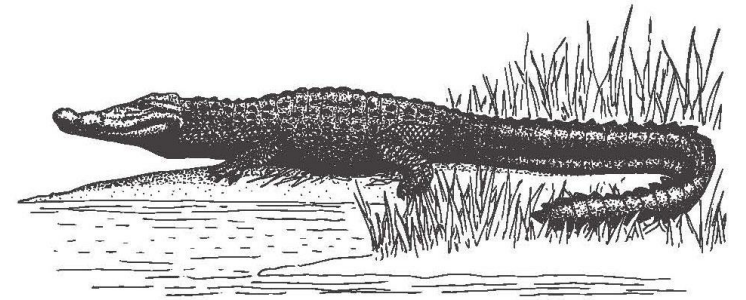




COEXIST WITH *Alligators*



PRESENTED BY: JOHN HENRY HARRELSON

Eratthem / Era System / Period		Series / Epoch	Stage / Age	numerical age (Ma)
Cenozoic	Quaternary	Holocene		present
		Pleistocene	Upper	0.0117
			Middle	0.126
			Calabrian	0.781
			Gelasian	1.80
	Neogene	Pliocene	Piacenzian	2.58
			Zanclean	3.60
		Miocene	Messinian	5.33
			Tortonian	7.24
			Serravallian	11.62
			Langhian	13.82
			Burdigalian	15.97
			Aquitanian	20.44
	Paleogene	Oligocene	Chattian	23.03
			Rupelian	28.1
			Priabonian	33.9
		Eocene	Bartonian	38.0
			Lutetian	41.3
			Ypresian	47.8
Thanetian			56	
Paleocene		Selandian	59	
		Danian	61	
		Maastrichtian	66	
Upper	Campanian	72		
	Santonian	83		
	Coniacian	86		
		89		



● *Alligator mississippiensis*



● Cretaceous-Paleogene extinction event

● † *Deinosuchus rugosus*

Above: American alligator (*Alligator mississippiensis*).

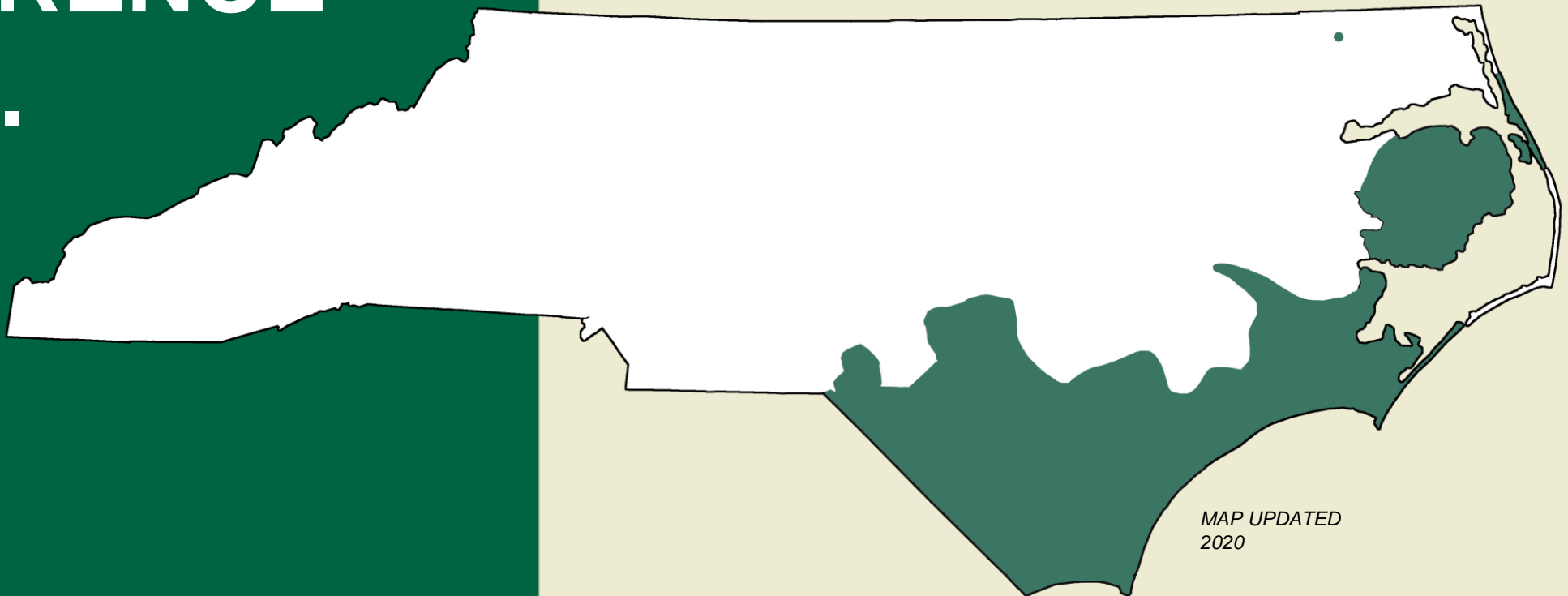
Left: Skull comparison of American alligator (smaller) to *Deinosuchus rugosus*.

