

# **Protocol for Setting Targets, Planning BMPs and Reporting Progress for Federal Facilities and Lands**

**Jim Edward  
Deputy Director – CBPO/EPA  
Citizens Advisory Committee Meeting  
May 21, 2015**

# Federal Facilities Targets: Progress to Date

- Federal Facilities Targets Action Team (FFTAT) formed by PSC and charged with developing Federal targets protocol.
- Biweekly meetings of FFTAT beginning in January 2015
- Co-chaired by VA and EPA
- Jurisdictions on FFTAT: VA, MD, DC and PA
- Federal Agencies: DOD, ACOE, DHS, GSA, NPS, USDA, EPA
- Draft Protocol completed and out for review by FFTAT.



# Federal Agencies Participation in Chesapeake Bay TMDL and WIPs

## Identify Facilities and Land Uses

*Phase 5*

- Spreadsheets
- BayFAST

*Phase 6*

- Facility Editor Tool

## Set Targets

- Jurisdictions (or EPA) and Federal Agencies will use the Federal Targets Protocol

## Indicate BMPs, Estimate Current Loads and Plan New BMPs

- BayFAST
- 502 Guidance

## Progress and Accountability

*Phase 5*

- BayFAST

*Phase 6*

- Watershed Model

## Track and Report BMPs

- Spreadsheets to the Jurisdictions
- Jurisdictions report through NEIEN

## Implement BMPs

- 502 Guidance
- Chesapeake Bay Basinwide BMP Verification Framework

# Purpose of Targets Protocol

- Document defines the procedures for setting nitrogen, phosphorus and sediment loading targets for federal facilities consistent with the 2010 Chesapeake Bay TMDL (Bay TMDL).
- Developed to assist the Bay jurisdictions with setting federal facility targets.
- To assist the federal agencies with using the Chesapeake Bay Facility Assessment Scenario Tool (BayFAST) to develop plans to meet those targets.



# BACKGROUND

- The May 2010 Executive Order 13508 Strategy states “Federal agencies with property in the watershed will provide leadership and will work with the Bay jurisdictions in the development of their Watershed Implementation Plans”
- The EO Strategy also made it clear that **“states would establish explicit load reduction expectations for individual federal facilities as part of the WIP process.”**
- The Bay jurisdictions and the federal partners are also setting two-year milestones to assure that they are on track to meet the Bay TMDL allocations.
- Federal facilities are expected to demonstrate their respective contributions to restoring the Chesapeake Bay by achieving federal targets.
- Federal facilities are expected to achieve **at least the same level of effort** as nonfederal entities.



# Pollution Reduction Approach

## Bay Jurisdictions will:

1. Identify the federal facilities for which targets will be set
2. Set numeric targets following this Protocol for the 2025 Bay TMDL target goal and the 2017 interim goal by July 2015
3. Communicate these targets in writing to federal agencies
4. Provide a reporting format to federal facilities
5. Report BMPs implemented on federal facilities using the National Environmental Information Exchange Network (NEIEN) as part of annual progress reporting
6. Develop 2016-2017 milestones that include the federal plans and submit to EPA by January 2016.



# Pollution Reduction Approach

## Federal Agencies will:

1. Create a parcel for each facility that is assigned a target and specify the acres of each land use within the parcel
2. Create a baseline scenario for the facility using BayFAST by not specifying any BMPs. (known as “2010 No Action scenario”)
3. Create a plan to meet the 2017 target provided by the Bay jurisdictions by adding current and planned BMPs
4. Report implemented BMPs to Bay jurisdiction(s) and CBPO annually by October 1<sup>st</sup>
5. Follow the Basinwide BMP Verification Framework and verification protocols developed by each Bay jurisdiction.



# Setting of Targets by Jurisdictions

- Bay jurisdictions are expected to finalize targets for federal facilities for nitrogen, phosphorus and sediment **by July 2015**
- Jurisdictions will communicate their targeting methodology to federal agencies through the FFTAT and then establish targets following the agreed-upon methodology which will be contained in an **Appendix to the Protocol**.
- If a Bay jurisdiction chooses not to set targets for any federal facilities, **EPA will set the targets for the federal facilities** in that jurisdiction after discussion with the jurisdiction.



