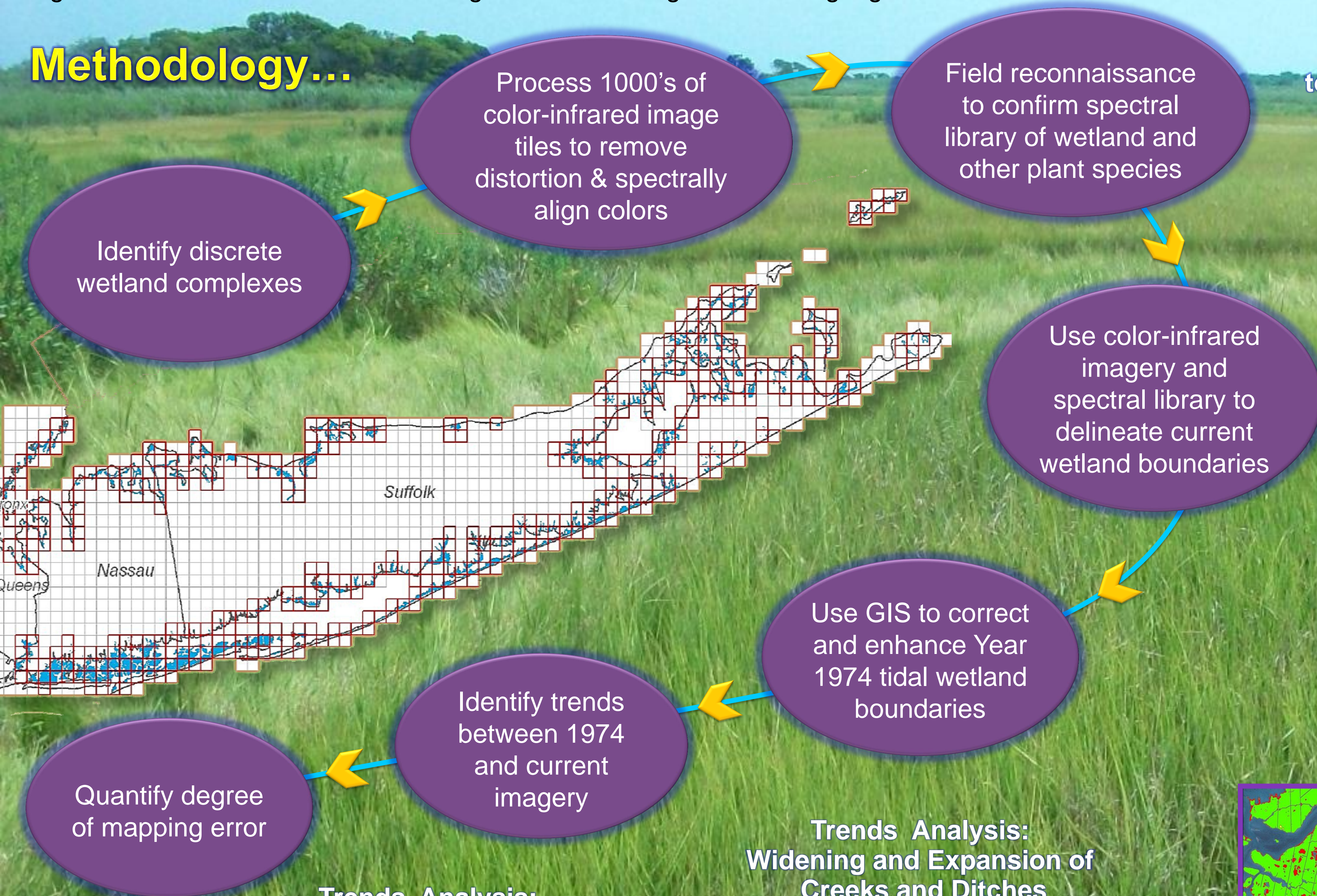


The findings are sobering...

The purpose of the Long Island Tidal Wetlands Trends Analysis project was to quantify the magnitude of landscape-level changes in wetlands loss and changes in marsh condition over 30+ years within the Long Island Sound, Peconic, and South Shore Estuaries including all or parts of Westchester, Bronx, Queens, Nassau, and Suffolk Counties. The project utilized Geographic Information System and image analysis tools coupled with field reconnaissance to quantitatively and qualitatively assess Long Island's past and current tidal wetlands.