Below: Location of Phoebus Landing archaeological site, Bladen County.



AMERICAN ALLIGATOR OCCURENCE IN N.C.

N.C. alligators inhabit freshwater areas in the easternmost counties, with the largest populations existing in the lower coastal plain.



MAP UPDATED
2020

Characteristics

Cold blooded (Ectothermic)

Ambush predators w/ quick bursts of speed in water

Well developed vision, smell and hearing

Vertical pupils, excellent night vision, nictitating membrane



Food

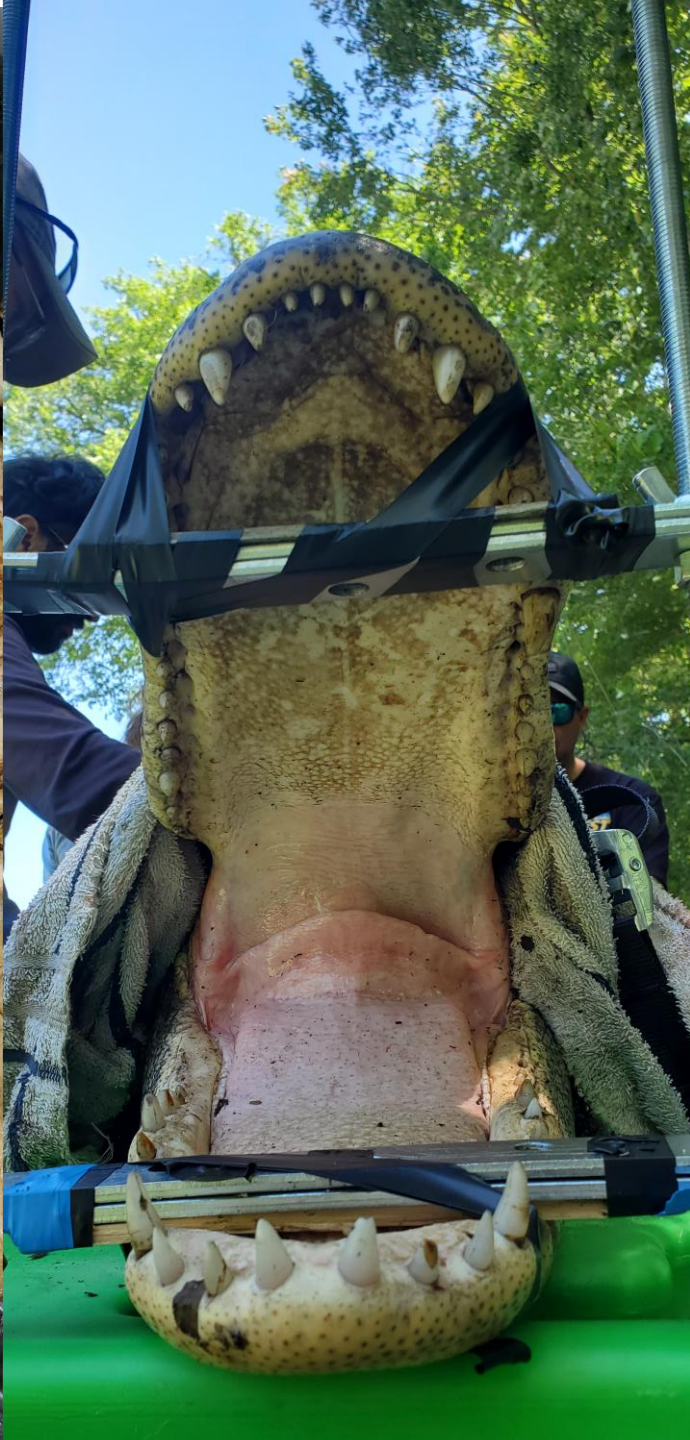
Juveniles feed primarily on insects, fishing spiders, millipedes, crayfish, frogs, small turtles, juvenile water snakes and small fish.

Adults feed primarily on turtles, snakes, fish, and crayfish. In brackish waters blue crabs are also part of the diet.

Carrion will also be eaten when found.

Adult alligators will readily take juveniles.



