

2014
ANNUAL
REPORT

Springfield

Water and Sewer
Commission



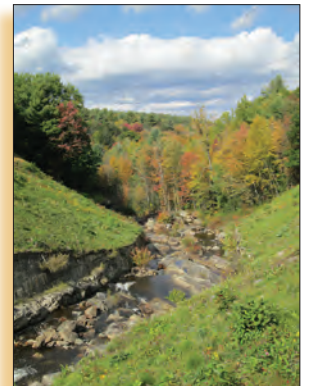
Water Center



Springfield, Massachusetts

Front Cover Photos

Borden Brook Spillway



Borden Brook Gatehouse

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Mission Statement

Our mission is to provide an adequate uninterrupted, high-quality supply of water to our customers, to collect and treat wastewater, and return clean water to the environment.

While fulfilling our mission, we strive to:

- Conserve and protect our reliable, high-quality water supply for present and future generations
- Meet or surpass public health standards, environmental standards, and support fire protection
- Operate, maintain, improve, and manage our water and wastewater infrastructure in a cost-efficient manner
- Manage finances to support Commission needs and maintain reasonable water and wastewater rates
- Maintain an adequate, safe, and professional workforce
- Understand and respond to customers' expectations for service

Dear Mayor and City Council Members:

The Springfield Water and Sewer Commission is pleased to present its Fiscal Year 2014 (FY 14) Annual Report. In FY 14, the Commission continued to provide water and wastewater services to 250,000 regional residents in its day-to-day operations. Dependable water and wastewater services are crucial to maintaining public health, fire protection, economic development, and a high quality of life in our region. We are committed to providing these services to the City of Springfield and surrounding communities in a responsible, efficient, and sustainable manner.

This report describes the water and wastewater systems, presents statistical data on work that has been completed during the fiscal year, and provides updates on capital improvement projects, daily operations, and accomplishments achieved by the Commission.

In August 2014, a significant water main break occurred at our Provin Mountain facility in Agawam, causing the shutdown of a 60-inch transmission main for emergency repairs. This precipitated a water-use restriction where we asked the communities of Springfield, Ludlow, Agawam, Longmeadow, and East Longmeadow to stop all outdoor water use, and reduce any unnecessary indoor water use. This restriction was necessary to ensure sufficient flow of drinking water and fire protection to the five communities while repairs were ongoing. Repairs were completed, the pipeline was brought back online, and the water use restriction was lifted within 72 hours. Many employees and contractors worked nonstop over the course of three days to make the repairs, support field crews, maintain our daily operations, and communicate with the public. Compliance with the water-use restriction allowed the Commission to supply reliable water service to all five communities while repairs were completed. We are thankful for the support we received from the community during this emergency situation.

At West Parish Filters (WPF) Water Treatment Plant, a project to upgrade the SCADA (Supervisory Control and Data Acquisition) system was substantially completed. Treatment Plant Operators use the SCADA system to control treatment processes, monitor operations, collect data, and produce reports. The upgraded system brings improved functionality, capacity, and redundancy, and gives Operators the ability to control operations from multiple locations throughout the treatment plant. The project cost is estimated at approximately \$1.5 million and is expected to be completed in early FY 15.

The Commission continued to invest in infrastructure, replacing or rehabilitating water and sewer main pipe within multiple streets in the City of Springfield. In FY 14, the Commission completed a project to replace approximately 4,150 feet and rehabilitate approximately 330 feet of sewer main pipe on Pine Street, Thompson Street, and Ingersoll Grove at a final cost of approximately \$2.6 million. The Commission also kicked off a project to make infrastructure improvements at 21 locations throughout the City. This project consists of replacement of 9,950 feet and rehabilitation of 2,880 feet of sewer main pipe, as well as replacement of 9,640 feet of water main pipe. The estimated cost of this project is \$7 million and the project is expected to be completed in 2015.

Springfield Water and Sewer Commissioners (from left to right):
William Leonard, Daniel Rodriguez, and Vanessa Otero.



Construction began on the South Transmission Water Main Replacement Project in September 2014. The South Transmission

Main, installed in 1928, carries water from the Provin Mountain Storage Tanks to the distribution system that delivers water to Springfield and surrounding communities. This pipeline is vital to providing dependable and uninterrupted water service to the region. The project, which will span multiple years, consists of replacing the six-mile pipeline from Provin Mountain to the Route 5 rotary as well as the installation of 11 valves, 13 air valve chambers, and 12 drainage areas through multiple wetlands. The project cost is estimated at \$24 million. Once completed, the new pipeline is expected to reliably supply water for the next 80 to 100 years.

In 2014, the Commission continued work to reduce Combined Sewer Overflows (CSO) with the substantial completion of the Washburn Street CSO project. This work is expected to reduce discharges to the Connecticut River by approximately 52 million gallons per year. The total project cost is estimated at \$20 million. The Commission also submitted its Integrated Wastewater Plan (IWP) to the state for review in accordance with the Massachusetts Environmental Policy Act. Development of the comprehensive plan was mandated by the U.S. Environmental Protection Agency (EPA) in order to define a strategy for CSO compliance with federal Clean Water Act requirements. The IWP seeks to balance regulatory compliance with responsible and sustainable investment in the Commission's wastewater infrastructure. Critical components of the plan include a detailed CSO alternatives analysis, a long-term Capital Improvement Plan for wastewater and water functions, and a financial-capability assessment and affordability analysis that determines implementation scheduling.

In FY 14 the Commission responded to 49 main breaks, inspected 3,850 hydrants, operated 3,717 valves, flushed 105 miles of pipe, swabbed 16.6 miles of pipe, installed 4,950 water meters, performed over 51,000 water quality tests, responded to 815 sewer backups, performed 2,626 mark-outs for water and sewer services, answered between 15,000 and 20,000 customer inquiries, and the Ludlow Reservoir hosted approximately 32,000 visitors. West Parish Filters produced 10.9 billion gallons of water and the Wastewater Treatment Facility cleaned 14.6 billion gallons of wastewater.

The Commission is committed to meeting our responsibility to reliably serve our consumers, renew our infrastructure, comply with environmental laws and regulations, and conserve and protect our water resources for future generations, all while maintaining the lowest possible rates.

If you have any questions related to this report please contact the Springfield Water and Sewer Commission at 413-452-1300.

Sincerely,

Daniel Rodriguez, Chairman; William Leonard, Commissioner; and Vanessa Otero, Commissioner

Awards and Achievements

Comprehensive Annual Finance Report Award

As a public entity, the Commission is required to complete financial reports in accordance with MA General Laws Chapter 40N. The Commission opted to complete and submit a Comprehensive Annual Financial Report (CAFR) for fiscal year 2013. The CAFR contains additional financial information, covers a longer time period, and goes beyond what is required by law. The FY 13 CAFR earned the Commission a Certificate of Achievement for Excellence in Financial Reporting award from the Government Finance Officers Association, the highest form of recognition in governmental financing and accounting. This is a national award that is rarely earned the first year a CAFR is submitted, making it all the more significant.



Information Technology

In 2013, the Commission identified the need to replace its legacy phone system, which had become increasingly difficult to maintain due to its age. Early in 2014, a Request for Proposals (RFP) was released to aid in the selection of a qualified vendor for the procurement and installation of a "Voice over Internet Protocol" (VoIP) Telephony System. A selection committee reviewed the responses to the RFP and made a recommendation as to which proposal would be most advantageous for the Commission. This selection process resulted in a contract with Carousel Industries for the procurement and installation of an Avaya VoIP Telephony System at the Commission's primary locations. Installation of the new phone system is scheduled to take place in FY 15. The new system will provide increased functionality, reliability, and redundancy, resulting in an improved customer experience.

Geographic Information Systems

The GIS Group routinely aids a variety of Commission departments with ongoing projects related to assets, mapping, and GIS data. In August 2014, the Group completed a 3D survey to aid in remediation of the large main break at the Provin Mountain facility in conjunction with the Massachusetts Department of Environmental Protection (MassDEP) and the Engineering Firm CDM Smith. Performing this work primarily in-house allowed for more accurate and timely results at a substantial cost savings.

The GIS team has played an integral role in the ongoing implementation of the new asset management system, VUEWorks. In addition, the GIS database is now the central clearinghouse for fixed assets and location data Commission-wide. By cross referencing a multitude of datasets throughout the Commission, GIS is now the most accurate reserve for this type of data. The benefit of this is that it is easily accessible by employees with internet access through the new and improved web map, as well as through VUEWorks.

These accomplishments will facilitate the completion of plans to incorporate data related to transmission pipelines that run west of the Connecticut River into GIS. This will enable the GIS Group to begin modeling the system for remediation and planning, potentially identifying assets in need of repair before they fail.

Springfield Preservation Trust Award

Each year, The Springfield Preservation Trust honors the people and organizations that are helping to restore historic structures in the City of Springfield through their Preservation Awards. These awards are given to properties that have successfully maintained or restored the historic look of a building in the City.



In FY 14, the Commission was recognized for its stewardship of the Joseph J. Superneau Operations Center, which was originally built in 1913 for the Springfield Water Department. The facility was renovated in a manner that restored and preserved the structural and visual integrity of the building.



Joseph J. Superneau Operations Center

The Commission Supports Economic Development

The Commission's Engineering and Technical Services Group reviews new development and redevelopment projects submitted for connection to the water and sewer systems. In order to protect the integrity of the water and sewer systems, projects must comply with the Commission's Rules and Regulations. Each year, over 100 development projects are reviewed, ranging from large-scale development to small, single-family homes. The following are some major projects reviewed in the Fiscal Year 2014.

Commission staff reviewed the designs and inspected the water and sewer services for several commercial and industrial redevelopment sites in Springfield:

Alwin Place Subdivision

The Commission reviewed proposed water and sewer main extensions and services to serve new homes in an eight lot subdivision in the 16 Acres neighborhood.

Signal Hill Circle

The Commission reviewed plans to extend the sanitary sewer main to serve 5 new homes in East Forest Park.

100 Grochmal Avenue, Western Mass Fire Training Facility

The Commission reviewed new water services for redevelopment of the former Springfield Fire Training Facility which has become the Commonwealth of Massachusetts Department of Public Safety, Western Mass Fire Training Facility.



Burn Building at Western Massachusetts Fire Training Facility (photo courtesy of mass.gov)

871 East Columbus Avenue, Hampton Inn Suites

The Commission reviewed water and sewer services for the new Hampton Inn Suites in the South End Neighborhood of Springfield.

376 Birnie Avenue, Commercial Building

The Commission reviewed the replacement of existing water services for a commercial building that was rehabilitated for new use.

100 Congress Street, Dunkin' Donuts

The Commission reviewed water and sewer services for the redevelopment of a site for a new Dunkin' Donuts location.

2808 Main Street, PVTA Bus Wash

The Commission reviewed plans related to the upgrade of bus washing equipment at the main bus station in downtown Springfield.

1193 State Street, Wash N Go

The Commission completed review of water and sewer services for a new Wash N Go car wash.

632 State Street, Restaurant Site

The Commission reviewed plans for the installation of a new grease interceptor.

644 State Street, Family Dollar Store

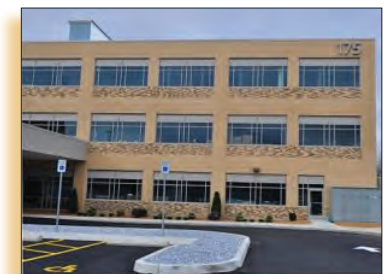
The Commission completed review of water and sewer services for a new Family Dollar Store and other retail space that opened.

389 Main Street, Indian Orchard, Pafumi Auto Sales

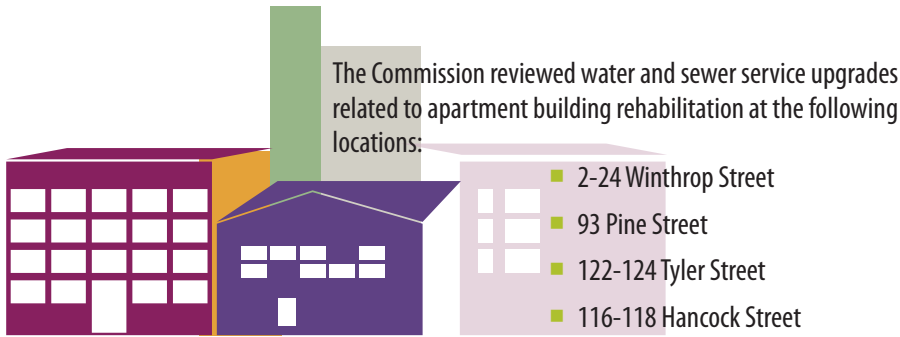
The Commission reviewed water and sewer services related to the redevelopment of a commercial building for a car dealership.

175 Carew Street, Medical Building

The Commission reviewed water and sewer upgrades for a new medical building that houses various medical practices.



Medical Building at 175 Carew Street



Commission staff worked on the review of design and inspection of water and sewer services for several commercial and industrial re-development sites in Ludlow:

Ludlow Municipal Complex on Chestnut and Winsor Streets

The Commission reviewed plans related to a fire suppression service upgrade.



483 Holyoke Street, Commercial Building Development

The Commission reviewed the proposed design of water and sewer services for a commercial building that is in development.

664 Center Street, Gas Station

The Commission reviewed the proposed design of water and sewer services for a new gas station currently in development.



Camp Wilder Park

Commission staff worked on the following projects for the City of Springfield and the Springfield Redevelopment Authority:

Located at 1476 Parker Street, the City Parks Department made improvements to the parks' facilities, and the Commission reviewed plans related to water service upgrades.

Central High School

The City installed an addition to the current building at 1840 Roosevelt Avenue. The Commission worked with the designer for the project to relocate an existing water main in the site.



Central High School Construction (photo courtesy of Masslive)

Elias Brookings Magnet School

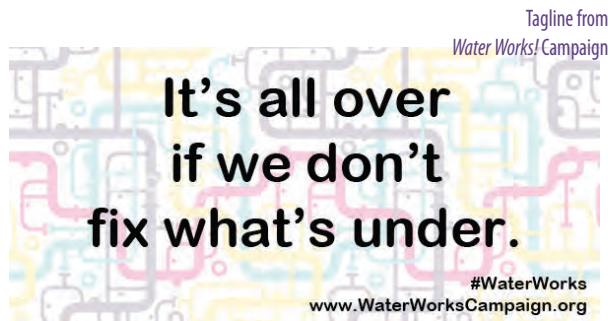
The City rebuilt the school at 433 Walnut Street after complete destruction of the original building in the 2011 tornado. The Commission completed review of plans for water and sewer services to the new building.



