is the Regional Community Assistance provider for the north central United States.
- SDWA:** The Safe Drinking Water Act – Passed by the US Congress in 1974 and amended in 1986 and 1996.
- TFM:** Technical, financial, and managerial – An abbreviation used to save space in the report and avoid frequent repetition of these terms, defined previously.
- US EPA:** The US Environmental Protection Agency - This Federal agency oversees State programs and provides financial support. EPA determines when a State’s capacity development program is in compliance with the Safe Drinking Water Act.
- USDA - RD:** US Department of Agriculture – Rural Development – This Federal agency helps rural communities by providing economic and technological assistance.



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## **INTRODUCTION TO CAPACITY DEVELOPMENT: SAFE DRINKING WATER ACT (SDWA)**

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Water system capacity is the ability to plan for, achieve, and maintain compliance with applicable drinking water standards. Based upon the research and technical assistance efforts of water works professionals, capacity is known to have three components: technical, financial, and management. Adequate capability in all three areas is necessary for a successful public water system.

Capacity development is the process of water systems acquiring and maintaining adequate technical, financial, and managerial capabilities to assist them in providing safe drinking water. The Safe Drinking Water Act's (SDWA) capacity development provisions provide a framework for States and water systems to work together to help ensure that systems acquire and maintain the technical, financial, and managerial capacity needed to meet the Act's public health protection objectives.

The 1996 SDWA Amendments include requirements for States to obtain authority to assure that new systems are viable, to develop a strategy to address the capacity of existing systems, and to ensure that potential Drinking Water State Revolving Fund (DWSRF) recipients have sufficient technical, financial and managerial (TFM) capacity prior to receiving loan funds (or that the loan funds will allow them to receive the capacity they require). The Act outlines several items to include in States' capacity development strategies for existing systems; however it is not mandated that States *must* include each of these items, but rather that they must *consider* each of the items in developing the strategy. Clearly, including each of the required elements produces a comprehensive capacity development program for the State and addresses all of the necessary issues. However, each State must examine each of the issues and determine those elements that best fit the needs of the State.

SDWA §1420(c)(2) addresses the requirements of strategies developed by each State to improve the technical, financial, and managerial capacity of public water systems under their jurisdiction. The development of the State's strategy is directly related to the level of financial resources available to help pay for water system improvements. A State that does not develop and implement a capacity development strategy will receive only 90 percent of the DWSRF allotment it would otherwise receive in FY 2001, 85 percent of its scheduled allotment in FY 2002, and only 80 percent of its scheduled allotment in each subsequent fiscal year.

In developing and implementing a capacity development strategy, SDWA §1420(c)(2) (A-E) requires States to “consider, solicit public comment on, and include as appropriate” five elements:

- Methods or criteria to prioritize systems [§1420(c)(2)(A)]
- Factors that encourage or impair capacity development [§1420(c)(2)(B)]
- How the State will use the authority and resources of the SDWA [§1420(c)(2)(C)]
- How the State will establish the baseline and measure improvements [§1420(c)(2)(D)]
- Procedures to identify interested persons [§1420(c)(2)(E)]

The Kansas Capacity Development Workgroup chose to prepare a comprehensive *Report of Findings* that includes consideration of all SDWA-required capacity development strategy elements.

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## **Kansas' Capacity Development Workgroup**

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The Kansas Capacity Development Workgroup, an important assembly of drinking water stakeholders, began work toward developing this *Report of Findings* in March of 1999. In addition to the workgroup members listed below, other individuals and organizations were invited to participate in this work. An extensive mailing was conducted to solicit interest in serving with the advisory group. The purpose was to form a stakeholder group that would represent the broadest possible spectrum of interested parties while at the same time respecting the need to keep the group small enough to function efficiently. Additionally, a number of individuals who were not formally appointed chose to voluntarily attend the workgroup meetings and were able to contribute materially to the group's work. Provisions were made to expand the public involvement process by the following means:

- A mailing list of persons or organizations was developed so that periodic updates could be provided.
- A decision was made to present the initial recommendations of the group to the public through a series of public workshops.
- Organizations that publish newsletters were asked to convey information about the workgroup's activities.

These measures, taken together, helped to ensure that the public would have multiple opportunities to learn about and provide input to the viability assessment activities. A record of the group's work is found in Appendix A.

### ***Kansas Capacity Development Workgroup Active Participants***

Charles Benjamin, Legislative Coordinator, Kansas Natural Resource Council  
Bob Dunlevy, US EPA – Region VII  
Terry Duvall, KS Water Office  
Sally Finney, Executive Director, Kansas Public Health Association  
Phillip Fishburn, Midwest Assistance Program  
Kim Gulley, League of Kansas Municipalities  
Dale Hayse, Executive Director, Kansas Ground Water Association  
Melissa Hunsicker, KS Association of School Boards  
Tom Huntzinger, KS Department of Agriculture  
Terry Leatherman, KS Chamber of Commerce & Industry  
Tom Lowe, KS Water Office  
Alan Luttrell, KS Consulting Engineers Evans- Bierly-Hutchison  
Ellen Miller, Ellen Miller Group  
M S Mitchell, KS Building Industry Association

Karl W. Mueldener, Director, Bureau of Water  
Richard Porter, KS Section of AWWA  
Elmer Ronnebaum, KS Rural Water Association  
Ed Rowe, League of Women Voters  
David Shupe, Kansas rural Water Finance Authority  
Tom Sloan, Representative  
Gary Smith, USDA Rural Development  
David F. Waldo, Bureau of Water/Public Water Supply Section  
Neb Webb, KS Department of Commerce & Housing

***Kansas Capacity Development Workgroup Inactive Participants***

Randy Allen, Executive Director, Kansas Association of Counties  
Senator David Corbin, Chairman, Committee on Energy & Natural Resources  
Representative Joann Freeborn, Chairman, Committee on Environment  
Jolene Funk, KS Association of Sanitarians  
Jim Maag, Executive Director, Kansas Bankers Association  
Jack Messer, President, Kansas Chapter American Public Works Association  
Dan Ramlow, Executive Vice President, Kansas Contractors Association, Inc.

