

Appendix K
Asset Management Plan Assistance
for Public Drinking Water Systems

Introduction

America's Water Infrastructure Act of 2018 (AWIA) amended the Safe Drinking Water Act (SDWA) to require states to describe in their Capacity Development Strategy how they will encourage and assist public drinking water systems with developing asset management plans. This appendix to the South Carolina Capacity Development Strategy describes how the South Carolina Department of Health and Environmental Control (DHEC) will address this AWIA requirement.

An EPA Implementation Memorandum dated December 2, 2019 outlines the specific requirements in AWIA pertaining to asset management plans and a state's capacity development strategy. The specific requirements are as follows:

AWIA amended Section 1420 subsections (c)(2) and (c)(3) of the SDWA to have states describe how they will encourage public water systems to have asset management plans:

- Section 1420(c)(2) of the SDWA concerns the content that a state shall consider, solicit public comment on, and include as appropriate in the state's capacity development strategy. The AWIA amended this subsection to add a sixth consideration:
 - *(F) a description of how the state will, as appropriate—(i) encourage development by public water systems of asset management plans that include best practices for asset management; and (ii) assist, including through the provision of technical assistance, public water systems in training operators or other relevant and appropriate persons in implementing such asset management plans.*
- Section 1420(c)(3) of the SDWA concerns the content that shall be included in a report the state must submit to the Governor as well as how frequently the report shall be submitted. The AWIA amended this subsection to address the report the state submits to the Governor to read in its entirety as (new text is underlined):
 - *Not later than 2 years after the date on which a state first adopts a capacity development strategy under this subsection, and every 3 years thereafter, the head of the state agency that has primary responsibility to carry out this title in the state shall submit to the Governor a report that shall also be available to the public on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of public water systems in the state including efforts of the state to encourage development by public water systems of asset management plans and to assist public water systems in training relevant and appropriate persons in implementing such asset management plans.*

Strategy to Support Asset Management Plans for Public Drinking Water Systems

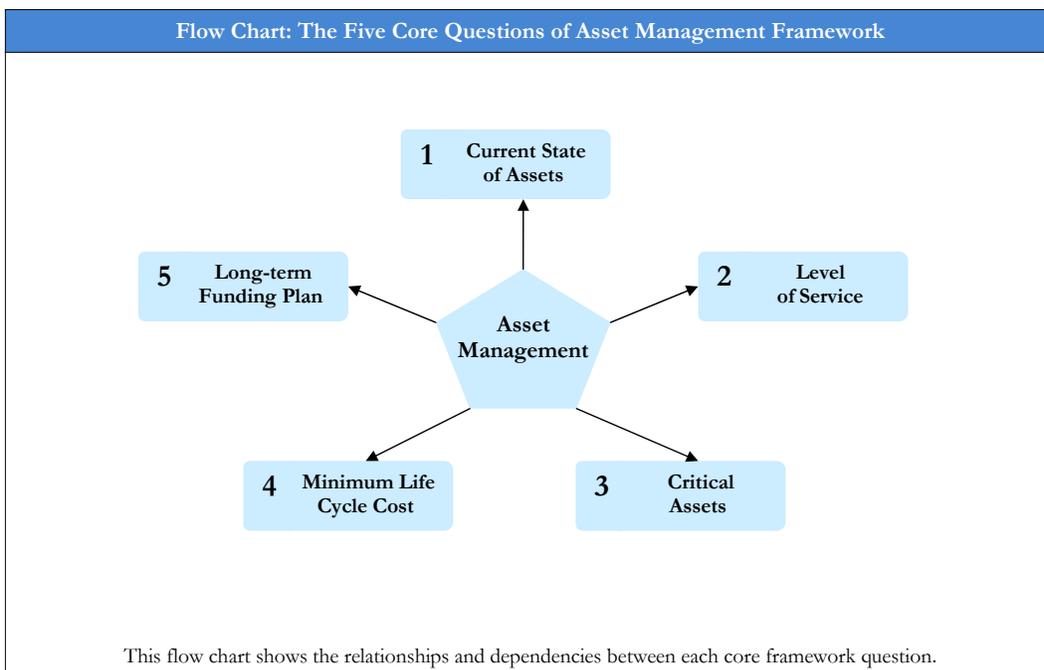
DHEC has and will continue to encourage and assist public drinking water systems with asset management planning and the preparation of asset management plans. DHEC activities to support asset management planning and plan development are listed below. The focus is on systems having an asset management plan and adopting asset management practices to improve and enhance the overall system capacity and sustainability.

Currently, DHEC is not proposing statutory or regulatory changes to require drinking water systems to have an asset management plan.

Asset Management Training

Since 2016, DHEC has used the Clean Water State Revolving Fund (CWSRF) and, more recently, the Drinking Water SRF (DWSRF) capitalization grants to fund asset management training workshops for small public wastewater and drinking water systems (population served less than 10,000) in the state. These activities are performed by a technical assistance contractor. DHEC plans to continue to use CWSRF and DWSRF capitalization grants to fund asset management training for small systems using a technical assistance contractor.