# Options for Specifying Targets for Federal Facilities

The federal facility targets may be specified in any of three ways at the discretion of the jurisdiction:

1. A per acre percent reduction from the baseline. For example, 45% per acre reduction in pounds of nitrogen.
2. Total pounds per acre required to be reduced from the baseline. For example, the target may be set at 10 pounds of nitrogen required to be reduced per acre, calculated from a baseline load of 220 pounds of nitrogen per acre and a 2025 target of 210 pounds per acre (220 minus 210 equals 10 pounds/acre).
3. Total allowable load in terms of pounds of nitrogen, phosphorus, and sediment per acre. For example, 210 pounds of nitrogen per acre.



# Considerations in Setting of Targets by Jurisdictions

- **Consistency with Permits:** The targets established by the Bay jurisdictions are expected to be consistent with the Bay TMDL, National Pollutant Discharge Elimination System (NPDES) permits, and any local TMDLs
- **Target Years:** Federal facility targets should be set for 2025, with an interim goal specified for 2017. Where the default baseline of 2010 No Action is used, an equivalent 60% 2017 reduction can be determined by calculating the ratio of the 2017 load to the 2025 load and applying that ratio to the federal facility's 2025 calculated target. Other methods that achieve an equivalent 60% are acceptable so long as EPA determines that it is consistent with the Bay TMDL.
- **Spatial Scale and Level of Effort:** Targets for federal facilities are expected to be established with the same level of implementation effort as targets for the state-major basin in which the facility is located (e.g., Virginia Potomac).



# Use of BayFAST by Federal Facility Managers

- Facility managers are to create a parcel in BayFAST with the acres of each land use. This is the first step in establishing a reduction plan. The land use data for each facility is due to the Bay jurisdictions by May 31, 2015.
- Updated land use data for each facility is due to the jurisdictions by May 31, 2015
- Facility managers enter the acres of each land use that were present in 2010 using the default baseline. Jurisdictions may specify a different baseline that is consistent with the Bay TMDL allocations.
- Federal facility managers are to create scenarios in BayFAST with BMPs that achieve the 2017 loading targets.
- Jurisdictions are to submit 2016-2017 milestone commitments that meet the 2017 target and include federal commitments in January 2016.
- Federal agencies are to provide their facility 2017 plans to the Bay jurisdictions by November 1, 2015.



# Reporting Progress by facility managers to the Bay jurisdictions and to EPA/CBPO

- Bay jurisdictions, working with CBPO, developed spreadsheet templates to facilitate federal facility reporting of BMP implementation to jurisdictions.
- Federal facilities will report annual BMP implementation towards meeting these facility-specific targets to the jurisdictions and CBPO using the spreadsheet templates.
- Bay jurisdictions are to continue reporting progress toward meeting Bay TMDL allocations by reporting BMPs through the National Environmental Information Exchange Network (NEIEN).
- Reporting deadline for federal facilities to Bay jurisdictions and CBPO is October 1<sup>st</sup>.
- Federal agencies are expected to undertake BMP verification following the **BMP Verification Framework** approved and adopted in September 2014 by the CBP Principals' Staff Committee and the protocols developed by each Bay jurisdiction



# Future Improvements Related to the Bay TMDL Midpoint Assessment

- The Bay jurisdictions are expected to submit Phase III WIPs to EPA in 2018.
- CBP partnership should complete improvements to BayFAST and development of the Phase 6 Watershed Model in 2017.
- Changes to the Phase 6 Watershed Model should result in the availability of load estimates for individual federal agencies as well as updated land uses for all federal and nonfederal areas. These estimates will facilitate tracking progress by individual federal agencies.
- BayFAST and the Watershed Model updates are intended to increase the capacity for federal agency planning, reporting, and assessment of progress.
- Federal facility loading targets for 2025 and the supporting methodology may change as part of the Phase III WIP development process, new data incorporated into the Phase 6 Watershed Model, and other aspects of the Bay TMDL midpoint assessment.



# Federal Facility Targets – Key Next Steps

- Establish targets including 2017 milestone
- Use state basin level and 2010 No Action base
- Correct land uses
- Method for assessing progress in 2017
- Enhancements to Bay Program model to produce federal progress assessment outputs
- Improved reporting – more complete by feds and additional information for use in NEIEN
- Additional BayFAST functions



# Federal Participation – 2015 Key Dates

## April

- Federal land uses categories and how to group federal agencies for annual Progress
- Format for reduction target method summary document
- CBP will work with each jurisdiction to compile details of reduction target methods

## May

- Jurisdiction target methods summary final
- **May 31- Federal agencies report land use data to jurisdictions**

## June

- **Draft facility-specific numeric targets for 2025 goal and 16/17 milestones**
- Draft historic BMP data due from agencies to jurisdictions
- **Water Quality GIT Meeting (June 8) and Management Board Meeting (June 18?)**
- Federal Leadership Committee Meeting (TBD)

