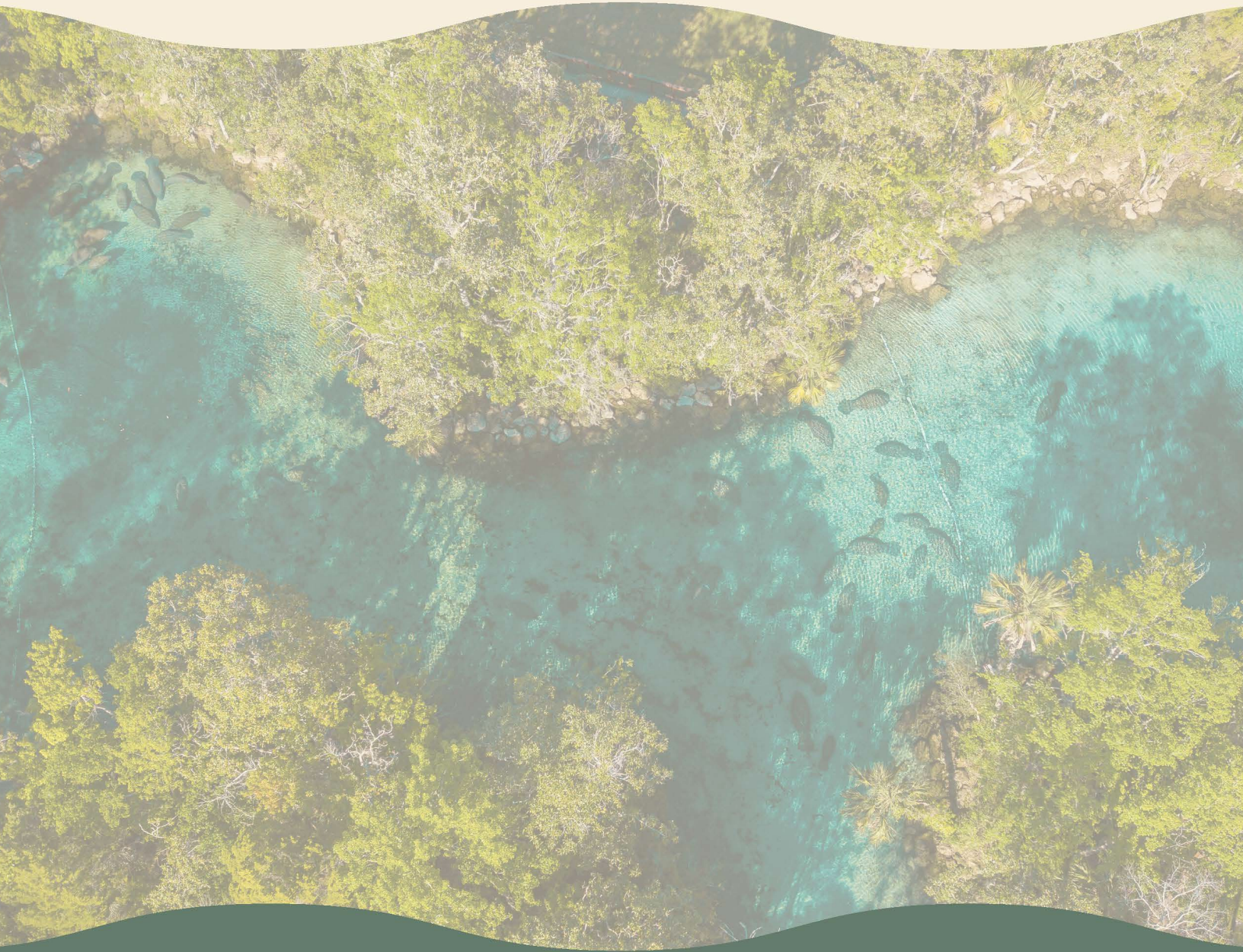




CONSERVATION

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Introduction

The Conservation Element of Citrus County's Comprehensive Plan is intended to guide the protection, enhancement, and sustainable management of the County's natural resources as the community continues to grow and evolve. This element plays a critical role in ensuring that ecological integrity, environmental quality, and public access to green and blue spaces are preserved for the current and future residents of Citrus County. Citrus County is home to a variety of valuable natural assets, including wetlands, estuaries, lakes, tree canopies, and diverse wildlife habitats. As development pressures increase, it becomes increasingly important to integrate environmental stewardship into land use, infrastructure, and community planning decisions. The Conservation Element provides the policy framework for identifying, prioritizing, and protecting the County's natural resources. The Data and Analysis section of this element establishes the factual foundation for future conservation efforts. It evaluates existing conditions, identifies existing conservation efforts, and highlights various environmental resources within Citrus County.

Major Water Bodies

Citrus County has multiple major bodies of water that serve as essential habitat, economic drivers, and a multitude of ecosystem services for the residents of Citrus County. There are multiple rivers that flow through Citrus County including but not limited to Salt River, the Withlacoochee River, Crystal River, Homosassa River, Chassahowitzka, and Halls River. There are also multiple lakes such as Lake Tsala Apopka, Lake Rousseau, Lake Bradley, and many other smaller lakes. There are also multiple large bodies of salt water such as Kings Bay, Homosassa Bay, and the Gulf of America. Citrus County has approximately 50,000 acres of waterbodies and these waterbodies can be seen on **Map CON-1**.

Wetlands

According to the Environmental Protection Agency (EPA), wetlands are areas where water is present at or near the surface of the soil for significant portions of the year. These vital ecosystems provide a wide range of essential ecosystem services, including natural water retention, flood control, and stormwater filtration by removing excess nutrients and particulates. In addition to their hydrological functions, wetlands play a critical role in sustaining Florida's diverse native vegetation and wildlife, serving as habitat for numerous plant and animal species and contributing to the overall ecological health and resilience of the region.

Wetlands can be classified into two generalized categories, coastal (tidal) and inland (non-tidal), there are both coastal and inland wetlands within Citrus County. Coastal wetlands, which often line oceanic bodies of water, tend to remain muddy or sandy with little vegetation. Inland wetlands, which are often found along river floodplains and lake perimeters, tend to be marshy and highly vegetated. Inland wetlands are referred to as freshwater emergent or freshwater forested/shrub wetlands. Inland wetlands are often some of the most productive ecosystems on earth and vitally important to the potable water supply in Florida. As a result, wetland features throughout Florida are heavily regulated and generally protected from development and other human activities. **Map CON-2** depicts all the wetlands within Unincorporated Citrus County and **Table CON-1** provides an acreage of all wetland typologies within Citrus County. According to the latest wetland GIS data provided by the U.S. Fish and Wildlife Service through the National Wetlands Inventory (NWI), unincorporated Citrus County possesses approximately 81,000 acres of wetlands, excluding surface waterbodies such as lakes, ponds, and rivers.

Table CON-1: Wetland Acreage

Wetland Type	Acres
Estuarine and Marine Wetland	35,531.6
Freshwater Emergent Wetland	12,582.2
Freshwater Forested/Shrub Wetland	32,957.0
Total	81,070.8

Source: US Fish and Wildlife Services, 2024

Floodplains

Floodplains are important ecological features that contribute to a region's water flow and storage, vegetative health, groundwater refreshment, and water quality. Whereas wetlands remain wet throughout the year, floodplain areas are next to bodies of water that experience flooding at different points in time. When comparing the locations of wetlands and floodplains within the community using **Map CON-2** and **Map CON-3**, significant portions of these critical environmental features often overlap. This is because both wetlands and floodplains are typically found within the lowest-lying areas of a community. Floodplains are comprised of two categories: 100-year floodplain or 1% annual chance of flood and 500-year floodplain or 0.2% annual chance of flood. There are a total of 185,653 acres of floodplains in unincorporated Citrus County shown on **Map CON-3** and detailed below in **Table CON-2**. The majority of floodplains are found along the eastern and western boundaries of Citrus County.

Table CON-2: Floodplain Acreage

Floodplain Type	Acres
100-Year Floodplain	172,812.6
500-Year Floodplain	12,841.1
Total	185,653.8

Source: Federal Emergency Management Agency, 2024

Aquifer Recharge and Discharge Areas

Aquifers are where groundwater is stored and the primary source of potable water for the residents of unincorporated Citrus County. The Southwest Florida Water Management District (SWFWMD) divides aquifer recharge/discharge areas into four broad categories three recharge areas (low, medium, and high) and one discharge area. Aquifer recharge areas are locations where rainfall, soil moisture, and surface water infiltrate the ground and replenish underground aquifers. Aquifer recharge areas not only replenish aquifers but also remove natural and artificial pollutants. As a result, protecting these aquifer recharge areas is crucial in maintaining the County's potable water sources. Aquifer discharge areas are locations where groundwater moves upward and emerges at or near the surface, rather than infiltrating downward into the aquifer. The aquifer recharge and discharge areas within unincorporated Citrus County can be found on **Map CON-4**. The discharge areas are generally located along the Gulf of America and the Withlacoochee River. The medium recharge areas primarily run along US 19 and the chain of lakes in eastern Citrus County. The high recharge area aligns with the center third of Citrus County.

Land Use Land Cover

Citrus County's vegetation inventory is both diverse and environmentally significant. One of the leading agencies responsible for its continued identification and protection is the Southwest Florida Water Management District (SWFWMD). SWFWMD maintains a geographic database of all the vegetative communities within their jurisdiction using a land use / land cover database that is developed using orthographic data and a standard classification protocol. According to SWFWMD, the ten largest land use / land cover categories in Citrus County include seven natural land use land cover categories which comprise 189,087 acres or 45.9% of unincorporated Citrus County. Many of these vegetative communities are home to plant species unique to Coastal Central Florida. **Table CON-3** presents the ten largest Land Use/Land Cover

categories found within Citrus County, while **Map CON-5** showcases all the categories assigned within the unincorporated Citrus County.

Table CON-3: 10 Largest Land Use Land Cover Categories

Land Use / Land Cover	Acres	Percent of Unincorporated Area
Residential	81,765.1	19.9%
Longleaf Pine - Xeric Oak	61,211.2	14.9%
Agricultural	42,588.7	10.3%
Saltwater Marshes	29,031.9	7.1%
Upland Hardwood - Coniferous Mix	27,569.2	6.7%
Stream And Lake Swamps (Bottomland)	24,212.9	5.9%
Bays And Estuaries	22,183.0	5.4%
Open Land	16,642.9	4.0%
Freshwater Marshes	14,690.1	3.6%
Wetland Forested Mixed	10,188.7	2.5%
Other	81,511.6	19.8%
Total	411,595.3	100.0%

Source: Southwest Florida Water Management District, 2023

Threatened and/or Endangered Species

Citrus County as a coastal Florida community is home to a wide array of wildlife species, many of which are currently considered to be threatened or endangered. The primary agency responsible for the continued identification and protection of these vulnerable species within the State is the Florida Fish and Wildlife Conservation Commission (FWC). The FWC classifies Florida's threatened or endangered wildlife into five (5) categories of special status, which are listed below in **Table CON-4**.

Table CON-4: FWC Threatened or Endangered Species Designations

Designation	Acronym	Description
Federally designated Endangered	FE	Species in danger of extinction if the deleterious factors affecting their population continue to operate.
Federally designated Threatened	FT	Species that are likely to become endangered in the nation within the foreseeable future if current trends continue.
State designated Threatened	ST	Species that are likely to become endangered in the state within the foreseeable future if current trends continue.
State designated Endangered	SE	Species in danger of extinction if the deleterious factors affecting their population continue to operate.
Species of Special Concern	SSC	Species that do not fit into the previous categories yet warrant special attention.

