

# 2024 Annual Report

**ENVIRONMENTAL SOLUTIONS  
FOR A BETTER TOMORROW**

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## Welcome

A MESSAGE FROM DR. GLASS

Since 1970, Maryland Environmental Service (MES) has been dedicated to providing essential services to the public and responding promptly to emergencies with a team of highly skilled environmental professionals. Every day, I'm inspired by the people at MES and their unwavering commitment to our core values, mission, and three pillars: Safety, Level of Service, and Education and Training.

Our employees are the heart of this mission. They are true environmental stewards who genuinely care about their work, showing up for Maryland's communities with dedication and passion that are nothing short of

remarkable. They don't just get the job done - they do it with excellence and pride. I'm deeply proud of the path we've laid to deliver the best for our clients, and of the clear direction set by the MES 5-year strategic plan. Together, we're building a stronger, more resilient future that will carry us into 2027 and beyond.

Through honesty, hard work, and fiduciary responsibility, our leadership has fueled remarkable growth in FY24. We've expanded our reach, enhancing our support to our clients and welcoming new ones into our mission. A new chapter has opened with the launch of an environmental justice and grants initiative - a

program designed to channel vital funding to Maryland's most vulnerable communities, those who need it most. This effort is about more than support; it's about empowering communities to build resilience and embrace sustainability. It's a meaningful step forward, and one we're excited to take together.

I also couldn't be prouder of what we've achieved together to elevate the employee experience. Earning Top Workplaces Awards from the Baltimore Sun (2022, 2023), the Washington Post, USA Today, and the Daily Record Most Admired CEO in Government (2024) is a true testament to our team's dedication and passion. Through the collaborative efforts of our recruitment team, we've kept vacancy rates impressively low. But it goes far beyond filling roles - we've created a workplace where ongoing learning, growth, and a culture of compassion empower our staff to thrive. MES employees don't just serve Maryland's communities; they give back wholeheartedly with their time, talent, and mentorship.

MES will continue to walk hand in hand with the people of Maryland as we strive to become the greenest state in the nation. We will protect the environment and invest in the future of environmental science, while safeguarding and preserving Maryland's most precious resources for generations to come. Together, we will create a legacy of sustainability for every citizen who calls this state home.

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MES continues to meet challenges head-on, delivering essential support for environmental projects to a wide range of clients and partners throughout Maryland.

## MISSION

To provide operational and technical services to protect and enhance the environment for the benefit of the people of Maryland.

## VISION

Maryland Environmental Service is an innovative and leading-edge solver of environmental problems; a responsible and successful manager of environmental operations; and a great place to work.

# OUR Board of Directors



**Shelley L. Heller**  
**Chair**



**Judge Frederic N. Smalkin**  
**Secretary**



**Brendon Baatz**  
**Treasurer**



**Dereck E. Davis**  
**Board Member**



**Charles Glass, Ph.D., P.E.**  
**Board Member**



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Ph.D., P.E.**  
**Board Member**



**Moalie Jose, P.E.**  
**Board Member,  
Chair, Audit Committee**



**Robert L. Witt, II**  
**Board Member**  
**Chair, Human  
Resources Committee**

# Administrative Update

## Strategic Planning Group

MES Senior Management remained focused on tracking the four goals outlined in the MES five-year strategic plan, using 26 key performance indicators (KPIs) as a guiding compass to stay on track or adjust course when needed. The team continues to assess performance across all levels, highlighting both successes and areas for improvement based on data collected throughout FY23 and FY24.

The four goals - Safety; Enhancing Employee Morale; Employee Retention, Succession Planning, and Recruitment; and Business Growth and Objectives - will continue to shape the organization's decisions and planning through FY27.

## Top Workplaces Awards

For the second year in a row, MES has been recognized as a Top Workplace by The Baltimore Sun, and for the first time, has also earned honors from both The Washington Post and USA Today. These accolades are based entirely on employee feedback collected through a third-party survey, which assessed 15 key cultural factors essential to organizational success. By implementing the MES Strategic Plan and conducting an annual employee engagement survey, MES has consistently enhanced the employee experience. These awards demonstrate that these efforts are yielding positive results.



MES Summer 2023 Interns



### Employee Education and Training

MES encourages staff to take advantage of the Tuition Reimbursement Program to pursue formal continuing education through conferences, seminars, and certificate or degree programs. MES also offers in-house training on topics such as procurement and finance procedures, cybersecurity, and mandatory sessions like EEO, DEI, and sexual harassment prevention training. Employees are encouraged to be lifelong learners by participating in these opportunities, as well as attending lunch-and-learn sessions and health and wellness events.

### Internship Program

MES launched a structured summer internship program in 2023, on-boarding eleven interns serving in various positions across the agency for the twelve-week program. The interns gained hands-on environmental and administrative experience and participated in networking and team building activities. MES staff members appreciated the opportunity to interact with the talented group, sharing perspectives, enthusiasm, and willingness to learn from each other. The internship program returned in summer 2024 with a total of 16 participants, continuing agency support of young professionals and commitment to education and training.

### Inspire Program

The Inspire Award Program rewards team members who either go above and beyond for our clients or provide a cost-saving or innovative idea that supports business growth and client savings. Supervisors nominate their staff members for the awards and if approved, the winners are acknowledged at the monthly Board of Directors meeting. In FY24, 37 staff members were honored through the Inspire Program.

### Grants and Environmental Justice Initiatives

In collaboration with a small group of staff members, MES started to build the foundation for an environmental justice practice that will include projects aimed at improving universal access to clean air, water, and land. The collaborative projects are supported by grant-funded, billable work in underserved communities utilizing federal opportunities through the Justice40 initiative. In FY24, MES supported the preparation, writing, and submission of grant applications totaling over 153M dollars, and provided letters of support for many others. The implementation of these projects embodies many of the core components of the Justice40 initiative, and the MES Mission and Vision.



**\$84,033.49**  
Provided in Tuition Reimbursement



**37**  
Staff Members Honored through the Inspire Program



**98**  
Recruitment Events



**\$63,241,873**  
in Grants Awarded

**Over 500**  
of the MES team members work on-site at essential environmental projects throughout the State of Maryland.

# Environmental Dredging & Restoration

MES has over 30 years of experience in engineering, construction, environmental management, and facility operations and maintenance related to dredging and dredged material containment facilities.

## **Dredged Material Management Program Support**

In fiscal year (FY)24, the Environmental Dredging and Restoration group (EDR) continued to support the Maryland Port Administration (MPA) in meeting the goals of its Dredged Material Management Program (DMMP). EDR support includes operation of the Masonville and Cox Creek dredged material containment facilities (DMCF), which provide placement capacity for sediments dredged from Baltimore Harbor channels; operation of the Cox Creek Sediment and Reuse (STAR) Facility, which is currently in the early stages of remediation and site development for transition to a dredged material

innovative reuse site; operation of the Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island (Poplar Island), which provides placement capacity for sediments dredged outside of the harbor; and planning, technical, and engineering support on the Mid-Bay Island Project, which will provide future placement capacity for Bay channel sediments. Additionally, EDR work includes planning and executing various levels of the DMMP and citizen oversight committee meetings and the DMMP Annual Meeting. These meetings enhance outreach efforts and increase community involvement in projects.

## **Port of Baltimore Environment, Safety, and Sustainability Support**

EDR also provides services at the Port of Baltimore's state-owned marine terminals, cruise terminal, and the World Trade Center by assisting MPA with meeting its environmental management system, safety, and sustainability goals. Services include facility asbestos inspections; National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) permit sampling, best management practices inspections (BMP), and reporting for stormwater permit compliance; invasive species control to prevent the need for decontaminating cargo before it leaves the Port; hazardous and non-hazardous waste management



site remediation at Dundalk Marine Terminal; and hazardous waste landfill post-closure care at the Hawkins Point Hazardous Waste Landfill. EDR also assists MPA's safety and risk management program by providing training to their employees in subjects such as recycling, safety, universal waste management, and completing building inspections.

EDR assisted MPA with its first annual sustainability report, which summarizes the programs, projects, and initiatives implemented in 2023 and organizes the efforts into six focus areas: economic vitality, infrastructure, health, safety and security, environmental stewardship, climate and energy, and community building. These six focus areas will serve as pillars for developing a long-term sustainability strategy.

### **Cox Creek and Masonville Dredged Material Containment Facility Expansions**

EDR continued to manage the Cox Creek expansion and dike raising to elevation +60 mean lower low water (MLLW). This project will increase the cumulative capacity at Cox Creek from 6.5 to 14.7 million cubic yards (MCY). Work in FY24 included compiling as-built documentation, design, and permit modifications to facilitate raising the height of the cross dike to increase water surface elevation in the waterside cell. This will delay the need to utilize the upland cell for dredged material inflows once work is completed in the first half of FY25. EDR also continued designs for a floating weir discharge system, a cross-property access road between Cox Creek and the STAR Facility, and the design and permitting of two stockpile locations at the STAR Facility to be used for placement of surplus material that will be removed from the DMCF upland cell.

EDR awarded the contract for the Masonville dike raising to elevation +30 MLLW in fall 2023. By the end of FY24, the contractor had installed 530 linear feet of storm drains and associated infrastructure; begun demolition and re-construction of two sand filters and associated swales; completed three sections of segmental block walls (2,400 linear feet total); and completed approximately 25% of the first six vertical feet of mechanically-stabilized, engineered wall that cut into the existing dikes from elevation +12 to +18 MLLW. Construction is expected to be complete in FY26 and will increase the cumulative capacity of the Masonville DMCF from 6.0 to 8.2 MCY.

### **Mid-Bay Island (Barren and James Islands)**

EDR provided project management, planning, engineering and design, geotechnical, construction management, outreach, and adaptive management and environmental support services to MPA and US Army Corps of Engineers (USACE) for the Mid-Bay Island Ecosystem Restoration Project (Mid-Bay), which will provide 30 years and 90-95 MCY of dredged material capacity.

Barren Island restoration phase I construction started in March 2023 and completed in October 2024. Barren Island will provide 72 acres of remote island habitat. James Island will be restored to approximately 2,072 acres of remote island habitat, with construction planned to begin in calendar year (CY)25 or 26.

Design, environmental, and geotechnical field work continued for both James and Barren Islands through 2024. EDR coordinated modifying the Barren Island Tidal Wetlands License for the phase II construction scheduled to begin in late CY24 and facilitated Barren Island construction monitoring. The project team supported the design of James Island, including coordinating with agency stakeholders; participating in the valued engineering study and facilitating design meetings



Pictured above, Masonville DMCF Expansion and Barren Island Phase 1 Construction  
Pictured below, Cox Creek Dike Raising



and workshops; providing preliminary plan sets for the James Island spillways, bulkhead, and personnel pier; and beginning facility design. EDR assisted as the James Island project moved through the National Environmental Policy Act (NEPA) process and continued to manage the permit process, ensuring construction can begin on schedule. The group also worked on efforts to ensure continued community and stakeholder engagement, including Mid-Bay Workgroup meetings, seasonal newsletters, the annual public meeting, and numerous one-on-one meetings that keep the agencies and the public involved and up to date with the project.



### **Poplar Island**

EDR continued to support MPA at Poplar Island in FY24. Federal maintenance inflow took place between December 2023 and March 2024, with approximately 1.48 MCY of dredged material placed at Poplar Island. Sand recovery continued with material removed from Cell 7 and stockpiled for future construction use in Cell 1D. Sand material totaling 17,516 cubic yards (CY) has been stockpiled, with a cumulative total of 223,994 CY moved to Cell 1D.

Habitat efforts on Poplar Island continued to focus on incorporating over 20 years of monitoring results into future wetland design. Towards this effort, MES facilitated meetings and discussions related to the design of Cell 5CD, the next wetland to be developed. These focused meetings continued to address construction limitations pre- and post- FY24 inflow, design lessons learned, new agency input, desired habitat features, and future upland-to-wetland connection. EDR continued to compile monitoring results and agency input to investigate and document how changing the project's restored wetland high marsh to low marsh ratio would impact resiliency to sea-level rise.



### **Deep Creek Lake**

EDR successfully completed the Deep Creek Lake Arrowhead Cove Dredging Project on behalf of our client, Garrett County, in FY24. Dredging of approximately 11,000 CY of sediment began in November 2023 and finished in January 2024. The dredged sediment was dewatered and transported to the Garrett County landfill for use as landfill cover. Site restoration activities in the cove were completed in spring 2024.

### **Outreach, Education, and Community Engagement**

The outreach, education, and community engagement staff reached over 11,000 students in classroom-based outreach programs. In these lessons, K-12 Maryland students learned about the Port of Baltimore, the need for dredging, and the success of MPA's restoration projects. Staff delivered over 100 programs to Title I schools serving children from low-income families. In addition, staff provided tour experiences to over 5,000 community members at Poplar Island, Hart-Miller Island, and Masonville.



EDR staff also expanded the award-winning Environmental Education E-Learning (E3) Portal ([www.portofbaltimoreeducation.org](http://www.portofbaltimoreeducation.org)), developed by the MES Environmental Education Team for the Port of Baltimore as a platform to make lessons, programs, and activities more accessible to educators, students, parents, and the greater public.

EDR staff assisted MPA and the Baltimore Port Alliance with the sixth Hiring & Career Expo, which brought together 34 employers sharing job openings at all levels. Over 300 jobseekers attended, making this the largest event to date.

The popular “Youth Birding Week with the Port of Baltimore” summer field experience expanded to two weeks in FY24 thanks to financial support from the Chesapeake Bay Trust, Maryland Ornithological Society, and the Baltimore Bird Club. Twenty-seven youth birders joined MES educators and local birding experts to experience a week of immersive hands-on activities. These young birders recorded nearly 3,000 birds and 140 unique species while learning about habitat conservation and MPA restoration work.



### **Terrapin Education and Research Partnership Program**

EDR continued to support the Port of Baltimore Terrapin Education and Research Partnership (TERP) with MPA and the Arlington Echo Outdoor Education Center, part of the Anne Arundel County Public School system. Other program partners include the National Aquarium, CHESPAX, and the William S. Schmidt Center. Juvenile turtles from Poplar Island live in Maryland classrooms for a school year, during which students collect growth data, observe behavior, learn husbandry protocol, and research the natural history of the species. After caring for the hatchlings, students release the terrapins to the Bay at Poplar Island. To date, nearly 3,300 terrapin hatchlings from Poplar Island have been head-started by students from schools around the state.



### **Survey Support**

EDR survey staff continued to operate as a full-service survey and mapping team, providing collaborative support to local, state, and federal entities to ensure timely and high-quality deliverables. During FY24, staff provided a variety of survey and AutoCAD-related services and support for multiple project efforts. This included all the MPA DMMP projects that involved cell surveys and volumetric computations for remaining airspace in the DMCFs, an integral component of the long-range capacity planning for dredged material placement. Other projects included quality assurance and quality control of survey data for before-dredge and after-dredge surveys of shipping lanes and channels, as well as vegetative analysis utilizing multi-spectral imaging and a new fixed-wing drone to assist in monitoring and maintaining the health of the tidal wetlands.

Pictured on page 10, Poplar Island Expansion, MES Staff Conducting Poplar Island Exterior Sediment Monitoring, and the Poplar Island Turtle Release  
Pictured above, MPA Youth Birding Week Program, and Poplar Island Wetland Creation

# Environmental Operations

The MES Environmental Operations Group serves counties, large municipalities, and rural communities which need creative solutions for solid waste challenges and recycling services.

The MES Environmental Operations (EO) group is a leading provider of solid waste management services for millions of Marylanders, including award-winning recycling centers, composting facilities, landfills, and landfill gas facilities. The composting facilities transform yard, leaf, and food waste into the highly sought-after products Leafgro® and Leafgro Gold®.

Our innovative services extend throughout the state, reaching many of those in the greatest need. For example, EO partners with the Maryland Department of Aging (MDoA) to manage the Durable Medical Equipment (DME) program. This program collects used DME that is then refurbished, recycled and commissioned for reuse, and provided at no charge to citizens in need. The group also works with the Department of Public Safety and Correctional Services (DPSCS) operating a cogeneration facility that supplies steam and electricity to the Eastern Correctional Institution. In addition, MES operates steam boilers used for heating, laundry,

and cooking at three other Maryland correctional facilities, providing essential services to individuals at those facilities.

## Integrated Solid Waste Management Operations

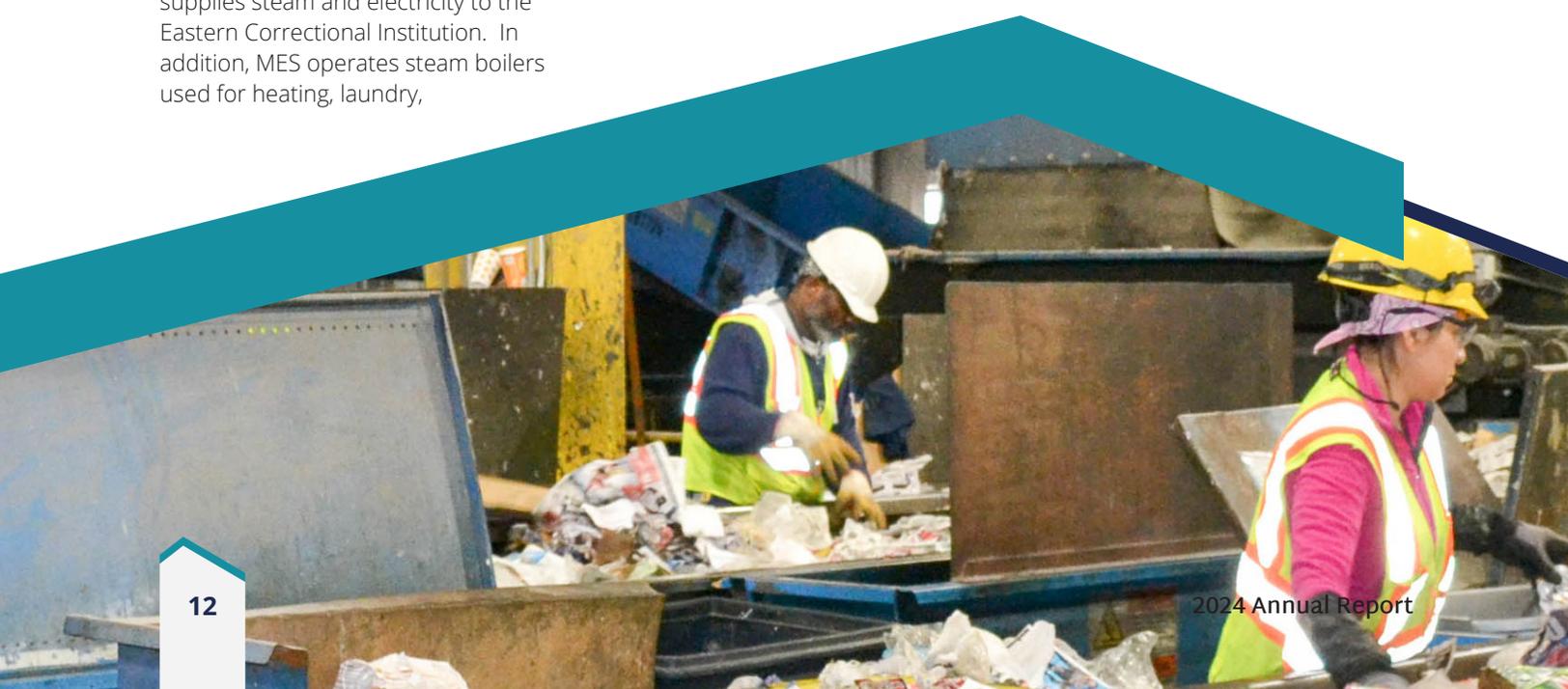
EO's solid waste operations focus on source reduction, reusing and recycling, and composting to reduce the volume of materials being sent to landfills or incineration. The group offers engineering, construction, and operations of large-scale, diversified, innovative, and integrated solid waste management.

In Montgomery County, EO continued to manage the county's dual-stream recycling operations, the county's state-of-the-art leaf and yard waste composting operations, as well as the solid waste collection

at county bus stops, and food waste collections for a commercial food scrap recycling operation. EO negotiated a five-year comprehensive agreement with Montgomery County that consolidated all offered services under a single umbrella contract, which begins in FY25.

EO also operates Harford County's complete solid waste management program, including engineering, composting, recycling, litter control, and the management of the county's homeowner collection facilities.

