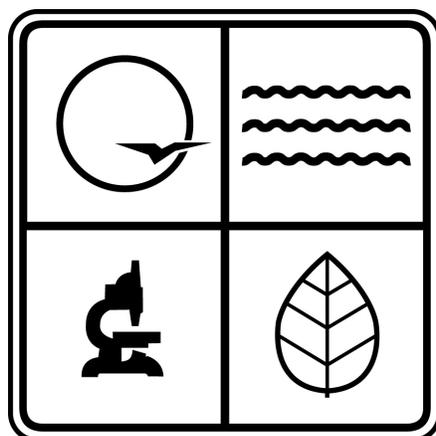


Report to the Governor

Missouri Public Water System Capacity Development



**Missouri Department of Natural Resources
Division of Environmental Quality
Water Protection Program
Public Drinking Water Branch**

September 2011

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Public Access to This Report

This report will be available to the public upon request and will be posted on the Missouri Department of Natural Resources' web site. It will also be made available to water industry association groups, technical assistance providers, and the U.S. Environmental Protection Agency for inclusion on their websites if they so choose. The Department will also issue a news release to newspapers statewide.

Definition of Terms

Capacity Development - Capacity development is a State effort to help public drinking water systems acquire and maintain technical, managerial, and financial capabilities to ensure they consistently achieve the public health objectives of the Safe Drinking Water Act and regulations reliably, and cost-effectively.

Community Water System (CWS) – A public water system that serves at least 15 service connections and is operated on a year-round basis or regularly serves at least 25 residents on a year-round basis.

Non-transient Non-community Water System (NTNCWS) – A public water system that is not a community water system and regularly serves at least 25 of the same persons over six months per year.

Public Water System (PWS) – A system for the provision to the public of piped water for human consumption, if the system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. The system includes any collection, treatment, storage or distribution facilities used in connection with the system. A public water system is either a community water system or a non-community water system.

Sanitary Survey – An on-site engineering inspection and review of a public water system – its supply sources, treatment of supply sources, treatment facilities and distribution systems, for the purpose of evaluating their adequacy, reliability and safety for producing and distributing drinking water.

Significant Non-complier (SNC) – Those violators that present the greatest risk to public health and, therefore, are generally primary enforcement targets.

Technical, Managerial and Financial (TMF) Capacity - Technical capacity refers to the physical infrastructure of the water system, including but not limited to the adequacy of the source water, infrastructure (source, treatment, storage and distribution), and the ability of system personnel to implement the requisite technical knowledge. Managerial capacity refers to the management structure of the water system, including but not limited to ownership accountability, staffing and organization, and effective linkages to customers and regulatory agencies. Financial capacity refers to the financial resources of the water system, including but not limited to revenue sufficiency, credit worthiness, and fiscal controls.

Transient Non-community Water System – A public water system that is not a community water system, which has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

Introduction

Missouri is committed to ensuring that its citizens are provided water that is safe to drink. As part of this commitment, the Missouri Department of Natural Resources' Water Protection Program Public Drinking Water Branch has developed and implements a strategy to help public drinking water systems improve their technical, managerial, and financial capacity. Capacity, as used in this context, is the process of water systems acquiring and maintaining adequate technical, managerial and financial capabilities to ensure that they consistently achieve the public health objectives of the Safe Drinking Water Act ("the Act"), regulations, and maintain sustainability of the system.

Pursuant to Section 1420 of the Act, states are required to develop and implement a capacity development strategy to assist public water systems that are in significant noncompliance in acquiring and maintaining technical, managerial and financial capacity that will bring them back into compliance with the Act.

Not later than two years after EPA has approved a state's capacity development strategy, and every three years thereafter, the state agency responsible for implementing the Act must submit a report to the governor on the efficacy of the strategy and progress made toward improving public water systems' technical, managerial and financial capacity. The report must also be made available to the public.

Missouri's strategy was approved by the U. S. Environmental Protection Agency on September 14, 2000. Adjustments to the strategy have been made as necessary through annual reports to EPA. Reports to the Governor were provided in 2002, 2005, and 2008. This is the fourth Report to the Governor regarding Missouri's capacity development strategy.

