# Roadblocks to Seagrass Recovery

## Seagrass Recovery Potential Model for Panhandle estuaries

### Change analysis of seagrass cover

# What these data show

This dataset shows the change in seagrass cover between mapping data sets in these Florida panhandle estuaries: Perdido Bay, Big Lagoon, Pensacola Bay, Escambia Bay, Santa Rosa Sound, Choctawhatchee Bay, St. Andrew Bay, and St. Joseph Bay.

To create this dataset, seagrass cover maps from 1992, 2002, 2003, 2007, 2010, and 2015 were used. Not all estuaries were mapped in each year, so the years used for analysis vary between estuary.

The years used for each estuary are:

Perdido Bay: 1992, 2002, 2010, 2015
Big Lagoon: 1992, 2003, 2010, 2015
Pensacola Bay: 1992, 2003, 2010, 2015
Escambia Bay: 1992, 2003, 2010, 2015
Santa Rosa Sound: 1992, 2003, 2010, 2015
Choctawhatchee Bay: 1992, 2003, 2007, 2015
St. Andrew Bay: 1992, 2003, 2010, 2015
St. Joseph Bay: 1992, 2003, 2010, 2015

This project was completed by the Florida Fish and Wildlife Conservation Commission Fish and Wildlife Research Institute and funded by the Gulf Environmental Benefit Fund of the National Fish and Wildlife Federation.

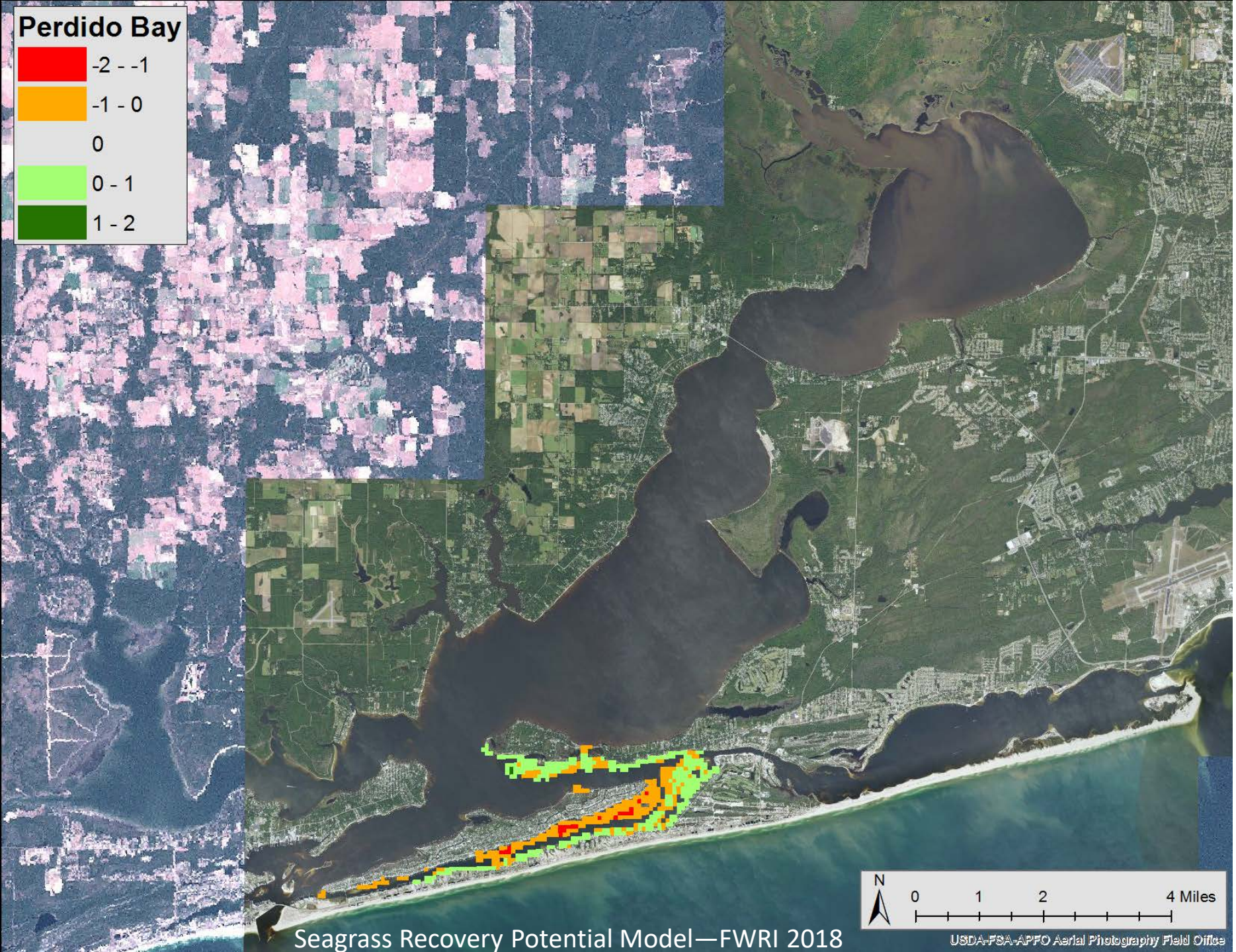
# Technical Information

To quantify change in seagrass cover, polygon shapefiles for each year were clipped to the area of each estuary, and the attributes common to pairs of mapping years were joined through union. The seagrass cover for each year was compared to the cover of the year prior, and given a numeric value based on the change. The values ranged from 2 to -2, where 2 was the greatest increase in cover (bare to continuous seagrass), and -2 was the greatest decrease in cover (continuous seagrass to bare).

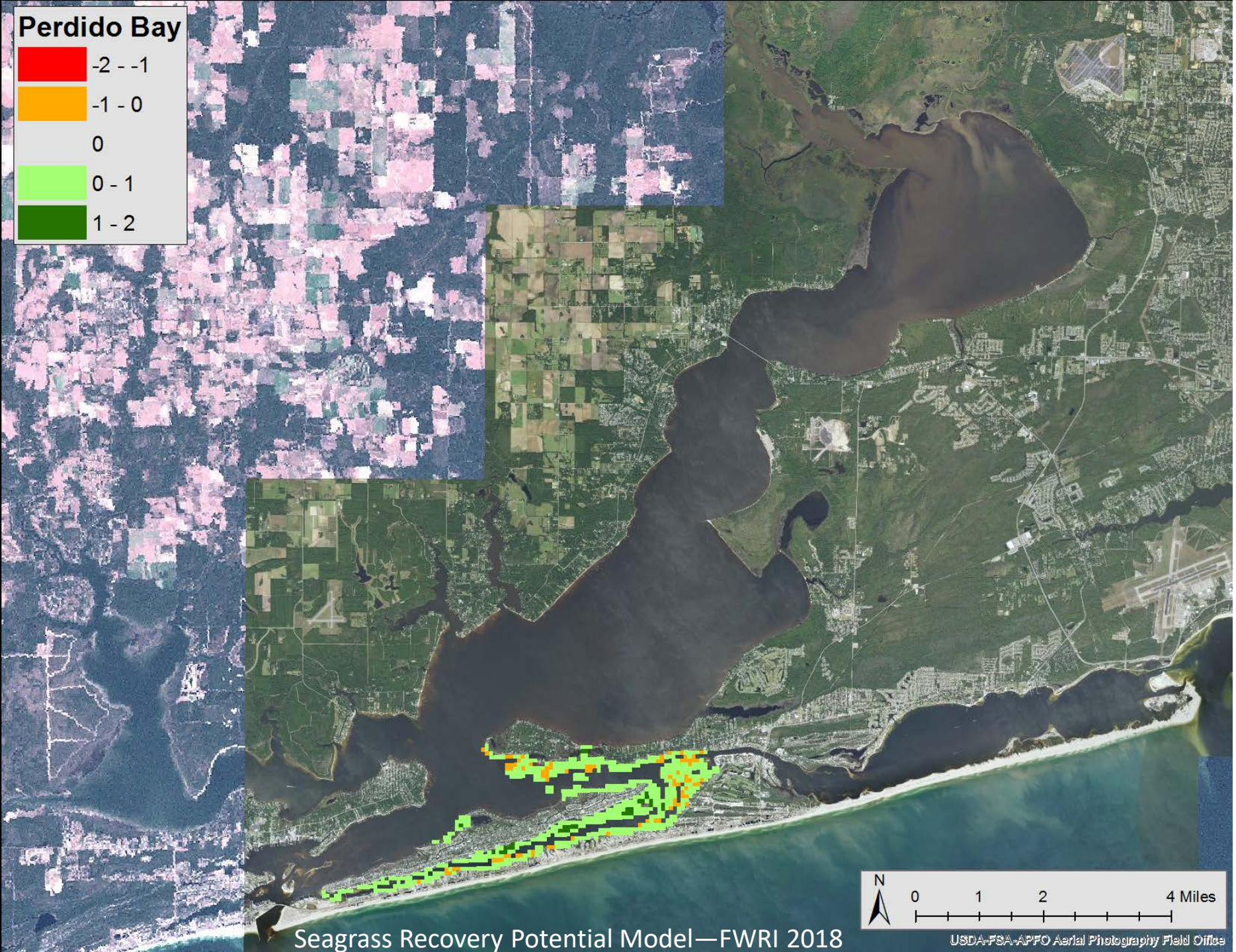
| Color | From | To | Code |
|---|---|---|---|
| | Continuous | No SAV | -2 |
| | Continuous | Patchy | -1 |
| | Patchy | No SAV | 0 |
| | No SAV | Patchy | 1 |
| | Patchy | Continuous | 1 |
| | No SAV | Continuous | 2 |

The change polygon shapefiles were then spatially joined to a 1-ha cells in a grid, and the mean numeric change of the polygons within each grid cell was calculated.

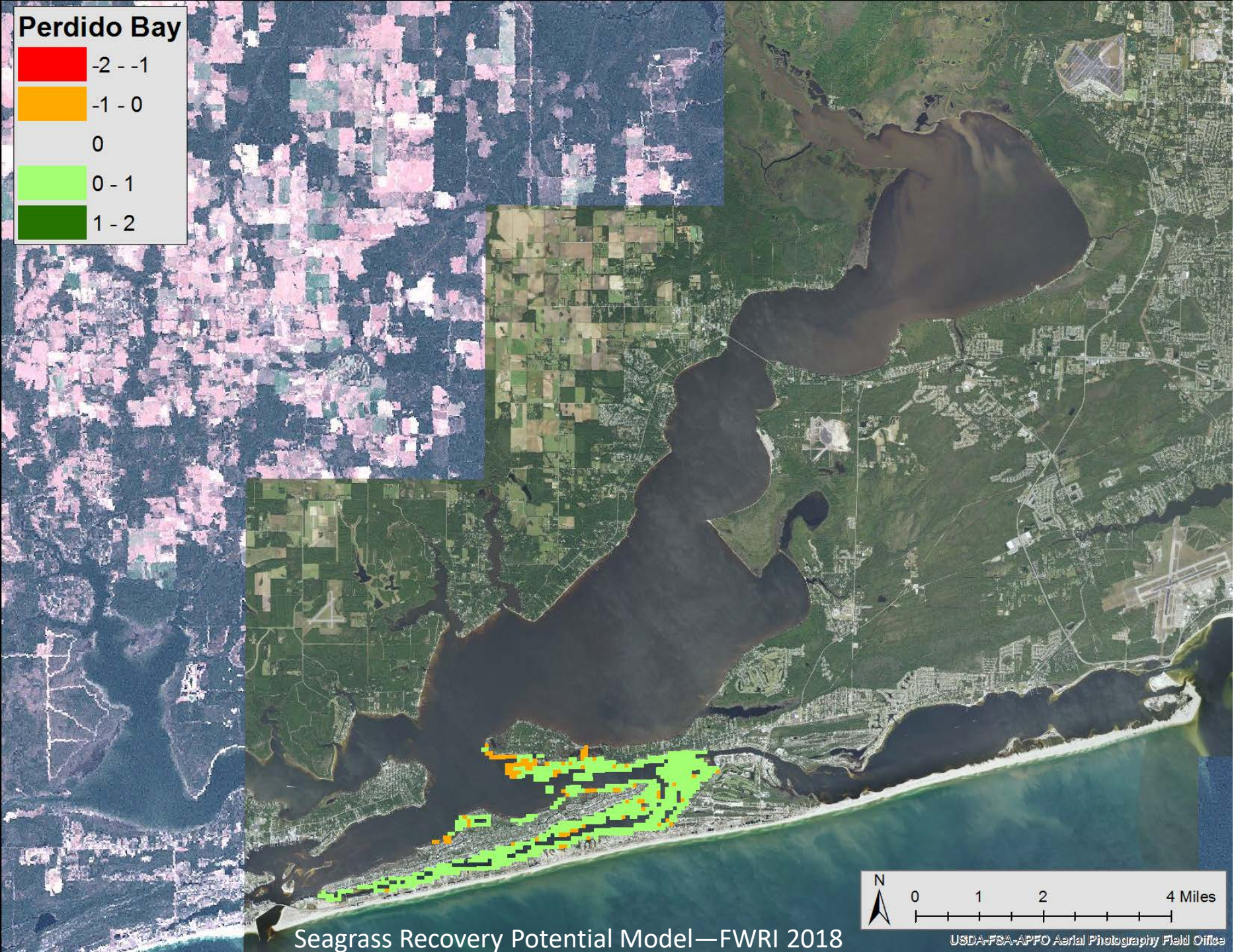
The projection of the shapefiles in this dataset is NAD83 UTM Zone 16N.



