

# PALEOTERRAIN MODEL OF THE YAMATO MARSH, PALM BEACH COUNTY, FLORIDA

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By combining remote sensing with geologic history a modeling technique has been produced for building a paleoterrain model which enables visualization of topography prior to anthropogenic development. LiDAR data supports the foundation of the model and stratigraphic sequences are utilized to describe the local geologic history. Two locations in southeastern Florida have been chosen for this study. The first site is utilized as a control for testing the model and contains a present day ridge system that runs north and south through the Boca Raton cemetery. The second site is a paleowatershed, the Yamato Marsh which is located in Delray Beach. The paleoterrain model of the marsh site can be utilized further in understanding land-use impacts on the surrounding environment. In conclusion the final model of the Yamato Marsh successfully offers insight as well as a glimpse at a geomorphic feature that visually no longer exists (Figure 1).

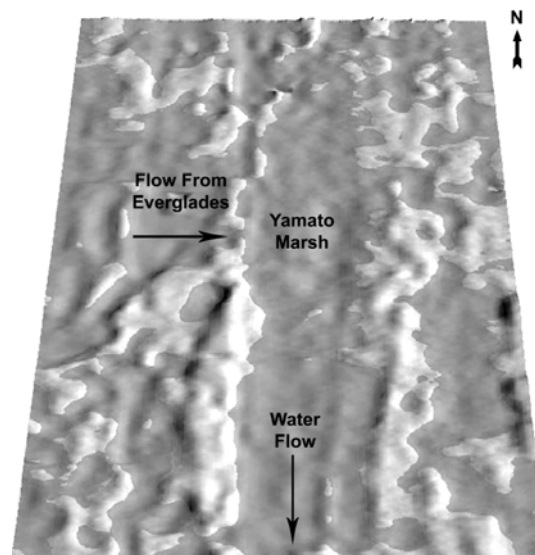


Figure1. Yamato Marsh predevelopment model with water layer draped on top, lighter gray surface represents land above water