



MDE Maryland Department of the Environment

Tracking, Reporting and Estimating Load Reductions for Best Management Practices

**Regional WIP Workshop
April 22, 2013**

MDE Science Services Administration



Overview

- Tracking Implementation
- Current Methods of Reporting BMPs
- Load Reductions
- Future Reporting Tools

Section Break

- Tracking Implementation
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Source Sectors

- Wastewater
 - Stormwater
 - Septic System (OSDS)
 - Forest
 - Agriculture
- Urban



Local Tracking of Urban Practices

- Wastewater information is tracked according to permit requirements.
- Stormwater and Septics: Local jurisdictions should be using spreadsheet or database applications to manage their BMP inventories.
 - **Stormwater:** There are 2 very different types of implementation: (distinguish)
 - New Construction
 - Retrofits
 - **Septic Systems:** Upgrades to BAT, Connections to Advanced Treatment Plants and Septic Pumping.





Key Stormwater and Septic Data to Track

- Inspection and Maintenance data should be tracked for verification
- Some basic required data elements:
 - Location (Lat/Long preferred)
 - BMP Type
 - Date Construction Completed
 - Impervious Drainage Area*
 - Total Drainage Area*
 - Treatment Design (inches of rain)*
 - Linear Feet (Stream Restoration)*
 - Tons (Street Sweeping)*
 - Inspection Date (To meet verification protocols)
 - Functional Status (To meet verification protocols)

