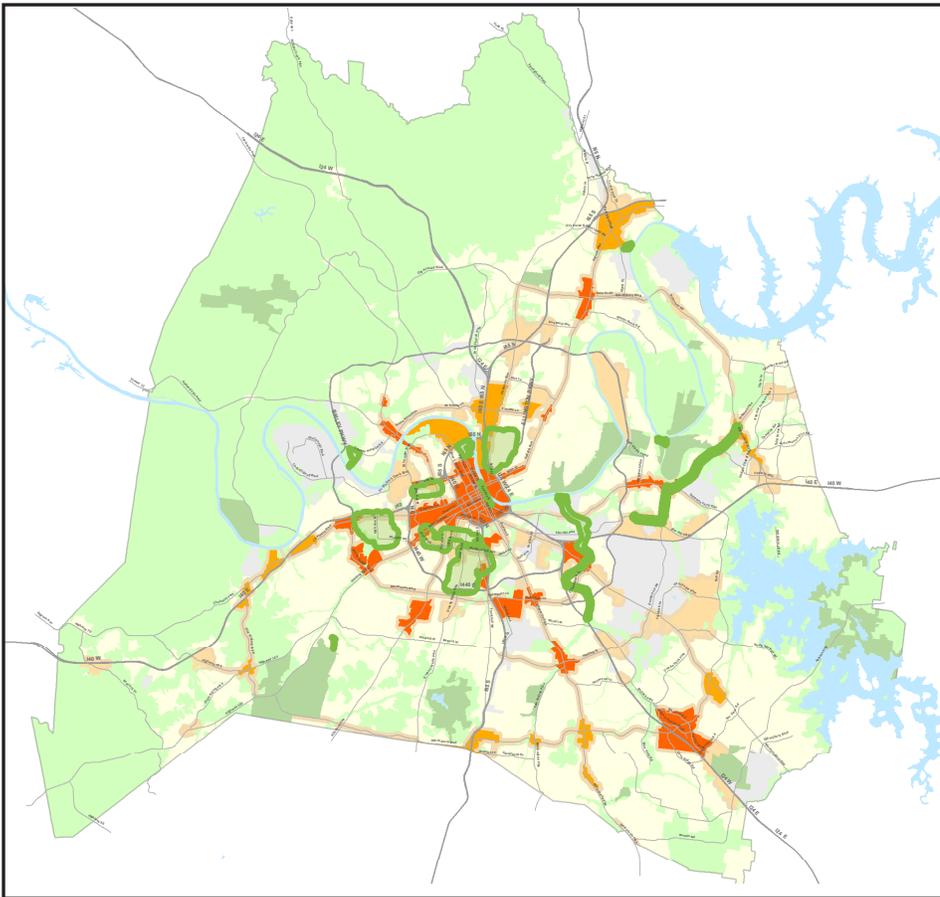
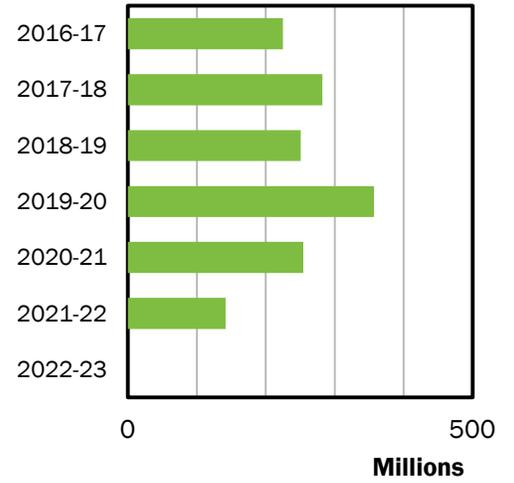


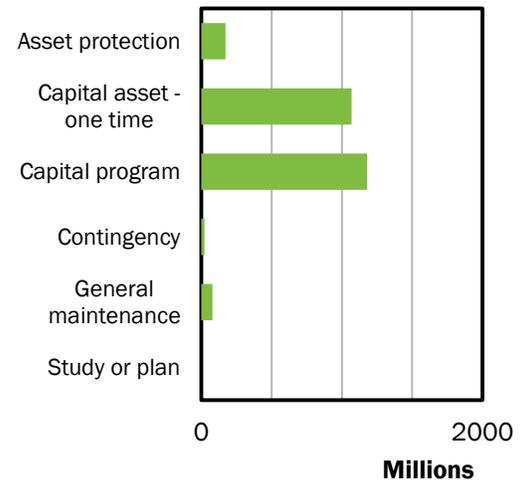
Water & Sewer



Spending by fiscal year



Spending by type of project



	Spending	Projects
Spending by Water & Sewer departments	\$1,510,310,000	27
Water and Sewer	\$1,510,310,000	27

