

2017 ANNUAL REPORT



MARYLAND ENVIRONMENTAL SERVICE

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MESSAGE FROM THE GOVERNOR

Our administration is committed to providing a quality education for our children, growing our economy, and working to ensure that every Marylander enjoys the benefits of a healthy and clean environment. Since taking office, we have made unprecedented investments in our environment, and are moving forward on high-priority initiatives, like the pilot dredging project at the Conowingo Dam, that help ensure the long-term health of the Chesapeake Bay. Maryland Environmental Service (MES) is currently working on over 900 projects that have a significant impact on the health of the Bay and directly affects the quality of life for our citizens throughout the state.

While we have made incredible strides over the past three years, there is still more work to do to ensure Maryland remains the best place to live, work, and raise a family. Working with state and local partners, MES will continue to fulfill its mission

of protecting and enhancing Maryland's environment for our citizens. In 2016, our administration launched the Customer Service Promise, a program designed to foster improvements in customer service across all Maryland state agencies. At the Maryland Environmental Service, this means a commitment to finding innovative solutions to our region's most complex environmental challenges that will preserve our precious natural resources for generations to come. I encourage you to learn more about how MES is keeping this promise in their annual report. Together, we will continue Changing Maryland for the Better.

Larry Hogan Governor





Boyd K. Rutherford Lt. Governor

BOARD OF DIRECTORS



Roy McGrath Chairman and CEO



Richard P. Streett, Jr. V.M.D., Secretary



Leslie Jackson Jenkins Esq., CPM



John J. O'Neill, Jr.* Deputy Director



William B. C. Addison, Jr.



J.P. Smith, Jr.



Janet R. Irvin Treasurer and Chief Financial Officer



Kevin Hedge



Joseph F. Snee, Jr. Esq.

*Served through August 29, 2017

LETTER FROM THE DIRECTOR

Dear MES Stakeholder,

This year has been filled with remarkable growth and extraordinary achievements for the Maryland Environmental Service (MES). I am pleased to report that 2017 was the most financially successful year in our organization's 48 year history. With the leadership of Governor Larry Hogan and Lt. Governor Boyd Rutherford, MES has tirelessly focused on our mission of providing operational and technical services that protect and enhance the environment for the benefit of the people of Maryland. We have been recognized with several awards for our work providing safe and efficient services to our partners and clients.

We are proud to be leading a dynamic organization that is stronger than ever.

Revenues in Fiscal Year 2017 exceeded \$165.7 million, up four percent over the previous fiscal year, and representing a new financial record for environmental projects undertaken by MES. Our organization's change in net position was \$2.4 million, up 25%, \$600,000, from Fiscal Year 2016 results, with over \$2 million reverted to the State resulting from our efficient business practices across State department and agency partners. MES is also developing important new partnerships, including supporting Sagamore Development's billion dollar Port Covington residential and commercial project and future home of Under Armour's worldwide headquarters in Baltimore.

For the first time, at the direction of Governor Hogan and the Chesapeake Bay Cabinet, MES issued a RFP that creates a pilot project at the Conowingo Dam. This project will allow the State to examine the feasibility of a larger scale project to minimize sediment releases over the Dam that ultimately flow downstream into the Chesapeake Bay. MES is proud to be a part of this critical project to build on recent successes increasing the health and vitality of our greatest natural treasure - the Bay.

The Conowingo RFP, however, is just one facet among many that have led MES to this record-setting year. Our strong results are a testament to the 800 tremendous teammates we have at MES. We are making efforts to increase our effectiveness and efficiency – both inside and out – to enhance our organization so it is even better positioned to serve our partners' needs into the future. In order to do this, MES consolidated the organization's three key operating groups into two, creating opportunities for enhanced synergy and operational efficiency. Further opportunities were included in the agency's newly developed stategic plan – MES 2022.

Our remarkable progress in 2017 leaves us confident that we are reaching our enduring goal for the Maryland Environmental Service - to be a premier provider of regional environmental service needs. Together, our team remains personally committed to working tirelessly toward that goal.

Roy McGrath Chairman & CEO

WHO WE ARE

In 1970, the State of Maryland created Maryland Environmental Service (MES) to protect our natural resources. MES continues to fulfill this vital mission today.