Missouri Capacity Development Strategy

Development

Staff of the Missouri Department of Natural Resources' Water Protection Program, Public Drinking Water Branch initiated a stakeholder effort in 1998 to gather input from a broad spectrum of public interest groups, drinking water industry associations, funding agencies, technical assistance providers and environmental groups. The Branch conducted an extensive mailing to solicit interest in participating in the stakeholder meetings and provided public notice in accordance with the Missouri "Sunshine Law." The Branch contracted with a professional facilitator from the Boise State University's Environmental Finance Center to facilitate several stakeholder meetings over two years (1998-2000).

From 2000 to 2011, implementation of the strategy has been adjusted periodically as a result of experience with the program and increased communication with systems and regional decision makers and organizations. The inherent principles of the elements have, however, remained unchanged.

Workgroup Recommendations

The 1998-1999 workgroup recommended ten elements for improving the technical, managerial and financial (TMF) capacity of public water systems. Implementation of these elements is an ongoing process that requires refining and improvement each year.

Year 2000 - Capacity Development Strategy Elements:

1. Improve water system knowledge of current and future rules and regulations.
2. Improve communication and trust between EPA, PDWB and the water system.
3. Provide Missouri citizens with public education on the importance of safe drinking water.
4. Encourage peer resource sharing.
5. Encourage partnerships between agencies and systems.
6. Improve interagency communication for TMF capacity related programs.
7. Coordinate capital resources.
8. Establish and implement a rate setting mechanism for sustaining fiscal health of water systems.
9. Increase planning in rural areas.
10. Develop and provide board member training and TMF Capacity materials to managers.

Continued Refinement of the Strategy

Department staff revisit the Capacity Development Strategy and update the strategy as new tools and procedures develop and as related stakeholder input is provided. Department staff coordinate internally and externally to discuss ongoing issues and ideas, and any resulting impact on the state's Capacity Development Strategy. Several of the ten original strategy elements were first revised in 2004 as a result of a stakeholders' meeting. Strategy elements were again revised during fiscal year 2007 and changes are proposed this fiscal year as presented below.

Capacity Development Strategy Elements (FFY 2011):

1. Improve water system knowledge of current and future rules and regulations.
2. Improve communication and trust between EPA, the Branch, regional decision makers/organizations and water systems.

3. Provide Missouri citizens with public education regarding the importance of safe drinking water, working within the constraints of the Department.
4. Encourage partnerships between agencies, regional decision makers/organizations and systems.
5. Improve interagency and intra-agency communication for TMF capacity related programs.
6. Coordinate capital resources.
7. Provide consistent rate setting and financial management training for small systems, assistance providers and state staff.
8. Increase planning in rural areas.
9. Develop and provide board and council member training, asset management/long-term strategic planning training, and other TMF capacity training and materials to applicable system personnel.
10. Develop a base-line to measure the success of TMF capacity activities.

Strategy Implementation and Efficacy

Public Drinking Water Branch Capacity Development Efforts

The Public Drinking Water Branch is responsible for implementing the Capacity Development Strategy. Continued implementation of the strategy is required, not only for Missouri to receive its full allotment of the Drinking Water State Revolving Fund capitalization grant from EPA, but also to assist public drinking water systems in achieving and maintaining safe drinking water and sustainability. The DWSRF grant is used to provide low-interest capital improvement loans to public water systems and to fund public drinking water protection efforts in Missouri, including but not limited to capacity development activities. The Branch also provides TMF assistance, loan and grant application assistance, energy efficiency assessments, leak detection assistance, and operator certification to public water systems through circuit rider contracts.

Compliance Assistance and Enforcement

In accordance with the Capacity Development Strategy, the Public Drinking Water Branch has prioritized systems based on their record of compliance. The first systems to receive technical, managerial and financial capacity assistance are systems in significant or consistent noncompliance with regulatory requirements or newly operational systems with violations. The systems previously included on the significant noncompliance list are now updated on a quarterly basis by the Branch and regional offices in cooperation with EPA. This has been accomplished through the development of an enforcement targeting tool and EPA direction, and has made it

possible to demonstrate improvements and resolution of system compliance issues as a direct result of state and circuit rider assistance.

