Champion a healthy environment for a thriving Montana

State of Montana
Capacity Development Strategy
for public water supply systems

2022

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I. INTRODUCTION

1. BACKGROUND

The Capacity Development Program was created under the Safe Drinking Water Act (SDWA) Amendments of 1996 (section 1420) to promote drinking water systems development of finances, management, infrastructure, and operations so they can provide safe drinking water consistently, reliably, and cost-effectively. More specifically, the capacity development provisions provide a flexible framework within which states and water systems can work together to ensure that systems acquire and maintain the technical, financial, and managerial capacity[1] to consistently achieve the health objectives of the 1996 SDWA.

Subsequently, America's Water Infrastructure Act of 2018 (AWIA) amended Section 1420(c) to add asset management[2] into their state capacity development strategies. AWIA contains the following requirements: (1) encourage public water supplies (PWSs) to create asset management plans (AMPs); (2) assist public water systems in training to implement AMPs; (3) include a summary of these efforts in a triennial capacity development report to the governor. Consistent with this statutory change, state drinking water programs are expected to revise their capacity development strategies to include a description of how asset management will be promoted through addressing the five-core-question[3] framework of asset management. This provision aligns with EPA's strategic measure of reducing the number of public water supply systems with health-based violations by ensuring long-term sustainability of the public water supply systems.

The Montana Department of Environmental Quality (MDEQ) Public Water Supply (PWS) has always supported technical, managerial and financial assistance to systems in need since the origin of our PWS program. The original MDEQ Capacity Development Strategy was designed in conformance with Section 1420(c) of the SDWA submitted, reviewed, approved, and implemented in the calendar year 2000'. MDEQ has assessed the 2018 SDWA requirements outlined in 1420(c), our existing program, and our future organizational capabilities to create an updated Capacity Development Strategy that will meet regulatory and existing PWS needs. The original MDEQ Capacity Development Strategy successfully guided our program efforts over the last 22 years, and the updated Capacity Development Strategy will guide our program as we move forward.

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[1] ***Technical capacity*** *refers to a system's physical and operational abilities (e.g., source water adequacy, infrastructure adequacy, technical knowledge and implementation)* ***Managerial capacity*** *refers to a system's administrative and organizational abilities. (e.g., ownership accountability, staffing and organizational, effective external linkages)* ***Financial capacity*** *refers to a system's abilities to generate or obtain enough money to maintain the system and pay for future improvements. (E.G., revenue efficiency, credit worthiness, fiscal management and controls)*

[2] ***Asset management*** *is the practice of managing infrastructure capital assets to minimize the total cost of owning and operating them, while delivering the service level customers desire and that complies with drinking water regulations.*

[3] ***1. What is my current state of system assets? 2. What is my required sustainable level of service? 3. What are my critical assets to sustain performance? 4. What are my minimum life-cycle costs? 5. What is my best long-term funding strategy?***

The updated MDEQ Capacity Development Strategy is a dynamic document that may be modified over time to meet the changing needs of Montana public water supply systems and regulatory requirements. The purpose of this document will outline MDEQ PWS's concentrated effort to maintain public water systems viability through technical, managerial financial capacity assistance, with an emphasis on incorporating asset management tools.

2. GOALS OF THE 2023 CAPACITY DEVELOPMENT STRATEGY

- Enhance performance beyond compliance through measures that improve efficiency, effectiveness, and service excellence. Control points to achieve this goal include prolonging asset life, sustainability, financial planning, meeting expectations, emergency response, improving security, and reduce operating costs.
- Promote and implement Montana's capacity development strategy with emphasis on asset management tools for new and existing public water supplies (PWSs) through meeting SDWA Sections 1420(C)(2)(A-F).
- Strive to achieve and maintain all PWSs compliance in accordance with the SDWA.
- Track and prioritize PWSs that fail to meet compliance requirements as outlined in the SDWA.
- Provide resources to systems in support of their efforts to supply customers with an adequate quantity, quality and reliable source of water.
- Continue stakeholder engagement to optimize capacity development efforts.
- Maintain and further develop Montana PWS history of system support through partnerships with regional technical assistance providers and our existing State Revolving Fund (SRF) TMF contract.

II. CAPACITY DEVELOPMENT FOR NEW SYSTEMS

Section 1420(a) of the SDWA requires the state to ensure that all new community (C) and non-transient non-community (NTNC) systems beginning operations after October 1, 1999 must demonstrate the capacity to comply with regulations. The MDEQ PWS program incorporated capacity development requirements into the current public water supply rules and referenced design circulars to address TMF components prior to new construction.

MDEQ rules and design circulars require new systems to demonstrate adequate technical, managerial and financial capacity as part of the approval process. The following list includes circulars referenced by MDEQ to ensure new systems have addressed TMF prior to construction.

1. Design standards and capacity development regulations

- DEQ 1 – Standards for Water Works
- DEQ 3 – Design Standards for Small Water Systems
- DEQ 7 – Montana Numeric Water Quality Standards
- DEQ 10 – Montana Standards for Development of Spring for PWSs
- DEQ 16 – Standards for Hauled Water Cisterns for Non-community PWSs.
- PWS 5 – Groundwater Under the Direct Influence of Surface Water
- PWS 6 – Source Water Protection Delineation

All new community (C) and non-transient non-community (NTNC) systems must include Appendix A and Table A-1 from the current MDEQ PWS construction circular (DEQ-1) along with the referenced self-assessment (SA) form (DEQ-1 Appendix A part A.1) to demonstrate consideration of technical, managerial and financial planning with emphasis on the five-core-question framework of asset management. *See attached Appendix A, Table A-1 and self-assessment form.* Creation of asset management plans are encouraged through MDEQ PWS staff and a variety of resources are available on the MTDEQ PWS webpage. *The webpage is currently under construction, but will be operational in 2023.*

2. New System Startup

All new community and non-transient non-community water supply systems in the state must successfully address the capacity related components outlined within the design circulars as a part of the system submittal review and approval process. As part of the capacity requirements, information on well siting, system infrastructure design review and approval, groundwater-under-the-direct-influence-of-surface-water assessment, source-water assessment, system startup procedures, records of as-built plans, and operator certification. PWS new owner packets and a comprehensive startup sanitary survey inspection are included in the MDEQ startup procedure for each new community and non-transient non-community water system. The review ensures each new water system has considered the system's technical, financial and managerial capacity for long-term viability and compliance with SDWA. DEQ can assess penalties against systems that fail to comply with capacity development requirements.

