



Efficiency
Innovation
Relationships
Reliability
Stability
Sustainability
Resiliency
Connections

FY2019 ANNUAL REPORT

Building for Tomorrow





Aerial View of the early stages of construction of the York Street Pump Station and Connecticut River Crossing Project, W. Columbus Avenue, Springfield.

Integrity · Environment · Vision · Accountability

Table of Contents

Message from the Commissioners.....	2
Message from the Executive Director.....	3
Water System Map	4
Wastewater System Map	5
Infrastructure Renewal	6-9
Watershed Protection	10-11
Watershed Lands Map	12
Water Supply & Consumption.....	13
Drinking Water Treatment.....	14-15
Wastewater Treatment	16-17
Field Services.....	18-19
Technology Infrastructure.....	20
Education & Community.....	21
Customer Service.....	22
Financial Report	23-24
Financial Analysis	25

Mission Statement

Our mission is to provide an 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 a safe and professional workforce
- Understand and respond to customers' expectations for service

Message From the Commissioners

The Board of Commissioners is pleased to present the annual report for fiscal year 2019 (FY19). Between July 2018 and June 2019 we oversaw the progress of numerous plans, initiatives, and projects in order to ensure service reliability and affordability for our ratepayers. In FY19 we delivered 10.5 billion gallons of drinking water, and cleaned 17.3 billion gallons of wastewater, as is our central mission. But integrated into these operations was our ongoing effort to steward the region's largest water and wastewater system towards the future in an affordable manner, and FY19 included many examples of how we are already building for tomorrow.

Perhaps the highlight of the year was the groundbreaking of the York Street Pump Station and Connecticut River Crossing Project in May 2019. After several years of careful planning, the cornerstone to the Commission's 2014 Integrated Wastewater Plan finally moved into the construction phase. Though most of our customers probably do not notice wastewater pump stations as they go about their business, the presence of Congressman Richard Neal and Mayor Domenic J. Sarno at the event helped highlight the importance of wastewater infrastructure to our everyday lives. The project provides value to our rate-

payers by addressing multiple obligations and issues in one design: the reduction of combined sewer overflows from our rivers, renewal of aging and obsolete infrastructure, and the addition of system redundancy and climate resiliency. We look forward to its completion in 2022.

There were also challenges in FY19 that underscored the need to keep planning and investing for the future. The Commission issued public notifications starting in January 2019 regarding the exceedance of haloacetic acids (HAA5) in drinking water. While this was not a public health emergency, it was caused by the treatment limitations of the West Parish Filters Water Treatment Plant, which was last substantially upgraded in 1974. New technology is needed to upgrade the plant to be able to consistently meet water quality standards and respond to changing regulations and climate change. Fortunately, steady planning to modernize the plant has been underway since 2015 as part of the West Parish Filters Facilities Plan. In FY19 the planning process was already in advanced stages, with the construction of a "pilot plant" to test new treatment methods that will resolve the HAA5 issue.

If there is one truth that FY19 and every

prior year during our tenure has shown, the water and wastewater industry is never static. With a legacy water and wastewater system dating back to the late 1800s, aging infrastructure always presents new issues that need to be solved, often outside of the schedule we may have planned. As Commissioners, our responsibility is to ensure stable rates relative to the dynamic nature of these challenges. Our oversight, financial planning, and fiscal policies are focused on enabling nimble responses to changing conditions while always maintaining the long view of affordability

and reliability for our present and future ratepayers. Stewardship of our most vital natural resource – our water – requires that we are always envisioning, planning, and building for tomorrow.



From left to right: Commissioner William Leonard, Commissioner Vanessa Otero, and FY19 Chairman Daniel Rodriguez.

Message From the Executive Director



Executive Director Joshua D. Schimmel speaks at the groundbreaking of the York Street Pump Station and Connecticut River Crossing Project, May 2019.



Executive Director Joshua D. Schimmel (center) meets with Congressman Richard Neal (second from right) and other water professionals to advocate for increased federal funding for water infrastructure, April 2019.

Alongside the Commissioners, I am proud to present this annual report reflecting our work program from FY19. The year was full of progress on many fronts, from our continual efforts to upgrade the water and sewer infrastructure beneath city streets, to the groundbreaking for a major project, to planning and testing new treatment methods at West Parish Filters Water Treatment Plant. We also continued enhancing our technological capabilities, customer service, and outreach to our community. The common thread throughout all of our FY19 activities is that we were building with a constant eye on tomorrow.

There is a large measure of satisfaction when a project reaches the construction stages, considering the intensity of planning and coordination that takes place ahead of time. This was particularly true in FY19 at the groundbreaking of the York Street Pump Station and Connecticut River Crossing project, which has been in the works for the greater part of a decade. But it also holds for every small segment of water main we replace, or sewer main we clean and inspect, GPS unit we deploy, or water supply forest plan we complete. The satisfaction comes from knowing that these steps, however incremental, are part of the proactive and comprehensive approach

that we take to stewarding this vitally important water and wastewater system into its next century of service for the region.

The largest challenge in carrying out this work day-to-day and annually is balancing and sequencing the many needs for upgrades and investment. The pipes, treatment plants, watershed, reservoirs, pump stations, manholes, and myriad of other infrastructure assets of a water and wastewater system are all interconnected. Maintenance and upgrades must be carried out in manner that balances rate structure, regulatory compliance, and financial sustainability. Throughout this report are numerous examples of the projects and initiatives we implement to achieve this balance, while also advancing the larger cornerstone projects that will modernize our system for the 21st century.

As we continue to focus on our core aging infrastructure needs, we also are meeting the new challenges that we face concerning qualified workforce shortages, cybersecurity threats, and new regulations for emerging contaminants. We are responding to these challenges by forming new relationships with key local, state, and federal partners, and utilizing new technology. As we progress into FY20 and beyond the building

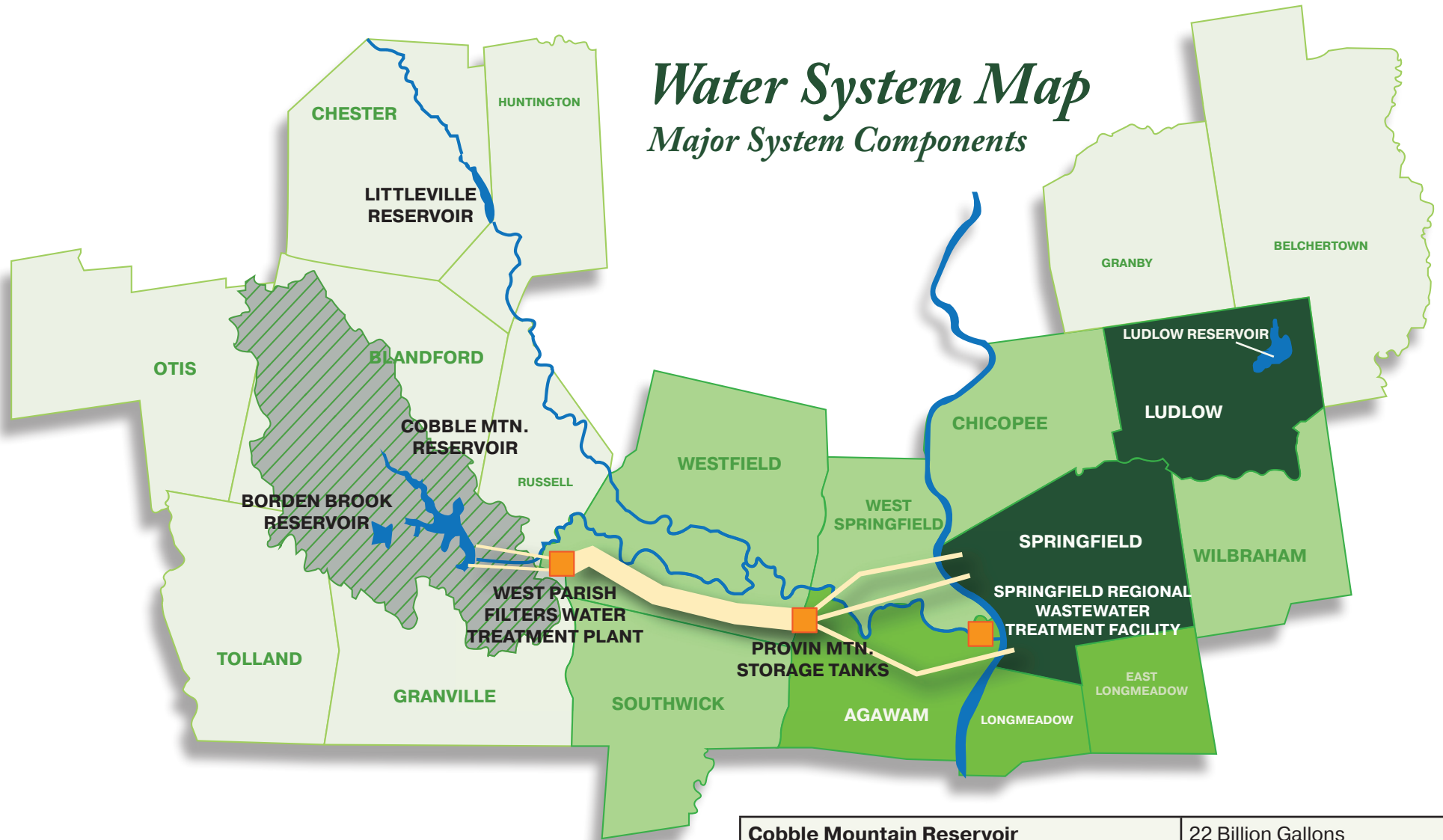
continues. I look forward to working alongside the Commissioners, Commission staff, and with our customers as we move forward and build for the future.




