



# DoD CHESAPEAKE BAY PROGRAM JOURNAL

PROTECTING THE CHESAPEAKE BAY FOR MILITARY READINESS, FOR OUR COMMUNITY, FOR FUTURE GENERATIONS

## Meet a New DoD Chesapeake Bay Program Coordinator

By: Sharon Baumann



Hi, my name is Sharon Baumann and I am the newest member of the DoD Chesapeake Bay Program team. In June, I came onboard as one of the DoD Chesapeake Bay Program Coordinators and I am thrilled to be here!

Let me give you a little background about me. I am a native of Allentown, Pennsylvania but relocated to the Norfolk, Virginia area in 1991 where I

received my bachelors in Biochemistry from Old Dominion University. In January 1993, my career started at the Navy Public Works Center Norfolk, Virginia as an Environmental Chemist and from that point on, my entire professional career has been serving on behalf of the Navy within the Chesapeake Bay watershed. In 2001, I started working as a Water Program Manager for several installations in the Tidewater area of Virginia. This is where I first began to understand the detrimental impacts industrial activities can have and have had on the Bay and other waterways. It was a real eye-opener for me! I expanded my knowledge of environmental media programs beginning in 2006 when I became the Pollution Prevention, Emergency Planning & Community Right to Know Act and Pesticide Management Program Manager; again supporting several Naval installations in the Tidewater area. In January 2008, I became the Installation Environmental Program Director for Naval Station Norfolk, where I served for 7 1/2 years. That position has truly taught me the value and power of partnerships. It also gave me the understanding of the challenges faced and what is needed to effect change at the installation level.

On a more personal level, I am married to an old, salty retired Navy Senior Chief, who I met when I was 14 (and he had yet to become old, salty or a Senior Chief). We've been married for almost 26 years. We have one son, Joey (20), who is attending the Virginia Military Institute and is on track to become an Air Force Officer. Yes, there are some

interesting rivalries in my house! During my off-duty time, I spend as much time with my family as possible, work with the youth group at church, and I love to sing, read and exercise.

Working as a representative of the Navy in the environmental field has been the perfect fit for me in that it appeals to my needs to make a difference in this world by helping to protect our natural resources and advocate for the men and women who keep our country safe. I am excited to continue that kind of work on a much broader scale representing the DoD! Although I've only been in this position for a couple of months, I am truly amazed by the number of people who are working together to restore and protect the Chesapeake Bay. The dedication and effort being expended is awe inspiring and I love the teamwork environment. For me the most exciting thing about my new role is the opportunity I will have to work with so many professionals throughout the DoD, other federal agencies, regulatory communities and Chesapeake Bay partners. I am ready and eager to do my part.

## IN THIS ISSUE

<b>PAGE 1</b>	<b>Meet a New DoD CBP Coordinator</b>
<b>PAGE 2/5</b>	<b>DoD CBP Updates</b>
	<ul style="list-style-type: none"> <li>➤ Federal Facilities Protocol</li> <li>➤ FY15 Datacall Release</li> <li>➤ BMP Verification</li> <li>➤ Livestock Stream Exclusion</li> </ul>
<b>PAGE 2</b>	<b>2015 Results Clean the Bay Day</b>
<b>PAGE 3</b>	<b>Microplastics in the Chesapeake Bay</b>
<b>PAGE 4</b>	<b>Featured Installation—JEB Little Creek</b>
<b>Back Page</b>	<b>CHECK IT OUT!</b>



# DoD Chesapeake Bay Program: Updates and Highlights

By: Kelly Duckworth, Michael Baker International

The DoD Chesapeake Bay Action Team (CBAT) met on July 23, 2015. Representatives from the Navy, Army, Air Force, Defense Logistics Agency and Marine Corps participated. The next CBAT is scheduled for early November 2015. A brief description of what was discussed and updates relating to the meeting are included:

## Federal Facilities Workgroup

A new Federal Facilities workgroup has been established under the Water Quality Goal Implementation Team. Previously, the Federal Facilities Team was an ad hoc group formed under the Federal Office of Directors, which has now been dissolved. Sarah Diebel has been requested to chair the new Federal Facilities workgroup. If you want to participate, the group is open. It will be a joint federal and jurisdictional workgroup; therefore, it will give DoD an opportunity to partner and coordinate with the jurisdictions to enhance communication.