EO continued its partnership with Prince George's County, serving as the operator of the county's single-stream recycling center and organics composting facility. EO provides construction management and engineering services to the Prince George's County Department of the Environment, Resource Recovery Division. Through this unique five-year agreement, EO manages consulting and service contracts related to capital improvement



projects and regulatory compliance at multiple facilities, including the Brown Station Road Sanitary Landfill, Sandy Hill Landfill, the Prince George's County Materials Recycling Facility (MRF), the Prince George's County Organics Composting Facility (PGCOCF), and the residential convenience centers. In FY24, construction started on the long-awaited Brown Station Road Infill project. This two-year construction project will allow the county to continue providing solid waste management of county-generated waste for the next 50 years. This work, managed by EO, involved the re-permitting of the Brown Station Road Landfill, detailed engineering and design, and construction of the new landfill cells.



The Brown Station Road Leachate Pretreatment Facility (BSRLPT) in Prince George's County treats leachate coming from the Brown Station Road Sanitary Landfill, removing metals and other contaminants until acceptable levels are reached for discharge into the sanitary sewer system. In FY24, the BSRLPT treated over 8.3 million gallons of leachate. The facility is set to begin a major upgrade in FY25, allowing it to utilize new technology to accommodate the long-term goals of Prince George's County.

EO offers similar consultation to several Maryland counties for services, including updating ten-year solid waste management plans, evaluation of solid waste disposal alternatives, strategies for sustainable resource management, and zero waste management planning.



EO operates a landfill for Kent, Queen Anne's, Talbot, and Caroline Counties through a partnership that will provide solid waste services for 92 years. In addition to the landfill, EO also manages recycling operations for the four counties. In FY24, EO successfully negotiated a 12-year contract extension to the existing Midshore II landfill. This agreement involved all four counties in the partnership and will allow for the complete utilization of existing capacity at Midshore II. The four counties will continue to provide cost-effective and efficient solid waste management services for their residents and businesses for another 12 years beyond the original 80-year agreement. In addition, EO began planning for the future, starting the long process of permitting Midshore III to be located in Queen Anne's County.

### **Environmental Monitoring**

EO provides up-to-date landfill monitoring support services for both opened and closed landfills, including sampling, analysis, statistical interpretation, and reporting analysis results of groundwater, surface water, and landfill gas at 27 landfills located throughout the state of Maryland.

With changes to regulations and the adaptations of new laws, 2024 was a landmark year for the Environmental Monitoring Section of EO, beginning with management of the state's new landfill gas regulation outlined in COMAR 26.11.42 – Control of Methane Emissions from Municipal Solid Waste Landfills. EO took on six additional tasks and hired another staff member to manage surface emissions monitoring and reporting required by the new regulation. Additionally, the section worked with the EO Engineering division to develop capital projects for control devices required by the new regulation. These capital projects will add to the seven control devices the section currently operates and maintains.

As the year progressed, the section began preparing for the Maryland Department of the Environment's (MDE) new per- and polyfluoroalkyl substances (PFAS) requirement for groundwater and surface water sampling at landfills by onboarding a contract lab to comply with MDE's stringent standards. The reporting limits are being met and there has been no sign of cross contamination in the samples collected. EO's employees are on the cutting edge of PFAS monitoring and reporting at landfills within the state.

Pictured Above, DME Donation, Leafgro®, and Montgomery County Yard Trim Compost Facility  
Pictured below, Prince George's County MRF





**201,352**  
Tons of Organics  
Diverted from Landfills



**33,794**  
Tons of Compost  
Produced from Food Scraps



**120,692**  
Tons of Recyclables  
Returned to the Market



**462,025**  
Gallons of Used  
Oil Recycled



**12,000**  
Metric Tons of Carbon  
Emissions Offset



**462,025**  
Gallons of Antifreeze  
Recycled

While there have been significant changes in state laws regarding landfill compliance, the Environmental Monitoring Section has continued to provide fantastic customer service to its current clients all while adding two new customers in Calvert and Queen Anne's Counties.

### State-of-the-Art Composting

EO had another successful year operating major composting operations for Harford, Prince George's, and Montgomery Counties. PGCOCF is one of the largest food scrap composting facilities in the country. Composting operations at the facility include windrow composting for leaf and yard trim to produce Leafgro® and a 12-bunker food waste compost system to produce Leafgro Gold®. In FY24, the team processed 33 million pounds of food scraps and 122,823 tons of leaf and yard trim compost and mulch.

In Montgomery County, EO continued to operate the Montgomery County Leaf and Yard Trim Composting Facility (Dickerson, MD). EO also operates a separate yard trim collection, processing, and transfer operation in Derwood, Maryland. Yard trim from county-based residential and commercial sources are delivered to be ground and then transported to the Dickerson site. Once at Dickerson, the material is windrow composted to produce Leafgro®. In FY24, EO processed over 40,658 tons of yard trim, producing 650,000 bags of Leafgro®. Bagged Leafgro is marketed for sale in the region and can be found in most lawn and garden centers and large box stores in the mid-Atlantic.

In Harford County, EO operates the Harford County Composting operation at the Harford County Waste Disposal Center (HWDC), in Scarboro, Maryland. The facility produces both mulch and compost. In FY24, the HWDC processed 21,371 tons of organics materials.

In total, EO processed 201,352 tons of organics into compost and mulch thereby diverting material that would have otherwise been landfilled. Diverting organic waste from landfills reduces methane, a very harmful greenhouse gas produced at landfills, and extends the useful life of a landfill.

In addition to composting operations, EO assisted Prince George's County in the rollout of the largest residential food scrap collection program in Maryland. The county is providing weekly curbside collection of food scraps and yard trim to over 180,000 homes. In addition to composting the materials from curbside collection, EO has supported this effort through quarterly composition studies during which staff separates curbside collected materials and evaluates their composition. This provides valuable information such as the amount of foods scraps and the types and amounts of contamination in the loads. The county can then use this information to direct its outreach and education efforts to increase participation and reduce contamination.

EO also works with Baltimore/Washington International Thurgood Marshall Airport (BWI) and its food vendors to operate a previously-developed food scrap collection program. This program continues to expand and now involves work with over 33 vendors within the airport, resulting in the collection for recycling of over 259,734 pounds of food scraps which would have otherwise been landfilled.

Over the past two years, EO helped its long-time partner Montgomery County with a Commercial Food Scraps Recycling Partnership Program. The program has been extremely successful, with the county recently celebrating recycling over 1,225,000 pounds of food scraps collected. The food scraps are then sent to the MES-operated PGCOCF and the Maryland Bioenergy Center located in Howard County, owned by Bioenergy Devco.

In FY24, EO developed a food scrap composting pilot for Baltimore County. Using a GORE ® system three-heap mobile unit, EO and Baltimore County successfully composted 540,000 pounds of food scraps collected from a county residential curbside collection pilot and Baltimore County commercial food scraps. The composting pilot program wraps up in FY25, with Baltimore County likely to continue it into the future.

### **Innovative Recycling Operations**

EO operates a single-stream recycling facility in Prince George's County and a dual-stream in Montgomery County.

Significantly upgraded in FY22, the Prince George's County MRF is now equipped with the newest technology and well positioned to continue serving county residents for many years into the future. In FY24, the facility processed and marketed over 60,854 tons of recyclables with a market value of \$160.89/ton.

In Montgomery County, EO has successfully operated a dual-stream recycling facility and a separate fiber recovery line for 30 years. In 2024, the facility recycled over 56,722 tons of recyclables. EO continued to work with the county on the design of needed upgrades at the materials recycling facility. These upgrades will include the latest technologies, providing more automation and increasing throughput.

EO also manages the Midshore Recycling Partnership. The group has placed source-separated containers at 42 locations across the four Midshore counties, generating 3,116 tons of recyclable which were sold into the market.

### **Recycling Durable Medical Equipment**

The DME Reuse program, operated by EO on behalf of the MDoA, continues to provide support to Maryland residents. This program access to critical medical equipment at no cost regardless of age, income, or location, with priority given to the needy and elderly populations. The program has expanded to include 21 collection and distribution sites in 14 counties and Baltimore City. In FY24, the DME program distributed more than 4,500 items that otherwise would have gone for disposal.

The DME program was also awarded the Reusies Community of the Year Award for 2024. This award highlights nonprofits that make reuse a reality in the community. This award garnered national attention and highlighted EO's great work!

### **Energy Plant Operations**

EO has operated a four-megawatt cogeneration facility on behalf of the DPSCS at the Eastern Correctional Institution (ECI) Complex in Somerset County since July 1989. The cogeneration plant is designed to produce all the electricity and thermal resources – such as steam and high-temperature hot water – required at the correctional complex.

At ECI, design work began in FY23 to retrofit the two 38 MMBtu boilers to combust natural gas. This work continued throughout FY24, with the commissioning of the new retrofitted plant anticipated to be completed during the first quarter of FY25. Originally, the boilers were fueled with debarked wood chips sourced from the lower Eastern Shore. Once the fuel conversion is complete, the cogeneration plant will be able to burn a more uniform, energy-dense fuel, increasing the reliability of plant operations. Along with the boiler conversion, EO also worked throughout FY24 to construct an underground service distribution pipeline to deliver utility-grade natural gas to ECI buildings and replace propane-fired equipment with natural gas-fired equipment. This work is expected to be completed in the first quarter of FY25.

In addition to ECI, EO operates the steam boiler plants at the Jessup Correctional Facility, the Central Maryland Correctional Institution, and the Maryland Correctional Institution in Hagerstown. These plants produce steam for heat, cooking, and laundry at each of the three prisons.

# Technical & Environmental Services

MES supports all levels of government, and private clients, with services related to environmental monitoring and compliance, renewable energy and geospatial and engineering projects, sewer assessments, certified water tower and manhole inspections, maintenance and stormwater projects.

The Technical and Environmental Services (TES) group provides expertise in diverse areas of environmental services and project management that support state agencies, counties, municipalities, private industries, and universities with a broad range of environmental challenges. In FY24, TES continued to provide services in the areas of environmental management and technical support, National Environmental Policy Act review assistance for Maryland Department of Natural Resources (DNR) and Maryland Department of Transportation (MDOT), geospatial digital mapping, and application development and programming, as well as stormwater engineering, inspection, and technical services. Additionally, TES continued to support statewide maintenance activities for water and wastewater

facilities, as well as managing diverse environmental tasks at BWI on behalf of the Maryland Aviation Administration (MAA). TES continued to expand a broad range of projects and initiatives on behalf of the Maryland Energy Administration (MEA) and the Maryland Military Department (MMD), in addition to new and expanding contracts with State Highway Administration (SHA).

## Geographic Information Systems

The Geographic Information Systems (GIS) section is working on a large-scale project for the SHA Asset Management Office to perform bicycle and pedestrian

crosswalk condition assessments on state-owned roadways throughout Maryland. Using ArcGIS custom tools, staff are validating previous data and performing new assessments for every crosswalk in the database, as well as new crosswalks found while staff are in the field. This includes collecting information on crosswalk condition, location, signage, and picture verification.

## GIS/Engineering

In FY24, TES began a project mandated by MDE to help bring DPSCS into compliance with its MS4 permit. The project entails collecting data at the Jessup and Patuxent campuses and building a geodatabase to document where all stormwater facilities are



Pictured Above, BWI Deicing Waste Glycol Collection, Parkville Stormwater Project, and Rocky Gap WWTP Transfer Pump Upgrade  
 Pictured below, Bowie State Regional Pond Inspection

located, as well as the conditions and stormwater treatment amounts. With the completion of the project, DPSCS will be in compliance with its regulatory environmental stormwater permits.

**GIS Software Application Development**

Software application development team members spent FY24 working to integrate several new modules into MDE’s authoritative data management system, called Environmental Tracking System (ETS). TES worked closely with the MDE Wastewater Pollution Prevention and Reclamation Program to identify and document notice of intent data and workflow requirements, and then implement those notice of intents into ETS for several General Discharge Permits.

**DNR Climate Change and Water Quality Portfolio**

The TES team worked with DNR to develop a Water Quality and Climate Resiliency Portfolio for two targeted resiliency areas, one of which is Pocomoke City, within Worcester County. The goal of this initiative was to develop a list of potential projects with community buy-in that will help restore local waters while also improving climate resilience. Projects had a primary focus on green and nature-based solutions, in addition to other solutions like gray infrastructure.

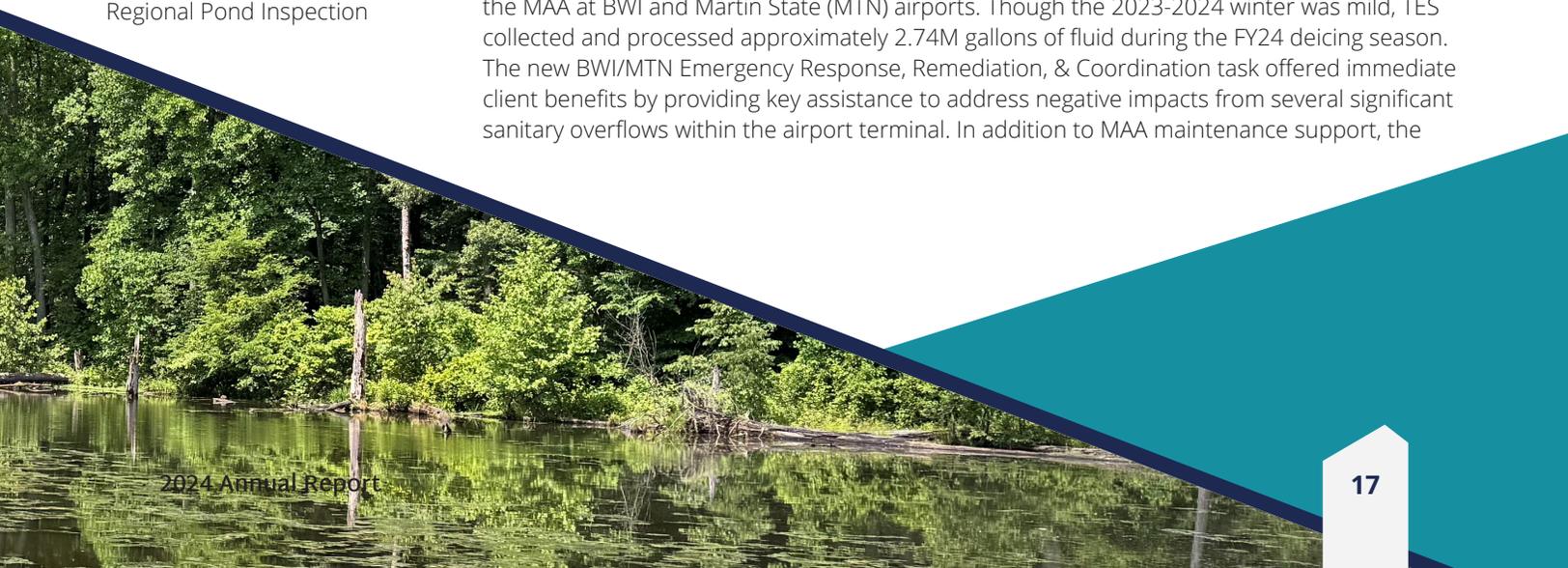
**Environmental Services**

TES continued to support stormwater compliance projects regulated under the National Pollutant Discharge Elimination System (NPDES), including services for St. Mary’s County, Baltimore County, and the private clients Eastalco and Pritchard Brown. The group also expanded work for the MMD with stormwater inspection and maintenance, stormwater remediation at Parkville Readiness Center and Ruhl Readiness Center, PFAS sampling at various locations, underground storage tank inspection and removal, and asbestos analysis and survey. TES expanded technical assistance services to Maryland Transportation Authority and Maryland Transit Administration (MTA) for a broad range of projects, including the MTA oil/water separator cleanout project, significant expansion of the phragmites removal project, and new tasks with sweeper dirt removal.

FY24 was an impressive year for the statewide Mesonet project, and TES played a significant role in managing this effort and the necessary coordination to get it off the ground. Working with the Maryland Department of Emergency Management and the University of Maryland College Park, TES supported work to break ground and erect the first Maryland Mesonet weather station. Since this first station went up in Ellicott City in October 2023, the network has grown to a total of 18 towers spread out across the state. Data are streaming in every minute and can be viewed by the public at [www.mesonet.umd.edu](http://www.mesonet.umd.edu). Building on this year’s success, efforts in FY25 will focus on further extending coverage across the state to enhance service for all communities.

**BWI/State Maintenance**

TES maintained environmental compliance and maintenance support to over 46 projects for the MAA at BWI and Martin State (MTN) airports. Though the 2023-2024 winter was mild, TES collected and processed approximately 2.74M gallons of fluid during the FY24 deicing season. The new BWI/MTN Emergency Response, Remediation, & Coordination task offered immediate client benefits by providing key assistance to address negative impacts from several significant sanitary overflows within the airport terminal. In addition to MAA maintenance support, the





46

Projects Maintained  
at BWI & Martin  
State Airports



2.7

Million Gallons of  
Deicing Fluid Collected



260

Facilities TES  
Supported



450

Emergency Requests  
Addressed



3,500

Preventative &  
Corrective Maintenance  
Actions

TES maintenance staff provided support to over 260 water/wastewater facilities located throughout Maryland. The team addressed over 450 emergency requests and more than 3,500 preventative and corrective maintenance actions, including facility upgrades such as the membrane bioreactor replacement at the Rocky Gap Water Treatment Plant.

### SHA Drainage/Environmental

Thanks to its strong partnership with SHA and the new drainage emergency memorandum of understanding (MOU), TES has completed seven major stormwater repair projects across Maryland's metropolitan roadways. SHA relies heavily on TES to assist with these stormwater repairs, which the group's ever-growing list of emergency requests clearly displays. With the expansion of a stormwater drainage project through multiple districts, TES reinitiated work and implemented a new 15-million-dollar MOU specifically with SHA's District 3 office. This new MOU will allow TES to cover a wide variety of environmental projects for this busy metropolitan district. Projects range from remediating illegal dumpsites off SHA-owned roads to repairing slope failures alongside major highways. TES maintained great relationships with SHA's Office of Materials Technology and Office of Environmental Design's Environmental Compliance Division. TES continues to take on more projects for these groups and prove to be a valuable partner for them to utilize and assist with any of their environmental requests.

### Energy Activities

During FY24, the TES team added three full-time staff to provide support to MEA's Energy Programs. TES continued to work with the Clean Energy Rebate Program for both residential and commercial applications, as well as the Electric Vehicle Supply Equipment program. Both programs experienced unprecedented application volumes and funds were exhausted months prior to the planned deadline. Strong review efforts of several hundred applications ensured the proposed projects met historic preservation requirements, a crucial aspect of funding awards. TES' Section Lead for MEA and energy activities is also MEA's representative on the state of Maryland's Federal Investment Team, which has yielded excellent results bringing additional funding to MEA to support Maryland's goals of greenhouse gas reductions and 100% clean energy. TES also regularly participated in the work associated with MEA's Geothermal Study task force, the Solar task force, and the completion of a landfill solar study investigating placing solar panels on closed landfills. The published version of this document can be found at **Maryland Landfill Solar Assessment** on MEA's **website**. In partnership with Maryland State Parks and DNR, TES worked on the installation of solar systems on buildings at five Maryland parks.



Three FT staff added to support MEA Energy Programs



Increased funding to MEA to support greenhouse gas reduction and 100% clean energy



TES partnered with Maryland State Parks and DNR to install solar systems at five parks

Pictured above, Marietta Woods Pond Retrofit

# Water & Wastewater Services

MES provides a full range of water supply and wastewater treatment services, from design and construction to inspection, project management, and operations.

The MES Water/Wastewater (W/WW) group manages the operation and maintenance of various treatment facilities, including municipal, county, and privately owned plants. The Operations Division oversees state-owned facilities such as those at correctional and health institutions, rest areas, and state parks. The division also provides services to rural areas lacking access to public water and sewer systems and works on facility retrofits, continually focusing on methods to increase efficiencies.

The Engineering Division manages the design and construction of capital improvement projects and other public works projects. The division helps clients identify their water and wastewater requirements, guides them in choosing the appropriate facility size,

technology, and equipment, drafts specifications, and supervises the construction of new plants. The biosolids staff works to ensure environmentally acceptable, dependable, and cost-effective methods are used to manage the solid material generated by the numerous agency-operated wastewater treatment plants (WWTP).