Commission staff continued to review proposed MassDOT roadway and intersection improvement projects for potential impact to the Commission's water and sewer infrastructure. These projects generally take 3 to 5 years from design to construction. In FY 14, the Commission reviewed the initial plans for a roadway improvement project in the North End of Springfield.

What is Water Worth to You?

In FY 14, the Commission launched its educational campaign, "What is Water Worth to You?" to educate the public on the current challenges water systems face, and to highlight the importance of water and wastewater services to our daily lives. This campaign was launched in conjunction with a number of national campaigns meant to highlight the need to make improvements to the water infrastructure in America including *The Value of Water Coalition* and the *Water Works! Campaign*.



Facing Aging Infrastructure and Regulatory Challenges

A network of hundreds of miles of water and sewer pipe lies beneath our streets. In combination with reservoirs, pumping stations, and water and wastewater treatment facilities, these pipes bring clean water into homes and businesses, and they carry wastewater to the treatment plant to be cleaned and returned to the environment. Having access to these services is vital for public health, environmental protection, economic development, and quality of life.

Today, water utilities are facing hefty challenges that are unique to our generation. Much of the underground water and sewer infrastructure has reached the end of its life and is in need of upgrade and replacement. In order to continue to provide reliable service and maintain compliance with regulatory mandates, the Commission must commit to a significant investment of time and resources.

Springfield is not alone – regionally and nationally, many other utilities face these same challenges. In February 2012, the Commonwealth of Massachusetts Water Infrastructure Finance Commission published a report estimating the funding gap for needed water and wastewater investments at \$21.4 billion. This doesn't include the funding gap for necessary stormwater investments.

Challenge #1: An Aging Infrastructure

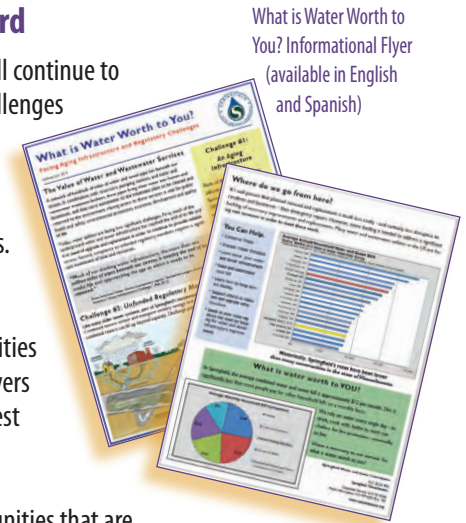
Parts of the water and sewer infrastructure in the City of Springfield date back to the late 1800s. The pipes are aging and in need of repair and replacement.

Challenge #2: Regulatory Mandates

Like many older systems, part of Springfield's wastewater collection system is composed of combined sewers, which have overflow points called Combined Sewer Overflows (CSOs). The US Environmental Protection Agency (EPA) has mandated that overflows from CSOs be reduced. The Commission has been working to reduce CSOs since 2003 and will continue to work toward this end for the next 20 years and beyond.

Moving Forward

The Commission will continue to highlight these challenges and educate the public on the value of water and wastewater services. The Commission is vigilant in pursuing financing opportunities that benefit ratepayers including low interest state revolving loans and principle forgiveness opportunities that are available. The Commission continues to meet with federal and state regulators and legislators to emphasize the importance of additional funding, extended time to plan and construct projects, and to request regulatory relief for CSO projects.



Water Main Breaks in FY 14			
Month	No. of Breaks	Month	No. of Breaks
July 2013	1	January 2014	11
August 2013	0	February 2014	9
September 2013	2	March 2014	5
October 2013	1	April 2014	3
November 2013	3	May 2014	4
December 2013	8	June 2014	2
TOTAL			49

Engineering and Capital Projects

(continued from previous page)

Infrastructure Improvements

In 2009, the Commission initiated a program to assess and map the wastewater collection system. Since the start of the program, the Commission has been able to assess more than half of the wastewater collection system and generate a Prioritized Infrastructure Improvements list, ranking assets by their condition along with risk and consequence of failure. The Commission contracted with Fay, Spofford & Thorndike (FST) to initiate the design and construction of infrastructure improvement projects stemming from the list. In FY 14, the Commission initiated and completed several improvements to the wastewater collection system. In some instances, improvements were made to the water distribution system in conjunction with the wastewater system upgrades when warranted by the age and condition of the water main pipe. This combination of work resulted in cost savings for the Commission and renewal of aging infrastructure.

Pine Street, Thompson Street, and Ingersoll Grove Sewer Replacement Project

In FY 14, the Pine, Thompson, and Ingersoll Grove Sewer Replacement Project was completed. This project, which spanned from FY 13 to FY 14, consisted of replacement of 4,150 feet of sewer mains and 1,500 feet of sewer laterals, trenchless rehabilitation of 350 feet of sewer mains, trenchless rehabilitation of 4 manholes, and installation of 27 manholes. Work was completed at the following locations:

- Pine Street from Cedar Street to Walnut Street
- Thompson Street from State Street to Worthington Street
- Ingersoll Grove from Worthington Street to Florida Street

The final project cost was approximately \$2.6 million.

Sewer and Water Infrastructure Improvements – 2014

In FY 14, the Commission began a project to construct infrastructure improvements at 21 locations throughout the City. This project consists of replacing 9,950 feet of sewer mains and 3,500 feet of sewer laterals, trenchless rehabilitation of 2,880 feet of sewer mains, trenchless rehabilitation of 35 manholes, installation of 55 manholes, replacement of 9,640 feet of water mains, and replacement of 2,600 feet of water service pipe.

Improvements are ongoing at the following locations:

- Allen Street from #9 Allen Park Road to #31 Allen Street, and from Roosevelt Avenue to Whittum Avenue
- Andrew Street from #42 Andrew Street to #20 Andrew Street
- Armory Street from Magazine Street to #25 Armory Street
- Belmont Avenue from Fort Pleasant Avenue to #102 Belmont Avenue
- Central Street from Maple Street to Pine Street
- Chalmers Street from Sumner Avenue to #37 Chalmers Street
- Cross Street from Main Street to Willow Street
- McKnight Street from Sherman Street to #41 McKnight Street



Contractor crews working on Walnut Street



Contractor crews working on Walnut Street

- Middlesex Street from Norfolk Street to King Street / Bristol Street
- Queen Street from Walnut Street to Hancock Street
- Ripley Place from #73 Saint James Avenue to #18 Ripley Place
- Saint James Avenue from #175 Saint James Avenue to #73 Saint James Avenue
- Sherman Street from Bay Street to McKnight Street
- Sumner Avenue from #1173 Sumner Avenue to Powell Avenue, from Allen Street to Dayton Street, and from Greenleaf Street to Oakland Street
- Walnut Street from Charter Avenue to #470 Union Street, and from Oak Street to Pine Street
- Wellington Street sewer extending into Springfield College Campus
- Westminster Street from Saint James Avenue to #112 Westminster Street

This project is expected to be completed in FY 15. The estimated cost of the project is \$7 million.

South Transmission Main Replacement

The Commission has three main transmission pipelines that carry water from the Provin Mountain Storage Tanks to the distribution system that delivers water to Springfield and Ludlow as well as Agawam, Longmeadow, and East Longmeadow. The southernmost of these pipelines, a 54- and 48-inch steel main installed in 1928, delivers water to Agawam prior to crossing the Connecticut River. The reliability of this pipeline is vital to providing dependable and uninterrupted water service to the region.

In 2010-2011, emergency improvements were made to a section of the south transmission main under and adjacent to the Connecticut River. The improvements consisted of slip-lining two sections of 36-inch pipe, and cleaning and cement-lining two sections of 48-inch pipe. The final project cost for these repairs was \$6.6 million.

While these emergency improvements were ongoing, a leak detection survey, internal inspection, and lab analysis of the transmission main were performed. These studies identified porosity, poor weld quality, and corrosion issues with the pipe.

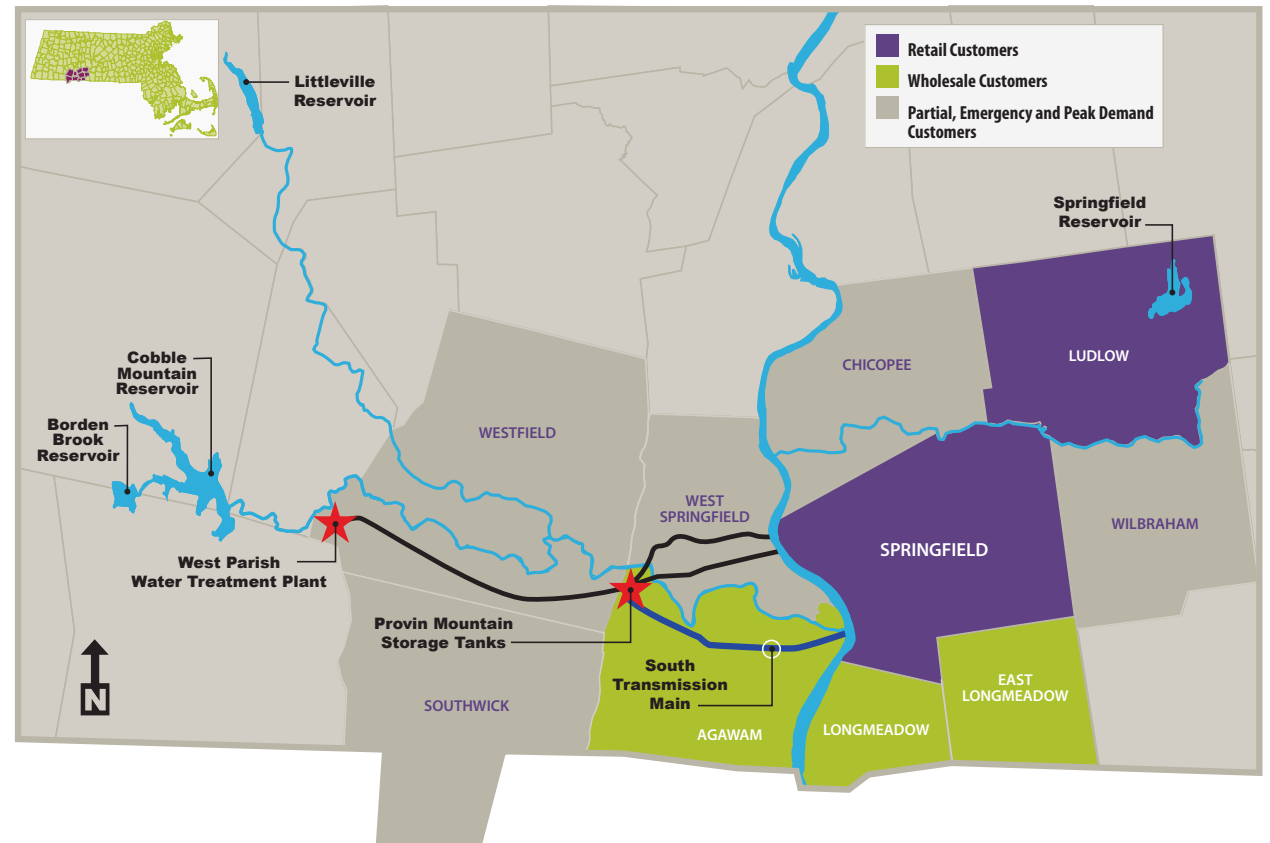
In November 2012 there was a large rupture in the upper section of the 54-inch south transmission main. In response to the rupture, the Commission performed emergency repairs and initiated the planning process for a full replacement of the six-mile-long pipeline.

In preparation of the project, the Town of Agawam installed a 24-inch water main and larger connection to the Commission's middle transmission main to meet their average day demand while the 54- and 48-inch main is shut down for replacement. The Commission also completed a vegetation removal project to clear the path of the pipeline in preparation of the full replacement project.

The project was issued for bids in early 2014 and was awarded to Baltazar Contractors, Inc. of Ludlow, MA. Construction began in September 2014 as anticipated. The project, which will span multiple years, consists of replacing the six-mile pipeline from Provin Mountain to the Route 5 rotary, as well as the installation of 11 valves, 13 air valve chambers, and 12 drainage areas through multiple wetlands. The project cost is estimated at \$24 million.