Water & Sewer

MAJOR REQUESTS

09WS0019	CLEAN WATER NASHVILLE PROGRAM: CONSENT DECREE RELATED PROJECTS AND PROJECT MGMT.
\$820,395,800	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0017	ENGINEERING - WATER PROJECTS
\$210,137,200	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0002	OMOHUNDRO WATER TREATMENT COMPLEX / REYER PUMPING STATION
\$63,067,300	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0007	CENTRAL WASTEWATER TREATMENT PLANT
\$62,474,700	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0015	SYSTEM SERVICES - COLLECTION AND DISTRIBUTION SYSTEMS
\$37,843,900	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0004	RESERVOIRS
\$32,850,000	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0008	WHITES CREEK WASTEWATER TREATMENT PLANT
\$25,700,000	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
10WS0001	GENERAL WASTEWATER TREATMENT PLANT FACILITIES REPLACEMENT AND REFURBISHMENT
\$25,200,000	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0014	CUSTOMER SERVICE CENTER
\$24,923,500	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □
09WS0016	ENGINEERING - DEVELOPMENT ASSISTANCE / COMPLIANCE
\$24,066,100	FY17 ■ FY18 ■ FY19 ■ FY20 ■ FY21 ■ FY22 ■ FY23 □

Water and Sewer projects | Water & Sewer

Number of active projects	27	Total	\$1,510,310,000
Project status	# projects	FY17	\$224,749,900
New	3	FY18	\$282,130,000
Resubmitted-In Progress	23	FY19	\$250,885,100
Resubmitted-Not Started	1	FY20	\$356,725,000
		FY21	\$254,310,000
		FY22	\$141,510,000
		FY23	

09WS0001 DEPARTMENTAL FLEET / VEHICLES ADDITIONS / REPLACEMENTS

In progress MWS vehicle additions and upgrades.

<i>Council Districts</i>	Countywide	<i>Type</i>	Capital asset - one time	<i>Tax district</i>	GSD	<i>Category</i>	Non-infrastructure
\$23,045,000	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Enterprise Funds	\$4,045,000	\$3,500,000	\$4,000,000	\$3,500,000	\$4,000,000	\$4,000,000	

09WS0005 RTE-WATER & WASTEWATER PUMPING STATIONS

In progress Large water & wastewater pump & pump motor refurbishments / replacements, small water & wastewater pump & pump motor refurbishments / replacements, stationary generator refurbishments, backup power improvements.

<i>Council Districts</i>	Countywide	<i>Type</i>	Capital program	<i>Tax district</i>	GSD	<i>Category</i>	Infrastructure
\$19,946,200	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$3,168,600	\$3,200,900	\$3,362,100	\$3,338,200	\$3,438,200	\$3,438,200	

09WS0006 LABORATORY

In progress Replace/refurbish and purchase new laboratory equipment and samplers.

<i>Council Districts</i>	Countywide	<i>Type</i>	Asset protection	<i>Tax district</i>	GSD	<i>Category</i>	Non-infrastructure
\$1,320,800	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$223,100	\$313,400	\$323,500	\$113,600	\$123,600	\$223,600	

09WS0010 SECURITY

In progress Improvements to facilities fencing, alarms, locks, surveillance cameras.

<i>Council Districts</i>	Countywide	<i>Type</i>	Capital program	<i>Tax district</i>	GSD	<i>Category</i>	Non-infrastructure
\$1,795,200	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$410,500	\$240,800	\$210,900	\$411,000	\$211,000	\$311,000	

Water & Sewer | Water and Sewer projects

09WS0011 DEPARTMENTAL CONTINGENCY FOR UNPLANNED AND EMERGENCY EVENTS

In progress Annual contingency to accommodate any unplanned event or system need.

Council Districts Countywide Type Contingency Tax district GSD Category Infrastructure

\$21,000,000 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed Revenue Bon \$3,500,000 \$3,500,000 \$3,500,000 \$3,500,000 \$3,500,000 \$3,500,000

09WS0013 INFORMATION SERVICES / DATA INTEGRITY

In progress Upgrade customer information system, upgrade mobile workforce management system, upgrade cmms system, other network and software upgrades.

Council Districts Countywide Type Capital program Tax district GSD Category Non-infrastructure

\$6,614,100 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed Revenue Bon \$1,196,000 \$2,572,500 \$1,323,300 \$524,100 \$274,100 \$724,100

09WS0014 CUSTOMER SERVICE CENTER

In progress On-going water meter exchange / change out program, new meters for developments, commercial meters, flexnet software implementation, building upgrades.

Council Districts Countywide Type Capital program Tax district GSD Category Infrastructure

\$24,923,500 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed Revenue Bon \$2,137,900 \$4,494,200 \$4,509,900 \$4,510,500 \$4,510,500 \$4,760,500

09WS0015 SYSTEM SERVICES - COLLECTION AND DISTRIBUTION SYSTEMS

In progress Service line renewals, (Metro owned), fire hydrant maintenance / replacement, valve maintenance / replacement, water / sewer taps, and street restoration / paving following capital repair activities.

