

2020 Springs Coast Seagrass Mapping Results

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**Surface Water Improvement and Management Program
Southwest Florida Water Management District**



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² Mapping & GIS Section, SWFWMD

³ NV5 powered by Quantum Spatial, Inc.

⁴ Wood PLC, Inc.

⁵ Environmental Science Associates, Inc.

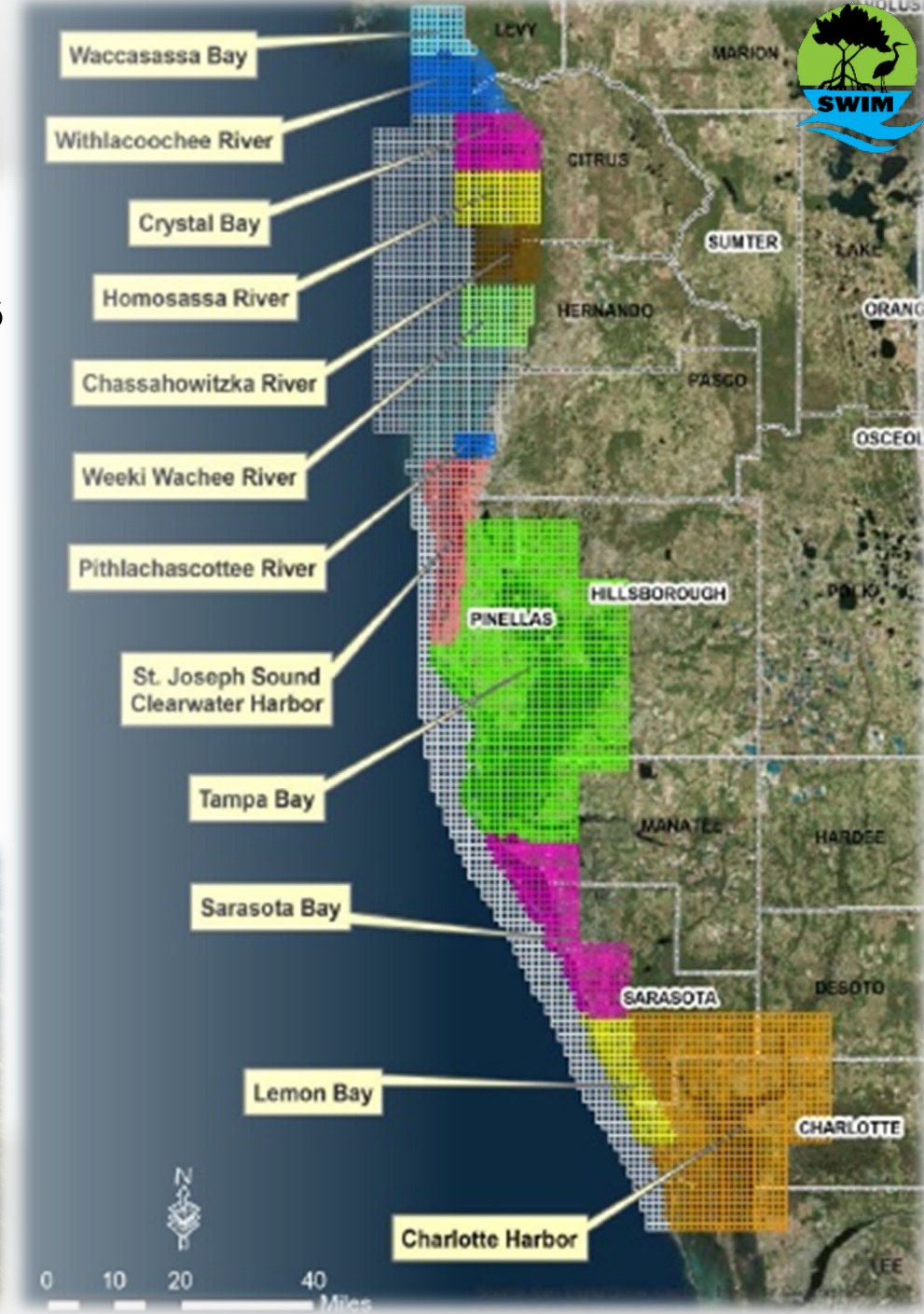
⁶ Surdex Corporation



SWFWMD Seagrass Mapping Program



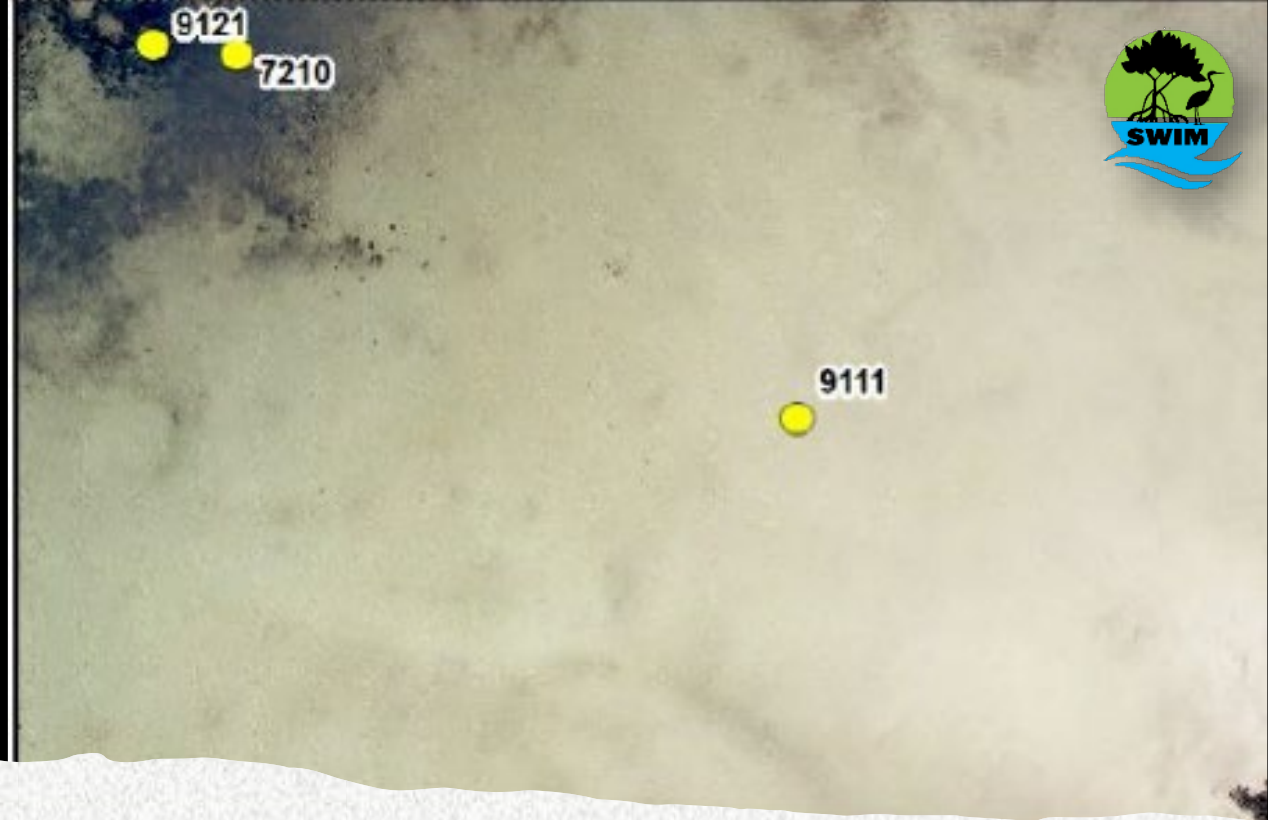
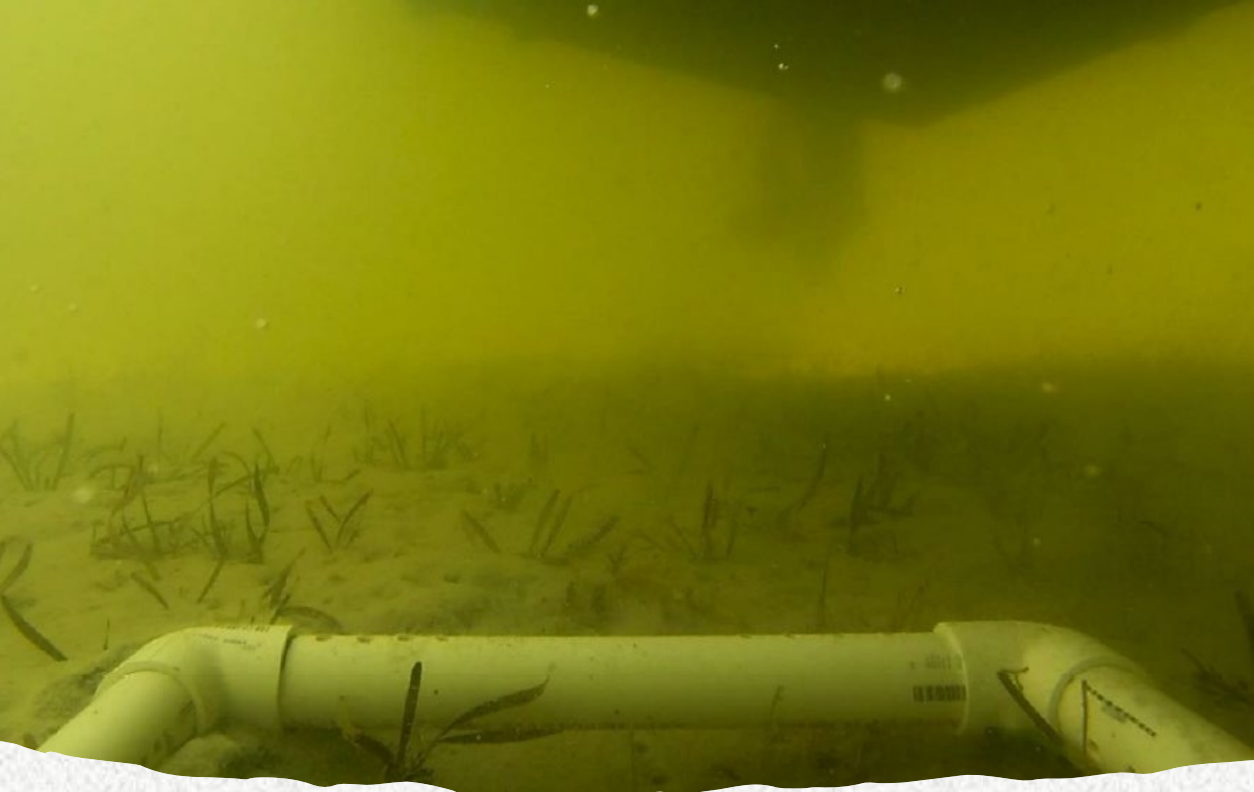
- **One of the most comprehensive seagrass mapping programs in the world**
- **1988 – Present**
- **Springs Coast & Suncoast Regions**
- **3,813 square miles**
 - Suncoast 2,543 square miles
 - Springs Coast 1,270 square miles





Continuous Seagrass (9116)

Description: These areas exhibit a continuous and uniform signature of >25% to 100% seagrass coverage, with less than 25% coverage of any area showing up as unvegetated bottom features. The seagrass beds may have variable density. Areas that appear as continuous beds of seagrass communities, regardless of species composition, will be mapped.



