

TO: Director, NC Division of Coastal Management
Members, NC Science Panel

FROM: Dr. Stanley R. Riggs

DATE: July 24, 2016

Following the landfall of hurricanes Bertha and Fran in 1996, three coastal geologists (Stan Riggs, John Wells, and Bill Cleary) who had spent their entire professional careers studying the NC coastal system, mutually agreed that NC needed to be better informed about the dynamics of its battered coast. At a subsequent meeting of the Coastal Resources Commission, the three coastal geologists proposed a technical panel be developed to advise the CRC on the science of storm dynamics and major coastal issues for which both short- and long-term policies were being developed. The necessity for a Science Panel was recognized and a group of 4 geologists, 4 engineers, and ultimately 1 ecologist (together with well over 250 years of experience in the NC coastal system) was formalized. For the next 14 years, each scientist brought a different expertise to the discussion. This volunteer group met frequently (often several times a month) concerning major issues such as coastal erosion, storm dynamics, beach nourishment sands, inlet dynamics, hardened shorelines, sea-level rise, etc.

For me, each of these meetings of the Science Panel were truly exciting learning experiences as we interacted with each other, personnel from the NC Division of Coastal Management and Coastal Resources Commission, and more importantly the public. In 2010, production of a Sea Level Report by a Science Panel sub-committee of 19 sea-level rise experts, supplied base-line information for both the short- and long-term planning of coastal development that included data from past history, as well as projections forward for a continuum that extended in the future to 2100. Unfortunately, the scientific reality of changing coastal dynamics interfered with the changing political agenda of unlimited growth and development of NC's coast. The report was welcomed by the scientific community and other coastal states, but rejected by NC's legislature.

In spite of increased political pressure, the Science Panel continued its commitment to understand the dynamics of sea-level rise and storms and their impacts on our ocean and estuarine shorelines and inlets. However, following the production of the 2015 sea-level rise report (March 31, 2015), it has become clear that our NC leadership feels there is no longer a need for the Science Panel as indicated by the following actions, which counters almost two decades of the Science Panel's efforts.

1. The Science Panel was told to limit the sea-level rise projection in the 2015 report to 30 years, in spite of the fact that the present rate of sea-level rise is already severely impacting the barrier islands and drowning major portions of the low mainland regions of northeastern NC. This limiting factor is devastating for the Outer Banks since NC DOT is presently building a high-tech, 100-year Oregon Inlet bridge that connects to NC Highway 12, which has about 25 miles with a history of total disruption that ranges from multiple times per year to a decade or two.

2. The Science Panel was not allowed to bring in any additional experts to produce the 2015 sea-level rise report, including some scientists who had helped supply the critical data for both the initial 2010 and new 2015 reports. Nor was the Panel permitted to have a team of external science reviewers other

than the two engineers brought in by the CRC. Also, the Science Panel has not been encouraged to meet since the 2015 sea-level rise report was submitted on 3-21-2015.

3. The Coastal Resources Commission has essentially eliminated the designation of Inlet Hazard Zone (IHZ) with the plan to “make inlets more user friendly, less scary”. This attitude is in concert with following state actions:

- a) legislation to increase the number of terminal groins at six NC inlets;
- b) rule changes that allow increased size, location, and duration of sand-bag walls;
- c) establishment of a new line for pre-existing oceanfront re-development for about 190 properties that are already in harms way;
- d) removal of many thousands of coastal lowland buildings either totally from the former designated flood zone or placed in a reduced hazard zone; and
- e) legislatively condemned federal lands adjacent to two major inlets in order to engineer them with jetties.

From the science perspective, these political actions are totally unacceptable and threaten the future viability of NC’s coastal economy and jeopardize the coastal resources: they compromise the local villages and their citizens. NC needs an educated public and a just rule-making system that works for the long-term betterment of the people, their economy, and the resources upon which that economy is based. The scientific reality is that there are some limits to growth on mobile barrier island sand piles and mainland areas close to sea level, all are and will continue to be impacted by sea-level change and storms.

I believe the once highly respected and effective Science Panel has been subtly defrocked and is now an ineffective body. So with great sadness, I resign my position on NC’s Science Panel.