Council Districts Countywide Type Capital program Tax district GSD Category Infrastructure

\$37,843,900 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed Revenue Bon \$4,758,300 \$6,395,800 \$6,514,600 \$6,708,400 \$6,758,400 \$6,708,400

09WS0016 ENGINEERING - DEVELOPMENT ASSISTANCE / COMPLIANCE

In progress Participation projects with developers for utility capacity, specialized technology, utility relocations, department staff efforts to support all engineering activities, office renovations.

Council Districts Countywide Type Capital program Tax district GSD Category Infrastructure

\$24,066,100 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed Revenue Bon \$4,055,800 \$4,088,900 \$4,105,400 \$4,122,000 \$4,122,000 \$3,572,000

09WS0018 ENGINEERING - MISC. SEWER PROJECTS

In progress SPS removal projects.

Council Districts Countywide Type Capital program Tax district GSD Category Infrastructure

\$1,000,000 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed Revenue Bon \$1,000,000

Water and Sewer projects | **Water & Sewer**

09WS0019	CLEAN WATER NASHVILLE PROGRAM: CONSENT DECREE RELATED PROJECTS AND PROJECT MGMT.						
In progress	River water quality update, corrective action and L-T control plans update, flow monitoring, modeling and analysis, dept efforts to assist in all activities, improvements, upgrades, upsizing of various sewer pumping stations, gravity sewer lines, and sewer force mains necessary to eliminate points of overflow in the system.						
<i>Council Districts</i>	Countywide	<i>Type</i> Capital asset - one time		<i>Tax district</i> GSD		<i>Category</i> Infrastructure	
\$820,395,800	<i>FY2017</i>	<i>FY2018</i>	<i>FY2019</i>	<i>FY2020</i>	<i>FY2021</i>	<i>FY2022</i>	<i>FY2023</i>
Proposed Revenue Bon	\$87,614,600	\$178,139,100	\$140,151,300	\$236,163,600	\$139,163,600	\$39,163,600	

09WS0025	STORMWATER - CAPITAL CONSTRUCTION / REMEDIAL MAINTENANCE IN USD						
In progress	Major capital construction - USD.						
<i>Council Districts</i>	Countywide	<i>Type</i> Asset protection		<i>Tax district</i> USD		<i>Category</i> Infrastructure	
\$9,000,000	<i>FY2017</i>	<i>FY2018</i>	<i>FY2019</i>	<i>FY2020</i>	<i>FY2021</i>	<i>FY2022</i>	<i>FY2023</i>
Proposed G.O. Bonds	\$9,000,000						

09WS0027	STORMWATER - ENGINEERING						
In progress	Capital engineering, plans review, facilities improvements / upgrades, work order management system, update inventory and maintenance of GPS system.						
<i>Council Districts</i>	Countywide	<i>Type</i> Contingency		<i>Tax district</i> GSD		<i>Category</i> Non-infrastructure	
\$1,000,000	<i>FY2017</i>	<i>FY2018</i>	<i>FY2019</i>	<i>FY2020</i>	<i>FY2021</i>	<i>FY2022</i>	<i>FY2023</i>
Proposed G.O. Bonds	\$1,000,000						

10WS0001	GENERAL WASTEWATER TREATMENT PLANT FACILITIES REPLACEMENT AND REFURBISHMENT						
In progress	Replace and refurbish blowers, compressors, pump systems, secondary treatment, disinfection, electrical systems, grit and screening, plant safety, buildings, roofs, HVAC, and other facility repairs.						
<i>Council Districts</i>	Countywide	<i>Type</i> Asset protection		<i>Tax district</i> GSD		<i>Category</i> Infrastructure	
\$25,200,000	<i>FY2017</i>	<i>FY2018</i>	<i>FY2019</i>	<i>FY2020</i>	<i>FY2021</i>	<i>FY2022</i>	<i>FY2023</i>
Proposed Revenue Bon	\$2,850,000	\$4,200,000	\$4,150,000	\$4,100,000	\$4,950,000	\$4,950,000	

10WS0002	GENERAL WATER TREATMENT PLANT FACILITIES REPLACEMENT AND REFURBISHMENT						
In progress	Replace and refurbish facilities and grounds, HVAC, electrical systems, disinfection, recondition filters, taste and odor improvements, general site improvements, regulatory mandates, and water quality improvements.						
<i>Council Districts</i>	Countywide	<i>Type</i> Asset protection		<i>Tax district</i> GSD		<i>Category</i> Infrastructure	
\$23,450,000	<i>FY2017</i>	<i>FY2018</i>	<i>FY2019</i>	<i>FY2020</i>	<i>FY2021</i>	<i>FY2022</i>	<i>FY2023</i>
Proposed Revenue Bon	\$6,550,000	\$5,750,000	\$2,550,000	\$3,500,000	\$2,550,000	\$2,550,000	

Water & Sewer | Water and Sewer projects

11WS0002 BIOSOLIDS AND ODOR CONTROL

In progress Replace and/or refurbish residual management equipmentt, replace heat drying facility components.