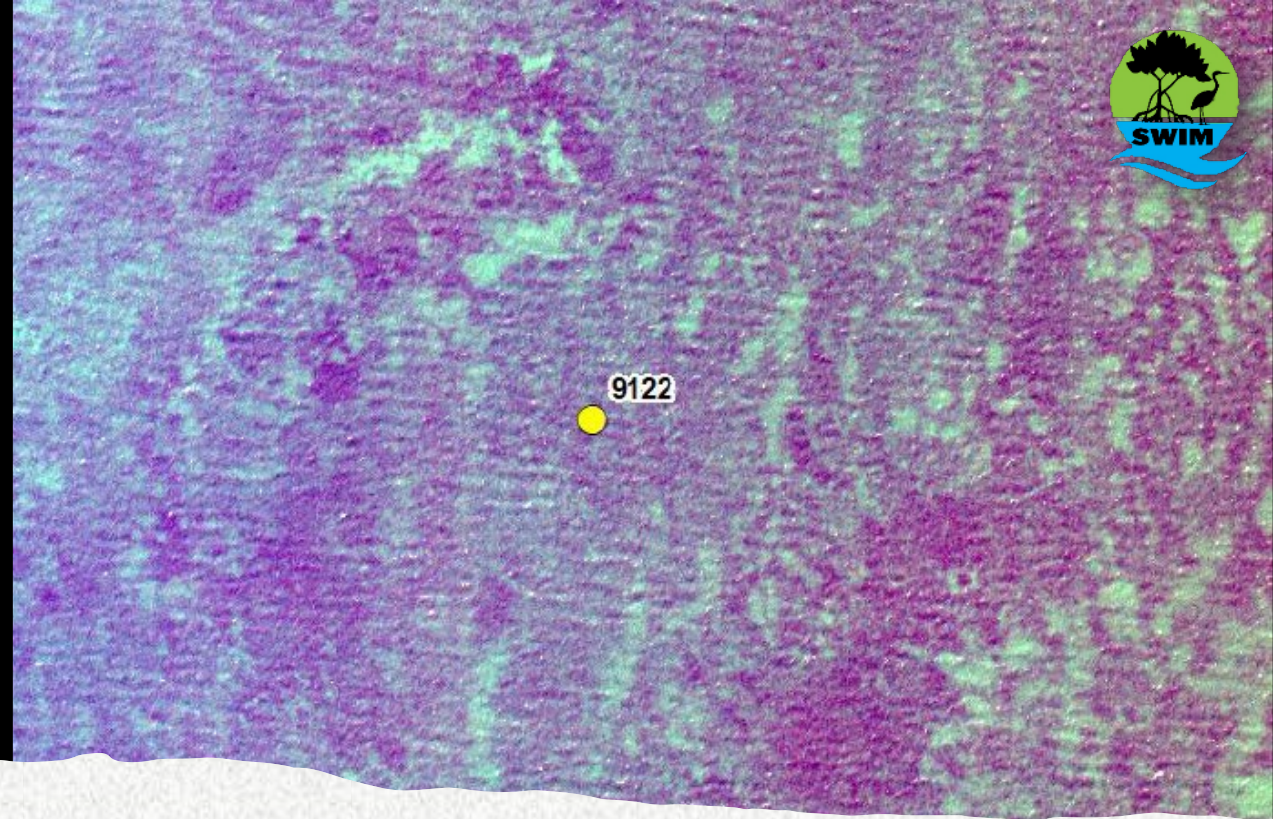
Sparse Seagrass (9111)

Description: Consists of a sparse density of 10% to less than 25% seagrass coverage. Also, may appear as singular, rounded clumps, or elongated strands of isolated seagrass patches mixed with open bottom or sand.



Composite Colonized Seagrass (9115)

Description: Consists of a combination of beds of seagrass, calcareous algae and areas of consolidated hardbottom colonized by sessile communities such as gorgonian or sponge.



Composite Colonized Macroalgae (9122)

Description: Composite colonization of areas that support a habitat of sparse attached macroalgae of 10% to less than 25% coverage, and sponges or corals.



Attached Macroalgae (9121)

Description: Only homogeneous stands of attached macroalgae are mapped. All polygons mapped as attached macroalgae are field verified during the mapping process. When *Caulerpa* or other rhizophytic attached macroalgae co-exists with seagrass beds, the area is characterized with a seagrass cover type unless beds of attached macroalgae are distinguishable from seagrass. Where feasible, they should be mapped, and field verified if >10% coverage.