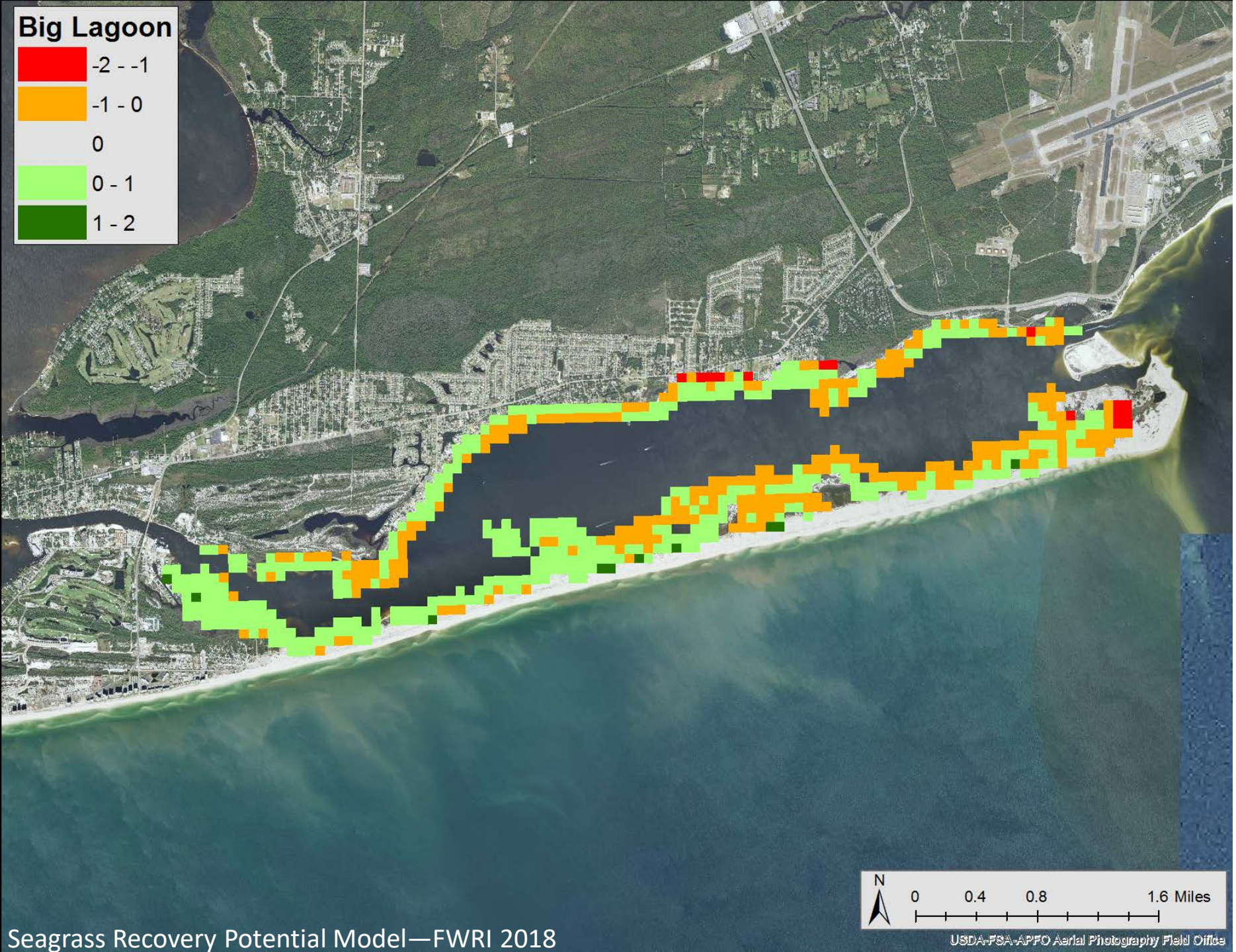

# Perdido Bay
## Change
## 1992 to 2002




# Perdido Bay
## Change
## 2002 to 2010

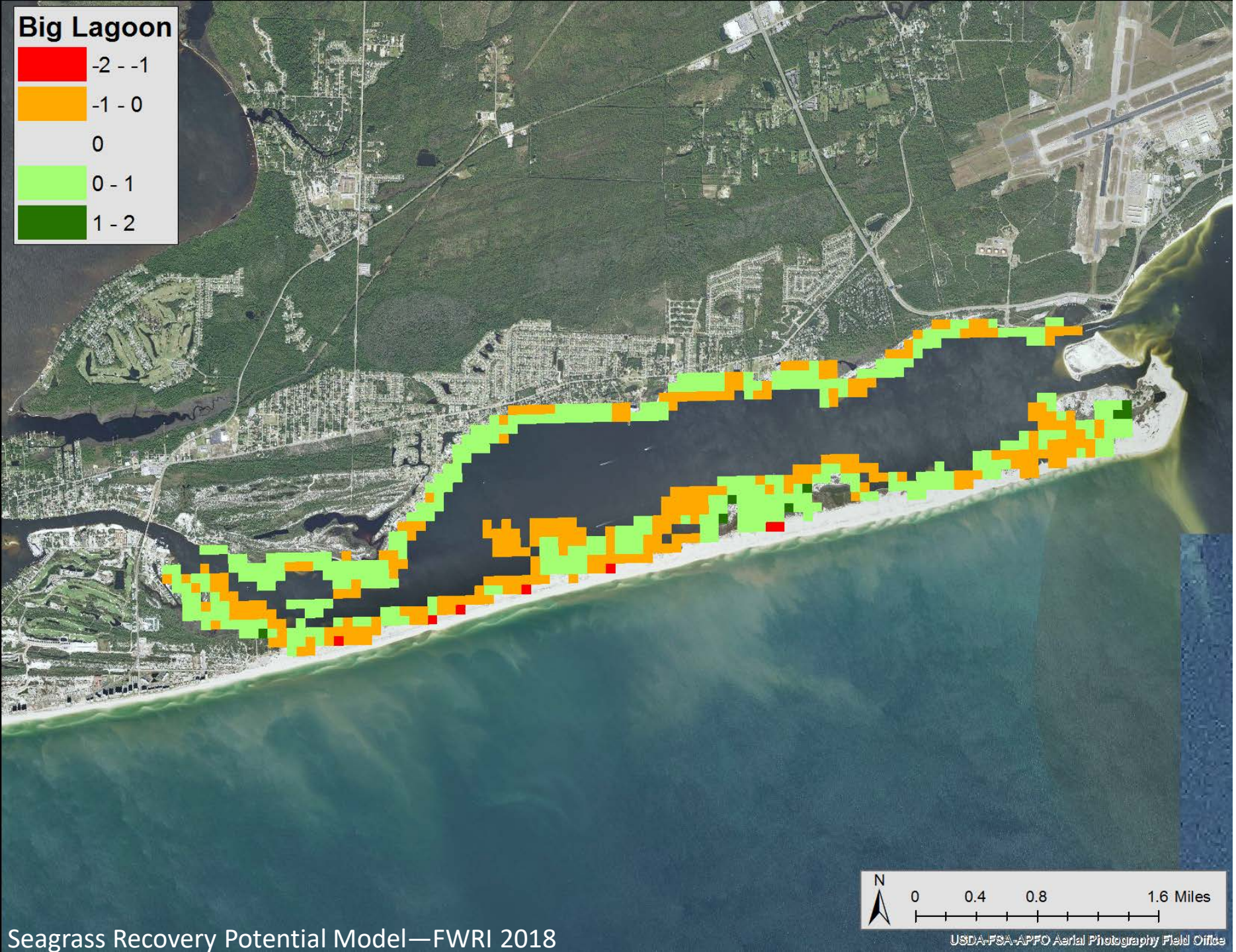



# Perdido Bay
## Change
## 2010 to 2015



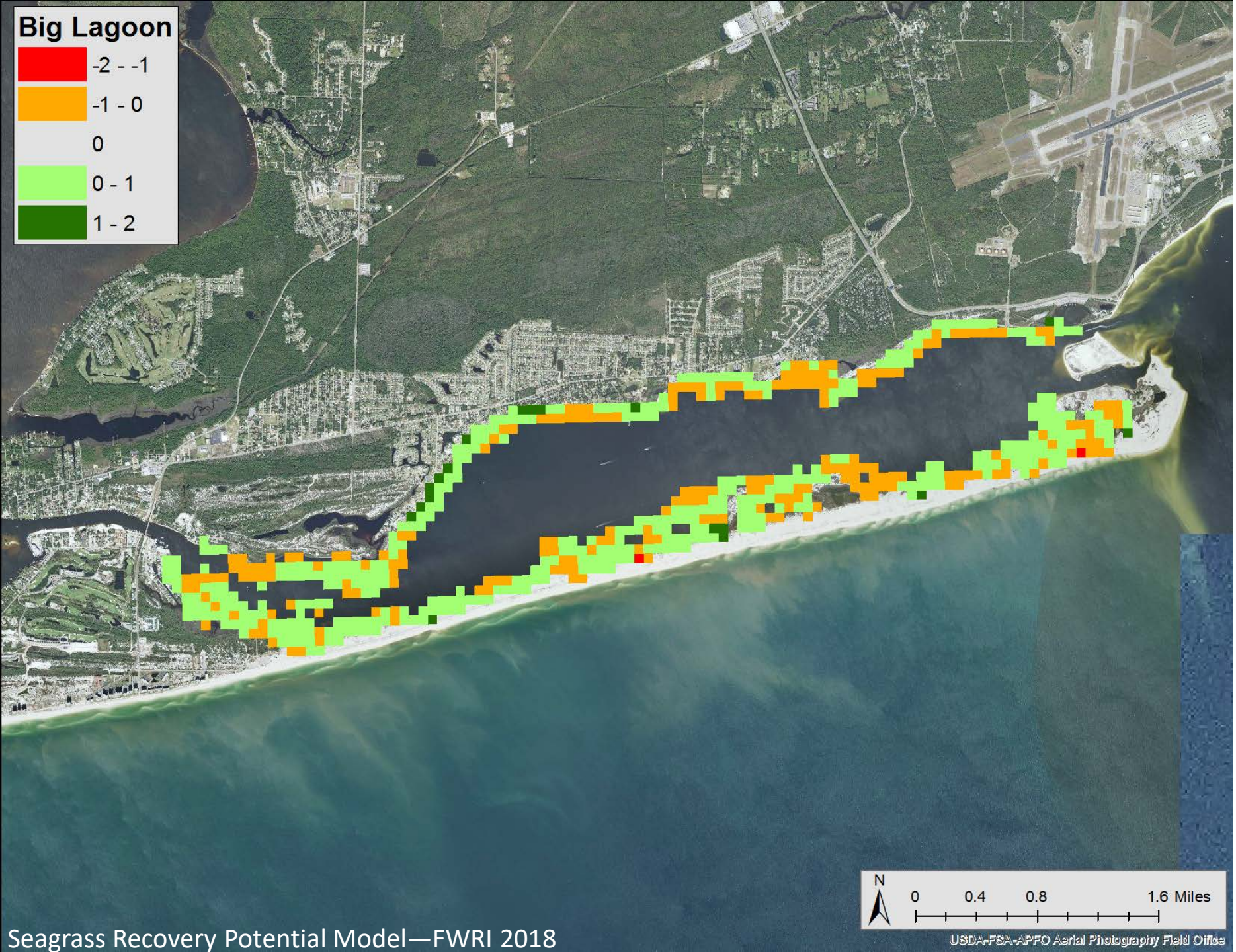