First section of 54" pipe installed



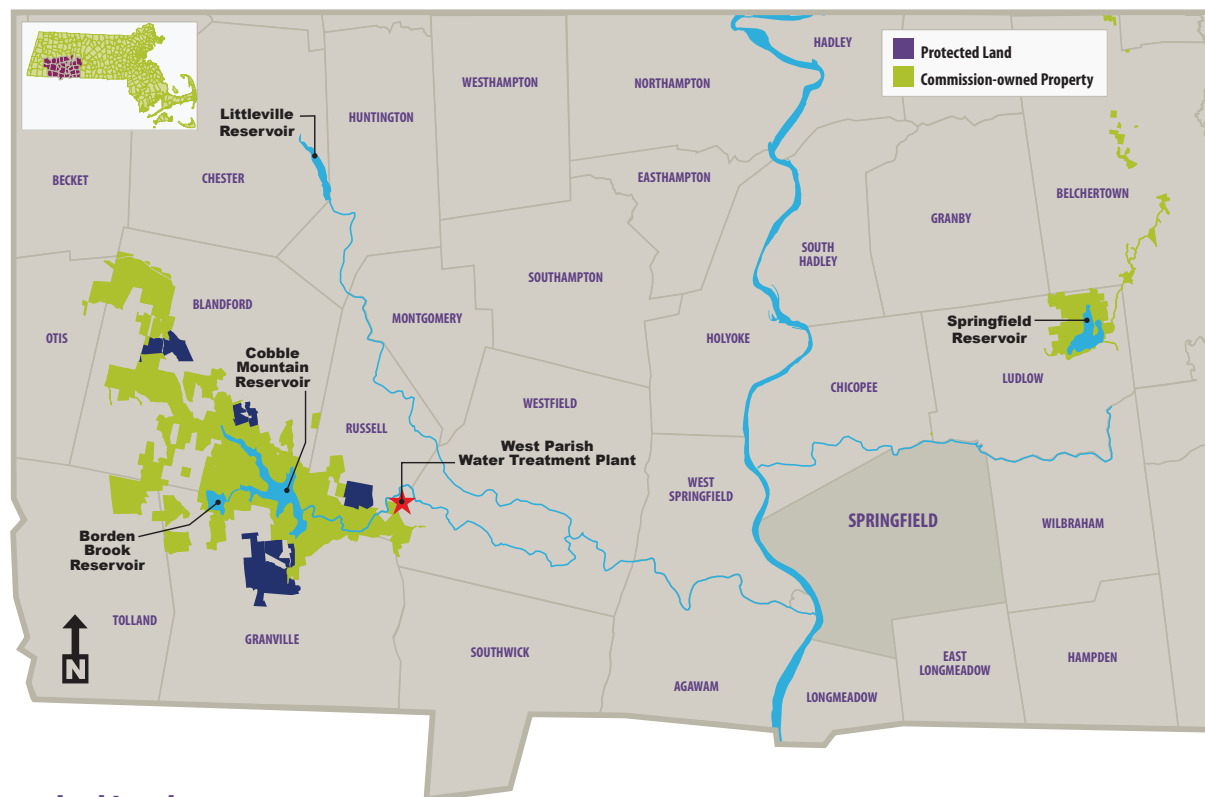
Watershed Protection

Watershed Overview

The Little River watershed is the source of our drinking water. The watershed encompasses over 31,000 acres (48.5 square miles) and includes portions of Becket, Blandford, Granville, Otis, Russell, Tolland, and Westfield. The Commission owns two large waterbodies in the Little River watershed: Borden Brook Reservoir, which covers an area of approximately 250 acres, and Cobble Mountain Reservoir, which covers an area of approximately 1,035 acres. In addition, the Commission owns approximately 3,100 acres of other small ponds, stream channel corridors, and recurrently flooding wetlands. All these waterbodies, streams and wetlands are fed by innumerable perennial and intermittent streams that drain the watershed. The Commission protects the watershed through a combination of strategies including land ownership, land management, and outreach to other land owners and communities in the watershed. The Commission's staff monitors the watershed on a daily basis.



Black bear walking across field in watershed



Watershed Land

The Commission owns and manages over 15,500 acres of land associated with the Little River water supply. During Fiscal Year 2014, the Commission acquired 43 acres of land in the town of Blandford and 50 acres in the town of Granville for the purpose of water supply protection. The acquisition of the 43-acre Blandford parcel secured protection of the south branch of Sugar Brook, a direct tributary to Borden Brook Reservoir. The acquisition of the 50 acres in Granville protected land directly adjacent to Borden Brook Reservoir. The Commission's property boundaries are clearly marked with blue paint on trees and metal placards.

In addition, the Commission has access to a stand-by water supply in the Littleville watershed and an emergency water supply in the Ludlow-Jabish Brook watershed. The Littleville watershed was developed in 1965 and has the ability to supply over 15 million gallons of water per day. The watershed has been protected through the efforts of federal, state, and NGO land conservation



Cobble Mountain Reservoir

programs, and those efforts have resulted in the permanent protection of approximately 44% of the watershed. The Ludlow-Jabish Brook watershed, located in Belchertown and Ludlow, was initially developed in 1875 and was actively used as a water supply until the 1990s, when it was taken off-line and set aside as an emergency water supply. The Commission owns and manages approximately 2,200 acres of land in this watershed including the Springfield Reservoir in Ludlow. Public access for passive recreation is allowed on approximately 1,700 acres at the Springfield Reservoir. The Commission has a full time staff on site that is responsible for maintaining the facility and for preserving the safety of both the visitors and the water supply.

Community Outreach

The Commission has participated with the state, local communities, and land owners to protect land in the Little River watershed. Over the years, the Commission has helped protect approximately 1,400 acres of land through conservation restrictions and restrictive covenants that limit land uses in order to protect the water supply. Those properties are periodically monitored by Commission staff for compliance with the terms of the conservation agreements. As part of its outreach effort, the Commission has over 1,000 acres of land open to the public for passive recreation. Opening those areas to the public has also helped alleviate trespassing on the more sensitive areas of the watershed. In addition to the Commission's land protection efforts, approximately 1,730 acres of forest land in the watershed are permanently protected as open space by the Commonwealth of Massachusetts, local municipalities, and NGO conservation organizations.



Removing Hemlock Trees Along Road

Watershed Operations

The Commission maintains a staff at Borden Brook Reservoir to perform dam maintenance, grounds maintenance, and road maintenance and repair. In the course of their duties, the staff makes note of conditions in the watershed and reports their findings to management. Forest roads are critical to managing the forest and require periodic maintenance so that they are passable when needed. This includes maintaining proper drainage and erosion control systems.

Forest management is an important aspect of watershed maintenance. Keeping the tree canopy over forest roads open to sunlight increases evaporation of rainwater and helps the roads dry after a storm. During 2014, the Commission conducted brush cutting, mowing, and tree removal along 21,000 feet of forest access roads in the Little River Watershed. The total area of the combined projects was approximately 25 acres. The Commission also contracted with a local company to remove a cluster of diseased hemlock trees.

In May 2014, Borden Brook staff began a project to repair a 2,300-foot section of Farnum Road in Granville, MA. The initial portion of the project required widening and re-grading the roadway, and reinforcing the bridge decking at the Ripley Brook crossing. The road was graded to improve drainage and covered with a layer of 3-inch granite stone so it could withstand heavy loads. The project was completed in the summer of 2014. The Borden Brook Reservoir staff

also graded and spread 3-inch granite stone on several smaller sections of forest access roads in the watershed as part of the ongoing road maintenance program.



Loading stone into a commission truck

Ongoing maintenance of watershed lands and roads is critical to the long-term protection of the drinking water supply.

Watershed Streams

Commission staff collects water quality samples from ten tributaries to Borden Brook Reservoir and Cobble Mountain Reservoir. The water samples are tested in the Commission's laboratory at West Parish Filters. The results show that the Little River water supply is very clean and demonstrate that



Land in the Zone A Protection Zone

watershed protection is critical to a clean water supply. Of the approximately 5,500 acres of land abutting waterbodies, streams, and wetlands in the watershed, the Commission has acquired approximately 3,100 acres. This land, which is known as Zone A Protection Land, is critical to protecting water quality. It provides a barrier to contaminants, preventing them from entering the water supply. In light of this, the Commission's primary watershed protection strategy is to protect as much land in the Zone A as possible.

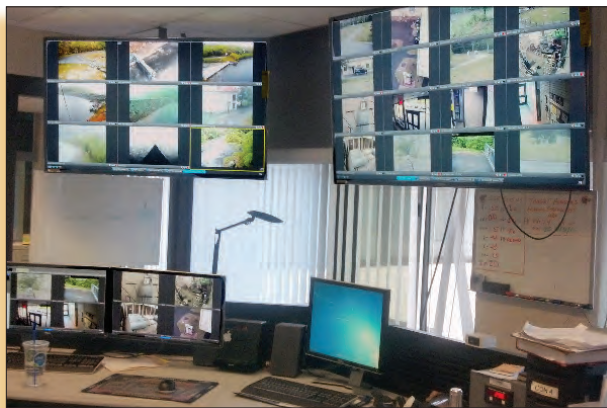
Water Treatment

The Water Treatment Process

The Commission's primary water source is the Little River in western Massachusetts, with water storage at Borden Brook and Cobble Mountain reservoirs. Back-up supplies are available through the Littleville Reservoir and the Springfield (Ludlow) Reservoir. The water supply is filtered at the West Parish Filters Water Treatment Plant, either through the 40-million gallon per day (mgd) slow sand filters or the 60-mgd dual media rapid filtration plant.

At the plant, water is filtered and treated to protect public health. The filtration process removes particles and impurities from the water. Then pH is adjusted and corrosion inhibitors are added to protect home plumbing. Finally, chlorine is added for disinfection purposes and the water flows through the distribution system for delivery to our customers.

The Commission recently completed an upgrade to its Supervisory Control and Data Acquisition (SCADA) system at the West Parish Filters Water Treatment Plant. The previous SCADA system was outdated and became increasingly difficult to maintain due to



New 60" monitors at the Treatment Plant installed in conjunction with the SCADA upgrade

the scarcity of replacement parts, many of which have been discontinued by the manufacturers. The new SCADA system provides full control access at various locations throughout the treatment plant, expands data storage capacity, improves data protection and backup, enhances alarms and security, improves functionality, and provides redundancy. Several Commission Departments, including Operations, Engineering, and Information Technology, collaborated with outside consultants and vendors to ensure smooth completion of the project.

The Commission is continuing to experiment with an alternative coagulant in half of the rapid sand filters to ensure continued compliance with the Stage 2 DBP Rule. The Commission is also inventorying its assets from the Cobble Mountain Reservoir through the West Parish Filtration Plant and to the Provin Mountain Storage Tanks in order to embark upon a comprehensive facilities plan at the treatment plant. The facilities plan will consider current and future issues including regulatory compliance, process and energy optimization, reliability, and redundancy.

Laboratory and Regulatory

The Commission's State Certified Drinking Water Laboratory conducted more than 50,000 water quality tests in Fiscal Year 2014. Water quality tests are performed daily on water entering and leaving each treatment process at the plant and throughout the Commission's distribution system. In addition, the laboratory performs bacteria testing on new water mains, water main extensions and replacement water main projects. All state and



Aerial View of the West Parish Filters Water Treatment Plant

federal regulatory requirements were met during Fiscal Year 2014, including the Total Coliform Rule, the Lead and Copper Rule, the Long Term 2 Surface Water Treatment Rule, the Stage 2 Disinfectants/Disinfection By-product Rule, and the Consumer Confidence Reporting Rule. The laboratory completed sample collection for the 3rd Unregulated Contaminant Monitoring Rule in December 2013. Lead and Copper Rule monitoring was successfully completed during 2012 with the next round of tap water sampling to occur in 2015.



West Parish Filters Water Treatment Plant

Water Quality and Consumption

Water Quality Group

The Commission's Water Quality Group (WQG) was formed in 2005 to develop a Unidirectional Flushing Program (UDF) and to perform maintenance on valves, hydrants and water mains in the distribution system. Maintenance of the infrastructure that makes up the distribution system is crucial so that Commission staff may effectively isolate areas to make repairs, to ensure that hydrants will reliably provide water for effective fire protection, and for the health and reliability of the system as a whole.

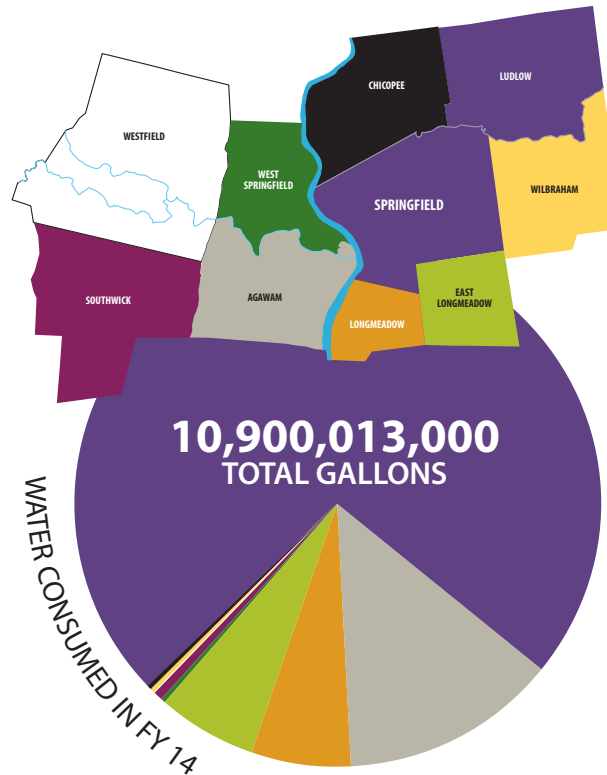
UDF is the process of cleaning a pipe by strategically flowing water through water mains in order to remove sediments from the pipe. In 2014, the Water Quality Group continued its Unidirectional Flushing efforts, flushing approximately 105 miles of pipe. The Group also continued soft swabbing pipe, another method of cleaning a water main that uses water pressure to push a polyurethane foam cylinder through the main. Soft swabbing is a more aggressive cleaning process which removes particles that have built up as a result of pipe corrosion and biological factors. Approximately 17 miles of pipe were soft swabbed in FY 2014. These cleaning processes improve hydraulic capacity, fire flow values, and water quality, and they reduce chlorine demand in the distribution system.



Water Quality Statistics

	Year	FY 14	Total*
Hydrants Inspected		3,850	24,388
Hydrants Rebuilt		485	4,435
Hydrants Painted		954	8,757
Valves Exercised		3,717	29,681
Pipe Flushed (miles)		105	655.2
Pipe Swabbed (miles)		16.6	108.4

*Since program began, 2006



Springfield/Ludlow	8,020,337,000
Agawam	1,430,879,000
Longmeadow	680,865,000
East Longmeadow	653,245,000
West Springfield	25,801,000
Southwick	62,613,000
Westfield	1,555,000
Wilbraham	13,252,000
Chicopee	11,466,000

Cross Connection Control

A cross connection is formed at any point where a drinking water line connects to equipment, a system containing chemicals, or water of questionable quality, and backflow may occur into the drinking water line. Some examples of where cross connections may occur are at boilers, air conditioning systems, fire sprinkler systems, irrigation systems, laboratory equipment, plating tanks, or chemical vats. In residences, a common offender is the ordinary garden hose attached to a container with garden chemicals.

The Commission began a Cross Connection Control Program in 1998 in accordance with Department of Environmental Protection guidelines. The program requires industrial, institutional and commercial properties to have their internal plumbing surveyed for cross connection hazards as well as the installation of backflow devices where appropriate. The Cross Connection Control Program prevents unintended materials from entering the drinking water supply.