Council Districts Countywide Type Asset protection Tax district GSD Category Non-infrastructure

\$8,500,000	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$1,775,000	\$1,325,000	\$1,150,000	\$1,150,000	\$1,550,000	\$1,550,000	

17WS0001 STORMWATER - FEMA PARTICIPATION - REPETITIVE FLOOD DAMAGE HOME BUYOUT

New Purchasing and removal of homes in flood plains with repetitive damage and claims against flood insurance. Program removes the homes and restores the site to natural stream buffers and open space.

Council Districts Countywide Type Capital program Tax district GSD Category Infrastructure

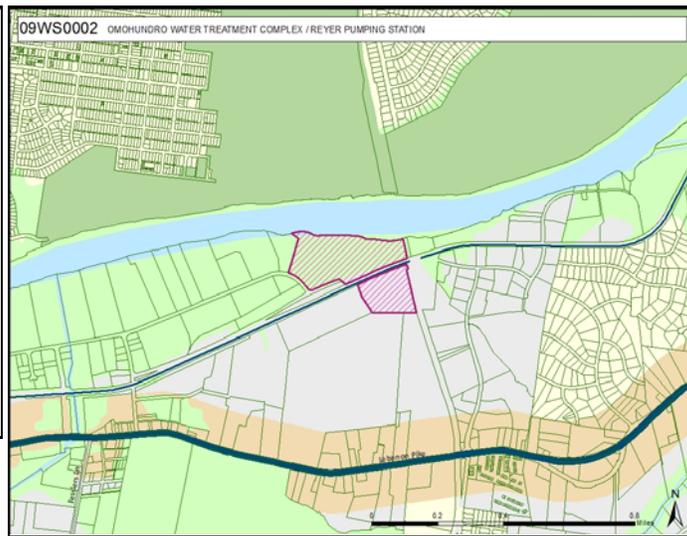
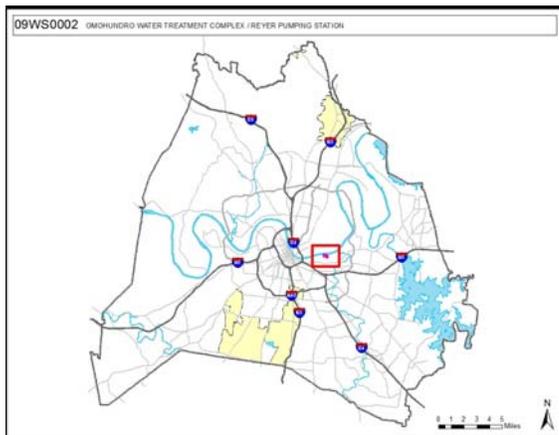
\$10,000,000	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed G.O. Bonds	\$5,000,000						
Federal Funds	\$5,000,000						

09WS0002 OMOHUNDRO WATER TREATMENT COMPLEX / REYER PUMPING STATION

In progress Includes, emergency power generation , pump refurbishments, treatment process improvements, replace valves, replace actuators, increase clear well capacity, raw water pumping station/flood mitigation SCADA system.

Council Districts 19 Type General maintenance Tax district GSD Category Infrastructure

\$63,067,300	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$9,340,700	\$15,349,300	\$9,253,600	\$1,407,900	\$1,357,900	\$26,357,900	



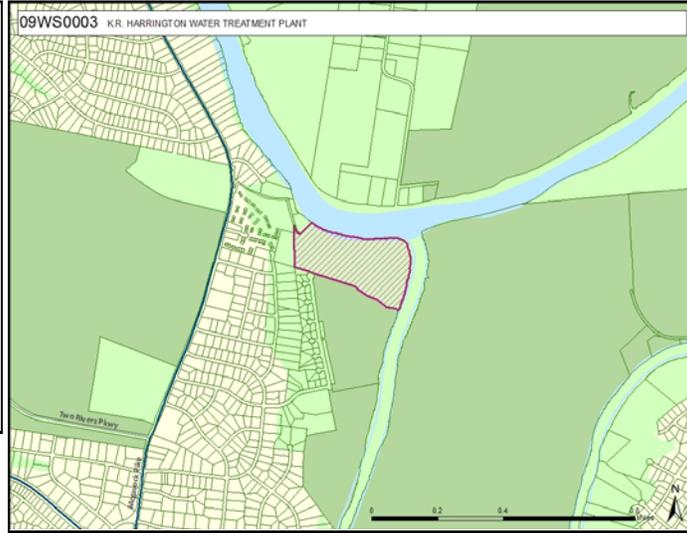
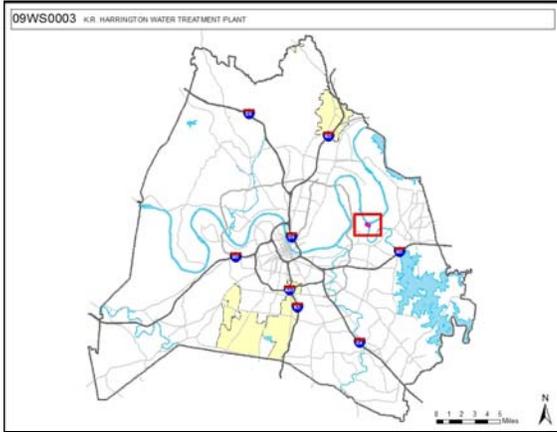
Water and Sewer projects | Water & Sewer

09WS0003 K.R. HARRINGTON WATER TREATMENT PLANT

In progress Replace high service units, recoat clarifier structure, refurbish pumps, filter backwash & waste improvements, replace valves.