## Protocol for Federal Facilities Target Setting

The Protocol was established because the Partnership requested more federal facilities' participation. The Protocol has been approved within the Partnership, as well as DoD.

The Protocol has several purposes: first, the document defines the procedures for setting targets; second, it will assist the Bay jurisdictions with coordinating with the federal agencies; and finally, it provides more details in how federal agencies can use the BayFAST scenario tool.

Since all of the land uses have been submitted to the jurisdictions, they have used the Protocol methodologies to establish targets for both regulated and non-regulated land uses (urban and agricultural), which were released on 21 August 2015 to the DoD Chesapeake Bay Program Office. More information on installation's targets will be forthcoming.

So what's next on the federal agencies to-do list? DoD needs to create the 2016/2017 water quality milestones that includes the federal implementation plans in the October/November timeframe. This information will be reported to the EPA Chesapeake Bay Program Office, as well as the jurisdictions.

If you have any further questions about the Protocol, please contact Sarah Diebel. For further reference material, visit <http://www.chesapeakebay.net/calendar/event/22806/>.

-Continued onto Page 5-

## Clean the Bay Day 2015 RESULTS

### Navy by the Numbers

From **nine Navy installations**,  
approximately **630 total volunteers**  
removed roughly **11,612 pounds**  
of harmful debris  
along more than **52 miles**  
of streams and shoreline  
**all in just three hours.**

On Saturday, June 6, 2015, under beautiful, tranquil skies across the state, approximately 6,000 thousands of Virginians simultaneously descended on streams and beaches of the Bay to remove harmful litter and debris from our waters. From the dense sites of Hampton Roads, up to Northern Virginia, west to the Blue Ridge, east to the Shore, and all in-between, people from all walks worked by land and boats (and paddle boards) to give back to the Bay in what amounts to an enormous spring cleaning for our waterways every year.

Among the masses were elected officials rolling up their sleeves alongside constituents, enlisted men and women at several military installations, teams fielded by many and varied sponsors and partners, non-profits, for-profits, government and private sector, scout groups, churches groups and thousands of individuals and families for this year's *Clean the Bay Day*.

This year, the most common items founds were: Plastic bottles, plastic bags, food wrappers and cigarette butts. The "not-so-common" items were a stolen burned-out car, a rusty safe, a 50-foot gill net, and a bride-and-groom wedding cake topper.

Thank you to our DoD community for continuing to volunteer in this legacy cleanup event!



# Microplastics Pollution in Discharges is Preventable

By: Tiffany Lee, Joint Base Myer-Henderson Hall

In the last few years, you may have noticed the term “microplastics” in the news. Microplastics are tiny pieces of plastic from discarded plastic bottles, bags, and containers that end up in rivers, lakes, and oceans. Because they are so tiny and hard to see, researchers set sail to collect water samples and estimate the amount of plastic in the ocean. The 5 Gyres Institute, an organization aimed at reducing plastics pollution in our oceans, estimates that 296,000 tons of plastic are floating in the world’s oceans. But, if you think that oceans are the only waterbodies with a microplastics problem, think again—the problem is also reported in the Chesapeake Bay.

In a partnership with the 5 Gyres Institute, Trash Free Maryland took to the Chesapeake Bay in November to study the presence of microplastics in the water. Setting out from Deale, MD, the research team collected seven samples by dragging a trawl for an hour at a time. The trawl was fitted with a cone-shaped net, whose holes measure 330 microns wide, about the width of 2-3 strands of human hair. Water flows through the main opening and the fine mesh of the net ensures anything suspended in the water is trapped behind.



Microplastics from the Rhode River, a tributary of the Chesapeake Bay.  
Photo credit: Chesapeake Bay Program

## Best Management Practices to Prevent Further Microplastic Pollution

- ◆ Recycle plastic. Make sure bins are not overfilled; windblown plastic ends up in waterways.
- ◆ Buy household products that do not contain microbeads. Read ingredient labels carefully: polypropylene and polyethylene are chemical names for plastic microbeads.
- ◆ Use reusable bags, cups, and utensils. Avoid using plastic straws.
- ◆ Learn more about HB 1697, a Virginia bill to ban the manufacture or sale of microbeads starting in 2018 at <http://1.usa.gov/IQlqRDj>.