Initially, a hierarchy of violation types based on public health risk was developed. Systems are ranked according to the relative seriousness of the problems and the associated risks. Prior to enforcement action and referral to the Missouri Attorney General's Office, public water system owners are offered the opportunity to participate in a voluntary compliance process. The system owner signs a Bilateral Compliance Agreement that specifies actions to be taken and a timeframe for the system to return to compliance. Technical, managerial or financial assistance may be provided. If the system does not return to compliance or show progress toward compliance, the Department may proceed with enforcement action or referral to the Attorney General's Office.

The Department's regional offices and the Missouri Rural Water Association, known as MRWA, provide on-site assistance to these systems in an effort to help them return to compliance. Other technical assistance organizations, such as the Midwest Assistance Program, or MAP, the Wichita State University Environmental Finance Center, and the University of Missouri Extension Technical Assistance Center, provide additional support with TMF activities. Coordinated efforts between the Public Drinking Water Branch, the Missouri Department of Economic Development, and the U.S. Department of Agriculture – Rural Development, which comprise the Missouri Water and Wastewater Review Committee, led to many state- and federally-funded projects to resolve compliance problems and, in many cases, led to regional water systems with adequate TMF capacity.

An ongoing goal of the Branch is to inform drinking water system owners and operators of the impact of future regulatory requirements and assist them in meeting those requirements before they become effective. This process has proven to be extremely effective and most systems have made significant progress to come into compliance with the more stringent regulatory requirements they are facing. Additionally, the Branch strives to improve communication with drinking water systems in order to assist them in becoming more proactive in addressing existing regulatory requirements.

Construction Authorizations and Permits to Dispense

The Public Drinking Water Branch is responsible for issuing Construction Authorization Permits and Permits to Dispense Water to the Public for community and non-community systems. Community and non-community checklists have been developed to assist in reviewing these permit applications and ensuring that all TMF requirements of 10 CSR 60-3.030 are met. The Branch has also refined the TMF checklists to improve compliance with TMF requirements, of

proposed systems, prior to issuing construction authorization. Each checklist provides a set of minimum requirements that systems must meet in order to achieve TMF capacity.

These minimum requirements include two copies of an engineering report, two copies of the engineering plans and specifications, one application signed by the continuing operating authority, TMF requirements of 10 CSR 60-3.030 as specified on the Checklist, and a signed Owner's Acknowledgement Statement. The Owner's Acknowledgement Statement is used to verify that the owner or president (continuing operating authority) is aware of the TMF capacity requirements and the need to maintain those requirements. These items are required prior to issuance of a construction authorization and a permit to dispense water. Some checklist items may require additional detail for the approval of a permit to dispense water after the construction authorization permit has been approved. Information, such as the organizational structure and/or the designation of a certified operator, may not be available until the system has been constructed.

The financial capacity demonstration may be done per items listed under the "Required Items for Financial Capacity Demonstration" section of the TMF Checklist. A Missouri Water System Financial Capacity Worksheet may also be requested and used to assist new water systems in establishing an initial budget and setting rates. The Department's Financial Assistance Center has tools available to establish user rates and user rate ordinances. If a proposed water system goes through the Missouri Water and Wastewater Review Committee and obtains funding, the financial evaluation by the committee is accepted. The majority of the systems demonstrate the financial capacity using these tools. Assistance is also offered to systems having difficulties documenting and/or achieving the required TMF capacity through circuit riders, Branch engineers, and regional offices.

Table 1. TMF Reviews for New Community and Nontransient Noncommunity Water Systems

Time Period (October 1 st through September 30 th)	Total Approved for Construction Authorization	Total Approved for Permit to Dispense
1999 - 2005	95	15
2005 - 2008	61	5
2008 - 2009	5	64
2009 - 2010	5	20
2010 - 2011	6	140
TOTAL	172	244

* Some water systems may not meet the definition of a public water supply, have decided not to build, did not have financial resources to complete the project or have requested a time extension on their construction authorization.

In the last two years, an initiative has been made by the Branch to reinforce the importance of system TMF capacity through tracking of new systems and submittal of permit to dispense applications. Tracking these systems and submittals assists the Branch in verifying that systems are obtaining and maintaining TMF capacity and understand the associated responsibilities.

