

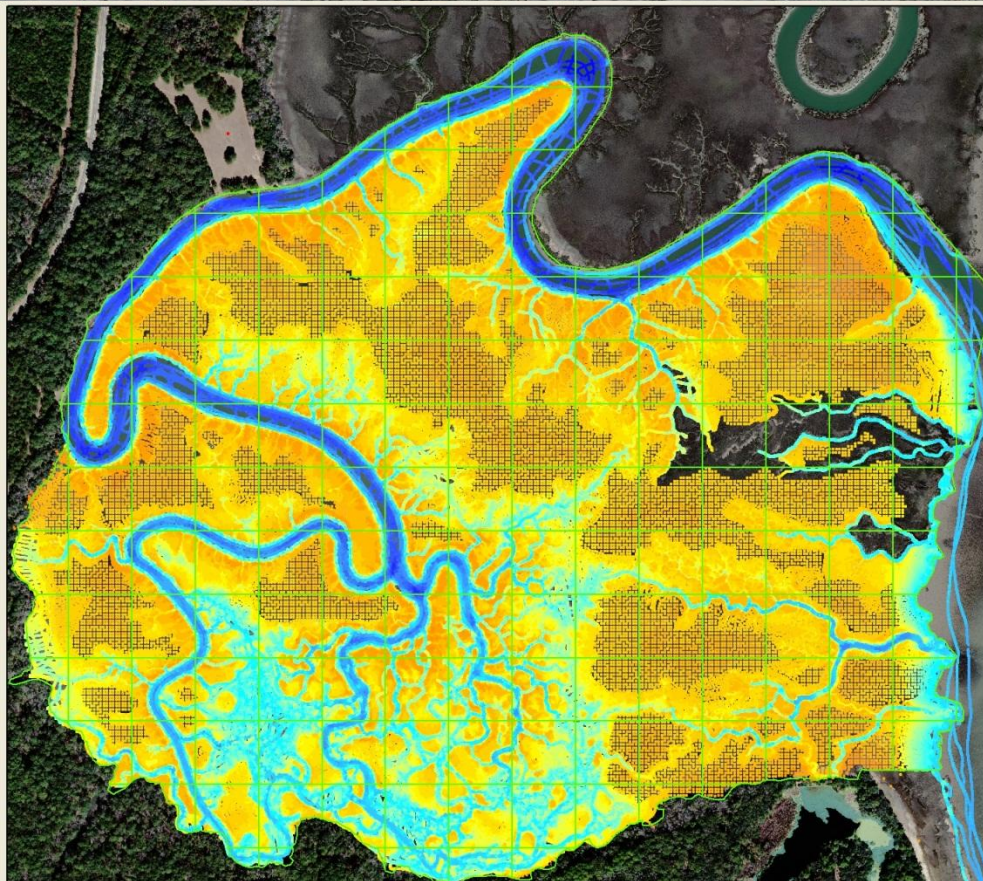
Dr. Clark Alexander

Skidaway Institute of Oceanography

Applied Coastal Research Laboratory, Georgia Southern University



- Estuarine, coastal and continental margin sedimentary processes
- Coastal geologic history
- Coastal vulnerability to climate change
- Mapping for science and management
- Anthropogenic impacts on the estuarine environment