Joshua D. Schimmel
Executive Director

If you have any questions about the contents of this report, please contact the Commission at 413-452-1300.

Water System Map

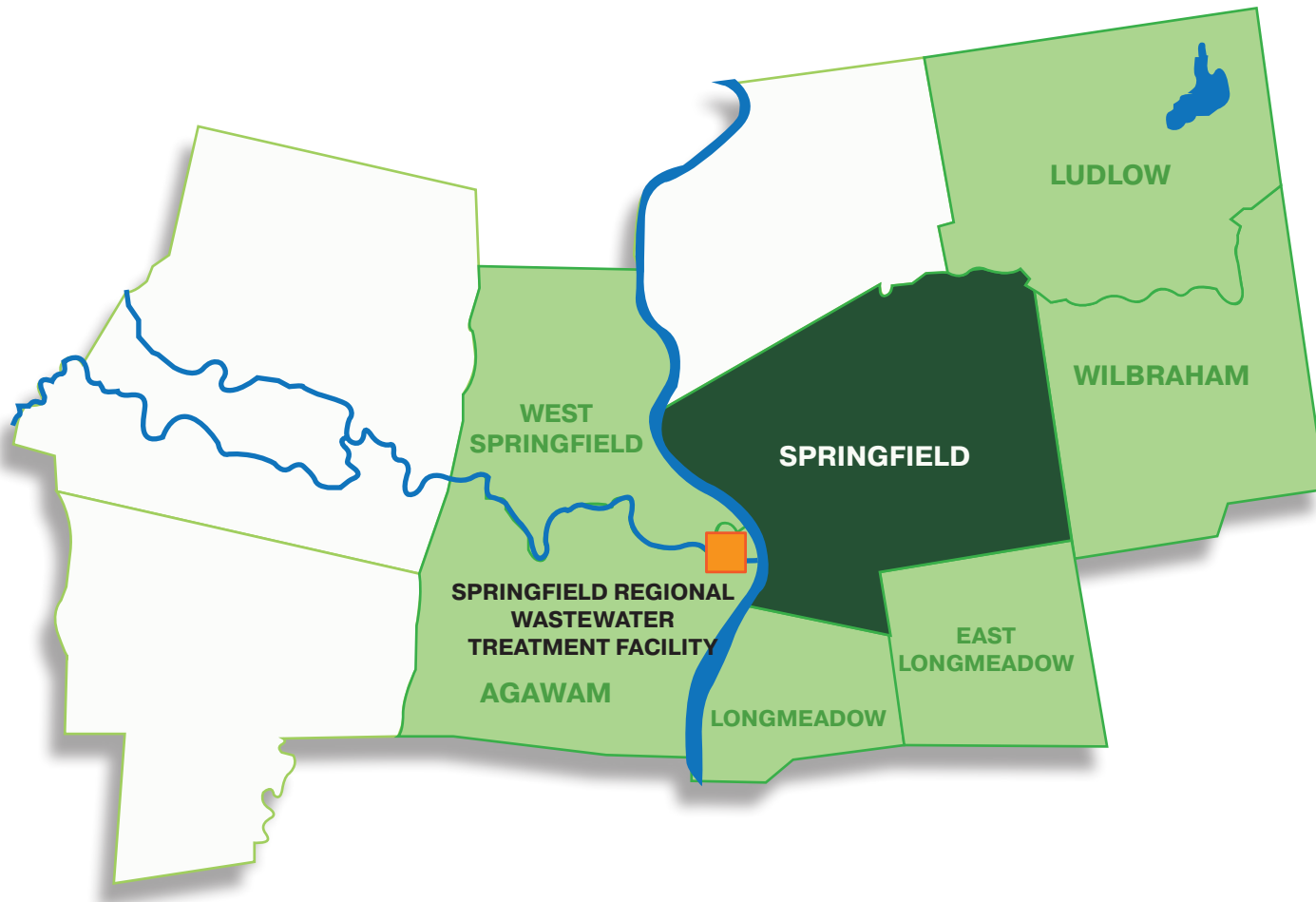
Major System Components





	Retail Water Communities
	Wholesale Water Communities
	Peak/Emergency Water Communities

Cobble Mountain Reservoir	22 Billion Gallons
Springfield Water Distribution System	500 miles of pipe
Ludlow Water Distribution System	80 miles of pipe
Borden Brook Reservoir	2 Billion Gallon Capacity
Ludlow Reservoir (Standby System)	2.2 Billion Gallon Capacity
Provin Mountain Storage Tanks	60 Million Gallon Capacity
West Parish Filters Water Treatment Plant	100 Million Gallons/Day

Wastewater Service Communities



	Retail Wastewater Communities
	Wholesale Wastewater Communities

Wastewater System Component	Capacity
Springfield Regional Wastewater Treatment Plant	67 Million Gallons/Day
Sewer Collection System (Springfield)	471 miles of pipe

Infrastructure Renewal

Building for Tomorrow

The original designers of the water and wastewater system built between the late 1900s through 1930s would be affirmed that their construction is still serving the public well into the 21st century. The high quality of design, engineering, and craftsmanship was testament to their vision for and dedication to the future of Springfield. But within their plans and designs was also the calculation that future generations would in turn maintain and invest in this vital public good. The responsibility to steward this legacy into the future is now an honor and responsibility the Commission takes very seriously.

Infrastructure renewal is one of the most critical components of carrying out the Commission's mission. The age of the system as well as the advance of science and corresponding regulations demand significant upgrades in order to continue delivering clean drinking water and reliable wastewater treatment. At the same time, maintaining ratepayer affordability for customers in the absence of state or federal grant funding for water infrastructure is a top priority. Therefore, the Commission spends great effort to carefully coordinate and sequence projects in order to maximize value for ratepayers and stabilize rate

increases. The following projects in this section highlight capital upgrade projects that were planned or implemented in FY19.

West Parish Filters Facilities Plan

The West Parish Filters Water Treatment Plant was built in 1909, with a major modernization completed in 1974. As science and technology advanced, plant processes were optimized over time to meet new regulations, but only within the limits of the 1974 design. In 2015, the Commission recognized the limitations of the plant processes in meeting future regulations. A new comprehensive facilities planning process was initiated to evaluate the entire plant in the context of current and future regulations and workforce needs.

In FY19, the Commission continued Phase 2 of the plan, most significantly the construction of the pilot plant to test new treatment methods (see page 14). Several capital projects resulting from Phase 1 of the plan were also implemented. This work included replacement of the buried chlorine feed lines and installation of a new leak detection system; the preliminary design of two new bridges to connect the treatment plant to the chlorine storage area (the existing bridges were constructed in 1909); and the design of new variable frequency drives

At Right: The new buried chlorine feed lines at West Parish Filters.

Opposite page, left: Commission staff and a contractor manually operate an actuator for a new transmission main valve.

Opposite page, right: The new Riverfront Park splash pad in Springfield.



Highlights of Major FY19 Capital Improvements

- \$3.3 million in water treatment system improvements projects.
- \$512,000 in transmission system rehabilitations.
- \$1.5 million in water distribution system assessment and rehabilitation.
- \$220,000 in hydrant projects.
- \$913,000 in meter replacements.
- \$1.1 million in wastewater collection system assessment and rehabilitation.
- \$656,000 in wastewater treatment system improvement projects.
- \$4.4 million in York Street and Connecticut River Crossing project.
- \$2.6 in water and sewer main rehabilitation projects.
- \$698,000 in hydro-power plant projects.
- \$1.1 million in various other rehabilitation and improvement projects.



lic analysis for the Cobble Mountain and Borden Brook reservoir dams was also completed.

Water Transmission and Storage Systems

Large tunnels, conduits, and transmission pipes from two different locations within Cobble Mountain Reservoir bring raw water to West Parish Filters. Rehabilitation of a two-mile 42-inch diameter raw water main dating from

for the process pumps, which will enable energy savings. In addition, a new cleaning method for one of the rapid sand filters was completed and can be used as a model for the five other filters.

Dams and Reservoirs

The Commission owns and is responsible for the maintenance of 10 dams, which were constructed between the late 1800s and the 1960s. Vegetation clearing and inspections required by state regulators are regular functions of dam maintenance. In FY19 the Commission continued to clear vegetation on the slopes of dams and spillways. Inspections required by the state Office of Dam Safety are to take place in FY20. In addition, a hydrologic and hydrau-

1960 was completed in FY19. Work included replacing valves at the inlet and outlet to the pipeline, repairing the access road, installing five new access manways, and the repair of 265 interior pipe joints. The pipeline was placed into service in August 2019 (FY20).