Source: Florida Fish and Wildlife Conservation Commission, 2024

There are currently 25 animal species and 53 plant and lichen species considered threatened or endangered within Citrus County. Of the 25 animals there is one butterfly species, 10 reptile, 13 bird, and two mammal species that are considered to be threatened or endangered within Citrus County. **Table CON-5** lists the animal species and **Table CON-6** lists the plant and lichen species that are threatened or endangered species which are potentially, likely, or confirmed to be within Citrus County, along with a description of their habitat, and current federal and state status.

Table CON-5: Threatened or Endangered Animal Species

Species	Habitat	Federal Status	State Status
Butterflies			
Monarch - Danaus Plexippus	This species is found in many habitats; the majority of breeding habitat occurs where milkweed plants grow, which include grasslands, scrublands, croplands, roadsides, urban and suburban parks and gardens, and sand dune areas. Adults roost in trees near water; primarily in maple trees and conifers in the northern USA, and pecan and oak trees in the southern USA.	Proposed Threatened	N/A

Species	Habitat	Federal Status	State Status
Reptiles			
American Alligator - Alligator Mississippiensis	American alligators inhabit fresh and brackish marshes, ponds, lakes, rivers, swamps, bayous, canals, and large spring runs. They often bask on partially submerged logs or on land next to the water. Alligators dig dens in river or lake margins or in marshes; they spend cold winter and drought periods in the den.	Similarity of Appearance to a Threatened Taxon	FT
Loggerhead Sea Turtle - Caretta Caretta	Nesting occurs usually on open sandy beaches above high-tide mark, seaward of well-developed dunes. Nests primarily on high-energy beaches on barrier strands adjacent to continental land masses in warm temperate and subtropical regions; steeply sloped beaches with gradually sloped offshore approaches are favored. Renesting generally occurs at the same beach or within a few km; generally, returns to the same area in subsequent years if habitat remains suitable.	Threatened	FT
Green Sea Turtle - Chelonia Mydas	Feeding occurs in shallow, low-energy waters with abundant submerged vegetation, and also in convergence zones in the open ocean. Migrations may traverse open seas. Adults are tropical in distribution, whereas juveniles range into temperate waters. Hatchlings often float in masses of marine macroalgae (e.g., Sargassum) in convergence zones. Coral reefs and rocky outcrops near feeding pastures often are used as resting areas. Inactive individuals may rest on the bottom in winter in the northern Gulf of California. Basking on beaches occurs in some areas (e.g., Hawaii).	Threatened	FT

Species	Habitat	Federal Status	State Status
Leatherback Sea Turtle - Dermochelys Coriacea	Marine; open ocean, often near edge of continental shelf; also, seas, gulfs, bays, and estuaries. Mainly pelagic, seldom approaching land except for nesting. Concentrates in summer in waters mostly 20-40 m deep near Cape Canaveral, Florida. Dives almost continuously, to depths of up to at least several thousand meters; may linger at the surface at midday but spend most of time submerged. Nests on sloping sandy beaches backed up by vegetation, often near deep water and rough seas. Largest colonies use continental, rather than insular, beaches.	Endangered	FE
Eastern Indigo Snake - Drymarchon Couperi	Habitat includes sandhill regions dominated by mature longleaf pines, turkey oaks, and wiregrass; flatwoods; most types of hammocks; coastal scrub; dry glades; palmetto flats; prairie; brushy riparian and canal corridors; and wet fields. Occupied sites are often near wetlands and frequently are in association with gopher tortoise burrows.	Threatened	FT
Hawksbill Sea Turtle - Eretmochelys Imbricata	This species uses a wide range of tropical and subtropical habitats, including shallow coastal waters with rocky bottoms, coral reefs, beds of sea grass or algae, mangrove-bordered bays and estuaries, and submerged mud flats.	Endangered	FE
Gopher Tortoise - Gopherus Polyphemus	Commonly occupies habitats with a well-drained sandy substrate, ample herbaceous vegetation for food, and sunlit areas for nesting. These habitat types include sandhill (pine-turkey oak), sand pine scrub, xeric hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, and mixed hardwood-pine communities.	N/A	ST

Species	Habitat	Federal Status	State Status
Short-Tailed Snake - Lampropeltis Extenuata	Habitat is dry sandy uplands, especially longleaf pine-turkey oak (sandhill) and sometimes adjacent xeric oak hammocks and rosemary-sand pine scrub. This snake also has been found in sphagnum bogs adjacent to typical habitat.	Proposed Threatened	ST
Suwannee Alligator Snapping Turtle - Macrochelys Suwanniensis	The Suwannee Alligator Snapping Turtle is primarily found in the Suwannee River basin, which spans parts of southern Georgia and northern Florida.	Threatened	ST
Pine Snake - Pituophis Melanoleucus	Good quality pine snake habitat appears to be characterized by xeric, pine-dominated or pine-oak (50 to 80% pine) woodland with an open, low understory established on sandy soils. Longleaf pine sandhills appear to represent critical habitat over much of the southeastern United States. Pine snakes also require forest openings, with level, well-drained sandy soils and little shrub cover, as nesting and hibernation sites.	Proposed Similarity of Appearance to a Threatened Taxon	ST
Birds			
Scott's Seaside Sparrow - Ammodramus Maritima Peninsulae	Seaside sparrows primarily inhabit tidal marshes in Florida. Scott's seaside sparrow can be found from Pasco County to Pepperfish Keys in Dixie County, Florida	N/A	ST
Florida Scrub-Jay - Aphelocoma Coerulescens	Scrub-jays inhabit sand pine and xeric oak scrub, and scrubby flatwoods, which occur in some of the highest and driest areas of Florida – ancient sandy ridges that run down the middle of the state, old sand dunes along the coasts, and sandy deposits along rivers in the interior of the state.	Threatened	FT

Species	Habitat	Federal Status	State Status
Florida Burrowing Owl - <i>Athene Cunicularia Floridana</i>	Burrowing owls inhabit open prairies in Florida that have very little understory (floor) vegetation. These areas include golf courses, airports, pastures, agriculture fields, and vacant lots. The range of the burrowing owl is throughout the peninsular of Florida in patches and localized areas.	N/A	ST
Piping Plover - <i>Charadrius Melodus</i>	Piping plovers inhabit sandy beaches, sand flats, and mudflats along coastal areas. The species can be found along Gulf Coast states and Mexico, along the Atlantic Coast from Florida to Newfoundland, and west to northern Michigan and Wisconsin. The nesting range extends from southern Canada to Nebraska.	Threatened	FT
Marian's Marsh Wren - <i>Cistothorus Palustris Mariana</i>	Marian's marsh wren inhabits marshes dominated by black needle rush (<i>Juncus roemarianus</i>) and cordgrass (<i>Spartina alterniflora</i>) on the Florida Gulf coast. This marsh wren species can be found from Pasco to Escambia County, Florida, and into southwest Alabama.	N/A	ST
Red-Cockaded Woodpecker - <i>Dryobates Borealis</i>	Inhabit 90-100 year-old longleaf pine, pond pine, pitch pine, and Virginia pine ecosystems from North Carolina, south to Florida, and west to Texas. In Florida, the Red-cocked woodpeckers inhabit slash, longleaf, and loblolly pines.	Threatened	FT
Little Blue Heron - <i>Egretta Caerulea</i>	Little blue herons inhabit fresh, salt, and brackish water environments in Florida including swamps, estuaries, ponds, lakes, and rivers. In the U.S., the little blue heron can be found from Missouri, east to Virginia, down to Florida, and west to Texas.	N/A	ST

Species	Habitat	Federal Status	State Status
Tricolored Heron - Egretta Tricolor	Tricolored herons inhabit fresh and saltwater marshes, estuaries, mangrove swamps, lagoons, and river deltas. They can be found from Massachusetts, down through the Gulf of America and Caribbean, to northern Brazil. Breeding sites can also be found on the Pacific Coast from Baja California down to Ecuador.	N/A	ST
Southeastern American Kestrel - Falco Sparverius Paulus	Open or partly open habitat: optimal habitat is sandhill, although can adapt to clearings with dead trees; also, prairies, coasts, wooded streams, burned forest, cultivated lands and farmland with scattered trees, open woodland, roadsides, suburbs, and some urban areas.	N/A	ST
American Oystercatcher - Haematopus Palliatus	The American oystercatcher inhabits beaches, sandbars, spoil islands, shell rakes, salt marsh, and oyster reefs. Oystercatchers can be found from the coasts of the northeastern U.S. down to Florida's Gulf Coast.	N/A	ST
Wood Stork - Mycteria Americana	Wood storks nest in mixed hardwood swamps, sloughs, mangroves, and cypress domes/strands in Florida. They forage in a variety of wetlands including both freshwater and estuarine marshes, although limited to depths less than 10-12 inches. The wood stork breeds in Florida, Georgia, South Carolina, and North Carolina. Non-breeding wood storks have an extensive range throughout North America, to northern Argentina in South America	Threatened	FT

Species	Habitat	Federal Status	State Status
Black Skimmer - Rynchops Niger	The black skimmer inhabits coastal areas in Florida such as estuaries, beaches, and sandbars. Skimmers can be found from the coasts of the northeastern U.S., down to Mexico, and over to the Gulf Coast of Florida. Breeding range is from Southern California, down to Ecuador.	N/A	ST
Least Tern - Sternula Antillarum	The least tern inhabits areas along the coasts of Florida including estuaries and bays, as well as areas around rivers in the Great Plains. In Florida, the least tern can be found throughout most coastal areas. Outside of Florida, least terns are found along the U.S. Atlantic Coast, mid-Atlantic states, and down from Mexico to northern Argentina.	N/A	ST
Mammals			
West Indian Manatee - Trichechus Manatus	In Florida, manatees occur in freshwater, brackish, and marine environments; typical coastal and inland habitats include coastal tidal rivers and streams, mangrove swamps, salt marshes, freshwater springs, and vegetated bottoms; where feeding often occurs in shallow grass beds, with ready access to deep channels. In coastal Georgia and northeastern Florida, manatees feed on smooth cordgrass (<i>Spartina alterniflora</i>) in salt marshes at high tide.	Threatened	FT
Florida Manatee - Trichechus Manatus Latirostris	In the Gulf, Florida manatees can be found west through coastal Louisiana and are occasionally sighted as far west as Texas. Prior to winter's coldest months, these adventurous manatees migrate back to Florida's warm water habitats, which include artesian springs and power plant discharge canals. Florida is at the northern end of the sub-tropical manatee's winter range, and these warm-water habitats play an important role in their survival during the winter months.	Threatened	FT

Source: Florida Natural Areas Inventory, 2025

Table CON-6: Threatened or Endangered Plant Species

Scientific Name	Common Name	Federal Status	State Status
Adiantum Tenerum	Brittle Maidenhair Fern	N/A	E
Agrimonia Incisa	Incised Groove-Bur	N/A	T
Asplenium Auritum	Auricled Spleenwort	N/A	E
Asplenium Pumilum	Dwarf Spleenwort	N/A	E
Asplenium Verecundum	Modest Spleenwort	N/A	E
Blechnum Appendiculatum	Hammock Fern	N/A	E
Carex Chapmanii	Chapman's Sedge	N/A	T
Centrosema Arenicola	Sand Butterfly Pea	N/A	E
Chthamalia Pubiflora	Sandhill Spiny-Pod	N/A	E
Dendrophylax Porrectus	Needleroot Airplant Orchid	N/A	T
Didymoglossum Punctatum Ssp. Floridanum	Florida Filmy Fern	Endangered	E
Encyclia Tampensis	Florida Butterfly Orchid	N/A	E
Epidendrum Conopseum	Green Fly Orchid	N/A	E
Forestiera Godfreyi	Godfrey's Swampprivet	N/A	E
Garberia Heterophylla	Garberia	N/A	T
Glandularia Maritima	Coastal Vervain	N/A	E
Glandularia Tampensis	Tampa Vervain	N/A	E
Goniopteris Reptans	Creeping Star-Hair Fern	N/A	E
Hexalectris Spicata	Spiked Crested Coralroot	N/A	E
Justicia Cooley	Cooley's Water-Willow	Endangered	E
Lechea Divaricata	Pine Pinweed	N/A	E
Lilium Catesbyi	Pine Lily	N/A	T
Litsea Aestivalis	Pondspice	N/A	E
Lobelia Cardinalis Var. Cardinalis	Cardinal Flower	N/A	T
Matelea Floridana	Florida Spiny-Pod	N/A	E

