TESTIMONY OF J. CHARLES FOX
SENIOR ADVISOR TO ADMINISTRATOR LISA JACKSON
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
WATER AND WILDLIFE SUBCOMMITTEE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U.S. SENATE

April 20, 2009

Senator Cardin and Members of the Subcommittee, I am J. Charles Fox, Senior Advisor to Administrator Lisa Jackson at the U.S. Environmental Protection Agency (EPA). Thank you for the opportunity to discuss EPA's new leadership approach to restore and protect the Chesapeake Bay and its watershed, and for holding this hearing on America's national treasure. As stated in the Chesapeake Bay Program "Report to Congress", which was provided in July, 2008, EPA is closely working closely with the Departments of Interior (USFWS, USGS, NPS), Agriculture (NRCS, ARS, USFS), Defense, and Commerce (NOAA) to have a shared-leadership approach to strengthen the management, coordination, and accountability of the Chesapeake Bay Program.

Guiding Principles and Priorities of the Obama and Jackson Administration

After being confirmed as President Barack Obama's Administrator for the EPA, Lisa Jackson provided her vision and priorities for the Agency in a memo dated January 23, 2009 to all EPA staff. In that memo, she first reiterated President Obama's three values for his agenda on the environment: 1) Science must be the backbone for EPA programs; 2) EPA must follow the rule of law; and 3) EPA's actions must be transparent.

These guiding principles apply to the Agency's work broadly as well as to our efforts on the Chesapeake Bay.

Administrator Jackson also highlighted five priorities that would receive her personal attention. She described one of her priorities as EPA's intent to intensify our work to restore and protect the quality of the nation's streams, rivers, lakes, bays, oceans and aquifers. She stated that the Agency will make strong use of our authorities to restore threatened treasures such as the Chesapeake Bay and the Great Lakes.

Other priorities of Administrator Jackson which are related to the Chesapeake Bay include: the impacts of climate change on our nation's water resources; improving air quality which can lead to reductions of nitrogen oxide emissions that contribute to over 20% of the nitrogen contributions to the Bay; and cleaning up hazardous-waste sites which can also contribute to localized water quality issues throughout the watershed.

The Role of the Senior Advisor

On March 11, 2009 the Administrator announced that I would serve as her Senior Advisor on the Chesapeake Bay and Anacostia restoration and protection efforts. I am excited about the opportunity to work with all of the Bay partners and Members of Congress to find ways to do more in addressing the challenges confronting the Bay and its watershed.

The Chesapeake Bay is a national treasure. We are mindful of our accomplishments over the last 25 years, but intensely focused on how to improve our work to have greater success in the future. EPA is committed to change, and to provide the leadership necessary to improve the performance and accountability of the Chesapeake Bay Program. We cannot pledge that the Bay's health will improve dramatically in the next several years. However, we can and do pledge to provide the leadership that will be responsive to the conclusions of scientists, to our obligations under federal law, and to the desires of the region's communities.

When asking me to serve, the Administrator stressed her desire to connect our communities to the Bay and its rivers – to improve our economies and our quality of life. The Anacostia River is a vital resource to the people of this region and symbolic of challenges we confront in all urban areas -- where the vast majority of our citizens reside. A healthy Chesapeake Bay is the result of healthy rivers and streams throughout the entire watershed. The Anacostia River is a great urban river with tremendous grass roots support from the Anacostia Watershed Society and the Anacostia Watershed Partnership, and others mobilizing local residents and local resources to improve the river. Our hope is that we can support local action that is successful in restoring the vitality of the Anacostia River and secure similar success in urban rivers throughout the watershed.

My role and emphasis as Senior Advisor to the Administrator is to help define new ways forward to meet our shared goals for the Chesapeake Bay, the Anacostia River and urban rivers throughout the watershed. Put simply based on the sources that need to be controlled, we need to improve the performance and accountability of EPA and the partnership.

The Scope and Complexity of the Watershed and Bay

The Chesapeake Bay watershed encompasses 64,000 square miles, parts of six States and the District of Columbia. Nearly 17 million people live in the watershed. The land mass of the Bay watershed is sixteen times the size of the Bay, a ratio higher than any other estuary in the world. This means that our actions on the land have a profound impact on our local streams, rivers and, ultimately the Bay.

The Chesapeake Bay is the largest estuary in North America and is ecologically, economically and culturally critical to the region and the country and, as North America's largest and most biologically diverse ecosystem. It is home to more than 3,600 species of fish, plants and animals. For more than 300 years, the Bay and its tributaries have sustained the region's economy and defined its traditions and culture. The economic value of the Bay is estimated at more than $1 trillion[1] and two of the five largest Atlantic ports (Baltimore and Norfolk) are located in the Bay.

