CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD (TMDL) MILESTONES

Approval

Chesapeake Bay Total Maximum Daily Load (TMDL) Planning Milestones for Fiscal Years 2012 and 2013.

These milestones are a requirement of the Environmental Protection Agency (EPA) Chesapeake Bay TMDL (31 Dec 2010).

9 NOV 2011

S. A. SCHMEISER
CAPT, U.S. Navy
Commanding Officer
NAS Patuxent River

Date

Nov 8 2011

H. E. MILLS
CAPT, U.S. Navy
Executive Officer
NAS Patuxent River

Date

NOV 3 2011

J. R. WATTS
CDR, CEC, U.S. Navy
Public Works Officer
NAS Patuxent River

Date

NAS Patuxent River, MD
Implementation Action and Programmatic Milestones for 2012 - 2013

AGRICULTURAL

The Maryland Department of the Agriculture (MDA) will submit the information to the Maryland Department of the Environment (MDE) on behalf of NAS Patuxent River.

STORMWATER MANAGEMENT RETROFITS

- NAS Patuxent River is working with the Navy Region to complete an installation-wide Stormwater BMP inventory and assessment.
- Continue to execute Coastal Zone consistency program.
- Continue to implement environmental site design.
- Perform Shoreline stabilization (pending funding).
- Retrofit traditional asphalt parking lot pavement with pervious pavements.

SEPTIC SYSTEM UPGRADES

- Perform a Septic system investigation to confirm the location of septic systems, confirm the systems were properly abandoned and propose solutions (removal or nutrient removal) and cost estimates for any remaining systems on the base property.

WASTEWATER TREATMENT PLANT DATA

- The Webster Field Sewer plant upgrade was completed. The system is equipped with additional nitrogen and phosphorus treatment.

PROGRAMMATIC 2-YEAR MILESTONES

- NAS Patuxent River is currently working to develop a Stormwater Management Implementation Plan (SWIP) for the entire NAS Patuxent River Complex. This plan will identify retrofit locations, additional best management practices (bmps) and the associated construction and maintenance costs.
- Continue to support applicable watershed jurisdictions Phase II WIP processes in 2012 and 2013.
- Continue to implement Low Impact Development (LID) under the Energy Independence and Security Act of 2007 (EISA) as a means to manage storm water for all construction and maintenance projects (2012).
- Continue to follow Navy LID Policy implemented in 2007.
- Continue to carry out and track the Facilities Reduction Program. (20 buildings to be demolished in upcoming FY returning footprints to pervious areas.)

PAX River Armory (24B85, Patuxent River Readiness Center)
Input to Maryland Department of Environment
Watershed Implementation Plan Phase II
DRAFT

I. PAX River Army National Guard Armory

PAX River Armory (24B85, Patuxent River Readiness Center) is located in St. Mary's County, Maryland, approximately 12 miles east of Leonardtown. The 12.4 acre facility is located on Pine Hill Run Road just south of the Naval Support Facility-Patuxent.

Land use and verification of accurate facility boundary and acreage data to be determined from future field assessment.

II. PAX River Armory Baseline Loadings November 2011:

To be determined.

III. Programmatic Two Year Milestones 2012-2013:

- **Agricultural-** Not Applicable.
- **Stormwater Management Retrofits-** To be determined.
- **Septic System Upgrades-** Not Applicable.
- **Wastewater Treatment Plant Data-** Not Applicable.
- **Accounting for Future Growth**-
    - The PAX River Armory will continue to support Maryland Department of Environment (MDE) Watershed Implementation Plan (WIP) Phase II processes in 2012 and 2013.
    - The PAX River Armory will continue to implement the Army Policy for Sustainable Design and Development (SDD), October 2010 and Low Impact Development (LID) under the Energy Independence and Security Act of 2007 (EISA) as a means to manage stormwater for all future construction and maintenance projects. Currently it is unknown if any new construction projects are scheduled through 2018.

IV. Successes:

The WIP Phase II process required collaborative involvement from MDE, the PAX River Armory and the U.S. Army Corps of Engineers to ensure pollutant load reductions as well as current and future BMP implementation levels fulfill the federal share of the needed reductions for Nitrogen, Phosphorous and Sediment pollutants. In an effort to meet WIP Phase II timelines, two year milestones and critical progress milestones in 2017 and 2020, PAX River Armory will conduct a comprehensive assessment of boundary data and land use/land cover data on the facility. Providing more accurate data will enable the facility to better assess the load runoff and appropriate BMPs for minimizing or reducing the loads.