Mesadenus Lucayanus	Florida Keys Ladies'-Tresses	N/A	E
Monotropis Reynoldsiae	Pygmy Pipes	N/A	E
Myriopteris Microphylla	Southern Lip Fern	N/A	E
Nymphaea Jamesoniana	Sleeping Beauty Waterlily	N/A	E
Orthochilus Ecristatus	Giant Orchid	N/A	T
Osmunda Spectabilis	Royal Fern	N/A	E
Osmundastrum Cinnamomeum	Cinnamon Fern	N/A	E
Pavonia Spinifex	Yellow Hibiscus	N/A	N
Pecluma Dispersa	Widespread Polypody	N/A	E
Pecluma Plumula	Plume Polypody	N/A	E
Pecluma Ptilodon Var. Bourgeauana	Comb Polypody	N/A	E
Peperomia Humilis Var. Humilis	Terrestrial Peperomia	N/A	E
Pinguicula Caerulea	Blueflower Butterwort	N/A	T
Pinguicula Lutea	Yellow Flowered Butterwort	N/A	T
Platanthera Flava Var. Flava	Palegreen Orchid	N/A	T
Pogonia Ophioglossoides	Rose Pogonia	N/A	T
Rhaphidophyllum Hystrix	Needle Palm	N/A	E
Sacoila Lanceolata	Leafless Beaked Ladies'- Tresses	N/A	T
Salix Floridana	Florida Willow	N/A	E
Schizachyrium Niveum	Scrub Bluestem	N/A	E
Spiranthes Brevilabris	Small Ladies'-Tresses	N/A	E
Spiranthes Laciniata	Lace-Lip Ladies'-Tresses	N/A	T
Spiranthes Longilabris	Giant Spiral Ladies'-Tresses	N/A	T
Spiranthes Tuberosa	Little Ladies'-Tresses	N/A	T
Stylisma Abdita	Scrub Stylisma	N/A	E

Tillandsia Utriculata	Spreading Air-Plant	N/A	E
Tricerma Phyllanthoides	Florida Mayten	N/A	T
Triphora Craigheadii	Craighead's Nodding-Caps	N/A	E

Source: Florida Natural Areas Inventory, 2025

Conservation Areas

The County has over 140,000 acres of conservation land managed by various agencies and organizations according to the Florida Natural Areas Inventory. The Florida Natural Areas Inventory is the central repository for information on Florida's conservation lands. For a property to be considered conservation land by the Florida Natural Areas Inventory (FNAI), a significant portion of the property must be undeveloped and retain most of the attributes one could expect it to have in its natural condition. Meaning properties included in the FNAI while currently undeveloped and in their current natural condition are not prohibited from future development. In addition, the managing agency or organization must demonstrate a formal commitment to the conservation of the land in its natural condition. **Map CON-6** shows these areas according to their management organizations, and **Table CON-7** shows the lands with more than 100 acres according to their name, managing organization, total acres, and acres within unincorporated Citrus County.

Table CON-7: Conservation Areas

Conservation Area	Managing Agency	Total Acres	Acres in Uninc. Citrus County
Withlacoochee State Forest	Florida Department of Agriculture and Consumer Services, Florida Forest Service	160,113.2	58,412.6
Crystal River Preserve State Park	Florida Department of Environmental Protection, Division of Recreation and Parks	27,679.3	26,420.6
Chassahowitzka National Wildlife Refuge	US Department of the Interior, Fish and Wildlife Service	30,842.9	16,556.6
Flying Eagle Preserve	Southwest Florida Water Management District	16,338.0	16,277.4

Conservation Area	Managing Agency	Total Acres	Acres in Uninc. Citrus County
Potts Preserve	Southwest Florida Water Management District	9,377.0	9,378.1
Marjorie Harris Carr Cross Florida Greenway	Florida Department of Environmental Protection, Division of Recreation and Parks	73,470.1	7,222.8
Chassahowitzka River and Coastal Swamps	Southwest Florida Water Management District	5,748.1	5,408.6
Fort Cooper State Park	Florida Department of Environmental Protection, Division of Recreation and Parks	708.1	708.0
Tsala Apopka/Two-Mile Prairie Connector	Southwest Florida Water Management District	461.5	461.5
Withlacoochee State Trail	Florida Department of Environmental Protection, Division of Recreation and Parks	761.6	387.2
Nature Coast Mitigation Bank	Terra Blue Environmental	200.4	202.5
Ellie Schiller Homosassa Springs Wildlife State Park	Florida Department of Environmental Protection, Division of Recreation and Parks	200.9	200.8
Upper Coastal Mitigation Bank	EarthBalance	149.0	148.7
Flying Eagle Ranch Conservation Easements	Southwest Florida Water Management District	133.1	133.1
Yulee Cumming Nature Preserve	Tampa Bay Conservancy, Inc.	113.2	113.2
Conservation Areas Under 100 acres	N/A	54,899.7	246.8
Total	N/A	381,196.0	142,278.5

Source: Florida Natural Areas Inventory, 2025

Over half of the total acreage of Citrus County’s conservation areas are either classified as waterbodies or wetlands according to the latest GIS data from the US Fish and

Wildlife Service (**Map CON-2**). This is mainly due to the large conservation areas along the Gulf of America in Citrus County. **Table CON-8** below breaks down the total acreage of conservation area by its wetland type.

Table CON-8: Conservation Wetlands and Waterbodies

Wetland/Waterbody Type	Acres	Percent of Conservation Area
Wetlands		
Estuarine And Marine Wetland	30,388.0	21.4%
Freshwater Emergent Wetland	6,623.0	4.7%
Freshwater Forested/Shrub Wetland	20,640.6	14.5%
Wetland Subtotal	57,651.6	40.5%
Waterbodies		
Estuarine And Marine Deepwater	7,318.8	5.1%
Freshwater Pond	1,147.7	0.8%
Lake	6,195.3	4.4%
Riverine	378.0	0.3%
Waterbody Subtotal	15,039.8	10.6%
Upland	69,587.1	48.9%
Total	142,278.5	100.0%

Source: US Fish and Wildlife Service, 2024 & Florida Natural Areas Inventory, 2025

Green Print

The North Florida Land Trust (NFLT) prepared the *Citrus County Nature Coast Forever Land Conservation Program: A Green Print for Success* to determine the feasibility of establishing a locally funded land conservation program. During the project, NFLT gathered feedback from the Board of County Commissioners and the public to determine what should be prioritized in the County’s potential land conservation program. The NFLT did an analysis of existing conservation areas within Citrus County. Based on the feedback collected and the analysis of existing conservation areas, the NFLT developed a Strategic Conservation Plan and a Conservation Manual to identify, assess, acquire, and steward conservation lands within Citrus County. The next steps for the conservation program are two referendums one is two formalize the County’s Conservation Plan and the other is for an optional sales tax that would have a certain percentage of funds allocated for funding the Conservation Plan.

Soils

Soil permeability is an important factor to understand because it strongly influences aquifer recharge, the movement and retention of surface water, and the potential for flooding. **Map CON-7** reveals that the central area of Citrus County has significantly more soil permeability than the western and eastern areas of Citrus County. The western and eastern portions of Citrus County are characterized by mucky, organic soils that tend to retain more standing water than the County's central areas. **Table CON-9** below provides a breakdown of soil types by the acreage in Citrus County. The largest groups of soils are Candler, Astatula, Taveres, Arredondo, and Hallandale soils.

Table CON-9: Soil Types

Soil Types	Acres	Percent
Candler fine sand, 0 to 5 percent slopes	72,465.3	17.5%
Astatula fine sand, 0 to 5 percent slopes	28,925.0	7.0%
Lake fine sand, 0 to 5 percent slopes	28,776.5	6.9%
Waters of the Gulf of America	28,641.3	6.9%
Tavares fine sand, 0 to 5 percent slopes	27,431.7	6.6%
Water	19,821.5	4.8%
Arredondo fine sand, 0 to 5 percent slopes	18,257.2	4.4%
Rock outcrop-homosassa-lacoochee complex	13,696.2	3.3%
Hallandale-rock outcrop complex, rarely flooded	11,104.9	2.7%
Weekiwachee-durbin mucks	10,678.1	2.6%
Adamsville fine sand, 0 to 2 percent slopes	10,184.8	2.5%
Terra ceia-okeelanta association, very frequently flooded	9,965.7	2.4%
Boca fine sand	8,289.2	2.0%
Basinger fine sand	8,075.5	1.9%
Okeelanta-lauderhill-terra ceia mucks	7,676.6	1.9%
Basinger fine sand, depressional, 0 to 1 percent slopes	7,404.9	1.8%
Astatula fine sand, 5 to 8 percent slopes	7,349.9	1.8%
Candler fine sand, 5 to 8 percent slopes	6,856.2	1.7%
Homosassa mucky fine sandy loam, 0 to 1 percent slopes	6,687.1	1.6%
Immokalee fine sand	6,586.7	1.6%
Arredondo fine sand, 5 to 8 percent slopes	5,320.8	1.3%
Udorthents, 0 to 5 percent slopes	4,845.3	1.2%
Sparr fine sand, 0 to 5 percent slopes	4,382.1	1.1%
Myakka, limestone substratum-eaugallie, limestone substratum complex	4,245.1	1.0%
Eaugallie fine sand	3,957.9	1.0%

Soil Types	Acres	Percent
Kendrick fine sand, 0 to 5 percent slopes	3,536.5	0.9%
Broward fine sand	3,299.3	0.8%
Eaugallie fine sand, depressional	3,199.0	0.8%
Myakka-myakka, wet, fine sands, 0 to 2 percent slopes	3,171.7	0.8%
Boca fine sand, depressional	2,939.0	0.7%
Boca-pineda, limestone substratum complex	2,899.7	0.7%
Redlevel fine sand	2,529.5	0.6%
Quartzipsamments, 0 to 5 percent slopes	2,498.7	0.6%
Pompano fine sand	2,265.4	0.5%
Lake fine sand, 5 to 8 percent slopes	2,180.4	0.5%
Orsino fine sand, 0 to 5 percent slopes	2,179.3	0.5%
Malabar fine sand, 0 to 2 percent slopes	1,994.8	0.5%
Pits	1,869.7	0.5%
Lochloosa fine sand, 0 to 5 percent slopes	1,587.2	0.4%
Lake, clayey surface, 0 to 5 percent slopes	1,424.2	0.3%
Matlacha, limestone substratum-urban land complex	1,381.8	0.3%
Apopka fine sand, 0 to 5 percent slopes	1,315.7	0.3%
Fort meade loamy fine sand, 0 to 5 percent slopes	1,245.6	0.3%
Kendrick fine sand, 5 to 8 percent slopes	1,189.4	0.3%
Candler-urban land complex, 0 to 8 percent slopes	1,152.1	0.3%
Pompano fine sand, frequently ponded, 0 to 1 percent slopes	1,131.7	0.3%
Ona-ona, wet, fine sand, 0 to 2 percent slopes	1,096.7	0.3%
Micanopy loamy fine sand, 2 to 5 percent slopes	1,000.1	0.2%
Pomello fine sand, 0 to 5 percent slopes	811.3	0.2%
Anclote fine sand, depressional	809.4	0.2%
Paisley fine sand, 0 to 1 percent slopes	762.3	0.2%
Kanapaha-kanapaha, wet, fine sand, 0 to 5 percent slopes	718.9	0.2%
Citronelle fine sand	614.9	0.1%
Okeelanta muck	610.5	0.1%
Arents, 45 to 65 percent slopes	609.1	0.1%
Williston-pedro-rock outcrop complex, 2 to 5 percent slopes	228.9	0.1%
Sparr fine sand, 5 to 8 percent slopes	163.1	0.0%
Candler fine sand, 8 to 12 percent slopes	150.0	0.0%
Paola fine sand, 0 to 5 percent slopes	106.9	0.0%
Gator muck, 0 to 1 percent slopes, frequently flooded	69.0	0.0%
Weekiwachee muck	15.7	0.0%
Total	414,382.7	100.0%

Source: NRCS, 2024

Commercial Fish and Shellfish

The Florida Fish and Wildlife Commission releases annual reports on the commercial fish and shellfish in each County with their Commercial Fisheries Landings Summaries. This data reflects the commercial fishing harvests by species within each County and does not reflect recreational harvests. **Table CON-10** below provides a breakdown of pounds, trips, average price, and estimated value of every fish and shellfish that is commercially landed in Citrus County. In 2025, over 875,000 pounds of fish and shellfish were commercially harvested in Citrus County with an estimated value of \$2,957,268.

