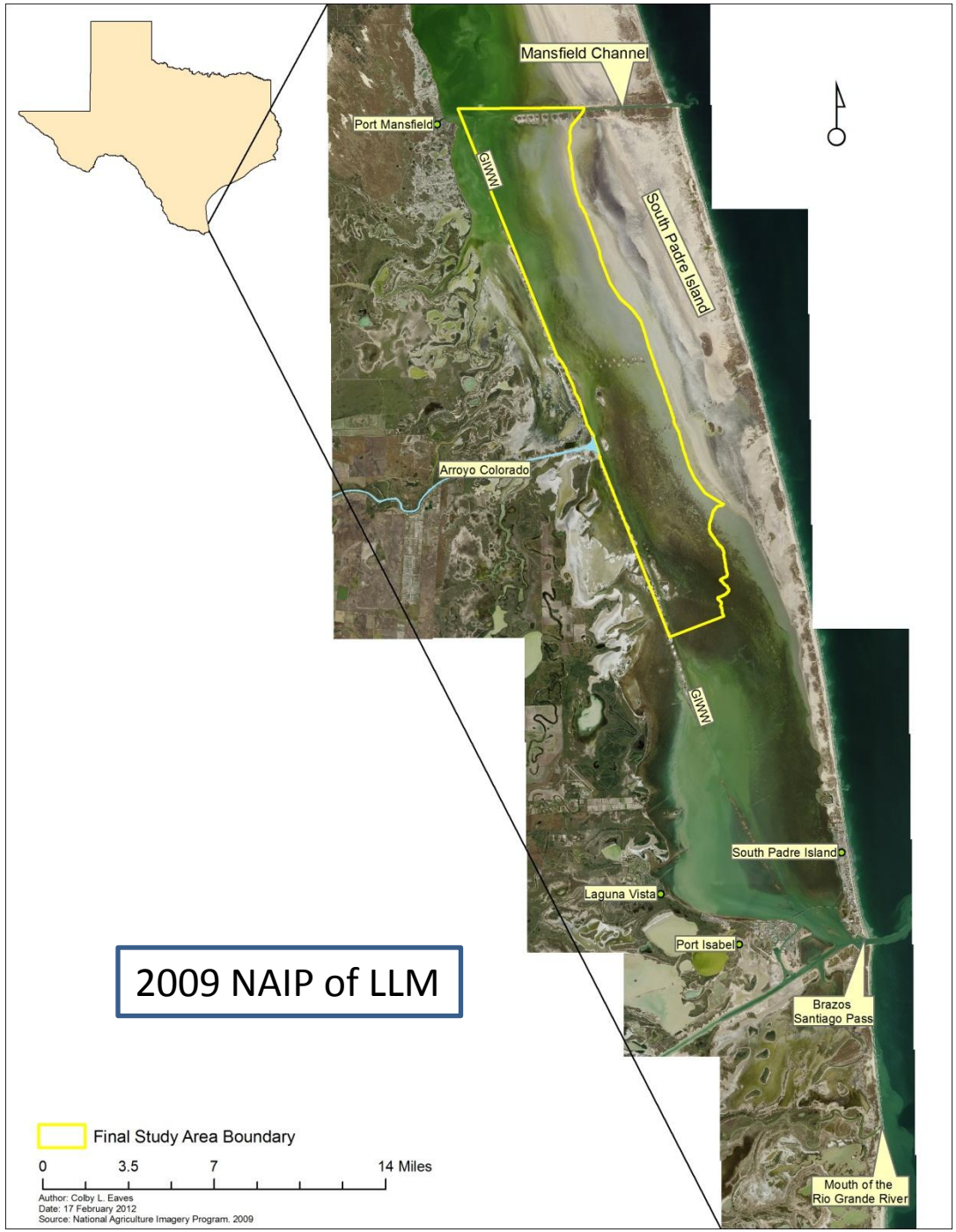
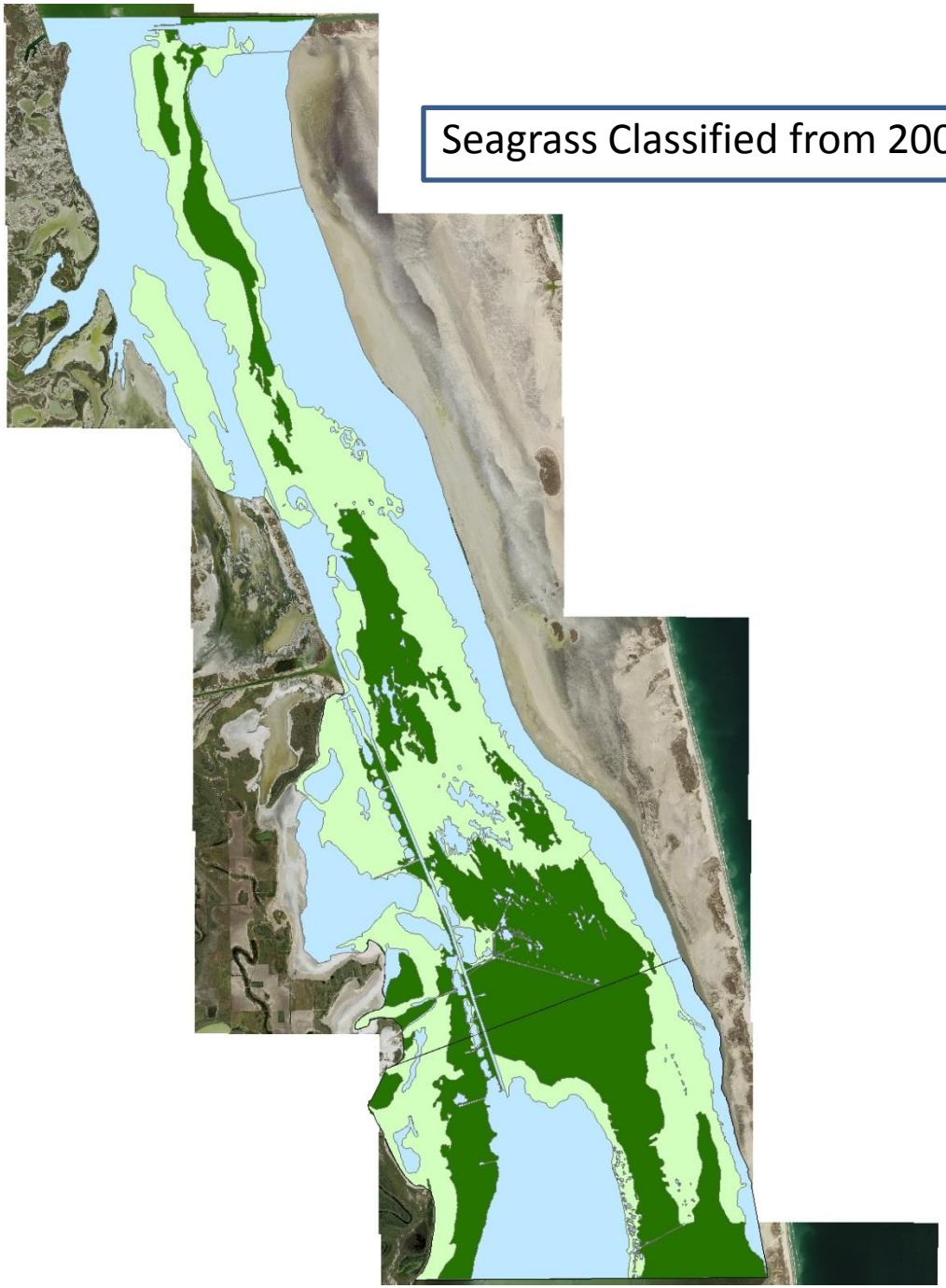