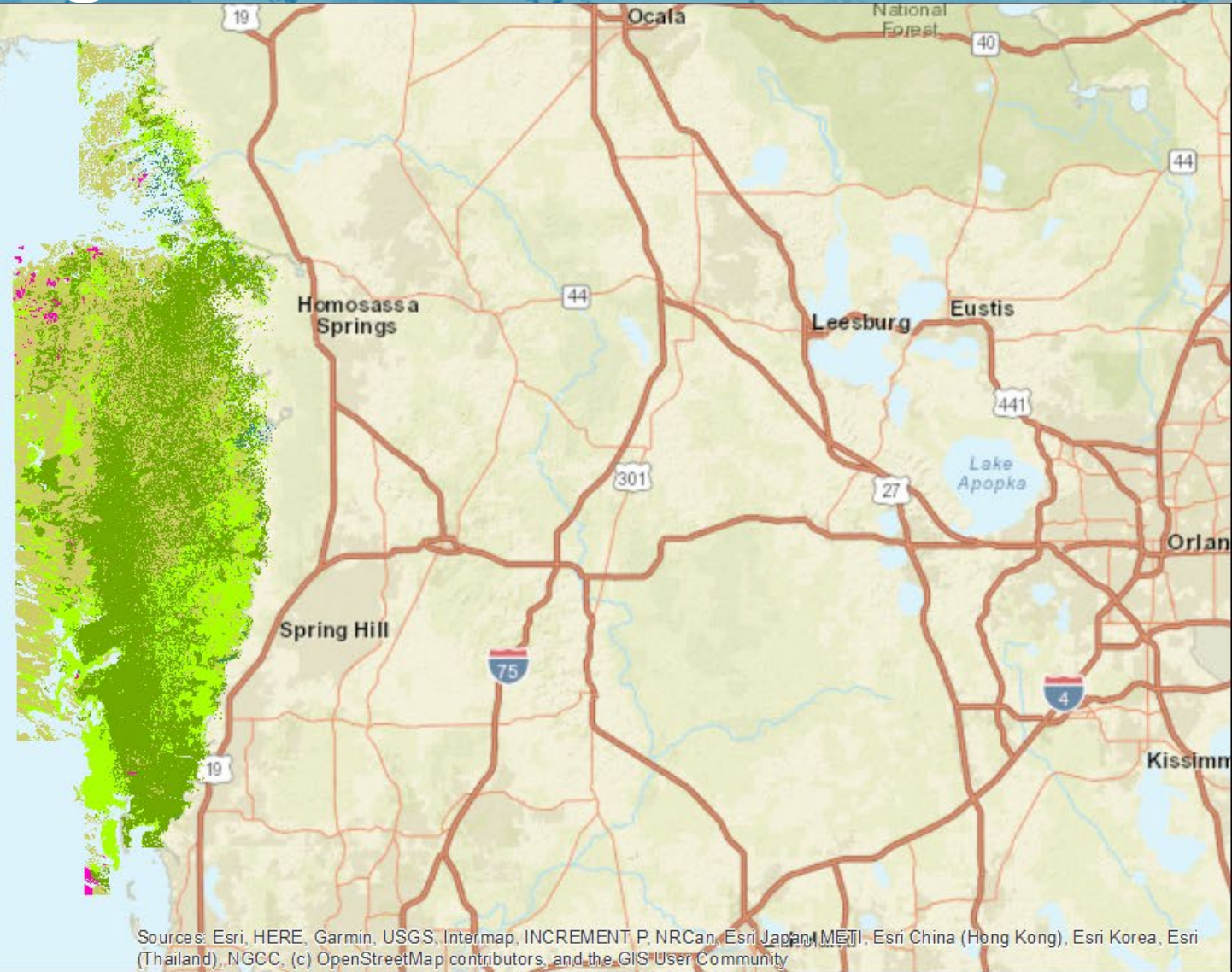
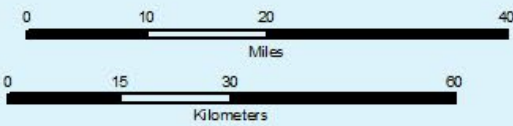
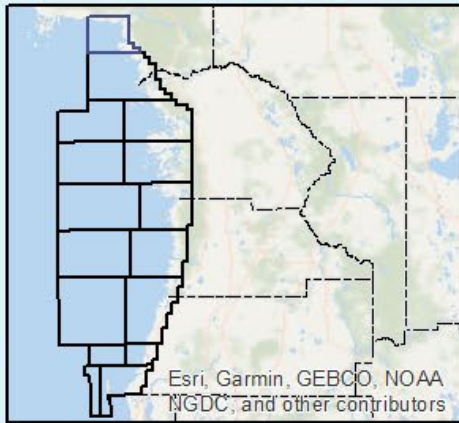
RESULTS

Springs Coast

2020

Springs Coast

- 9111 Sparse Seagrass
- 9116 Continuous Seagrass
- 9115 Composite Colonized Seagrass
- 9121 Attached Macroalgae
- 9122 Composite Colonized Algae
- 6540 Oyster Bars



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

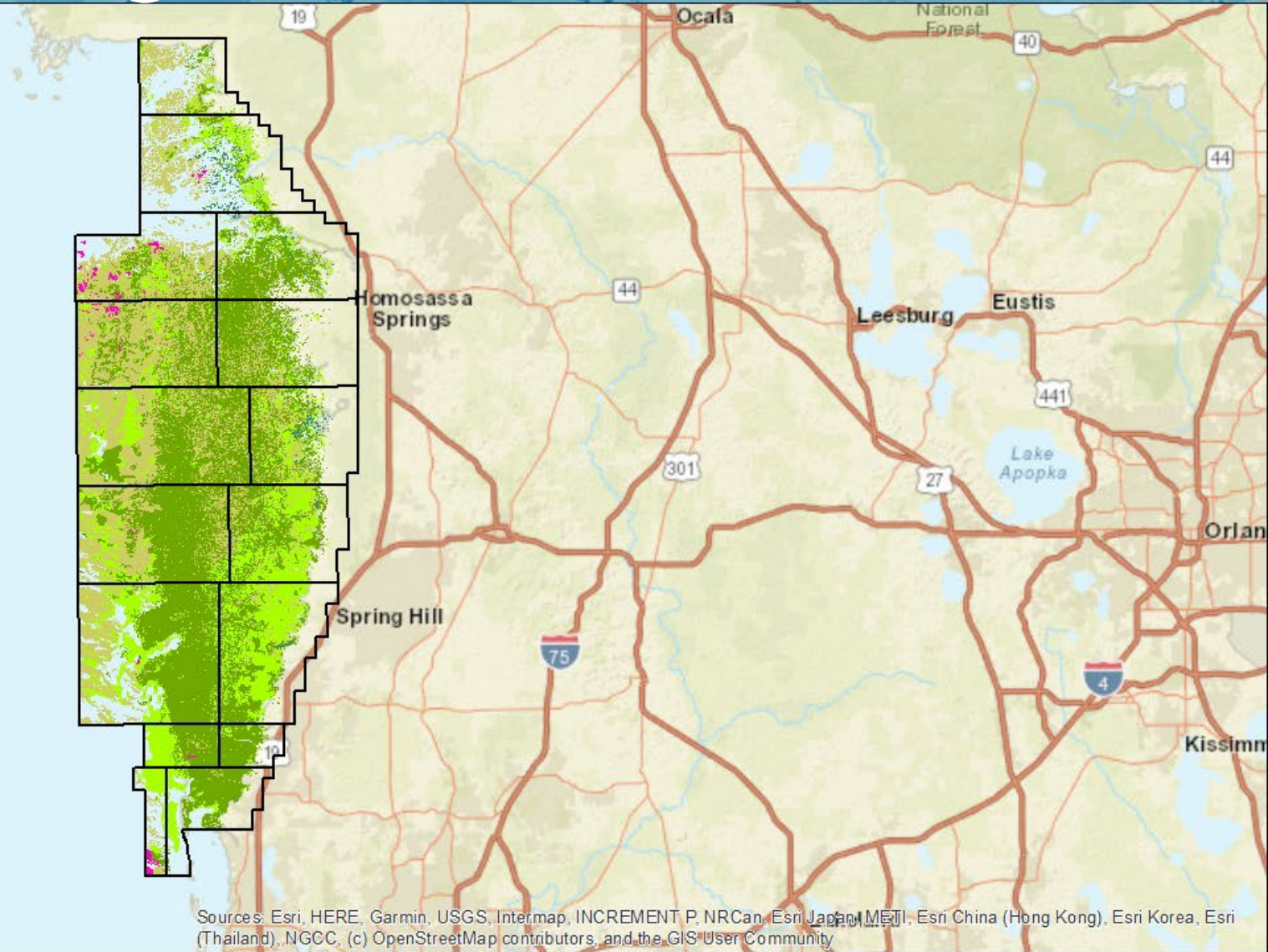
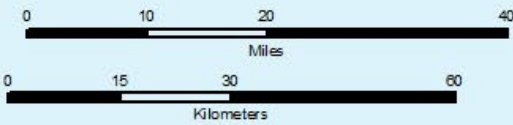
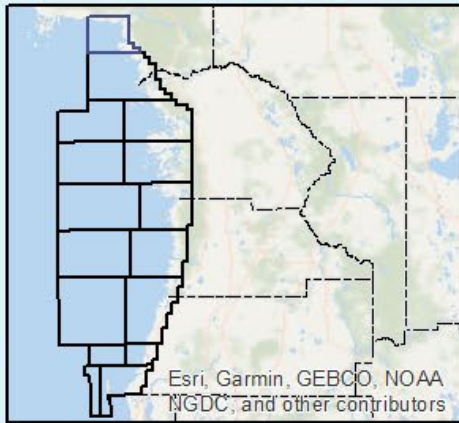
Segment	2016	2020	Δ Acres	% Change
Springs Coast	577,920	586,512	8,592	1.5%