MDEQ is also committed to ensuring all newly constructed transient non-community (TNC) public water supply systems demonstrate TMF capacity through introduction of the state capacity development program and asset management tools. MTDEQ staff shares this material through:

- MDEQ PWS construction circulars
- sanitary surveys
- technical assistance visits (field, phone, office, training)
- self-assessment (SA) form
- MDEQ resource webpage
- new system owner package

III. CAPACITY DEVELOPMENT FOR EXISTING SYSTEMS

Montana has over 2,200 existing public water supplies scattered across our large state with current and projected growth that continues to stress our limited staff capacity. Given the large number of systems, vast size of Montana, and a shortage of staff, MDEQ has chosen to provide capacity development services with asset management emphasis primarily through the Capacity Development Coordinator, engineering review, technical assistance contractors, and collaborating with other qualified regional technical assistance providers. MDEQ PWS field staff discuss capacity development and asset management with the system representative(s) and refer them to the Capacity Development Coordinator for further assistance. All technical assistance entities working within Montana have been encouraged to pursue formal asset management coursework to enhance their effectiveness. Technical assistance providers completing additional formal asset management courses are requested to report the training to

the MDEQ Capacity Development Coordinator and will be considered a preferred TA provider for facility-based asset management training.

1.0 §1420(C)(2)(A): METHODS AND CRITERIA USED TO IDENTIFY AND PRIORITIZE PWSs IN NEED OF CAPACITY DEVELOPMENT

The MDEQ PWS capacity development strategy prioritizes assistance to systems that are out of compliance. However, MDEQ PWS strongly believes our state capacity development program also needs to continue helping systems operating within compliance as a tool to sustain compliance. With that stated, MDEQ will make every effort to support all systems with capacity development assistance while emphasizing asset management tools, but will prioritize problem systems that pose an immediate acute health risk. MDEQ PWS has historically prioritized system criteria based primarily on empirical information gathered and reviewed by PWS staff because the information may be tactile, visual (images), written or numerical in nature. The established professional scale used to prioritize systems for assistance is shown below.

Systems with MCLs or system deficiencies that pose an acute health risk will be given first priority. These systems will be identified when monitoring data are reviewed, compliance runs are conducted, a preliminary assessment for groundwater under the direct influence of surface water is conducted, or an unapproved system is discovered. Systems classified in this category are:

- Systems that have been placed on a boil order and/or any other contaminant concentration that poses an acute health risk.
- Systems with an unresolved significant deficiency(s) or sanitary defect(s).
- Systems that have failed a preliminary assessment for groundwater under the direct influence of surface water and become classified as surface water.
- Systems with an Enforcement Targeting Tool (ETT) score of 10+ points.
- Systems that have unresolved 4-log disinfection treatment violation(s).
- Unapproved discovered PWS systems.

Systems with unresolved non-acute health risks or have potential health risks will be given second priority. These systems will be identified when monitoring data is reviewed or during a preliminary assessment for groundwater under the direct influence of surface water. Systems that fall in this category are:

- Systems that have repeated RTCR level 2 assessments, documented history of 5.0 mg/L to 10.0 mg/L nitrates or have a history of exceeding regulated contaminant concentrations that pose a non-acute health risk.
- Systems that have failed the preliminary assessment for groundwater under the direct influence of surface water.

Systems that are operating within compliance but request assistance to maintain compliance will be given third priority. These systems will be identified by all mechanisms previously discussed. Examples of systems that fall in this category include, but are not limited to:

- Systems requesting asset management tools and guidance for creation of a system specific asset management plan.
- Systems that need improvements as identified in sanitary surveys, technical assistance visit, Consumer Confidence Reports (CCRs).
- Systems expressing the desire to become a county water district.
- Systems that require capital improvement solutions and/or need rate structure guidance.

Primary tools implemented by MDEQ for identifying and prioritizing systems in need of capacity development assistance include:

- **Compliance Runs and Review of Monitoring Data**
  Systems with an ETT score of 10+ points will be identified as a priority system for capacity development assistance and provided a self-assessment (SA) form. The completed SA form will be analyzed by MT DEQ PWS staff to assess the systems' TMF/AM capacity.

- **Sanitary Surveys**
  Unresolved significant deficiencies observed during sanitary surveys will be a priority. Sanitary survey inspectors provide the system representative with a business card with their contact information on the front and the Capacity Development Coordinator's contact information on the back. The inspector will verify if the system has an asset management plan, provide a hard copy or access to the self-assessment form, and reference capacity development resources in the final sanitary survey letter. The inspector is encouraged to contact the Capacity Development Coordinator directly if they want to refer the system for additional assistance.

- **Discovered Systems**
  Discovered unapproved public water supply systems will be considered a priority. The MDEQ standard operating procedure for unapproved PWS's includes data base update, new system packet sent to system, sanitary survey within 45-days, completed sanitary survey report within 30-days, system is referred to engineering, internal reports copied to DEQ and engineering review in accordance with Design Circulars. The word "Unapproved" is added to the system name until compliance has been met.

- **Revised Total Coliform Rule**
  Systems with unresolved sanitary defects observed during a level 2 assessment, or have documented reoccurring RTCR issues will be considered a priority candidate for capacity development assistance.

- **Preliminary Assessments for Groundwater Under the Direct Influence of Surface Water**
  MDEQ PWS currently assesses all groundwater and spring fed systems to classify the source as either groundwater or groundwater under the direct influence of surface water. System deficiencies, particularly systems under the influence of surface water, are generally identified during the preliminary assessment process and may be directed to the Capacity Development Coordinator for additional assistance.

- **Source Water Assessments**
  The Source Water Protection Program of DEQ evaluates all public water supply system source aquifers in the state. During the assessment process, system deficiencies are noted, and improvements are recommended. The source water assessment process may potentially result in the installation of required treatment or locating a new water source supply due to vulnerability of the existing water source. Source Water Protection staff may refer systems to the Capacity Development Coordinator for capacity development assistance as warranted.
- **Midwest Assistance Program (MAP), Montana Rural Water Systems (MRWS) and Rural and Tribal Environmental Solutions (RATES)**
  Members of MAP, MRWS and RATES routinely visit sites throughout Montana and can identify systems in need of capacity development assistance. MDEQ PWS MAP, MRW and RATES all have approved training providers on staff and have partnered with MDEQ PWS to bring facility-based training opportunities to fruition. MDEQ feels the incentive of potentially earning continuing education credits (CECs) while completing facility-based capacity development training with emphasis on the five-core question framework of asset management will entice water system participation across our large rural state.

