

## **Maryland Environmental Service**

Your challenge is to meet the demands of stormwater regulations. Governor O'Malley wanted MES to be prepared to help you.



## Maryland Environmental Service

Counties and Towns are wary of taking on the carrying costs of additional employees.

Our strategy: Finding ways to help you defray those costs.

## Maryland Environmental Service

On the front end, a stormwater program is labor intensive.

After a project is established, labor is reduced.

MES can allow you to have the staff you need, only for as long as you need them.

# MES has invested in human resources to address County and Municipal stormwater needs.

**MES employs over 700 employees including 150 stormwater professionals. Staff resources include:**

Project Managers  
Environmental Specialists  
Samplers  
Lab Specialists  
Mechanics  
Laborers  
Software Application Developers  
Compliance Inspectors

Geologists  
GIS Specialists  
Chemists  
Equipment Operators  
Website Developers  
Engineers  
Grant Specialists



MES has invested in technology resources to help keep costs down.

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MES has developed computer applications to develop your stormwater implementation strategy.

Stormwater applications help you locate the most cost-effective opportunities to do retrofits.

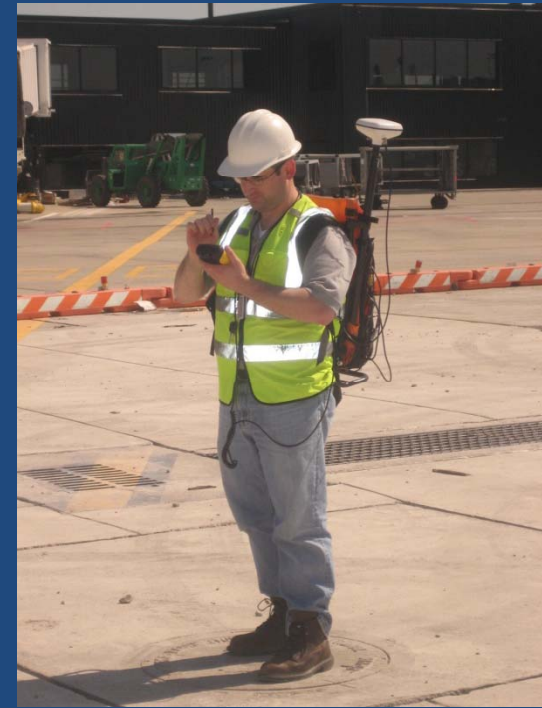
The apps generate the reports you must send to the regulatory body.

# Stormwater Applications

MES has done stormwater work for BWI Airport since the 1980's

When we started to ramp up our GIS work, step one was to do a field inventory of stormwater structures at the airport.

For the M.A.A., we developed a suite of stormwater inspection field applications. Other Department of Transportation modals now use the apps.



View	Location	Sub Area	Inspectors	Orig. Insp	This Insp Date	Issue Resolved	Weather	Monthly	Incident	FollowUp
<input type="checkbox"/>	Air Cargo	Buma	Frank Klemm	3/3/2009	3/3/2009	3/3/2009		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Air Cargo	Buma	Frank Klemm	3/3/2009	3/3/2009	3/3/2009		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Air Cargo	Cargo 2	Frank Klemm	2/27/2009	2/27/2009	2/27/2009		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Stormwater Applications Developed by MES

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**MES has developed four significant stormwater applications, as well as several other customized stormwater apps.**

- Stormwater Inspections Field App
- IDDE Inspection (illicit discharge and detection elimination) App
- SPPP (stormwater pollution and prevention plan) App
- Oil Water Separator App

**You don't have to reinvent the wheel.**

**The MES stormwater apps are already developed and can be used by Counties and Municipalities.**

# Stormwater Applications - IDDE

IDDE\_Form\_MasterGIS.mxd - ArcMap - ArcView  
 File Edit View Insert Selection Tools Window Help  
 1:24,117  
 Editor Task: Create New Feature Target:  
 Inspection Edit View Clear Selected Features Rain Print Reports Status Adjustments

**Layers**

- IDDE\_points
  - Status
    - Not Done
    - Need Follow Up
    - Need Reinspection
    - In Compliance

**Outfall Reconnaissance Form**

Page 1 | Page 2 | Follow Up | Photos

Subwatershed: Stony Run    Date: 1/16/2013    Investigators: \_\_\_\_\_  
 Outfall ID: PBT01    Time (24hr): 09:07    Air Temp: \_\_\_\_\_ °C / 0 °F  
 Land Use in Drainage Area: Commercial    Community: BWI    Comments: \_\_\_\_\_

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**OUTFALL DESCRIPTION**

Diameter of Pipe (in): 0    Submerged in Water: No    Flow Present?: Yes  
 Material: Concrete    Submerged w/ Sediment: No    *If no, skip to Physical Indicators (for non-flowing)*  
 Shape: Circular     In-stream (for sample collections)    If so, describe flow: N/A  
 Number of Openings: Single    Depth of Flow (in.): 0

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**OUTFALL CHARACTERIZATION**

Estimated Flow (fps) 0     Water Temp. \_\_\_\_\_ °C / 0 °F     pH 0     DO (mg/L) 0  
 Ammonia (mg/L) 0     Surfactants (mg/L) 0     Fluoride (mg/L) 0     Conductivity (µS/cm) 0  
 Fecal (MPN) 0     Potassium (mg/L) 0     DRO (mg/L) 0     GRO (mg/L) 0

Comments: \_\_\_\_\_

OK    Cancel

OF003    PBO162    OF002 OF303    ACOF2 ACOF3    ELOTOF03  
 SherOF04 SherOF03    SherLoop    PEOF1    CADF1    PEOF3    OWT456OF    EW03  
 PBO200    MAC10F    MPT703 OF007  
 PBO196    PBO202  
 FSOF04 FSOF05    PBO3500F  
 R33LI012    R33LI005  
 GL\_OF

1389429.07 552110.88 Feet



# Stormwater Applications - CARS



This Workorder contains attachments. You can view them by clicking on the button above.

