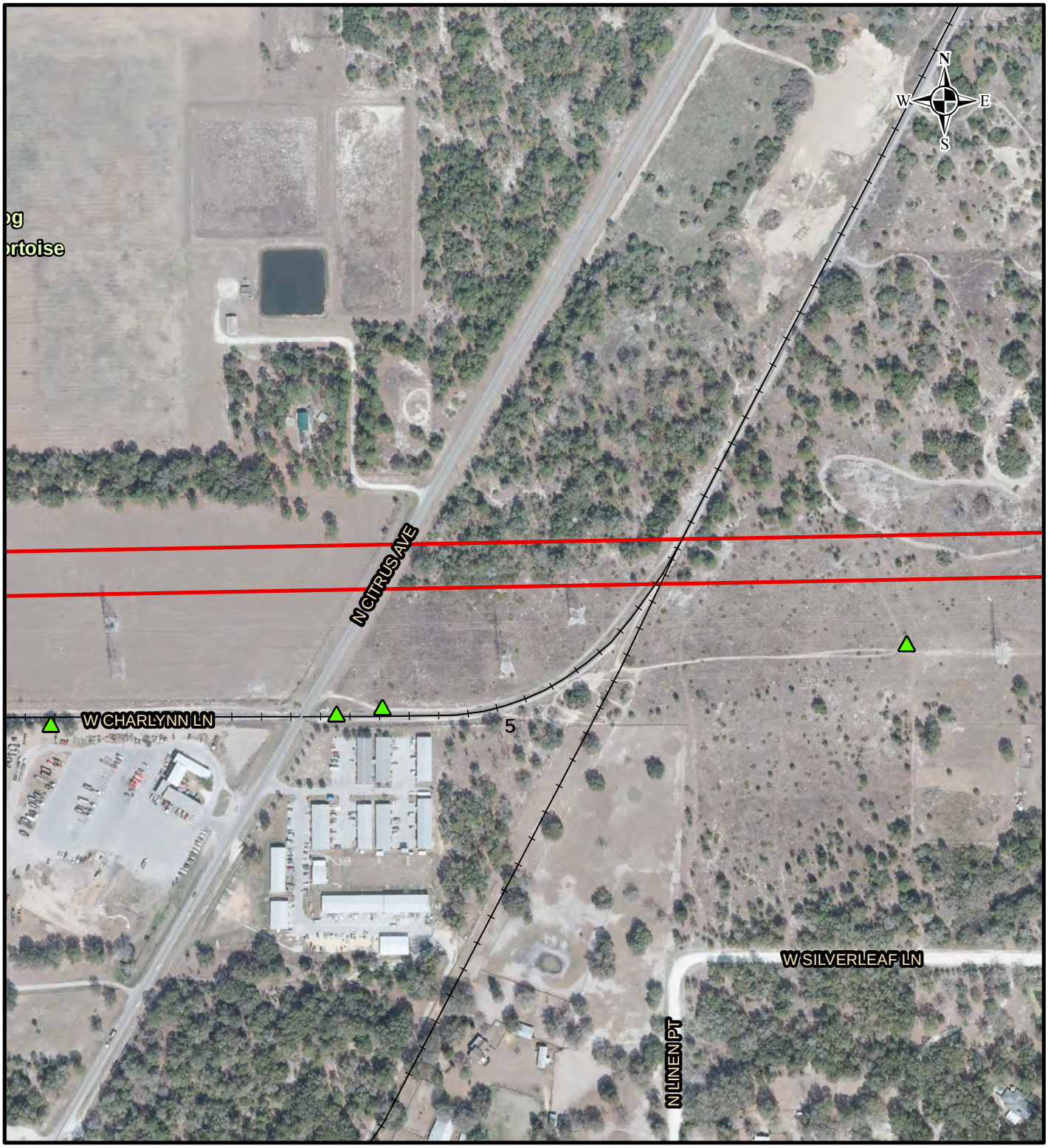

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LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

GOLDER OBSERVED SPECIES

- Gopher Tortoise
- Eastern Indigo Snake
- Sherman's Fox Squirrel
- Long Spurred Mint
- Southeastern American Kestrel
- Florida Sandhill Crane
- Florida Scrub Jay
- Bald Eagle
- Bald Eagle Nest (Pot.)

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

Progress Energy

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LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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Progress Energy

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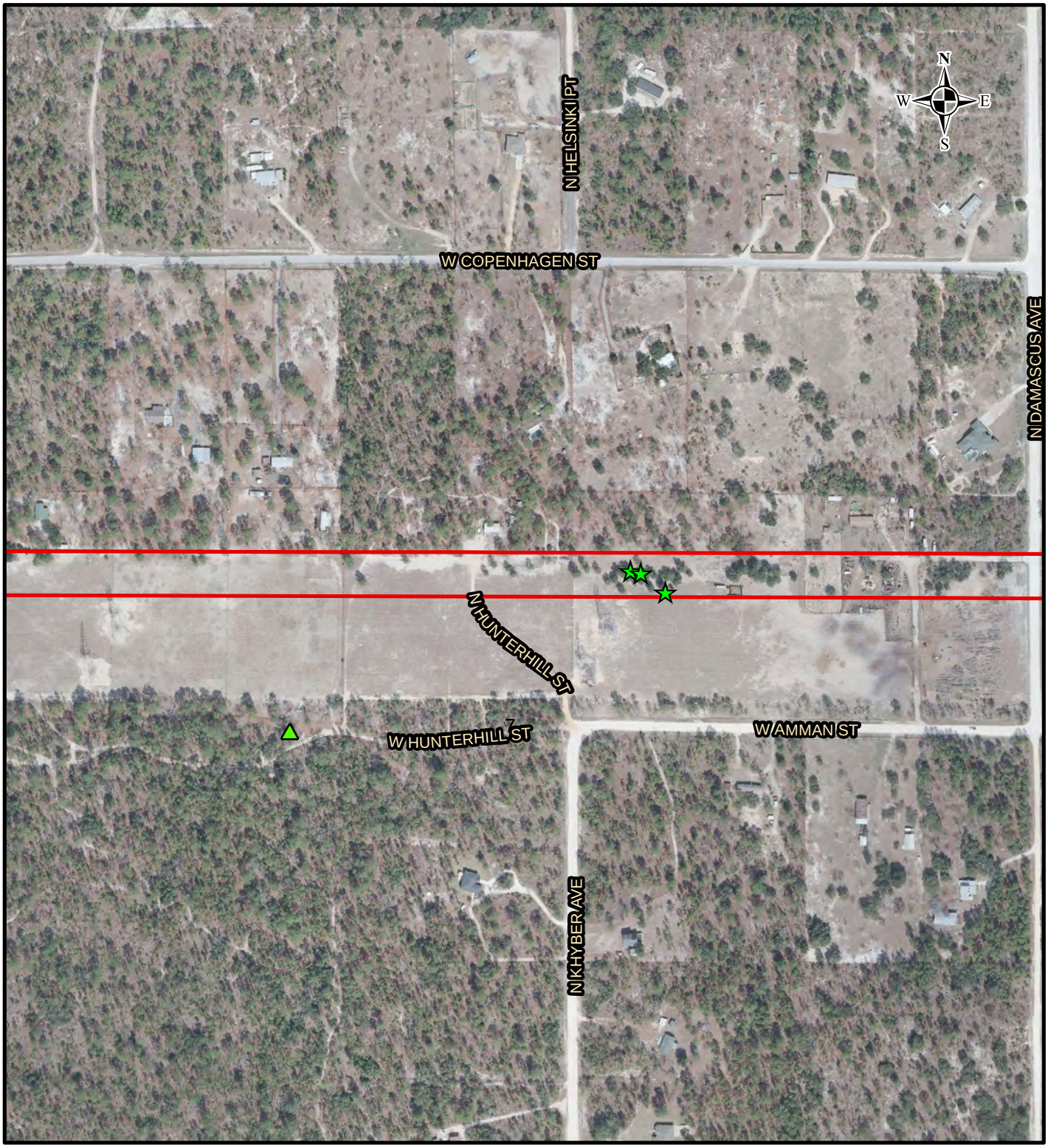

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LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

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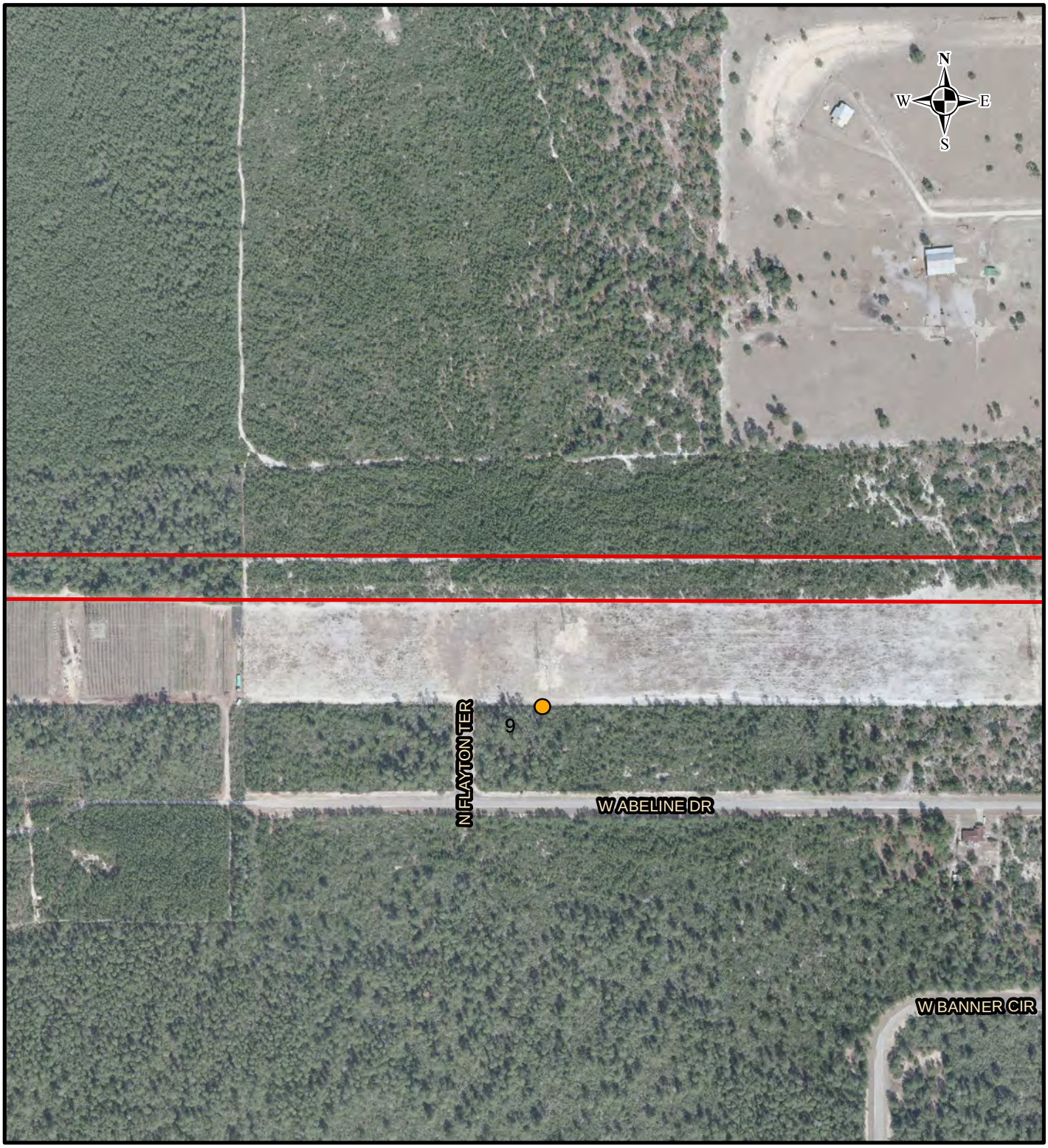

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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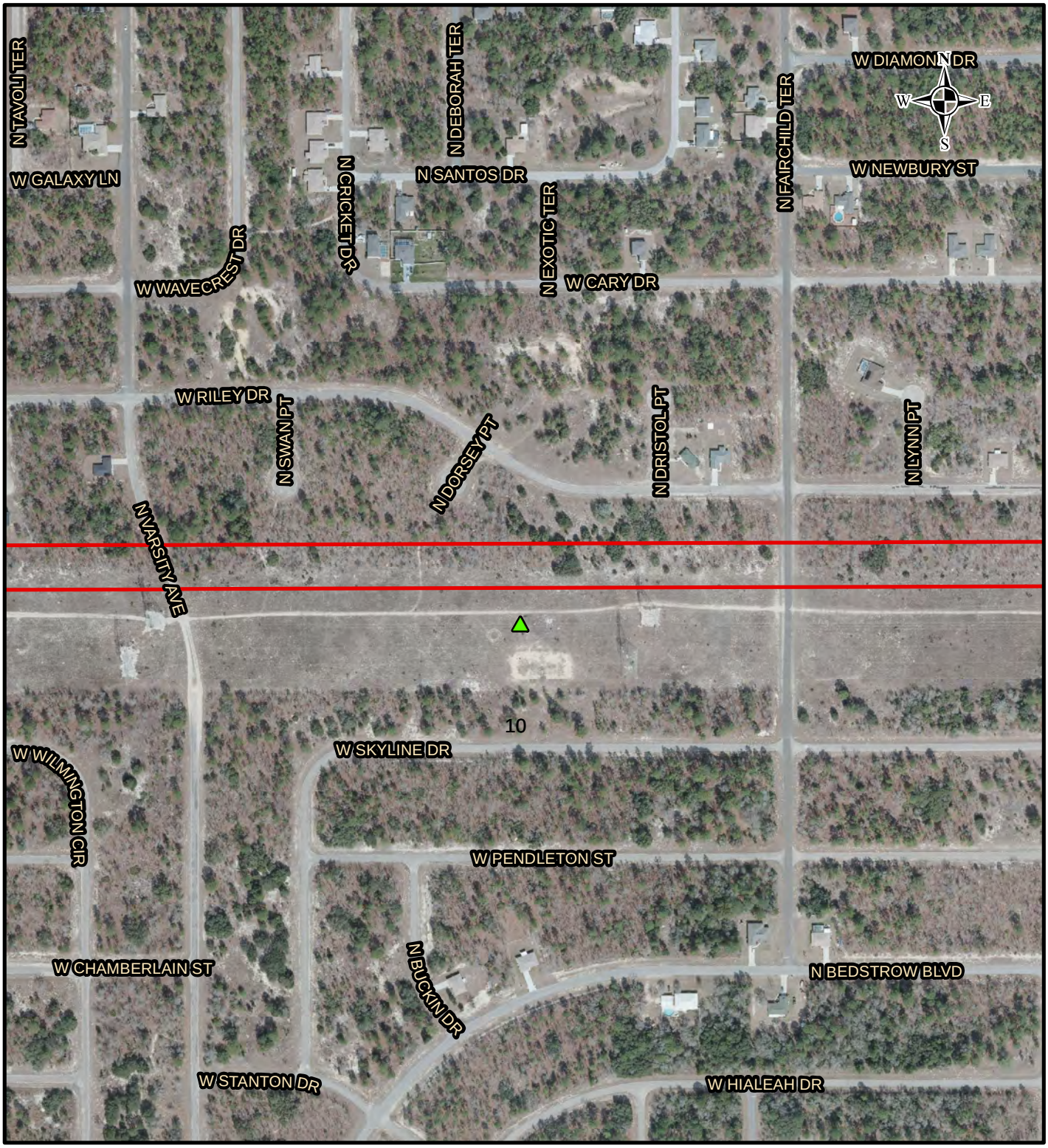

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LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

Progress Energy

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LEGEND

- LCFS Preferred Right-of-Way
- Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

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LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
LISTED SPECIES MAP

Progress Energy

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LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

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Feet

LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

Progress Energy

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LEGEND

LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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Feet

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LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

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LCFS Preferred Right-of-Way

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LEVY NUCLEAR PLANT

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LEGEND

LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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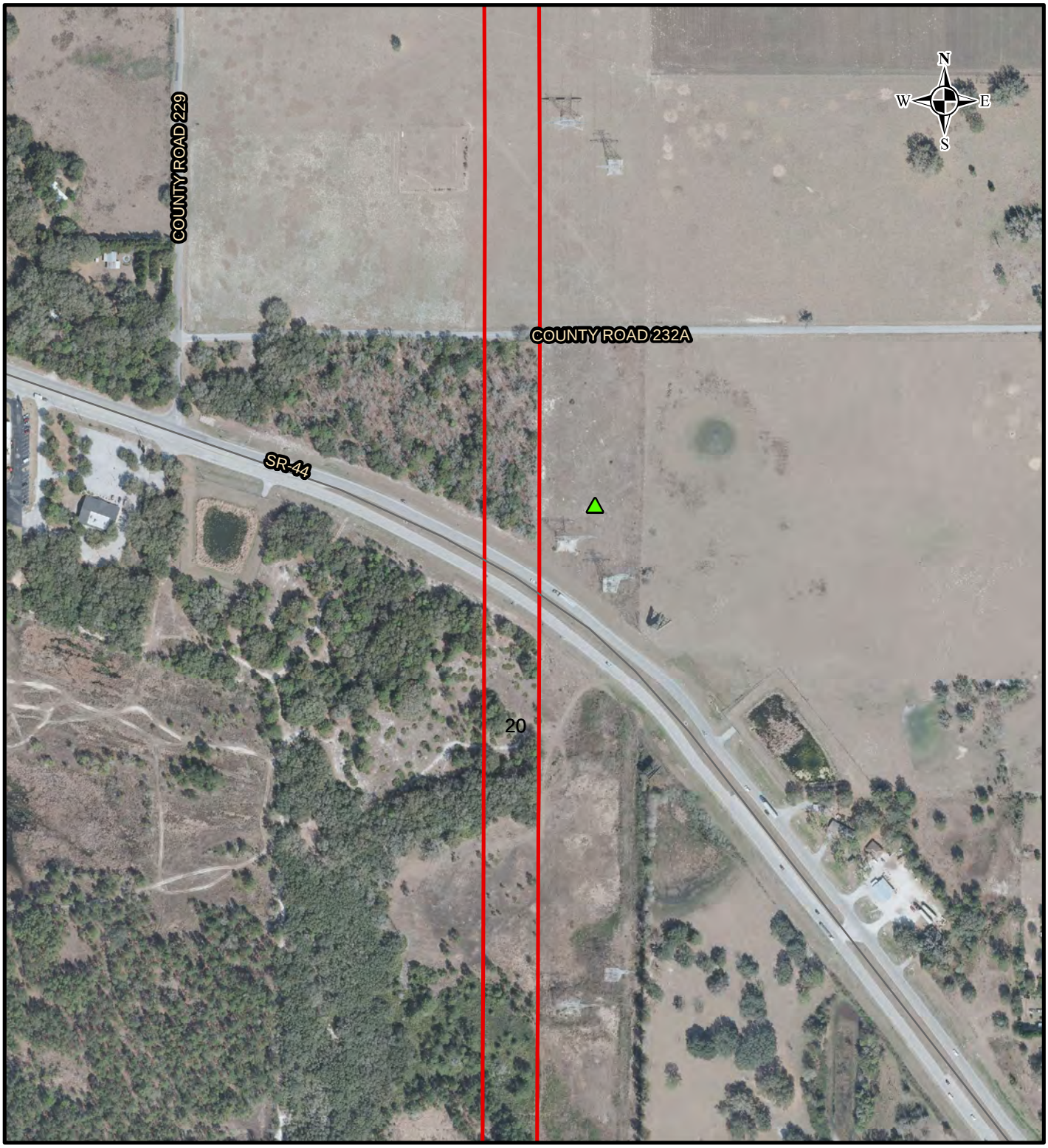

LEGEND

LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
LISTED SPECIES MAP

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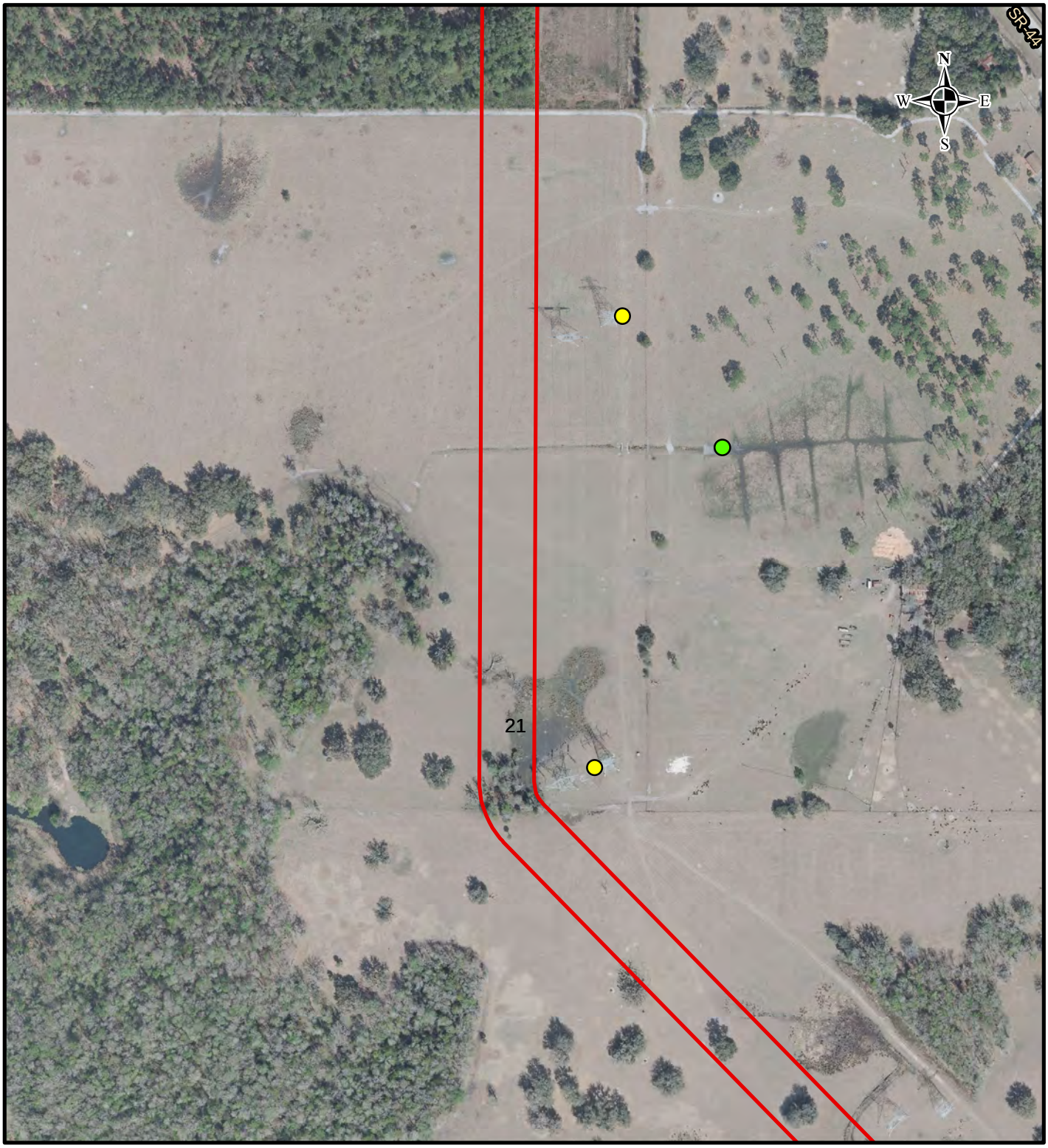

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LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
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LCFS Preferred Right-of-Way

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Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; Listed Species Data: Florida Natural Areas Inventory, 2006 and Golder Observed, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
LISTED SPECIES MAP

Progress Energy

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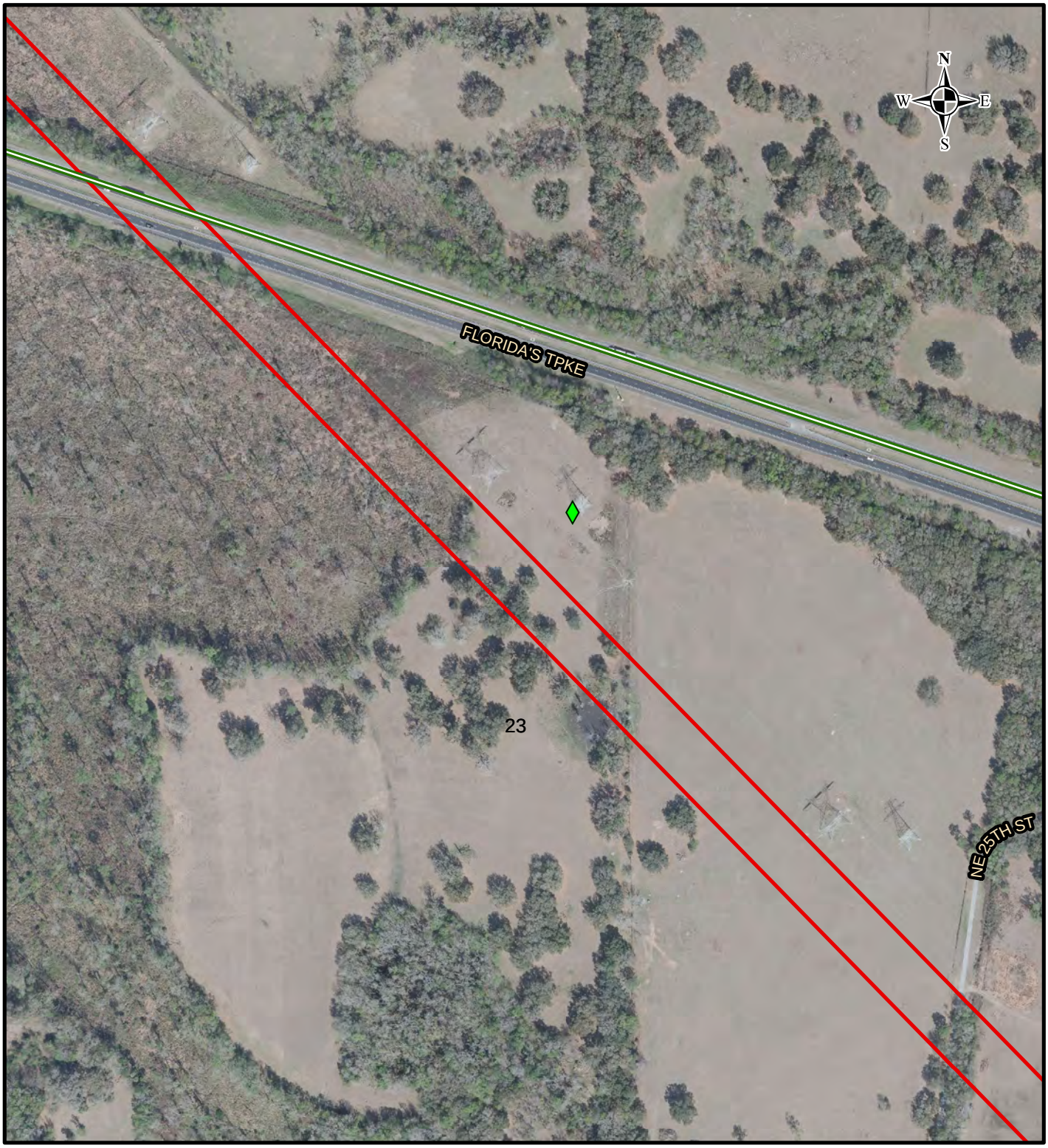

LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

GOLDER OBSERVED SPECIES

- Gopher Tortoise
- Eastern Indigo Snake
- Sherman's Fox Squirrel
- Long Spurred Mint
- Southeastern American Kestrel
- Florida Sandhill Crane
- Florida Scrub Jay
- Bald Eagle
- Bald Eagle Nest (Pot.)

400 200 0 400 Feet

NOTE: Please refer to Index page for the portions of the Levy - Central Florida South line that are within Wood Stork Core Foraging Areas.

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

Progress Energy

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400 200 0 400
Feet

LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

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400 200 0 400 Feet

LEGEND

LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH LISTED SPECIES MAP

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LCFS Preferred Right-of-Way

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
LISTED SPECIES MAP

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LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
LISTED SPECIES MAP

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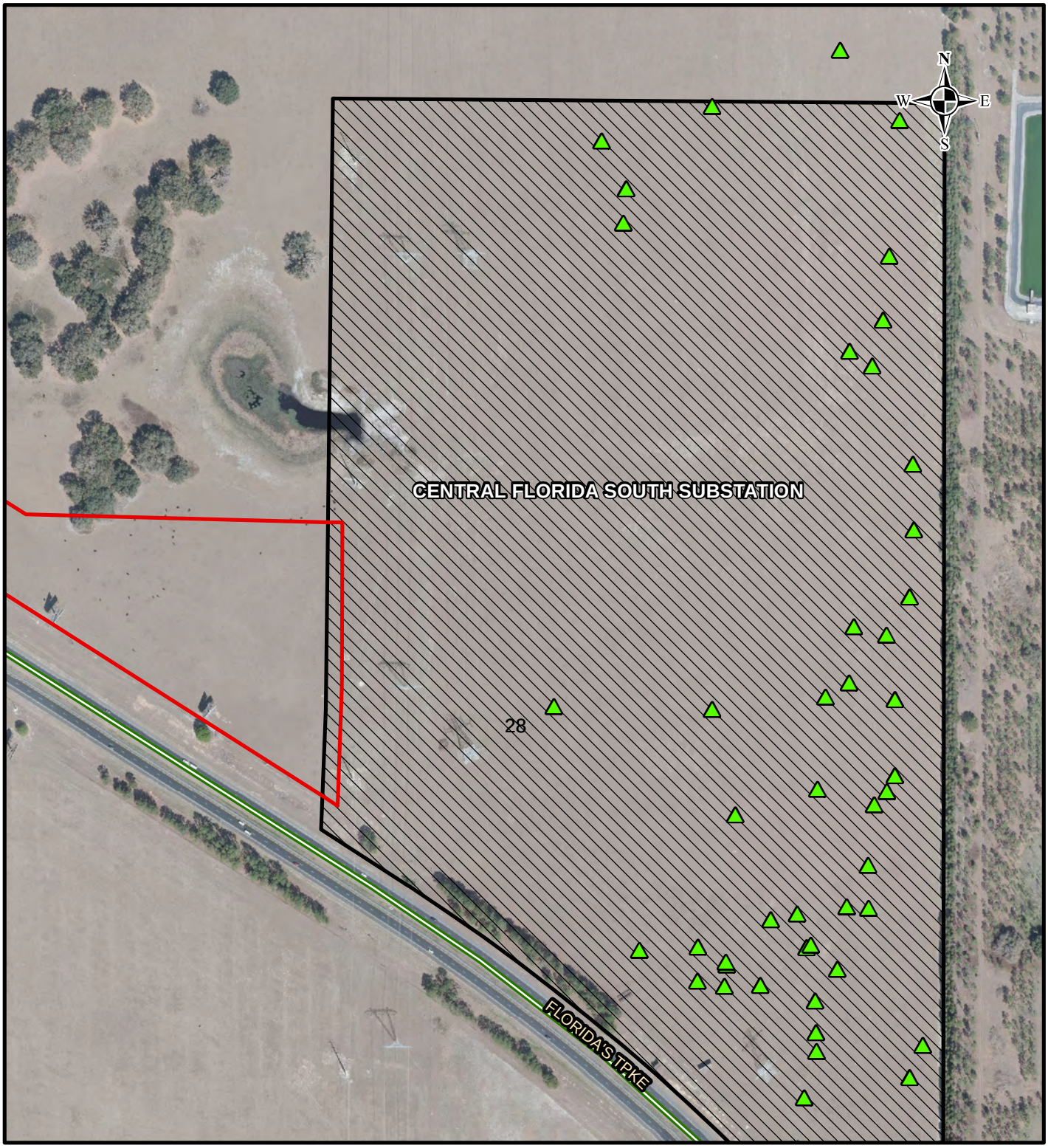

400 200 0 400
Feet

LEGEND

LCFS Preferred Right-of-Way

Florida Natural Areas Inventory Occurrence

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
LISTED SPECIES MAP

Progress Energy

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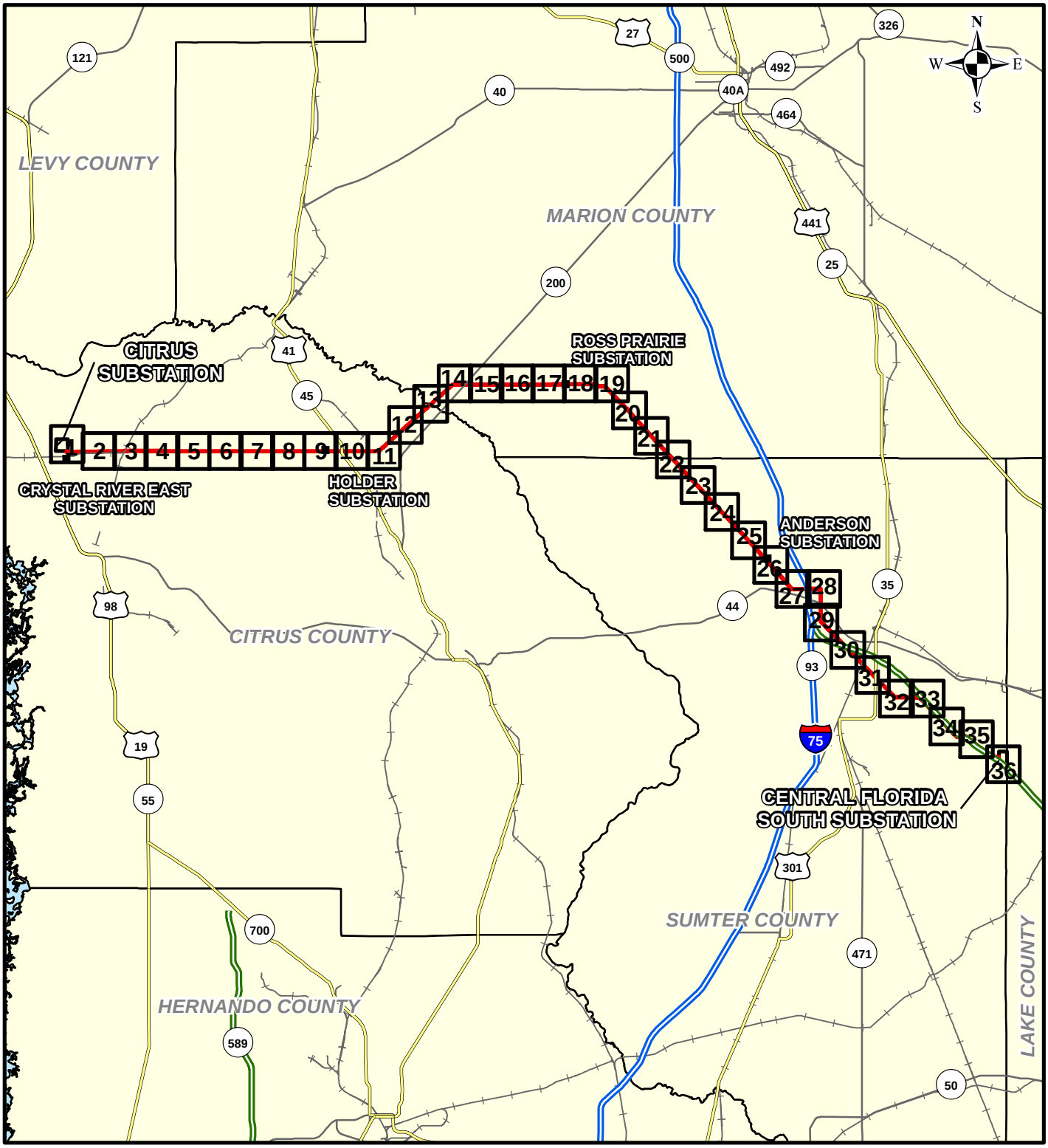

LEGEND

- Interstate
- Toll Road
- US Road
- State Road
- Railroad
- LCFS Preferred Right-of-Way
- County Boundary

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; County Boundary: U.S. Census Bureau, 2000

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
SOILS MAP

Progress Energy

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FIGURE 5
LEVY - CENTRAL FLORIDA SOUTH SOIL IDENTIFICATION TABLE

SOIL ID	DESCRIPTION	COUNTY
2	Adamsville fine sand	Citrus
3	Candler fine sand, 0 to 5 percent slopes	Citrus
4	Candler fine sand, 5 to 8 percent slopes	Citrus
5	Basinger fine sand	Citrus
6	Basinger fine sand, depressional	Citrus
7	Myakka fine sand	Citrus
8	Paola fine sand, 0 to 5 percent slopes	Citrus
9	Pompano fine sand	Citrus
10	Pompano fine sand, depressional	Citrus
11	Tavares fine sand, 0 to 5 percent slopes	Citrus
14	Lake fine sand, 0 to 5 percent slopes	Citrus
15	Lake fine sand, 5 to 8 percent slopes	Citrus
16	Arredondo fine sand, 0 to 5 percent slopes	Citrus
17	Arredondo fine sand, 5 to 8 percent slopes	Citrus
20	Pits	Citrus
22	Quartzipsaments, 0 to 5 percent slopes	Citrus
27	Pomello fine sand, 0 to 5 percent slopes	Citrus
28	Redlevel fine sand	Citrus
29	Astatula fine sand, 0 to 5 percent slopes	Citrus
30	Astatula fine sand, 5 to 8 percent slopes	Citrus
35	Sparr fine sand, 0 to 5 percent slopes	Citrus
36	EauGallie fine sand	Citrus
48	Arents, 45 to 65 percent slopes	Citrus
49	Terra Ceia-Okeelanta association, very frequently flooded	Citrus
51	Boca-Pineda, limestone substratum complex	Citrus
53	Boca fine sand	Citrus
54	Apopka fine sand, 0 to 5 percent slopes	Citrus
55	Udorthents, 0 to 5 percent slopes	Citrus
56	Lake, clayey surface, 0 to 5 percent slopes	Citrus
59	Boca fine sand, depressional	Citrus
60	Broward fine sand	Citrus
99	Water	Citrus
2	Adamsville sand, 0 to 5 percent slopes	Marion
3	Anclote sand, depressional	Marion
4	Anclote-Tomoka complex, depressional	Marion
5	Apopka sand, 0 to 5 percent slopes	Marion
11	Pedro-Arredondo complex, 0 to 5 percent slopes	Marion
13	Astatula sand, 0 to 5 percent slopes	Marion
14	Astatula sand, 5 to 12 percent slopes	Marion

SOIL ID	DESCRIPTION	COUNTY
22	Candler sand, 0 to 5 percent slopes	Marion
23	Candler sand, 5 to 12 percent slopes	Marion
25	Eaton loamy sand	Marion
26	Electra sand, 0 to 5 percent slopes	Marion
40	Holopaw sand	Marion
42	Jumper fine sand, 0 to 5 percent slopes	Marion
43	Kanapaha fine sand, 0 to 5 percent slopes	Marion
48	Lynne sand	Marion
54	Paisley loamy fine sand	Marion
59	Placid-Pompano-Pomona complex	Marion
61	Pomona sand	Marion
62	Pompano sand	Marion
63	Pompano fine sand, depressional	Marion
64	Samsula-Martel complex, depressional	Marion
65	Sparr fine sand, 0 to 5 percent slopes	Marion
69	Tavares sand, 0 to 5 percent slopes	Marion
99	Water	Marion
1	Arredondo fine sand, 0 to 5 percent slopes	Sumter
3	Astatula fine sand, rolling	Sumter
4	Candler sand, 0 to 5 percent slopes	Sumter
5	Candler sand, 5 to 8 percent slopes	Sumter
6	Kendrick fine sand, 0 to 5 percent slopes	Sumter
8	Lake fine sand, 0 to 5 percent slopes	Sumter
9	Paisley fine sand, bouldery subsurface	Sumter
10	Sparr fine sand, 0 to 5 percent slopes	Sumter
11	Millhopper sand, 0 to 5 percent slopes	Sumter
13	Tavares fine sand, 0 to 5 percent slopes	Sumter
14	Lake fine sand, 5 to 8 percent slopes	Sumter
15	Adamsville fine sand, bouldery subsurface	Sumter
16	Apopka fine sand, 0 to 5 percent slopes	Sumter
18	Okeelanta muck	Sumter
19	Apopka fine sand, 5 to 8 percent slopes	Sumter
20	Florahome sand, 0 to 5 percent slopes	Sumter
21	EauGallie fine sand, bouldery subsurface	Sumter
22	Smyrna fine sand	Sumter
24	Basinger fine sand	Sumter
25	Kanapaha sand, bouldery subsurface	Sumter
26	Wabasso fine sand, bouldery subsurface	Sumter
27	Sumterville fine sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
28	Seffner fine sand	Sumter
29	Nittaw muck, frequently flooded	Sumter
30	Placid fine sand, depressional	Sumter
31	Myakka sand	Sumter

SOIL ID	DESCRIPTION	COUNTY
32	Pompano fine sand	Sumter
33	Sparr fine sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
34	Tarrytown sandy clay loam, bouldery subsurface	Sumter
36	Floridana mucky fine sand, depressional	Sumter
37	Astatula fine sand, 0 to 8 percent slopes	Sumter
39	Mabel fine sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
40	Millhopper sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
41	Everglades muck, frequently flooded	Sumter
42	Adamsville fine sand	Sumter
43	Basinger fine sand, depressional	Sumter
44	Oldsmar fine sand, bouldery subsurface	Sumter
45	Electra fine sand, bouldery subsurface	Sumter
46	Ft. Green fine sand, bouldery subsurface	Sumter
47	Okeelanta muck, frequently flooded	Sumter
49	Terra Ceia muck, frequently flooded	Sumter
50	Immokalee sand	Sumter
51	Pits-Dumps complex	Sumter
52	Candler sand, 8 to 12 percent slopes	Sumter
53	Tavares fine sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
54	Monteocha fine sand, depressional	Sumter
55	Pomello fine sand, 0 to 5 percent slopes	Sumter
56	Wabasso fine sand, depressional	Sumter
57	Gator muck, frequently flooded	Sumter
58	Paisley fine sand, depressional	Sumter
59	Arents, organic substratum	Sumter
60	Delray fine sand, depressional	Sumter
61	EauGallie fine sand	Sumter
62	Urban land	Sumter
64	Gator muck	Sumter
65	Candler sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
66	Arredondo fine sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
99	Water	Sumter
1	Sparr sand, 0 to 5 percent slopes	Lake
4	Anclote and Myakka soils	Lake
5	Apopka sand, 0 to 5 percent slopes	Lake
6	Apopka sand, 5 to 12 percent slopes	Lake
8	Candler sand, 0 to 5 percent slopes	Lake
17	Arents	Lake
20	Immokalee sand	Lake
24	Kendrick sand, 0 to 5 percent slopes	Lake
27	Everglades muck, depressional	Lake
28	Myakka sand	Lake
30	Lochloosa sand	Lake

SOIL ID	DESCRIPTION	COUNTY
40	Placid and Myakka sands, depressional	Lake
42	Pompano sand	Lake
45	Tavares sand, 0 to 5 percent slopes	Lake
99	Water	Lake