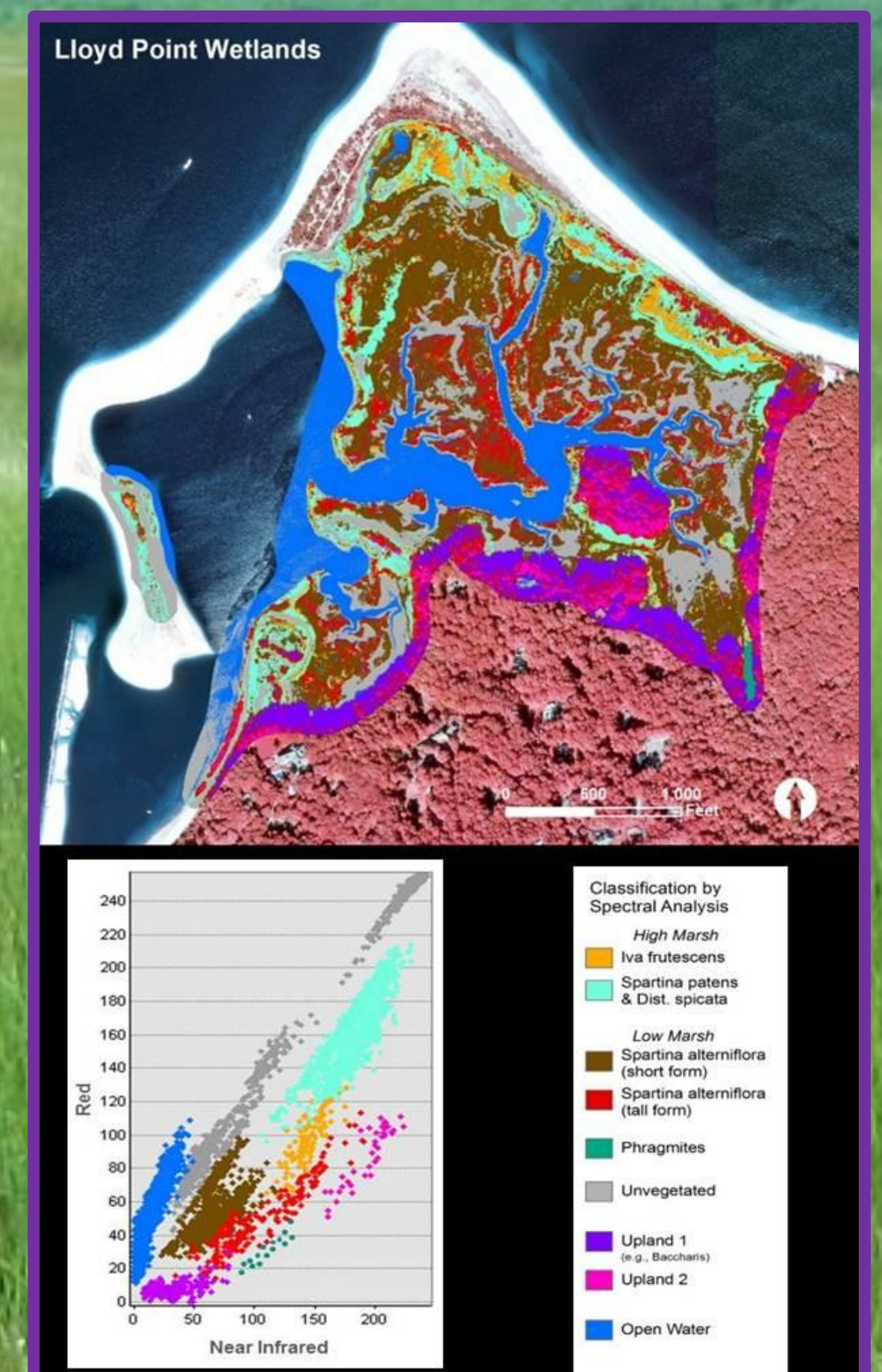
The findings of the trends analysis are sobering, providing supportive evidence for human impact on the coastal environment, especially the effects of global-warming driven rise in sea level. The loss of nearly 3,000 acres of native wetlands implies a substantial loss of ecosystem services in Long Island's estuaries. The approximately 30% loss of high marsh habitats, in particular, throughout Long Island between 1974 and the mid to late 2000's and resulting loss of ecosystem services and habitat for wildlife and rare plants demands restoration efforts in complexes with greatest losses of high marsh area and increased management in the largest remaining high marshes.

