


Many developments to public water systems begin with detailed studies in order to identify specific improvements required to meet current and projected water demands. In some cases, a master plan that analyzes the entire water system is warranted to project growth and recommend measures to meet needs well into the future. Evaluating alternative water sources with regard to water quality, treatment, and yield may also be required as populations grow larger and new sources are needed.

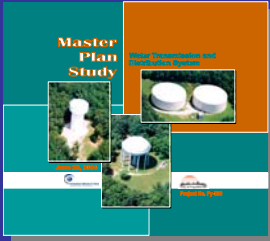
Since the early 1960s, McGoodwin Williams & Yates has been performing water supply and system studies and master plans. Working closely with the client, MWY begins with detailed research using the best available information and utilizes state-of-the-art hydraulic modeling software to analyze the water system.


The most important component of a study or master plan, however, is sound engineering judgement and experience. With over four decades of experience with master planning issues, MWY is recognized for its outstanding service to clients in comprehensive planning capacities, including recommendations for compliance with regulatory agencies as well as evaluations of financing alternatives for improvements.

The following are brief descriptions of several recent studies and master plans performed by MWY.

STUDIES AND MASTER PLANS

<p>Master Plan: <i>Springdale Water and Sewer Master Plan (ACEC Award Winner)</i></p> <p>Scope: 20-Year Master Plan for both the water and sewer system</p> <p>Contact: Rick Pulvirenti, P. E., Director of Engineering Springdale Water Utilities P. O. Box 769 Springdale, Arkansas 72765 PH: 479-751-5751</p>	
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<p>Master Plan: <i>Fayetteville Water Master Planning Study</i></p> <p>Scope: 20-Year Water Master Plan</p> <p>Contact: Ron Petrie, P. E., City Engineer City of Fayetteville 113 West Mountain Fayetteville, Arkansas 72701 PH: 479-575-8206</p>	
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<p>Master Plan: <i>Water Distribution System Master Plant Study and Transmission Line from Beaver Water District</i></p> <p>Scope: 20-Year Water Master Plan</p> <p>Contact: Britt Vance, Public Works Director City of Bentonville 115 West Central Bentonville, Arkansas 72712 PH: 479-271-3168</p>	
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SPRINGDALE WATER AND SEWER MASTER PLAN

Springdale, Arkansas

CLIENT:

Springdale Water and Sewer Commission

PROJECT SCOPE:

20-Year Master Plan for both the water and sewer system for the city of Springdale

(2007-2008 Engineering Excellence Award Winner from the American Council of Engineering Companies of Arkansas)

COMPLETION:

Water 2006

Sewer 2007

CONTACT PERSON:

Rick Pulvirenti, P.E.

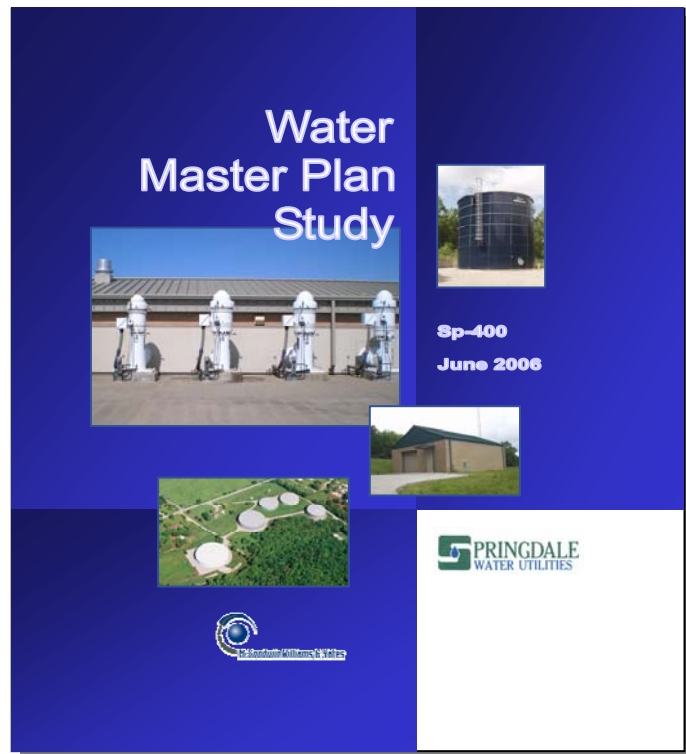
Director of Engineering

Springdale Water Utilities

P. O. Box 769

Springdale, Arkansas 72765

479-751-5751



PROJECT DESCRIPTION:

The Springdale Water and Sewer Commission selected MWY to provide a detailed update of the previous water master planning study for the city's water system as well as to provide a new master planning study for the sewer system.