Cross Connection Devices	Added in 2014	In System
Double Check Assembly Devices	29	952
Reduced Pressure Devices	85	1,812

Key Statistics – FY 14

Retail Water Accounts	42,700
Miles of Water Pipe	592
Fire Hydrants	6,295
Gallons of Water Supplied	10.9 Billion
Water Treatment Plant	1

Water Distribution

The Water Distribution System is maintained by the Water Construction Group, the largest group in terms of personnel that works out of the Joseph J. Superneau Operations Center. This group responds to water main and service pipe breaks 24 hours a day, 7 days a week. They also perform valve and hydrant repairs and replacements and control the Commission's Pavement Management Program.

Metering

The Commission uses water meters to measure water usage in order to bill customers. This data can also be used to identify leaks, establish water demand patterns over time, and help evaluate the overall health of the distribution system. Accurate metering data is critical for effective utility management.

In 2004, the Commission completed a project to retrofit water services with Automated Meter Reading (AMR) technology and water meters. AMR meters allow the Commission to collect usage data via radio frequency transmissions. Each month, Commission employees drive specially equipped vehicles through Springfield and Ludlow, collecting water usage data for approximately 45,500 meters. This meter reading process has a data collection success rate of over 99%.

Maintenance Program

AMR meters are upgraded or replaced every ten years as part of an ongoing maintenance schedule. This ensures that the meters will continually and reliably collect and transmit data.



The Commission utilizes meters that are compliant with the Safe Drinking Water Act and other applicable government regulations. The current AMR meters are modular, allowing Commission staff to service the meter within the customer's home or business. In most cases, parts can be changed out without the need to remove or replace the entire meter.

One of the Commission's Meter Reading Vehicles



Technology inside a Commission Meter Reading Vehicle

Resource Management

The turn of the 21st century brought a renewed emphasis on water resource management. Metering plays a significant role in water conservation, and this role continues to grow. Accurate metering allows for timely information on water usage and in turn, the identification of unusual water usage patterns that are often indicative of a leak and/or unexpected use. It is in the best interest of both the Commission and the customer that these issues be identified, and accurate metering provides the tools to do just that. Curtailing leaks and notifying customers of excessive use contributes to the overall goal of water conservation, which benefits everyone.

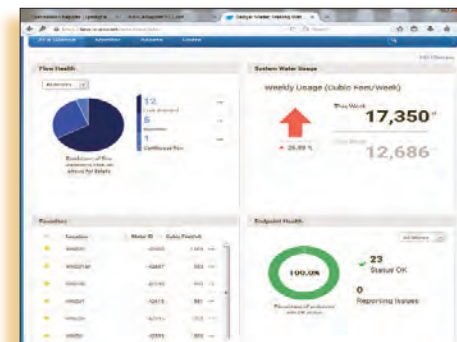
Ongoing Improvements toward an Advanced Metering Infrastructure

In 2014, two pilot programs were launched to evaluate Smart Meter technology. Smart Meters use cloud-based solutions to store data that is transmitted automatically at regular intervals via cellular technology.

The first pilot program was conducted with one of the Commission's largest industrial customers. Smart industrial meter technology provided both the Commission and the customer a user interface to access flow rates, readings, and temperature data in five minute intervals from a desktop computer, laptop, or smartphone. In the first month of the program, the customer discovered a significant leak on a 6-inch water service, simply by reviewing the continuous data this technology provided.

The second pilot program was conducted with a local university, and was intended to evaluate the use of Smart Meter technology in a residential setting with multiple buildings. As with the industrial pilot, the information from the Smart Meters allowed university staff to identify a number of leaks and make repairs. This translated to cost savings for the university while contributing to conservation of our most valuable resource.

These trials were highly successful and the Commission will continue to explore the use of Smart Meter technology with large water consumers.



Smart Meter user interface

Springfield Water Main Pipe Installed in FY 14	Pipe Size (Diameter in inches)	Pipe Installed (Length in Feet)
Allen Street	8	688
Alwin Place	6	421
Arch Street	Asst	317
Armory Street	Asst	255
Birnie Avenue	Asst	1,230
Chase Avenue	6	652
Chestnut Street	12	60
Churchill Street	Asst	58
Fort Pleasant Avenue	8	34
Greenleaf Street	Asst	67
Grosvenor Street	6	24
Hollywood Street	Asst	12
Huntington Street	Asst	110
Laconia Street	6	176
Mellon Street	8	15
Melrose Street	Asst	315
Merwin Street	6	27
Oakland Street	Asst	64
Orchard Street	42	109
Plainfield	12	52
Riverview Street	6	738
Riverview Terrace	6	44
Roosevelt Avenue	12	31
Sheldon Street	Asst	394
Sumner Avenue	Asst	1,348
Sumner Terrace	Asst	50
Suzanne Street	8	159
Tiffany Street	Asst	23
Walnut Street	12	14
Worthington Street	Asst	13

Water Main Pipe Legend

Asst = Assorted Sizes | All pipes installed were ductile iron
All installs under 10" not included above = 175'

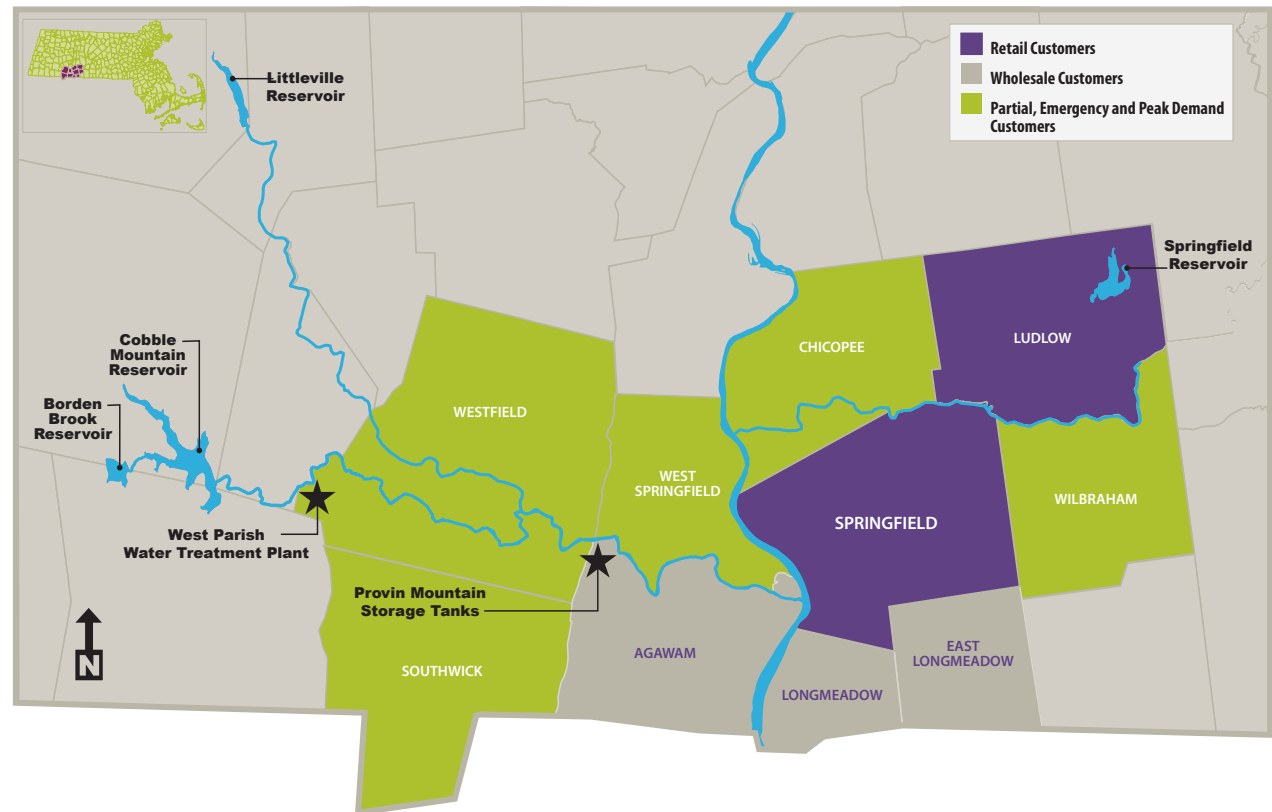
Water Distribution System Updates	
New Hydrants	50
Replacement Hydrants	193
New Valves Installed	136
Valves Replaced	44

2013 Water and Sewer Service Mark Outs		
Month	Routine	Emergency
July	203	60
August	138	63
September	153	64
October	224	62
November	147	33
December	64	72
Totals	929	354

2014 Water and Sewer Service Mark Outs		
Month	Routine	Emergency
January	47	101
February	45	59
March	63	109
April	238	63
May	269	65
June	274	46
Totals	936	443

Water and Sewer Service Mark Out Combined Totals Routine **1,865** Emergency **797**

Water Supply Map



Wastewater Collection System

Approximately 36,400 sewer accounts are serviced in Springfield. The sewer collection system consists of 138 miles of combined sewer; 312 miles of separated sewer; 23 combined sewer overflow outfalls; 12,000 manholes; and 33 pumping stations. Wastewater is conveyed to the Springfield Regional Wastewater Treatment Facility (SRWTF) located along Route 5 in Agawam. The SRWTF has a design capacity to treat 67 million gallons per day of sewage.

The Commission has four primary responsibilities with respect to the collection system:

- Operation and Maintenance
- Regulatory Compliance
- Engineering/ Technology
- Construction/Infrastructure Renewal

Operation and Maintenance

The Commission provides reliable sanitary sewer service to its customers through a combination of maintenance programs. This is achieved by effectively utilizing Commission staff and equipment in conjunction with contracted services to perform inspections, cleaning, repairs, and other related maintenance functions. Additionally, the Commission supports its contract operator, United Water, LLC, which maintains and operates sewage and flood control pumping stations and appurtenances, intercepting sewers, and combined sewer overflow regulating structures.

Engineering/Technology

In 2014, the Commission and consulting engineering firms advanced the Geographic Information System (GIS) and Asset Management capabilities of the wastewater collection system. These systems allow for better efficiencies in operating and maintaining the collection system. The Asset Management

system is utilized in the development of a prioritized list of sewer rehabilitation and replacement projects and allows for the integration of system needs with regulatory requirements.

Regulatory

Pursuant to U.S. Environmental Protection Agency (USEPA) mandates, the Commission continued to advance its Capacity, Management, Operation, and Maintenance (CMOM) Program for the collection system. Utilizing the advances in the GIS and the Asset Management systems, the cleaning and maintenance programs were improved upon. Reportable sanitary sewer overflows decreased from 122 occurrences in FY 08 to 34 occurrences in FY 14, a 72% decrease since the program's inception. The reduction is attributed to the comprehensive cleaning and assessment program. Commission staff utilized the improved GIS and Asset Management programs to better track and trend problem areas which has resulted in a more effective maintenance operation. Additionally, the Commission prepared and submitted a comprehensive Integrated Wastewater Plan that balances infrastructure needs (see Combined Sewer Overflows).



Interior of a sewer main in Springfield obtained as part of the ongoing Collection System Assessment Program

Fats, Oils and Grease (FOG) – Cease the Grease Springfield

Fats, Oils and Grease (FOG) is a leading cause of sewer backups into homes and businesses. Sewer backups occur when FOG is improperly disposed of down a sink, drain, or toilet. FOG coats the inside of sewer pipes and builds up over time, eventually causing a blockage and sewer backup.



The Commission is in the fourth year of its informational outreach initiative to educate home owners, tenants, food service establishments, restaurants, and the community about the proper disposal of FOG and the hazards of sewer backups. The goal of Cease the Grease Springfield is to reduce the amount of sewer backups caused by FOG clogs.

This year, the Commission launched a media campaign prior to the Thanksgiving holiday entitled, "Cease the Grease This Holiday Season." During the holidays, the risk of sewer backups as a

result of FOG is heightened because of the additional cooking that takes place for holiday celebrations. Media kits containing educational materials and tools were handed out to all the local media outlets. As a result of these efforts, ABC40/FOX6, 22NEWS, The Republican/Masslive, and The Reminder Publications featured informational segments and articles educating the public on the proper disposal of FOG and the hazards of sewer backups.

Sewer Group FY 14

Sewer Mains Jetted by the Commission	389,951 ft.
Sewer Mains Jetted by Contractors	357,677 ft.
Service Connections Rodded	375
Sewer Back-Up Complaints Responded To	815
Sanitary System Repairs	162
House Connection Repairs	116
Standing Mains Cleared	49
Manholes Washed and Cleaned	2,034
Cave-ins Repaired	117
Siphons Checked	264
Siphons Cleared	0

Integrated Wastewater Plan and Combined Sewer Overflows

In 2014, the Commission submitted a comprehensive Integrated Wastewater Plan (IWP) utilizing a newly established framework being implemented by the USEPA. The framework initiated by the USEPA allows for communities to define an overall strategy for the continued operation and maintenance of the wastewater system



Excavation for a new drain within Birnie Avenue while supporting an active sewer main

while planning for compliance with federal Clean Water Act requirements. The Integrated Wastewater Plan seeks to balance regulatory requirements with responsible and sustainable investment in the Commission's wastewater infrastructure. Major aspects of the plan account for the Combined Sewer Overflows, Wastewater Treatment, and the Wastewater Collection System. The Commission's IWP was submitted to USEPA and MassDEP as the first comprehensive Integrated Plan of its kind under the USEPA's new Integrated Planning Framework. The Commission anticipates approval of the IWP in FY 15. Critical components of the plan include a detailed CSO alternatives analysis, a long-term Capital Improvement Plan for wastewater and water functions, and a financial capability assessment and affordability analysis that provides guidelines for implementation scheduling. Work performed in 2014 to support this effort included the Washburn CSO Project, the Main Interceptor Project Design, and the ongoing Collection System Assessment Program.

Combined Sewer Overflows

Like many older sewer systems, some of Springfield's wastewater collection system is composed of combined sewers. Combined sewers collect and transport sanitary sewage and stormwater together in one pipe. During heavy rains, the combined sewers can fill up beyond capacity. Discharge points are built into the system so that excess flow empties into bodies of water rather than backing up into basements and spilling onto roadways. These discharge points are known as combined sewer overflows (CSOs). In 1994, the USEPA mandated that the overflow resulting from CSOs be reduced, and has since intensely regulated communities with CSOs.



Preparation of an 84-inch sewer for slip lining a new 72-inch pipe within Washburn Street

approximately 52 million gallons of overflow from the Connecticut River in the typical year. The project is substantially complete. The total project cost is estimated at \$20 million.