* Apply only to Stormwater

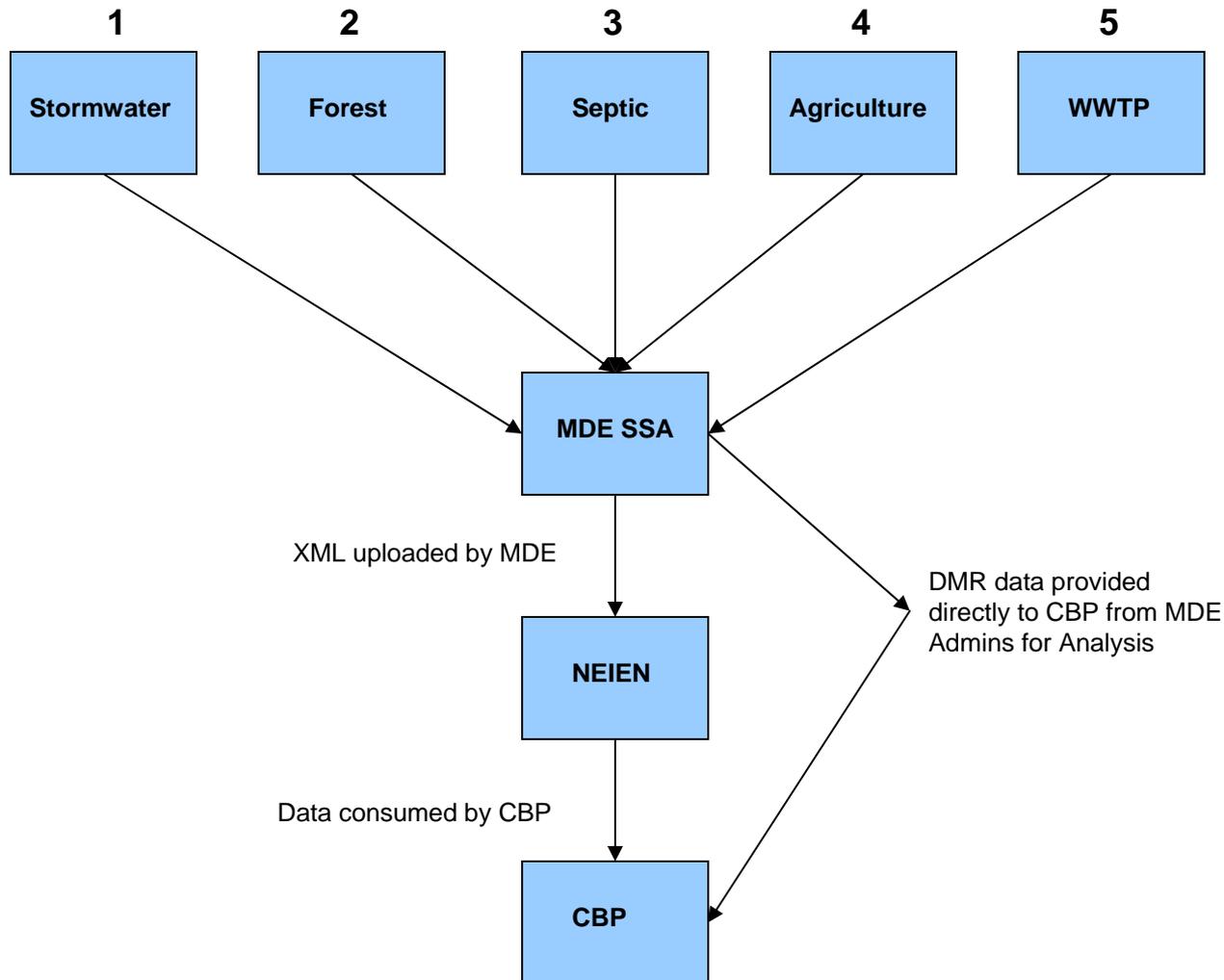


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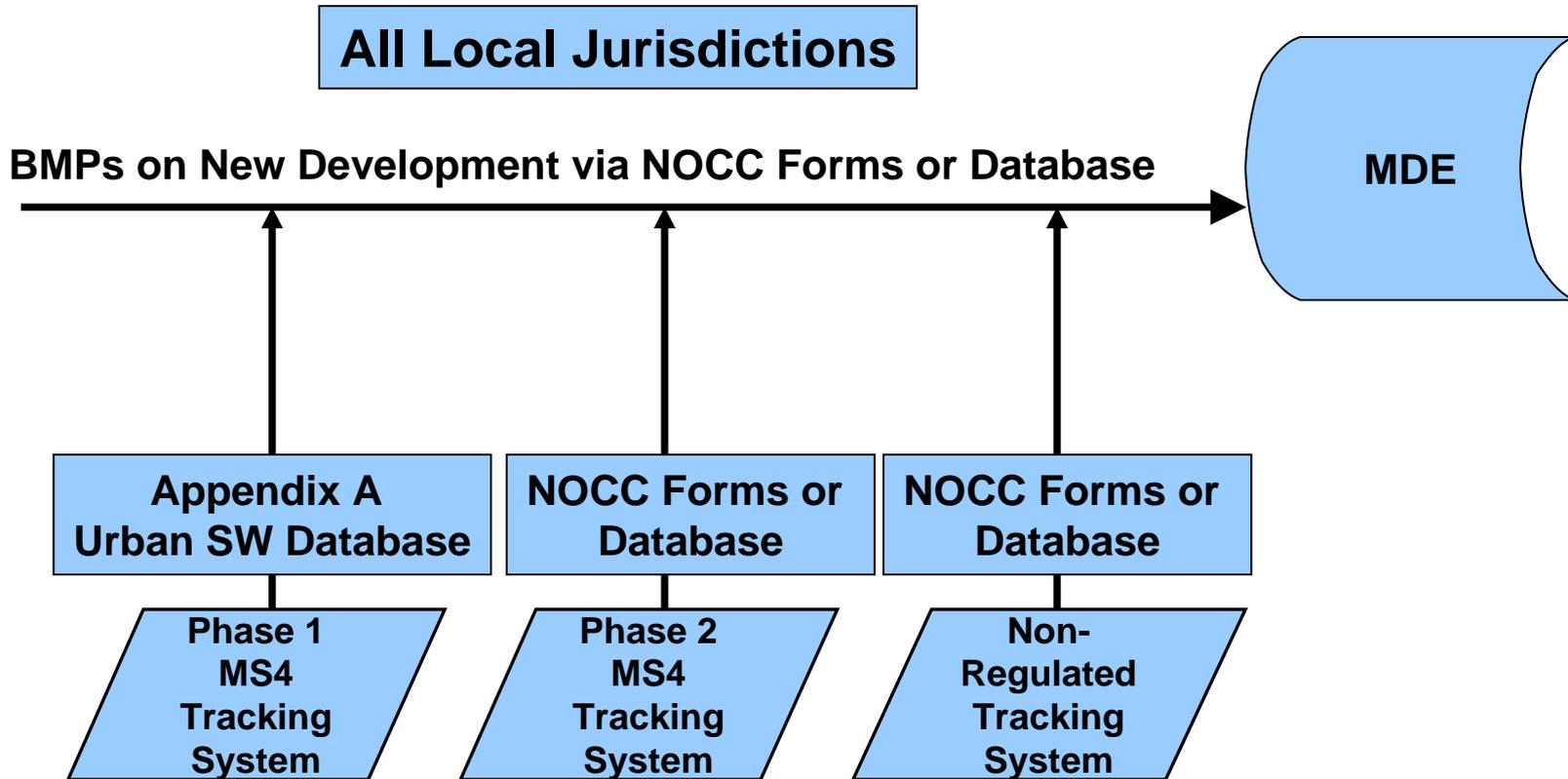
Overview of all Sources