Springs Coast

2020

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Segment	2016	2020	Δ Acres	% Change
Springs Coast	577,920	586,512	8,592	1.5%

2020 Springs Coast Results

Inshore



Estuary Segment	2016 (acres)	2020 (acres)	Acreage Change	% Change
Waccasassa Bay	10,934	12,807	1,874	+17.1%
Withlacoochee	24,338	24,369	31	+0.1%
Crystal Bay	25,115	27,223	2,108	+8.4%
Homosassa	32,610	32,408	-202	-0.6%
Chassahowitzka	30,086	29,163	-923	-3.1%
Weeki Wachee	42,484	42,249	-235	-0.6%
Aripeka	47,295	46,651	-644	-1.4%
Pithlachascotte	8,506	8,427	-79	-0.9%
Ancote	17,771	17,912	141	+0.8%

2020 Springs Coast Results

Offshore



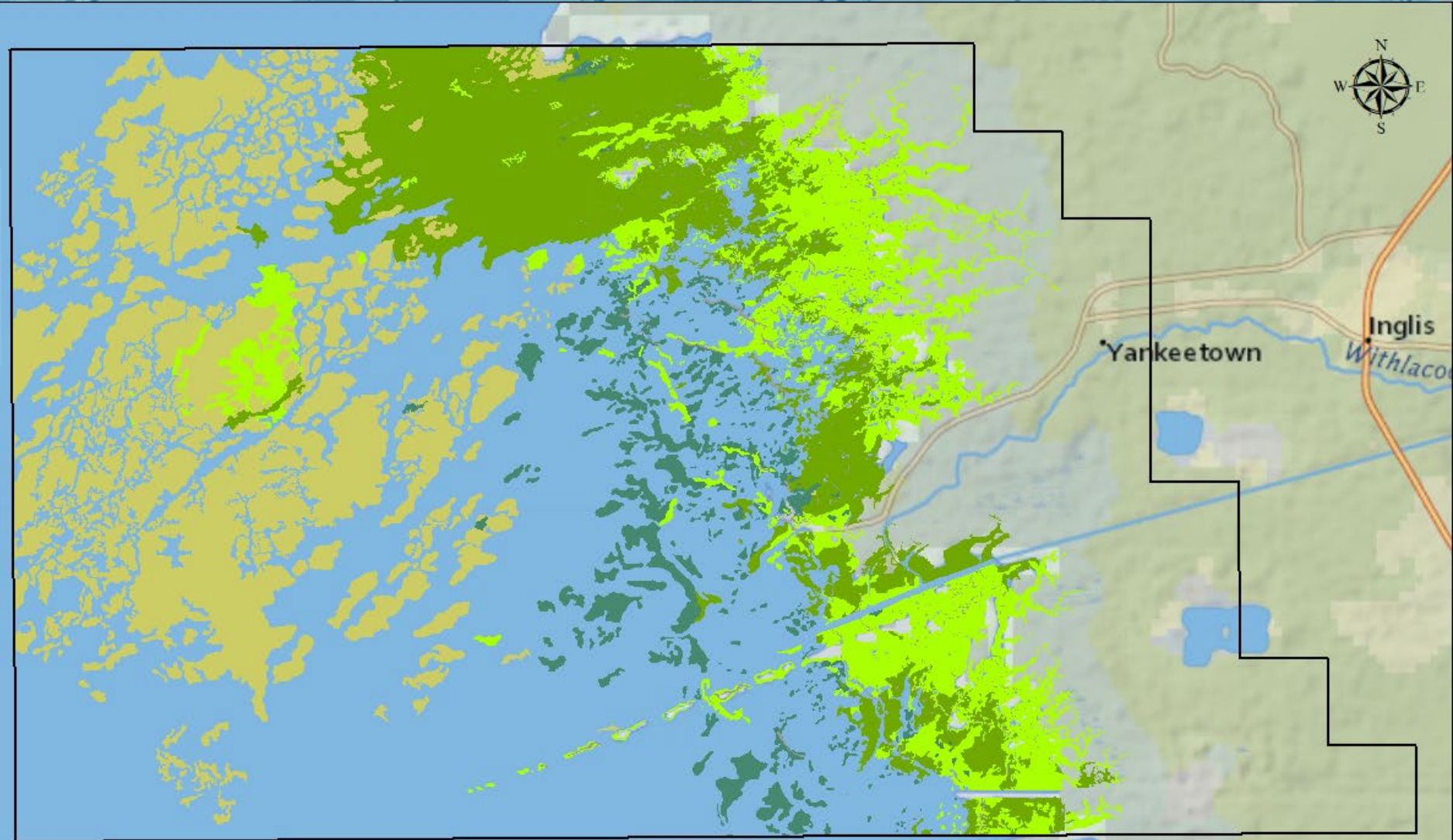
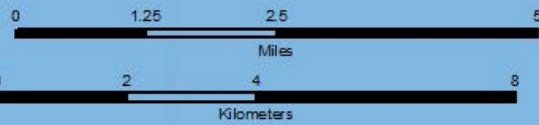
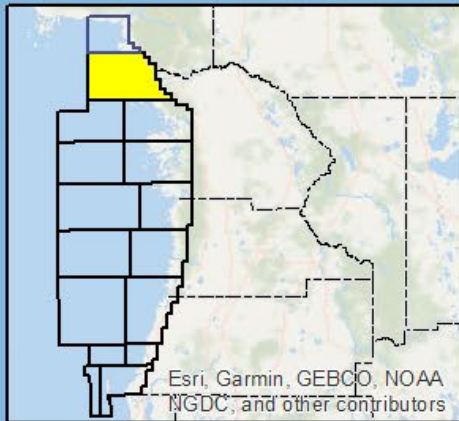
Estuary Segment	2016 (acres)	2020 (acres)	Acreage Change	% Change
Crystal Bay	33,161	33,780	619	+1.9%
Homosassa	59,176	58,639	-537	-0.9%
Chassahowitzka	81,305	81,501	196	+0.2%
Weeki Wachee	70,623	70,658	35	No Change
Aripeka	74,319	79,028	4,709	+6.3%
Pithlachascotte	15,041	15,213	172	+1.1%
Anclote	5,156	6,483	1,326	+25.7%
Inshore Total	239,138	241,210	2,072	+0.9%
Offshore Total	338,781	345,302	6,520	+1.9%