Since 1998, the Commission has worked with the USEPA toward reduction, and where feasible, removal of CSOs. To date, the Commission has invested more than \$100 million in its CSO program to satisfy unfunded federally mandated projects required through multiple USEPA Administrative Orders. In 2014, the Commission continued its work to reduce CSO overflows with the construction of the Washburn Street CSO Project. This work will remove

By incorporating the CSO Program into the comprehensive Integrated Wastewater Plan, the Commission will be able to better balance wastewater infrastructure needs with the dynamic nature of regulatory change. In 2014, the former CSO Long Term Control Plan was made part of the IWP and submitted as a single plan to the USEPA. The plan has a forty (40) year implementation schedule that provides for a more sustainable and financially feasible implementation.

Upcoming Projects

In 2014, the Commission initiated the investigative field work and design of the Main Interceptor Sewer and CSO Outfall Improvements Project. As part of the prioritized system-wide Collection System Assessment Program, the Main Intercepting Sewer (MIS) was identified as one of the most critical pipes within the collection system.

Inspection of the MIS indicated that the pipe had significant structural defects and would require expedited replacement or repair. Additionally, CSO outfalls at Worthington Street, Phelps Street, and Longhill Street were identified as having significant structural defects. Field work, preliminary design, and final design work for the project was initiated in 2014. Design of the project is anticipated to be complete in 2015, with construction beginning by May of 2015.



Installation of flow control structure to a sewer main within Arch Street

Wastewater Treatment



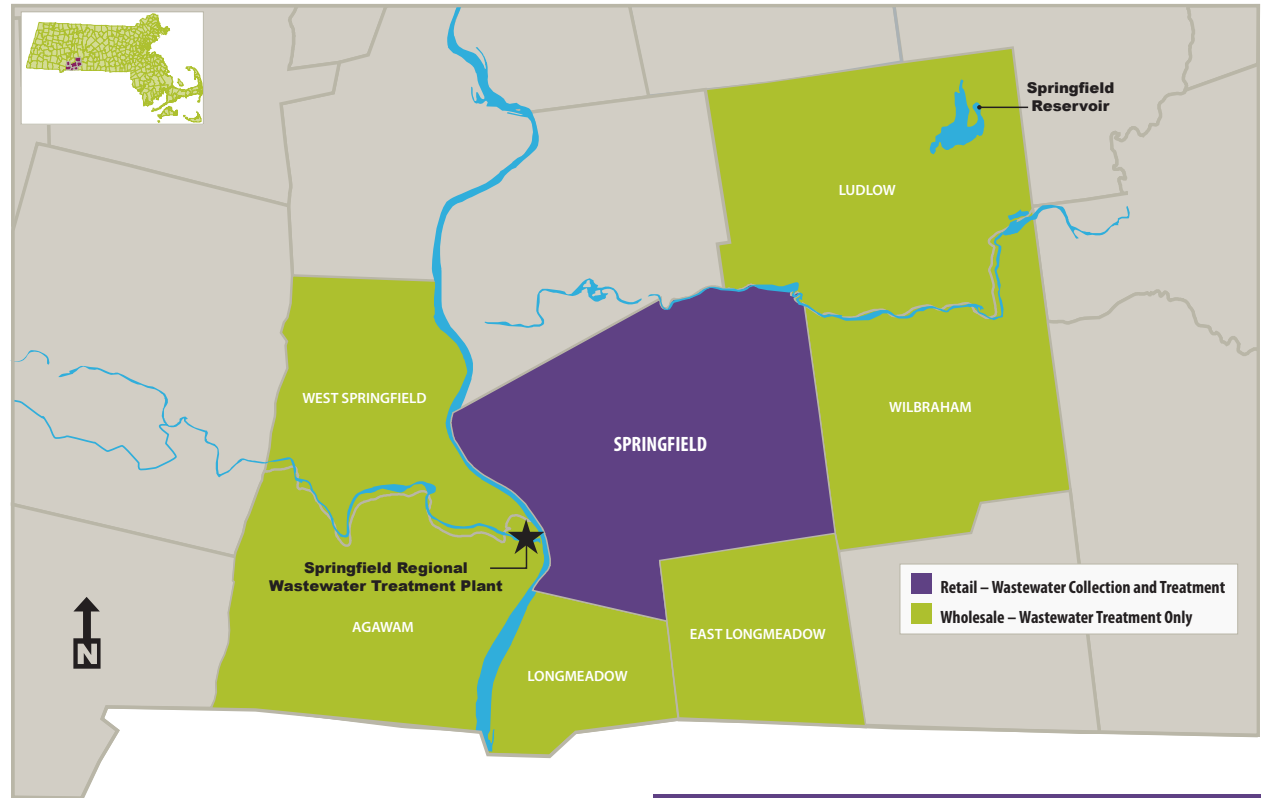
Springfield Regional Wastewater Treatment Facility

The Springfield Regional Wastewater Treatment Facility (SRWTF) accepts wastewater from the households, businesses, and industries within Springfield and surrounding member communities, including Agawam, East Longmeadow, Longmeadow, Ludlow, Wilbraham, West Springfield, and part of Chicopee, provides primary and secondary treatment, and discharges the treated water to the Connecticut River. The SRWTF is one of the largest wastewater treatment facilities in New England and is designed to provide secondary treatment for up to 67 million gallons of wastewater per day; in 2014 a daily average of 41 million gallons (mgd) of wastewater was treated and discharged to the Connecticut River.

United Water

During 2014 the SRWTF continued treatment of wastewater in compliance with all requirements of applicable regulatory permits.

United Water Springfield, LLC, completed the 14th year of a 20-year service agreement to operate the SRWTF and associated sewage and flood control pumping stations. Capital improvements completed during the year included the replacement of worn slide gates in secondary flocculation basins in order to improve control, installation of a generator at the



Liberty Street Sewage Pump Station, and paving and drainage improvements in the plant courtyard.

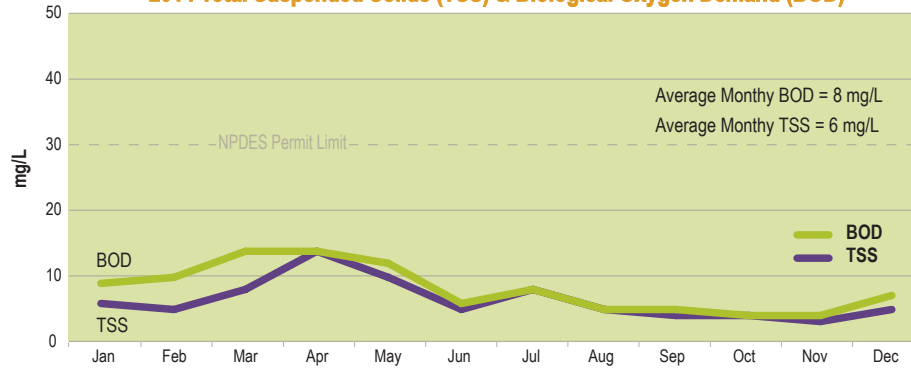
Industrial Pretreatment Program

The Industrial Pretreatment Program (IPP) establishes and enforces limits of industrial discharges to protect the collection system and treatment plant from harmful pollutants. The IPP conducts routine audits and inspections at industries to monitor compliance with the pretreatment standards.

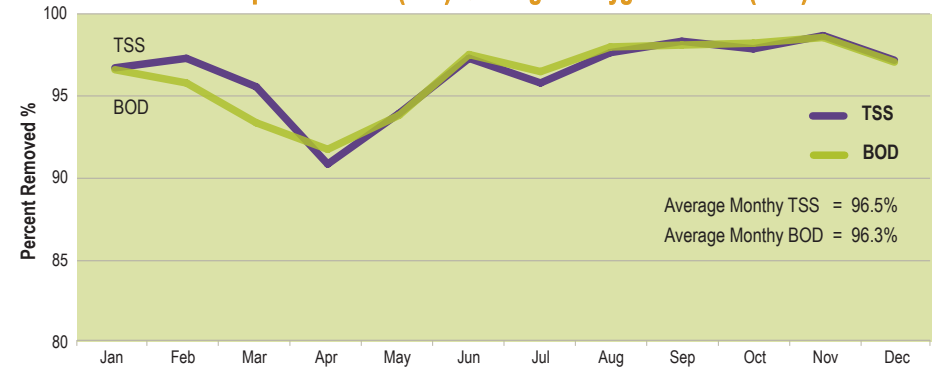
Industrial Pretreatment Program Statistics for Calendar Year 2014	
Significant Industrial Users	51
Industrial Wastewater Discharge Permits	56
Inspections Completed	276
Wastewater Samples Collected	217
Registered Sewer Users – Wet	207
Registered Sewer Users – Dry	362
Violations Issued	12

Wastewater Treatment Data

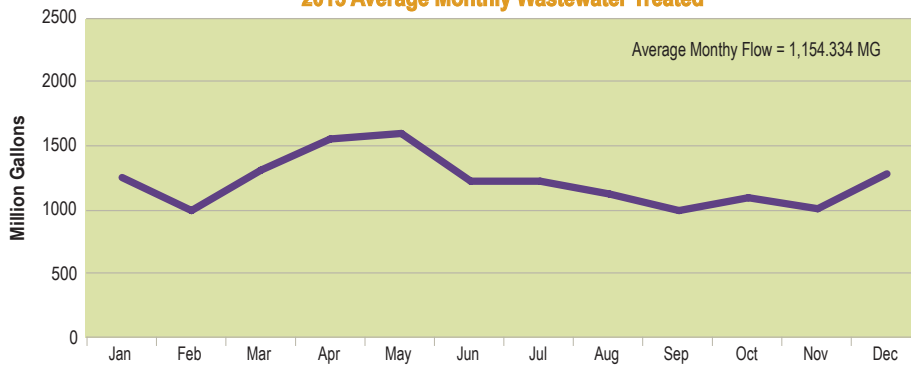
2014 Total Suspended Solids (TSS) & Biological Oxygen Demand (BOD)



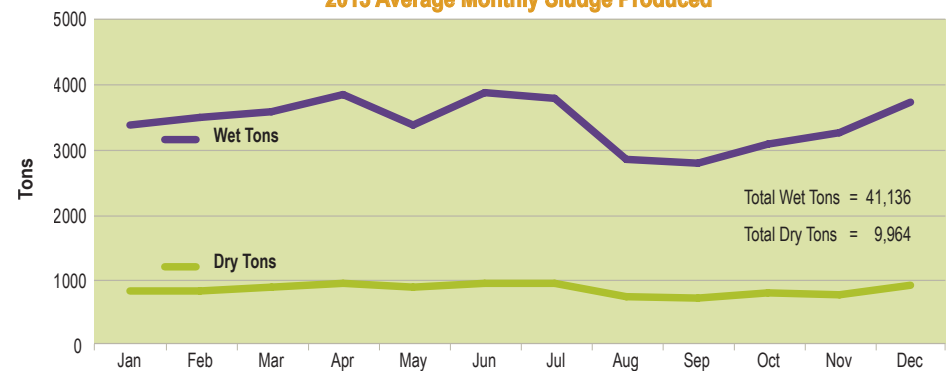
2014 Total Suspended Solids (TSS) & Biological Oxygen Demand (BOD) Removal



2013 Average Monthly Wastewater Treated



2013 Average Monthly Sludge Produced



Audited Financial Statement

Fiscal Year 2014 – Audited Financial Statement
by Melanson Heath

Independent Auditor's Report

To the Commissioners, Springfield Water and Sewer Commission,
Springfield, Massachusetts

Report on the Financial Statements

We have audited the accompanying statement of net position of the Springfield Water and Sewer Commission, as of June 30, 2014 and the related statements of revenues, expenses and changes in net position and cash flows for the year then ended and the related notes to the financial statements, which collectively comprise Springfield Water and Sewer Commission's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

The Springfield Water and Sewer Commission's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Springfield Water and Sewer Commission, as of June 30, 2014, and the respective changes in financial position and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis and Schedules of Funding Progress be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with evidence sufficient to express an opinion or provide any assurance.

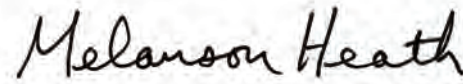
Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Springfield Water and Sewer Commission's basic financial statements. The supplementary information appearing on pages 28 and 29 is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and

certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Springfield Water and Sewer Commission's basic financial statements. The introductory and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and, accordingly, we do not express an opinion or provide any assurance on it.

October 31, 2014



Management Discussion and Analysis

As management of the Springfield Water and Sewer Commission, we offer readers this narrative overview and analysis of the financial activities of the Springfield Water and Sewer Commission for the fiscal year ended June 30, 2014.

Overview of the Financial Statements

The basic financial statements include (1) the statement of net position, (2) the statement of revenues, expenses, and changes in fund net position, (3) the statement of cash flows, and (4) notes to the financial statements.

The statement of net position is designed to indicate our financial position as of a specific point in time. At June 30, 2014, it shows our net worth of \$113,334,230, which is comprised of \$124,060,618 invested in capital assets, \$31,651,795 restricted for other purposes, namely restricted cash and inventory, and \$(42,378,183) unrestricted.

The statement of revenues, expenses and changes in fund net position summarizes our operating results. As discussed in more detail below, our change in fund net position for the year ended June 30, 2014 was a change of \$(4,399,530).

The statement of cash flows provides information about the cash receipts and cash payments during the accounting period. It also provides information about the investing and financing activities for the same period.

Financial Highlights

The Commission ended the year with operating income approximately \$12.4 million. The following paragraphs give an overview of the year's activities.

It has been the practice of the Commission to establish its rates and charges for water and wastewater services at levels sufficient to produce revenues adequate to defray all operation and maintenance expenses, debt service, and reserve deposits projected by the Commission's Consulting Engineers and to maintain net revenues available for debt service in excess of the coverage requirements mandated by the General Bond Resolution. Until fiscal year 2010, the Commission had historically adjusted its rates and charges for water and wastewater services on a basis which stabilized rates and charges over a multi-year period. Beginning in fiscal year 2011, the Commission has adopted single-year rate schedules to more closely match revenues to expenditures.