Groves Creek,
Skidaway Island, GA

Survey Area

08/22/2011

Current Status:
350,452 positions

all_skio_merge_08222011

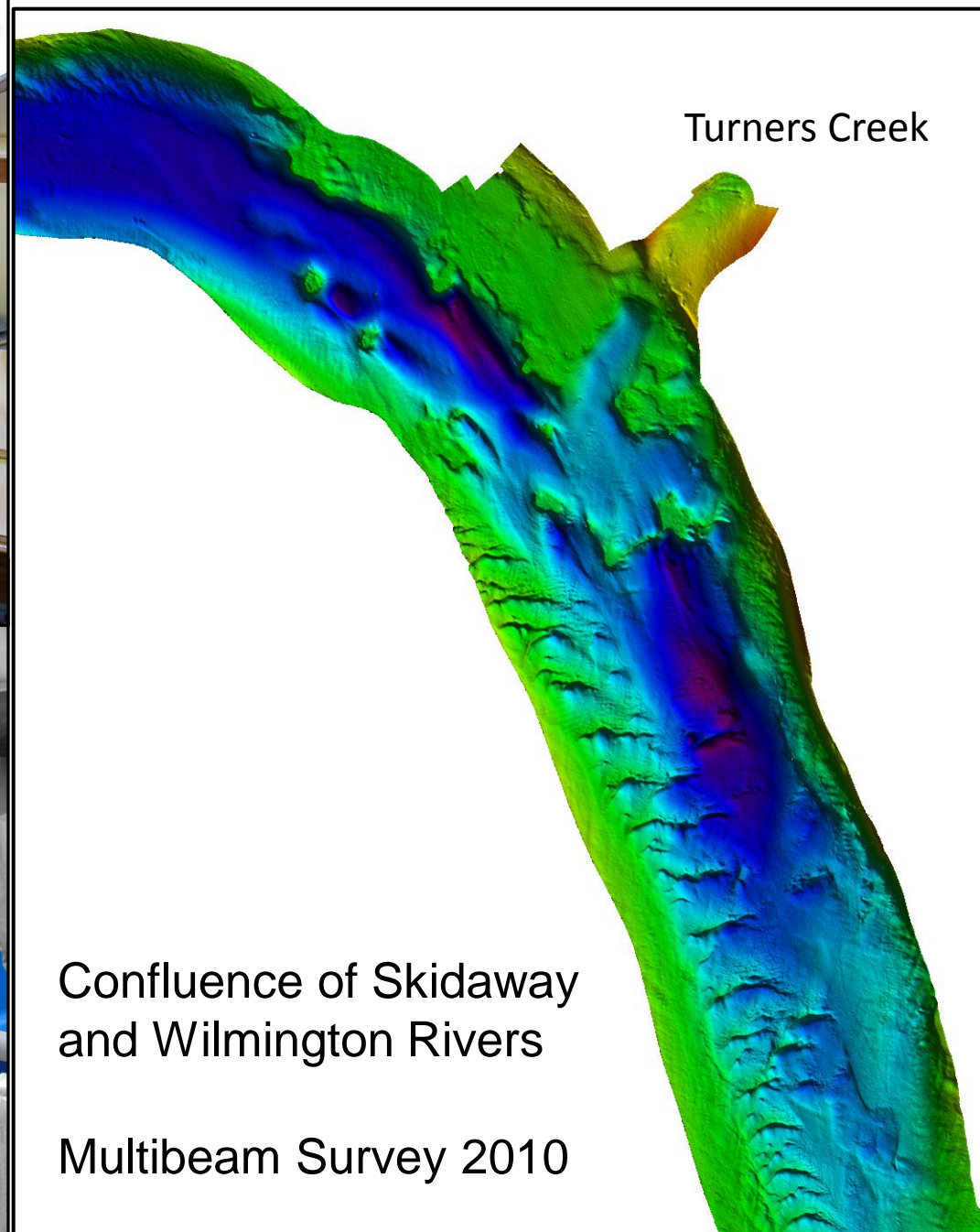
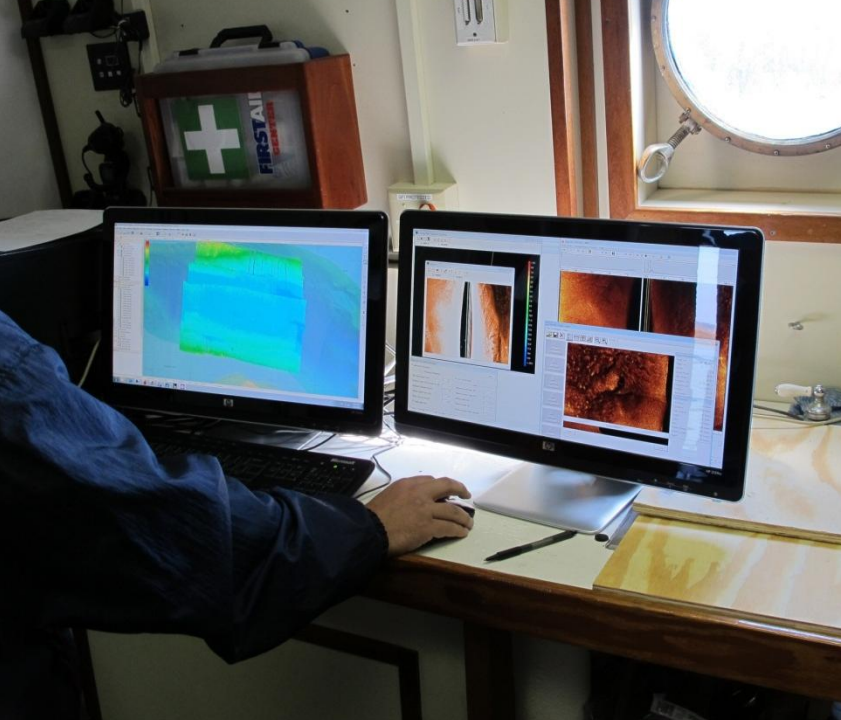
Elev

