SEWER

St. Mary's County Metropolitan Commission Capital Improvements Budget FY 2023 - 2028 Sewer

With Escalation i=2.5%

Project Name	Status	Project ID	Prior Approved	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2023 - 2028 TOTAL
Rehabilitation / Replacement										
Various Rehabilitation at MTWRF	2	SM2312	\$1,263,937	\$120,822	\$123,842 ^B		\$29,699			\$274,363
Piney Point Road Sewer Line Analysis and Force Main Replacement	2	5171MS	\$505,664		\$1,159,693	\$4,446,041				\$5,605,734
Southampton Sewer System Rehabilitation	2	8201SR	\$73,570	\$909,192		\$2,017,112				\$2,926,304
Inflow & Infiltration Sewer Replacement, Rehabilitation and Upgrade	4	SM2306	\$242,880	\$348,820 ^C	\$355,200 ^C	\$361,580 ^C	\$367,960 ^C	\$399,636 ^C	\$409,627	\$2,242,823
Manhole Rehabilitation	4	SM2305	\$104,880	\$107,445	\$110,200	\$112,955	\$115,748	\$118,642	\$121,608	\$686,598
Various Wastewater System Rehabilitation	4	SM2310	\$89,335	\$191,545	\$93,840	\$196,135	\$98,574	\$219,907	\$103,564	\$903,565
Glenn Forest to NAS Interceptor	1							\$829,282		\$829,282
Generator Replacement-Sewer A	1	SM2303		\$120,000 ^A	\$120,000	\$720,000				
FY 2023 CIB (FY23-FY28) Rehabilitation / Replacement =			\$2,280,266	\$1,797,824	\$1,962,775	\$7,253,823	\$731,981	\$1,687,467	\$754,799	\$14,188,669

Approved FY 2022 CIB (FY22-FY27)	\$1,577,824	\$1,618,933	\$7,033,823	\$511,981	\$1,442,581	\$12,185,142
Change to Program from FY2022 CIB	\$220,000	\$343,842	\$220,000	\$220,000	\$244,886	\$1,248,728

Status:

1 Planning Phase

2 Design Phase

3 Contract Phase

4 Construction Phase

5 Close-out Phase

Property Acquisition (to be initiated after Planning)

A - New Project

B - Added Low DO treatment feasability study to FY23 (no change), moved Sludge Study from FY23 to FY24.

C - Added \$100K annually for Contract Services to provide a more proactive program.

St. Mary's County Metropolitan Commission Capital Improvements Budget FY 2023 - 2028 Sewer

With Escalation i=2.5%

Project Name	Status	Project ID	Prior Approved	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2023 - 2028 TOTAL
Pump Stations										
Bradley Boulevard WWPS	1	8211SS	\$38,439			\$339,397				\$339,397
Forest Run WWPS	1	8131SS	\$326,291	\$0 ^A	\$787,969 ^A	\$1,306,202 ^A	\$1,338,857 ^A			\$3,433,028
Greenbrier WWPS	2					\$45,521	\$373,270			\$418,791
Wicomico Shores #2 WWPS Replacement	1				\$391,519 ^B					\$391,519
Wicomico Shores #1 WWPS Replacement	1	1221SS	\$46,498		\$390,812					\$390,812
Hunting Quarters WWPS	1					\$385,216 ^C				\$385,216
Broad Creek WWPS	1							\$113,141		\$113,141
FY 2023 CIB (FY23-FY28) Pump Stations =			\$411,228	\$0	\$1,570,300	\$2,076,336	\$1,712,127	\$113,141	\$0	\$5,471,904

Approved FY 2022 CIB (FY22-FY27)	\$1,662,205	\$2,464,811	\$727,332	\$373,270	\$113,141	\$1,971,849
Change to Program from FY2022 CIB	-\$1,662,205	-\$894,511	\$1,349,004	\$1,338,857	\$0	\$131,145

Status:

1 Planning Phase

2 Design Phase

3 Contract Phase

4 Construction Phase

5 Close-out Phase

Property Acquisition (to be initiated after Planning)

A - Moved funding out 1 year. Separated SPS for FY24 and FM in FY25 & FY26

B - Moved \$30k for Design from FY23 to FY24

C - Moved Design funding from FY24 to FY25

St. Mary's County Metropolitan Commission Capital Improvements Budget FY 2023 - 2028 Sewer

With Escalation i=2.5%

Project Name	Status	Project ID	Prior Approved	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2023 - 2028 TOTAL
System Upgrades / Expansion										
St. Clements Shores WWTP Expansion Phase B	2	2151SF	\$10,260,643	\$250,000 ^A						\$250,00
Methane Co-Generator Upgrade at Marlay-Taylor WWTP	2	8171SF	\$446,379		\$93,935 ^B			\$0 ^C	\$582,374 ^C	\$676,30
Sewer Vacuum Truck	1				\$581,521					\$581,52
Grinder Pump Replacements	4	SM2309		\$782,000 ^D	\$782,000 ^D	\$782,000 D	\$782,000 ^D	\$782,000 ^D	\$782,000	\$4,692,000
Marlay-Taylor Expansion	1							\$315,000 ^E	\$2,730,000 F	\$3,045,00
FY 2023 CIB (FY23-FY28) System Upgrades / Expansion =			\$10,707,022	\$1,032,000	\$1,457,456	\$782,000	\$782,000	\$1,097,000	\$4,094,374	\$9,244,830
Approved FY 2022 CIB (FY22-FY27)				\$941,644	\$581,521	\$850,000	\$0	\$1,516,862		\$7,011,70
Change to Program from FY2022 CIB				\$90,356	\$875,935	-\$68,000	\$782,000	-\$419,862		\$1,260,42
Totals										
Rehabilitation / Replacement			\$2,280,266	\$1,797,824	\$1,962,775	\$7,253,823	\$731,981	\$1,687,467	\$754,799	\$14,188,66
Pump Stations			\$411,228	\$0	\$1,570,300	\$2,076,336	\$1,712,127	\$113,141	\$0	\$5,471,90
System Upgrades / Expansion			\$10,707,022	\$1.032.000	\$1,457,456	\$782.000	\$782.000	\$1.097.000	\$4.094.374	\$9,244,83