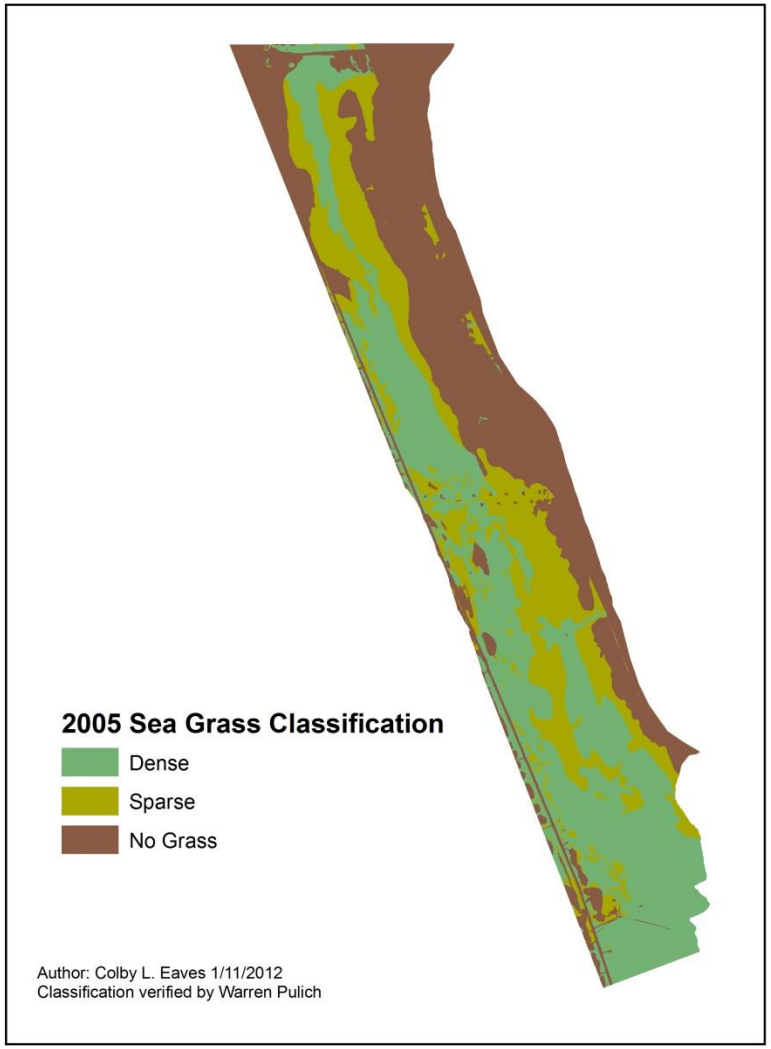
GIS ANALYSIS OF LLM SEAGRASS AREA CHANGES FROM 2005 - 2011