***Kansas Capacity Development Workgroup Meeting Facilitator***

Bill Jarocki, Environmental Finance Center

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## **SECTION A: METHODS OR CRITERIA TO PRIORITIZE SYSTEMS IN NEED OF TFM ASSISTANCE**

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### ***BACKGROUND***

The key issue in designing the State's capacity development strategy is identifying and prioritizing those public water systems that are most in need of improving TFM capacity to deliver safe drinking water to the public. At the core of this discussion is this question; "what information about water systems does the KDHE or other stakeholders have that helps identify problems that need to be addressed?" Care was taken to identify and consider the variety of sources for information about the TFM conditions of water systems. Ultimately, the Workgroup determined the following:

- The best and most current information (consistent and verifiable) for providing an indication of the capabilities of public water systems is the technical compliance information maintained by the KDHE. Some financial and management capacity information is maintained by the KDHE. The Kansas Corporation Commission also maintains financial and management information for privately owned systems.
- The drinking water program already has well defined mechanisms in place for dealing with acute risks to public health. Public notification, boil water advisories where appropriate, and immediate corrective actions are all undertaken when pathogenic organisms or high levels of chemical contaminants are detected in a water supply. Consequently, the capacity development strategy will not be expected to deal with these emergency situations.
- A pattern of non-compliance will often serve as an indication that a water system lacks TFM capacity. Failures to monitor, frequent recurrences of coliform bacteria in the distribution system, variations in water quality leaving treatment facilities and other symptoms of this nature should trigger an assessment of a water system's TFM capabilities.
- An overwhelming majority of violations of the drinking water rules occur in very small drinking water systems (serving fewer than 500 persons). Concern that prioritizing systems on the basis of population would result in an overall neglect of small water systems was alleviated by the knowledge that this size category would nearly always be the one chosen for assistance.
- The purpose of the prioritization scheme was not to decide which systems would or would not receive assistance, but was aimed more at determining the order in which systems would be given attention. Because the capacity development strategy will

- become an ongoing element of the State's drinking water program, it should be possible to eventually serve all systems that truly need capacity assistance.
- There is a need to collect additional information about the water systems to determine TFM capacity in order to deliver specific assistance to meet T, F or M capacity deficiencies.

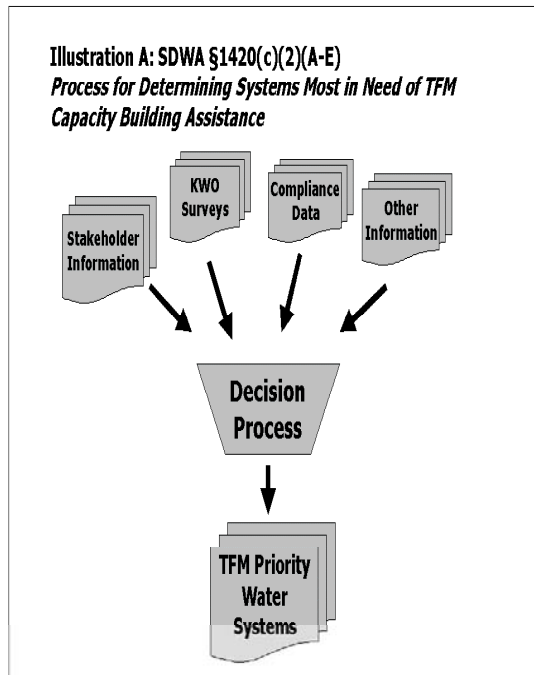
### ***IDENTIFICATION AND PRIORITIZATION***

The Workgroup deliberated the issue of how current information could be used to identify and prioritize systems needing TFM capacity building. Discussions occupied portions of three meetings. As a result of the considerations identified above the prioritization model generally illustrated in the flowchart on the following page was developed.

Currently information about the status of water systems is officially maintained by the KDHE and other state agencies such as the Kansas Water Office. Assembling this information in order to gain a comprehensive view of the capability conditions of all water systems has not been accomplished in the past. Traditionally, systems have been targeted for assistance based on their compliance with state drinking water statutes, rules and regulations. Compliance data on systems is maintained by the KDHE.

The Workgroup determined that in addition to compliance data, there are other reliable sources of information available to determine which water systems are most in need of assistance in improving technical, financial and management capacity. The information is retained by a variety of State, Federal and local organizations and stakeholder groups. The committee recommends that this rich variety of information be synthesized in an open process to better determine the State's priorities for providing assistance to water systems.

The process in Illustration A generally describes how information is processed and how a prioritization of systems is accomplished. If this general framework is accepted, the KDHE will work with information sources to further refine this process.



It is also important to note the Kansas Water Office's (KWO) responsibility for assessing the capabilities of all water systems. The KWO will be implementing a system review survey that is intended to capture the critical information necessary to determine capabilities of water systems and establish a TFM benchmark for the state. As the State moves toward strategy implementation, the combination of KWO survey results and supplemental information from other stakeholders and sources will be used to determine systems most in need. As KWO fully implements its survey process, the KDHE will have access to statewide, comprehensive information that will enable the agency to identify areas where TFM assistance is most needed.

The nature of the assistance offered under the capacity development program should be determined only after an assessment of the technical, financial, and managerial capacity of the water systems that are ranked highest. Section C of this report discusses several of these assistance options being considered.

## **SECTION B: FACTORS THAT ENHANCE OR IMPAIR CAPACITY DEVELOPMENT**

### ***BACKGROUND***

Considerable attention was given to addressing Section 1420(C)(2)(B) of the SDWA Amendments of 1996. The Act requires each State to identify the factors that either encourage or impair the technical, financial, & managerial (TFM) capacity of public water systems. States are required to identify institutional, regulatory, financial, tax, and legal factors. A sixth factor category, "other," was added to capture issues outside of the prescribed categories.

The factors operating at the Federal, State, and local level that impair or enhance water system capacity are presented in this section of the report. By definition they are:

- *Institutional – Intergovernmental, cultural, procedural or relationship issues that either enhance or impair the ability of water systems to acquire and/or maintain TFM capabilities*
- *Regulatory – Federal, State or local rules and regulations that affect TFM capacity*
- *Financial – Financial practices, policies or conditions that affect TFM capacity*
- *Tax – Federal, State or local taxation practices, policies or attitudes that affect TFM capacity*
- *Legal – Federal, State or local statutes, interpretations of laws and court decisions that affect TFM capacity*

These factors were drawn from national studies, from the experience of Workgroup members and from knowledge gained by the KDHE in administering the drinking water program over the years. The Workgroup identified 119 factors at the Federal, State and local levels that are either enhancements or impairments to public water system TFM capacity.