The scope of the water study included updating the hydraulic model of the water system, using H₂ONET software by MWHSoft. Demands were based on the city's actual billing records and were geocoded into the computer model. Projected demands for design horizons up to 20 years were calculated based upon population and demographic projections, and recommendations were made to alleviate current low-pressure areas as well as to improve the system to accommodate future growth.

The sanitary sewer study consisted of constructing a dynamic computer model of the sanitary sewer system, including gravity lines, force mains, and lift stations. Flow monitoring was performed to identify areas of significant infiltration and inflow, and recommendations were made for necessary improvements to accommodate future growth. In addition, the water utilities' standard water and sewer specifications were reviewed and updated.

FAYETTEVILLE WATER MASTER PLANNING STUDY

Fayetteville, Arkansas

CLIENT:

City of Fayetteville

PROJECT SCOPE:

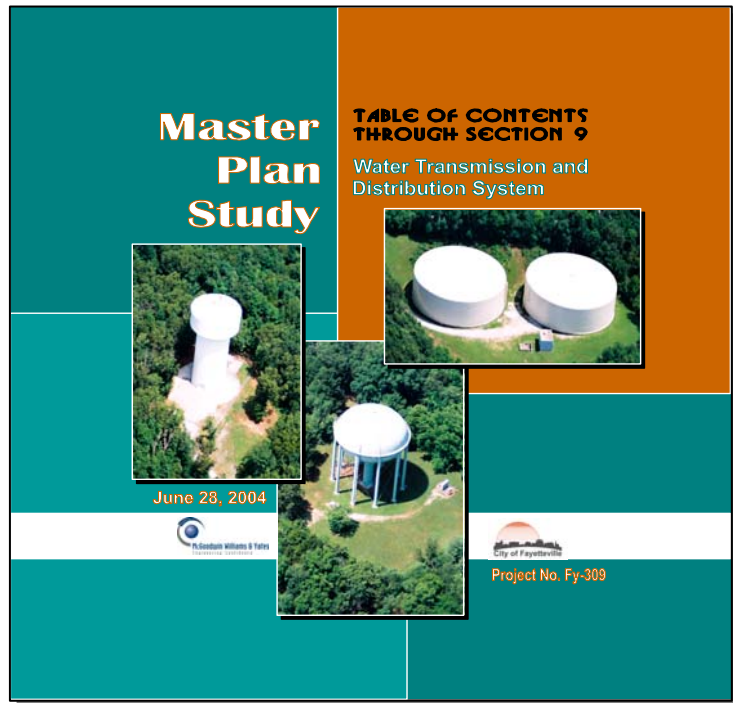
20-Year Water Master Plan

COMPLETION:

2004

CONTACT PERSON:

David Jurgens, P.E.
Water & Wastewater Director
City of Fayetteville
113 West Mountain
Fayetteville, Arkansas 72701
479-575-8318



PROJECT DESCRIPTION:

In 2002, the city of Fayetteville selected MWY to provide a detailed update to the previous water master planning study that was completed in 1996. The purpose of the study update was to identify and model new facilities added since the original study, identify additional weak points within the existing distribution and transmission facilities, and identify additional improvements that may be required to meet the projected 20-year water needs. The study also included updating the existing computer model of the water distribution system. The model's demand values were based on the city's actual billing records. The software used for this project was H₂ONET by MWHSOFT. In the interim, MWY has assisted the city in analyzing numerous developments and recommending improvements to accommodate the impact, domestic and fire flow demands, each of these developments have upon the city's distribution system. MWY is currently working with city officials to update the plan based on the evolving needs of the city.