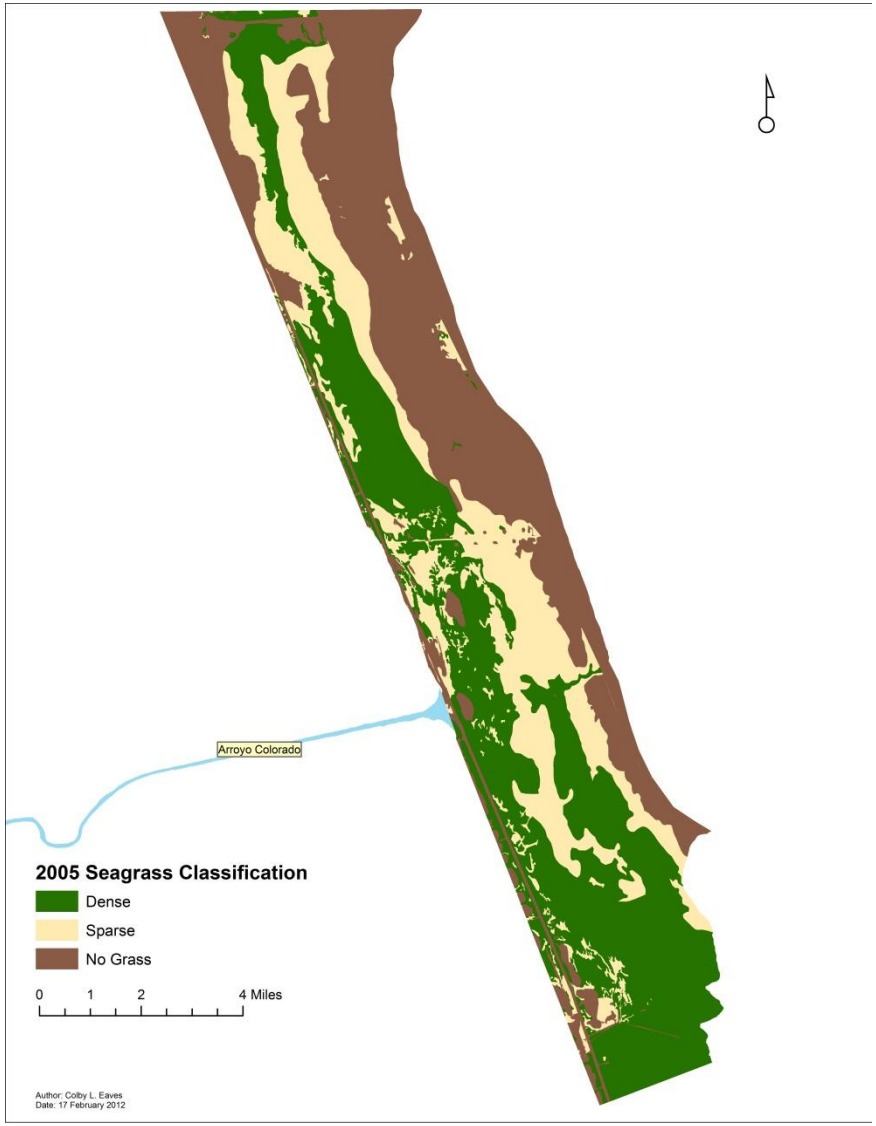

Mansfield Channel
Port Mansfield
GIWW
South Padre Island
Arroyo Colorado
GIWW
South Padre Island
Laguna Vista
Port Isabel
Brazos Santiago Pass
Mouth of the Rio Grande River
2009 NAIP of LLM
Final Study Area Boundary
0
3.5
7
14 Miles
Author: Colby L. Eaves
Date: 17 February 2012
Source: National Agriculture Imagery Program. 2009