Subtotal \$13,398,516 \$2,829,824 \$4,990,531 \$10,112,159 \$3,226,108 \$2,897,608 \$4,849,173 \$28,905,40 Capital Reserves 6.20% \$831,000 \$175,000 \$309,000 \$627,000 \$200,000 \$180,000 \$301,000 \$1,792,000	FY 2023 CIB (FY23-FY28) Totals =		\$14,229,516	\$3,004,824	\$5,299,531	\$10,739,159	\$3,426,108	\$3,077,608	\$5,150,173	\$30,697,402
Subtotal \$13,398,516 \$2,829,824 \$4,990,531 \$10,112,159 \$3,226,108 \$2,897,608 \$4,849,173 \$28,905,40										
	Capital Reserves	6.20%	\$831,000	\$175,000	\$309,000	\$627,000	\$200,000	\$180,000	\$301,000	\$1,792,000
System Upgrades / Expansion \$10,707,022 \$1,032,000 \$1,457,456 \$782,000 \$1,097,000 \$4,094,374 \$9,244,83	Subtotal		\$13,398,516	\$2,829,824	\$4,990,531	\$10,112,159	\$3,226,108	\$2,897,608	\$4,849,173	\$28,905,402
	System Upgrades / Expansion		\$10,707,022	\$1,032,000	\$1,457,456	\$782,000	\$782,000	\$1,097,000	\$4,094,374	\$9,244,830

Approved FY 2022 CIB (FY22-FY27)	\$4,440,673	\$4,954,265	\$9,145,155	\$940,251	\$3,263,584	\$22,743,927
Change to Program from FY2022 CIB	-\$1,435,849	\$345,266	\$1,594,004	\$2,485,857	-\$185,976	\$2,803,302

<u>Status:</u> 1 Planning Phase

2 Design Phase

3 Contract Phase

4 Construction Phase

5 Close-out Phase

Property Acquisition (to be initiated after Planning)

A - Added \$250K ARPA funds

B - Moved out from FY23 to FY24

C - Engine #2 rebuild changed to replacement and moved out to FY28

D - Changed from every other year to annual

E - Updated cost estimate

F - Moved design \$ into FY28 from out years

SEWER REPLACEMENT

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Various Rehabilitation at MTWRF	SM2312	Sewer Rehabilitation
	PROGRAM	

DESCRIPTION:

Various rehabilitation work to be performed at the Marlay-Taylor Water Reclamation Facility (MTWRF). Construction costs listed below are estimated. Work includes but is not limited to:

• Shellfish Protection Pond Rehab - \$30K - FY2021 (completed). Sludge Holding Tank Replacement - \$350K - FY2021 (completed)

• SWM Retrofit (Bio-Swales) - \$250K - FY2021

Digester Cleaning - \$250K - FY2022

Sludge Dewatering Screens - \$50K - FY2021

Low Dissolved Oxygen (DO) Treatment Feasibility Study - \$60K - FY2022

• Conversion to low DO treatment may result in blower energy use reduction by 40% (\$14K) and 2/3 of chemical use - \$100K - FY 2023

Class A Sludge Study - \$100K - FY2024

• Gate Valves - \$25K - FY2026

PLANNING JUSTIFICATION:

Comprehensive Plan 10.2.2.A - Provide the infrastructure to ensure adequate capacity to accommodate concentrated development in growth areas. Ongoing capital investments are required to ensure the ENR provisions of 7.6.1.B.iv.a are maintained.

LOCATION:

8th Election District, 8th Sanitary District.

		Prior	Budget		Five Y	Year Capital P	rogram		Total
APPROPRIATION PHASE		Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)		\$46,500	\$5,000	\$5,000		\$1,250			\$57,750
PLANNING/DESIGN (10%)		\$93,000		\$100,000					\$193,000
LAND ACQUISITION		\$0							\$0
CONSTRUCTION		\$930,000	\$100,000			\$25,000			\$1,055,000
INSPECTION (10%)		\$93,000							\$93,000
CONTINGENCIES (10%)		\$93,000	\$10,000	\$10,000					\$113,000
ESCALATION Base FY	2021	\$8,437	\$5,822	\$8,842		\$3,449			\$26,550
TOTAL COSTS		\$1,263,937	\$120,822	\$123,842	\$0	\$29,699	\$0	\$0	\$1,538,300

FUNDING SOURCE	Total	Prior	Budget		Five \	Year Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$1,263,937	\$1,263,937							
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$274,363		\$120,822	\$123,842		\$29,699			
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$1,538,300	\$1,263,937	\$120,822	\$123,842	\$0	\$29,699	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$1,538,300
TOTAL	100%	\$1,538,300

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Piney Point Road Sewer Line Analysis and Force Main Replacement	5171MS		Sewer Replacement

DESCRIPTION:

Test and analyze pipe sections over the total length of the 9.6 mile (50,000 ft.) existing 8-inch DIP sanitary sewer force main located from Piney Point WWPS through Callaway, discharging in a gravity manhole located on Great Mills Road (MD Route 246). This force main was installed in the 1970's.

This testing and analysis determined areas which were most susceptible to corrosion and potential failure. Areas along the pipe length were identified which were more suspect and condition assessment tests have been performed. Test results have been analyzed generating a report which recommends remediation measures to avoid potential pipe failure. The study noted that replacement of the entire length with non-corrosive pipe is required and completed in the order below. Each of the 4 phases will replace approximately 2.4 miles starting at the sewer pump station in Piney point and working toward Great Mills.

Phase 1: FY24-FY25 - (0+00 to 127+08.25), Phase 2: FY29 - (127+08.25 to 254+16.50), Phase 3: FY33 - 254+16.50 to 381+24.75, Phase 4: FY37 - 381+24.75 to 508+33

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - Justification is based on three previous pipe breaks in a 1,200 lf section of line near Valley Lee which was repaired under a separate FY2016 capital project in February 2017 additional breaks near the Piney Point WWPS required emergency repairs. First break occurred in Summer of 2009, the second in April 2014 and the third in June 2014.

This proposed testing and analysis is consistent with recommendations in the 2015 Piping & Corrosion Specialties, Inc. report recommendations to establish an integrity management program in high consequence areas along the DIP force main. The estimated costs are based on a class 4 estimate provided by the consultant, in 2017 LOCATION:

2nd Election District, 5th Sanitary District, MD 249

			Phase 1A	Phase 1B				
APPROPRIATION PHASE	Prior	Prior Budget Five Year Capital Program						Total
	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)	\$24,665							\$24,665
PLANNING/DESIGN (10%)	\$393,300							\$393,300
LAND ACQUISITION								\$0
CONSTRUCTION	\$50,000		\$1,000,000	\$3,740,300				\$4,790,300
INSPECTION (10%)	\$10,000							\$10,000
CONTINGENCIES (10%)	\$20,000							\$20,000
ESCALATION Base FY 2018	\$7,699		\$159,693	\$705,741				\$873,133
TOTAL COSTS	\$505,664	\$0	\$1,159,693	\$4,446,041	\$0	\$0	\$0	\$6,111,398