MES is a not-for-profit public corporation and self-supporting, independent State agency, combining the public sector's commitment to environmental protection with the private sector's flexibility and responsiveness. The agency has no regulatory authority and receives no direct operating appropriations from the State.

MES provides environmental and technical services to governmental and private sector partners and works on projects including dredged material management, solid waste management, water and wastewater treatment, composting, recycling, hazardous materials cleanup, stormwater services, and renewable energy. MES provides expert engineering, monitoring, and inspection services.

With 900 diverse projects located across the Mid-Atlantic region, MES couples operational expertise with a commitment to strict environmental compliance and safe work practices.

Maryland Environmental Service remains focused on finding innovative solutions to our region's most complex environmental challenges and preserving our natural resources for generations to come.

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

VISION

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



MES 2017 Board of Directors

The MES leadership team is deeply committed to diversity, inclusion, and equity. It is when the experiences of everyone are valued, their unique perspectives are understood, and they are supported to be creative and innovative, that our organization achieves its best.

- Roy McGrath, Director and CEO



MES HITS THE MARK

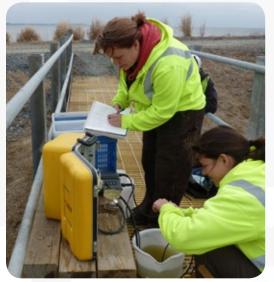
The cornerstones of MES are the products and services we offer to our partners. This year, our organization successfully met all of our performance goals. Our "BEST" (Building Excellence and Success Together) performance incentive program is a way to recognize and reward all eligible team members for contributing to the continued growth and strength of the organization.

It takes many moving parts for MES to fulfill its responsibilities to the partners we serve. This requires an unwavering commitment to do so in a way that achieves excellence. It also takes an effective strategy, like our performance incentive program that encourages our team to achieve its best.











ENVIRONMENTAL SERVICES

The MES Environmental Services Group supports our partners in water and wastewater, dredging and restoration, outreach and education, monitoring and compliance, stormwater, geospatial, and engineering services.

Water, Wastewater, and Engineering

In 2017, MES continued to provide treatment services at over 120 drinking water projects and treated 6.03 billion gallons of wastewater in Maryland and neighboring states. This included analyzing and reporting for 84,210 individual parameters.

Among the Engineering and Operations accomplishments, MES started a new Biolac[™] wastewater treatment project in the town of Sudlersville. We designed, constructed, and launched a new ultrafiltration membrane bioreactor wastewater treatment project at the Southern Maryland Pre-Release Unit. We started a new sequential batch reactor in the Town of Galena. We also welcomed new partner, Summerhill Park in Anne Arundel County, as our team worked diligently to bring this facility into compliance.

In May, MES was honored to hold a ribbon-cutting ceremony with Lt. Governor Boyd Rutherford to officially dedicate the new microfiltration wastewater treatment project at the Charlotte Hall Veterans Home.

Environmental Dredging and Restoration

This year, MES has worked collaboratively with the University of Maryland Center for Environmental Studies at the Horn Point Shoreline Restoration Project. This project includes both jetty rehabilitation and dredging. We successfully prepared a waterways improvement fund grant application for potential dredging of a cove at Deep Creek Lake. In Frederick County, we worked on design, procurement, and dredging of Lake Linganore upstream of the Boyers Mill Bridge.





Southern MD Pre-Release Unit Operation

Conowingo RFP

The Conowingo Capacity Recovery and Innovative Reuse and Beneficial Use Pilot Project or Conowingo RFP was issued this year on August 31 by MES, at the direction of Governor Hogan and on behalf of the Chesapeake Bay Cabinet. The Conowingo RFP is a pilot dredging and innovative use project that calls for the dredging of approximately 25,000 cubic yards of sediment in the Susquehanna River around the Conowingo Dam.

The scientific community is now focused on the impacts posed by sediment and nutrients entering the Chesapeake Bay at the Conowingo Dam, and it is absolutely vital that the State find real solutions to this problem. This project will allow MES to examine the feasibility of a larger project to minimize sediment releases over the Conowingo Dam.



Working Together with Maryland Department of Transportation Maryland Port Administration

MES continued to have a strong partnership with MDOT Maryland Port Administration. In 2017, there was an expansion of three active dredged material containment facilities, resulting in a continued strong partnership between MES and MDOT MPA.