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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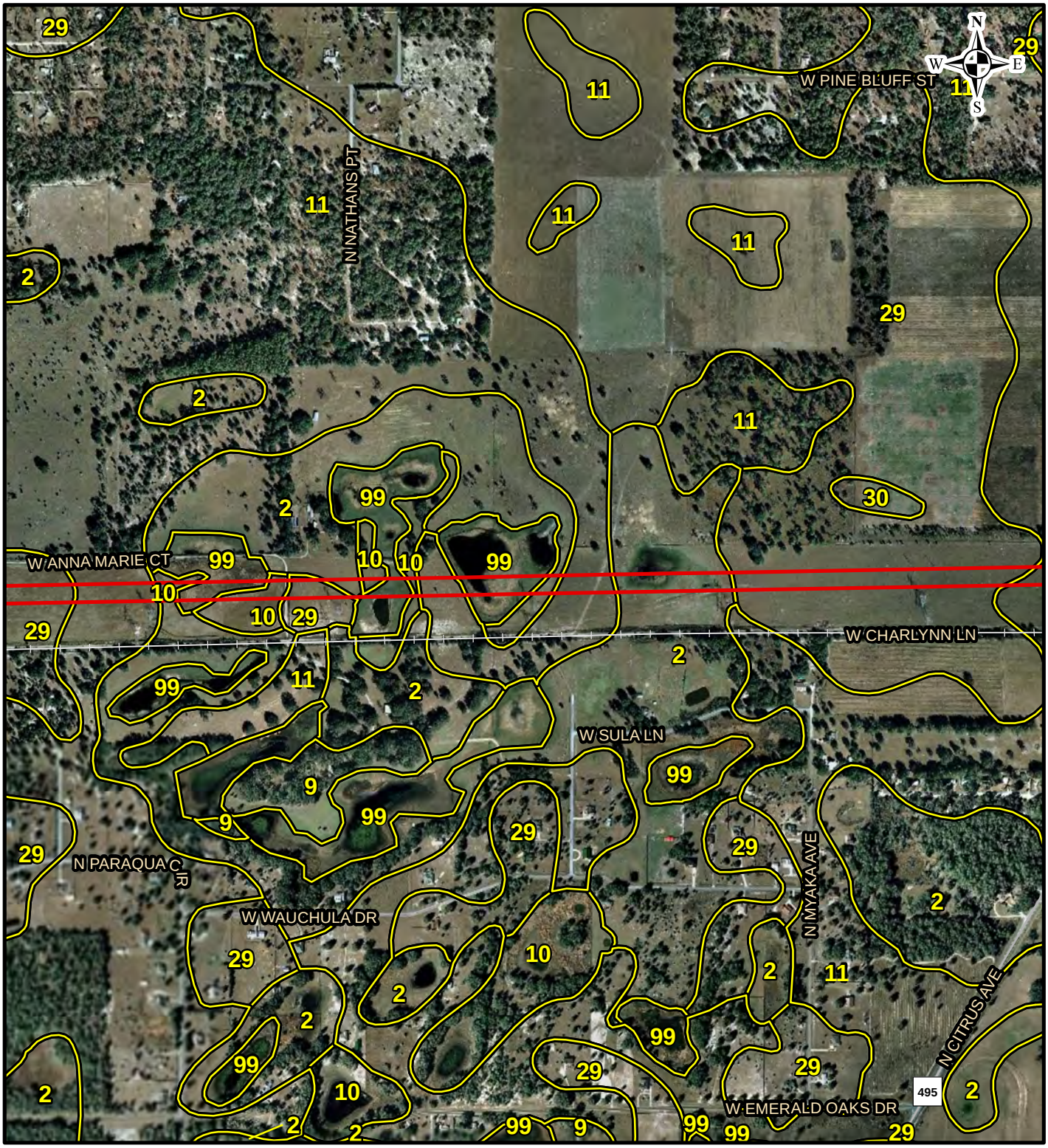

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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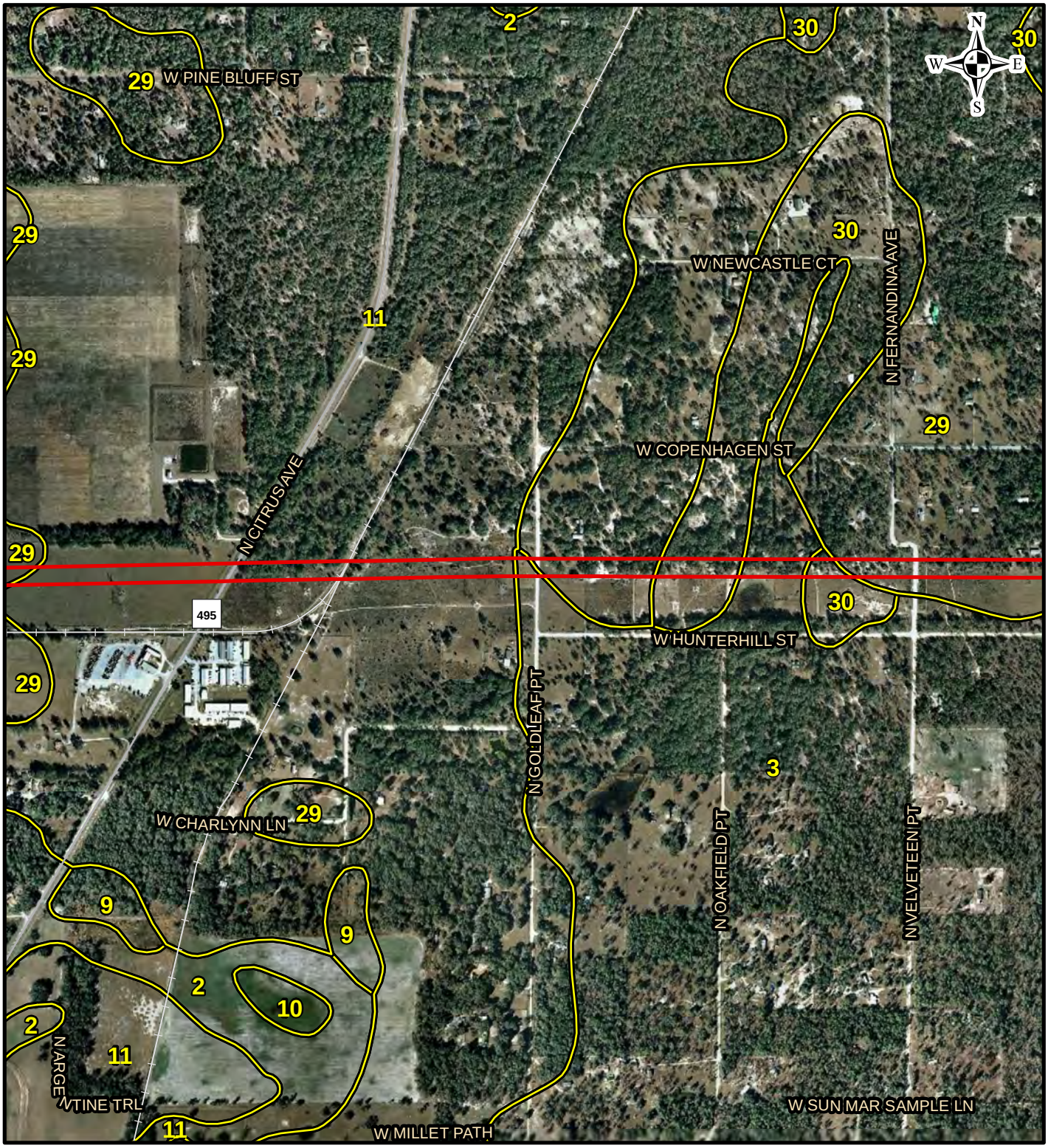

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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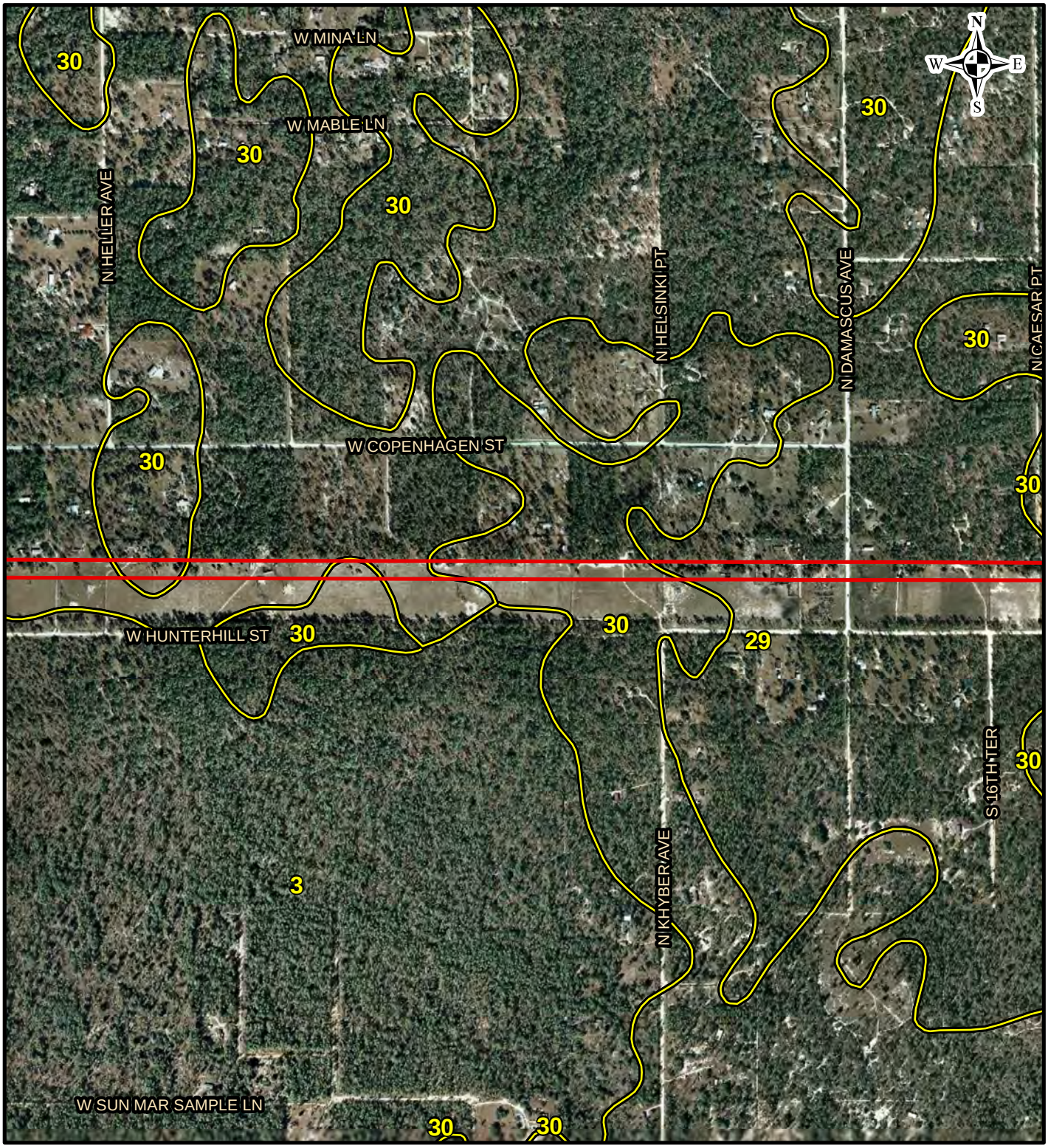

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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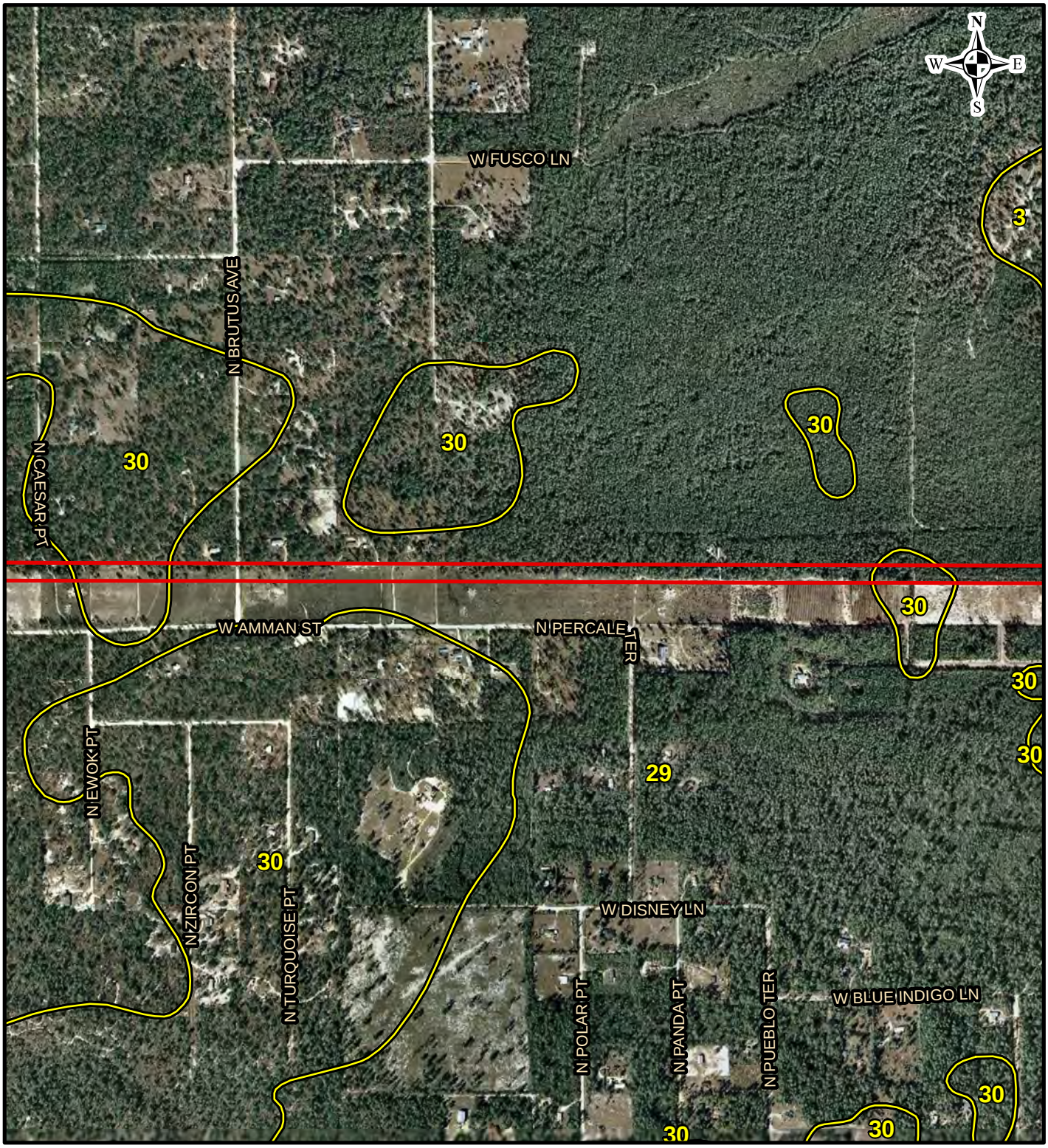

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LCFS Preferred Right-of-Way

Soil Boundary

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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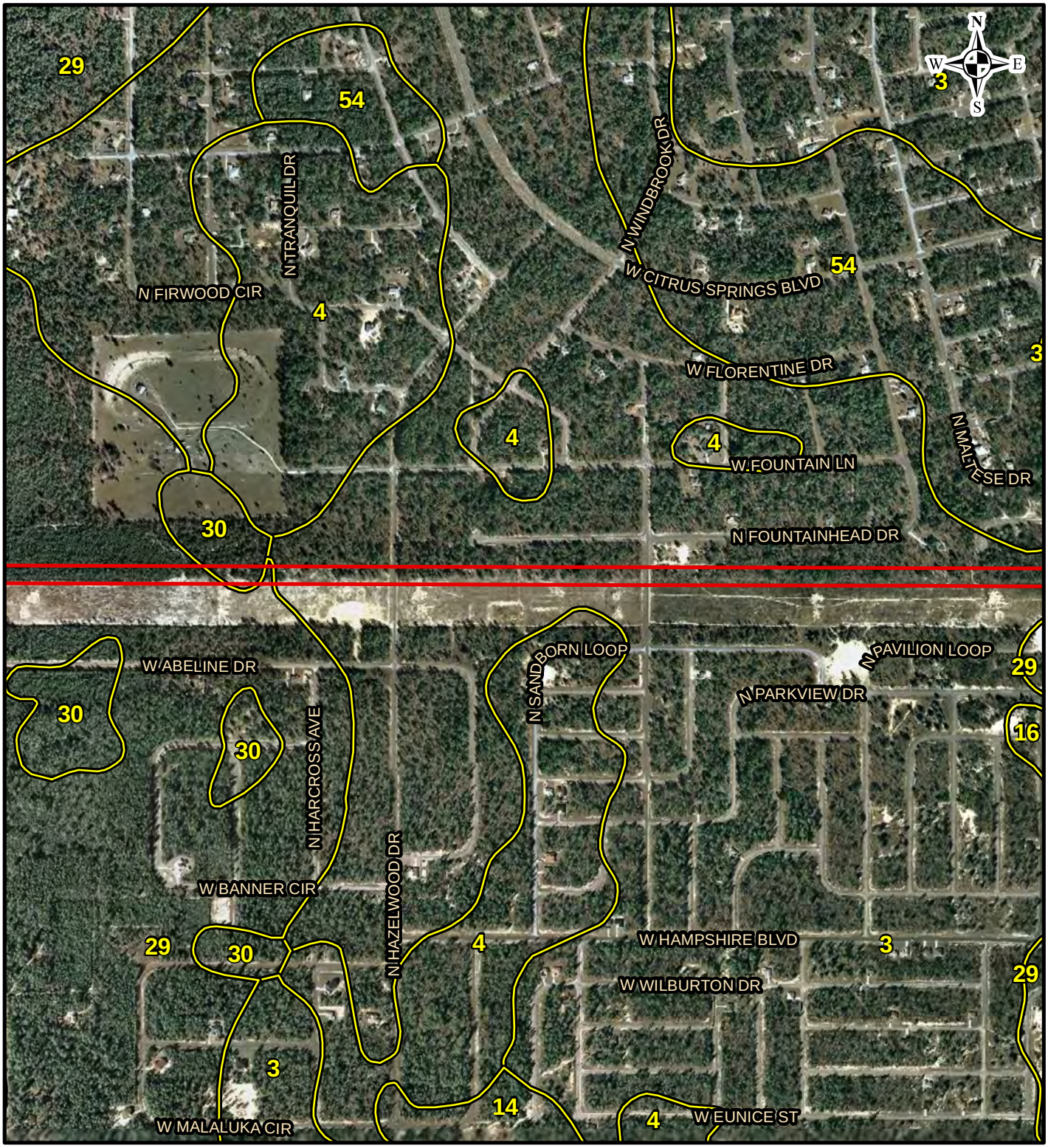

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LCFS Preferred Right-of-Way

Soil Boundary

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LEVY NUCLEAR PLANT

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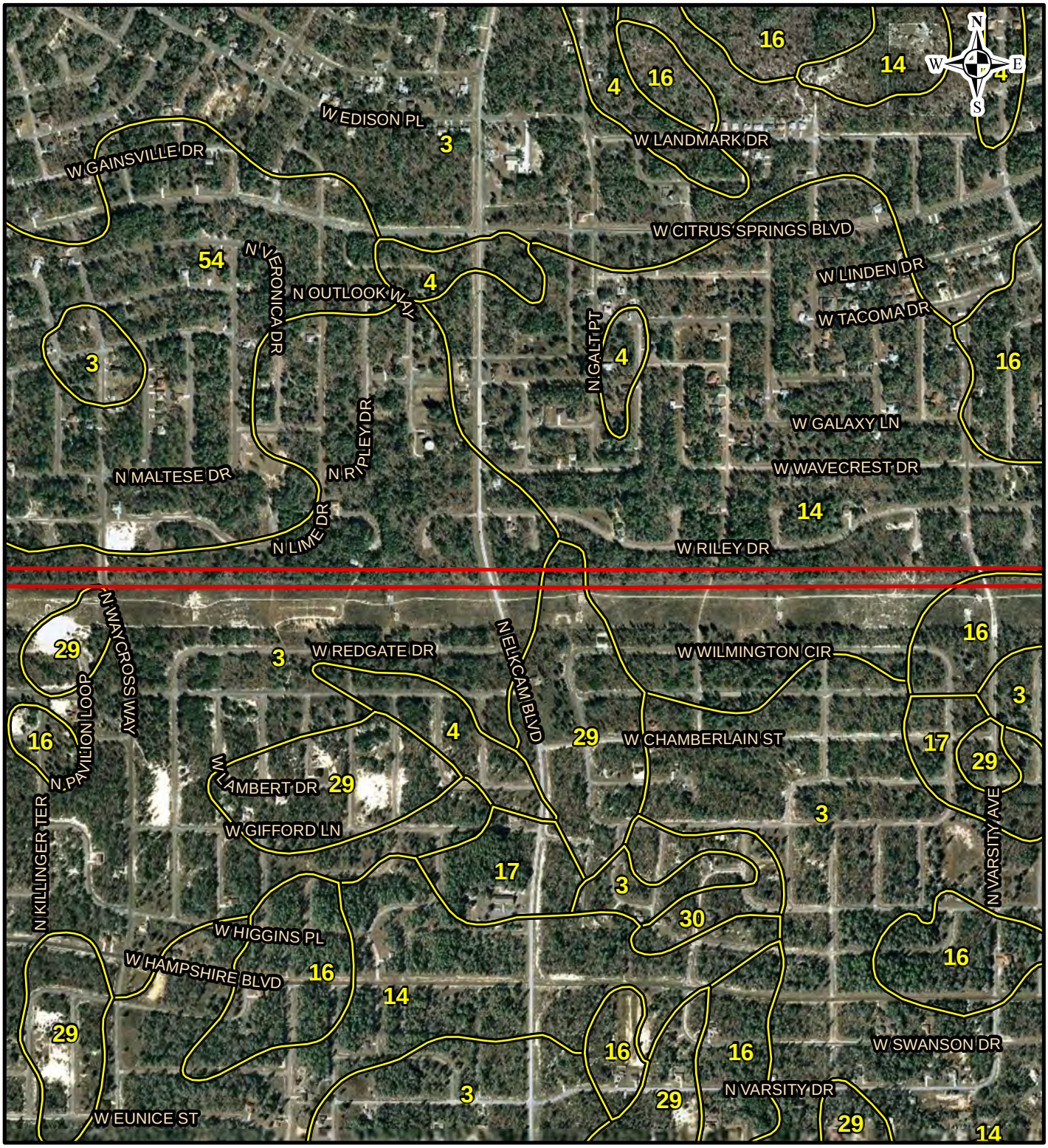

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; Soils: U.S. Department of Agriculture, Natural Resources Conservation Service, 2006; Aerials: ESRI, 2008

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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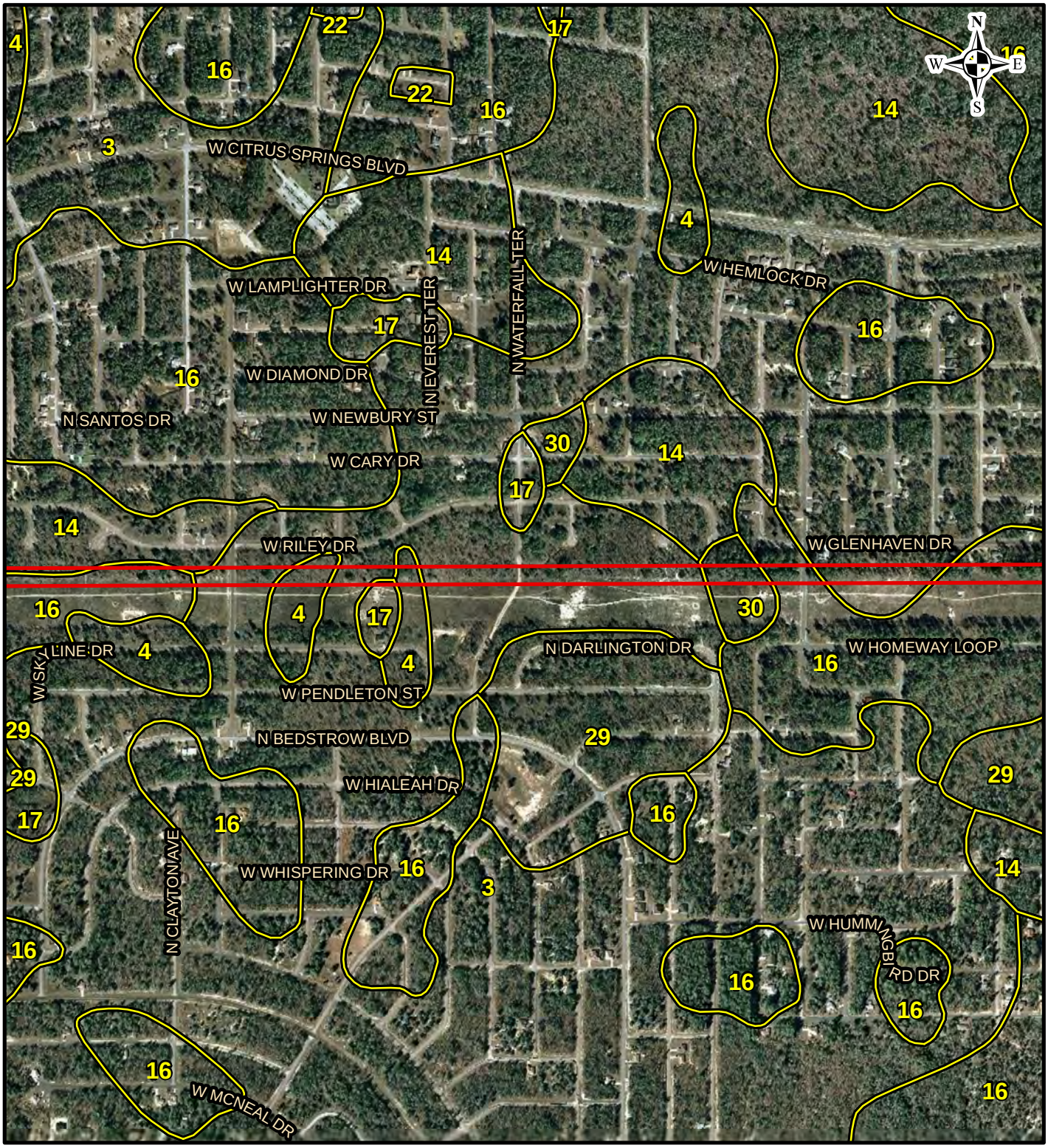

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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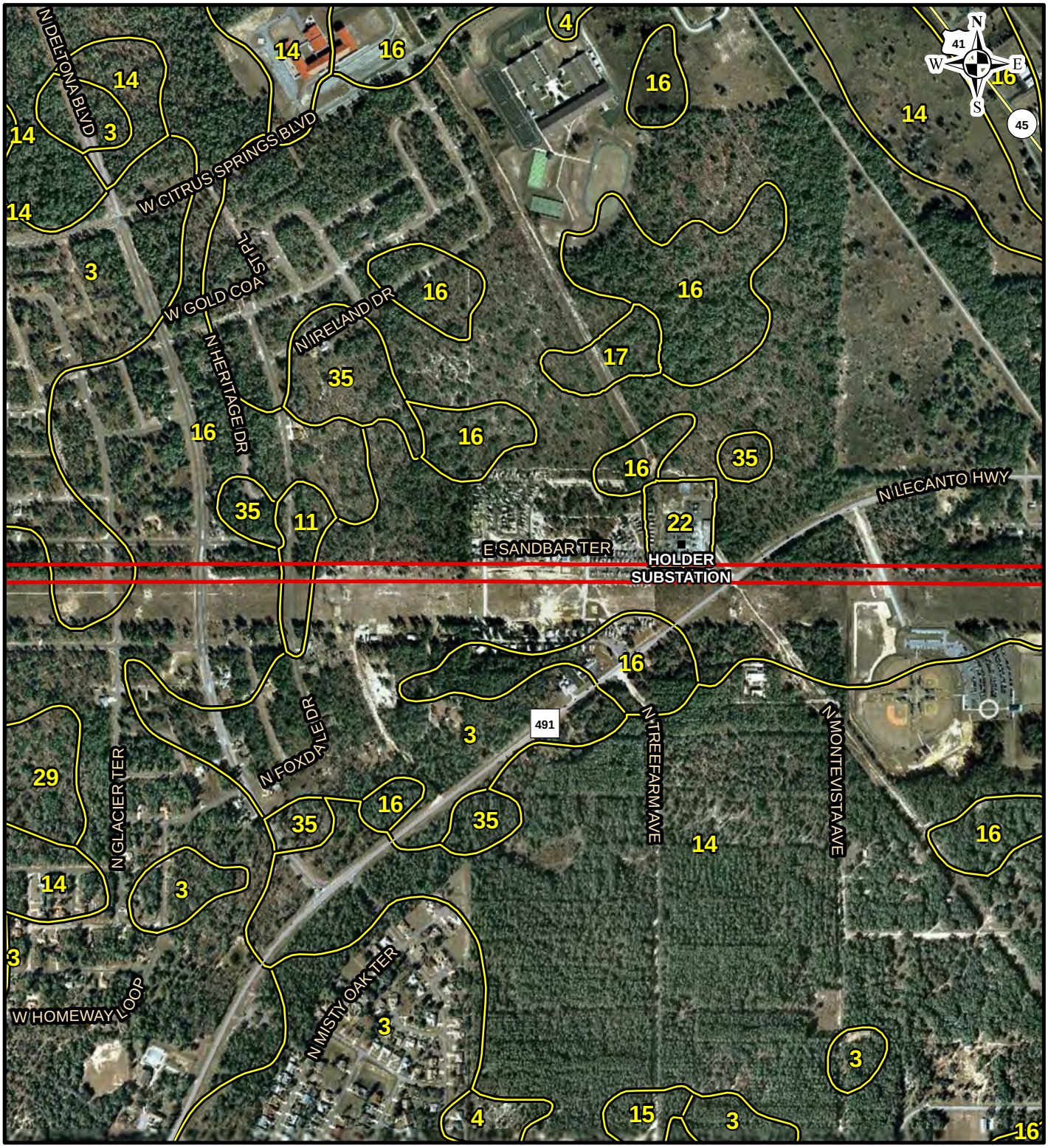

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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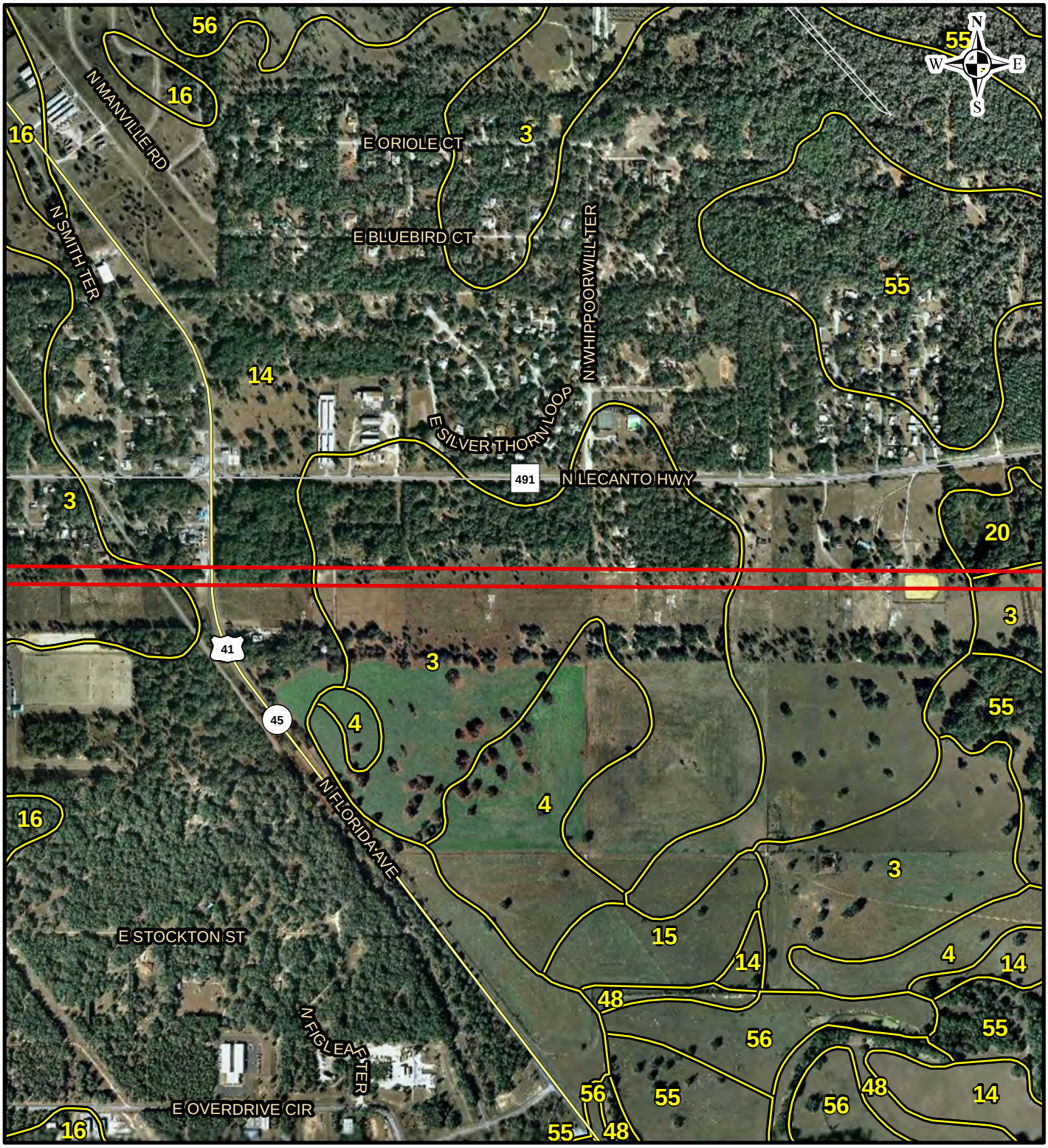

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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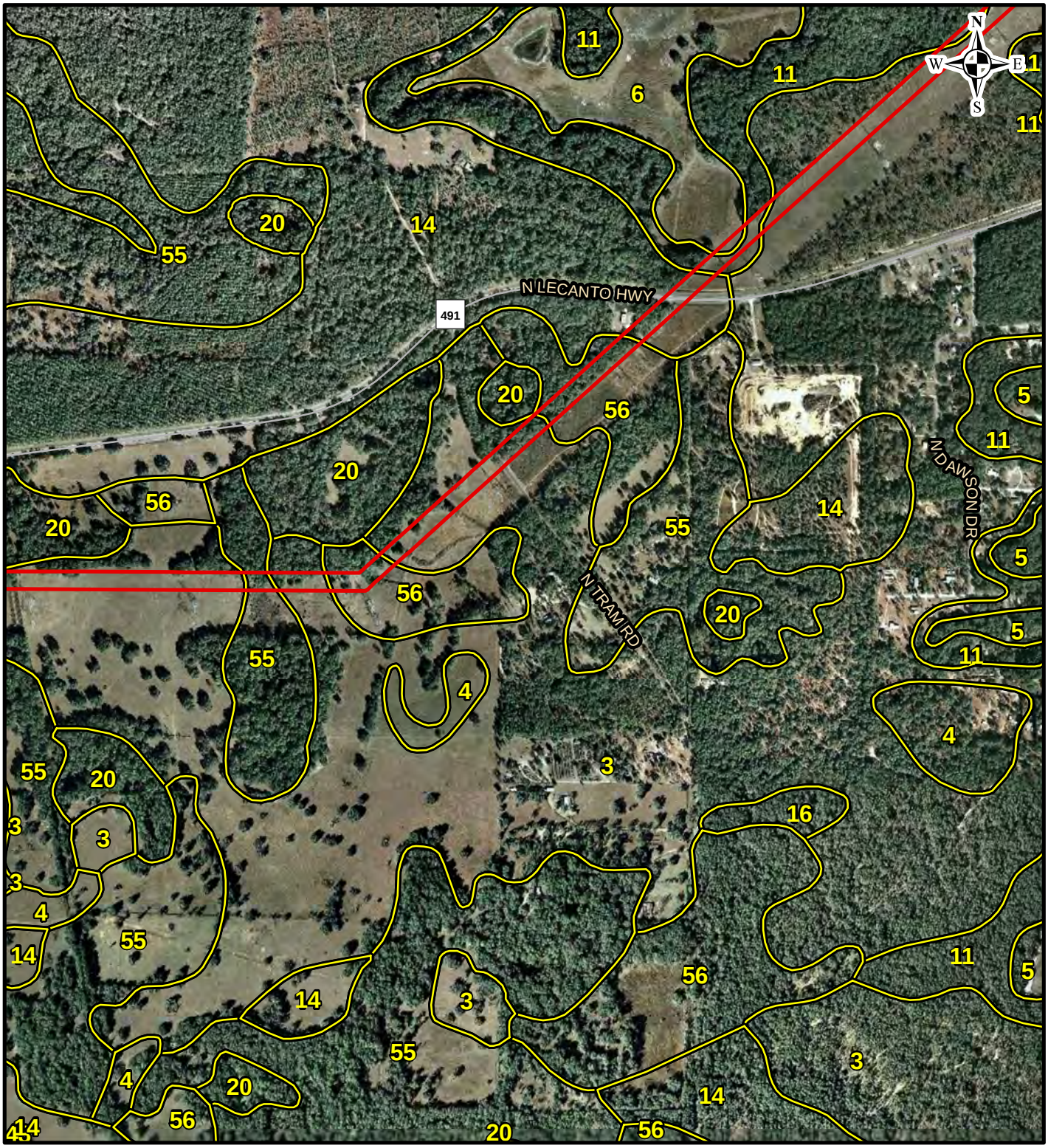

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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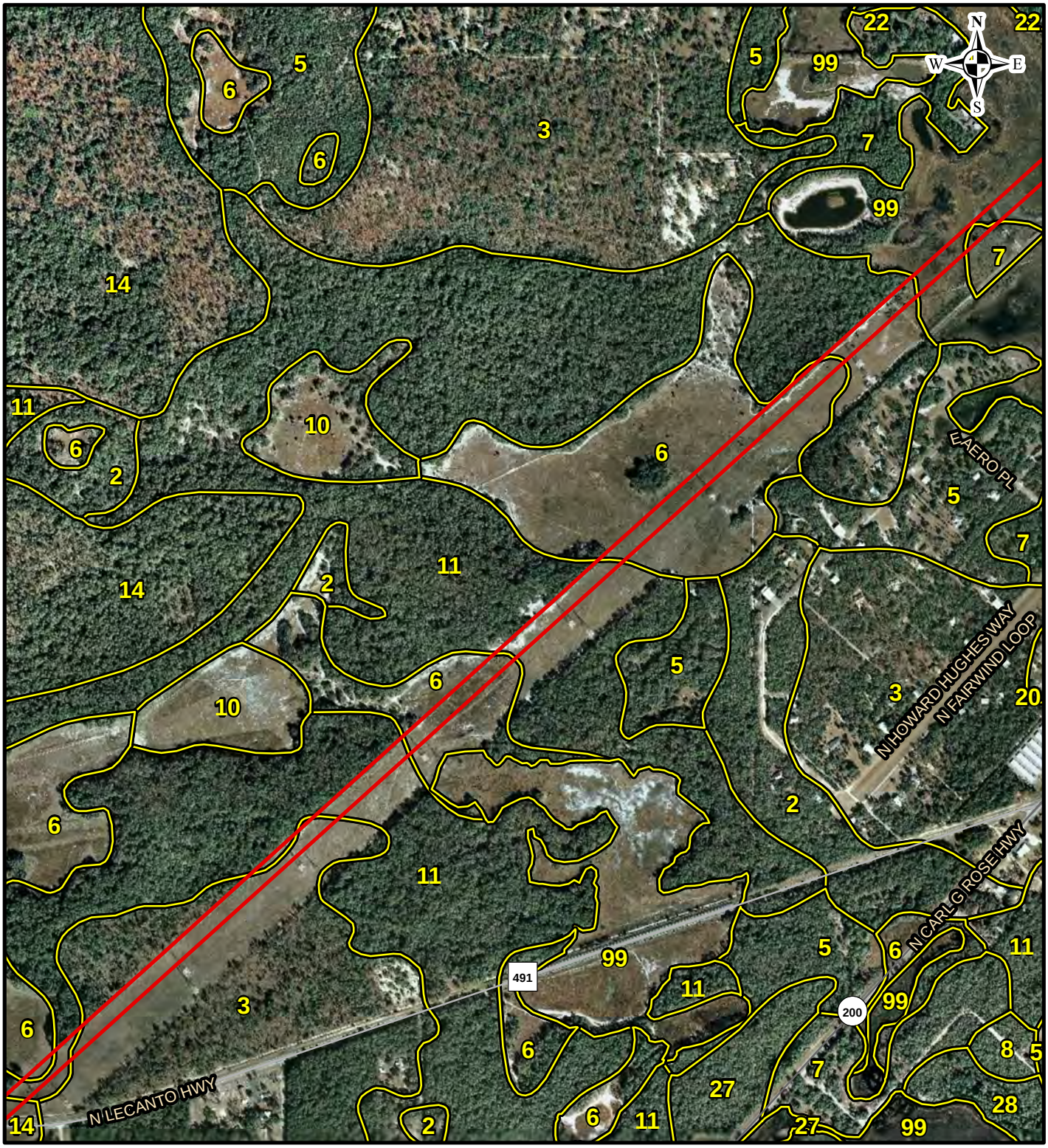

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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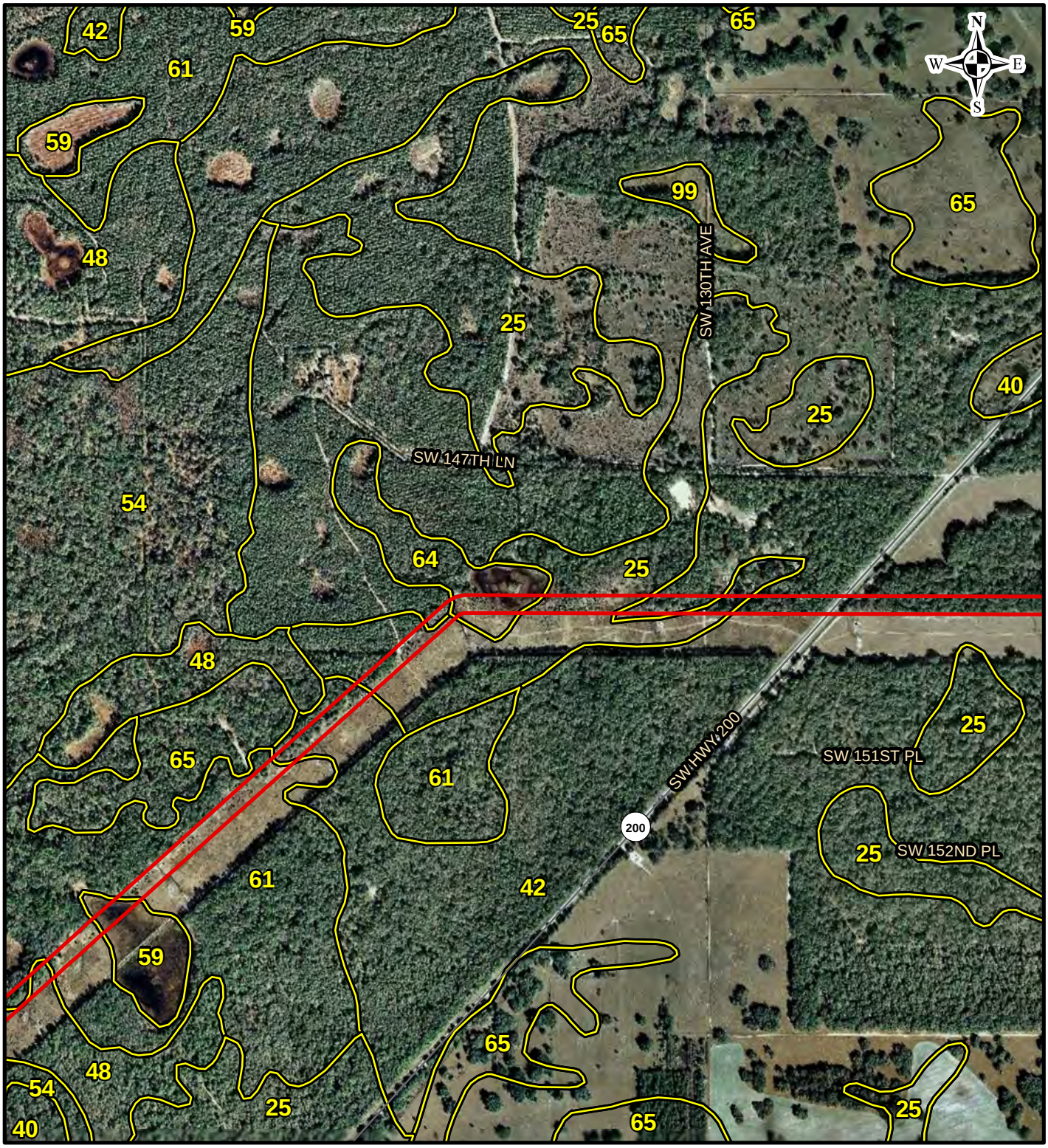