The W/WW staff maintains the State Water and Wastewater Utility Master Plan, which is updated every two-to-three years to reflect changes in regulations, population, or level of usage at state facilities. The staff reviews the laboratory data and identifies any trends that could indicate potential future compliance permit violations. They then create a multi-year

capital improvement plan and present it to the Department of Budget and Management's Office of Capital Budgeting. This prioritized list becomes the MES Five-Year Plan in the annual Capital Budget Request.

## **Rocky Gap Membrane Retrofit**

The W/WW Operations and Engineering Divisions, maintenance staff, and the membrane manufacturer completed a retrofit of the Rocky Gap polymeric membranes with new ceramic membranes. This effort required substantial modifications for installation to proceed. Despite the constraints, the group delivered a successful retrofit and was prepared for the busy season at the park and casino.

## **Elk Neck WWTP Upgrade**

The Elk Neck State Park WWTP is currently being replaced with a new





Pictured above, Sandy Point State Park Water Tower, Rocky Gap Membrane Retrofit, and Camp Fretterd Pump Station Upgrade  
Pictured below, Operations Challenge Team at the Tri-Association Conference

enhanced nutrient removal (ENR) WWTP. The current facility is an extended-aeration plant built in the early 1970s, does not have the capability to remove nitrogen or phosphorus, and lacks a dedicated emergency shellfish holding tank. The new plant will address these deficiencies by producing ENR-quality effluent, expanding the emergency shellfish holding capacity, and equipping the operator with newer, more reliable equipment. Additionally, it will offer a safer workspace. The new plant should be completed in March 2025.

**Sandy Point Water Treatment Plant**

The Sandy Point State Park water tower and distribution system was constructed as part of the park around 1950. The system provides potable water for the park, as well as the nearby Maryland Department of Transportation offices and Natural Resources Police facility. The W/WW group is replacing the 70-year-old water tank because evaluations show failings in the pier foundations and key tank structure components. The new tank will be constructed further from the waterfront area to reduce corrosion.

The water treatment facility will also be upgraded with this project as the current facility has passed its useful life.

**Camp Fretterd WWTP Upgrade**

The Camp Fretterd WWTP is currently being upgraded as the existing wastewater treatment plant cannot accommodate the proposed new facilities at the military reservation. Upgrades include the construction of a new equalization tank, expansion of the existing treatment building, new process controls, and upgrades to the electrical service. The new plant is estimated to be completed by the end of 2025.

**Camp Fretterd Pump Station Upgrade**

The Maryland Military Department (MMD) is currently planning an expansion of the Upper Campus within the boundaries of the Camp Fretterd Military Reservation, to include a new Marine Corps Reserve Center (MCRC) and Maryland Department of Emergency Management building expansion. The proposed expansions require the existing water pumps at the booster pump station to be upgraded to supply the combined peak demands of both the MCRC and other Camp Fretterd facilities downstream of the booster station. The new booster pump station should be completed by November 2024.

**Cheltenham Youth Detention Center**

As the existing WWTP has been in operation since 1990 and uses obsolete technology, the facility will be upgraded to meet ENR limits. The proposed upgrades include the construction of a new membrane bioreactor (MBR) treatment plant and controls, a new office building, and miscellaneous improvements. Construction is currently underway.

Cheltenham water system improvement design is ongoing. This upgrade will enhance resiliency through the installation of a new well and rehabilitation of the existing elevated storage tank and distribution system to address water quality and stagnation issues. A new well will be drilled to replace the failing well. As part of this project, the cemetery's irrigation system will also be separated from the water system.





**145**

**Water Treatment  
Facilities**



**93**

**Wastewater Treatment  
Facilities**



**32**

**Pump Stations**



**1.42**

**Billion Gallons of  
Drinking Water  
Produced**



**5.98**

**Billion Gallons of  
Wastewater Treated**

### **Cunningham Falls Sewer Line Rehabilitation**

The sanitary sewer line on Route 77 in Thurmont, Maryland, was rehabilitated to decrease the inflow and infiltration flows entering the line. Route 77 was shut down between Catoctin Hollow Road and Pryor Road for approximately three months to install 26 new utility access points. Approximately 12,000 linear feet of sewer line were lined from the existing siphon chamber to the Town of Thurmont meter vault. The project was completed, and the road reopened before the Memorial Day weekend to allow the state park to accept campers and visitors.

### **Greenbrier State Park**

The sanitary sewer lines in Greenbrier State Park were surveyed using a camera system and then cleaned. The project was completed at the end of May in time to host Memorial Day visitors to the park. The data obtained in this effort will be utilized by engineers to design the collection system restoration project at the park.

### **Eastern Correctional Institution Biosolids Upgrade**

The biosolids systems at Eastern Correctional Institution (ECI) are being upgraded as the facility's belt presses are at the end of their expected functional life. Installation of the first belt filter press (BFP) replacement is complete. The new press produces higher solids content, reducing the cost of disposal. Installation of the second new unit is currently in progress.

### **Water Tower/Tank Rehabilitations**

Water towers at Martinak and Tuckahoe State Parks, along with the elevated water storage tank at Chesapeake College, were reconditioned and repainted in FY24.

### **Winning at the Annual Tri-Association Conference**

MES had an incredible year at the Annual Tri-Association Conference! In addition to the return of our fabulous Operations Challenge team, Motley Poo, MES scored big by winning the Chesapeake Water Environment Association Residuals and Biosolids Beauty Contest for best class B residuals and biosolids, submitted from Maryland Correctional Institution at Hagerstown Wastewater Treatment Plant, and the Water Environment Federation Burke Safety Award for the active and effective safety program at the Cambridge Wastewater Treatment Plant. Congratulations to all!

## Team Innovation

Water/Wastewater started a new group comprised of engineers and operators to look into technology in the industry and partner with universities to assist in proposal development and scaled pilots. Some of the partnerships and technologies reviewed in FY24 are listed below.

- **John Hopkins University, Department of Environmental Health and Engineering, Carbon Capture and Utilization from Treated Water Effluent in Water Resource Recovery Facilities** – Dr. Roggero Rossi submitted a decarbonization project proposal to the U.S. Department of Energy. The proposal is a collaborative effort between Johns Hopkins University and the National Renewable Energy Laboratory, with MES as a partner. It is currently under review, with a determination expected in fall 2024.
- **George Washington University, Department of Civil and Environmental Engineering** W/WW collaborated with Dr. Shen and her students to collect influent and effluent wastewater from Camp Fretterd and Charlotte Hall. The project focuses on finding bacteria and viruses in wastewater, surveying their removal, and assessing impacts on human health.
- **South Dakota School of Mines and Technology, Department of Civil and Environmental Engineering** – W/WW staff is collaborating with Dr. Ye Tao, to plan to send drinking water samples over the next four years. Dr. Shen (George Washington University) put W/WW staff into contact with Dr. Ye, whose project aims to study disinfection byproducts in drinking water.
- **Floating Solar** – W/WW staff is looking into utilizing floating solar panels at the Cambridge WWTP Lagoon. The group is working with D3Energy on this project.
- **ECI RO Reject, Electrocoagulation** – W/WW staff is working with Powell Water to investigate utilizing electrocoagulation to treat the RO Reject to use it in the cooling towers at the Cogen plant.
- **ECI RO Reject Blending** – The W/WW Engineering Division is currently evaluating the partial incremental blending of the RO reject with wastewater effluent. The feasibility of the concept plan was discussed with MDE, and following their agreement, MES tasked KCI Technologies to prepare the necessary piping modifications and the mass balance of the constituents in the final effluent. The piping modification and result of the mass balance analysis have been submitted to MDE for review and approval.



Pictured above, ECI Belt Filter Press, Tri-Association Conference Operations Challenge, and Camp Fretterd WWTP Upgrade



**Maryland**  
ENVIRONMENTAL  
SERVICE

## Contact us

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259 Najoles Road  
Millersville, MD 21108



# Maryland ENVIRONMENTAL SERVICE

259 Najoles Road  
Millersville, MD 21108

*(A Component Unit of the State of Maryland)*

Financial Statements and Reports Required  
for Audits Performed in Accordance with  
*Government Auditing Standards*

Fiscal Years Ended June 30, 2024 and 2023

(With Independent Auditor's Report Thereon)

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## Independent Auditor's Report

Board of Directors  
Maryland Environmental Service

### Report on the Audit of the Financial Statements

#### **Opinions**

We have audited the financial statements of each major fund and the fiduciary activities of the Maryland Environmental Service (the Service), a component unit of the State of Maryland, as of and for the years ended June 30, 2024 and 2023, and the related notes to the financial statements, which collectively comprise the Service's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of each major fund and the fiduciary activities of the Service, as of June 30, 2024 and 2023, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Basis for Opinions**

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Service and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### **Responsibilities of Management for the Financial Statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Service's ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and, therefore, is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Service's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Service's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings and certain internal control-related matters that we identified during the audit.

### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in net OPEB liability and related ratios, schedule of employer contributions OPEB, schedule of proportionate share of net pension liability and schedule of required employer pension plan contributions be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated October 30, 2024, on our consideration of the Service's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Service's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Service's internal control over financial reporting and compliance.

*RSM US LLP*

Gaithersburg, Maryland  
October 30, 2024

**Maryland Environmental Service**  
**Management's Discussion and Analysis (unaudited)**  
**June 30, 2024**  
*(In thousands except where noted)*

As the management of the Maryland Environmental Service (MES or the Service) we offer the following narrative overview and analysis of the financial activities of the Service for the fiscal years ended June 30, 2024 and 2023. This unaudited management discussion and analysis should be read in conjunction with the audited financial statements and the notes thereto, which follow this section.

The Service is an independent agency of the state of Maryland that provides environmental services to both the public and private sectors on a fee for service basis. Substantially all of the Service's revenue is derived from the delivery of technical and operational environmental services. The Service is organized into three basic groups: Administration, Environmental Operations (recycling and solid waste services), and Environmental Services. The Environmental Services group includes water and wastewater, dredging and environmental monitoring services. The Service also accounts for operations of the Midshore Regional Landfills (Midshore).

### **Financial Highlights**

The Service continues with another year of solid financial performance due to continuing and adding additional projects across the State of Maryland.

### **Environmental Dredging and Restoration**

Mid-Bay Island (Barren and James Islands). The Service continues to provide project management, planning, engineering and design, geotechnical, construction management, outreach and adaptive management and environmental support services to the Maryland Port Administration (MPA) and the U.S. Army Corps of Engineers (USACE) for the Mid-Bay Island Ecosystem Restoration Project (Mid-Bay). Mid-Bay will accommodate an estimated 90-95 million cubic yards of dredged material, providing a minimum of 30 years of dredged material capacity. Barren Island restoration construction started in March 2023, and will provide a minimum 72 acres of remote island habitat. James Island restoration will restore approximately 2,072 acres of remote island habitat, with construction planned to begin in 2025/2026.

Design, environmental and geotechnical field work continued for both James and Barren Islands through FY 24. The Service coordinated modifying the Barren Island Tidal Wetlands License for the phase II construction scheduled to begin in late fiscal year (FY) 2024, and facilitated Barren Island construction monitoring. The project team supported the design of James Island, including coordinating with agency stakeholders; participating in the valued engineering study and facilitating design meetings and workshops; providing preliminary plan sets for the James Island spillways, bulkhead, and personnel pier; and beginning facility design. The Service also assisted as the James Island project moved through the National Environmental Policy Act process and continued to manage the permit process. Other work included efforts to ensure continued community and stakeholder engagement, including Mid-Bay Workgroup meetings, seasonal newsletters, the annual public meeting and numerous one-on-one meetings that keep the agencies and the public involved and up to date with the project.

Cox Creek Dredged Material Containment Facility. The Service continues to operate the Cox Creek Dredged Material Containment Facility (DMCF) on behalf of the MPA. Additionally, the Service provided environmental, engineering, surveying and construction management services for the Cox Creek expansion and dike raising to Elevation +60 mean lower low Water (MLLW) in FY24. This project will increase the cumulative capacity at Cox Creek from 6.5 to 14.7 million cubic yards (MCY). Work in FY24 included compiling as-built documentation, design and permit modifications to facilitate raising the height of the cross dike to increase water surface elevation in the waterside cell. This will delay the need to utilize the upland cell for dredged material inflows once work is completed in the first half of FY25. The Service also continued designs for a floating weir discharge system, a cross-property access road between Cox Creek and the Sediment Technology and Reuse (STAR) Facility, and the design and permitting of two stockpile locations at the STAR Facility to be used for placement of surplus material that will be removed from the DMCF upland cell.

**Maryland Environmental Service**  
**Management's Discussion and Analysis (unaudited)**  
**June 30, 2024**  
*(In thousands except where noted)*

Masonville Dredged Material Containment Facility. The Service continues to operate the Masonville Dredged Material Containment Facility (DMCF) on behalf of the MPA. Additionally, the Service provided environmental, engineering, surveying and construction management services for raising of the dike system to Elevation +30 mean lower low Water (MLLW) in FY24. The service awarded the contract for the Masonville dike raising to elevation +30 MLLW in fall 2023. By the end of FY24, the contractor had installed 530 linear feet of storm drains and associated infrastructure; begun demolition and re-construction of two sand filters and associated swales; completed three sections of segmental block walls (2,400 linear feet total); and completed approximately 25% of the first six vertical feet of mechanically stabilized, engineered wall that cut into the existing dikes from elevation +12 to +18 MLLW. Construction is expected to be complete in FY26 and will increase the cumulative capacity of the Masonville DMCF from 6.0 to 8.2 MCY.

Poplar Island. The Service continues to manage the Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island (Poplar Island) on behalf of the project partners, the USACE and the MPA by managing daily operations of the site including construction, environmental monitoring and surveying. Federal maintenance inflow took place between December 2023 and March 2024, with approximately 1.48 million cubic yards of dredged material placed at Poplar Island. Sand recovery continued with material removed from Cell 7 and stockpiled for future construction use in Cell 1D. Sand material totaling 17,516 cubic yards (CY) has been stockpiled, with a cumulative total of 223,994 CY moved to Cell 1D.

Habitat efforts on Poplar Island continued to focus on incorporating over 20 years of monitoring results into future wetland design. Towards this effort, MES facilitated meetings and discussions related to the design of Cell 5CD, the next wetland to be developed. These focused meetings continued to address construction limitations pre- and post- FY24 inflow, design lessons learned, new agency input, desired habitat features and future upland-to-wetland connection. The Service continued to compile monitoring results and agency input to investigate and document how changing the project's restored wetland high marsh to low marsh ratio would impact resiliency to sea-level rise.

Sediment Technology and Reuse (STAR) Facility. The Service continued to provide support on behalf of MPA on the STAR Facility, including site operations and maintenance, remediation planning and submission of Remedial Action Plans to MDE for approval in FY24. In coordination with remediation activities, the site will be developed to become the future hub of processing dredged material from the Cox Creek DMCF for innovative and beneficial reuse. This year, the Service has drafted a Request for Information to be issued by MPA for respondents who are interested in establishing large-scale innovative reuse operations at the site. The Service's operations staff continue to support the facility by performing grounds maintenance, vegetation control, mowing, debris removal, grading, storm and groundwater management, infrastructure and electrical maintenance. The operations team also supports the water treatment system contractor with emergency repairs, and responds with temporary solutions to keep the treatment plant operational. The operations staff have provided continuous monitoring and maintenance of the perimeter fencing, engaged in daily communications and coordination with Maryland Transportation Authority (MDTA) Police, maintenance and repairs to lighting, fencing and a security camera network.

Deep Creek Lake. The Service successfully completed the Deep Creek Lake Arrowhead Cove Dredging Project on behalf of our client, Garrett County, in FY24. Dredging of approximately 11,000 cubic yards of sediment began in November 2023 and finished in January 2024. The dredged sediment was dewatered and transported to the Garrett County landfill for use as landfill cover. Site restoration activities in the cove were completed in spring 2024.

## **Environmental Operations**

In FY24, the Service composted 34 million pounds of food waste; returned 121K tons of recyclables to the market; recycled 462K gallons of used oil and 30K gallons of used antifreeze; processed 201K tons of organics into compost and mulch products; and generated carbon offsets equaling 12K metric tons of carbon emissions.

**Maryland Environmental Service**  
**Management's Discussion and Analysis (unaudited)**  
**June 30, 2024**  
*(In thousands except where noted)*

In FY24 the Service sold 119K cubic yards of organic compost along with 121K tons of residential recyclables. The sale of compost and recyclables generated \$13.1 million in revenue. The revenue generated was used to offset operational costs for each facility. Facilities include Montgomery County Materials Recovery Facility, Montgomery County Yard Trim and Compost Facility, Prince George's County Materials Recovery Facility, Prince George's County Organics Compost Facility and the Midshore Regional Recycling Program.

The Service continued with boiler conversion improvements at the Eastern Correctional Institution co-generation plant in Princess Anne, Maryland. This project is scheduled to finish by December FY25. The Service continued operations at three steam plants at the Central Maryland Correctional Facility in Sykesville, Maryland, the Maryland Correctional Institution at Hagerstown, and the Jessup Correctional Institution, where steam is used for heating, laundry and kitchen purposes.

The Service began our fourteenth year of operations at the Midshore II Regional Solid Waste Facility (MSII) in Ridgely, Maryland. This program provides comprehensive solid waste and recycling services to Talbot, Caroline, Queen Anne and Kent Counties. The service charges a tipping fee for each ton of waste that is landfill. This generated \$9.8M dollars in revenue that is wholly reserved for the operations of the landfill, and funding a residential recycling program. In FY24, The Service successfully negotiated a 12-year extension for the MSII with the Four County Partnership which, in turn, extended the original 80-year regional agreement to 92 years. This extension will allow the Service to fully utilize valuable landfill air space at MSII that otherwise would have been lost if we had held to the original contract term. The Service continued permitting efforts for a future Midshore III facility in Queen Anne's County.

The Service purchased depackaging equipment for the Prince George's County Organics Composting Facility. This \$655,826 purchase will allow the service to begin to accept packaged food scraps diverting that material from landfilling. The Service also added four new full-time positions at the Prince George's County Materials Recovery Facility to improve the quality control for commodities.

In FY 24, with just over four years of operations, the Services operations of the Maryland Department of Aging's Durable Medical Equipment Facility has recycled more than 42,997 individual items, including 4,095 wheelchairs, 1,594 hospital beds, 971 power wheelchairs and 614 patient lifts. The market value of this equipment is in excess of \$14,480,385 all of which is dedicated to being distributed at no cost to Marylanders who need this equipment.

### **Technical and Environmental Services**

After execution in early 2023, work on multiple new memorandums of understanding (MOUs) with State Highway Administration (SHA) began in FY24. Specifically, construction work occurred supporting the Highway Hydraulics Division (HHD) at SHA in spring 2024. Additionally, as requested drainage remediation work in SHA District 3 started with the beginning of FY24, and continued throughout the FY. This included over \$250,000 of new work. Following additional new MOUs for SHA Districts 4, 5 and 6, task orders for nearly \$1.8M were executed to support drainage remediation projects which include drainage system inspection, operation and maintenance of storm water facilities, control of vegetation and documentation to maintain the highway in an environmentally sound manner.

Thirty-four new tasks were signed under the \$5M MOU with Maryland Military for a variety of environmental management services totally over \$1M. Additionally, a new agreement with Maryland Department of Natural Resources (DNR) added three new full time MES positions to support work in the fisheries licensing and monitoring group. Technical and Environmental Services (TES) continued supporting St. Mary's County stormwater projects with a FY budget of \$60,000, and Prince George's County stormwater projects with a FY budget of over \$800,000. MES also continued various task for multiple divisions of Maryland Department of Environment (MDE) with projects exceeding \$250,000 over the FY.

**Maryland Environmental Service**  
**Management's Discussion and Analysis (unaudited)**  
**June 30, 2024**  
*(In thousands except where noted)*

Services supporting both the Maryland Energy Administration (MEA) and the University of Maryland (UMD) system continued to grow with new tasks totaling over \$7M for various services to MEA, and \$250,000 for stormwater support services at multiple UMD campuses.

**Water and Wastewater**

The Service continued the design work for the expansion of the Maryland Department of the Military's Camp Fretterd Water Main Replacement.

The Service has continued the construction of the Maryland Department of the Military's new Water Booster Pump Station at Camp Fretterd, with completion expected in calendar year 2024. Additionally, construction of the Wastewater Treatment Plant upgrade has commenced and is projected to be completed in calendar year 2025.