- **Engineering**
  Existing PWS systems proposing improvements/expansions must be reviewed by PWS Review Section engineers prior to construction. Systems in need of assistance may be directed to the MDEQ Capacity Development Coordinator for potential capacity development and asset management assistance.

- **Public Service Commission (PSC)**
  Communication with the PSC will help maintain awareness of PWS section staff on systems in need of capacity development and asset management assistance.

- **Consumer Confidence Reports**
  As PWS Section staff review CCRs, staff can identify systems that might benefit from capacity development and asset management assistance.

2.0 §1420(C)(2)(B): FACTORS THAT ENCOURAGE OR IMPAIR CAPACITY DEVELOPMENT

1. Factors that encourage capacity development

- The Safe Drinking Water Act (SDWA) and Montana statutes and rules require public systems to provide safe drinking water to all customers by requiring systems to sample, comply with the national primary drinking water standards, and have a certified operator when required. The PWS Bureau has the authority to enforce the statutes and rules that govern public water suppliesand assess fines and penalties to non-comp lying systems.
- Rural Development (RD), Drinking Water State Revolving Fund Loan Program (DWSRF), Community Development Block Grant Program (CDBG), Renewable Resource Grant & Loan Program (RRGL), Water

Pollution Control State Revolving Fund Loan (WPCSRF), Montana Coal Endowment Program (MCEP), Montana Board of Investments INTERCAP Loan Program, American Rescue Plan Act (ARPA), Economic Development Administration (EDA), Army Corp of Engineers Infrastructure and technical Assistance Programs, Sanitation Facilities Construction Program, Build Back Better Act (BABA), Clean Water Act (CWA) and Safe Drinking Water Act (SWDA) all provide grant and loan monies to community and non-transient non-community systems for planning, design, and construction of water and wastewatersystem improvements. These monies allow public water supplies to expand and modify their systems to maintain compliance.

- All aforementioned lending agencies and technical assistance agencies (MAP, MRWS and RATES) in the state participate in bimonthly meetings. This group is called W_2ASACT and stands for Water,Wastewater, and Solid Waste Action Coordinating Team. W_2ASACT's major accomplishment is the uniform application that was developed for all funding agencies in the state, including Rural Development. The MDEQ PWS Capacity Development Coordinator has joined this group and will be a contributing member.
- Continued collaboration of efforts between the aforementioned funding agencies, EPA and MDEQ to promote and fund centralized water systems in the north and eastern part of the state with drinking water concerns due to poor quantity and/or quality. These systems currently include Rocky Boy's North Central Montana Regional Water System, Fort Peck Dry Prairie Rural Water System, Musselshell-Judith Regional Water System and Dry-Redwater Regional Water Authority.
- The MDEQ PWS Bureau maintains county health department contracts for completion of sanitary surveys and technical assistance. The county contracts are managed by PWS staff. An additional TMF contract to perform O&M, technical, managerial, financial assistance has been managed through the DWSRF program. The TMF contract has historically been comprised of two contracts: operation and maintenance (O&M) contract and financial and managerial assistance (FMA). These two contracts have merged into one contract to provide operation and maintenance (O&M), and financial managerial assistance (FMA). This contract will now include asset management assistance and will be managed by the PWS Capacity Development Coordinator.
- The PWS Bureau maintains up-to-date monitoring schedules that are accessible to all active public water supply systems online. The sampling schedules developed for systems are a very useful tool and assist systems with maintaining compliance. MDEQ PWS, in junction with other providers (MRW, MAP, RATES, MW_2OI), routinely provide training opportunities for operators and managers of water systems. MDEQ PWS and Montana Water and Wastewater Operators Initiative (MW2OI) staff hosts water schools in the spring and fall. Water school provides training for new

operators and continuing education credits for existing operators. Most approved trainers maintain an available training schedule (calendar) that can be referenced by operators looking for desired training opportunities.

- The MDEQ PWS Capacity Development Coordinator must maintain professional capacity development and asset management growth through participation in formal training, workshops, conferences and other professional opportunities. Asset management certification through formal training is encouraged.
- MDEQ PWS encourages regional technical assistance providers to further develop their asset management skillset through formalized education. This improves service to water systems and sustains a core group of approved capacity development training providers with an emphasis on the five-core-question framework of asset management.
- MDEQ PWS Operator Certification program has expanded the opportunities to earn continuing education credits (CEC) through facility-based capacity development training. MAP, MRW and RATES have partnered with DEQ to make this innovative form of training a reality. The very reason for creating the facility-based training is to encourage capacity development programs and promote asset management efforts across Montana with the potential to earn CECs in both water and wastewater.
- MDEQ PWS field staff business cards now have contact information for the Capacity Development Coordinator on the back. This provides an avenue for mentioning capacity development program to the system representative and contact information to request capacity development and asset management assistance. PWS inspectors will document their capacity development interaction with the system representative(s) within the sanitary survey inspection letter.
- MDEQ is in the process of developing a capacity development resource webpage that emphasizes asset management tools for the creation and maintenance of asset management plans. A drop-box will be available for systems to share their asset management plans and obtain a professional review.
- MDEQ has developed an automated sample reminders program to notify voluntary participants of outstanding or upcoming monitoring and reporting due dates. Owner and operator responses have been extremely positive for the systems that have signed up for the MDEQ reminder program.

2. Regulatory factors that will impair capacity development

- The EPA growing list of regulated contaminants, reduction in MCL's and additional reporting requirements represent a financial challenge for small public water systems in Montana and many new developments are designed to stay under the PWS threshold. The regulated public are viewing these changes as cost-prohibitive, and the anticipated result will be more small non-public systems installed throughout the state.
- The ability of MDEQ PWS to implement these changes will be limited by the availability of funding and staffing.

3.0 §1420(C)(2)(C): HOW MONTANA WILL USE THE AUTHORITY AND RESOURCES TO ADVANCE CAPACITY DEVELOPMENT PRACTICES

- **Administration:** This money is used to fund engineering positions, review of plans/specifications, preparation of SRF loans, development of the Intended Use Plan, and other related DWSRF Program functions.
- **PWS:** This money is distributed towards water schools, administrative fees, staffing, county sanitary survey contracts and operator certification program.
- **Source Water Protection Program:** The Source Water Protection Program at MDEQ evaluates all public water supplies and developing a Source Water Plan for each system. The Source Water Plan will provide long-term benefits to systems in protecting water quality.