Once water is treated, it is carried to four storage tanks located within Provin Mountain in Agawam. The tanks serve to maintain pressure in the distribution system and supply in the event of sudden largescale water consumption (such as a fire or water main break). In FY19 the Commission took the original tank, which was constructed in 1909, offline. The Commission also added

mixers to improve water quality by reducing stagnation. These actions were taken based on a study completed in recent years that indicated reducing storage time and adding mixing would improve water quality. Design and project bidding for the hydraulic isolation of the oldest tank, and for a new cover for another tank, was completed in FY19 with work planned for FY20.

Cobble Mountain Hydro-Power Plant

The elevation of Cobble Mountain Reservoir approximately 800 feet above that of the city allows for the generation of electricity as water flows by gravity towards the valley. The Cobble Mountain Hydro-Power Plant was built in 1930 and is operated by Holyoke Gas & Electric. The Commission owns the plant and controls the amount of water flow through the plant based on water supply needs. Revenue from electricity is used to help offset the costs of capital projects. In FY19, 35,527 megawatts were generated, totaling \$5,031,460 in gross revenue.

Several upgrades and repairs were made to the 1930 plant in FY19. These included

the replacement of three additional power transmission poles dating from 1930 that serve the power plant, and the replacement of two cooling loops in two generation units. Designs were also ongoing for the replacement of the remaining original power transmission poles, and final design reviews were conducted for the replacement of two governors, which control the flow of water through the turbines. The replacement of the governors will be completed in FY20.

New Service Connections

All new or renovated projects that connect to retail water or sewer service requires coordination with the Commission's Engineering and Technical Services (ETS) group. In FY19, 27 commercial and 46 residential projects were reviewed and approved by ETS in order to ensure proper connection to the drinking water and wastewater systems. Notable projects included Brightwood Lincoln Elementary School, the revitalization of



Pynchon Park, and the installation of a new water service line for the splash pad at Riverfront Park. In addition, ETS inspectors performed 2,193 utility markouts, 542 of which were for emergency requests.

York Street Pump Station and Connecticut River Crossing Project

A groundbreaking ceremony was held for the York Street Pump Station and Connecticut River Crossing Project (YSPS) on May 20, 2019. The YSPS project is funded by a \$122 million low-interest loan provided by the Massachusetts Clean Water Trust State Revolving Fund, which receives funding from EPA. The Commission also received a state grant of \$185,000 in FY19 through the Pioneer Valley Planning Commission's Connecticut River Cleanup Committee to be used towards YSPS construction. By addressing multiple issues – such as aging infrastructure, regulatory compliance, and system resiliency – at once, the Commission is aiming to maximize value for rate-payer investment and maintain affordability.

A cornerstone project of the Commission's Integrated Wastewater Plan (adopted in 2014), perhaps the YSPS's most high profile objective is environmental protection by reducing combined sewer overflows (CSOs).

Combined sewer systems collect wastewater and stormwater in the same pipes, and are prevalent in older cities such as Springfield. Springfield has 150 miles of combined sewer pipe and 23 combined sewer outfalls that discharge into the Connecticut, Mill, and Chicopee Rivers. Since 1994 when EPA mandated the reduction of CSOs in cities nationwide, the Commission has invested more than \$100 million in its CSO reduction program, resulting in an approximate 34% reduction in annual CSO volume. The YSPS project will increase that annual reduction volume up to 60% by preventing 100 million gallons of CSOs from entering the Connecticut River in a typical year.

The modern and higher-capacity pump station will increase pumping capacity from 34 to 62 million gallons/year, and replace the existing and obsolete 80-year-old station. Construction of three new conveyance pipes under the Connecticut River will improve system redundancy and reliability. The city will also receive increased flood control protection through the repurposing of the existing pump station.

In FY19 the Commission contracted with Daniel O'Connell's Sons, Inc. of Holyoke as the Construction Manager-at-Risk (CMAR).

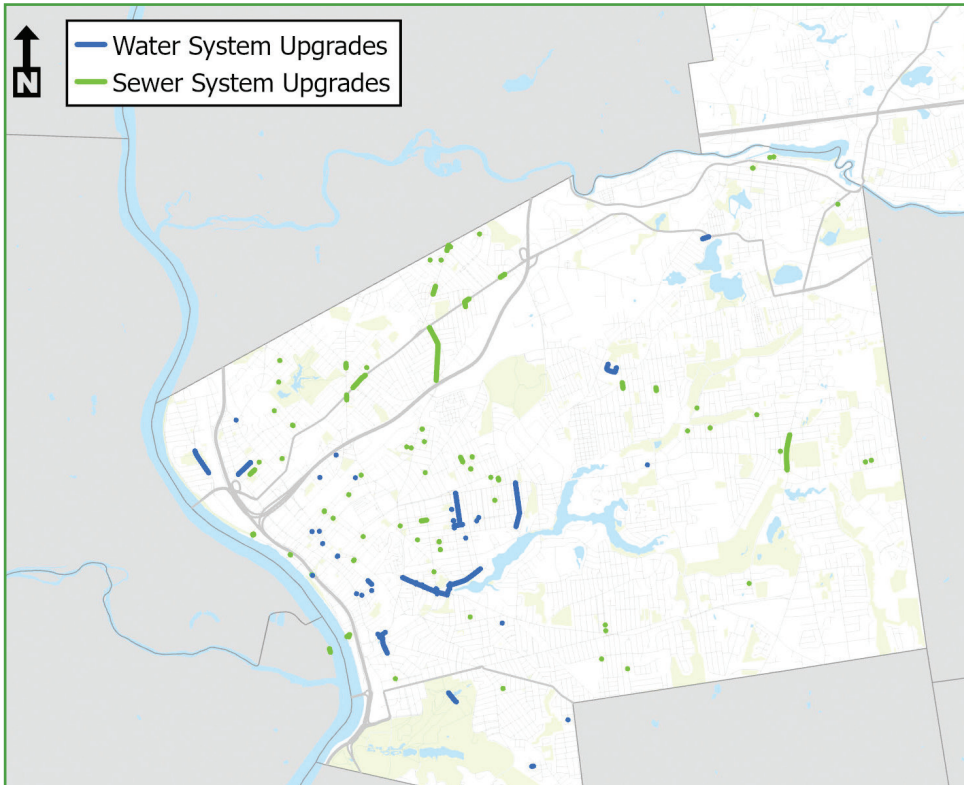


Above: From left to right, MassDEP Commissioner Martin Suuberg, MassDEP Western Region Director Mike Gorski, EPA Region 1 Acting Administrator Deborah Szaro, Congressman Richard Neal, Mayor Domenic J. Sarno, Executive Director Josh Schimmel, Commissioner Vanessa Otero, Commissioner Bill Leonard, and Commissioner Dan Rodriguez participate in the groundbreaking for the York Street Pump Station and Connecticut River Crossing Project in May 2019.

Utilizing a CMAR is an innovative way to minimize unforeseen construction complications and unexpected costs by including the construction manager in the design process. Through this approach, the experience of the construction manager can help shape final plans and specifications. As part of this CMAR process a Guaranteed Maximum Price (GMP) contract value was

established in FY19 that covered construction work on either side of the river (the new York Street Pump Station in Springfield, and the new influent structure on Bondi's Island). Subcontracts for the various trades to work on the pump station project were secured by the CMAR and approved by the Commission.

FY19 Infrastructure Improvements



FY19 Water and Sewer System Upgrades	Amount Upgraded
Sewer pipe installed	2,503 linear feet
Sewer (rehabilitation) lining	6,615 linear feet
Water main pipe installed	10,827 linear feet
New manholes installed/rehabilitated	12

Water and Sewer Distribution System Renewal

Data from the Asset Management and Maintenance Program (see page 19) are used to identify where repairs and replacements are most needed in the wastewater collection system. In FY19, 1.7 miles of underground sewer infrastructure were upgraded. The Commission’s Field Services group also prioritizes water distribution upgrades using data on asset age and water main break history. In FY19, 2 miles of underground water infrastructure were repaired or rehabilitated. These upgrades

are funded through the Infrastructure Improvements Program, which in FY19 allocated \$2.1 million for sewer and \$1.7 million for water upgrades.

Below: An old water main is removed from the intersection of Rifle and Allen Streets.



Watershed Protection

Building Resiliency

As much as pipes, treatment plants, and pump stations are critical components of the Commission's infrastructure, so are the thousands of acres of forestland surrounding Borden Brook, Cobble Mountain, and Ludlow Reservoirs. The role of the forest in water treatment is one that has remained relatively constant despite how much water treatment technology, science, and regulations have evolved over the past century. Forest land provides natural filtration and captures, stores, and releases water in a sustainable cycle, and also provides a natural buffer from

potential contamination sources such as development and agricultural runoff.