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
SOILS MAP

Progress Energy

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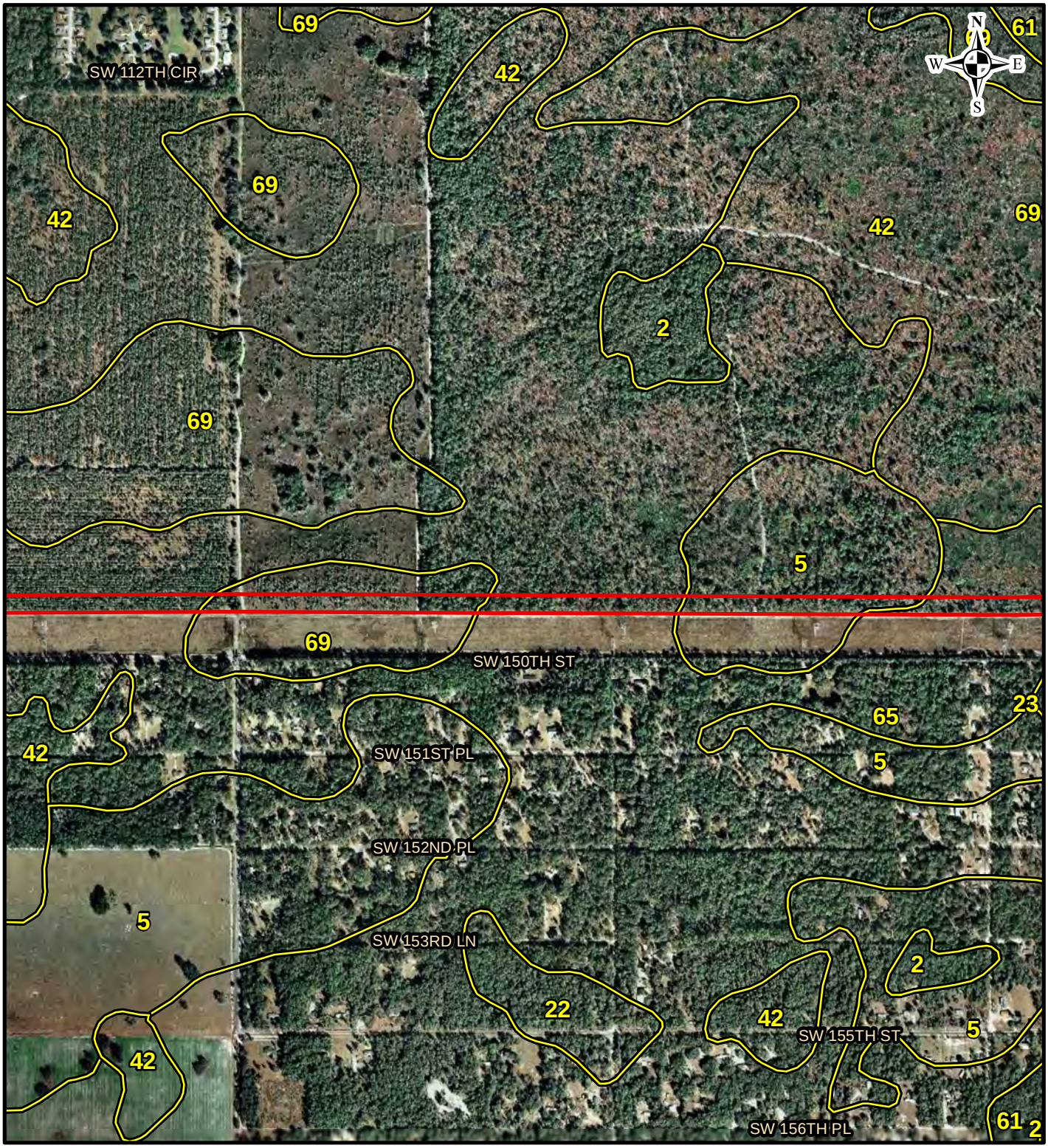

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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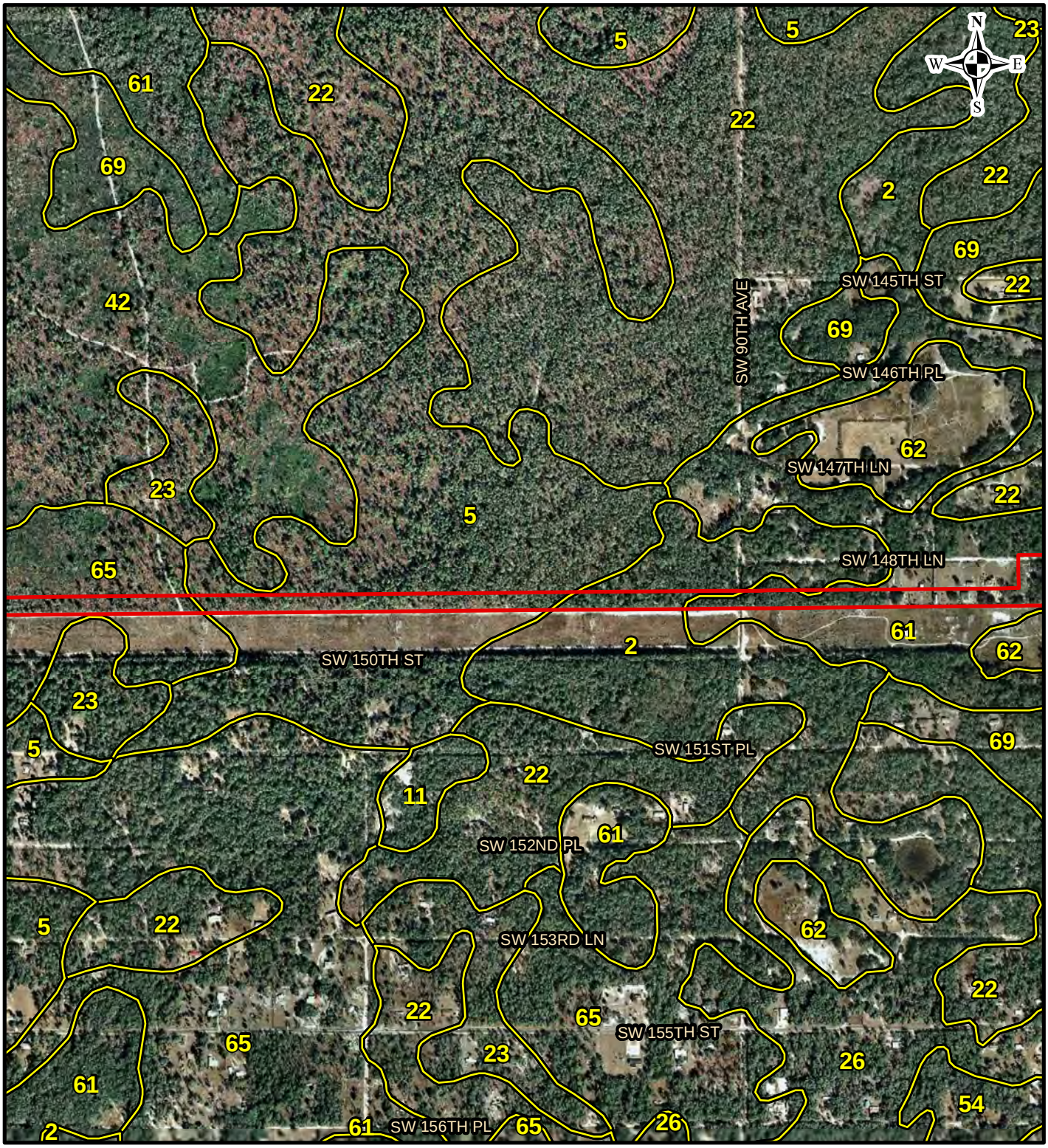

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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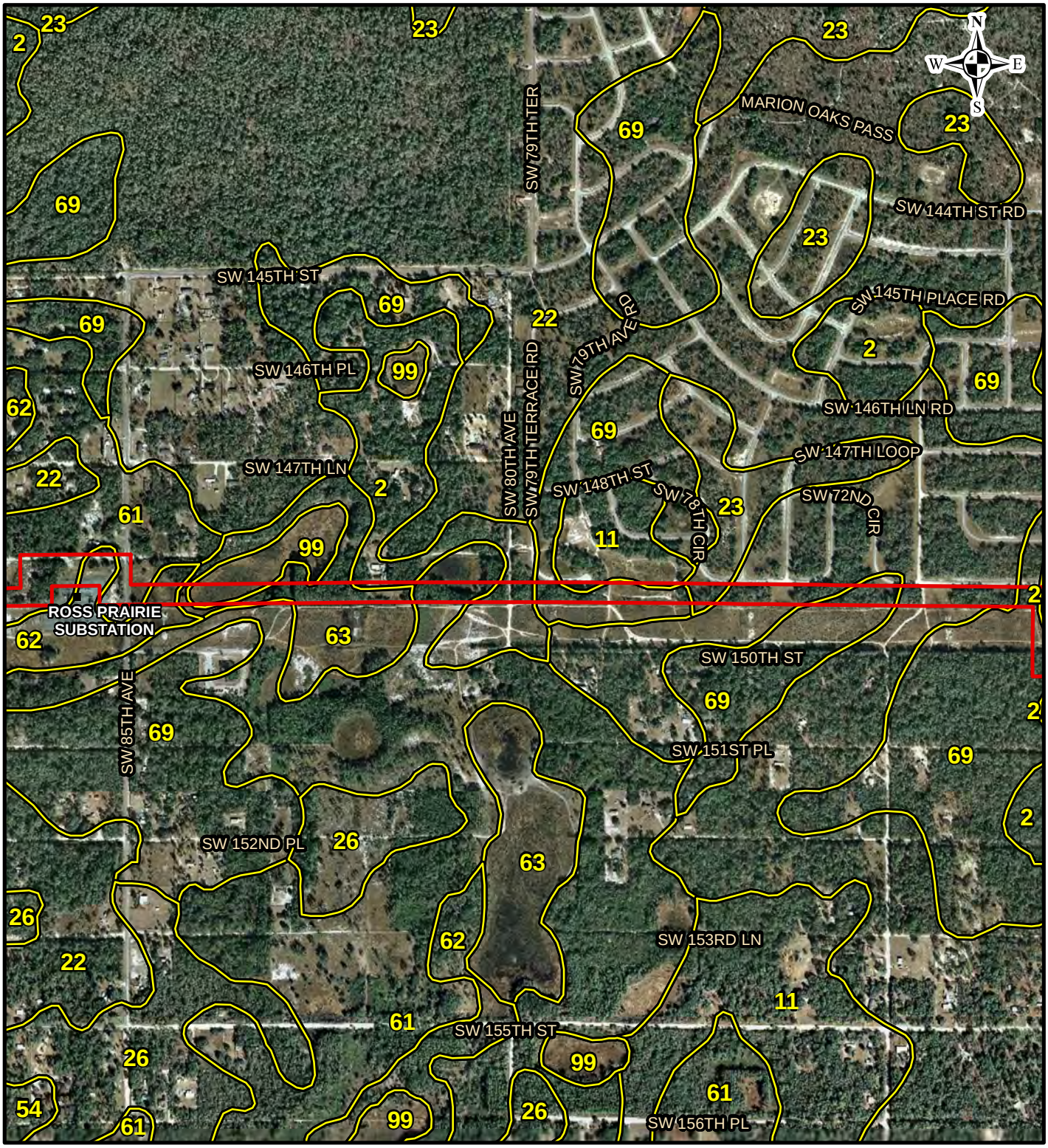

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
SOILS MAP

Progress Energy

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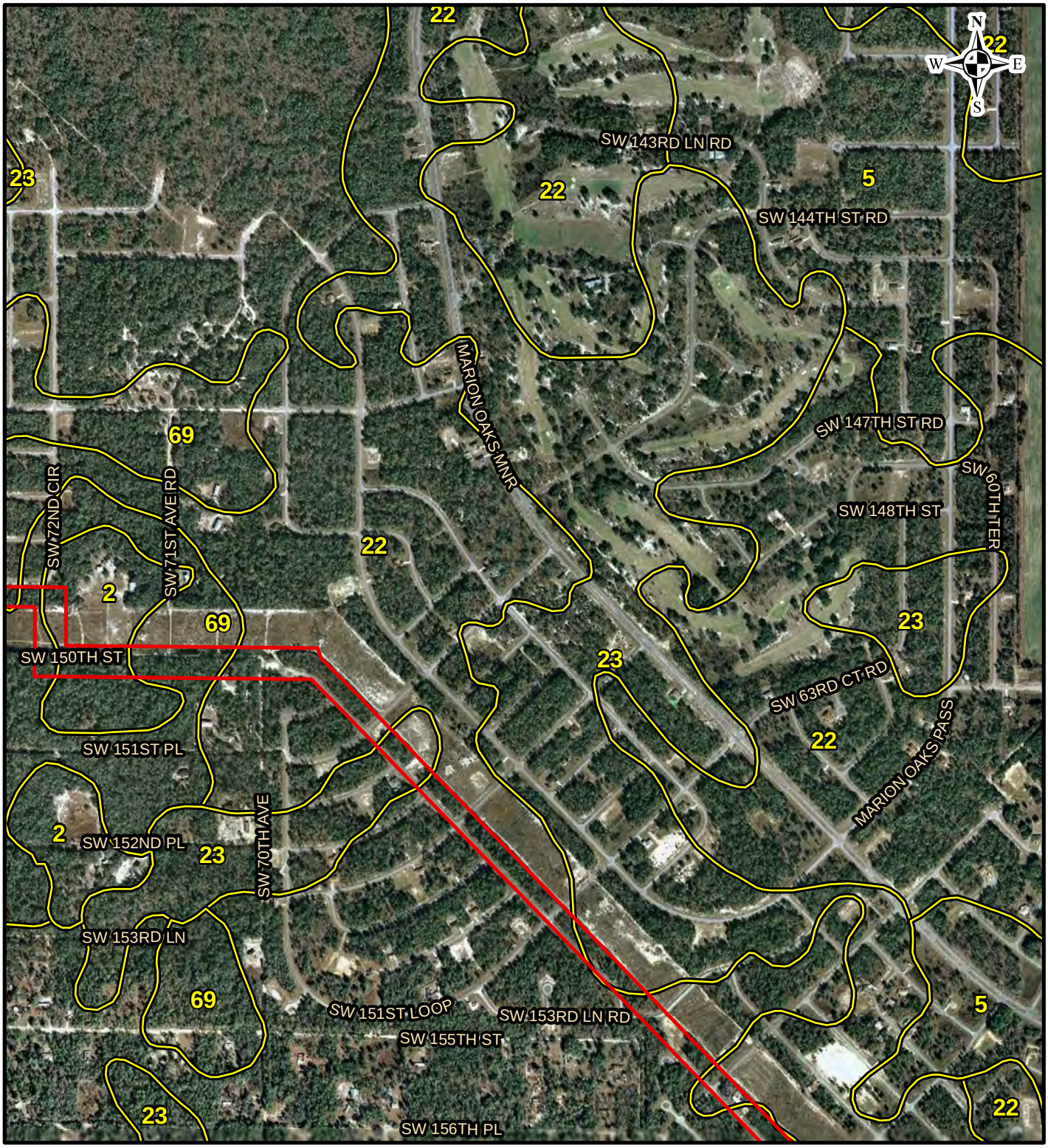

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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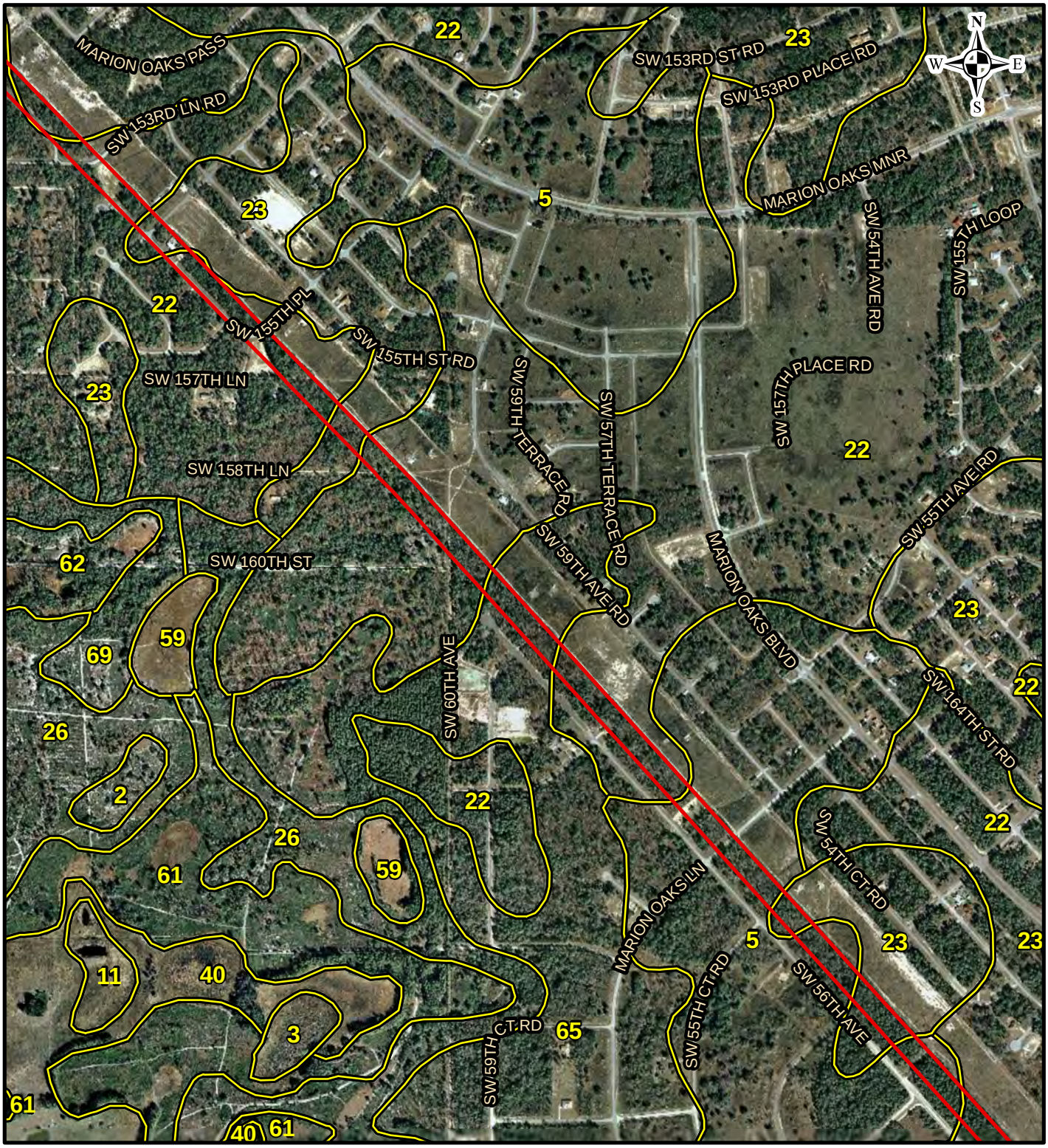

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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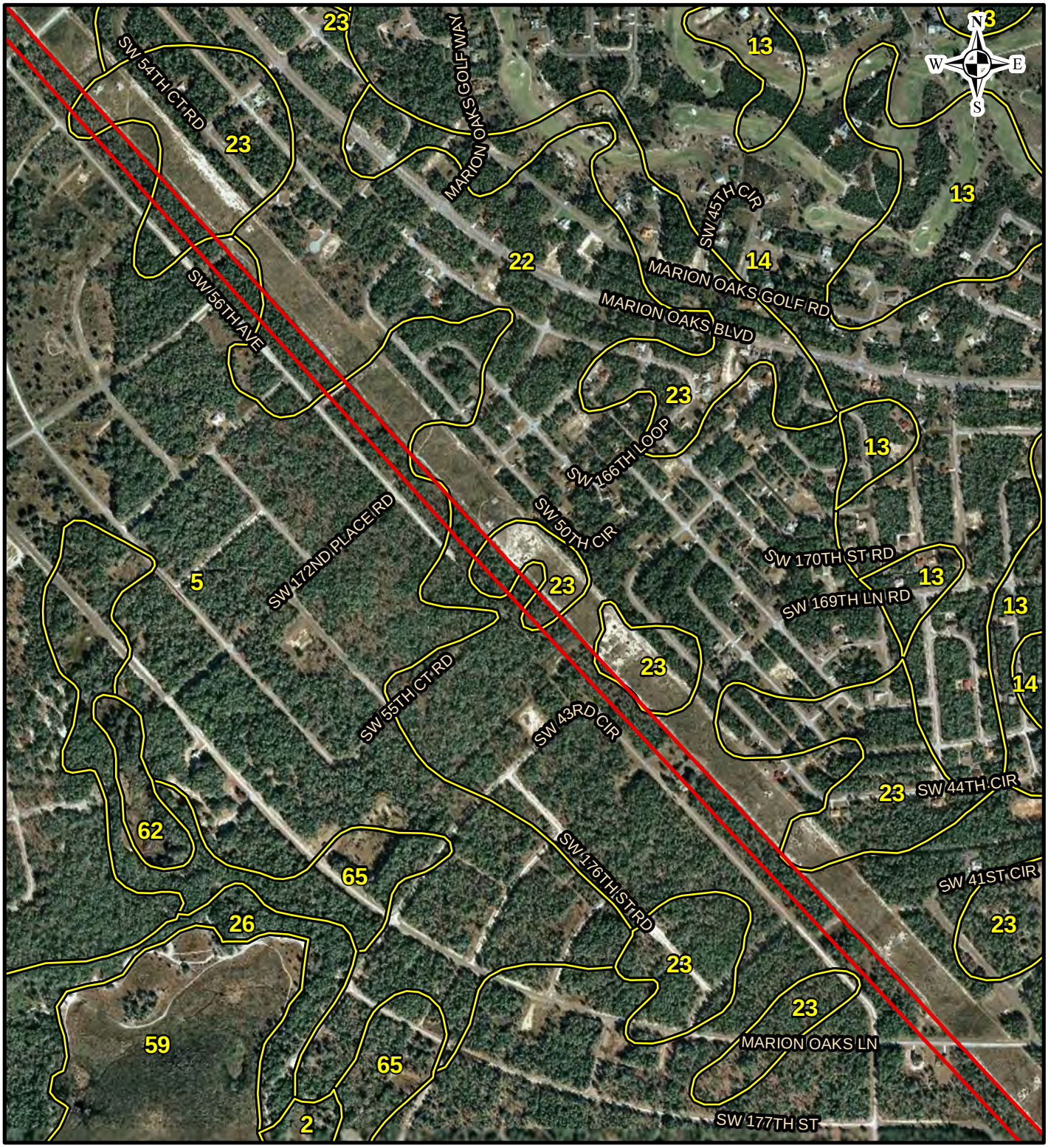

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
SOILS MAP

Progress Energy

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LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000

Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

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Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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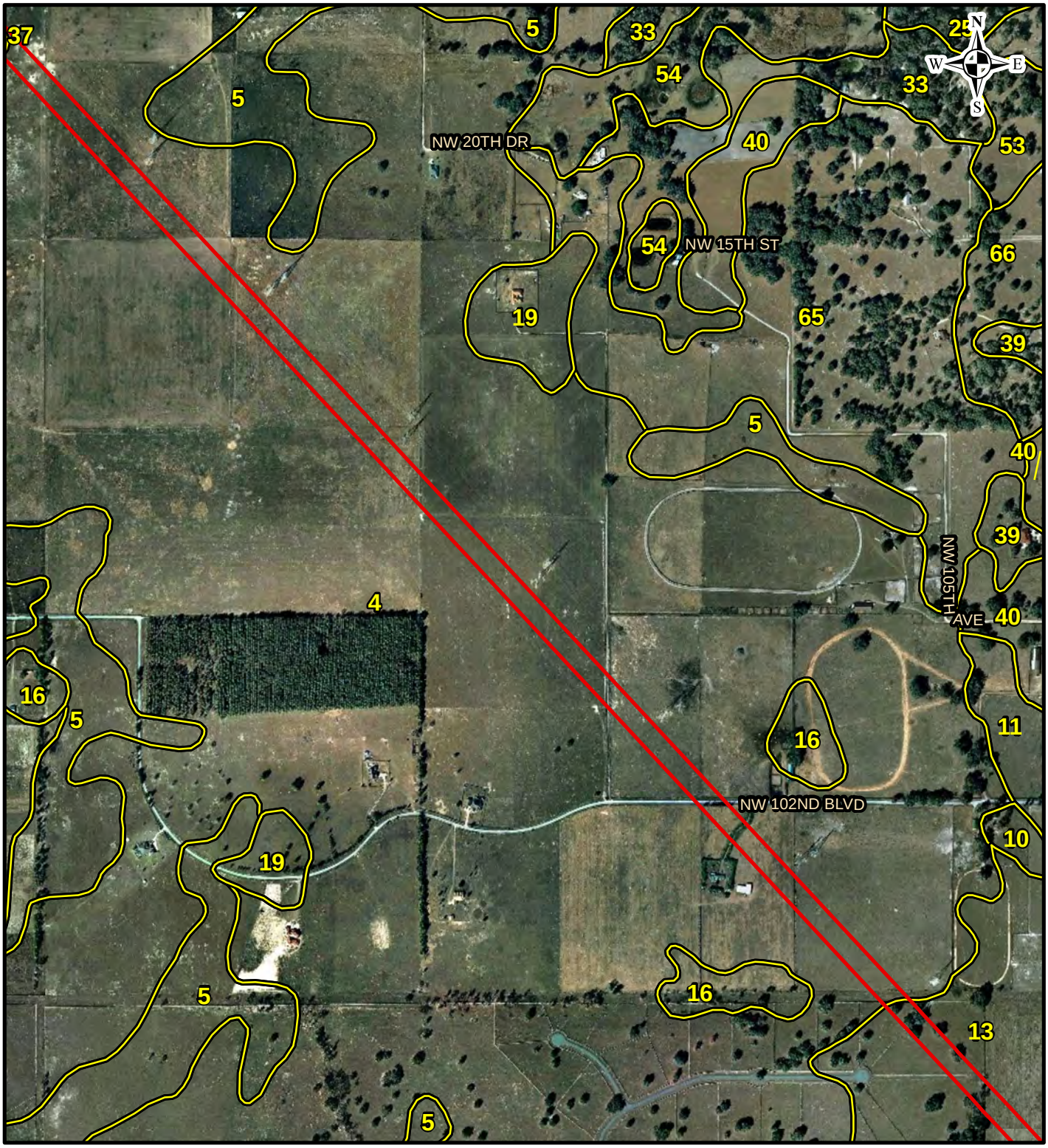

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000

Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
SOILS MAP

Progress Energy

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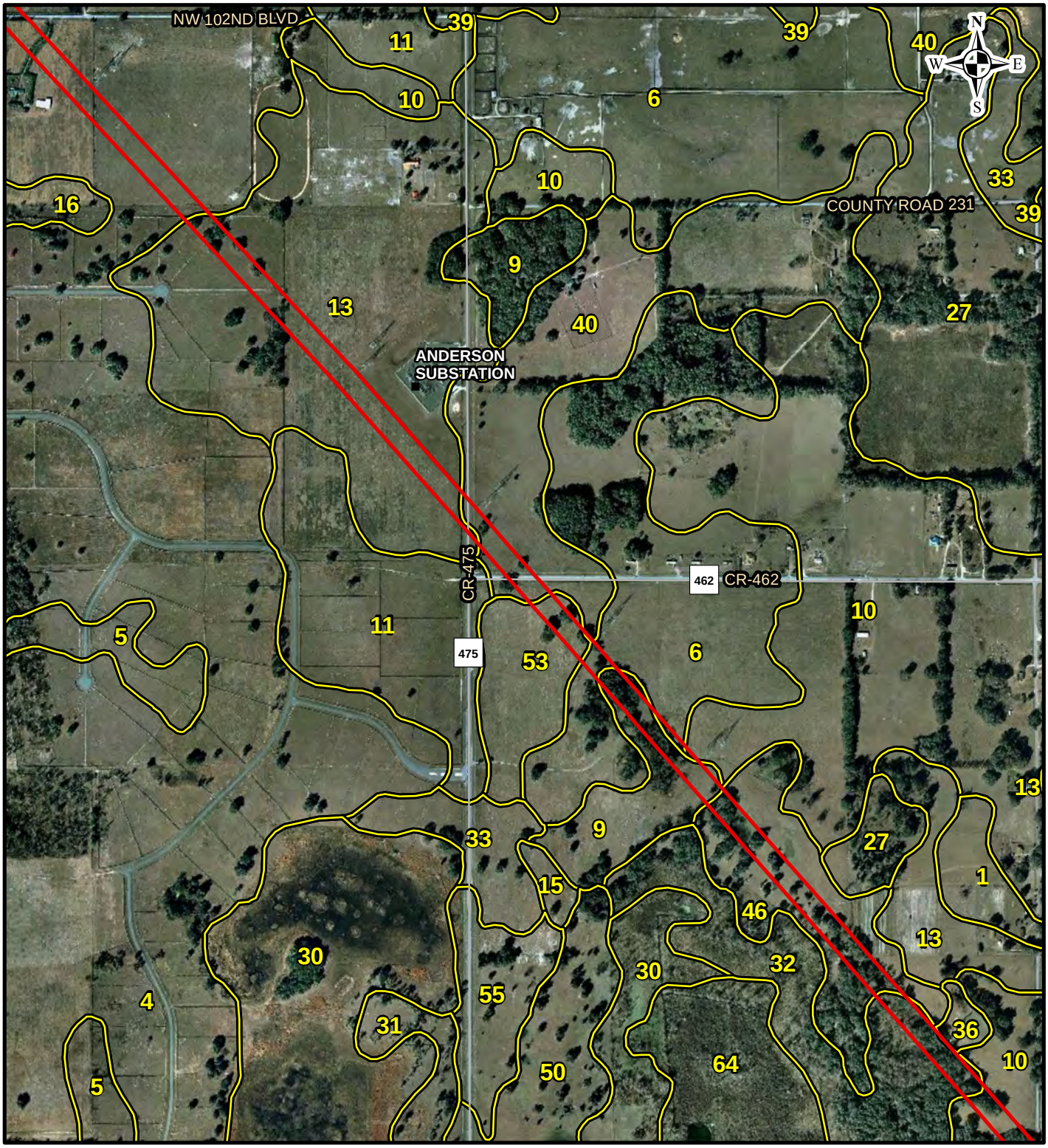

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000
Feet

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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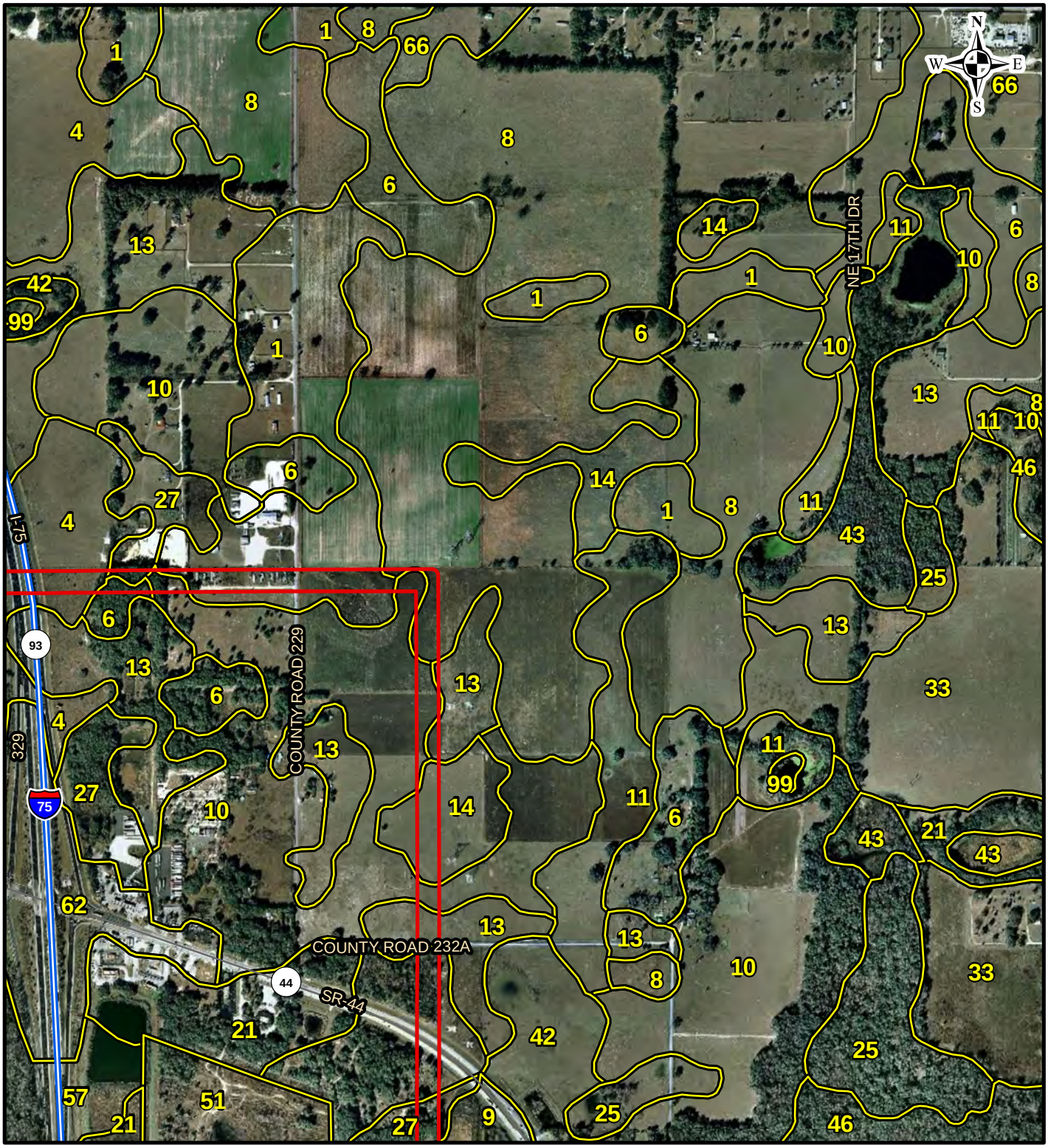

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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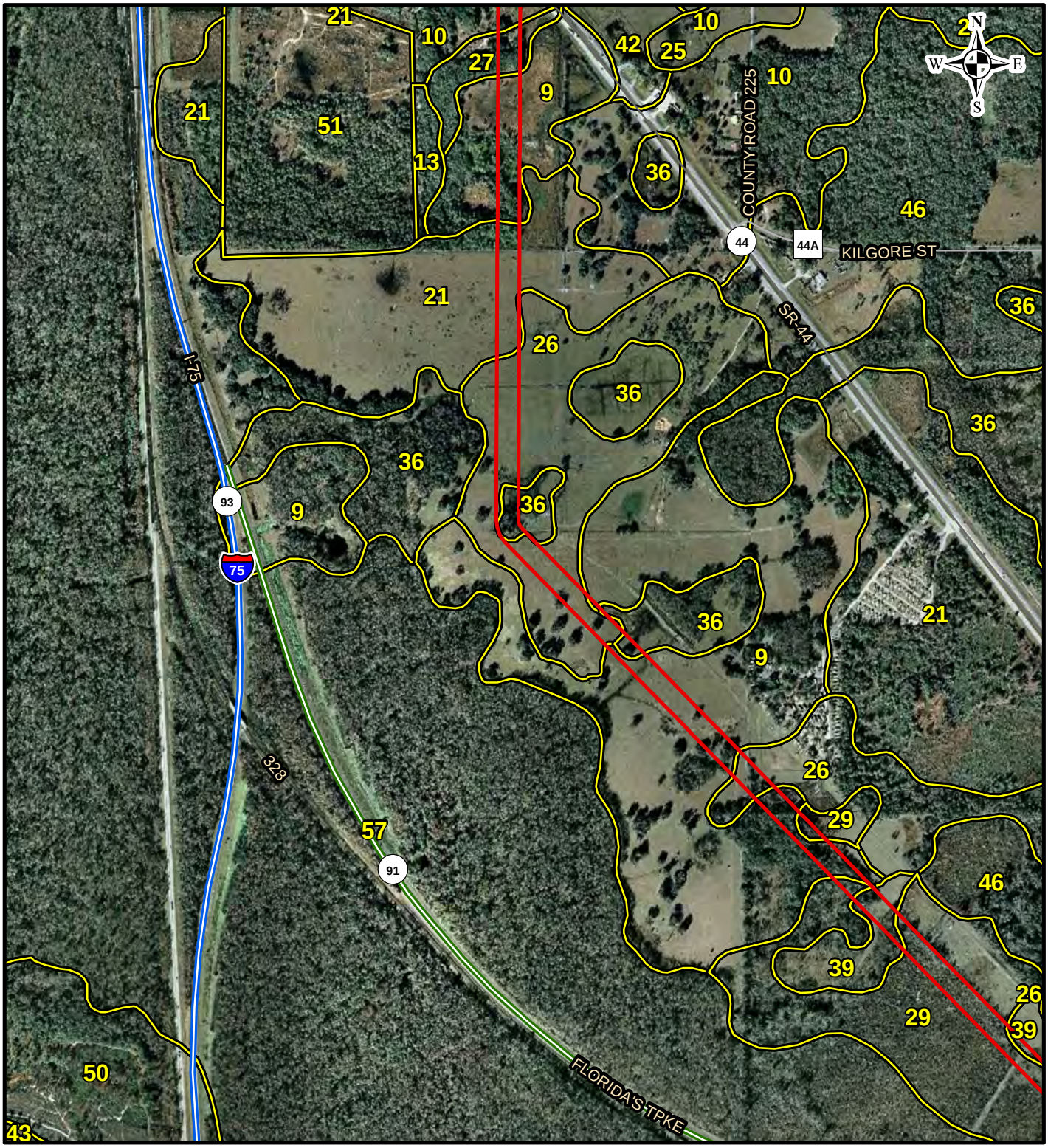

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
SOILS MAP

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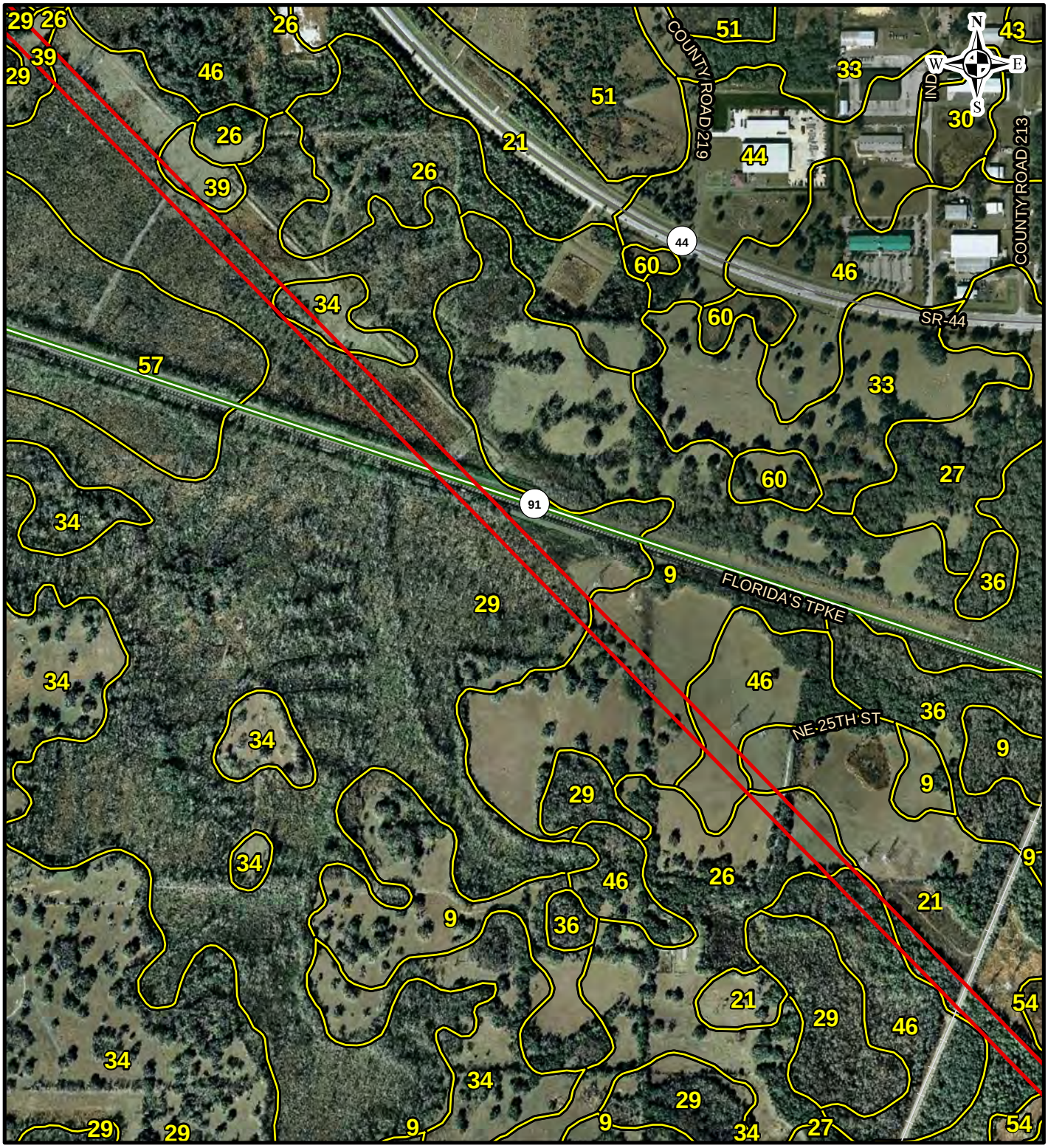

