

## Some NC Flood Map Recommendations for the Oversight State Agency (DPS)

- 1 - Do not put bandaids on problematic flood map situations. In general it is imperative that the **methodology** be fixed to address most map inaccuracies.
- 2 - Hire a PhD statistician to do a thorough and independent analysis of the statistical assumptions of the [ADCIRC](#) model, and how NC DPS applied ADCIRC. [This expert should be supervised by someone outside of DPS – e.g. State legislators.]
- 3 - Prove to the public that ADCIRC is the best flood map computer modeling option available (e.g. compare it to [Mike 21](#) and any other competent model options).
- 4 - Prove to the public that [ADCIRC](#) generates highly accurate flood maps (e.g. use Hurricane Matthew as an example).
- 5 - Publicize ALL the specifics for each and every parameter for each of the 700± synthesized storms (i.e. an Excel spreadsheet with all 700 storms listed).
- 6 - Publicize ALL the specifics for each and every parameter for each of the synthesized storms that resulted in the highest projected high water levels (e.g. Carteret County).
- 7 - Publicly acknowledge that the high water levels resulting from storm scenarios that have never happened, can NOT be verified as being accurate.
- 8 - Eliminate the most speculative synthesized storms. (In other words: properties should be categorized on flood maps, consistent with their historical flood history.)
- 9 - Set up a system where there is a lot more actual High Water Mark data measured and recorded for major NC storms. (The objective would be to get one High Water Mark per mile of NC waterfront, per major storm.)
- 10-Set up a system where real-world High Water Marks from NC storms are quickly incorporated into NC flood maps. (“Quickly” means less than one year.)
- 11-The State needs to publicly state that its official position regarding flood maps is:  
MUCH LESS computer modeling and MUCH MORE real High Water Mark data.
  - Is that the case?
    - If so, exactly what are they doing to bring this about?
    - If not, what is their official policy position in this regard?
- 12-DPS should rerun the projected flood maps incorporating: **a)** the changes recommended by the independent statistical expert, **b)** the changes in ADCIRC resulting from the Hurricane Matthew data, **c)** the changes resulting from eliminating the most speculative synthesized storms [per #8 above], and **d)** the latest [LIDAR](#) results available. (LIDAR = Light Imaging, Detection, And Ranging.)