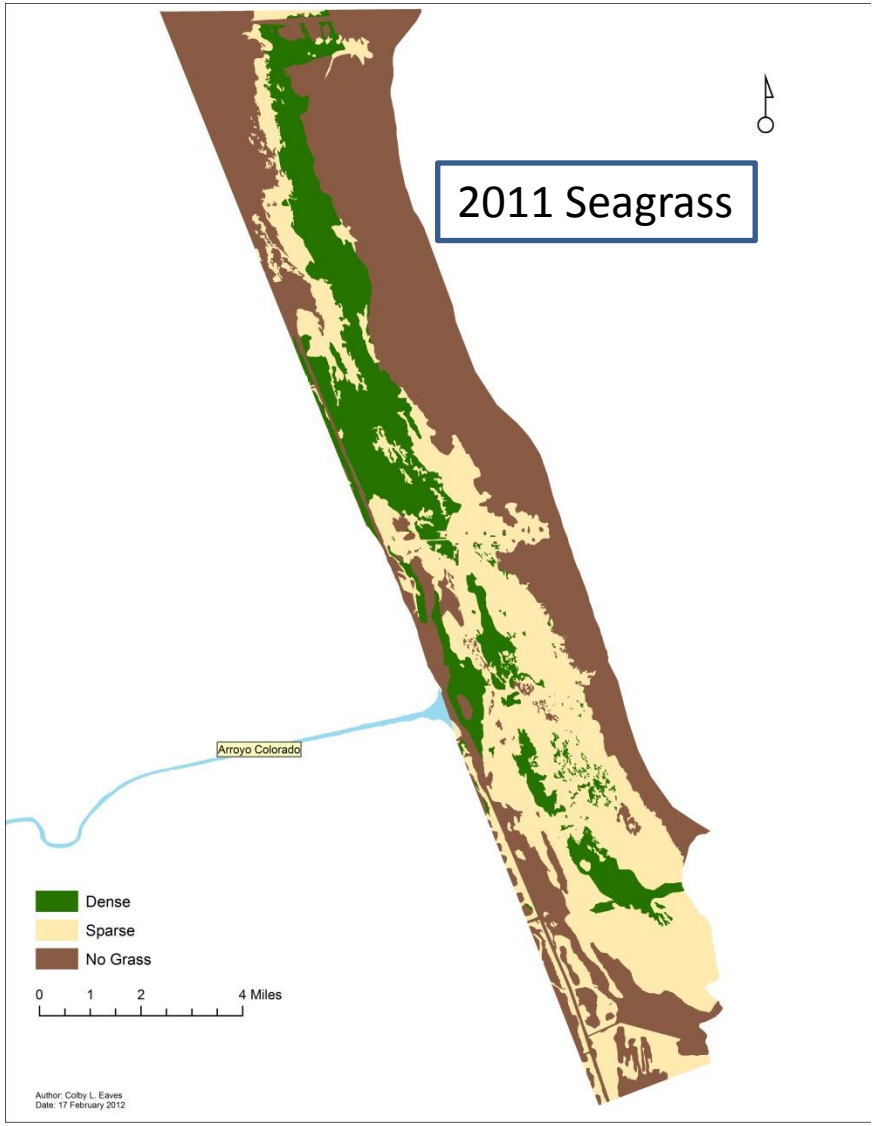


Seagrass Classified from 2009 NAIP

Mansfield Channel
South Padre Island
Arroyo Colorado
Legend
Final Study Area Boundary
Source: NAIP 2005 and
U.S. Army Corp of Engineers July 2005 and October 2005
Author: Colby L. Eaves 1/11/2012