Non-point and Point Source Data Flow to CBP





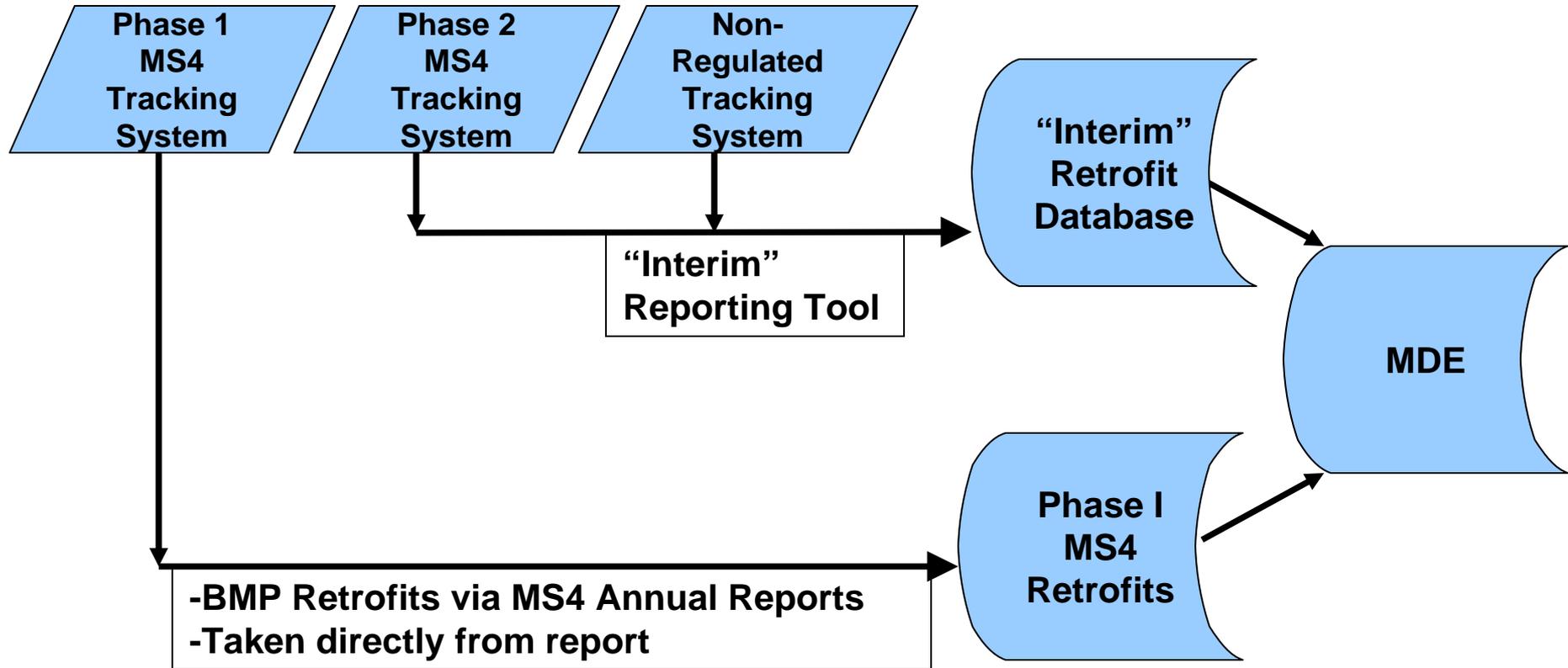
New Development SW BMP Reporting



NOCC Form Regulations [COMAR 26.17.02.10G](#)



