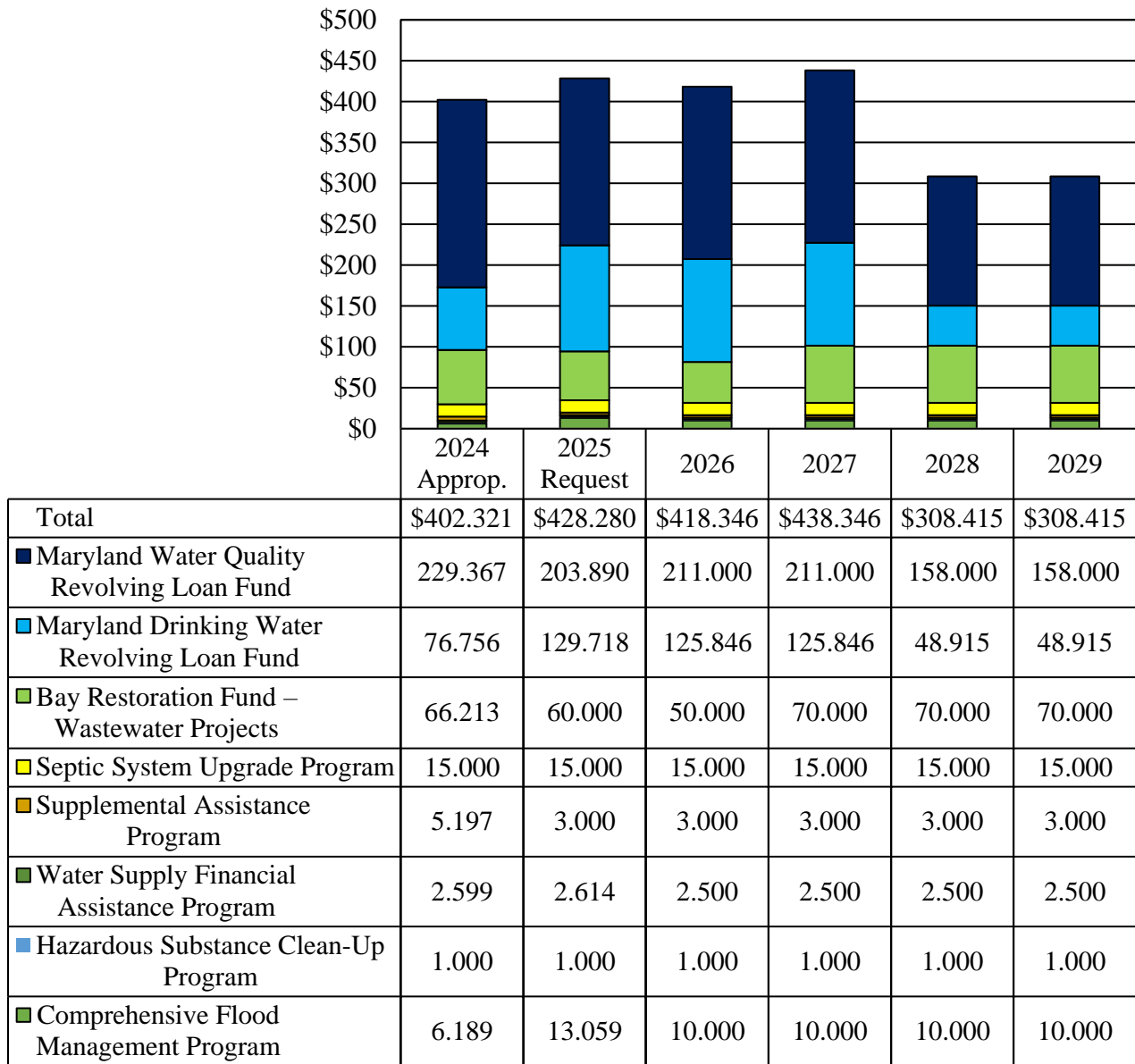


UA01
Department of the Environment

Capital Budget Summary

Grant and Loan *Capital Improvement Program*
(\$ in Millions)



For further information contact: Andrew D. Gray

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Key Observations

- ***Infrastructure Investment and Jobs Act Funding:*** The Maryland Department of the Environment (MDE) does not have a plan for the allocation of federal Infrastructure Investment and Jobs Act (IIJA) funding for emerging contaminants in the Water Quality Revolving Loan Fund (WQRLF) and the Drinking Water Revolving Loan Fund (DWRLF) and lead service line replacement funding for the DWRLF. In addition, Maryland’s data on lead service lines is incomplete, yet federal funds are being allocated. Meanwhile, Maryland is required to submit final statewide lead service line data in October 2024.
- ***Federal Emerging Contaminants Funding Allocation and Award Report Not Submitted:*** The budget committees requested that MDE submit a report that details the process and criteria under which MDE is allocating the State’s share of federal funds received through the IIJA specifically designated to address emerging contaminants. It was also requested that the report provide detailed applicant information, including project scope, schedule, and comprehensive funding plan. The report was to be submitted by December 31, 2023, but has not been submitted.

PAYGO Recommended Actions

1. Concur with Governor’s allowance for the Maryland Department of the Environment.

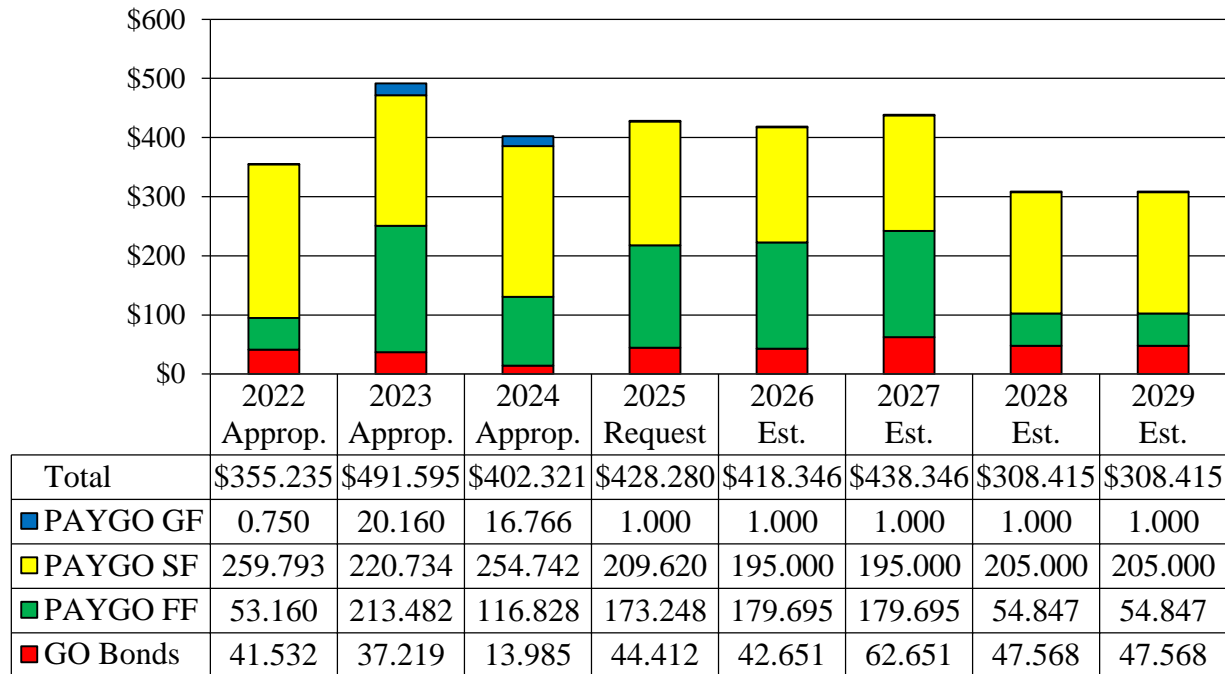
GO Bond Recommended Actions

1. Approve all authorizations for the Maryland Department of the Environment.

Budget Overview of Grant and Loan Programs

The MDE fiscal 2025 capital program totals \$428.3 million, comprised of \$1.0 million in general funds, \$209.6 million in special funds, \$173.2 million in federal funds, and \$44.4 million in general obligation (GO) bonds. This is \$26.0 million more than the fiscal 2024 budget, and as shown in **Exhibit 1**, the increase is primarily attributable to \$56.4 million more in federal funds from the IJA and \$30.4 million in GO bonds for matching the federal funding. This is offset partially by a decrease of \$45.1 million in revolving loan fund special funds and \$15.8 million in general funds that are no longer used for the State match. The Budget Reconciliation and Financing Act of 2024 includes a provision transferring \$6.0 million in general funds from the Dedicated Purpose Account to the General Fund in fiscal 2024, which is funding attributable to the \$6.0 million in the fiscal 2023 budget for the Conowingo Dam Capacity Recovery and Dredge Material Reuse Project, which is canceled.