FUNDING SOURCE	Total	Prior	Budget		Five `	Year Capital F	Program		Balance to
	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$5,921,398	\$315,664		\$1,159,693	\$4,446,041				
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$190,000	\$190,000							
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$6,111,398	\$505,664	\$0	\$1,159,693	\$4,446,041	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$6,111,398
TOTAL	100%	\$6,111,398

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Southampton Sewer System Rehabilitation	8201SR		Sewer Rehabilitation

DESCRIPTION:

The County Commissioners have identified the Southampton Subdivision for infrastructure improvements to sidewalks, curb and gutter, storm drainage, utilities and streets. The Sewer System Rehabilitation is a wastewater renewal project proposed in conjunction with DPW&T's neighborhood revitalization project. The Sewer System Rehabilitation project will affect the approximately 97 dwellings by providing them with a more reliable sewer system. The project will replace or rehabilitate the sewer system on Southampton Drive, Windsor Drive, Brighton Ave, Cambridge Ave and Lincoln Ave. No new connections will be provided and no additional land, rights-of-way, or easements are anticipated. The project is anticipated to be fully designed (2020) but constructed in two phases.

FY 2023 - Phase 1 includes a portion of Lincoln Avenue and Southampton Drive, Bristol Avenue, and Windsor Drive. This phase will reline and/or replace existing sewer laterals and mains. Construction: Fall 2022 (13 months).

FY 2025 - Phase 2 includes a portion of Lincoln Avenue and Southampton Drive, Cambridge Avenue, Brighton Avenue and the cross country sewer line. This phase will reline and/or replace existing sewer laterals and mains. There is no sewer line replacement anticipated in Phase 3. All grinder pumps will be replaced by separate project. Construction: Fall 2024 (13 months).

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - Southampton Subdivision is one of the oldest subdivisions in the County. The condition assessments of the infrastructure are as follows: exceeded life expectancy of the facilities, excessive inflow and infiltration, excessive repair costs, and inadequate system reliability. Operations and Maintenance are included in the design of the project. The construction costs are based on a class 4 estimate provided by the consultant, in 2017 dollars plus a 2.5% escalation per year.

LOCATION:

8th Election District, 8th Sanitary District, Southampton Subdivision

		Phase 1		Phase 2				
APPROPRIATION PHASE	Prior	Budget		Five	Year Capital F	Program		Total
	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)	\$10,000	\$22,355		\$62,849				\$95,204
PLANNING/DESIGN (10%)	\$60,000	\$4,711		\$125,698				\$190,409
LAND ACQUISITION								\$0
CONSTRUCTION		\$647,105		\$1,256,983				\$1,904,088
INSPECTION (10%)		\$64,711		\$125,698				\$190,409
CONTINGENCIES (10%)		\$64,711		\$125,698				\$190,409
ESCALATION Base FY 2018	\$3,570	\$105,599		\$320,186				\$429,355
TOTAL COSTS	\$73,570	\$909,192	\$0	\$2,017,112	\$0	\$0	\$0	\$2,999,874

FUNDING SOURCE	Total	Prior	Budget		Five '	Year Capital F	Program		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$2,999,874	\$73,570	\$909,192		\$2,017,112				
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$2,999,874	\$73,570	\$909,192	\$0	\$2,017,112	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$2,999,874
TOTAL	100%	\$2,999,874

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Inflow & Infiltration Sewer Replacement, Rehabilitation and Upgrade	SM2306	Sewer Rehabilitation
	PROGRAM	

DESCRIPTION:

Inflow and infiltration is the flow of ground and/or storm water into the sewer collection system causing dilution of the sewage which decreases the efficiency of treatment and can cause flows to increase past design capacities. This ongoing programmatic project is to: spot replace, rehabilitate and reline sanitary sewers; pump station wet well rehabilitation (cleaning and parging); interceptor cleaning and obstruction removal (jet rodding and root cutting); and sewer main inspection (including but not limited to CCTV inspection services and implementation of a smoke testing program). Project includes adding a macerator at the South Essex Pump Station to prevent debris from damaging system components and to facilitate the breakdown of high volumes of material that causes extensive maintenance and the installation of flow meters and pressure transducers within the system (SCADA) network to help prevent/mimimize the number of sanitary sewer overflows (SSOs). Work is typically completed in the summer during low flow peak periods.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - Replacement, rehabilitation and upgrades of aging infrastructure to minimize inflow & infiltration (I&I) and to implement a more proactive program to address I&I.

LOCATION:

APPROPRIATION PHASE	Prior	Budget		Five Y	/ear Capital P	Program		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$64,400
PLANNING/DESIGN (Contract Services)		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$600,000
LAND ACQUISITION								\$0
CONSTRUCTION	\$185,000	\$185,000	\$185,000	\$185,000	\$185,000	\$185,000	\$185,000	\$1,295,000
INSPECTION (5%)	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$9,200	\$64,400
CONTINGENCIES (10%)	\$16,600	\$16,600	\$16,600	\$16,600	\$16,600	\$16,600	\$16,600	\$116,200
ESCALATION Base FY 2018	\$22,880	\$28,820	\$35,200	\$41,580	\$47,960	\$79,636	\$89,627	\$345,703
TOTAL COSTS	\$242,880	\$348,820	\$355,200	\$361,580	\$367,960	\$399,636	\$409,627	\$2,485,703

FUNDING SOURCE	Total	Prior	Budget		Five Y	'ear Capital F	Program		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
REVOLVING LOAN FUNDS	\$0								
DHCD LOAN	\$1,359,296	\$242,880		\$355,200	\$361,580		\$399,636		
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$348,820		\$348,820						
DIRECT CHRGS - SYS IMPR CHG	\$777,587					\$367,960		\$409,627	
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$2,485,703	\$242,880	\$348,820	\$355,200	\$361,580	\$367,960	\$399,636	\$409,627	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$2,485,703
TOTAL	100%	\$2,485,703

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Manhole Rehabilitation	SM2305	Sewer Rehabilitati	ion
	PROGRAM		

DESCRIPTION:

Ongoing programmatic rehabilitation of approximately 60 of the existing 3,800 (approx. 1.5% of inventory) manholes annually, as identified and prioritized by staff inspections in order to help address Inflow and Infiltration (I&I). Work preformed under the contract includes but is not limited to; pressure washing, root removal, parging and sealing of cracks and corrosion, raising/gasketing manholes in low lying areas, and application of hydraulic cement and epoxy coatings as required. Work is typically completed in the Fall. FY2018 initial programmed budget was \$95,000.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - Rehabilitate aging infrastructure to reduce inflow and infiltration. Estimated costs include a 2.5% escalation per year.

