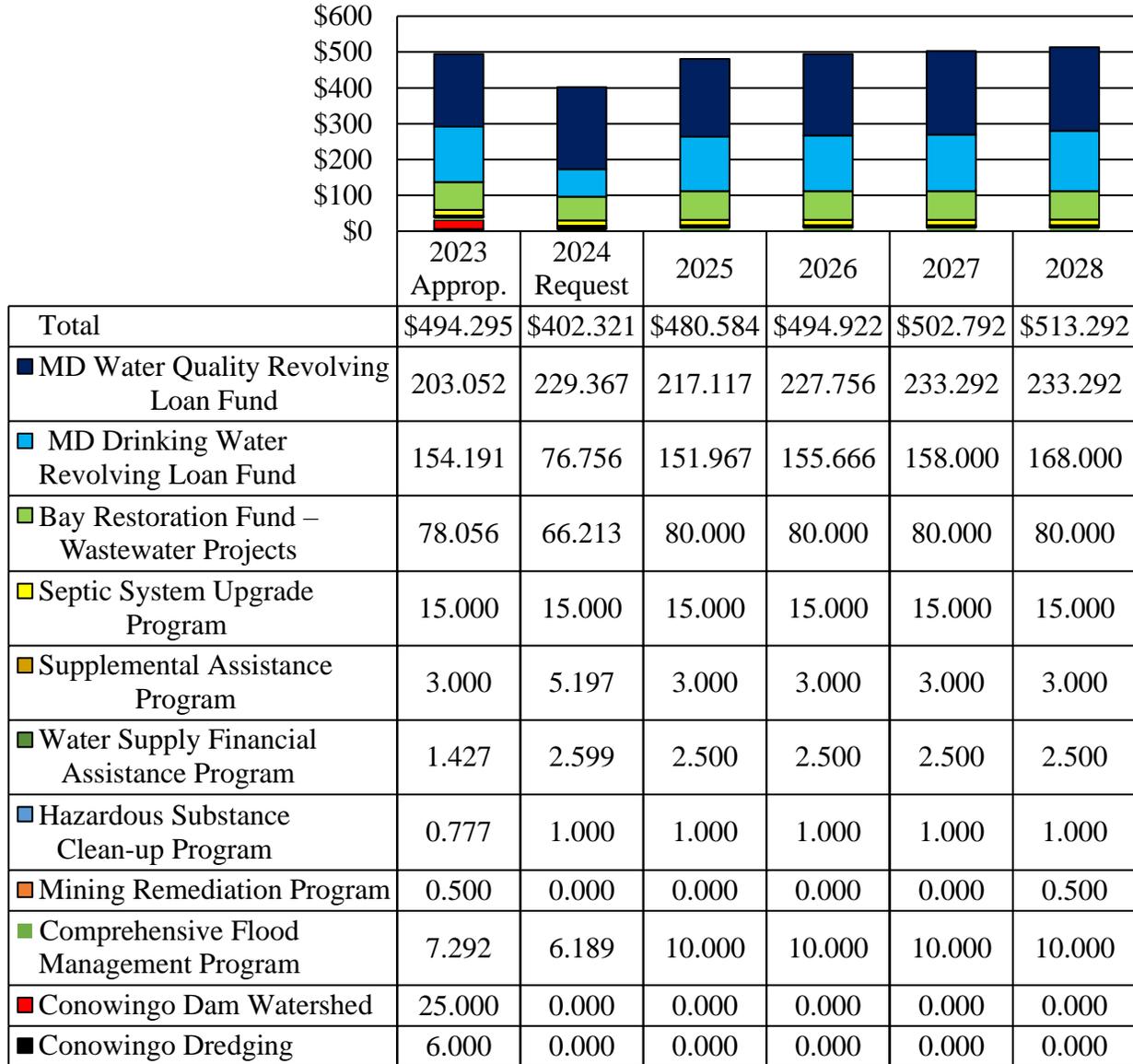


UA01
Department of the Environment – Capital

Capital Budget Summary

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



MD: Maryland

Note: For the purposes of these exhibits, the fiscal 2023 funding from the Dedicated Purpose Account – \$25.0 million for the Conowingo Dam Watershed and the full \$6.0 million for Conowingo Dam Dredging even though \$3.3 million has been released – is reflected as general funds but will be spent as special funds.

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Key Observations

- ***Infrastructure Investment and Jobs Act (IIJA) Funding Not Fully Reflected in State Revolving Fund Budgets:*** The Water Quality Revolving Loan Fund (WQRLF) and Drinking Water Revolving Loan Fund (DWRLF) are receiving substantial amounts of federal IIJA funding. However, the Maryland Department of the Environment (MDE) does not appear to have intended use plans in place for a portion of that funding as follows: WQRLF – federal fiscal 2022 funding of \$2.3 million to address emerging contaminants such as per- and polyfluoralkyl substances (PFAS); and DWRLF – federal fiscal 2022 funding of \$51.9 million for lead service line replacement, \$13.8 million to address emerging contaminants such as PFAS, and \$9.5 million for assistance to small and disadvantaged communities.
- ***Expert Staffing Shortages and Preventive Maintenance Concerns Impact State’s Bay Restoration Fund Investments:*** The failures at Back River and Patapsco wastewater treatment plants (WWTP) due to expert staffing shortages and preventive maintenance concerns highlight an overall challenge to Maryland’s investment in its wastewater infrastructure. While MDE appears to have a plan in place to address the preventive maintenance concerns, it is less clear how the expert staffing shortage issue can be resolved.