The Service anticipates starting the design services for the Maryland Department of Natural Resources' sewer collection system rehabilitation and water distribution system improvements at Greenbrier State Park in late 2024, and the water distribution system improvements at Fort Frederick in late 2024 or early 2025.

The Service continued the design work for the Maryland Department of Natural Resources' new Wastewater Treatment Plant and Water Treatment Plant at Swallow Falls State Park; its new Water Treatment Plant, water tower and sewer pump station improvements at Sandy Point State Park; its new Water Treatment Plant, Wastewater Treatment Plant, sewer collection system and water distribution system improvements at the New Germany State Park; its new Wastewater Treatment Plant at Point Lookout State Park; sewer collection system rehabilitation at Cunningham Falls Rt. 77; and water distribution system improvements at Elk Neck State Park.

The Service completed CCTV work for the Maryland Department of Natural Resources on the sewer collection system at Greenbrier State Park.

The Service completed rehabilitation work for the Maryland Department of Natural Resources on the elevated water storage tanks at Martinak State Park and Tuckahoe State Park.

The Service continues the construction of the Maryland Department of Natural Resources' new Wastewater Treatment Plant Upgrade at Elk Neck State Park and the sewer collection system rehabilitation and water distribution system improvements at Point Lookout State Park.

The sewer collection system rehabilitation at Rocky Gap State Park has been completed.

The Service has continued design work for the Maryland Department of Veterans and Military Families' new Water Treatment Plant at Charlotte Hall Veterans Home, with the design currently 65% complete.

The Service has commenced construction work for the Maryland Department of Juvenile Services' new Wastewater Treatment Plant and Water Treatment Plant improvements at the Cheltenham Youth Facility.

The Service has completed the construction of the Maryland Department of Juvenile Services' Victor Cullen Juvenile Center Wastewater Treatment Plant Upgrade. The project is complete.

The Service has completed the construction of the Maryland Department of General Services' Woodstock Job Corps Center Wastewater Treatment Plant Upgrade. The project is complete.

The Service initiated the refurbishment of the low-pressure sewer collection pump stations at the University of Maryland – Horn Point Laboratory on the eastern shore. This project is in the final stages of completion.

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The Service started the construction of the Maryland Department of Public Safety and Correctional Services' advanced Wastewater Treatment Plant Dewatering Biosolids improvements at Dorsey Run.

The Service started construction of the last phase of the ECI Wastewater Treatment Plant Upgrade consisting of the sludge facility upgrade. The construction of this phase started in 2022, and is expected to be completed later this calendar year.

During the year, the Service completed development of preliminary engineering report (PER) for the improvement of the pump stations, the headworks/wastewater screening systems and wastewater treatment process refinement has been completed. The project is currently in the program development phase, and application for partial funding by Bay Restoration Fund to MDE is pending.

The Service completed development of preliminary engineering report (PER) and recommendation of necessary improvements has been completed, and the project is in the program development, review and approval phase during this calendar year.

During the year, the Water and Wastewater Group added 15 new projects to its Operations Division.

### **Overview of Financial Statements**

The basic financial statement for the Service and Midshore is prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) as promulgated by the Governmental Accounting Standards Board (GASB). The Service's financial statements are reported as a special purpose business-type entity. This report includes three basic financial statements: the statement of net position; the statement of revenue, expenses and changes in net position; and the statement of cash flows for each major enterprise fund.

The condensed statements of net position present the financial position of the service as of June 30, 2024, 2023 and 2022. They provide information about the nature and the amount of resources (assets), plus deferred outflows (as applicable), obligations (liabilities), plus deferred inflows (as applicable) and net position.

The statements of revenue, expenses and changes in net position present the changes in net position over the course of the years ended June 30, 2024, 2023 and 2022. The change in net position may be useful in assessing whether the financial position improved or deteriorated for the year.

The statements of cash flows present the cash activities segregated by four major cash flow categories: operating activities, noncapital financing activities, capital and related financing activities, and investing activities. These statements may be useful in determining the changes in liquidity and in understanding how cash and cash equivalents were used during the years ended June 30, 2024, 2023 and 2022.

### **Fiduciary Fund**

Fiduciary funds are used to account for resources held for the benefit of parties outside the Service. These activities are excluded from the business-type activities because the resources of these funds are restricted and cannot be used to finance the Service's operations. The Service's fiduciary funds include the OPEB Trust Fund.

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The fiduciary activities are reported in the Other Postemployment Benefit Fiduciary Statements of Plan Net Position and the Statements of Changes in Fiduciary Net Position.

- The Statements of Fiduciary Net Position present a point-in-time snapshot of the amounts the other postemployment benefit (OPEB) plan has accumulated in net position to pay for future benefits and any liabilities that are owed as of the date of the statements.
- The Statements of Changes in Fiduciary Net Position present the additions and deductions for the fiscal years. Major sources of additions are contributions and net investment income. Major sources of deductions include benefit payments. These statements present how the net position changed from the prior fiscal year.

The fiduciary fund financial statements can be found on pages 28-29 of this report.

**Notes to the Basic Financial Statements**

The notes to the basic financial statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements.

The basic financial statements can be found on pages 22-56 of this report.

**Required Supplementary Information**

In addition to the basic financial statements and accompanying notes, this report also presents certain Required Supplementary Information concerning the Service's defined benefit pension plan and OPEB plan for its employees.

The required supplementary information can be found on pages 57-59 of this report.

**Financial Analysis**

The purpose of the discussion and analysis that follows is to provide an understanding of the financial performance and activities of the Service as of and for the fiscal year ended June 30, 2024, with 2023 and 2022 for comparative purposes. As required supplementary information, the accompanying analysis of financial information should be used in conjunction with the financial statements and related notes thereto included elsewhere to assess the overall financial condition and reported operating results of the Service.

**Maryland Environmental Service**  
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*(In thousands except where noted)*

The following tables present condensed financial information about the Service and Midshore's net position as of June 30.

Maryland Environmental Service:

**Condensed Statement of Net Position**  
*(Expressed in Thousands)*

	2024	2023	(Restated) 2022
Current and other assets	\$ 115,895	\$ 117,904	\$ 93,263
Capital assets and right to use leased assets	18,714	19,632	19,082
Total assets	134,609	137,536	112,345
Deferred Outflows related to Pensions and OPEB	1,420	1,155	2,186
Long-term debt	3,977	5,142	5,192
Other liabilities	99,065	101,894	76,741
Total liabilities	103,042	107,036	81,933
Deferred Inflows related to Pensions and OPEB	2,270	1,612	3,172
Net position:			
Net investment in capital assets	14,737	14,490	13,902
Restricted	126	124	124
Unrestricted	15,854	15,429	15,400
Total net position	\$ 30,717	\$ 30,043	\$ 29,426

Midshore Regional Landfill:

**Condensed Statement of Net Position**  
*(Expressed in Thousands)*

	2024	2023	2022
Current and other assets	\$ 21,734	\$ 19,502	\$ 16,892
Capital assets	26,857	27,244	29,308
Total assets	48,591	46,746	46,200
Bonds payable	17,298	19,363	21,326
Other liabilities	14,735	13,123	10,099
Total liabilities	32,033	32,486	31,425
Deferred inflows related to debt refunding	134	169	192
Net position:			
Net investment in capital assets	9,438	7,898	8,603
Restricted	1,891	1,804	1,738
Unrestricted	5,095	4,389	4,242
Total net position	\$ 16,424	\$ 14,091	\$ 14,583

**Maryland Environmental Service**  
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*(In thousands except where noted)*

The statements of net position present the financial position of the Service. Net position represents the difference between the amount of resources (assets), plus deferred outflows (as applicable), obligations (liabilities), plus deferred inflows (as applicable) and net position. Over time, increases and decreases in net position provide an indicator of improving or deteriorating financial position.

Total net position for the Service increased \$674 in 2024. Net investment in capital assets increased \$247 from the net of depreciation, acquisition of equipment and payment of debt. The remaining components, restricted and unrestricted net position of \$15,980, represent funds available for future expenditures.

Total net position for the Service increased \$617 in 2023. Net investment in capital assets increased \$588 from the net of depreciation, acquisition of equipment and payment of debt. The remaining components, restricted and unrestricted net position of \$15,553, represent funds available for future expenditures.

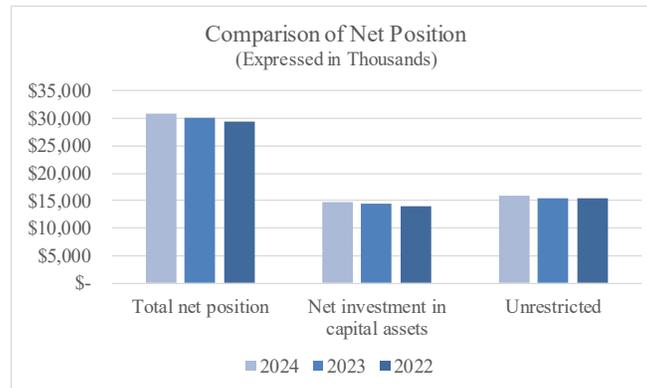
Over time, increases and decreases in net position provide an indicator of improving or deteriorating financial position.

Total net position for Midshore increased \$2,333 in 2024, which is related to the excess of revenues over expenses. Net investment in capital assets increased \$1,540 from the net of depreciation, acquisition of equipment and payment of debt. The remaining components, restricted and unrestricted net position of \$6,986 represent funds available for future expenditures.

Total net position for Midshore decreased \$492 in 2023, which is related to the excess of expenses over revenues. Net investment in capital assets decreased \$705 from the net of depreciation, acquisition of equipment and payment of debt. The remaining components, restricted and unrestricted net position of \$6,193 represent funds available for future expenditures.

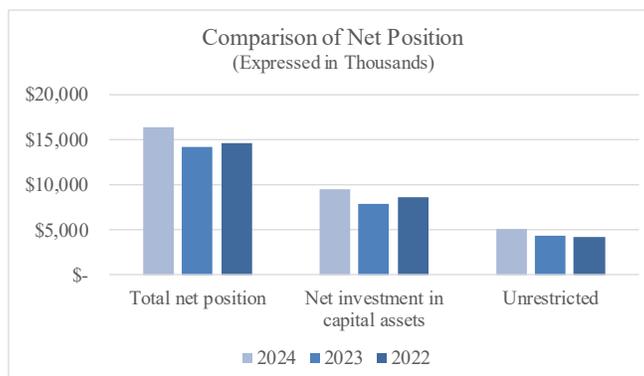
A comparison of years ended June 30, 2024, 2023 and 2022, for the Service and for Midshore are presented graphically below:

Maryland Environmental Service:



**Maryland Environmental Service**  
**Management's Discussion and Analysis (unaudited)**  
**June 30, 2024**  
*(In thousands except where noted)*

Midshore Regional Landfill:



The following table presents condensed financial information about the Service and Midshore revenue, expenses and changes in net position for the years ended June 30, 2024, 2023 and 2022.

Maryland Environmental Service:

**Condensed Changes in Net Position**  
*(Expressed in Thousands)*

	2024	2023	(Restated) 2022
Total operating revenue	\$ 215,065	\$ 198,872	\$ 166,474
Operating expenses			
Salaries and benefits	74,308	65,675	58,645
Other	131,264	120,150	95,886
General and administrative	13,446	12,849	13,071
Total operating expenses	219,018	198,674	167,602
Operating (loss) income	(3,953)	198	(1,128)
Non-operating revenue, net	4,627	419	70
Change in net position	674	617	(1,058)
Net position, beginning of year	30,043	29,426	30,484
Net position, end of year	\$ 30,717	\$ 30,043	\$ 29,426

**Maryland Environmental Service**  
**Management's Discussion and Analysis (unaudited)**  
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Midshore Regional Landfill:

**Condensed Changes in Net Position**  
*(Expressed in Thousands)*

	2024	2023	2022
Total operating revenue	\$ 9,842	\$ 9,781	\$ 8,840
Operating expenses			
Salaries and benefits	2,073	2,039	1,723
Other	5,433	7,684	6,242
General and administrative	575	583	515
Total operating expenses	8,081	10,306	8,480
Operating income (loss)	1,761	(525)	360
Non-operating revenue (expense), net	572	33	(561)
Change in net position	2,333	(492)	(201)
Net position, beginning of year	14,091	14,583	14,784
Net position, end of year	\$ 16,424	\$ 14,091	\$ 14,583

The following table presents operating revenue by activity for the years ended June 30, 2024, 2023 and 2022:

**Revenue by Activity**  
*(Expressed in Thousands)*

	2024	2023	2022
Environmental dredging & restoration	\$ 47,552	\$ 44,636	\$ 40,658
Water/wastewater operations	35,714	36,647	32,987
Recycling	35,840	36,633	26,772
Solid waste management	21,041	19,525	18,775
Energy co-generation	24,017	23,109	16,763
Environmental engineering	17,653	6,075	5,309
Environmental monitoring	25,520	24,181	18,610
Hazardous waste treatment	7,237	5,533	3,959
Grants	3,120	2,425	2,613
Other	491	108	28
Total revenue	\$ 218,185	\$ 198,872	\$ 166,474

The total increase in operating revenue for the year ended June 30, 2024, was \$19,313, compared to the year ended June 30, 2023. The change represents an increase of 9.7% in operating revenue. There was an increase in Environmental Dredging & Restoration of \$2,916, an increase in Environmental Engineering of \$11,578 and an increase in Solid Waste Management of \$1,516.

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The increase in Environmental Dredging and Restoration Group's revenue is largely attributable to The Mid-Bay Island (Barren and James Island) project. Activities began in the last quarter of FY23, with substantial work in FY24, and has an estimated completion date of October 2024. This included project and construction management, adaptive management, engineering and design support, geotechnical borings and analysis and turbidity monitoring.

The increase in Environmental Engineering is due to the boiler conversion improvements at the Eastern Correctional Institution co-generation plant in Princess Anne, Maryland. This latest phase of the conversion process included modifications to the internal boiler and boiler room to include removing equipment no longer needed and the installation of equipment that will receive natural gas. This project is scheduled to finish by December FY25.

The increased in Solid Waste Management was due to the continued operations at three steam plants at the Central Maryland Correctional Facility in Sykesville, Maryland, the Maryland Correctional Institution at Hagerstown, and the Jessup Correctional Institution, where steam is used for heating, laundry and kitchen purposes.

The total increase in operating revenue for the year ended June 30, 2023, was \$32,398, compared to the year ended June 30, 2022. The change represents an increase of 19.5% in operating revenue. There was an increase in Environmental Dredging & Restoration of \$3,978, an increase in Energy Generation of \$6,346, an increase in Environmental Monitoring of \$5,571, an increase in Recycling of \$9,861 and an increase in Water/Wastewater Operations of \$3,660.

The increase in Environmental Dredging and Restoration Group's revenue is largely attributable to The Masonville Base Dike Widening Project that consisted of placing over 300,000 cubic yards of fill material, 177,000 placed within fiscal year June 30, 2023, along the interior of the dike, decommissioning and demolition of the two existing spillway weir structures and placement of 125,000 square yards of high strength geotextile material. The Base Dike Widening was necessary to lay the foundation for the next phase of dike raising. The project started in January 2022 and was completed in June 2023 with most of the work occurring in fiscal year June 30, 2023.

The increase in Energy Generation is driven by utility costs. Billing for the natural gas pipeline began shortly after its completion in November 2021. Thus, the pipeline capacity costs for fiscal year June 30, 2022, only covered a portion of the fiscal year, whereas these pipeline capacity costs were borne for the entirety of fiscal year June 30, 2023. Another factor was that the unit costs of both primary (wood chips) and secondary fuel (#2 oil) increased. Most notably, the unit cost of wood chips increased by nearly double about halfway through fiscal year June 30, 2022.

The increase in Water/Wastewater was due to MES overseeing the operation, maintenance and improvements of the Baltimore City Back River plant, the largest in the state, to ensure that Baltimore City meets objectives that include protecting public and environmental health. On June 10, 2022, MDE and Baltimore City leadership reached an agreement that charts a course for continued progress at the Back River WWTP.

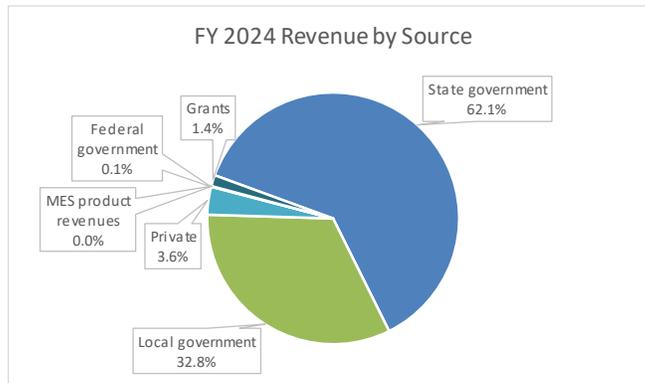
**Maryland Environmental Service  
Management’s Discussion and Analysis (unaudited)  
June 30, 2024  
(In thousands except where noted)**

The following table presents revenue by source for the years ended June 30, 2024, 2023, and 2022:

**Revenue by Source  
(Expressed in Thousands)**

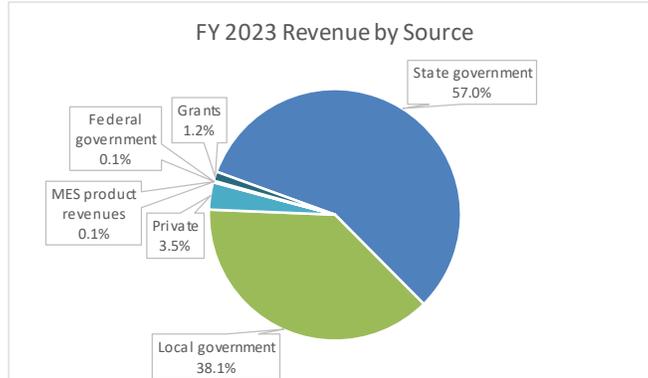
	2024	2023	2022
State government	\$ 135,422	\$ 113,301	\$ 96,162
Local government	71,467	75,830	61,282
Private	7,936	6,988	6,061
Federal government	222	218	193
MES product revenues	18	110	163
Grants	3,120	2,425	2,613
<b>Total Revenue</b>	<b>\$ 218,185</b>	<b>\$ 198,872</b>	<b>\$ 166,474</b>

The following graph presents the Service’s revenue by source for the year ended June 30, 2024:

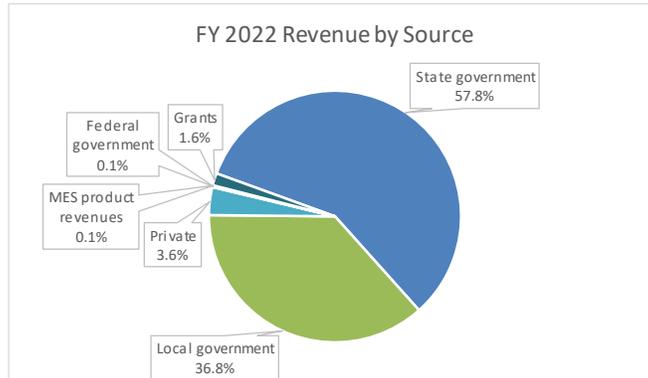


**Maryland Environmental Service  
Management's Discussion and Analysis (unaudited)  
June 30, 2024  
(In thousands except where noted)**

The following graph presents revenue by source for the year ended June 30, 2023:



The following graph presents revenue by source for the year ended June 30, 2022:



State government revenues increased by \$22,121, while Local government revenues decreased by \$4,363 in 2024.

The main factor for the increase in state revenues was due to the Mid-Bay Island project and construction management, adaptive management, engineering and design support, geotechnical borings and analysis and turbidity monitoring. The boiler conversion improvements at the Eastern Correctional Institution co-generation plant that included modifications to the internal boiler and boiler room. And, the continued operations at three steam plants at the Central Maryland Correctional Facility in Sykesville, Maryland, the Maryland Correctional Institution at Hagerstown, and the Jessup Correctional Institution.

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The main reason for the decrease in local government was the completion of the operations and maintenance of the Back River Wastewater Treatment Plant in the City of Baltimore, bringing the facility back into compliance with its permit.

State government and Local government revenues increased by \$17,139 and \$14,548, respectively, in 2023.