Exhibit 1
MDE Capital Programs Funding/ Fiscal 2025 Request by Fund Source
Fiscal 2022-2029 Est.
(\$ in Millions)



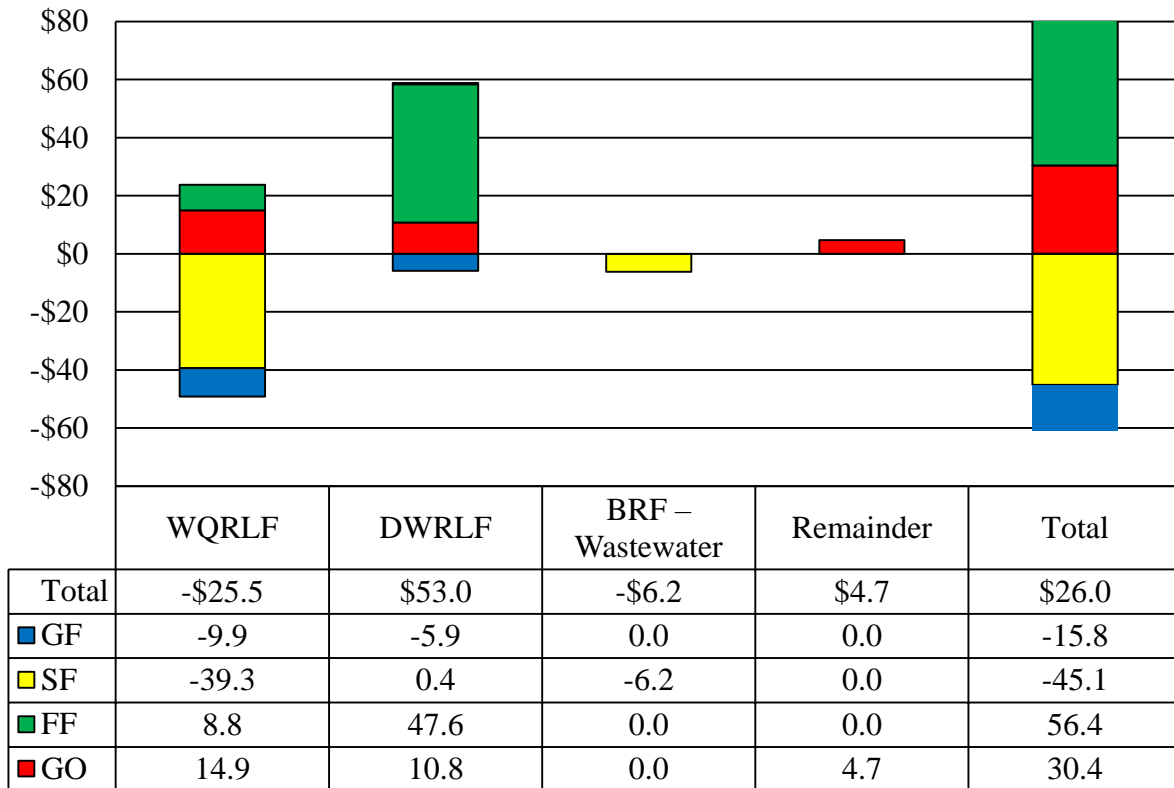
FF: federal funds
 GF: general funds
 GO: general obligation

MDE: Maryland Department of the Environment
 PAYGO: pay-as-you-go
 SF: special funds

Source: Department of Budget and Management

Exhibit 2 illustrates the WQRLF, the DWRLF, and the Bay Restoration Fund (BRF) Wastewater funding variances between fiscal 2024 and 2025. The change between fiscal 2024 and 2025 for the remaining programs is primarily an increase of \$6.9 million in GO bonds for the Comprehensive Flood Management Program, which is offset partially by a decrease of \$2.2 million for the Supplemental Assistance Program. MDE’s overall available capital funding remains at around \$430 million through fiscal 2027 and then subsequently decreases with the projected end of the IJA funding budgeted in the WQRLF and the DWRLF.

Exhibit 2
MDE Capital Funding Changes
Fiscal 2024-2025
(\$ in Millions)



BRF: Bay Restoration Fund
 DWRLF: Drinking Water Revolving Loan Fund
 FF: federal funds
 GF: general funds

GO: general obligation funds
 MDE: Maryland Department of the Environment
 SF: special funds
 WQRLF: Water Quality Revolving Loan Fund

Source: Department of Budget and Management; Department of Legislative Services

Water Quality Revolving Loan Fund

Program Description: The WQLRF was created to provide low-interest loans to counties and municipalities to finance water quality improvement projects. Projects eligible for funding include wastewater treatment plants (WWTP), failing septic systems, and nonpoint source projects, such as urban stormwater control projects.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
GF	\$9.902	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
SF	148.434	109.126	110.000	110.000	110.000	110.000
FF	71.031	79.827	85.000	85.000	40.000	40.000
GO Bonds	0.000	14.937	16.000	16.000	8.000	8.000
Total	\$229.367	\$203.890	\$211.000	\$211.000	\$158.000	\$158.000

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2025 Request	Future Request	Total State Share
Middle Branch Resiliency Project – Stage 1 (Baltimore City)	\$120.438	\$0.000	\$25.000	\$0.000	20.8%
Patapsco Wastewater Treatment Plant Headworks Improvements (Sanitary Contract 938) (Baltimore County)	89.548	0.000	23.500	0.000	26.2%
Ellicott City North Tunnel Extension Project (Howard)	165.784	0.000	23.500	0.000	14.2%
Piscataway Water Resource Recovery Facility – Bio-Energy Project (Prince George’s)	334.835	164.702	23.500	0.000	56.2%
Washington Suburban Sanitary Commission Sewer Basin Reconstruction Program – Loan 5 (Section 8) (Regional)	110.017	0.000	23.500	0.000	21.4%
Hagerstown Wastewater Treatment Plant Improvements (Washington)	37.731	0.000	20.000	0.000	53.0%
Patapsco Wastewater Treatment Plant Headworks Improvements (Sanitary Contract 938) (Baltimore City)	89.547	0.000	11.805	0.000	13.2%
Anne Arundel County Thermal Processing Demonstration Facility (Anne Arundel)	10.000	0.000	10.000	0.000	100.0
Remaining Projects	164.136	22.088	43.085	0.000	Varies
Total	\$1,122,036	\$186.790	\$203.890	\$0.000	

- Changes:** The fiscal 2025 budget reflects \$13.2 million less than the amount planned for fiscal 2025 in the 2023 *Capital Improvement Program* (CIP). The decrease is primarily attributable to a reduction of \$14.5 million in available federal funds because a portion of national State Revolving Fund base being used by the U.S. Congress for earmarks. The State match will be funded with GO bonds as part of the State’s fiscal plan to replace programmed levels of pay-as-you-go (PAYGO) general funds with the additional debt capacity authorized for the 2024 session. The use of GO bonds for the State match is programmed in the CIP to continue through fiscal 2029. **Exhibit 3** shows the budgeted federal State match for MDE’s PAYGO/capital budget. The budget provides \$79.8 million of federal funds, of which \$60.2 million is attributable to the IJA. These funds are comprised of \$19.7 million for the base grant, \$55.0 million for IJA general supplemental funding, and \$5.1 million for IJA emerging contaminants. The State match is \$14.9 million and is comprised of \$3.9 million for the 20% match for the base grant and \$11.0 million for the 20% match for the IJA general supplemental funding.