PAYGO Recommended Actions

1. Concur with Governor’s allowance.

GO Bond Recommended Actions

1. Approve all authorizations and the one fiscal 2025 preauthorization for the Maryland Department of the Environment.

Updates

- ***Mining Remediation Program Funding Temporarily Shifts to Federal Funds:*** The 2022 *Capital Improvement Program (CIP)* programmed \$0.5 million in general obligation (GO) bond funding for fiscal 2024 through 2027 for the Mining Remediation Program. The 2023 CIP reflects no capital funding for the program between fiscal 2024 and 2027 due to the availability of federal IIJA funding in MDE’s operating budget. The GO bond

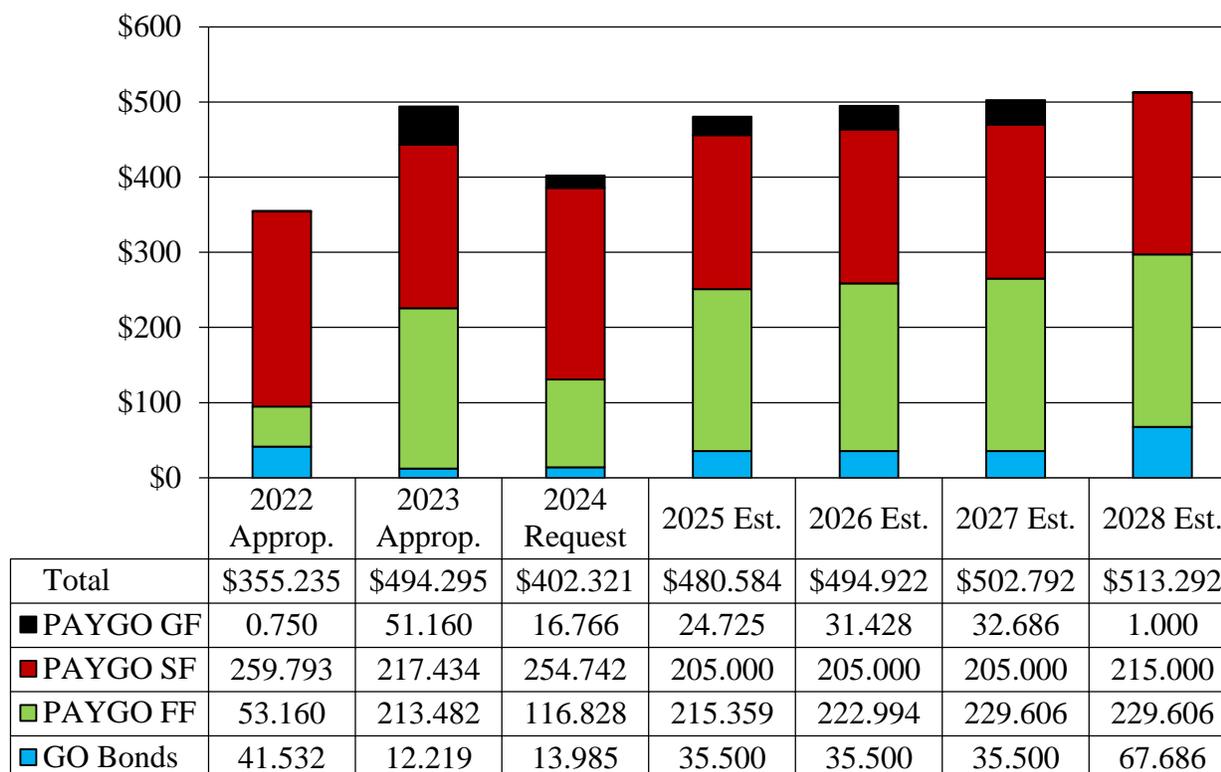
authorizations for the Mining Remediation Program resume at the \$0.5 million level in fiscal 2028.

- ***Conowingo Dam Watershed Implementation Project:*** The fiscal 2023 capital budget included a \$25.0 million general fund appropriation to the Dedicated Purpose Account (DPA) for MDE for the Conowingo Dam Capacity Recovery and Dredge Material Innovative and Beneficial Reuse Project. At the January 4, 2023 Board of Public Works meeting, the board approved a contract for the Susquehanna River Basin Commission to be the fiscal agent to administer the \$25.0 million for pay for success contracts in Cecil and Harford counties and in portions of the Susquehanna River watershed in Pennsylvania to address the 0.18 million pounds of nitrogen reduction required under Maryland’s portion of the Conowingo Watershed Implementation Plan. The conditions established in 2022 session committee narrative requesting additional information about the Conowingo Watershed Implementation Project have not been met, and the requested report has not been submitted.
- ***Conowingo Dam Dredging Project:*** The fiscal 2023 capital budget included a \$6.0 million general fund appropriation to the DPA for the Maryland Environmental Service (MES) for the Conowingo Dam Capacity Recovery and Dredge Material Innovative and Beneficial Reuse Project. Committee narrative requested additional information about the project, which was addressed in a report to the committees. Despite concerns about the effectiveness of the proposed dredging project and lack of an overall plan of scope of work, schedule, and cost estimates, the Department of Budget and Management processed a budget amendment releasing \$3.3 million of the general fund appropriation from the DPA to begin work on the project. The funds were moved to MDE’s budget, since MES is a nonbudgeted agency.