**GENERAL INFORMATION**

Work Order ID:

\*Facility:  \*Status:

\*Category:  \*Assigned To:

\*Type:  Active?

Disposition:  Follow Up Required:

Disposition Note:  \*Priority:

Other:  MES Task #:

Hours Spent:  Contractor Cost:

Material Cost:  Contractor Description:

Material Description:

**NOTES**

Description of Work:

Comments:

Add Comments:

**DATES/SCHEDULE**

Date Opened:

Date Approved:   None  Recurring

Date Completed:

**GENERAL INFORMATION**

Work Order ID:

\*Facility:  \*Status:

\*Category:  \*Assigned To:

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Disposition:  Follow Up Required:

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**NOTES**

Description of Work:

Comments:

Add Comments:

**DATES/SCHEDULE**

Date Opened:

Date Approved:

Date Completed:

None  Recurring

MVA's Compliance and Recordkeeping System (CARS) of stormwater inspections performed at the MVA HQ.

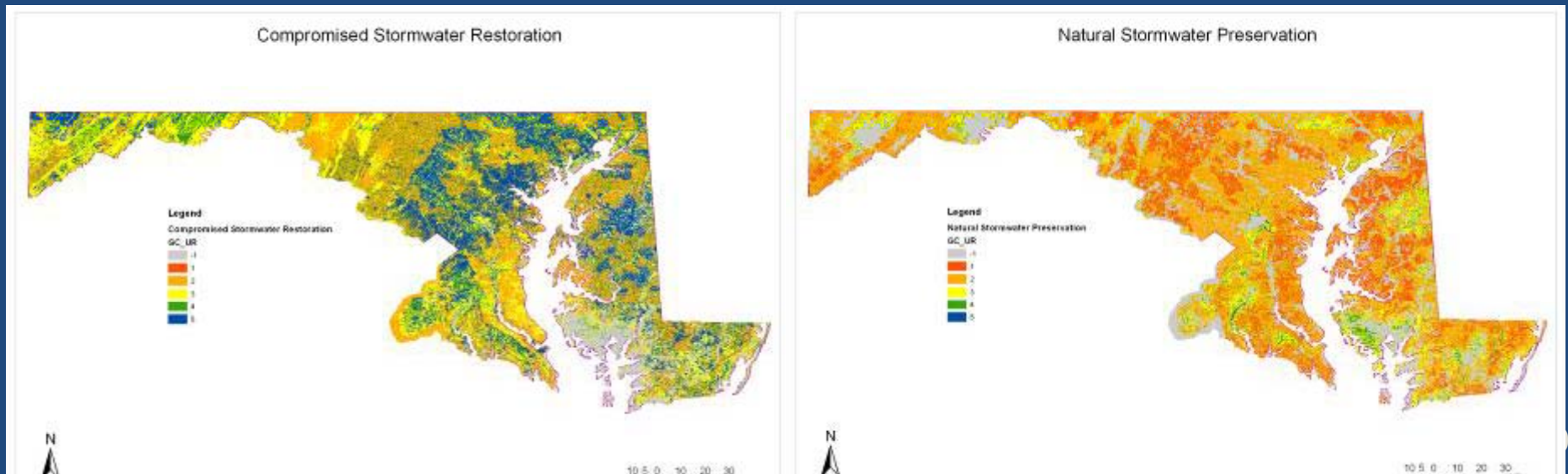
# Stormwater Applications

MES developed the Watershed Resource Registry for the Green Highways Partnership project, which includes EPA, ACE,SHA, FWS, FHWA, MDE, and DNR.

It is for Federal, State and Local governments to target “bang for your buck” locations for restoration and preservation.

It's FREE

EPA will be presenting on this tool later this afternoon.



## How MES Works

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- Established to be an affordable resource for county and municipal governments
- Non-profit
- Fee for service
- Counties and municipalities can quickly and efficiently enter into IGAs with MES for services
  - In accordance with language in the Annotated Code, counties and municipalities may enter into Inter-governmental agreements with MES without going through their procurement processes
- Can't respond to formal RFPs. We can however submit a proposal if specifically requested

# MES Stormwater Projects



The Baltimore Montessori Public Charter Schoolyard Greening project removed 2,395 square yards (0.49 acres) of impervious surface, and replaced it with sod, topsoil, mulch and plantings. The cost was \$136,900.

# MES Stormwater Projects



The Matthew Henson Elementary School project removed 4,400 square yards (0.95 acres) of impervious surface and replaced it with sod. The cost was \$139,500.

## MES Stormwater Projects

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In St. Mary's County, MES tracks the stormwater system inspections in a database, mails out the inspection results to the system owners, provides technical assistance to owners for how to make repairs and do maintenance, and provides regular status updates to the County.

MES Stormwater Projects

**Pervious paver installation at the MVA Beltsville Full Service Facility**

## MES Stormwater Projects

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**Pond repair at MDOT Headquarters**



# MES Headquarters



# Your Stormwater Program

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**The underground pipes, the computer applications and the regulations are not visible to citizens.**

**But a new tree and new green space gets noticed and appreciated by citizens.**

**These projects attract community involvement.**

**Property values are increased.**

**It's a challenge to your budgets. MES is here to help you keep your costs as low as possible.**

# MES Stormwater Services

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**For more info. about our services, contact:**

**Jason Gillespie**

**410-729-8363, [jgill@menv.com](mailto:jgill@menv.com)**