Exhibit 3
Water Quality Revolving Loan Fund Funding
Fiscal 2025
(\$ in Millions)

	PAYGO	
	<u>Capital</u>	<u>Note</u>
Federal		
Base Grant	\$19.7	Match requirement.
IJA General Supplemental	55.0	Match requirement. 49% required as subsidy.
IJA Emerging Contaminants	5.1	100% required as subsidy.
Total	\$79.8	
State Match (GO Bonds)		
Base Grant (20%)	\$3.9	
IJA General Supplemental (20%)	11.0	
Total	\$14.9	

IJA: Infrastructure Investment and Jobs Act

Source: Department of Budget and Management

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- ***Encumbrances and Expenditures:*** The fiscal 2023 encumbrance level of \$49.6 million is an improvement upon the encumbrances in fiscal 2022. WQRLF booked a negative encumbrance of \$8.4 million in fiscal 2022. This reflected the cancellation of \$10.7 million in previously encumbered loans and grants offset by only \$2.3 million in encumbrances for new loans and grants. In contrast, in fiscal 2021, the WQRLF encumbered \$424.5 million. The average annual encumbrance levels between fiscal 2020 and 2023 is \$147.1 million.
- ***Concerns:*** As shown in Exhibit 3, the budget includes \$5.1 million of federal IJA funding in fiscal 2025 to address emerging contaminants, such as polyfluoroalkyl substances. This amount, in addition to \$2.1 million from a fiscal 2022 federal allocation, will support a portion of the costs of the \$10.0 million Anne Arundel County Thermal Processing Demonstration Facility. This is the only project allocated federal IJA funds for emerging contaminants. **The Department of Legislative Services (DLS) recommends that MDE comment on the overall plan for the allocation of IJA emerging contaminants funding.**
- ***Other Comments:*** The fiscal 2025 budget provides for 22 projects serving 12 jurisdictions plus 1 regional project and one statewide project. The fiscal 2023 to 2027 appropriations reflect federal IJA funding, including \$60.2 million in fiscal 2025.

Drinking Water Revolving Loan Fund

Program Description: The DWRLF was established in accordance with a federal capitalization grant approved by the U.S. Congress in calendar 1996 in anticipation of future federal capitalization grants. This program was authorized by the General Assembly to provide loans to counties and municipalities to finance water supply improvements and upgrades. In accordance with the federal law, these funds may also be loaned to private parties.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
GF	\$5.864	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
SF	25.095	25.495	20.000	20.000	30.000	30.000
FF	45.797	93.421	94.695	94.695	14.847	14.847
GO Bonds	0.000	10.802	11.151	11.151	4.068	4.068
Total	\$76.756	\$129.718	\$125.846	\$125.846	\$48.915	\$48.915

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2025 Request	Future Request	Total State Share
Hampstead Water Treatment Facility Emerging Contaminants Remediation (Carroll)	\$19.788	\$0.000	\$19.500	\$0.000	98.5%
City of Aberdeen Water Treatment Plant Upgrade (Harford)	13.972	0.000	13.972	0.000	100.0%
Mountain Lake Park and Loch Lynn Heights Water Line Replacement (Garrett)	38.135	1.587	11.500	0.000	34.3%
Parkwood Water Main Replacement – Phase I (Montgomery)	11.098	0.000	11.098	0.000	100.0%
Village in the Woods Water Main Replacement (Prince George’s)	9.623	0.000	8.645	0.000	89.8%
Chestertown Water Treatment Plant Upgrade (Kent)	7.825	0.000	7.825	0.000	100.0%
Baltimore County Lead Service Line Inventory Program – Disadvantaged Community (Baltimore County)	6.509	0.000	6.509	0.000	100.0%
Newburg Drive Water Main Replacement (Prince George’s)	6.928	0.000	5.773	0.000	83.3%
Karla Lane Water Main Replacement (Prince George’s)	5.280	0.000	5.280	0.000	100.0%
Remaining Projects	72.958	17.041	39.616	0.000	Varies
Total	\$192.116	\$18.628	\$129.718	\$0.000	

- Changes:** The fiscal 2025 budget provides \$22.2 million less than the amount planned for fiscal 2025 in the 2023 CIP. The decrease is primarily attributable to a reduction of \$27.6 million in available federal funds because a portion of national State Revolving Fund base was used by Congress for earmarks. The reduction in federal funds reduces the State match requirement, which for the same reasons outlined above will be funded with GO bond funds. **Exhibit 4** shows the federal funding and matching State funding for MDE’s operating and PAYGO/capital budgets. The budget provides \$93.4 million of federal funds of which \$85.9 million is attributable to the IJA. These funds are comprised of \$7.5 million for the base grant, \$31.9 million for IJA general supplemental funding, \$15.9 million for IJA emerging contaminants, \$28.7 million for IJA lead service line, and \$9.5 million for small or disadvantaged communities – emerging contaminants. The State match is calculated using the total federal funding, which includes funding in MDE’s operating budget. The total match funding is \$10.8 million, which is comprised of \$2.1 million for the 20% match for the base grant and \$8.7 million for the 20% match for the IJA general supplemental funding.

Exhibit 4
Drinking Water Revolving Loan Fund Funding
Fiscal 2025
(\$ in Millions)

	<u>Operating</u>	<u>PAYGO/ Capital</u>	<u>Total</u>	<u>Note</u>
Federal				
Base Grant	\$2.8	\$7.5	\$10.3	Match requirement.
IJA General Supplemental	11.8	31.9	43.7	Match requirement. 49% required as subsidy.
IJA Emerging Contaminants	0.0	15.9	15.9	100% required as subsidy.
IJA Lead Service Line	0.0	28.7	28.7	49% required as subsidy.
Small or Disadvantaged Communities – Emerging Contaminants	0.0	9.5	9.5	
Total	\$14.6	\$93.4	\$108.0	
State Match (GO Bonds)				
Base Grant (20%)	\$0.0	\$2.1	\$2.1	
IJA General Supplemental (20%)	0.0	8.7	8.7	
Total	\$0.0	\$10.8	\$10.8	