- **Operator Certification**
  Set asides are used for Montana's EPA approved operator certification program. MDEQ PWS will expand the existing certification program to include facility-based capacity development training with asset management emphasis through an approved training provider for water and wastewater continuing education credits. This expansion of the certification program will be implemented to entice public water supply systems involvement in the capacity development program and provide an additional avenue to earn CECs in our large rural state.

- **Technical, Managerial, and Financial Assistance Contract**
  This contract is a combination of the previous Financial and Management Contract and Technical Assistance Contract. The TMF section of the contract provides operational and maintenance assistance to small community water systems. The focus of this section is to assist new operators in operating the system, developing a sampling schedule, proper sampling procedures, and other operator-related issues. The financial and managerial section of the contract assists systems interested in becoming a district, rate establishment to finance improvements or maintain a reserve, cash-flow issues, administration, staffing issues and establishing a system specific asset management plan.

4.0 §1420(C)(2)(D): ESTABLISH A BASELINE AND MEASURING IMPROVEMENTS

The number of systems that maintain compliance will be used as a base of reference since the strategy focus is on systems achieving and sustaining compliance. MDEQ PWS will use the Annual Compliance Report (ACR) as the primary source for assessing the effectiveness of the state capacity development and asset management program as a whole. However, a multitude of system specific components such as review of self-assessment forms, review of asset management plans, training feedback, technical assistance feedback, compliance information, sanitary survey information, and compliance with DEQ-1/DEQ-3 Circulars will help establish system baseline and analyze the effectiveness of our updated capacity development strategy.

5.0 §1420(C)(2)(E): IDENTIFYING INTERESTED PERSONS

MDEQ identified persons of interest during public hearings, seminars, meetings and public outreach prior to implementing the original capacity development strategy in 2000. Stakeholder comments were few, but noted.

The existing Capacity Development Coordinator introduced the updated draft Montana DEQ Capacity Development Strategy throughout 2022 through training events, seminars, meetings, public outreach, supervisors, professional review from Wichita State, and interactions with EPA Region 8. Reoccurring annual training opportunities, independent training opportunities, facility-based training opportunities, and professional interactions will be considered for future updates of Montana's capacity development strategy. Continued input from technical assistance providers, licensed professionals, certified operators, public water supply systems, MDEQ staff and other interested parties is encouraged to promote growth and efficiency of the capacity development program as system needs and federal regulations continue to change in the future.

6.0 §1420(c)(2)(F): STATE ENCOURAGEMENT OF ASSET MANAGEMENT

The Montana Department of Environmental Quality has made significant strides in development and promotion of the capacity development program as a whole since implementing a fulltime employee as the Capacity Development Coordinator in January of 2022. The five-core-question framework of asset management is now emphasized through the MDEQ updated Capacity Development Strategy and will be an integral component of our program as we move forward. MDEQ encouragement of the asset management program is promoted through the following methods:

- Implement and support a designated Capacity Development Coordinator position in MDEQ PWS. The long-term goals of this position will direct capacity development efforts with emphasis on asset management, serve as the technical assistance specialist for PWSs with persistent issues, and continue to develop Montana's involvement in the Area Wide Optimization Program (AWOP).
- Asset management questions have been incorporated into the capacity development self-assessment form. Self-assessment forms will be provided to systems through sanitary surveys, technical assistance visits, engineering review, rules management, and training events. The self-assessment form will be provided to systems with a ETT score of 10+ when appropriate.
- Table A-1 has been placed back into DEQ-1 and is referenced in DEQ-3
- A capacity development webpage that will be accessible to the general public is under construction, and will include asset management tools and resources.
- DEQ PWS will create a drop-box within the capacity development webpage for systems to submit their asset management plans and self-assessment forms for professional review.
- MDEQ PWS Field Staff must discuss CD/AM with the system representative, verify if the system has an asset management plan, present the representative with a business card that has the Capacity Development Coordinator contact information on the back, and note CD/AM contact within the sanitary survey inspection reports.
- Expansion of the Operator Certification Program to include facility-based training water and wastewater opportunities for CD and AM centered training through approved providers. Creation of an asset management plan must be emphasized.

Area technical assistance providers were encouraged to develop asset management knowledge through additional formal training.

- Continue to offer capacity development training opportunities with an emphasis on asset management tools throughout Montana, and encourage area technical assistance providers to promote system specific asset management plans through field visits and annual training events.

IV. DEVELOPMENT AND IMPLEMENTATION

Montana's capacity development strategy and program are dependent on continued availability of DWSRF capitalization grant funds to financially support our efforts in maintaining technical, managerial and financial capacity in our public water supply systems. Many individuals have been, and will continue to be involved in the development and implementation of the capacity development strategy. The PWS Bureau will be responsible for the maintenance of the Montana capacity development strategy with an emphasis on the five-core-question framework of asset management and ten attributes[1] of an effectively managed utility. PWS staff, approved technical assistance providers, and private consultants will present capacity development and asset management annually at training sessions and conferences to provide assistance to systems, solicit public input, and keep Montana's capacity development strategy current.

The PWS Bureau will involve consultants, operators, public water supply owners, board and council members, Midwest Assistance Program (MAP), Montana Rural Water Systems (MRWS), and Rural and Tribal Environmental Solutions (RATES). Facility-based capacity development training with emphasis on asset management for continuing education credits will also provide an avenue to collect attendee contact information for follow-up, training evaluations and summary of topics covered through the approved training providers. Subsequent contact with the system representatives and compliance reports will help determine the overall effectiveness of facility-based capacity development training. MDEQ will modify the strategy as needed based on changing needs of water systems, regulations, and public input. Technical assistance contracts will be routinely evaluated to ensure the services are meeting needs of systems and consumers.

MDEQ will review submitted asset management plans, self-assessment forms, training feedback, ETT data, and technical assistance reports to help determine the effectiveness of our capacity development program as a whole. This data will also enable MDEQ to determine which of the five-core-question framework needs to be strengthened and guide additional asset management improvements within our capacity development program.

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[1] product quality, customer satisfaction, employee and leadership development, operational optimization, financial viability, infrastructure stability, operational resiliency, community sustainability, water resource adequacy, stakeholder understanding and support

V. REGULATORY AUTHORITY

MDEQ is granted authority for capacity requirements in the current Public Water Supply Law (Title 75, Chapter 6, Section 104(2)(e)(f) MCA). Section 75-6-104(2)(e)(f) specifically grants the department authority to adopt rules for the following:

> (e) the siting, construction, operation, and modification of a public water supply system or public sewage system, including requirements to remedy:
>
> (f) the review of the technical, managerial, and financial capacity of a proposed public water supply system or public sewage system, as necessary to ensure the capability of the system to meet the requirements of this part:

An important portion of this statute is that the Board of Environmental Review (BER) and MDEQ are granted the authority for enforcement against non-complying systems with the ability to assess administrative, civil, and criminal penalties.