Council Districts **15** Type **General maintenance** Tax district **GSD** Category **Infrastructure**

\$15,646,100	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$1,814,800	\$1,015,700	\$416,100	\$2,366,500	\$9,016,500	\$1,016,500	

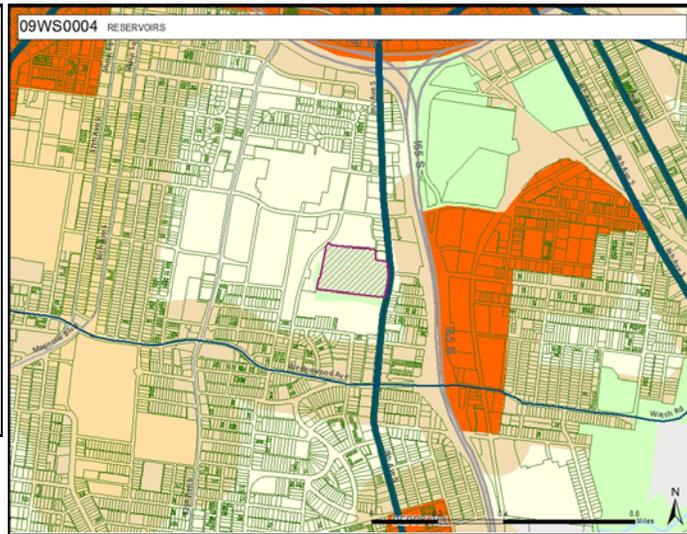
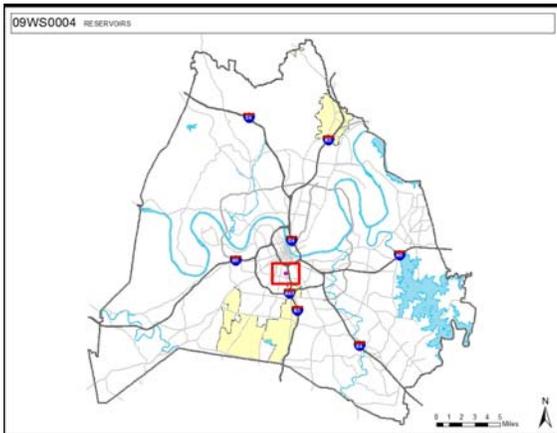


09WS0004 RESERVOIRS

In progress Resurface access roads, reservoir drainage improvements, tank inspections, vault improvements, reservoir rehabilitations, improvements at 8th Ave reservoir.

Council Districts **17** Type **Capital program** Tax district **GSD** Category **Infrastructure**

\$32,850,000	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$2,550,000	\$10,450,000	\$12,525,000	\$2,525,000	\$2,400,000	\$2,400,000	



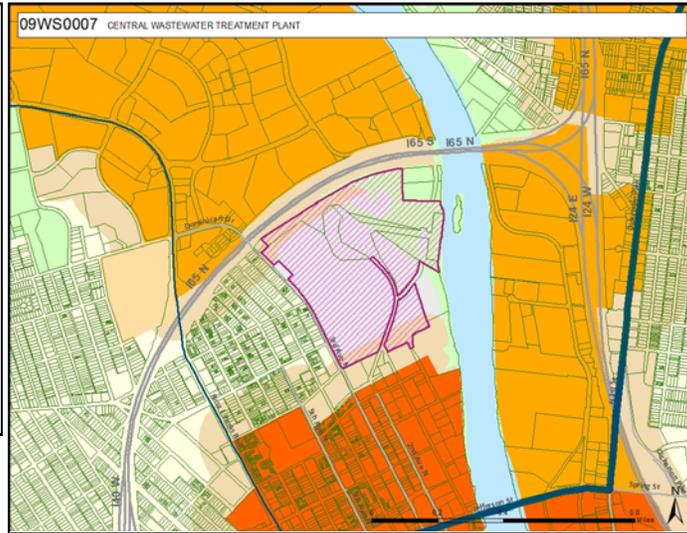
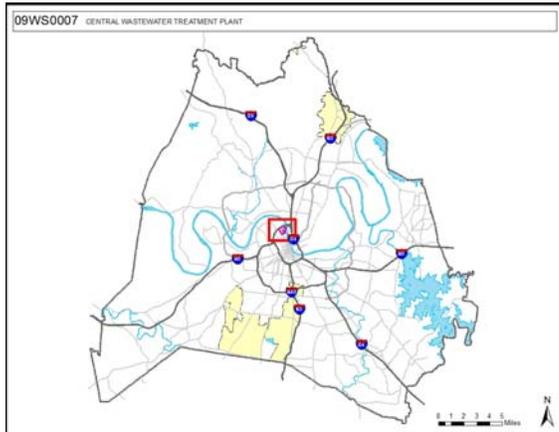
Water & Sewer | Water and Sewer projects