## July

- **Final numeric reduction targets calculated for priority facilities**
- Federal facilities GIS data layer added to BayFAST

## August

- Jurisdiction targets approaches added to BayFAST
- August 31- Federal agencies submit Final historic BMP data

## September

- Sept 30- Jurisdictions submit final historic BMP data

## October

- **Oct 1- fed agencies report 2015 progress BMPs to jurisdictions** (if not included in historic data)

## November

- Nov 1- Two-year milestone spreadsheets due from federal agencies to jurisdictions



# Key Definitions

**Land Cover** – Indicates physical land type (impervious surface, pervious surface, agriculture, forest, etc.)

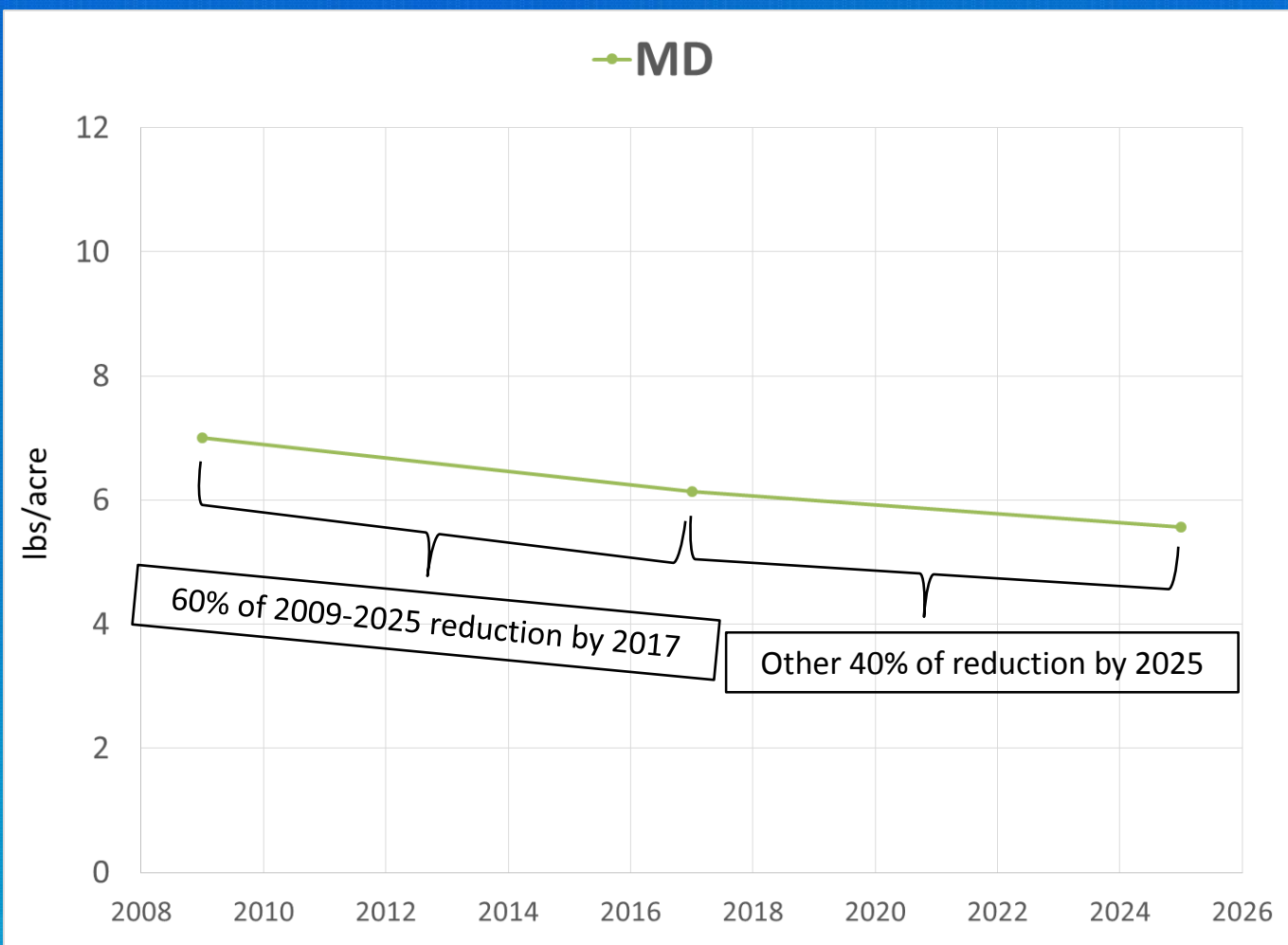
**Land Use** – Indicates how the land is used (regulated high density developed impervious, Non-regulated low density developed pervious, pasture, harvested forest, etc.)\*\*

**Baseline** – Starting condition against which future conditions will be compared in order to assess progress towards achieving your target.