Summary of Net Position		
Year	2014	2013
Current Assets	\$ 76,587,523	\$ 77,834,890
Noncurrent Assets	3,168,102	3,279,784
Capital Assets	250,215,656	227,306,793
Deferred Outflows	<u>3,485,237</u>	<u>2,424,711</u>
Total Assets and Deferred Outflows	333,456,518	310,846,178
Current Liabilities	13,494,070	13,232,656
Noncurrent Liabilities	131,432,022	119,038,533
Deferred Inflows	<u>75,196,196</u>	<u>60,841,229</u>
Total Liabilities and Deferred Inflows	220,122,288	193,112,418
Net Investment in Capital Assets	124,060,618	104,126,159
Restricted – other purposes	31,651,795	31,120,310
Unrestricted	<u>(42,378,183)</u>	<u>(17,512,709)</u>
Total Net Position	<u>\$ 113,334,230</u>	<u>\$ 117,733,760</u>
Operating Revenues	\$ 64,332,287	\$ 62,227,894
Operating Expenses	<u>(51,890,194)</u>	<u>(49,614,168)</u>
Operating Income	12,442,093	12,613,726
Non-operating Revenues (Expenses)	(3,656,584)	(3,159,421)
Special Items	<u>(13,185,039)</u>	<u>(6,150,256)</u>
Increase (Decrease) in Net Position	(4,399,530)	3,304,049
Beginning Net Position	<u>117,733,760</u>	<u>114,429,711</u>
Ending Net Position	<u>\$ 113,334,230</u>	<u>\$ 117,733,760</u>

In fiscal year 2014, there was again an increase in collection efforts and an increase in rates; however, overall usage was less than anticipated. As a result, wastewater charges revenue and fees were approximately \$(2.2 million) less than budget. Wholesale water charges and fees were also less than budget by approximately \$(1.4 million). Power generation revenues were greater than estimates by approximately \$1.3 million. These and other factors resulted in total operating revenue of approximately \$64.3 million in fiscal year 2014, approximately \$(1.9 million) less than budget, and \$2 million more than the prior year.

Operating expenses were less than budget by approximately \$4 million, primarily as a result of vacant positions and less overtime needed than anticipated. In addition, there was conservative budgeting for general operational expenses and an anticipated increase in energy costs and chemical expenses that did not materialize.

In fiscal year 2014, we continued receiving loan proceeds through the Massachusetts Clean Water Trust (the Trust), which was partially subsidized by Federal funds. In accordance with Trust guidelines, the grant revenue was recognized with the first proceeds and is reflected as nonoperating revenue of \$495,678 on the statement of revenues, expenses and changes in fund net position. Additional grant revenue will be recognized in fiscal year 2015 as these projects continue.

In fiscal year 2011, we implemented FASC 980, Accounting for the Effects of Certain Types of Regulation, which essentially adjusts for differences between how revenue/rates are budgeted and how they are accounted for on a Generally Accepted Accounting Principles (GAAP) basis. In the Commission's case, revenue intended to fund capital asset acquisitions is set aside (deferred) and is recognized equal to the annual depreciation expense on those assets; depreciation expense on assets funded in other ways (such as through bonds) is removed from the income statement because those costs are not factored into the budget process; conversely, because principal debt repayment costs are funded through the budget, those costs are reflected in the income statement as a reduction to net position. The net effect of these adjustments are reported under the line "Excess revenues to fund deferrals" on the statement of revenues, expenses and changes in fund net position, which was a decrease of \$(13,185,039) for fiscal year 2014.

As a result of the key elements described above the activities for the year resulted in a change in net position of \$(4,399,530).

Capital Asset and Debt Administration

Capital assets

Total investment in capital assets at year end amounted to \$250,215,656 (net of accumulated depreciation), an increase of approximately \$22.9 million from the prior year. This investment in capital assets includes land, buildings and improvements, machinery and equipment, and infrastructure.

Major capital asset events during the current fiscal year included the following:

- Depreciation expense of \$(7 million)
- \$1.2 million addition under the Chicopee and Connecticut Rivers and other CSO relief projects
- \$13.6 million in Washburn Street CSO separation
- \$580,000 in pipe replacement and hydrant projects
- \$900,000 in meter replacements
- \$1.6 million in transmission main system rehabilitations
- \$5.8 million in sewer main rehabilitation
- Water main project of \$480,000
- \$500,000 in distribution system rehabilitations
- \$2.9 million in collection system assessment and rehabilitation
- New vehicles and equipment purchased of \$1.1 million
- Computer software and equipment purchases of \$250,000
- Various general building improvements of \$120,000
- Land acquisition of \$300,000
- Various other projects of \$570,000

Additional information on the Commission's capital assets can be found at Footnote 10 on page 27.

Long-term debt

At the end of the current fiscal year, total bonded debt outstanding was \$136,479,114, of which approximately \$400,000 was issued through the City of Springfield and \$136 million was issued under revenue bonds backed by dedicated revenues of the Commission.

Additional information on the Commission's long-term debt can be found at Footnote 11 on page 28.

Statement of Net Position

Springfield Water and Sewer Commission
June 30, 2014

Assets: Current		
Cash		\$ 30,987,756
Restricted cash		29,670,647
Accounts receivable, net of allowance for uncollectibles		7,453,194
Intergovernmental receivable		7,515,218
Inventory, net of allowance		<u>960,708</u>
Total current assets		76,587,523
Assets: Noncurrent		
Intergovernmental receivable, net of current portion		1,650,739
Inventory held by others		1,022,136
Health insurance deposit		495,227
Capital assets, net of accumulated depreciation		158,842,406
Land and construction in progress		<u>91,373,250</u>
Total noncurrent assets		253,383,758
Deferred Outflows of Resources		<u>3,485,237</u>
Total Assets and Deferred Outflows of Resources		333,456,518

(continues at right)

Requests for Information

This financial report is designed to provide a general overview of the Springfield Water and Sewer Commission's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to:

Public Communications Manager
Springfield Water and Sewer Commission
P.O. Box 995
Springfield, MA 01101-0995

(continued)

Liabilities: Current		
Accounts Payable		3,848,938
Accrued payroll and withholdings		365,019
Accrued interest payable		1,438,771
Current portion of loans payable		7,244,266
Current portion of loans payable (through City of Springfield)		417,046
Current portion of accrued compensated absences		<u>180,030</u>
Total current liabilities		13,494,070
Liabilities: Noncurrent		
Loans payable, net of current portion		128,817,802
Accrued compensated absences, net of current portion		1,201,854
Net OPEB obligation		1,261,063
Other accrued liabilities		<u>151,303</u>
Total noncurrent liabilities		131,432,022
Deferred Inflows of Resources		<u>75,196,196</u>
Total Liabilities and Deferred Inflows of Resources		220,122,288
Net Position		
Net investment in capital assets		124,060,618
Restricted:		
Reserve for inventory		1,982,844
Reserve for debt covenants and scholarships		29,668,951
Unrestricted		<u>(42,378,183)</u>
Total Net Position		<u>\$ 113,334,230</u>

The accompanying notes are an integral part of these financial statements.

Statement of Revenues, Expenses and Changes in Fund Net Position

Springfield Water and Sewer Commission
for the year ended June 30, 2014

Operating Revenues	
Water and sewer usage	\$ 63,889,847
Other	442,440
Total Operating Revenues	64,332,287
Operating Expenses	
Salaries and wages	12,897,208
Employee benefits	7,708,445
Operations	21,677,024
Intergovernmental	519,315
Capital outlay	1,384,494
Depreciation and amortization	7,142,654
Other	561,054
Total Operating Expenses	51,890,194
Operating Income	12,442,093
Non-operating Revenues (Expenses)	
Interest income	13,709
Interest expense	(4,331,542)
Grant reimbursement revenue	661,249
Total Non-operating Revenues (expenses), net	(3,656,584)
Excess revenues before deferral adjustments	8,785,509
Excess revenues used to fund deferrals	(13,185,039)
Change in Net Position	(4,399,530)
Net Position at Beginning of Year	117,733,760
Net Position at End of Year	\$ 113,334,230

The accompanying notes are an integral part of these financial statements.

Statement of Cash Flows

Springfield Water and Sewer Commission
for the year ended June 30, 2014

Cash Flows From Operating Activities	
Receipts from customers and users	\$ 64,841,611
Payments to vendors and employees	(44,409,726)
Net Cash Provided By Operating Activities	20,431,885
Cash Flows from Noncapital Financing Activities	
Intergovernmental reimbursements	278,397
Cash Flows from Capital and Related Financing Activities	
Acquisition and construction of capital assets	(29,951,758)
Proceeds from intergovernmental loans and grants	13,932,721
Principal payments on bonds and loans	(6,577,835)
Payments of interest	(4,331,795)
Net Cash (used for) Capital and Related Financing Activities	(26,928,667)
Cash Flows from Investing Activities	
Receipt of investment income	13,709
Net Change in Cash and Short-Term Investments	(6,204,676)
Cash and Short-Term Investments, Beginning of year	66,863,079
Cash and Short-Term Investments, End of Year	\$ 60,658,403
Reconciliation of Operating Income to Net Cash Provided by (used for) Operating Activities	
Operating income	\$ 12,442,093
Adjustments to reconcile operating income to net cash provided by (used for) operating activities:	
Depreciation and amortization	7,142,654
Changes in assets and liabilities:	
Accounts receivable	627,157
Inventory	42,250
Accounts payable and accrued payroll	(992,197)
Accrued compensated absence	48,823
Net OPEB obligation	1,261,063
Other accrued liabilities	(139,958)
Net Cash Provided By Operating Activities	\$ 20,431,885

The accompanying notes are an integral part of these financial statements.

Notes to Financial Statements

1. Summary of Significant Accounting Policies

The accounting policies of the Springfield Water and Sewer Commission (the Commission) conform to generally accepted accounting principles (GAAP) as applicable to governmental units. The following is a summary of the more significant policies:

A. Business Entity

The Commission has the responsibility to provide water and wastewater services on a fair and equitable basis to the City of Springfield (the City) and to provide wholesale water and regional wastewater services to other participating communities.

B. Regulation and Basis of Accounting

The Springfield Water and Sewer Commission (the Commission) was created in July 1996 under Massachusetts General Laws Chapter 40N; however, the Commission did not become a separate accounting entity until July 1997. Under Massachusetts General Laws Chapter 40N, the Board of Commissioners, appointed by the Mayor of the City of Springfield, establishes policies for accounting and other matters. The Board regulates the rates that the Commission can charge its customers for water and sewer usage. The rates charged to customers are based on the cash required for the Commission's operations, debt service and reserve contributions.

To comply with the external financial reporting requirements of the Board, the accompanying financial statements are presented on a basis that is consistent with generally accepted accounting principles (GAAP) for proprietary (enterprise) funds.

To accommodate the rate-making process, the Commission follows the accounting standards set forth in Governmental Accounting Standards Board Statement No. 62 ("GASB 62"), Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements. GASB 62 allows certain board approved (a) revenues provided for future allowable costs to be deferred until the costs are actually incurred (deferred inflows) and (b) costs incurred to be capitalized if future recovery is reasonably assured (deferred outflows).

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the enterprise fund are charges to customers for sales and services.

Operating expenses for enterprise funds include the cost of sales and services, administrative expenses and depreciation on capital assets.

All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

C. Cash and Short-Term Investments

For purposes of the statement of cash flows, the Commission considers investments with original maturities of three months or less to be cash equivalents. These are reflected in the following accounts reported on the statement of net position: cash and restricted cash.

D. Inventory for Consumption

Gasoline and diesel fuel purchased and unused at year end is stated at cost, and materials inventory is stated on the first-in/first-out basis.

E. Inventory Held by Others

Under the terms of a privatization agreement with United Water Environmental Services, Inc., the Commission transferred custody of certain inventory to United Water. The value stated was a negotiated value, which will be replaced by United Water at the expiration of the privatization contract in October 2020.

F. Capital Assets

Capital assets, which include property, plant, equipment, and infrastructure assets are defined by the Commission as assets with an initial individual cost of more than \$5,000 (for land, vehicles and equipment), \$10,000 (for buildings and improvements) and \$20,000 (for infrastructure) and an estimated useful life in excess of two years. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated fair market value at the date of donation.

The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend assets lives are not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed.

Interest incurred during the construction phase of capital assets would be included as part of the capitalized value of the assets constructed.

Capital assets are depreciated using the straight-line method over the following estimated useful lives:

Assets	Years
Building Improvements	20 – 50
Water / Sewer Infrastructure	50 – 100
Vehicles	5 – 15
Office and Computer Equipment	5 – 10

G. Compensated Absences

It is the Commission's policy to permit employees to accumulate earned but unused vacation and sick pay benefits. All vested sick and vacation pay is accrued when incurred. Sick pay benefits are payable upon death or retirement, with certain limits, for all employees employed over six months.

H. Net Position

Net position represents the difference between assets/ deferred outflows and liabilities/ deferred inflows. Net investment in capital assets, consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any borrowing used for the acquisition, construction, or improvement of those assets. Net position is reported as restricted when there are limitations imposed on their use either through the enabling legislation adopted by the Commission or through external restrictions imposed by creditors, grantors, or laws or regulations of other governments. The remaining net position is reported as unrestricted.

I. Use of Estimates

The preparation of basic financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures for contingent assets and liabilities at the date of the basic financial statements, and the reported amounts of the revenues and expenditures/ expenses during the fiscal year. Actual results could vary from estimates that were used.

2. Stewardship, Compliance and Accountability

Budgetary Information

At the June meeting of the Commission, the Commissioners review and approve an operating and capital budget for the proposed expenditures of the fiscal year commencing the following July 1. The original budget may be amended during the fiscal year at Commission meetings as required by changing conditions.

At year end, appropriation balances lapse, except for certain unexpended capital items which will be honored during the subsequent year.

A budget and actual comparison of operating expenditures is presented as a supplementary schedule.

3. Cash and Short-Term Investments

Custodial credit risk, as defined under GASB Statement No. 40, is the risk that in the event of a bank failure, the Commission's deposits may not be returned to it. As of June 30, 2014, \$198,665 of the Commission's bank balance of \$61,794,537 was exposed to custodial credit risk as uninsured, uncollateralized, and/or collateral held by the pledging bank's trust department not in the Commission's name.