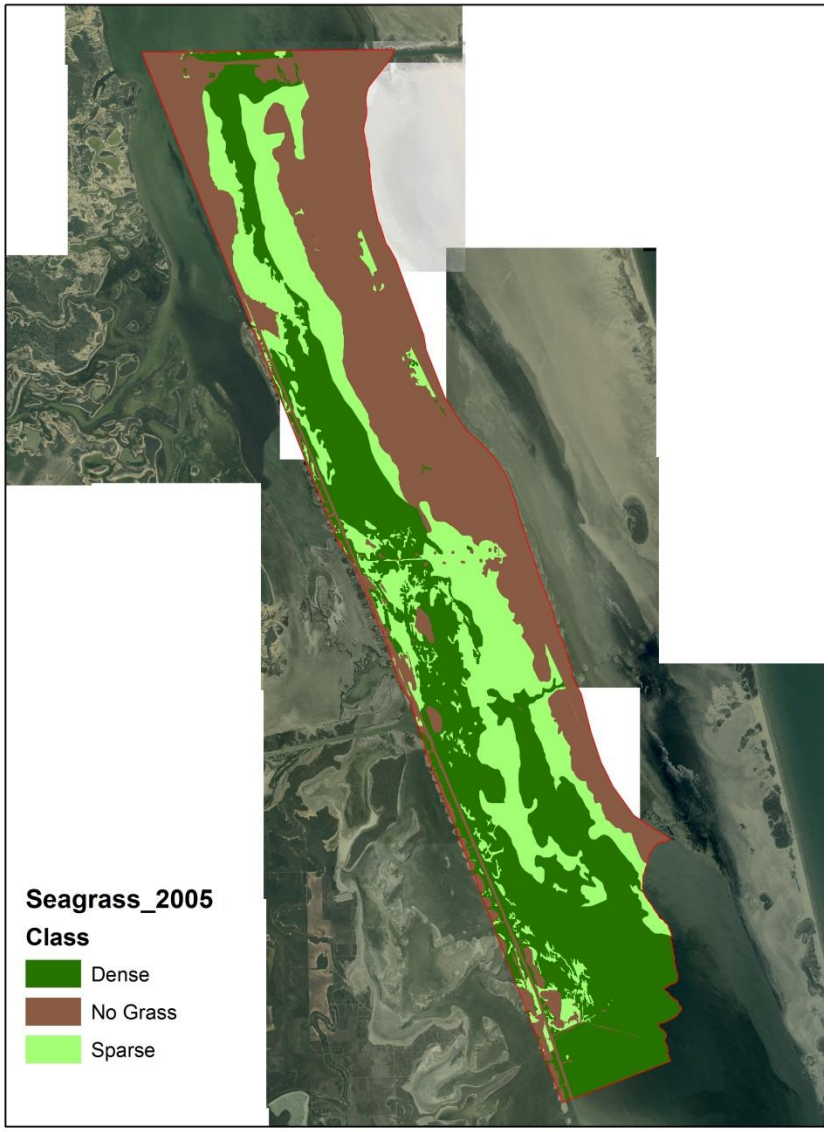

2005 Sea Grass Classification
Dense
Sparse
No Grass
Author: Colby L. Eaves 1/11/2012
Classification verified by Warren Pulich


Arroyo Colorado
2005 Seagrass Classification
Dense
Sparse
No Grass
0 1 2 4 Miles
Author: Colby L. Eaves
Date: 17 February 2012