- 8.210000 - -8.830088
- 8.830088 - -9.188688
- 9.188688 - -4.107713
- 4.107712 - -3.240788
- 3.240787 - -2.545365
- 2.545364 - -1.987583
- 1.987582 - -1.540181
- 1.540180 - -1.181315
- 1.181314 - -0.893466
- 0.893465 - -0.662679
- 0.662678 - -0.477382
- 0.477381 - -0.328833
- 0.328832 - -0.209681
- 0.209680 - -0.114108
- 0.114107 - -0.037448
- 0.037447 - -0.024041
- 0.024042 - -0.073363
- 0.073364 - -0.112924
- 0.112925 - -0.162246
- 0.162247 - -0.223736
- 0.223737 - -0.300396
- 0.300397 - -0.395969
- 0.395970 - -0.515121
- 0.515122 - -0.660669
- 0.660670 - -0.848866
- 0.848867 - -1.078753
- 1.078754 - -1.367603
- 1.367604 - -1.726468
- 1.726469 - -2.173870
- 2.173871 - -2.731652
- 2.731653 - -3.427045
- 3.427046 - -4.294000

100 Meters

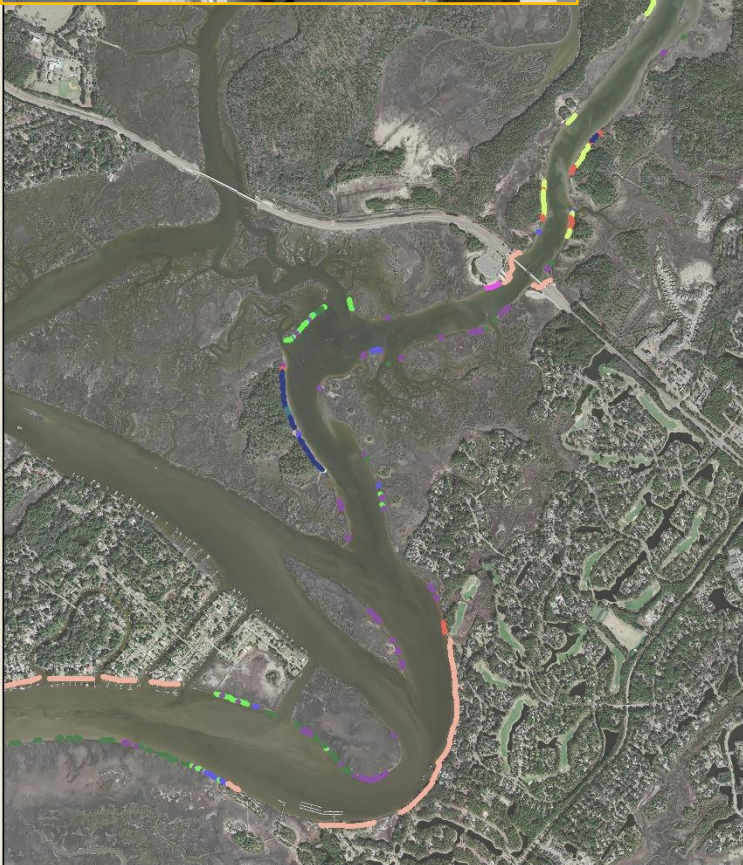
N





Confluence of Skidaway
and Wilmington Rivers

Multibeam Survey 2010



Shoreline Classification

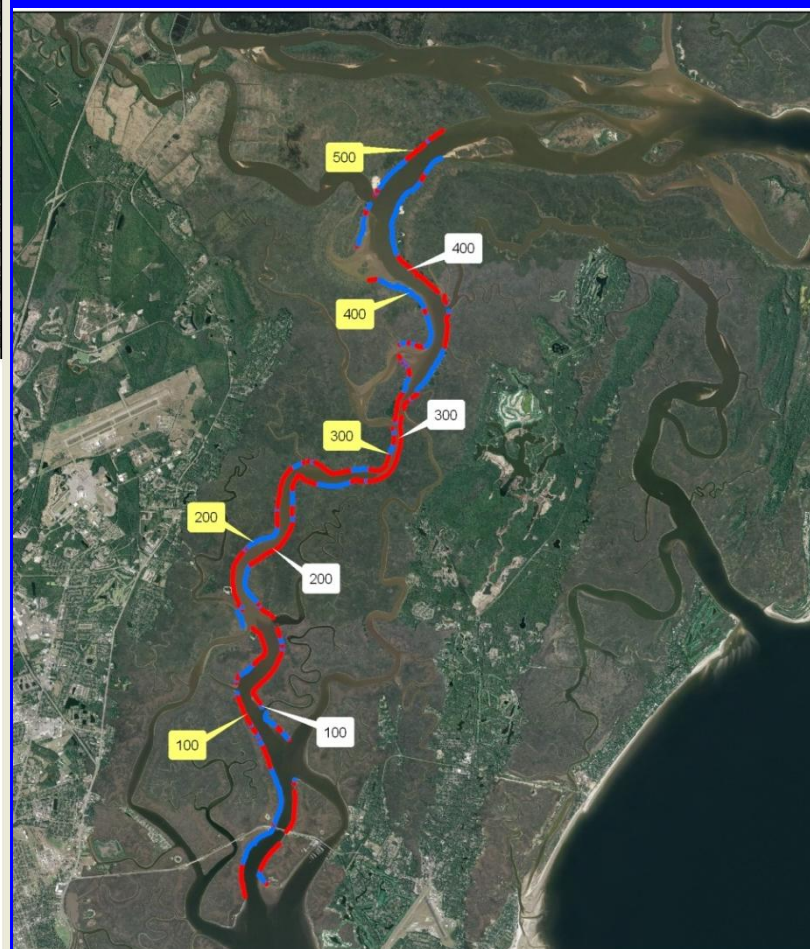
- armored/developed
- ballast stones
- dead oysters fronting beach
- dead oysters fronting marsh
- live oysters
- marsh scarp 20-50
- marsh scarp >50
- mudflat
- non-erosional sandy bluff
- oyster bar
- restricted
- sand bar
- sandy beach
- sandy bluff
- undercut
- upland
- upland scarp