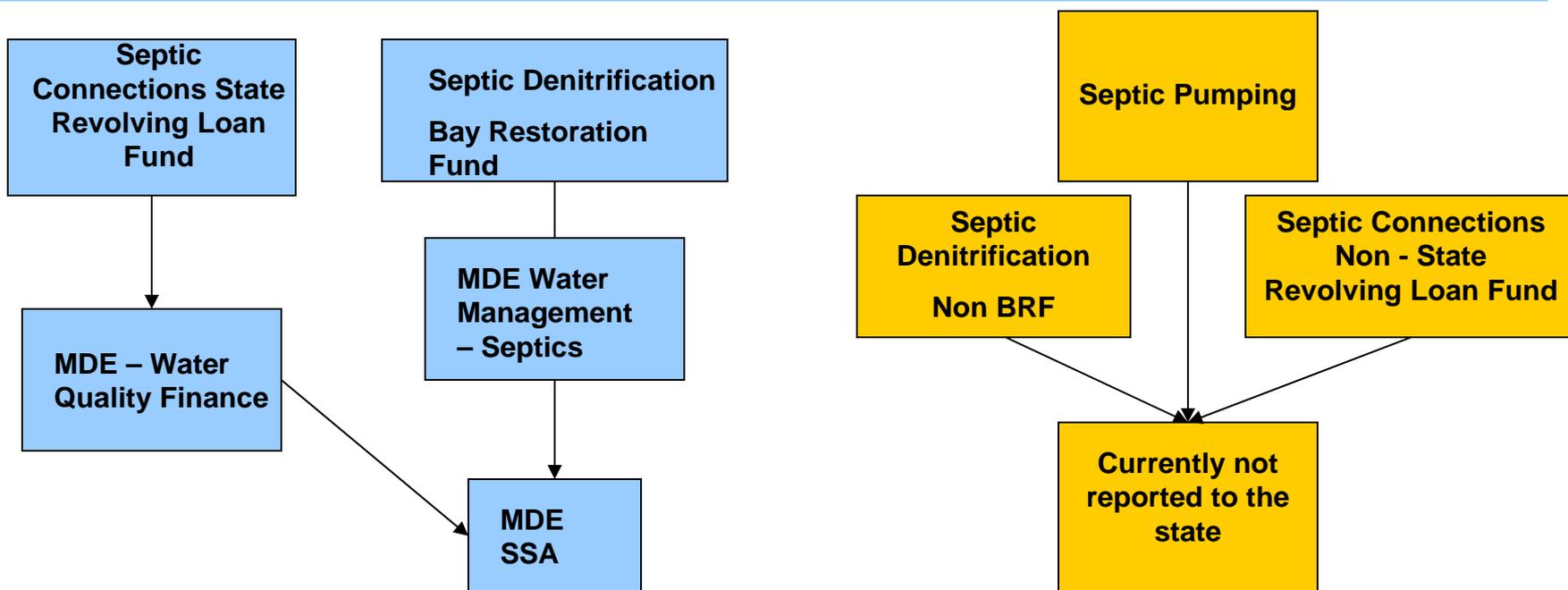
Retrofit BMP Reporting



[Link to MDE "Interim" Reporting Tool](#)