IJA: Infrastructure Investment and Jobs Act

Source: Department of Budget and Management

- **Encumbrances and Expenditures:** The program encumbered \$12.9 million in fiscal 2022 and \$1.5 million in fiscal 2023. In comparison, the program encumbered \$116.3 million in fiscal 2021. The average annual encumbrance level between fiscal 2020 and 2023 is \$33.0 million, primarily due to the large encumbrance level in fiscal 2021. **DLS recommends that MDE comment on why encumbrances decreased from \$12.9 million in fiscal 2022 to \$1.5 million in fiscal 2023.**
- **Performance Measures:** The U.S. Environmental Protection Agency’s (EPA) *7th Drinking Water Infrastructure Needs Survey and Assessment* was reported to the U.S. Congress in September 2023. Maryland reported \$14.6 billion in drinking water infrastructure needs over the next 20 years in the following categories: distribution/transmission (\$12.8 billion); treatment (\$1.0 billion); storage (\$0.5 billion); source (\$0.3 billion); and other (\$0.1 billion). The \$14.6 billion funding need was expressed by drinking water system size as follows: large (\$12.0 billion); medium (\$1.3 billion); small (\$0.9 billion); and not-for-profit noncommunity water systems (\$0.4 billion).
- **Concerns:** Lead service line replacement and emerging contaminants are two major components of the federal IIIA funding. MDE’s fiscal 2024 and 2025 project lists reflect funding for lead service line inventorying and replacement and for emerging contaminants projects, but by all appearances, MDE does not have a plan to guide the use of the lead service line replacement and emerging contaminants funding. One complicating factor is concern about how the federal IIIA funding is being allocated to the states, in particular for lead service line replacement. For instance, in terms of Maryland’s need, the *7th Drinking Water Infrastructure Needs Survey and Assessment* notes that there are 8,099 service lines with lead content, 20,196 with unknown material, 1,712 that are standalone galvanized, 155,938 with no lead content, and 1,270,475 that were not reported per Maryland survey information. The large number of service lines with no reported information appears to be a problem for a number of states and EPA. As a result, EPA estimated the number of lead service lines from each state’s survey responses, which appears to have disadvantaged the states with accurate data and favored states lacking in data. For Maryland, the estimated number of lead service lines is 71,166, or 0.77% of the overall number of 9,188,545 lead service lines for the 50 states and the District of Columbia. The 0.77% percentage will be used for determining the allocation of funding to Maryland from federal IIIA lead service line funding until new information is provided. The states were offered an opportunity to provide more service line data in fall 2023 and are required to submit a complete inventory in October 2024. **DLS recommends that MDE comment on the plan for allocating federal IIIA lead service line replacement and emerging contaminants funding to Maryland jurisdictions, whether Maryland provided updated service line information to EPA in fall 2023, and the status of the statewide lead service line survey required by EPA by October 2024.**
- **Other Comments:** The fiscal 2025 budget provides for 33 projects serving 15 jurisdictions plus 1 regional project. The fiscal 2023 to 2029 appropriations reflect federal IIIA funding, including the \$85.9 million in fiscal 2025.

Bay Restoration Fund – Wastewater Projects

Program Description: The BRF (Chapter 428 of 2004) was created to address the significant decline in Chesapeake Bay water quality due to overenrichment of nutrients, such as phosphorus and nitrogen. This dedicated fund, financed in large part by WWTP users, initially was used to provide grants to local governments to upgrade Maryland’s 67 major WWTPs with enhanced nutrient removal (ENR) technology. This was part of the effort to reduce an additional 7.5 million pounds of nitrogen per year to reach Maryland’s commitment under the Total Maximum Daily Load (TMDL) as implemented by the Watershed Implementation Plan.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
SF	\$66.213	\$60.000	\$50.000	\$50.000	\$50.000	\$50.000
GO Bonds	0.000	0.000	0.000	20.000	20.000	20.000
Total	\$66.213	\$60.000	\$50.000	\$70.000	\$70.000	\$70.000

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2025 Request	Future Request	Total State Share
Patapsco Wastewater Treatment Plant Headworks Improvements (Sanitary Contract 938) (Baltimore County)	\$89.548	\$0.000	\$15.000	\$0.000	16.8%
Town of Manchester Wastewater Treatment Plant Upgrade (Carroll)	22.825	1.257	13.652	0.000	65.3%
Middle Branch Resiliency Project – Stage 1 (Baltimore City)	120.438	0.000	8.000	0.000	6.6%
Cheltenham Boy’s Village Youth Facility Wastewater Treatment Plant Upgrade (Prince George’s)	15.821	3.018	5.566	0.000	54.3%
Patapsco Wastewater Treatment Plant Headworks Improvements (Sanitary Contract 938) (Baltimore City)	89.548	0.000	5.000	0.000	5.6%
Remaining Projects	47.790	17.258	12.782	0.000	Varies
Total	\$385.970	\$21.533	\$60.000	\$0.000	

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- **Changes:** The fiscal 2025 budget provides \$20.0 million less than the amount programmed for fiscal 2025 in the 2023 CIP due to the projected cash flow needs of projects. The 2024 CIP programs \$10.0 million less in special funds for fiscal 2026 through 2029 to reflect the reduced funding capacity of the BRF. The 2024 CIP also removes the \$20.0 million in GO bond funding programmed for fiscal 2026 but maintains the \$20.0 million in GO bond funding for fiscal 2027 through 2029 to increase the funding capacity of the program.
- **Encumbrances and Expenditures:** There is \$109.1 million to be encumbered and \$242.9 million to be expended from before fiscal 2020. A total of \$590.0 million in revenue bonds have been authorized and are reflected in MDE’s fund summary, but only \$330.0 million in revenue bonds have been issued. The fiscal 2024 spending plan reflects \$254.1 million in beginning balance from fiscal 2023, the \$66.2 million fiscal 2024 appropriation, and the encumbering of \$197.0 million. The \$197.0 million encumbrance level in fiscal 2024 would be higher than even the \$117.9 million encumbrance level in fiscal 2019 and is much higher than the average annual encumbrance level of \$33.5 million between fiscal 2020 and 2023. The fiscal 2024 spending plan leaves \$123.3 million for fiscal 2025.
- **Projects Selected:** For fiscal 2025, the eight projects are broken down into the following categories: six minor WWTPs related to upgrades to ENR technology; one major WWTP project (Patapsco WWTP Headworks Improvements); one flood management project (Middle Branch Resiliency Project – Stage 1); and planning for cost-effective upgrade of minor WWTPs. In contrast, the fiscal 2024 funding all was allocated to nine minor WWTP upgrades to ENR due to the requirement in Chapters 694 and 695 of 2021 to fund minor WWTP upgrades before transferring funding to the Clean Water Commerce Account. Chapters 694 and 695 reflected a change from prior years when funding was also available for combined sewer overflows (CSO) abatement, rehabilitation of existing sewers and upgrading conveyance systems, and stormwater alternative compliance plans.
- **Performance Measures:** Of the 67 major WWTPs, 65 have been upgraded to ENR technology and are in operation; the Westminster WWTP is at 94% construction completion, and the Princess Anne WWTP is in the planning phase. MDE notes that there are more than 300 minor WWTPs that are eligible for funding if the upgrades are cost effective, and 35 minor plants have signed the funding agreement and started the process. Of these 35 minor plants, 16 are in planning or design, 6 are under construction, and 13 have completed the upgrade. In addition, 2 more minor WWTPs were upgraded using other fund sources. MDE anticipates more applications in the future due to continued interest and treatment technology advances that are increasing the cost effectiveness of these upgrades.

- **Concerns:** Previous concerns about the BRF revenue declining appear to have been allayed by the payment of a delinquent account. However, the operational and infrastructure failures at Back River and Patapsco WWTPs raise new concerns about the security of the State’s investment in the 67 major WWTPs as well as the minor WWTPs. The main reasons for the failures at Back River and Patapsco are related to the shortage of expert staffing and the lack of preventive maintenance. MDE has a plan in place to address preventive maintenance concerns by requiring third-party engineering reports as part of permit renewals for plants with consistent noncompliance history during the previous permit cycle and will require a facility improvement plan as a follow-up to the third-party engineering reports. In addition, as a form of early detection system, MDE will review Discharge Monitoring Report data on a quarterly basis to identify WWTPs that are not operating at ENR levels. In terms of staffing, MDE has noted that it received a staffing report from both the Back River and Patapsco WWTPs on December 22, 2023, and that the report includes both short- and long-term strategies for recruitment, retention, and training, **DLS recommends that MDE comment on the outcome of its review of third-party engineering reports and facility improvement plans as part of permit renewals for plants with consistent noncompliance history during the previous permit cycle and on the outcome of its quarterly review of Discharge Monitoring Report data for WWTPs. In addition, DLS recommends that MDE comment on the findings in the staffing reports for the Back River and Patapsco WWTPs and what possible lessons learned are generally applicable to address the expert staffing shortages in the wastewater treatment sector.**
- **Other Comments:** The fiscal 2025 budget provides for eight projects serving seven jurisdictions (the Patapsco Wastewater Treatment Plant Headworks Improvements project in Baltimore City is cost-shared by Baltimore City and Baltimore County). The fiscal 2025 funding will reduce the nitrogen load to the Chesapeake Bay by an estimated 63,714 pounds per year. MDE is still considering whether to issue \$100.0 million in new revenue bonds with a revised projected future debt issuance in fiscal 2027. The decision to issue the revenue bonds is dependent upon project cash flow projections and schedules. However, any debt that would be issued would be for six years or less, due to the BRF fee decreasing on July 1, 2030.