1,000

Meters



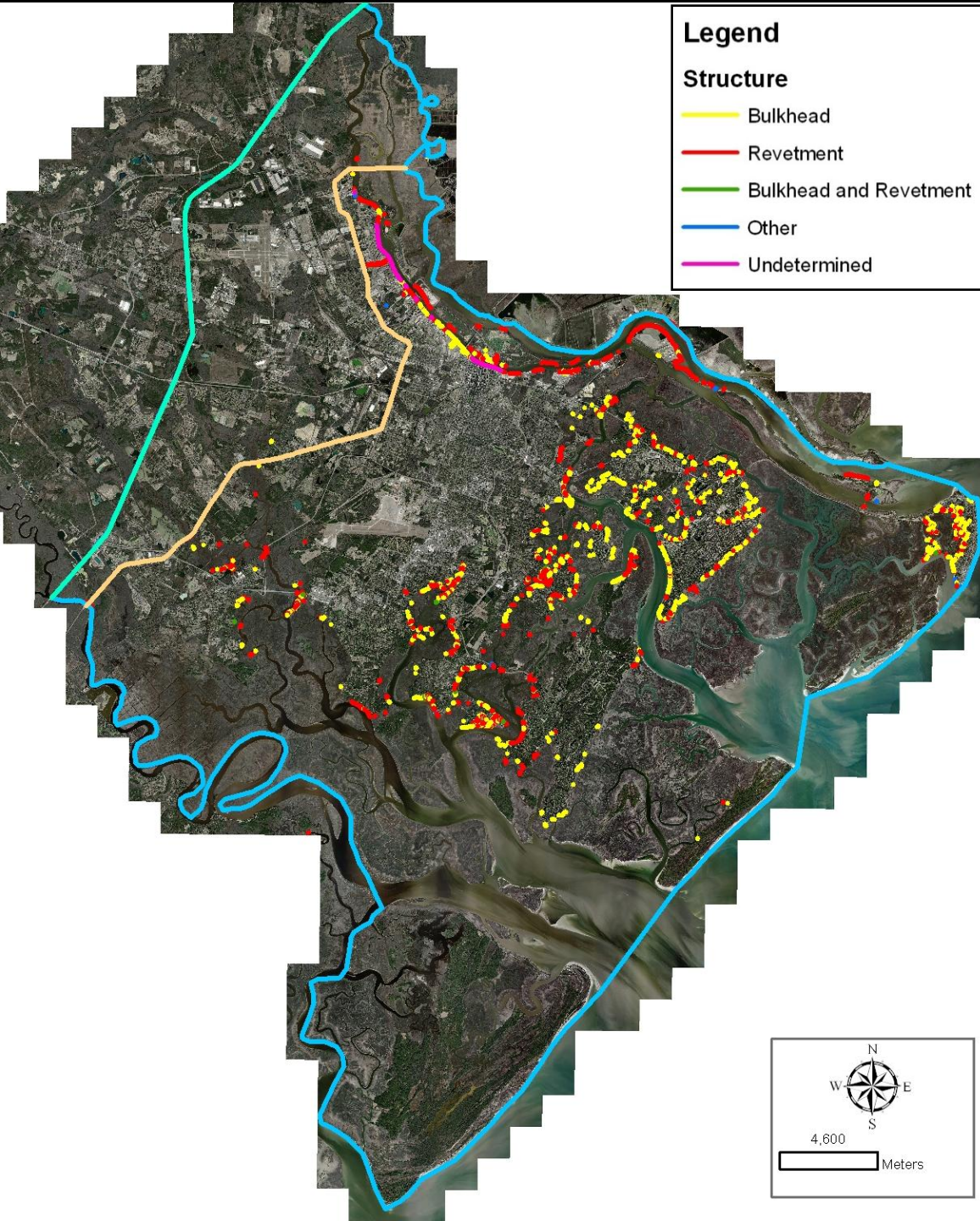
Estuarine Shoreline Mapping for Resources and Dynamic Processes