Withlacoochee

2016

Withlacoochee

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National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

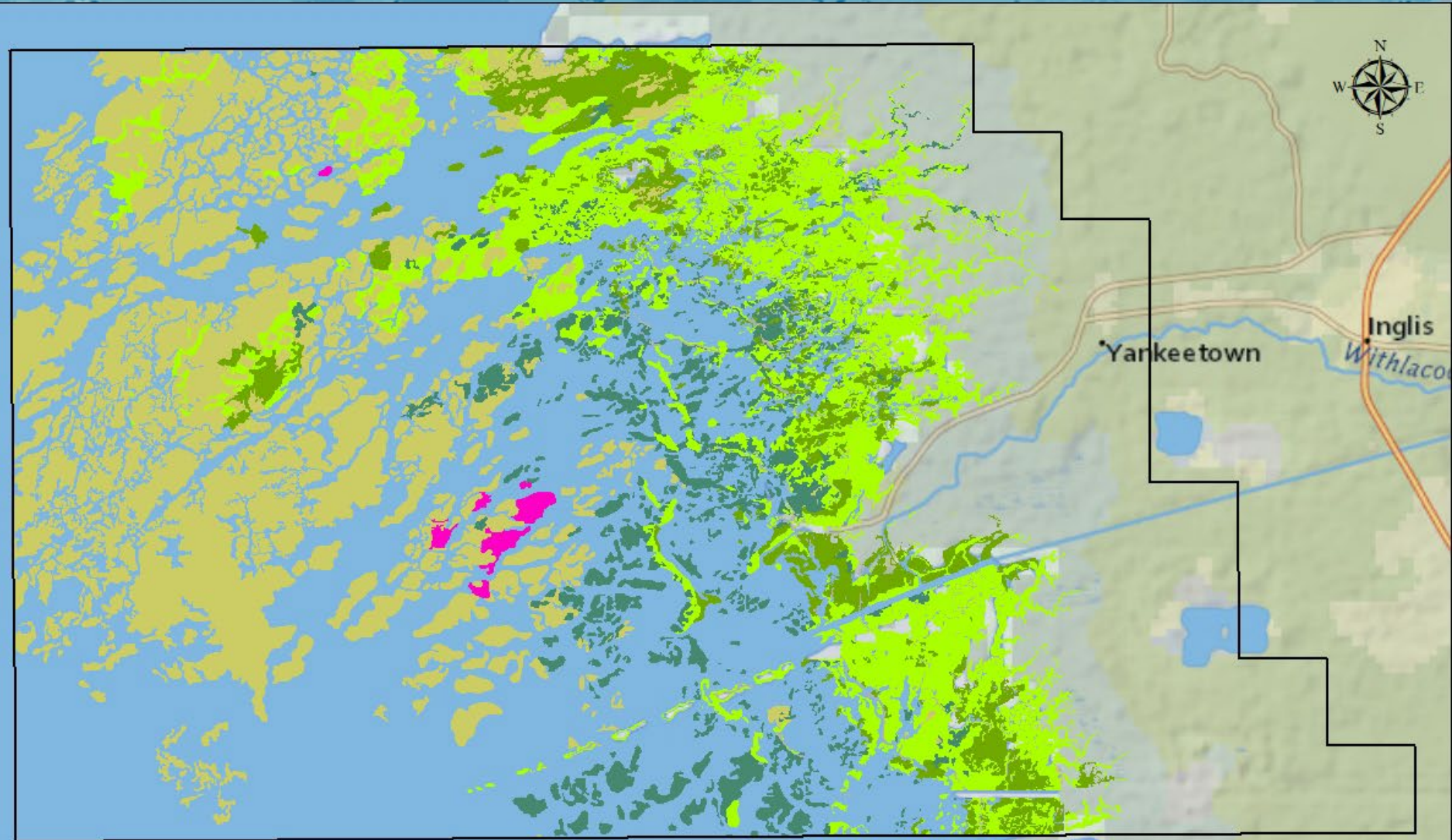
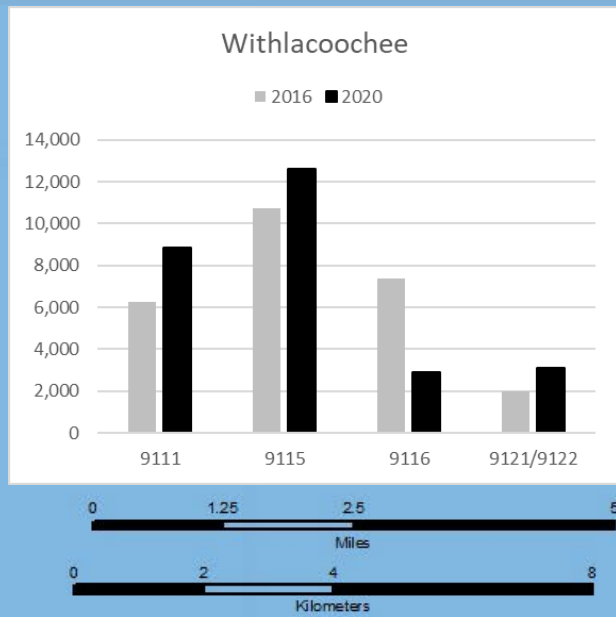
Segment	2016			
Withlacoochee	24,338			