Table CON-10: Commercial Fish and Shellfish

Species	Pounds	Trips	Average Price	Estimated Value
Amberjacks	3,524	12	\$3.13	\$11,030
Cobia	50	2	\$4.81	\$240
Crab, Blue (Hard)	274,861	891	\$2.26	\$622,242
Crab, Blue (Soft)	252	12	\$5.64	\$1,421
Crab, Stone, Jumbo Claws	10,937	357	\$26.22	\$286,802
Crab, Stone, Large Claws	26,355	395	\$16.87	\$444,499
Crab, Stone, Medium Claws	28,519	401	\$14.05	\$400,772
Crab, Stone, Ungrd Claws	7,174	261	\$4.68	\$33,593
Drum, Black	327	12	\$0.96	\$315
Grouper, Black	30	3	\$4.56	\$138
Grouper, Gag	826	10	\$5.84	\$4,826
Grouper, Other	25	6	\$5.32	\$135
Grouper, Red	12,317	20	\$5.39	\$66,444
Grouper, Scamp	134	7	\$5.70	\$765
Grunts	144	21	\$1.51	\$218
Hogfish	2,187	11	\$7.82	\$17,097
Jack, Crevalle	2	2	\$0.50	\$1
Ladyfish	31,549	38	\$1.14	\$36,068
Misc. Food Fish	319	11	\$5.47	\$1,744
Mojarra	4	1	\$0.50	\$2
Mullet, Black	60,133	138	\$5.51	\$331,421

Species	Pounds	Trips	Average Price	Estimated Value
Mullet, Silver	83	1	\$0.60	\$50
Oysters	24,307	301	\$7.28	\$176,920
Permit	42	6	\$5.50	\$233
Porgies	122	14	\$2.76	\$337
Rays & Skates	216	1	\$0.50	\$108
Sheepshead	1,055	39	\$1.65	\$1,736
Shrimp, Bait	361,075	434	\$1.11	\$399,739
Shrimp, Brown	4,366	12	\$2.64	\$11,520
Shrimp, White	15,763	17	\$2.93	\$46,227
Snapper, Grey (Mangrove)	3,663	19	\$4.56	\$16,722
Snapper, Lane	348	12	\$3.61	\$1,257
Snapper, Mutton	59	4	\$5.85	\$347
Snapper, Other	70	1	\$4.05	\$286
Snapper, Red	7,039	16	\$5.55	\$39,075
Snapper, Vermilion	408	13	\$3.20	\$1,305
Snapper, Yellowtail	10	1	\$5.86	\$60
Triggerfish	370	10	\$4.25	\$1,573
Total	878,665	3,512	N/A	\$2,957,268

Source: Florida Fish and Wildlife Commission, 2026

Mining

The Florida Department of Environmental Protection's (FDEP) Mining and Mitigation Program (MMP) is responsible for, reviewing Environmental Resource permits, compliance, inspection and enforcement at mine sites. FDEP also manages a GIS layer of all active mining operations in the State of Florida. There are currently 9 different mines operating in unincorporated Citrus County and the locations of these mines are illustrated on **Map CON-8**.

Air Quality

FDEP operates one air quality monitoring site in Citrus County. The Air Quality Monitoring Site is located at the Crystal River Preserve – specifically at 13450 West Power Line Road, Crystal River FL 34428. The site has been monitoring both particle pollution and sulfur dioxide (SO₂) levels since 1984. According to FDEP's Air Quality Index, air quality has remained good or moderate for the last 10 years of monitoring in the County. Article IV of Chapter 21 of Citrus County's Code of Ordinances mainly

stipulates that all sources of air pollution must comply with regulations set by the United States Environmental Protection Agency (EPA) and the FDEP.

Karst Features

Karst is a terrain with distinctive landforms and hydrology created from the dissolution of soluble rocks, principally limestone and dolomite. Karst terrain is characterized by springs, caves, sinkholes, and a unique hydrogeology that results in aquifers that are highly productive but extremely vulnerable to contamination. There are 51 springs (**Map CON-9**) located west of US 19 in Unincorporated Citrus County. There are 403 reported sinkholes (**Map CON-10**) in unincorporated Citrus County mainly along the east and west boundaries of the County.

Hazardous Waste

Hazardous waste is solid waste material because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or irreversible illness, or may pose a potential hazard to human health or the environment when improperly managed.

Household hazardous waste can be disposed at the Citrus County Landfill located at 230 W Gulf To Lake Hwy, Lecanto, FL 34461 on designated disposal days. The designated disposal days are every Tuesday, Thursday, and Friday, as well as one Saturday per quarter. There has not been a major hazardous materials incident in Citrus County. Chapter 82 of Citrus County's Code of Ordinances has multiple regulations to ensure adequate collection and disposal of hazardous waste in Citrus County.

Water Quality

Citrus County plant operators are licensed by the FDEP and monitor the County's water and wastewater facilities on a daily basis, for an array of possible contaminants. The Citrus County Department of Water Resource releases annual water quality reports for the ten water systems in Citrus County. These reports include information on disinfectants, disinfection by-products, inorganic contaminants, synthetic organic contaminants, volatile organic contaminants, radioactive contaminants, lead, copper, and some unregulated contaminants. The latest set of Annual Water Quality Report provided information for water tested in 2024. All ten public water systems were found to be safe to drink according to standards set by the Environmental Protection Agency (EPA).

Water Usage

Citrus County currently has a capacity for 14.324 million gallons per day according to their Consumptive Use Permit. Based on adopted level of service standards and projected population growth, the County will exceed its total permitted capacity through the 2050 planning horizon. The Data and Analysis Section of the Public Facilities Element has more detailed information related to potable water capacity and demand.

Wellfield Protection

The County currently has multiple policies in the Conservation Element of the Comprehensive Plan related to Wellfield Protection. The currently adopted wellfield protection zone is based on five-year time of travel zones on all wells that have a permitted withdrawal capacity of 100,000 gallons per day or greater. For more information on Wellfield Protection, please refer to the Data and Analysis Section of the Public Facilities Element.

Florida Ecological Greenways Network

The Florida Ecological Greenways Network (FEGN) was developed by the University of Florida's Center for Landscape Conservation Planning and the Florida Department of Environmental protection. The FEGN identifies areas of opportunity for protecting a statewide network of ecological hubs and linkages designed to maintain large scale ecological functions including focal species habitat and ecosystem services throughout the state. The FEGN is divided into five different priorities and **Table CON-9** describes the five priorities and **Map CON-11** shows the FEGN's distribution in Citrus County. Over 240,000 acres of land in unincorporated Citrus County are included in the FEGN, 58.6% of the FEGN in unincorporated Citrus County is existing conservation areas as depicted in **Map CON-6**.

Table CON-11: Florida Ecological Greenways Network Priority Areas

Priority	Description	FEGN Acres within Unincorporated Citrus County	
		Total	Conservation Area (FNAI)
1	Areas are essential for completing a functionally connected statewide network of public and private conservation lands across the state.	87,557.6	57,695.7
2	Areas surrounding Critical Linkages that help protect a wider and potentially more functional corridor. In some cases, there are additional corridors connecting to other important areas of the state that could significantly contribute to a statewide ecological network.	119,060.8	77,000.3
3	Areas providing significant alternate routes to Critical Linkages, with the goal of providing functional alternatives where available in case a Critical Linkage cannot be protected.	0	0
4	Areas providing important riparian corridors or represent other regionally significant opportunities to protect large intact landscapes.	0	0
5	All other areas of large intact landscapes that support protection of a statewide ecological network.	37,815.5	2,293.8
Total		244,433.9	136,989.7

Source: University of Florida & Florida Department of Environmental Protection, 2021

Florida Wildlife Corridors

The Florida Wildlife Corridor Act, adopted in 2021 with unanimous bipartisan support, established a statewide framework for protecting and enhancing an interconnected network of conservation lands that supports Florida’s biodiversity, ecological resilience, and long-term environmental health. The Florida Wildlife Corridor refers to the conserved lands and opportunity areas defined as Priority 1, 2 and 3 of the FEGN. Encompassing more than 18 million acres, including approximately 10 million acres of protected lands, the Corridor identifies critical habitat connections and opportunity

areas where conservation efforts can strengthen wildlife movement, protect ecosystem services, and reduce habitat fragmentation caused by development, which is shown on **Map CON-12**. For Citrus County, the Florida Wildlife Corridor presents an important opportunity to coordinate local conservation strategies with state and regional initiatives, including land acquisition, conservation easements, greenway planning, and habitat restoration efforts, to preserve natural systems, maintain ecological connectivity, and protect the County's environmental resources for future generations. This is further supported by the County's Greenprint effort that includes similar strategies.

Future Considerations

Citrus County has an expansive inventory of natural resources including waterbodies, various threatened and endangered species, and over 142,000 acres of conservation areas. During the public engagement process the public indicated a strong desire to protect the County's natural resources and preserve Citrus County Rural Character. Based on the above data and analysis and the public engagement process the following was considered while updating the Conservation Element Goals, Objectives, and Policies.

1. **Water Resource Protection.** Citrus County should consider strengthen policies that protect aquifer recharge areas, wellfields, wetlands, springsheds, and other critical water resources. Future efforts should focus on maintaining water quality and quantity through enhanced conservation strategies, resource management practices, and coordination with regional water management initiatives.
2. **Greenway and Habitat Connectivity.** With more than one-third of unincorporated Citrus County identified as conservation land, the County should pursue opportunities to coordinate with state and regional partners, including conservation and land acquisition programs, to expand and connect greenway corridors, protect habitat linkages, and enhance ecological connectivity throughout the region. Starting with the Florida Wildlife Corridors and the County's Greenprint effort, this priority is advancing swiftly and will provide significant protection for existing and future preserved lands.
3. **Tree Preservation and Canopy Protection.** Public input consistently emphasized the importance of preserving mature trees, protecting native vegetation, and discouraging unnecessary clear-cutting. The County should evaluate the adoption of tree preservation standards within the Land Development Code to

promote canopy retention, require appropriate mitigation for tree removal, and encourage site design that integrates existing natural features.