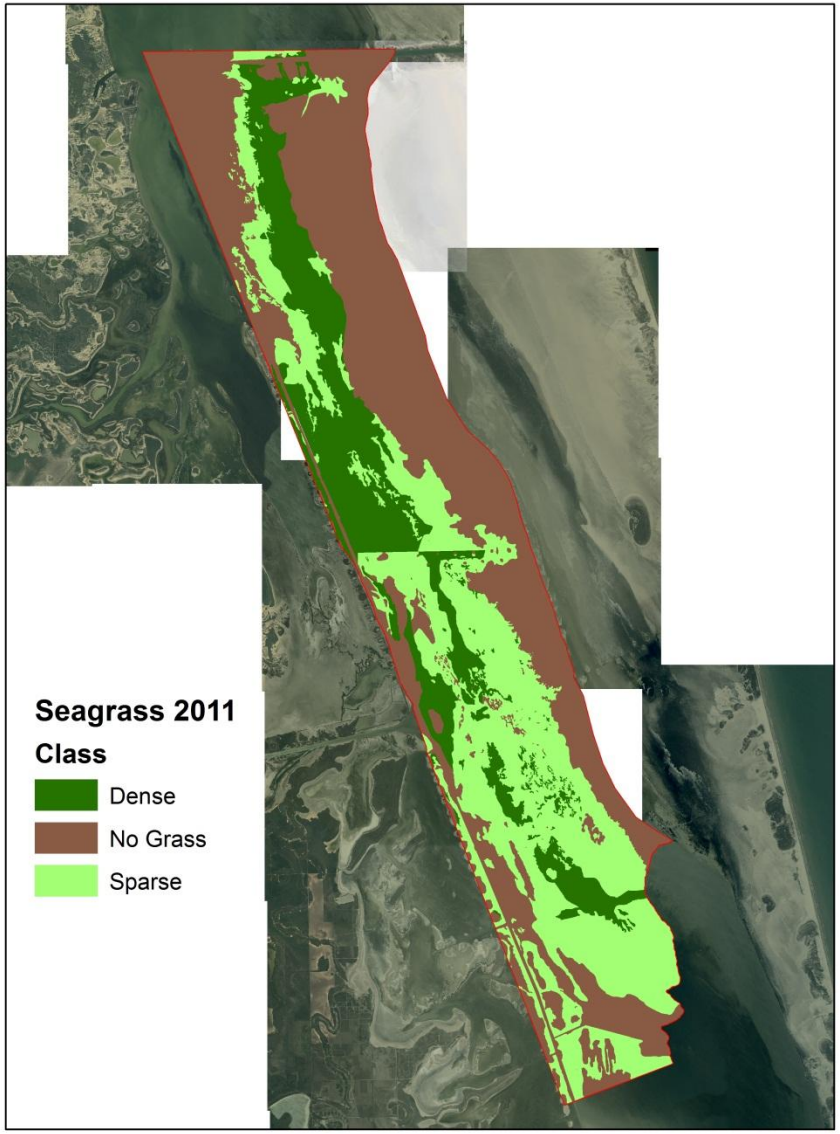

2011 Seagrass
Arroyo Colorado
Dense
Sparse
No Grass
0 1 2 4 Miles
Author: Colby L. Eaves
Date: 17 February 2012

	Nov. 2005	Oct. 2011
Dense Grass	18, 453	9, 324
Sparse Grass	11, 946	16, 748
Bare	18, 289	22, 614
Total Acreage	48, 689	48, 689