5

Km

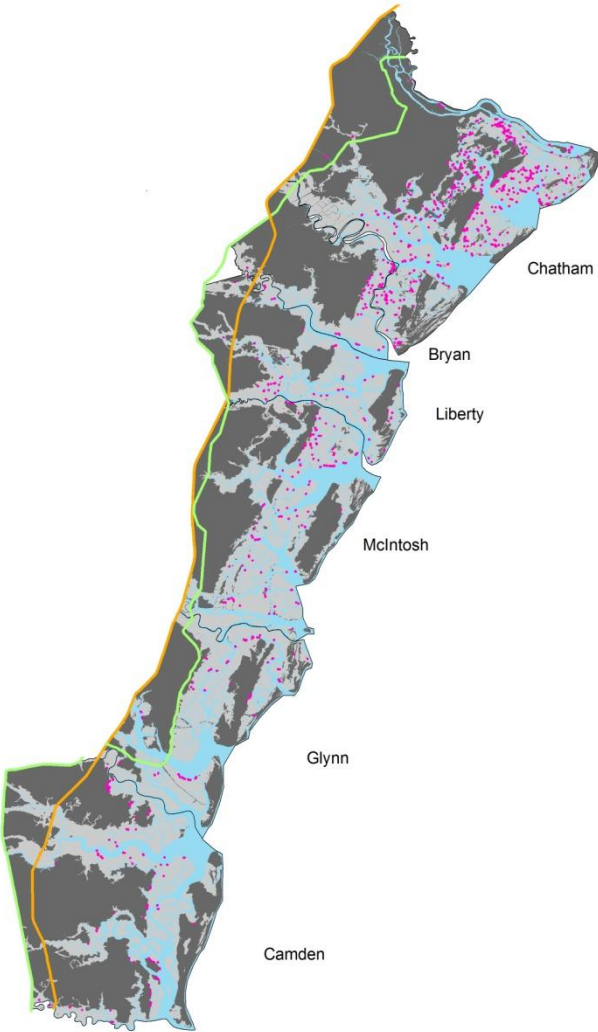




Armored Shorelines in Chatham County, Georgia

- Number of structures: 1,651
- Total armoring: 108,479 m
- Bulkheads: 46,166 m
- Revetments: 55,978 m
- Both: 1,615 m
- Causeways: 71,658 m