*Table B1: Federal, State, and Local Factors that Affect Water System TFM Capacity*

| Factors       | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 18           | 29          |
| Regulatory    | 7            | 17          |
| Financial     | 15           | 16          |
| Tax           | 3            | 6           |
| Legal         | 3            | 1           |
| Other         | 1            | 3           |
| Total         | 47           | 72          |

***FEDERAL FACTORS THAT ENHANCE OR IMPAIR PUBLIC WATER SYSTEM TFM CAPACITY***

Federal Enhancements to TFM Capacity

*Institutional Enhancements:*

- US EPA funding to states for the Public Water Supply Section program and to other technical assistance organizations provides support for building TFM capacity at the water system level.
- US EPA’s capacity development guidelines give states flexibility by allowing states to determine what is needed to improve water systems.
- Significant benefits are received by public water systems from the US EPA's investment in training, technical assistance and education programs offered to water systems through the Kansas Department of Health & Environment, (KDHE), and US EPA's various contractors, grantees, and partners.
- There are several different federal government entities (e.g., US Army Corp of Engineers, USDA Rural Development, USDA NRCS, and HUD CDBG) that are involved with providing services, thus providing more channels to provide help to systems.
- The US EPA is involved in the process of fashioning a State strategy for improving water system capabilities in Kansas and offers important guidance and input in the rule making process associated with implementing the 1996 SDWA Amendments.

*Regulatory Enhancements:*

- The Safe Drinking Water Act, first passed in 1974 and significantly amended in 1986 and 1996 establishes the responsibility of public water systems in protecting the public health through the provision of safe drinking water. The Act has provided an

important common ground for the protection of public health for 25 years. SDWA provides the statutory and regulatory basis for what states and local water systems must do at a minimum to provide safe drinking water.

- Depth and detail of research and the commitment to work with the regulated community and states in determining national standards is an enhancement to TFM capacity.
- Stakeholder involvement in the development of rules and regulations is an enhancement to capacity.

*Financial Enhancements:*

- Water suppliers that meet DWSRF requirements have the opportunity to make capital improvements funded with low interest loans.
- Continued funding for State programs (Public Water Supply Section) is an important enhancement to creating State capacity for TFM programs.
- US EPA is required to conduct more realistic cost per benefit studies when responding to the Congress' requirement for additional drinking water regulations.
- Availability of financing at low interest for necessary improvements.
- Federal financial support of the circuit riders and grass root organizations such as Kansas Rural Water Association, Midwest Assistance program, Kansas American Water Works Association, the Salina Vocational and Technical School, and the Community Colleges at Dodge City and Fort Scott.
- The establishment of the DWSRF, created to assist in the financing of capital improvements to public water systems, is an important new resource for building TFM capacity. Federal resources are authorized and appropriated by Congress for the establishment and enhancement of the DWSRF programs administered by the states.
- The DWSRF allows states to set-aside portions of the state capitalization grants for TFM capacity building. This is a significant source of resources for the states to fund programs for improving the capacity of public water systems.
- The USDA – Rural Development Loan and Grant Program provides a source of capital financing resources for many rural public water systems in Kansas. Often, USDA-RD will work closely with State and Federal agency representatives to package financing for rural utilities.
- The US Housing and Urban Development Agency's Community Development Block Grant program (CDBG) provides much needed grant financing for public water systems seeking to improve systems for community development purposes. CDBG funding often reduces the debt financing needs of systems.

*Tax Enhancements:* None noted for inclusion in *Report of Findings*.

*Legal Enhancements:* None noted for inclusion in *Report of Findings*.

*Other Enhancements:* None noted for inclusion in *Report of Findings*.

*Table B2: Federal Factors that Affect Water System TFM Capacity*

| Factors       | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 5            | 11          |
| Regulatory    | 3            | 9           |
| Financial     | 9            | 7           |
| Tax           | 0            | 1           |
| Legal         | 0            | 0           |
| Other         | 0            | 0           |
| Total         | 17           | 28          |

#### Federal Impairments to TFM Capacity

##### *Institutional Impairments:*

- While considerable funding is provided, demand for oversight, assistance programs and capital expenditures outpace Congressional appropriations and administrative budget levels.
- Occasionally US EPA Regional Office and US EPA Headquarters programmatic interpretations differ, creating confusion for states and the regulated community.
- Federal performance measures drive state program operations – focus should be on outcome, not process.
- Even though US EPA’s regional office structure is designed to accommodate regional preferences, the US EPA Headquarters is perceived to be institutionally remote (removed) from the issues that are relevant to rural Kansas; especially less populated counties in the State.
- Actions and process focused on larger systems. There is not enough focus on smaller systems. This is perceived as an institutional bias against smaller water systems.
- There is insufficient coordination between federal agencies that also have responsibility for participating in the mission of providing safe water.
- Federal officials are perceived to be beholden to bureaucratic structures that reduce flexibility in assisting states and the regulated community in meeting national drinking water protection goals.

- US EPA’s unwillingness to reevaluate standards when science becomes available. US EPA Integrated Risk Information System (IRIS) database contains information suggesting public health would be adequately protected with nitrate levels up to 20 milligrams per liter.
- The lack of “trust building” activities of the US EPA has led to a distrust of the agency by local government entities. In addition, the agency is driven by the need to initiate enforcement actions (an internal measure of program effectiveness).
- Congress and US EPA may not fully understand the financial cost of regulatory compliance on water systems in Kansas. Kansas public water systems operate at a much smaller scale than those systems that seem to have the most input in the design and implementation of environmental statutes and regulations.
- Operations and the support of public water systems have traditionally not been viewed as a high priority within the US EPA.

*Regulatory Impairments:*

- The Mandates Relief Act of 1995 has had an insignificant effect on the issuance of new unfunded mandates for water systems. The impact of drinking water requirements on systems continues to be a burden that has not been relieved by the Act. The increased number of federal regulations (which are often viewed as unfunded mandates) and continuous changes in regulations and rules create difficulties for both State regulators and regulated systems.
- Science vs. Politics/cost-benefit analysis. Although recent progress has been made in crafting drinking water standards that are cost effective and efficient in protecting the public health, more work needs to be done in the area of providing common-sense information on the standards that are being promoted. Congress is concerned about the implementation of health-based regulations. However, the costs and benefits of those regulations need to be considered; especially in communities that face a variety of demands on limited budgets.
- Rules and regulations are promulgated by US EPA without complete consideration of the ability of states and local water systems to ultimately implement them. Mandated rules should be implemented with regard to the characteristics of the states. Risk based assessment of need for rule implementation in each state should be considered.
- The growing number and prescriptive nature of regulations are regulatory impairments.
- The Federal rulemaking process has limited small system input.
- State and local officials must often deal with the uncertainty associated with or arising from the process for adoption of drinking water rules and standards. The sequence of regulatory implementation – sometimes Federal regulations are imposed

prior to state action – do not allow the states enough time to react. Federal regulations are often proposed according to Congressionally mandated timetables without giving states the time to respond adequately prior to implementation.