Bay Restoration Fund – Septic System Projects

Program Description: The BRF includes a separate program to fund the replacement of failing septic systems. This program is funded as part of the BRF legislation by a fee on users of septic systems and sewage holding tanks, of which 60% of the revenue is allocated to MDE for the Septic System Upgrade Program and 40% to the Maryland Department of Agriculture (MDA) for the Cover Crop Program.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
SF	\$15.000	\$15.000	\$15.000	\$15.000	\$15.000	\$15.000
Total	\$15.000	\$15.000	\$15.000	\$15.000	\$15.000	\$15.000

- **Encumbrances and Expenditures:** The program encumbers and expends funding efficiently – only \$7.8 million remains to be expended from fiscal 2023. The program’s annual average encumbrance rate is \$15.0 million. The fiscal 2024 spending plan reflects a \$0 opening balance from fiscal 2023, the \$15.0 million appropriation for fiscal 2024, and the encumbrance of the entire \$15.0 million in fiscal 2024, leaving a \$0 balance for fiscal 2025.
- **Performance Measures:** As of June 30, 2022, the program had funded 14,942 best available technology (BAT) upgrades and helped connect 1,242 homes to public sewers. In fiscal 2023, an additional 720 BAT upgrades were funded, and 173 homes were connected to public sewers, bringing the June 30, 2023 totals to 15,662 BAT upgrades and 1,415 homes connected to public sewers. Septic system performance measures are usually provided with the BRF Advisory Committee annual state report, but the January 2024 report does not appear to have been submitted and posted online. **DLS recommends that MDE comment on when the January 2024 Bay Restoration Fund Advisory Committee annual status report will be submitted and posted online.**
- **Other Comments:** The fiscal 2025 budget provides for approximately 1,000 septic system upgrades. There are approximately 420,000 onsite septic systems in Maryland. There is also \$1.5 million in MDE’s operating budget that is programmed by Chapter 379 of 2014. Chapter 379 requires that up to 10% of the funds in the BRF septic account be distributed to a local public entity delegated by MDE – local health departments – to cover reasonable costs associated with implementation of regulations pertaining to septic systems that use the BAT for nitrogen removal. Chapter 413 of 2020 expanded the authorized uses of the BRF to include costs associated with connecting a property using a septic system to an existing municipal wastewater facility that has signed a funding agreement with MDE and is under construction to achieve ENR or biological nutrient removal level treatment. This provision terminates June 30, 2024.

Supplemental Assistance Program

Program Description: The Supplemental Assistance Program provides grant assistance to local governments for planning, designing, and constructing WWTP improvements; for connection of older communities with failing septic systems; for correction of CSO and sanitary sewer overflows (SSO); and for correction of excessive infiltration and inflow throughout the State. Funds are targeted principally to two types of projects: (1) maintaining compliance at existing WWTPs; and (2) eliminating failing septic systems in older communities.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
GO Bonds	\$5.197	\$3.000	\$3.000	\$3.000	\$3.000	\$3.000
Total	\$5.197	\$3.000	\$3.000	\$3.000	\$3.000	\$3.000

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2025 Request	Future Request	Total State Share
Greensboro Regional Wastewater System Extension – Phases 3 and 4 (Caroline)	\$11.116	\$0.000	\$1.500	\$0.000	13.5%
Town of Manchester Wastewater Treatment Plant Upgrade (Carroll)	22.825	0.000	1.500	0.000	6.6%
Total	\$33.941	\$0.000	\$3.000	\$0.000	

- **Encumbrances and Expenditures:** The fiscal 2024 spending plan reflects an opening balance of \$9.0 million from fiscal 2023, the \$5.2 million fiscal 2024 authorization, and the encumbrance of \$8.2 million, which exceeds the recent annual average encumbrance activity of \$0.6 million between fiscal 2020 and 2023, although the program did take a funding hiatus until fiscal 2021. The total available funding for fiscal 2025 given the fiscal 2024 encumbrance plan is \$6.0 million.
- **Performance Measures:** Of the \$1.4 billion in local water quality project funding requests received by MDE during the most recent project solicitation period, approximately \$10.3 million was requested for 32 projects in small, disadvantaged communities.
- **Other Comments:** The fiscal 2025 budget provides for two projects serving two jurisdictions.

Water Supply Financial Assistance Program

Program Description: The Water Supply Financial Assistance Program provides grants to assist small communities in the acquisition, construction, equipping, rehabilitation, and improvement of publicly owned water supply facilities. The State may provide up to 87.5% of total eligible project costs (not to exceed \$1.5 million per project), and a minimum 12.5% local match is required.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
GO Bonds	\$2.599	\$2.614	\$2.500	\$2.500	\$2.500	\$2.500
Total	\$2.599	\$2.614	\$2.500	\$2.500	\$2.500	\$2.500

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2025 Request	Future Request	Total State Share
Mountain Lake Park and Loch Lynn Heights Water Line Replacement (Garrett)	\$38.135	\$0.000	\$1.500	\$0.000	3.9%
North East Water Quality Improvement Project – Source (Pond Cleanup) (Cecil)	0.830	0.035	0.691	0.000	87.5%
North East Water Quality Improvement at Leslie Water Treatment Plant (Cecil)	0.330	0.007	0.250	0.000	77.9%
North East Water Quality Improvement at Rolling Mill Water Treatment Plant (Cecil)	0.250	0.007	0.173	0.000	72.0%
Total	\$39.545	\$0.049	\$2.614	\$0.000	

- **Changes:** The fiscal 2025 amount is \$0.1 million more than the planned amount to allow for the funding of the four highest ranking eligible projects. There is no change in the planned project funding in the 2024 CIP.
- **Encumbrances and Expenditures:** There is \$1.6 million still to be expended from before fiscal 2020. The fiscal 2024 spending plan reflects an opening balance of \$6.2 million from fiscal 2023, the \$2.6 million fiscal 2024 authorization, and the encumbrance of \$7.3 million, which appears to be optimistic given the \$1.8 million average annual encumbrance level between fiscal 2020 and 2023, leaving \$1.4 million for fiscal 2025.
- **Projects Selected:** The three North East projects in Cecil County reflect two water treatment plants that require the installation of a permanent powder activated carbon

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storage and feed system and the cleanup of a raw water pond that has accumulated sediment over many years.

- **Performance Measures:** MDE received drinking water requests for 122 projects requesting \$0.7 billion for fiscal 2025 funding, which reflects almost three times as many projects and almost twice the amount of funding as the 43 projects requesting \$0.4 billion for fiscal 2024 funding. Of note, drinking water requests are also funded by the DWRLF. The largest category of funding requested was for transmission/distribution, which saw requests from 74 applications for \$0.5 billion.
- **Other Comments:** The fiscal 2025 budget provides for four projects serving two jurisdictions. The fiscal 2024 funding will provide safe and adequate water supply to 14,238 Maryland residents.