MDEQ has rules and design circulars that establish parameters for the design, construction, operation, and monitoring of public systems. Title 17, Chapter 38, Sub-chapter 1, Administrative Rules of Montana (ARM), provides the criteria for the design and construction of a public water supply. Title 17, Chapter 38, Sub-Chapter 1 references the design circulars used for public water supply systems: DEQ 1 is the design circular for community water systems and DEQ 3 is the design circular for non-community water systems. The design circulars provide standards for the siting and design criteria for new or modified public water systems. Title 17, Chapter 38, Sub-Chapter 2, ARM, contains the criteria for bacteriological, chemical and radiological requirements for public water systems. This portion of the rule provides monitoring frequency requirements, maximum contaminant levels for regulated contaminants, treatment requirements and reporting procedures for monitoring results. MDEQ maintains a computer database of the distribution, source, entry point and monitoring information. This database is updated whenever new monitoring results are received, modifications to the system are constructed, or violations occur.

Acronyms

DEQ	**Department of Environmental Quality**
MDEQ	**Montana Department of Environmental Quality**
DWSRF	**Drinking Water State Revolving Fund loan program**
SRF	**State Revolving Fund**
SDWA	**Safe Drinking Water Act**
EPA	**Environmental Protection Agency**
CD	**Capacity Development**
TMF	**Technical, Managerial and Financial**
AM	**Asset Management**
BER	**Board of Environmental Review**
ARM	**Administrative Rules of Montana**
MCL	**Maximum Contamination Level**
FTM	**Failure to Monitor**
ETT	**Enforcement Targeting Tool**
SA	**Self-Assessment**
ACR	**Annual Compliance Report**
PWS	**Public Water Supply**
RTCR	**Revised Total Coliform Rule**
MW_2OI	**Montana Water and Wastewater Operators Initiative**
MAP	**Midwest Assistance Program**
MRWS	**Montana Rural Water Systems**
RATES	**Rural and Tribal Environmental Solutions**
CEC	**Continuing Education Credits**
PSC	**Public Service Commission**
CCRs	**Consumer Confidence Reports**
W_2ASACT	**Water, Wastewater, and Solid Waste Action Coordinating Team**
DEQ 1	**Design circular for community systems**
DEQ 3	**Design circular for non-community systems**
O&M	**Operation and Maintenance**
4-LOG	**99.99% inactivation of bacteria**

APPENDIX A

A.1 General

In addition to the information required in the circular, information on management, operation, maintenance, and financing of the system must be submitted. The purpose of this information is to allow evaluation of a new system for proper system management, operation and maintenance (O&M), and financial planning that provides long-term stability of the new system. The 1996 Safe Drinking Water Act provides for State development of strategies to ensure the managerial, technical, and financial capacity for new community water systems.

The fundamental goals of capacity development are:

to protect public health by ensuring consistent compliance with drinking water standards,

to enhance performance beyond compliance through measures that improve efficiency, effectiveness, and service excellence,

to promote continuous improvement through monitoring, assessment, and strategic planning.

Capacity terms are defined as follows based on definitions in Title 36, Chapter 23, Sub-chapter 1, ARM:

Managerial capability (capacity) means the management structure of the water system, including but not limited to ownership accountability, staffing, and organization.

Technical capability (capacity) means the physical infrastructure of the water system, including but not limited to the source water adequacy, infrastructure adequacy, and technical knowledge based on information provided.

Financial capability (capacity) means the financial resources of the water system, including but not limited to the revenue sufficiency, credit worthiness, and fiscal controls.

The Department is granted the authority in 75-6-103(2)(f), MCA, to ensure financial viability of proposed public water supply systems (and public sewage systems) as necessary to ensure the capability of the system to meet the requirements of Title 75, Chapter 6, Part 1, MCA.

A separate application form with appropriate guidance is available from the Department to assist in providing information. All new public water supplies and existing systems making modifications must submit a capacity development inventory and self-assessment form.

A.2 Managerial Capacity

Provide the following information:

1. Name, address, and telephone number of the owner(s). If ownership or control of the system is to change in the near future, such as in a subdivision where the developer will eventually relinquish control to the homeowners' association, provide a projected time line for change of ownership.

2. Administrative and management organizational charts. Define the functions and responsibilities of the organization and each administrative/managerial position. For example, if the organization has a secretary, provide a brief description of the secretary's responsibilities.

3. Plans for staffing the system with a certified operator and back-up operator. Provide the name of the operator if an operator has been selected. An operator should be available to operate the system even if the system has not yet become public. If the system is to be operated under contracted services, provide a copy of the contract.

4. A system or plan for maintaining records (including records of operation, service maintenance, and repairs), plans and specifications for construction, as-built drawings, O&M manuals, and compliance information. Preferably, an office space should be dedicated for storing all information that is readily accessible by the operator, manager(s), and owner(s) of the system.

5. A copy of the articles of incorporation, by-laws, or similar documents that:

a. Define the purpose of the responsible entity.

b. Describe the procedures for compliance with the requirements of the Secretary of State's Office for creating and maintaining a non-profit association.

c. List membership and define membership rights (all lot owners should automatically

d. Define the format and schedule for meetings and requirements for quorums.

e. Describe the powers and duties of the board of directors.

f. Describe the process for transferring control of the system from the developer to the lot owners, where applicable.

g. Explain the procedures for amendment of the by-laws.

h. Confer authority to assess and collect fees for O&M, monitoring, personnel, capital improvements and equipment replacement.

i. Establish the service area of the responsible entity.

j. Confer authority to require water conservation practices, including metering.

k. Confer authority to require installation of water meters, and to own and maintain water meters, and the authority to bill according to water usage.

l. Confer authority to require installation of backflow prevention devices, and to own and maintain such devices.

m. Confer authority and define procedures for disconnection of service (nonpayment, refusal to provide meters or backflow devices or to allow access for maintenance of this equipment).

Also, provide policies on how delinquent accounts, system violations, fee changes, and customer complaints will be addressed. Please note that homeowners' associations must file their articles of incorporation with the Secretary of State.