[1] *Saving a National Treasure: Financing the Cleanup of the Chesapeake Bay*, A Report to the Chesapeake Bay Executive Council, Chesapeake Bay Blue Ribbon Finance Panel, October 27, 2004

The Chesapeake Bay Program and Partnership

This past year, the Chesapeake Bay Program and partnership celebrated its 25-year anniversary. There is much to be proud of in what has been accomplished. A few examples are illustrative of the accomplishments of this partnership:

- Unparalled research and monitoring programs and an improved understanding of this complex ecosystem;
- Comprehensive and specific goals and outcomes designed to 1) Protect and restore fisheries; 2) Protect and restore vital aquatic habitats;, 3) Protect and restore water quality; 4) Maintain healthy watersheds; 5) Foster Chesapeake Stewardship; and, 6) Enhance Partnership and Accountability;
- Significant technical and financial commitments by Federal, State, local and other partners;
- Independent advice and counsel by three Advisory Committees (Citizens, Local Government, Scientific and Technical);
- Demonstrable examples of restoration progress such as:
    - A shared Federal, state, and local commitment to invest and upgrade 483 municipal and private wastewater facilities to achieve nutrient removal which will all be required to have a permit by the end of 2010;

- implemented a watershed-wide phosphate detergent ban;
- Planted more than 6,000 miles of streamside forests,
- restored more than 13,000 acres of wetlands;
- preserved more than 1 million acres of forests, wetlands, farmland and other resource lands; and
- Removed blockages to over 2,000 miles of historic spawning grounds for shad and other migratory fish; and implemented significant harvest restrictions to restore a previously collapsed striped bass fishery.

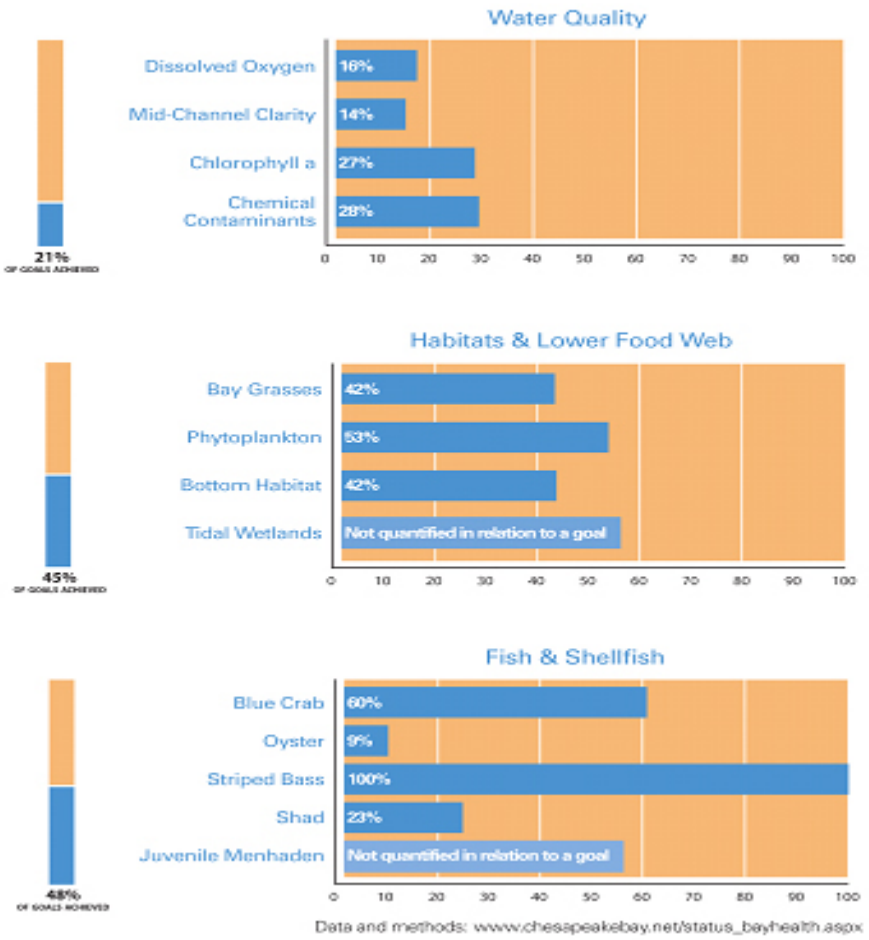
The Health of the Bay

In March 2009, the Bay Program issued its annual Health and Restoration Assessment of the Chesapeake Bay and Watershed, also referred to as the 'Bay Barometer'. A copy of the Executive Summary has been provided to the Chair and members of the Committee.

The Bay Barometer affirms what we all know. Despite the impressive restoration work done by the array of partners, the health of the Bay and watershed remains severely degraded. The data included in this report are sobering. Virtually all of the 13 measures which comprise Bay Health show very limited progress (water quality, habitats and lower food web and fish and shellfish) (see Figure 1). There have been positive improvements in the population of striped bass, which is generally attributed to the actions by Maryland, Virginia and other east coast states to limit harvest pressure years

ago, although this population has been stressed in recent years by a high incidence of mycobacteriosis.