# Big Lagoon
## Change
## 1992 to 2003


Seagrass Recovery Potential Model—FWRI 2018



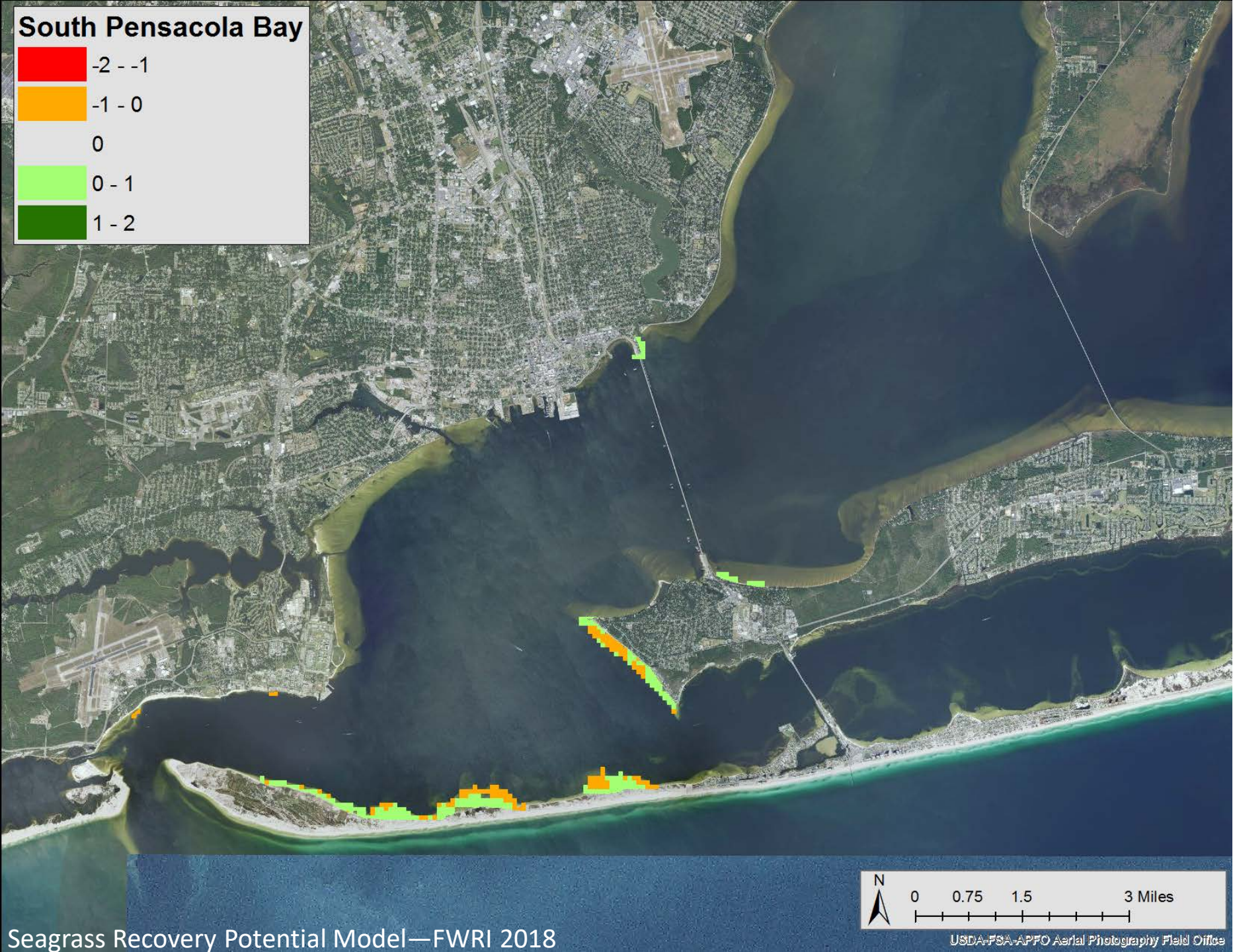

Seagrass Recovery Potential Model—FWRI 2018

# Big Lagoon
## Change
## 2003 to 2010

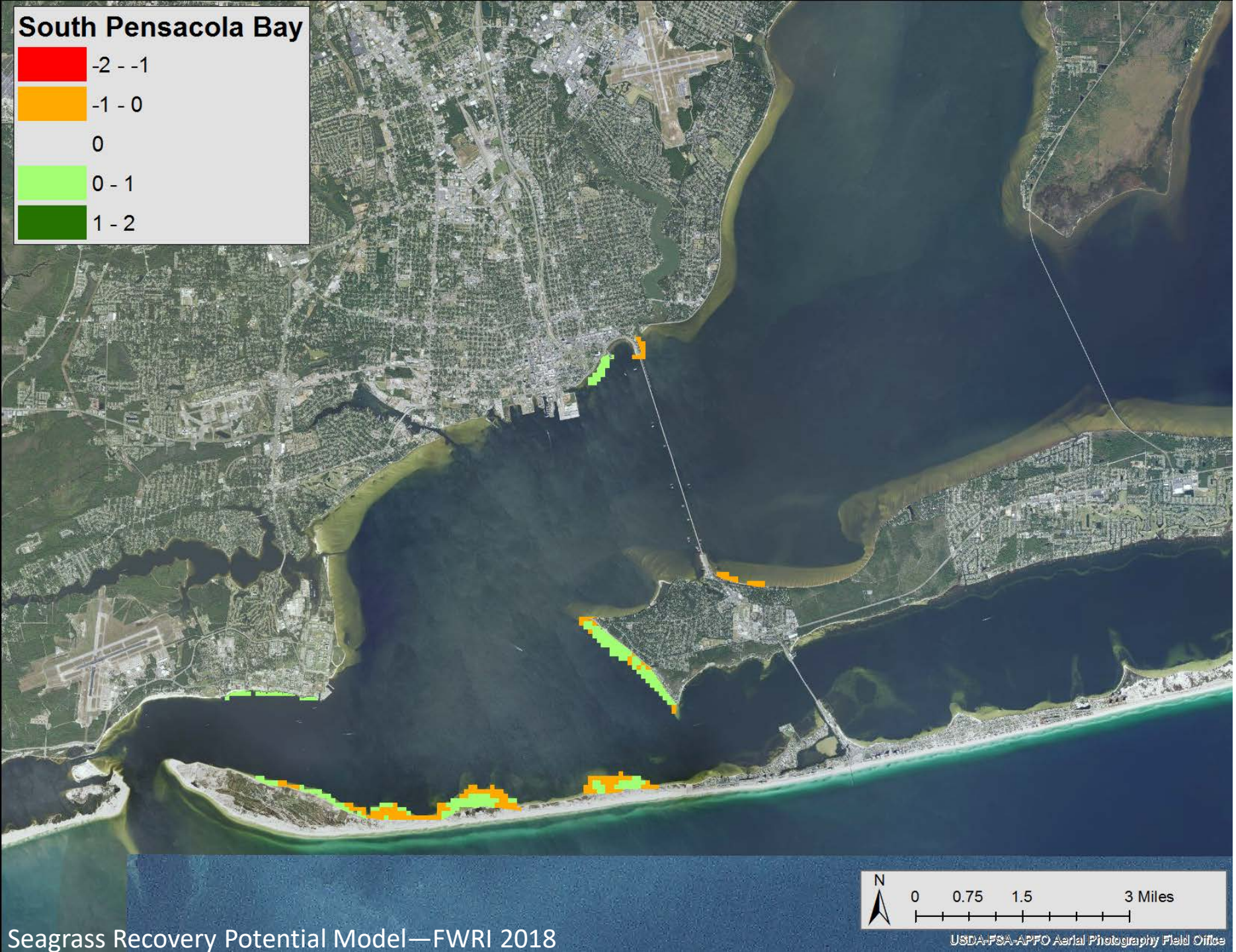



# Big Lagoon
## Change
## 2010 to 2015


Seagrass Recovery Potential Model—FWRI 2018