Engineering Contract Services

The Branch helps very small community water systems improve their TMF capacity by providing funding for engineering report services contracts (engineering report studies). Priority is based primarily on compliance information, infrastructure conditions and capacity, along with the willingness of the systems' owner to look at consolidation options, whether physical, operational or managerial. Small system infrastructure problems are most commonly related to lack of financial planning, operation and/or maintenance. In many cases, these are also the causes of non-compliance. Engineering contract services provide very small systems with the funding to have an entire system evaluation performed, considering several options including consolidation with nearby water systems.

The Engineering Report Services program is also proposing to assist systems with project development through the funding of plans and specifications required for Construction Authorization approval. Eligible candidates for the additional funding would consist of systems with an Engineering Report Services Contract, from the previous round, who completed a Branch-approved engineering report.

Additionally, there is a requirement for systems to demonstrate a good faith effort to apply to the Missouri Water and Wastewater Review Committee (MWWRC) for project development and construction funding. The approved engineering reports funded through the Engineering Report Services program (using DWSRF set-asides) may also be used as part of a system's submittal and/or application to MWWRC. The MWWRC committee is comprised of all the state and federal funding agencies within Missouri and includes the Department's Drinking Water State Revolving Fund Loan and Grant Program, the Missouri Department of Economic Development's Community Development Block Grant Program and the U.S. Department of Agriculture's Rural Development Program. The funds may be used to consolidate two systems, upgrade the source, treatment, storage, and distribution systems or perform other measures to bring the system into TMF compliance. The committee meets monthly, on an as-needed basis, to discuss all project applicants' needs and possible funding options to best fit those needs.

Applications for Engineering Report Services Contracts are mailed to all eligible community water supply systems. Currently, eligible systems are those who have a permit to dispense (or are

pursuing one), a certified operator, and those who have not been funded in the previous two years through an Engineering Report Services Contract. The application assigns priority criteria for certain issues a system may have (i.e., lack of storage, lack of capacity, security). Since 2009, the Branch has adjusted funding ratios for each application based on these priority criteria. Awards, as determined by the Department, have not been limited to a specific dollar amount since 2009. In 2009, the awards for engineering report contracts totaled approximately 1.7 million dollars, distributed among approximately 60 systems. These awards were funded by the American Recovery and Reinvestment Act.

Overall, this program has assisted water systems in evaluating alternatives for obtaining compliance and improving TMF capacity. For example, evaluations have been performed to improve treatment methods, insufficient distribution system pressures, and other health related issues. In regards to improving TMF capacity, this program assists systems with evaluation of user rates and budgeting, long-term forecasting, potential regionalization options, anticipated operation and maintenance, and anticipated needed improvements.

Operator Certification

The Branch places a large emphasis on system operator knowledge through the promotion of continuing education and training. Renewal training credit hours are offered for attendance of technical training in order for operators to maintain their Operator Certification Certificates of Competency. The training must be pre-approved by the Branch and is provided by Department staff, technical assistance providers, or other competent organizations.

The Department's voucher program assists very small system operators with costs associated with their training and certification. Under this federally-funded program, vouchers are issued to eligible water systems (systems that serve 3,300 people or less and are a community or non-transient non-community system) for use by their operators to defray the cost of training and certification. Vouchers can be used as payment for eligible drinking water treatment and distribution training, examinations, initial operator certification, and renewal certification.

Since February 2010, the Branch has had a contract in place with a technical assistance provider, or circuit rider, to provide special assistance to systems that have challenges meeting operator certification requirements. The circuit rider provides basic pre-certification training for the operators of small systems that have not had a properly certified operator and were, for that reason, approaching enforcement action and penalties. Through his efforts the number of systems providing drinking water to the public without a properly trained and certified operator has decreased significantly. Overall, the number of systems without a certified or properly

certified operator has decreased approximately 75 percent since May 2009, at which time the Branch first began tracking systems without operators.

Additional emphasis is currently being placed on improving communication between operators, trainers and the Department through circuit rider assistance and follow-up visits for newly certified operators. The purpose of these follow-up visits is to ensure that opportunities are provided for hands-on and more comprehensive and interactive instruction at the operators' systems.

Source Water Protection

Protecting and ensuring the quality and quantity of water available is a vital management function for any water system. Providing source water protection training and information helps public water system staff to develop and maintain system TMF capacity by increasing their understanding of the relationship between preventing contamination of their source water and the technical and financial impacts on their system.