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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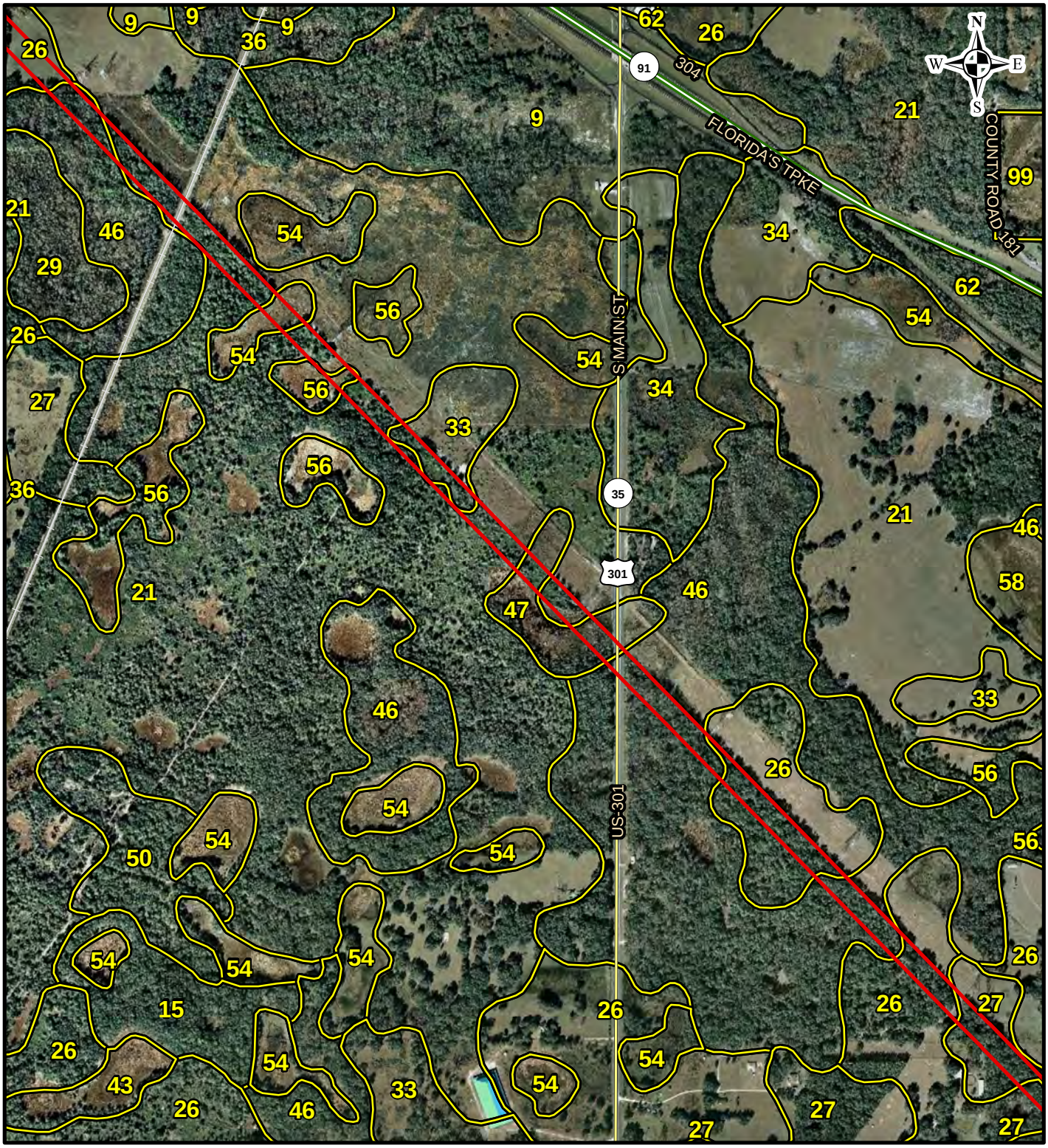

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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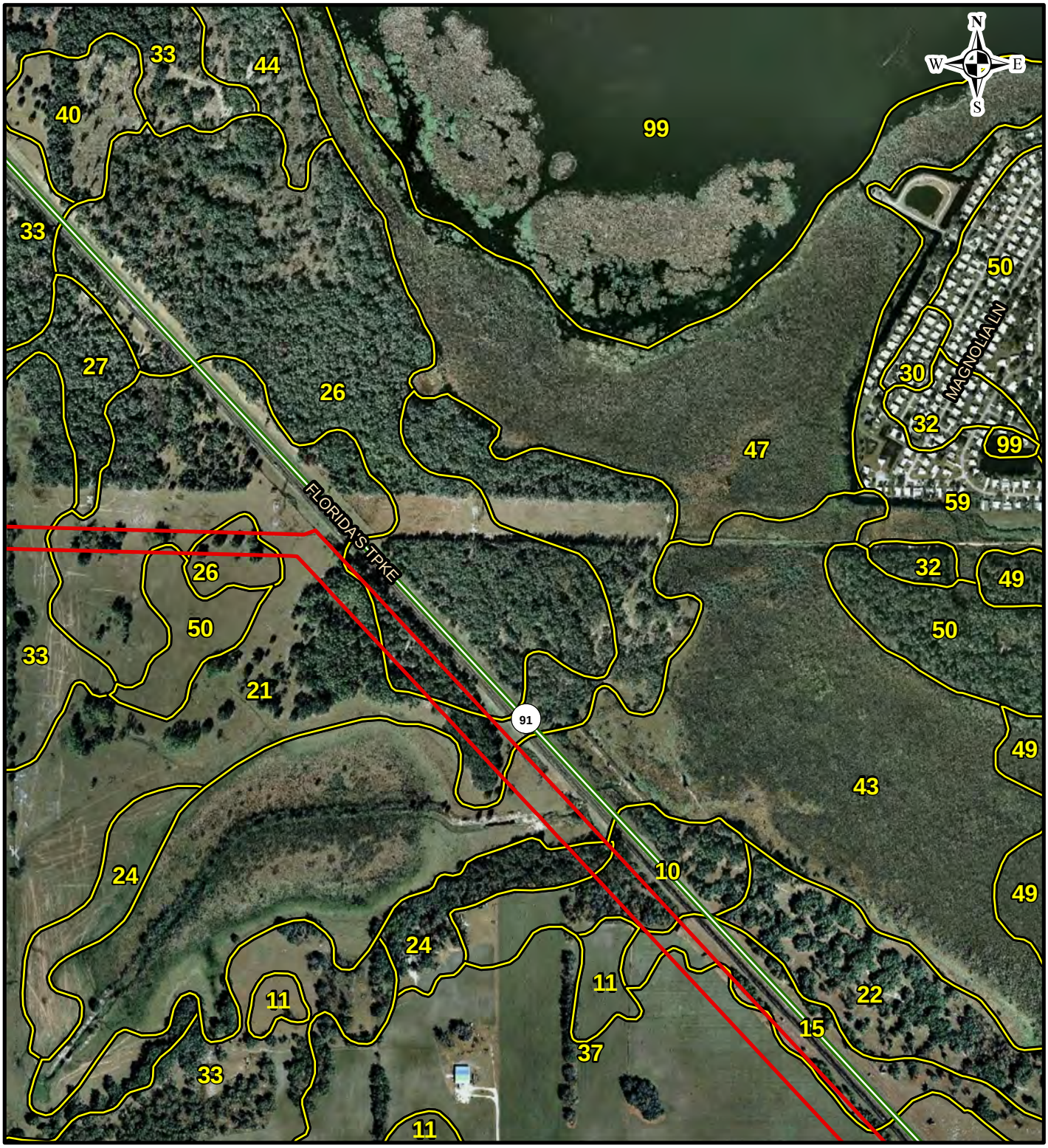

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LCFS Preferred Right-of-Way

Soil Boundary

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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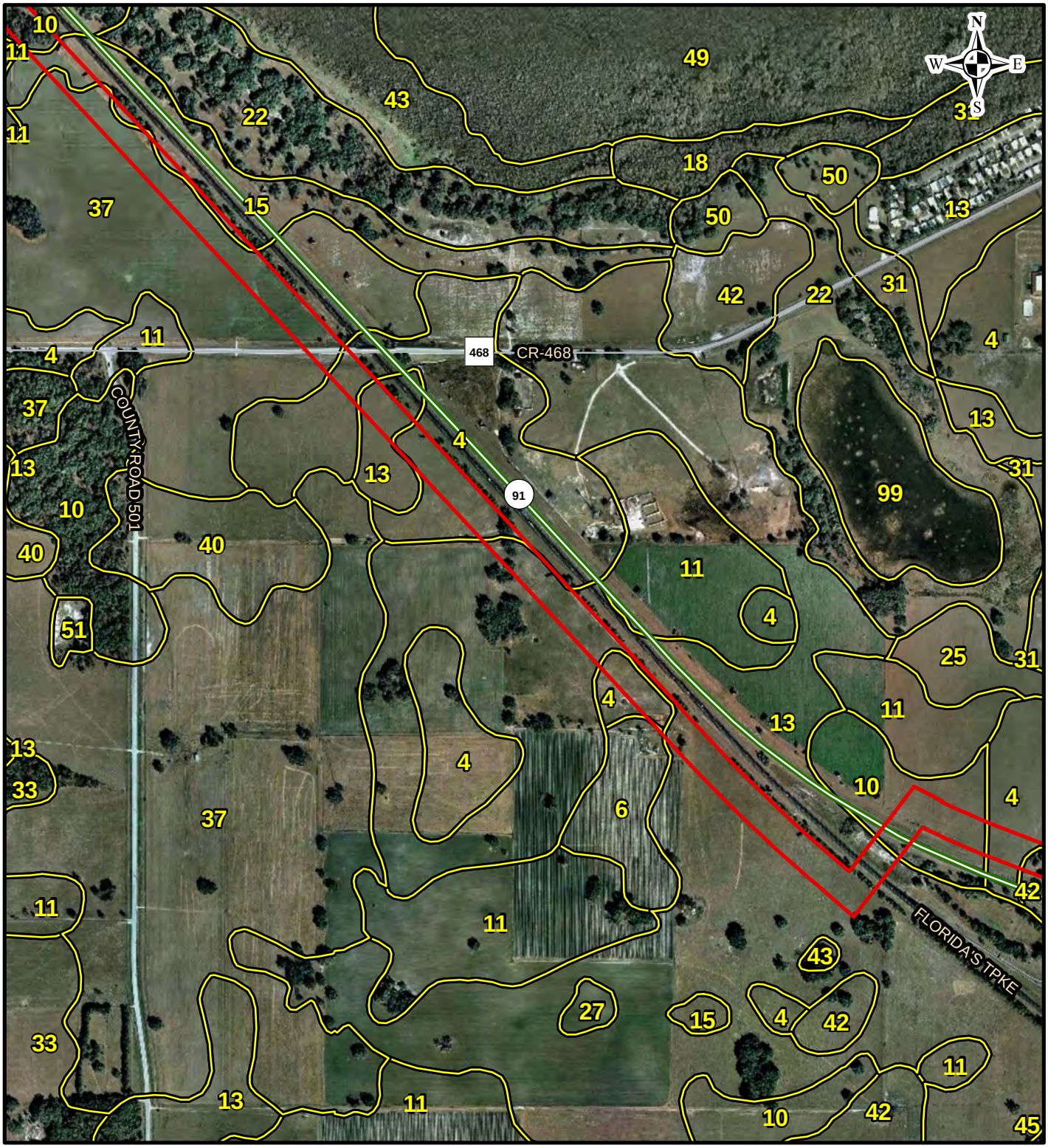

LEGEND

LCFS Preferred Right-of-Way

Soil Boundary

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

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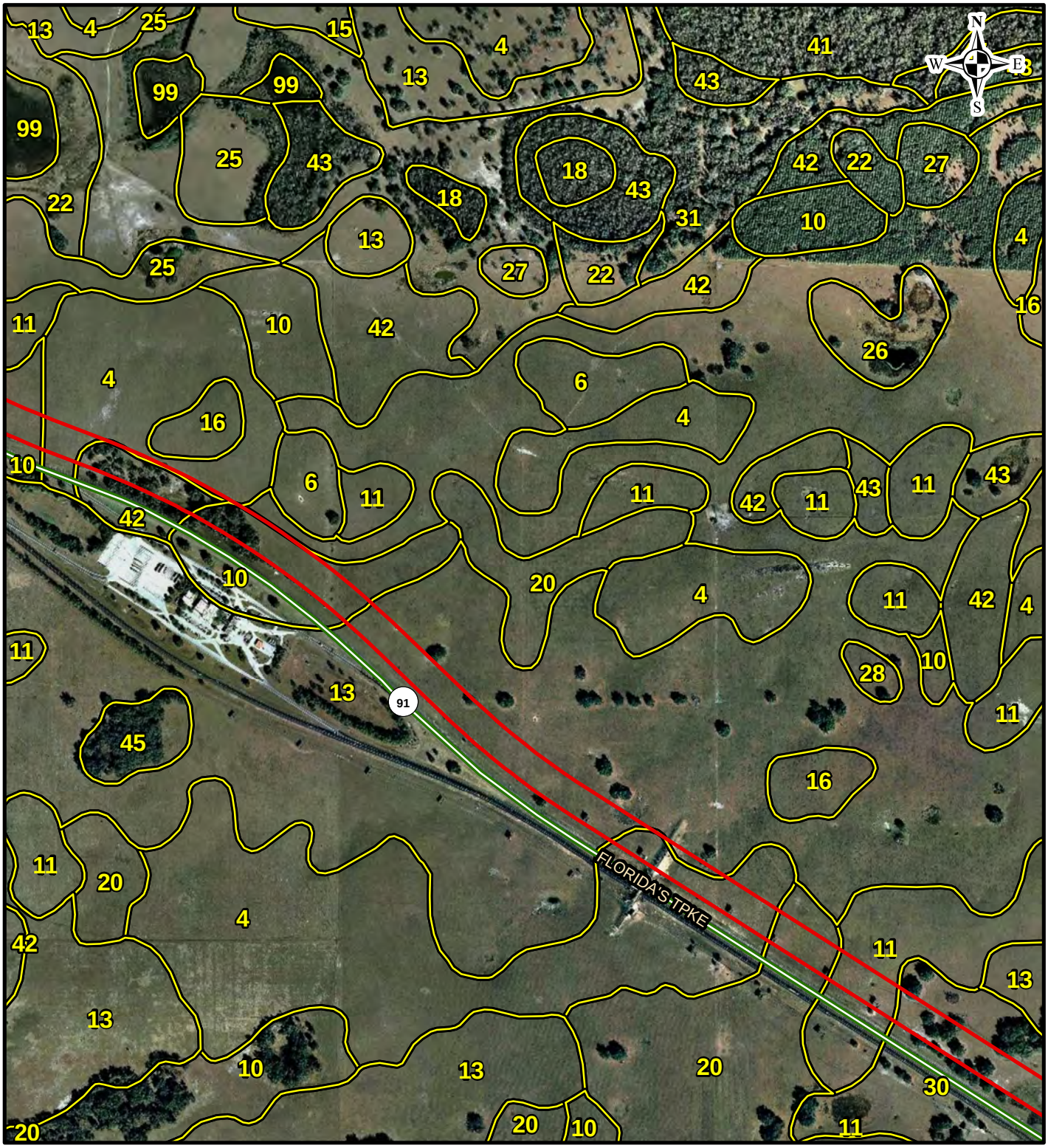

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000 Feet

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
SOILS MAP

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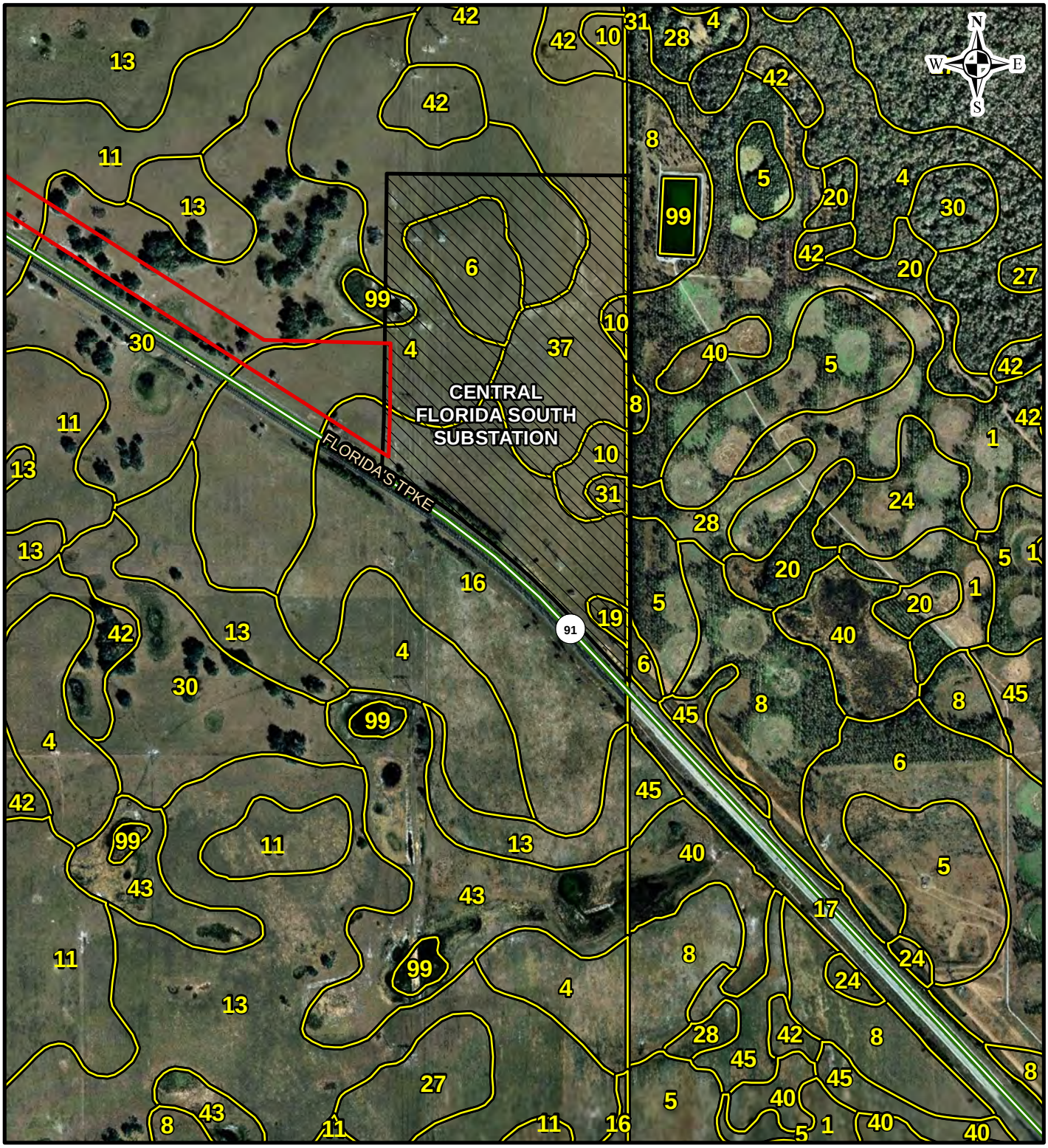

LEGEND

- LCFS Preferred Right-of-Way
- Soil Boundary

1,000 500 0 1,000
Feet

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; Soils: U.S. Department of Agriculture, Natural Resources Conservation Service, 2006; Aerials: ESRI, 2008

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SOILS MAP

Progress Energy

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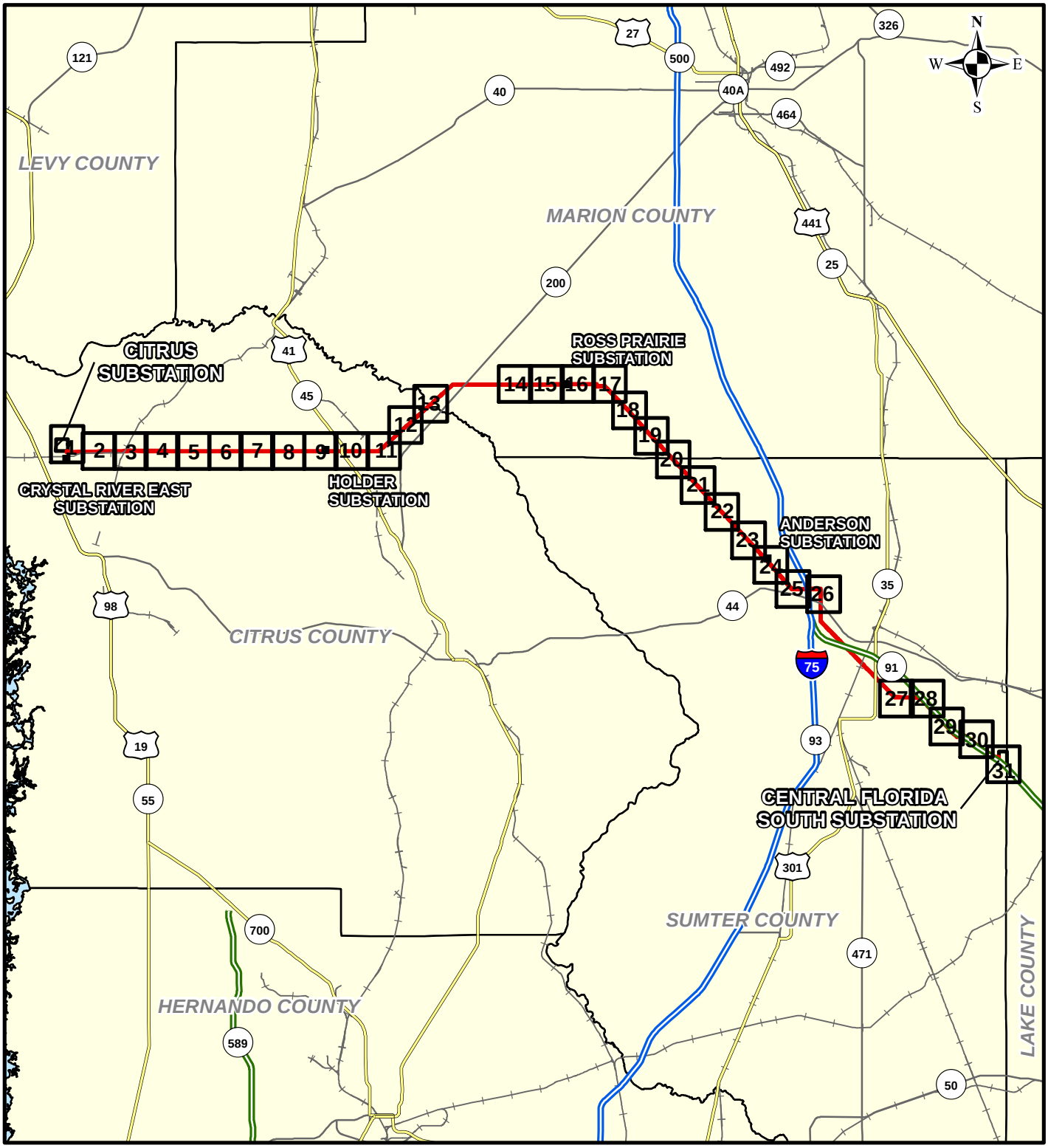

LEGEND

- Interstate
- Toll Road
- US Road
- State Road
- Railroad
- LCFS Preferred Right-of-Way
- County Boundary

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; County Boundary: U.S. Census Bureau, 2000

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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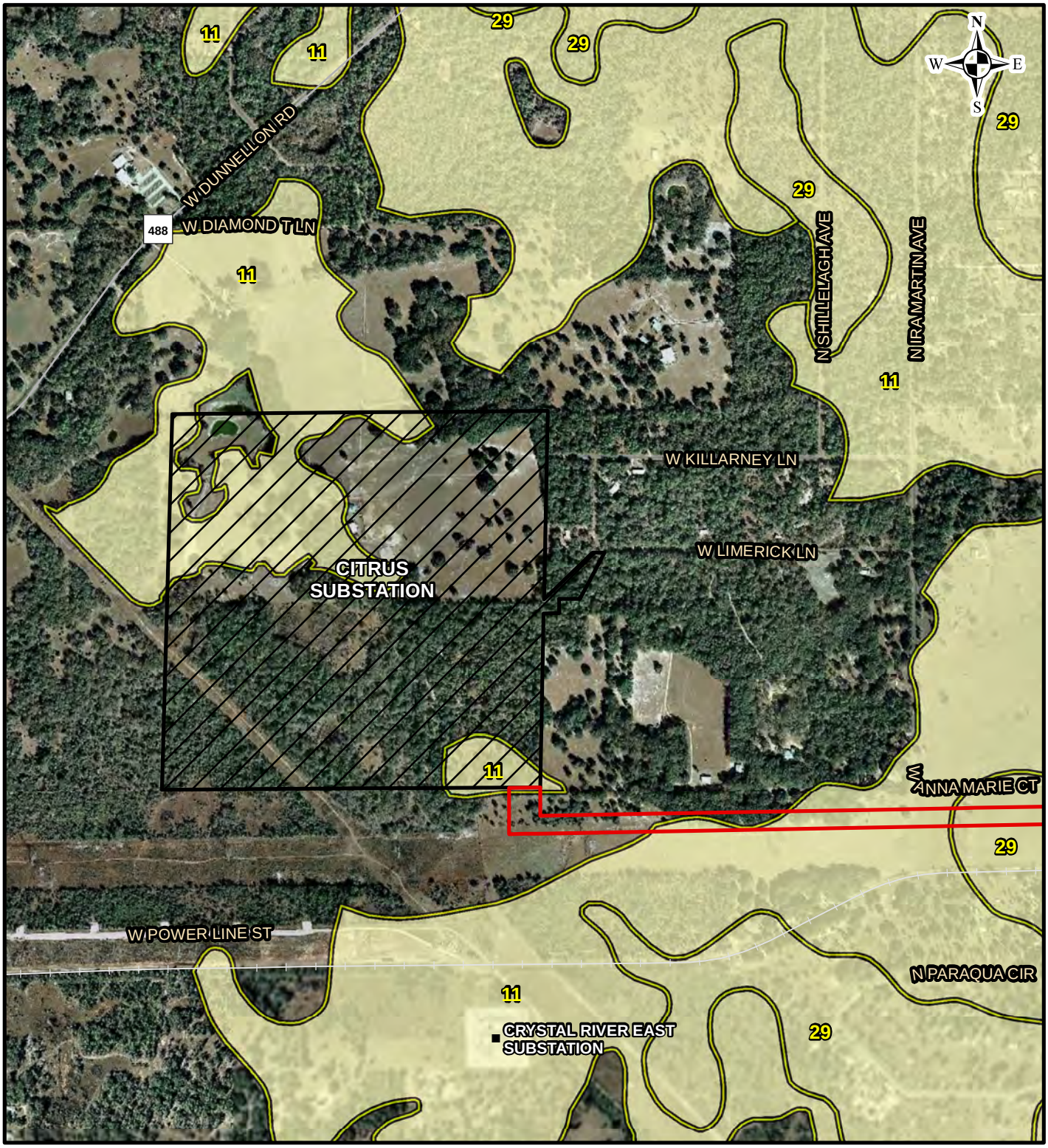
FIGURE 6
LEVY - CENTRAL FLORIDA SOUTH SOIL IDENTIFICATION TABLE
GOPHER TORTOISE SUITABLE SOILS

SOIL ID	DESCRIPTION	COUNTY
3	Candler fine sand, 0 to 5 percent slopes	Citrus
4	Candler fine sand, 5 to 8 percent slopes	Citrus
8	Paola fine sand, 0 to 5 percent slopes	Citrus
11	Tavares fine sand, 0 to 5 percent slopes	Citrus
14	Lake fine sand, 0 to 5 percent slopes	Citrus
15	Lake fine sand, 5 to 8 percent slopes	Citrus
27	Pomello fine sand, 0 to 5 percent slopes	Citrus
29	Astatula fine sand, 0 to 5 percent slopes	Citrus
30	Astatula fine sand, 5 to 8 percent slopes	Citrus
56	Lake, clayey surface, 0 to 5 percent slopes	Citrus
13	Astatula sand, 0 to 5 percent slopes	Marion
14	Astatula sand, 5 to 12 percent slopes	Marion
22	Candler sand, 0 to 5 percent slopes	Marion
23	Candler sand, 5 to 12 percent slopes	Marion
69	Tavares sand, 0 to 5 percent slopes	Marion
3	Astatula fine sand, rolling	Sumter
4	Candler sand, 0 to 5 percent slopes	Sumter
5	Candler sand, 5 to 8 percent slopes	Sumter
8	Lake fine sand, 0 to 5 percent slopes	Sumter
11	Millhopper sand, 0 to 5 percent slopes	Sumter
13	Tavares fine sand, 0 to 5 percent slopes	Sumter
14	Lake fine sand, 5 to 8 percent slopes	Sumter
20	Florahome sand, 0 to 5 percent slopes	Sumter
37	Astatula fine sand, 0 to 8 percent slopes	Sumter
40	Millhopper sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
52	Candler sand, 8 to 12 percent slopes	Sumter
53	Tavares fine sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
55	Pomello fine sand, 0 to 5 percent slopes	Sumter
65	Candler sand, bouldery subsurface, 0 to 5 percent slopes	Sumter
8	Candler sand, 0 to 5 percent slopes	Lake
45	Tavares sand, 0 to 5 percent slopes	Lake



LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

NOTE

See Figure 6 Soil Identification Table for Soil Definitions
There were no "Desirable" soil types in the project area.

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Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; Soils: U.S. Department of Agriculture, Natural Resources Conservation Service, 2006; Aerials: ESRI, 2008

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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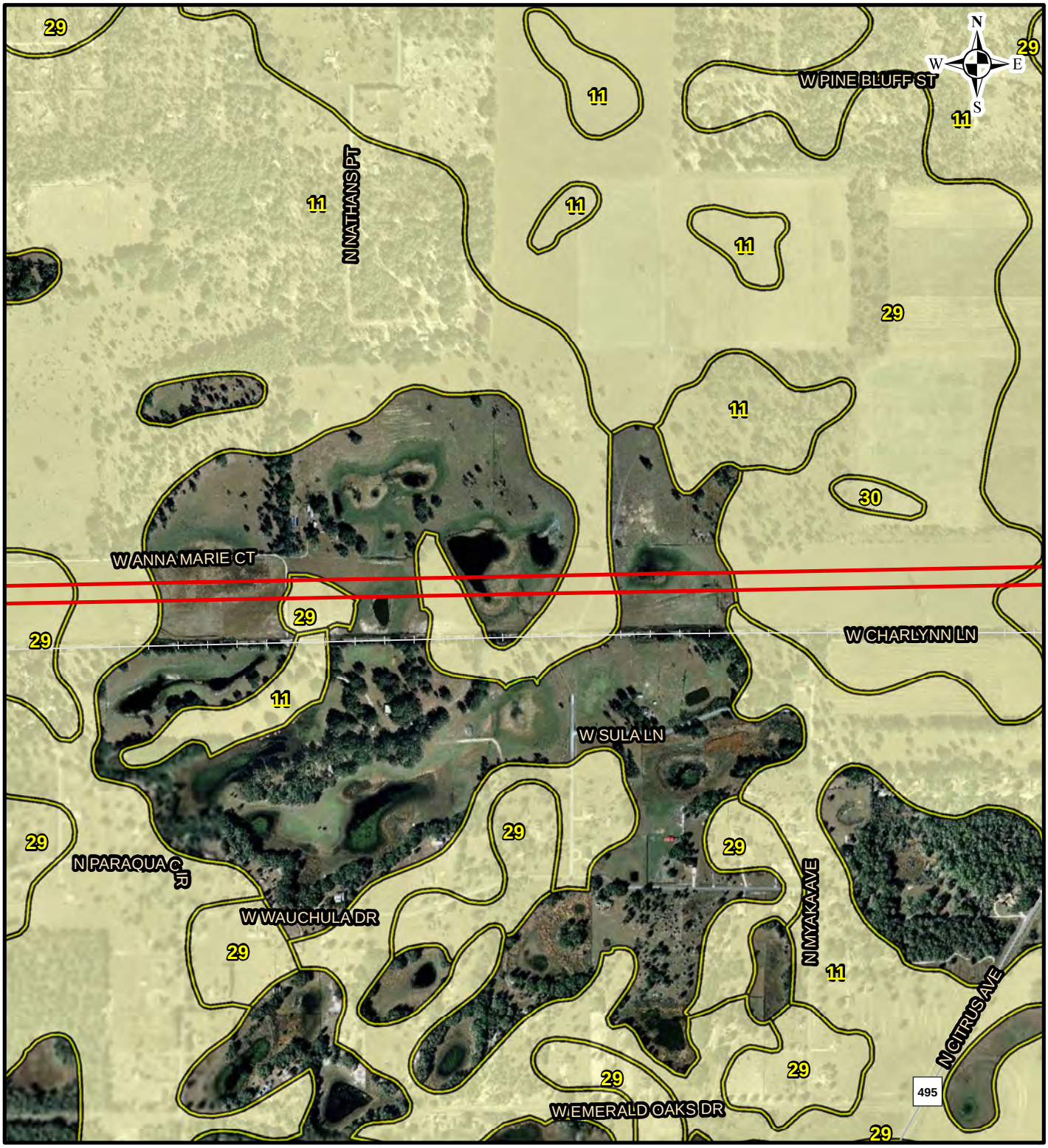

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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FIGURE 6
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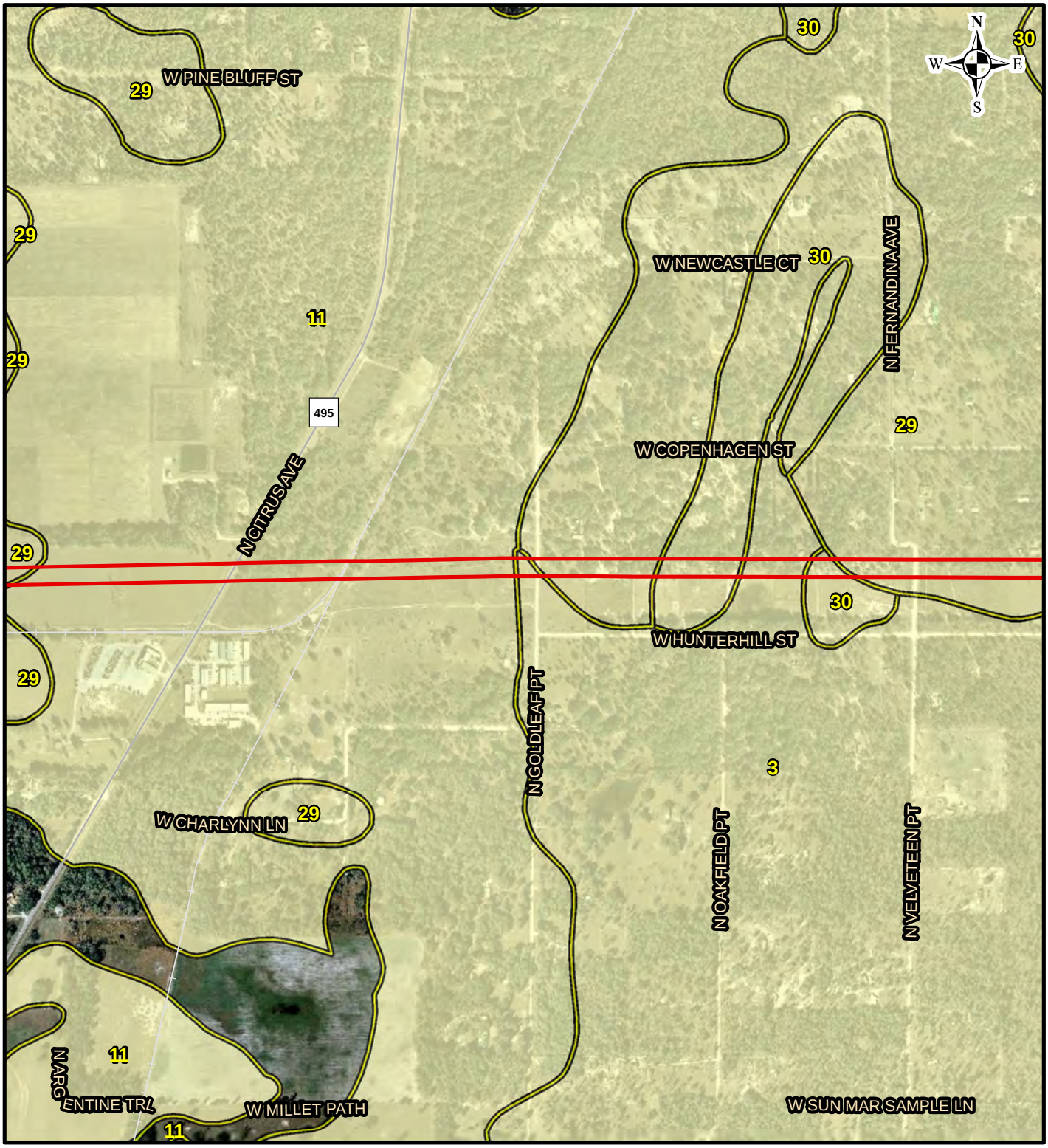

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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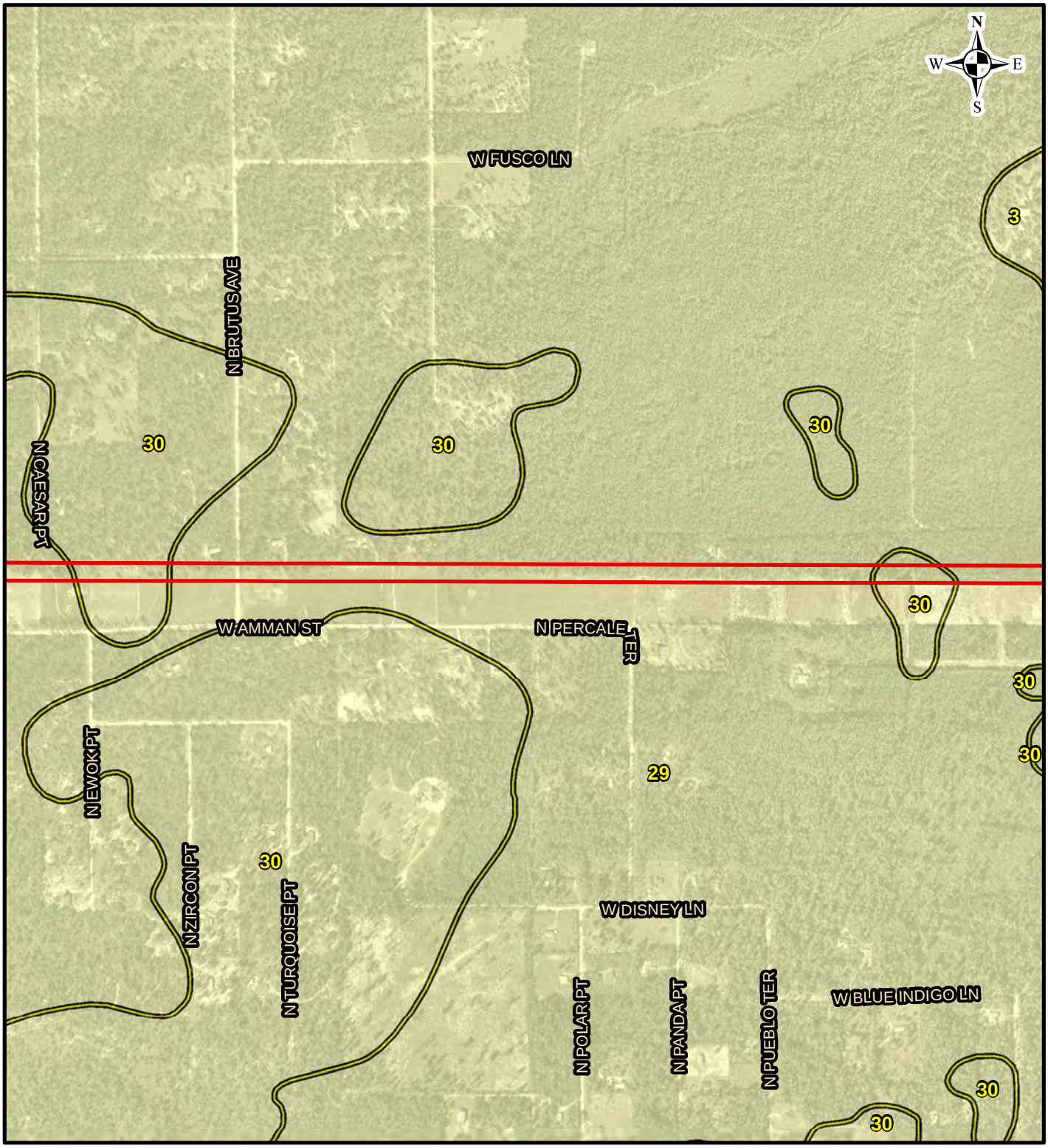

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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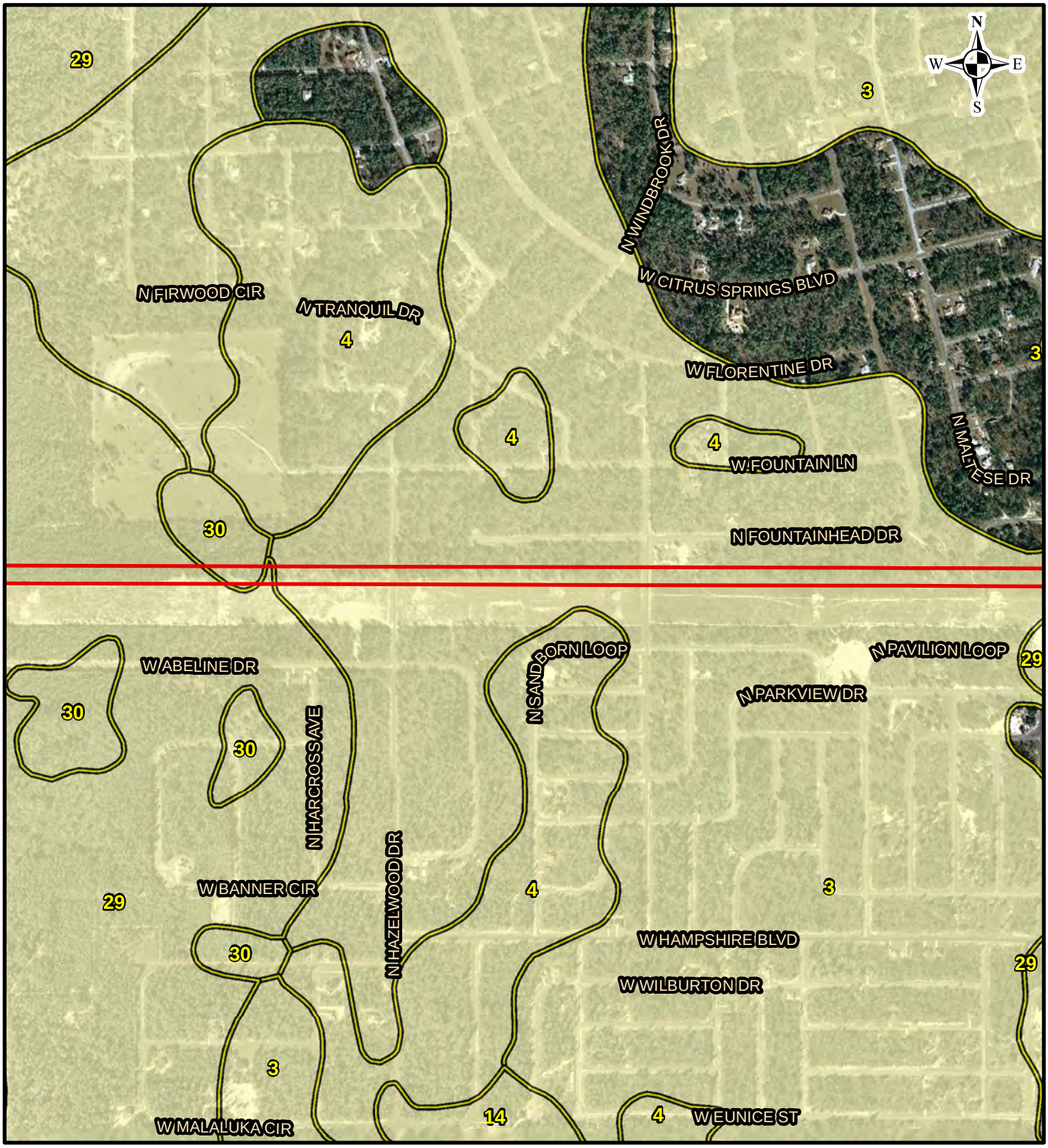

