

Tuesday, July 20, 2021

ENVIRONMENTAL ASSESSMENT

Project Location: 594 Spinnaker Drive Island Collier County FL 34145
Parcel No. 58049320007 Marco Beach Unit 12 Block 389 Lot 2

Description This residential, undeveloped property and is approximately 0.33 acres. Located to the north is an undeveloped residential property with similar habitat with Gopher Tortoise and their burrows present; to the south is an existing house; to the west is public land owned by Collier County Government consisting of mangrove wetland that transitions to beach and lagoon habitat; and to the east is the public roadway, Spinnaker Drive, maintained by the City of Marco Island.

Weather The survey was conducted on Tuesday, July 20, 2021 from 8-1030 AM with 86 degrees Fahrenheit (78/86F); partly cloudy to sunny skies; southeast wind at 6 mph; 15% precipitation; and 74% humidity.

Method 100% pedestrian survey of the 0.33-acre area, walking five (5) belt transects from east to west at approximately 20-foot widths, meandering due to dense vegetation and topography. 100% of the property was observed.

Soil Type Natural Resources Conservation Services (NRCS) National Cooperative Soil Survey describes the soils on this property having upland soil with Soil Type 35: "*St. Augustine, organic substratum-Urban land complex, 0 to 2 percent slopes.*" This soil type is found typically on marine terraces and has a depth to water table of 18-42-inches. The property was previously filled for development and has a concrete seawall along the rear boundary.

Habitat & Vegetative Cover The habitat is described previously disturbed, urban property. The front third area of the property is miscellaneous grasses and legumes, routinely mowed with stands of vine covered Wire Grass, miscellaneous grasses and legumes and a Gumbo Limbo in the northeast corner. Mid property, dense Coinvine and Wire Grass cover approximately one third of the area. Brazilian Pepper, Gumbo Limbo and Sea Grape trees cover the rear third of the property. There is a concrete seawall along the rear/west side of the property. Red and Black mangrove are present west of the seawall and property. There are no wetlands, habitat, substrates or vegetation typical of wetlands, on the property.

Listed Species Wildlife Survey Thirteen (13) Gopher Tortoise (*Gopherus polyphemus*) Potentially Occupied (PO) burrows, 10 Adult, 2 SubAdult and 1 Juvenile burrows, were documented onsite by flags, photographed and latitude/longitude collected and are depicted in the below aerial map. 13 PO burrows equates to up to seven (7) Gopher Tortoise burrows on the property. There is evidence throughout the property of possibly old burrows that are now naturally filled/eroded, Abandoned (AB) burrows, most likely due to mowing, sandy soils and topography of the property. Scutes and part of a tortoise carapace were observed, evidence of an adult mortality.

Other Wildlife No other listed species or their burrows, cavities or nests were observed. Other wildlife, including Brown Anole (*Anolis sagrei*), Marsh Rabbit, (*Sylvilagus palustris*), Loggerhead Shrike (*Lanius ludovicianus*), Gray Catbird (*Dumetella carolinensis*) and miscellaneous insects were observed throughout the property.