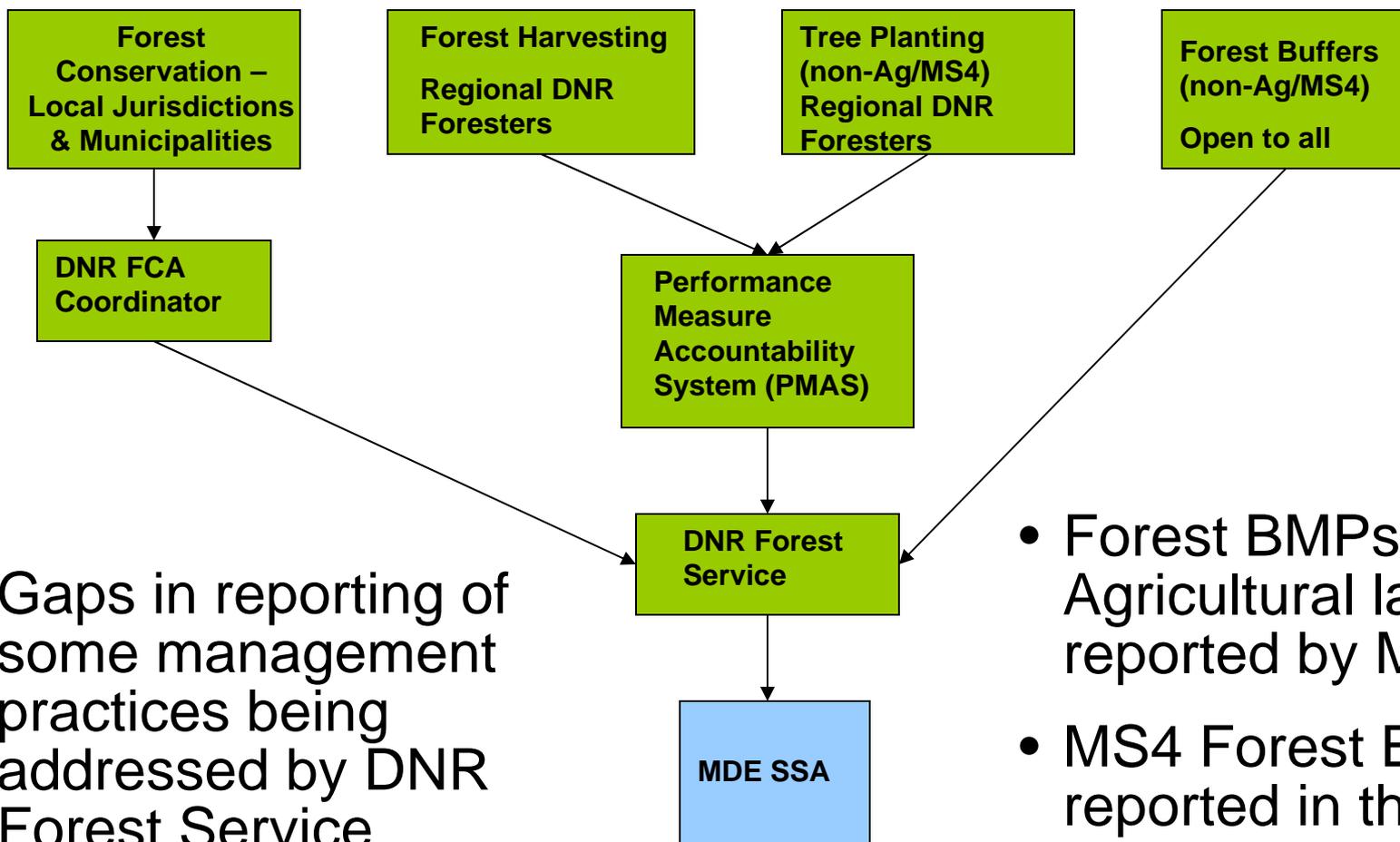
New collections systems are currently being created

Septic Systems



- ([COMAR 26.04.02.07 Subsection F](#)) Within one month of the completion of an installation, a person installing a BAT system shall report to the Department, or the Department's designee, in a manner acceptable to the Department, the address and date of completion of the BAT installation and the type of BAT installed.
- (COMAR 26.04.02.07 Section D (5)) The certified service provider shall report on inspection, operation and maintenance activities to the Department, or the Department's designee, in a manner acceptable to the Department on a yearly basis prior to the yearly anniversary of the date of installation.