Budget Overview of Grant and Loan Programs

The MDE fiscal 2024 capital program totals \$402.3 million comprised of \$16.8 million in general funds, \$254.7 million in special funds, \$116.8 million in federal funds, and \$14.0 million in GO bonds. This is \$92.0 million less than the fiscal 2023 budget, and as shown in **Exhibit 1**, the decrease is primarily attributable to a reduction of \$83.6 million in federal funds for the DWRLF and \$25.0 million in general funds for the one-time Conowingo Dam Watershed funding. These reductions are offset partially by an increase of \$41.5 million in special funds for the WQRLF.

Exhibit 1
MDE Capital Programs Funding
Fiscal 2022-2028 Est.
(\$ in Millions)

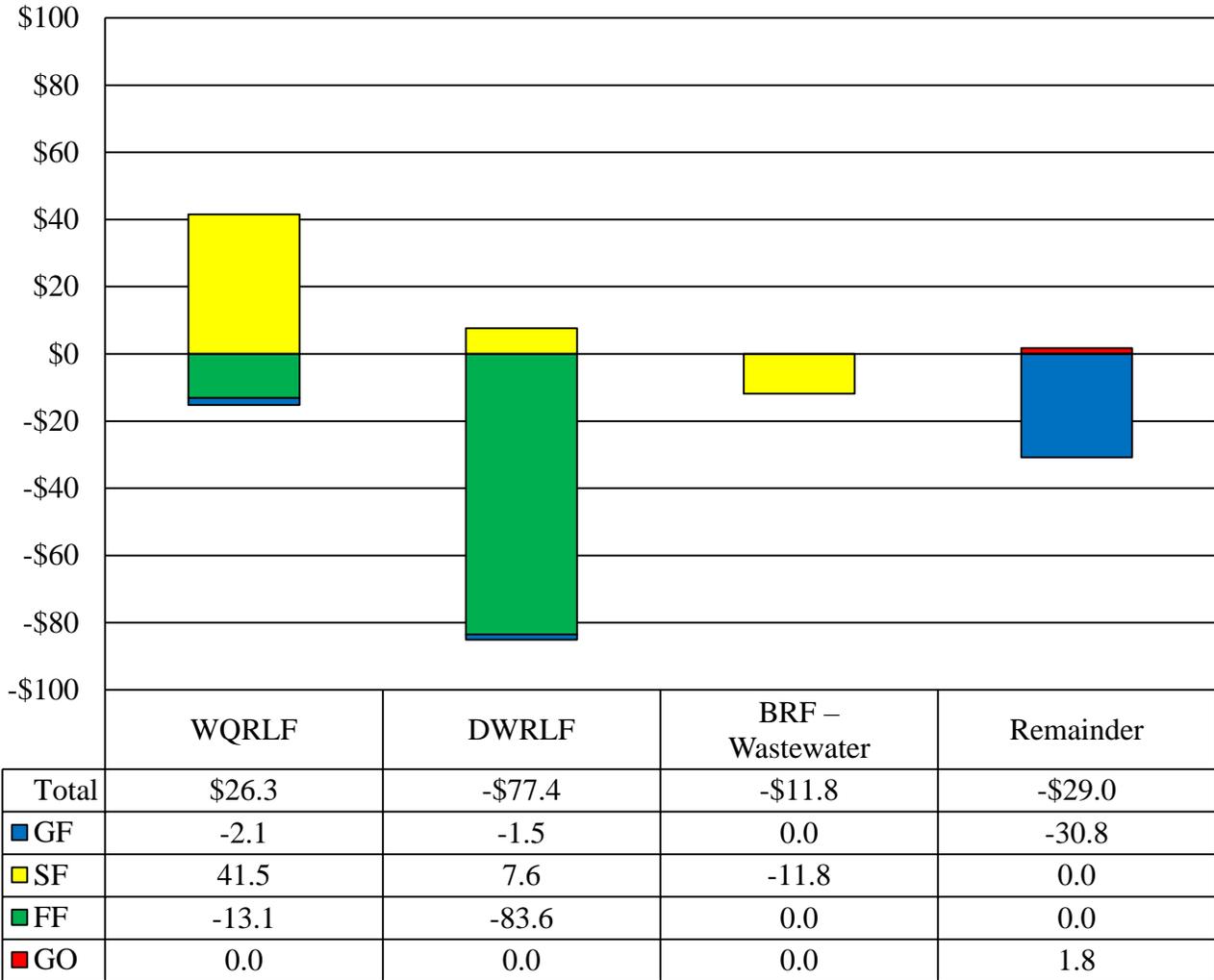


FF: federal funds
 GF: general funds
 GO: general obligation
 MDE: Maryland Department of the Environment
 PAYGO: pay-as-you-go
 SF: special funds

Source: Department of Budget and Management

Exhibit 2 illustrates the WQRLF, the DWRLF, and the Bay Restoration Fund (BRF) Wastewater funding variances between fiscal 2023 and 2024. The majority of the change between fiscal 2023 and 2024 for the remaining programs is a decrease of \$25.0 million in general funds for the Conowingo Dam Watershed project and \$6.0 million for the Conowingo Dam Dredging project. MDE’s overall available capital funding increases between fiscal 2025 and 2028 due to federal IJA funding budgeted in the WQRLF and the DWRLF.

Exhibit 2
MDE Capital Funding Changes
Fiscal 2023-2024
(\$ 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

WQRLF

Program Description: 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.