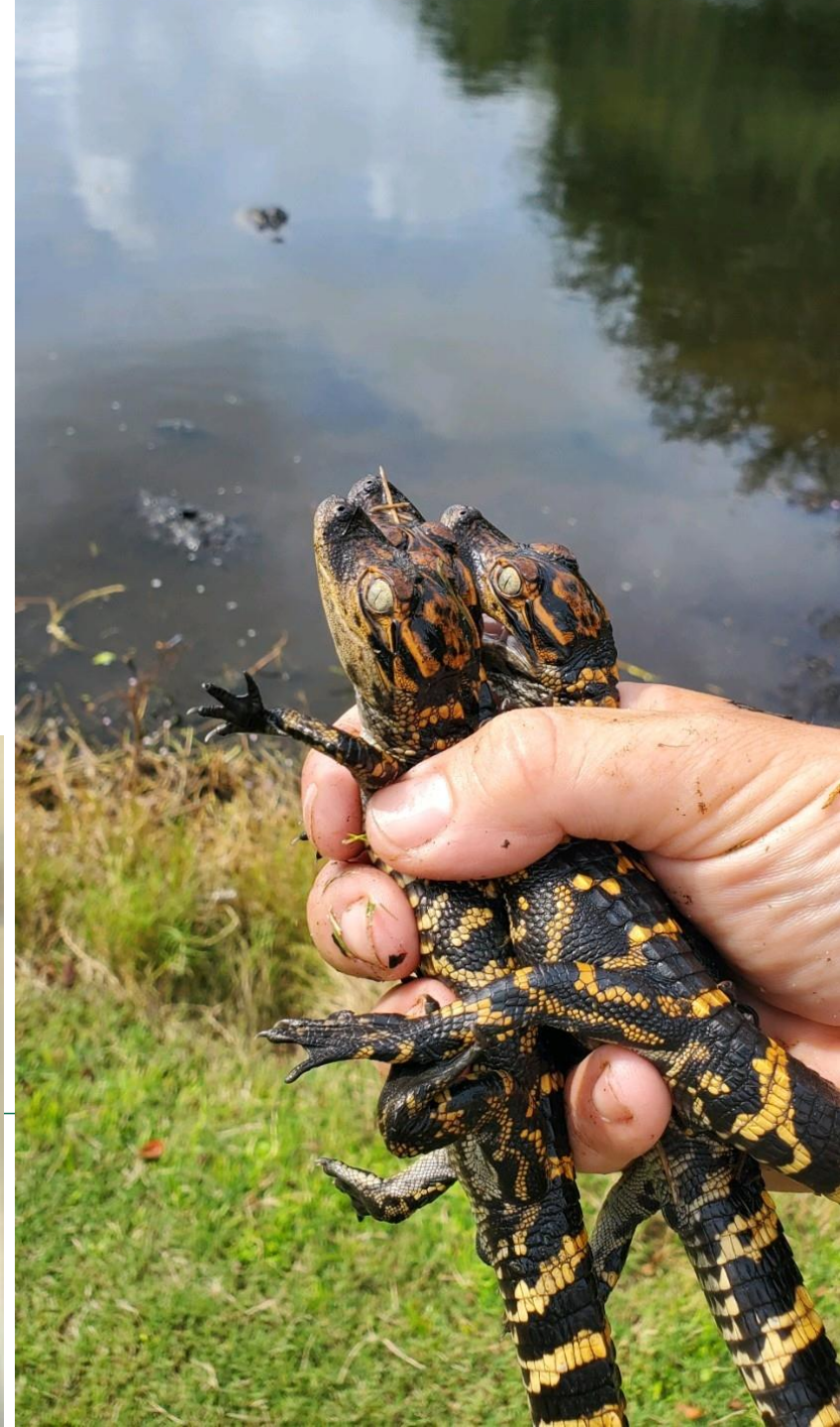


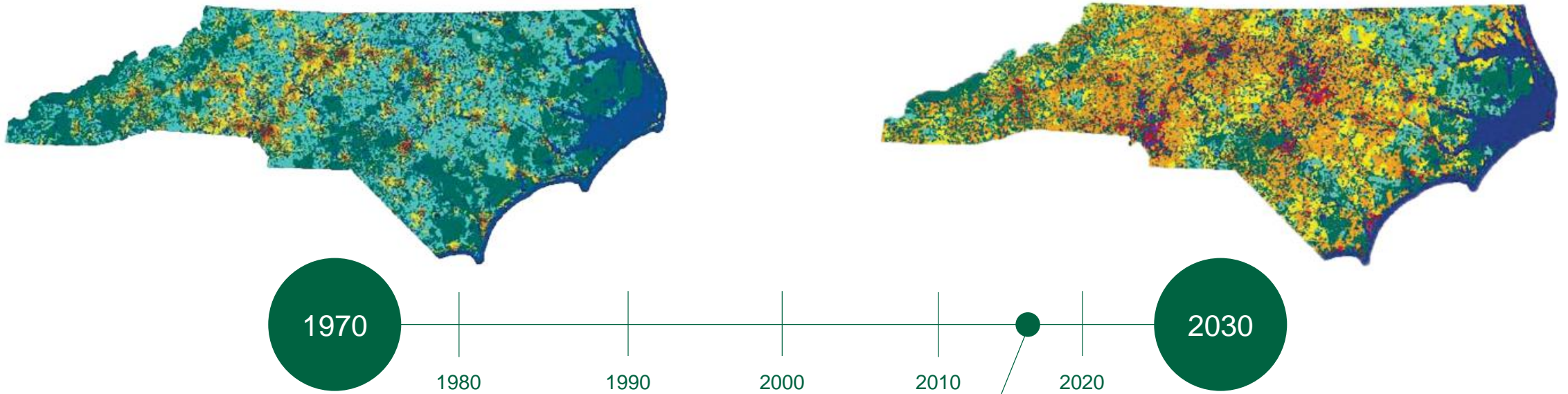


Nesting



Babies!