Methodology...

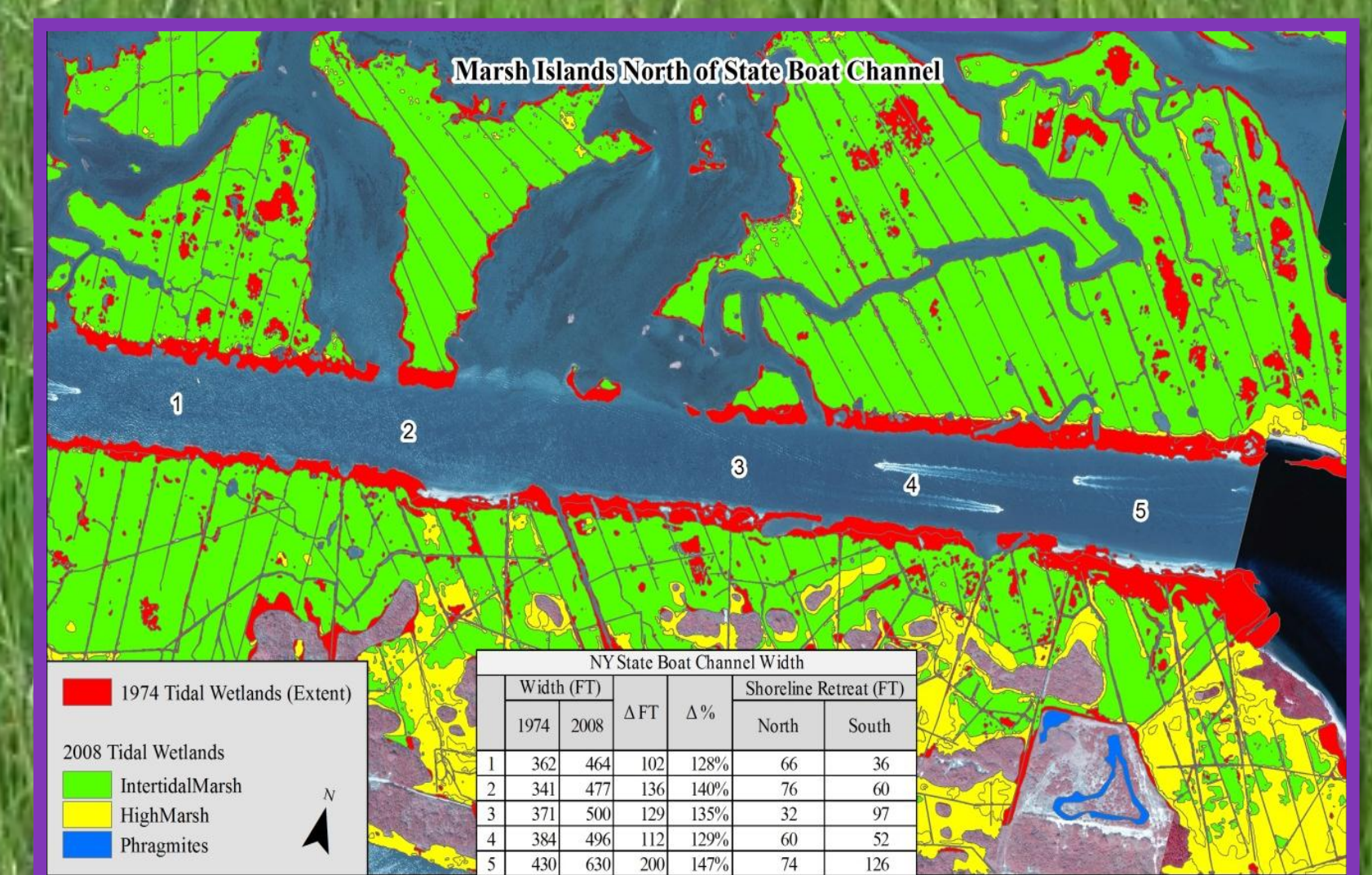


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