09WS0007 CENTRAL WASTEWATER TREATMENT PLANT

In progress Replace/refurbish primary treatment and secondary treatment equipment, improve energy efficiencies and conservation, new maintenance facility.

Council Districts **19** Type **Asset protection** Tax district **GSD** Category **Infrastructure**

\$62,474,700	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$6,763,100	\$9,874,400	\$13,680,100	\$11,985,700	\$12,585,700	\$7,585,700	

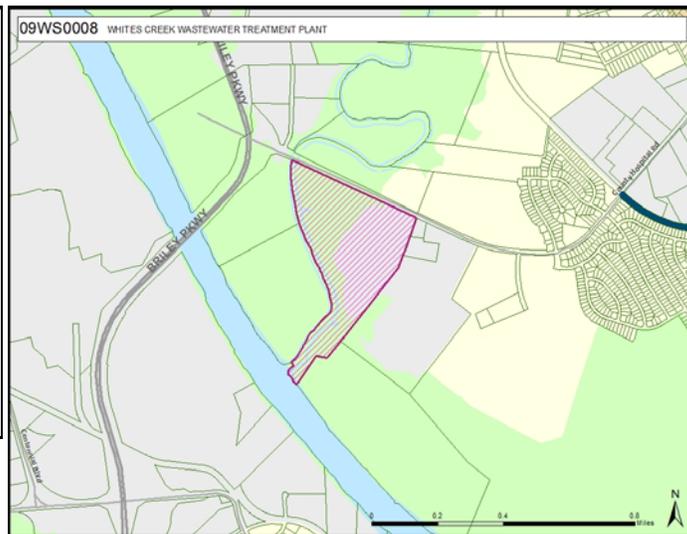
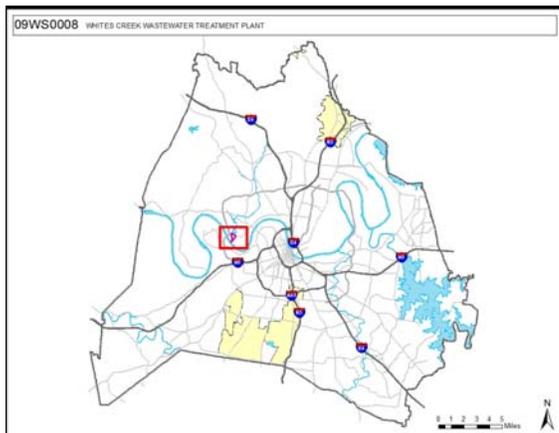


09WS0008 WHITES CREEK WASTEWATER TREATMENT PLANT

In progress Replace/refurbish secondary treatment/aeration equipment, replace residuals force main to central, refurbish/replace primary treatment and UV disinfection equipment.

Council Districts **1** Type **Asset protection** Tax district **GSD** Category **Infrastructure**

\$25,700,000	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$900,000	\$1,900,000	\$950,000	\$10,650,000	\$5,650,000	\$5,650,000	

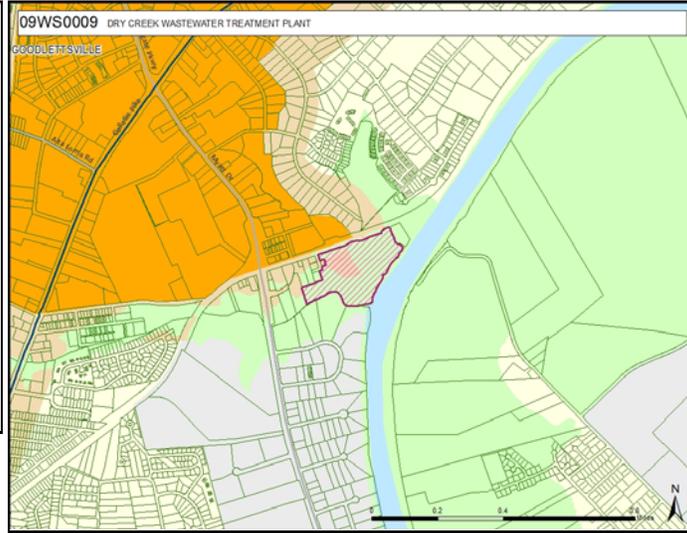
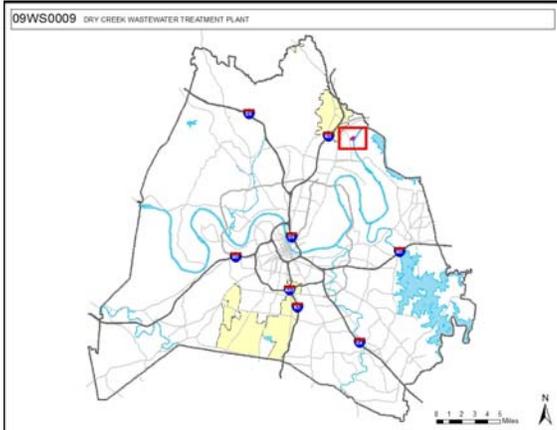