Fund Sources:						
(\$ in Millions)	2023 Approp.	2024 Request	2025	2026	2027	2028
GF	\$12.026	\$9.902	\$12.758	\$18.762	\$19.686	\$0.000
SF	106.918	148.434	110.000	110.000	110.000	110.000
FF	84.108	71.031	94.359	98.994	103.606	103.606
GO Bonds	0.000	0.000	0.000	0.000	0.000	19.686
Total	\$203.052	\$229.367	\$217.117	\$227.756	\$233.292	\$233.292

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2024 Request	Future Request	Total State Share
Baltimore City Stormwater Management Projects (Baltimore City)	\$25.000	\$0.000	\$25.000	\$0.000	100%
Piscataway Water Resource Recovery Facility Bio-Energy Project (Prince George’s)	285.806	143.962	25.000	0.000	59.1%
Sanitary Sewer Reconstruction Program – Section 7 (Regional)	25.000	0.000	25.000	0.000	100.0%
Piney Orchard Water Reclamation Facility Upgrades (Anne Arundel)	42.301	0.000	23.266	0.000	55.0%
Westernport Sanitary Sewer Replacement (Allegany)	22.665	0.000	21.165	0.000	93.4%
Remaining Projects	186.846	7.332	109.936	0.000	Varies
Total	\$587.618	\$151.294	\$229.367	\$0.000	

- **Changes:** The availability of federal IJA funds is the reason for the \$73.0 million increase in fiscal 2024 relative to the amount planned in the 2022 CIP. The additional federal funding also requires an increase in the State matching funds. For fiscal 2024, there is \$28.0 million in base federal funding, which requires a 20% match, or \$5.6 million, and \$43.0 million in IJA funding, which requires a 10% match, or \$4.3 million, for a total match of approximately \$9.9 million.

- Encumbrances and Expenditures:** The WQRLF booked a negative encumbrance of \$8.4 million in fiscal 2022. This reflects 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 Department of Legislative Services (DLS) recommends that MDE comment on why so few new loans and grants were encumbered in fiscal 2022 and whether \$10.7 million in loans and grants being reverted in fiscal 2022 is typical.**
- Concerns:** As shown in **Exhibit 3**, the federal IJA funding includes an allotment of \$2.3 million in federal fiscal 2022 to address emerging contaminants such as PFAS. MDE’s intended use plan for the WQRLF indicates that a separate plan will be submitted at a later date for the emerging contaminants allotment, as projects are identified for the funds. **DLS recommends that MDE comment on when an intended use plan will be submitted to the U.S. Environmental Protection Agency (EPA) for the emerging contaminants allotment of federal IJA funding and when this funding will be realized in MDE’s budget.**

Exhibit 3
Infrastructure Investment and Jobs Act Funding for MDE
Federal Fiscal 2022-2026 Est.
(\$ in Thousands)

<u>Program</u>	<u>2022</u>	<u>2023</u> <u>Est.</u>	<u>2024</u> <u>Est.</u>	<u>2025</u> <u>Est.</u>	<u>2026</u> <u>Est.</u>	<u>Total</u> <u>2022-2026</u> <u>Est.</u>	<u>Comment</u>
Clean Water State Revolving Funds: Existing Program	\$43,046	\$50,779	\$55,414	\$60,026	\$60,026	\$269,291	10% match requirement for federal fiscal 2022-2023 and 20% match for federal fiscal 2024-2026.
Clean Water State Revolving Funds: Addressing Emerging Contaminants	2,261	5,180	5,180	5,180	5,180	22,981	New program. Addresses PFAS in the environment. No match requirement.

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<u>Program</u>	<u>2022</u>	<u>2023</u> <u>Est.</u>	<u>2024</u> <u>Est.</u>	<u>2025</u> <u>Est.</u>	<u>2026</u> <u>Est.</u>	<u>Total</u> <u>2022-2026</u> <u>Est.</u>	<u>Comment</u>
Drinking Water State Revolving Funds: Existing Program	33,960	38,483	41,996	45,492	45,492	205,423	10% match requirement for federal fiscal 2022-2023 and 20% match for federal fiscal 2024-2026.
Drinking Water State Revolving Funds: Lead Service Line Replacement	51,934	52,347	52,347	52,347	52,347	261,320	New program. Replaces lead service lines in communities. No match.
Drinking Water State Revolving Funds: Addressing Emerging Contaminants	13,840	13,960	13,960	13,960	13,960	69,651	New program. Addresses PFAS in drinking water. No match.
Assistance for Small and Disadvantaged Communities	9,457	9,457	9,457	9,457	9,457	47,285	
Total	\$154,498	\$170,205	\$178,353	\$186,461	\$186,461	\$875,950	

Note: The amounts for federal fiscal 2022 are updated figures provided by MDE. The amounts for federal fiscal 2023-2026 are calculated assumptions.

MDE: Maryland Department of the Environment
 PFAS: per- and polyfluoroalkyl substances

Source: Federal Funds Information for States; Maryland Department of the Environment

- **Other Comments:** The fiscal 2024 budget provides for 21 projects serving 11 jurisdictions plus 2 regional projects. The fiscal 2023 to 2028 appropriations reflect federal IJA funding, including \$43.0 million in fiscal 2024.

DWRLF

Program Description: 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.