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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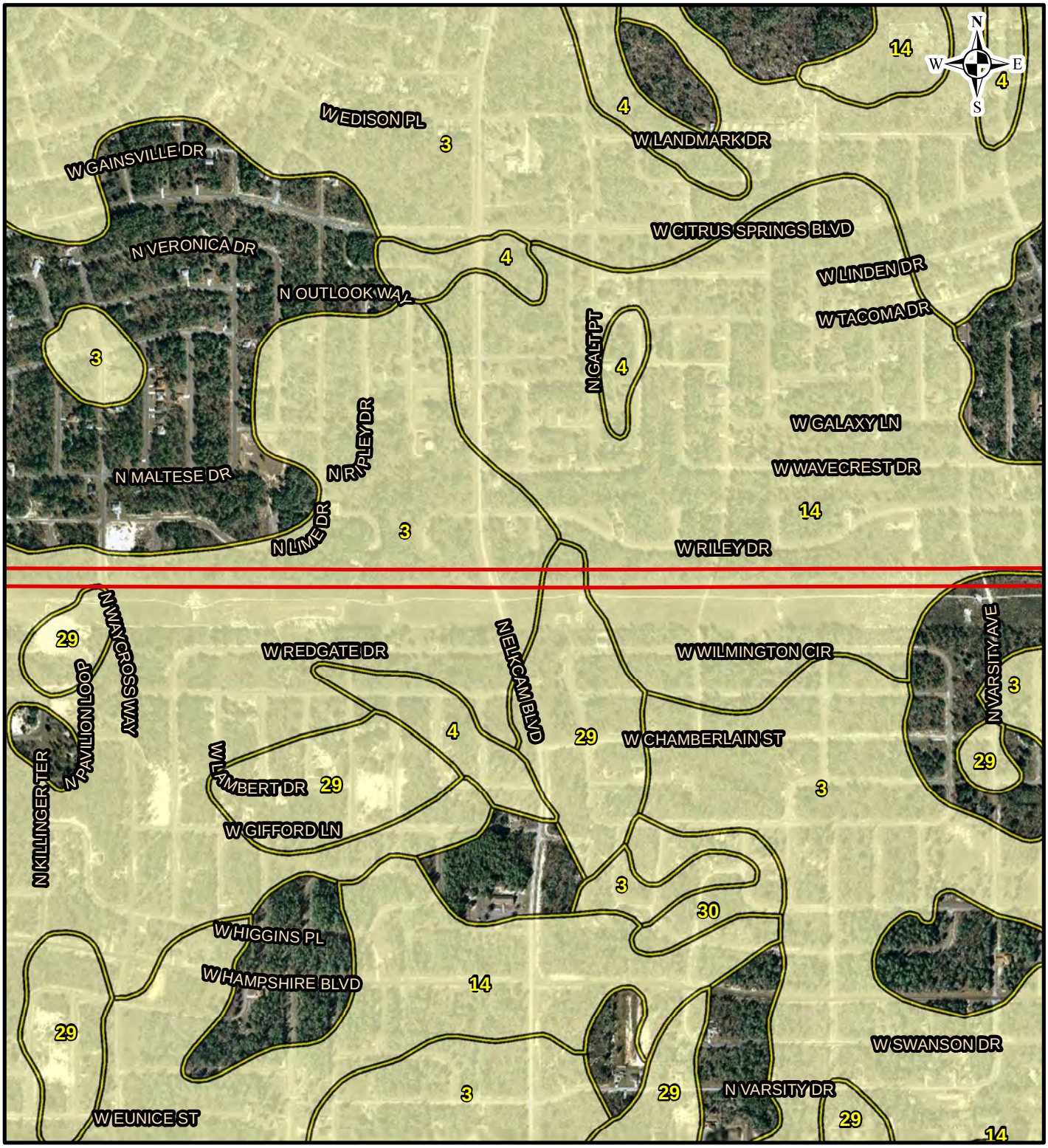

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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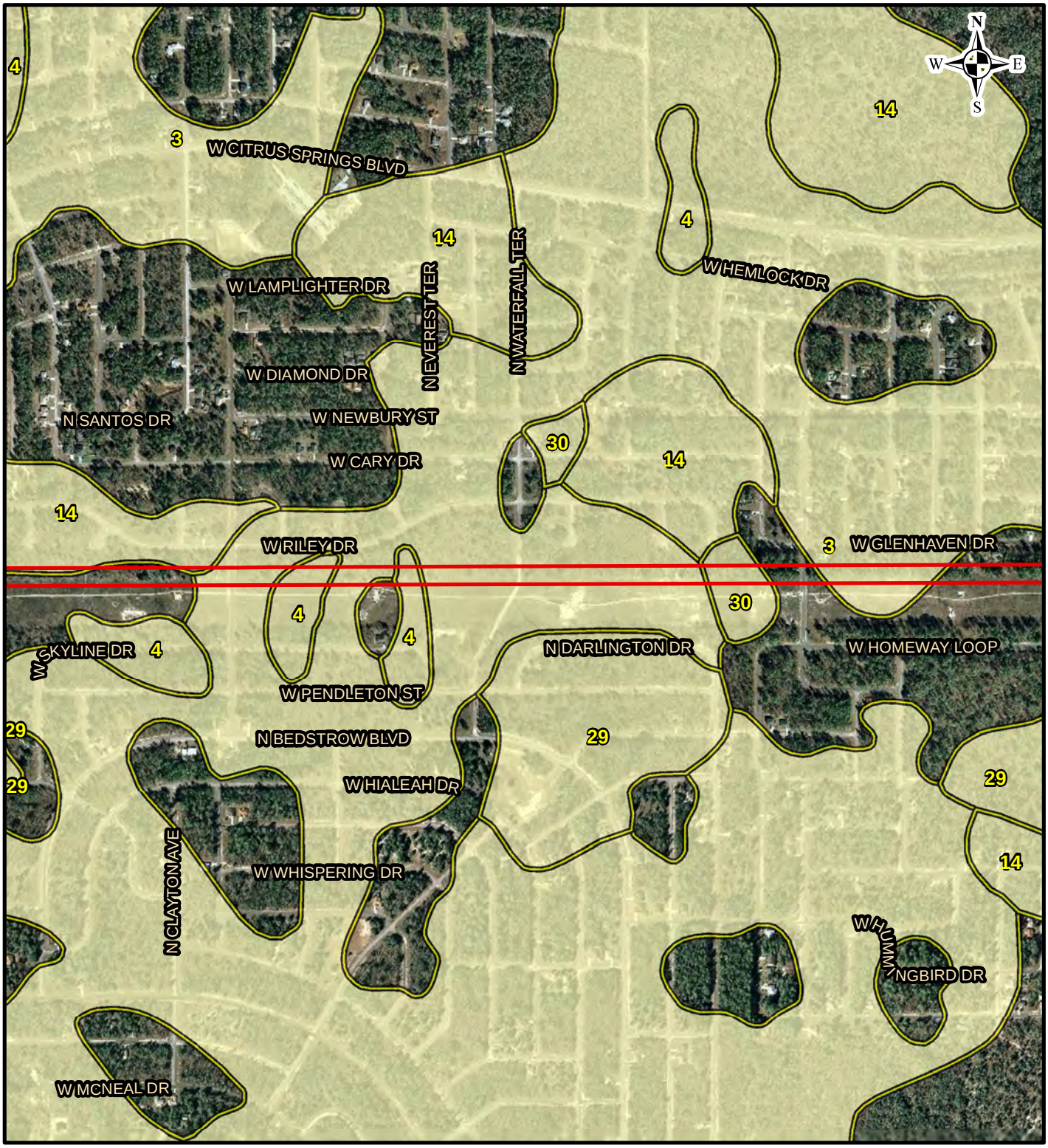

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

NOTE

See Figure 6 Soil Identification Table for Soil Definitions
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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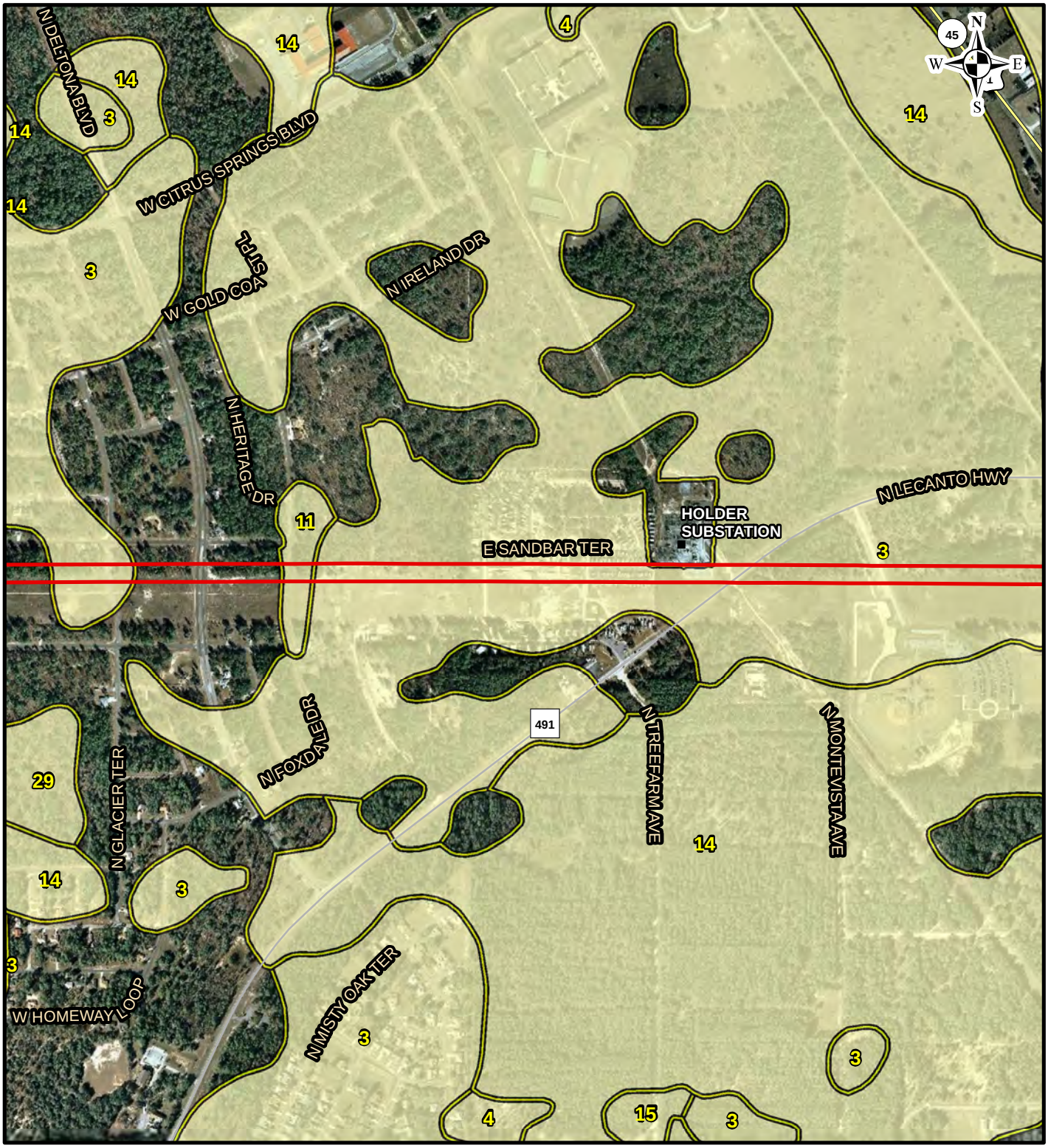

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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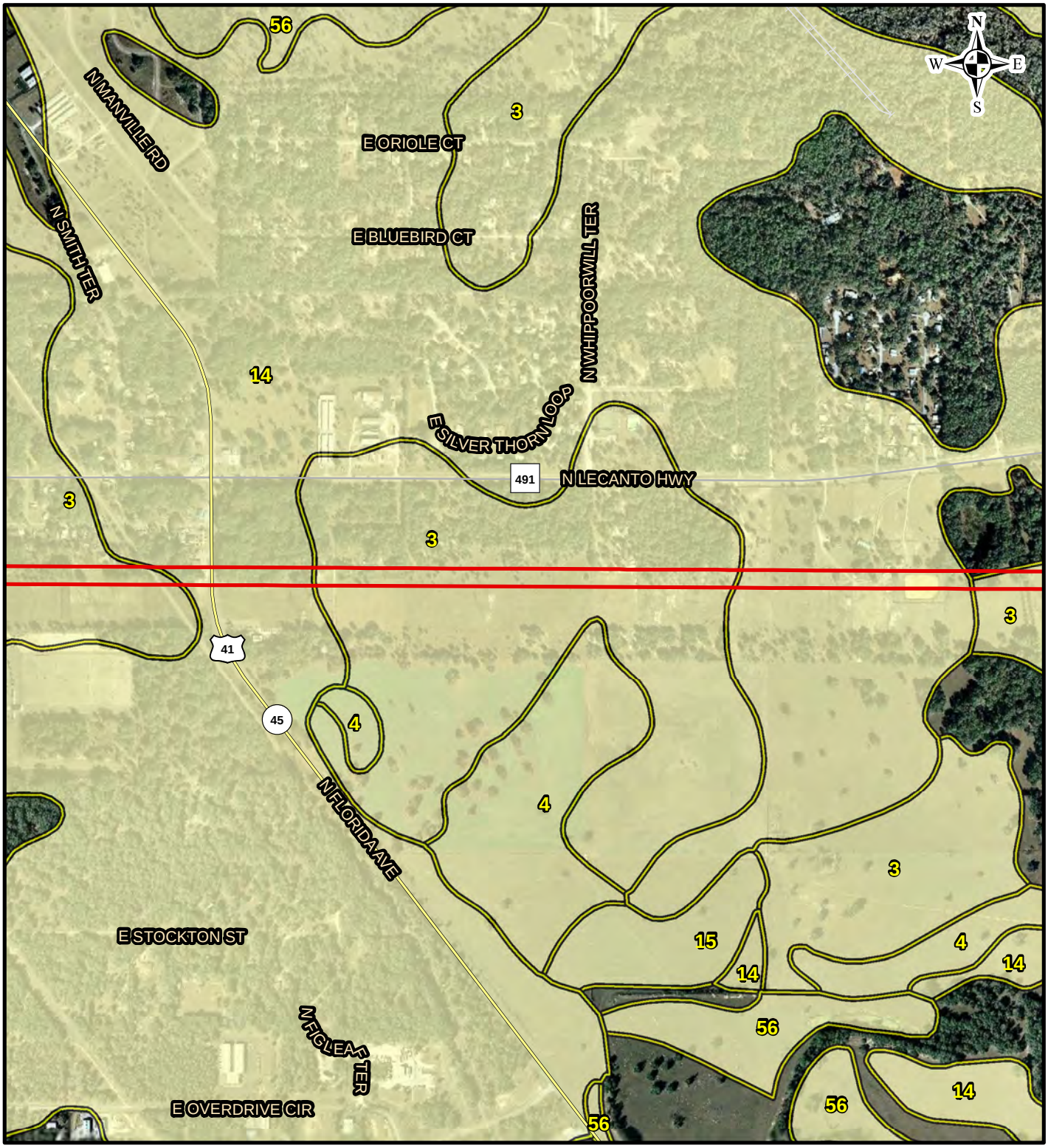

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000

Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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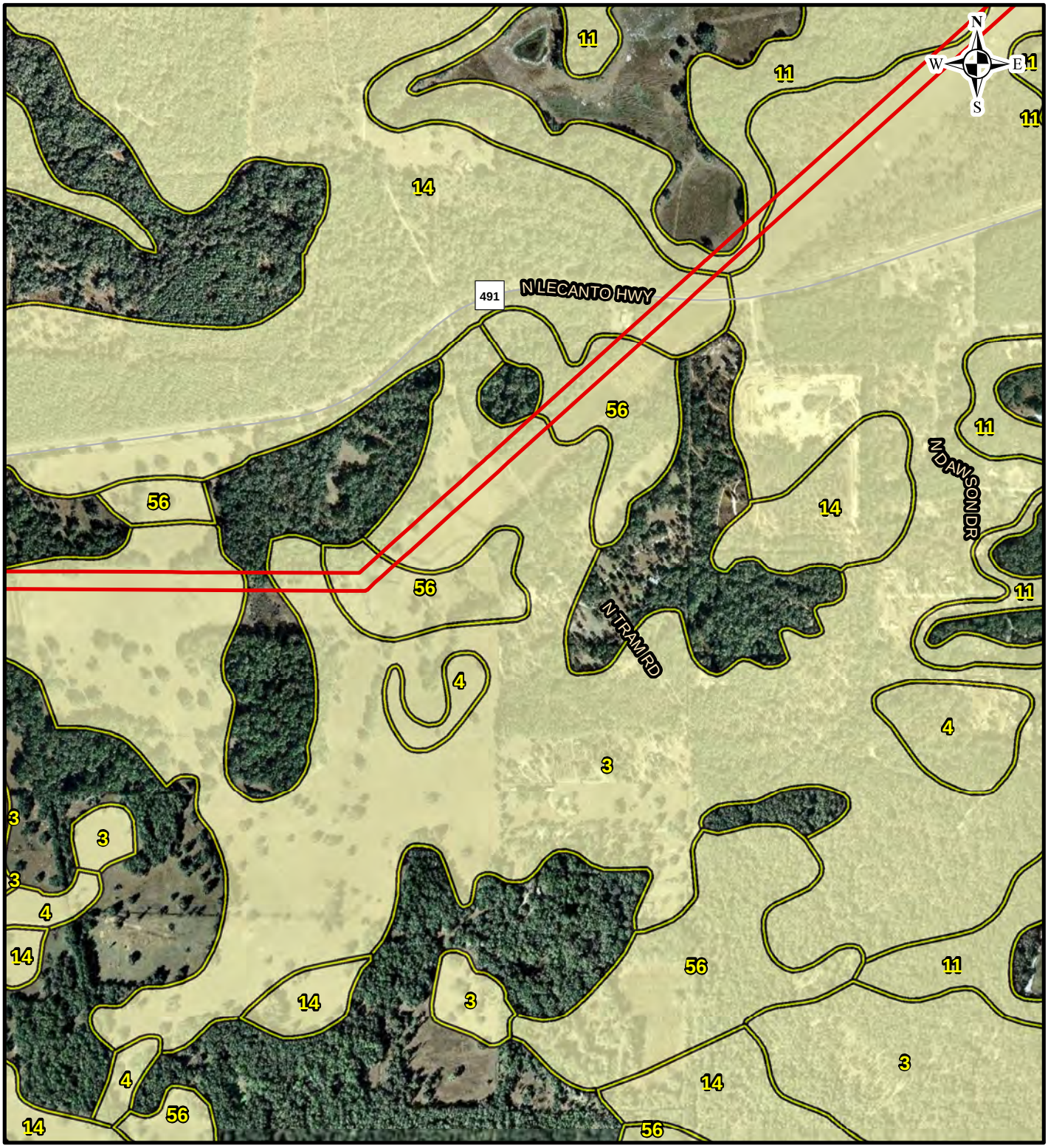

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000
Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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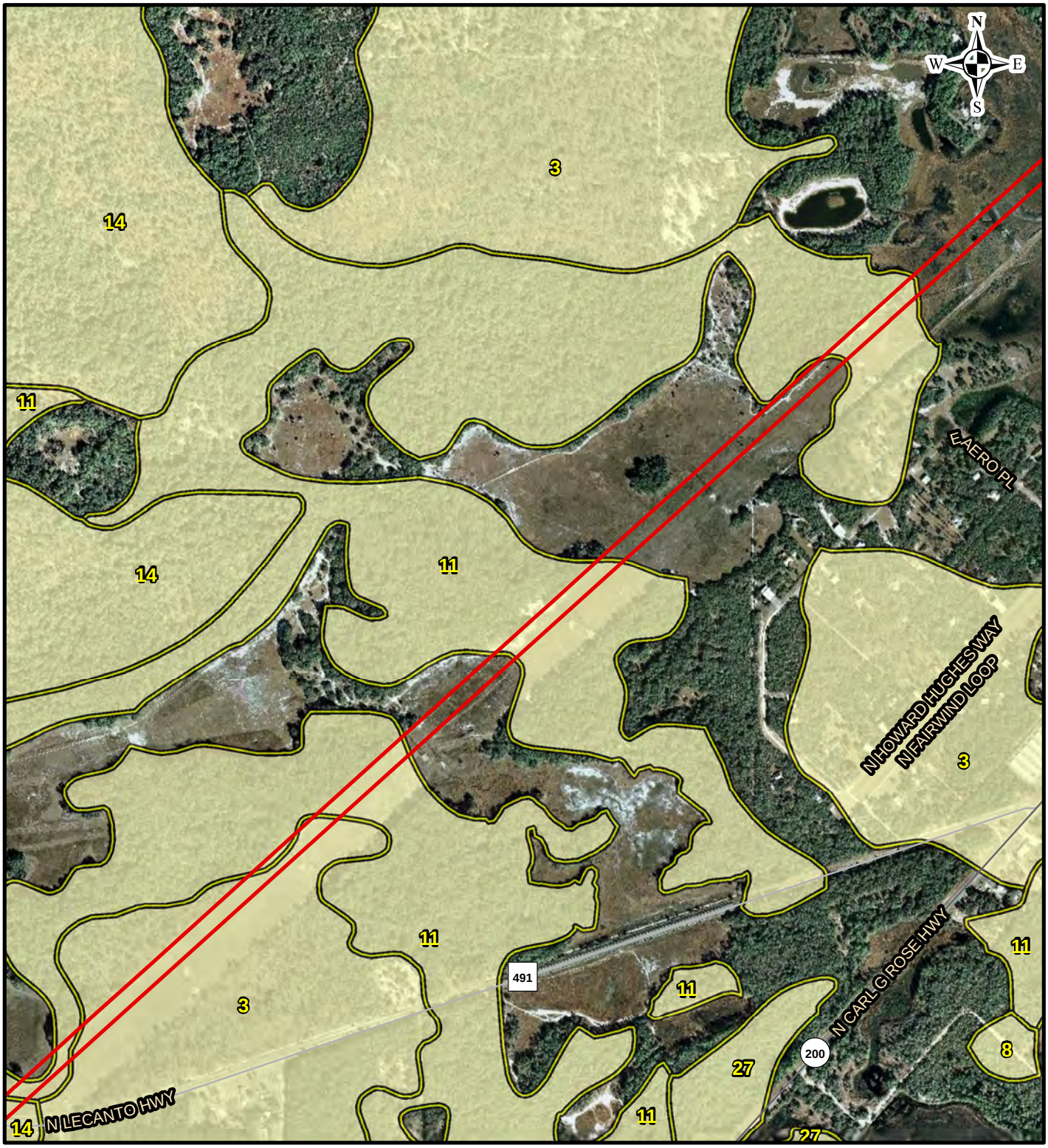

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000

Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000

Feet

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LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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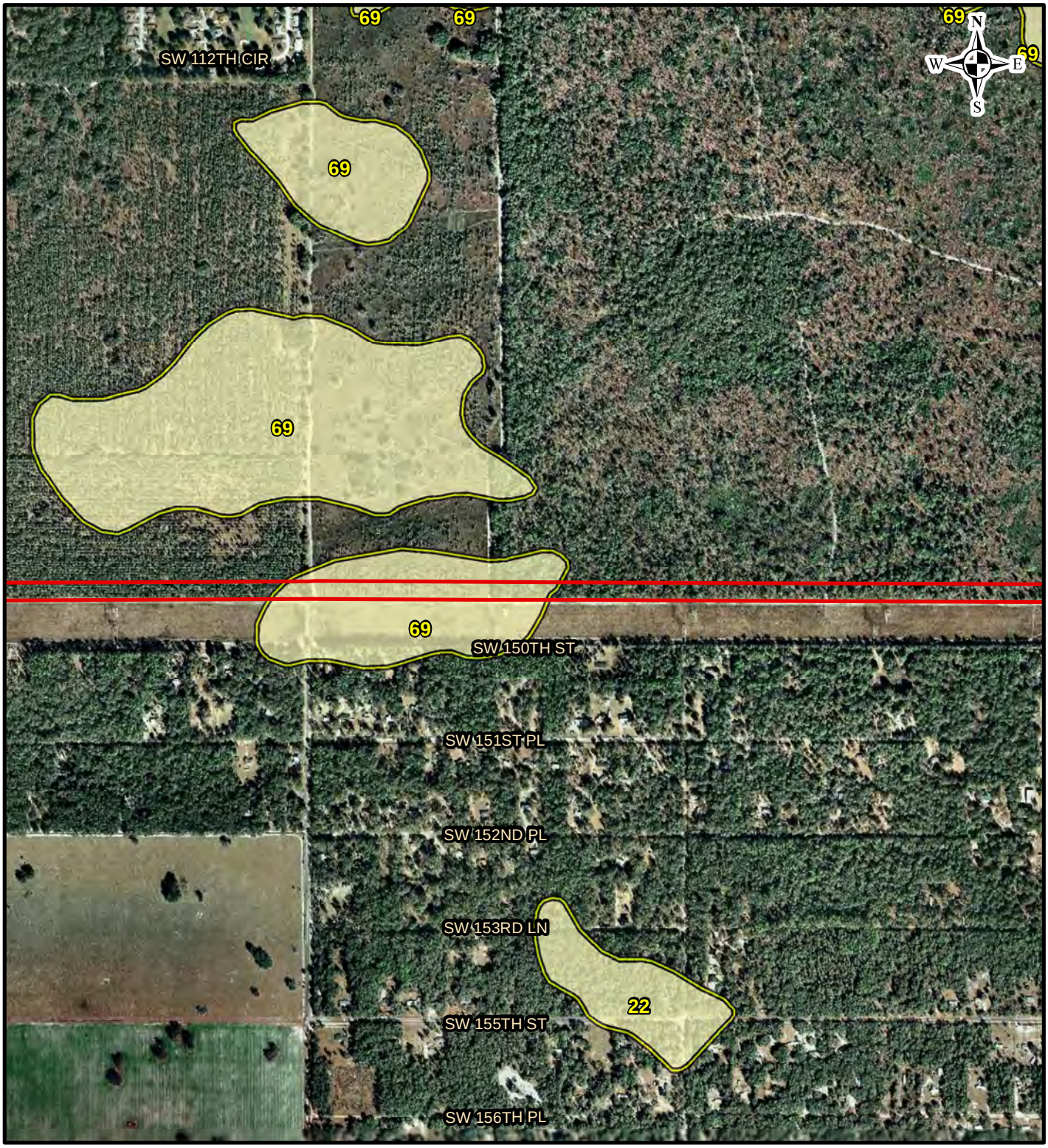

LEGEND

- LCFS Preferred Right-of-Way
- Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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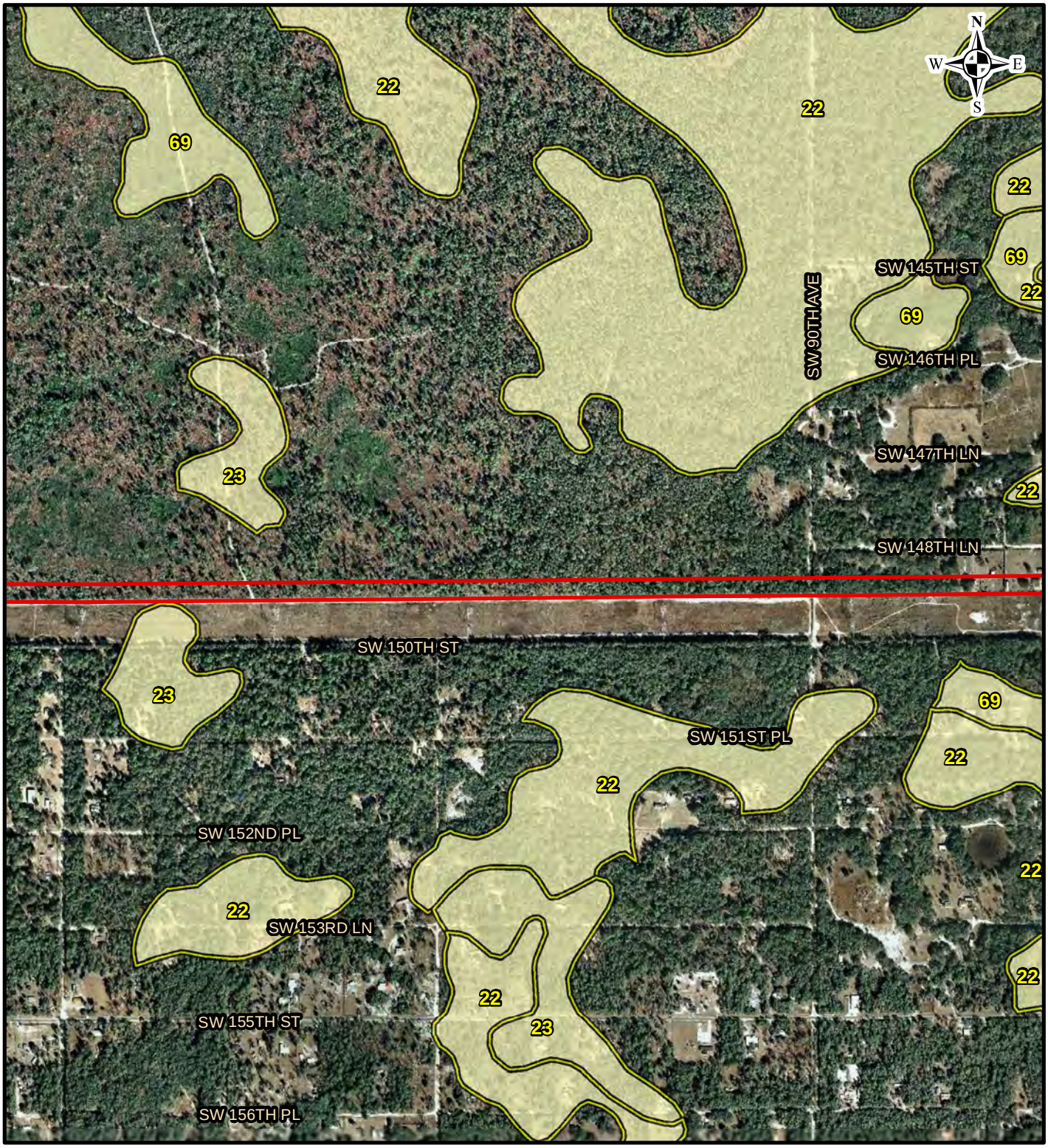

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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FIGURE 6

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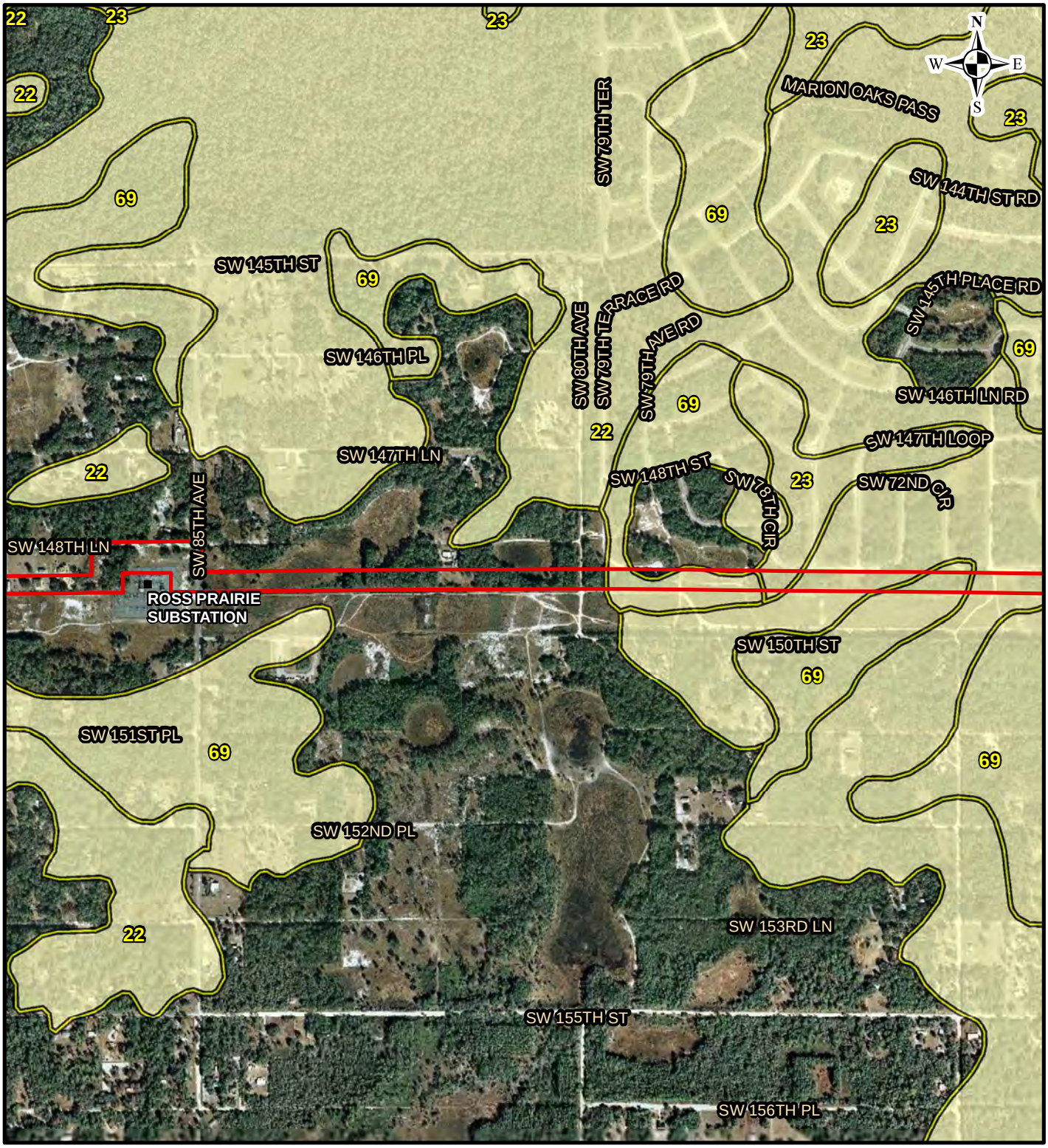

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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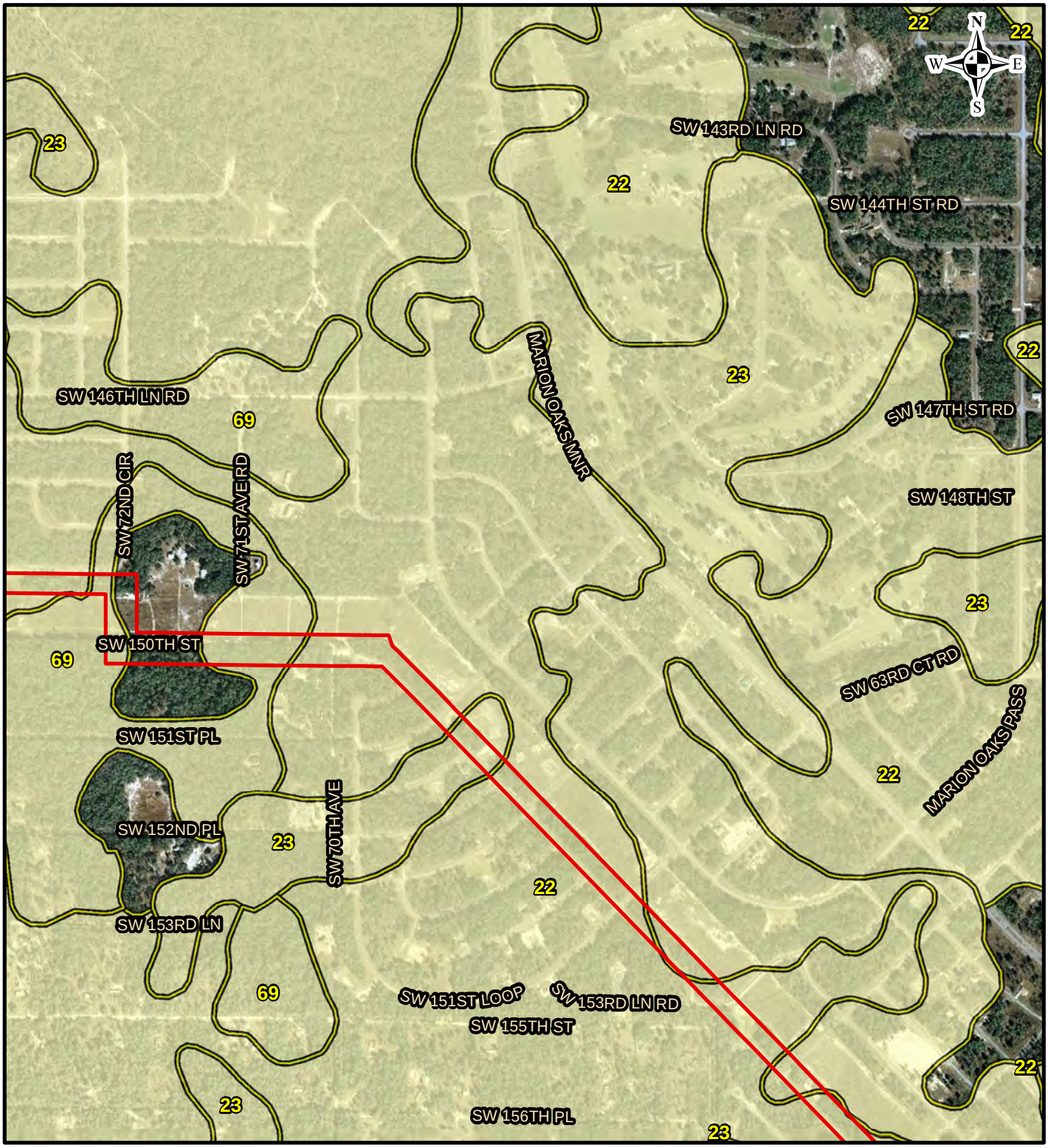

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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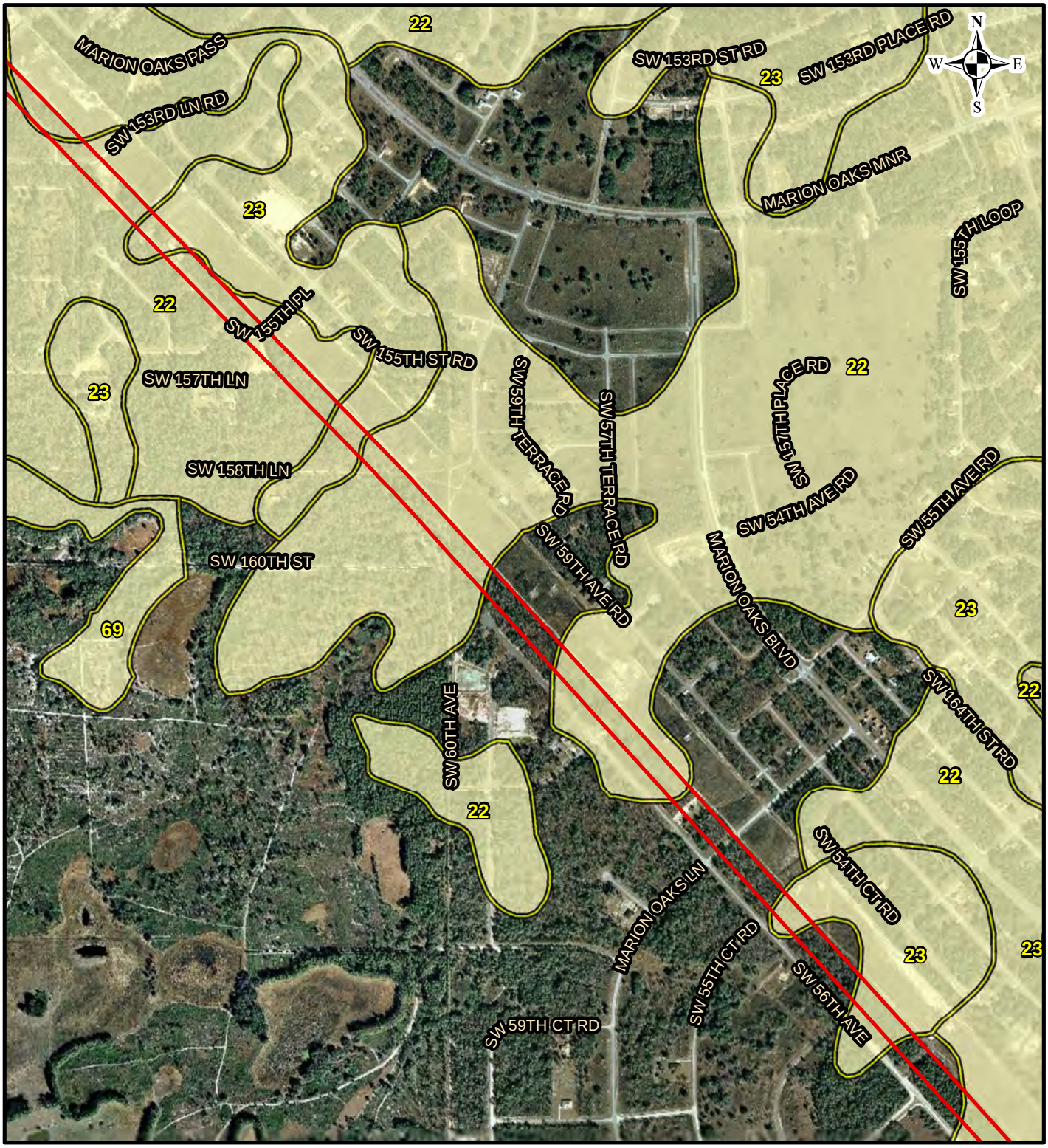

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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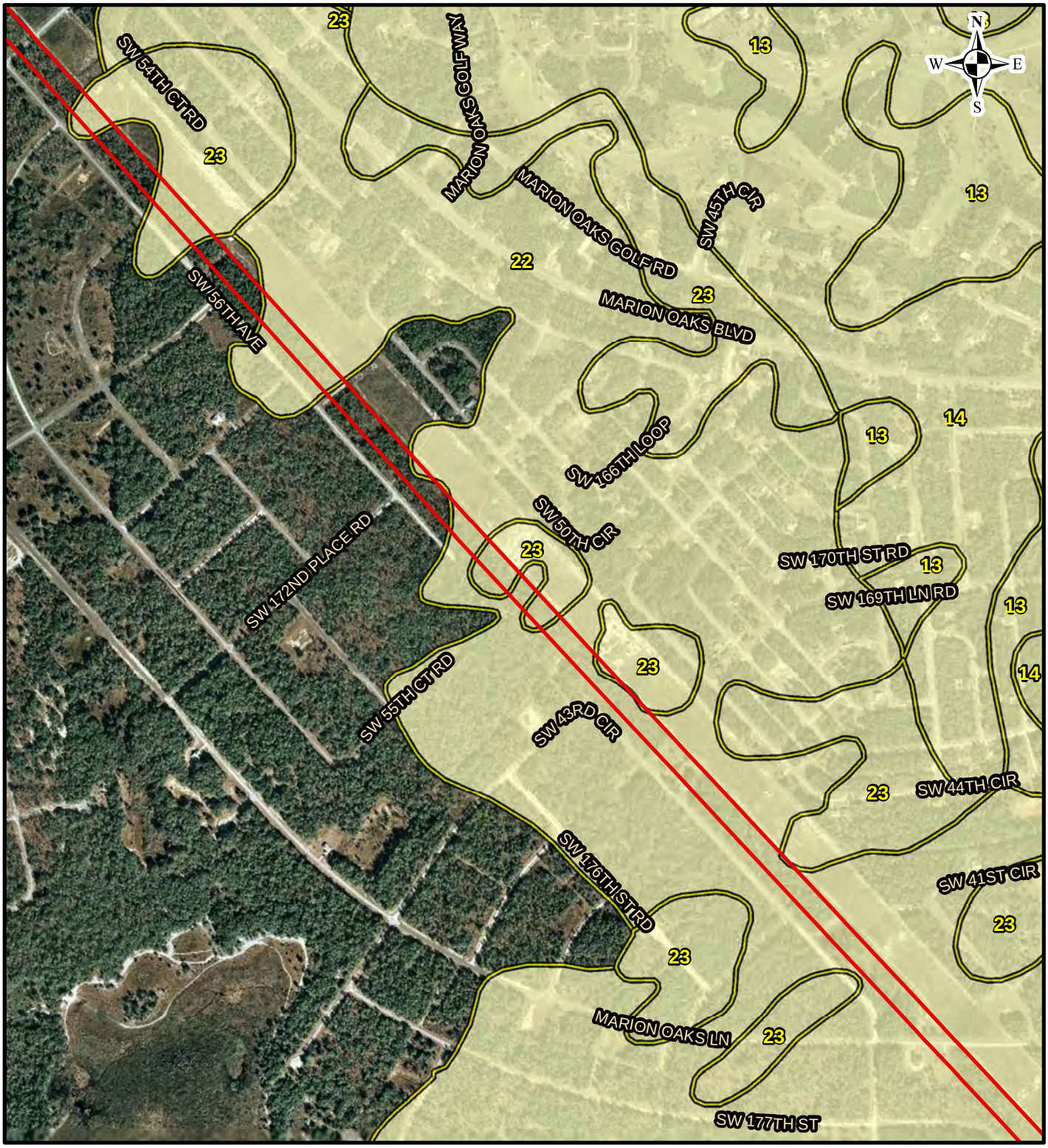