In 2010, Missouri was selected by a panel of national source water protection experts, and funded by EPA, to participate in a pilot study titled "Enabling Source Water Protection: Aligning Land Use with Source Water Protection." The study consisted of examining existing opportunities for improving source water protection as related to land use, and finding ways to integrate/coordinate those opportunities, where applicable. Ultimately, these findings were presented in guidance materials that were improved upon to educate and inform civic planners and community leaders as to the merits of comprehensive environmental protection planning.

Grants were awarded in FY2011 to benefit public water systems' source water protection efforts as follows:

- Abandoned well plugging grants were awarded to 13 public water systems, totaling \$95,000.
- Source water protection project grants were awarded to 16 public water systems, totaling \$145,000.

Also, from 2008 to present, the Branch has endorsed approximately 55 active Source Water Protection or Wellhead Protection Plans. These systems (combined) serve approximately 650,000 consumers statewide, or about 12.5% of Missouri's population served by Community public water systems.

Regional Office Capacity Development Roles

All departmental regional offices assist water systems with Capacity Development. Systems having potential issues with the requirements of future regulations, as indicated by operational test data, receive technical assistance from the regional offices. The Public Drinking Water Branch collects data from water systems and provides a quarterly list, to the regional offices, of systems which face non-compliance with existing and upcoming regulatory requirements. Where determination of non-compliance, due to upcoming regulatory requirements, is the responsibility of the Department, the regional offices have access to automated reports and information through the Department's Safe Drinking Water Information System (SDWIS) and Safe Water Information Management Report (SWIMR) databases/tools. These tools also assist the Branch in prioritizing needed system assistance. The regional offices provide assistance to specified systems through on-site visits, priority inspections and training programs to help the systems meet regulatory requirements. Regional office assistance also includes suggestions to improve operations or reduce costs to the facility if opportunities can be identified for the specific facility. Assistance in understanding and meeting permit requirements, including any permit limits, monitoring, record keeping, and/or reporting requirements, is also provided. Permittees are encouraged to ask questions by contacting the regional office for any additional information or assistance needed.

The Public Drinking Water Branch and the regional offices coordinate to continuously track systems. Hard copies of all project receipt letters, comment letters, approvals and TMF checklists are provided to regional office staff assigned to capacity development. The Branch has also implemented a required notification process for the construction completion of new systems. Engineers representing the system, who are responsible for construction oversight, are required to submit a "Statement of Work Completed" form to the Branch so that the regional offices may be notified as applicable. Corresponding regional offices are provided hard copies of Statement of Work Completed forms, indicating the need for a final inspection. This also alerts the regional offices to systems which are to receive a TMF assessment during their respective sanitary survey. Construction authorizations and Statement of Work Completed forms are also recorded in the Branch's project database in order to verify construction status for systems with construction authorizations more than two years old.

Sanitary surveys are performed every three years for community water systems and five years for non-community water systems. The sanitary surveys cover all aspects of public water system, including its operation and management. The TMF capacity assessment component of the sanitary survey is extremely beneficial to both compliant and non-compliant systems in ensuring TMF capacity. The electronic sanitary surveys (ESS), developed and implemented in 2008, continue to be used throughout the Department's regional offices, and allow for recently collected

data to be recalled in the central office for updating the state database as necessary. The ESS also allows for further quality control regarding the accuracy of data present in the state database. These surveys are a critical tool in evaluating the TMF capacity of water systems once they are in operation and are also often used to determine system priority for TMF assistance.

Division of Geology and Land Survey

Entities interested in drilling a new well in Missouri are required to contact the Branch's Wellhead Protection Section of the Division of Geology and Land Survey (DGLS) prior to construction. The Wellhead Protection Section provides proper casing depths for new wells, while regional office personnel are responsible for approving new well sites. Also, by contacting the Wellhead Protection Section prior to construction, the owner is given information pertaining to the requirements of their specific well construction (i.e. estimated total depth needed, geologic hazards, estimated yield, nominal well diameter, grout setting time and isolation radius for potential contamination) before any cost is incurred, thus aiding in the entity's financial capacity. Well site surveys and proper casing depths are critical in preventing the construction of a well to incorrect standards and ensuring that proposed community wells, non-community wells, and private wells are identified correctly and constructed accordingly. This also helps ensure the technical capacity of the system.

