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Sent: Tuesday, December 09, 2008 2:19 PM

To: [REDACTED]

Cc: [REDACTED]

Subject: Flooding and sea level rise

At yesterday's Steering Committee, a discussion took place about Action 1.4.9 which relates to flooding in the County as a consequence of sea level rise. The action item was specific only to County property. The Technical report is more explicit on this topic and mentions discouraging private development in areas prone to flooding. I seemed to me that the outcome of yesterday's discussion was to strike all reference to this item.

I would like to point out that in my opinion the SC discussion missed an essential point. It seemed that members were thinking of flooding in conventional terms, based on historical experience. But science has now established that the sea level is rising globally and this must be taken account of in long term planning. It is not an episodic phenomenon, but will persist for centuries. Thus it does not fall into the category of unpredictable events (floods) but it is certain that, increasingly, areas of the County will become permanently inundated with the next few decades. Moreover, storms will be more energetic and flood surges, on top of the higher water level, will be more severe.

My point in bringing this up is that both public and private development, in areas at risk must acknowledge this phenomenon and I think that zoning regulations may be the appropriate mechanism for avoiding development in affected areas. Development in adjacent areas, which while not permanently inundated, will be subject to a greater incidence of flooding due to enhanced storm surge, should be required to be constructed with a minimum "freeboard", i.e., on raised foundations.

There was some uncertainty yesterday about which authority to quote as the basis of such an action. The United Nations Intergovernmental Panel on Climate Change (IPCC) is the recognized authority on Global Climate Change, including sea level rise. Locally VIMS is the recognized authority and their prediction of sea level rise also includes local effects, such as land subsidence, that the IPCC work does not cover.

As to how the areas of the County which are at risk should be determined, I suggested during the CPT process that a limited partnership with VIMS be entered into, and also that an aerial LIDAR mapping study be done, together with a computer simulation of flooding events. This mapping could be done in collaboration with other adjacent municipalities and Counties, so as to achieve some economy of scale.

Lest it may seem that I am a crank with an obscure pet project, I have just today attended a seminar at VIMS, in which Counties from New Jersey and Maryland, as well as Virginia participated. This is a topic that is just now coming to the forefront. We heard, for example, about the city of Norfolk spending hundreds of thousands of taxpayer dollars to raise a few houses due to sea level rise, and future plans to raise an entire roadway. Might JCC not avoid similar expense in the future by virtue of long range planning now?

I hope the Steering Committee may revisit this topic. During the CPT process, I submitted a detailed paper to the CPT and also made a presentation (which is part of the CPT materials) -as a submission from the J4C.

Regards [REDACTED]