At the Masonville Dredged Material Containment Facility, MES is actively working on a dike raising project. Also at Masonville, MES completed the construction of the confined aquatic disposal project or CAD. The CAD was completed on an extremely tight timeline to accommodate the federal dredging season and the mandatory fleet week activities window.

This year, demolition and construction activities started at Cox Creek to expand the existing dredged material containment facility both vertically and laterally.

MES' mission at Poplar Island continues to grow. Poplar Island, located two miles northwest of Tilghman Island in the middle of the Chesapeake Bay, has been in the process of being recreated since 2001. The island has been constructed using dredged material from the Chesapeake Bay. Maintenance of Maryland's Federal and State channels generates 4 to 5 million cubic yards of material annually. Poplar Island is the only remaining alternative for placement of large quantities of material dredged from the Baltimore Harbor approach channels. That is why the 575 acre expansion of this facility was so critically important. This expansion means an additional 28 million cubic yards of sediment will be placed at the island over the next 23 years.

Industry Leading

As part of a working group that included the Maryland Department of the Environment, MES worked with MDOT MPA to develop a technical screening criteria and guidance document for the innovative and beneficial use of dredged material. This document is a major step in assisting the State in meeting its priority to find environmentally responsible solutions for managing dredged material.

Environmental Monitoring

This year the Prince George's County Clean Water Partnership Team or CWP reached a milestone of certifying over 1,000 acres of impervious surface. MES has been a vital partner in this program by providing a wide array of services to the County. Our organization currently works with the County to oversee installation of new facilities and to bring existing stormwater facilities into the maintenance phase of the CWP. This will ensure the functionality of stormwater infrastructure over a 30 year lifecycle. The partnership's next milestone goal is to treat another 1,000 acres by March 2018.

Work with MDOT Maryland Aviation Administration

MES is expanding the deicing support services to a new partner at BWI Marshall Airport. Our work at BWI will now include deicing operations at the Midfield Cargo Complex, which is operated by Aviation Facilities Company (AFCO). MES will support AFCO's mission with deicing infrastructure inspections and maintenance, deicing fluid storage, and providing additional operations and deicing fluid disposal for the Maryland Aviation Administration.

National Impact

MES' Watershed Resources Registry continues to gain traction in other states throughout the region and beyond. It began as a national pilot project in Maryland to integrate land-use planning, regulatory, and non-regulatory decision making using the watershed approach. The strategy the Environmental Protection Agency (EPA) and MES have developed is now being rolled out to states in the Chesapeake Bay watershed and beyond. As this registry continues to gain traction, MES' work will further be seen as a model for the nation.



Clean Water Partnership



Watershed Resources Registry

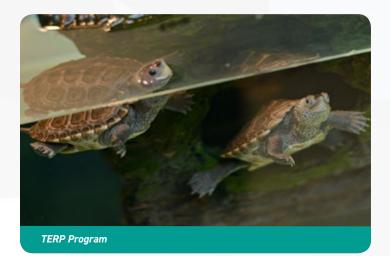


Poplar Island

TERP Program

The Terrapin Education and Research on Poplar (TERP) Program team had the opportunity to release 33 diamondback terrapins into the Chesapeake Bay this year from the Paul S. Sarbanes Ecosystem Restoration Project at Poplar Island. Prior to the restoration of Poplar Island, the amount of available terrapin habitat had declined significantly in the region. Within the first years of operations of the island, terrapin nests were discovered in the sandy areas of the project.

In response to these terrapins nesting on Poplar Island, a research project began in 2005, in which terrapin hatchlings are placed in local schools. During their time in the classroom, these turtles grow to the size of a 3 to 5-year-old wild terrapin. By giving their hatchlings a "head start", Maryland students hopefully give these terrapins a better chance of survival once they are released back on



Poplar Island. MES created the TERP Program in a partnership with the Maryland Department of Transportation Maryland Port Administration (MDOT MPA) and Arlington Echo, which is the Anne Arundel County Public School's Outdoor Education Center.

Today, MES works on behalf of our client MDOT MPA to manage the TERP Program. Along with our partners, Arlington Echo and the National Aquarium, young turtles are placed in classrooms in Anne Arundel County, Baltimore City, the Eastern Shore, and across the State. Currently, 15 schools, ranging from elementary to high school, participate in the TERP Program. This program is designed for students to learn about the lifecycles and habitats of animal species whose health indicates the quality of their environment.