LOCATION:

APPROPRIATION PHASE	Prior	Budget		Five Y	/ear Capital P	rogram		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$24,500
PLANNING/DESIGN (10%)								\$0
LAND ACQUISITION								\$0
CONSTRUCTION	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$560,000
INSPECTION (10%)	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$28,000
CONTINGENCIES (10%)	\$7,763	\$7,763	\$7,763	\$7,500	\$7,500	\$7,500	\$7,500	\$53,289
ESCALATION Base FY 2018	\$9,617	\$12,182	\$14,937	\$17,955	\$20,748	\$23,642	\$26,608	\$125,689
TOTAL COSTS	\$104,880	\$107,445	\$110,200	\$112,955	\$115,748	\$118,642	\$121,608	\$791,478

FUNDING SOURCE	Total	Prior	Budget		Five Y	/ear Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$0								
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
METCON CAP PRO UPGRADE FUND	\$791,478	\$104,880	\$107,445	\$110,200	\$112,955	\$115,748	\$118,642	\$121,608	
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$791,478	\$104,880	\$107,445	\$110,200	\$112,955	\$115,748	\$118,642	\$121,608	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$791,478
TOTAL	100%	\$791,478

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Various Wastewater System Rehabilitation	SM2310	Sewer Rehabilitation
	PROGRAM	

DESCRIPTION:

General rehabilitation and replacement of mechanical, electrical, and structural equipment and components, at various locations, including, but not limited to electrical service upgrades, pumps, etc. This is a new preventative and emergency maintenance program that is beyond the scope of the operating budget. Facilities needing upgrades include but are not limited to: Cedar Cove WWLS, California Run, Piney Point A & B Banks, Widgeon, Sheehan, Riverbay, Picketts Harbor, Airedele Road WWTP, Greenbrier, Black Duck, and St. George Island.

The Commission currently operates 66 wastewater pump stations. These station were constructed throughout the county from the early 1970's onward. The facilities need periodic replacement or rehabilitation of various equipment in order to maintain the station's viability to effectively and efficiently convey wastewater to the various treatment facilities. This money would allow discretionary funding of the various needs of the department on a yearly basis.

LOCATION:

APPROPRIATION PHASE	Pr	ior	Budget		Five Y	/ear Capital P	rogram		Total
APPROPRIATION PHASE	Арр	roval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)									\$0
PLANNING/DESIGN (10%)									\$0
LAND ACQUISITION									\$0
CONSTRUCTION	\$8	35,000	\$185,000	\$85,000	\$185,000	\$85,000	\$185,000	\$85,000	\$895,000
INSPECTION (10%)									\$0
CONTINGENCIES (10%)									\$0
ESCALATION Base FY 2	2020 \$	54,335	\$6,545	\$8,840	\$11,135	\$13,574	\$34,907	\$18,564	\$97,900
TOTAL COSTS	\$8	9,335	\$191,545	\$93,840	\$196,135	\$98,574	\$219,907	\$103,564	\$992,900

FUNDING SOURCE	Total		Budget		Five Y	/ear Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$0								
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$992,900	\$89,335	\$191,545	\$93,840	\$196,135	\$98,574	\$219,907	\$103,564	
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$992,900	\$89,335	\$191,545	\$93,840	\$196,135	\$98,574	\$219,907	\$103,564	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$992,900
TOTAL	100%	\$992,900

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Glenn Forest to NAS Interceptor			Sewer Rehabilitation

DESCRIPTION:

This a wastewater facilities renewal project. Originally built as part of Contract 2-S in the late 1960s, this particular section of interceptor gravity sewer collects sewerage from the majority of the Lexington Park Systems well as the entirety of the Piney Point System. The project will rehabilitate approximately 5,060 linear feet of existing 39" diameter RCP pipe and approximately 605 linear feet of existing 30" diameter RCP pipe . The proposed pipe section begins at the Glenn Forest Subdivision and extends east across MD 235 to Navy property. Specifically, this section of pipe is located between manholes G1AA31G and G1AA35Y. Properties along the existing alignment of the interceptor sewer will be affected by construction, however, no new services will be provided by the project. No additional land acquisition or right-of-way will be required. Easements are anticipated to be required for the project.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.c - Ensure that all interceptors are sized to meet the needs of the planned growth of the drainage area or sanitary district in which the project is located.

The project is identified as Wastewater Facilities Capital Project ID 13 and the assessment to expand this section of interceptor sewer main. Operations and maintenance are included in the design of the project. Rehabilitation of this pipe will resolve issues associated with capacity in this section. The construction cost are based on a class 5 estimate provided by the project manager.

LOCATION:

8th Election District, 8th Sanitary District

APPROPRIATION PHASE	Prior	Budget		Five '	Year Capital P	Program		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)								\$0
PLANNING/DESIGN (10%)						\$715,087		\$715,087
LAND ACQUISITION								\$0
CONSTRUCTION								\$0
INSPECTION (10%)								\$0
CONTINGENCIES (10%)								\$0
ESCALATION Base FY 2021						\$114,195		\$114,195
TOTAL COSTS	\$0	\$0	\$0	\$0	\$0	\$829,282	\$0	\$829,282

FUNDING SOURCE	Total	Prior	Budget		Five '	Year Capital F	Program		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$829,282						\$829,282		
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$829,282	\$0	\$0	\$0	\$0	\$0	\$829,282	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$829,282
TOTAL	100%	\$829,282

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Generator Replacement-Sewer	SM2303	Sewer Replacement
	PROGRAM	

DESCRIPTION:

Project includes the replacement of state required emergency generators and transfer switches. The Commission maintains approximately 92 emergency generators with service life expectations of approximately 20 years. The prorgam is intended to replace/upgrade two (2) generators per year. Generators will be standardized to the fullest extent practical and advances in technology will be monitored to ensure the most efficient systems are considered.

There are fifteen (15) generators in excess of 20 years old and twelve (12) between 14 and 20 years old that are in need of scheduled replacement.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.i.b. - Properly dispose of wastewater and construct all sewage collection systems to current standards.