Approximately 31,000 acres (48.5 square miles) comprise the Little River watershed in which Cobble Mountain and Borden Brook reservoirs, the Commission's main drinking water sources, are located. Rain, snow, rivers, streams, and springs within the Little River watershed drain into the reservoirs, where water then flows on to West Parish Filters Water Treatment Plant for treatment. In FY19 Cobble Mountain Reservoir capacity levels ranged from a low of 88% to 99%. Ludlow Reservoir, which serves as an emergency water sup-

ply, is surrounded by approximately 2,232 acres of protected forest land in Ludlow.

Land Acquisition and Protection Program

Land protection is a proven approach to reduce the water supply's susceptibility to contamination, and the Commission actively pursues land protection opportunities in the Little River watershed. Approximately 49% of the forest land in the Little River Watershed is owned and protected by the Commission, and an additional 9% is protected by public or non-profit land protection organizations. In FY19 the Commission pursued an opportunity to protect 83 acres in Granville that was finalized in FY20. By utilizing Geographic Information System (GIS) mapping, the Commission also prioritizes land parcels for future potential protection. Considerations include whether parcels contain acreage that is within 400 feet of a water body (known as "Zone A" land), their role in the watershed ecosystem, and the potential market for sale.

Watershed Management

Active management of watershed forest owned by the Commission plays a critical role in water treatment. Management activities promote forest health and resiliency

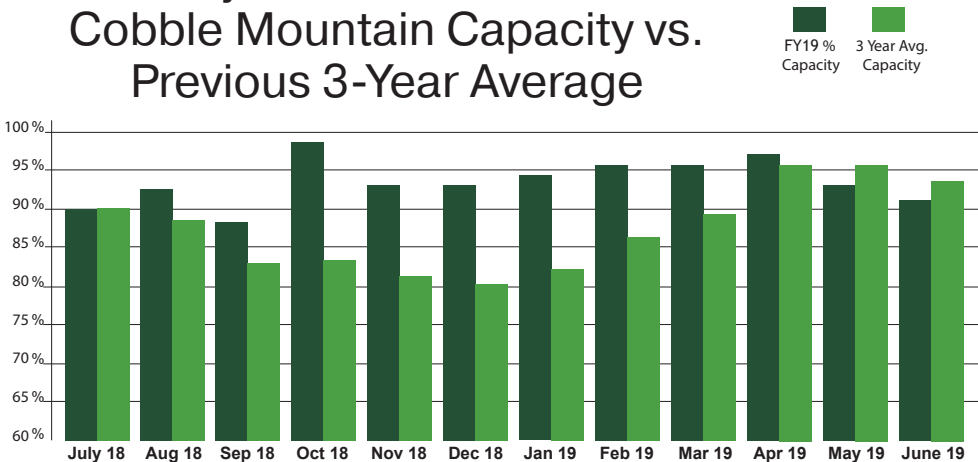


Above: Defoliation from gypsy moths was documented in August 2018 in Ludlow Reservoir, leading to forest management activities.

Below: A land steward measures culverts in the watershed.



July 2018 - June 2019 Cobble Mountain Capacity vs. Previous 3-Year Average



cy, maintain watershed infrastructure and access, and monitor for encroachment and potential sources of contamination.

Forest Management Program

In FY19 the Commission continued with the development of forest stewardship plans that fall within the framework of a new overarching “Watershed Forest Vision.” The updated plans and vision reflect the most up-to-date scientific forest management concepts and address anticipated impacts from a changing climate. Work on the Borden Brook Forest Stewardship Plan for 1,700 acres near the headwaters of Borden Brook Reservoir, as well as a full watershed forest inventory, commenced in FY19 and will be completed by the end of FY20. Implementation of management recommendations will be implemented as soon as feasible, even as other planning

continues.

A gypsy moth outbreak in Ludlow Reservoir shifted focus from the Little River watershed to Ludlow Reservoir watershed in FY19. As most of the oak in the watershed forest was fatally impacted, forest harvesting plans were developed by a consulting licensed forester for approval by state regulatory agencies and implemented starting in the early winter of 2019. Forest harvesting at Ludlow Reservoir will be complete by the end of FY20, after which management focus will return to the Little River watershed.



Watershed Maintenance

A healthy forest plays a passive role in the water treatment process, but maintaining the health of that forest and access to it demands year-round activity. Commission

land stewards are responsible for numerous monitoring and maintenance activities in the watershed, including boundary, invasive species, and wildlife monitoring; culvert assessments; and monitoring of watershed assets such as roads and facilities.

In FY19 watershed maintenance staff conducted debris removal in ditches and culverts along watershed roads, replacement of failing drainage culverts, and road grading where necessary. The Commission also partnered with the Town of Granville to make drainage improvements to approximately 68 existing drainage culverts within portions of Wildcat, Phelon, and Cobble Mountain Roads. Preventative road maintenance is a sound source water protection practice as it prevents washouts, erosion, and sedimentation during rain events.

Water Quality Monitoring

Stream and reservoir sampling are conducted by Commission land stewards and laboratory technicians. In FY19 a comprehensive reservoir sampling program for Borden Brook and Cobble Mountain Reservoirs was developed in order to track water quality changes, particularly dissolved natural organic matter, in the reservoirs over time. Land stewards were trained to take samples from boats along cross-sections of the reservoirs at multiple depths, resulting in approximately 900 data points per sampling event. Sampling takes place from April through December. The data will be used to inform treatment upgrades currently being planned for West Parish Filters Water Treatment Plant.

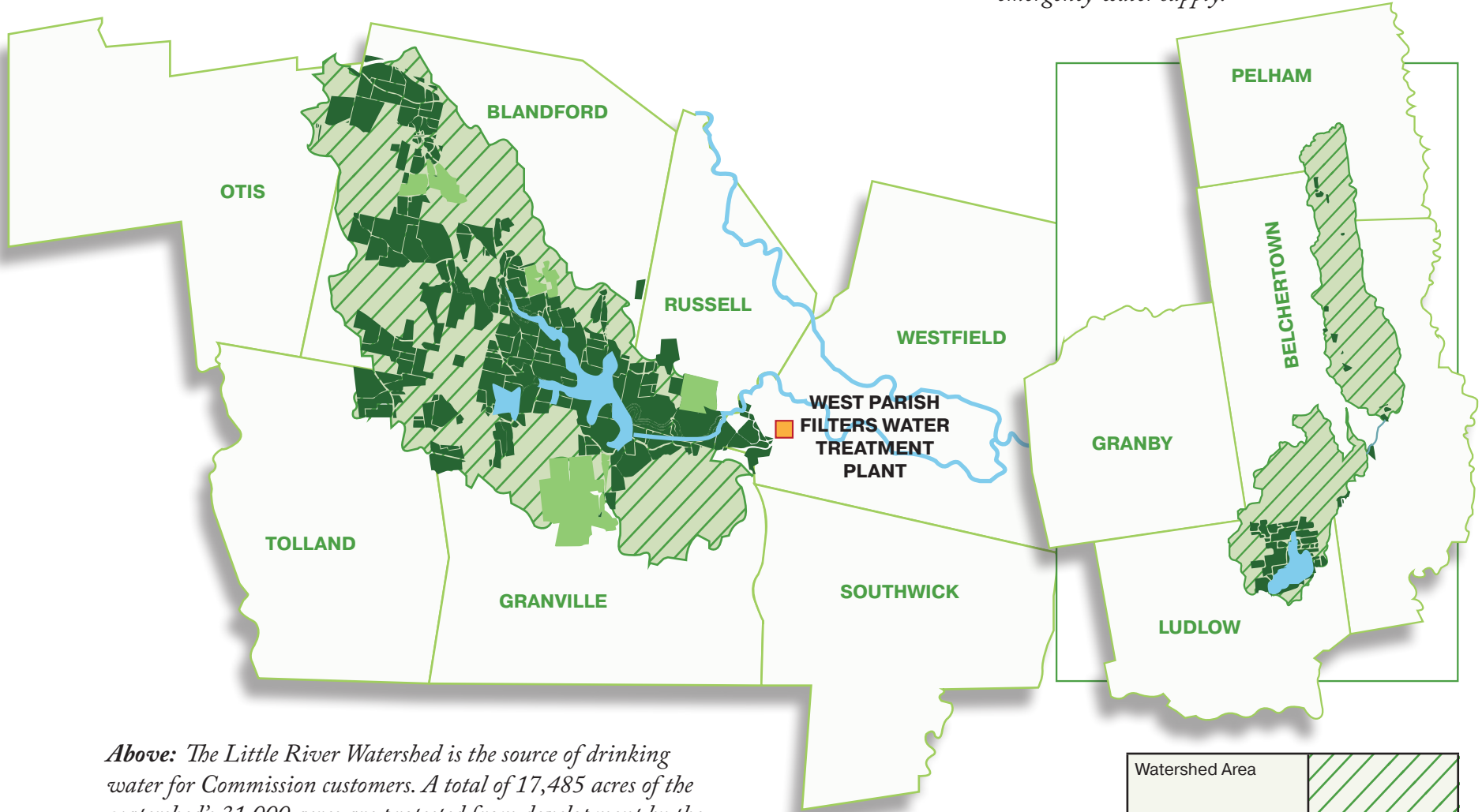
Ludlow Reservoir

Ludlow Reservoir was developed in 1872 and remains in service as an emergency water supply. The surrounding protected watershed forest is managed by the Commission primarily to protect water quality, and also to enable recreational use. There were 16,658 of visitors to Ludlow Reservoir in FY19. Public access in FY19 was limited at times due to forest harvesting activities taking place in the surrounding watershed.