Hazardous Substance Clean-Up Program

Program Description: The Hazardous Substance Clean-Up Program provides funds for the State’s required 10% share of assessing and cleaning up of contaminated sites listed on the federal National Priorities List (Superfund) and other sites with the potential to impact human health and the environment due to contamination where there is no responsible party within the State that do not qualify for federal funding through the Superfund program.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
GF	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000
Total	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2025 Request	Future Request	Total State Share
407 Anne Street Site Remediation (Wicomico)	\$0.592	\$0.142	\$0.300	\$0.150	100.0%
Site Assessments	1.700	0.700	0.250	0.750	100.0%
Gladnor Road Plume Remediation (Anne Arundel)	0.350	0.200	0.150	0.000	100.0%
Linden Lane Contaminated Groundwater Assessment (Montgomery)	0.550	0.200	0.150	0.200	100.0%
Anacostia River Hazardous Substance Assessments (Regional)	0.700	0.350	0.150	0.200	100.0%
Total	\$3.892	\$1.592	\$1.000	\$1.300	

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- ***Encumbrances and Expenditures:*** Encumbrances are occurring in a timely fashion. The approximately \$33,000 in fiscal 2020 funding and approximately \$56,000 in fiscal 2022 funding that remains to be encumbered reflects closed and canceled purchase orders for completed projects that is available for allocation to new projects. The largest encumbrances in recent years were \$0.8 million in fiscal 2020 and again in fiscal 2022. The average annual encumbrances between fiscal 2020 and 2023 is \$0.5 million. The fiscal 2024 spending plan reflects an opening balance of \$0.1 million from fiscal 2023, the \$1.0 million fiscal 2024 appropriation, and \$1.0 million in encumbrances in fiscal 2024, leaving \$0.1 million for fiscal 2025.
- ***Projects Selected:*** The regional Anacostia River Hazardous Substance Assessments project involves an assessment of possible Maryland sites releasing polychlorinated biphenyls along the Northeast and Northwest Branches of the Anacostia River in Montgomery and Prince George’s County. The assessment is part of a 23-agency partnership with the Leadership Council for a Cleaner Anacostia River, chaired by the District of Columbia’s Department of Energy and Environment, and EPA.
- ***Performance Measures:*** As of July 2023, there are 955 active Brownfield Master Inventory sites and 1,023 archived Inventory sites.
- ***Other Comments:*** The fiscal 2025 budget provides for investigation and contamination clean up at three sites serving three jurisdictions and one regional site as well as provides for multiple new site assessments throughout Maryland.

Comprehensive Flood Management Program

Program Description: The program provides grant funding to local governments for projects that reduce the risk of loss of life and property from flooding. Grant funds may be used to acquire flood-prone properties for demolition or relocation; install flood warning systems; and construct flood control projects, including engineering studies required to support the design of these projects.

Fund Sources:						
(\$ in Millions)	2024 Approp.	2025 Request	2026	2027	2028	2029
GO Bonds	\$6.189	\$13.059	\$10.000	\$10.000	\$10.000	\$10.000
Total	\$6.189	\$13.059	\$10.000	\$10.000	\$10.000	\$10.000

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2025 Request	Future Request	Total State Share
Ellicott City Maryland Avenue Culvert Improvements (Howard)	\$25.525	\$4.097	\$5.000	\$0.000	35.6%
Annapolis City Dock Stormwater and Flood Mitigation – Phase 2 (Anne Arundel)	9.750	0.000	3.000	0.000	30.8%
Middle Branch Resiliency Initiative Project – Stage 1 (Baltimore City)	120.438	0.000	2.800	0.000	2.3%
Town of Hebron Flood Mitigation Project (Wicomico)	2.212	0.000	1.659	0.000	75.0%
Smith Island Clean Water Project (Somerset)	21.919	0.000	0.600	0.000	2.7%
Total	\$179.843	\$4.097	\$13.059	\$0.000	

- Changes:** The budget provides \$3.1 million more than the amount programmed for fiscal 2025 in last year’s CIP due to the interest in funding high priority mitigation and resiliency projects. Previously, Chapters 651 and 652 of 2019 required the Governor to appropriate at least \$3.0 million for the program in fiscal 2021 and 2022 and at least \$2.0 million in fiscal 2023, but there is no funding mandate for fiscal 2025.
- Encumbrances and Expenditures:** The program is relatively new, having first been funded in fiscal 2020, so there are no large prior year unexpended or unencumbered balances. The most recent unexpended funding is \$0.2 million from fiscal 2020. While the funding history is limited, program encumbrances have averaged just \$2.9 million annually from fiscal 2021 through 2023, well below annual funding levels over the same time period. Considering the 2024 CIP includes annual funding of \$10 million in each of

fiscal 2026 through 2029, the program will need to increase annual encumbrances above current levels to keep projects moving. In particular, the \$23.8 million authorized in fiscal 2022 may be difficult to encumber and expend in a timely fashion. The current fiscal 2024 spending plan reflects an opening balance of \$34.5 million, the \$6.2 million fiscal 2024 authorization, and \$31.2 million in encumbrances in fiscal 2024, which seems to be overly optimistic given recent history, leaving \$9.5 million for fiscal 2025 encumbrances.

- ***Projects Selected:*** The fiscal 2025 project list includes \$3.0 million for the Annapolis City Dock Stormwater and Flood Mitigation – Phase 2 project in Anne Arundel County. This funding was preauthorized in the fiscal 2024 capital budget because construction was unlikely to begin before fiscal 2025. The project list also includes \$2.8 million for the Middle Branch Resiliency Initiative Project – Stage 1 in Baltimore City. The overall estimated project cost is \$120.4 million and provides 2.3% of the overall cost for the innovative multistakeholder project that, according to the Federal Emergency Management Agency, will benefit customers and employees of Baltimore Gas and Electric Company’s Spring Gardens site and MedStar Harbor Hospital site, and 410,000 nearby residents, or 21% of the total population of Baltimore City and Baltimore and Anne Arundel counties. Of note, several projects funded in fiscal 2025 have explicit prior State matching funds that are not included in the State prior authorizations reflected above. **DLS recommends that MDE comment on how the Middle Branch Resiliency Initiative Project was developed, the role of the two large private employers in the development of the project, and the lessons learned from this project for future large-scale stormwater and flood mitigation projects. DLS also recommends that MDE comment on the methodology for determining whether to show prior State matching funds as prior State appropriations for projects.**
- ***Performance Measures:*** For fiscal 2025 funding, the program received 11 applications requesting \$33.9 million; this is down from the 24 applications requesting \$61.9 million in fiscal 2024 funding. The fiscal 2025 funding will meet 39% of the project demand, which is an increase relative to the 10% of project demand met with fiscal 2024 funding. The largest project type for which funding was requested was the \$16.1 million for the “numerous” categories, which presumably reflects multiple techniques or approaches to flood management for each project. The second largest project category for which funding was requested was flood mitigation at \$12.7 million. The other categories include nuisance flooding (\$2.3 million), stormwater/subsurface drainage (\$2.2 million), and elevation/shoreline (\$0.6 million).
- ***Other Comments:*** The fiscal 2025 funding provides for five projects in five jurisdictions.