LOCATION:

Various Sanitary Districts, Various Election Districts

	Prior	Budget		Five '	Year Capital P	rogram		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)	\$0							\$0
PLANNING/DESIGN (10%)	\$0							\$0
LAND ACQUISITION	\$0							\$0
CONSTRUCTION	\$0	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$720,000
INSPECTION (10%)	\$0							\$0
CONTINGENCIES (10%)	\$0							\$0
ESCALATION Base FY 2023	\$0							\$0
TOTAL COSTS	\$0	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$720,000

FUNDING SOURCE	Total	Prior	Budget		Five \	/ear Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$0								
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$720,000		\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$720,000	\$0	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	\$0
FACILITIES EXPANSION	0%	\$0
REHAB/REPLACEMENT	100%	\$720,000
TOTAL	100%	\$720,000

SEWER PUMP STATIONS

Bradley Boulevard WWPS Sewee	
Bradley Boulevard WWPS 8211SS Sewee	er Pump Station

DESCRIPTION:

This project will replace the existing Wastewater Pump Station (WWPS) originally installed in 1988. The project will install a new Smith and Loveless package pumping station which includes a shelter, a new perimeter security fence, and an odor control system. This project will affect approximately 525 EDUs. There are no new connections anticipated as a result of this project. The project is anticipated to be completed in a single phase. Construction is anticipated to be performed in house. Construction: Winter 2024/2025 (4 Months) is anticipated to be performed in house.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - The condition of the WWPS is deteriorating as it nears the end of its service life and needs to be rehabilitated. This project is identified on the Wastewater facilities Capital Plan Project as a category 3 with a priority of 8. The cost estimate is based on a class 4 MetCom cost estimate. The construction costs are based on a class 4 estimate provided by consultant, in 2017 dollars plus a 2.5% escalation per year.

LOCATION:

8th Election District, 8th Sanitary District, Willows Rd.

	Prior	Budget		Five	Year Capital P	rogram		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)	\$11,897							\$11,897
PLANNING/DESIGN (10%)	\$26,542							\$26,542
LAND ACQUISITION								\$0
CONSTRUCTION				\$237,936				\$237,936
INSPECTION (10%)				\$23,794				\$23,794
CONTINGENCIES (10%)				\$23,794				\$23,794
ESCALATION Base FY 2018				\$53,874				\$53,874
TOTAL COSTS	\$38,439	\$0	\$0	\$339,397	\$0	\$0	\$0	\$377,836

	Total	Prior	Budget		Five	Year Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$377,836	\$38,439			\$339,397				
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$377,836	\$38,439	\$0	\$0	\$339,397	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$377,836
TOTAL	100%	\$377,836

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Forest Run WWPS	8131SS	Sewer Pump Station

DESCRIPTION:

Rehabilitation of the existing station is necessary because it is equipped with old outdated equipment that is desperate need of upgrading. Due to expansion and increased size of stations and area that Forest Run serves a third pump is necessary for high flows in the case a pump becomes inoperable or fails there will redundancy in the system. Upgrades/ Rehabilitation to this station shall include but not limited to: Generator replacement and removal from inside the building, electrical upgrade (VFDS, new control cabinets and wiring), Beam and Trolley system for pump removal, installation of a second door on the back side of build so vehicle access can be made during equipment removal or repairs. Most of these repairs can be coordinated or completed in-house. This project may include separating Forest Run and Essex South force mains to reduce pressure on the pump stations during high flow events. The force main for Forest run needs to be upgraded so that a third pump can be put in service as a back up or and/or run during emergencies and high flows.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - Replacement, rehabilitation and upgrades of aging infrastructure to minimize inflow & infiltration (I&I).

LOCATION:

8th Sanitary District, 8th Election District

			Pump					
	Design		Station	1/2 FM	1/2 FM			
APPROPRIATION PHASE	Prior	Budget		Five `	Year Capital P	rogram		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)			\$30,000	\$48,518	\$48,518			\$127,036
PLANNING/DESIGN (10%)	\$326,291							\$326,291
LAND ACQUISITION								\$0
CONSTRUCTION			\$600,000	\$970,350	\$970,350			\$2,540,700
INSPECTION (10%)			\$60,000	\$97,035	\$97,035			\$254,070
CONTINGENCIES (10%)			\$60,000	\$97,035	\$97,035			\$254,070
ESCALATION Base FY 2022			\$37,969	\$93,264	\$125,919			\$257,152
TOTAL COSTS	\$326,291	\$0	\$787,969	\$1,306,202	\$1,338,857	\$0	\$0	\$3,759,319

FUNDING SOURCE	Total	Prior	Budget		Five \	/ear Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$3,759,319	\$326,291	\$0	\$787,969	\$1,306,202	\$1,338,857			
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$3,759,319	\$326,291	\$0	\$787,969	\$1,306,202	\$1,338,857	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$3,759,319
TOTAL	100%	\$3,759,319

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Greenbrier WWPS			Sewer Pump Station

DESCRIPTION:

This is a wastewater pump station (WWPS) renewal project. This project will rehabilitate the existing WWPS that was originally installed in 1992. The project will install electrical upgrades to meet safety and code requirements. The project will provide a new shelter for the WWPS controls. No new connections are required as a result of this project. The need for additional land acquisition, right-of-way, or easements will be evaluated in FY2025. The project is to be completed in a single phase. Construction: Spring 2026 (5 months).

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - The Water & Wastewater Facilities Plan condition assessment has recommended that this station will require immediate electrical repair work to comply with safety and code requirements (category 1) and moderate upgrade of the existing station (category 3). The construction costs are based on a class 4 estimate provided by consultant, in 2017 dollars plus a 2.5% escalation per year.

LOCATION:

8th Election District, 8th Sanitary District, Hermanville Road

	Prior	Budget		Five \	lear Capital P	rogram		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)				\$12,765				\$12,765
PLANNING/DESIGN (10%)				\$25,530				\$25,530
LAND ACQUISITION								\$0
CONSTRUCTION					\$255,300			\$255,300
INSPECTION (10%)					\$25,530			\$25,530
CONTINGENCIES (10%)					\$25,530			\$25,530
ESCALATION Base FY 2018				\$7,226	\$66,910			\$74,136
TOTAL COSTS	\$0	\$0	\$0	\$45,521	\$373,270	\$0	\$0	\$418,791

FUNDING SOURCE	Total	Prior	Budget		Five \	/ear Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$0								
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$418,791				\$45,521	\$373,270			
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$418,791	\$0	\$0	\$0	\$45,521	\$373,270	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$418,791
TOTAL	100%	\$418,791

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Wicomico Shores #2 WWPS Replacement			Sewer Pump Station

DESCRIPTION:

This is a Wastewater Pump Station (WWPS) renewal project. This project will replace the existing WWPS with a new Smith and Loveless package pumping station which also includes a new shelter, a new perimeter security fence, generator, and transfer switch. No new connections are required as a result of this project. The need for additional land acquisition, right-of-way, or easements will be evaluated in FY2023. The project is to be completed in a single phase. Construction: Spring 2024 (5 months).

