

Testimony of Collin P. O'Mara, Secretary, Delaware Department of Natural Resources and
Environmental Control
before the Subcommittee on Water and Wildlife,
Committee of Environment and Public Works,
United States Senate

Hearing on A Renewed Commitment to Protecting the Chesapeake Bay:
Reauthorizing the Chesapeake Bay Program

August 3, 2009

Good Afternoon Chairman Cardin, Ranking Member Crapo and Members of the Subcommittee. My name is Collin O'Mara and I serve as Secretary of Natural Resources and Environmental Control for the State of Delaware. On behalf of Governor Jack Markell, I would like to thank you for inviting Delaware to participate in this discussion on the Chesapeake Bay Program.

Today, I pledge Delaware's support for restoring the Chesapeake Bay. While not directly bordering on the Bay proper, 35% of our state lands drain into the Bay. We count on its resources for sustenance and recreation and we have a stake and a responsibility to ensure its restoration. Delaware joined the Chesapeake Bay family in September 2000 when then-Governor Carper committed to working with the Chesapeake partners to achieve water-quality goals. Under the leadership of Governor Markell, we have renewed our committed to the Bay to this day, as recently evidenced by our partnership in the development of the Captain John Smith National Historic Trail.

Today, more than 25 years after the first multi-state agreement to address water quality concerns in the Bay, we still have much left to do. The Bay's water quality continues to suffer, and the challenges to its restoration are more complex than when the original program was authorized. To achieve healthy waters, we need new, creative mechanisms to address the number one water quality concern facing the bay – nutrients – and in particular nitrogen. We need the right combination of incentives and authorities, to guarantee improvement in the Bay that we have been unable to achieve thus far. We need to utilize every tool at our disposal to reduce the

multiple, diffuse sources of nutrients entering the Bay to avoid finding ourselves back at this table discussing the same challenges ten years from now.

Over the course of the next decade, our efforts to combat the nutrient problem in the Chesapeake Bay will also be complicated by another vexing problem – that of climate change. No single environmental issue is as sweeping and potentially catastrophic as the projected impacts from a changing climate.

Before I address the impacts of climate change on the Bay, please allow me to first discuss a few key steps that Delaware has taken to improve water quality and programs that we believe can potentially serve as national models. As background, Delaware comprises less than two percent of the total landmass of the watershed and contributes less than two percent of the total nutrients. Approximately, two and a half percent of nutrient loading from Delaware comes from point sources while the vast majority derive from nonpoint sources such as agriculture and residential and commercial development. Delaware's relatively few point source dischargers are well regulated. Of the three municipal wastewater treatment plants impacting the watershed, one has installed the limit of technology one utilizes biological nutrient reduction processes, and one utilizes spray irrigation. Delaware has invested over \$27.8 million in these three plants since 1997 – \$8.4 million in State grant dollars, the balance in low interest SRF loans.

Nonpoint sources have been the more difficult problem for not only the Chesapeake Bay, but for all Delaware waterways. Agriculture, septic systems, diverse urban and residential sources all impact water quality. Farms comprise forty-one percent of the total land area in Delaware and in 2007, Delaware ranked first in the United States in both the agricultural production value per farm (\$520,090) and per acre (\$2,222) with Sussex County producing more broiler chickens than any other county in the nation. We are committed to ensuring that farming remains sustainable and profitable in Delaware. Our farmers see themselves as stewards of the land and of the water; however such high productivity and density of poultry operations places special stresses on our natural resources.

To reduce nonpoint source pollution and ensure that our agricultural community protects our natural resources while remaining profitable, Delaware has adopted two programs that we

believe can serve as national models. In 2000, under the leadership of then Governor Carper, Delaware adopted a nutrient management law, which placed authority for on-farm nutrient management with an 18-member Nutrient Management Commission. This unique law requires nutrient management plans for the vast majority of farms, contains certification requirements for nutrient application, reporting requirements, and phosphorous-based planning where needed. Delaware is currently working with EPA officials to strengthen the existing program to ensure that key environmental outcomes are being achieved and we believe that adopting a similar approach across the entire watershed would have a dramatic and measurable impact.

Similar to our Nutrient Management Program, we believe that our Pollution Control Strategy program could serve as a national model for implementing the nonpoint source reductions required by Total Maximum Daily Loads (TMDLs). Recommendations being developed by diverse stakeholder groups coordinated on a watershed basis include both regulatory and voluntary mechanisms for controlling and reducing nutrient loadings beyond EPA's authority. Strategies were originally designed to meet local water-quality standards and they are being updated to achieve the reductions needed in the Chesapeake TMDL—these approaches, especially comprehensive stakeholder engagement, could have the greatest impact if adopted watershed-wide. Further, Delaware is developing regulations to implement nutrient reductions from on-site wastewater treatment and disposal systems for new developments through enhanced storm water controls and riparian buffers, which will be a key aspect of the Bay TMDL.

