STD-1: Storms, Tides, and Disasters

MAST-602: Introduction to Physical Oceanography
Fall 2008 (Andreas Muenchow)

The City of Lewes, DE web-site at

http://www.ci.lewes.de.us/index.cfm?fuseaction=news.getOne&newsid=144

contains this information to the general public:

Sussex County All Hazards Evacuation Annex [04/30/2008]

Tropical storms and hurricanes have a distinct season (June 1 through November 30). The impact of storms can be minimized by proper planning and implementation of pre-season preparedness initiatives.

During periods of severe weather, all individuals are encouraged to …

According to the Delaware Department of Transportation (DelDOT):

- approximately ninety percent of Delaware's coastal storm flood-vulnerable housing units (Category 2 hurricane) are located in Sussex County.
- one in four housing units in Sussex County is a mobile home (24,000) that are susceptible to severe wind damage and would need to be evacuated during hurricane threats.
- a large percent of hotel/motel units are located in or near Sussex County areas vulnerable to coastal storms.
- a 1990 Delaware Hurricane Evacuation Study estimated a range of 40,000 to 56,000 potential evacuating vehicles

The Sussex County All Hazards Evacuation Annex (link provided below) has been developed to describe the concept of operation to manage the transportation system and assist the county's population deemed most "at risk" to the effects of tidal inundation from a hurricane or coastal storm to escape the effects of the storm. The intent of the Annex is to demonstrate how the State's Transportation Management Center (TMC) will work together with the Sussex County Transportation Management Team (TMT) to manage the transportation system and protect life and property during an incident or event that threatens to cause tidal inundation in Sussex County. The procudures outlined in the Annex mainly focus on tidal inundation incidents and events including hurricanes, nor'easters, coastal storms, tidal or storm surges, and heavy rains.

As resident oceanographers we are asked to assist in formulating a predictive scheme based on sound science that would provide decision makers with specific recommendations on when to order the evacuation of people from areas most endangered.

Step-1: Think individually about the problem and formulate in a full sentence or two what environmental variable may be best to approach the problem and why.

Step-2: To be announced.