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - The assessment of the condition of the WWPS provided by MetCom Operations is the WWPS is deteriorating and at the end of its service life.

LOCATION:

4th Election District, 1st Sanitary District, Wicomico Shores Subdivision

			Design Construction					
APPROPRIATION PHASE	Prior Budget Five Year Capital Program					FY 2028	Total Project	
			¢10.70/					¢10.70/
ADMINISTRATION (5%)			\$13,706					\$13,706
PLANNING/DESIGN (10%)			\$30,000					\$30,000
LAND ACQUISITION								\$0
CONSTRUCTION			\$274,122					\$274,122
INSPECTION (10%)			\$27,412					\$27,412
CONTINGENCIES (10%)			\$27,412					\$27,412
ESCALATION Base FY 2022		\$0	\$18,866					\$18,866
TOTAL COSTS	\$0	\$0	\$391,519	\$0	\$0	\$0	\$0	\$391,519

FUNDING SOURCE	Total	Prior	Budget		Five \	Year Capital F	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$391,519		\$0	\$391,519					
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$391,519	\$0	\$0	\$391,519	\$0	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$391,519
TOTAL	100%	\$391,519

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Wicomico Shores #1 WWPS Replacement	1221SS		Sewer Pump Station

DESCRIPTION:

This is a Wastewater Pump Station (WWPS) renewal project. This project will replace the existing WWPS with a new Smith and Loveless package pumping station which also includes a new shelter, a new perimeter security fence, generator, and transfer switch. No new connections are required as a result of this project. The need for additional land acquisition, right-of-way, or easements will be evaluated in FY2023. The project is to be completed in a single phase. Construction: Spring 2024 (5 months).

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.ii.a - Provide planned sewer service - The assessment of the condition of the WWPS provided by MetCom Operations is the WWPS is deteriorating and at the end of its service life. The construction costs are based on a class 4 estimate provided by consultant, in 2017 dollars plus a 2.5% escalation per year.

LOCATION:

4th Election District, 1st Sanitary District, Wicomico Shores Subdivision

	Prior	Budget		Five	Year Capital F	Program		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)	\$14,042							\$14,042
PLANNING/DESIGN (10%)	\$28,083							\$28,083
LAND ACQUISITION								\$0
CONSTRUCTION			\$280,830					\$280,830
INSPECTION (10%)			\$28,083					\$28,083
CONTINGENCIES (10%)			\$28,083					\$28,083
ESCALATION Base FY 2018	\$4,373		\$53,816					\$58,189
TOTAL COSTS	\$46,498	\$0	\$390,812	\$0	\$0	\$0	\$0	\$437,310

FUNDING SOURCE	Total	Prior	Budget		Five '	Year Capital F	Program		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$437,310	\$46,498		\$390,812					
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$437,310	\$46,498	\$0	\$390,812	\$0	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$437,310
TOTAL	100%	\$437,310

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Hunting Quarters WWPS			Sewer Pump Station

DESCRIPTION:

This project will replace the existing Wastewater Pump Station (WWPS) which was originally installed in 1987 with a new Smith and Loveless package pumping station, a new perimeter security fence, and a replacement 40KW back-up generator. This project will affect approximately 75 customers. The need for additional land acquisition, right of way, or easements will be evaluated in FY2024. There are no new connections anticipated as a result of this project. The project is anticipated to be completed in a single phase. Construction: Spring 2025 (5 months).

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - The condition of the WWPS is deteriorating as it nears the end of its service life and needs to be rehabilitated. This project has been identified by the Operations Department as a category 3 with a priority of 4. The construction costs are based on a class 4 estimate provided by consultant, in 2017 dollars plus a 2.5% escalation per year.

LOCATION:

2nd Election District, 8th Sanitary District, Hunting Quarter Drive

	Prior	Budget		Five `	/ear Capital F	Program		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)				\$12,003				\$12,003
PLANNING/DESIGN (10%)				\$24,005				\$24,005
LAND ACQUISITION								\$0
CONSTRUCTION				\$240,051				\$240,051
INSPECTION (10%)				\$24,005				\$24,005
CONTINGENCIES (10%)				\$24,005				\$24,005
ESCALATION Base FY 2018				\$61,147				\$61,147
TOTAL COSTS	\$0	\$0	\$0	\$385,216	\$0	\$0	\$0	\$385,216

FUNDING SOURCE	Total	Prior	Budget		Five `	Year Capital F	Program		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$385,216				\$385,216				
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$385,216	\$0	\$0	\$0	\$385,216	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$385,216
TOTAL	100%	\$385,216

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION	
Broad Creek WWPS			Sewer Pump Station

DESCRIPTION:

This is a Wastewater Pump Station (WWPS) renewal project. This project will replace the existing suction lift pumps to a submersible pump package. WWPS with a new Smith and Loveless package pumping station which also includes a new shelter, a new perimeter security fence, generator, and transfer switch. No new connections are required as a result of this project. The need for additional land acquisition, right-of-way, or easements will be evaluated in FY2027. The project is to be completed in a single phase. Construction: Spring 2029 (5 months).

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - The assessment of the condition of the WWPS provided by MetCom Operations is the WWPS is deteriorating and at the end of its service life.

LOCATION:

8th Sanitary District, 6th Election District, Hollywood Area

						Design		
APPROPRIATION PHASE	Prior Approval	Budget FY 2023						Total Project
ADMINISTRATION (5%)								\$0
PLANNING/DESIGN (10%)						\$100,000		\$100,000
LAND ACQUISITION								\$0
CONSTRUCTION								\$0
INSPECTION (10%)								\$0
CONTINGENCIES (10%)								\$0
ESCALATION Base FY 2022						\$13,141		\$13,141
TOTAL COSTS	\$0	\$0	\$0	\$0	\$0	\$113,141	\$0	\$113,141

FUNDING SOURCE	Total	Prior	Budget		Five '	Year Capital F	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$113,141						\$113,141		
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$113,141	\$0	\$0	\$0	\$0	\$0	\$113,141	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$113,141
TOTAL	100%	\$113,141

SEWER UPGRADES / EXPANSION

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
St. Clements Shores WWTP Expansion Phase B	2151SF	Sewer Upgrade/Expansion

DESCRIPTION:

This facility was constructed approximately 33 years ago with a capacity of 100,000 gallons per day (gpd). The plant is currently operating at 90% capacity. Phase A of the St. Clements Shores WWTP Expansion is complete which upgraded both the treatment and disposal systems to reliably serve the existing customers along with approximately 34 additional EDUs (approximately 29 EDUs included in the plant's capacity but not yet connected and 5 EDUs for existing homes with existing septic systems deemed critical by the Health Department).