Little River Watershed Protection	
14,803 acres (49%)	Land protected by the Commission
3,428 acres (61% of Little River watershed “Zone A” land)	“Zone A” land (within 400 feet of water) protected by the Commission
17,485 acres (58%)	Land protected by the Commission, state, and non-profit agencies

Watershed Lands

Below: Ludlow Reservoir was the City of Springfield's original reservoir. Today it is maintained as an emergency water supply.

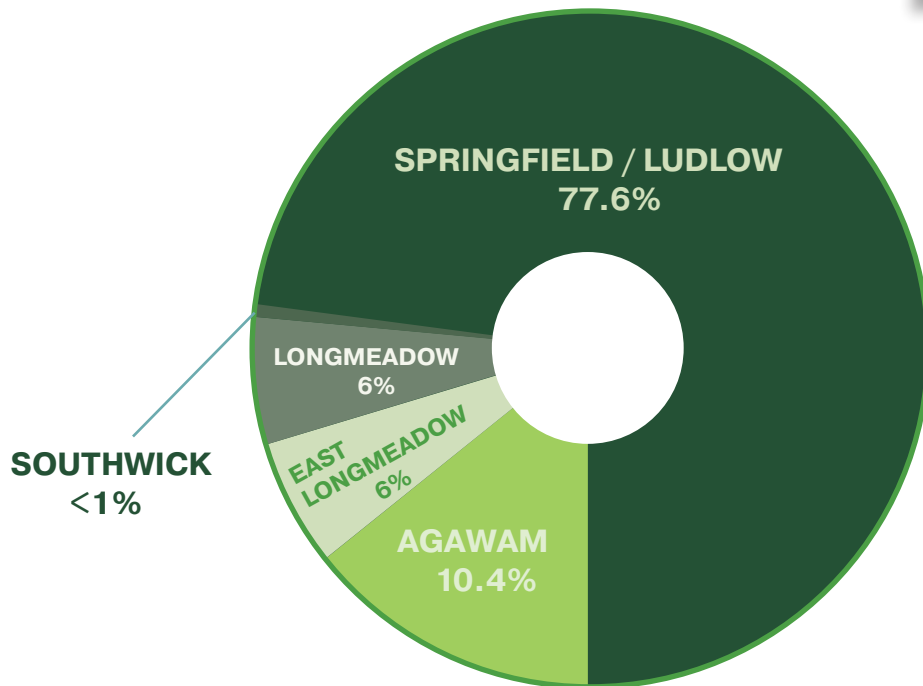
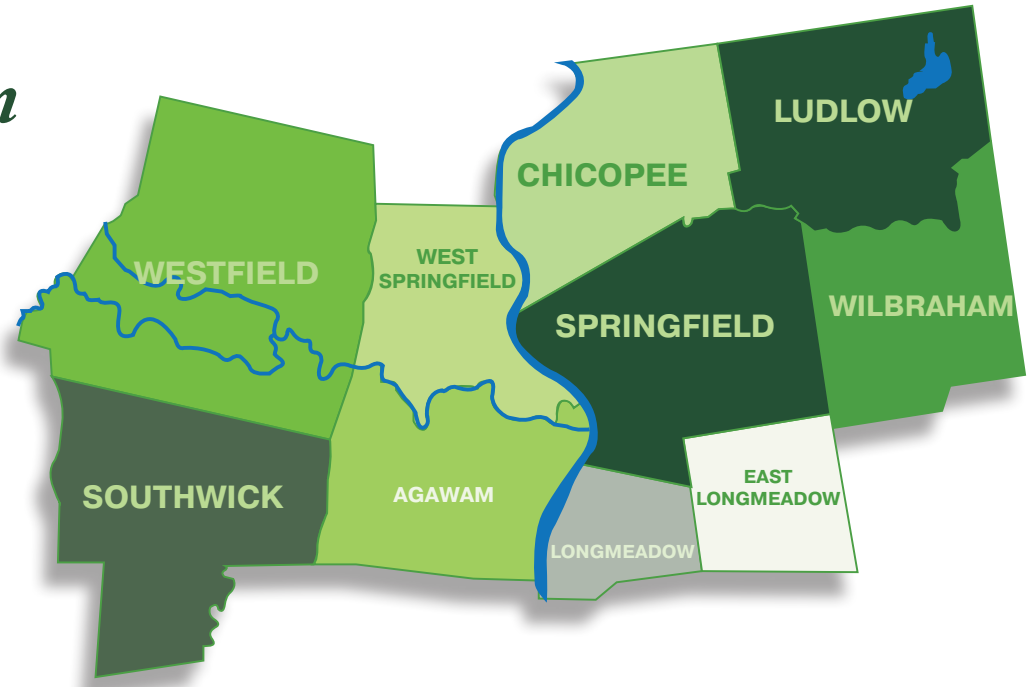


Above: The Little River Watershed is the source of drinking water for Commission customers. A total of 17,485 acres of the watershed's 31,000 acres are protected from development by the Commission, state, and non-profit agencies.

Watershed Area	
Commission-Owned Property	
Protected Land	

Water Supply & Consumption

Each day, in the Lower Pioneer Valley, approximately 250,000 people rely on the Commission for their drinking water. The Commission delivers drinking water to retail customers in Springfield and Ludlow (and a small portion of Chicopee and Wilbraham) and provides wholesale water to the towns of Agawam, Longmeadow, and East Longmeadow. The Commission also provides public water systems in Southwick, Westfield, West Springfield, Chicopee and Wilbraham with partial, peak or emergency water supply. In FY19, Commission customers consumed or used approximately 10.5 billion gallons of water.



FY19 Water Consumption By Town (Gallons)		
Agawam		1,100,072,000
East Longmeadow		625,353,000
Longmeadow		626,288,000
Southwick		17,790,000
West Springfield		0
Westfield		0
Wilbraham		0
Chicopee		0
Springfield/Ludlow		8,207,447,000
Total Consumed		10,576,950,000

Drinking Water Treatment

Building Innovation

In the hills of Westfield, 20 miles to the west of Springfield, is the West Parish Filters Water Treatment Plant, where water for over 250,000 customers in the lower Pioneer Valley is treated. Water treatment is one of the most essential functions of the Commission, as it protects public health by removing potentially dangerous pathogens from the region's drinking water. Some treatment processes in use at the Commission, such as chlorination, are credited with virtually eliminating water-borne diseases in the developed world over the past century.

West Parish Filters was originally built in 1909. Some sections of the older plant are still in use today, including slow sand filters built in the 1920s, which are used during peak demand periods. The plant last underwent significant modernization in 1974 when the rapid sands filtration facility was constructed. Today the Commission is currently in the process of planning and designing significant 21st century treatment upgrades for the plant.

The Commission spent approximately \$19.4 million in FY19 on water treatment-related operations.



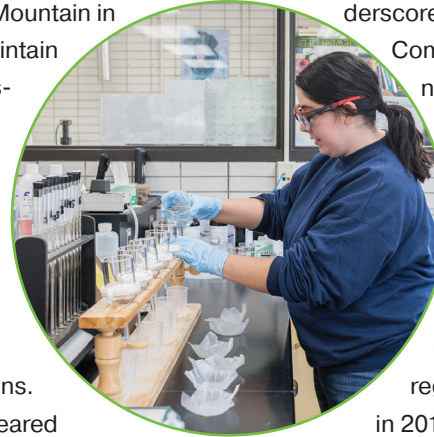
Above: The West Parish Filters Water Treatment Plant in Westfield.

Transmission System Maintenance

Staff stationed at Provin Mountain in Agawam oversee and maintain three high-pressure transmission mains that carry drinking water to retail and wholesale customers. Staff monitor for leaks, encroachments and excessive vegetation growth along the 37 miles of transmission mains. In FY19 vegetation was cleared along approximately 16 miles.

The Pilot Plant

The Commission takes a proactive approach to meeting the needs of customers as well as state and federal regulations. In FY19 the Commission initiated Phase II of the West Parish Filters Water Treatment Plant Facilities Plan, a process that began in 2016 to identify necessary treatment upgrades in anticipation of regulatory changes. Achieving simultaneous compliance with all regulations to maintain public health is the Commission's top priority, and as technology, scientific knowledge, environmental conditions, and regulations evolve, water treatment must advance in kind.



In FY19 the need for this planning was underscored by the issuance of the Commission's first public notification about haloacetic acids (HAA5), a regulated disinfection byproduct (DBP), that exceeded regulatory standards DBPs were first regulated in the 1990s, and those regulations were updated in 2012. HAA5 forms when dissolved natural organic matter (NOM), which is naturally occurring, interacts with chlorine. Above-average precipitation in the fall of 2018 raised levels of NOM in Cobble Mountain Reservoir, resulting in elevated levels of HAA5. The existing treatment processes at West Parish Filters are not designed to adequately remove elevated levels of NOM. Phase II of the Facilities Plan is focused on identifying an additional treatment step to more thoroughly remove NOM from the raw water and reduce DBPs.