Massachusetts General Law Chapter 44, Section 55 limits deposits "in a bank or trust company or banking company to an amount not exceeding sixty per cent of the capital and surplus of such bank or trust company or banking company, unless satisfactory security is given to it by such bank or trust company or banking company for such excess." The Commission's deposits are within this limitation.

4. Restricted Cash

The Commission issues debt under a General Bond Resolution which requires cash reserves to be maintained. These reserves are reported as restricted cash.

The reserves include an Operating Reserve Fund (equal to 1/6 of the Commission's annual operating budget), a Renewal/Replacement Fund (\$1 million), a Debt Service Fund (equal to principal and interest, payable on an accrual basis at June 30), and a Debt Service Reserve Fund (equal to the highest principal and interest due in any subsequent year). In addition, the Bond Resolution establishes several other reserves which may be activated in future years.

The restricted cash balance reported in the financial statements is comprised of the following at June 30, 2014:

Reserve Funds	
Operating Reserve Fund	\$ 7,634,957
Renewal / Replacement Fund	1,000,000
Debt Service Fund	10,437,471
Debt Service Reserve Fund	10,515,225
Other Funds	
Project Accounts	1,696
Scholarship Trust Fund	81,298
Total	\$ 29,670,647

5. Accounts Receivable

Accounts receivable consist of the following at June 30, 2014.

Customer Accounts	
Billed water, sewer and wastewater regional	\$ 4,405,090
Less allowances	(610,872)
Total billed	3,794,218
Unbilled water (including power generation and wholesale water charges) and sewer	4,416,614
Adjustment to wastewater regional and sewer pump station for actual usage through June 30, 2014	(757,638)
Total Customer Accounts	\$ 7,453,194

6. Intergovernmental Receivables

The balance in this account represents the following:

	Current	Non-Current
Massachusetts Clean Water Trust loan funds not yet requested (or expended on project costs) as of June 30, 2014. These funds are expected to be drawn down as project costs are incurred in fiscal year 2015.	\$ 7,403,536	—
Amount due from Town of Wilbraham under an agreement signed in June 2007, whereby the Town agrees to reimburse the Commission a portion of the costs/debt incurred to enable the Town to enter the sewage disposal system. Future amounts to be paid by the Town are anticipated to coincide with certain debt issued by the Commission, which mature in fiscal years 2026 through 2038.	111,682	1,650,739
Total Balance June 30, 2014	\$ 7,515,218	\$ 1,650,739

7. Inventory for Consumption

This inventory balance at June 30, 2014 consists of the following, at right.

Consumables	
Fuel inventory (gasoline and diesel)	\$ 66,594
Materials inventory (parts and supplies)	1,048,841
Less adjustment for obsolete and slow moving materials inventory	(154,727)
Total	\$960,708

8. Deferred Outflows and Inflows

To accommodate the rate-making process, the Commission follows the accounting standards set forth in Financial Accounting Standards Codification Section 980 (FASC 980), *Accounting for the Effects of Certain Types of Regulation*. FASC 980 allows certain board approved (a) revenues provided for future allowable costs to be deferred until the costs are actually incurred (deferred credits) and (b) costs incurred to be capitalized if future recovery is reasonably assured (deferred charges).

Deferred Outflows

Deferred outflows of resources represent the consumption of net assets by the Commission that is applicable to future reporting periods. Deferred outflows of resources have a positive effect on net position, similar to assets.

The following is a summary of deferred outflow of resources balances as of June 30, 2014:

Unamortized refunding of debt	\$ 67,500
Deferred charges	3,417,737
Total Deferred Outflows	\$3,485,237

Deferred charges consist of costs incurred to privatize and upgrade the wastewater regional plant facility, accrued sick, vacation and other compensated absences, accrued workers compensation costs and net OPEB obligation. The privatization costs will be funded through adjustments to regional wastewater member town assessments over the life of the privatization contract, which ends in fiscal year 2021. Other costs will be recovered through future rates or matched against credits related to the specific costs in the future.

Deferred Inflows

Deferred inflows of resources are the acquisition of net assets by the Springfield Water and Sewer Commission that are applicable to future reporting periods. Deferred inflows of resources have a negative effect on net position, similar to liabilities.

Deferred inflows consists of the balance of deferred credits.

Amounts raised through rates specifically earmarked for capital improvements and debt repayment are recorded as deferred credits and will be reversed through the statement of revenues, expenses and changes in fund net position over the depreciable life of the asset and related debt repayment.

The application of FASC 980 results in certain revenues and expenses being removed from the statement of revenues, expenses, and changes in fund net position and reflected in the statement of net position as deferred outflows or deferred inflows. The revenues and expenses that have been removed from the statement of revenues, expenses, and changes in fund net position and added to the statement of net position appear in the line "Excess revenues used to fund deferrals" on the statement of revenues, expenses, and changes in fund net position. The detail of changes to and components of these amounts are as follows:

	6/30/13	Increase (Decrease)	6/30/14
Deferred Charges			
Accrued workers compensation	291,261	(139,958)	151,303
Accrued compensated absences	1,333,061	48,823	1,381,884
Net OPEB obligation	—	1,261,063	1,261,063
Privatization costs	723,246	(99,759)	623,487
Total deferred charges	\$ 2,347,568	\$ 1,070,169	\$ 3,417,737
Deferred Credits			
Capital improvements, net of depreciation	26,216,701	7,777,132	33,993,833
Principal debt payments	34,129,301	6,577,835	40,707,136
Group insurance deposit	495,227	—	495,227
Total deferred credits	\$ 60,841,229	\$ 14,354,967	\$ 75,196,196

9. Health Insurance Deposit

The Commission participates in the Hampshire County Group Insurance Trust (the Trust) to provide health insurance coverage to its employees. When the Commission joined the Trust, they were required to place on deposit the equivalent of 3 months (estimated) claims expense. This deposit reserve affords the Commission voting rights in the Trust and would only be used to fund the residual claims in the event the Commission withdraws from the Trust.

10. Capital Assets

Capital asset activity for the year ended June 30, 2014 was as follows (in thousands):

	Beginning Balance	Increase	Decreases	Convert to Capital Assets	Ending Balance
Capital assets, being depreciated					
Furniture and fixtures	\$ 6,133	\$ —	\$ —	\$ 601	\$ 6,734
Vehicles and equipment	8,136	—	(598)	867	8,405
Buildings and improvements	6,296	—	—	65	6,361
Infrastructure	262,852	—	—	10,433	273,285
Total capital assets, being depreciated	283,417	—	(598)	11,966	294,785
Less accumulated depreciation for					
Furniture and fixtures	(3,262)	(666)	—	—	(3,928)
Vehicles and equipment	(6,582)	(697)	582	—	(6,697)
Buildings and improvements	(1,330)	(179)	—	—	(1,509)
Infrastructure	(118,307)	(5,501)	—	—	(123,808)
Total accumulated depreciation	(129,481)	(7,043)	582	—	(135,942)
Total capital assets, being depreciated, net	153,936	(7,043)	(16)	11,966	158,843
Capital assets, not being depreciated					
Land	5,103	—	—	—	5,103
Construction in progress	68,268	29,968	—	(11,966)	86,270
Total capital assets, not being depreciated	73,371	29,968	—	(11,966)	91,373
Capital assets, net	\$ 227,307	\$ 22,925	\$ (16)	—	\$ 250,216

11. Long-Term Debt

A. Debt Issued through the City of Springfield

At the time of its creation, the Commission assumed general obligation certificates of indebtedness and State revolving loans of the City pertaining to the water and sewer systems. Payments of principal and interest are made directly to the City in accordance with the original maturity and interest schedules.

B. Revenue Bonds

Certain debt issued after separating from the City has been issued as Revenue Bonds. Under the terms of these loans, all operating revenues of the Commission are deposited in a dedicated operating reserve account and from which prescribed reserves are established (see restricted cash footnote). In addition, all bond proceeds have been deposited in separate project accounts that are under the lender's controls. These project accounts may be accessed only to fund project-related costs.

A summary of the long-term debt outstanding as of June 30, 2014

	Serial Maturities Through	Interest Rate(s) %	Loan Balance Outstanding as of 6/30/14	Bond Premium Amortization	Total Balance 6/30/14
Issued Through City of Springfield					
Sewer bond (MCWT 91-59)	02/01/15	1.00 – 2.75	\$ 119,051	\$ –	\$ 119,051
Sewer bond (MCWT 94-24)	02/01/15	1.00 – 2.75	<u>297,995</u>	<u>–</u>	<u>297,995</u>
Total issued through City			417,046	–	417,046
Issued Through Water and Sewer Commission					
Sewer (MCWT 94-24 / 95-07 / 98-133)	08/01/20	1.00 – 2.75	2,707,334	–	2,707,334
Sewer (United Water)	10/01/20	Various	588,042	–	588,042
Revenue bonds (refunding)	11/01/21	4.0 – 5.0	5,835,000	–	5,835,000
Sewer CSO (MCWT CW-01-39)	08/01/22	1.00 – 2.75	1,807,269	–	1,807,269
Revenue bonds	07/01/23	2.0 – 5.0	5,630,000	124,799	5,754,799
Revenue bonds	07/15/26	4.25 – 5.0	14,145,000	193,161	14,338,161
Revenue bonds	10/15/28	4.0 – 5.75	11,635,000	32,929	11,667,929
Sewer CSO (MCWT CW-08-36)	07/15/30	2.00	8,518,997	–	8,518,997
Revenue bonds	11/15/30	3.00–5.0	23,205,000	1,862,558	25,067,558
Sewer CSO (MCWT CW-08-36-A)	07/15/32	2.00	5,889,247	–	5,889,247
Sewer CSO (MCWT CW-10-06)	07/15/32	2.00	1,646,558	–	1,646,558
Sewer CSO (MCWT CW-11-01)	07/15/32	2.00	6,142,263	–	6,142,263
Sewer CSO (MCWT CW-11-22)	01/15/33	2.00	1,589,265	–	1,589,265
Sewer CSO (MCWT CW-12-03)	01/15/35	2.00	19,660,542	–	19,660,542
Sewer CSO (MCWT CW-06-27)	07/15/37	2.41	<u>24,849,104</u>	<u>–</u>	<u>24,849,104</u>
Total issued through Water and Sewer Commission			<u>133,848,621</u>	<u>2,213,447</u>	<u>136,062,068</u>
Total Long-Term Debt			<u>\$ 134,265,667</u>	<u>\$ 2,213,447</u>	<u>\$ 136,479,114</u>

C. State Revolving Loan

The U.S. Environmental Protection Agency sponsors a low interest rate loan program. The loans are administered by the States and are used by local communities to improve their sewer systems.

Some of the Commission's loans are administered through the Massachusetts Clean Water Trust (the Trust) Revolving Loan Program (previously known as the Massachusetts Water Pollution Abatement Trust). The following is a summary of the Trust loan balances at June 30, 2014.

Loan Number	Issue Date	Original Loan Balance	Principal Subsidy	Balance 6/30/14
91-59	06/01/95	\$ 1,513,116	\$ (114,381)	\$ 119,051
94-24 (Part II)/ 95-07/98-133	11/01/00	6,572,640	(1,262,515)	2,707,334
CW-01-39	11/26/02	4,365,122	(660,576)	1,807,269
CW-10-06	06/13/12	3,176,651	(1,110,353)	1,646,558
CW-11-01	06/13/12	7,304,701	(695,563)	6,142,263
CW-11-22	05/22/13	1,860,000	(203,737)	1,589,265
CW-12-03	12/31/13	20,497,831	(837,289)	19,660,542

D. Future Debt Service

The annual payments to retire all general obligation long-term debt outstanding (including bond premium amortization) as of June 30, 2014 are as follows:

	Principal	Interest	Total
2015	\$ 7,661,312	\$ 4,460,129	\$ 12,121,441
2016	7,428,034	4,207,932	11,635,966
2017	7,628,126	3,966,388	11,594,514
2018	7,834,462	3,708,605	11,543,067
2019	8,026,994	3,447,635	11,474,629
2020 – 2024	39,515,799	12,777,087	52,292,886
2025 – 2029	33,805,813	6,095,298	39,901,111
Thereafter	<u>24,578,574</u>	<u>1,906,302</u>	<u>26,484,876</u>
Total	<u>\$ 136,479,114</u>	<u>\$ 40,569,376</u>	<u>\$ 177,048,490</u>

E. Long-Term Debt Activity

2014 summary of activity in long-term obligations:

	Balance 07/01/13	Increase	Decrease	Balance 06/30/14	Less Current Portion	Equals Long-Term Portion
Long-Term Debt (in thousands)						
Loans Payable						
Issued through Commission	\$ 123,326	\$ 19,661	\$ (6,925)	\$ 136,062	\$ (7,244)	\$ 128,818
Issued through City	812	–	(395)	417	(417)	–
Unamortized effect of advance refunding	(78)	–	10	(68)	10	(58)
Other						
Accrued compensated absences	1,333	167	(118)	1,382	(180)	1,202
Net OPEB obligation	–	1,494	(233)	1,261	–	1,261
Accrued Workers compensation	291	–	(140)	151	–	151
Total	<u>\$ 125,684</u>	<u>\$ 21,322</u>	<u>\$ (7,801)</u>	<u>\$ 139,205</u>	<u>\$ (7,831)</u>	<u>\$ 131,374</u>

F. Bond Covenants

The Commission's General Bond Resolution contains various restrictive covenants including, among other things, restrictions on incurring both short-term and long-term debt in certain circumstances and restrictions on selling, mortgaging, leasing, or otherwise disposing of any part of the system. The Bond Resolution requires the Commission to establish water and sewer rates at least sufficient to pay current expenses, pay principal and interest of indebtedness, create and maintain reserves required by bond resolutions, and pay the cost of all necessary repairs, replacements, and renewals of the system. They also require certain accounts to be established and maintained (Note 4), the balances of which are restricted to various operating, debt service, capital expenditure, and renewal and replacement purposes. The Commission has pledged all cash accounts and revenues as collateral for the debt.

In addition the Commission is required to comply with certain bond covenants which require that "net revenues" as defined in the General Resolution, for each fiscal year shall equal at least 125% of the Debt Service Requirement.

The Commission was in compliance with all bond covenants for the year ended June 30, 2014.

12. Restricted Net Position

The balance in restricted net assets of \$31,651,795 represents the restricted cash balance for required reserves and scholarships of \$29,668,951 and the total value of inventory of \$1,982,844.