Phase B is to upgrade both the treatment and disposal systems at the plant in order to provide additional service to the area, approximately 180-280 additional EDUs. Phase B will require a revision to the plant's current National Pollutant Discharge Elimination System (NPDES) groundwater discharge permit with MDE, significant upgrade to the treatment system and additional disposal capacity. Phase B will increase the plant's capacity by as much that is feasible within the constraints of currently owned MetCom property. This phase will include a Preliminary Engineering Report (PER) and evaluation of the existing land i.e. property site evaluation, hydrogeological evaluation, soil coring, and RIB loading tests along with potentially upgrading the plant to meet ENR standards with a Membrane Bioreactor (MBR) system with a capacity of 0.10 - 0.18 mgd. The service area for Phase B was approved by LUGM, MDE, and the Health Department and revisions to the County's Comprehensive Plan and CWSP along with Resolution's noting the properties included and an allocation policy were also approved in 2021. FY22 funding allocations are based on the 1-4-22 determination. FY23 monies include proposed County ARPA grant funding to design sewer extensions within the designated service area.

Phase C, if necessary, would expand the plant to serve additional areas outside of Phase B. This would require significant upgrades to the treatment system along with additional Rapid Infiltration Basins (RIBs) for disposal which will require purchase of additional land. This expanded service area will need to be addressed by the County and MDE to determine where they would like to see the service area expanded and any revisions to the CWSP. Phase C discussion is included for informational purposes only.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.b. - Direct sewerage service as needed to remedy the failure of existing septic systems where no feasible alternative exists. The County Environmental Health Department, Land Use and Growth Management have expressed interest in servicing the area. Many of the homes with failing septic systems are within the critical area zone and need public sewer service. A 2.5% escalation will be added each year. Breton Bay PUD MOU (1978). Plant Allocation Policy (1983). CWSP and Comprehensive Plan Amendments were completed in 2021.

LOCATION:

3rd Election District, 2nd Sanitary District, St. Clements Shores

	Design Construction							
APPROPRIATION PHASE	Prior Approval	Budget FY 2023	FY 2024	Five ' FY 2025	Year Capital F FY 2026	Program FY 2027	FY 2028	Total Project
ADMINISTRATION (5%)	\$388,625							\$388,625
PLANNING/DESIGN (10%)	\$927,956	\$250,000						\$1,177,956
LAND ACQUISITION	\$200,000							\$200,000
CONSTRUCTION	\$6,218,000							\$6,218,000
INSPECTION (10%)	\$777,250							\$777,250
CONTINGENCIES (10% of Des., Admin., Insp.)	\$1,748,812							\$1,748,812
ESCALATION Base FY 2022								\$0
TOTAL COSTS	\$10,260,643	\$250,000	\$0	\$0	\$0	\$0	\$0	\$10,510,643

FUNDING SOURCE	Total	Prior	Budget		Five `	Year Capital F	Program		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$0								
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
FEDERAL GRANT/ARP	\$0								
STATE GRANT/BRF	\$7,336,833	\$7,336,833							
COUNTY GRANT (ARPA)	\$1,711,905	\$1,461,905	\$250,000						
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$1,461,905	\$1,461,905							
TOTAL FUNDS	\$10,510,643	\$10,260,643	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	33%	\$3,468,512
FACILITIES EXPANSION	33%	\$3,468,512
REHAB/REPLACEMENT	34%	\$3,573,619
TOTAL	100%	\$10,510,643

INCREMENT	Fiscal	
INCITEMENT	Year	
STAFFING (FTE's)	\$104,000 (1 FTE)	2024
CONTRACT SERVICES		2024
SUPPLIES & MATERIALS	\$16,800 - \$30,800	2024
UTILITIES	\$50,500	2024
OTHER (F&E)	\$8,000 (membrane replacement)	2024
TOTAL		

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Methane Co-Generator Upgrade at Marlay-Taylor WWTP	8171SF	Sewer Upgrade/Expansion

DESCRIPTION:

Project to upgrade the existing methane co-generator at the Marlay-Taylor WWTP. Since its original construction in 2010, the co-gen system has experienced continuous operating problems and control issues preventing MetCom from fully utilizing the system. In a study completed by AECOM in 2018, it was determined that the control system needed a complete upgrade (FY 2021), additionally one of the engines requires major repair. During a site visit on 6/24/21 it was determined that the system as a whole has deteriorated and additional replacements/upgrades are required system wide including but not limited to gas production analysis, gas holder replacement, engine/generator replacement, booster blowers and gas receiver. Once complete the system should run approximately 12-18 hours a day and produce approximately 5,940 KWH of power. In 2019, the grant from MDE for siloxane removal was returned (\$945,000), because the scope of the grant was determined not to be the root cause of the operating problems. Data shows that with the gas profile a full engine rebuild may be required every 5-6 years. In FY24, the first engine may be rebuilt or replaced as it is not running now, the second engine is budgeted to be replaced in FY28. An evaluation report is scheduled to be completed in FY22, which may impact the scope of this CIB project. Additionally, if needed, grant opportunities may be available to supplement the system with natural gas.

PLANNING JUSTIFICATION:

Comprehensive Plan 10.2.4.A.ii.c - Promote the efficient utilization and reduced consumption of energy resources by requiring energy efficient construction.

The control upgrades and engine repair are required to ensure the co-gen system is fully operational.

LOCATION:

8th Sanitary District, 8th Election District

	Evaluation/ Controls		Engine #1				Engine #2	
APPROPRIATION PHASE	Prior Approval	Budget FY 2023	FY 2024	Five ' FY 2025	Year Capital F FY 2026	Program FY 2027	FY 2028	Total Project
ADMINISTRATION (5%)	\$11,225		\$3.000				\$16.850	\$31,075
PLANNING/DESIGN (10%)	\$142,450		\$6,000				\$33,700	\$182,150
LAND ACQUISITION CONSTRUCTION	\$224,500		\$60,000				\$337.000	\$0 \$621,500
INSPECTION (10%)	\$22,450		\$6,000				\$337,000	\$62,150
CONTINGENCIES (10%)	\$22,450					\$33,700	\$62,150	
ESCALATION Base FY 201	8 \$23,304	\$0	\$12,935	\$0	\$0	\$0	\$127,424	\$163,663
TOTAL COSTS	\$446,379	\$0	\$93,935	\$0	\$0	\$0	\$582,374	\$1,122,688

FUNDING SOURCE	Total	Prior	Budget		Five '	Year Capital F	Program		Balance to
	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$1,002,688	\$326,379		\$93,935				\$582,374	
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$120,000	\$120,000							
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$1,122,688	\$446,379	\$0	\$93,935	\$0	\$0	\$0	\$582,374	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$1,122,688
TOTAL	100%	\$1,122,688

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Sewer Vacuum Truck		Sewer Upgrade/Expansion

DESCRIPTION:

A replacement sewer vacuum truck is needed to address ongoing maintenance and reliability issues. The combination vacuum and sewer jetting vehicle is utilized to clean wet wells at the 64 wastewater pumping stations and to maintain over 149 miles of gravity sewer mains.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - Replacement, rehabilitation and upgrades of aging infrastructure to minimize inflow & infiltration (I&I). Estimated costs plus a 2.5% escalation per year. The acquisition is in accordance with the MetCom Vehicle Replacement Program.