4. **County Conservation Lands Program.** While significant acreage within Citrus County is protected through public and conservation ownership, relatively little is owned directly by the County. Citrus County should explore establishing a County conservation lands program focused on strategic land acquisition, long-term stewardship, and management of environmentally sensitive lands that provide ecological, recreational, and community benefits. In concert with establishing the program, the should consider establishing a dedicated funding source (e.g., local option sales tax, dedicated ad valorem, or impact fee).

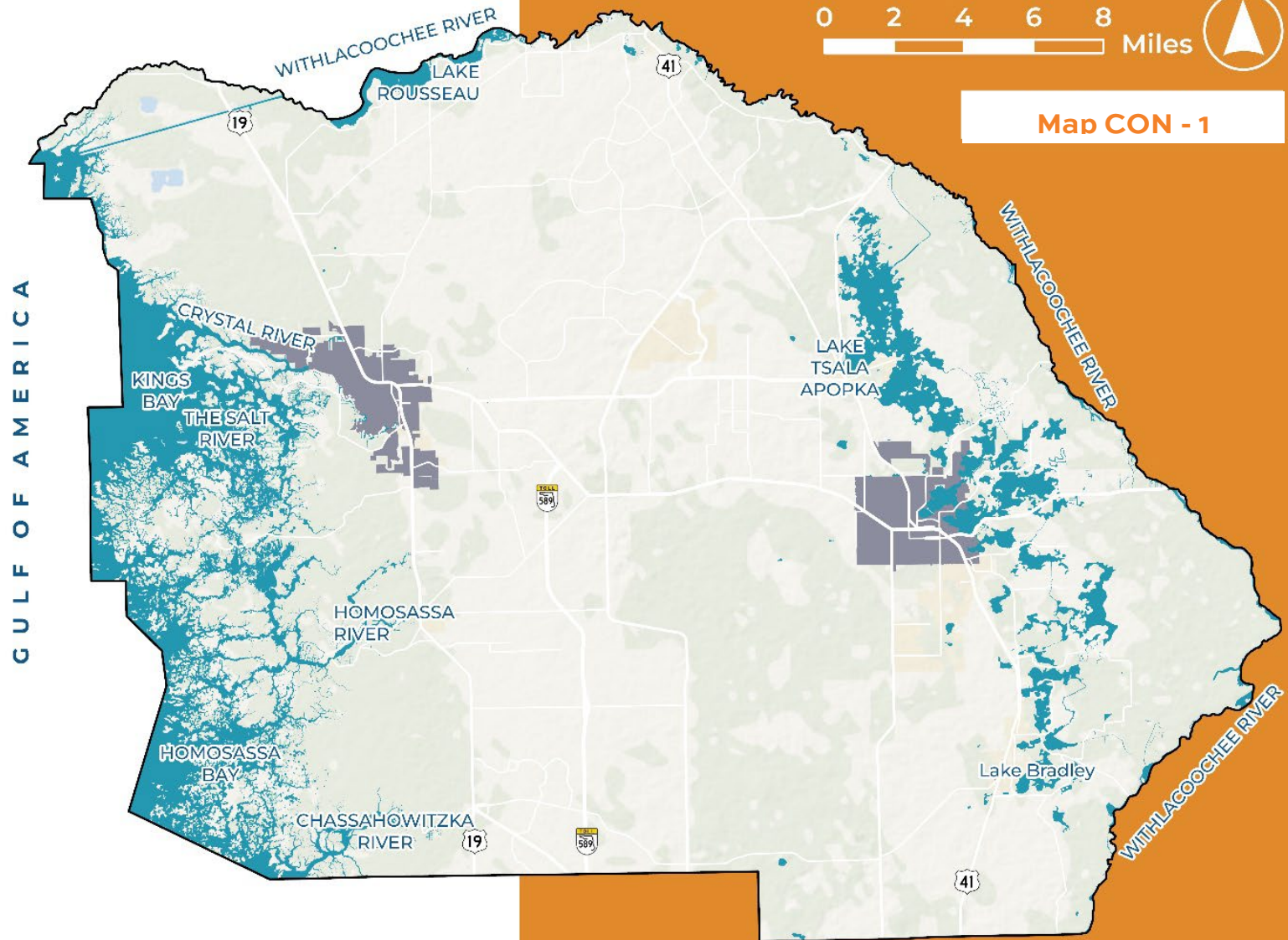
Legend

-  Citrus County Boundary
-  Incorporated Area
-  Waterbody

MAJOR WATERBODIES



Map CON - 1



Legend

 Citrus County Boundary

 Incorporated Area

Wetland Type

 Estuarine and Marine Wetland

 Freshwater Emergent Wetland

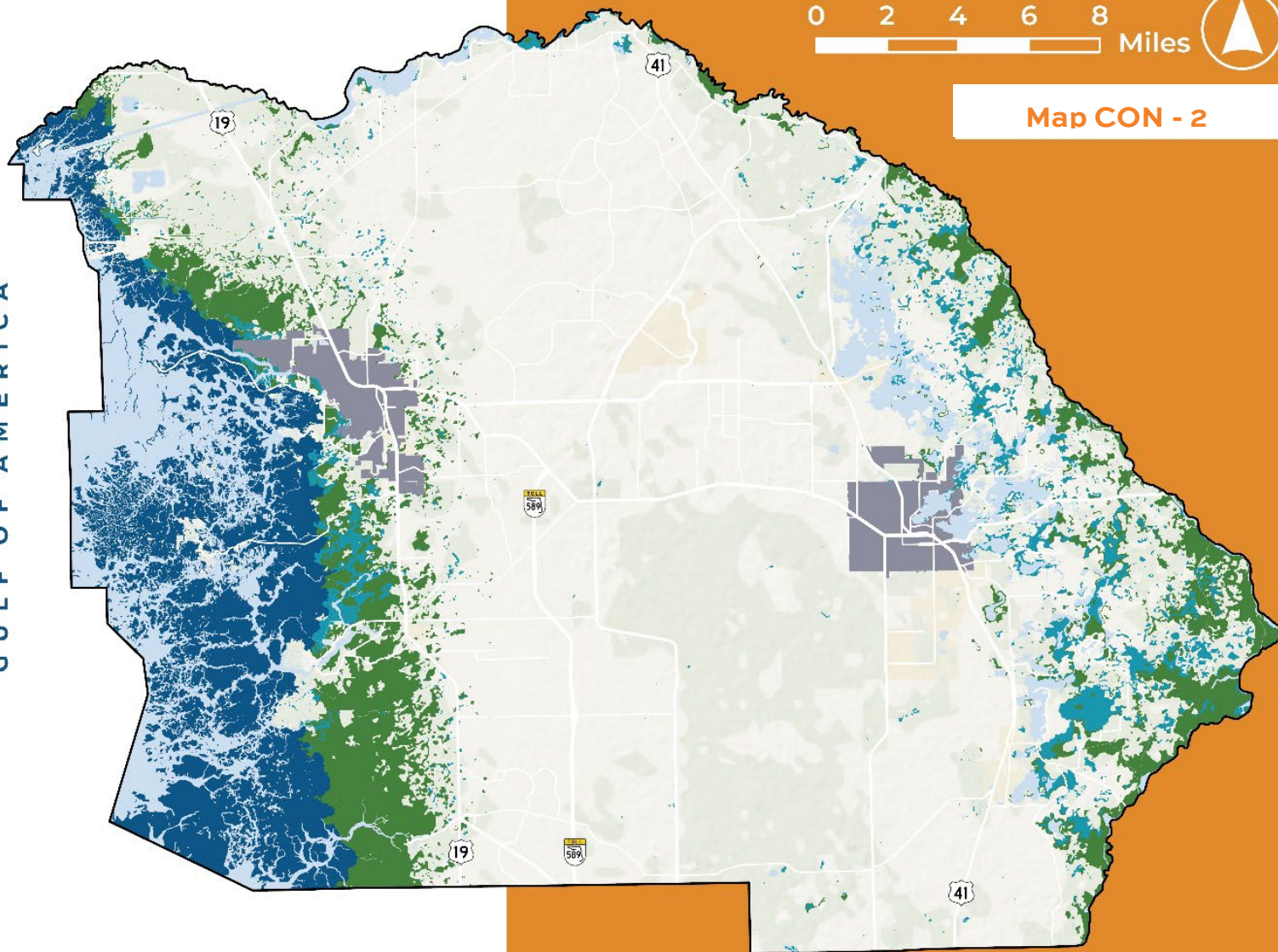
 Freshwater Forested/
Shrub Wetland

WETLANDS INVENTORY



Map CON - 2

GULF OF AMERICA



Legend

 Citrus County Boundary

 Incorporated Area

Floodplain

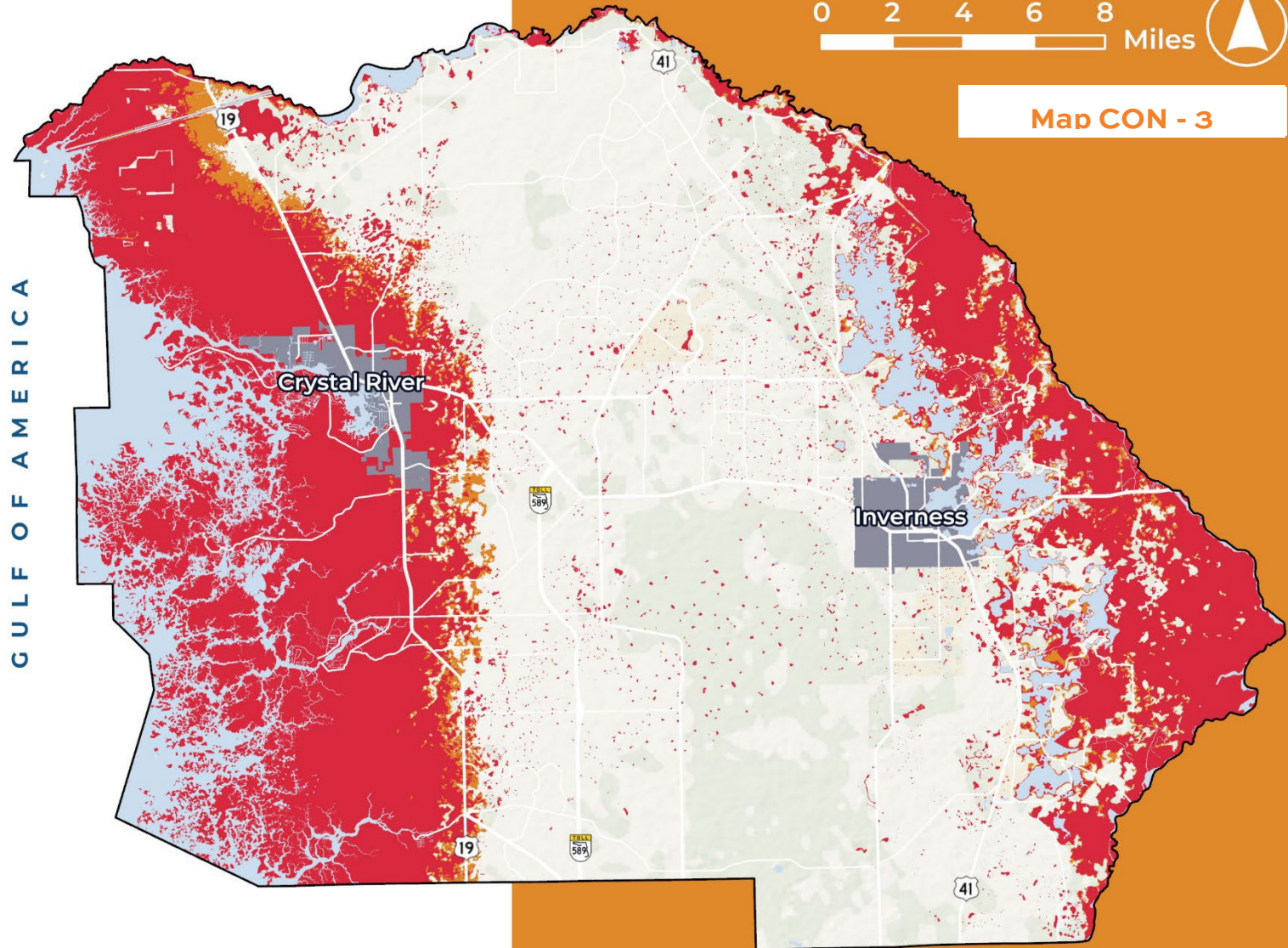
 100-Year Floodplain

 500-Year Floodplain

FLOODPLAIN INVENTORY



Map CON - 3



Legend

 Citrus County Boundary

 Incorporated Area

Aquifer Recharge/Discharge

 High Recharge

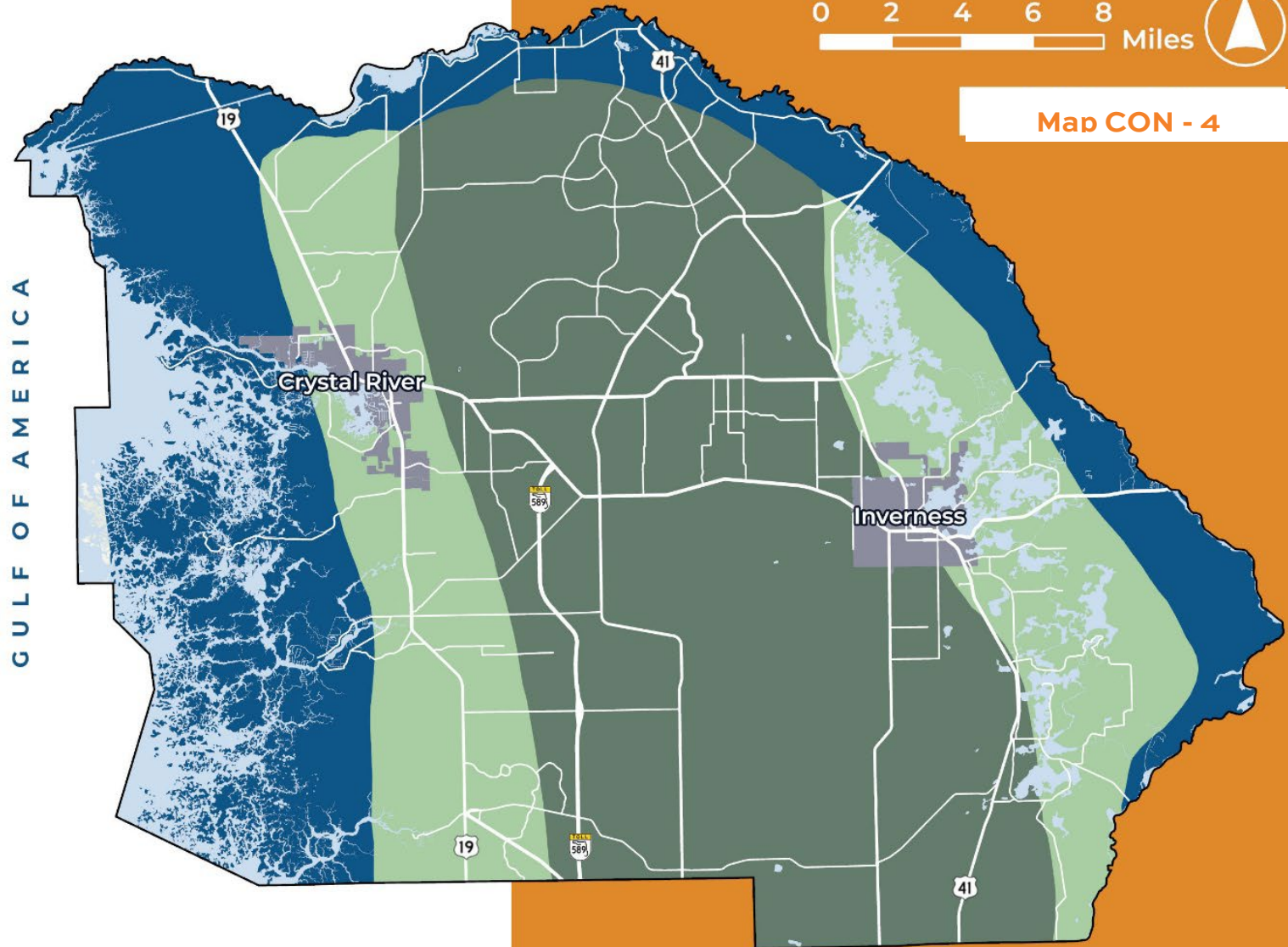