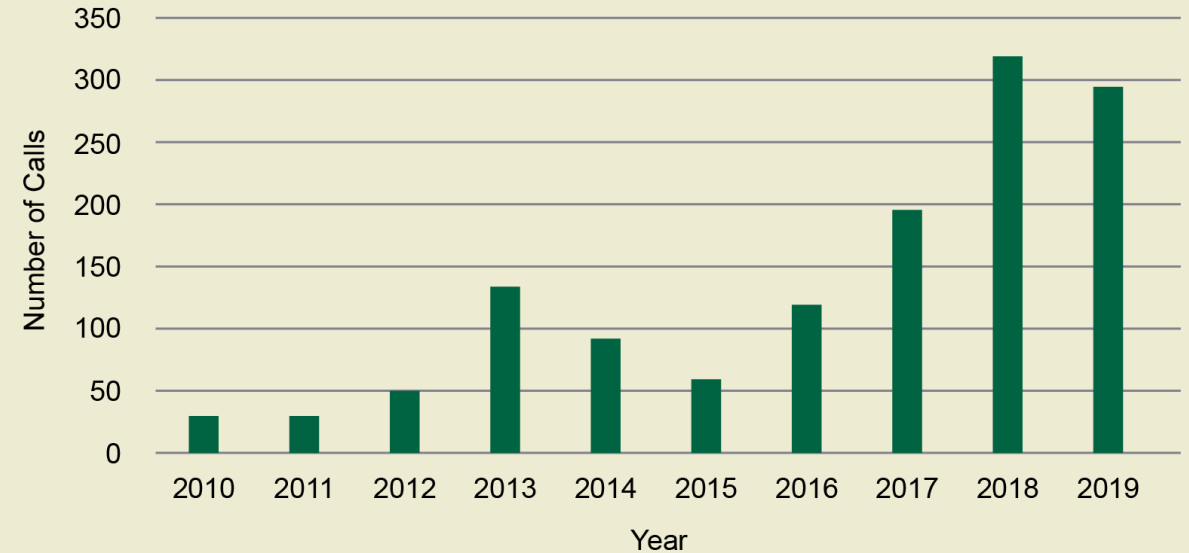
Human population estimation as of 2016 is 2.6 million living in the coastal plain of North Carolina

Estimated populations are unknown for American Alligators in N.C.

HUMAN POPULATION ESTIMATES

HUMAN- ALLIGATOR INTERACTIONS IN N.C.

Calls Received by NCWRC About Nuisance Alligators



As human populations continue to expand in N.C.'s coastal counties, and as development continues to occur without mitigation of alligator conflicts, the potential for human-alligator interactions will continue to increase.



UNIQUE COASTAL DEVELOPMENTS

Many coastal communities cannot exist without modifications to the landscape that take unattractive habitat for alligators and make it ideal:

- Retention ponds
- Waterways to hold/move water

Communities often don't have the resources they need to inform visitors and new community members about potential alligator interactions:

- They don't have appropriate signage
- There aren't any mitigation strategies to exclude alligators from the community
- No information regarding coexisting is provided