The main factor for the increase in state revenues was due to the Masonville Base Dike Widening Project, that consisted of placing over 300,000 cubic yards of fill material, 177,000 placed within FY2023, along the interior of the dike, decommissioning and demolition of the two existing spillway weir structures, and placement of 125,000 square yards of high strength geotextile material. The Base Dike Widening was necessary to lay the foundation for the next phase of dike raising. Also, the State Highway Administration has substantially increased the number of both stormwater construction and drainage remediation projects assigned to MES.

### **Operating Expenses**

For both the Service and Midshore, operating expenses are predominantly related to those classified as cost of goods and services, general and administrative and depreciation on capital assets.

### **Operating Income**

Service operating income reported in 2024 was (\$833), compared to an operating income of \$198 in 2023, an increase of \$1,326. The increase was mainly due to the increase in operating expenses.

Service operating income reported in 2023 was \$198, compared to an operating loss of (\$1,128) in 2022, a decrease of \$1,031. The decrease was mainly due to the increase in Revenues.

Midshore operating income reported in 2024 was \$1,791, compared to operating loss of (\$525) in 2023, an increase of \$2,316. This increase was driven primarily by the effect of a lower closure post-closure estimate compared to the updated closure-postclosure cost estimate done in 2023.

Midshore operating loss reported in 2023 was (\$525), compared to operating income of \$360 in 2022, a decrease of \$885. This decrease was driven primarily by an updated closure-postclosure cost estimate.

### **Non-Operating Revenue (Expenses), Net**

Service non-operating revenue (expense), net increased \$1,088 to \$1,507 in 2024. Non-operating items primarily include interest income and interest expense. For 2024, investment income increased by \$997.

Service non-operating revenue (expense), net increased \$349 to \$419 in 2023. Non-operating items primarily include interest income and interest expense. For 2023, investment income increased by \$667.

Midshore non-operating revenue (expense), net increased \$509 to \$542 in 2024. Non-operating items primarily include interest income and interest expense. For 2024, interest income increased by \$369, and interest expense decreased by \$132.

Midshore non-operating revenue (expense), net increased \$594 to \$33 in 2023. Non-operating items primarily include interest income and interest expense. For 2023, interest income increased by \$9, and interest expense decreased by \$212.

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*(In thousands except where noted)*

**Grants**

Service grants in 2024 totaled \$3,120, compared to \$2,425 in 2023 and \$2,613 in 2022. The main reason for the \$695 increase in 2024, compared to 2023 was the installation of the Maryland Mesonet tower, and the replacement of old diesel engines for more cleaner trucks.

**Capital Assets and Right to Use Leased Assets**

The following tables present the Service's capital assets and right to use leased assets, net of depreciation as of June 30, 2024, 2023 and 2022, and capital expenditures for the years ended June 30, 2024, 2023 and 2022:

**Capital Assets, Net of Depreciation**  
*(Expressed in Thousands)*

	2024	2023	2022
Land and improvements	\$ 4,262	\$ 4,262	\$ 4,262
Buildings and improvements	4,573	4,737	4,903
Machinery and equipment	6,042	5,845	5,682
Total	\$ 14,877	\$ 14,844	\$ 14,847

**Right to Use Leased Assets, Net of Amortization**  
*(Expressed in Thousands)*

	2024	2023	(Restated) 2022
Land	\$ 551	\$ 584	\$ 616
Subscription based software	3,286	4,204	3,619
Total	\$ 3,837	\$ 4,788	\$ 4,235

**Capital Expenditures**  
*(Expressed in Thousands)*

	2024	2023	2022
Autos and trucks	\$ 1,591	\$ 1,178	\$ 210
Land	-	349	-
Tools/machinery/equipment	8	-	-
Total	\$ 1,599	\$ 1,527	\$ 210

As of June 30, 2024, the carrying value of capital assets and right to use leased assets, net of depreciation and amortization was \$18,718, a decrease of \$914 from 2023. The decrease is comprised of capital additions of \$1,599 that was offset by depreciation and amortization of \$2,517. The capital additions for the year were fleet vehicle replacements, construction/farm equipment and equipment tools.

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**June 30, 2024**  
*(In thousands except where noted)*

As of June 30, 2023, the carrying value of capital assets and right to use leased assets, net of depreciation and amortization was \$19,632, an increase of \$550 from 2022. The increase is comprised of capital additions of \$1,527 and additional right of use leased assets of \$1,285 that was offset by depreciation and amortization of \$2,158. The capital additions for the year were fleet vehicle replacements, construction/farm equipment and IT Equipment. Additional right of use leased assets were subscription-based information technology arrangements.

The following tables present Midshore's capital assets, net of depreciation as of June 30, 2024, 2023 and 2022, and capital expenditures for the years ended June 30, 2024, 2023 and 2022:

**Capital Assets, Net of Depreciation**  
*(Expressed in Thousands)*

	2024	2023	2022
Land and improvements	\$ 1,690	\$ 1,690	\$ 1,690
Buildings and improvements	22,150	23,956	25,777
Construction in progress	331	85	66
Machinery and equipment	2,686	1,513	1,775
Total	\$ 26,857	\$ 27,244	\$ 29,308

**Capital Expenditures**  
*(Expressed in Thousands)*

	2024	2023	2022
Construction in progress	\$ 246	\$ 19	\$ 9
Tools/machinery/equipment	1,753	181	969
Leasehold improvements	-	-	-
Total	\$ 1,999	\$ 200	\$ 978

As of June 30, 2024, the carrying value of capital assets, net of depreciation was \$26,857, a decrease of \$387 from 2023. The decrease is comprised of capital additions of \$1,999 and depreciation of \$2,381.

As of June 30, 2023, the carrying value of capital assets, net of depreciation was \$27,244, a decrease of \$2,064 from 2022. The decrease is comprised of capital additions of \$200 and depreciation of \$2,264.

Additional information on the Service's capital assets can be found in Note 3 to the financial statements.

**Maryland Environmental Service**  
**Management's Discussion and Analysis (unaudited)**  
**June 30, 2024**  
*(In thousands except where noted)*

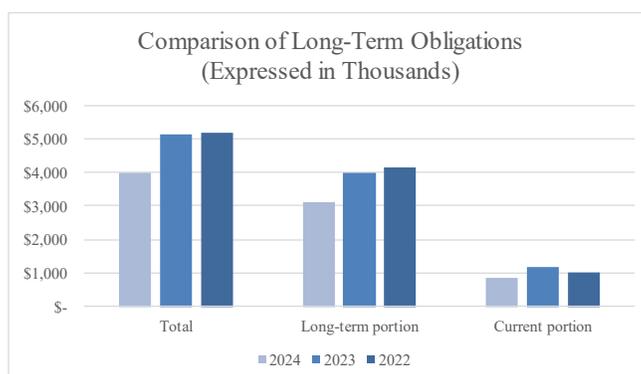
**Long-Term Obligations**

The following table and graph present outstanding long-term obligations as of June 30, 2024, 2023 and 2022:

Maryland Environmental Service:

**Long-Term Obligations**  
*(Expressed in Thousands)*

	2024	2023	(Restated) 2022
Lease liabilities	\$ 3,899	\$ 4,611	\$ 4,235
Bonds and note payable	78	531	957
<b>Total</b>	<b>\$ 3,977</b>	<b>\$ 5,142</b>	<b>\$ 5,192</b>

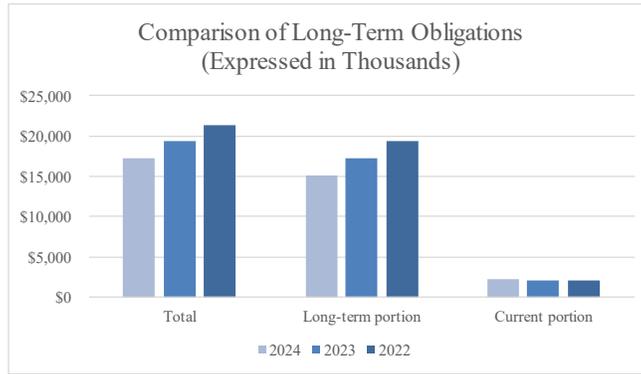


**Maryland Environmental Service  
Management’s Discussion and Analysis (unaudited)  
June 30, 2024  
(In thousands except where noted)**

Midshore Regional Landfill:

**Bonds Outstanding  
(Expressed in Thousands)**

	2024	2023	2022
Bonds payable	\$ 17,298	\$ 19,363	\$ 21,326
<b>Total</b>	<b>\$ 17,298</b>	<b>\$ 19,363</b>	<b>\$ 21,326</b>



As of June 30, 2024, the Service’s long-term obligations decreased \$1,165 to \$3,977 as a result of \$1,165 of principal payments.

As of June 30, 2023, the Service’s long-term obligations decreased \$50 to \$5,142 as a result of \$1,285 new lease liabilities offset by \$1,335 of principal payments.

As of June 30, 2024, Midshore long-term obligations was \$17,298 representing a decrease in outstanding principal of \$2,065.

As of June 30, 2023, Midshore long-term obligations was \$19,363 representing a decrease in outstanding principal of \$1,963.

Additional information on the Service’s debt activity can be found in Note 8 to the financial statements.

**Requests for information:** To obtain further information regarding current and future programs, prior year financials and contact information for the Service’s employees, please refer to our website at: [www.menv.com](http://www.menv.com).

**MARYLAND ENVIRONMENTAL SERVICE  
FINANCIAL STATEMENTS**

<i>Maryland Environmental Service</i>		
<i>Statements of Net Position</i>		
<i>As of June 30, 2024 and 2023</i>		
<i>(Expressed in Thousands)</i>		
	2024	2023
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 8,360	\$ 12,641
Investments	54,059	59,688
Accounts receivable (net of allowance of \$50)	44,891	34,698
Unbilled project costs accrued	2,408	3,674
Other	21	220
Total current assets	109,739	110,921
Non-current assets:		
Restricted cash	110	110
Due from project participants	5,747	6,873
Net OPEB asset	299	-
Right to use leased assets, net of amortization	3,837	4,788
Capital assets, net of accumulated depreciation:		
Land	4,262	4,262
Buildings and improvements	4,573	4,737
Machinery and equipment	6,042	5,845
Total capital assets	14,877	14,844
Total non-current assets	24,870	26,615
Total assets	134,609	137,536
Deferred outflows:		
Deferred outflows related to OPEB	839	705
Deferred outflows related to pensions	581	450
Total deferred outflows	1,420	1,155
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	33,679	27,709
Compensated absences	3,700	3,337
Due to Midshore and other projects	18,065	15,915
Advances from project participants	35,192	45,782
Lease liabilities	783	713
Note payable	78	453
Accrued workers' compensation costs	421	429
Total current liabilities	91,918	94,338
Non-current liabilities:		
Advances from project participants	1,807	1,106
Lease liabilities, less current portion	3,116	3,898
Note payable, less current portion	-	78
Accrued workers' compensation costs	2,383	2,428
Compensated absences	1,656	1,859
Net OPEB liability	-	1,253
Net pension liability	2,162	2,076
Total non-current liabilities	11,124	12,698
Total liabilities	103,042	107,036
Deferred inflows		
Deferred inflows related to OPEB	1,838	1,088
Deferred inflows related to pensions	432	524
Total deferred inflows	2,270	1,612
<b>Net Position</b>		
Net investment in capital assets	14,737	14,490
Restricted net position	126	124
Unrestricted net position	15,854	15,429
<b>Total net position</b>	<b>\$ 30,717</b>	<b>\$ 30,043</b>

The accompanying notes are an integral part of these financial statements.

<i>Maryland Environmental Service</i>			
<i>Statements of Revenue, Expenses and Change in Net Position</i>			
<i>For the years ended June 30, 2024 and 2023</i>			
<i>(Expressed in Thousands)</i>			
	2024	2023	
<b>Operating revenue:</b>			
Charges for services	\$ 215,065	\$ 196,447	
<b>Total operating revenue</b>	<b>215,065</b>	<b>196,447</b>	
<b>Operating expenses:</b>			
Salaries and benefits	74,308	65,675	
Contractual services	44,473	51,919	
Technical fees	15,813	12,598	
Utilities	13,073	15,370	
Repairs and maintenance	4,702	5,728	
Materials and supplies	9,855	12,009	
Land, structures and equipment	39,632	19,776	
Depreciation and amortization	2,517	2,158	
General and administrative	13,446	12,849	
Other	1,199	592	
<b>Total operating expenses</b>	<b>219,018</b>	<b>198,674</b>	
<b>Operating (loss) income</b>	<b>(3,953)</b>	<b>(2,227)</b>	
<b>Non-operating revenue (expenses):</b>			
Grants	3,120	2,425	
Investment income	1,668	671	
Interest expense	(228)	(250)	
Miscellaneous income (expense)	67	(2)	
<b>Non-operating revenue, net</b>	<b>4,627</b>	<b>2,844</b>	
<b>Change in net position</b>	<b>674</b>	<b>617</b>	
Net position, beginning of year	30,043	29,426	
<b>Net position, end of year</b>	<b>\$ 30,717</b>	<b>\$ 30,043</b>	

The accompanying notes are an integral part of these financial statements.

<i>Maryland Environmental Service</i>		
<i>Statements of Cash Flows</i>		
<i>For the years ended June 30, 2024 and 2023</i>		
<i>(Expressed in Thousands)</i>		
	2024	2023
<b>Cash Flows From Operating Activities</b>		
Receipts from customers	\$ 197,375	\$ 225,337
Payments to suppliers	(133,874)	(129,071)
Payments to employees	(75,274)	(66,595)
Net cash (used in) provided by operating activities	(11,773)	29,671
<b>Cash Flows From Noncapital Financing Activities</b>		
Grant receipts	3,120	2,425
Net cash provided by noncapital financing activities	3,120	2,425
<b>Cash Flows From Capital and Related Financing Activities</b>		
Purchases of capital assets	(1,599)	(1,527)
Principal maturities	(1,165)	(1,335)
Interest paid	(228)	(250)
Proceeds from sale of capital assets	67	27
Net cash used in capital and related financing activities	(2,925)	(3,085)
<b>Cash Flows From Investing Activities</b>		
Purchases of investments	(216,222)	(186,000)
Sales and maturities of investments	221,851	145,374
Interest and dividends	1,668	671
Net cash provided by (used in) investing activities	7,297	(39,955)
Net changes in cash and cash equivalents	(4,281)	(10,944)
Cash and cash equivalents - beginning of the year	12,751	23,695
Cash and cash equivalents - end of the year	\$ 8,470	\$ 12,751
<b>Reconciliation of operating income (loss) to net cash provided by operating activities:</b>		
Operating (loss) income	\$ (3,953)	\$ 198
Adjustments to reconcile operating (loss) income to net cash (used in) provided by operating activities:		
Depreciation and amortization expense	2,517	2,158
Loss on disposal of capital assets	-	77
Change in non-cash operations:		
Receivables, net	(8,927)	791
Other assets	199	528
Accounts and other payables	6,130	(1,276)
Due from and advances from project participants	(8,763)	25,597
Net pension liability	(137)	(267)
Net OPEB liability	(936)	(718)
Net change due to/from Midshore	2,150	2,894
Accrued workers compensation	(53)	(311)
Net cash (used in) provided by operating activities	\$ (11,773)	\$ 29,671
<b>Noncash Capital and Financing Activities</b>		
Lease obligations incurred for new right to use leased assets	\$ -	\$ 1,285

The accompanying notes are an integral part of these financial statements.

**Midshore Regional Landfill**  
**Statements of Net Position**  
**As of June 30, 2024 and 2023**  
**(Expressed in Thousands)**

	2024	2023
<b>Assets</b>		
Current assets:		
Due from MES	\$ 18,065	\$ 15,915
Accounts receivable	607	707
Total current assets	18,672	16,622
Non-current assets:		
Restricted investments	3,062	2,880
Capital assets not depreciated	2,021	1,775
Capital assets being depreciated, net	24,836	25,469
Total capital assets	26,857	27,244
Total non-current assets	29,919	30,124
Total assets	48,591	46,746
<b>Liabilities</b>		
Current liabilities:		
Accounts payable and accrued expenses	2,010	2,520
Advances from project participants	528	483
Bonds outstanding	2,186	2,056
Total current liabilities	4,724	5,059
Non-current liabilities:		
Bonds outstanding	15,112	17,307
Accrued landfill closure and postclosure care costs	12,197	10,120
Total non-current liabilities	27,309	27,427
Total liabilities	32,033	32,486
Deferred inflows:		
Deferred inflows related to debt refunding	134	169
Total deferred inflows	134	169
<b>Net Position</b>		
Net investments in capital assets	9,438	7,898
Restricted net position	1,891	1,804
Unrestricted net position	5,095	4,389
Total net position	\$ 16,424	\$ 14,091

The accompanying notes are an integral part of these financial statements.

**Midshore Regional Landfill**  
**Statements of Revenue, Expenses and Change in Net Position**  
**For the years ended June 30, 2024 and 2023**  
**(Expressed in Thousands)**

	2024	2023
<b>Operating revenue:</b>		
Charges for services	\$ 9,842	\$ 9,781
<b>Total operating revenue</b>	<b>9,842</b>	<b>9,781</b>
<b>Operating expenses:</b>		
Salaries and benefits	2,073	2,039
Contractual services	506	415
Technical fees	67	78
Utilities	47	54
Operations and maintenance	711	722
Materials and supplies	278	151
Land, structures and equipment	243	311
Depreciation	2,381	2,264
Closure/post closure	1,124	3,611
General and administrative	575	583
Other	76	78
<b>Total operating expenses</b>	<b>8,081</b>	<b>10,306</b>
<b>Operating income (loss)</b>	<b>1,761</b>	<b>(525)</b>
<b>Non-operating revenue (expenses):</b>		
Operating grants	30	-
Interest income	922	553
Interest expense	(389)	(521)
Miscellaneous income	9	1
<b>Non-operating revenue (expenses), net</b>	<b>572</b>	<b>33</b>
<b>Change in net position</b>	<b>2,333</b>	<b>(492)</b>
Net position, beginning of year	14,091	14,583
<b>Net position, end of year</b>	<b>\$ 16,424</b>	<b>\$ 14,091</b>

The accompanying notes are an integral part of these financial statements.

**Midshore Regional Landfill**  
**Statements of Cash Flows**  
**For the years ended June 30, 2024 and 2023**  
**(Expressed in Thousands)**

	2024	2023
<b>Cash Flows From Operating Activities</b>		
Receipts from customers	\$ 9,987	\$ 9,577
Payments to suppliers	(4,210)	(5,873)
Payments to employees	(2,073)	(2,039)
Net cash provided by operating activities	3,704	1,665
<b>Cash Flows From Noncapital Financing Activities</b>		
Grant receipts	30	-
Net cash provided by noncapital financing activities	30	-
<b>Cash Flows From Capital and Related Financing Activities</b>		
Purchases of capital assets	(1,999)	(200)
Proceeds from sale of capital assets	14	-
Principal maturities	(1,868)	(1,797)
Interest paid	(621)	(710)
Net cash used in capital and related financing activities	(4,474)	(2,707)
<b>Cash Flows From Investing Activities</b>		
Purchases of investments	(182)	-
Proceeds from sale of investments	-	489
Interest and dividends	922	553
Net cash provided by investing activities	740	1,042
Net changes in cash and cash equivalents	-	-
<b>Cash and cash equivalents - beginning of the year</b>	-	-
<b>Cash and cash equivalents - end of the year</b>	\$ -	\$ -
<b>Reconciliation of operating income (loss) to net cash provided by operating activities:</b>		
Operating income (loss)	\$ 1,761	\$ (525)
Adjustments to reconcile operating income (loss) to net cash provided by operating activities:		
Depreciation expense	2,381	2,264
Change in non-cash operations:		
Accounts receivables	100	(204)
Accounts and other payables	(465)	246
Due from MES	(2,150)	(2,894)
Accrued landfill closure	2,077	2,778
Net cash provided by operating activities	\$ 3,704	\$ 1,665

The accompanying notes are an integral part of these financial statements.

*Maryland Environmental Service  
Other Postemployment Benefit Plan  
Statements of Fiduciary Net Position  
As of June 30, 2024 and 2023  
(Expressed in Thousands)*

	2024	2023
<b>Assets</b>		
Cash and short-term investments	\$ 1,089	\$ 760
Investments:		
Equities	5,082	3,871
Fixed income	2,331	2,057
Total investments	7,413	5,928
Total assets	8,502	6,688
<b>Fiduciary net position held in trust for other postemployment benefits</b>	<b>\$ 8,502</b>	<b>\$ 6,688</b>

The accompanying notes are an integral part of these financial statements.