As part of this phase, a small-scale operational model pilot treatment plant was constructed on the grounds of West Parish Filters in FY19 and is being used to evalu-



Top and above: The interior and exterior of the pilot plant.

At right: Samples are collected from Borden Brook Reservoir for the enhanced raw water sampling program.

ate a wide variety of factors and treatment processes that will improve treated water quality. The pilot plant project is being performed by AECOM, a leader in water treatment technology, along with international research experts from the University of Massachusetts at Amherst. A variety of pre-oxidation, coagulation, clarification, and filtering processes will be trialed through FY20. The data collected will be used to inform design and construction plans for the treatment process upgrades. The pilot plant project was permitted and approved by the Massachusetts Department of Environmental Protection (Mass-DEP).

Laboratory and Regulatory Program

In FY19 the Commission analyzed approximately 50,000 drinking water quality tests to ensure the water is safe for customers to drink and use. Regular sampling and laboratory analysis is a critical aspect of protecting public health. Laboratory analysis also informs the treatment process and operations in the field, such as water main flushing. The staff at the Commission's state-certified laboratory located at the West Parish Filters Water Treatment Plant oversee water quality testing and compliance with state and federal requirements. External certified laboratories were also utilized for a variety of tests.

As part of the laboratory and regulatory program, Commission staff take approximately 15-30 samples daily. Samples are taken during the treatment process, as well as from throughout the distribution system in Springfield and Ludlow. This

sampling helps laboratory staff ensure that our drinking water is safe to drink and meets state and federal regulations. At the Commission's laboratory bacteria testing is also conducted to identify if any water mains should be added, repaired, or replaced.

Routine testing is increasingly important to the Commission as samples taken in 2018 and March 2019 showed elevated levels of haloacetic acids (HAA5), a disinfection byproduct (DBP), beyond the regulatory limits set by EPA and MassDEP. As a result, in spring 2019 the Commission implemented additional sampling in Cobble Mountain Reservoir to characterize the dynamics of dissolved natural organic matter (NOM) in the raw reservoir water. In FY19 the Commission was in compliance with all other state and regulatory requirements.



Wastewater Treatment

Building Sustainability

The hundreds of thousands of toilets and drains throughout our service area send wastewater into the Commission's underground collection (sewer) system. Approximately 470 miles of collection system pipes in Springfield bring wastewater to the Springfield Regional Wastewater Treatment Facility (SRWTF) in Agawam. Municipally owned collection systems in Agawam, East Longmeadow, Longmeadow, Ludlow, Wilbraham, West Springfield, and part of Chicopee also send wastewater to the SRWTF.

In FY19, the SRWTF treated an average of 48 million gallons/day (MGD), or 17,322 billion gallons total. The plant's design capacity of 67 MGD places it as the second largest wastewater treatment facility in New England, and provides ample capacity for expanded regional economic development. The SRWTF is operated by SUEZ Water Environmental Services, which in FY19 was in its final year of a 20-year operating contract with the Commission.

Work undertaken by the Commission in FY19 will position the region's wastewater treatment for decades to come by enabling it to adapt it to the changing

landscape of regulations, technology, and energy issues ahead. The Commission spent \$18.4 million on wastewater treatment operations in FY19.

SRWTF Operation Contract Renewal

The twenty-year contract with SUEZ to operate the SRWTF will end in October 2020. In FY19, Requests for Proposals (RFPs) were issued to start the process of establishing a new twenty-year contract. The new operations contractor will be responsible for the pump stations, force mains, sewer interceptors, flood control pump stations, and wastewater treatment plant operations. As part of the new contract, capital projects are planned to ensure that operation and maintenance of the facilities are meeting current and future permitting requirements. SWSC received interest from five vendors, with RFP submissions due in the fall of 2019.

NPDES Permit Renewal

EPA issued a new draft National Pollutant Discharge Elimination System (NPDES) permit in late 2017, the first new permit in close to twenty years. Regulations set in the NPDES permit drive technology spending and capital investments that must be made at the SRWTF. In particular, a new proposed limit on nitrogen in the SRWTF's

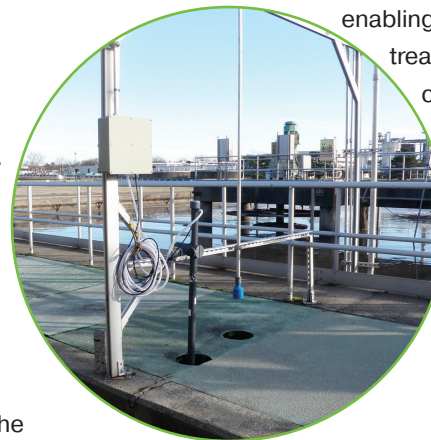
discharge into the Connecticut River may have expensive investment implications and effectively limit the capacity of the plant to current flow rates. For that reason, the Commission submitted substantial comments on the draft permit for EPA to consider in FY18. To date, EPA has not responded to those comments or issued a final draft. In the meantime, the Commission requested that vendors responding to the new SRWTF operation contract propose modifications to the treatment process that will afford the Commission the ability to meet EPA's proposed new regulatory requirements.

Nitrogen Monitoring

Nitrogen loading from wastewater treatment plants in the Connecticut River watershed is being regulated by the EPA through a Total Maximum Daily Load (TMDL) established for Long Island Sound (LIS) in 2004. The threshold of nitrogen reduction established by the TMDL has been met, but due to ongoing low oxygen levels in LIS potentially caused by continued nitrogen loading from various sources, EPA is pur-

suing further nitrogen reductions. In FY19 the Commission continued its partnership with the United States Geological Survey (USGS) and the Massachusetts Department of Environmental Protection (Mass-DEP) in its Connecticut River nitrogen sampling program to fill in data gaps and help inform future regulatory efforts.

In FY19 the National Fish and Wildlife Foundation also awarded the Commission \$51,146 to purchase and install nitrogen analyzers within the aeration basins at the SRWTF. These analyzers send real-time information back to the control room, enabling adjustments within the treatment process to increase the efficiency of the nitrification process while saving money on energy. The equipment was purchased and installed in 2019.



Above: A nitrogen analyzer was installed in FY19 to monitor real-time nitrogen levels.



Biosolids

“Biosolids” are generated as a byproduct of the wastewater treatment process. Biosolids are currently disposed of at incinerators or at distant landfills, with all options increasingly costly and limited due to capacity and changing regulations.

In FY19 the Commission received a grant from the Massachusetts Clean Energy Technology Center for \$52,500 to conduct a feasibility study on the construction of

anaerobic digesters. With the funding, a consultant completed a BioEnergy Generation Feasibility Study with a variety of options that will help shape the capital needs to process and more economically dispose of biosolids at the SRWTF. Additionally, the information gained from the study was utilized in developing the conditions for biosolids management within the new operations contract.

Industrial Pretreatment Program

The Commission’s Industrial Pretreatment Program (IPP) regulates industry wastewater that may be more contaminated than that of typical users. Examples of these industries include laundry facilities, metal finishing, and dairy processing. In FY19, 48 industries and 51 wastewater discharge permits were regulated under the IPP, representing an average of 5.5 million gallons/day. IPP staff performed 266 inspections at industries in all eight communities that use the SRWTF, ensuring compliance with additional treatment requirements that protect the collection system, treatment plant, and the environment. The Commission spent \$486,590 on IPP operations in FY19.



Above: The aeration basins at the Springfield Regional Wastewater Treatment Facility.

At left: A bulk container stores biosolids before being loaded onto trucks for landfill disposal.

Field Services

Building Reliability

Throughout the year, customers may notice Commission trucks and crews working in their neighborhood. The Commission’s Field Services Division is responsible for maintaining the drinking water distribution and wastewater collection systems underneath the city streets. Crews also assist customers with installation, repairs and replacements of water and sewer service lines at individual properties, and provide additional services such as water consumption surveys and water quality checks. All of these activities are funded through the Commission’s operations

FY19 Water and Sewer System Statistics	
Miles of Water Main	597
Number of Valves	19,765
Number of Hydrants	6,224
Number of Meters	46,313
Miles of Wastewater Mains	471
Number of Wastewater Manholes	11,422
Number of Wastewater Pump Stations	27*

* plus 7 flood control pump stations

budget. In FY19, \$18.2 million was spent on water distribution activities, and \$20.6 million was spent on wastewater collection activities.

Water Quality Protection

To optimize water quality and keep water reliably flowing through the distribution system, the Commission relies on the Water Quality Group (WQG). The WQG is responsible for various inspections and maintenance throughout the distribution system. This includes regularly inspecting and exercising valves and hydrants to ensure they are functioning in the event of a water main break or fire. The WQG also implements the Unidirectional Flushing (UDF) Program, which cleans sediment out of mains in order to increase water flow. In FY19 65 miles of pipe were flushed through the UDF Program. Flushing is also strategically implemented by the WQG in coordination with engineers and operators at West Parish Filters in order to ensure safe chlorine levels and water age throughout the system.