 Medium Recharge

 Discharge

AQUIFER RECHARGE



Map CON - 4



Legend

□ Citrus County Boundary

■ Incorporated Area

Land Use / Land Cover

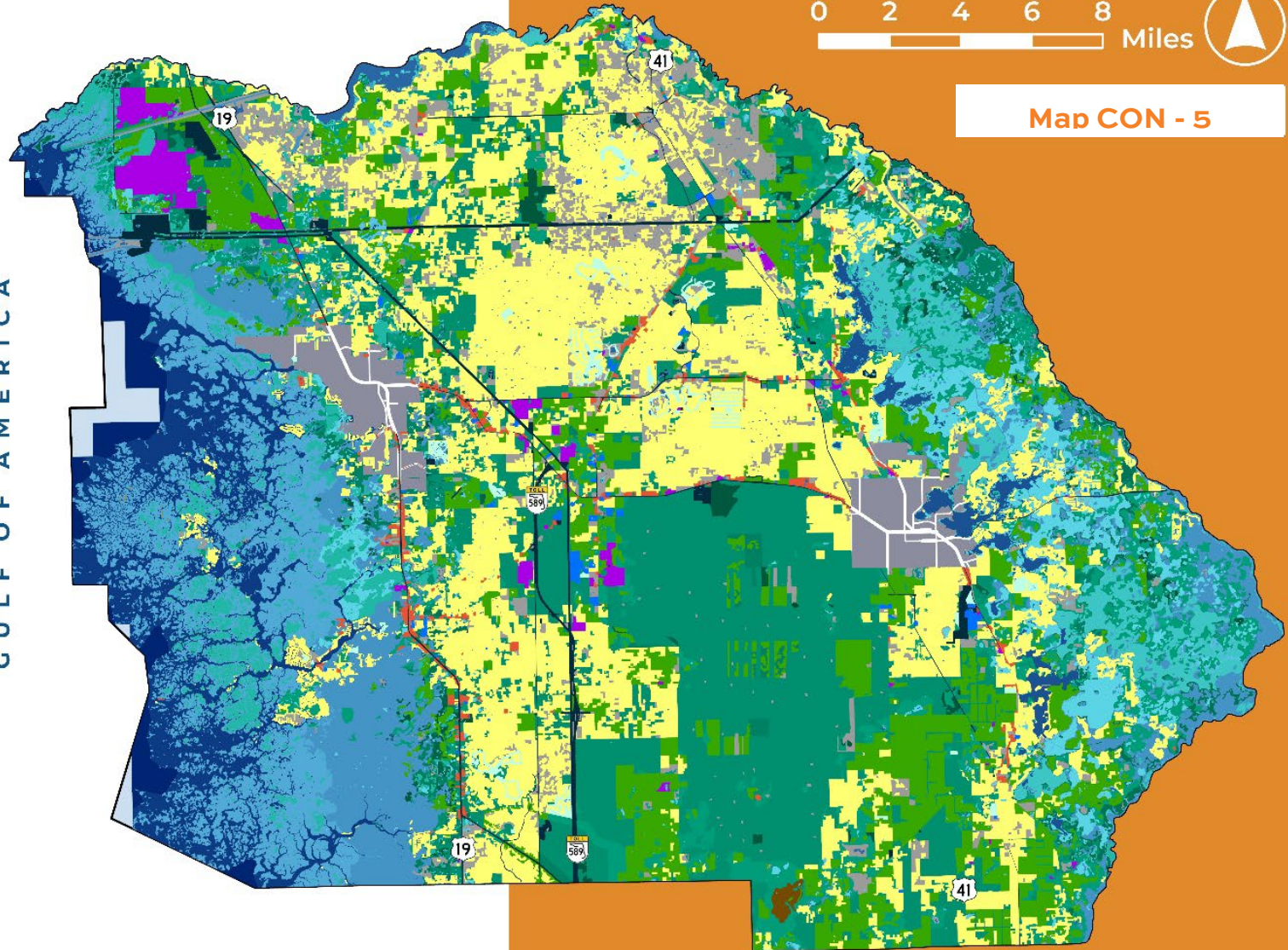
- Agriculture
- Residential
- Commercial
- Institutional
- Industrial
- Recreational
- Utilities and Infrastructure
- Disturbed and Open Land
- Herbaceous
- Shrub and Brushland
- Mixed Rangeland
- Cypress
- Pine Flatwoods
- Longleaf Pine - Xeric Oak
- Upland Coniferous Forest
- Upland Hardwood Forest
- Wetland Coniferous Forest
- Wetland Forested Mixed
- Wetland Hardwood Forests
- Vegetated Non-Forested Wetlands
- Emergent Aquatic Vegetation
- Freshwater Marshes
- Mangrove Swamps
- Bay Swamps
- Wet Praries
- Saltwater Marshes
- Stream and Lake Swamps
- Intermittent Ponds
- Reservoirs
- Lakes
- Bays and Estuaries
- Gulf of America
- Reclaimed Land
- Salt Flats
- Beaches other than Swimming
- Sand other than Beaches

LAND USE / LAND COVER



Map CON - 5

GULF OF AMERICA



Legend

 Citrus County Boundary

 Incorporated Area

Managing Agency

 US Fish and Wildlife Service

 Florida Department of Environmental Protection

 Florida Fish and Wildlife Conservation Commission

 Florida Forest Service

 Southwest Florida Water Management District

 Citrus County

 North Florida Land Trust

 EarthBalance

 Tampa Bay Conservancy, Inc.