- Federal regulations should be written to balance the technical requirements for establishing rules with the capability of water systems to assimilate the requirements into their operations and management. Size and complexity of regulations is a problem when resources are devoted to interpret rules to overcome the way they are written.
- The structure and language of drinking water rules are complex, difficult for the regulated community and customers to understand, and poorly communicated.
- US EPA’s health/risk calculations for new drinking water contaminants are often complex making it difficult for states and the regulated community to understand and explain. The seeming lack of sound scientific analysis in formulating regulatory standards is an impediment to State and local implementation. Thus, new contaminant rules and drinking water standards seem to be based upon politics as opposed to sound science.

*Financial Impairments:*

- Cost of monitoring and treatment for smaller systems.
- Requirement of matching funds for some projects.
- Public water systems in rural areas (such as Kansas) are burdened by federal Davis-Bacon Act requirements for payment of prevailing wage rates on construction projects financed in part or entirely by the HUD-funded CDBG program. The higher wage-rate requirements of the federal Davis Bacon Act create an additional financial burden to water systems seeking to make needed capital improvements. Local wage rates may be traditionally lower than those required under Davis Bacon.
- The US EPA drinking water needs survey indicates a significant need for capital financing resources. The current funding levels requested by the US EPA and approved by Congress are inadequate to meet funding needs. Federal grant and loan programs should be enhanced. In addition, the DWSRF program should be given a longer authorization/appropriation period by the Congress.
- Set-asides for capacity development and improvement (TFM) programs are tied to DWSRF capitalization. There is a need for more permanent funding for technical assistance activities for TFM.
- The US EPA does not provide adequate financial resources (in the form of the Public Water Supply Supervision grant) to the Water Supply Section to completely implement the State's expanded responsibilities under the SDWA.

- The Federal funding for the capitalization of the State’s DWSRF funding is inadequate to meet the demand for loans. Additional capitalization dollars, as well as grant funding for water systems that cannot afford to fully pay for capital facility improvements, should be provided. In addition, the lack of federal resources for State drinking water grants to address “old” unfunded and underfunded mandates is a problem.

*Tax Impairments:*

- Federal tax code limitations on private facilities financing through the use of private activity bonds are impairments to the acquisition of capital for needed improvements. Private activity bonds are used either entirely or partially for private purposes and are given federal tax-exempt status. Private activity bonds are advantageous because they offer private entities lower interest rates than they would otherwise be able to obtain; a government can use private-activity bonds to give economic incentives to targeted activities or geographic areas.

*Legal Impairments:* None noted for inclusion in *Report of Findings*.

*Other Impairments:* None noted for inclusion in *Report of Findings*.

***STATE FACTORS THAT ENHANCE OR IMPAIR PUBLIC WATER SYSTEM TFM CAPACITY***

State Enhancements to TFM Capacity

*Institutional Enhancements:*

- Kansas maintains a State water plan that is updated annually. A strong public involvement process is utilized which includes eleven-member advisory committees in each of twelve major river basins. The Kansas Water Plan includes policy recommendations on public water supply and other water management categories. The Kansas Water Authority approves the plan and makes annual recommendations to the Governor and the Legislature regarding implementation. A dedicated fund (the State Water Plan Fund) is available for implementing recommendations. Approximately \$16 million is available annually to implement the Kansas Water Plan.
- The Kansas Public Drinking Water Program has had a strong bias towards providing technical assistance and training to its regulated drinking water systems in order to achieve system compliance goals. This underlying bias toward assistance versus enforcement will improve the success of additional, strategic programs to improve TFM capacity.

- Information, education and training for community leaders from a variety of sources (KRWA, AWWA, KDHE, MAP, etc.). These provide for, or enhance the communication and education of community leaders. The commitment of these organizations to providing service and information to public water systems has created a strong matrix of assistance for regulated systems and a forum for partnerships to be developed between service providers.
- KDHE training – Numerous educational opportunities are available via AWWA, KRWA, MAP, the community college system, and others. These regional opportunities allow for training with minimal travel on the part of operators.
- The KDHE has the benefit of having a well-trained staff that is accessible, knowledgeable and friendly. The primacy agency exhibits a supportive “work with” attitude and is often willing to exercise “flexibility.” The KDHE cooperates with other stakeholders in promoting the common goal of providing safe drinking water to the public.
- Required certification and continuing education. The State of Kansas’s operator certification program helps to ensure that water systems have capable staff to meet the increasing complexity of requirements in providing safe drinking water to the public.
- The State laboratory is part of drinking water primacy agency (KDHE). This linkage provides additional technical capabilities within the drinking water protection program.
- Kansas has demonstrated TFM enhancements under Public Water Supply Loan Fund financial analysis/review – integrity contracts.

*Regulatory Enhancements:*

- Survival Guides: The Kansas Drinking Water Program has developed and distributed user-friendly guidance documents for water system officials. Examples include the *Total Coliform Rule Survival Guide*, the *Phases II & V Chemical Rule Survival Guide*, and *What Public Water Supply Manager/Operators Need to Know About Consumer Confidence Reports*.
- Mandatory operator certification – Kansas has a strong Operator Certification Program, which enhances capacity.
- KDHE has a reasonably good knowledge of upcoming regulations and involves and informs stakeholder organizations of the regulations while they are under development and also prior to their enactment. Field staff work well with systems on regulations.
- The 1986 SDWA Amendments allowed the creation of State-authorized programs for issuing monitoring waivers to public water systems. KDHE implemented the

monitoring waiver program through its rulemaking authority. Kansas’s monitoring waiver program, funded in part by system user fees has created significant cost savings for public water systems.

*Financial Enhancements:*

- Multiple funding sources provided by the Federal and State governments [e.g., DWSRF and Department of Economic Development (USDA-RD, HUD), etc.] are available to make difficult financing challenges more viable.
- KDHE Water Supply Section receives revenues from State-imposed quarterly operating fees paid by regulated water systems. This fee revenue partially supplements Legislative appropriations for Water Supply Section program activities.
- Kansas has provided significant financial and administrative resources for the coordination of important sources of capital financing for water system improvements through an informal advisory committee. This committee, KIAC (the Kansas Inter-Agency Advisory Committee), is an important State resource for building capacity. The “one stop funding” consultation process is also an excellent resource for water systems.
- Kansas has added \$5 million to capitalization with 4 to 1 leverage. This high leverage of Kansas DWSRF loan program funding is an enhancement.

*Tax Enhancements:*

- Tax exempt bonds are available to fund infrastructure projects in municipalities without an election [KSA 65-163u].