The Commission’s Cross Connection Control Program oversees inspections in buildings throughout the city and Ludlow in order to protect water quality. This program was adopted in 1998 in accordance with

MassDEP regulations. When a water line is connected to equipment or other system containing chemicals or water of questionable quality (such as soda fountains or HVAC equipment), Commission inspectors ensure that safeguards such as backflow prevention devices are installed to prevent contamination. All backflow prevention devices in commercial, industrial and institutional plumbing must be inspected regularly. In FY19, 4,451 inspections were conducted.

FY19 Water Quality Group Activities	
Hydrants Inspected	3,307
Hydrants Repaired/Rebuilt	129
Valves Exercised	3,046
Miles of Mains Flushed (UDF Program)	64

Water Infrastructure Maintenance and Upgrades

Responding to unpredictable water main breaks, replacing aging water mains, rebuilding hydrants or repaving street trenches are just some of the projects customers might see the Commission’s Water Construction Group (WCG) working



on. The WCG is responsible for repairing or replacing water infrastructure and is always ready to respond to emergencies, 24 hours a day, 7 days a week. The WCG also works with customers on water service line replacements and inspections.

Water Consumption Tracking and Assessments

Customers are billed for water and sewer based on their water consumption. To collect water consumption data, water meters located in every customer’s building report data through radio signals that are collected by the Meter and Field Services Group (MFSG) on a monthly basis. Another important function of this group is conducting water consumption surveys. During these surveys, MFSG staff check for leaks, assess household water uses, and advise

FY19 Water Construction Group Activities	
New Hydrants Installed	17
Hydrants Replaced	110
Water Main Breaks Repaired	32
Water Service Replacements	126
New Valves Installed	191
Valves Replaced	22

customers on water conservation techniques and repairs. Members of the MFSG also change out meters and respond to other inquiries.

Wastewater Collection System Operations

The Commission is responsible for the maintenance, upgrade, repairs, and regulatory compliance of 471 miles of sewer pipes that transport wastewater from the City of Springfield to the SRWTF. The Sewer Division of the Commission’s Field Services group performs this work, including responding to sewer backups, repairs, and inspections. The system’s 34 pump stations, 23 combined sewer outfalls, and large transmission pipes (known as intercepting sewers) carrying wastewater to the treatment plant are maintained by SUEZ, the Commission’s contracted wastewater treatment plant operator.

Asset Management and Maintenance Program

In order to optimize the performance of the collection system, and to prioritize

resources for repair or rehabilitation, the Sewer Division, consultants and contractors annually conduct high-pressure cleaning and visual and remote camera/robotic assessment of the condition of the sewer pipes in Springfield. In FY19, 73,696 linear feet of sewer pipe were assessed through this program, an increase of 17,769 feet from last year. Approximately 407 miles or 86% of Springfield’s wastewater collection system has been cleaned and assessed since the program began in 2008.



The AMMP provides collection system reliability, and also supports compliance with federal and state environmental regulations that protect water quality. Sanitary sewer overflows (SSOs) are events that can be caused by sewer line disruptions, blockages, stormwater or groundwater infiltration, or other system defects. The

FY19 Meter and Field Services Activities	
Meters Installed (Primary & Auxillary)	1,604
Water Consumption Assessments	347

AMMP proactively identifies potential problems in the collection system that could lead to SSOs. In FY19, there were 43 SSOs, a significant reduction compared with 122 in FY08 prior to the start of the AMMP. All SSOs are reported to EPA and MassDEP.

FY19 Wastewater Collection Activities	
Manholes Cleaned	707
Sewer Jetted (feet)	987,654
Sewer Backup Responses	758
Sewer System Repairs	54
Sewer System Repair Pipe Installed (feet)	880
Residential Service Line Repairs	95

Opposite page, top: A valve chamber is cleaned of debris before exercising the valve to ensure it is operable in the event of a fire or water main break.

Opposite page, bottom: A member of the Water Construction Group digs down to a water main beneath Milford Street.

Above: A member of the Water Quality Group prepares a hydrant for flushing.

Technology Infrastructure

Building Efficiency

Today's technology works in concert with century-old infrastructure to keep the water flowing. The Commission's Information Technology (IT) department works closely with all other departments to integrate digital technology solutions and security into operations in order to improve workflow efficiency, asset management, and customer service.

Due to the heightened threat of cyber attacks on utilities and other government service organizations in FY19, the IT department continued to enhance the Commission's digital resources with an emphasis on cybersecurity. A new firewall was deployed at all sites to increase monitoring of all network and internet access, and a Business Continuity and Resiliency Site was tested and deployed to keep operations running in the event of an emergency. Security cameras and servers were also installed to several additional strategic locations throughout the Commission to protect assets and improve employee safety. Meanwhile, the IT department responded to over 2,700 helpdesk tickets throughout FY19 to assist employees with various projects and initiatives.

Geographic Information Systems

Geographic Information Systems (GIS) mapping touches almost all sectors of the water and wastewater business at the Commission. GIS helps place individual assets or work orders into the context of the entire system, allowing for more efficient coordination and the mapping of trends. As an example, In FY19 the GIS team finalized an important and years-long project that mapped every water service line in the distribution system. This information is vital to better providing customers with information about the size, material, and age of their privately owned water service lines, and also positions the Commission to respond to future anticipated regulations related to the federal Lead and Copper Rule. The GIS team also assisted watershed staff by deploying a high-accuracy GPS unit. This unit will allow the land stewards to capture the precise locations of property boundary marker and other features important to watershed land management processes.

Interactive mapping is particularly useful in displaying information for customers who may wish to know about activities occurring in their neighborhoods. Adding to the Commission's catalog of interactive maps for water main breaks and flushing, in FY19

the GIS team created a construction map that shows the impacts Commission projects are having on traffic patterns in Springfield or Ludlow. The GIS team plans to continue building more interactive maps in the future that display projects and other Commission activities so customers can view the expanse of the Commission's work in their neighborhoods.



Above: A Commission land steward uses a new high-accuracy GPS unit to identify property boundary lines.

Opposite page, in circle: Fifth graders from Springfield Public Schools visit the SRWTF as part of World is Our Classroom's "A Day at Bondi's Island."

Education & Community

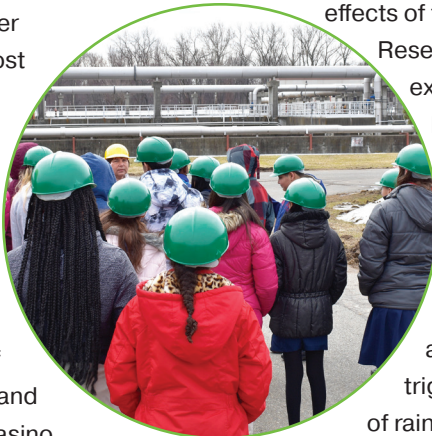
Building Connections

A crucial part of our operations includes communicating with customers about the investments, initiatives, and issues that shape how the Commission delivers clean and safe drinking water and wastewater services.

The Commission's water station is one of the most prominent ways to showcase water's integral role in community life. In FY19 the Commission participated in 23 events with its water station, ranging from the 4th of July fireworks to the grand opening of the MGM casino in downtown Springfield. In the fall, the Commission also invited members of the public to visit the water and wastewater treatment plants to celebrate the national "Imagine a Day Without Water" annual advocacy event. Participants had the unusual opportunity to see first-hand how their drinking water and wastewater is treated.

Water issues are in the state and national news more than ever, and over the course

of FY19 the Commission also worked to educate customers and the public about specific issues concerning their water supply. A tour of the Ludlow Reservoir in December 2018 preceded forest harvesting activities that were necessary to address a recent gypsy moth infestation. The Commission's consulting forester led participants into the forest to view the fatal effects of the infestation on Ludlow



Reservoir's oak trees, and explained the role of forest health on water quality. The Commission also held a public meeting in the spring of 2019 to address the public notification about haloacetic acids (HAA5), which was triggered by excessive levels of rain in the fall of 2018. And

as issues concerning lead in drinking water arose in other areas of the country, the Commission also responded to media inquiries about how we protect against lead in our own distribution system, including an interview on WGBY's *Connecting Point*.

Infrastructure renewal remains an ever-important topic in the water sector. The Commission visited several neigh-

borhood council meetings to explain the construction work taking place within neighborhoods and the benefits that would arise from new water or sewer pipes. For example, the Commission held a meeting with the Old Hill Neighborhood Council to explain the work involved in replacing a 1880s-era water main within Colton Street. On a larger scale, the Commission also introduced the York Street Pump Station and Connecticut River Crossing Project to the public through a public groundbreaking event during Infrastructure Week 2019. Congressman Richard Neal and Mayor Sarno helped introduce the \$122 million project, the region's largest water-related infrastructure project in decades, to members of the media.

Connecting young people with their water source and the cycle of water present in their daily lives is important to building the next generation of informed customers, as well as potential future employees. Since 2001, the Commission has hosted students from Springfield Public Schools to visit the drinking water and wastewater treatment plants as well as the watershed. Facilitated by the non-profit World is Our Classroom, in FY19 "A Day at Cobble Mountain" introduced approximately 750 seventh-grade students from 11 differ-

ent schools to the reservoir and water treatment plant, while 1,752 fifth-grade students from 32 schools visited the wastewater treatment plant and learned about the water cycle through "A Day at Bondi's Island."