In seven samples, the net picked up algae, trash, foam, and plastic. According to the 5 Gyres Institute representative, the first sample collected contained almost ten times the amount of plastic than would be collected in a typical ocean sample. The plastic found in the Chesapeake Bay samples included bits of bags, tarps/sheeting, fishing line, and microbeads, the small plastic scrubbers found in face wash, toothpaste, and many household cleaning products.

Microbeads in particular are a major source of microplastics pollution worldwide. Microbeads are small enough to bypass

water treatment systems’ filters and end up in waterways. Scientists warn that chemicals and toxins absorbed by microbeads and other microplastics could be passed on to organisms who mistake them for food and eat them, and could then be passed up higher and higher on the food chain, eventually reaching humans. The threat posed by microbeads prompted legislative bans on their production in several states, including Maryland. A similar bill has been written by Virginia’s legislators for the current session.

Trash Free Maryland and the 5 Gyres Institute will resample the Chesapeake Bay during a three week trip in July-August 2015. Casting off from different locations, the research team will try to collect enough samples to estimate the density of microplastic pollution in the Bay and determine the main types of plastics contributing to microplastic pollution. Trash Free Maryland also hopes to run toxicology analyses of the samples to identify the types of chemicals that are absorbed by microplastics, and whether or not these chemicals are present in the tissues of organisms that ingest them.



The trash trawl net is 330 microns in size, and will catch everything but water. Photo Credit: Julie Lawson

## DID YOU KNOW THAT THE PER CAPITA PER PERSON FOOTPRINT OF PLASTIC USE IS 326 POUNDS PER YEAR?

What can installations do about this alarming fact? For starters, get your installation community involved with trash clean up events regularly. These are usually free to host and require little coordination and volunteer time. Also, get your coworkers to watch this two-minute video on the introduction of microbeads; it may change the way they think about the products they use! <http://storyofstuff.org/movies/lets-ban-the-bead/>



# FEATURED INSTALLATION

## JEB Little Creek—Fort Story: Construction Completed at Superfund Site

Released by EPA on 14 May 2015; Contact Information—smith.bonnie@epa.gov, 215-814-5543

The U.S. Environmental Protection Agency announced today that the U.S. Navy has completed Superfund cleanup construction at the Joint Expeditionary Base Little Creek—Fort Story in Virginia. The completion culminates 31 years of investigation and remediation at the major East Coast operating base supporting overseas contingency operations.

Construction completion is the most important Superfund milestone because it means that all physical construction of the cleanup remedies are complete. All immediate threats have been addressed and all long-term threats are under control.

“Thanks to the Navy’s hard work, commitment and the excellent working relationship they cultivated with EPA and Virginia, we’re able to celebrate only the second construction completion for a Navy facility here in the Mid-Atlantic region,” said EPA Mid-Atlantic Regional Administrator Shawn M. Garvin. “The Navy community here at JEB has much to be proud of and look forward to, given that 140 base locations that were once of concern are now protective of people’s health and available for appropriate reuse, including new recreational areas that will provide personnel and their families places to enjoy for years to come.”

Overall, the Navy spent more than \$40 million on approximately 140 locations known or suspected to be contaminated throughout the facility. Now, the land is available to support the Navy’s mission, provide environmental benefits to the Chesapeake Bay and also recreational and sporting opportunities for the base and the community.

JEB Little Creek, formerly known as the Naval Amphibious Base Little Creek, was added to the Superfund National Priorities List in May 1999. Between 1999 and 2015, EPA, the Navy and the Commonwealth of Virginia have worked together to ensure that the cleanup was consistent with current Superfund and Department of Defense guidance.

For each of the 140 sites that were known or suspected to be contaminated, an assessment was performed. At locations where unacceptable risk to human health or the environment was found, action was taken. All of the sites are now available to support the Navy’s mission; 132 of these sites have no land-use restrictions.

In addition to mitigating human health and environmental risks, the cleanup sought to revitalize areas for beneficial uses and environmental stewardship, such as:

- ◆ At one area of the base, waste was removed and replaced with wetlands, nature trails and wildlife observation platforms. This site is on the Chesapeake Bay and attracts birders and hikers.
- ◆ An area that was once a 12-acre landfill is now used by the Navy for combat training exercises. On another part of the former landfill, families can now run and play on several ball fields.
- ◆ At a six-acre former landfill, the area is now the Eagle Haven Golf Course driving range, where today’s event was held. It includes two windmills that generate green energy and power an irrigation system to maintain the vegetation on the driving range.