Aerial Map of 594 Spinnaker Drive



^ North
--- Property Boundary
● Potentially Occupied (PO) Burrows

Gopher Tortoise Burrow Information

<u>Name</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Description</u>
PO-01	25.95134	-81.74574	Potentially Occupied (PO); Adult; 8"width opening; intact; front/SE corner setback; under vines
PO-02	25.95112	-81.74589	PO; Adult; 11"width opening; intact; tracks; under Brazilian Pepper & Sea Grape trees, south, rear
PO-03	25.9512	-81.74585	PO; Adult; 20" width opening; intact; tracks; fresh soil; under Coinvine
PO-04	25.95119	-81.74583	PO; Adult; 24" width opening; intact; tracks; fresh soil; under Coinvine
PO-05	25.95118	-81.74585	PO; Adult; 24" width opening; intact; tracks; fresh soil; under Coinvine; mid property
PO-06	25.95119	-81.74589	PO; Adult; 24" width opening; intact; tracks; fresh soil; under Coinvine; mid property
PO-07	25.95126	-81.74585	PO; SubAdult; 5-6"width opening; intact; tracks; under Wire Grassess; mid property
PO-08	25.95127	-81.74589	PO; Adult; 24" width opening; intact; tracks; fresh soil; under Coinvine; mid property
PO-09	25.95127	-81.74587	PO; Adult; 12" width opening; intact; tracks; fresh soils; under Wire Grasses;mid property
PO-10	25.95126	-81.7459	PO; Adult; 24" width opening; intact; tracks; fresh soil; under Coinvine; mid property
PO-11	25.95124	-81.74592	PO; Adult; 24" width opening; intact; tracks; fresh soil; under Coinvine; mid property
PO-12	25.95127	-81.74574	PO; SubAdult; 6"width opening; intact; tracks; under Wire Grassess; mid & north side property
J-01	25.95132	-81.74572	Juvenile; 2" width opening; intact; front/SE corner area; under vines, near PO-01
AB-01	25.95123	-81.74585	Abandoned Burrow; remnants of mound; no opening; naturally eroded/filled
AB-02	25.95138	-81.74595	Abandoned Burrow; remnants of mound; no opening; naturally eroded/filled

Photos



PO-01



PO-02



PO-03



PO-04



PO-05



PO-06



PO-07



PO-08



PO-09



PO-10



PO-11



PO-12



J-01



Gopher Tortoise



Scutes, part of Carapace

Development Requirements pertaining to Environmental Provisions

Gopher Tortoise are a listed threatened species in Florida and under the protection/jurisdiction of the Florida Fish and Wildlife Conservation Commission (FWC), Florida Administrative Code, Rule 68A-27.003 and 68A-27.007. Locally the City of Marco Island protects the Gopher Tortoise under City of Marco Island Code of Ordinances, Chapter 18, Article V. Endangered, Threatened and Listed Species Protection. The protection includes the animal as well as its habitat, including the burrow. If development cannot be avoided within 25-foot radius from a burrow opening, a Florida Fish and Wildlife Conservation Commission (FWC) permit will be required to capture and relocate all tortoises to an FWC approved recipient site and collapse the burrows prior to development.

Development will require a City of Marco Island building permit. For the approval/issuance of the City of Marco Island building permit, the FWC Gopher Tortoise Permit will be required. For this property with 13 burrows, the FWC permit will allow the capture and relocation of up to seven (7) Gopher Tortoise to an FWC approved recipient site and collapse/fill of the thirteen (13) Gopher Tortoise burrows. When the capture/relocation of the tortoises is completed, development can initiate.

Prior to development, invasive vegetation species can be removed with a City of Marco Island Vegetation Trimming and Removal Permit. Invasive vegetative species on this property consists of Brazilian Pepper and Virginia Creeper vine. This report will be required for that type of permit. All heavy equipment, vehicles, material, will be required to stay 25 feet in all directions from the Gopher Tortoise burrows to ensure they are not collapsed or negatively impacted. No substrate within the required 25-foot radius of the burrow opening can be disturbed. The Sea Grape, Gumbo Limbo, Wire Grass, are native species and cannot be removed prior to a City of Marco Island Building Permit is issued.

A cost estimate to capture/relocate up to 7 Gopher Tortoises and collapse/remove the 13 burrows with an FWC permit prior to development is attached to this report.

I certify the environmental survey and assessment for this property were performed in conformance of Florida Fish & Wildlife Conservation Commission Gopher Tortoise Guidelines and meets the standards of the City of Marco Island development application requirements. The reported information is accurate as to the date of the survey and report provided. If additional environmental information is required for this property, please contact me at your convenience.

Respectfully,

Nancy J. Richie

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Marine Biologist

FWC Registered Agent RAG-18-00022

FWC Gopher Tortoise Agent GTA-15-00037C

NMFS/NOAA Protected Species Observer

UF Master Naturalist

Island Environmental & Marine Services, LLC

553 Somerset Court Marco Island, FL 34145

239-404-5766 nancyjrichie@gmail.com