City of Fort Walton Beach Storm Surge Map

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Scale 1" = 1000'

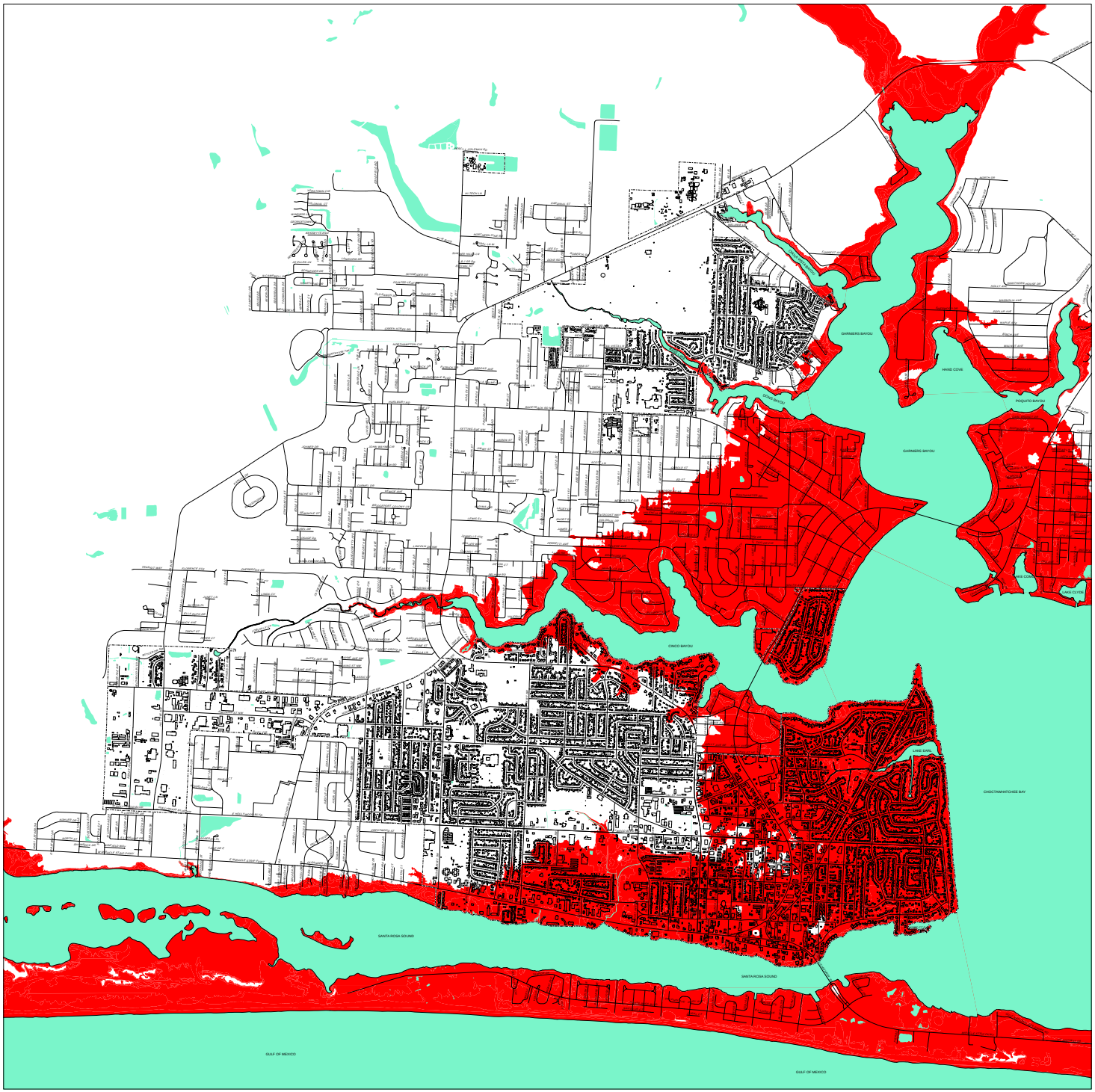
0 1,000 2,000 3,000 4,000 Feet

P:\Engineering\Arc\Data\Maps\
Surge-For-Website-Composite-Categories.mxd

This G.I.S. map produced by
City of Fort Walton Beach
Engineering Department
August 2010

This polygon featureset depicting Surge Zones, was created using a Surge Modeling application created for the Florida Statewide Regional Evacuation Update Study. The data was derived from National Hurricane Center SLOSH model runs on the parabolic basin for this particular region in Florida. The runs create outputs for all different storm simulations from all points of the compass. Each direction has a MEOW (maximum envelope of water) for each category of storm (1-5), and all directions combined result in a MOMs (maximum of maximums) set of data. The MOMs are used in this surge model.

The application uses three input parameters or data: elevation (from LIDAR), SLOSH basin results, and contiguous shoreline or sea polygons. The LIDAR data used has been converted to a DEM with 5ft pixel resolution. All processing takes place at the same raster resolution, so the resulting surge polygons (if 5ft) are a spline curve-fitting representation loosely following the outer third of each pixel. The shoreline features are used to process only contiguous surge zones for each category storm, so there are no lower surge "islands" in the interior of the surge output features.



Legend

- Category 5 Hurricane - Predicted Surge
- City Limits
- Building Footprints Shown Inside City Limits
- Water Bodies