LOCATION:

Various Sanitary Districts, Various Election Districts

	Prior	Budget		Five	Year Capital F	Program		Total
APPROPRIATION PHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)			\$20,000					\$20,000
PLANNING/DESIGN (10%)			\$40,000					\$40,000
LAND ACQUISITION								\$0
VEHICLE COST			\$400,000					\$400,000
INSPECTION (10%)			\$40,000					\$40,000
CONTINGENCIES (10%)			\$40,000					\$40,000
ESCALATION Base FY 2021			\$41,521					\$41,521
TOTAL COSTS	\$0	\$0	\$581,521	\$0	\$0	\$0	\$0	\$581,521

FUNDING SOURCE	Total	Prior	Budget		Five \	Year Capital F	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$581,521			\$581,521					
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$581,521	\$0	\$0	\$581,521	\$0	\$0	\$0	\$0	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$581,521
TOTAL	100%	\$581,521

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Grinder Pump Replacements	SM2309	Sewer Upgrade/Expansion
	PROGRAM	

DESCRIPTION:

Replacement of approximately 40 of older grinder pump cores, vaults and discharge pipes per year. Cost is based on \$10K installation and \$7K grinder pump replacement kit. Maintaining an inventory of these items to install as the older pumps fail and as residential permit applications require replacement. Between 800 and 900 service repair calls are performed each year on aproximately 1,800 grinder pumps. Estimated service life for grinder pumps is between 25 and 30 years.

Retrofit kits may still be utilized as an interm measuer until all older E-One low pressure units have been fully replaced.

Alternatively, MetCom could charge an annual maintenance fee or rescind its prior responsibility similar to Calvert County Resolution No. 45-17.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service - Gradual replacement of aging infrastructure; many of these are approaching or have exceeded their useful life of 20 years. Continue replacing up to 125 rotating assemblies (cores) per year, plus replace up to 100 isolation valves and 50 complete units per year.

LOCATION:

APPROPRIATION PHASE	Prior	Budget		Five	Year Capital P	rogram		Total
ALLIKOLKIAHONTHASE	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Project
ADMINISTRATION (5%)		\$34,000	\$34,000	\$34,000	\$34,000	\$34,000	\$34,000	\$204,000
PLANNING/DESIGN (10%)								\$0
LAND ACQUISITION								\$0
CONSTRUCTION		\$680,000	\$680,000	\$680,000	\$680,000	\$680,000	\$680,000	\$4,080,000
INSPECTION (10%)		\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$68,000	\$408,000
CONTINGENCIES (10%)								\$0
ESCALATION Base FY 2023	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COSTS	\$0	\$782,000	\$782,000	\$782,000	\$782,000	\$782,000	\$782,000	\$4,692,000

FUNDING SOURCE	Total	Prior	Budget		Five Y	/ear Capital P	rogram		Balance to
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$0								
REVOLVING LOAN FUNDS	\$0								
DHCD LOAN	\$4,692,000		\$782,000	\$782,000	\$782,000	\$782,000	\$782,000	\$782,000	
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHGS - SYSTEM IMPROV	\$0								
TOTAL FUNDS	\$4,692,000	\$0	\$782,000	\$782,000	\$782,000	\$782,000	\$782,000	\$782,000	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$
SERVICE AREA EXPANSION	0%	
FACILITIES EXPANSION	0%	
REHAB/REPLACEMENT	100%	\$4,692,000
TOTAL	100%	\$4,692,000

PROJECT TITLE	PROJ. NO.	PROJECT CLASSIFICATION
Marlay-Taylor Expansion		Sewer Upgrade/Expansion

DESCRIPTION:

Begin preliminary expansion evaluation for Marlay-Taylor from 6MGD to 9MGD to serve growth in the area. MDE requires a capacity management plan when flow reaches 80% of permitted capacity. A Preliminary Engineering Report (PER) is scheduled for FY27, Design / Permitting in FY28 and Construction in FY29. The need for land acquisition in under evaluation at this time.

PLANNING JUSTIFICATION:

Comprehensive Plan 7.6.1.B.iii.a - Provide planned sewer service.

LOCATION:

8th Sanitary District, 8th Election District

						PER	Design	
APPROPRIATION PHASE	Prior Approval	Budget FY 2023	Five Year Capital Program FY 2024 FY 2025 FY 2026 FY 2027 FY 2028				FY 2028	Total Project
ADMINISTRATION (5%)						\$15,000	\$130,000	\$0
PLANNING/DESIGN (10%)						\$300,000	\$2,600,000	\$2,900,000
LAND ACQUISITION								\$0
CONSTRUCTION								\$0
INSPECTION (10%)								\$0
CONTINGENCIES (10%)								\$0
ESCALATION Base FY 2022								\$0
TOTAL COSTS	\$0	\$0	\$0	\$0	\$0	\$315,000	\$2,730,000	\$2,900,000

FUNDING SOURCE	Total	Prior	Budget	Five Year Capital Program			Balance to		
FUNDING SOURCE	Project	Approval	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Complete
MDE/DHCD LOAN	\$3,045,000						\$315,000	\$2,730,000	
MDE LOAN FUNDS	\$0								
DHCD LOAN	\$0								
BONDS	\$0								
STATE GRANT	\$0								
COUNTY FUNDS	\$0								
METCOM FUNDS	\$0								
DIRECT CHRGS - SYS IMPR CHG	\$0								
DIRECT CHRGS - CAP CONTR CHG	\$0								
TOTAL FUNDS	\$3,045,000	\$0	\$0	\$0	\$0	\$0	\$315,000	\$2,730,000	\$0

FUNDING ASSIGNMENT	Total Project %	Total Project \$		
SERVICE AREA EXPANSION	33%	\$957,000		
FACILITIES EXPANSION	33%	\$957,000		
REHAB/REPLACEMENT	34%	\$986,000		
TOTAL	100%	\$2,900,000		