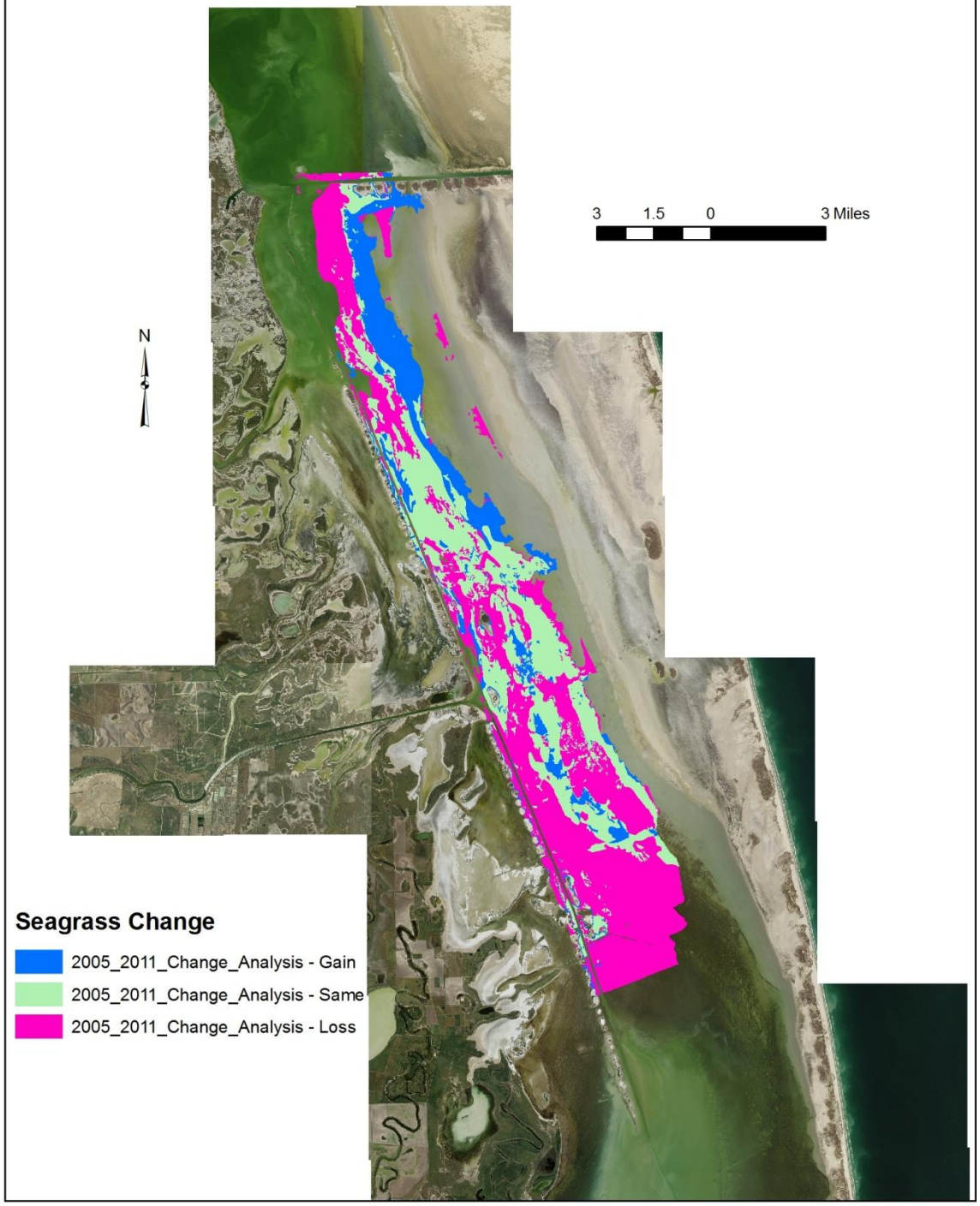
2005 Seagrass



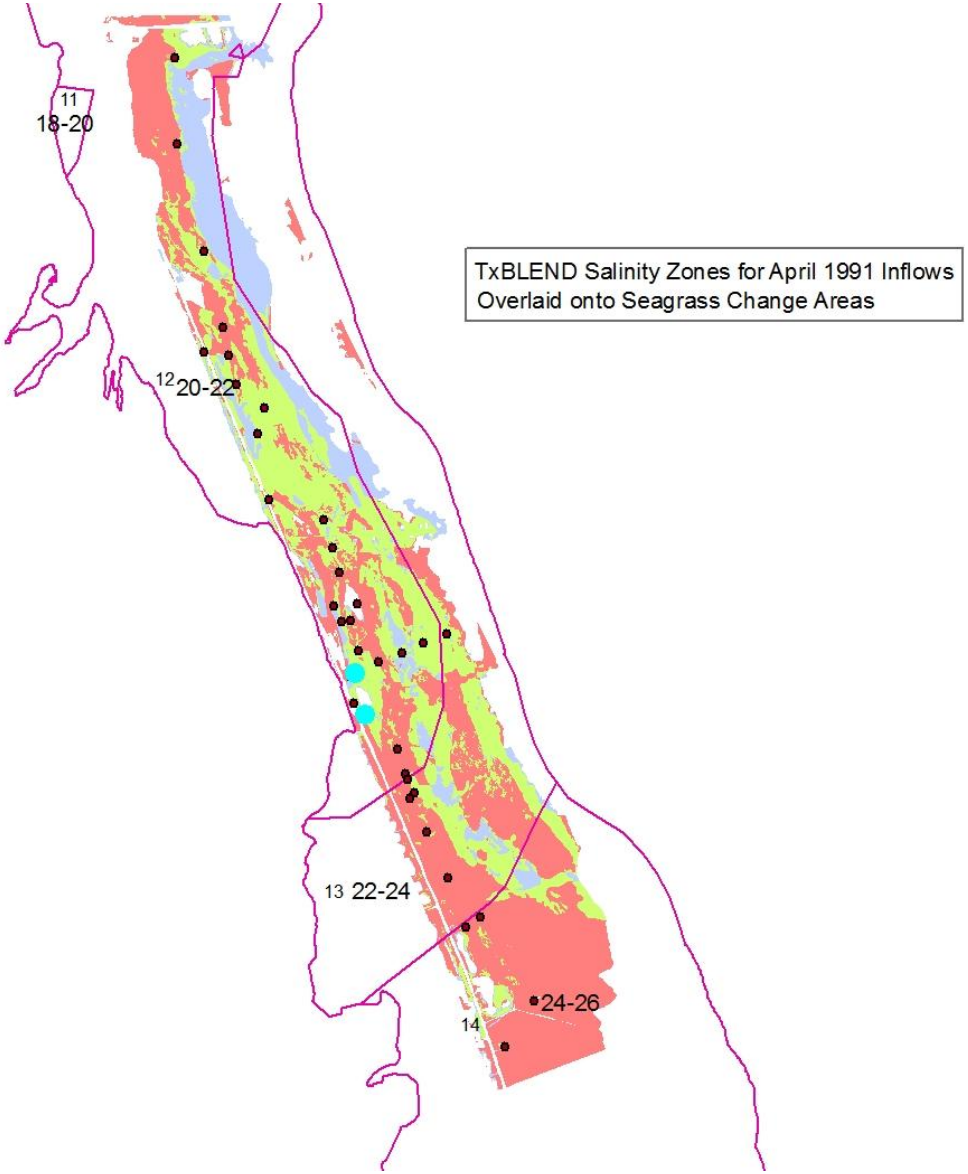
2011 Seagrass

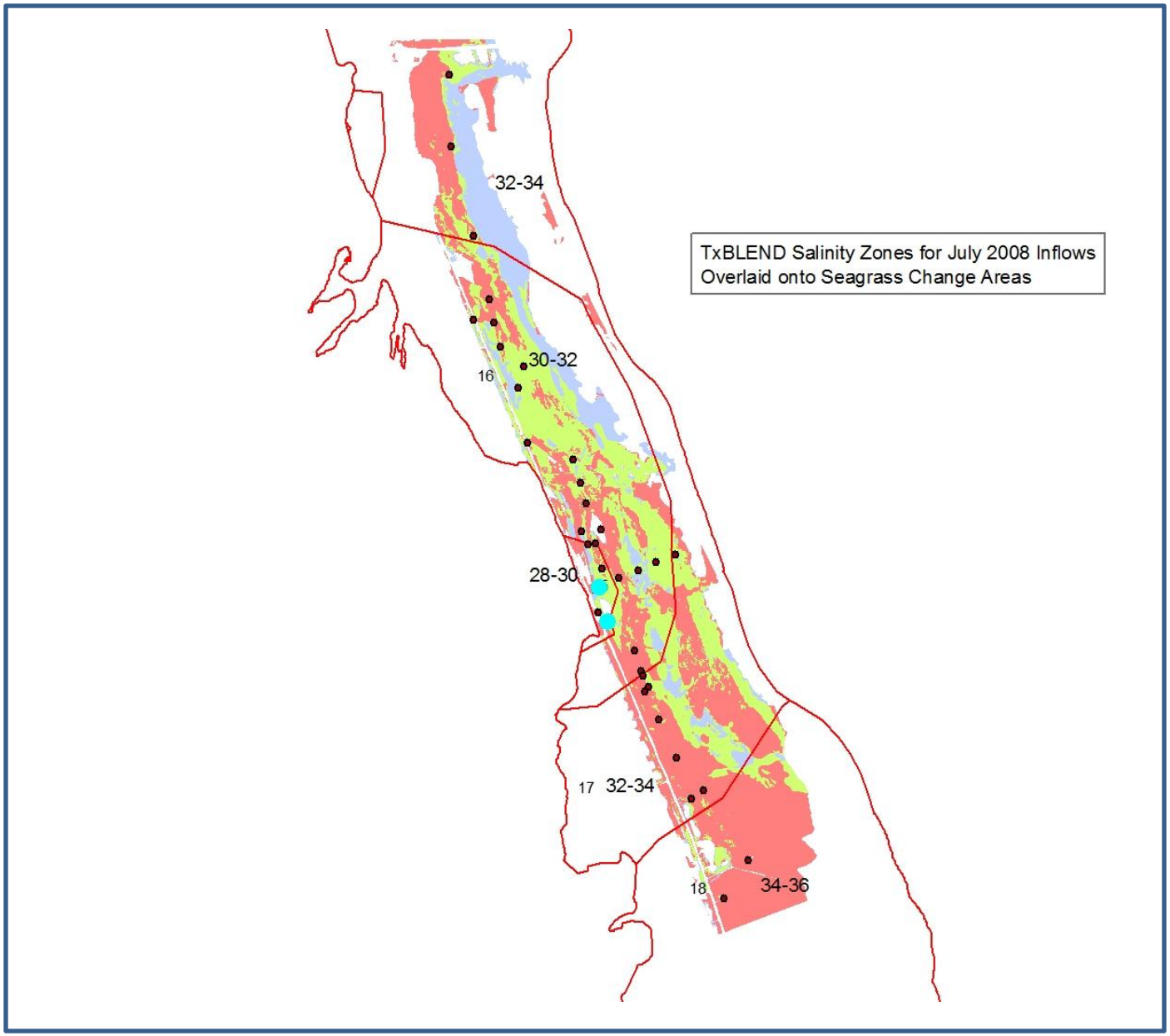


Class	2005		2009		2011	
	Acres	Percent of Total	Acres	Percent of Total	Acres	Percent of Total
Dense	18453	37.9	11329	23.3	8929	18.3
Sparse	11946	24.5	15658	32.2	17086	35.1
Bare	18289	37.6	21706	44.6	22672	46.6
Total	48688		48693		48687	


3 1.5 0 3 Miles
N
Seagrass Change
2005_2011_Change_Analysis - Gain
2005_2011_Change_Analysis - Same
2005_2011_Change_Analysis - Loss

2005 - 2011 Change Analysis Area Totals	
Change	Acres Changed
No Grass - No Change	16372
No Grass to Sparse	1286
No Grass to Dense	638
Dense - No Change	4763
Sparse to No Grass	2597
Sparse - No Change	5823
Sparse to Dense	3530
Dense to No Grass	3706
Dense to Sparse	9985
Total	48699


TxBLEND Salinity Zones for April 1991 Inflows
Overlaid onto Seagrass Change Areas
11
18-20
12
20-22
13
22-24
14
24-26


TxBLEND Salinity Zones for July 2008 Inflows
Overlaid onto Seagrass Change Areas
32-34
30-32
16
28-30
17
32-34
18
34-36