While eutrophication is the most critical water quality concern, I believe there will soon be a time when tackling water quality issues and implementing solutions seems perfunctory. The impacts from a changing climate are going to dwarf the known and foreseen problems acknowledged when the Chesapeake Bay Program's enabling legislation was penned a quarter of a century ago—and I propose that the two interconnected challenges of climate and water quality are best addressed holistically.

As a peninsular state almost entirely surrounded by tidal waters and with the lowest mean elevation of any state, Delaware will likely be more affected by sea-level rise than any state in the nation. Like our neighbors in the Mid-Atlantic Region, we have high population density, aging infrastructure, critical agricultural resources, and several cities located at the head of tide,

exposing them to the front line of sea level rise.

Some of the Chesapeake's tidal wetlands, such as those at Blackwater River in Maryland are already being covered with water due to sea-level rise today. Delaware witnessed change during the Mother's Day Nor'easter last May which flooded many areas for the first time in decades. Rising sea levels will submerge low-lying lands, erode beaches and shorelines, convert wetlands to open water, cause more severe coastal flooding and increase the salinity of the Chesapeake and its aquifers. The loss of tidal wetlands alone will reduce flood control, reduce storm surge buffering capacity, and lose important water quality buffer and fish nursery areas.

As we move forward with efforts to improve water quality and address climate change, we must ensure that we are using the best science to drive our decision-making. In Delaware, we are currently evaluating numerous mitigation and adaptation strategies to protect the health and safety of residents. We understand the importance and interconnectivity of the Chesapeake Bay and all of our estuaries throughout the Mid- Atlantic. A loss of habitat in the Chesapeake's wetland nursery grounds has a domino effect on fisheries management throughout the region. The lessons learned in Chesapeake Bay Region provide us great insights throughout other estuaries in the region and nation.

We need policies to promote buffers on our tidal and non-tidal wetlands in order to give rising waters room to flow, studies to prepare for potential salinity impacts on our water supply for both potable consumption and agricultural production, and policy tools to align our nutrient reduction policies with carbon sequestration to promote practices with multiple benefits. We need to incorporate climate change realities into our regulatory and incentive programs in order to efficiently and effectively promote best management practices statewide. We need resources to provide Delaware and all other Bay jurisdictions with the science, tools, and policies to prepare for this new challenge.

For example, we know that forested buffers along our waterways reduce nutrient run off, but they also can provide carbon sequestration benefits. In the farming community, grassed buffers and cover crops are preferred over forested practices. Would this still be the case if farmers were paid for the value of the carbon sequestration? What if buffer resources were preferentially

allocated to individuals adopting forested buffers, because they provide greater water quality and carbon mitigation benefits?

I am confident that we can use market based mechanisms, rather than traditional command-and-control approaches, to incent our needed environmental outcomes while spurring economic growth in a carbon constrained world. We must seek solutions that make it economically advantageous to adopt practices that will improve water quality and confront climate change, especially during this difficult economic time. We need a clear price signal on carbon, creative financing mechanisms such as a carbon credits trading structure, and federal dollars to jump start programs to reduce initial risks in the creation of new markets. We need to reward actions that produce multiple benefits. We need to ensure sufficient access to capital to assist farmers and other stakeholders to make necessary improvements, despite limited access to private funding.

Finally, we must hold ourselves accountable, measure progress, verify the environmental benefits, and gain the trust of taxpayers. Environmental Defense Fund has advanced five key principles that align with my vision of a more comprehensive, outcome-driven solution. We need to meticulously develop and track performance metrics, use this data to drive policy decision-making, assign responsibility and hold ourselves accountable to achieve progress, and constantly work to align economic incentives to achieve both environmental and economic progress. Most importantly, success will require engaging all stakeholders in a meaningful way if we are to achieve lasting progress—government cannot solve this challenge alone from the top down. Under the leadership of Governor Kaine, the Bay Governors have begun to take this approach and now we must deliver measurable results.

These are the challenges that we look forward to facing with you and our Chesapeake Bay partners. As we consider the reauthorization of the Chesapeake Bay Program, I believe there is no better place to think about the need to adjust our sails. The task will not be easy – for if it was, we would not be here today. The Bay needs more attention than ever before and achieving our goals will require relentless pursuit sof creative and effective means at controlling nutrient sources and addressing climate change.

I appreciate the opportunity to speak with you today. I would be happy to take questions.