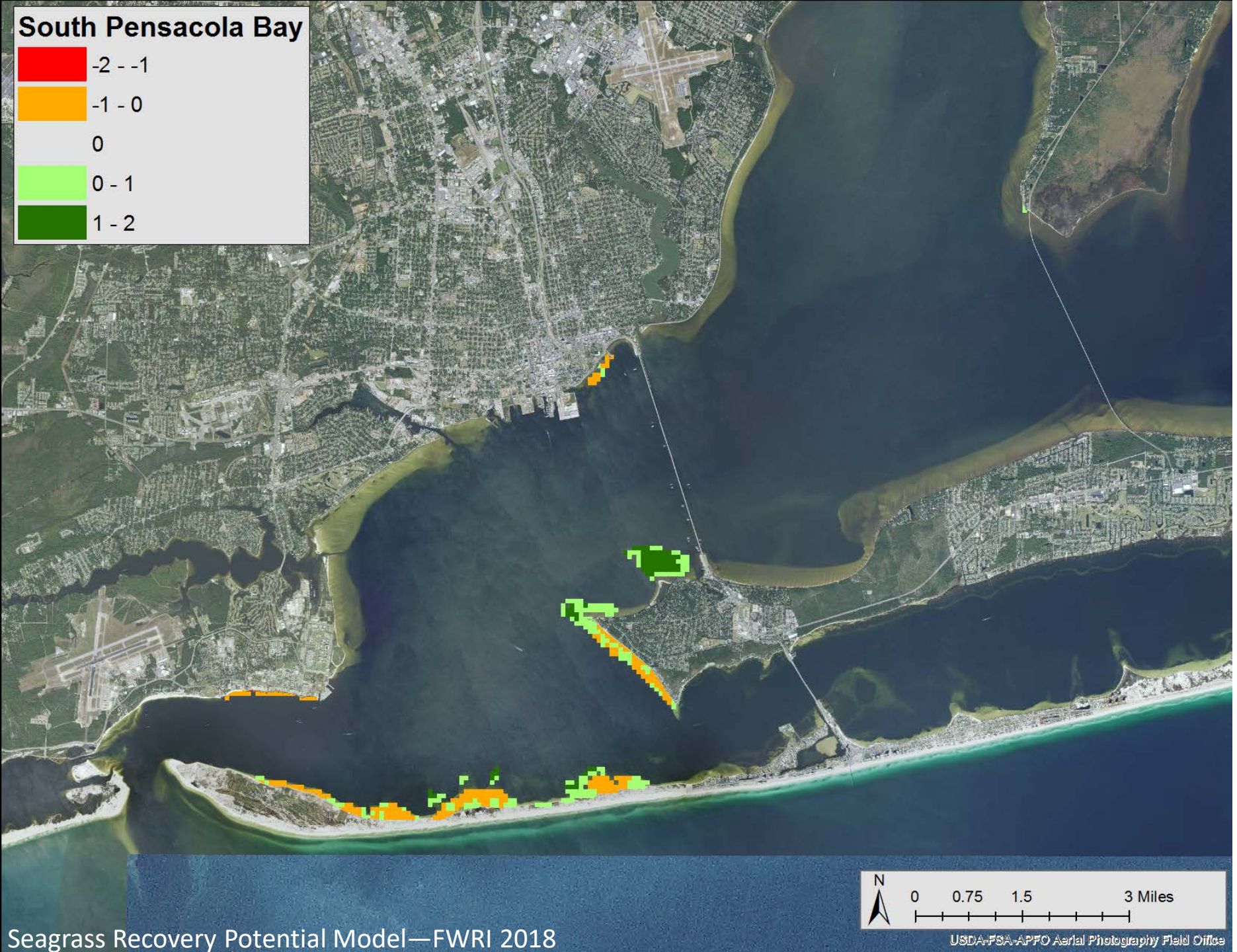



# Pensacola Bay Change 1992 to 2003

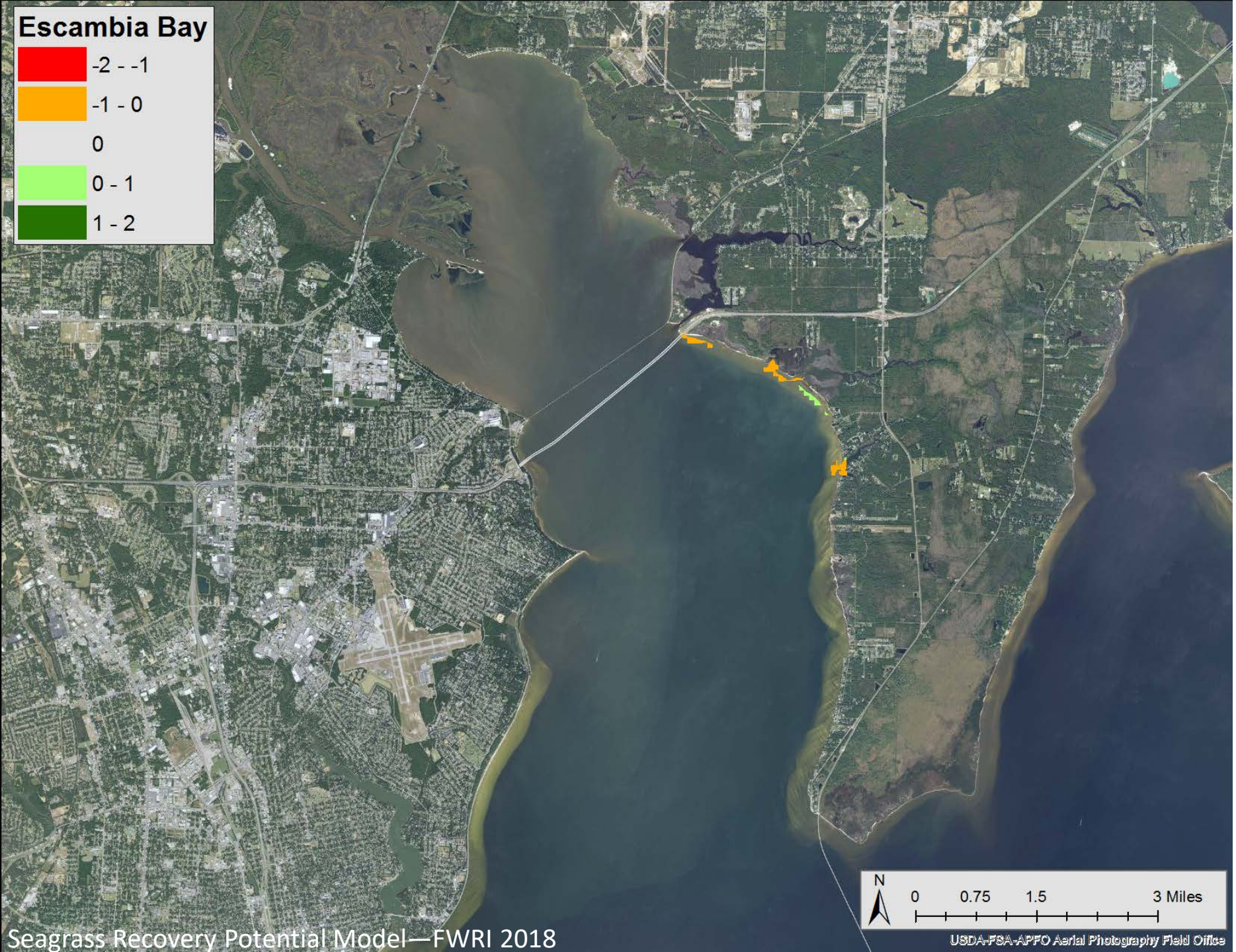



Seagrass Recovery Potential Model—FWRI 2018

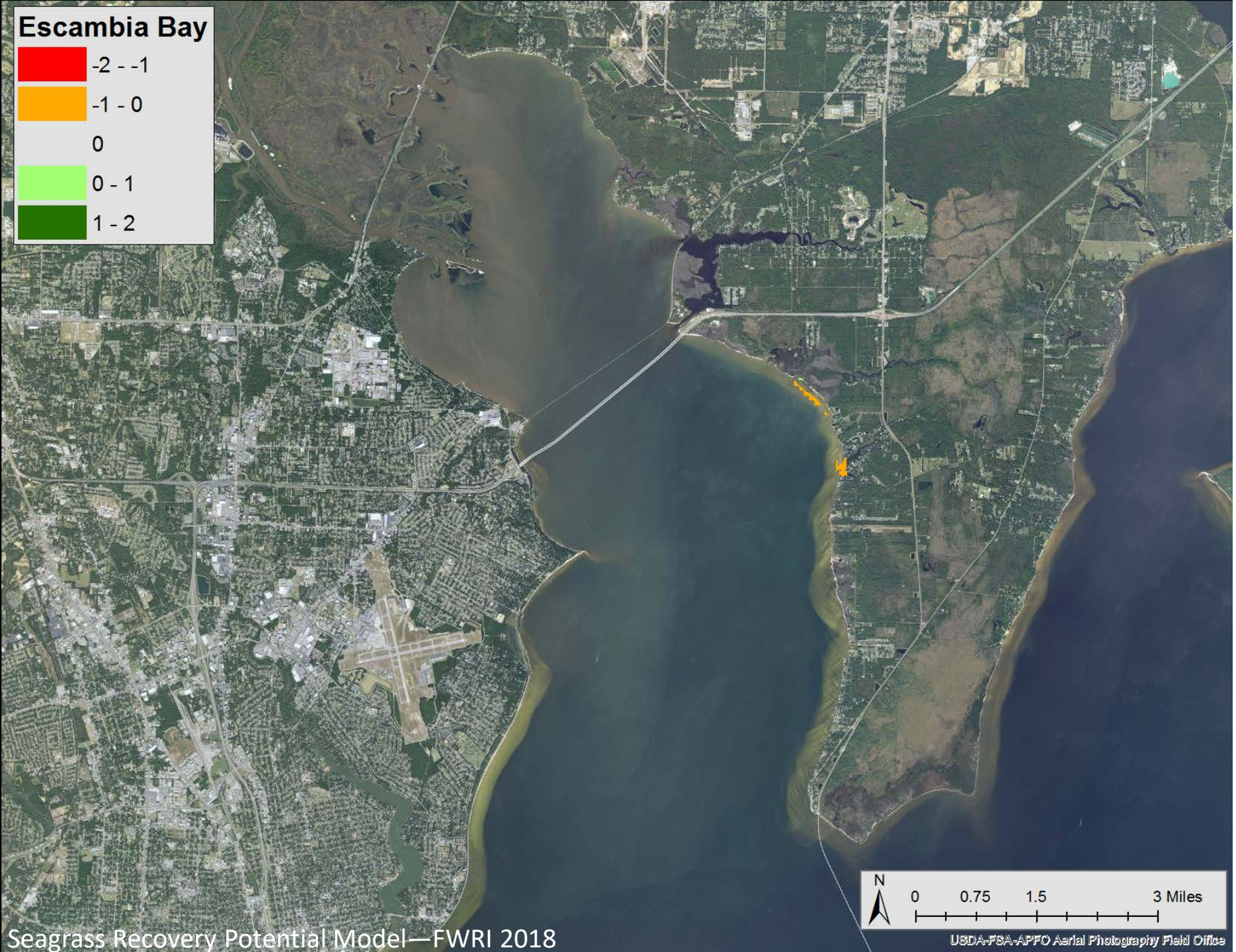
# Pensacola Bay Change 2003 to 2010