MDE and the Services held several meetings. The meetings were helpful and productive. Going forward this federal-state-local partnership will prove to be instrumental in meeting the long term restoration plan for the

Chesapeake Bay as well as improve credibility and accountability for Department of Defense (DoD), a Federal agency leading by example.

V. Challenges:

- Coordination with multiple Bay jurisdictions made it difficult to apply one agency approach to meeting the required load reductions. For the Services this required additional resources in order to understand what each jurisdiction's expectations are, and these inconsistencies may result in long term load inaccuracies when determining whether TMDL goals have been met across the watershed.
- It was critical that all boundary and land use cover be verified. Facilities of this size have limited GIS data. Therefore, it took an additional amount of resources and technical capability to create shapefiles in order to verify boundaries and land use data.

VI. Inaccuracies:

To be determined.

Webster Field (24C33)
Input to Maryland Department of Environment
Watershed Implementation Plan Phase II
DRAFT

I. Webster Field

Webster Field (24C33) consists of a currently vacant 3.56 acre parcel on the Naval Air Station Patuxent Webster Field Annex. It is located in St. Mary's County, Maryland, approximately 15 miles southeast of Leonardtown. This site consists of a 3.56 acre vacant parcel in which MDARNG plans to build on in the future.

Webster Field is not an independent entity per MDE. It was included as a component of Naval Air Station Patuxent Webster Field Annex. Land use and verification of accurate facility boundary and acreage data to be determined from future field assessment.

II. Webster Field Baseline Loadings November 2011:

To be determined.

III. Programmatic Two Year Milestones 2012-2013:

- **Agricultural-** Not Applicable.
- **Stormwater Management Retrofits-** To be determined.
- **Septic System Upgrades-** Not Applicable.
- **Wastewater Treatment Plant Data-** Not Applicable.
- **Accounting for Future Growth**-
    - Webster Field will continue to support Maryland Department of Environment (MDE) Watershed Implementation Plan (WIP) Phase II processes in 2012 and 2013.
    - Webster Field will continue to implement the Army Policy for Sustainable Design and Development (SDD), October 2010 and Low Impact Development (LID) under the Energy Independence and Security Act of 2007 (EISA) as a means to manage stormwater for all future construction and maintenance projects. Currently it is unknown if any new construction projects are scheduled through 2018.

IV. Successes:

The Watershed WIP Phase II process required collaborative involvement from MDE, Webster Field and the U.S. Army Corps of Engineers to ensure pollutant load reductions as well as current and future BMP implementation levels fulfill the federal share of the needed reductions for Nitrogen, Phosphorous and Sediment pollutants. In an effort to meet WIP Phase II timelines, two year milestones and critical progress milestones in 2017 and 2020, Webster Field will conduct a comprehensive assessment of boundary data and land use/land cover data on the facility. Providing more accurate data will enable the facility to better assess the load runoff and appropriate BMPs for minimizing or reducing the loads.

Webster Field (24C33)
Input to Maryland Department of Environment
Watershed Implementation Plan Phase II
DRAFT

MDE and the Services held several meetings. The meetings were helpful and productive. Going forward this federal-state-local partnership will prove to be instrumental in meeting the long term restoration plan for the Chesapeake Bay as well as improve credibility and accountability for Department of Defense (DoD), a Federal agency leading by example.

V. Challenges:

- Coordination with multiple Bay jurisdictions made it difficult to apply one agency approach to meeting the required load reductions. For the Services this required additional resources in order to understand what each jurisdiction's expectations are, and these inconsistencies may result in long term load inaccuracies when determining whether TMDL goals have been met across the watershed.
- It was critical that all boundary and land use cover be verified. Facilities of this size have limited GIS data. Therefore, it took an additional amount of resources and technical capability to create shapefiles in order to verify boundaries and land use data.

VI. Inaccuracies:

- MDE included Webster Field as an independent entity when in fact it is a component of Naval Air Station Patuxent Webster Field Annex. Recognize there is potential for inaccuracies as MDE identified the wrong ownership for this property and when accounted for under Naval Air Station Patuxent Webster Field Annex, this could result in duplication of load reductions at Naval Air Station Patuxent Webster Field Annex. Information for this facility will be provided to the Navy- Naval Air Station Patuxent Webster Field Annex.
- Additional inaccuracies to be determined.