6. In the event that the responsible entity becomes insolvent, how will perpetuation of the system be maintained? Has a second party been considered for future ownership in the event that the responsible entity becomes insolvent?

The managerial plan must allow for:

a. Efficient operation of the system.

b. Adequate control of and accountability for the system by the owner(s), manager(s), and operator(s).

c. Adequate resources and accountability for regulatory compliance by the owner(s), manager(s) and operator(s).

d. Dissemination of appropriate information to all customers and regulatory agencies.

A.3 Technical, Operational, and Maintenance Capacity

Provide the following information in the form of an O&M manual that will be available to the operator, owner(s), and manager(s):

1. An explanation of startup and normal operation procedures. Startup should address operation of the system throughout system buildout if applicable (i.e., a subdivision will experience varying demands as the subdivision develops and builds out).

2. Will any equipment be leased or rented? Are easement or lease agreements necessary for any portion of the system? If applicable, provide pertinent information (i.e., copy of easement or lease agreement). Are changes in local zoning necessary to protect the proposed source(s)?

3. Record keeping method and system for reporting to the Department.

4. Sampling and analyses program to demonstrate compliance with drinking water standards (Title 17, Chapter 38, Sub-Chapter 2, ARM) for all sources, entry points, treatment, and distribution systems.

5. Staffing and training requirements to operate the system to maintain compliance with drinking water standards (Title 17, Chapter 38, Sub-Chapter 2, ARM).

6. Documentation of a safety program.

7. Documentation of an emergency plan and emergency operating procedures (e.g., in the event of a chemical spill or loss of power).

8. Manufacturer's manuals for all equipment and contact names for service. A routine maintenance program and maintenance schedules must also be included. Forms for recording routine maintenance checks per manufacturer's guidelines should be provided, including frequency of maintenance and anticipated replacement dates for major equipment.

Items 1 through 5 must be submitted in the form of an O&M manual prior to approval of the system.

A letter from the applicant must be provided prior to system use indicating that the system (or portion of the system that has been completed to date) was constructed per the approved plans and specifications. As-built, record drawings for the system (or portion of the system that has been completed to date) must be provided within 90 days after the system has become operational. The as-built, record drawings must include an O&M manual addressing items 1 through 8 and must contain manufacturer's manuals and other pertinent information to complete the O&M manual.

9. The system must be operated in a manner that:

a. Maintains compliance with drinking water standards (Title 17, Chapter 38, Sub-Chapter 2, ARM).

b. Allows effective operation of the system in accordance with the approved plans and specifications.

c. Supplies adequate water, both in terms of quantity and quality.

d. Complies with operating conditions presented in the engineer's report.

A.4 Financial Capacity

The following financial information must be submitted in order to receive system approval:

1. The financial information in Table A-1 must be completed for a 5-year period.

2. O&M rates and capital improvement/replacement rates must be developed based on the information in Table A-1. A capital improvement/replacement plan must be developed for a 20-year period and the rate set accordingly. A reserve fund must be established and maintained to address future replacement of equipment based on anticipated replacement dates.

3. Customers should be metered. If customers are metered, demonstrate how the rates account for metering (cost of meters, cost of operator to read/maintain meters, how rates correspond to meter readings).

4. Connection/system development fee and basis for fee, if applicable.

5. A description of the owner(s) or responsible entity's access to financial capital. If a large sum of money is necessary for replacement, improvement, or expansion, can the owner(s) or responsible entity obtain a loan or grant?

6. Budgetary controls and audit schedule.

7. If the system is privately owned, has the Department of Public Service Regulation been contacted?

8. Provide a financial plan that demonstrates how all improvements will be constructed per the proposed plans and specifications. If bonding or other financial assurance has been provided for improvements with a regulating entity (such as the county), provide information on the bonded improvements.

The financial plan must demonstrate that:

a. Revenues match or exceed expenses.

b. Adequate funds will be maintained for replacement of equipment.

c. Appropriate reserve accounts will be maintained.

d. The budget will be controlled, preferably by audits every 3 to 5 years.

e. The 5-year cash flow presented in Table A-1 is sufficient to properly operate the system.

All proposed improvements will be constructed completely and in accordance with the approved plans and specifications.

TABLE A-1 -- SYSTEM BUDGET

Applicant:_____ Completed by:_____ Date:_____

5 Year Projections	Year 1 Projected	Year 2 Projected	Year 3 Projected	Year 4 Projected	Year 5 Projected
Enter Year:					
1. Beginning Cash on Hand					
2. Cash Receipts:					
a. Total Revenues					
b. Connection Fees					
c. Interest and Dividend Income					
d. Other Income					
e. Total Cash Revenues (2a thru 2d)					
f. Transfers in/Additional Rev Needed					
g. Loans, Grants or other Cash Injection					
h. other - please specify					
3. Total Cash Receipts (2e thru 2h)					
4. Total Cash Available (1 + 3)					
5. Operating Expenses					
a. Salaries and wages					
b. Employee Pensions and Benefits					
c. Purchased Water					
d. Purchased Power					
e. Fuel for Power Production					
f. Chemicals					
g. Materials and Supplies					
h. Contractual Services - Engineering					
i. Contractual Services - Other					
j. Rental of Equipment/Real Property					
k. Transportation Expenses					
l. Laboratory					
m. Insurance					
n. Regulatory Commission Expenses					
o. Advertising					
p. Miscellaneous					
q. Total Cash O & M Expenses (5a + 5p)					
r. Replacement Expenditures					
s. Total O M & R Expenditures (5q + 5r)					
t. Loan Principal/Capital Lease Payments					
u. Loan Interest Payments					
v. Transfers Out					
w. Capital Purchases (specify)					
x. Other					
6. Total Cash Paid out (5s thru 5x)					
7. Ending Cash Position (4 - 6)					
8. Number of Customer Accounts					
9. Average Annual User charge Account users:(2a/8)					
10. End of Year Reserves					
a. Debt Service Reserve					
b. Bond Retirement Reserve					
c. Capital Improvement Reserve					
d. Replacement Reserve					
e. Total Reserves (10a thru 10 d)					
11. End of Year Operating Cash (7 - 10e)					

Self-Assessment for Capacity Development for New Systems

Name of System:_____

Type of system ownership (municipal, districts, homeowner assoc., co-op, etc)

_____

Is system for-profit or non-profit? _____ Formed under what statute? _____

Name of person in charge (Owner, Manager, President)_____

Address_____ Phone _____

Number of connections _____ population served _____

A. Financial

Are you on target with budgeted income and expenses? Yes No

From last audit are current total assets greater than your liabilities? Yes No

If not, do you have a plan to change the situation? Yes No

Do you have a long-range financial plan? Yes No

Are you following it? Yes No

Do you adequately fund depreciation or have other reserves? Yes No

Do you have a capital improvement plan Yes No

Financial controls (circle all that apply) Yes No

Monthly financial statements Yes No

Monthly review of financial statements by board, council or owner Yes No

Annual audit Yes No

Written financial policies Yes No

Do you review your rate structure annually? Yes No

Does your current rate structure produce income to cover?