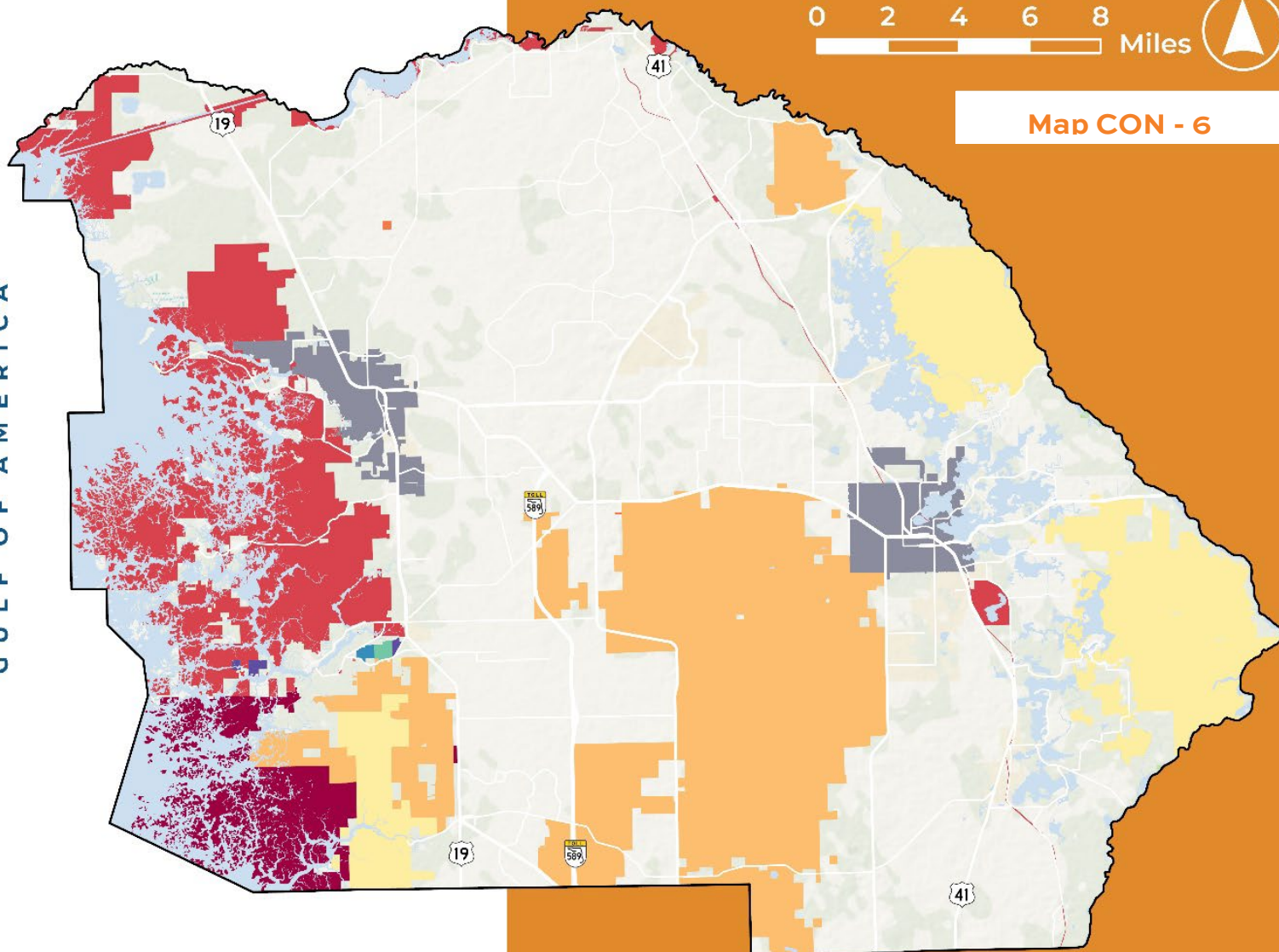
 Terra Blue Environmental

GULF OF AMERICA

CONSERVATION AREAS



Map CON - 6



Legend

 Citrus County Boundary

 Incorporated Area

Soil Permeability

 Excessively Drained

 Moderately Well Drained

 Well Drained

 Somewhat Poorly Drained

 Poorly Drained

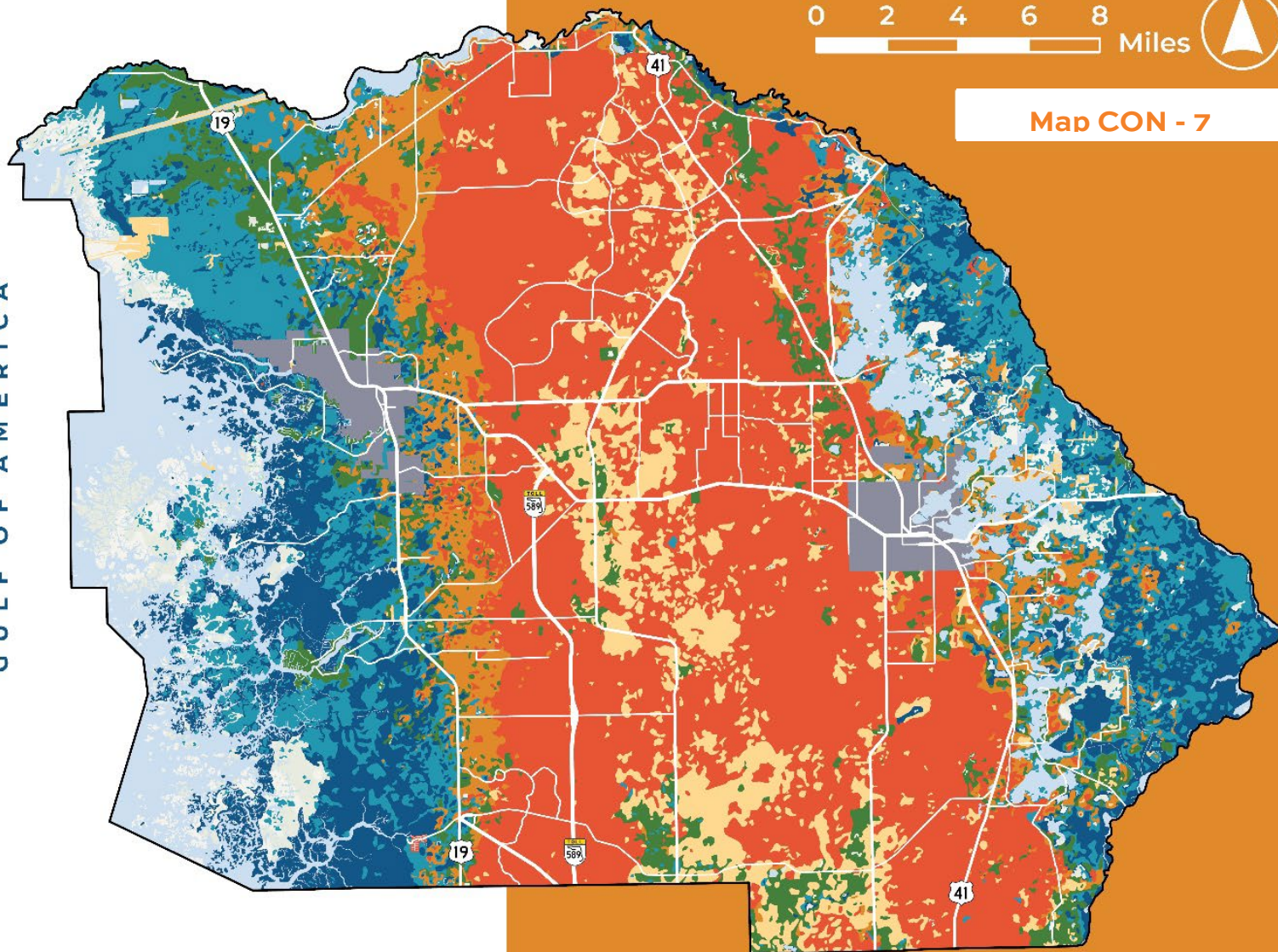
 Very Poorly Drained

SOIL PERMEABILITY

0 2 4 6 8 Miles 

Map CON - 7

GULF OF AMERICA



Legend

 Citrus County Boundary

 Incorporated Area

Mine

 Crystal River Quarry

 Crystal River Storage
Gypsum FAC.