Issues

1. Federal Emerging Contaminants Funding Allocation and Award Report Not Submitted

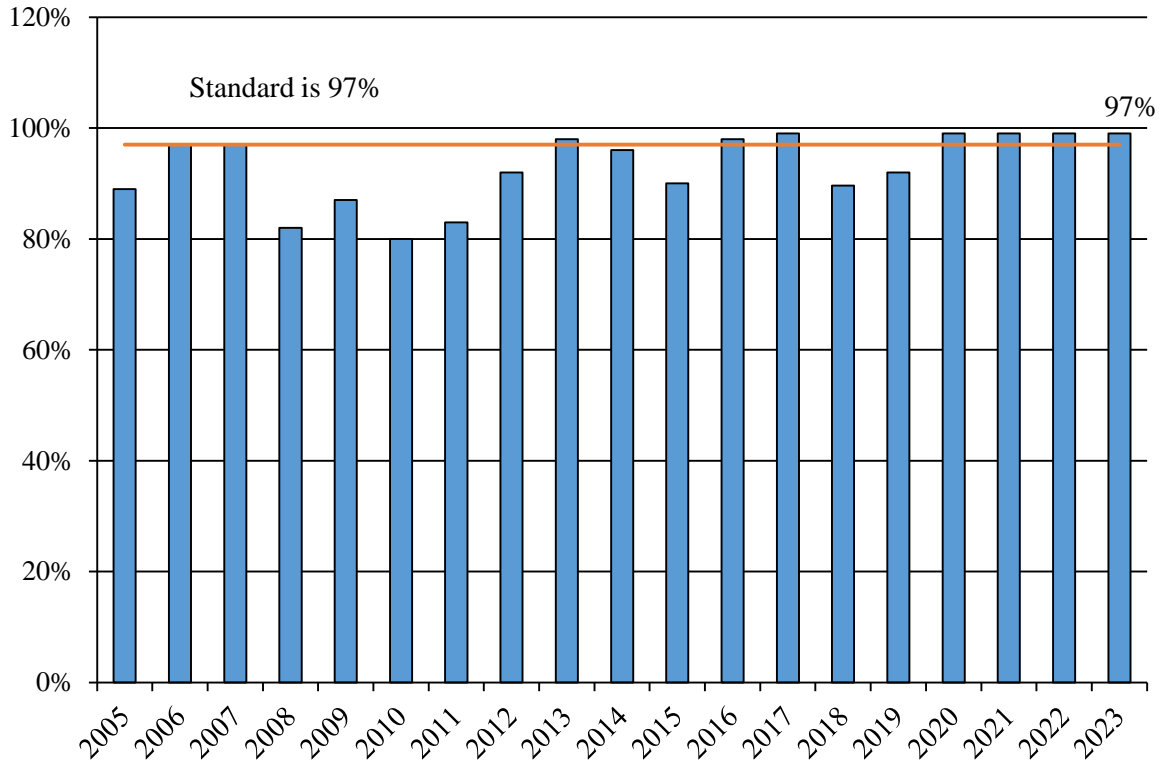
In the 2023 *Joint Chairmen’s Report*, the budget committees requested that MDE submit a report that details the process and criteria under which MDE is allocating the State’s share of federal funds received through the IJA specifically designated to address emerging contaminants. The requested report was also requested to provide detailed applicant information, including project scopes, schedules, and comprehensive funding plans. The report was requested to be submitted by December 31, 2023, but has not been submitted. **DLS recommends that MDE comment on when it will submit the requested report detailing the process and criteria under which MDE is allocating the State’s share of federal funds received through the IJA specifically designated to address emerging contaminants.**

Performance Measures and Outputs

Drinking Water Revolving Loan Fund

Exhibit 4 shows an overall trend toward a cleaner public water system in Maryland since fiscal 2018 with 99% of Marylanders served by systems that are in compliance with all drinking water regulations between fiscal 2020 and 2023.

Exhibit 4
Marylanders Served by Public Water Systems in Significant Compliance
Fiscal 2005-2023



Source: Governor’s Fiscal 2008-2025 Budget Books; Department of Budget and Management

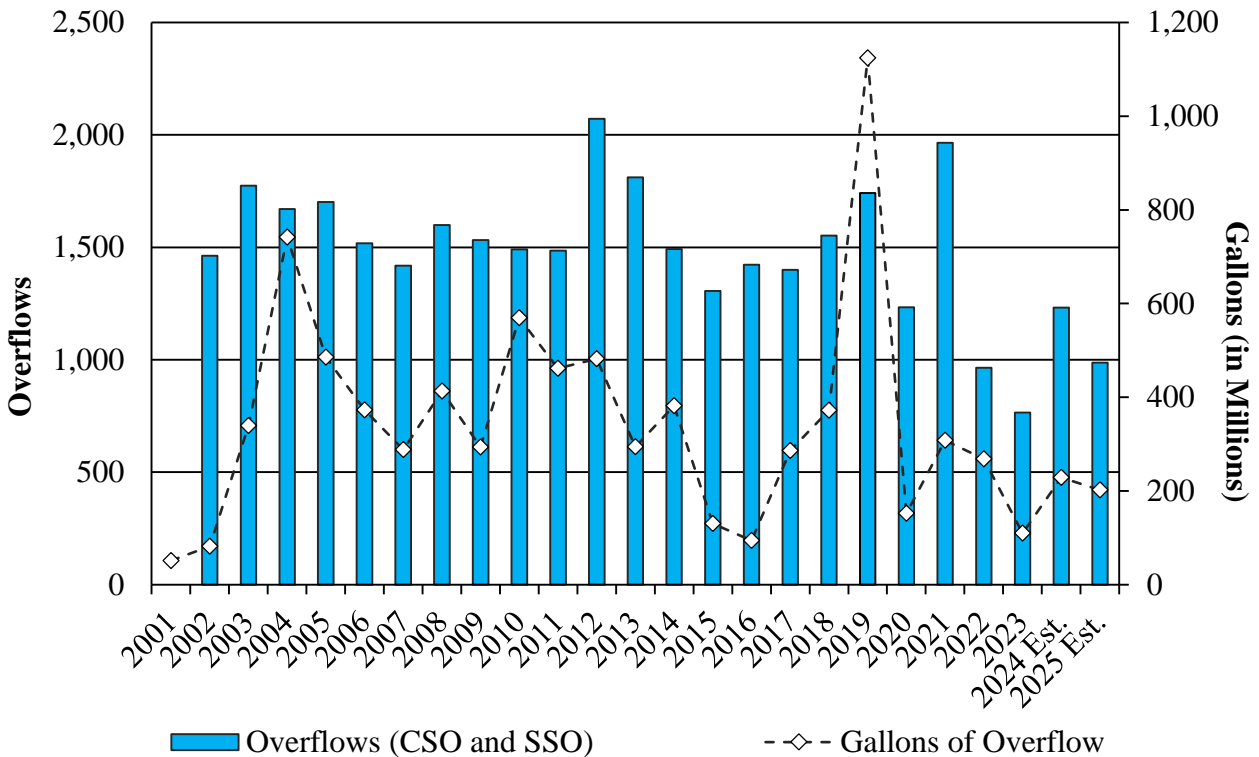
Bay Restoration Fund – Wastewater Projects

A number of Maryland’s jurisdictions have signed consent decrees requiring the upgrade of their sewer systems due to the release of untreated sewage from facilities with National Pollutant Discharge Elimination System permits.

As illustrated in **Exhibit 5**, the number of gallons of overflow had been decreasing between fiscal 2010 and 2018, but then there was a substantial increase in fiscal 2019. Large overflows in a particular year may be attributable to a few extreme events, such as in Cumberland and La Vale in Allegany County in recent years, and particularly due to substantial storms in calendar 2019 that increased CSO. With the exception of fiscal 2019, over the fiscal 2004 through 2023 period, there

appears to be a slight downward trend in the number and gallons of overflows. The fiscal 2023 data reflects a decrease in both the number and gallons of CSO and SSO. MDE has noted that funding for sewer rehabilitation, progress on improvements and repairs to collection systems, and the amount of rainfall will determine future sewer overflow reductions. MDE has very little control over either the number of overflows or the associated gallons.

Exhibit 5
CSO and SSO Overflows
Fiscal 2001-2025 Est.