# Pensacola Bay Change 2010 to 2015




# Escambia Bay Change 1992 to 2003

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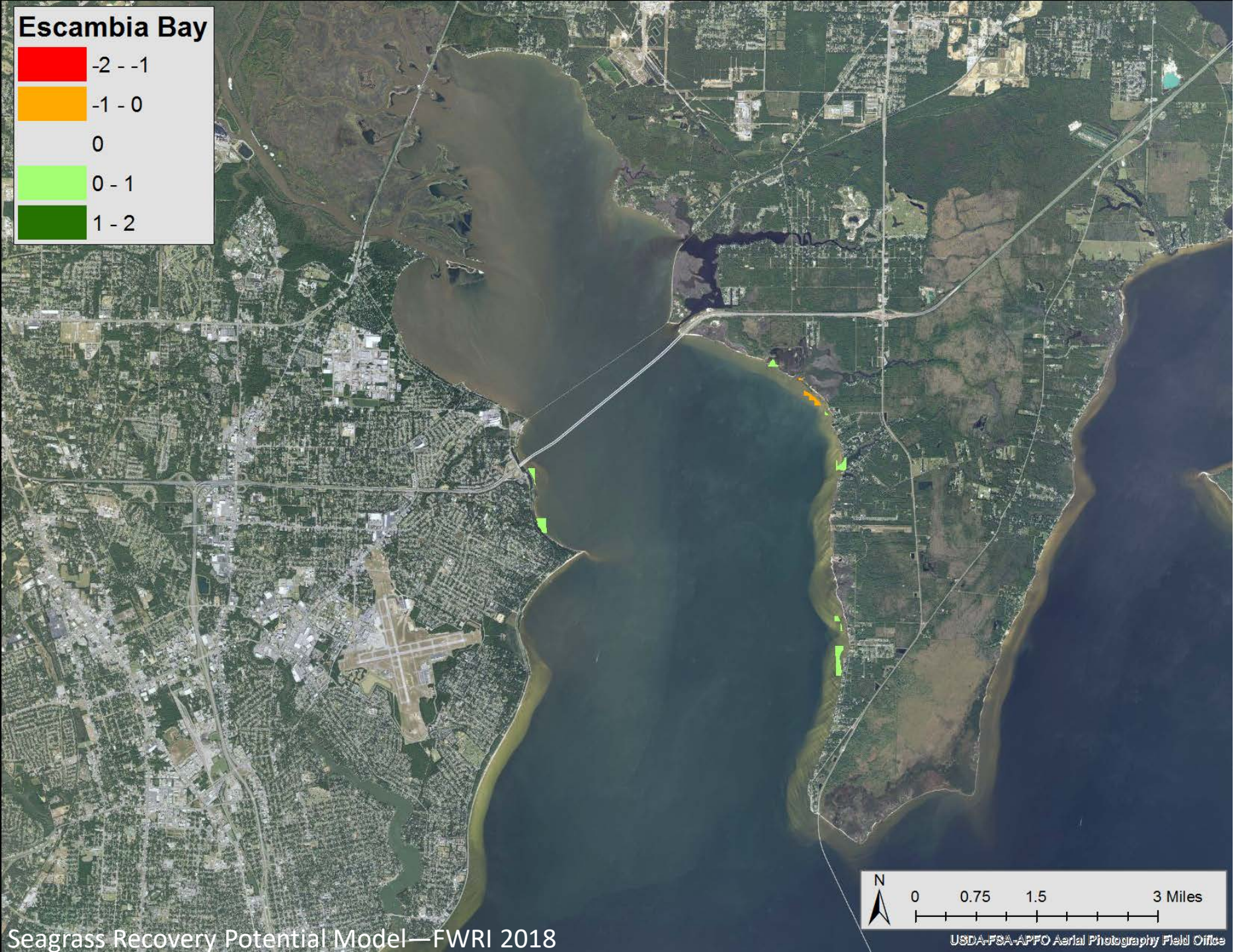
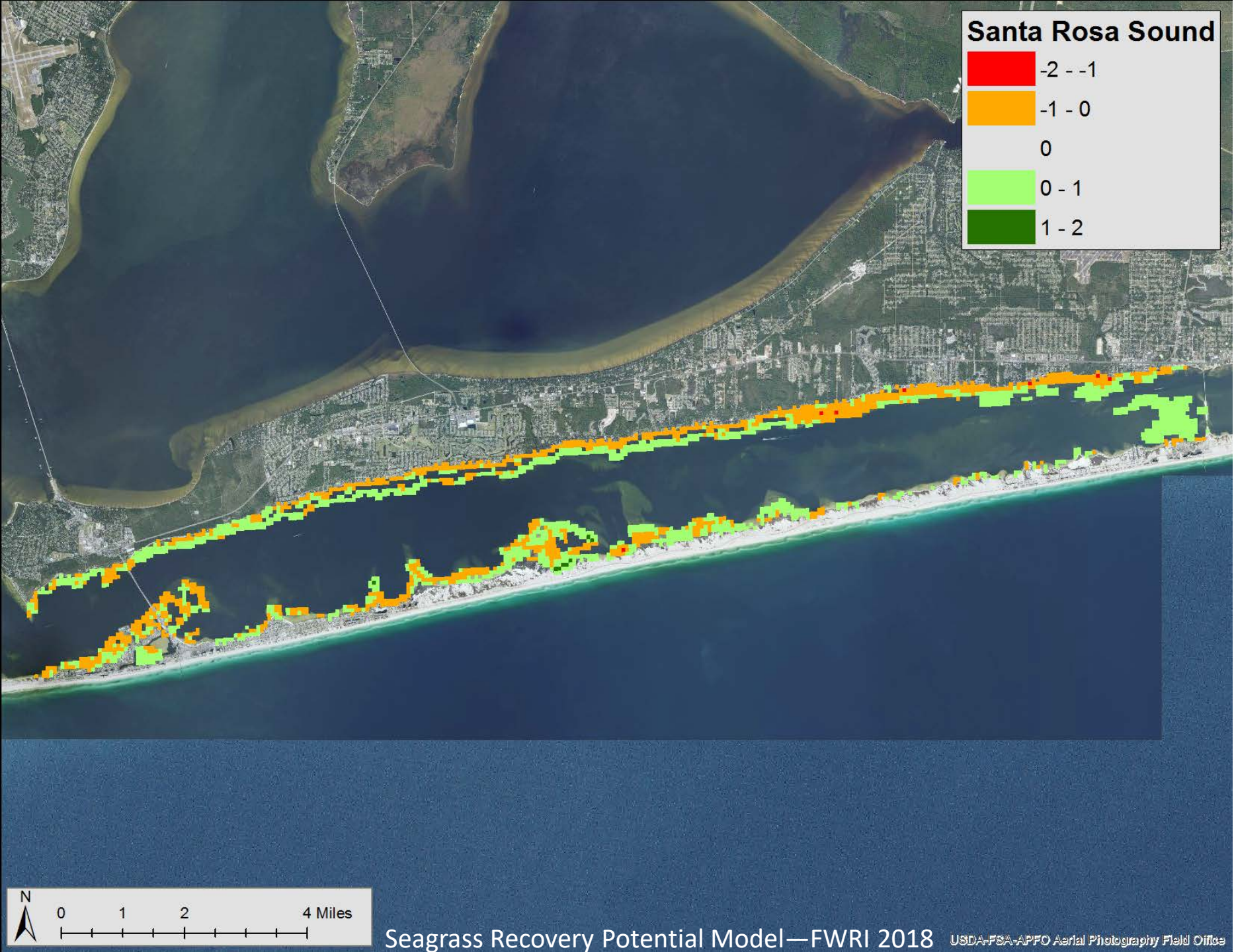
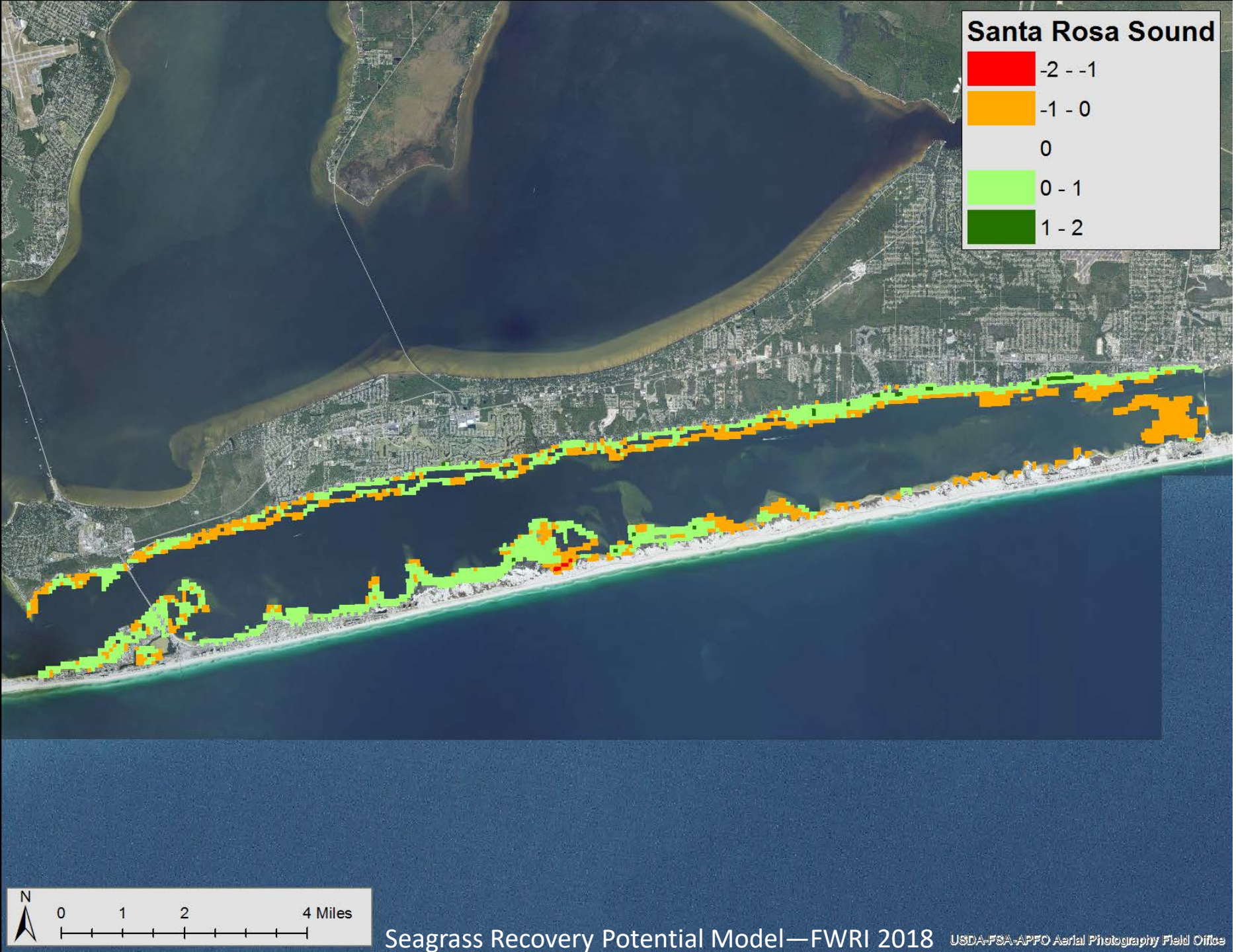
# Escambia Bay Change 2003 to 2010