Fund Sources:						
(\$ in Millions)	2023 Approp.	2024 Request	2025	2026	2027	2028
GF	\$7.357	\$5.864	\$10.967	\$11.666	\$12.000	\$0.000
SF	17.460	25.095	20.000	20.000	20.000	30.000
FF	129.374	45.797	121.000	124.000	126.000	126.000
GO Bonds	0.000	0.000	0.000	0.000	0.000	12.000
Total	\$154.191	\$76.756	\$151.967	\$155.666	\$158.000	\$168.000

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2024 Request	Future Request	Total State Share
Town of Westernport Water Distribution System Improvements Phases 5-7 (Allegany)	\$18.162	\$8.162	\$10.000	\$0.000	100.0%
Ashburton Pumping Station Rehabilitation (Baltimore City)	27.819	0.000	10.000	17.819	100.0%
Ashburton Pumping Station Rehabilitation (Baltimore County)	27.819	0.000	10.000	17.819	100.0%
Midland Gilmore Raw Water Storage Tank (Allegany)	17.840	7.935	9.905	0.000	100.0%
Remaining Projects	46.576	0.000	36.851	7.500	Varies
Total	\$138.215	\$16.097	\$76.756	\$43.137	

- Changes:** The availability of federal IJA funds is the reason for the \$35.8 million increase in DWRLF funding in fiscal 2024 relative to the amount planned in the 2022 CIP. The additional federal funding requires an increase in the State matching funds. For fiscal 2024, there is \$12.8 million in base federal funding, which requires a 20% match, or \$2.6 million, and \$33.0 million in IJA funding, which requires a 10% match, or \$3.3 million, for a total match of approximately \$5.9 million.

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- ***Encumbrances and Expenditures:*** The program only encumbered \$12.9 million in fiscal 2022, although it encumbered \$116.3 million in fiscal 2021. **DLS recommends that MDE comment on why so few loans and grants were encumbered in fiscal 2022.**
- ***Performance Measures:*** The National Drinking Water Needs Survey in March 2018 reflected that Maryland’s drinking water infrastructure needs over the next 20 years total \$9.3 billion. The most recent National Drinking Water Needs Survey was completed in late calendar 2021, but the final report does not appear to have been released yet.
- ***Concerns:*** The federal Safe Drinking Water Act Project allows for up to 31% of the federal DWRLF capitalization grant to be used for project set-asides in order to support water system capacity, operator certification, source water protection, training, and technical assistance to public water systems. MDE is using 27% of the 31% allowed for nonproject set-aside activities to support its operating budget. In addition, as previously shown in Exhibit 3, the federal IJA federal fiscal 2022 funding includes an allotment of \$51.9 million for lead service line replacement, \$13.8 million to address emerging contaminants such as PFAS, and \$9.5 million for assistance to small and disadvantaged communities. MDE’s intended use plan for the DWRLF indicates that separate intended use plans will be submitted at a later date for the lead service line replacement and emerging contaminants allotments, as projects are identified for the funds but does not specifically mention the additional funding for assistance to small and disadvantaged communities. **DLS recommends that MDE comment on when an intended use plan will be submitted to EPA for the lead service line replacement, emerging contaminants, and assistance to small and disadvantaged communities allotments of federal IJA funding and when this funding will be realized in MDE’s budget. In addition, DLS recommends that MDE comment on whether it has a plan for addressing the lead service line problem in Maryland using the allotted federal funding.**
- ***Other Comments:*** The fiscal 2024 budget provides for 13 projects serving 7 jurisdictions plus 3 regional projects. The fiscal 2023 to 2028 appropriations reflect federal IJA funding, including the \$33.0 million in fiscal 2024, as noted previously.

BRF – Wastewater Projects

Program Description: The BRF (Chapter 428 of 2004) was created to address the significant decline in Chesapeake Bay water quality due to over enrichment 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)	2023 Approp.	2024 Request	2025	2026	2027	2028
SF	\$78.056	\$66.213	\$60.000	\$60.000	\$60.000	\$60.000
GO Bonds	0.000	0.000	20.000	20.000	20.000	20.000
Total	\$78.056	\$66.213	\$80.000	\$80.000	\$80.000	\$80.000
Fund Uses (\$ in Millions):						
Project (Jurisdiction)	Est. Cost	Prior Auth.	2024 Request	Future Request	Total State Share	
Piney Orchard Water Reclamation Facility Upgrades (Anne Arundel)	\$42.301	\$0.000	\$19.036	\$0.000	45.0%	
Centreville Wastewater Treatment Plant Expansion (Queen Anne’s)	29.879	0.000	14.940	0.000	50.0%	
Remaining Projects	35.596	0.000	32.237	0.000	Varies	
Total	\$107.776	\$0.000	\$66.213	\$0.000		

- Changes:** The budget provides \$20.0 million more than the amount programmed for fiscal 2024 in the 2022 CIP due to higher than anticipated requests for minor WWTP upgrades to ENR technology. The higher funding level is also attributable to an assumption that sufficient revenue will be available to support these projects unlike the assumption established in the level of programmed funding in the 2022 CIP. The assumption that sufficient revenue will be available to support minor WWTP upgrades is programmed through fiscal 2028 as set forth in the 2023 CIP. The 2023 CIP also reflects the inclusion of \$20.0 million in GO bonds to compensate for the equivalent amount of special funds that are required to be transferred to the Clean Water Commerce Account by Chapters 694 and 695 of 2021 (Clean Water Commerce Act), which also improves the available revenue picture. Finally, in fiscal 2023, there was a one-time requirement to transfer \$15.0 million in total to the Chesapeake Bay Trust, the Department of Natural Resources, and the Maryland Department of Agriculture (MDA) for tree planting activities per Chapter 645 of 2021 (Tree Solutions Now Act).