Withlacoochee

2020

Withlacoochee

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Withlacoochee	24,338	24,369	31	0.1%

Waccasassa Bay

2016

Waccasassa Bay

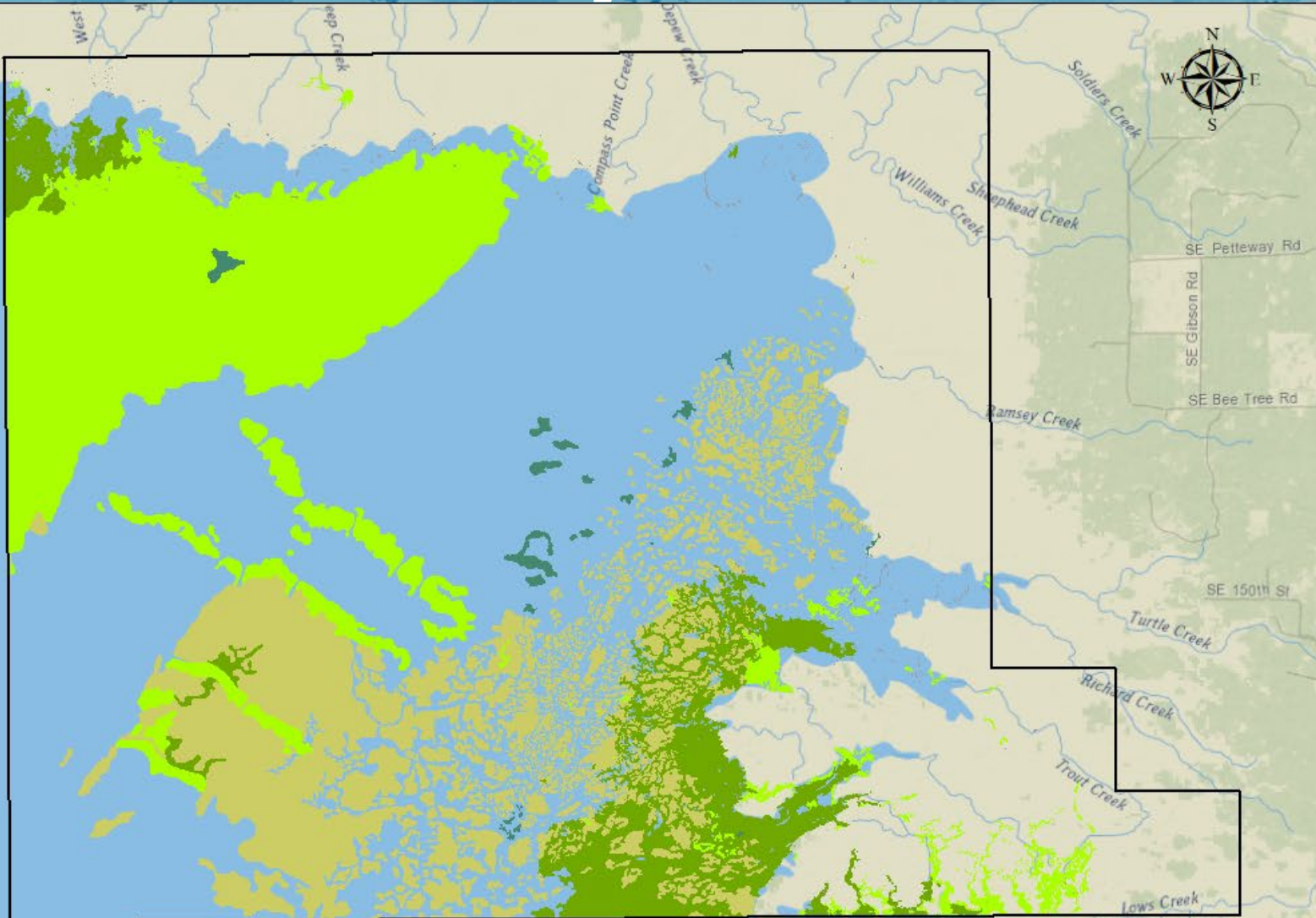
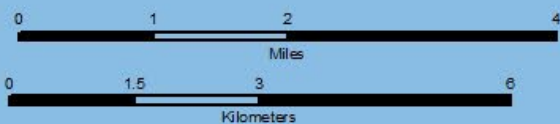
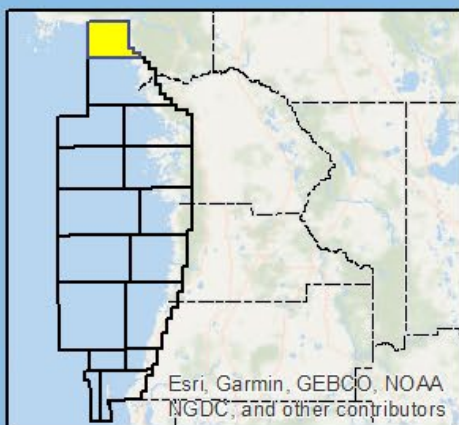
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Segment	2016			
Waccasassa Bay	10,934			