# Escambia Bay Change 2010 to 2015




# Santa Rosa Sound Change 1992 to 2003

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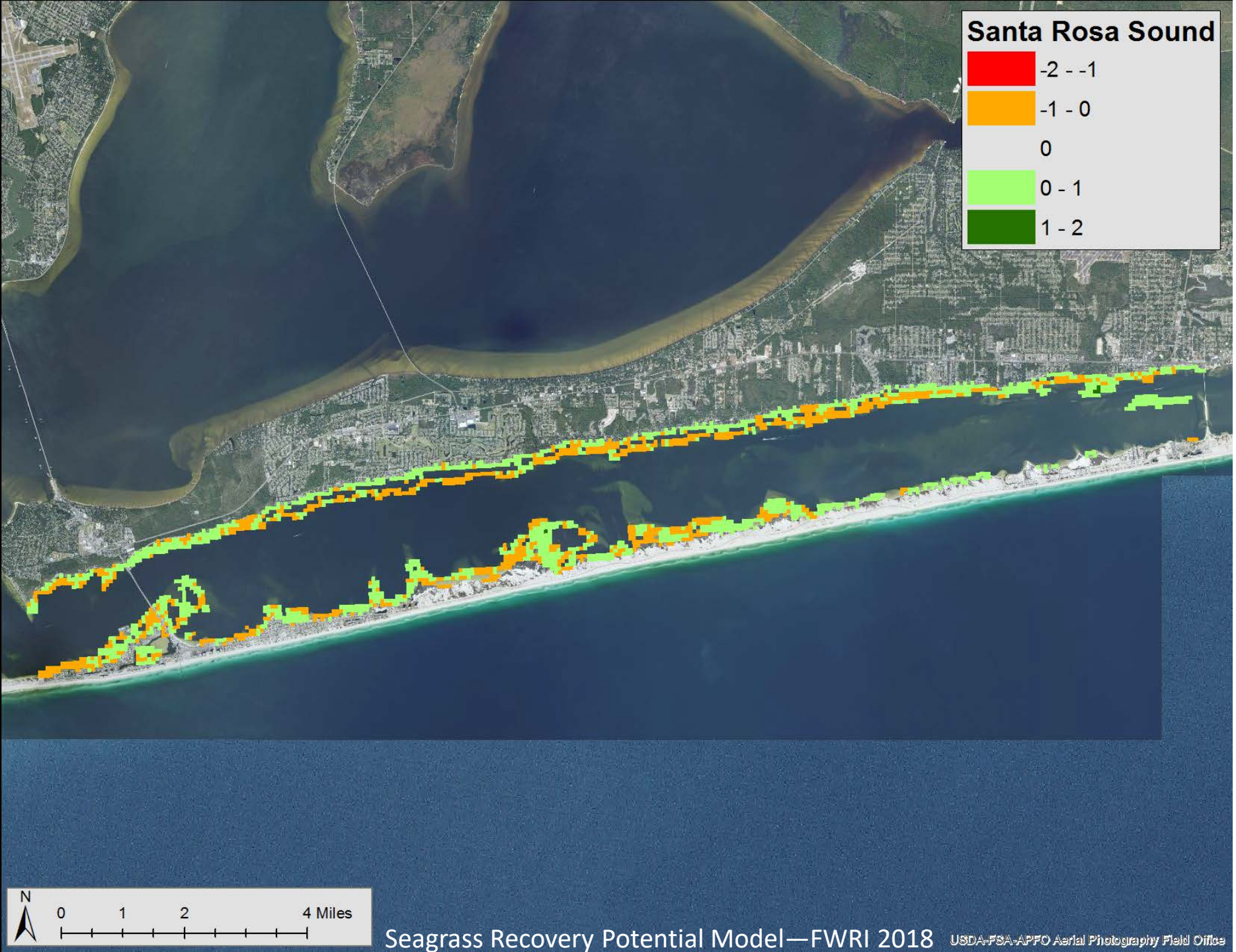
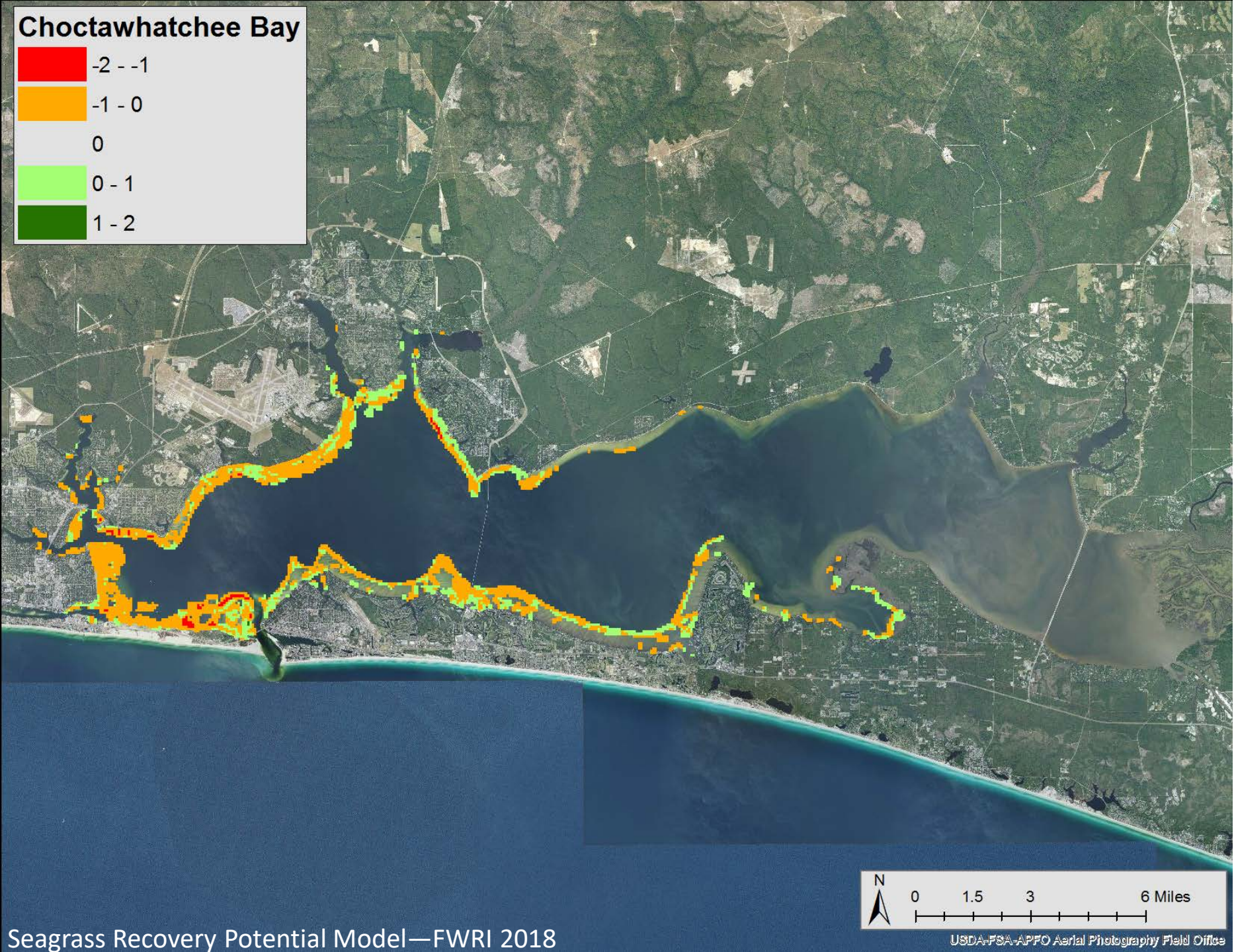



# Santa Rosa Sound Change 2010 to 2015

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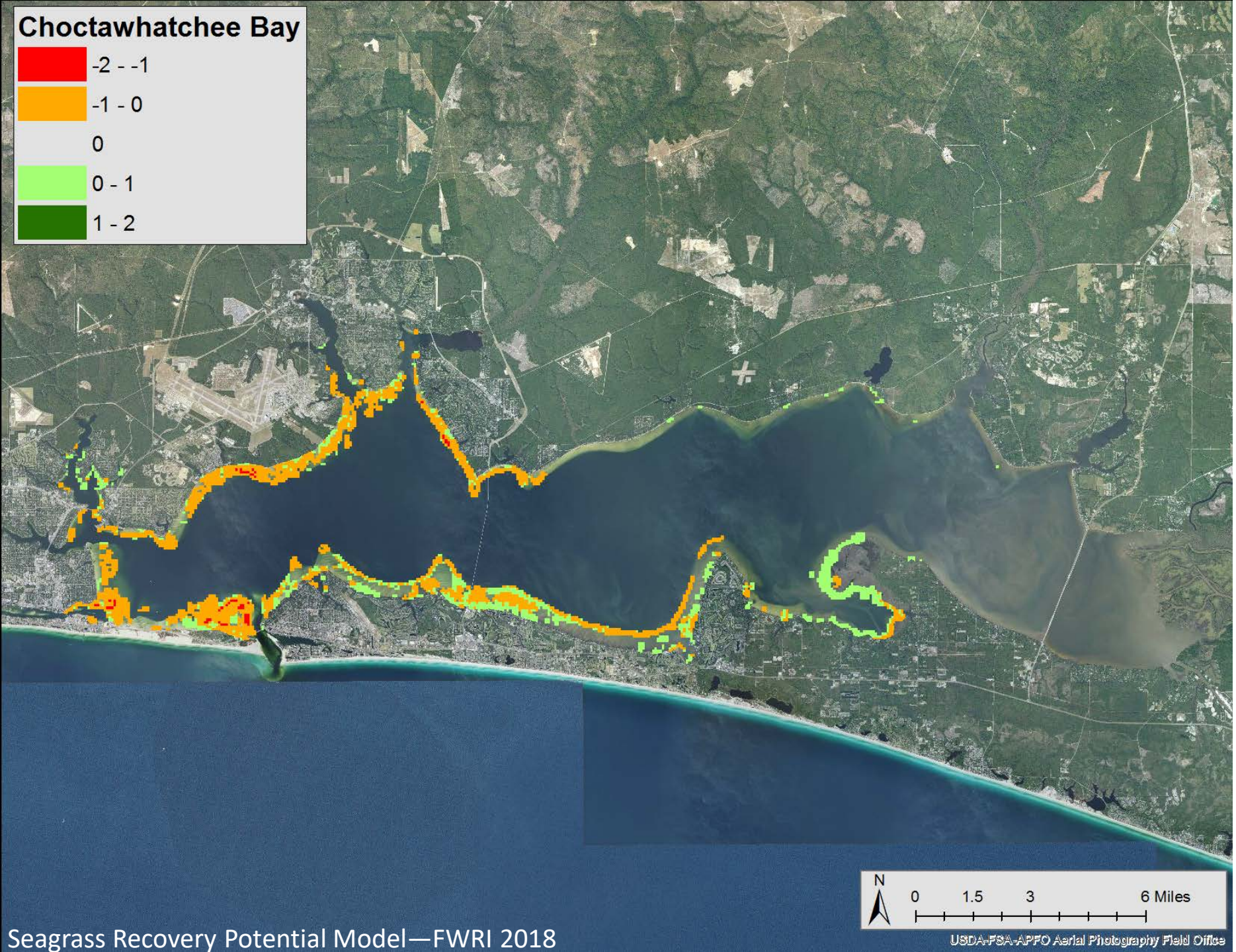
# Choctawhatchee Bay Change 1992 to 2003