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- ***Encumbrances and Expenditures:*** There is \$166.3 million to be encumbered and \$260.0 million to be expended from before fiscal 2019. 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 planned encumbrances of \$97.4 million in fiscal 2023 is higher than all but the \$117.9 million encumbrance level in fiscal 2019 but would still allow for \$226.9 million for fiscal 2024.
- ***Projects Selected:*** For fiscal 2024, all nine projects are minor WWTP upgrades to ENR due to the requirement in Chapters 694 and 695 to fund minor WWTP upgrades before transferring funding to the Clean Water Commerce Account. This reflects 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. 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, 18 are in planning or design, 5 are under construction, and 12 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 expert staffing and 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 enhanced nutrient removal levels. However, it is not clear what role MDE can play in the expert staffing issue identified at the Back River and Patapsco WWTPs. **DLS recommends that MDE comment on the impact of expert staffing shortages on the performance of WWTPs that have received BRF funding and what can be done to address this issue.**
- ***Other Comments:*** The fiscal 2024 budget provides for 9 projects serving 9 jurisdictions. The fiscal 2024 funding will serve approximately 13,481 equivalent dwelling units throughout Maryland and reduce the nitrogen load to the Chesapeake Bay by an estimated 45,725 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 2025. The decision to

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issue the revenue bonds is dependent upon project cash flow projections and schedules. However, any debt that would be issued would be for seven years or less, due to the BRF fee decreasing after 2030.

BRF – 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 MDA for the Cover Crop Program.

Fund Sources:						
(\$ in Millions)	2023 Approp.	2024 Request	2025	2026	2027	2028
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 \$442 remains to be encumbered and \$8.7 million to be expended from fiscal 2022.
- **Performance Measures:** As of June 30, 2022, the program has funded 14,942 best available technology (BAT) upgrades, of which 9,205 upgrades were completed within Maryland’s Critical Areas. The program has also helped connect 1,242 homes to public sewers.
- **Other Comments:** The fiscal 2024 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.

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)	2023 Approp.	2024 Request	2025	2026	2027	2028
GO Bonds	\$3.000	\$5.197	\$3.000	\$3.000	\$3.000	\$3.000
Total	\$3.000	\$5.197	\$3.000	\$3.000	\$3.000	\$3.000
Fund Uses (\$ in Millions):						
Project (Jurisdiction)	Est. Cost	Prior Auth.	2024 Request	Future Request	Total State Share	
Westernport Sanitary Sewer Replacement (Allegany)	\$22.665	\$0.000	\$1.500	\$0.000	6.6%	
Town of Luke Sewer Collection System – Phase 3 (Allegany)	1.509	0.000	1.313	0.000	87.0%	
Cecilton Wastewater Treatment Plant Upgrade (Cecil)	7.000	0.000	1.000	0.000	14.3%	
Smith Island Clean Water Project (Somerset)	19.868	12.687	0.826	0.000	68.0%	
Frostburg Combined Sewer Overflow Elimination – Phase X-C (Allegany)	3.559	0.000	0.559	0.000	15.7%	
Total	\$54.601	\$12.687	\$5.197	\$0.000		

- **Changes:** The funding for fiscal 2024 is \$2.2 million higher than planned due to the cash flow needs of projects. There is no change in the out-year planned amounts.
- **Encumbrances and Expenditures:** There is \$0.1 million still to be expended prior to fiscal 2019. The fiscal 2023 plan is to encumber \$6.6 million, which exceeds the recent encumbrance activity history, although the program did take a funding hiatus until fiscal 2021. The total available funding for fiscal 2023 given the fiscal 2023 encumbrance plan is \$3.0 million.
- **Performance Measures:** Of the \$1.3 billion in local water quality project funding requests received by MDE, \$401.5 million were requested for 31 projects in small, disadvantaged communities.
- **Other Comments:** The fiscal 2024 budget provides for five projects serving three jurisdictions.

Water Supply Financial Assistance Program

Program Description: The General Assembly created the Water Supply Financial Assistance Program in 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.

Fund Sources:						
(\$ in Millions)	2023 Approp.	2024 Request	2025	2026	2027	2028
GO Bonds	\$1.427	\$2.599	\$2.500	\$2.500	\$2.500	\$2.500
Total	\$1.427	\$2.599	\$2.500	\$2.500	\$2.500	\$2.500

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2024 Request	Future Request	Total State Share
Winchester Road Water Line Replacement (Allegany)	\$4.602	\$0.000	\$1.000	\$0.000	21.7%
Pocomoke City Market Street Water Main Relining (Phase 1) (Worcester)	2.257	0.777	0.844	0.000	71.8%
Remaining Projects	2.474	0.000	0.755	0.000	Varies
Total	\$9.332	\$0.777	\$2.599	\$0.000	

- **Changes:** The fiscal 2024 amount is \$0.1 million more than the planned amount due to project cash flow needs. There is no change in the planned project funding in the 2024 CIP.
- **Encumbrances and Expenditures:** There is \$0.5 million still to be expended from before fiscal 2019. The fiscal 2023 encumbrance plan of \$3.7 million leaves \$2.4 million available for fiscal 2024.
- **Performance Measures:** The program received requests from 43 projects for \$393.9 million for fiscal 2024 funding. The largest category of funding requested was for transmission/distribution, which saw requests from 30 applications for \$328.1 million.
- **Other Comments:** The fiscal 2024 budget provides for five projects serving three jurisdictions. The fiscal 2024 funding will provide safe and adequate water supply to 22,138 Maryland residents.