WATER DISTRIBUTION SYSTEM MASTER PLAN STUDY and TRANSMISSION LINE FROM BEAVER WATER DISTRICT

Bentonville, Arkansas

CLIENT:

Bentonville, Arkansas

PROJECT SCOPE:

20-Year Water Master Plan

COMPLETION:

September 2002

CONTACT PERSON:

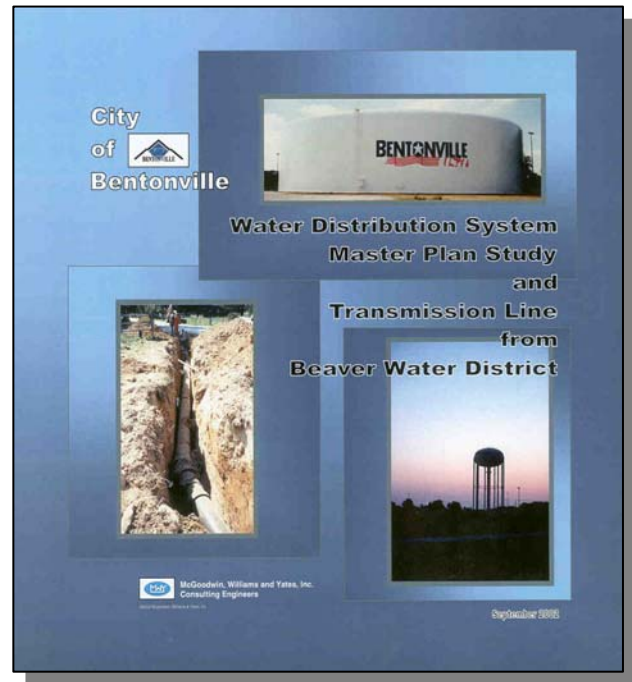
Britt Vance, Public Works Director

City of Bentonville

115 West Central

Bentonville, Arkansas 72712

PH: 479- 271-3168



MWY performed a 20-year master plan study of the Bentonville Water System. The scope of work included a hydraulic computer model of the water system, recommendations for fire flow improvements, identification of low pressure areas, recommendation of immediate, short term and long term system improvements within the system, including elevated storage. The scope also included an analysis of current water transmission capabilities and a recommendation for future transmission lines from Beaver Water District, including preliminary route selection.

MASTER PLAN STUDY FOR SHORT-TERM AND LONG-TERM WATER TREATMENT IMPROVEMENTS

Carroll-Boone Water District

CLIENT:

Carroll-Boone Water District

PROJECT SCOPE:

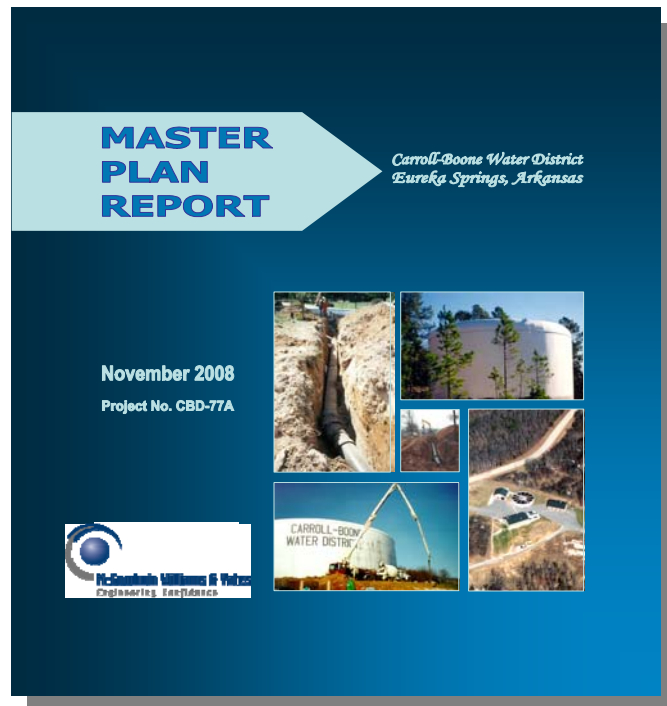
20-Year Water Master Plan

COMPLETION:

November 2008

CONTACT PERSON:

John Summers, Plant Manager
11510 Hwy. 187
Eureka Springs, Arkansas 72631-8995
PH: 479-253-7269



MWY was authorized by the Board of Directors of the Carroll-Boone Water District (CBWD) to perform a 20-year master plan study of the CBWD water system. The scope of work included a hydraulic computer model of the water system, projection of water demands and recommendation of immediate short-term and long-term improvements in the areas of water treatment, transmission and storage facilities as required to accommodate future needs to serve the customers of the CBWD.