2006 USGS

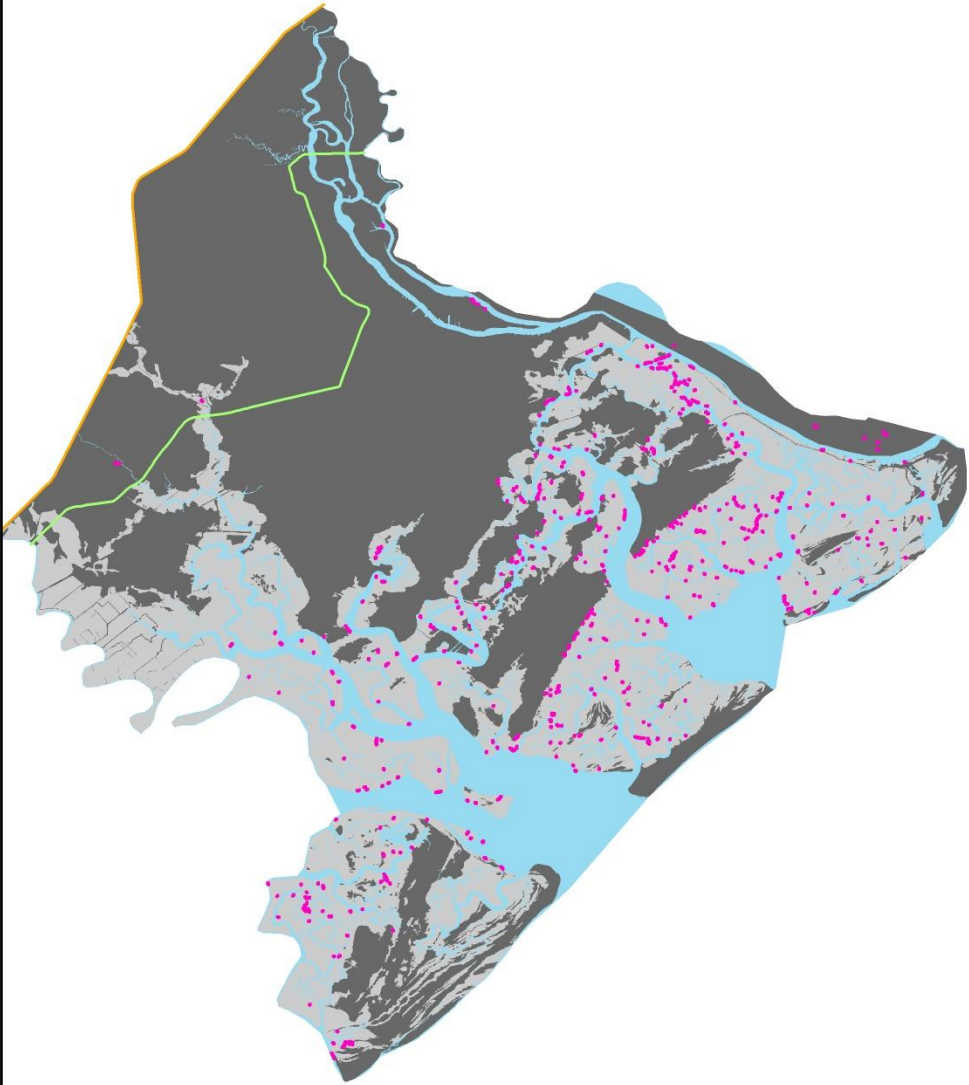


Legend

Highway 17	Marsh
Interstate 95	Upland
Wrack	Water



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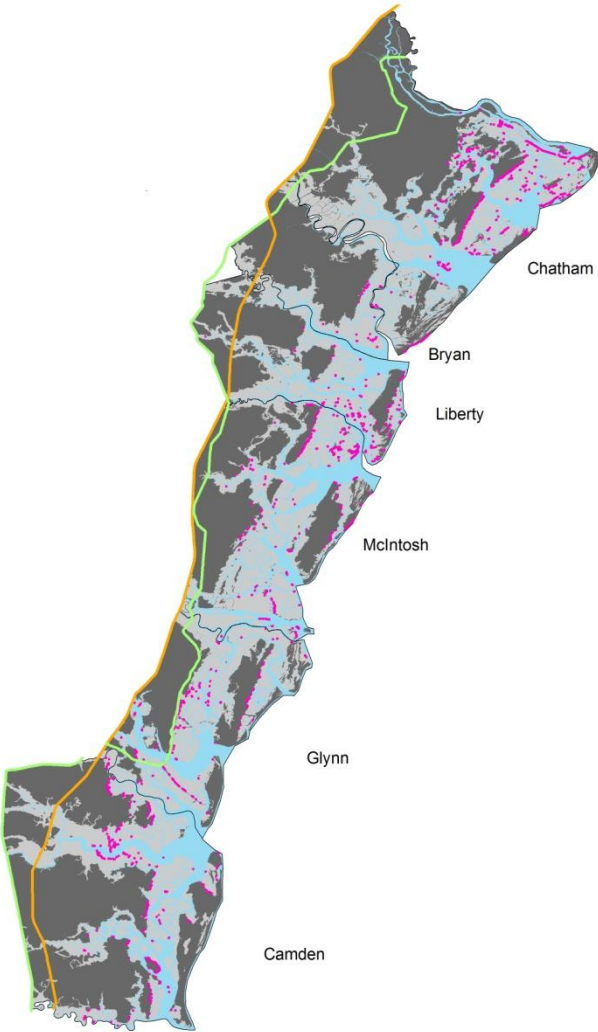
Legend