*Legal Enhancements:*

- The State of Kansas respects the authority of local governments and preserves that authority by recognizing the Home Rule provision of its Constitution (Article 12, Section 5.)

*Other Enhancements:*

- By emphasizing the need for TFM capacity, stakeholder organizations reinforce the relationship of TFM and successful operation of public water systems.

*Table B3: State Factors that Affect Water System TFM Capacity*

| Factors       | Enhancements | Impairments |
|---------------|--------------|-------------|
| Institutional | 8            | 5           |
| Regulatory    | 4            | 5           |
| Financial     | 4            | 1           |



|       |    |    |
|-------|----|----|
| Tax   | 2  | 4  |
| Legal | 1  | 1  |
| Other | 1  | 0  |
| Total | 20 | 16 |

## State Impairments to TFM Capacity

### *Institutional Impairments:*

- Duplication of services provided through State agencies for utilities or other State agencies – many departments have the same offerings/layers of bureaucracies. For example, Kansas water regulation is divided among several different agencies and leads to confusion within State government and for regulated entities.
- The KDHE has limited financial and personnel resources to provide technical support and training.
- Many small systems. Approximately 54% of Kansas’s water supplies serve populations of less than 500. It is difficult to provide Drinking Water Program information, training, and assistance to this large number of small water systems.
- The people of the State view water as a free resource and place little value on its use. Most people find it hard to believe that Kansas’s water is not always clean and drinkable.
- Improving TFM capabilities of public water systems will require additional resources for information, education and technical assistance programs. There is a lack of adequate funding for oversight activities in the financial and management capacity areas; the drinking water program does not have the resources and methods in place to adequately measure and assess the financial and management capabilities of public water systems subject to the TFM provisions of the SDWA. Current program resources and personnel are limited in this regard.

### *Regulatory Impairments:*

- Capacity development is impaired when regulated systems believe that corrective actions on their part are not absolutely required.
- Due to the complexity of drinking water system requirements, some water systems may have incomplete information about the body of regulations regarding the provision of safe drinking water. The current volume of rules, regulations, requirements and guidance relative to public water systems is difficult to master and they continually change.

- Regulations are very complex – many times regulators and assistance providers don't have complete and/or common knowledge of the regulation changes.
- Significant areas of the state are closed to further water appropriation. Municipal water supply development is a difficult problem where water appropriation is limited. This is especially a problem when locating new sources of supply. Present water rights are very restrictive and give no consideration to public health concerns.
- Water rights administration is complex and poorly understood by the public and by water system managers and operators.

*Financial Impairments:*

- No standard form of accounting is required of systems. Other financial management standards and requirements (such as periodic audit requirements) are needed. Water use and the performance water utility operations need to correspond to accounting information.

*Tax Impairments:*

- The lack of any exemption of State sales taxes for purchasing materials is an impairment to financial capacity.
- Nobody wants a tax increase.
- Public water systems are required to pay State sales tax on purchases (excluding chemical and utilities used in production). Private systems are tax-exempt from such purchases when using tax-exempt financing.

*Legal Impairments:* None noted for inclusion in *Report of Findings*.

*Other Impairments:* None noted for inclusion in *Report of Findings*.

***LOCAL FACTORS THAT ENHANCE OR IMPAIR PUBLIC WATER SYSTEM TFM CAPACITY***

Local Enhancements to TFM Capacity

*Institutional Enhancements:*

- The current regional and statewide meetings of various stakeholder groups (AWWA, KRWA, LKM) provide excellent opportunities for TFM capacity building.
- Funding for programs and activities that provide training and education at the local level (non-regulatory programs) are enhancements to capacity.

- Inter-local cooperation among rural utilities results in shared capabilities for meeting local service demands. The pattern of sharing equipment with other towns could lead to shared management or administration.
- Consumer Confidence Reports and public awareness campaigns.
- Kansas’ strong tradition of local control translates into better community understanding and commitment to addressing community needs, such as the provision of safe drinking water. Local recognition of performance heightens institutional commitment to provide efficient and effective local services. Local officials have a genuine concern for water quality – they drink the water they serve to their customers.

*Regulatory Enhancements:* None noted for inclusion in *Report of Findings*.

*Financial Enhancements:*

- The water system funding activities of many public water systems are regulated (locally “self-regulated”) by elected officials. Because of the political nature of setting fees and charges for water service, financing decisions are best handled locally by local officials. Elected officials have the authority to initiate financing for capital projects.
- Flexibility in making priority decisions.

*Tax Enhancements:*

- Local taxes help to support public owned systems.

*Legal Enhancements:*

- Constitutional Home Rule Authority (Article 12, Section 5), and municipal police powers through local ordinances and resolutions.
- Authority for rural water districts and public wholesale water supplies [K.S.A. 82a-615 et. seq. and K.S.A. 19-3545 et.seq.].

*Other Enhancements:*

- Local water systems exhibit characteristics for cooperation with other communities, agencies.

*Table B4: Local Factors that Affect Water System TFM Capacity*

| <i>Factors</i>       | <i>Enhancements</i> | <i>Impairments</i> |
|----------------------|---------------------|--------------------|
| <i>Institutional</i> | 5                   | 13                 |
| <i>Regulatory</i>    | 0                   | 3                  |

|                  |    |    |
|------------------|----|----|
| <i>Financial</i> | 2  | 8  |
| <i>Tax</i>       | 1  | 1  |
| <i>Legal</i>     | 2  | 0  |
| <i>Other</i>     | 0  | 3  |
| <i>Total</i>     | 10 | 28 |

*Local Impairments to TFM Capacity*

*Institutional Impairments:*

- Although municipal water suppliers with their own source of supply are required to report water use information to the State, public water systems who purchase their water from other suppliers, are not currently required to submit water use information.
- Many system operators do other things than just operate water systems.
- Lack of public awareness of the costs of water production, treatment and distribution. Generally, customers do not realize that water is a limited natural resource and that considerable financial resources are needed to produce and deliver it safely. The public expectation is that water be inexpensive although it is an essential product. Local policy-makers often seem to share this delusion and price water service inappropriately (in terms of meeting the full costs of delivering this commodity). There is a lack of public knowledge specific to the SDWA or the water industry as a whole.
- The ability to understand complex regulations and requirements is limited by lack of trained management personnel.
- Distrust of regulatory and stakeholder organizations by some water systems.
- Lack of communication between elected officials and employees of water systems.
- Not enough well-trained personnel to do a complete job; small systems cannot afford this personnel.
- Long-term viability of a water system is enhanced when communities and their respective governing boards recognize the most critical element to accomplishing this goal – a professional staff with the access to necessary resources and funding. Small communities often do not possess the resources for sustainability. In addition, there is high turn over in management.
- Unwillingness of local systems and towns to give up individuality and control.
- Turnover of elected officials and/or operators in small systems. Limited number of individuals willing to get involved with management. Often, management of the system is left to part-time officers and volunteers in small systems.