Hazardous Substance Clean-Up Program

Program Description: The Hazardous Substance Clean-Up Program provides funds for cleaning up uncontrolled waste sites listed on the federal National Priorities List (Superfund) and other uncontrolled waste sites within the State that do not qualify for federal funding through the Superfund program.

Fund Sources:						
(\$ in Millions)	2023 Approp.	2024 Request	2025	2026	2027	2028
GF	\$0.777	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000
Total	\$0.777	\$1.000	\$1.000	\$1.000	\$1.000	\$1.000

Fund Uses (\$ in Millions):					
Project (Jurisdiction)	Est. Cost	Prior Auth.	2024 Request	Future Request	Total State Share
Site Assessments	\$1.450	\$0.450	\$0.250	\$0.750	100.0%
Former Artmor Plastics	0.300	0.000	0.200	0.100	100.0%
Remaining Projects	1.982	1.032	0.550	0.400	100.0%
Total	\$3.732	\$1.482	\$1.000	\$1.250	

- **Changes:** There is an increase of \$0.2 million relative to fiscal 2023, but there have been no changes in the planned funding for the out-years.
- **Encumbrances and Expenditures:** Small amounts remain to be expended from before fiscal 2019, but encumbrances are occurring in a timely fashion. The largest encumbrances in recent years were \$0.8 million in fiscal 2020 and again in fiscal 2022.
- **Performance Measures:** As of July 2022, there are 951 active Brownfield Master Inventory sites and 988 archived Inventory sites.
- **Other Comments:** The fiscal 2024 budget provides for investigation and contamination clean up at four 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)	2023 Approp.	2024 Request	2025	2026	2027	2028
GO Bonds	\$7.292	\$6.189	\$10.000	\$10.000	\$10.000	\$10.000
Total	\$7.292	\$6.189	\$10.000	\$10.000	\$10.000	\$10.000
Fund Uses (\$ in Millions):						
Project (Jurisdiction)	Est. Cost	Prior Auth.	2024 Request	Future Request	Total State Share	
Ellicott City Flood Mitigation Pond (Howard)	\$11.720	\$0.000	\$3.000	\$0.000	25.6%	
Cambridge Flood Mitigation Project (Dorchester)	13.364	0.000	1.805	0.000	13.5%	
Frederick Downtown Drainage Area Flood Mitigation (Frederick)	1.591	0.000	1.085	0.000	68.2%	
Oxford Comprehensive Shoreline Resilience Project (Talbot)	3.246	0.000	0.300	0.000	9.2%	
Total	\$29.921	\$0.000	\$6.189	\$0.000		

- Changes:** The budget provides \$3.2 million more than the amount programmed for fiscal 2024 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 2024.
- Encumbrances and Expenditures:** The most recent iteration of this program is relatively new, so there are no large prior year unexpended or unencumbered balances from many years ago. However, the limited funding history reflects approximately \$3.0 million in encumbrances each year, which means that balances could develop if encumbrances and expenditures do not increase commensurately with the increase in proposed funding in the 2023 CIP. The \$23.8 million authorized in fiscal 2022 may be difficult to encumber and expend in a timely fashion. The current plan is to encumber \$24.0 million in fiscal 2023, which seems to be overly optimistic given recent history, and still leaves \$12.9 million available for fiscal 2024 encumbrances.

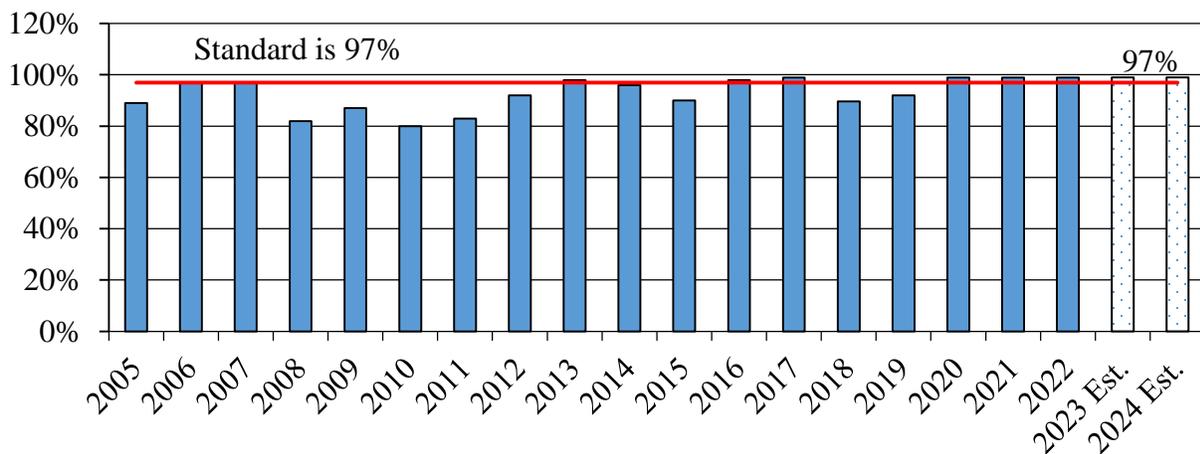
- Performance Measures:** The program received 24 applications requesting \$61.9 million. Therefore, 10% of the project demand has been met by the fiscal 2024 authorization. Elevation/shoreline work was the largest project type for which funding was requested.
- Other Comments:** The fiscal 2024 funding provides for four projects in four jurisdictions. There is \$3.0 million preauthorized in fiscal 2025 for the Annapolis City Dock Stormwater and Flood Mitigation Phase project in Anne Arundel County to reflect when the funding will be needed to bid the project for construction. **DLS recommends approval of the \$3.0 million preauthorization in fiscal 2025 for the Annapolis City Dock Stormwater and Flood Mitigation Phase project in Anne Arundel County.**

