



May 31, 2007

Governor Tim Kaine
Office of the Governor
Patrick Henry Building, 3rd Floor
1111 East Broad Street
Richmond, VA 23219

Dear Governor Kaine:

We are writing regarding sea level rise and the ecological impact upon Virginia's coastal ecosystems. We have been reviewing existing information for the Chesapeake Bay and its tidal tributaries, the coastal bays of the Eastern Shore, and Virginia's southern rivers and bays in the Currituck Sound watershed.

With a relative sea level rise in the range currently predicted by federal agencies (1 ½ to 2 feet in the next century), a "best guess" estimate indicates a loss of 50 – 80% of the remaining vegetated tidal wetlands in the tidal reaches of Virginia by 2107, absent efforts at mitigation. Adjacent shoreline features (mudflats, buffers, dunes, etc.) would also be adversely impacted.

Losses of this magnitude would, at the lowest predicted ranges, negate any progress made toward restoration of the Chesapeake Bay's ecosystem. Unmitigated losses of wetlands, buffers, and coastal dunes at the upper predicted ranges would trigger an ecosystem collapse throughout the Chesapeake Bay.

Sea level rise impacts are already being felt. A paper from University of Maryland states that, "coastal marshes are currently disappearing in the Chesapeake at rates as rapid as the more widely publicized losses in the Mississippi Delta."

The coming relative sea level rise will hit the mid-Atlantic Region hard, with Virginia being the most impacted region. In fact, Hampton Roads is the largest population center at greatest risk from sea level rise and storm surges outside of New Orleans.

In the mid-Atlantic, some states are in the process of initial analysis, some are conducting detailed mapping of coastal areas and running inundation models, and some have advanced to initial deliberations on a response and mitigation strategy. Virginia is currently the only state in the mid-Atlantic Region without a visible state reaction to the issue of sea level rise and its impacts on coastal ecosystems.

In the Chesapeake 2000 agreement, Virginia and all of the signatories agreed to, *“Evaluate the potential impact of climate change on the Chesapeake Bay watershed, particularly with respect to its wetlands, and consider potential management options.”* Virginia has made no appreciable progress toward that goal since then-Governor Gilmore signed that agreement.

In addition, the Coastal Zone Management Act at U.S.C. 33 § 1451(l) finds that, *“Because global warming may result in a substantial sea level rise with serious adverse effects in the coastal zone, coastal states must anticipate and plan for such an occurrence.”*

Wetlands Watch is beginning a campaign to raise awareness on this issue with a goal of making sea level rise a high priority issue in Virginia. We must do better than make a “best guess” at where inundation will occur and what the ecological impacts will be. We offer our assistance in improving the state response to sea level rise.

First, Virginia’s flood map modernization effort needs to be adequately funded to allow precise mapping of coastal areas. Maryland and North Carolina provided state funding to augment the Federal Emergency Management Agency (FEMA) program to modernize flood zone maps. In coastal areas, those state funds have provided LIDAR data and are producing digitized maps with data density sufficient to predict relative sea level rise inundation areas.

In Virginia, inundation maps at this level of detail are only available if local governments pay for them, and as of today, few at-risk coastal communities have paid to get the data. And even for those few localities with detailed inundation mapping, there is no funding for ecological impact analysis or modeling.

This leaves these localities environmentally vulnerable. At the same time they are becoming economically vulnerable from decisions made by others with better information. Allstate has stopped writing new homeowner insurance policies in 19 Virginia coastal communities. State Farm and Nationwide are pulling new coverage from coastal areas as well. USAA will no longer offer unconditional coverage on second homes in Virginia.

These companies are reacting to greater risk from sea level rise and storm surge damage. Together they represent more than 55% of the private insurance market in the mid-Atlantic. In addition, all insurance companies operating in Virginia have raised insurance rates and announced a doubling of the hurricane deductible to 5% on homeowner policies.

For the ecosystems and economies of Tidewater Virginia, sea level rise and storm surge risks are a major threat to which our state government needs to respond.

The second phase of a state action plan is an evaluation of the ecosystem services that will be lost as we identify those coastal features that will drown if they cannot move shoreward. For example, Maryland has estimated that it is currently losing around 150 acres of tidal vegetated wetlands a year and North Carolina has placed its loss from sea level rise and erosion at 780 acres of wetlands annually. Virginia has no estimate of its acreage losses nor the habitat, nutrient cycling, and other functions threatened by these losses. We do not know which functions will be in greatest demand as sea level rises and thus we have no plan for mitigating for the loss of those functions.

Third, the state, in partnership with local governments, needs to begin assembling a “tool box” of land use and other approaches for arranging the orderly retreat of people and ecosystems from the rising tides. What is needed is collaboration between state and local governments, landowners and land trusts, and business and non-profit organizations such as Wetlands Watch.

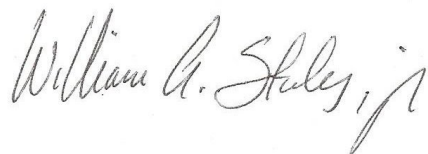
One focal point for the start of this collaboration is the planned release later this year of federal studies outlining regional tributary-level impacts of sea level rise in Virginia and the likely responses along the shoreline. These will be rough estimates and will need refinement by involved and interested citizens at all levels, but in the course of that work we can begin to move this issue to higher visibility and priority.

We realize that this is a significant undertaking and one that will require constant effort for decades to come. It is also an issue that has, in the past, only been dimly glimpsed. With more immediate needs, it is understandable why this work has been placed farther down the list of state government priorities.

However, now that we can begin to see the outlines of the problem, now that various economic sectors in Virginia have begun to react, now that the news is full of global change issues, now that the deadline looms on the commitments made under the Chesapeake 2000 agreement, we must make this matter one of our State’s highest priorities.

Wetlands Watch stands ready to assist you in this effort and bring greater public attention to this pressing need.

Sincerely,

A handwritten signature in cursive script that reads "William A. Stiles, Jr." The signature is written in dark ink and is positioned above the typed name and title.

William A. Stiles, Jr.
Executive Director