- Some water systems do not recognize the need to operate in a business-like fashion. There is a lack of planning and evaluation, poor financial management and budgeting (including capital budgeting), and a lack of training available for management. Management capacity of smaller water systems is negatively affected by high turnover of board members. A resistance to regulators prescribing how systems should be managed and operated also affects the acquisition of institutional capacity.
- Lack of understanding of Federal, State, and local agencies and responsibilities.
- General lack of willingness of public water system boards to plan for and finance long term improvements.

*Regulatory Impairments:*

- Local rules requiring employees to reside within the community.
- There is very little positive stimulus being put forward as to reasons the community should comply with regulatory requirements.
- Current limitations in training opportunities in the area of SDWA statutes, rules, regulations and guidance are an impairment to the ability of public water systems to maintain management capacity necessary for continued compliance with drinking water requirements.

*Financial Impairments:*

- Many systems cannot afford all the testing and regulatory requirements.
- Economies of scale are lacking for many small water systems.
- Difficulty in convincing board members and/or elected officials that the system needs to fully support itself with its revenue.
- Many water systems in Kansas lack financial resources and the knowledge of financial resource management. This current impairment to capacity could be overcome through training and technical assistance programs. Financial management capacity is limited in many small systems. This results in a lack of funds to hire staff, allow them time for training, etc.
- The lack of planning for current and future capital facilities is a significant impairment. Capital facilities planning has a direct effect on the TFM capabilities of public water systems. The failure to recognize necessary future improvements to the technical facilities due to expansion or regulatory requirements often results in water systems being ill prepared to react to the need for financial resources necessary to construct and operate their facilities.
- Cost of new treatment may exceed “reasonable” rate levels.

- Citizen pressure to “hold the line” on taxes (and user fees) is placed on public water system’s board members who are then reluctant to raise user charges to appropriate levels.
- Many water systems serve communities made up of “senior” citizens who are not interested in raising rates to support building a system in 10 – 20 years that they won’t be around to benefit from.

*Tax Impairments:*

- Limited and/or shrinking tax base in many communities.

*Legal Impairments:* None noted for inclusion in *Report of Findings*.

*Other Impairments:*

- Specific geologic conditions (radionuclides, arsenic, and sulfate) create special compliance problems for Kansas’s public water systems.
- The isolation of some communities from sources of equipment and supplies makes it expensive to operate a water system. Isolation from other water systems reduces the options for sharing equipment and makes it expensive for the operator.
- Local leaders seeking funding to make system improvements often do not understand what are appropriate engineering and other professional service fees to be charged for project development.

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## **SECTION C: RECOMMENDATIONS ON HOW THE STATE CAN USE ITS AUTHORITY AND RESOURCES TO HELP WATER SYSTEM CAPACITY**

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Following its work of identifying and discussing the factors that encourage or impair capacity development, the Capacity Development Workgroup directed its attention to forming a set of recommendations for program elements designed to address the need for improving the TFM capabilities of regulated public water systems. The Workgroup's recommendations take into consideration the following:

- *The program elements are suggested in response to significant TFM enhancements and impairments identified in Section B of this Report of Findings.* These program elements represent efforts the State of Kansas, its cooperating local governments and public, not-for-profit and private partners can undertake to improve TFM capabilities.
- Generally, the impairments to TFM are problems that need to be addressed by public water system regulators and the regulated community. The programs listed in this section of the report are suggested to overcome TFM capacity problems in public water systems.
- The suggested program elements are presented without specific schedules for implementation or ranking. The purpose of this section of the report is to present programs for improving TFM capabilities without regard to implementation demands. The program elements presented do not include specific recommendations regarding responsibility for implementation by the KDHE Drinking Water Program or other stakeholders. Ultimate responsibility for implementation of selected program elements remains with the KDHE as the primacy agency for the State of Kansas. However, it is expected that the KDHE will seek assistance from other stakeholders and service providers in improving the TFM capabilities of public water systems.

### ***PROGRAM RECOMMENDATIONS: FIFTEEN ELEMENTS FOR IMPROVING THE TECHNICAL, FINANCIAL AND MANAGEMENT CAPABILITIES OF PUBLIC WATER SYSTEMS***

1. TFM capacity building is an on-going issue – one that some providers have worked to help solve. What is needed is a statewide benchmarking, supported by a periodic TFM survey to generate information that can be used to identify general positive and negative trends developing with water systems in Kansas. The information could be ascertained from a Kansas Water Office's survey document. Such a survey would be mandatory, and questions would be designed to garner information about general trends regarding how systems respond to TFM. The purpose is to help the State identify how to best utilize limited technical assistance to help water systems.

2. Provide State lawmakers with an information package that explains the concept of TFM, and why Kansas is promoting capacity assessment and improvement for public water systems. The information package could include a final *Report of Findings*. In future informational transfer the KDHE could include periodic reports (similar to those sent to the Governor) regarding the performance of the strategic efforts.
3. Require all public water systems to submit a water use report annually to the Kansas Division of Water Resources.
4. The capacity development workgroup recommends that the KDHE investigate the feasibility of developing a water system “as built” mapping assistance program.
5. Develop TFM guidance development tools such as a business planning guidebook that a system can use to prepare for triennial TFM survey, or that can be used by a certified technical assistance provider to help a system complete the survey. For example, all guidance tools developed should be built around the seven (7) functions of capacity development: 1) capital improvement practices and plan, 2) management practices and planning, 3) operating practices and planning, 4) maintenance practices and planning, 5) budgeting practices and planning, 6) emergency and conservation planning, and 7) training practices and plans.
6. Water System Finance Training. Fiscal capacity and financial management are two of the key components of the financial capacity. Adequate funding of water system operations is essential to the current and future need to provide safe drinking water to the public. Annual review of rates is important to sustaining the fiscal health of the water system. Yet, the majorities of small water systems in the State of Kansas do not routinely review and adjust water service charges to keep pace with revenue demands. It is recommended that water system rate setting and financial management training and technical assistance be provided to water systems in order to improve financial and management capacity.
7. Several Workgroup members identified the need to encourage partnerships and communication between agencies and among systems. For example, local networking of water system operators and board members could result in the sharing of ideas on how to solve common problems, informal mutual aid agreements for use of equipment and personnel, and reduce the need for regulatory agency intervention.
8. The capacity development workgroup recommends actions to improve the general knowledge of drinking water issues among the public. The KDHE should work with stakeholder groups and others to provide sample information and “camera ready” pieces for informing water users and the public about drinking water costs and other pertinent issues.