Current expenses Yes No

Replacement costs Yes No

Reserves Yes No

Are all contractual obligations being met? Yes No

B. Management

Indicate your governance structure (i.e. elected board, council, appointed, sole ownership,etc)

_____

Are applicable by-laws, resolutions, ordinances or covenants up-to-date? Yes No

Date of last review? _____

Does governing body meet on a regular basis? Yes No

Are minutes of meetings available? Yes No

Is an annual budget prepared and reviewed at board or council meetings? Yes No

Do you have a federal ID number from the IRS? Yes No

Do you have written operational policies (i.e. connection, cut-off, payments etc)? Yes No

Are policies up-to-date? Yes No

Is the person in charge clearly defined? Yes No

If applicable, is there a staffing chart organizational chart (if applicable)? Yes No

Are there written personnel policies? Yes No

Are they up-to-date? Yes No

Is system in compliance with all state and federal laws? Yes No

C. Technical

What is your water source? Surface Ground Purchased

Are water rights sufficient and secured? (For Western states) Yes No

Do you have a source water protection plan? Yes No

If purchased, does your supplier have a source water protection plan? Yes No
Is the quantity of your water source adequate for the next five years? Yes No
Does your source meet or exceed SDWA standards? Yes No
Does or will it meet standards without extensive treatment? Yes No
If no, are you aware of :
What treatment is or will be required Yes No
Treatment costs? Yes No
Operator skills required? Yes No
Likely contaminants that may affect your system in the future? Yes No
Is your service area clearly defined? Yes No
Does your system have a plan for operations and maintenance?
(Examples: line flushing and storage tank maintenance) Yes No
Have all the certification requirements for operations been met? Yes No
Is your operator certified? Yes No
Is the system aware of the benefits of industry related service organizations such as state rural water associations? Yes No
Does the system calculate and control water loss? Yes No
Does your system have a conservation plan? Yes No
Does your system have accurate maps of distribution system? Yes No
Do your operators have the appropriate level of certification? Yes No
Do your system personnel attend appropriate and current training sessions? Yes No
Is your system required to have an approved emergency plan? Yes No
If so give date of last review:_____
Does your system have and use facility service manuals? Yes No
Have you corrected any deficiencies noted on your last sanitary survey? Yes No
Has your system had a violation of the SDWA in the last year? Yes No
Does your system periodically review safety programs?
(i.e. OSHA requirements, etc) Yes No
Does your system strive for quality service and to be responsive to customer needs? Yes No
If you had difficulty answering any question or answered "no" to any of these questions, we encourage you to contact the Montana Department of Environmental Quality or the nearest Montana Rural Water Systems representative. Your water system should formulate a strategy to resolve all issues that could not be answered positively

D. Asset Management

Do you have an up-to-date asset management plan? Yes No

The five-core-question framework of asset management is an excellent tool to begin or strengthen your asset management program. Please assess the following:

Asset Inventory:

- What is the current state of the utility's assets?
- Does the utility have all asset specification sheets to aid in creation of asset management plan?
- What does the utility own?
- Where is it?
- What condition is it in?
- What is the remaining useful life?
- What is its remaining economic value?
- What is the energy use?

Level of Service:

- What is the utility's required sustained level of service (LOS)?
- What are the utility's performance goals?
- What are the physical capabilities of the utility's assets?
- What is the demand by my stakeholders?
- What do regulators require?
- What is my actual performance?
- How will you measure performance?

Criticality:

- Which assets are critical to sustained performance?
- How can assets fail?
- How do assets fail?
- What are the likelihoods and consequences of asset failure?
- What does it cost to repair the asset?
- What are other costs that are associated with asset failure?
- What is the overall business risk based on probability and consequence of asset failure?
- Is there redundancy to reduce risk?
- Is the asset failures due to capacity, level of service, mortality or financial efficiency?

Life Cycle Costing:

- What are the utility's best "minimum life-cycle cost" capital improvement plan (CIP) and operation and maintenance (O&M) strategies?
- Is there a strategic plan for operating and maintaining the utility's assets?
- What alternative management options exist?
- Is a process, based on risk, in place to determine when to repair, rehabilitate or replace assets?
- Are you considering energy efficiency?
- Which are the most feasible for my organization?

Long-Term Funding:

- What is the utility's best long-term funding strategy?
- Do you have funding sources to provide the capital you need for O&M, capital replacement and energy efficiency improvement?
- Last date of rate assessment?
- Is our rate structure sustainable for our system's long-term needs?

Capacity Development Self-assessment for Existing Systems

PWSID No. _____
Project Name/Number: _____
Application Date: _____
Reviewer/Review Date: _____
[Instructions: Write in the appropriate response on the line adjacent to the checklist item (i.e. yes, no, NA or any other appropriate comment). Use comment areas at the end of checklist to explain as appropriate.]

A. Technical, Operational, and Maintenance Capacity Checklist

1. Maintains compliance with drinking water standards
(Title 17, Chapter 38, Sub-Chapter 2, ARM). _____
a. Is the system an EPA significant non-complier (SNC)? _____
b. Is the system currently under DEQ enforcement action? _____
2. Allows effective operation of the system in accordance with the approved plans and specifications, including record keeping method and system for reporting to the DEQ. _____
3. Allows effective operation free of major deficiencies as supported by most recent sanitary survey report? _____
4. Supplies adequate water, in terms of both quantity and quality _____
5. Complies with operating conditions presented in the engineer's design report. _____

B. Financial Capacity Checklist

1. Revenues match or exceed expenses. _____
2. Adequate funds will be maintained for replacement of equipment._____
3. Appropriate reserve accounts will be maintained._____
4. The budget is controlled by administrative oversight or regular audits _____
5. The 5-year cash flow presented in Table A-1, or the budget information submitted with the plan review application indicates a budget sufficient to properly operate the system. _____
6. All proposed improvements will be constructed completely and in accordance with the approved plans and specifications. _____

C. Managerial Capacity

1. System organization will promote efficient management of the system. _____
2. Adequate control of and accountability for the system by the owner(s), manager(s), and operator(s). _____
3. Adequate resources and accountability for regulatory compliance exist for the owner(s), manager(s) and operator(s). _____
4. Demonstrates an effective mechanism for dissemination of appropriate information to all customers and regulatory agencies. _____

Final Capacity Determination

The PWS demonstrates adequate technical, financial and managerial capacity to maintain compliance with drinking water standards.Yes No

If No, identify deficiencies. PWS must formally commit to correcting these deficiencies prior to receiving an approval for water system expansion or improvement.