 Inglis Quarry

 Inglis Quarry Barge Canal

 Lecanto Mine

 Maylen Mine

 Nature Coast Mine

 P&D Holdings, LLC Mine

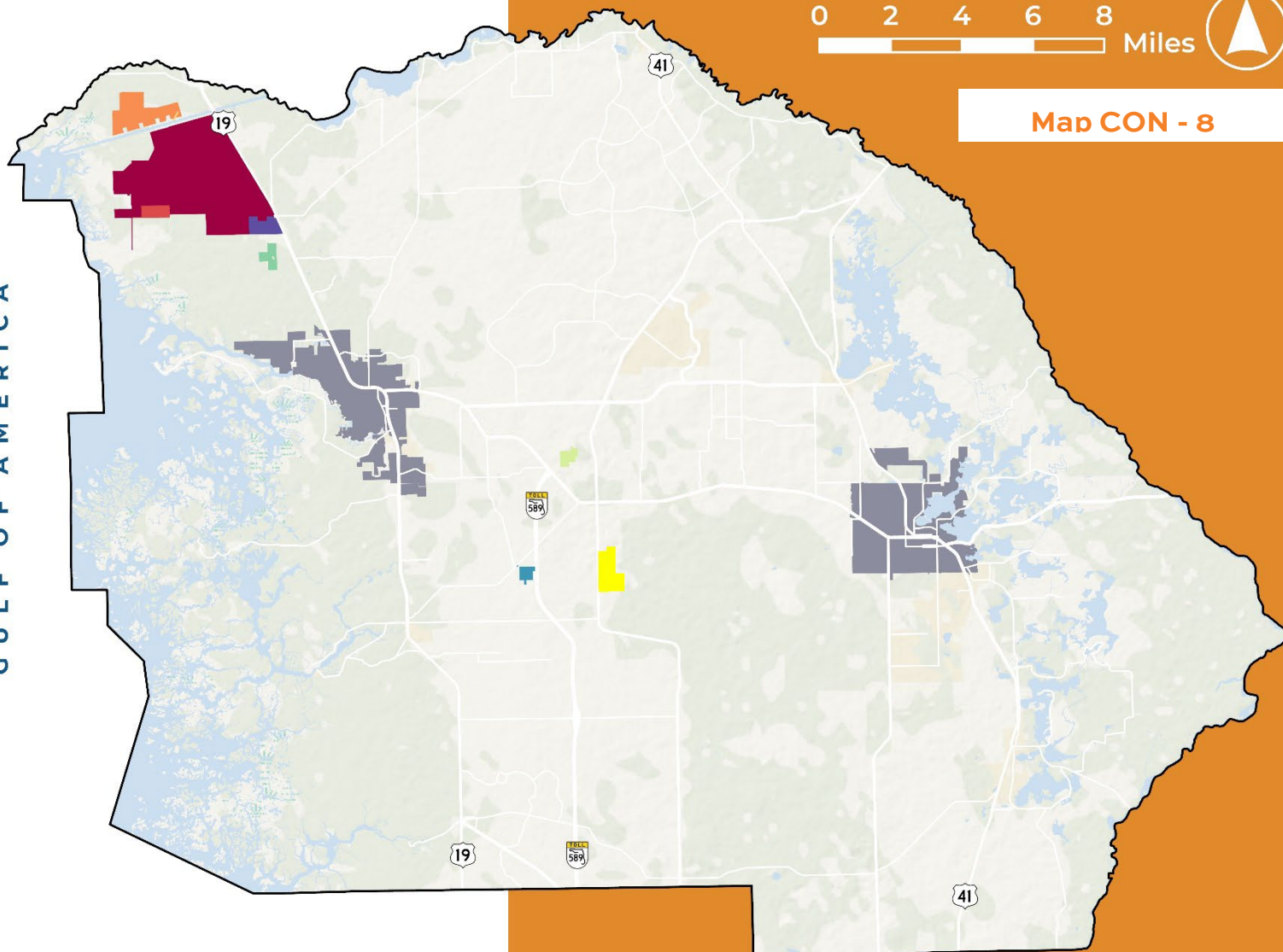
 Red Level Mine

MINING SITES



Map CON - 8

GULF OF AMERICA



Legend

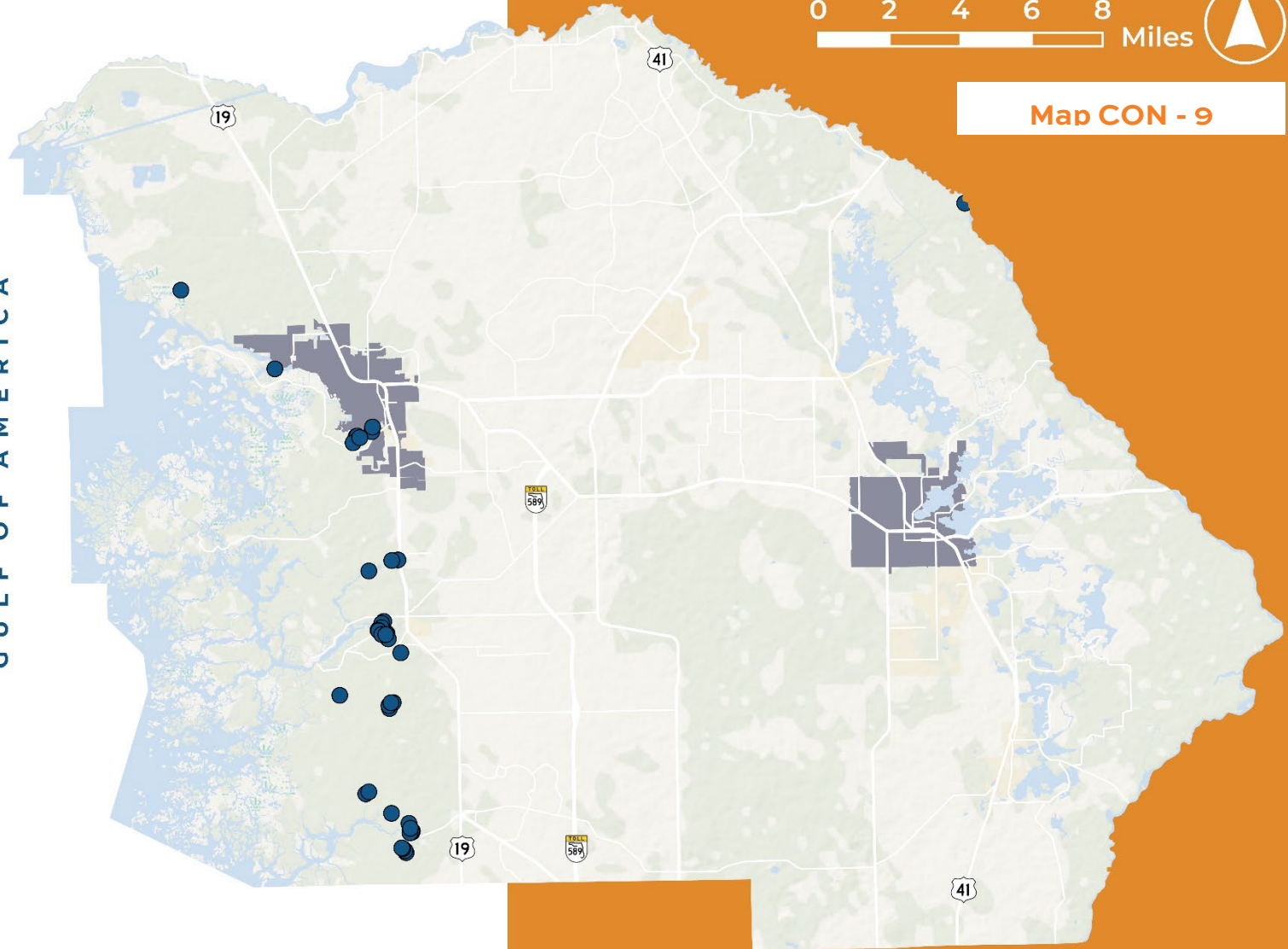
-  Incorporated Area
-  Spring Location

SPRING LOCATIONS



Map CON - 9

GULF OF AMERICA



Legend

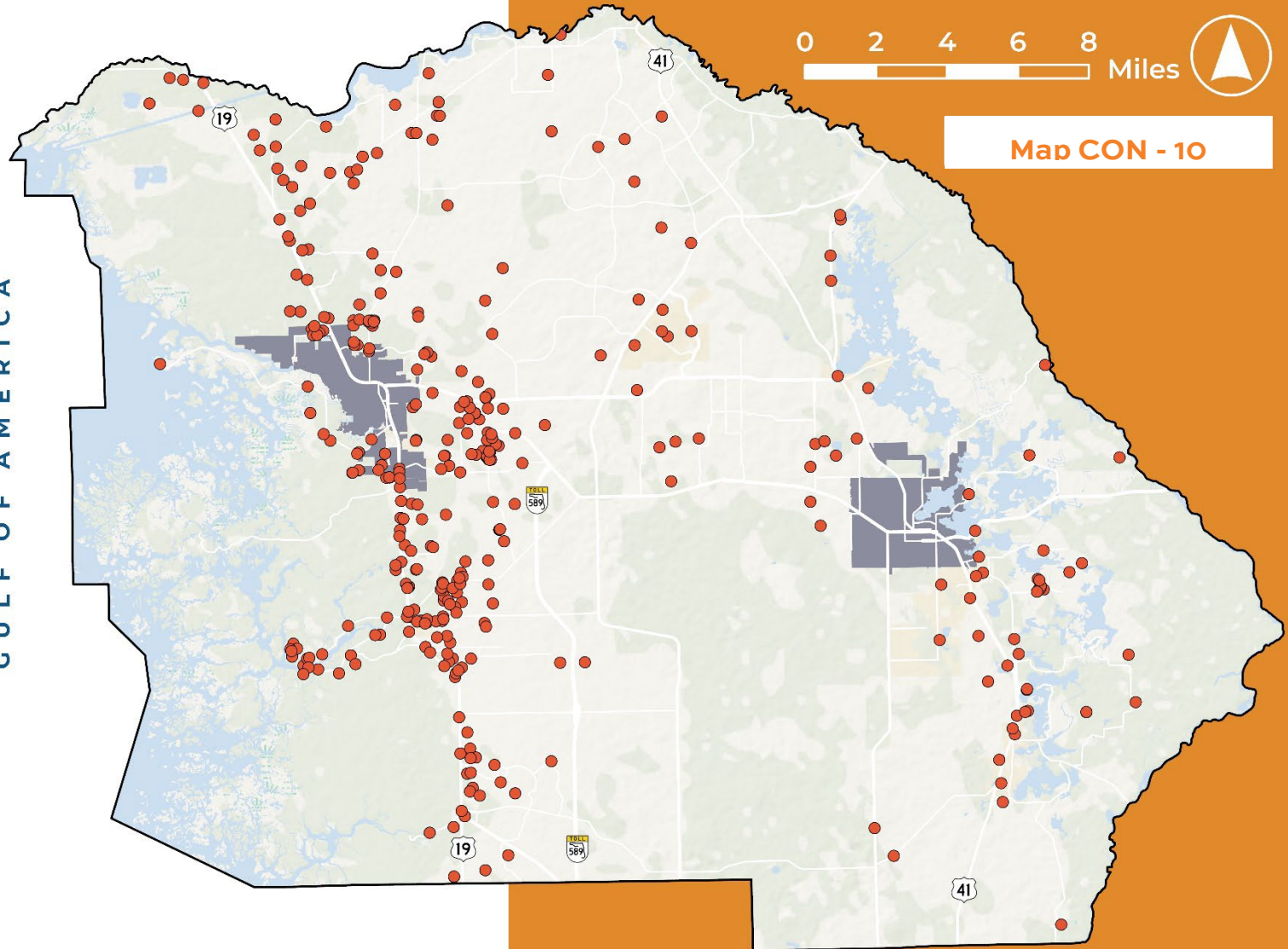
-  Citrus County Boundary
-  Incorporated Area
-  Reported Sinkhole

REPORTED SINKHOLES



Map CON - 10

GULF OF AMERICA



Legend

 Citrus County Boundary

 Incorporated Area

FEGN Priority

 Priority 1

 Priority 2

 Priority 3

 Priority 4

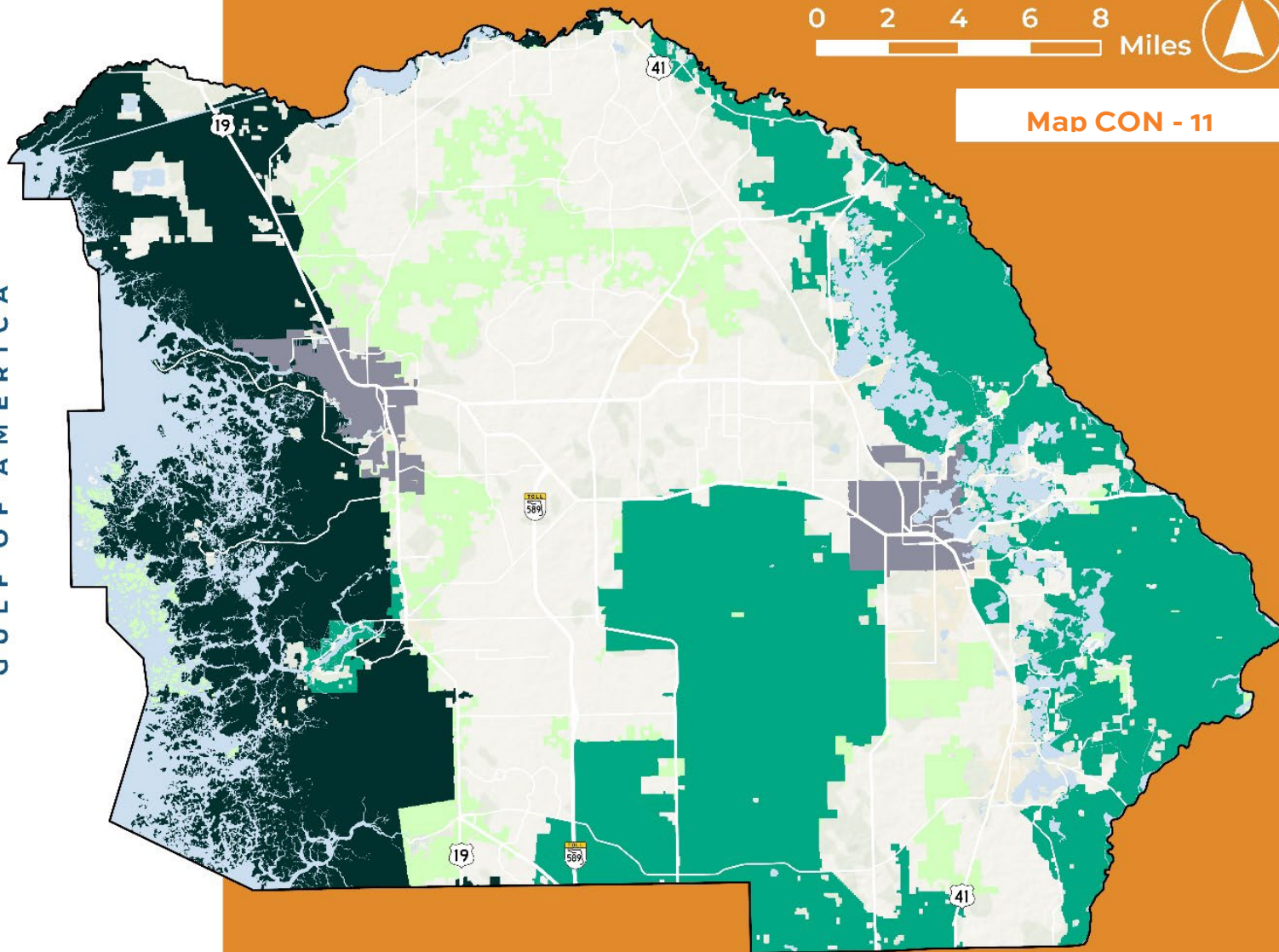
 Priority 5

FLORIDA ECOLOGICAL GREENWAYS NETWORK



Map CON - 11

GULF OF AMERICA



Legend

 Citrus County Boundary

 Incorporated Area

Florida Wildlife Corridor

 Opportunity Area

Conservation Land

 Federal

 State

 Local

 Private

FLORIDA WILDLIFE CORRIDOR



Map CON - 12

GULF OF AMERICA