9. Establish Requirements for Use of Water Metering Devices. Achieving and maintaining technical capacity of a water system is closely tied to managing the water resources available for public consumption. The usage of metering devices at the water source (e.g., wellheads or intake manifolds) enable water system managers to track overall system capacity performance. Financing the water system depends on customer charges based on individual water use. It is recommended that the State establish rules requiring use of water meters.
10. Review of Current Guidance Materials. The Kansas Drinking Water Program currently provides a variety of “survival guides” to all regulated public water systems. It is recommended that a specific user-friendly guide on statutes and regulations relative to public drinking water systems be produced and distributed. The purpose of the guide would be to provide "plain English" information on the Federal and State statutes, regulations, rules and guidance relative to the capacity requirements and all other requirements of the SDWA. The format should be both print and electronic. The key to the production and delivery of the handbook will be training sessions for water system operators, managers, consultants, and customers.
11. The capacity development workgroup recommends that the KDHE develop a training program designed to increase the capacity of water system board members to solicit appropriate engineering services for system expansion and improvements. This training would help board members in determining the need for and soliciting professional services for feasibility studies, a greater variety of engineering solutions for system requirements, consolidation and other economy of scale options, etc.
12. Assist systems in developing Facilities Management Plans. Such plans would first focus on preventive maintenance and establishing regular maintenance schedules. Second, plans would include repair/replacement guidelines for key components in a system such as meters, valves, and booster pumps. Third, the long-term sustainability of Kansas’ drinking water systems requires that they plan for investment in their physical facilities. All systems would be encouraged to meet either a specified debt coverage or operating financial ratio that results in the accumulation of sufficient reserves so a system can make an internal investment in major future improvements. A large system will accumulate a larger amount of reserves than a smaller system, but some funds will be available for self-investment. The DWSRF should be considered as a source of funding for developing guides for the preservation strategy concept.
13. Proactive Distribution of Information. The State Drinking Water Program should provide information to public water systems that is proactive, accurate, and understandable. In running their operations like businesses, it is important for public water system managers to know about prospective changes in statutes and regulations that have a direct bearing on their TFM capabilities. There are benefits associated with water systems knowing about important changes in statutes and regulations; in providing

operators, managers, board members and the customers with understandable time lines for regulatory implementation; and, for "common sense" interpretations and guidance on important public water system requirements. The capacity development workgroup suggested the creation of a periodic newsletter. The newsletter would be provided to each water supply by the KDHE. In addition to periodic information transfer, the capacity development workgroup has suggested that the KDHE provide a concise CCR-style report that would include an accounting of how the annual water supply fees were spent in addition to a summary of annual compliance data and KDHE activities.

14. For a number of years, the Water Supply Section of KDHE has been burdened with having to deliver a State Drinking Water Protection Program with limited resources. The scope of the Drinking Water Protection Program has been dramatically increased because of the last two amendments to the Safe Drinking Water Act in 1986 and 1996. The perception of the capacity development workgroup is that personnel resources have not kept pace with the new responsibilities of the State program. The capacity development workgroup recommends that a third-party assessment of current and future program resource needs provide information needed to overcome this perception and allow the capacity development workgroup and other stakeholders to support the financial and staffing resource needs in the Drinking Water Program. The capacity development workgroup recognizes that the proper implementation of a TFM Capacity Development Strategy is tied directly to the availability of program resources. The workgroup, as concerned stakeholders, believes that it (as well as the public) should be involved in examining existing program resources and what supplements might be needed to implement the Strategy.
15. The capacity development workgroup made special note of the turnover of water system board/council members. High member turnover in small systems results in a loss of managerial capacity (and continuity). Unfortunately, this occurs as the drinking water regulatory environment becomes more complex. The capacity development workgroup recommends the development of supplemental training materials for new board/council members that would help them understand their role in the oversight of the water system, and in helping their system acquire and maintain TFM capacity. These training materials could also be used in training events offered by other organizations.

## **SECTION D: MEASURING THE SUCCESS OF KANSAS' CAPACITY DEVELOPMENT STRATEGY**

This *Report of Findings* offers the Workgroup's suggestions about how the Kansas Department of Health and the Environment (KDHE) might develop a strategy for improving the technical, financial and managerial capabilities of public water systems. In developing that strategy, the Workgroup suggests that KDHE measure the success of its capacity development efforts in three ways:

### 1. Compliance Tracking

In accordance with the prioritization scheme presented in Section A, the first criterion in selecting water systems for attention under the Capacity Development Strategy is compliance history – the assumption is that a history of non-compliance reflects a lack of capacity. KDHE should consider tracking the compliance of systems that are chosen for assistance under the Strategy. Statewide trends in compliance, such as might be indicated by the triennial report to the US EPA on systems with a history of non-compliance, are complicated by a large number of contributing factors which may not relate to system capacity. System-specific compliance tracking will more accurately measure the effectiveness of the capacity building efforts carried out under the Strategy.

### 2. Outreach and Assistance

KDHE should keep careful records of assistance programs aimed at assisting water systems in improving capacity. The Workgroup has recommended a range of efforts of this kind in Section C of this report. Examples include, but are not limited to:

- a) Number of performance evaluations conducted.
- b) Site visits for technical assistance (number and type of assistance rendered).
- c) Number of water systems that complete self-assessments of capacity. Comparison of assessments taken before and after receiving assistance would be particularly useful.

A count of the activities carried out under the Strategy is an indicator of the magnitude of the effort, but only indirectly a measure of effectiveness. Whenever possible, the KDHE should follow capacity assistance efforts with some type of system specific assessment at a later date to determine if the assistance was effective and the results that were obtained had lasting value.

The US EPA State Drinking Water Information System would be a good place to track capacity assessments, assistance, and follow-up efforts. A consumer survey could be developed for use in soliciting feedback from systems that have received assistance under the

Capacity Development Strategy. This survey would be mailed to the system within a few weeks of the time that assistance was given. Results from these surveys, and from other tracking activities, would be used to modify the Strategy over time, placing emphasis on those elements that are successful and trimming activities that prove to be less useful.

### 3. Planning Activities

The number of water systems that prepare capital facility management plans, business and/or financial plans or complete capacity self-assessments each year would be a good indicator of the success of the Strategy because it would reflect growing knowledge about, and interest in, capacity issues on the part of public water systems in the State.