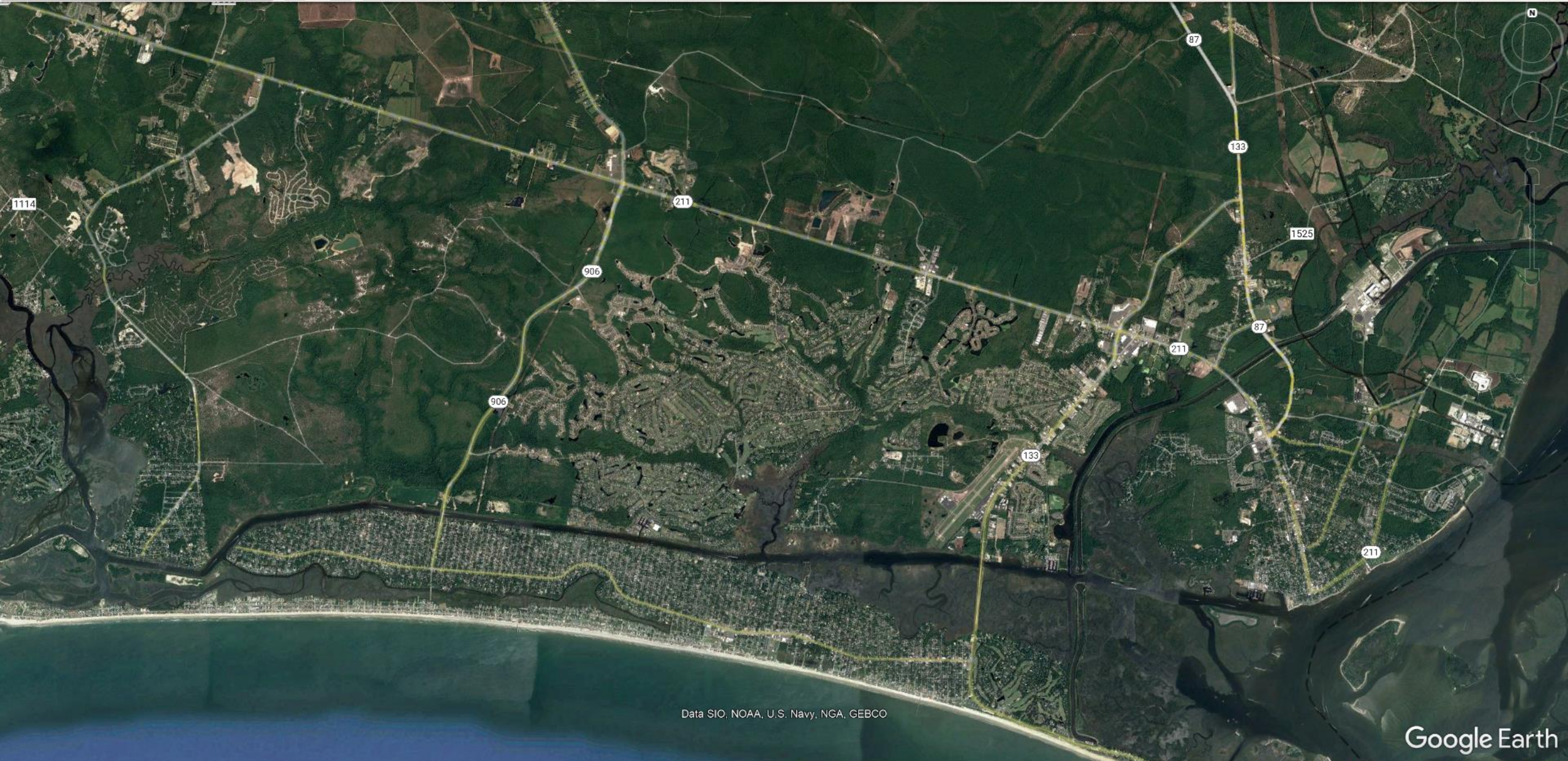


12/1985



Image Landsat / Copernicus

Google Earth



Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google Earth

Imagery Date: 9/2/2021 33°56'27.62" N 77°59'14.81" W elev 0 ft eye alt 12.54 mi

12/1985

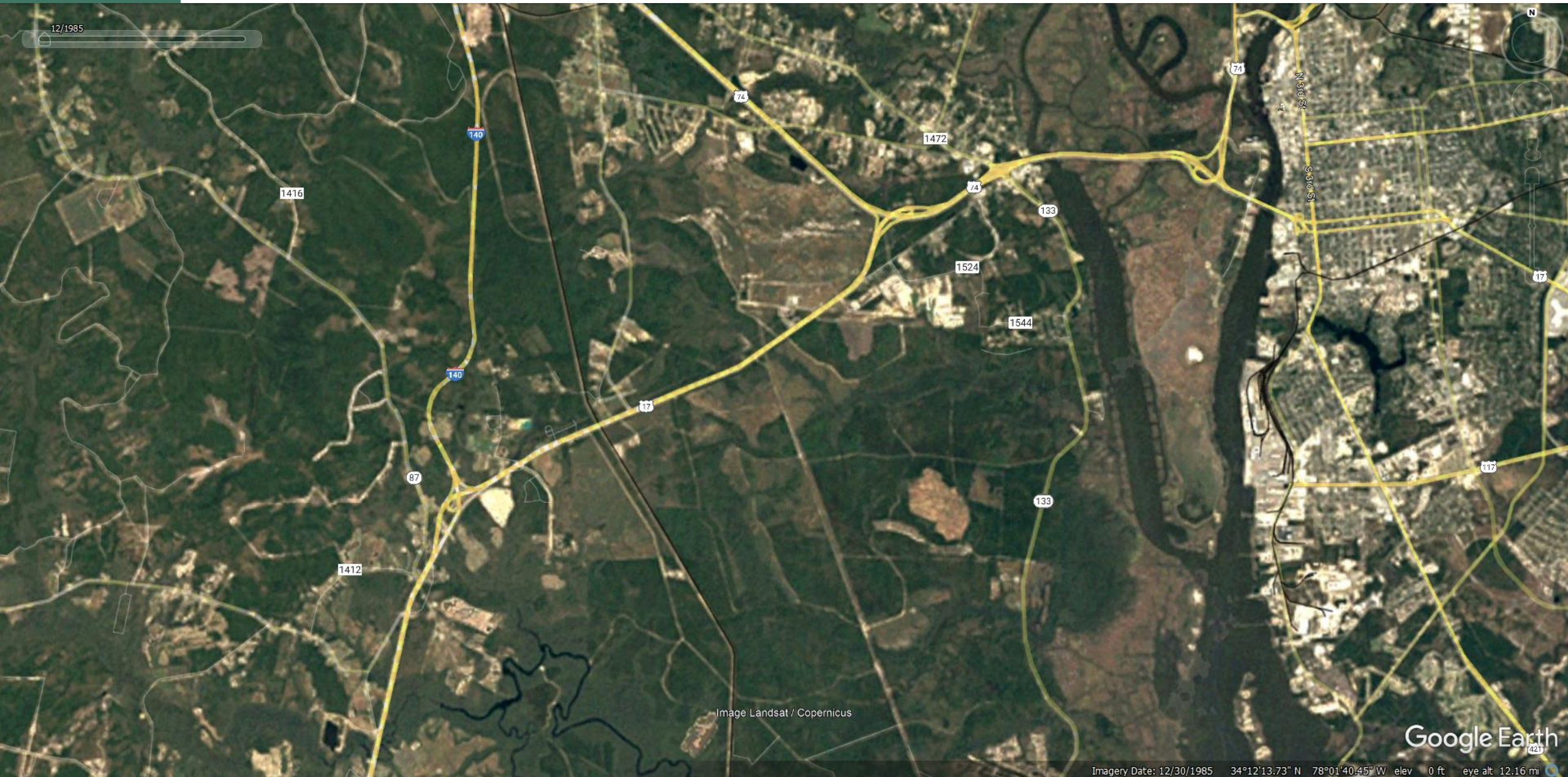
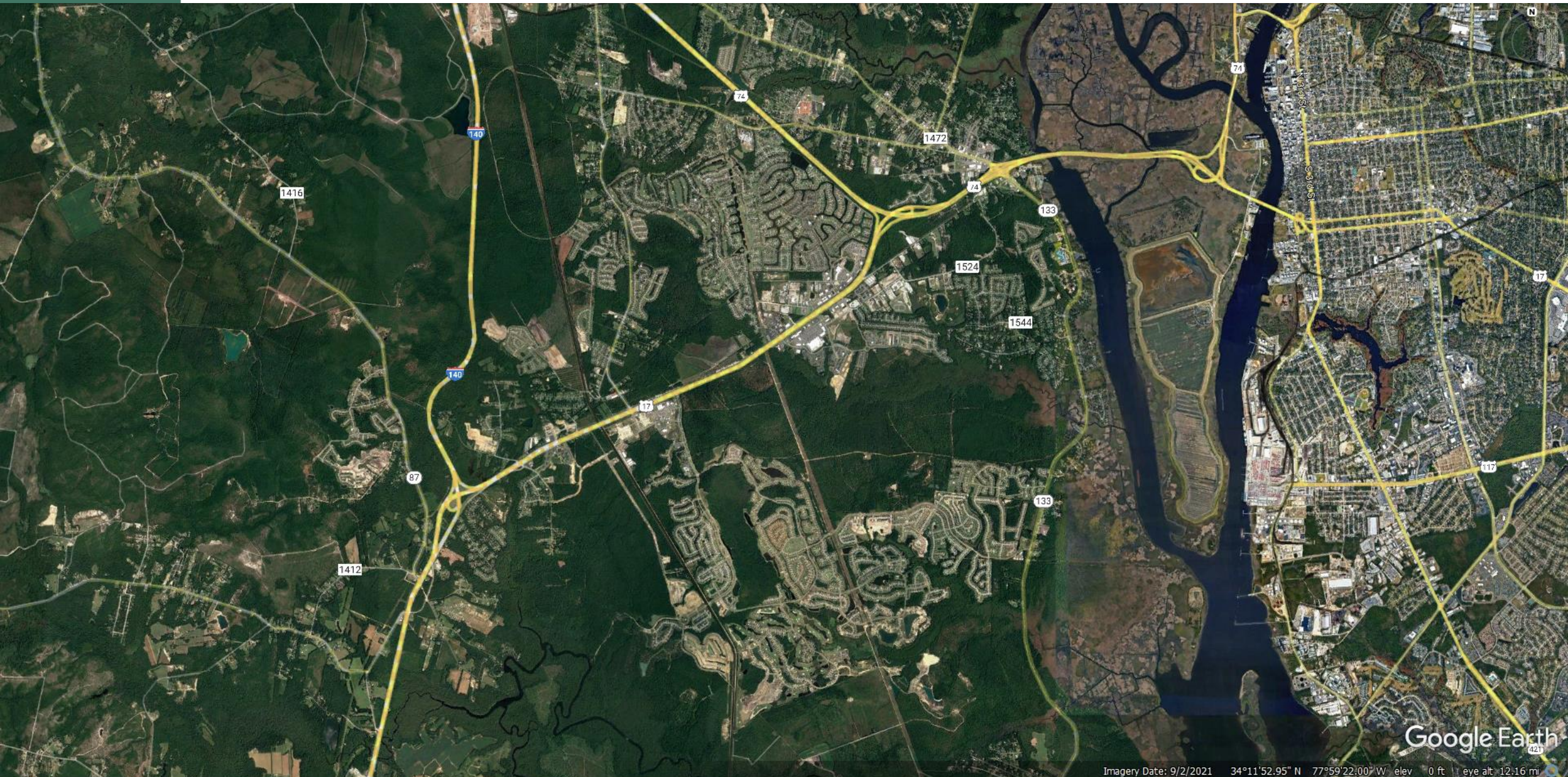


Image Landsat / Copernicus

Google Earth

Imagery Date: 12/30/1985 34°12'13.73" N 78°01'40.45" W elev 0 ft eye at 12.16 mi



Google Earth

Imagery Date: 9/2/2021 34°11'52.95" N 77°59'22.00" W elev 0 ft eye alt 12.16 mi

**IF YOU MUST THROW
OBJECTS AT THE ALLIGATORS**



**YOU
MUST
RETRIEVE
THEM**

WARNING

**ALLIGATORS
WILL EAT
SMALL DOGS
PLEASE KEEP
ON LEASH &
STAY AWAY
FROM POND**

**DO NOT
FEED THE**

NOTICE



Alligators are common
in this area.
They can be dangerous
and should not be approached,
frightened or fed.
Please give them the respect
they deserve.