All measurements gathered by the students are used in a research program conducted by Dr. Willem Roosenburg of Ohio University.

This program is just one more way MES is leading by example and helping improve our critical natural resources.

New to the Executive Leadership Team



Michael Harris Managing Director Financial Performance



Vishal Bhatia Managing Director Information Technology & Innovation



On Administrative Professionals Day, MES recognized valued teammates who've made this year so successful.



Our outreach included engagement with the Latino Community.

Administration: Human Resources, Facilities, Communications, and Procurement

- A streamlined hiring process lowered vacancy rates:
 - Before: 3.53%
 - After: 2.81%
- Awarded \$140,047 in tuition reimbursement to 40 employees
- Reviewed all HRIS processes and simplified to make them more efficient
- Improved the new employee onboarding process
- Reorganized and enhanced communications team, achieving record social media engagement success
- Emphasized commitment to Minority Business Enterprise (MBE) program and Small Business Reserve (SBR) initiatives
- Awarded 84 contracts in FY 17
- Completed 260 Purchase Orders in FY 17
- Conducted employee compensation review
 - Adopted pay scale adjustments based on review recommendations from advisory consultants
- Performed benefits review
 - Added supplementary benefits
 - Began retirement benefits review with goal of enhancing coverage consistent with State of Maryland policy
- Assessed and enhancing employee facilities and amenities
- Evaluated new internal H.R./ Personnel platform

ENVIRONMENTAL OPERATIONS

The MES Environmental Operations Group serves state agencies, counties, municipalities, and rural communities who need creative solutions for solid waste challenges. Whether a landfill on the Eastern Shore that provides essential services to thousands of Maryland citizens or a wood-fired co-generation facility that supplies steam and electricity to a State prison, we strive to satisfy our partners with cost-effective and environmentally-responsible solutions.





Prince George's County MRF

Award Winning

MES' efforts at the Prince George's County Materials Recycling Facility (MRF) were recognized by both the State Employees Risk Management Administration (SERMA) and the Solid Waste Association of North America (SWANA) for the facility's excellent safety practices. This is a dramatic turnaround for this facility, and MES was proud to have a leading role. This award is one of eight National SWANA Excellence Awards MES has received as a result of its operations.



Innovative Reuse

Food waste composting is quickly becoming an even larger part of MES' portfolio. This year we doubled the capacity at the Western Branch Composting Facility. The facility now has the capacity to process 8,000 tons of food waste per year. MES is also working closely with the University of Maryland College Park to compost waste from all of the dining halls on the college campus. This "closed loop" partnership



provides for the return of the finished food waste compost (Leafgro Gold[®]) to the UMD's Terp Farm where it is used as a soil amendment to facilitate the growth of vegetables that are utilized in the UMD dining halls. This is another industry leading effort that MES is undertaking.



Increased Foot Print

This past year, MES expanded our mission with several of our partners. MES increased our scope of work at the W.R. Grace facility in Baltimore. And, MES assumed operations of the steam plant at the Jessup Correctional Facility. MES also added new fiber processing equipment at the Montgomery County Materials Recovery Facility in Derwood. The equipment, which processes paper and cardboard, expands our recycling mission at that facility. MES also neared completion of a long term project to upgrade the electrical control system for the Eastern Correctional Institution's (ECI) Wood Fired Co-gen Facility in Westover. Also, MES initiated the construction of a new 25kV substation to replace the outdated substation and associated equipment at ECI. MES initiated preliminary work on a \$10 million upgrade of the Prince George's County Brown Station leachate pre-treatment system.



Leafgro[®] Continues to Grow

This year, bagged Leafgro[®] had record levels of production. The product, which is produced at Montgomery County's Dickerson Facility, had a 23% increase in production. The Leafgro[®] team produced and sold out 650,000 bags of the product. It was a banner year both in production and sales for bags.

Midshore I Powers the Shore

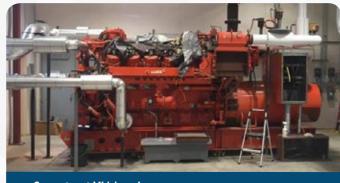
MES now has the ability to support the generation of power for about 700 homes on the Eastern Shore thanks to our partnership with Easton Utilities. MES supplies the landfill gas from Midshore I as fuel and Easton Utilities burns the landfill gas in a generator that produces electricity. In addition to the power generation going on at Midshore I, MES completed a \$7.8 million innovative exposed geomembrane capping project at the facility. This literally capped a busy year at that facility.