CSO: combined sewer overflow
SSO: sanitary sewer overflow

Note: The number of gallons of overflow is calculated by the annual net change in number of gallons of overflows from the fiscal 2003 to 2005 average.

Source: Governor’s Fiscal 2008-2025 Budget Books; Department of Budget and Management

Appendix 1 Grant and Loan Program Descriptions

Descriptions of MDE’s nine current programs are as follows.

- **WQRLF:** The WQRLF was created to provide low-interest loans to counties and municipalities to finance water quality improvement projects. Projects eligible for funding include WWTPs, failing septic systems, and nonpoint source projects such as urban stormwater control projects. The federal Act requires a 20% State match. Matching requirements for additional federal funds vary from year to year. WQRLF projects are prioritized based on an EPA-approved Integrated Project Priority System. The priority system for WQRLF projects consists of a system for evaluating, rating, and ranking of both point source and nonpoint source water quality projects. Through June 2023, the program has executed \$3.319 billion in loans, loan forgiveness, and grants.
- **DWRLF:** The DWRLF was established in accordance with a federal capitalization grant approved by the U.S. Congress in 1996 in anticipation of future federal capitalization grants. This program was authorized by the General Assembly to provide loans to counties and municipalities to finance water supply improvements and upgrades. In accordance with the federal law, these funds may also be loaned to private parties. The federal Act requires that a minimum of 20% of State matching funds for each year’s federal capitalization grant be deposited into the fund. Matching requirements for additional federal funds vary from year to year. Similar to WQRLF projects, DWRLF projects are prioritized based on an EPA-approved Drinking Water Project Priority System that focuses on many criteria, the most important being the public health benefit. Through June 2023, the program has executed more than \$601 million in loans, loan forgiveness, and grants.
- **BRF – Wastewater Projects:** The BRF (Chapter 428) was created to address the significant decline in Chesapeake Bay water quality due to overenrichment of nutrients such as phosphorus and nitrogen. This dedicated fund, financed in large part by WWTP users, initially was used to provide grants to local governments to upgrade Maryland’s 67 major WWTPs with ENR technology as part of reducing an additional 7.5 million pounds of nitrogen per year in order to reach Maryland’s commitment under the TMDL as implemented by the Watershed Implementation Plan. The current funding prioritization schedule is as follows: funding an upgrade of a wastewater facility with a design capacity of 0.5 million gallons or more per day from no upgrade all the way to ENR; and funding for the most cost-effective ENR upgrades at WWTPs with a design capacity of less than 0.5 million gallons per day from no upgrade all the way to ENR. Following the allocations for major (0.5 million gallons or more per day) and minor (less than 0.5 million gallons per day) WWTPs, the prioritization schedule requires a transfer of \$20.0 million to the Clean Water Commerce Account and then includes the following uses, as determined by MDE and based on water quality and public health benefits: funding up to 87.5% of the cost for CSO abatement; rehabilitation of existing sewers; and upgrading conveyance systems including pumping stations; costs associated with upgrading septic systems and sewage

holding tanks; and funding up to 50% for grants for local government stormwater control measures – including projects relating to water quality, climate resiliency, or flood control per Chapter 44 of 2020 – for jurisdictions that have implemented a specified system of charges under current authority.

- ***BRF – Septic System Projects:*** The BRF includes a separate program to fund the replacement of failing septic systems. This program is funded as part of the BRF legislation by a fee on users of septic systems and sewage holding tanks, of which 60% of the revenue is allocated to MDE for the Septic System Upgrade Program and 40% to MDA for the Cover Crop Program. MDE provides grants to upgrade failing systems and holding tanks with BAT for nitrogen removal. Overall, the program gives priority to projects that involve failing systems in environmentally sensitive areas that are ready to proceed. The program is administered by county governments or other parties; contractors conducting the septic system upgrades are directly reimbursed for their work. Applications are prioritized as follows: (1) failing septic systems or holding tanks in the Critical Areas; (2) failing septic systems or holding tanks outside the Critical Areas; (3) nonconforming septic systems in the Critical Areas; (4) nonconforming septic systems outside of the Critical Areas; (5) other septic systems in the Critical Areas, including new construction; and (6) other septic systems outside the Critical Areas, including new construction.
- ***Supplemental Assistance Program:*** The Supplemental Assistance Program provides grant assistance to local governments for planning, designing, and constructing WWTP improvements; for connection of older communities with failing septic systems; for correction of CSO and SSO; and for correction of excessive infiltration and inflow throughout the State. Funds are targeted principally to two types of projects: (1) projects where the community needs to construct improvements to its sewer system infrastructure but is unable to afford the local share of the construction cost; and (2) projects where the community needs to construct improvements to its sewer system infrastructure but is unable to completely afford the financing arrangements under the WQRLF. Funds are directed principally to projects where local governments need a subsidy to undertake the needed water quality or public health project. This program is often used in conjunction with other sources of federal and State financial assistance to achieve project affordability. This program funds up to 87.5% of eligible costs for projects in small, lower-income jurisdictions, not to exceed \$1.5 million.
- ***Water Supply Financial Assistance Program:*** The General Assembly created the Water Supply Financial Assistance Program in calendar 1982 to address the deteriorating condition of the State’s water supply infrastructure and the lack of adequate financing available to local governments to upgrade water supply systems. This program provides grants to assist small communities in the acquisition, construction, equipping, rehabilitation, and improvement of publicly owned water supply facilities. The State may provide up to 87.5% of total eligible project costs (not to exceed \$1.5 million per project), and a minimum 12.5% local match is required. This program is often used in conjunction

with other sources of federal and State financial assistance (such as the DWRLF) to achieve project affordability.

- ***Hazardous Substance Clean-Up Program:*** The Hazardous Substance Clean-Up Program provides funds for the State’s required 10% share of assessing and cleaning up contaminated sites listed on the federal National Priorities List (Superfund) for which EPA is responsible for the other 90% of the costs. This program also funds the assessment and remediation of other sites with the potential to impact human health and the environment due to contamination where there is no responsible party within the State that qualify for federal funding through the Superfund program. The State provides up to 100% of the costs of assessment and cleanup for the projects not included on the Superfund. In all cases, the program seeks cost recovery, when possible, from the responsible parties.
- ***Mining Remediation Program:*** Where there is no financially viable responsible party, the program provides funding for remediation of abandoned lands and waters impacted by inadequate coal mining reclamation practices prior to the passage of the federal Surface Mine Control and Reclamation Act of 1977. The program works through the Maryland Abandoned Mine Land Division. Projects include reclamation of surface mine high walls and pits, stabilization of landslides, restoration of stream banks to address flooding, extinguishing underground coal mine and coal refuse fires, stabilization of coal refuse piles, water supply replacement, stabilizing buildings and roads that are impacted by underground mine subsidence, and acid mine drainage treatment projects.
- ***Comprehensive Flood Management Program:*** The program provides grant funding to local governments for projects that reduce the risk of loss of life and property from flooding. Grant funds may be used to acquire flood-prone properties for demolition or relocation; install flood warning systems; and construct flood control projects, including engineering studies required to support the design of these projects. Capital projects that assist with flood management techniques may include, but are not limited to, flood control dams, levees and dikes, stormwater detention or retention structures, and flood proofing. Chapters 651 and 652 authorize MDE, under its existing Comprehensive Flood Management Grant Program, to award grants to subdivisions that have incurred at least \$1 million in infrastructure damage by a flood event that occurred on or after January 1, 2009. The grants may be for an amount up to 50% of the combined cost of infrastructure repairs, watershed restoration, and emergency work associated with a flood event that may be equal to a certain amount of the total money appropriated to the grant program in specified fiscal years. Chapters 651 and 652 required the Governor to appropriate at least \$3 million in the State budget in fiscal 2021 and 2022 and at least \$2 million in fiscal 2023.