*Maryland Environmental Service  
Other Postemployment Benefit Plan  
Statements of Changes in Fiduciary Net Position  
For the years ended June 30, 2024 and 2023  
(Expressed in Thousands)*

	2024	2023
<b>Additions</b>		
Employer contributions	\$ 1,118	\$ 1,136
Investment Income:		
Net appreciation in fair value of investments	798	304
Interests and dividends	183	183
Total investment income	981	487
Less investment expense	17	21
Net investment income	964	466
Total additions	2,082	1,602
<b>Deductions</b>		
Benefits paid	268	241
<b>Net change</b>	1,814	1,361
<b>Fiduciary net position held in trust for other postemployment benefits</b>		
Net position, beginning of year	6,688	5,327
<b>Net position, end of year</b>	<b>\$ 8,502</b>	<b>\$ 6,688</b>

The accompanying notes are an integral part of these financial statements.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(1) Organization and Summary of Significant Accounting Policies**

***(a) Reporting Entity***

The General Assembly created Maryland Environmental Service (MES or the Service) in 1970 as an agency of the Maryland State Department of Natural Resources. Major activities of the Service include the provision of water supply and wastewater treatment, sewage sludge management, recycling assistance, solid waste management and resource recovery from waste and dredging services. Services are provided to State of Maryland owned facilities, local communities, political subdivisions, Federal facilities and the private sector.

Pursuant to Chapter 196 of the 1993 Acts of the Maryland General Assembly, effective July 1, 1993, the Service was established as an instrumentality of the State and a public corporation independent of the Department of Natural Resources. Chapter 196 also expanded the Service's Board of Directors from seven to nine members; provided for the appointment of the Deputy Director, Secretary and Treasurer by the Director, with the approval of the Governor; provided for the appointment of the remaining Board members by the Governor, with the advice and consent of the Senate; exempted the Service from most provisions of the State Procurement Law; established the retirement and health benefits available for certain employees of the Service; authorized the Service to create a new personnel system; exempted the Service from most provisions of the State Merit System Law effective January 1, 1995; authorized the Service to create private corporations; authorized the Service to exercise the corporate powers granted Maryland corporations under the Maryland General Corporation Law; and made other changes to the law governing the Service. For financial reporting purposes, the Service is considered a discrete component unit of the State of Maryland.

The Service operates public and private water and wastewater treatment plants throughout the State of Maryland. Licensed and certified personnel operate and maintain the facilities. Projects range in size from basic pumping stations to advanced wastewater treatment facilities. Capabilities include laboratory testing, operations oversight and management, operations, maintenance and plant supervision.

In the area of solid waste management, the Service operates state-of-the-art waste facilities, including municipal solid waste and rubble landfills, incinerators, resource reclamation facilities in Montgomery and Prince George's Counties.

The Service has the capabilities to provide site analysis, planning, engineering, design and construction services, and the resources to finance and build water, wastewater and solid waste projects. The Service operates the Hart-Miller Island, Poplar Island, Cox Creek and Masonville Dredge Material Disposal Facilities, as well as provides technical support for the Maryland Department of Transportation Maryland Port Administration.

The Service produces and sells yard waste compost for Montgomery and Prince George's Counties under the registered trademark Leafgro®.

The Service also reports a second major enterprise fund for the purpose to account for operations of the Midshore Regional Landfills. The landfills, located in Talbot County, Maryland and Caroline County, Maryland, are operated for the benefit of the governments of Caroline, Kent, Queen Anne's and Talbot Counties. The counties have the ultimate responsibility for payment of operating expenses and debt of the facilities.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(1) Organization and Summary of Significant Accounting Policies (continued)**

**(a) Reporting Entity (continued)**

Certain employees of the Service are eligible to participate in the Retiree Medical Reimbursement Plan (OPEB Plan), which is a single employer defined benefit plan administered by the Service. The plan is considered part of the Service's financial reporting entity as a fiduciary fund. A separate report for the OPEB Plan is prepared in compliance with Governmental Accounting Standards Board (GASB) Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*.

**(b) Measurement Focus, Basis of Accounting, and Financial Statement Presentation**

The accompanying financial statements present the financial position and results of operations of all of the Service, Midshore and OPEB Plan activities. The financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to governmental entities. GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. Under these standards, the Service utilizes the accrual basis of accounting and the economic measurement focus in preparing its financial statements wherein revenues are recognized when earned and expenses are recognized when incurred.

The GASB requires that resources be classified into three categories of net position. Net position represents the residual interest in the Service's assets plus deferred outflows (as applicable) of resources less liabilities plus deferred inflows (as applicable) of resources and consist of net investment in capital assets, restricted and unrestricted, as follows:

*Net investment in capital assets:* The net investment in capital assets component of net position consists of capital assets, net of accumulated depreciation and right to use lease assets, net of amortization reduced by the outstanding balances of bonds, mortgages, notes, lease liabilities or other borrowings that are attributable to the acquisition, construction or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction or improvement of those assets or related debt are included in this component of net position.

*Restricted:* Restricted net position represents the portion of net position that is reported as restricted when there are external third-party limitations (statutory, contractual or bond covenant) on its use. The Service's restricted net position includes Grumman Sinking Fund for the purpose of creating reserves for, and financing, capital improvements to the related systems. Midshore's restricted net position includes the Closure Fund, Liability Fund and Construction Fund. They are, respectively, to provide for general maintenance, compliance monitoring and other costs to be incurred after the Mid-Shore II Landfill has been closed, to settle any claims against the town of Easton related to the landfill, pay for design and construction costs of any corrective measures required on the landfill by MDE or EPA, and pay costs to defend any claims related to the landfill, and to finance costs of construction project/activities.

*Unrestricted:* Unrestricted net position represents the portion of net position that is not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by the Board or may be otherwise limited by contractual agreements with outside parties.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(1) Organization and Summary of Significant Accounting Policies (continued)**

**(c) Revenue Recognition**

The Service distinguishes operating revenue and expenses from nonoperating items. Operating revenue and expenses generally result from providing services and producing and delivering goods in connection with ongoing operations. The principal operating revenue of the Service are charges to customers for services. Operating expenses include the cost of services, administrative expenses, and depreciation on capital assets. All revenue and expenses not meeting this definition are reported as non-operating revenue and expenses. Interest income is recognized as non-operating revenue as earned. Grants and similar items are recognized as soon as all eligibility requirements imposed by the provider have been met.

**(d) Cash and Cash Equivalents**

The Service's cash is considered to be cash on hand and demand deposits and highly liquid interest investments with maturities of three months or less from the date of acquisition.

**(e) Investments**

The Service's investments are reported at fair value using quoted market price or the best available estimate thereof. GASB Statement No. 72, *Fair Value Measurement and Application*, defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

**(f) Capital Assets**

Capital assets are stated at cost and consist primarily of Service-owned assets related to projects operated for participants. Certain contracts contain provisions whereby the participants have the option to purchase certain equipment during the terms of the contracts.

The Service defines capital assets as assets with an initial, individual cost of more than \$5,000 (amount not rounded to thousands) and an estimated useful life in excess of one year. The costs of normal maintenance and repairs that do not add to the value of the assets or materially extend an asset's life are not capitalized.

Capital assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impaired assets that will no longer be used are reported at the lower of carrying value or fair value. Impairment losses on capital assets that will continue to be used are measured using the method that best reflects the diminished service utility of the capital asset. Impairment of capital assets with physical damage are measured using a restoration cost approach, an approach that uses the estimated cost to restore the capital asset to identify the portion of the historical cost of the capital asset that should be written off. The Service did not record any impairment charges as of June 30, 2024 and 2023, as there were no indicators of impairment.

Depreciation is computed using the straight-line method over the estimated useful lives of the capital assets, which range from 3 to 40 years. For purposes of the statements of revenue, expenses and change in net position, the depreciation on assets, which are not directly related to projects, are included in general and administrative expenses and product costs.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(1) Organization and Summary of Significant Accounting Policies (continued)**

**(f) Capital Assets (continued)**

Certain contracts contain provisions whereby the Service purchases equipment or constructs assets for clients. These expenses are recorded as land, structures and equipment in the statements of revenue, expenses and change in net position and are not capitalized.

**(g) Receivables and Payables**

During the course of its operations, the Service has numerous transactions with Midshore Regional Landfill to manage operations, provide services, construct assets and service debt. To the extent that such transactions have not been paid or received as of June 30, the balances of interfund amounts receivable or payable have been reflected accordingly.

All receivables are shown net of an allowance for uncollectible accounts. Accounts receivable in excess of 90 days that are not deemed collectible are written off against the allowance for uncollectible accounts.

The Service payables include project related expenses and accruals, personnel related costs and pass-through product revenues owed to some of its major clients.

**(h) Unbilled Project Costs**

The Service records unbilled project costs as the timing difference related to the payroll and accounts payable accrual.

**(i) Due To/From Project Participants**

The Service accounts for major projects that cannot reflect accumulated profits as a due to/from at the close of fiscal year to the due to/from project participants' account.

**(j) Right to Use Assets**

The Service has recorded right to use lease assets as a result of implementing GASB 87, *Leases*, and GASB 96, *Subscription-Based Information Technology Arrangements*. The right to use assets are initially measured at an amount equal to the initial measurement of the related lease liability, plus any lease payments made prior to the lease term, less lease incentives, and plus ancillary charges necessary to place the lease into service. The right to use assets are amortized on a straight-line basis over the life of the related lease.

**(k) Compensated Absences**

Employees of the Service earn vacation benefits based on time in service. The rights to such benefits are vested and recorded as earned. Sick leave is also earned and accumulated by employees based on time in service. However, such benefits do not vest and are not paid or recorded unless sickness causes employees to be absent.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(1) Organization and Summary of Significant Accounting Policies (continued)**

***(l) Accrued Workers' Compensation Costs***

The accrued workers' compensation costs, applicable to the Service's coverage discussed in Note 13, are recorded as a short-term and long-term liability. As these costs are recoverable under the Service's contracts, a receivable from project participants has been recorded to reflect the future funding of this liability. The cost of providing claims servicing and claims payments is allocated by charging a "premium" to the Service based on a percentage of estimated current payroll or based on average loss experience.

***(m) Pensions and Other Postemployment Benefits.***

Certain employees of the Service are members of the Maryland State Retirement and Pension System. Employees are members of the Employees Retirement System of the State of Maryland (ERS). ERS is part of the State of Maryland Retirement and Pension System, which is considered a multiple employer cost sharing plan.

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of ERS and additions to/deductions from ERS' fiduciary net position have been determined on the same basis as they are reported by ERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable, in accordance with the benefit terms. Investments are reported at fair value.

The Service provides certain postemployment benefits to eligible employees. These benefits are paid out of the Service's Retiree Medical Reimbursement Plan (the Plan), a single employer defined benefit plan. It is offered to eligible employees not covered under the State Retiree Plan. To be eligible, employees must have 30 years of service with the Service, or retire at age 60 or over and have 16 years of employment with the Service. Retired employees, or their spouses ages 60 or over can be reimbursed up to \$3,600 per calendar year for medical expenses. The net other postemployments benefits (OPEB) liability is calculated as the OPEB liability, as actuarially determined, less the Plan's net position. An OPEB asset is recorded when the Plan's net position is greater than the OPEB liability.

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s), and so will not be recognized as an outflow of resources (expense/expenditure) until then. The Service's deferred outflows consist of changes to pension and OPEB expenses. Deferred outflows of resources relating to pension and OPEB are described in Notes 10 and 11, respectively.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s), and so will not be recognized as an inflow of resources (revenue) until that time. The Service's deferred inflows consisted of items relating to pension and OPEB, as described in Notes 10 and 11, respectively.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(1) Organization and Summary of Significant Accounting Policies (continued)**

***(n) Advances from Project Participants***

Advances from project participants are received by the Service as provided for under contracts, and are generally for working capital purposes. Such advances are recorded as a liability and are generally refunded to project participants at the end of the related contracts.

***(o) Long Term Obligations and Bond Discount***

Long term debt and other long-term obligations, including long-term contractual lease payments, are reported as liabilities in the applicable statements of net position. Bond payable is reported net of bond discount, which is recognized during the current period. Bond discount is amortized to interest expense using the effective interest method over the contractual term of the bonds.

***(p) Arbitrage***

The U.S. Treasury has issued regulations on calculating the rebate due to the Federal government on arbitrage profits and determining compliance with the arbitrage rebate provisions of the Tax Reform Act of 1986. Arbitrage profits arise when the Service temporarily invests the proceeds of tax-exempt debt in securities with higher yields. The Service treats the estimated rebate payable as a reduction of any interest income earned. As of June 30, 2024, there was no arbitrage rebate liabilities.

***(q) Use of Estimates***

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows, liabilities and deferred inflows and disclosures of contingencies at the date the financial statements, and the reported amounts of revenues and expenses during the period. Actual results could differ from these estimates.

***(r) Reclassifications***

Certain reclassifications were made to the comparative fiscal year 2023 amounts to conform to the fiscal year 2024 presentation in the basic financial statements. Reclassifications did not impact ending net position or change in net position.

**(2) Cash and Cash Equivalents and Investments**

Custodial credit risk is the risk that in the event of a bank failure, the Service's deposits may not be returned to it. State statutes require that deposits and investments with financial institutions be fully collateralized. The investment policies for all of the Service's funds are the same as those of the state of Maryland Treasurer (Finance and Procurement Article 6-222). The Service's cash is considered to be cash on hand and demand deposits. Cash and cash equivalents totaled \$8,360 and \$12,641 as of June 30, 2024 and 2023, respectively. Included, as cash equivalents for financial statement presentation, were certain overnight investments of \$18,434 and \$15,474, offset by \$10,074 and \$2,833 of outstanding checks as of June 30, 2024 and 2023, respectively. Investments are valued at fair value, which is based on quoted market prices.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(2) Cash and Cash Equivalents and Investments (continued)**

The State Finance and Procurement Article Section 6-222 defines the types of securities authorized as appropriate investments for the Service and the conditions for making investment transactions. Investment transactions may be conducted only through qualified depositories, certified dealers or directly with issuers of the investment securities. The National Resource Article Section 3-126 authorizes the investment in obligation as described in the State Finance and Procurement Article Section 6-222.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Service's policy for managing its exposure to fair value loss arising from increasing interest rates is to comply with the State. The Service intends to hold investments until maturity to reduce adverse effect of changes in interest rates.

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Service's policy for reducing its exposure to credit risk is to comply with the State, which states that investments with financial institutions must be fully collateralized.

The Service categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

As of June 30, 2024, the Service had the following investments and quality ratings:

Investment Type	Ratings by Organization Moody's	Fair Value (In Thousands)	Investment Maturities (in Years)					
			Less than				More than	
			1	1-5	6-10	11-15	15	
US Treasuries	Aaa	\$ 54,059	\$ 54,059	\$ -	\$ -	\$ -	\$ -	\$ -

As of June 30, 2023, the Service had the following investments and quality ratings:

Investment Type	Ratings by Organization Moody's	Fair Value (In Thousands)	Investment Maturities (in Years)					
			Less than				More than	
			1	1-5	6-10	11-15	15	
US Treasuries	Aaa	\$ 59,688	\$ 59,688	\$ -	\$ -	\$ -	\$ -	\$ -

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(2) Cash and Cash Equivalents and Investments (continued)**

As of June 30, 2024, the Midshore Regional Landfill had the following investments and quality ratings:

Investment Type	Ratings by Organization Moody's	Fair Value (In Thousands)	Investment Maturities (in Years)					
			Less than					More than
			1	1-5	6-10	11-15	15	
US Treasuries	Aaa	\$ 910	\$ 910	\$ -	\$ -	\$ -	\$ -	\$ -
Money Market Funds	Aaa	2,152	2,152	-	-	-	-	-
		<u>\$ 3,062</u>	<u>\$ 3,062</u>	<u>\$ -</u>				

As of June 30, 2023, the Midshore Regional Landfill had the following investments and quality ratings:

Investment Type	Ratings by Organization Moody's	Fair Value (In Thousands)	Investment Maturities (in Years)					
			Less than					More than
			1	1-5	6-10	11-15	15	
US Treasuries	Aaa	\$ 864	\$ 864	\$ -	\$ -	\$ -	\$ -	\$ -
Money Market Funds	Aaa	2,016	2,016	-	-	-	-	-
		<u>\$ 2,880</u>	<u>\$ 2,880</u>	<u>\$ -</u>				

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. The Service's policy for reducing this risk of loss is to comply with State regulation.

The issuance of debt is authorized by National Resource Article Section 3-112. Each Bond issue includes a Tax and Section 148 Certificate, which specifies the investment type and yield requirements.

Restricted cash and investments include deposits and investments that relate to the bond indentures and restricted project funds, which are not available to pay the general operating expenses of the Service.

The restricted cash and investments are comprised of the following funds as of June 30:

Maryland Environmental Service:

	<u>2024</u>	<u>2023</u>
Service held:		
Project restricted	<u>\$ 110</u>	<u>\$ 110</u>

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(2) Cash and Cash Equivalents and Investments (continued)**

Midshore Regional Landfill:

	2024	2023
Trustee held:		
Closure Fund	\$ 861	\$ 820
Construction Funds	1,291	1,196
Service held:		
Liability Fund	910	864
	\$ 3,062	\$ 2,880

OPEB Trust:

All investments are valued at fair value. Fair value for investments is determined using quoted market value of securities. Assets held in trust are held in a custodial account for which the custodian makes no investment decisions. PNC Institutional Investments is the advisor that provides investment management services. The Service follows the asset allocation policy adopted by the state of Maryland for the Post-Retirement Health Benefits Trust (the Plan).

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Plan's investment policy does not limit investment maturities as a means of managing its exposure to fair value losses arising from increases in interest rates.