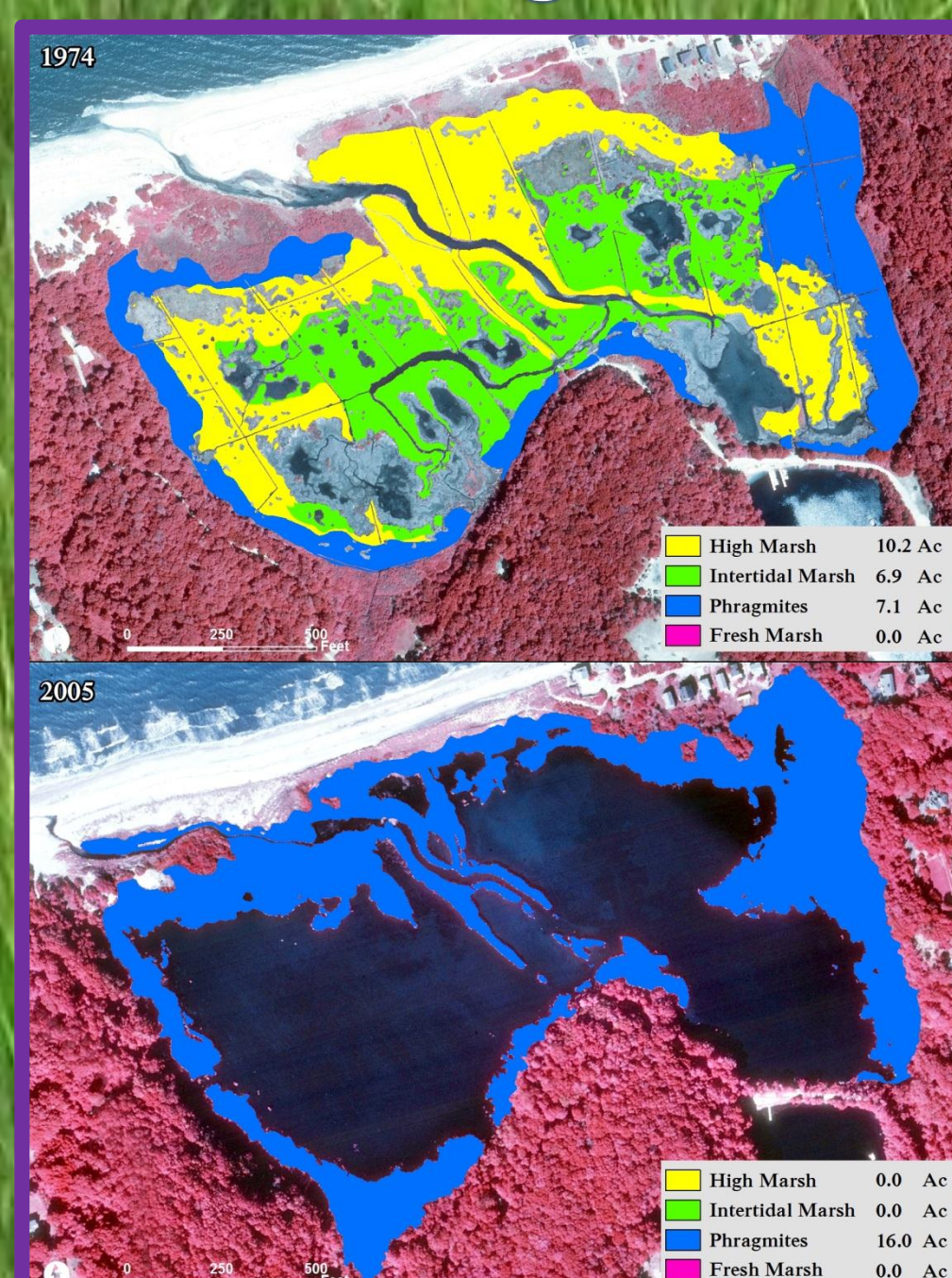
From Hand Drawn Lines (1974) to Multi-spectral Image Classification



