



**For Immediate Release:
March 15, 2013**

Re: An open letter from the community of coastal scientists regarding the benefits of inlets opened during coastal storms.

Inlets are a critical part of natural, coastal processes. Storm-formed island breaches are, in fact, an important aspect of long-term barrier island maintenance. These naturally occurring inlets are often temporary, but while open they transport sand from the nearshore zone into the back-barrier, adding width to the island. Inlets, and their associated sand shoals and flood tidal delta platforms build land and wetlands. This is visible in numerous locations up and down the east coast. The widest portions of the barrier islands are frequently those areas with old inlet locations. This is certainly true for Fire Island, Westhampton Dunes, Assateague Island and significant portions of the North Carolina Outer Banks among many others.

Carefully managing storm-formed inlets is a critical adaptive strategy for preserving barrier islands in response to long-term climate change. Islands that are narrow and sand-poor on the backside are more likely to fragment and "fall apart" in response to rising sea level and future storms. Islands with an inlet formed sand platform on the backside can migrate back, and up onto the flood tidal delta sands, shoals, and marshes. In effect, storm-formed inlets are like beach nourishment projects for the estuarine side of the island, and they can add significant wetland acreage to the back of the island (along with all the values those wetlands provide).

In light of this, inlets should be allowed to remain open wherever possible. Doing so reduces the long-term vulnerability of the barrier island system. Inlets should only be closed in cases where there is a clear need for barrier island continuity (e.g., a critical transportation corridor) or where the inlet is causing immediate and demonstrable harm.

Recently, the North Carolina Department of Transportation elected to allow an inlet that opened during Hurricane Irene to remain open in acknowledgement of these benefits and the likelihood of future breaches. The area will be spanned by a 2-mile long, elevated highway.

Increased storm vulnerability for back barrier water bodies and infrastructure should not simply be assumed, but proven and measured. Any cost benefit analysis for closing the inlet must take into account the benefits that will be provided by increased island width, decreased island vulnerability, and the growth of estuarine wetlands (and the services they provide).

Closing inlets in natural areas, parks, and wilderness areas should require a very, very high burden of proof that the inlet is causing harm. In short, closing storm-formed inlets may see like the logical response for those managing barrier island shorelines. But doing so ignores the significant benefits these inlets provide and will likely increase the vulnerability of the island and mainland over the long term.

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