Performance Measures and Outputs

DWRLF

Exhibit 4 shows an overall trend toward a cleaner public water system in Maryland. However, between fiscal 2017 and 2018, there was a decrease in the percentage of Marylanders served by systems that are in compliance with all drinking water regulations. Of note, a workload analysis by the consulting group Cadmus, under contract from EPA, found that 28% of Maryland’s public drinking water systems did not have a certified operator in calendar 2020. However, MDE has noted that operator certification is not a primary standard or treatment technique under the National Primary Drinking Water Regulations.

Exhibit 4
Marylanders Served by Public Water Systems in Significant Compliance
Fiscal 2005-2024 Est.



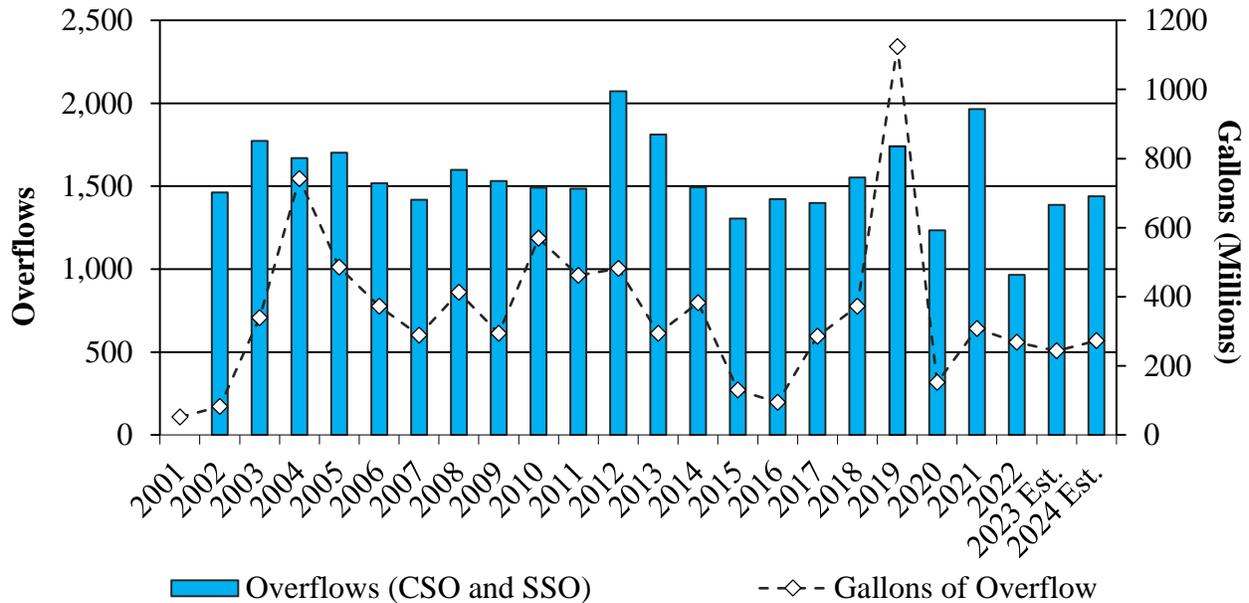
Source: Governor’s Fiscal 2008-2024 Budget Books; Department of Budget and Management

BRF – 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. Over the fiscal 2001 through 2022 period, it appears that very little progress has been made to reduce the number of overflows due to periodic large overflows. 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. The fiscal 2022 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 2001-2024 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 2008-2024 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 as well as 10% State match for the IJA funding. For fiscal 2024 (federal fiscal 2022), at least 10% of the federal funding must be used for green reserve projects – water efficiency, energy efficiency, and stormwater projects – provided that sufficient applications are received. The federal appropriation act further requires a minimum of 10% of the capitalization be provided as additional subsidies and between 0% and 30% may be provided as additional subsidization above and beyond the 10% statutory minimum. 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 2022, the program has executed \$3.3 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 as well as 10% of State matching funds for the IJA funding. For fiscal 2024 (federal fiscal 2022), at least 14% of the federal funding must be used for loan forgiveness or grants, and additional subsidies are required for the use of at least 12% but no more than 35% of the capitalization grant for state-defined, disadvantaged communities. 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 2022, the program has executed more than \$600 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 over enrichment 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 WWTP 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 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 cleaning up uncontrolled waste sites listed on the federal National Priorities List (Superfund) and other uncontrolled waste sites within the State that do not qualify for federal funding through the Superfund program. The State provides up to 100% of the costs of cleanup for the projects not included on the National Priorities List. At orphan sites, sites lacking a financially viable responsible party to pay for the cleanup, the State provides 100% of the cost of the preliminary site assessment. In all cases, the program seeks cost recovery, when possible, from the responsible parties. The program also provides the State’s share (10%) of remediation costs for federal Superfund orphan sites with the remainder provided through the federal share (90%).
- ***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.