EPA’s Mid-Atlantic Regional office has determined that the installations at JEB Little Creek—Fort Story has met the criteria for being added to EPA’s construction completion list.

More information on the site is available at: <http://www.epa.gov/reg3hwmd/super/sites/VA5170022482/index.htm> .



Mr. Donald Schregardus, Deputy Assistant Secretary of the Navy (Environment), speaks during an environmental restoration construction complete Ceremony on Joint Expeditionary Base Little Creek - Fort Story. The base is celebrating significant milestones in a 31-year environmental cleanup project. (U.S. Navy photo by Mass Communication Specialist 2nd Class Abe McNatt/Released)



# DoD Chesapeake Bay Program: Updates and Highlights Continued

By: Kelly Duckworth, Michael Baker International

## Integration of the 2014 Agreement with the FY15 Datacall

*The FY15 Datacall was released on 31 August 2015.*

Due to multiple concerns with the utilization of the Access Database for the annual datacall, the datacall was executed through the use of an Excel spreadsheet. The datacall asks the same types of questions as previous datacalls but integrates the Final Management Strategies from the 2014 Agreement.

For each section that was in the database, there are now tabs within the Excel file. There is a tab for contact information, a tab for installation information, a project entry tab for FY15 projects and projected FY16/FY17 projects, and a tab for planned BMPs for State Years (SY)16/SY17.

Services will be given seven weeks to complete this datacall, thus due on **16 October 2015**.

For further information, please contact Kelly Duckworth at [kduckworth@mbakerintl.com](mailto:kduckworth@mbakerintl.com).

## BMP Verification

The Chesapeake Bay Program partners have formally defined BMP verification as “the process through which agency partners ensure practices, treatments and technologies resulting in reductions of nitrogen, phosphorus and/or sediment pollutant loads are implemented and operating correctly.” BMP verification can be viewed as a life cycle process that includes initial inspection, follow-up checks and evaluation of BMP performance.

### So what’s happening now?

The Jurisdictions have provided the federal facilities draft BMP verification documents. The DoD Chesapeake Bay Office has read through these documents to determine what the current requirements are. If you are interested in reading the complete draft documents, they can be found at: [http://www.chesapeakebay.net/about/programs/bmp/additional\\_resources](http://www.chesapeakebay.net/about/programs/bmp/additional_resources)

Additionally, the BMP Verification Panel, which provides the Panel’s preliminary feedback of each Jurisdiction’s plan, gave their evaluation of these draft documents. In the link above, the Panel stated, “Verification procedures for BMPs owned or operated by Federal agencies, facilities and landowners were essentially absent from the jurisdictions’ initial draft BMP verification program plans-this is an issue that needs to be addressed by both the jurisdictions AND their federal agency and facility partners.” EPA and the Jurisdictions may be asking for DoD to provide input in the near future. We will also be asking for this topic to be discussed at the next Federal Facilities Workgroup meeting (TBD). However, at this point, the documents do not appear to single out or impose any additional requirements for Federal Facilities.

If you have any questions on the BMP Verification process or the draft documents that were released, please contact Sharon Baumann at [sharon.baumann@navy.mil](mailto:sharon.baumann@navy.mil).

## Livestock Stream Exclusion Report

The Chesapeake Bay Commission released the Livestock Stream Exclusion Report in May 2015. It can be defined as an example of an agricultural BMP. Livestock exclusion incorporates a suite of BMPs designed to keep livestock out of streams and wetlands via fencing, alternative water sources, vegetative buffers or a variety of these techniques.