Waccasassa Bay

2020

Waccasassa Bay

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9116 Continuous Seagrass

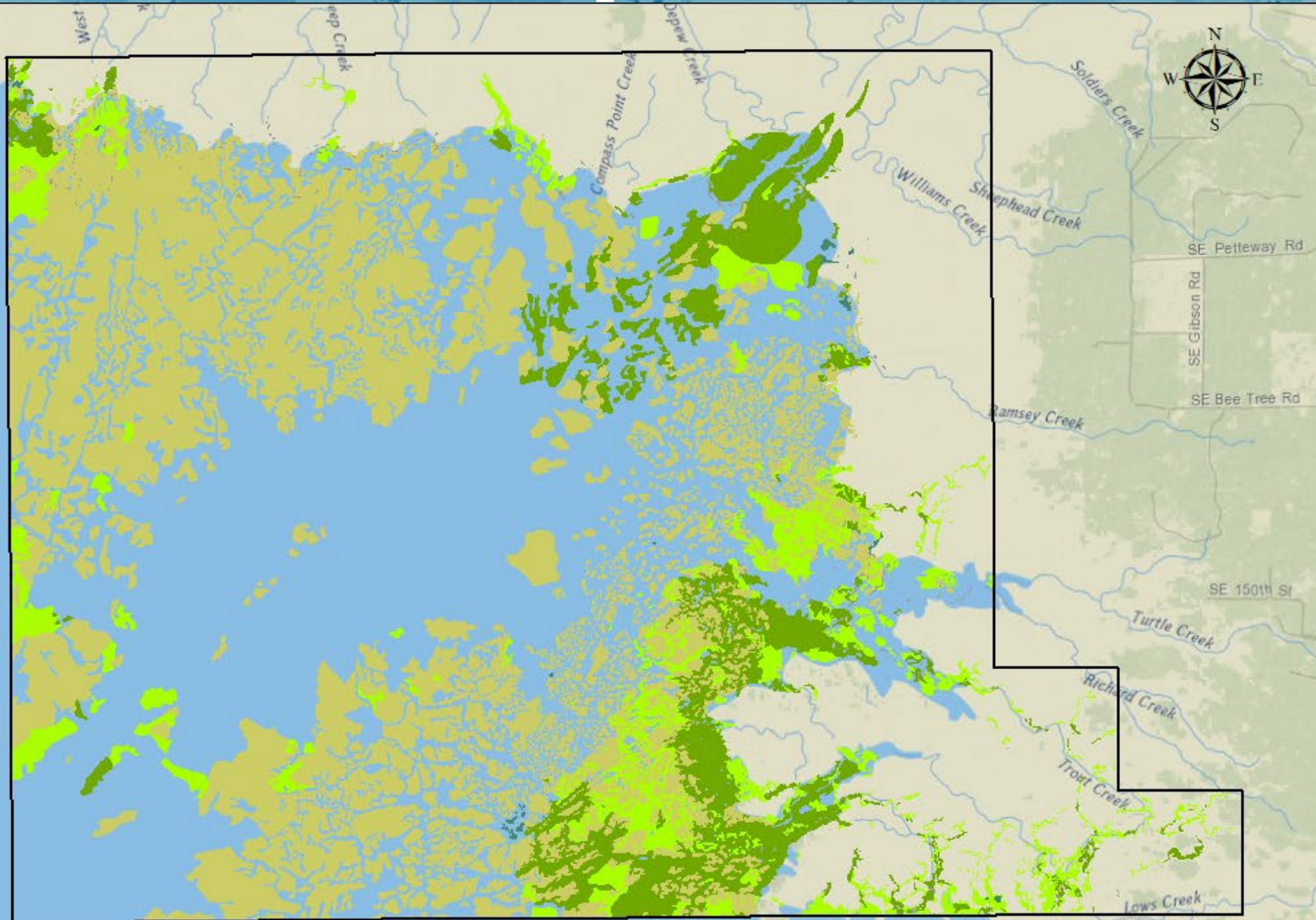
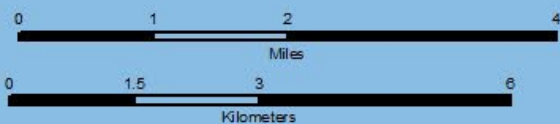
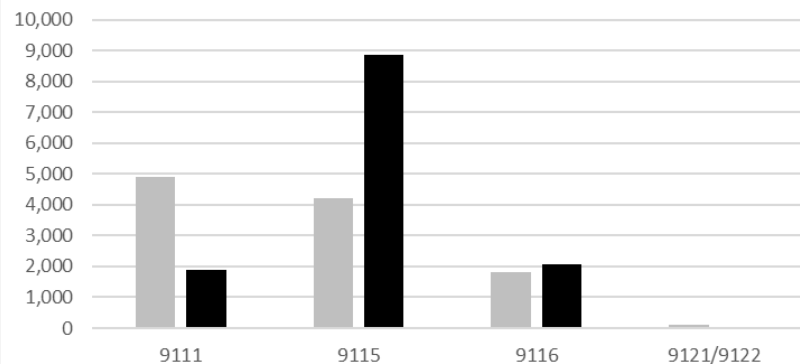
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Waccasassa Bay

■ 2016 ■ 2020



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Segment	2016	2020	Δ Acres	% Change
Waccasassa Bay	10,934	12,807	1,874	17.1%



Springs Coast Summary

- Little change in overall acreage between 2016 (577,920 acres) and 2020 (586,512 acres)
- Large gains in some segments, especially Anclothe Offshore, Crystal Bay Inshore, and Waccasassa Bay
- Some shifts from continuous seagrass (9116) to composite colonized seagrass habitat (9115) in some segments

Next Springs Coast Seagrass Map will be in 2024

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