The asset management training workshops will continue to emphasize the benefits of asset management planning and having an asset management plan. The training curriculum includes all aspects of asset management planning including tools that systems can use to assist them with preparing an asset management plan. The training incorporates the best practices of asset management including the five core questions that EPA recommends a system consider and address when preparing an asset management plan. The five core questions are shown in the EPA diagram below:



Source: Asset Management: A Best Practices Guide, EPA 816-F-06-014, April 2008

In addition to the asset management training funded by the SRF program for small systems, asset management training opportunities are offered by other governmental agencies and water organizations in the state. Technical conferences in the state often include presentations about asset management planning for drinking water systems and the benefits of having an asset management plan. Asset management training and information provided by water organizations, presentations at technical conferences, and vendors promoting asset management tools are good sources of information about asset management practices and tools for larger public drinking water systems in the state (population served greater than 10,000). In general, the larger public drinking water systems have the resources and access to asset management information and tools needed to prepare an asset management plan.

An ongoing challenge that systems face is to maintain asset management plans and data after they have been initially developed. As more utilities develop asset management plans, the need to maintain these plans will only rise in importance. Asset management training can help in this regard as it emphasizes the importance of maintaining asset management plans after they have been developed.

Direct Assistance to Small Systems

In addition to the asset management training discussed above, CWSRF and DWSRF funds have and will continue to be used to fund a contractor to provide direct technical assistance to small public systems to assist with planning, data collection, and preparing asset management plans. Assistance with preparing asset management plans focuses on incorporating the five core questions recommended by EPA and discussed above. The technical assistance contractor also can provide direct assistance to small systems for other activities that can support asset management planning such as mapping system assets, leak detection testing to identify system assets in need of repair, rate setting to make sure capital resources are available to fund future repairs and upgrades, and to identify user-friendly and reasonably priced asset management tools (e.g., asset management software). Small systems are identified for direct assistance based on needs identified by the DHEC sanitary survey, monitoring data, or requests for assistance by the system. The technical assistance contractor may receive direct requests for assistance by a system or identify a system needing assistance during training sessions or system visits.

Two key obstacles to small systems preparing an asset management plan are lack of resources to guide the preparation of the plan and having the system information needed to prepare a plan. The direct assistance to small systems discussed in this section helps to address these obstacles.

A key obstacle to small systems implementing and maintaining an asset management plan is turnover of key leadership and staff positions. The direct assistance to small systems, while not addressing this directly, may have an indirect positive effect on this ongoing challenge as key staff are better equipped to manage their systems.

Funding for Asset Management Plans

The South Carolina DWSRF program offers funding to public drinking water systems to prepare planning documents including asset management plans. The program offers either low interest loans or principal forgiveness funds to public drinking water systems depending on factors such as the system size, median household income of the service area, and the system's ability to afford a DWSRF loan. A key obstacle to small and disadvantaged systems preparing asset management plans is lack of financial resources to prepare the plan. Providing principal forgiveness funding for small, disadvantaged systems to prepare asset management plans helps to address this obstacle.

Sanitary Surveys: Asset Management Data Collection and Outreach

DHEC will use the drinking water system sanitary survey process, which includes a system visit, to gather information about a system's status regarding asset management planning and to share information about asset management planning assistance. The DHEC sanitary survey form will be revised to include questions such as:

- 1) Does your system have an asset management plan?
- 2) Does your system have a capital improvement plan or similar financial plan to address the future costs of maintaining and replacing assets and updating the system to meet future customer demand and regulatory requirements?

The sanitary survey system visit will be used as an opportunity to provide information about the benefits of asset management planning and share information about available resources such as what is asset management planning including the five core elements, upcoming asset management training opportunities, direct assistance for small public systems interested in preparing an asset management plan, and the funding available for preparing asset management plans.

The asset management information collected during the sanitary survey will be used to identify systems in need of assistance and inform future resource needs and strategies to encourage and assist systems with preparing asset management plans. This data also can be used to identify progress made with getting systems to adopt asset management practices and prepare asset management plans.

Reporting

Activities conducted by DHEC each year to encourage and assist with the development of asset management plans for public drinking water systems will be included in annual Capacity Development Strategy reports and in the triennial reports to the governor. In addition to reporting on program activities, the report to the governor will also address the progress the program is

making on encouraging drinking water systems to do asset management planning and prepare an asset management plan.

Stakeholder Participation

Stakeholder input was requested from organizations in the state that work most directly with water systems, namely SC Rural Water Association (SCRWA), Southeast Rural Community Assistance Project (SERCAP), and the South Carolina chapter of the American Water Works Association (SCAWWA). These organizations represent large and small water systems and their members and customers include water system managers, operators, and water industry professionals. These are the organizations and individuals most qualified to provide meaningful input regarding asset management planning for water systems in South Carolina.

SCRWA, SERCAP, and SCAWWA shared the draft Asset Management Assistance Plan with their staff and membership. SCRWA had no comments. SERCAP and SCAWWA provided comments, which have been incorporated into this document. The comments provided by SCAWWA came from members of the Joint Asset Management Committee of the Water and Environmental Association of South Carolina (WEASC) and SCAWWA.