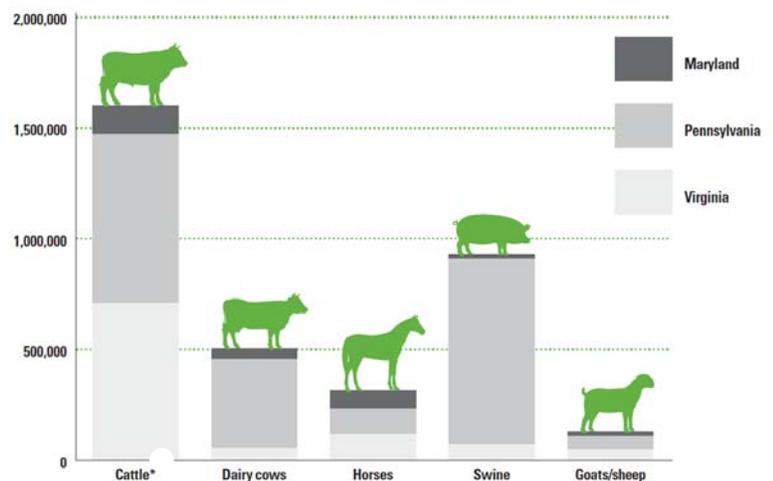
The report offers three benefits of why livestock exclusion offers a win-win opportunity. First, stable stream banks equates to better water quality. Thus, keeping livestock out of a stream protects the stream banks and maintains a vegetative filter to trap sediment and other nutrients that would otherwise flow into streams during precipitation events. Second, healthy streams keep animals healthy. Producers who installed fences along streams report improved herd health (i.e. decreased leg injuries and increased calf survival). Finally, studies have shown herd prefer drinking from off-stream resources, such as a watering trough 92% of the time because the water is cleaner, which also means herd weight gain and an increase in livestock production.

### So what does this mean for DoD?

During the annual FY15 datacall, a series of agricultural questions will be asked in the Installation Information tab. It is pertinent for the DoD Chesapeake Bay Program Office get a baseline of which installations outlease agricultural lands, and if any livestock are present. Additionally, it is important to know if DoD participates in any Conservation Reserve Enhancement Program, Cost-Share Program, etc. This information will help with future reporting and partnerships with other federal agencies.

## LIVESTOCK IN THE CHESAPEAKE BAY WATERSHED

Livestock headcounts from 2012 USDA Census of Agriculture



DoD/DoN Chesapeake Bay Program Office  
1510 Gilbert Street  
Building N-26, Room 3300  
Norfolk, VA 23511

## { CHECK IT OUT }

### Stream Restoration Conference - Baltimore, MD [23-25 September 2015]

<http://midatlanticstream.org>

The 7th Mid-Atlantic Stream Restoration Conference will provide an opportunity for individuals involved with streams to share ideas and lessons learned in stream restoration planning, assessment, design, construction, and evaluation and other topical stream issues. The conference includes presentations, discussions, exhibits, and pre-conference workshops. Scientists and practitioners are encouraged to share experiences, network with colleagues, and become involved in shaping the future of stream restoration in the Mid-Atlantic.

### BayFAST Webinar [ 24 September 2015 at 1000]

<http://bayfast.us11.list-manage.com/track/click?u=2f382e9434ec900f28c0539e2&id=8ec8fa5f0a&e=14df746334>

The Chesapeake Bay Program will host a webinar that focuses on the newly added selectable layers for watersheds, MS4s, Phase IIs, and federal facilities. This will assist users in quickly defining a parcel. Of course, the ability to draw your own remains available and selected boundaries can be edited. The webinar is free and no registration is necessary.

### Water Resources Conference of the Virginias - Roanoke, WV [5-6 October 2015]

<http://wrcvirginias.org>

This two-state event combines exceptional educational presentations with outstanding opportunities for university faculty and students, policy makers, industry, environmental consultants, state and federal agencies, watershed groups and the public to share the latest information, technologies and research relating to West Virginia's and Virginia's water resources.

### 21st Maryland Water Monitoring Council Conference - North Linthicum, MD [ 5-6 October 2015]

<http://mddnr.chesapeakebay.net/MWMC/MWMC2010/annualConference.asp>

The theme of the 2015 conference is Protecting the Source – Sustaining Maryland's Waters. In the face of many emerging environmental challenges such as climate change, the spread of exotic species, and population growth, Marylanders continue to expect a dependable water supply for drinking, recreation, and agriculture.

This newsletter is produced by Michael Baker International under Contract No. N62470-10-D-3000 for DoD/Navy Chesapeake Bay Program Support.

This newsletter is distributed via email. Contact the DoD Chesapeake Bay Program with any questions, comments, or to be added to the email distribution list (email: sarah.diebel@navy.mil or telephone: 757-341-0383).