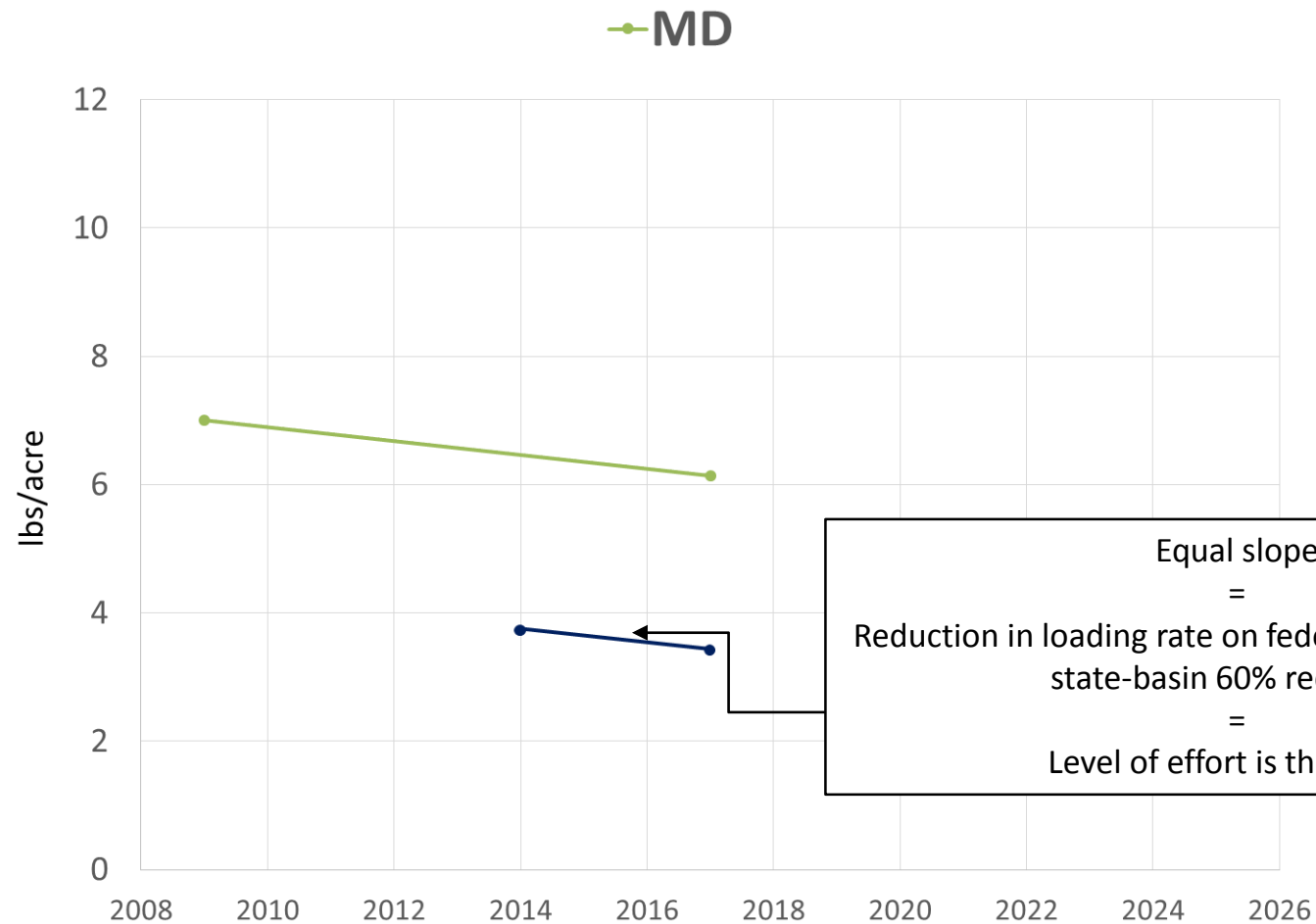
**2010 No Action** – Default baseline model scenario used to develop targets; 2010 land uses with no BMPs in place..

\*\*Land use is reported by federal agencies to the jurisdictions









Equal slope  
=  
Reduction in loading rate on federal facility is same as  
state-basin 60% reduction  
=  
Level of effort is the same.