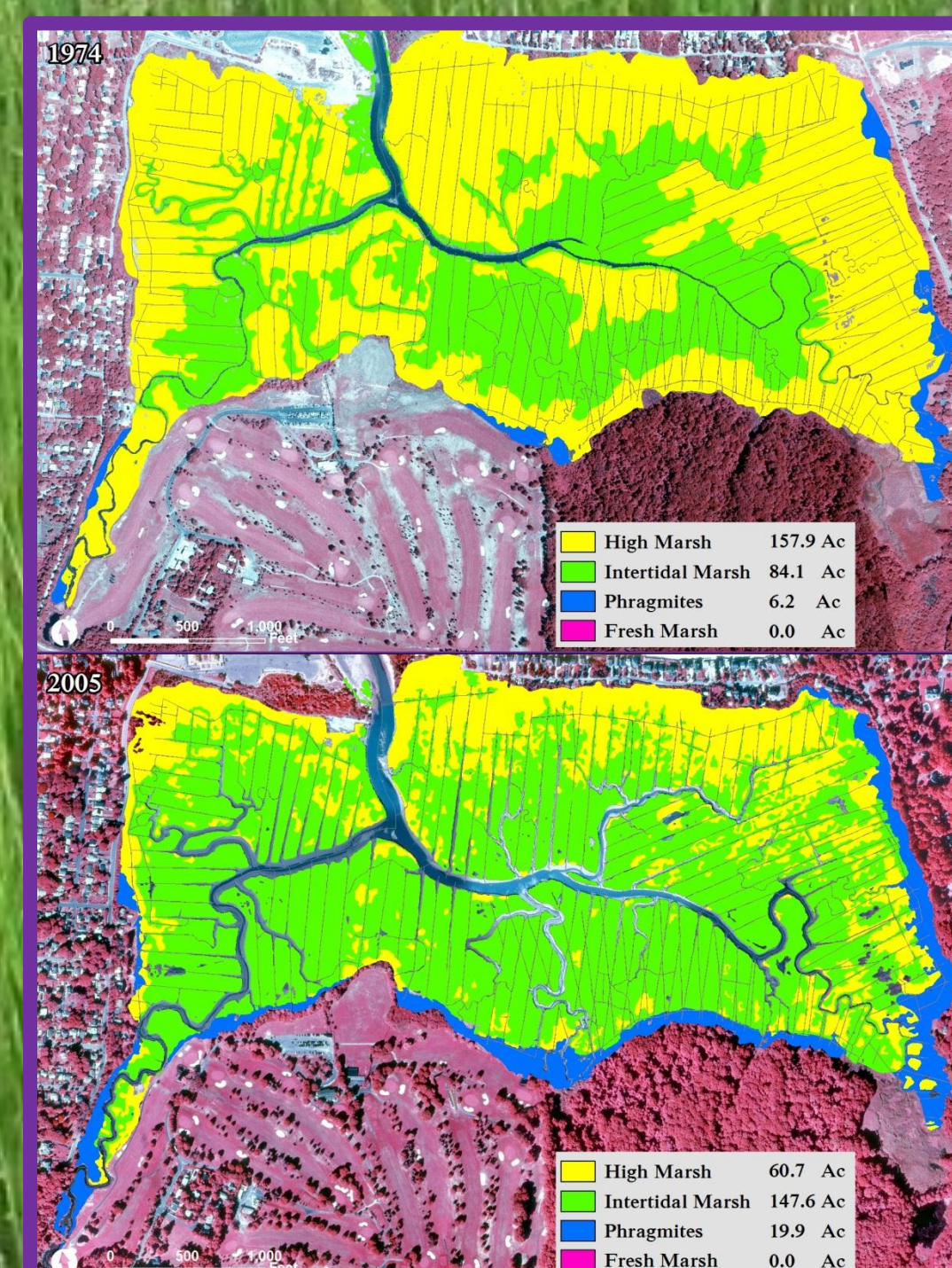
Trends Analysis: Marsh Edge Retreat



Trends Analysis: Intertidal and High Marsh Loss



Trends Analysis: Widening and Expansion of Creeks and Ditches



Long Island Tidal Wetlands Trends Analysis
Long Island New York
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