13. Subsequent Events

Debt – In July 2014, the Commission issued a general revenue bond for \$25,615,000. The bond carries an interest rate of 3-5% and is payable over the next twenty years.

In September 2014, the Commission signed an interim anticipation note for a CSO project through the Massachusetts Clean Water Trust. The loan amount of \$22,587,589 carries an interim interest rate of 0.10% and is scheduled to be converted to a permanent loan by December 2015.

In October 2014, the Commission issued a general revenue refunding bond for \$15,245,000 to refund their 2003A and 2006A bonds. The refunding bond carries an interest rate of 3-5% and is payable over the next twelve years.

14. Commitments and Contingencies

Grants – Amounts received or receivable from grantor agencies are subject to audit and adjustment by grantor agencies, principally the federal government. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable funds. The amount of expenditures which may be disallowed by the grantor cannot be determined at this time, although the Commission expects such amounts, if any, to be immaterial.

Sewer Overflow – The Commission has been under a series of administrative orders (AO) from the Environmental Protection Agency to abate the discharge of pollutants from overflow into the Connecticut River.

In September 2008, the Commission received an AO, related to sewer collection system Capacity, Management, Operation and Maintenance (CMOM) program and completion of the Final Long-term CSO Control Plan. Under the AO, the Commission is required to establish a CMOM program to assess and monitor the entire system; identify and prioritize system deficiencies; and ultimately design plans and construction drawings for eliminating overflows. The Commission submitted a Long-Term CSO Control Plan in May 2012 which has been accepted by EPA and the Massachusetts DEP. This integrated plan outlines priority projects over the next 20 years but allows the Commission flexibility to address other needs if the situation arises. The Commission will

continue to receive separate AOs for each scheduled project in the Long-Term Control Plan as the projects progress.

In June 2012, the Commission received an additional AO, to again abate the discharge of pollutants from overflow into the Connecticut River. The deadline for completion of this AO is December 31, 2014. The Commission is currently on schedule to meet the time requirements contained in this AO.

Compliance with the AOs will result in major expansion, improvement and/or construction of new and existing facilities (pump stations and related infrastructure). As a result, costs for the major projects currently identified, estimated at \$112 million (\$17 million of which has been incurred as of June 30, 2014) has or will be capitalized as incurred. The Commission intends to fund these costs through a combination of grants, reduced rate (State) loans, bonds, and retained earnings.

Workers Compensation Liability – The financial statements include an estimate of future benefit costs/settlements for employees currently receiving workers compensation benefits.

Self-Insurance – The Commission participates in the Hampshire County Group Insurance Trust to provide health insurance coverage to its employees. The Trust is funded by member assessments, which are calculated in a manner similar to commercial insurance premiums. As of March 31, 2014 the Trust contracted with an insurance carrier for excess liability coverage which takes effect when an individual claim exceeds \$175,000.

If the Trust were to experience a cash deficit, each member would be required to contribute additional funds. At March 31, 2014, according to the Trust's unaudited financial statements, after accruing an estimated liability for incurred but unreported claims of approximately \$3.3 million, the Trust was in a surplus position of approximately \$27.1 million.

15. Post-Employment Health Care and Life Insurance Benefits

GASB Statement 45, Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions, requires governments to account for other post-employment benefits (OPEB), primarily healthcare, on an accrual basis rather than on a pay-as-you-go basis. The effect is the recognition of an actuarially required contribution as an expense on the statement of activities when a future retiree earns their post-employment benefits, rather than when they use their post-employment benefit. To the extent that an entity does not fund their actuarially required contribution, a post-employment benefit liability is recognized on the statement of net position over time.

A. Plan Description

In addition to providing the pension benefits described in Note 16, the Commission provides post-employment healthcare benefits for retired employees through the City of Springfield's plan administered through the Group Insurance Commission (GIC). The GIC is a quasi-independent state agency that administers an agent multi-employer defined benefit OPEB plan. As of December 31, 2013, the actuarial valuation date, approximately 142 retirees and 230 active employees meet the eligibility requirements. The plan does not issue a separate financial report.

B. Benefits Provided

The Commission provides medical and prescription drug coverage to retirees and their covered dependents. All active employees who retire from the Commission and meet the eligibility criteria will receive these benefits.

C. Funding Policy

Retirees contribute 25% of the cost of the health plan, as determined by the Commission. The Commission contributes the remainder of the health plan costs on a pay-as-you-go basis.

D. Annual OPEB Costs and Net OPEB Obligation

The Commission's fiscal 2014 annual OPEB expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover the normal cost per year and amortize the unfunded actuarial liability over a period of thirty years. The table at right shows the components of the Commission's annual OPEB cost for the year ending June 30, 2014, the amount actually contributed to the plan, and the change in the Commission's net OPEB obligation based on an actuarial valuation as of December 31, 2013 (in thousands).

Annual required contribution (ARC)	\$ 1,494
Interest on net OPEB obligation	—
Adjustment to ARC	—
Annual OPEB cost	1,494
Contributions made	(233)
Increase in net OPEB obligation	1,261
Beginning of year Net OPEB obligation	—
End of year Net OPEB obligation	\$ 1,261

The Commission's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation were as follows:

Fiscal Year Ended	Annual OPEB Cost	% of OPEB Cost Contributed	Net OPEB Obligation
2014	\$ 1,494	16%	\$1,261

E. Funding Status and Funding Progress

The funded status of the plan as of December 31, 2013, the date of the most recent actuarial valuation was as follows (in thousands):

Actuarial accrued liability (AAL)	\$ 15,837
Actuarial value of plan assets	—
Unfunded actuarial accrued liability (UAAL)	\$ 15,837
Funded ratio (actuarial value of plan assets/AAL)	0%
Covered payroll (active plan members)	N/A
UAAL as a percentage of covered payroll	N/A

Actuarial valuations of an ongoing plan involve estimates of the value of reported amount and assumptions about the probability of occurrence of events far into the future. Examples included assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

F. Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the plan as understood by the Commission and the plan members and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the Commission and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the December 31, 2013, actuarial valuation the projected unit credit cost method was used. The actuarial value of assets was not determined as the Commission has not advanced funded its obligation. The actuarial assumptions included a 3.5% investment rate of return and an initial annual healthcare cost trend rate of 6.5%, which decreases to a 5% long-term rate for all healthcare benefits after ten years. The amortization costs for the initial UAAL is a level percentage of payroll for a period of 30 years, on a closed basis. This has been calculated assuming the amortization payment increases at a rate of 4.5%.

16. Pension Plan

The Commission follows the provisions of GASB Statement No. 27, *Accounting for Pensions for State and Local Government Employees* (as amended by GASB 50), with respect to the employees' retirement funds.

A. Plan Description

Substantially all full time employees participate in the City of Springfield Contributory Retirement System (the System), a cost-sharing, multiple-employer, defined benefit pension plan administered by the City of Springfield Retirement Board. The System provides retirement, disability, and death benefits to plan members and beneficiaries. Chapter 32 of the Massachusetts General Laws assigns the System the authority to establish and amend benefit provisions of the plan and grant cost-of-living increases. The System issues a publicly available financial report which can be obtained through the City of Springfield Retirement System, 70 Tapley Street, Springfield MA 01104.

B. Funding Policy

Plan members are required to contribute to the System at rates ranging from 5% to 11% of annual covered compensation. The Commission is required to pay into the System its share of the remaining system-wide actuarially determined contribution plus administration costs which are apportioned among the employers based on active covered payroll. The contributions of plan members and the Commission are governed by Chapter 32 of the Massachusetts General Laws. The Commission's contributions to the System for the years ended June 30, 2014, 2013, and 2012 were \$3,860,964, \$3,558,294 and \$3,436,573, respectively, which were equal to its annual required contributions for each of these years.

C. Funding Status

The annual required contribution for the current year was determined as part of an actuarial valuation using the entry age normal actuarial cost method. The actuarially accrued liability for the City of Springfield as of January 1, 2012 was \$925 million. The City's assets available for benefits on that date (at market value) was \$268 million, leaving an unfunded actuarially accrued liability of \$657 million. The percentage attributable to each participating entity was not available. The actuarial value of assets is determined by projecting the market value of assets as of the beginning of the prior plan year with the assumed rate of return during that year (8%) and accounting for deposits and disbursements with interest at the assumed rate of return. The unfunded actuarially accrued liability is being amortized as a level percentage of payroll on a closed basis. The remaining amortization period at January 1, 2012 was 25 years, with payments increasing between 5-6% per year.

17. Transactions with City of Springfield

Other than the retirement system contribution noted above, the Commission's fiscal year 2014 transactions with the City consist of payments for Police Department services of \$885,518, for retiree health insurance of \$182,502, and for other City department services and fees totaling \$416.

18. Wastewater Regional Operations Management

In August 2000, the Commission entered into an agreement with United Water, Springfield, LLC (now United Water Environmental Services, Inc.) to operate the Commission's wastewater regional operations effective October 1, 2000 and for a term of 20 years. The pertinent conditions of the agreement are as follows:

- All assets remain the property of the Commission
- Equipment/inventory used over the 20-year term is to be replaced/reimbursed by United Water
- The Commission continues to control the customer billing process
- The Commission agreed to incur a maximum of \$10.3 million for the initial capital improvements to the facility. These improvements became the property of the Commission upon acceptance of the work performed.
- United Water bills the Commission monthly for the cost of providing service and an administrative fee. The monthly cost as of June 2014 was approximately \$890,000
- In September 2000, United Water reimbursed the Commission for approximately \$1.9 million of costs incurred in the privatization process. The Commission is repaying this amount through the monthly billing process
- Under the contract, United Water must provide a guaranteed letter of credit to the Commission as security for operating performance and capital asset management. The letter of credit is adjusted annually to maintain a value equal to 150% of the contract value, which changes based on a number of factors. At June 30, 2014, the letter of credit was approximately \$20.1 million.

19. Implementation of New GASB Standards

The GASB has issued Statement No. 68, *Accounting and Financial Reporting for Pensions*, which is required to be implemented in fiscal year 2015. Management's current assessment is that this pronouncement will have a significant impact on the Commission's basic financial statements by recognizing as a liability and expense the Commission's applicable portion of the City of Springfield Retirement System's actuarially accrued liability.

Required Supplementary Information (Unaudited)

Schedule of Funding Progress

Springfield Water and Sewer Commission for the year ended June 30, 2014

Other Post-Employment Benefits	Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)–Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
	12/31/13	\$ –	\$15,836,718	\$15,836,718	0.0%	N/A	N/A

Employees' Retirement System Schedule of Funding Status	Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)–Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b-a)/c]
	01/01/12	\$267,806,693	\$924,996,962	\$657,190,269	29.0%	\$134,749,528	487.7%
	01/01/10	278,377,005	799,915,756	521,538,751	34.8	124,129,569	420.2
	01/01/08	296,522,245	699,026,798	402,504,553	42.4	126,478,597	318.2
	01/01/05	276,286,563	649,023,965	372,737,402	42.6	115,383,642	323.0
	01/01/04	291,017,758	615,605,168	324,587,410	47.3	109,937,408	295.2

Employees' Retirement System Schedule of Employer Contributions	System Wide			
	Plan Year End	Annual Required Contributions	Actual Contributions	Percent Contributed
	12/31/13	\$40,824,977	\$40,824,977	100%
	12/31/12	39,380,319	39,380,319	100%
	12/31/11	35,984,472	35,984,472	100%

Commission	
Actual Contributions	Commission Contributions as a % of Actual Contributions
\$3,860,964	9.5%
3,558,294	9.0
3,436,573	9.6

The accompanying notes are an integral part of these financial statements.

Schedule of Operating Expenditures Budget and Actual

Springfield Water and Sewer Commission for the year ended June 30, 2014

	Original Budget	Final Budget	Actual	Variance Favorable (Unfavorable)
Expenditures and Other Uses				
Salaries and wages	\$ 13,743,790	\$ 13,743,790	\$ 12,754,106	\$ 989,684
Employee benefits	6,767,140	6,767,140	6,587,340	179,800
Operations	23,410,548	23,410,548	21,588,647	1,821,901
Intergovernmental	551,768	551,768	519,315	32,453
Capital outlay	443,550	443,550	294,187	149,363
Depreciation and amortization	7,142,654	7,142,654	7,142,654	—
Other	674,900	674,900	484,610	190,290
Interest	4,639,435	4,639,435	4,175,867	463,568
Total Expenditures	\$ 57,373,785	\$ 57,373,785	\$53,546,726	\$ 3,827,059

The accompanying notes are an integral part of these financial statements.

Notes to Supplemental Schedule

Schedule of Operating Expenditures – Budget and Actual

Budgetary Basis

The appropriation appearing to the left of this page of the financial statements represents the operating budget of the Commission that was originally authorized in June 2013.

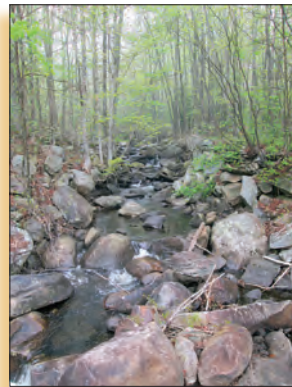
Budget/GAAP Reconciliation

The budgetary data is based upon accounting principles that differ from generally accepted accounting principles (GAAP). Therefore, in addition to the GAAP basis financial statements, the results of operations are presented in accordance with budgetary accounting principles to provide a meaningful comparison with budgetary data.

The following is a summary of adjustments made to the actual expenditures to conform to the budgetary basis of accounting.

Operating Expenditures (GAAP basis)	\$51,890,194
Non-operating Expenditures (GAAP basis)	4,331,542
Reverse capital expenditures appropriated in a prior fiscal year	(1,090,307)
Reverse the effect of prior year and current year GAAP accruals of:	
Inventory	(76,444)
Accounts payable and accrued payroll	(182,656)
Interest on long-term debt	(155,675)
Net OPEB obligation	(48,823)
Accrued Compensated absences	(1,261,063)
Accrued Workers compensation	139,958
Budgetary basis	\$ 53,546,726

Back Cover
Borden Brook Reservoir



Feeder Stream to Borden Brook



Springfield Water and Sewer Commission

P.O. Box 995

Springfield, Mass. 01101-0995