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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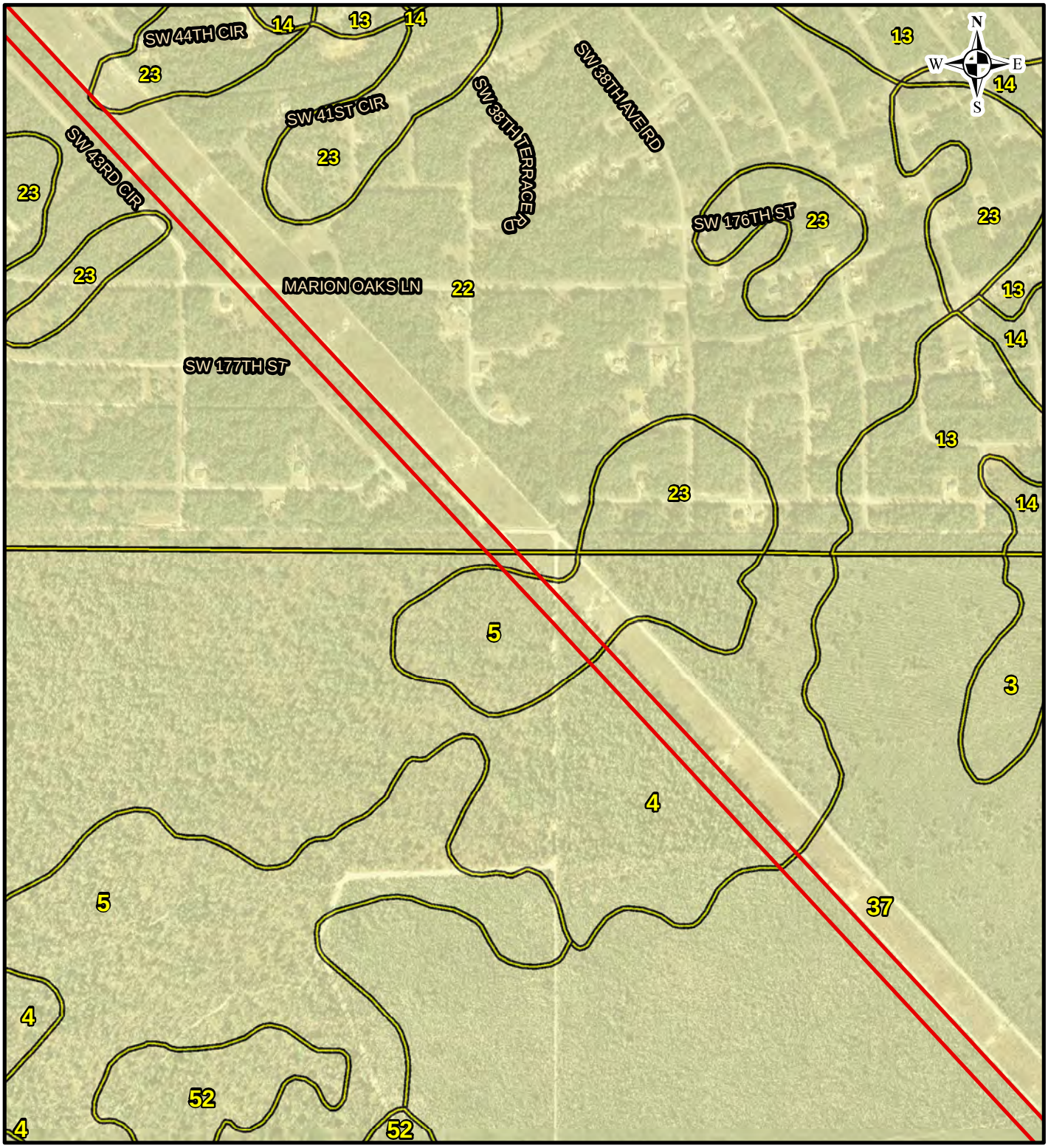

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000

Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

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Feet

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LEVY NUCLEAR PLANT

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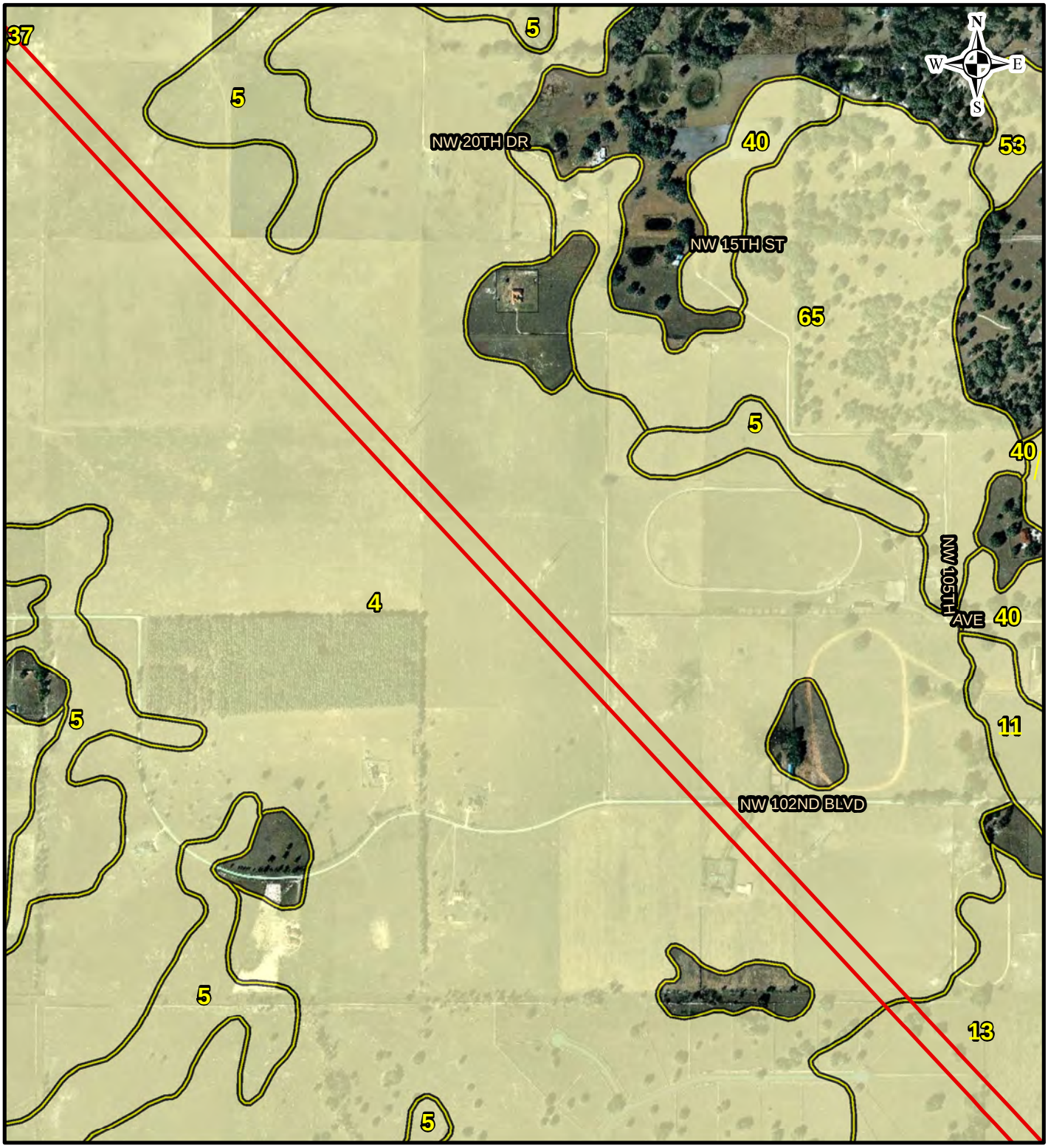

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LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

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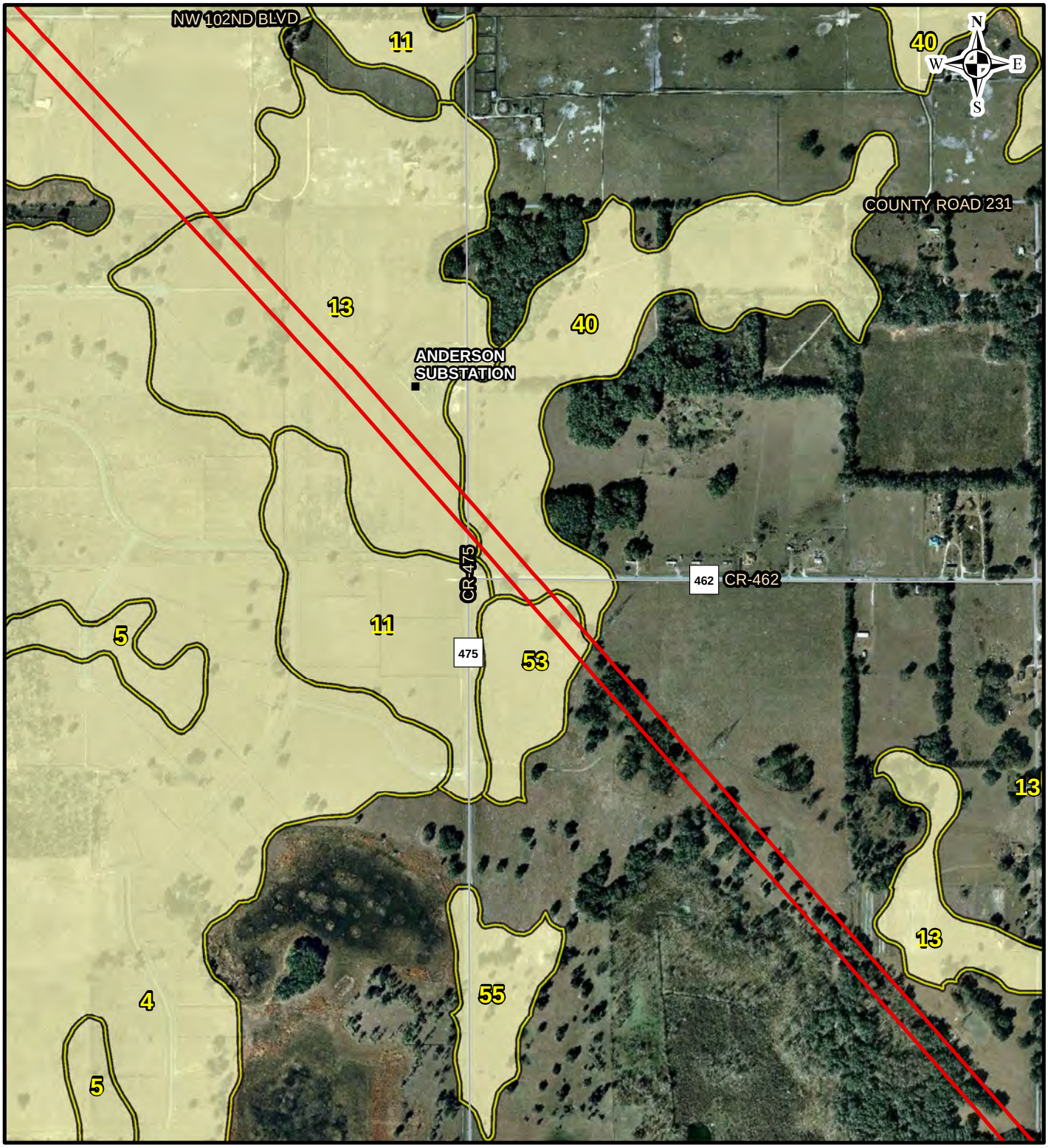

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LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

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Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

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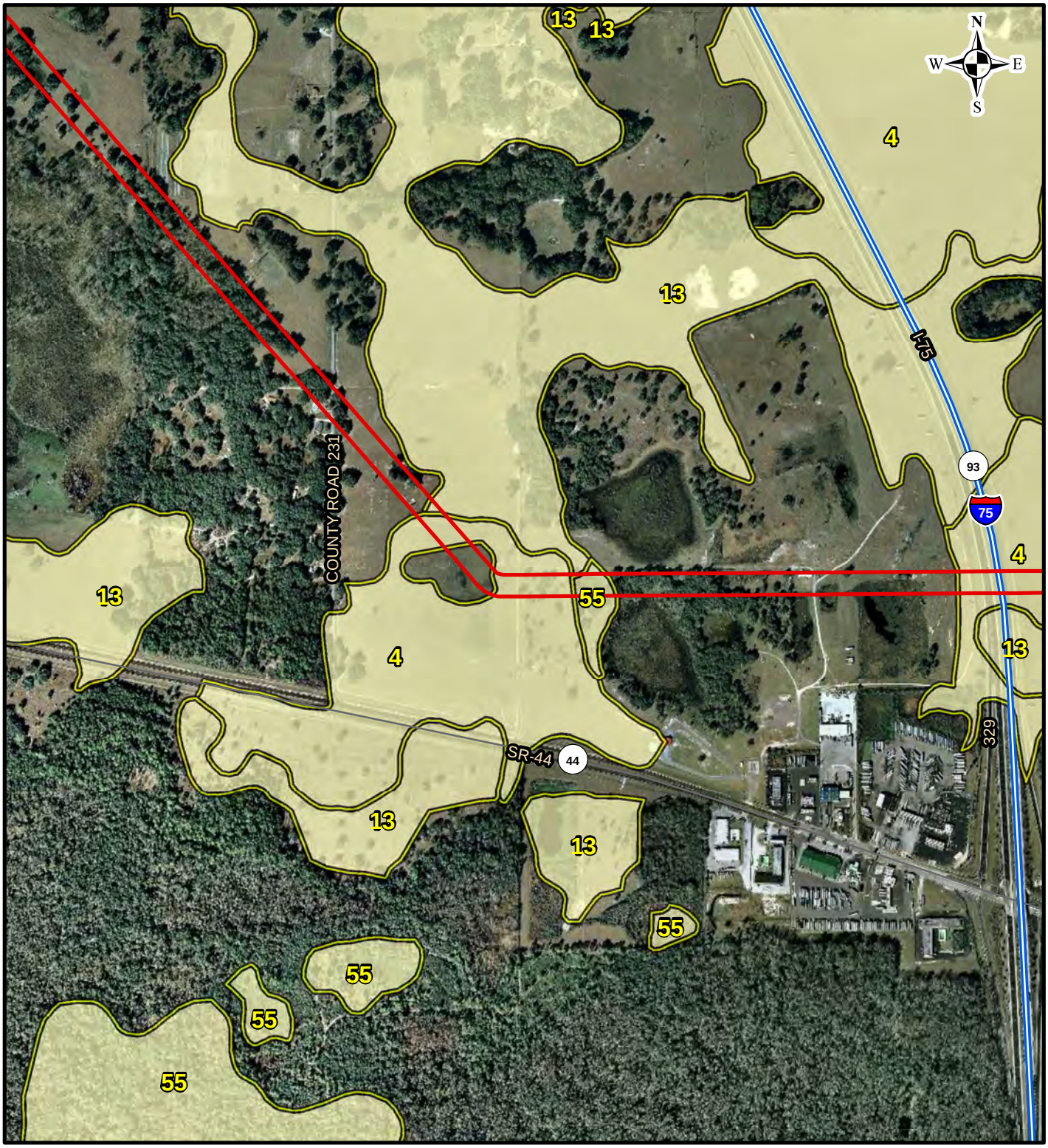

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LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
GOPHER TORTOISE SUITABLE SOILS MAP

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FIGURE 6

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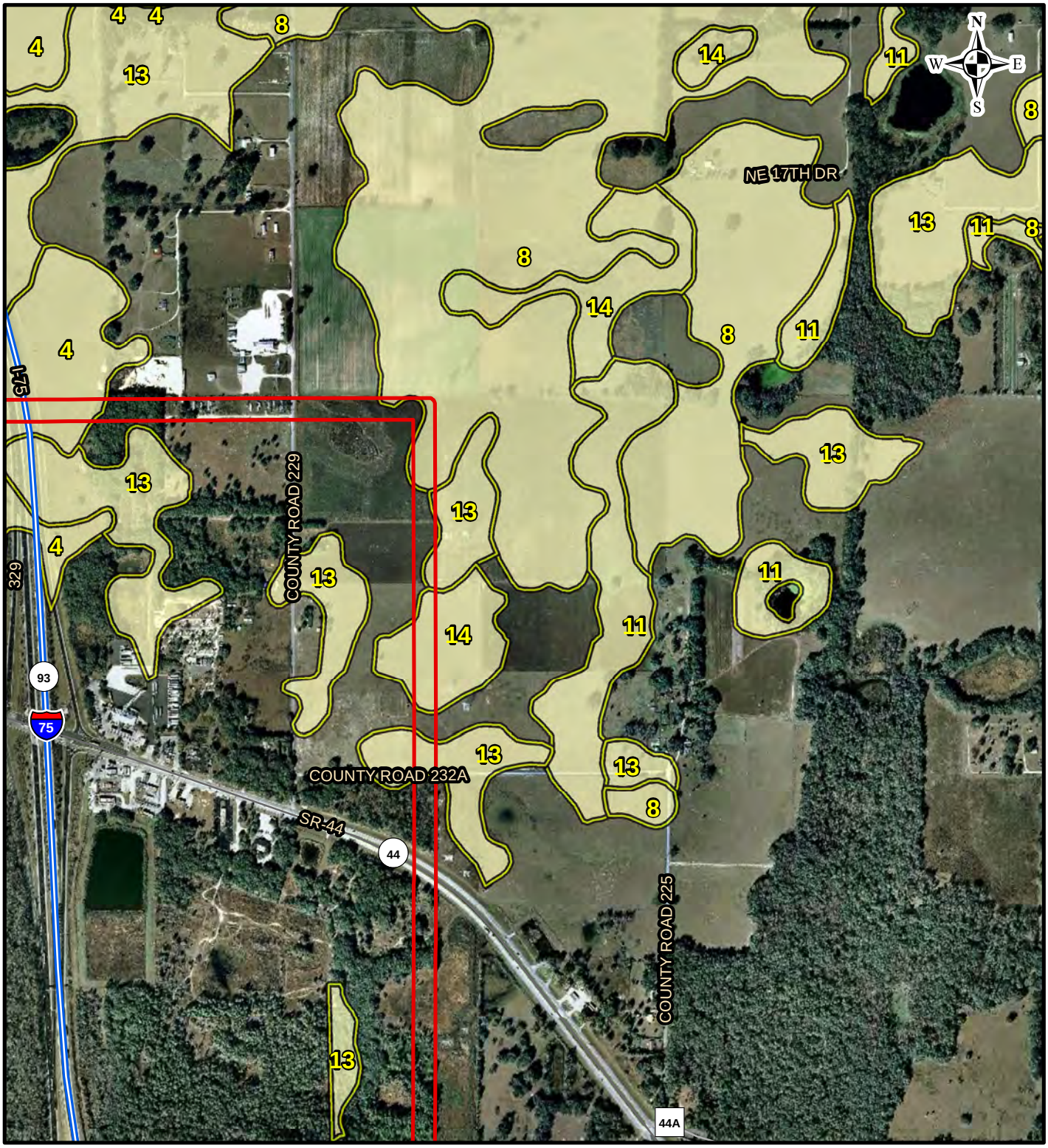

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

NOTE

See Figure 6 Soil Identification Table for Soil Definitions
There were no "Desirable" soil types in the project area.

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; Soils: U.S. Department of Agriculture, Natural Resources Conservation Service, 2006; Aerials: ESRI, 2008

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

MXD File No. 103-89627C011			SCALE AS SHOWN	REV. 0
DESIGN	JG	02/28/2011	FIGURE 6	
GIS	JG	02/28/2011		
CHECK	SR	02/28/2011	PAGE 26 OF 31	
REVIEW	KB	02/28/2011		

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LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

NOTE

See Figure 6 Soil Identification Table for Soil Definitions
There were no "Desirable" soil types in the project area.

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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DESIGN	JG	02/28/2011	FIGURE 6	
GIS	JG	02/28/2011		
CHECK	SR	02/28/2011	PAGE 27 OF 31	
REVIEW	KB	02/28/2011		

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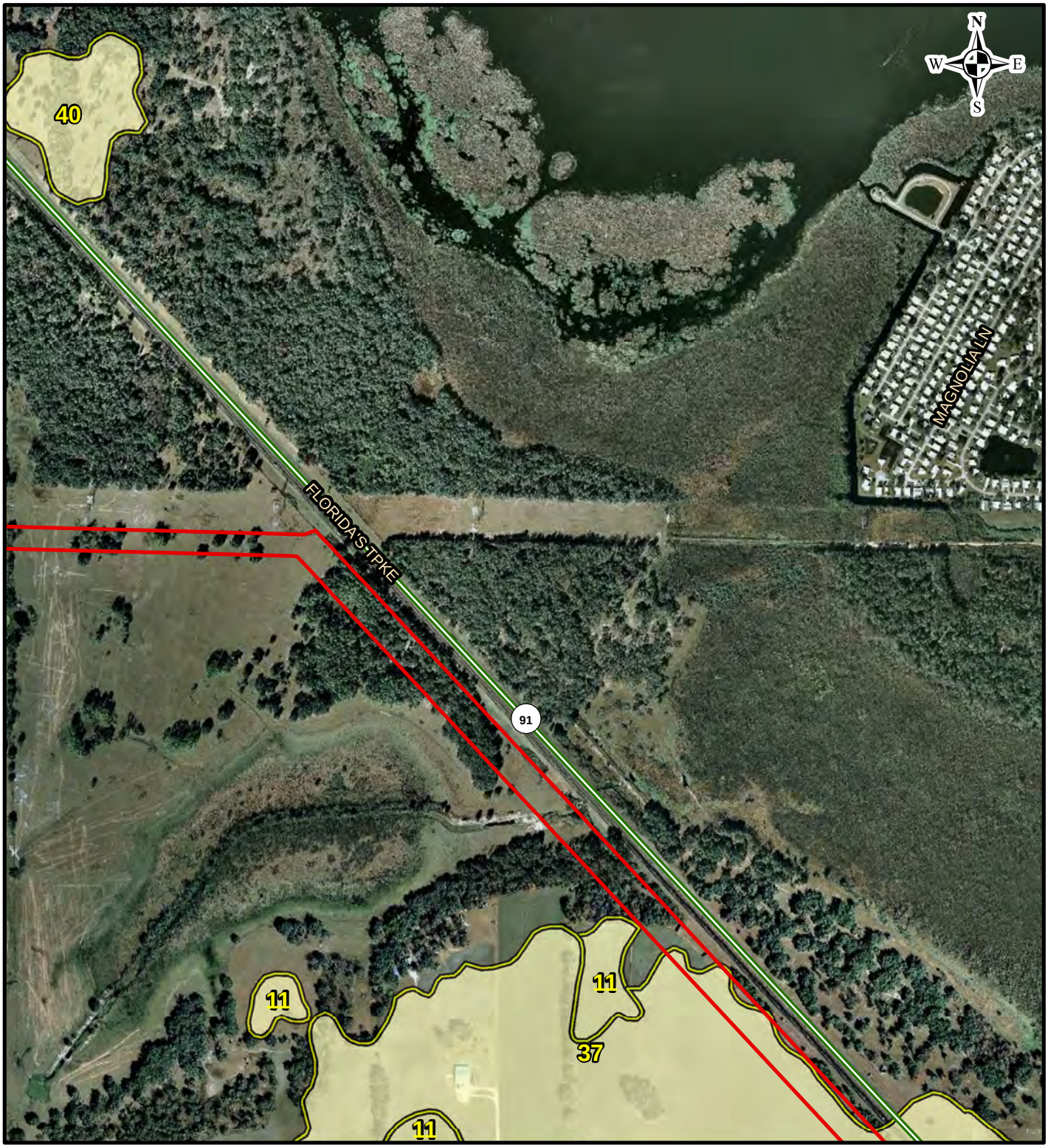

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

NOTE

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There were no "Desirable" soil types in the project area.

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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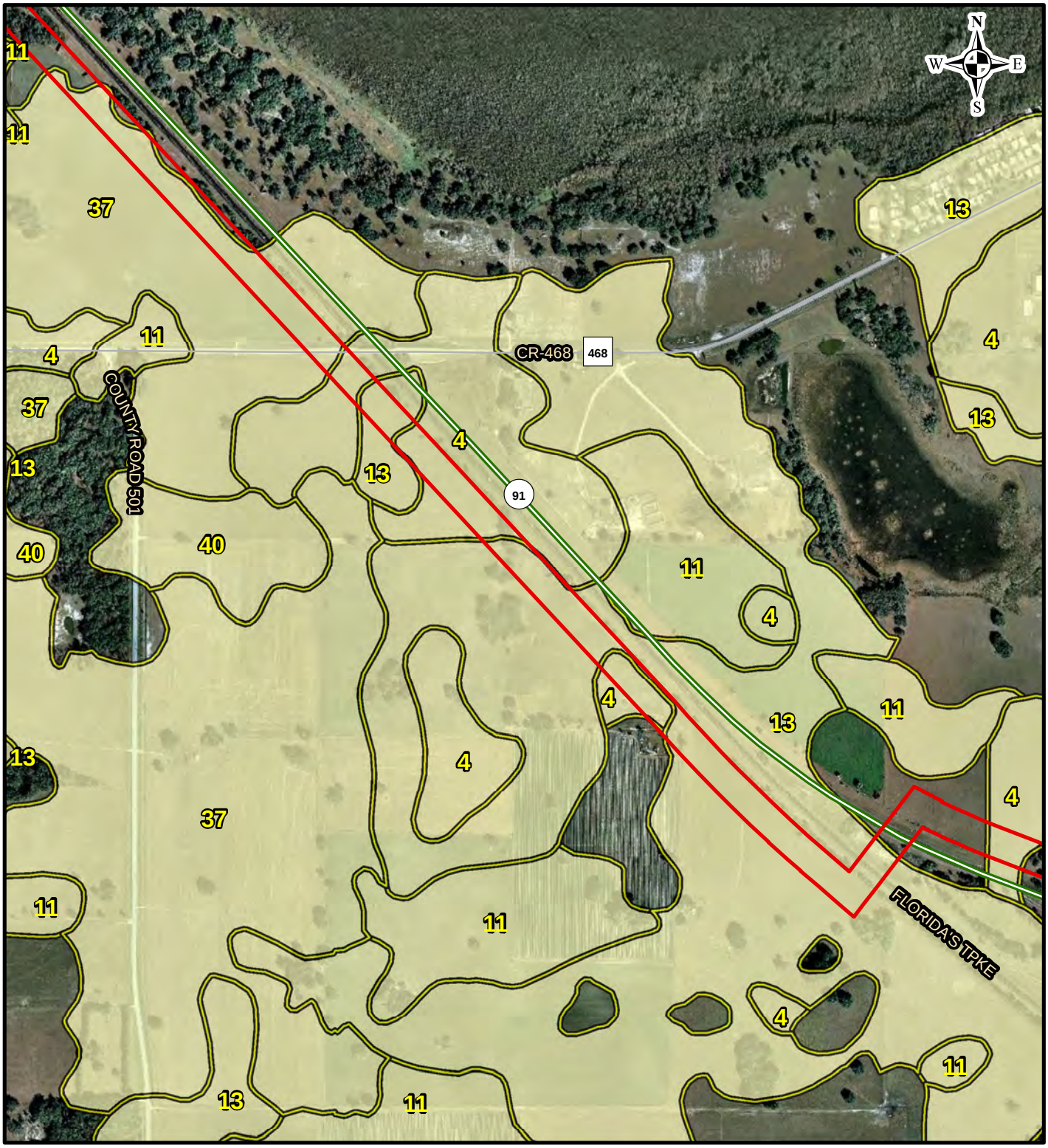

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

MXD File No. 103-89627C011			SCALE AS SHOWN	REV. 0
DESIGN	JG	02/28/2011	FIGURE 6	
GIS	JG	02/28/2011		
CHECK	SR	02/28/2011	PAGE 29 OF 31	
REVIEW	KB	02/28/2011		

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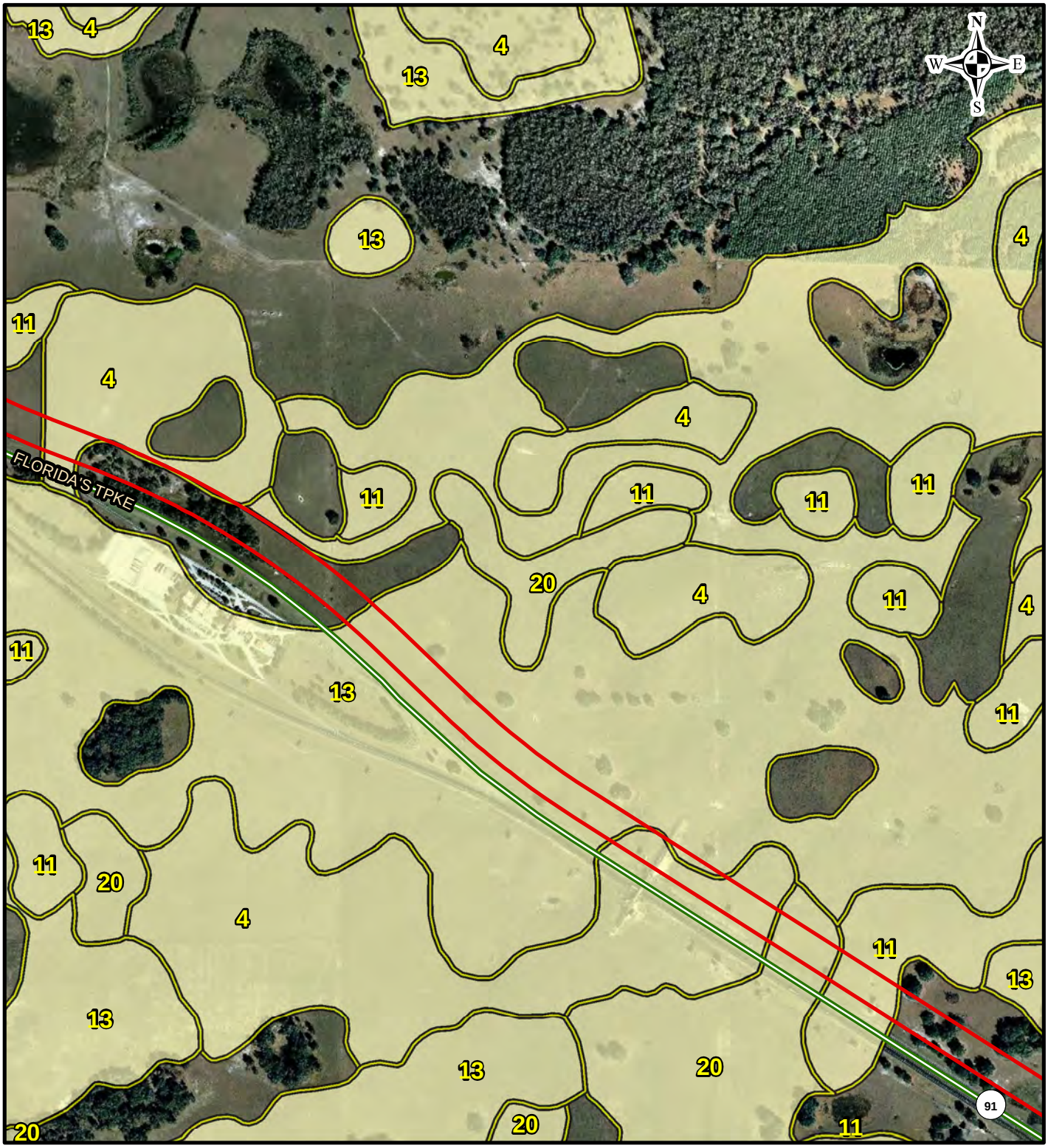

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000

Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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FIGURE 6

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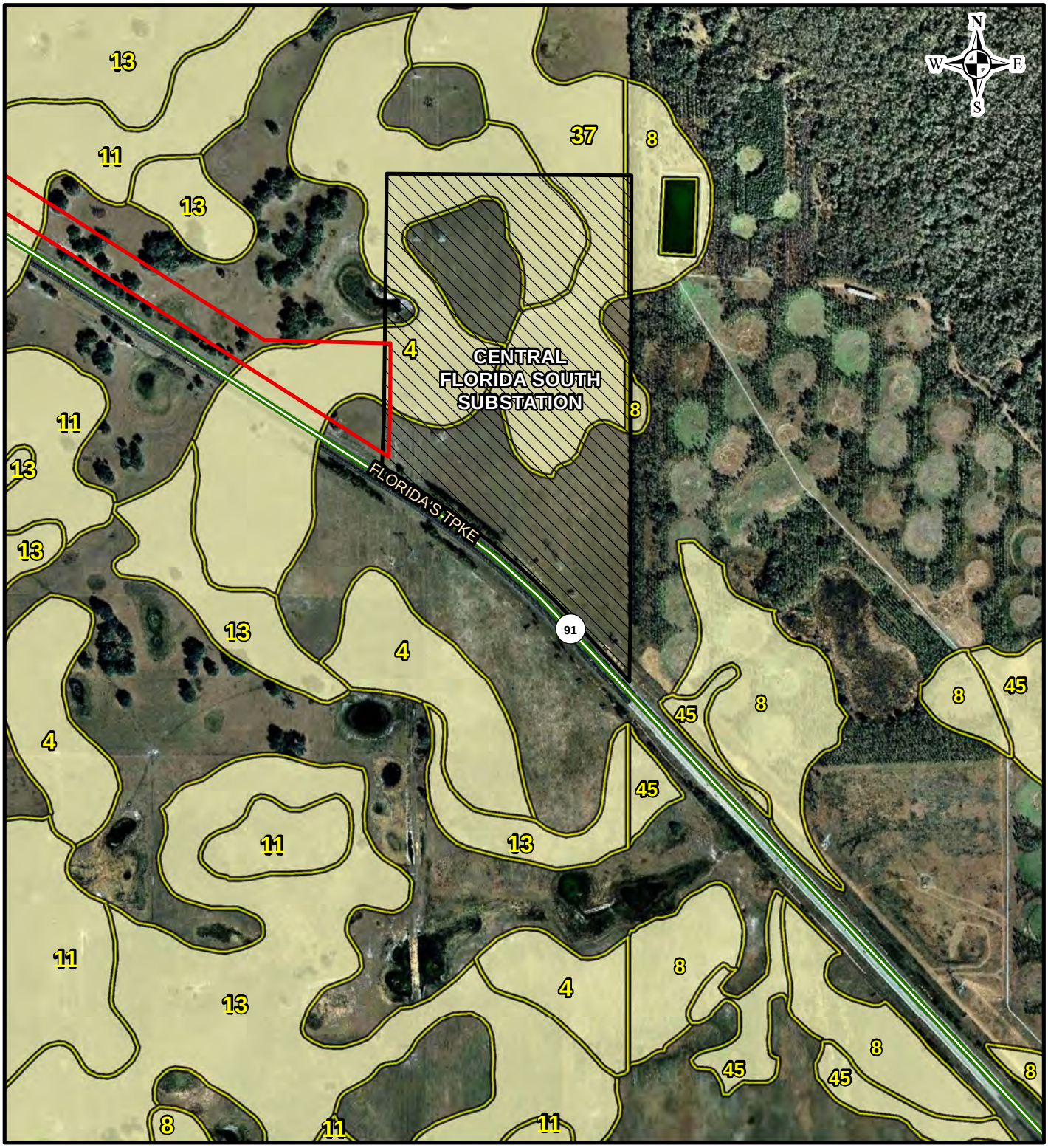

LEGEND

LCFS Preferred Right-of-Way

Gopher Tortoise Acceptable Soil Type

1,000 500 0 1,000 Feet

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH GOPHER TORTOISE SUITABLE SOILS MAP

Progress Energy

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DESIGN	JG	02/28/2011	FIGURE 6	
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F:\PROJECTS\2010 PROJ\103-89627 Levy Project - USACE Section 404 Permit Support\C - Listed Species LCFS Route\GIS\MXD\103-89627C011 Gopher Tortoise Soils.mxd

APPENDIX A

FLORIDA NATURAL AREAS INVENTORY ELEMENT OCCURRENCE REPORT

FLORIDA Natural Areas INVENTORY

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

December 1, 2009

Stacy Rizzo
Golder Associates, Inc.
6026 NW 1st Place
Gainesville, FL 32607

Dear Ms. Rizzo,

Thank you for your request for information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project:	Proposed Citrus Substation – Proposed Central Florida South Substation
Date Received:	November 24, 2009
Location:	Citrus, Marion and Sumter Counties

Based on the information available, this site appears to be located within a significant region of natural areas and habitat for several rare species. Special consideration should be taken to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

Based on the information available, this site appears to be located on or very near a significant region of scrub habitat, a natural community in decline that provides important habitat for several rare species within a small area. Additional consideration should be given to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

Element Occurrences

A search of our maps and database indicates that currently we have several Element Occurrences mapped within the vicinity of the study area (see enclosed maps and element occurrence tables). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The Element Occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, Element Occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Reports). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

Florida Resources and Environmental Analysis Center

Institute of Science and Public Affairs

The Florida State University

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

Florida Scrub-jay Survey – U.S. Fish and Wildlife Service

This survey was conducted by staff and associates of the Archbold Biological Station from 1992 to 1996. An attempt was made to record all scrub-jay (*Aphelocoma coerulescens*) groups, although most federal lands were not officially surveyed. Each map point represents one or more groups.

This data layer indicates that there are potential scrub-jay populations on or very near your site. For additional information:

Fitzpatrick, J.W., B. Pranty, and B. Stith, 1994, Florida scrub jay statewide map, 1992-1993. U. S. Fish and Wildlife Service Report, Cooperative Agreement no. 14-16-004-91-950.

Managed Areas

Portions of the site appear to be located within the Withlacoochee State Trail, managed by the Florida Department of Environmental Protection, Office of Greenways and Trails, the Withlacoochee State Forest and the Ross Prairie State Forest, both managed by the Florida Department of Agriculture and Consumer Services, Division of Forestry, and the Halpata Tastanaki Preserve, managed by the Southwest Florida Water Management District.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

Land Acquisition Projects

This site appears to be located within the Longleaf Pine Ecosystem Florida Forever BOT Project, which is part of the State of Florida's Conservation and Recreation Lands land acquisition program. A description of this project is enclosed. For more information on this Florida Forever Project, contact the Florida Department of Environmental Protection, Division of State Lands.

Florida Forever Board of Trustees (BOT) projects are proposed and acquired through the Florida Department of Environmental Protection, Division of State Lands. The state has no regulatory authority over these lands until they are purchased.

The Inventory always recommends that professionals familiar with Florida's flora and fauna should conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological

resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. If I can be of further assistance, please give me a call at (850) 224-8207.

Sincerely,

Alicia C. Newberry

Alicia C. Newberry
Data Services Coordinator

Encl

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 1 of 7)

Citrus County

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
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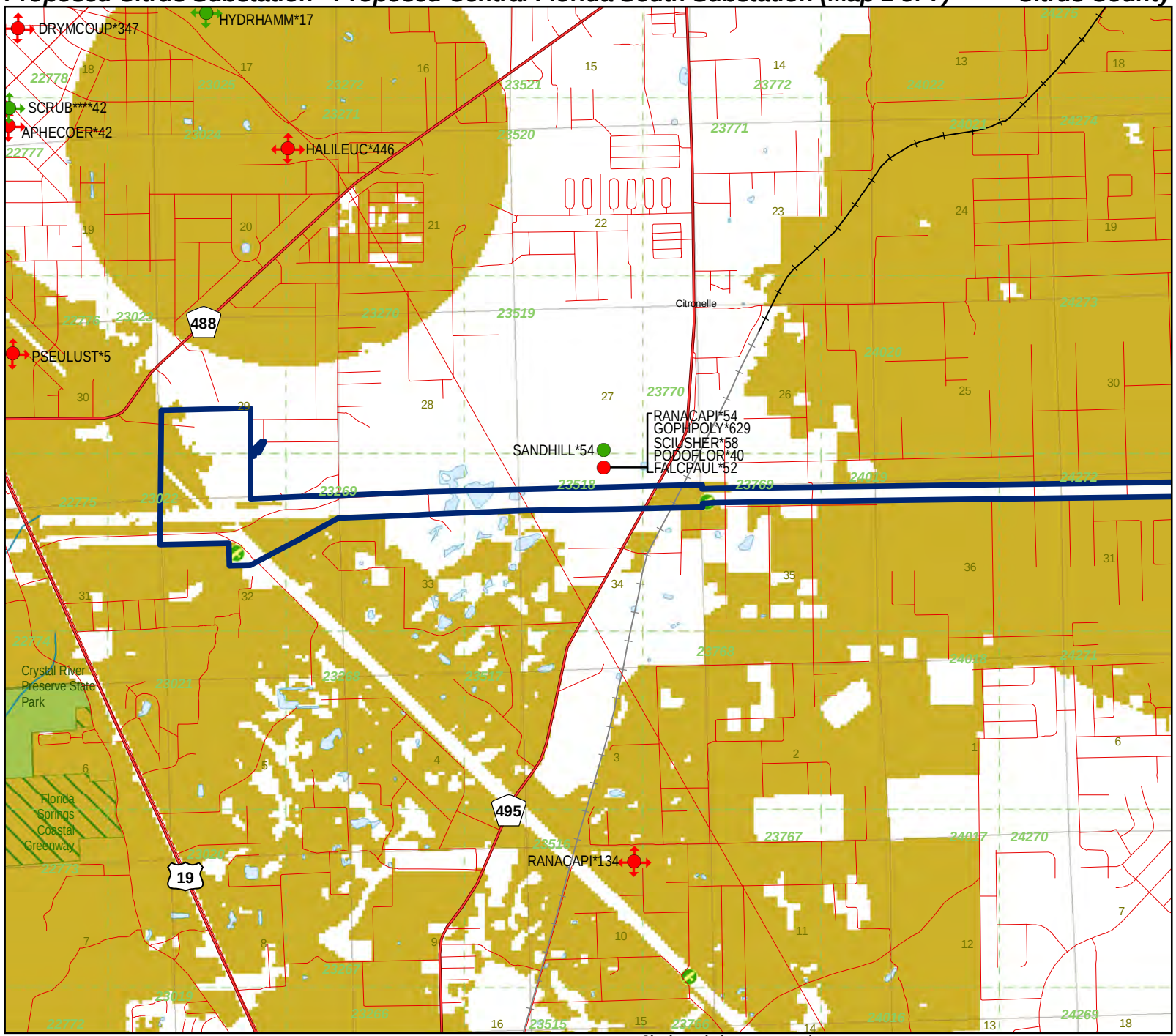
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive
- Point Indicates General Vicinity of Element
- U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

N W E S

0 0.5 1 2 Miles

Site boundaries are approximate.

NOTE
Map should not be interpreted without accompanying documents.

