

# THE EAST HAMPTON STAR

SHINES FOR ALL

## Coastal Living After Sandy

The all-day workshop was co-sponsored by the Montauk Chamber of Commerce and the Concerned Citizens of Montauk

By Russell Drumm | April 17, 2013 - 7:28pm



Morgan McGivern

Gurney's Inn hosted a post-Sandy summit on Friday that brought together first responders, planners, state, county, and local officials, and representatives of the Long Island Power Authority and Suffolk County Water Authority to discuss how to redefine the future of coastal living in the wake of the Oct. 29 storm.

The all-day workshop was co-sponsored by the Montauk Chamber of Commerce and the Concerned Citizens of Montauk.

"FEMA training" was offered to first responders and emergency management officials in morning and afternoon sessions. The Federal Emergency Management Agency's center for domestic preparedness has developed advanced training for responses to catastrophic natural disasters or terrorist acts.

During a catered lunch between the two workshops, Jay Tanski, a New York Sea Grant coastal processes specialist, provided an overview of Long Island's coastal makeup as well as the forces at work upon it. Few local governments have enough information to make informed decisions about how to deal with the long-range problem of sea level rise, he said, and the more urgent challenge posed by powerful northeast storms.

While the occasional hurricane can be damaging, hurricanes tend to move by quickly, said Mr. Tanski. By contrast, more frequent northeasters typically drag on through a number of tide cycles — a high tide on top of storm surge produces a double whammy.

The author of "Long Island's Dynamic South Shore: A Primer on the Forces and Trends Shaping our Coast" said the island actually has more sand to work with than much of the rest of the East Coast, a function of its post-glacial beginnings. While a big storm like Sandy could strip beaches and cause the sea to reach farther landward than it has in

years, he said, decisions about how to protect the coast should not be made in the immediate aftermath. Beaches grow and shrink. They are elastic if left alone. Beaches respond to storms. Sand pulled offshore by storm surge and wave action causes sandbars, which serve as natural buffers until natural processes restore them landward. In a PowerPoint presentation, Mr. Tanski showed that in 1962, the shoreward reach of the sea in front of downtown Montauk following the Ash Wednesday northeaster that year was as great or greater than it is today. He said the East End was eroding; Montauk loses a tenth of an inch of beach per year, the South Shore in general loses one foot per century. The East End, without the protection of barrier beaches, is eroding faster than western Long Island. A 2010 study showed that some beaches to the west are actually accreting, or growing.

“Long shore drift drives material east to west, but we don’t know where all the material comes from. We don’t know everything.”

Mr. Tanski said that while the immediate impact of a single storm might be apparent, it is the cumulative effect of many storms that determines how the shoreline changes over time.

“Annual fluctuations are uncertain, which makes it difficult to detect long-term trends,” he said. It is clear, however that the highest erosion and accretion rates occur near man-made inlets and structures that interrupt the natural movement of sand. Mr. Tanski said that as much as five million cubic yards has been taken out of the near-shore system by the Shinnecock Inlet, its jetties, and currents.

By contrast, he said, Fire Island has remained relatively stable. It has not “migrated” — a function of dunes being overwashed over time — in 1,300 years.

As for sea level, it’s been rising for the past 18,000 years. The sea level will be important in 2100. In the meantime, careful monitoring of the shoreline is essential, said the speaker — “small variations within larger changes. It lets us project, so we can tailor our response for specific areas.”

Mr. Tanski stressed the importance of “knowing the physical characteristics” of an area. Whether to buy flood insurance, for example, should be decided by an entire community. “You have to convince property owners.”

The coastal expert said that Southern states have studied their coastlines to a far greater extent than New York. Sea Grant, he noted, has been negotiating with the State Department of State for the past five years for money to better monitor South Shore beaches. “There’s more interest since Sandy. Perhaps Sandy resources can be brought to bear for information-gathering.”

“There are no typical shorelines,” Mr. Tanski concluded.