For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan would not be able to recover the value of its investments that are in the possession of an outside party. Investment securities are exposed to custodial risk if the securities are uninsured and are held by either: (a) the counterparty, or (b) the counterparty's trust department or agent but not in the Plan's name.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(2) Cash and Cash Equivalents and Investments (continued)**

The Service has the following recurring fair value measurements as of June 30, 2024 and 2023:

- All investments consist of equities and mutual funds and are valued using quoted market prices (Level 1 inputs)

Concentration of credit risk is the risk of loss attributed to the magnitude of the Plan's investment in the securities of a single issuer. The Plan's investment policy follows the asset allocation policy adopted by the State of Maryland for the Post-Retirement Health Benefits Trust and does not further limit its investment options. The Plan's investments consist of equity, fixed income securities and money market funds and follow the allocation policy. As of June 30, 2024, the Plan had the following investments that represented 5% or more of total investments:

<b>Issue</b>	<b>Fair Value</b>	<b>Percentage</b>
iShares CORE S&P 500 ETF	\$ 2,875	39%
Vanguard Total Bond Market Index Fund	1,391	19%
iShares CORE S&P MID-CAP ETF	602	8%
iShares CORE S&P SMALL-CAP ETF	505	7%
iShares MSCI EAFE EFT	394	5%
DODGE & COX Incle Fund	337	5%

As of June 30, 2023, the Plan had the following investments that represented 5% or more of total investments:

<b>Issue</b>	<b>Fair Value</b>	<b>Percentage</b>
iShares CORE S&P 500 ETF	\$ 2,170	37%
Vanguard Total Bond Market Index Fund	1,240	21%
iShares CORE S&P MID-CAP ETF	503	8%
iShares CORE S&P SMALL-CAP ETF	436	7%
iShares MSCI USA EFT	313	5%
iShares MSCI EAFE EFT	299	5%
DODGE & COX Incle Fund	272	5%

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The investment policy for the Plan does not limit investments. As of June 30, 2024 the Plan's investments consisted of equity and fixed income securities and are not rated.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(3) Capital Assets**

The tables below represent the changes in capital:

Maryland Environmental Service – Year Ended June 30, 2024:

	Balance 06/30/23	Additions	Deletions	Transfers In/Out	Balance 06/30/24
Capital assets, not depreciated					
Land and improvements	\$ 4,262	\$ -	\$ -	\$ -	\$ 4,262
Total capital assets not depreciated	4,262	-	-	-	4,262
Capital assets, being depreciated					
Buildings and improvements	11,312	-	(200)	-	11,112
Equipment	18,441	1,599	(1,244)	(428)	18,368
Total capital assets being depreciated	29,753	1,599	(1,444)	(428)	29,480
Less: accumulated depreciation for					
Buildings and improvements	6,575	164	(200)	-	6,539
Equipment	12,596	1,402	(1,244)	(428)	12,326
Total accumulated depreciation	19,171	1,566	(1,444)	(428)	18,865
Total capital assets, net	\$ 14,844	\$ 33	\$ -	\$ -	\$ 14,877

Maryland Environmental Service – Year Ended June 30, 2023:

	Balance 06/30/22	Additions	Deletions	Transfers In/Out	Balance 06/30/23
Capital assets, not depreciated					
Land and improvements	\$ 4,262	\$ -	\$ -	\$ -	\$ 4,262
Construction in progress	-	-	-	-	-
Total capital assets not depreciated	4,262	-	-	-	4,262
Capital assets, being depreciated					
Buildings and improvements	11,561	-	(249)	-	11,312
Equipment	18,720	1,527	(1,806)	-	18,441
Total capital assets being depreciated	30,281	1,527	(2,055)	-	29,753
Less: accumulated depreciation for					
Buildings and improvements	6,659	165	(249)	-	6,575
Equipment	13,037	1,261	(1,702)	-	12,596
Total accumulated depreciation	19,696	1,426	(1,951)	-	19,171
Total capital assets, net	\$ 14,847	\$ 101	\$ (104)	\$ -	\$ 14,844

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
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**(3) Capital Assets (continued)**

Midshore Regional Landfill – Year Ended June 30, 2024:

	Balance 06/30/23	Additions	Deletions	Transfers In/Out	Balance 06/30/24
Capital assets, not depreciated					
Land and improvements	\$ 1,690	\$ -	\$ -	\$ -	\$ 1,690
Construction in progress	85	246	-	-	331
Total capital assets, not depreciated	<u>1,775</u>	<u>246</u>	<u>-</u>	<u>-</u>	<u>2,021</u>
Capital assets, being depreciated					
Buildings and improvements	49,579	-	-	-	49,579
Equipment	4,933	1,753	(64)	428	7,050
Total capital assets being depreciated	<u>54,512</u>	<u>1,753</u>	<u>(64)</u>	<u>428</u>	<u>56,629</u>
Less: accumulated depreciation for					
Buildings and improvements	25,623	1,806	-	-	27,429
Equipment	3,420	575	(59)	428	4,364
Total accumulated depreciation	<u>29,043</u>	<u>2,381</u>	<u>(59)</u>	<u>428</u>	<u>31,793</u>
Total capital assets, net	<u>\$ 27,244</u>	<u>\$ (382)</u>	<u>\$ (5)</u>	<u>\$ -</u>	<u>\$ 26,857</u>

Midshore Regional Landfill – Year Ended June 30, 2023:

	Balance 06/30/22	Additions	Deletions	Transfers In/Out	Balance 06/30/23
Capital assets, not depreciated					
Land and improvements	\$ 1,690	\$ -	\$ -	\$ -	\$ 1,690
Construction in progress	66	19	-	-	85
Total capital assets, not depreciated	<u>1,756</u>	<u>19</u>	<u>-</u>	<u>-</u>	<u>1,775</u>
Capital assets, being depreciated					
Buildings and improvements	49,579	-	-	-	49,579
Equipment	5,235	181	(483)	-	4,933
Total capital assets being depreciated	<u>54,814</u>	<u>181</u>	<u>(483)</u>	<u>-</u>	<u>54,512</u>
Less: accumulated depreciation for					
Buildings and improvements	23,802	1,821	-	-	25,623
Equipment	3,460	443	(483)	-	3,420
Total accumulated depreciation	<u>27,262</u>	<u>2,264</u>	<u>(483)</u>	<u>-</u>	<u>29,043</u>
Total capital assets, net	<u>\$ 29,308</u>	<u>\$ (2,064)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 27,244</u>

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(4) Right to Use Leased Assets**

The tables below represent the changes in right to use lease assets:

Maryland Environmental Service – Year Ended June 30, 2024:

	Balance 06/30/23	Additions	Deletions	Transfers In/Out	Balance 06/30/24
Right to use leased assets, being depreciated					
Land	\$ 616	\$ -	\$ -	\$ -	\$ 616
Subscription based software	5,364	-	-	-	5,364
Total capital assets being depreciated	<u>5,980</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5,980</u>
Less: accumulated amortization for					
Land	32	33	-	-	65
Subscription based software	1,160	918	-	-	2,078
Total accumulated depreciation	<u>1,192</u>	<u>951</u>	<u>-</u>	<u>-</u>	<u>2,143</u>
Total right to use leased assets, net	<u>\$ 4,788</u>	<u>\$ (951)</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 3,837</u>

Maryland Environmental Service – Year Ended June 30, 2023:

	(Restated) Balance 06/30/22	Additions	Deletions	Transfers In/Out	Balance 06/30/23
Right to use leased assets, being depreciated					
Land	\$ 616	\$ -	\$ -	\$ -	\$ 616
Subscription based software	4,079	1,285	-	-	5,364
Total capital assets being depreciated	<u>4,695</u>	<u>1,285</u>	<u>-</u>	<u>-</u>	<u>5,980</u>
Less: accumulated amortization for					
Land	-	32	-	-	32
Subscription based software	460	700	-	-	1,160
Total accumulated depreciation	<u>460</u>	<u>732</u>	<u>-</u>	<u>-</u>	<u>1,192</u>
Total right to use leased assets, net	<u>\$ 4,235</u>	<u>\$ 553</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 4,788</u>

**(5) Construction Commitments**

The Service entered into construction contracts with unrelated parties in the amount of \$331 for the construction of Midshore Cell # 3. As of June 30, 2024, all commitments had been incurred.

**(6) Concentrations of Credit**

The Service derived approximately 62% and 57% of its revenue in the years ended June 30, 2024 and 2023, respectively, from providing services to the state of Maryland.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(7) Lease Liabilities**

The Service reports its leasing arrangements that qualify as other than short-term leases at the present value of their future minimum lease payments as of the date of its inception.

The Service leases office space under a non-cancellable agreement requiring monthly payments expected to range from \$4 to \$6 through August 2041. The Service also leases third-party technology requiring annual payments ranging from \$547 to \$839 through June 2029. The lease liabilities were measured at a discount rate of 5%. Associated with these leases, the Service has recorded right to use assets with net book values of \$3,837 and \$4,788 at June 30, 2024 and 2023, respectively.

The future minimum lease obligations and the net present value of these minimum lease payments as of June 30, 2024, were as follows:

<b>Years ending June 30:</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2025	\$ 783	\$ 198	\$ 981
2026	854	159	1,013
2027	596	115	711
2028	566	84	650
2029	595	55	650
Thereafter	505	181	686
<b>Total</b>	<b>\$ 3,899</b>	<b>\$ 792</b>	<b>\$ 4,691</b>

**(8) Debt**

Maryland Environmental Service:

On April 5, 2003, the Service received note proceeds of \$5.5 million from a lending institution. The note agreement requires monthly payments of \$39 through August 2024, including interest at 6.98%.

Future minimum payments for the note payable as of June 30, 2024, were due as follows:

<b>Years ending June 30:</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2025	\$ 78	\$ 1	\$ 79
<b>Total</b>	<b>\$ 78</b>	<b>\$ 1</b>	<b>\$ 79</b>

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(8) Debt (continued)**

Midshore Regional Landfill:

Bonds outstanding (including current portion and premium amounts) consists of the following as of June 30:

	2024	2023
Midshore II Regional Landfill Project Revenue Bonds, Series 2020 \$9,805 (plus bond premium of \$1,700); interest at 3.0% to 4.0% paid semiannually on May 1 and November 1; due in annual installments beginning 2021 through 2030 in varying amounts from \$815 to \$1,160.	\$ 8,679	\$ 9,678
Midshore II Regional Landfill Project Revenue Bonds, Series 2018 \$7,850 (plus bond premium of \$793); interest at 3.0% to 5.0% paid semiannually on May 1 and November 1; due in annual installments beginning 2018 through 2030 in varying amounts from \$500 to \$1,260.	6,202	6,849
Midshore II Regional Landfill Project Revenue Bonds, Series 2014 \$2,940 ; interest at 3.1% paid semiannually on May 1 and November 1; due in annual installments beginning 2014 through 2029 in varying amounts from \$247 to \$369	1,734	2,050
Hobbs Road Landfill Closure Project Water Quality Bond, Series 2011A; April 2011 \$1,087; interest at 1.1% paid semiannually in February and August; due in annual installments beginning 2013 through 2031 in varying amounts from \$90 to \$111.	683	786
	17,298	19,363
Total	17,298	19,363
Less: current portion	2,186	2,056
Long-term portion of debt	\$ 15,112	\$ 17,307

Future minimum payments for bonds payable as of June 30, 2024, were due as follows:

Years ending June 30:	Total	Principal	Interest
2025	\$ 2,493	\$ 2,161	\$ 548
2026	2,489	2,275	468
2027	2,487	2,390	385
2028	2,488	2,511	299
2029	2,490	2,636	208
2030-2032	4,991	5,325	143
Total	\$ 17,438	\$ 17,298	\$ 2,051

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(8) Debt (continued)**

The Maryland Environmental Service Water Quality Bond, Series 2011A, was issued in connection with the closure and capping of the Hobbs Road Landfill. The bond constitutes special obligations of the Service, and are payable solely from revenues (tipping fees and supplemental fees) from the project pledged by the Service under the bond indentures. Neither the state of Maryland, nor any political subdivision, nor the Service, shall be obligated to pay the bonds or the interest thereon, except from such project revenue. In the event of any participating county's failure to pay any amounts required under the related Waste Service Agreement when due, the Service may accept Acceptable Waste generated outside the Midshore Counties. In addition, the State Intercept Provision (Md. Natural Resources Article Section 3-108(b)) provides that if a Midshore County fails to pay the Service within 60 days of the due date as established by contract, all State funds, or that portion of them required, relating to the income tax, the tax on racing, the recordation tax, the tax on amusements and the license tax which would otherwise be distributed to such Midshore County by the Comptroller of Maryland shall be paid directly to the Service.

The Regional Landfill Project Revenue Bond, 2014 Series, was issued in connection with the construction of a new landfill cell to increase the capacity of the Midshore II Regional Landfill. The bond constitutes a special obligation of the Service, and is payable solely from revenues (tipping fees and supplemental fees) from the project pledged by the Service under Indenture of Trust. Neither the state of Maryland, nor any political subdivision, nor the Service, shall be obligated to pay the bond or the interest thereon, except from such project revenues. In the event of any participating county's failure to pay any amounts required under the related Waste Disposal Service Agreement when due, the Service may accept Acceptable Waste generated outside the Midshore Counties. In addition, the State Intercept Provision, (Md. NR Code Ann., Section 3-108(b)), provides that if any local government fails to pay the Service within 60 days of the due date as established by contract, all State funds, or that portion of them required, relating to the income tax, the tax on racing, the recordation tax, the tax on amusements and the license tax which would otherwise be distributed to such local government, including a Midshore County, by the Comptroller of Maryland shall be paid directly to the Service.

MES issued \$8.9 million in tax-exempt bonds in July of 2018 for the purpose of financing the cost of the planning, design, construction, equipping and operation of Midshore II Regional Landfill Project Cell #3, located in Caroline County, Maryland, to improve or increase the disposal capacity of the Midshore II Landfill. The Service entered into separate Waste Disposal Service Agreements in 2009 with County

Commissioners of Caroline County, County Commissioners of Queen Anne's County, County Commissioners of Kent County and Talbot County, Maryland. Each of the Midshore Counties has agreed to deliver all its Acceptable Waste for disposal at the Regional Landfill, in each year throughout the term of the Series 2018 Bonds and to pay certain disposal fees. The Service Agreements executed by each Midshore County contain substantially similar terms and conditions. Each Midshore County will pay the Service a per-ton disposal fee (or Tipping Fee) for Acceptable Waste deliveries to the Regional Landfill by the Midshore County. The Service will also charge a Tipping Fee for disposal of Acceptable Waste deliveries to the Regional Landfill by persons other than the Midshore Counties. If in any year the Tipping Fees charged to all users of the Midshore II Landfill, other operating revenues of the Midshore II Landfill including, but not limited to, charges for services or use of property or equipment, proceeds from the sale of recovered materials and revenues from gas, steam or electricity and interest earnings on money held by the Service in the Special Purpose Fund are insufficient to pay the total costs, defined in the Service Agreements and including, but not limited to, the costs of financing and operating the Regional Landfill, then each County will pay the Service a fee equal to its share based on its population compared to the population of all Midshore Counties of such deficiency.

**Maryland Environmental Service**  
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**(8) Debt (continued)**

Midshore issued \$9.8 million in tax-exempt bonds in September 2020, with a premium of \$1.7 million, for the purpose of refunding Midshore's outstanding revenue bond 2011 series. This funding, along with \$1.1 million in debt service reserve fund sources, was used to defease the 2011 Series, and the Service has removed the liability from its accounts.

The Service entered into separate Waste Disposal Service Agreements in 2009 with County Commissioners of Caroline County, County Commissioners of Queen Anne's County, County Commissioners of Kent County and Talbot County, Maryland. Each of the Midshore Counties has agreed to deliver all its Acceptable Waste for disposal at the Regional Landfill, in each year throughout the term of the Series 2020 Bonds and to pay certain disposal fees. The Midshore counties have agree to pay a Tipping Fee for each ton of acceptable waste delivered to the Service by or for the account of the Midshore Counties. The Tipping Fee might be adjusted by the Service. The Midshore Counties have also agreed in each fiscal year to pay a supplemental fee equal to the amount by which total costs exceed revenues in such fiscal year.

The Bonds are not payable from the general funds of the Service, and do not constitute a legal or equitable pledge, or lien or encumbrance upon, any of the assets or property of the Service or upon any liability of the State of Maryland, of any political subdivision thereof (including the Subdivisions) or of the Service.

The following table represents changes in long-term liabilities for the years ended June 30:

Maryland Environmental Service:

2024	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Advances from project participants	\$ 46,888	\$ 60,563	\$ (70,452)	\$ 36,999	\$ 35,192
Lease liabilities	4,611	-	(712)	3,899	783
Note payable	531	-	(453)	78	78
Compensated absences	5,196	3,847	(3,687)	5,356	3,700
Workers' compensation	2,857	-	(53)	2,804	421
Net OPEB liability (asset)	1,253	-	(1,552)	(299)	-
Net pension liability	2,076	86	-	2,162	-
Long-term liabilities	<u>\$ 63,412</u>	<u>\$ 64,496</u>	<u>\$ (76,909)</u>	<u>\$ 50,999</u>	<u>\$ 40,174</u>

2023	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Advances from project participants	\$ 22,586	\$ 76,164	\$ (51,862)	\$ 46,888	\$ 45,782
Lease liabilities	4,235	982	(606)	4,611	713
Note payable	957	-	(426)	531	453
Compensated absences	4,820	3,683	(3,307)	5,196	3,337
Workers' compensation	3,168	-	(311)	2,857	429
Net OPEB liability	2,234	-	(981)	1,253	-
Net pension liability	1,551	525	-	2,076	-
Long-term liabilities	<u>\$ 39,551</u>	<u>\$ 81,354</u>	<u>\$ (57,493)</u>	<u>\$ 63,412</u>	<u>\$ 50,714</u>

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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*(In thousands except where noted)*

**(8) Debt (continued)**

Midshore Regional Landfill:

2024	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Bonds payable, net of premium	\$ 19,363	\$ -	\$ (2,065)	\$ 17,298	\$ 2,186
Landfill closure and postclosure care	10,120	2,436	(359)	12,197	-
Long-term liabilities	<u>\$ 29,483</u>	<u>\$ 2,436</u>	<u>\$ (2,424)</u>	<u>\$ 29,495</u>	<u>\$ 2,186</u>

2023	Beginning Balance	Additions	Reductions	Ending Balance	Due Within One Year
Bonds payable, net of premium	\$ 21,326	\$ -	\$ (1,963)	\$ 19,363	\$ 2,056
Landfill closure and postclosure care	7,342	3,113	(335)	10,120	-
Long-term liabilities	<u>\$ 28,668</u>	<u>\$ 3,113</u>	<u>\$ (2,298)</u>	<u>\$ 29,483</u>	<u>\$ 2,056</u>

**(9) Pension**

Employees of the Service who were members of the State Employees Retirement or Pension systems on June 30, 1993, continue to participate in the Employees' Retirement and Pension Systems. These systems are part of the Maryland State Retirement and Pension System (the System), and are cost-sharing multiple employer public employee retirement systems. The System, which is administered in accordance with the State Personnel and Pensions Article of the Annotated Code of Maryland, consists of several plans which are managed by the Board of Trustees for the System. The System provides retirement, death and disability benefits in accordance with State statutes. Vesting begins after completion of 5 years of service. Members of the Retirement System may retire with full benefits after attaining the age of 60, or completing 30 years of Service Credit, regardless of age. Members of the Pension system may retire with full benefits after attaining the age of 62 or after completing 30 years of Service Credit, regardless of age. The State Employees Retirement and Pension System prepares a separately audited Annual Comprehensive Financial Report, which can be obtained from the State Retirement and Pension System of Maryland, 120 E. Baltimore Street, Baltimore, Maryland 21202 or at <https://sra.maryland.gov/annual-financial-reports>.

Members of the Retirement System are required to contribute to the System either 7% or 5% of their regular salaries and wages depending upon the retirement option selected. Members of the Contributory Pension System are required to contribute to the System 7% of their regular salaries and wages. Employer contribution rates are determined by the State annually. The Service's share of the cost of participation was \$229 and \$40, respectively, for the years ended June 30, 2024 and 2023.

All other employees of the Service participate in a Vanguard 401(k) Savings Plan. The plan requires the Service to contribute to the fund. The Service's share of the cost of participation for the years ended June 30, 2024 and 2023, was \$4,641 and \$2,913, respectively. Employees are fully vested when eligible for the plan.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(9) Pension (continued)**

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

As of June 30, 2024 and 2023, the Service reported a liability of \$2,162 and \$2,076, respectively, for its proportionate share of the ERS net pension liability. The ERS net pension liability was measured as of June 30, 2024 and 2023, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Service's proportion of the ERS net pension liability was based on a projection of the Service's long-term share of contributions to the pension plan relative to the projected contributions of all participating government units, actuarially determined. The Service's proportion for ERS was .0094% and 0.0127% for the years ended June 30, 2024 and 2023, respectively.

For the years ended June 30, 2024 and 2023, the Service recognized pension expense for ERS of approximately \$86 and \$526, respectively. As of June 30, 2024, the Service reported deferred outflows of resources and deferred inflows of resources related to ERS from the following sources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Changes in assumptions	\$ 154	\$ -
Net difference between projected and actual earnings on pension plan investment	201	-
Net difference between actual and expected experience	-	(27)
Net change in proportionate share	-	(405)
Contributions made subsequent to the measurement date	226	-
Total	\$ 581	\$ (432)

The \$226 reported as deferred outflows of resources relates to ERS resulting from the Service contributions subsequent to the measurement date will be recognized as a reduction of the ERS net pension liability in the year ending June 30, 2025. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to ERS will be recognized in pension expense as follows:

Years Ending June 30	Deferred Outflows		Deferred Inflows	
	Change in Assumptions	Net difference between projected and actual earnings on pension plan investments	Net change in proportionate share	Actual and Expected Experience
2025	\$ 55	\$ 13	\$ (195)	\$ (20)
2026	65	(35)	(101)	(15)
2027	34	179	(58)	(8)
2028	-	44	(35)	8
2029	-	-	(16)	8
Total	\$ 154	\$ 201	\$ (405)	\$ (27)

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(9) Pension (continued)**

The following are the methods and assumptions used to determine total pension liability at June 30, 2024:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	17 years for the State Systems, 18 years for LEOPS Muni, and 25 years for CORS Muni. For ECS Muni: 40 years phasing down to 20 years over 5 years, 25 years remaining
Asset valuation method	5-Year smoothed market; 20% collar
Inflation	2.25% general, 2.75% wage.
Salary increases	2.75% to 11.25% including inflation.
Investment rate of return	6.80%
Retirement age	Experience-based table of rates that are specific to the type of eligibility condition. Last updated for the 2019 valuation pursuant to an experience study of the period 2014-2018.
Mortality	Various versions of the Pub-2010 Mortality Tables with projected generational mortality improvements based on the MP-2018 fully generational mortality improvement scale.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. For each major asset class that is included in the target asset allocation as of June 30, 2023, these best estimates are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Public equity	34.00%	6.60%
Private equity	16.00%	8.20%
Rate sensitive	21.00%	2.20%
Credit opportunities	8.00%	5.10%
Real assets	15.00%	5.00%
Absolute return	6.00%	4.00%
	<u>100.00%</u>	

A single discount rate of 6.80% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 6.80%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(9) Pension** (continued)

Sensitivity of the Service’s proportionate share of the net pension liability to changes in the discount rate.