Map produced by ACN
Map Date: 1 DEC 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 1 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
APHECOER*42	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	1981-02-21	GRASSY PALMETTO SCRUB	1981-02-21: 11 SCRUB JAYS
RANACAPI*134	Rana capito	Gopher Frog	G3	S3	N	LS	1991-03-17	Upland Pine Forest; old field community	1991-03-17: D.J. STEVENSON, observed 1 adult female.
HYDRHAMM*17	Hydric hammock		G4	S4	N	N	2004	ISOLATED OCCURRENCE WITH LIMESTONE BOULDERS AT THE SURFACE; SOME DEEPER POOLS OF WATER.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1991-11-12) (U05FNA02FLUS). DOMINATED BY SABAL PALMETTO AND ACER RUBRUM.
SCRUB****42	Scrub		G2	S2	N	N	2004	GRASSY PALMETTO SCRUB	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1981-02-21) (U05FNA02FLUS). OCCURRENCE AT SITE
GOPHPOLY*629	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1990-04	SANDHILL, LONGLEAF PINE-TURKEY OAK, WIREGRASS, ALSO SOME PASTURE.	NUMEROUS BURROWS. 300+/- INDIVIDUALS BASED ON BURROW SURVEYS TO FGFWFC STANDARDS, EST POPULATION DENSITY OF 1.3/AC. 42%, 25% AND 33% OF OBSERVED BURROWS WERE ACTIVE, INACTIVE AND OLD RESPECTIVELY.
FALCPAUL*52	Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	LT	1990-04	SANDHILL, LONGLEAF PINE-TURKEY OAK, WIREGRASS.	8 INDIVIDUALS AND SURVIVING FLEDGLINGS AND 2 CONFIRMED NESTS.
SANDHILL*54	Sandhill		G3	S2	N	N	1990-04	SANDHILL, LONGLEAF PINE-TURKEY OAK, WIREGRASS.	No EO data given
PODOFLOR*40	Podomys floridanus	Florida Mouse	G3	S3	N	LS	1990-04	SANDHILL, LONGLEAF PINE-TURKEY OAK, WIREGRASS.	36 (ADULTS AND JUVENILE) INDIVIDUALS CAPTURED AND RELEASED, DURING 800 TRAP NIGHT SURVEY. MAJORITY OF TRAPS WERE SET IN VICINITY OF GOPHERUS BURROWS.
RANACAPI*54	Rana capito	Gopher Frog	G3	S3	N	LS	1990-04	SANDHILL, LONGLEAF PINE-TURKEY OAK, WIREGRASS.	6 INDIVIDUALS CAPTURED IN FUNNEL TRAPS SET AT ENTRANCE OF GOPHER TORTOISE BURROWS.
SCIUSHER*58	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1990-04	SANDHILL, LONGLEAF PINE-TURKEY OAK, WIREGRASS, ALSO IN PASTURE-BAHIA GRASS.	6 INDIVIDUALS OBSERVED IN SANDHILL AND PASTURE.

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 1 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
DRYMCOUP*347	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1973-10	No general description given	MUSEUM SPECIMEN: S. CHRISTMAN, OCT 1973, UF.
HALILEUC*446	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1995-2003: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST: 1995: PRODUCED 1 YOUNG; 1994: GONE; 1993: PRODUCED 2 YOUNG; 1992-87: NO DATA; 1982-1986 ACTIVE; FLEDGED YOUNG 1982-1983, 1985.
PSEULUST*5	Pseudobranchus striatus lustricolus	Gulf Hammock Dwarf Siren	G5T1	S1	N	N	1951-03-15	1951: habitat not described by Neill (1951) (A51NEI02FLUS).	1951-03-15: W. T. Neill collected at least eight adults (paratypes, ERA-WTN 14218-14225) (A51NEI02FLUS, B92MOL01FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 1 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 23022					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Leitneria floridana	Corkwood	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Matrix Unit ID: 23023					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Leitneria floridana	Corkwood	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

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Tallahassee, FL 32303
(850) 224-8207
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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 1 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 23269

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Sandhill upland lake		G3	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Leitneria floridana	Corkwood	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 23518

Documented

Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
Sandhill upland lake		G3	S2	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 1 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Leitneria floridana	Corkwood	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 23769

Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Leitneria floridana	Corkwood	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 24019

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 1 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Sandhill		G3	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Matrix Unit ID: 24272					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 1 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 2 of 7)

Citrus County

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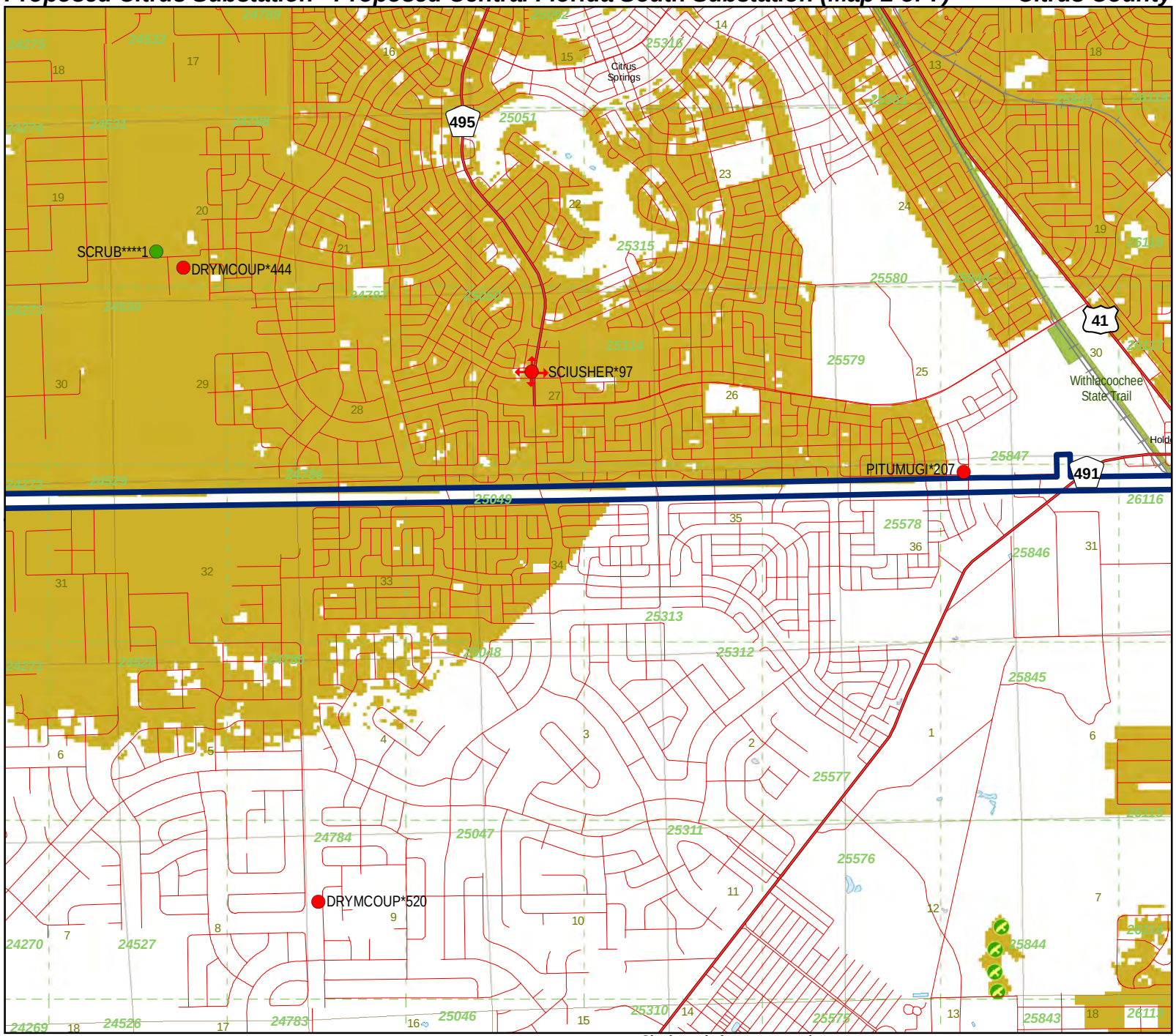
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE
Map should not be interpreted without accompanying documents.

Site boundaries are approximate.

Map produced by ACN
Map Date: 1 DEC 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 2 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SCIUSHER*97	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1995-01-12	Sandhill dominated by longleaf pine, turkey oak and wiregrass.	1995-01-12: 1 adult, foraging (U95MAI01).
SCRUB****1	Scrub		G2	S2	N	N	2004	SURROUNDED BY SANDHILL.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1983-02-19) (U05FNA02FLUS). SAND PINE>SAND LIVE OAK,CHAPMAN'S OAK,MYRTLE OAK, FETTERBUSH,GARBERIA,SOLIDAGO CHAPMANII,SCRUB CLOVER, SCRUB BLUEBERRY,SAW PAL
DRYMCOUP*444	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1994-06-13	Sand pine scrub.	Snake observed AOR.
PITUMUGI*207	Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS	1999-07-28	1999-07: semi-developed subdivision in former sandhill; includes many vacant lots (U99MAI02FLUS).	1999-07-28: G. Maidhoff observed road-killed adult pine snake (U99MAI02FLUS).
DRYMCOUP*520	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	2008-06-18	2008-06-18: sandhill developed as a residential subdivision with many roads and houses (U08MAI01FLUS).	2006-06-18: D. Ferry photographed adult in his driveway (U08MAI01FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 2 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 24529					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Matrix Unit ID: 24786					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 2 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 25049

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 25313

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 2 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE

Matrix Unit ID: 25578

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS

Matrix Unit ID: 25846

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Sandhill		G3	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 2 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 25847

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Sandhill		G3	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 2 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 3 of 7) Citrus and Marion Counties

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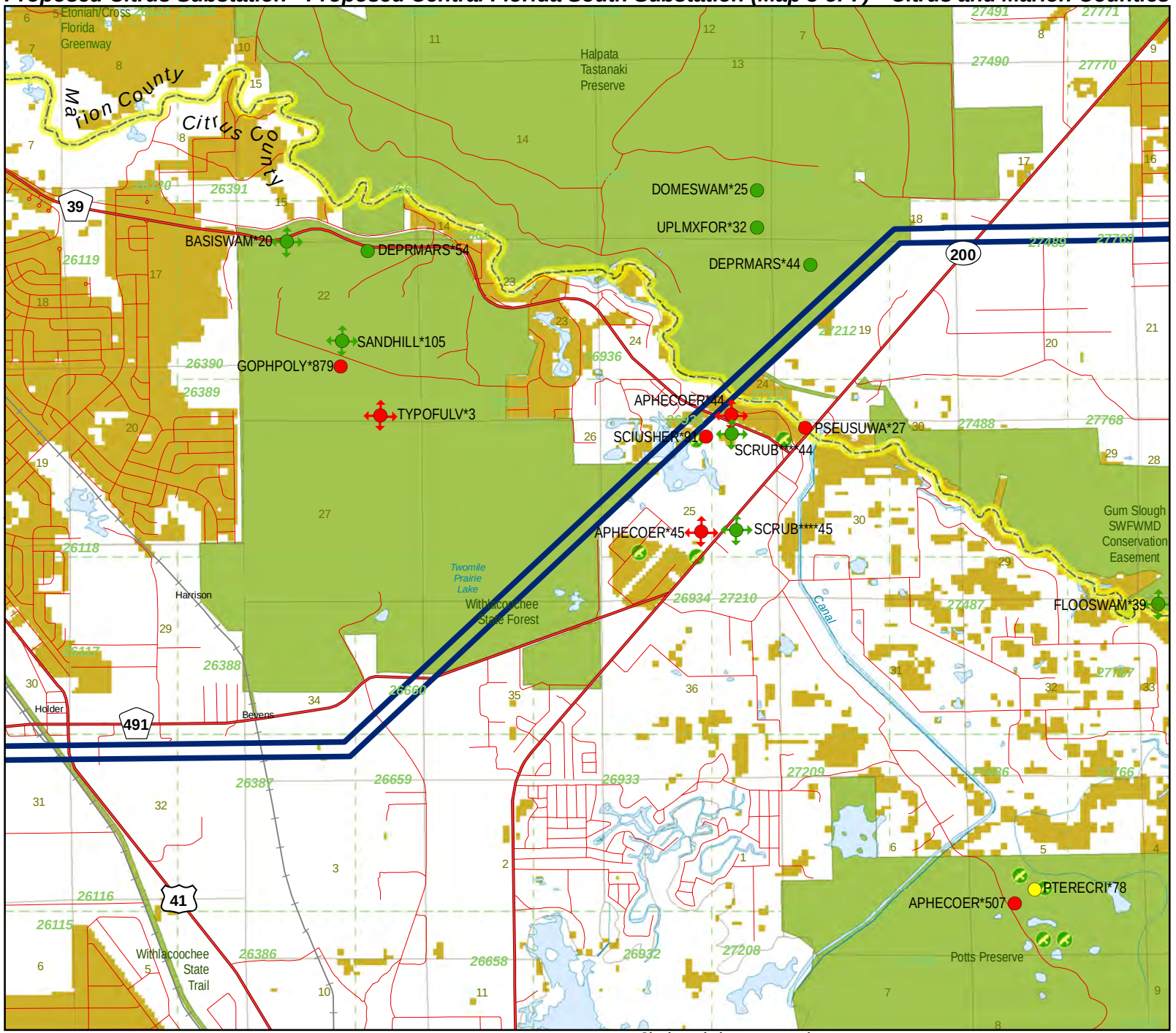
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

N W E S

0 0.5 1 2 Miles

Site boundaries are approximate.

NOTE
Map should not be interpreted without accompanying documents.

Map produced by ACN
Map Date: 1 DEC 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 3 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SCRUB****44	Scrub		G2	S2	N	N	1981-03-05	SECOND GROWTH OAK SCRUB	OCCURRENCE AT SITE
SCRUB****45	Scrub		G2	S2	N	N	1981-03-05	OAK SCRUB	OCCURRENCE AT SITE
PSEUSUWA*27	Pseudemys concinna suwanniensis	Suwannee Cooter	G5T3	S3	N	LS	1994-05-12	MEDIUM-SIZED RIVER WITH BLACKWATER AND SPRING-FED CHARACTERISTICS; BORDERED BY NARROW FLOODPLAIN SWAMP/FOREST AND UPLAND MIXED FOREST; AQUATIC VEGETATION INCLUDES HYDROCOTYLE, SCIRPUS, TYPHA, PISTIA, MORE.	1994-05-12: D. JACKSON OBSERVED SEVERAL BASKING INDIVIDUALS, MOSTLY SUB-ADULT, DURING MORNING CANOE SURVEY OF 3-MILE STRETCH DOWNSTREAM OF S-200 (PNDJAC01FLUS). 1991-07-26: D. S. CROWE (FFWCC) OBSERVED 2 ADULT FEMALES AT S-44 CROSSING (FWC WILDOBS. DATAB
DOMESWAM*25	Dome swamp		G4	S4	N	N	2004	CYPRESS DOMINATED AREAS EVIDENT IN AERIAL PHOTO IN NORTHERN PORTION OF STOKES FOREST.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-01) (U05FNA02FLUS).
DEPRMARS*44	Depression marsh		G4	S4	N	N	2004	DEPRESSIONS DOMINATED BY WETLAND GRASSES AND SEDGES.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-01) (U05FNA02FLUS). LARGE TRACT OF OLD GROWTH FOREST WITH SEVERAL DEPRESSIONAL WETLANDS.
SCIUSHER*91	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1994-05-12	Principal habitat on ranch is sandhill that has been disturbed by cattle ranching activities; pasture grasses have encroached into groundcover. Turkey oaks are large, longleafs are abundant though mostly small, wiregrass is widespread though sparse. Subs	1994-05-11, 12: during 2-day field assessment of Jordan Ranch, Jackson and Printiss observed one adult.
UPLMXFOR*32	Upland mixed forest		G4	S4	N	N	2004	UPLAND MIXED FOREST DOMINATED BY LAUREL OAK (QUERCUS LAURIFOLIA), LIVE OAK (Q. VIRGINIANA), AND WATER OAK (Q. NIGRA), WITH LONGLEAF PINE (PINUS PALUSTRIS), SOUTHERN MAGNOLIA (MAGNOLIA GRANDIFLORA), AND SLASH PINE (P. ELLIOTTII). SAW PALMETTO (SERENOA REP	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-01) (U05FNA02FLUS). LARGE TRACT OF OLD GROWTH FOREST WITH SEVERAL DEPRESSIONAL WETLANDS.
APHECOER*45	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	1981-03-05	OAK SCRUB	1981-03-05: 1 SCRUB JAY

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 3 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
APHECOER*44	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	1981-03-05	SECOND-GROWTH OAK SCRUB	1981-03-05: 2 SCRUB JAYS
GOPHPOLY*879	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1994-05-12	Principal habitat on ranch is sandhill that has been disturbed by cattle ranching activities; pasture grasses have encroached into groundcover. Turkey oaks are large, longleafs are abundant though mostly small, wiregrass is widespread though sparse. Subs	1994-05-11, 12: Jackson and Printiss observed many active burrows; each of 4 burrows probed with 1 burrow camera contained an adult tortoise; one contained a gopher fly.
PTERECRI*78	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2003-08-20	2003-08-20: One plant observed in scrubby flatwoods which burned in May 2002 wildfire; plowlines in area (F03DEA01FLUS).	2003-08-20: One individual plant observed in fruit (F03DEA01FLUS).
BASISWAM*20	Basin swamp		G4	S3	N	N	2004	Basin Swamp surrounded by Sandhill.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1994-05-11) (U05FNA02FLUS). Large (ca. 300 ac.) aesthetic swamp with permanent water; surrounded and dominated by tall pond cypress (Taxodium ascendens);
SANDHILL*105	Sandhill		G3	S2	N	N	2008-05-14	1994: Sandhill (moderately to heavily disturbed) bordered by Basin Swamp, Depression Marshes and Xeric Hammock/Scrubby Flatwoods (F94JAC02FUS).	2008-05-14: native groundcover is abundant, but in several areas, groundcover is degraded due to lack of fire and subsequent hardwood encroachment. Midstory oaks are dense throughout most of the site and sand pine is invading in some areas (PNDKIN02FLUS
FLOOSWAM*39	Floodplain swamp		G4	S4	N	N	2004	LARGE AREA OF CYPRESS-DOMINATED SWAMP; RED MAPLE AND POP ASH ALSO FREQUENT.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-01) (U05FNA02FLUS).
DEPRMARS*54	Depression marsh		G4	S4	N	N	2004	Depression Marsh surrounded by Pine Plantation.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1994-05-11) (U05FNA02FLUS). Surrounding habitat disturbed (plantation); water 1"-24" with abundant floating and submerged vegetation (especially water shi
TYPOFULV*3	Typocerus fulvocinctus	Yellow-banded Typocerus Long-horned Beetle	G2	S2	N	N	1994-Pre	1994-Pre: occurs in pine flatwoods (B94DEY01FLUS).	1994-Pre: This species occurs in pine flatwoods (B94DEY01FLUS).

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 3 of 7)

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APHECOER*507	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	2004-10-03pre	2004-10-03pre: scrubby flatwoods adjacent to sand pine scrub (U04DEA02FLUS).	2004-10-03pre: 3 birds seen flying (U04DEA02FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 3 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 26116					
Likely					
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Matrix Unit ID: 26387					
Likely					
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 3 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 26659

Likely

Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 3 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Matrix Unit ID: 26660					
Likely					
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Typocerus fulvocinctus	Yellow-banded Typocerus Long-horne	G2	S2	N	N
Matrix Unit ID: 26934					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Potential					

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 3 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Scrub		G2	S2	N	N
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Typocerus fulvocinctus	Yellow-banded Typocerus Long-horne	G2	S2	N	N

Matrix Unit ID: 26935

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS

Potential

Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S2	LT	LS
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS

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Florida Natural Areas Inventory

Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllanthus leibmannianus ssp. platylepis	Pinewood Dainties	G4T2	S2	N	LE
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pseudemys concinna suwanniensis	Suwannee Cooter	G5T3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Scrub		G2	S2	N	N
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Typocerus fulvocinctus	Yellow-banded Typocerus Long-horne	G2	S2	N	N

Matrix Unit ID: 27211

Documented

Pseudemys concinna suwanniensis	Suwannee Cooter	G5T3	S3	N	LS

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Floodplain swamp		G4	S4	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Upland hardwood forest		G5	S3	N	N

Potential

Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S2	LT	LS
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N

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Biodiversity Matrix Report
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Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Scrub		G2	S2	N	N
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Matrix Unit ID: 27212					
Documented					
Depression marsh		G4	S4	N	N
Upland mixed forest		G4	S4	N	N
Likely					
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N
Potential					
Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S2	LT	LS
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 3 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pseudemys concinna suwanniensis	Suwannee Cooter	G5T3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Scrub		G2	S2	N	N
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 27489

Likely

Mesic flatwoods		G4	S4	N	N
Upland hardwood forest		G5	S3	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 3 of 7

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Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 4 of 7)

Marion County

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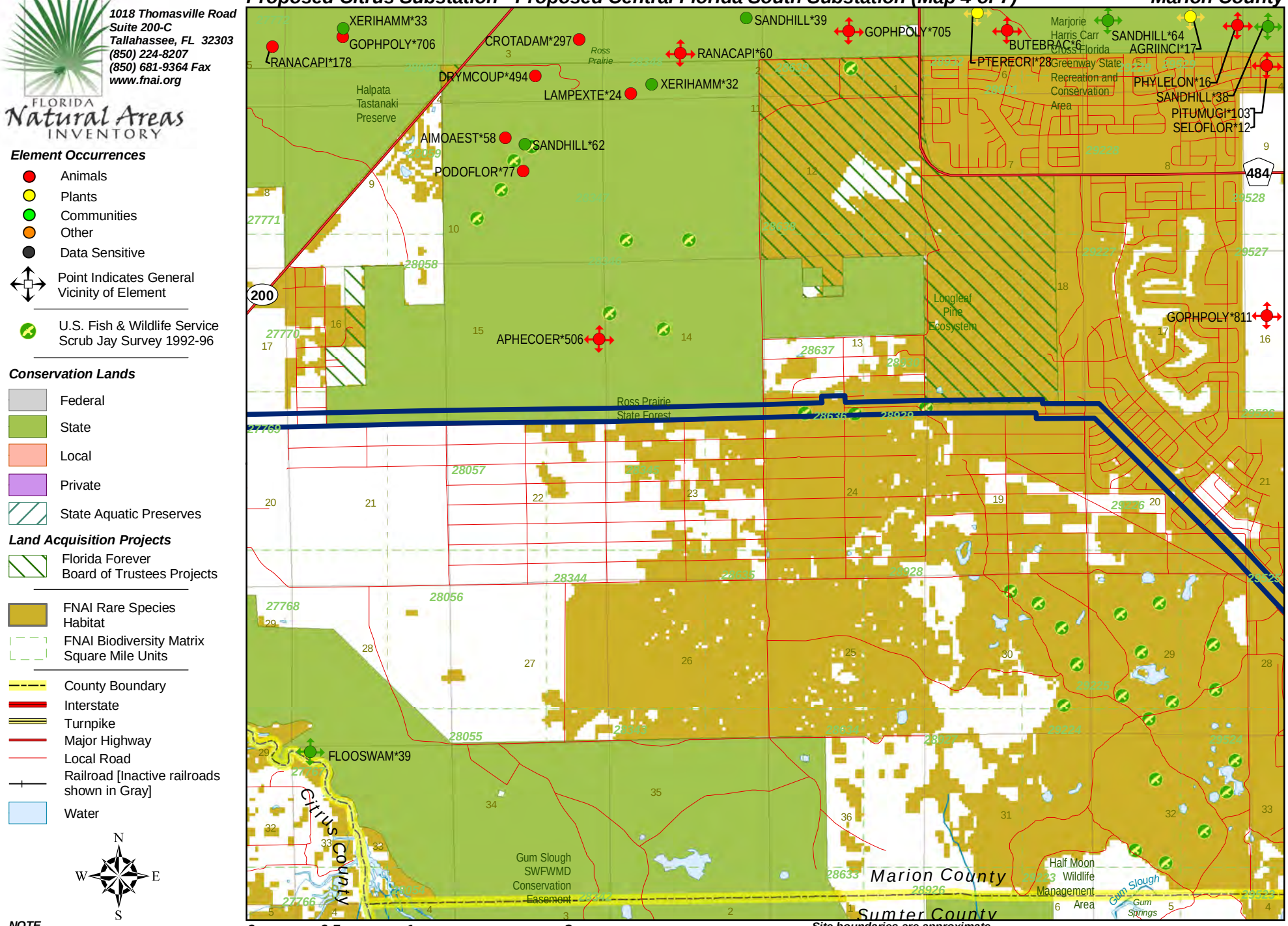
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

N W E S

0 0.5 1 2 Miles

NOTE
Map should not be interpreted without accompanying documents.

Site boundaries are approximate.

Map produced by ACN
Map Date: 1 DEC 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 4 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
GOPHPOLY*811	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1993-03-08	SANDHILL EO #82: AREA DOMINATED BY TURKEY OAKS, LONGLEAF PINE, AND SOME QUERCUS MARGARETTA; OAKS AND PINES OF VARIOUS AGES THROUGHOUT, SOME PINES VERY MATURE--NOT LOGGED? SOME ENCROACHMENT BY LIVE OAK AND SAND PINE. ON CANDLER SOILS (TYPIC QUARTZIPSAMMEN	SEVERAL BURROWS NOTED DURING MARION CO. NATURAL AREAS SURVEY.
XERIHAMM*32	Xeric hammock		G3	S3	N	N	2004	LARGE DEPRESSION MARSHES INTERSPERSED BETWEEN XERIC HAMMOCK.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1991-10-03) (U05FNA02FLUS). LARGE QUERCUS VIRGINIANA DOMINANT IN OVERSTORY, ALSO WITH Q. LAURIFOLIA AND A FEW MAGNOLIA GRANDIFLORA; SHRUB LAYER INCLUDES I
XERIHAMM*33	Xeric hammock		G3	S3	N	N	2004	LIVE OAK HAMMOCK WITH AMERICAN HOLLY (ILEX OPACA) AND BEAUTYBERRY (CALLICARPA AMERICANA) IN THE UNDERSTORY, PARTRIDGEBERRY (MITCHELLA REPENS) IN THE GROUNDCOVER; GRADES INTO SANDHILL AND DEPRESSION MARSH.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1991-11-07) (U05FNA02FLUS). LARGE QUERCUS VIRGINIANA, Q. LAURIFOLIA, AND OCCASIONAL MAGNOLIA GRANDIFLORA.
SANDHILL*62	Sandhill		G3	S2	N	N	2004	OPEN LONGLEAF PINE/TURKEY OAK/WIREGRASS GRADING INTO XERIC HAMMOCK AND DEPRESSION MARSH.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1991-10-24) (U05FNA02FLUS). SCATTERED OVERSTORY OF LONGLEAF PINE (PINUS PALUSTRIS) WITH A MODERATELY DENSE TO SPARSE MIDSTORY COMPRISED PREDOMINANTLY OF T

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SANDHILL*39	Sandhill		G3	S2	N	N	2004	SAND POST OAK (QUERCUS MARGARETTA) AND BLUE JACK OAKS (QUERCUS INCANA) PREVALENT CLOSER TO SR200.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1991-10-03) (U05FNA02FLUS). OPEN TO DENSE TURKEY OAKS, MATURE WITH MOSTLY "POLE" STAGE LONGLEAF PINES BUT SOME MATURE IN A FEW AREAS; UNDERSTORY OF WIREGR
AIMOAEST*58	Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N	1999	No general description given	1999: Reported on site (U99WOO01FLUS).
PODOFLOR*77	Podomys floridanus	Florida Mouse	G3	S3	N	LS	1999-04-14	99-07-06: Primarily sandhill and scrub habitat (U99SUR03FLUS)	99-07-06: 3 captures using Sherman live traps. 10 traps set, representing a total of 10 trap nights (number of traps multiplied by number of nights open) U99SUR03FLUS.
RANACAPI*60	Rana capito	Gopher Frog	G3	S3	N	LS	1991-10-03	FROG OBSERVED AT MOUTH OF GOPHER TORTOISE BURROW AT 8:00 AM.	1 FROG OBSERVED.
PITUMUGI*103	Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS	1975-03-19	No general description given	SPECIMEN COLLECTED AOR 19 MARCH 1975 BY CHRISTMAN AND KEENLYNE.
AGRIINCI*17	Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE	1975-09-04	1975-09-04: Turkey oak woods along with Galium, Paronychia, Diodia and Helianthella (S75MARUFFLUS).	1975-09-04: Occasional herb in turkey oak woods; specimen taken [plant with flower bud] (S75MARUFFLUS).
BUTEBRAC*6	Buteo brachyurus	Short-tailed Hawk	G4G5	S1	N	N	1991-09-16	PERCHED IN A LIVE OAK IN SANDHILL.	ONE HAWK OBSERVED; UNKNOWN WHETHER IT WAS RESIDENT OR TRANSITORY ALTHOUGH BEHAVIOR SUGGESTED IT MAY BE A RESIDENT.
GOPHPOLY*706	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1991-11-07	XERIC HAMMOCK AND SANDHILL.	10 ACTIVE, 3 INACTIVE, 2 ABANDONED TORTOISE BURROWS FOUND; 3 RECENTLY DEAD, PREDATED TORTOISE SHELLS OBSERVED.
LAMPEXTE*24	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	1991-10-24	XERIC HAMMOCK.	UNCATALOGUED FSM SPECIMEN, 1 NOVEMBER 1975, C.R. SMITH.

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CROTADAM*297	Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N	2003-11-19	2003-11-19: Mesic oak hammock heavily dominated by Quercus virginiana. Due to the amount of shade the canopy provided, little herbacous growth exists. This oak hammock is surrounded by wet prairies with extensive coverage in grasses and other e	2003-11-19: Davis documented one large (5 ft) adult Crotalus adamanteus coiled at edge of mesic hammock (PNDDAV04FLUS, U04DAV01FLUS).
DRYMCOUP*494	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	2003-11-19	2003-11-20: one adult indigo snake was found leaving a dry prairie of various grasses, and moving toward a mesic live oak hammock. The dry prairie is a part of the "diggings" of the old barge canal (PNDDAV04FLUS). 2002-12-07: upland lon	2003-11-19: A. Davis observed one large Drymarchon couper in a dry prairie. This individual was moving out of the dry prairie and into a live oak (Quercus virginiana) mesic hammock (U04DAV01FLUS, PNDDAV04FLUS). 2002-12-07:
RANACAPI*178	Rana capito	Gopher Frog	G3	S3	N	LS	2004-01-27	2004-01-27: sandhill with canopy of Pinus palustris and scattered Quercus laevis. The canopy is very open overall. Ground cover abundant with Aristida stricta and other grasses and herbs (PNDDAV04FLUS, U04DAV01FLUS).	2004-01-27: Davis documented one adult gopher frog in an unbaited funnel trap placed in an active tortoise burrow (PNDDAV04FLUS, U04DAV01FLUS).
GOPHPOLY*705	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1991-09-23	SANDHILL THAT HAS BEEN RECENTLY BURNED ADJACENT TO SR 484.	APPROX. 18 BURROWS FOUND.
SANDHILL*64	Sandhill		G3	S2	N	N	2004	LARGE TRACT OF INTACT SANDHILL WHICH HAS BEEN RECENTLY BURNED IN SOME AREAS; INTACT GROUNDCOVER.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1991-09-23) (U05FNA02FLUS). PINUS PALUSTRIS/QUERCUS LAEVIS/ARISTIDA STRICTA.
SANDHILL*38	Sandhill		G3	S2	N	N	2004	SANDHILL	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1988-10) (U05FNA02FLUS). MODERATELY TO VERY DENSE MATURE TURKEY OAKS (Q. LAEVIS) WITH MANY YOUNG SAPLINGS. UNDERSTORY OF WIREGRASS AND LONGLEAF PINE SAPLI

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 4 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
FLOOSWAM*39	Floodplain swamp		G4	S4	N	N	2004	LARGE AREA OF CYPRESS-DOMINATED SWAMP; RED MAPLE AND POP ASH ALSO FREQUENT.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-03-01) (U05FNA02FLUS).
PTERECRI*28	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2004-03-25	2004-03-25: Source Point 2 (southern point) -Sandhill with land clearing and off-road vehicle trails (U05HER01FLUS). 1975-09-11: Source Point 1 (northern point) -Turkey oak community (PNDMAR01FLUS).	2004-03-25: Source Point 2 (southern point) had one vegetative plant at 5 feet tall observed in sandhill (U05HER01FLUS). 1975-09-11: Source Point 1 (northern point). Infrequent annual in the turkey oak community; inconspicuous in the flora [plant w/ frui
APHECOER*506	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	2007-03-00	2007-03-00: scrubby flatwoods w/ history of fire exclusion. Nearby scrubby flatwoods have been recently treated mechanically and part of these areas burned (U07DOF01FLUS).	2007-03-00: two territories; 3 jays observed in north territory, 2 jays in south (PNDPED02FLUS).
SELOFLOR*12	Selonodon floridensis	Florida Cebrionid Beetle	G2G3	S2S3	N	N	1975-06-17	2005-08-05: There is sandhill in most of this area (NNDFNA01FLUS). 1975-06-17: No description given (B99GAL01FLUS).	1975-06-17: Fourteen specimens were collected in a blacklight trap (B99GAL01FLUS).
PHYLELON*16	Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N	1975-06-28	1975-06-28: No description given (B89WOO01FLUS).	1975-06-28: One specimen was collected by P.C. Drummond using a blacklight trap (B89WOO01FLUS). 1975-05-21: Holler and Woodruff collected one specimen using a blacklight trap (B89WOO01FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 4 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 27769					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Upland hardwood forest		G5	S3	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Matrix Unit ID: 28057					
Likely					
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N

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Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE

Matrix Unit ID: 28345

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT

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Florida Natural Areas Inventory

Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE

Matrix Unit ID: 28636

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE

Matrix Unit ID: 28929

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N

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Biodiversity Matrix Report
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Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Matrix Unit ID: 29226					
Likely					
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 4 of 7

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Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 29526

Likely

Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT

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Map 4 of 7

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Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Sideroxylon alachuense	Silver Buckthorn	G1	S1	N	LE
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 5 of 7)

Marion & Sumter Counties

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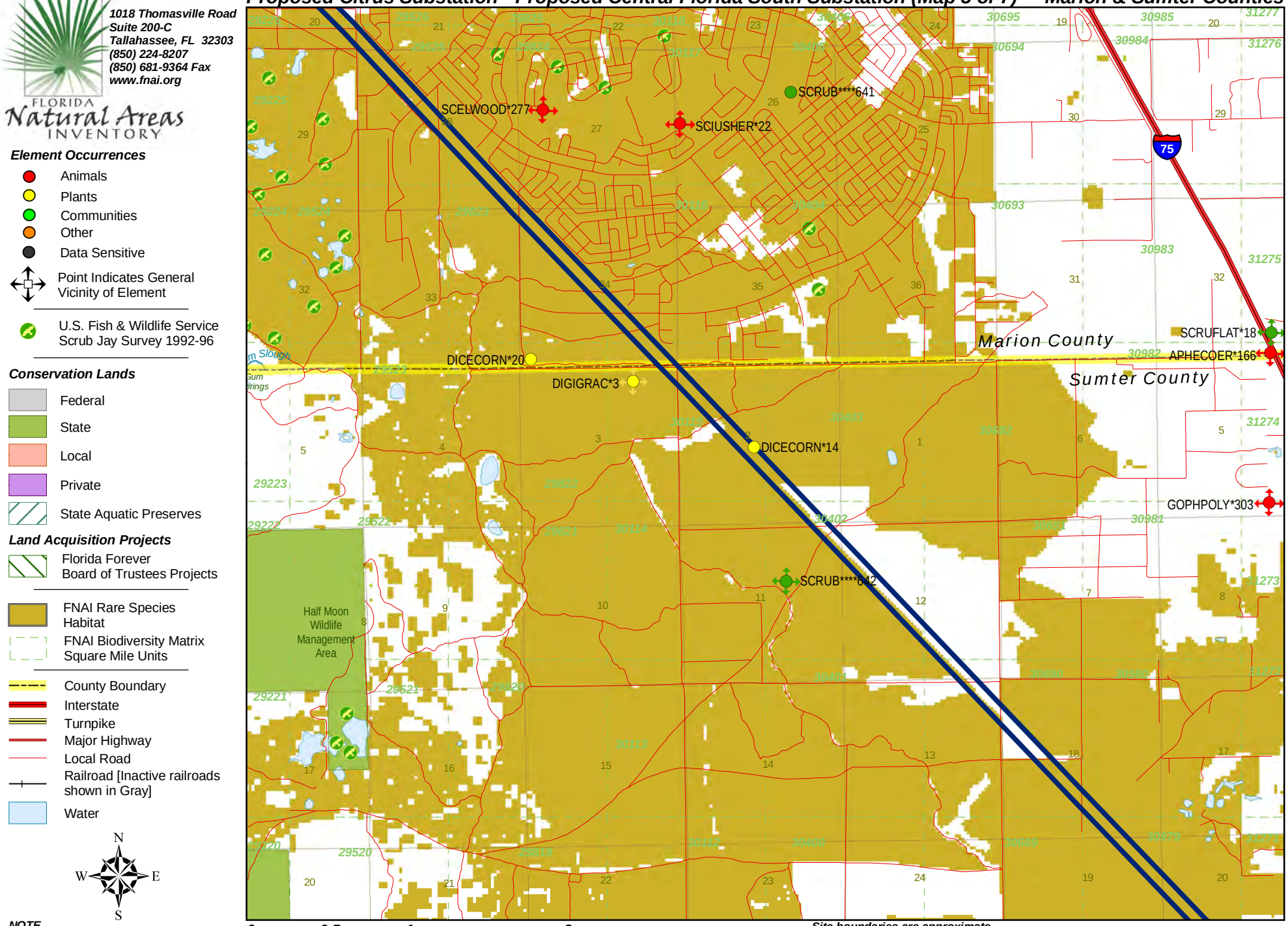
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive
- Point Indicates General Vicinity of Element
- U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

N W E S

0 0.5 1 2 Miles

Site boundaries are approximate.

NOTE
Map should not be interpreted without accompanying documents.

Map produced by ACN
Map Date: 1 DEC 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 5 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SCRUFLAT*18	Scrubby flatwoods		G3	S3	N	N	2004	OPEN SLASH PINE SCRUB	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1981-02-21) (U05FNA02FLUS). OCCURRENCE AT SITE
APHECOER*166	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	1981-02-21	2004-12-11: Habitat now is mostly improved pasture with small housing developments. Small remnant scrub fragments are present throughout area but fire suppressed (PNDJEN04FLUS).1981-02-21: OPEN SLASH PINE SCRUB= [SCRUBBY FLATWOODS] (PNDCOX01FLUS).	2004-12-11: Informal survey to update EO found no scrub jays in area though the area does have potential to harbor them. Original habitat has been converted mostly to pasture and residential housing but the housing is of the low impact kind with fragment
SCELWOOD*277	Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N	1987-07-07	Scrub	1987-07-07: S.P. Christman, MNH, observation.
GOPHPOLY*303	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	2004-12-11	2004-12-11: Burrows near highway on private ranchland (PNDJEN04FLUS).	2004-12-11: Several recent but inactive burrows found. Habitat is mostly unburned ranchlands (PNDJEN04FLUS). 1986: DEAD ON ROAD (U86DIE01FLUS).
SCIUSHER*22	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1986	No general description given	ABUNDANT, 1986 AS REPORTED TO TIM O'MEARA BY FGC GAME MGT. SPECIALIST SUPERVISOR, CHARLES ORME.
DICECORN*14	Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE	1988-11-14	No general description given	Specimen fertile.
SCRUB****641	Scrub		G2	S2	N	N	1987	No general description given	No EO data given
DIGIGRAC*3	Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N	2001	LONGLEAF PINE-TURKEY OAK SANDHILLS (U01STR01FLUS).	2001: NONE GIVEN (U01STRO01FLUS).
DICECORN*20	Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE	2001	2001: LONGLEAF PINE - TURKEY OAK SANDHILLS (U01STR01FLUS).	2001: NO DATA GIVEN (U01STR01FLUS).
SCRUB****642	Scrub		G2	S2	N	N	2004	No general description given	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 2004) (U05FNA02FLUS). 2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1987-07-19) (U05FNA02FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 29525					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Matrix Unit ID: 29823					
Documented					
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N

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Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Matrix Unit ID: 29824					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT

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Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 30115

Documented

Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE

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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE

Matrix Unit ID: 30116

Likely

Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N
Mesic flatwoods		G4	S4	N	N
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

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Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 30402					
Likely					
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 30403					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Mesic flatwoods		G4	S4	N	N
Sandhill upland lake		G3	S2	N	N
Scrub		G2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N

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Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sceloporus woodi	Florida Scrub Lizard	G3	S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 30690

Likely

Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria gracillima	Longleaf Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE

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Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 30691

Likely

Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Sandhill		G3	S2	N	N
Scrub		G2	S2	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 5 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 30979

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Upland hardwood forest		G5	S3	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 30980

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 5 of 7

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Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Stilosoma extenuatum	Short-tailed Snake	G3	S3	N	LT
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 6 of 7)

Sumter County

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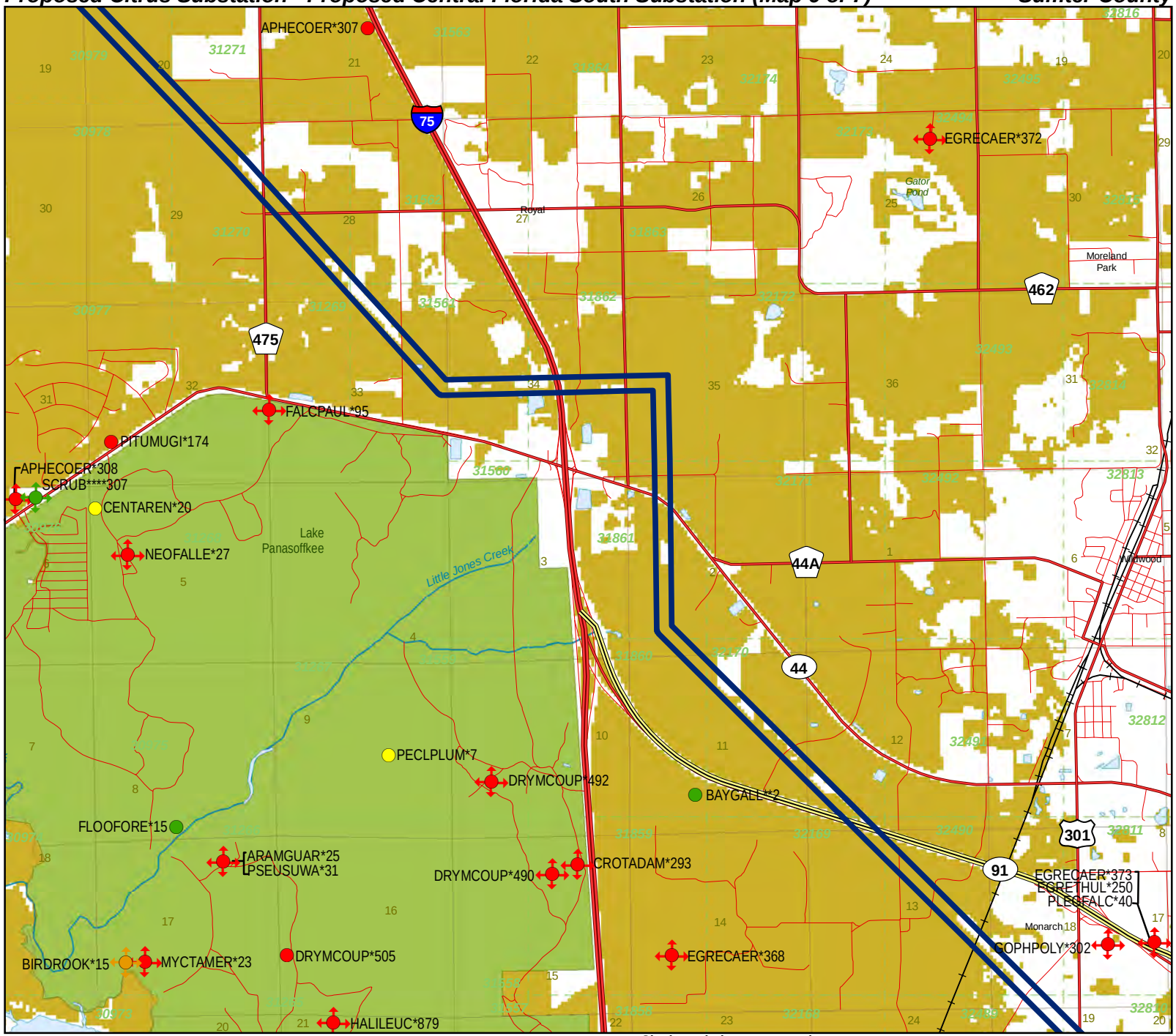
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

N W E S

NOTE
Map should not be interpreted without accompanying documents.