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## SECTION E: PUBLIC INVOLVEMENT IN PREPARING THE KANSAS CAPACITY DEVELOPMENT REPORT OF FINDINGS

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The KDHE called upon its Capacity Development Workgroup to provide a sounding board on issues for developing a set of findings for improving capacity that could then be presented to the general public. Workgroup members, by combining their varied backgrounds and different perspectives deliberated to ensure that the group's *Report of Findings* would be balanced and comprehensive.

However, the Workgroup could not possibly encompass in its membership all organizations and individuals within the State who might have an interest in this subject. In its first meeting, the Workgroup examined the question of who else should be involved in the process of preparing a drinking water capacity development strategy. They concluded that certain key interest groups, beyond those already represented, should be encouraged to participate with the Workgroup if at all possible. Additionally, other interested persons and organizations were invited to provide information regarding their position through an interview process or in writing. Finally, the public at large was engaged to the greatest extent possible through a series of public involvement initiatives. A questionnaire was developed to facilitate public input.

### Other Public Involvement Initiatives

Several efforts were made to present the *Report of Findings* to the public and gather their comments. These efforts include:

- a presentation of the *Report of Findings* at the Kansas Rural Water Association conference at Wichita in march, 2000;
- Posting the *Report of Findings* on the KDHE web site;
- Mailing the *Report of Findings* to all public water supply systems in the state;
- Holding public meetings at Garden city, Wichita, Topeka, and Hays in June, 2000 to discuss the *Report of Findings*; and
- Issuing a statewide press release announcing the availability of the *Report of Findings* either on the KDHE web site or from KDHE, and announcing the series of public meetings.

The public provided no comments on the *Report of Findings* following these efforts.

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## **APPENDIX A: CAPACITY DEVELOPMENT WORKGROUP MEETING NOTES**

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The Capacity Development Workgroup met eight times during 1999 and 2000 to consider developing a capacity strategy for public water systems. During the month of March 2000 the draft of the Kansas Capacity Development *Report of Findings* was prepared using input from Workgroup members, Department of Health and the Environment management, and public comments.

### **Highlights of the Kansas Capacity Development Workgroup Meetings**

*March 19, 1999*

Bill Jarocki explained to the Workgroup that the Environmental Finance Center at Boise State University assists States in capacity development. He presented an overview of the capacity development program and distributed handouts. A brainstorming of the Kansas Capacity Development Strategy then ensued. A draft timetable and strategy schedule dates were determined. A short discussion then took place on the relevant information available at this time, which was determined to be demand information, compliance information, monitoring violations, 18 months, and municipal finance records.

*April 16, 1999*

The meeting began with a discussion of what capacity is. The State of Kansas had compliance information, but it was determined that vulnerability, Kansas Water Office assessment, and Watershed Regional Assessment Program information were also needed. The Workgroup then began work on Section 1420(c)(2)(A), the methods or criteria that the State will use to identify and prioritize those public water systems most in need of improving TFM capacity. A matrix was designed using systems in significant noncompliance as the primary determining factor. Next would be health risk, followed by population, and then TFM analysis. A matrix was then created to determine “Bigger Problems” vs. “Smaller Problems” and how they would be solved. Population would be the first factor, followed by how cooperative the system was, followed by TFM analysis to identify the problem, and a solution.

An input identification problem was also discussed. “Triggers” that determine the need for TFM system review and solutions were identified. A matrix for Section 1420(c)(2)(B) – factors that enhance or impair capacity at the Federal, State, and local level – was introduced to the Workgroup.

*May 6, 1999*

A modern governance board matrix was introduced using the acronym *POSCERV*, which encompasses Planning, Operations, Staffing, Communications, Evaluation, Resources (\$), and Vision for TFM. The Workgroup then moved on to discuss Section 1420(c)(2)(C) – a

description of how the State will use the authorities and resources of the SDWA or other means to assist public water systems in compliance efforts, encourage partnerships between supplies to enhance the TFM viability of the systems, and assist supplies in the training and certification of operators.

*July 15, 1999*

The Workgroup resumed its discussion of 1420(c)(2)(C), and identified 7 programmatic responses: “Legitimize” cooperative approaches to providing drinking water; Coordinating financing agencies; Water Plan; Training for local decision makers; Develop financial management tools/training; Customer communication and the strategic use of Consumer Confidence Reports; and Assist in source water protection at local level. The Workgroup then discussed Kansas capacity criteria for new systems with financial and management capacity indicators/measures being identified.

*September 21, 1999*

The Workgroup finished discussion of the review process for assuring new public water supply systems demonstrate the TFM capability of complying with drinking water regulations prior to beginning operation. The Kansas Public Water Supply Permit application form was modified to address managerial and financial aspects of utility management. Workgroup discussion then centered on the approach to be used for Section 1420(c)(2)(A), to identify and prioritize water systems in need of TFM assistance. Representatives of the Kansas Water Office discussed the Kansas Water Plan recommendations concerning water system capacity (viability), in particular use of a standard questionnaire to aid in identification of systems in need of assistance. A subgroup was assigned to continue development of the questionnaire.

*November 18, 1999*

The Workgroup focused its discussion on Section 1420(c)(2)(B), the Federal, State, and local institutional, regulatory, financial, tax, legal, and other enhancements and impairments to the ability of a water system to comply with drinking water standards. Boise State EFC staff had prepared a compilation of enhancement and impairment factors from other states for the Workgroup to review. The Workgroup reviewed this compilation, rejected some factors, modified others, and added many Kansas specific factors to the listing. The Kansas Water Office provided an update on the status of the capacity questionnaire.

*December 17, 1999*

The Workgroup continued discussion on 1420(c)(2)(B) enhancement and impairment factors. Staff from the EFC provided a draft prepared following the November 18 discussion, which was further reviewed and edited. A compilation of other state recommendations on how to

use the authorities and resources of the Safe Drinking Water Act, 1420(c)(2)(C), prepared by the EFC, was reviewed for applicability to Kansas. Several workgroup members provided their specific recommendations, which were reviewed and discussed by the group. The Kansas Water Office distributed the draft capacity questionnaire to the workgroup.

*January 13, 2000*

The final draft of the Federal, State, and local institutional, regulatory, financial, tax, legal, and other enhancements and impairments to water system capacity was reviewed and given a final edit. The Workgroup then reviewed the draft Section 1420(c)(2)(C) recommendations to continue existing enhancements to TFM capacity and to overcome impairments to capacity. It was agreed these two components of the strategy were ready for public review, after incorporating the workgroup comments. Options for presenting the Report of Findings to the public were discussed, and included the Kansas Water Authority Basin Advisory Committees and the annual conference of the Kansas Rural Water Association.