# Choctawhatchee Bay Change 2003 to 2007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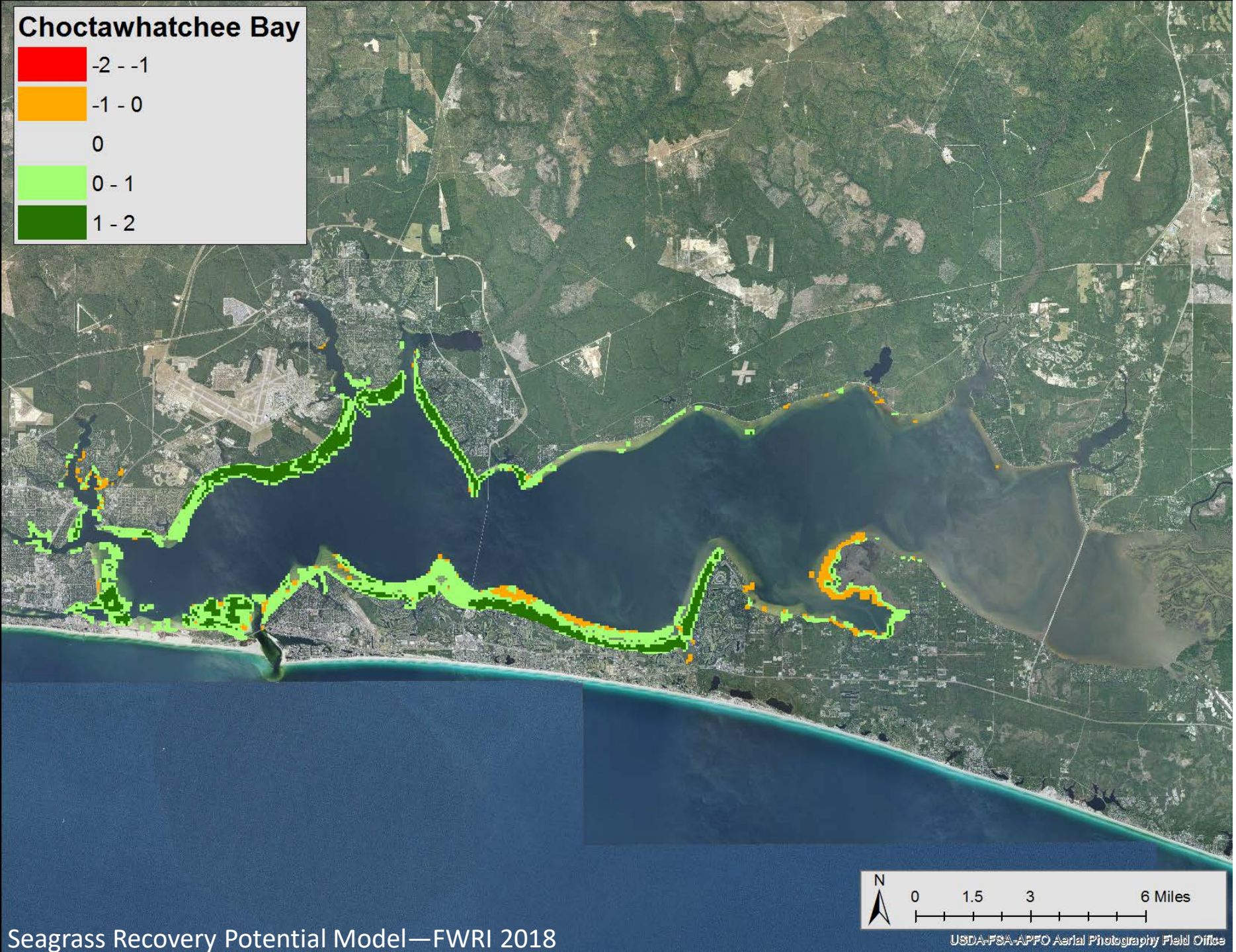
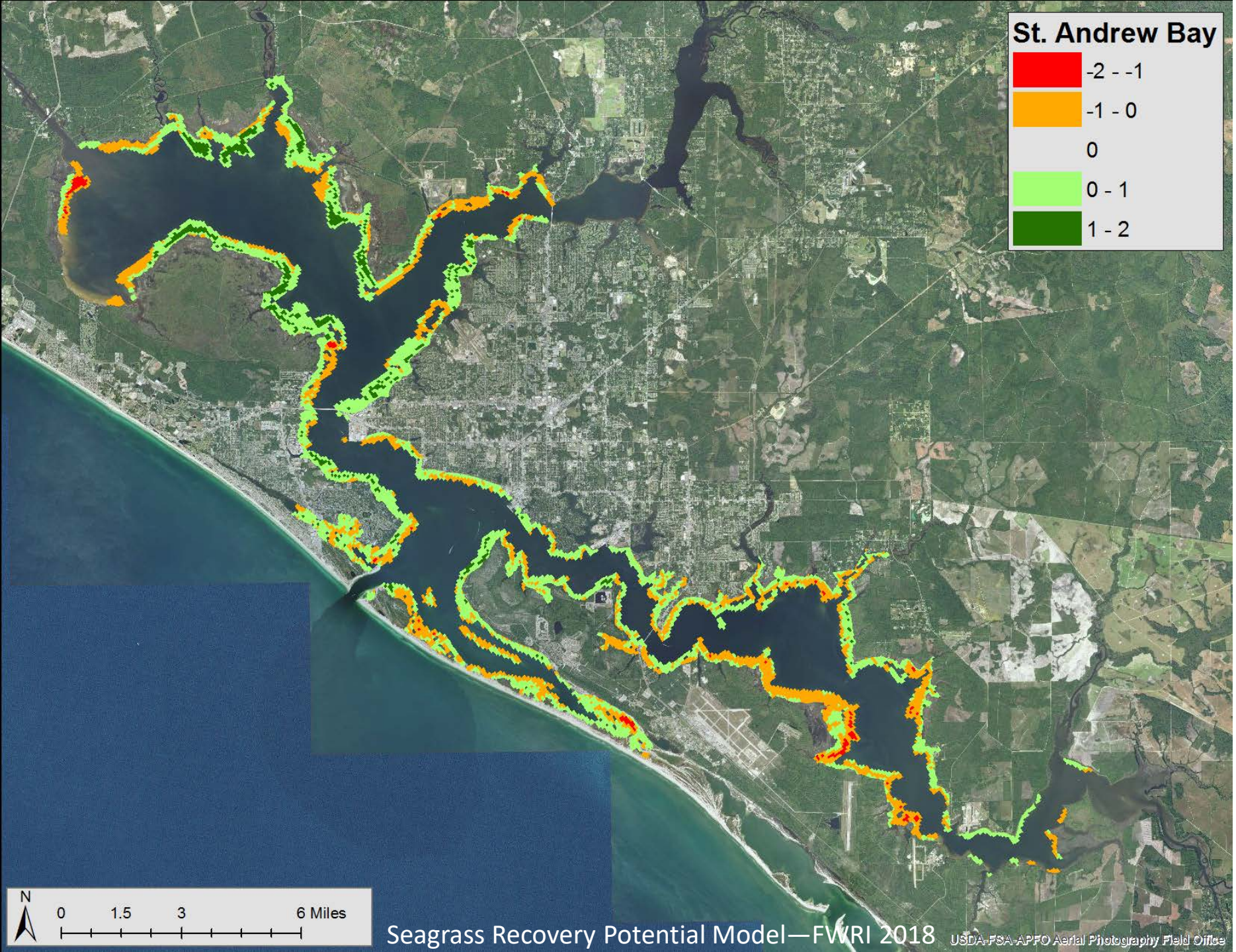
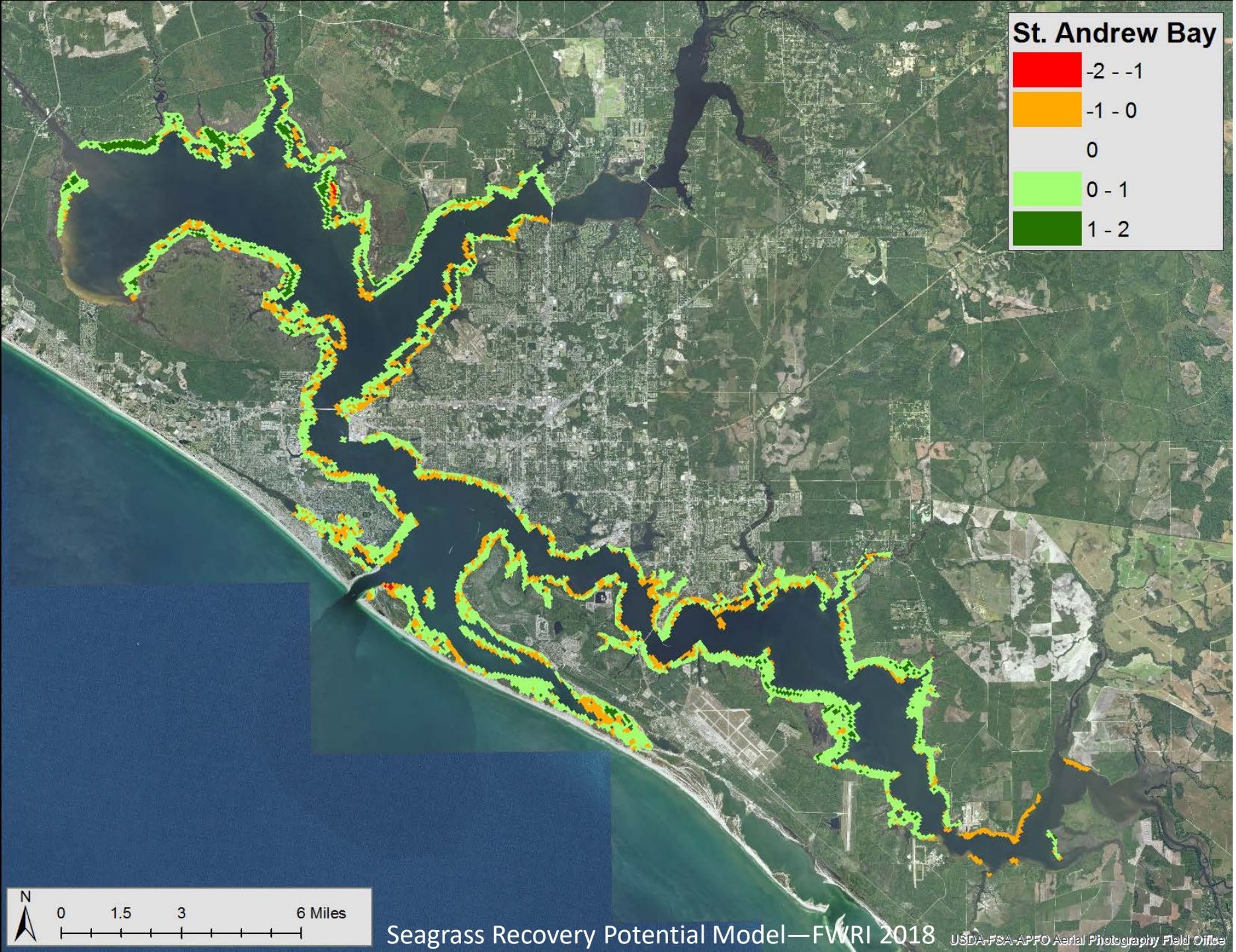