Mid-shore Gas Flare

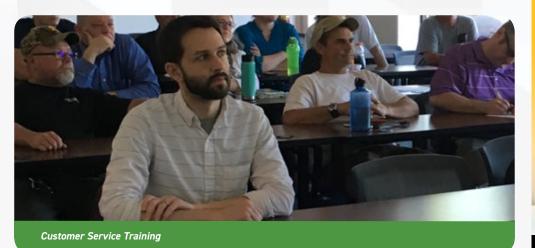
Leafgro®



Generator at Midshore I

WORLD CLASS CUSTOMER SERVICE

Delivering world-class customer service takes more than good intentions. As part of Governor Hogan's Customer Service Promise, MES developed a strategic customer service plan. The plan features enhanced customer service training for all employees.



THE CUSTOMER SERVICE PROMISE

- The State of Maryland pledges to provide constituents, businesses, customers, and stakeholders with services in the following manner:
- Friendly and Courteous: We will be helpful and supportive and have a positive attitude and passion for what we do.
- Timely and Responsive: We will be proactive, take initiative, and anticipate your needs.
- Accurate and Consistent: We will always aim for 100% accuracy, and be consistent in how we interpret and implement state policies and procedures.
- Accessible and Convenient: We will continue to simplify and improve access to information and resources.
- Truthful and Transparent: We will advance a culture of honesty, clarity and trust.



TAKING THE SHOW ON THE ROAD

A new MES initiative this year is our "Road Show," where members of our leadership team hold meetings with key, existing partners and potential new partners who could benefit from MES' wide scope of services. Already, these meetings deliver significant results.

These meetings and our partner relationships have been enhanced by the launch of our agency's first customer relationship management system - Salesforce - which is used by governments and leading companies around the globe.



Meeting with Secretary Mike Gill, Md. Dept. of Commerce



SOME OF THE CURRENT AND POTENTIAL PARTNERS WE VISITED



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"Catch the Wave" Team Meetings

COMMUNICATING EXCELLENCE

Reaching Partners Like Never Before

Communicating with our partners (and those who could be) requires a commitment to trying new and different ways to reach them. For many in 2017 - including MES - that means social media. MES has increased its social media platforms and now operates regularly on Facebook, Instagram, YouTube, and LinkedIn. The audience is responding with increased growth in terms of audience size and engagement. On Facebook alone, our following increased by over 3,000 in just four months.

Enhanced Internal Communications

In addition to improved external communications, MES has focused on an enhanced internal communications process. These efforts have included increased email messages, a newsletter, and also in-person meetings. Director/CEO Roy McGrath continued a successful series of "Catch the Wave" meetings with MES team members at over 25 locations throughout the State. These visits provided many of our 800 teammates the opportunity to connect personally with MES leadership.

UPDATING THE BRAND

As an organization, MES team members developed, and voted, this year on a new, modern logo that reflects the energy and creativity of our organization. Already the logo is displayed throughout the organization on buildings, materials and, most recently, on our visually-enticing new vehicle wraps.



2017 HIGHLIGHTS



Leafgro[®] has record production year.



Governor Larry Hogan holds press conference at the Conowingo Dam.



Inaugural All-Staff Meeting brings over 800 employees from across the State together.



Team members enjoy a pre-game picnic with Governor Larry Hogan at MES Night at the Yard.



Prince George's County Materials Recycling Facility receives two prestigious safety awards.



Prince George's County Clean Water Partnership treats over 1,000 acres of land.



Maryland Public Televison coverage of the Conowingo Dam with Jeff Salkin and Roy McGrath.



Ribbon cutting at Charlotte Hall Veterans Home opens state-of-the-art wastewater treatment plant.



Construction begins on the Poplar Island expansion.

CELEBRATING 82 TEAMMATE MILESTONES



Inaugural All-Staff Meeting



Henry Austin, Jr.



Tammy Banta



Sean Coleman, Esq.