09WS0009 DRY CREEK WASTEWATER TREATMENT PLANT

In progress Replace primary and secondary treatment equipment, replace residual management mechanics, disinfection improvements.

Council Districts **9, 10** Type **Asset protection** Tax district **GSD** Category **Infrastructure**

\$11,834,100	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$1,933,000	\$3,479,300	\$1,380,000	\$1,780,600	\$1,380,600	\$1,880,600	

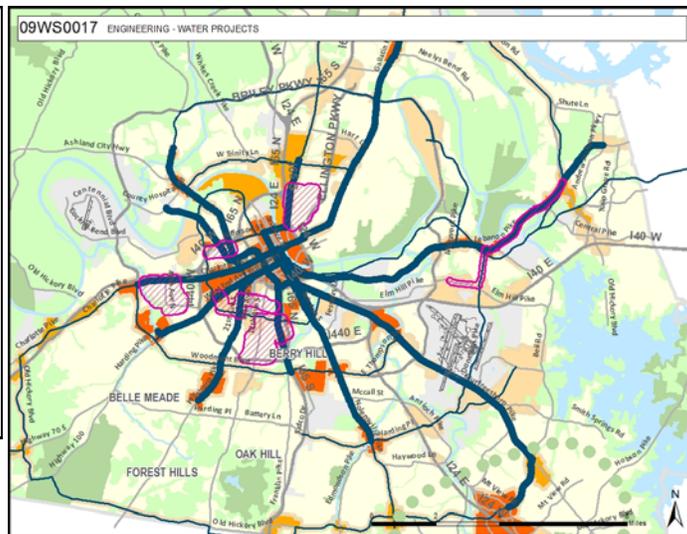
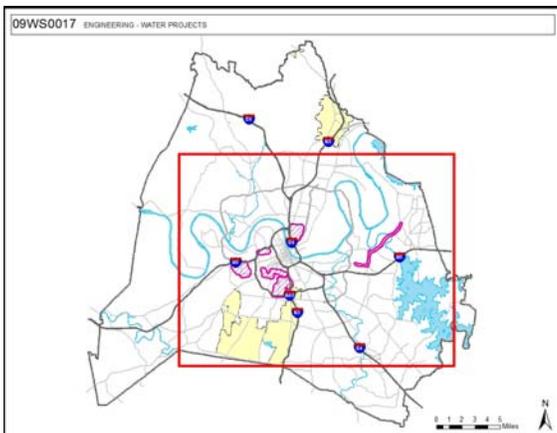


09WS0017 ENGINEERING - WATER PROJECTS

In progress Edge Hill water main, leak detection, new Love Circle WPS and line work, Cumberland City low 24 dual feed water main, pressure management projects, Sylvan Park water main replacement phases 2-7, Albion/DB Todd area water main replacement, 12th Ave water main replacements phases 2-6, East Nashville water main replacement - multiple phases, 38th Ave reservoir replacement, and other water main replacement projects as identified.

Council Districts **2, 5, 11, 14, 15, 17, 18, 19, 20, 21, 24, 25** Type **Capital asset - one time** Tax district **GSD** Category **Infrastructure**

\$210,137,200	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Proposed Revenue Bon	\$40,913,500	\$22,090,700	\$33,829,300	\$51,367,900	\$43,767,900	\$18,167,900	