Interstate 95	Marsh
Highway 17	Upland
Wrack_Polygons_2006_USGS	Water



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2009 NAIP

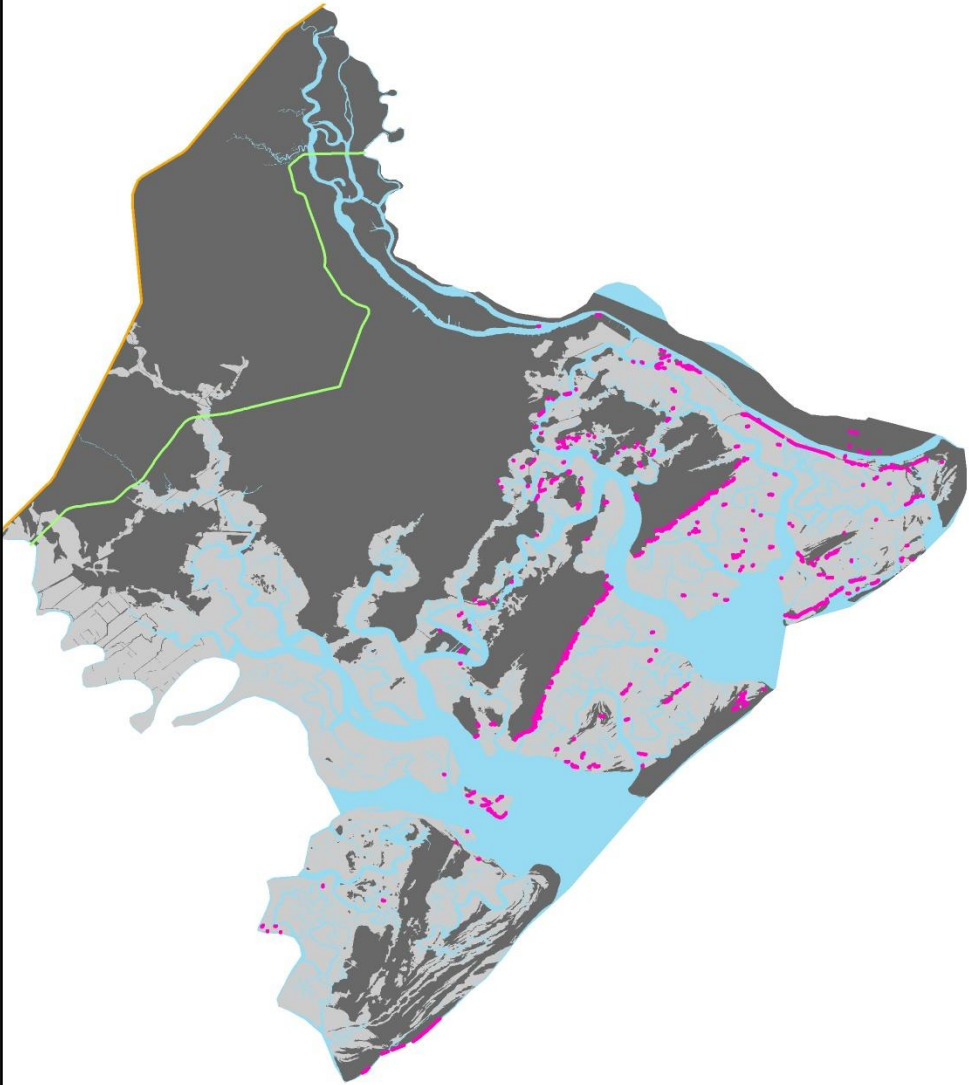


Legend

Highway 17	Marsh
Interstate 95	Upland
Wrack	Water

0 20 Kilometers

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Legend

Interstate 95	Marsh
Highway 17	Upland
Wrack_Polygons_2009_NAIP	Water

0 5 Kilometers

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