RYLAND RYVRONMENTAL RVVCE RVVC

Michael Schlotterbeck



Roger Williams





Russell Carter, Jr. David Dahill Nancy Holliday Christian Inyamah

Melissa Slatnick Jesse White Keith Wright





Julio Alvarez Karen Cushman Randy Gaver Nathan Hairston, Sr. Douglas John Mark Kaiser

Michael Kiser William Larrimore Luke Page Jason Pindell David Roche







John Agnoli Maria Bowman Timothy Brofka Evans Browne Janel Fishpaw Joshua Grant William Harris Shannon Jenkins Joseph Johnson, III. Brooke Keplinger Jerry Keyser James Kondracki Michael Manen John Miller John Mirabile Douglas Myers

John Oltman David Peters Casey Powers Jessica Riesett William Selle Felipe Turcios-Oter Samantha Washington

William BowmanRacRonald BrownDusOrlando CarrascoJosRichard CarterMegFany ContrerasFlogMegan DiFattaCarJames FenwickMarJason GillespieMarRobert GulrichKat

Rachel Harman Dustin Harris Joseph Hott Megan Humphrey Floyd Kaufman Carl Kling Mark Kolakowski Mary Lantzas Katherine Linford

Demond Miller Edward Miller Marshall Monteith Mickey Newport Alexa Poynter Jon Schmidt Bryce Selby Kristen Shavatt Travis Shulties James Smith Theodore Streett Paul Waters Keith White Jen Wijetunga Earle Wood, Jr. Dale Younker

OUR PARTNERS AND VENDORS ARE TALKING

Positive Partnership

DNR has had a very positive partnership with MES and MPA over the course of decades with respect to the development of Hart-Miller Island. This partnership has led to expanded opportunities for resource development, wildlife habitat, and new recreational opportunities for the citizens of Maryland.

- Bob Iman, Department of Natural Resources

Commitment to Customer Service

Your staff's response on this important project reflects MES' overall commitment to customer service which has benefited MDOT MPA not only in this instance, but in many other instances. Many thanks to your staff and MES for a job well done!

- Chris Correale, Maryland Department of Transportation Maryland Port Administration

Outstanding Performance

MES has been and continues to be an outstanding performing Agency! MES staff is very responsive to the requests of the County and operates and maintains the County's Organics Composting Facility, Materials Recycling Facility, and Leachate Treatment Plant in an exceptional manner.

- Marilyn E. Rybak, C.P.M., Prince George's County

Producing Results

I want to express my gratitude to your team as all have continued to support the field explorations divisions' geotechnical inspection at SHA. I believe your team's efforts are playing a major role in producing results. Please pass my gratitude along to the team!

- Roy Butler, State Highway Administration Office of Materials and Technology

World Class Service

CMT Services, Inc's (CMT) Strategic Partnership with the Maryland Environmental Service (MES) Team is one that we value tremendously! Our companies have a unique synergy grounded in our shared commitment to deliver comprehensive and dependable World Class service to our customers unconditionally.

- Annette Johnson, CMT Services, Inc.

Professional

The training was technical in nature and required an extensive software update. The training was completed without any problems and was beneficial to all involved. I wanted to let you know how much we (and FEMA) appreciate the extra work and professional handling by MES.

- David Guignet, M.d. Dept. of the Environment



MES Headquarters



The Office of the Attorney General team at MES provided exceptional support and guidance throughout the year.

Finance

- Convened work group review and, based on their recommendations, eliminated commute vehicle charges, significantly reducing the overhead percentage charged to clients in coming fiscal years, with escalating estimated annual savings of \$300,000 to \$500,000
- Implemented updated expense tracking and management procedures, achieving greater efficiencies and results while maintaining our reputation for highest customer service standards
- Assembled an internal process improvement work group comprised of teammates from across the organization and led by Financial Perfomance Director Michael Harris
- Best practices improvements assessed and applied to budgeting

Information Technology

- Performed review of Information Technology policies and procedures
- Reorganized department for improved efficiency
- Developed and recommended new "Bring Your Own Device" policy, to streamline and more efficiently manage mobile devices
- Upgraded JD Edwards management system
- Implemented Phase I of Employee Self Service project (teammates can now view paystubs and other HR information online)
- Implemented new VOIP (Voice over IP) phone system
- Developed numerous process improvements for MES and clients such as: automating JD Edwards journal entry uploads, asset reporting improvements for clients, and implementing new payment options
- Development of a refreshed website is underway



"Working with MES the past two years has not only created significant savings for the county but made us a more effective and customer service orientated organization in regards to our solid waste operation."

> -Billy Boniface, Director of Administration, Harford County