# Choctawhatchee Bay Change 2007 to 2015


Seagrass Recovery Potential Model—FWRI 2018




# St. Andrew Bay Change 1992 to 2003

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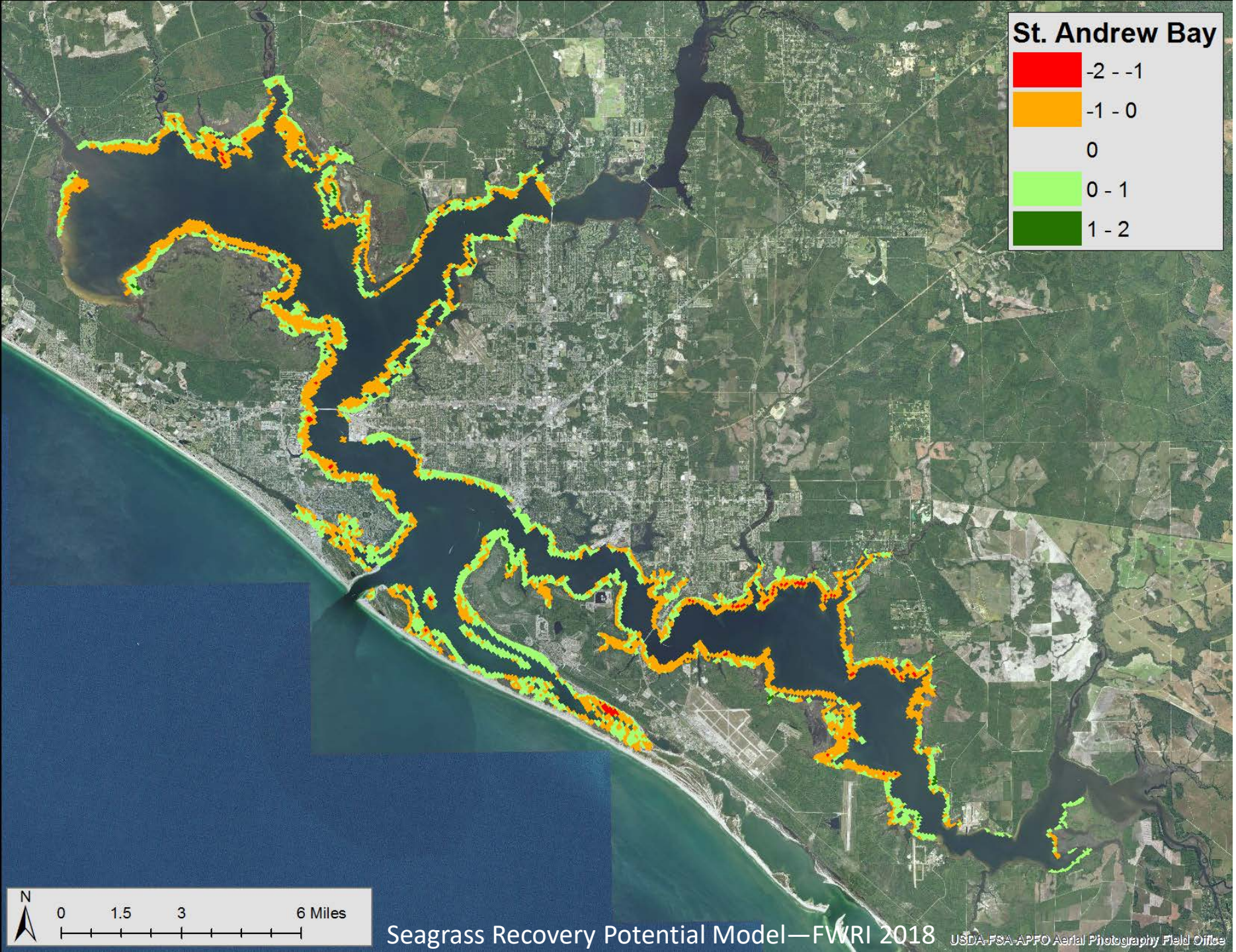
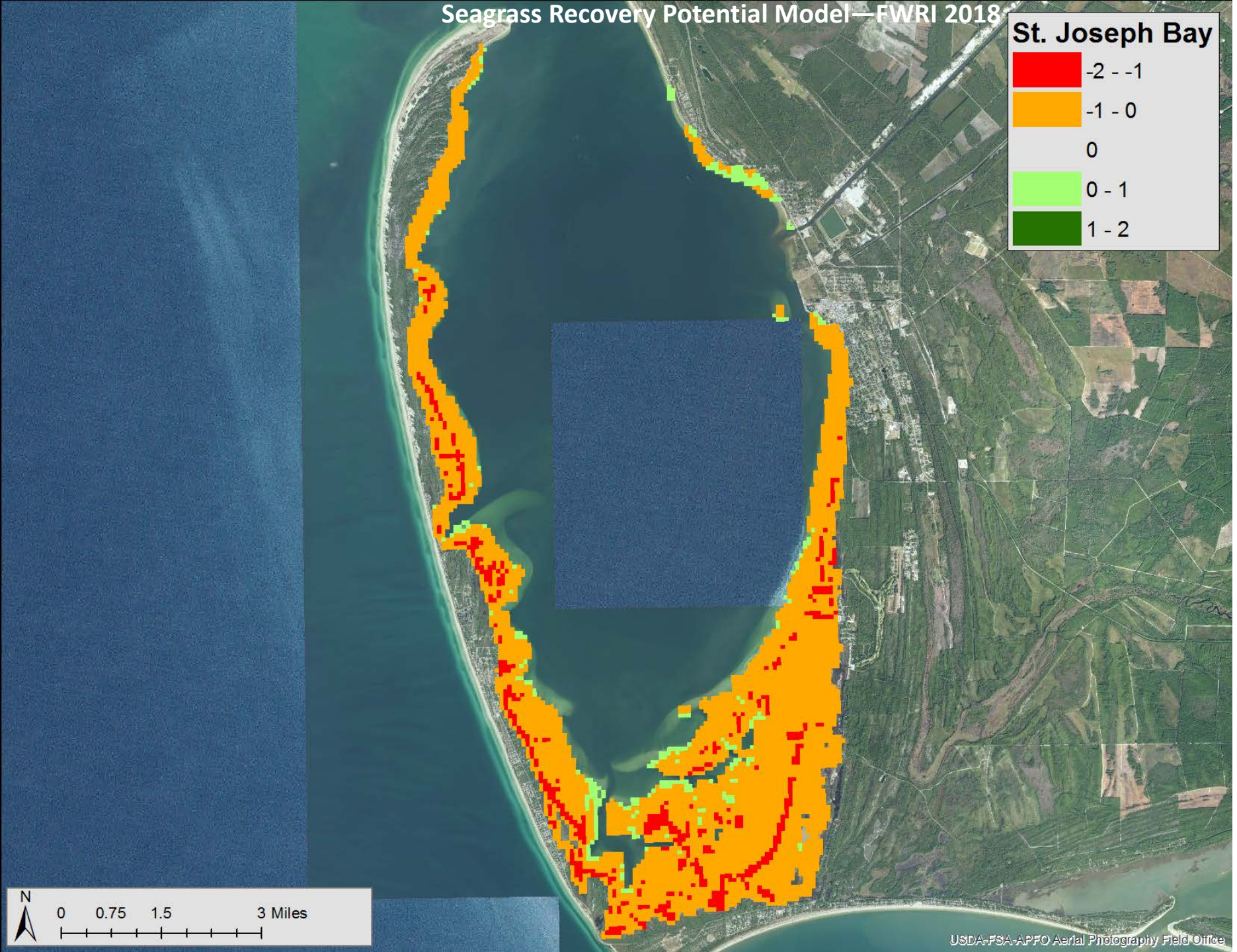



# St. Andrew Bay Change 2010 to 2015




# St. Joseph Bay Change 1992 to 2003

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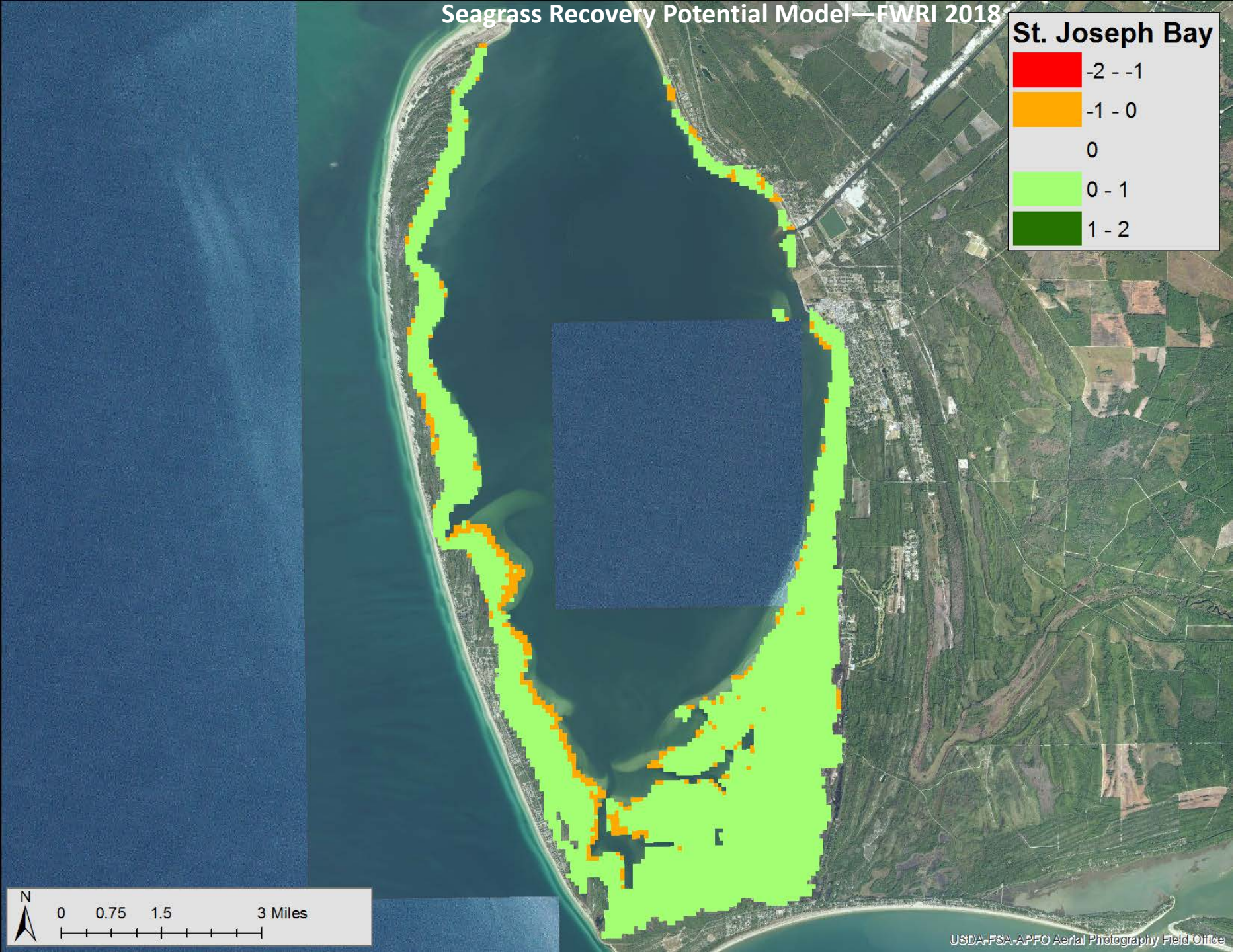
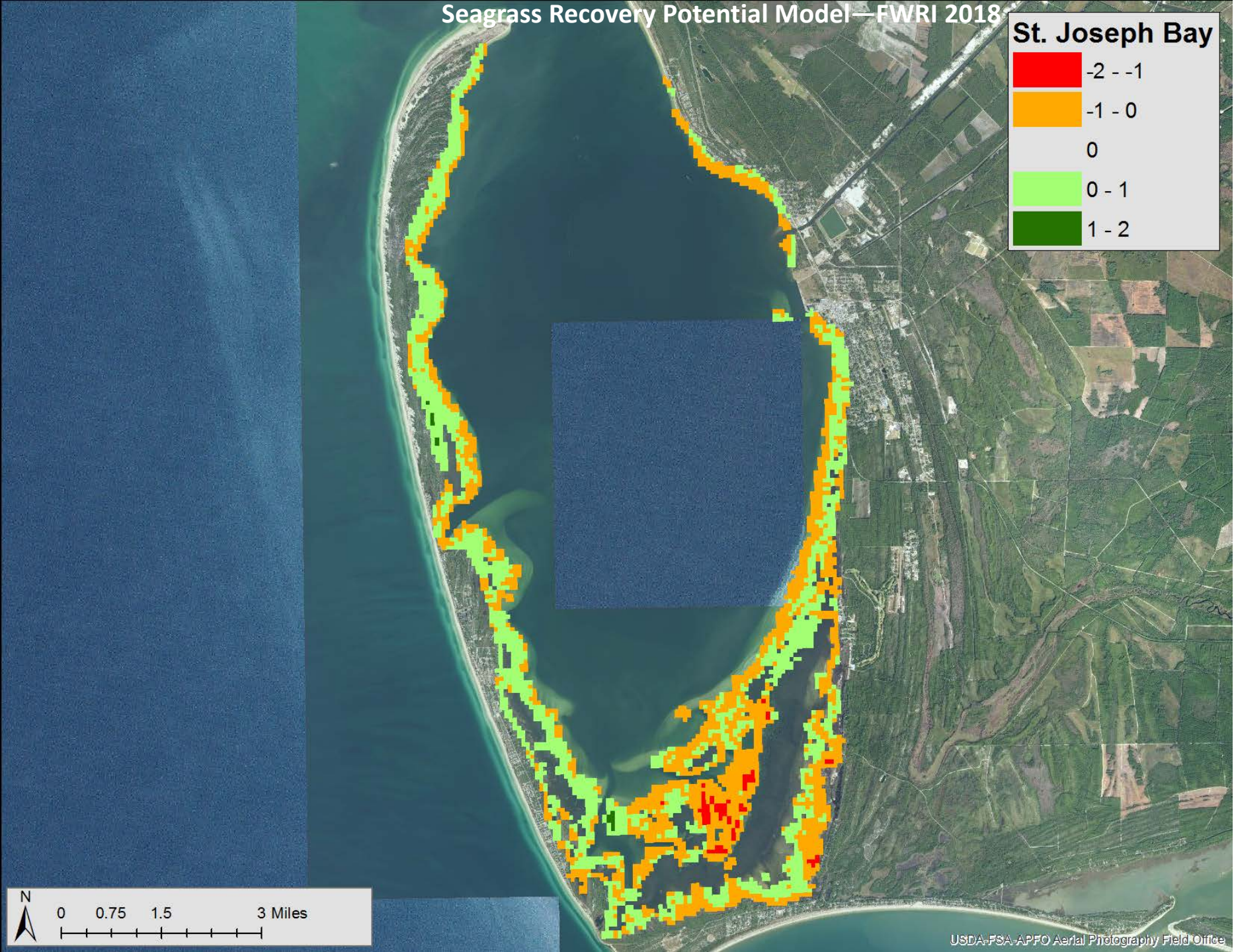



# St. Joseph Bay Change 2003 to 2010




# St. Joseph Bay Change 2010 to 2015