KEEP YOUR DISTANCE

**NO
FISHING
AFTER
DARK**

**BEWARE OF
ALLIGATOR**



**PLEASE DO NOT
FEED
THE WILDLIFE**

N.C. Gen. Stat. § 113-291.11





COMMUNITY

Communities have a responsibility to recognize that they must take proactive steps to coexist with alligators and mitigate any conflicts.

COEXISTING TIP #1

Don't feed Alligators!

Feeding alligators is the #1 action that results in alligators becoming comfortable around people, alligators approaching people, and alligators being attracted to and spending more time in your community.

DO NOT:

- Intentionally feed an alligator – it is illegal
- Feed any other wildlife in areas where alligators have been seen
- Dispose of fish scraps or unused bait while fishing near alligator occupied waterways



COEXISTING TIP #2

Behave Responsibly!

If you see an alligator or are in an area where an alligator lives, act accordingly.

- Maintain a safe distance of 50 feet (at least 2 school bus lengths)
- Do not approach or harass an alligator
- Keep pets on a leash, do not allow them to swim, exercise, or drink in or near waters that may contain alligators
- Remember, the waterway itself is typically more of a hazard than alligators

DON'T HARASS THE GATORS!!



What if Coexisting doesn't work?

If left alone, alligators rarely pose a threat to humans. Alligators are shy and secretive in nature and actively avoid people unless conditioned with food. Alligators are generally not considered a threat to humans unless they are 6' or more in length. There are few circumstances in which an authorized individual will get involved.

Instances in which an authorized individual might get involved may include an alligator...

- In a place of business or on a highway
- Displaying threatening behavior
- Causing property damage
- Disrupting commercial activities
- In a situation that poses a danger to the health and safety of the alligator



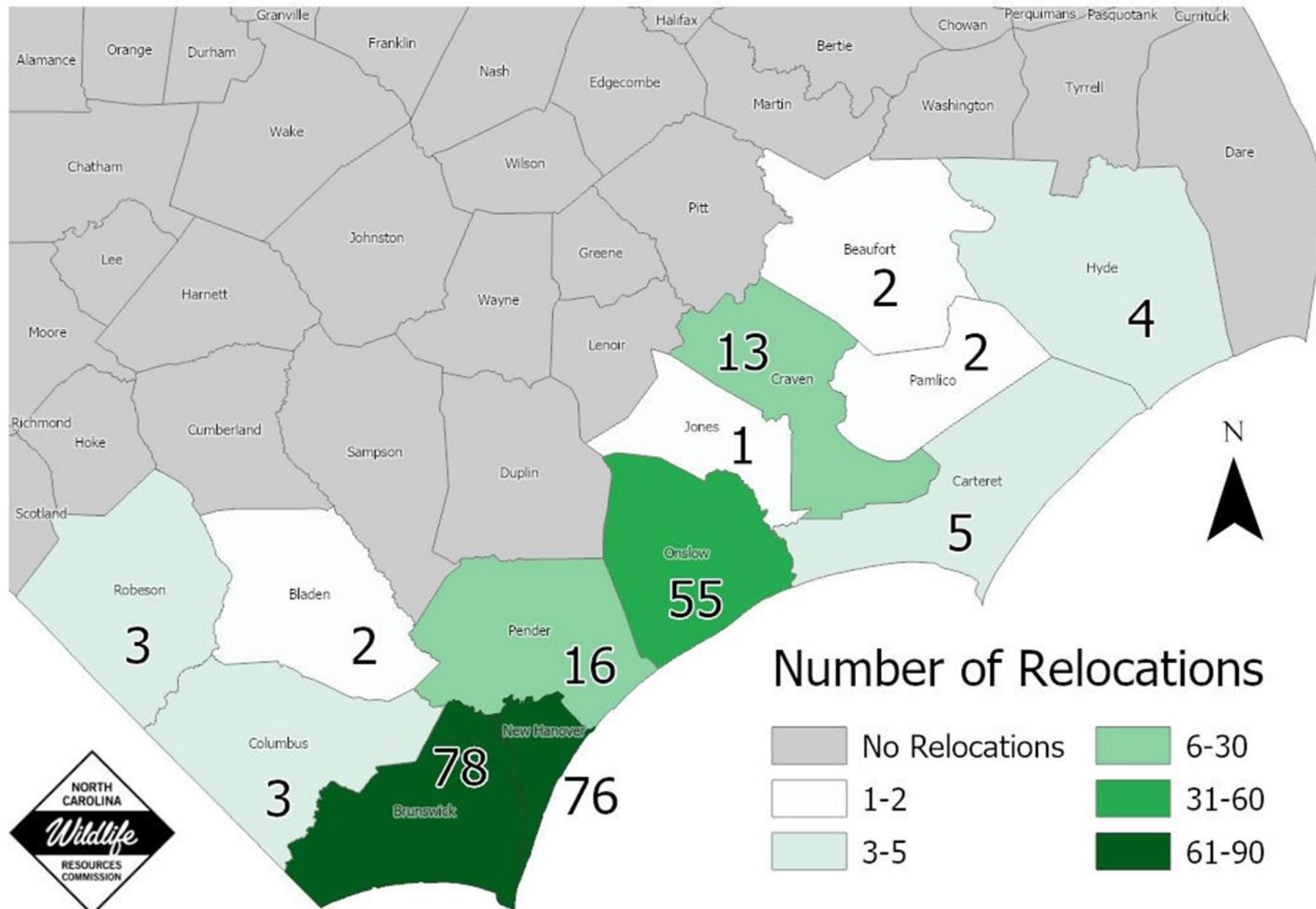
RELOCATION FACTORS

The NCWRC takes the following factors into account during a relocation request:

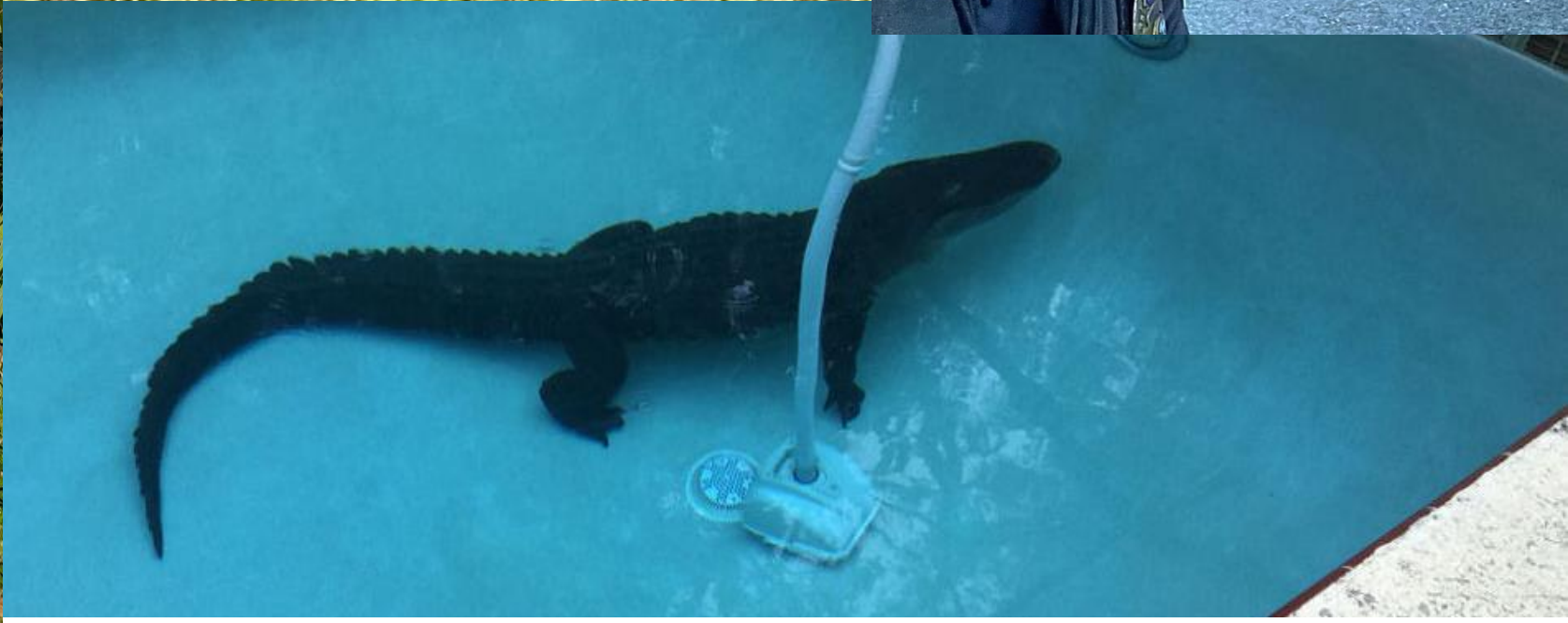
- Moving a food-conditioned alligator transfers the problem elsewhere
- Alligators can move long distances and move back into developed areas
- Moving any wildlife around on the landscape is disruptive to natural balances within ecosystems

We are the only state that continues to have an alligator relocation program. All other states euthanize them or move them to captivity (e.g., meat/hide farms). To avoid going that route, we need to ensure the continuation of responsible relocation decisions.

Alligator Relocations by County (2017-2021)











**WATCH
OUT
ALONG
THE
WATERS
EDGE!**



@oibmickey



@oibmickey



Photos by: Matt Cream



Photos by: Matt Cream

WHO TO CONTACT



Please remember only authorized individuals can handle alligators.



Contact the Wildlife Helpline at 866-318-2401 or send email to wildlifehelpline@ncwildlife.org:


- If you have questions or concerns about alligators in your area and would like to speak to a biologist



Contact the Wildlife Enforcement Hotline at 800-662-7137:

- If someone is intentionally feeding, harming, harassing or poaching an alligator
- If an alligator is interrupting traffic on a public road

Questions?



Conservation is a state of harmony between men and land

-Aldo Leopold

John Henry Harrelson
910-874-2725
John.Harrelson@ncwildlife.org