Figure 1. Chesapeake Bay Measures of Health Progress (2008)



In general, the Bay Program partners have made some important – but not sufficient -- progress to reduce nutrient pollution from agriculture and wastewater treatment plants. Agriculture is the single largest source of nutrient and sediment pollution to the Bay, with about half of that load directly related to animal manure. However, the pollution from urban and suburban stormwater is actually increasing.

The negative trend in nutrient and sediment pollution from stormwater is directly linked to the rise in population of the watershed. Since 1950, the number of residents has doubled. Projections through 2030 show continued population growth, loss of natural areas and increases in urban development. People are moving into sprawling suburbs and living in bigger houses on larger lots, causing forests, farms and other valuable lands to be transformed into subdivisions, shopping centers and parking lots. Impervious surfaces, such as roads and rooftops, increased by 41% compared to an 8% increase in population growth from 1990-2000. Impervious surfaces do not allow water to filter into the ground. Instead, rainfall runs off, picking up pollution and quickly carrying it into waterways.

Other Sources and Issues in the Chesapeake Watershed

The priority emphasis of implementation will remain on improving water quality throughout the watershed, as well as making progress on the full spectrum of health and ecosystem measures. It will remain important for the Program partners to develop enhanced understanding of and, as appropriate, respond to other issues and stressors in the Chesapeake watershed, including for example:

- The contribution of nutrient and pathogen pollution from onsite wastewater systems and septic tanks;
- The contribution of nutrients and sediments from historic dams (i.e., legacy sediments);

- The potential impact of sediments behind Conowingo Dam, in the event of a major storm;
- The role of endocrine disruptors and pharmaceuticals that are released through various wastewater treatment systems;
- Continued investigation of the source(s) of intersex fish and fish kills in the Shenandoah and Potomac;
- The impacts of agricultural production on nutrient loads and impacts on water quality and ;
- The impact of the atmospheric deposition of nitrogen.

To improve our understanding of these issues, EPA and its partners are continuing to conduct critical research on topics including endocrine-disrupting chemicals and best management practices to control runoff. Further, EPA is initiating new research to address needs such as better understanding how ecosystem services in rivers and estuaries are impaired by excess nitrogen from increased agriculture production and other watershed activities.

Chesapeake Bay Program Reauthorization

The challenge we all confront is how to improve our performance and accountability to achieve the goals that we all share for the future of the Chesapeake Bay and its tributaries.

The Clean Water Act, Section 117, the Chesapeake Bay, was last authorized in 2000. It expired in 2005. This action by Congress was helpful in supporting the Chesapeake Bay Program and the Agreement adopted by the partners in 2000 as a matter of federal law. But as we know now, the 2010 goals of that Agreement are not going to be achieved.

The fundamental challenge for the Bay's water quality is reducing runoff pollution from urban, suburban and agricultural lands. Presently, we have a range of tools that we are implementing to tackle these problems. However, the range of existing tools may not be enough to get the job done. EPA and our partners will want to better focus our existing regulatory authorities and other tools and consider adopting new tools to improve the health of the Chesapeake and its tributaries. We look forward to working with this Subcommittee and other Members of Congress to explore these issues in the months ahead. A reauthorization of the Chesapeake Bay Program presents all of us with a unique opportunity to redefine our future, and we are very appreciative of the Subcommittee's leadership in this regard.

Closing

The Chesapeake Bay Program has many attributes that make it unique: world class science; comprehensive environmental data, measures and outcomes; and superior partnerships among Federal, State local, private and non-governmental organization partners.

Across the landscape there have been important actions over the past 25 years - by farmers to implement nutrient management practices and install buffer strips and fences; by homeowners to reduce energy consumption and runoff pollution; by localities to upgrade wastewater treatment plants and to reduce stormwater pollution; by developers to implement sediment and erosion control plans and implement smart growth practices; by states to expand land conservation and strengthen their water quality protection programs. However these good efforts are simply not sufficient.

The straightforward conclusion is that the Chesapeake Bay ecosystem remains severely degraded, despite the concerted efforts by many for more than 25 years. However, all of these challenging conclusions are tempered by a strong sense of optimism we all share for the future. Scientists today can describe with a high degree of precision what we need to do to save the Bay and its tributaries. Our region's elected officials are engaged like never before. At EPA, we have a dynamic new Administrator who is willing to provide the leadership necessary to improve our environment for the benefit of the Bay and communities throughout the country.

Thank you again Senator Cardin, and Members of the Subcommittee, for the opportunity to appear before you today. In the coming months, it is our hope that you will be hearing more from us and our Bay Program partners about ways to improve the use of various tools to enhance the Chesapeake Bay's environmental quality.