The Service’s proportionate share of the ERS net pension liability calculated using the discount rate of 6.80% is \$2,162. Additionally, the Service’s proportionate share of the ERS net pension liability if it were calculated using a discount rate that is 1 percentage point lower (5.80%) is \$3,206 or 1 percentage point higher (7.80%) is \$1,296.

**Plan Description.** The Maryland Environmental Service (the Service) Retiree Medical Reimbursement Plan (the Plan) is a single employer defined benefit plan. It is offered to eligible employees not covered under the State Retiree Medical Plan. To be eligible for coverage under the Service’s plan, an employee must retire from the Service at age 60 or older and have at least 16 years of service with the Service. Through December 31, 2018, the Plan reimbursed retirees for eligible medical expenses incurred by the retiree or spouse up to \$3,600 per calendar year per retiree. Effective January 1, 2019, the annual limit was increased to \$4,000 for current retirees. For retirements on or after January 1, 2019, the annual limit is based on the number of years of service at retirement, as follows:

Service at Retirement	Annual Limit
15-19	\$ 4,000
20-24	\$ 4,500
25-29	\$ 5,000
30+	\$ 5,500

Retirees are not required to contribute to the Plan.

**(10) Other Postemployment Benefits (OPEB)**

The number of participants in the OPEB Plan as of the actuarial valuation date of July 1, 2023, was as follows:

Active	766
Retired	86
Total	852

*General:* Participation in the Plan is on a voluntary basis. In order to participate in the Plan, a retiree must complete annual enrollment forms. Participation is effective on the first of the month following the date the Service receives the completed enrollment forms.

*Contributions:* The Service makes contributions to the Plan on a quarterly basis based on an actuarially determined amount in accordance with the actuarial valuation. Participants do not contribute to the Plan.

*Benefit Payment:* The reimbursement account can be used to pay for any healthcare expense that would qualify as a deduction under IRS rules such as deductibles and copayments, dental expenses, prescription drug costs, vision care expenses. The expenses submitted for reimbursement must not be eligible for payment or reimbursement under any other health plan.

*Plan Termination:* Although it has not expressed intent to do so, the Service has the right to discontinue its contributions or to terminate the Plan. Upon termination of the Plan, any unused benefits at the time of termination may be used up to the end of the Plan year in which termination occurs.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(10) Other Postemployment Benefits (OPEB)** (continued)

In 2010, the Service set up an irrevocable trust, the Maryland Environmental Service OPEB Trust Fund for the sole purpose of funding postemployment benefits for current and future retirees. Contribution requirements are determined according to actuarial valuations.

*Actuarial Methods and Assumptions:* Projections of benefits for reporting purposes are based on the substantive plan (the plan as understood by the Service and plan members), and include the types of benefits provided at the time of each valuation and the historical pattern of benefit costs of the Service to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with long-term perspective of the calculations.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the Service are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

In the July 1, 2023, actuarial valuation, the entry age normal cost method was used. The actuarial assumptions included a 6.0% estimated long-term investment yield on the investments that are expected to be used to finance the payment of benefits, which are the assets held in the trust.

*Funding Policy:* The Service has an irrevocable trust, the Maryland Environmental Service OPEB Trust Fund, for the sole purpose of funding postemployment benefits for current and future retirees. Contribution requirements are determined according to actuarial valuations. The Service contributed \$1,118 and \$1,136, respectively, in fiscal years 2024 and 2023. Total reimbursement of medical expenses was \$268 and \$241, respectively, in fiscal years 2024 and 2023.

As of the June 30, 2024, the Plan was 103.6% funded. The actuarial accrued liability for benefits was \$8,204 resulting in a total net OPEB asset of (\$299).

*Annual OPEB Cost and Net Obligation:* The Service's annual OPEB cost (expense) is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of generally accepted accounting principles. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years. For the fiscal year ended June 30, 2024, the Service's annual OPEB cost was \$159.

*Plan Expenses:* The Plan incurs investment expenses in proportion to its share of each investment for which it is involved. The Service absorbs all internal administration costs related to the Plan.

The components of the net OPEB liability of the Service as of June 30, 2024, were as follows:

Total OPEB liability	\$ 8,203
Plan fiduciary net position	8,502
Net OPEB asset	<u>\$ (299)</u>
Plan fiduciary net position as a percentage of total OPEB liability (asset)	103.6%

**Maryland Environmental Service**  
**Notes to Financial Statements**  
**June 30, 2024 and 2023**  
*(In thousands except where noted)*

**(10) Other Postemployment Benefits (OPEB) (continued)**

Year Ended June 30,	<u>2024</u>	<u>2023</u>	<u>2022</u>
<b>Total OPEB Liability</b>			
Service cost	\$ 169	\$ 164	\$ 156
Interest	479	456	516
Changes of benefit terms	-	-	-
Difference between expected and actual experience	(507)	1	(756)
Changes in assumptions and other inputs	389	-	523
Benefit payments	(268)	(241)	(179)
<b>Net Change in Total OPEB Liability</b>	<u>262</u>	<u>380</u>	<u>260</u>
Total OPEB Liability - Beginning	7,941	7,561	7,301
Total OPEB Liability - Ending	<u>\$ 8,203</u>	<u>\$ 7,941</u>	<u>\$ 7,561</u>
<b>Plan Fiduciary Net Position</b>			
Contributions - employer	\$ 1,118	\$ 1,136	\$ 479
Net investment income	964	466	(643)
Benefit payments	(268)	(241)	(180)
<b>Net Change in Plan Fiduciary Net Position</b>	<u>1,814</u>	<u>1,361</u>	<u>(344)</u>
Plan Fiduciary Net Position - Beginning	6,688	5,327	5,671
Plan Fiduciary Net Position - Ending	<u>\$ 8,502</u>	<u>\$ 6,688</u>	<u>\$ 5,327</u>
<b>Net OPEB (Asset) Liability</b>	<u>\$ (299)</u>	<u>\$ 1,253</u>	<u>\$ 2,234</u>

Projections of benefits for reporting purposes are based on the substantive plan (the plan as understood by the Service and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of benefit costs of the Service to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with long-term perspective of the calculations.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the Service are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(10) Other Postemployment Benefits (OPEB) (continued)**

In the July 1, 2023, actuarial valuation date, the entry age normal cost method was used. The actuarial assumptions included a 6.0% estimated long-term investment yield on the investments that are expected to be used to finance the payment of benefits, which are the assets held in the trust.

Actuarial valuation date	July 1, 2023
Fiduciary net position	\$ 8,502
Total OPEB liability	\$ 8,204
Net OPEB asset	\$ (299)
Funded ratio	103.6%
Annualized covered payroll	\$ 52,881
Inflation	2.00%
Ratio of unfunded actuarial liability to annual covered payroll	2.30%
Actuarial cost method	Entry age
Money-weighted return	8.89%

Mortality rates were based on the PubG.H-2010 Employee and Healthy Retiree Mortality Tables, with generational projection using Scale MP-2020.

The long-term rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns net of OPEB plan investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of the geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rates of Return
Cash & Equivalents	13.00%	-1.00%
Equity	60.00%	6.75%
Fixed Income	25.00%	0.00%
Real Estate	0.00%	2.00%
Other	2.00%	7.25%
<b>Total</b>	<b>100.00%</b>	<b>15.00%</b>

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(10) Other Postemployment Benefits (OPEB) (continued)**

OPEB Deferred Outflows and Inflows of Resources

At June 30, 2024 and 2023, the Service reported deferred outflows of resources and deferred inflows of resources as follows:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Difference between actual and expected experience	\$ 1	\$ (857)
Changes in assumptions	442	(343)
Difference between actual and expected investment earnings	396	(638)
Total	\$ 839	\$ (1,838)

Amounts reported and deferred outflows of resources and deferred inflows of resources related to OPEB expense will be recognized in OPEB expense as follows:

Years Ending June 30		
2025	\$	(255)
2026		(40)
2027		(238)
2028		(215)
2029		(84)
Thereafter		(167)
Total	\$	(999)

Sensitivity of Net OPEB Liability to Changes in the Healthcare Cost Trend Rate and Discount Rate

The following presents the net OPEB liability of the Service, as well as what the Service's net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.0%) or 1 percentage point higher (8.0%) than the current discount rate:

	1% Decrease	No Change	1% Increase
Net OPEB liability (asset)	\$ 822	\$ (299)	\$ (1,228)

The following presents the net OPEB liability of the Service, as well as what the Service's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1 percentage-point lower or 1 percentage-point higher than the current healthcare cost trend rates (7.0%):

	1% Decrease	No Change	1% Increase
Net OPEB liability (asset)	\$ (957)	\$ (299)	\$ 318

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(11) Contingent Liabilities**

The Service is involved in litigation arising from the normal course of its operations. In the opinion of management, the amount of liability, if any, resulting from the final resolution of these matters will not be material to the financial position of the Service.

On April 15, 2011, the Maryland Environmental Service issued \$1.5 million of Water Quality Bond, Series 2011B, with the Maryland Water Quality Financing Administration (the Administration) in connection with the closure and capping of the Hobbs Road Landfill. Pursuant to the Clean Water Act, the Administration has forgiven the repayment of the principal amount and interest payment of the bond subject to MES continues to perform its other obligations under the agreement. Upon determination by the Administration that any of the other obligations under the agreement have been violated, payment of the principal and interest will become due and payable on demand. As of June 30, 2024, management believes it is in compliance with its obligations and has not violated the agreement.

**(12) Landfill Closure and Postclosure Care Costs**

State and Federal laws require the Service to cover and to perform certain maintenance and monitoring functions at Midshore I, Easton Landfill, Midshore II and Hobbs Road Landfill sites for 30 years after closure. Although closure and postclosure care costs will be paid near or after the date the landfills stop accepting waste, the Service reports a portion of these closure and post closure costs as a liability based upon the estimated useful life of the landfills.

Midshore I stopped accepting waste on December 31, 2010, was capped, and is now in the postclosure monitoring and maintenance period. Total closure and postclosure care costs for the landfill is currently estimated to be \$5,612, as determined through engineering studies and \$3,641 has been recognized as a liability by the Service as of June 30, 2024.

Midshore II current cells are approximately 41% filled as of June 30, 2024, with a remaining life of 20 years. Total closure and postclosure care costs for the landfill is currently estimated to be \$27,124, as determined through engineering studies, and \$8,556 has been recognized as a liability by the Service as of June 30, 2024. Costs may be subject to change due to inflation, deflation, technology and changes in applicable laws and regulations.

Under Federal regulations, the Service satisfied its financial assurance requirements based upon local government financial ratio tests of the project participants as of June 30, 2024. The Service expects to satisfy these requirements as of June 30, 2025, using the same criteria.

The Service serves as an operator for various landfills throughout the state of Maryland and no liability is recognized in regard to landfill closure and postclosure costs related to these landfills because of the Service's limited role solely as an operator of these facilities.

**Maryland Environmental Service**  
**Notes to Financial Statements**  
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**(13) Risk Management**

The Service is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Service participates in the state of Maryland's self-insurance program (the program). The program covers general liability, property and casualty, workers' compensation (see Note 1(m)), and environmental liabilities and provides certain employee health benefits. The program allocates its cost of providing claims servicing and claims payments by charging a "premium" to the Service based on a percentage of estimated current payroll or based on average loss experience. As of June 30, 2024 and 2023, no additional assessments were made and the Service's premium for the years ended June 30, 2024 and 2023, was \$5,989 and \$4,970, respectively.

**(14) Subsequent Events**

Management has evaluated subsequent events through October 30, 2024 and noted no transactions to be disclosed.

**Maryland Environmental Service**  
**Schedule of Changes in Net OPEB Liability and Related Ratios**

Year Ended June 30,	2024	2023	2022	2021	2020	2019	2018	2017
<b>Total OPEB Liability</b>								
Service cost	\$ 169	\$ 164	\$ 156	\$ 150	\$ 148	\$ 111	\$ 107	\$ 152
Interest	479	456	516	490	410	285	343	319
Changes of benefit terms	-	-	-	-	-	1,312	-	-
Difference between expected and actual experience	(507)	1	(756)	(61)	321	6	(501)	-
Changes in assumptions and other inputs	389	-	523	(42)	450	173	(669)	-
Benefit payments	(268)	(241)	(179)	(180)	(175)	(120)	(89)	(84)
<b>Net Change in Total OPEB Liability</b>	<b>262</b>	<b>380</b>	<b>260</b>	<b>357</b>	<b>1,154</b>	<b>1,767</b>	<b>(809)</b>	<b>387</b>
Total OPEB Liability - Beginning	7,941	7,561	7,301	6,944	5,790	4,023	4,832	4,445
Total OPEB Liability - Ending	<u>\$ 8,203</u>	<u>\$ 7,941</u>	<u>\$ 7,561</u>	<u>\$ 7,301</u>	<u>\$ 6,944</u>	<u>\$ 5,790</u>	<u>\$ 4,023</u>	<u>\$ 4,832</u>
<b>Plan Fiduciary Net Position</b>								
Contributions - employer	\$ 1,118	\$ 1,136	\$ 479	\$ 541	\$ 473	\$ 263	\$ 368	\$ 335
Net investment income	964	466	(643)	999	(19)	176	154	349
Benefit payments	(268)	(241)	(180)	(180)	(175)	(120)	(89)	(84)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>1,814</b>	<b>1,361</b>	<b>(344)</b>	<b>1,360</b>	<b>279</b>	<b>319</b>	<b>433</b>	<b>600</b>
Plan Fiduciary Net Position - Beginning	6,688	5,327	5,671	4,311	4,032	3,713	3,280	2,680
Plan Fiduciary Net Position - Ending	<u>\$ 8,502</u>	<u>\$ 6,688</u>	<u>\$ 5,327</u>	<u>\$ 5,671</u>	<u>\$ 4,311</u>	<u>\$ 4,032</u>	<u>\$ 3,713</u>	<u>\$ 3,280</u>
<b>Net OPEB (Asset) Liability</b>	<u>\$ (299)</u>	<u>\$ 1,253</u>	<u>\$ 2,234</u>	<u>\$ 1,630</u>	<u>\$ 2,633</u>	<u>\$ 1,758</u>	<u>\$ 310</u>	<u>\$ 1,552</u>
Plan fiduciary net position as a percentage of total OPEB Liability	103.6%	84.2%	70.5%	77.7%	62.1%	69.6%	92.3%	67.9%
Covered Employee Payroll	52,881	55,306	53,178	\$ 48,536	\$ 46,669	\$ 44,599	\$ 42,883	\$ 44,599
Net OPEB (asset) liability as a percentage of covered employee payroll	-0.6%	2.3%	4.2%	3.4%	5.6%	3.9%	0.7%	3.5%

**Notes to the Schedule:**

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is completed, OPEB plans should present information for those years for which information is available.

*Changes of Benefit Terms:* Effective January 1, 2019, the reimbursement limit for current retirees was increased to \$4,000. For retirements on or after January 1, 2019, the reimbursement limit was changed to (a) \$4,000 for 15-19 years of service, (b) \$4,500 for 20-24 years of service, (c) \$5,000 for 25-29 years of service and (d) \$5,500 for 30+ years of service at retirement.

*Changes of Assumptions:* Discount Rate 2017-2021 0.00%; 2022-2024 6.00%

**Mortality Rates:**

2017-2018	RPH-2014 Employee and Healthy Annuity, Generational with MP- 2018
2019	PubG.H-2010 Employee and Healthy Retiree, Generational with MP-2018
2020	PubG.H-2010 Employee and Healthy Retiree, Generational with MP-2019
2021	PubG.H-2010 Employee and Healthy Retiree, Generational with MP-2020
2022-2024	PubG.H-2010 Employee and Healthy Retiree, Generational with MP-2021

**Maryland Environmental Service  
Schedule of Employer Contributions OPEB**

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Actuarially Determined Contribution	\$ 257	\$ 266	\$ 132	\$ 287	\$ 348	\$ 283	\$ 333	\$ 271
Employer Contribution	335	368	263	473	541	479	1,136	1,118
Contribution Excess	(78)	(102)	(131)	(186)	(193)	(196)	(803)	(847)
Covered Employee Payroll	39,956	42,883	44,599	46,669	48,536	53,178	55,306	52,881
Employer Contribution as a Percentage of Covered Employee Payroll	0.8%	0.9%	0.6%	1.0%	1.1%	0.9%	2.1%	2.1%

**Notes to Schedule**

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is completed, OPEB plans should present information is available.

Methods and assumptions used to determine contributions rates:

Valuation Date:	Actuarially determined contributions are calculated as of June 30, one year prior to the end of the fiscal year in which contributions are reported.
Actuarial Cost Method:	Entry Age
Amortization Method:	Level percentage of payroll, closed
Amortization Period:	15 years
Asset Valuation Method:	Market Value
Inflation:	2.00%
Healthcare Cost Trend Rates:	6.50% initial, decreasing 0.50% per year to an ultimate rate of 5.00%
Salary Increases:	4.00% average, including inflation
Investment Rate of Return:	6.00%, net of plan investment expenses, including inflation
Retirement Rates:	In the actuarial valuation
Mortality Rates:	Mortality rates were based on the PubG.H-2010 Employee and Healthy Retiree mortality tables, Generational with Projection Scale MP-2021 for males or females, as appropriate.

**Maryland Environmental Service**  
**Schedule of Proportionate Share of Net Pension Liability**

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
The Service's proportion of the ERS net pension liability	0.0094%	0.0127%	0.0127%	0.0122%	0.0127%	0.0155%	0.0131%	0.0159%	0.0143%	0.0125%
The Service's proportionate share of the ERS net pension liability	\$ 2,162	\$ 2,076	\$ 1,551	\$ 2,583	\$ 2,620	\$ 3,260	\$ 2,822	\$ 3,761	\$ 2,968	\$ 2,102
The Service's covered employee payroll	1,019	997	1,062	1,085	1,119	1,365	1,365	2,557	2,483	2,177
The Service's proportionate share of the net pension liability as a percentage of its covered employee payroll	212%	208%	146%	238%	234%	239%	207%	147%	120%	97%
Plan net position as a percentage of the total pension liability	73.81%	81.84%	81.84%	70.72%	72.34%	69.38%	69.38%	65.79%	68.78%	71.87%

**Schedule of Required Employer Pension Plan Contributions**

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Contractually required contribution (ERS)	\$ 226	\$ 229	\$ 249	\$ 228	\$ 243	\$ 262	\$ 303	\$ 318	\$ 336	\$ 301
Contributions in relation to the contractually required contribution	226	229	249	228	243	262	303	318	336	301
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
The Service's covered-employee payroll	\$ 1,019	\$ 997	\$ 1,062	\$ 1,062	\$ 1,085	\$ 1,119	\$ 1,365	\$ 1,365	\$ 2,557	\$ 2,177
Contributions as a percentage of covered employee payroll	22.18%	22.97%	23.45%	21.01%	21.72%	22.19%	22.19%	12.43%	13.53%	13.83%

**Report on Internal Control Over Financial  
Reporting and on Compliance and Other Matters Based on an  
Audit of Financial Statements Performed in Accordance  
With Government Auditing Standards**

Board of Directors  
Maryland Environmental Service

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*), the financial statements of each major fund and the fiduciary activities of Maryland Environmental Service (the Service), a component unit of the State of Maryland, as of and for the year ended June 30, 2024, and the related notes to the financial statements, which collectively comprise the Service's basic financial statements, and have issued our report thereon dated October 30, 2024.

**Report on Internal Control Over Financial Reporting**

In planning and performing our audits of the financial statements, we considered the Service's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Service's internal control. Accordingly, we do not express an opinion on the effectiveness of the Service's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

**Report on Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Service's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

**Purpose of This Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*RSM US LLP*

Gaithersburg, Maryland  
October 30, 2024