Water & Sewer | Water and Sewer projects

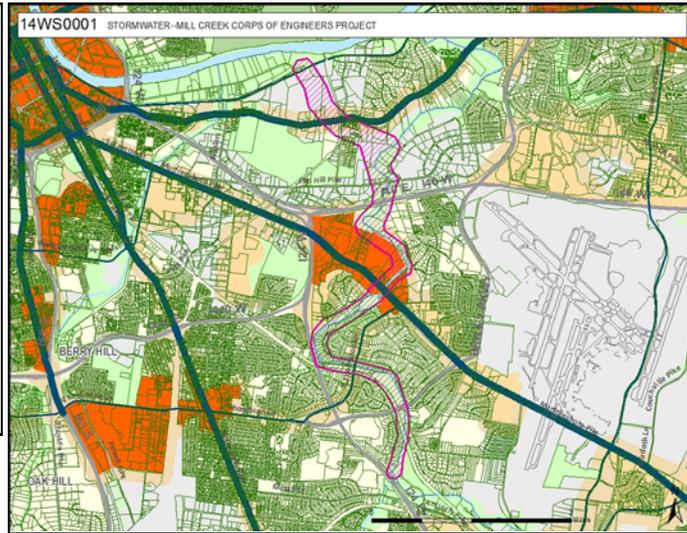
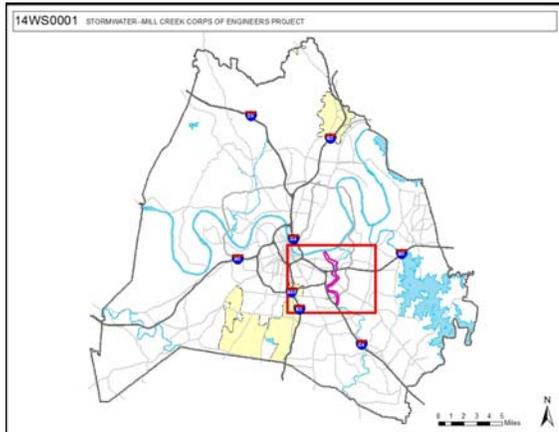
14WS0001 STORMWATER-MILL CREEK CORPS OF ENGINEERS PROJECT

Not started Drainage improvements - Flintlock Court and Mill Creek engineering study along Owendale Drive, and Corps of Engineers project.

Council Districts **13, 15, 16, 19** Type **Capital program** Tax district **GSD** Category **Infrastructure**

\$12,500,000 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed G.O. Bonds \$250,000 \$250,000 \$3,000,000 \$3,000,000 \$3,000,000 \$3,000,000



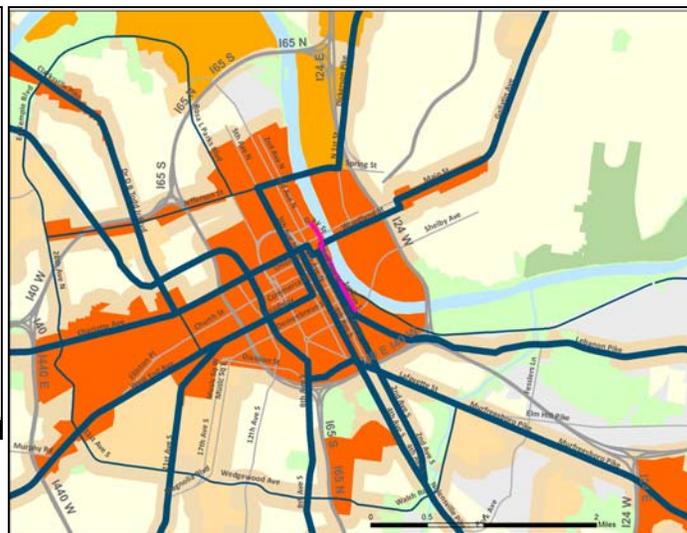
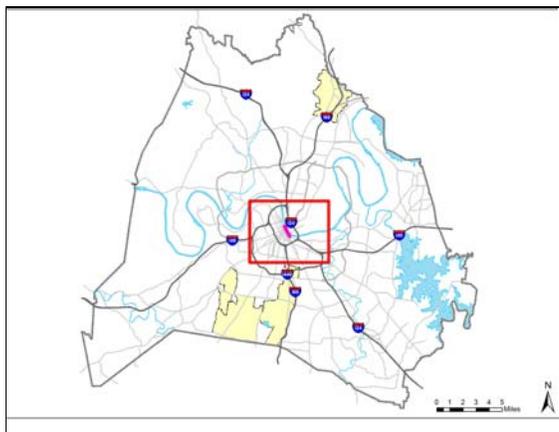
17WS0002 DOWNTOWN NASHVILLE FLOOD WALL DESIGN / PLANNING / COUNTY-WIDE PUBLIC ENGAGEMENT

New Plan, design, construction of flood containment wall - pumping station & associated appurtenances to control / mitigate flooding in downtown area around Broadway / historic district. County-wide public engagement.

Council Districts **19** Type **Capital asset - one time** Tax district **USD** Category **Infrastructure**

\$15,000,000 FY2017 FY2018 FY2019 FY2020 FY2021 FY2022 FY2023

Proposed Revenue Bon \$15,000,000



Water and Sewer projects | **Water & Sewer**

17WS0003 STORMWATER IMPROVEMENTS - PAGE ROAD FROM BELLE PARK / JARDIN DE BELLE PUD TO BROOKFIELD AVE
 New STORMWATER IMPROVEMENTS - PAGE ROAD FROM BELLE PARK / JARDIN DE BELLE PUD TO BROOKFIELD AVE.

Council Districts **34** Type Tax district **GSD** Category **More info needed**

\$2,000,000 **FY2017** **FY2018** **FY2019** **FY2020** **FY2021** **FY2022** **FY2023**

Proposed G.O. Bonds \$2,000,000