Forest



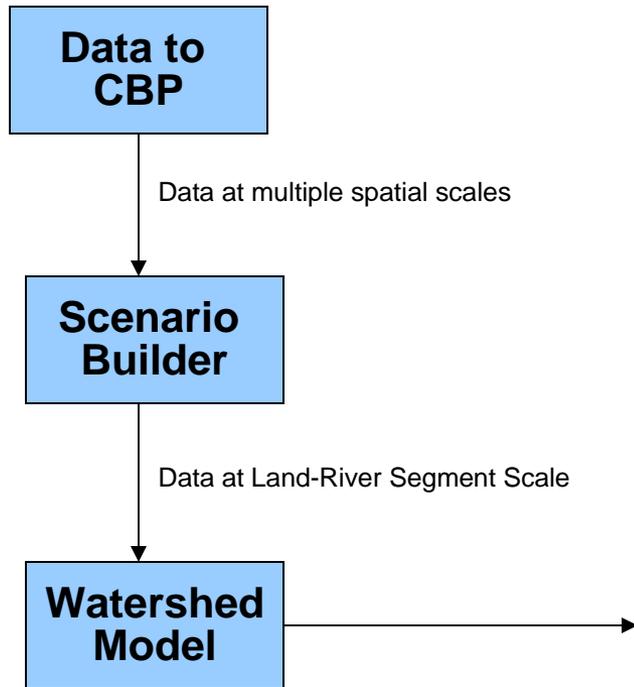
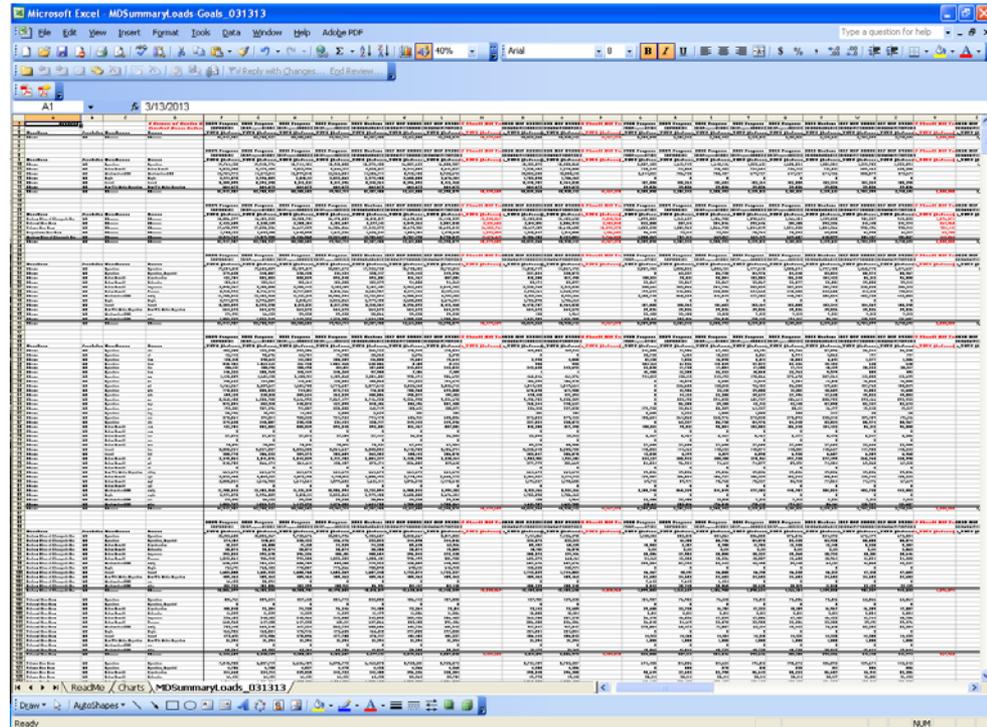
- Gaps in reporting of some management practices being addressed by DNR Forest Service

- Forest BMPs on Agricultural lands are reported by MDA
- MS4 Forest BMPs are reported in their reports

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Loads/Reductions from CBP

The screenshot shows a Microsoft Excel spreadsheet titled "MDSummaryLoads_Goals_031313". The spreadsheet contains a large table with many columns and rows, likely representing model results or data for various land-river segments. The data is organized into sections, with some rows highlighted in red. The spreadsheet is displayed in a window with a standard Windows interface, including a menu bar and a toolbar.

To see the model results, the Chesapeake Bay TMDL Tracking and Accounting System ([BayTAS](#)) results are incorporated into *Chesapeake Stat*

Other Reduction Planning Tools

- **Maryland Assessment and Scenario Tool ([MAST](#))**
 - Designed to mimic the Bay model
 - Web Tool
- **Center for Watershed Protection [Watershed Treatment Model](#)**
 - Independent of Bay model
 - Excel Spreadsheet
- **Simple Spreadsheet tools**
 - Locally derived

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Tools Under Development

- MS4 Permit Reporting Tool (MDE):
 - Reporting for all aspects of Phase I permits; BMPs are included.
- NEIEN Aggregation Tool (MDE):
 - **Tracking Function:** Consolidates and stores information from numerous BMP reporting entities.
 - **Reporting Support:** Automates the formatting of data and NEIEN XML conversion for reporting to CBP.
- BMP Cost Efficiency Calculator (statewide)
- Homeowner BMP Tracking, Verification and Load Estimate Tool (UM Sea Grant & UMCES)

Summary

- **Tracking Best Management Practices (BMPs):** It is the local jurisdiction's responsibility to maintain an active inventory of all BMPs it installs
- **Reporting BMPs:** Local jurisdictions will report their BMP inventories to the appropriate state agency for transmission to the Chesapeake Bay Program
- **Load Estimates:** Reductions from BMPs will be calculated by CBP using the Chesapeake Bay Model

Questions?



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