Below, top: Visitors to West Parish Filters learn about the drinking water system during "Imagine a Day Without Water" in October 2018.

Bottom: The Commission's consulting forester points out gypsy moth damage and tree markings to members of the public during a forest walk in Ludlow Reservoir, December 2018.



Customer Service

Building Relationships

A fundamental key to providing quality, uninterrupted water and wastewater services to approximately 175,000 retail customers through 42,000 service points is excellent customer service. The Commission's Customer Service Group (CSG) is comprised of two teams – one focusing on billing and accounts, and the other on field operations such as water or sewer emergencies or new connections and inspections. When customers have questions or need assistance, the CSG is there to answer the call – in FY19, 51,326 customer calls were answered by the CSG.

The Commission's customer service representatives have extensive experience with the full range of water and sewer inquiries that may affect customers. With many having worked at the Commission for over a decade, our customer service representatives are able to understand even the most complex issues and provide customers with the help and guidance they need. Included among our customers are the many contractors work-



ing on construction projects throughout our retail service area. Specialized CSRs work to coordinate inspections and other construction-related activities to properly and efficiently integrate water and sewer into projects.

For a water or sewer emergency, such as a broken pipe or sewer backup, the CSG is always ready to respond. Customer service representatives work quickly to dispatch a crew to the property, provide advice to help minimize the situation until crews arrive, and offer reassurance and guidance along the way. Building positive customer relationships is an important function of the Commission's operations, which is why, after such an event, customer service representatives often will follow up to check in on the customer's situation, and are grateful whenever a customer takes the time to contact them afterwards to let them know how it all turned out.

In addition to emergency situations, a customer's routine needs are also important to the Commission and customer service

representatives answer billing questions, assist with property closings, or help set up new service installation appointments. But being proactive is also as important as being responsive. CSRs regularly review accounts for high use or possible leaks through the Leak Detection Program. Through this program customers are alerted if there is an unusual water meter reading including sudden high or low usage, which can indicate a leak or broken pipe. In some instances a crew is also sent to the property to check for flooding or municipal authorities are contacted to secure an abandoned property, protecting both the structure and the surrounding neighborhood. In FY19 customer service representatives reached out to 920 customers that were identified for unusual high use. Those customers received information from the CSG on water conservation and the Commission's Leak Detection Program.



Top and above: *The Bondi's Island Customer Service Group responds to billing and account questions.*

At left, in circle: *The Colton Street Customer Service Group provides customer service for field operations.*

Financial Report

Building Stability

The management of the Springfield Water and Sewer Commission (Commission) provides this narrative overview of the financial activities of the Commission for the fiscal year ended June 30, 2019 (FY19). A full accounting and analysis of all financial activities is provided in the Commission's FY19 Comprehensive Annual Financial Report (CAFR), available on the Commission's website or by request.

Financial Highlights

In FY19 the Commission had a change in net position of \$11,316,892. The following paragraphs provide an overview of the activities in FY19.

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 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.



In fiscal year 2019, there was again an increase in collection efforts and an increase in rates, however in most cases, overall usage was less than anticipated. As a result, wastewater charges, revenue, and fees were approximately \$(265,000) less than budget. Wholesale water charges and fees were less than budget by approximately \$(638,000). Power generation revenues were more than estimates by approximately \$2 million. These and other factors resulted in total operating revenue of approximately \$79 million in fiscal year

SUMMARY OF NET POSITION

	YEAR	2019	2018
Current Assets	\$	125,867,127	107,217,164
Non-Current Assets		2,627,726	2,733,266
Capital Assets		339,755,313	331,354,919
Total Assets		468,250,166	441,305,349
Deferred Outflows of Resources		108,470,893	100,682,969
Total Assets and Deferred Outflows	\$		
Current Liabilities		42,625,175	19,869,815
Non-Current Liabilities		272,038,137	278,547,153
Total Liabilities		314,663,312	298,416,968
Deferred Inflows of Resources		125,845,352	118,675,847
Total Liabilities and Deferred Inflows	\$		
Net Investment in Capital Assets		152,176,660	135,716,523
Restricted - Other Purposes		50,334,806	58,368,491
Unrestricted		(66,299,071)	(69,189,511)
Total Net Position	\$	136,212,395	124,895,503
Operating Revenues		79,022,695	76,648,551
Operating Expenses		(61,242,938)	(57,955,221)
Operating Income	\$	17,779,757	18,693,330
Non-Operating Revenues (Expenses)		(2,511,874)	(3,878,014)
Special Items		(3,950,991)	(13,814,043)
Increase (Decrease) in Net Position	\$	11,316,892	1,001,273
Beginning Net Position		124,895,503	123,894,230
Ending Net Position	\$	136,212,395	124,895,503

2019, approximately \$1.2 million more than budgeted, and \$2.4 million more than the prior year.

Operating expenses were less than budgeted by approximately \$2.1 million, primarily as a result of vacant positions and less overtime needed than anticipated. In addition, there was conservative budgeting for general operational expenses.

Summary of Net Position

In fiscal year 2011, the Commission 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 used to fund deferrals” on the statement of revenues, expenses and changes in fund net position, which was a decrease of \$(3,950,991) for fiscal year 2019.

Capital Asset and Debt Administration

Total investment in capital assets at year-end amounted to \$339,755,313 (net of accumulated depreciation). This investment in capital assets includes land, buildings and improvements, machinery and equipment, and infrastructure.

At the end of the current fiscal year, total bonded debt outstanding was \$185,252,698, all of which was backed by dedicated revenues of the Commission. Additional information on the Commission’s long-term debt can be found in the FY19 CAFR.

Major capital asset events during FY19 included the following:

Depreciation Expense	(\$9.8 million)
Hydrant Projects	\$220,000
Meter Replacements.....	\$913,000
Water Treatment System Improvement Projects	\$3.3 million
Wastewater Treatment System Improvement Projects	\$656,000
York Street and River Design Projects	\$4.4 million
Water Main Rehabilitation Projects.....	\$507,000
Sewer Main Rehabilitation Projects	\$2.1 million
Main Interceptor Projects.....	\$246,000
Transmission System Rehabilitations	\$512,000
Collection System Assessment and Rehabilitation	\$1.1 million
Distribution System Assessment and Rehabilitation.....	\$1.5 million
Electrical Distribution Improvement Projects	\$698,000
New Vehicle and Equipment Purchases.....	\$363,000
Computer Software and Equipment Purchases.....	\$320,000
Various Other Rehab and Improvement Projects	\$1.1 million

Additional information on the Commission’s capital assets can be found at Footnote 11 on page 45 in the FY 2019 CAFR.

Financial Analysis

Requests for Information

The FY19 Comprehensive Financial Report is available on the Commission's website, waterandsewer.org.

Questions concerning any of the financial information provided in this report or requests for additional financial information should be addressed to:

Communications Manager

Springfield Water and Sewer Commission

P.O. Box 995

Springfield, MA 01101-0995

413-452-1300

WATER AND SEWER RATES - LAST 5 FISCAL YEARS					
WATER RATES (PER 100 CUBIC FEET)	2020	2019	2018	2017	2016
Residential	\$3.62	\$3.22	\$3.01	\$2.89	\$2.78
Commercial	\$3.62	\$3.22	\$3.01	\$2.89	\$2.78
Municipal	\$2.70	\$2.40	\$2.24	\$2.15	\$2.07
Industrial	\$2.70	\$2.40	\$2.24	\$2.15	\$2.07
Solutia contract	\$2.65	\$2.32	\$2.11	\$1.99	\$1.88
Town contracts (per million gallons)	\$1,554.41	\$1,491.03	\$1,717.86	\$1,526.61	\$1,178.93
Residential Water % Change	12.4%	7.0%	4.2%	4.0%	4.5%
SEWER RATES (PER 100 CUBIC FEET)	2020	2019	2018	2017	2016
Residential	\$5.71	\$5.32	\$4.93	\$4.74	\$4.56
Commercial	\$6.28	\$5.85	\$5.42	\$5.21	\$5.01
Industrial	\$6.85	\$6.38	\$5.92	\$5.69	\$5.46
Municipal	\$5.71	\$5.32	\$4.93	\$4.74	\$4.56
Food Service	\$7.43	\$6.92	\$6.41	\$6.16	\$5.92
Medical	\$6.28	\$5.85	\$5.42	\$5.21	\$5.01
Solutia contract (per million gallons)	\$1,138.91	\$1,197.77	\$1,145.39	\$1,060.86	\$1,108.27
Town contracts (per million gallons)	\$1,138.91	\$1,197.77	\$1,145.39	\$1,060.86	\$1,108.27
Residential Sewer % Change	7.9%	7.9%	4.0%	3.9%	5.1%
Average Combined Rate Increase	9.9%	7.4%	4.1%	4.0%	4.8%

Source: Fiscal Year 2019 Commission's adopted Rules and Regulations Chapter 5