Contaminant Studies

Through cooperative agreements with DGLS and the U.S. Geological Survey, PDWB has provided assistance to public water systems with radionuclide compliance issues. Mitigation or removal and disposal of radionuclides from water are not simple or inexpensive tasks. These issues also significantly affect systems' technical, managerial, and financial capacity.

The PDWB well data demonstrates that certain wells, located in specific locations around the state, contain radionuclides. It was hypothesized that specific geologic zones intersected by the wells may contribute to elevated radionuclide levels. It was also determined that if these zones were to be located and sealed off, the elevated levels may be eliminated without expensive treatment and waste disposal issues. With the cooperation of water system management, the PDWB funded a series of packering studies in affected areas of the state to test this hypothesis.

The results of the studies showed that sealing off the specified geologic zones could resolve elevated radionuclide levels but in some cases this was not a feasible implementation option. In those cases, the radionuclide-producing intervals were also major water producing zones. In wells where this was not the case, simply plugging the bottom of the well would potentially

mitigate elevated levels of radionuclides, as the radionuclide-producing zones were often associated with increasing depth of the well and associated geologic formations. These findings saved one system approximately \$1 million, not including costs, labor and logistics associated with disposing of the waste. Other systems with similar concerns and geologic conditions will likely also benefit from these findings. Due to the observed benefit and need for this type of study, the branch is planning additional studies to target other types of compliance issues.

Technical Assistance Providers

Technical assistance providers, such as the Missouri Rural Water Association, Midwest Assistance Program, American Water Works Association, Missouri Water and Wastewater Conference and the Wichita State University Financial Assistance Center play a vital role in helping water system owners and operators meet TMF capacity needs. Approximately 90 percent of Missouri's 2,791 active public water systems have a population of 3,300 or less. Approximately 50 percent of active systems fall into this small system category and are required to have TMF capacity. These small public water systems are less likely than larger systems to have the independent means to develop and maintain TMF capacity.

With about 2,589 public water systems falling into the small system category, the workload on state staff would be of significant magnitude. The technical assistance providers have been a valuable asset in increasing the amount of outreach and TMF assistance to newly operational systems with violations and existing systems in significant noncompliance. The technical assistance providers have also coordinated with the Branch and regional offices in identifying TMF issues and finding solutions.

The technical assistance provided by these organizations includes, but is not limited to, on-site assistance, board member meetings, operator and board member training, financial capacity assistance and rate setting, long-term strategic planning, grant and loan application assistance, energy assessments, leak detection, regionalization efforts and educational outreach. Further detail regarding specific technical assistance providers is presented below.

Missouri Rural Water Association (MRWA)

The Branch and the Missouri Rural Water Association, or MRWA, have developed a very productive and effective working relationship over the years in assisting public water systems across Missouri. MRWA is very active, both on-site and off-site, in helping systems build and maintain TMF capacity. Since 1966, the MWRA has provided on-site training and technical assistance to Missouri water and wastewater providers. Since implementation of the

TMF program in late 2000, MRWA has expanded its training emphasis to include more management and financial issues in addition to its on-site and classroom technical assistance efforts. MRWA has provided extensive board and council training, addressing public water system issues, throughout Missouri.

Through competitive procurement, the Branch awarded a small systems circuit rider contract to MRWA in May, 2007. The one-year contract had two one-year renewal cycles, which the Branch exercised. The contract ended in May, 2010. Over the three years of the contract, the circuit rider provided hands-on technical assistance to operators at small public water systems throughout the state.

In 2010 the Branch expanded its efforts to provide assistance to public water systems by developing contracts for four circuit riders. MRWA won three of the contracts. The MRWA circuit riders provide assistance with leak detection and energy efficiency, operator certification (previously described in the Operator Certification section of this report), and compliance and capacity development issues.

Training and assistance provided will:

- Improve the system's TMF knowledge.
- Assist with system-specific problems.
- Improve skill levels of system personnel.
- Increase awareness of available resources.
- Increase awareness of responsibilities.