Comments:

_____
_____
_____
_____
_____
_____

D. Asset Management

Do you have an up-to-date asset management plan? Yes No

The five-core-question framework of asset management is an excellent tool to begin or strengthen your asset management program. Please assess the following:

Asset Inventory:

- What is the current state of the utility's assets?
- What does the utility own?
- Where is it?
- What condition is it in?
- What is the remaining useful life?
- What is its remaining economic value?
- What is the energy use?

Level of Service:

- What is the utility's required sustained level of service (LOS)?
- What are the utility's performance goals?
- What are the physical capabilities of the utility's assets?
- What is the demand by my stakeholders?
- What do regulators require?
- What is my actual performance?
- How will you measure performance?

Criticality:

- Which assets are critical to sustained performance?
- How can assets fail?
- How do assets fail?
- What are the likelihoods and consequences of asset failure?
- What does it cost to repair the asset?
- What are other costs that are associated with asset failure?
- What is the overall business risk based on probability and consequence of asset failure?
- Is there redundancy to reduce risk?
- Is the asset failures due to capacity, level of service, mortality or financial efficiency?

Life Cycle Costing:

- What are the utility's best "minimum life-cycle cost" capital improvement plan (CIP) and operation and maintenance (O&M) strategies?
- Is there a strategic plan for operating and maintaining the utility's assets?
- What alternative management options exist?
- Is a process, based on risk, in place to determine when to repair, rehabilitate or replace assets?
- Are you considering energy efficiency?
- Which are the most feasible for my organization?

Long-Term Funding:

- What is the utility's best long-term funding strategy?
- Do you have funding sources to provide the capital you need for O&M, capital replacement and energy efficiency improvement?
- Last date of rate assessment?
- Is our rate structure sustainable for our system's long-term needs?

Guidance for Part A. Technical, Operational and Maintenance Capacity Assessment
To complete the above checklist, the DEQ project engineer may request additional information from the applicant. Suggestions for additional information that may be requested include:
1. A current operation and maintenance manual, if available, or a description of operation and maintenance procedures.
2. A description of the record keeping method and system for reporting to the Department.
3. A description of the sampling and analyses program to demonstrate compliance with drinking water standards (Title 17, Chapter 38, Sub-Chapter 2, ARM) for all sources, entry points, treatment, and distribution systems.
4. A description of staffing and training requirements to operate the system to maintain compliance with drinking water standards (Title 17, Chapter 38, Sub-Chapter 2, ARM).
5. Documentation of a safety program.
6. Documentation of an emergency plan and emergency operating procedures (e.g., in the event of a chemical spill or loss of power).

Guidance for Part B. Financial Capacity Assessment
To assist in completing the above checklist, the DEQ project engineer may request additional information from the applicant. Suggestions for additional information that may be requested include:
1. The financial information in Table A-1 completed for a 5-year period.
2. Documentation of O&M rates and capital improvement/replacement rates developed based on the information in Table A-1. Documentation of a capital improvement/replacement plan developed for a 20-year period and the rate set accordingly. Documentation of a reserve fund established and maintained to address future replacement of equipment based on anticipated replacement dates.
3. Customers should be metered. If customers are metered, demonstrate how the rates account for metering (cost of meters, cost of operator to read/maintain meters, how rates correspond to meter readings).
4. Documentation of connection/system development fee and basis for fee, if applicable.
5. Documentation of budgetary controls and audit schedule.
If the system is privately owned, documentation that the Department of Public Service Regulation has been contacted.

Guidance for Part C. Management Capability Assessment
To assist in completing the above checklist, the DEQ project engineer may request additional information from the applicant. Suggestions for additional information that may be requested include:
1. The name, address and telephone number of the owner(s). If ownership or control of the system is to change in the near future, such as in a subdivision where the developer will eventually relinquish control to the homeowners' association, provide a projected time line for change of ownership.
2. Administrative and management organizational charts. Define the functions and responsibilities of each administrative/managerial position. For example, if the organization has a secretary, provide a brief description of the secretary's responsibilities.
3. Plans for staffing the system with a certified operator and back-up operator. Provide the name of the operator if an operator has been selected. An operator should be available to operate the system even if the system has not yet become public. If the system is to be operated under contracted services, provide a copy of the contract.
4. A system or plan for maintaining records (including records of operation, service maintenance, and repairs), plans and specifications for construction, as-built drawings, O&M manuals, and compliance information. Preferably, an office should be dedicated for storing all information so it is readily accessible by the operator and manager(s) of the system.
5. A copy of the articles of incorporation, by-laws, or similar documents that:
a. Define the purpose of the responsible entity.
b. Describe the procedures for compliance with the requirements of the Secretary of State's c.

Office for creating and maintaining a non-profit association.
c. List membership and define membership rights (all lot owners should automatically become members unless they are not in good standing, which should be defined).
d. Define the format and schedule for meetings and requirements for quorums.
e. Describe the powers and duties of the board of directors.
f. Describe the process for transferring control of the system from the developer to the lot owners, where applicable.
g. Explain the procedures for amendment of the by-laws.
h. Confer authority to assess and collect fees for O&M, monitoring, personnel, capital improvements and equipment replacement.
i. Establish the service area of the responsible entity.
j. Confer authority to require water conservation practices, including metering.
k. Confer authority to require installation of water meters, and to own and maintain water meters, and the authority to bill according to water usage.
l. Confer authority to require installation of backflow prevention devices, and to own and maintain such devices.
m. Confer authority and define procedures for disconnection of service (nonpayment, refusal to provide meters or backflow devices or to allow access for maintenance of this equipment).
Also, provide policies on how delinquent accounts, system violations, fee changes, and customer complaints will be addressed. Please note that home owners' associations must file their articles of incorporation with the Secretary of State.
6. In the event that the responsible entity becomes insolvent, how will perpetuation of the system be maintained? Has a second party been considered for future ownership in the event that the responsible entity becomes insolvent?