The Public Drinking Water Branch compiles a list of systems that could benefit from this assistance, for use by the circuit rider. The MRWA circuit riders visit the systems, provide assistance, and consult regularly with the Branch on public water systems' needs. The contracts with MRWA are in their second year and may be renewed for four more years.

Midwest Assistance Program (MAP)

MAP assists local leadership of rural communities find solutions to their infrastructure and development needs through information, resource management and technical assistance. They have incorporated technical, managerial and financial assistance into their work with management and operating staff of both privately-owned and publicly-owned public water systems.

Through competitive procurement, the branch awarded a circuit rider contract to MAP, in February 2010, for providing assistance to systems regarding infrastructure improvement financing. This contract includes providing training and assistance with loan and grant applications, engineering reports, facility plans, environmental reviews, income surveys, rate setting, and technical, managerial and financial issues. The Branch routinely provides MAP with lists of water systems in need of assistance and MAP uses this list to plan and prioritize their efforts. This contract with MAP is in its second year and may be renewed four more years.

Information Sharing through Missouri Section American Water Works Association (AWWA) and Missouri Water and Wastewater Conference (MWWC)

The American Water Works Association and the Missouri Water and Wastewater Conference, provides forums for the exchange of ideas through meetings, conferences and educational programs around the state for system owners and operators, board and council members, and contractors. The Branch often provides informational presentations at these events regarding new rules and related Branch activities and/or updates.

Wichita State University Environmental Finance Center (EFC)

The Wichita State University Environmental Finance Center was established in 2009 for EPA's Region 7. The EFC, the Missouri University of Science and Technology and EPA have facilitated the Missouri Water Utilities Partnership program, in cooperation with Siemens and the Department. Since 2010, several communities were able to learn and benefit from these partnerships (Columbia, Harrisonville, Joplin, Neosho, O'Fallon, Rolla, and St. Peters) through an effort to improve system's energy efficiency and reduce costs. The Branch plans to draw on the EFC's experience with the State of Kansas' asset management training program, to provide similar training to Missouri regional staff so that capacity development efforts can continue to improve through Department staff communication with systems.

Continued and Future Strategy Implementation

Of the revised capacity development strategy elements listed above, various outside agency technical assistance providers are able to assist with the following elements of the Capacity Development Strategy. These elements are:

- Improve water system knowledge of current and future rules and regulations.
- Provide Missouri citizens with public education regarding the importance of safe drinking water, working within the constraints of the Department.

- Encourage partnerships between agencies, regional decision makers/organizations and systems.
- Coordinate capital resources.
- Provide consistent rate setting and financial management training for small systems, assistance providers and state staff.
- Increase planning in rural areas.
- Provide board and council member training, asset management/long-term strategic planning training, and other TMF capacity training and materials to applicable system personnel.
- Collecting data for a systems base-line to measure the success of TMF capacity activities.

The Public Drinking Water Branch will continue implementing the capacity development strategy elements and anticipates continuing to enhance its capacity development efforts over the next three years. The Branch is committed to ensuring that the capacity development program provides optimal assistance to public water system owners and operators as they strive to provide safe drinking water to the public.

Goals

Goals for the upcoming years consist of continuing to evaluate capacity development program and related processes in order to improve system tracking and focus for providing assistance. Improved data collection practices will not only aid the Branch in system tracking, but will also improve outreach and assistance provided by circuit riders, Branch staff and regional office staff. The Branch will also continue to provide training to state staff in order to improve knowledge of capacity development merits and efforts, and to further incorporate regional office staff efforts into capacity development assistance.

A more focused priority for newly activated systems is also a goal for the upcoming years in order to provide the assistance new systems need to stay on course to maintain TMF capacity. Finally, the Branch is pursuing a board and council training module for consistent board and council training, in order to provide system administrators with the necessary knowledge and tools to manage their systems in a way that promotes the attainment and/or maintenance of TMF capacity.

Conclusion

The Branch is continuing to improve the TMF capacity of Missouri's public water systems. Each year more owners, operators, and local leaders are being educated as to the importance of providing safe water to their consumers and/or communities as well as methods to effectively do so. The Branch continues to explore and develop additional methods of providing this education to water system owners, operators, and local leaders. The Branch also continues to evaluate the capacity development program and related processes in order to more effectively provide assistance and training, and to improve Branch communication and coordination with all facets of the Missouri capacity development effort.