0 0.5 1 2 Miles

Site boundaries are approximate.

Map produced by ACN
Map Date: 1 DEC 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 6 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SCRUB****307	Scrub		G2	S2	N	N	1981-04-20	GRASSY PALMETTO SCRUB.	No EO data given
GOPHPOLY*302	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1987-pre	No general description given	1987-pre: Species occurrence noted here in Diemer's unpublished map set (U86DIE01FLUS).
PLEGFALC*40	Plegadis falcinellus	Glossy Ibis	G5	S3	N	N	1988-05-16	Small clump of elderberry in spoil-farm pond next to FL. Turnpike.	1988-05-16: R. Sullivan, GFC - GRHE and LBHE young in feathered stage. "Total" (nests?) = 47 (also includes SNEG, GLIB, ANHI).
EGRETHUL*250	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-05-16	1988-05-16: Small clump of elderberry in spoil/farm pond next to FL. Turnpike (U97GFC02FLUS).	1988-05-16: R. Sullivan, GFC. GRHE and LBHE young in feathered stage. "Total" (nests?) = 47 (also includes SNEG, GLIB, ANHI) (U97GFC02FLUS).
EGRECAER*373	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-05-16	Small clump of elderberry in spoil/farm pond.	1988/05/16: R. Sullivan, GFC, observation. GRHE and LBHE young in feathered stage. "Total" (nests?) = 47 (also includes SNEG, GLIB, ANHI).
EGRECAER*372	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-05-19	Willows in wet prairie.	1988/05/19: R. Sullivan, GFC, observation. 200-300 CAEG roosting, but no nests observed. LBHE and CAEG seen in loafing on colony nesting stage. ANHI and GBHE seen in feathered young nesting stage. "Total" (nests?) = B.
APHECOER*307	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	1981	2004-12-11: Clump of palmettos no longer persist here (PNDJEN04FLUS). 1981: CLUMP OF SAW PALMETTOS ON RIGHT-OF-WAY (PNDCOX01FLUS)	2004-12-11: Informal survey to update EO produced no scrub jays. Area has been converted to improved pasture, no habitat left; inspection of 2004 aerial photography flown 03/11/2004 shows development of something surrounded by an oval shaped road under c
FLOOFORE*15	Floodplain forest		G4	S3	N	N	1997-08-13	Floodplain swamp on edge of spring run stream which grades into upland mixed forest and cutover sandhill now dominated by pond pine (Pinus serotina).	1997-08-13: Extensive floodplain forest with a canopy of Taxodium distichum, Liquidambar styraciflua, Nyssa biflora, Acer rubrum, and Fraxinus pennsylvanica. Subcanopy of Sabal palmetto and Carpinus caroliniana. Very sparse shrub layer but herbs are dens
PITUMUGI*174	Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS	1991-09-18	Sandhill.	Specimen UF 83633 collected by D. Stevenson and D. Crowe, Sept. 18, 1991.

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 6 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
BAYGALL**2	Baygall		G4	S4	N	N	2004	VERY EXTENSIVE, WELL-DEVELOPED SEEPAGE SWAMP DOMINATED BY BAY SPP. RECEIVES TREATED SEWAGE FROM WILDWOOD.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1982-06-16) (U05FNA02FLUS).
APHECOER*308	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	1981-04-20	GRASSY PALMETTO SCRUB.	1981-02-21: 3-4 SCRUB JAYS; 1981-04-20: 4 SCRUB JAYS.
NEOFALLE*27	Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N	1991-07-22	1991-07-22: Depression Marsh and Floodplain Marsh (U97GFC02FLUS).	1991: D.J. Stevenson, GFC, observed 1 adult (U97GFC02FLUS).
EGRECAER*368	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1989-05-09	Willow island in borrow pit.	1989/05/09: J.A. Hovis, GFC, observation. CAEG in incubation posture. Surveyed from helicopter. Site not visited by plane in 1989. "Total" = X (unknown).
BIRDROOK*15	Bird Rookery		G5	SNR	N	N	1978-04	CYPRESS STRAND ALONG LAKE AND CREEK, NESTING SUB- STRATE OF CYPRESS.	GREAT BLUE HERON (5 PRS IN 4/77, NONE THEREAFTER); WOOD STORK (40 PRS IN 4/77; EMPTY ON NEXT VISIT IN 4/78).
PSEUSUWA*31	Pseudemys concinna suwanniensis	Suwannee Cooter	G5T3	S3	N	LS	1991-07-22	Spring run stream	1991-07-22: D.S. Crowe, GFC, observed 1 adult.
ARAMGUAR*25	Aramus guarauna	Limpkin	G5	S3	N	LS	1991-07-22	Seepage stream	1991-07-22: D.J. Stevenson, GFC, observed 1 adult.
FALCPAUL*95	Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	LT	1991-05-13	Improved pasture, or sod farm	1991-05-13: J.A. Hovis, GFC, observed 1 adult female; also observed approx. 1 week ago (5/06?-NeSmith) by S.F. Husted..
MYCTAMER*23	Mycteria americana	Wood Stork	G4	S2	LE	LE	1978-04	CYPRESS STRAND ALONG LAKE AND CREEK, NESTING SUB- STRATE OF CYPRESS.	43-45 NESTING PAIRS IN 4/77; NONE IN 4/78.
CROTADAM*293	Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N	2003-04-22	2003-04-22: individual observed in oak scrub community (U03DEA03FLUS).	2003-04-22: DeAngelis observed one Crotalus adamanteus in an oak scrub community (U03DEA03FLUS).
DRYMCOUP*490	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	2003-04-24	2003-04-24: one Drymarchon couperi was found in an oak scrub community (U03DEA02FLUS).	2003-05-01: One Drymarchon couperi was found near the east-central boundary of Lake Panasoffkee (SWFWMD) in an oak scrub community (PNDDEA03FLUS).

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Florida Natural Areas Inventory

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 6 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
DRYMCOUP*492	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	2004-03-16	2004-03-16 (J. DeAngelis): one indigo was observed in an isolated upland community of Quercus geminata, Quercus myrtifolia, Quercus chapmani, and Serenoa repens (PNDDEA03FLUS, U04DEA01FLUS).	2004: J. DeAnglis found one eastern indigo snake in disturbed uplands (PNDDEA03FLUS, U04DEA01FLUS).
PECLPLUM*7	Pecluma plumula	Plume Polypody	G5	S2	N	LE	2005-07-13	2003-07-29: mesic and hydric hammock on live oak with resurrection fern and green fly orchid. Canopy includes magnolia, sweetgum, cabbage palm, and needle palm (in shrubs). Several large (4'+ dbh) Quercus virginiana contained an estimated 200-300 plant	2005-07-13: at least 300-400 plants seen, probably hundreds more in hammock, epiphytic on live oaks, many with sporangia (PNDGUL01FLUS).
HALILEUC*879	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1995-2003: Continuously active. (U03FWC01FLUS). Previous data (note different format) Nest; 1995: Produced 1 young; 1994: Produced 2 young; 1993: Produced 2 young.
DRYMCOUP*505	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	2004-02-10	2004-02-10: Scrub with xeric oaks, saw palmetto, and sparse grasses. Area covers approximately 350 acres (U04DEA01FLUS).	2004-02-10: One indigo within close proximity to tortoise burrow (U04DEA01FLUS).
CENTAREN*20	Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE	2002-07-10	2002-07-10: SANDHILL, GENTLY SLOPING TO ADJACENT MARSH; DOMINANT SPECIES: PINUS PAULSTRIS, QUERCUS LAEVIS, Q. GEMINATA (SOME Q. MARGARETTA), ARISTIDA STRICTA, BAHIA GRASS (PNDEA03FLUS).	2002-07-10: 4 PLANTS, FLOWERING; STEMS INTERTWINED WITH CLITORIA MARIANA VINES (PNDDEA03FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 6 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 31270					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N
Potential					
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 31271					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Upland hardwood forest		G5	S3	N	N
Potential					
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 6 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 31561

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N

Potential

Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 31860

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 6 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Documented					
Baygall		G4	S4	N	N
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Scrub		G2	S2	N	N
Potential					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Dicerandra cornutissima	Longspurred Mint	G1	S1	LE	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Matrix Unit ID: 31861					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Upland hardwood forest		G5	S3	N	N
Potential					

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 6 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 31862

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N

Potential

Agrimonia incisa	Incised Groove-bur	G3	S2	N	LE
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 6 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 32169

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Egretta caerulea	Little Blue Heron	G5	S4	N	LS
Mycteria americana	Wood Stork	G4	S2	LE	LE

Potential

Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 32170

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 6 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N
Potential					
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Pituophis melanoleucus mugitus	Florida Pine Snake	G4T3	S3	N	LS
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Matrix Unit ID: 32490					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N
Potential					
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 6 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

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Proposed Citrus Substation - Proposed Central Florida South Substation (Map 7 of 7)

Sumter County

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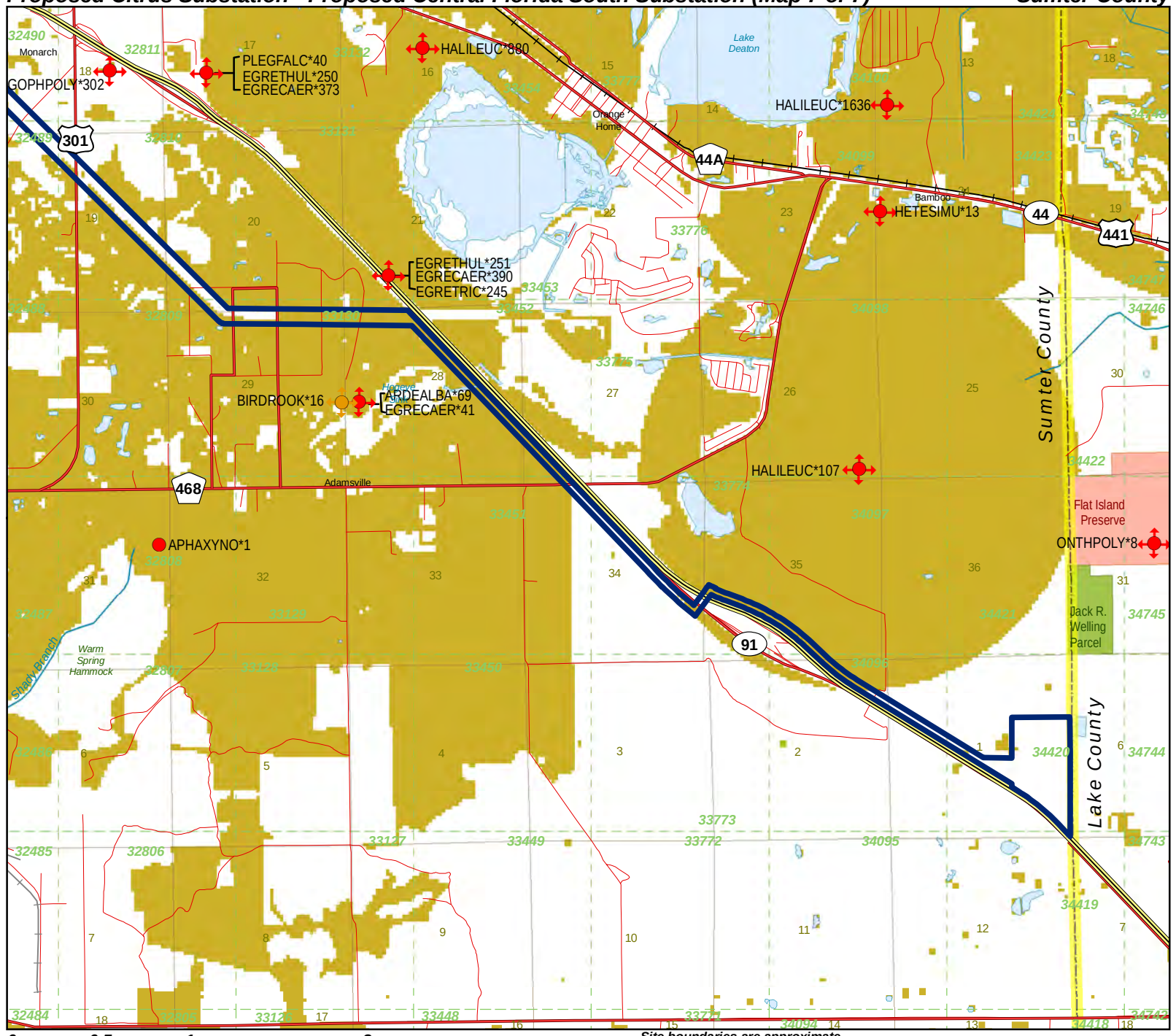
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

N W E S

0 0.5 1 2 Miles

Site boundaries are approximate.

NOTE
Map should not be interpreted without accompanying documents.

Map produced by ACN
Map Date: 1 DEC 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 7 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
ARDEALBA*69	Ardea alba	Great Egret	G5	S4	N	N	1978-07	POND SURROUNDED BY WILLOWS AND PASTURE LAND; NESTING SUBSTRATE IS WILLOWS OVER WATER.	10 NESTING PAIRS IN 4/77; 10 PRS IN 4/78.
EGRECAER*390	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-05-16	Willows in freshwater wetland.	1988/05/16: R. Sullivan, GFC, observation. "Unable to estimate numbers." (GREG, SNEG, CAEG, GBHE, LBHE, TCHE, WHIB, ANHI present). 1989/05/09: Total = A, ANHI present.
HETESIMU*13	Heterodon simus	Southern Hognose Snake	G2	S2	N	N	1995-07-23	Bahia grass pasture ca. 100 yards from 30 acres of live oak hammock surrounding semi-permanent pond; GEOMYS abundant; BUFO QUERCICUS breeds in two ponds (U00ASH01FLUS).	1995-07-23: Ashton observed adult male and female in GOPHERUS burrow.
EGRETRIC*245	Egretta tricolor	Tricolored Heron	G5	S4	N	LS	1988-05-16	No general description given	1988/05/16: R. Sullivan, GFC. "Unable to estimate numbers."
GOPHPOLY*302	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1987-pre	No general description given	1987-pre: Species occurrence noted here in Diemer's unpublished map set (U86DIE01FLUS).
PLEGFALC*40	Plegadis falcinellus	Glossy Ibis	G5	S3	N	N	1988-05-16	Small clump of elderberry in spoil-farm pond next to FL. Turnpike.	1988-05-16: R. Sullivan, GFC - GRHE and LBHE young in feathered stage. "Total" (nests?) = 47 (also includes SNEG, GLIB, ANHI).
EGRECAER*41	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1978-07	POND SURROUNDED BY WILLOWS AND PASTURE LAND; NESTING SUBSTRATE IS WILLOWS OVER WATER.	ACTIVE IN AREA, BUT NO KNOWN NESTING ACTIVITY.
EGRETHUL*250	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-05-16	1988-05-16: Small clump of elderberry in spoil/farm pond next to FL. Turnpike (U97GFC02FLUS).	1988-05-16: R. Sullivan, GFC. GRHE and LBHE young in feathered stage. "Total" (nests?) = 47 (also includes SNEG, GLIB, ANHI) (U97GFC02FLUS).
BIRDROOK*16	Bird Rookery		G5	SNR	N	N	1978-07	POND SURROUNDED BY WILLOWS AND PASTURE LAND; NESTING SUBSTRATE IS WILLOWS OVER WATER.	MOSTLY CATTLE EGRETS (2000 PRS 6/76; 3500 PRS 4/77; 4000 4/78). LITTLE BLUE HERON (ACTIVE BUT NO NESTING);GREAT EGRET (10 PRS 4/77; 10 PRS 4/78); ANHINGA & GREAT BLUE HERON ARE ACTIVE IN AREA, BUT APPARENTLY DON'T NEST.
EGRETHUL*251	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-05-16	Willows in freshwater wetland.	1988/05/16: R. Sullivan, GFC. "Unable to estimate numbers."

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR

Proposed Citrus Substation - Proposed Central Florida South Substation (Map 7 of 7)

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
EGRECAER*373	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-05-16	Small clump of elderberry in spoil/farm pond.	1988/05/16: R. Sullivan, GFC, observation. GRHE and LBHE young in feathered stage. "Total" (nests?) = 47 (also includes SNEG, GLIB, ANHI).
HALILEUC*1636	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2002	2005-07-12: Source does not provide a description.	Nest status: Active, 2002; Not active, 2003; Unknown status or not assessed, 2001, 2000, 1999;(U03FWC01FLUS)
HALILEUC*107	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2002, 2001; Inactive - 2000, 1999;Status 1995-98: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST: 1995: PRODUCED 1 YOUNG; 1994: PRODUCED 1 YOUNG; 1993-92: GONE; 1991: INACTIVE; 1990-8
HALILEUC*880	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1995-2003: Continuously active. (U03FWC01FLUS). Previous data (note different format) Nest; 1995: Produced 2 young; 1994: Inactive; 1993: Active, produced 0 young.
APHAXYNO*1	Aphaostracon xynoelictum	Fenney Springs Hydrobe Snail	G1	S1	N	N	1967-05-25	FENNEY SPRINGS IS 2 VERTICAL-SIDED POOLS FORMED BY A COLLAPSED LIMESTONE CAVERN. POOLS DRAIN INTO LARGE SPRING RUN THAT FLOWS WESTWARD.	ELEMENT FOUND ONLY IN SPRING POOLS AND RUN IN IMMEDIATE VICINITY OF SPRINGS, ON SUBSTRATE, DEBRIS, VEGETATION. ABUNDANT IN LATE SUMMER ON MOSS-COVERED LIMESTONE BOULDERS. ASSOCIATED WITH CINCINNATIA FLORIDANA (ABUNDANT IN SPRING-RUN).
ONTHPOLY*8	Onthophagus polyphemi polyphemi	Punctate Gopher Tortoise Onthophagus Beetle	GNRTNR	S2S3	N	N	1938-07-02	1938-07-02: in a gopher tortoise burrow (B73WOO01FLUS).	1938-07-02: Two specimens were collected from a gopher tortoise burrow by C.C.Goff (B73WOO01FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 7 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 32809					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Upland hardwood forest		G5	S3	N	N
Potential					
Ardea alba	Great Egret	G5	S4	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bird Rookery		GNR	SNR	N	N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Egretta caerulea	Little Blue Heron	G5	S4	N	LS
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Matrix Unit ID: 32810					
Likely					
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Egretta caerulea	Little Blue Heron	G5	S4	N	LS
Egretta thula	Snowy Egret	G5	S3	N	LS
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Plegadis falcinellus	Glossy Ibis	G5	S3	N	N
Upland hardwood forest		G5	S3	N	N
Potential					
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N

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Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 33130

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Egretta caerulea	Little Blue Heron	G5	S4	N	LS
Egretta thula	Snowy Egret	G5	S3	N	LS
Egretta tricolor	Tricolored Heron	G5	S4	N	LS
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N

Potential

Ardea alba	Great Egret	G5	S4	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bird Rookery		GNR	SNR	N	N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE

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Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 33451

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Upland hardwood forest		G5	S3	N	N

Potential

Ardea alba	Great Egret	G5	S4	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bird Rookery		GNR	SNR	N	N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Egretta caerulea	Little Blue Heron	G5	S4	N	LS
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE

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Biodiversity Matrix Report
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Warea amplexifolia	Clasping Warea	G1	S1	LE	LE

Matrix Unit ID: 33452

Likely

Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Egretta caerulea	Little Blue Heron	G5	S4	N	LS
Egretta thula	Snowy Egret	G5	S3	N	LS
Egretta tricolor	Tricolored Heron	G5	S4	N	LS
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Upland hardwood forest		G5	S3	N	N

Potential

Ardea alba	Great Egret	G5	S4	N	N
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii	Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bird Rookery		GNR	SNR	N	N
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Platanthera integra	Yellow Fringeless Orchid	G3G4	S3	N	LE
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Pycnanthemum floridanum	Florida Mountain-mint	G3	S3	N	LT
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 33774

Likely

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 7 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Forestiera godfreyi	Godfrey's Swampprivet	G2	S2	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Monotropsis reynoldsiae	Pygmy Pipes	G1Q	S1	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Matrix Unit ID: 34096					
Potential					
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bonamia grandiflora	Florida Bonamia	G3	S3	LT	LE
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE

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Florida Natural Areas Inventory

Biodiversity Matrix Report
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Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Onthophagus polyphemi polyphemi	Punctate Gopher Tortoise Onthophag	GNRTNR	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE

Matrix Unit ID: 34097

Likely

Haliaeetus leucocephalus	Bald Eagle	G5	S3	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE

Potential

Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Onthophagus polyphemi polyphemi	Punctate Gopher Tortoise Onthophag	GNRTNR	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE

Matrix Unit ID: 34420

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory

Biodiversity Matrix Report
Map 7 of 7

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Likely					
Mycteria americana	Wood Stork	G4	S2	LE	LE
Potential					
Arnoglossum diversifolium	Variable-leaved Indian-plantain	G2	S2	N	LT
Asplenium heteroresiliens	Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum	Ruffled Spleenwort	G1Q	S1	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Bonamia grandiflora	Florida Bonamia	G3	S3	LT	LE
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Carex chapmanii	Chapman's Sedge	G3	S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	LT
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Digitaria floridana	Florida Crabgrass	G1	S1	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Eriogonum longifolium var. gnaphalifolium	Scrub Buckwheat	G4T3	S3	LT	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Justicia cooleyi	Cooley's Water-willow	G2	S2	LE	LE
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius	Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Notophthalmus perstriatus	Striped Newt	G2G3	S2S3	N	N
Onthophagus polyphemi polyphemi	Punctate Gopher Tortoise Onthophag	GNRTNR	S2S3	N	N
Podomys floridanus	Florida Mouse	G3	S3	N	LS
Polygala lewtonii	Lewton's Polygala	G3	S3	LE	LE
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Spigelia loganioides	Pinkroot	G2Q	S2	N	LE
Trichomanes punctatum ssp. floridanum	Florida Filmy Fern	G4G5T1	S1	N	LE
Triphora craigheadii	Craighead's Nodding-caps	G1	S1	N	LE
Warea amplexifolia	Clasping Warea	G1	S1	LE	LE

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

GLOBAL AND STATE RANKS

Florida Natural Areas Inventory (FNAI) defines an **element** as any rare or exemplary component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. FNAI assigns two ranks to each element found in Florida: the **global rank**, which is based on an element's worldwide status, and the **state rank**, which is based on the status of the element within Florida. Element ranks are based on many factors, including estimated number of occurrences, estimated abundance (for species and populations) or area (for natural communities), estimated number of adequately protected occurrences, range, threats, and ecological fragility.

GLOBAL RANK DEFINITIONS

G1	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2	Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3	Either very rare and local throughout its range (21-100 occurrences or less than 10,0000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4	Apparently secure globally (may be rare in parts of range).
G5	Demonstrably secure globally.
G#?	Tentative rank (e.g., G2?)
G#G#	Range of rank; insufficient data to assign specific global rank (e.g., G2G3)
G#T#	Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)
G#Q	Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
G#T#Q	Same as above, but validity as subspecies or variety is questioned.
GH	Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
GNA	Ranking is not applicable because element is not a suitable target for conservation (e.g. as for hybrid species)
GNR	Not yet ranked (temporary)
GNRTNR	Neither the full species nor the taxonomic subgroup has yet been ranked (temporary)
GX	Believed to be extinct throughout range
GXC	Extirpated from the wild but still known from captivity/cultivation
GU	Unrankable. Due to lack of information, no rank or range can be assigned (e.g., GUT2).

STATE RANK DEFINITIONS

Definition parallels global element rank: substitute "S" for "G" in above global ranks, and "in Florida" for "globally" in above global rank definitions.

FEDERAL AND STATE LEGAL STATUSES (U.S. Fish and Wildlife Service – USFWS) PROVIDED BY FNAI FOR INFORMATION ONLY.

For official definitions and lists of protected species, consult the relevant state or federal agency.

FEDERAL LEGAL STATUS

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

LE Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species which is in danger of extinction throughout all or a significant portion of its range.

LE,XN A non essential experimental population of a species otherwise Listed as an Endangered Species in the List of Endangered and Threatened Wildlife and Plants. LE,XN for Grus americana (Whooping crane), Federally listed as XN (Non essential experimental population) refers to the Florida experimental population only. Federal listing elsewhere for Grus americana is LE.

PE Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.

LT Listed as Threatened Species, defined as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

LT,PDL Species currently listed Threatened but has been proposed for delisting.

PT Proposed for listing as Threatened Species.

C Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants, Category 1. Federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.

SAT Threatened due to similarity of appearance to a threatened species.

SC Species of Concern, species is not currently listed but is of management concern to USFWS.

N Not currently listed, nor currently being considered for addition to the List of Endangered and Threatened Wildlife and Plants.

FLORIDA LEGAL STATUSES (Florida Fish and Wildlife Conservation Commission – FFWCC/ Florida Department of Agriculture and Consumer Services – FDACS)

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission - FFWCC, 1 August 1997, and subsequent updates.

LE Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.

LT Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.

LT* Indicates that a species has LT status only in selected portions of its range in Florida. LT* for Ursus americanus floridanus (Florida black bear) indicates that LT status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. LT* for Neovison vison pop. 1 (Southern mink, South Florida population) state listed as Threatened refers to the Everglades population only (Note: species formerly listed as Mustela vison mink pop. 1. Also, priorly listed as Mustela evergladensis).

LS Listed as Species of Special Concern by the FFWCC, defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification,

environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.

LS* Indicates that a species has LS status only in selected portions of its range in Florida. LS* for Pandion haliaetus (Osprey) state listed as LS (Species of Special Concern) in Monroe County only.

PE Proposed for listing as Endangered.

PT Proposed for listing as Threatened.

PS Proposed for listing as a Species of Special Concern.

N Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or please visit: http://DOACS.State.FL.US/PI/Images/Rule05b.pdf

LE Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.

PE Proposed by the FDACS for listing as Endangered Plants.

LT Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered. LT* indicates that a species has LT status only in selected portions of its range in Florida.

PT Proposed by the FDACS for listing as Threatened Plants.

N Not currently listed, nor currently being considered for listing.

FLORIDA Natural Areas INVENTORY

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Longleaf Pine Ecosystem

Hamilton, Gilchrist, Volusia and Marion Counties

Group B
Full Fee

Purpose for State Acquisition

Though they once covered much of north and central Florida, old-growth longleaf pine sandhills are now only distant memories, replaced by pine plantations, pastures, and housing developments. Nevertheless, fragments of good sandhills still remain. The Longleaf Pine Ecosystem project will conserve two of the largest and best of these fragments, in so doing helping to ensure the survival of several rare animals like the red-cockaded woodpecker as well as some plants, and giving the public an opportunity to see and enjoy the original, and increasingly rare, natural landscape of Florida's uplands. This project may also help complete the Florida National Scenic Trail, a statewide non-motorized trail that crosses a number of Florida Forever project sites.

Bell Ridge: The primary goal is to restore, maintain and protect in perpetuity all native ecosystems; to integrate compatible human use: and to insure long-term viability of populations and species considered rare. The Bell Ridge is a small xeric upland physiographic feature lying just north of the much larger Brooksville Ridge. The gently rolling hills and ridges of the Bell Ridge represent relict beach dunes now at elevations of 60-100 feet and consist of excessively well-drained sands of generally low fertility. It is predominantly sandhill of variable quality. The Bell Ridge Sandhills can be expected to support most of the fauna, both game and nongame, typical of sandhill habitat. Evidence of one rare species, the gopher tortoise was found.

Longleaf Pine Ecosystem
FNAI Elements - July 2009

Red-cockaded Woodpecker	G3/S2
Florida Scrub-jay	G2/S2
Florida Black Bear	G5T2/S2
Eastern Indigo Snake	G3/S3
Gopher Tortoise	G3/S3
Florida Mouse	G3/S3
Longspurred Mint	G1/S1
Giant Orchid	G2G3/S2
Incised Groove-bur	G3/S2
Short-tailed Hawk	G4G5/S1
Scrub Stylisma	G3/S3

22 rare species are associated with the project

Manager

Division of Forestry (DOF), Department of Agriculture and Consumer Services (Ross Prairie, Blue Spring Longleaf).

Bell Ridge: The DOF will manage the project under a multiple use management regime consistent with the State Forest system.

General Description

Longleaf Pine Ecosystem sites (Ross Prairie Sandhill, Ross Prairie Addition, Bell Ridge, and Blue Spring Longleaf) are some of the highest quality longleaf pine sandhills in Florida. Longleaf pine sandhills are one of Florida's most distinctive and endangered forest types, and have declined by more than 80% in the last century. The project will protect nearly 20 plants, animals, and natural communities listed by Florida Natural Areas Inventory. Archaeological sites are known from the Ross Prairie site. These sites are vulnerable to logging and fire suppression as well as development.

Public Use

The project will provide state forests, with opportunities for hunting, hiking, horseback riding, camping and nature appreciation.

Placed on list	**1993**
Project Area (Acres)	**25,637**
Acres Acquired	**10,218***
at a Cost of	**$30,408,180**
Acres Remaining	**15,417**
with Estimated (Tax Assessed) Value of	**$26,681,675**

*** includes 54 acres at Caraway Lake acquired by the Florida Audubon Society in 1990**

Acquisition Planning
Largest property owners south of canal lands (essential) within the Ross Prairie (8,216 acres) site are Janet Land Corp. (acquired) and Deltona-Marion Oaks Sub. (unwilling seller). North of the canal lands are seven (essential), Ocala Waterway Estates (essential), Guy (essential), Davis, and less than 35 other smaller tracts. Acquisition work is scheduled to begin in early 1999 onthe Maverick, Davis, and Guy tracts. The BlueSpring site (1,978 acres) site consists of one owner, (acquired, through TNC).

On December 3, 1998, LAMAC transferred the Deland Ridge and Chassahowitzka Sandhill sites to the Negotiation Impasse group.

On July 29, 1999, the Council combined the 3,040 acres Ross Prairie Addition project to the Longleaf Pine Ecosystem project (Priority Group).

On December 9, 1999 the Council approved the Bell Ridge project and added it to the Longleaf Pine Ecosystem project.

The Division of State Lands is not actively working this project.

Coordination
There is no acquisition partner.

Management Policy Statement
The primary goals of management of the Longleaf Pine Ecosystem project are: to conserve and protect environmentally unique and irreplaceable lands that contain native, relatively unaltered flora and fauna representing a natural area unique to, or scarce within, a region of this state or a larger geographic area; to conserve and protect significant habitat for native species or endangered and threatened species; and to conserve, protect, manage, or restore important ecosystems, landscapes, and forests, in order to enhance or protect significant surface water, coastal, recreational, timber, fish or wildlife resources which local or state regulatory programs cannot adequately protect.

Management Prospectus
Qualifications for state designation The quality of the pine forests on the Blue Spring Longleaf and Ross Prairie sites, and their size and diversity, make them suitable for state forests.

Manager DOF is manager (Ross Prairie, Blue Spring Longleaf).

Bell Ridge: The DOF will manage the project under a multiple use management regime consistent with the State Forest system.
Conditions affecting intensity of management On the Blue Spring tract, there are no known major disturbances that will require extraordinary attention, so management intensity is expected to be typical for a state forest. On Ross Prairie, however, the construction of an extension of the Florida Turnpike may hinder fire management activities and public access to the forest.
Timetable for implementing management and provisions for security and protection of infrastructure The Blue Spring Longleaf tract and part of the Ross Prairie tract have been acquired. The Division is now providing public access to these tracts for low-intensity, non-facilities-related outdoor recreation.

Management on the Blue Spring Longleaf tract will concentrate on maintaining the existing open conditions and seeds will be collected with as little disturbance as possible to the resources. On all three tracts, the Division will provide access to the public while protecting sensitive resources. The sites' natural resources and threatened and endangered plants and animals will be inventoried to provide the basis for a management plan.

Long-range plans for these tracts will generally be directed toward restoring disturbed areas to their original conditions, as far as possible, as well as protecting threatened and endangered species. An all-season burning program will use, whenever possible, existing roads, black lines, foam lines and natural breaks to contain fires. Timber management will mostly involve improvement thinning and regeneration harvests. Plantations will be thinned and, where appropriate, reforested with species found in natural ecosystems. Stands will not have a targeted rotation age. Infrastructure will primarily be located in disturbed areas and will be the minimum required for management and public access. The Division will promote environmental education.
Revenue-generating potential The Division of Forestry will sell timber as needed to improve or maintain desirable ecosystem conditions. These sales will provide a variable source of revenue, but the revenue-generating potential for these tracts is expected to be low.

LONGLEAF PINE ECOSYSTEM: OVERVIEW

HAMILTON, GILCHRIST, VOLUSIA, AND MARION COUNTIES

Map 1: Hamilton County
A. Blue Spring Longleaf Site

Map 2: Gilchrist County
A. Bell Ridge Sandhills Site

Map 3: Volusia County
A. Deland Ridge Site

Map 4: Marion County
A. Ross Prairie Sandhill Site
B. Ross Prairie Addition Site

0 15 30 60
Miles

SEPTEMBER 2006

Cooperators in management activities The DOF will cooperate with and seek the assistance of other state agencies, local government entities and interested parties as appropriate.

Bell Ridge:

Management Policy

The primary objective of management of the Bell Ridge Sandhills is to protect and restore the threatened Sandhill natural community. A secondary objective is to provide resource-based recreational activities that are compatible with protection of the natural and cultural resource values of the project. The site will be managed under the multiple-use concept—management activities will be directed first toward conservation of resources and second toward integrating carefully controlled consumptive uses. Managers will control access to the proposal; thoroughly inventory the resources; restore hydrological disturbances; conduct prescribed burning of fire-dependent communities in a manner mimicking natural lightning-season fires, using existing firelines, natural firebreaks, existing roads, or foam lines for control, when possible; strictly limit timber harvesting in mature stands; and monitor management activities to ensure that they are actually conserving resources. Managers will limit the number and size of recreational facilities, ensure that they avoid the most sensitive resources, and site them in already disturbed areas when possible.

The proposal includes over 3,000 acres of relatively undisturbed land adjacent to an existing area of conservation lands. It consequently appears to have the size and location to achieve its primary and secondary objective.

Management Prospectus

Management Goals

The Bell Ridge Sandhill encompasses approximately 3,500 acres in Gilchrist, Florida. The site is located approximately 9 miles north east of Trenton, seven miles east of Bell, seventeen miles north of the Watermelon Pond Unit of Goethe State Forest, and twenty miles west of Gainesville. The DOF proposes to manage the project under a multiple use management regime consistent with the State Forest system, and in a manner designed to accomplish the acquisition goals and measures for this project as approved by the Acquisition and Restoration Council. These goals and measures are hereby incorporated by reference.

The primary land management goal for the DOF is to restore, maintain and protect in perpetuity all native ecosystems; to integrate compatible human use; and to insure long-term viability of populations and species considered rare. This ecosystem approach will guide the DOF management activities on this project.

Qualifications for State Designation

The major community represented on this project is sandhill. The project's size and diversity makes it desirable for use and management as a State Forest. Management by the DOF as a State Forest is contingent upon the state acquiring fee simple title to the entire project and obtaining some level of legal public access to the site, which is likely since the eastern and northern property boundaries are county maintained graded roads.

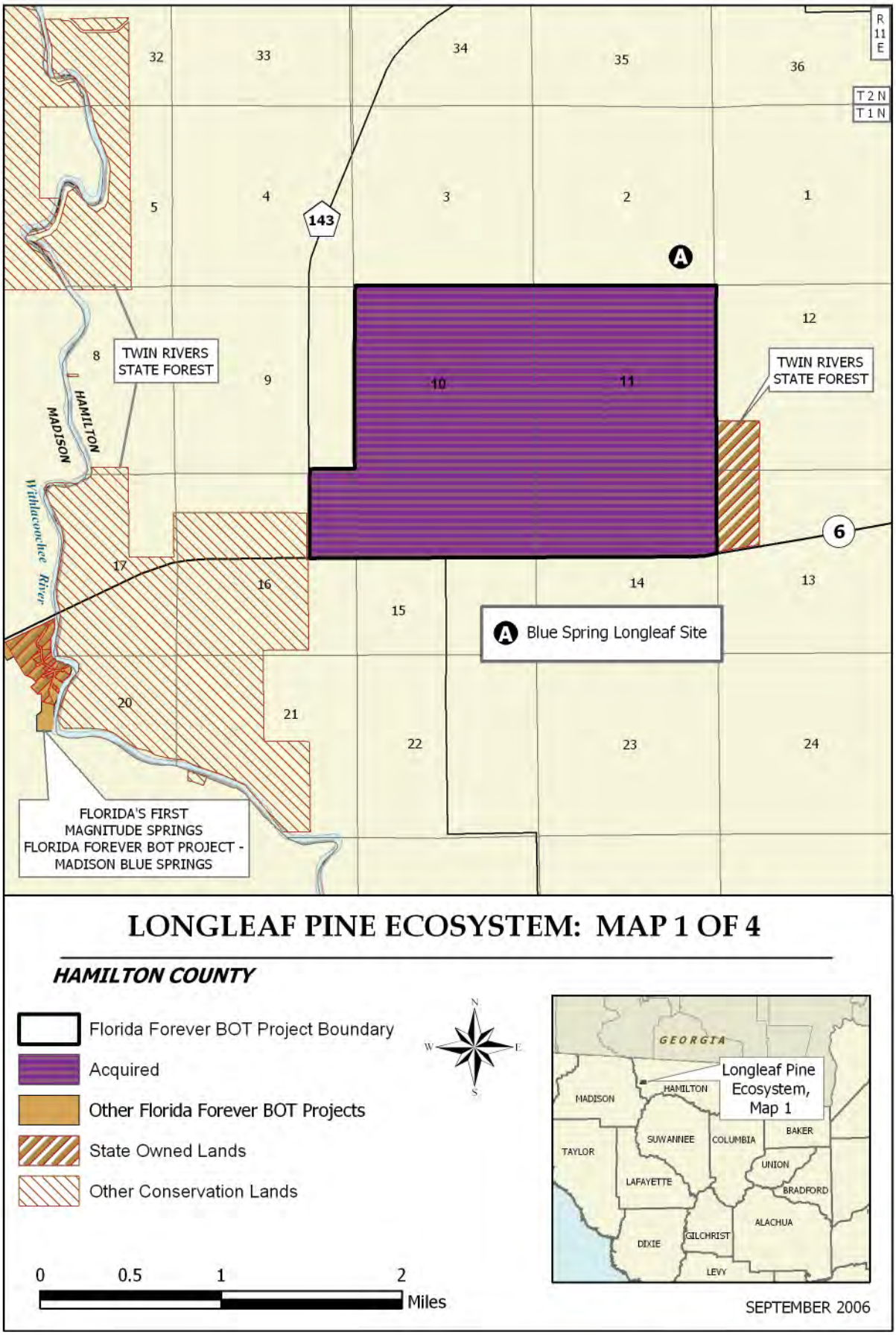
Conditions Affecting Intensity of Management

There are portions of the parcel that have been disturbed that will require restoration efforts. There is at least one linear facility that bisects the parcel, which will be an area of management concern for monitoring unauthorized uses and introduction of invasive exotic species. The sandhill community is considered imperiled and as such may be sensitive to certain uses and the intensity of use. As such, water resource development projects, water supply development projects, stormwater management projects and any additional linear facilities, other than those that already exist on the project, are considered incompatible with this type of ecosystem and with the resource values on this project. The adjacent residential developments will pose a management concern associated with prescribed burning, public use, unauthorized uses, and other natural resource management activities. There are areas that have refuse and debris and which should be removed prior to closing on the core parcel. Other than those above-mentioned points, there are no other known major disturbances that will require extraordinary attention. The level of management intensity and related management cost is expected to be moderately high initially to establish this as a state forest.

Timetable for Implementing Management

Once the core area is acquired and assigned to the Division of Forestry, public access will be provided for low intensity outdoor recreation activities. The Division of Forestry proposes to manage the site as a new unit of the State Forest system, and the Waccasassa Forestry Center personnel will carry out initial management activities and coordinate public access and use. DOF will cooperate with and seek the assistance of other

Longleaf Pine Ecosystem - Group B/Full Fee



state agencies, local government entities and interested parties as appropriate.

Initial and intermediate management efforts will concentrate on site security, public and fire management access, resource inventory, reforestation of areas where off-site species have been harvested, natural regeneration of the native species in the areas with low densities, and any restoration activities. Steps will be taken to insure that the public is provided appropriate access while simultaneously affording protection of sensitive resources. There are many roads throughout the property, and as such a road plan will need to be developed to determine those to be used for vehicular use by the public, those that are required for administrative use, and unnecessary access points and roads that should be closed. An inventory of the site's natural resources and threatened and endangered flora and fauna will eventually be conducted tobasis for formulation of a management plan. Prior to collection of necessary resource information, management proposals for this project can only be conceptual in nature. Long-range plans for this property will generally be directed toward the restoration of disturbed areas and maintenance of natural communities. To the greatest extent practical, disturbed sites will be restored to conditions that would be expected to occur in naturally functioning ecosystems. Any existing pine plantations will be thinned to achieve a more natural appearance. Off-site species will eventually be replaced with species that would be expected to occur naturally on those specific sites. Management activities will also stress enhancement of the abundance and spatial distribution of threatened and endangered species.

Portions of the area can sustain an all season prescribed burning program utilizing practices which incorporate recent research findings. The objective is to eventually establish an all season prescribed burning program on all of the fire dependent community types. Whenever possible, existing roads, black lines, foam lines and natural breaks will be utilized to contain and control prescribed and natural fires.

Timber management activities will primarily consist of improvement thinning and regeneration harvests aimed at maintaining and perpetuating forest ecosystems. Stands will not have a targeted rotation age but will be managed to maintain a broad diversity of age classes ranging from young stands to areas with old growth characteristics. This will provide habitat for the full spectrum of species that would be found in the natural environment and enhance and maintain biodiversity. The resource inventory will be used to identify sensitive areas that need special attention, protection or management, and to locate areas that are appropriate for any recreational or administrative facilities. Recreation and administrative infrastructure development will primarily be located in already disturbed areas and will be the absolute minimum required to allow public access for the uses mentioned above, to provide facilities to accommodate public use, and to administer and manage the property.

The Division will promote recreation and environmental education in the natural environment. It is anticipated that interpretative and user services recreational facilities will be developed and the use of low impact, rustic facilities will be stressed. High impact, organized recreation areas are not planned because of possible adverse effects on the natural environment. Unnecessary roads, firelines and hydrological disturbances will be abandoned and/or restored to the greatest extent practical.

Florida Forever Performance Measures

The DOF has reviewed the project and believes that following Florida Forever Performance Measures appear to apply to this parcel:

- Measure G1: Acres acquired that are available for sustainable forest management.
- Measure G2: Acres of state owned forestland managed for economic return in accordance with current Best Management Practices (BMPs).
- Measure G4: Percentage and number of acres identified for restoration actually restored by reforestation. **Note:** In some areas, this may be accomplished by natural regeneration in areas of low density and once off-site species are harvested.

There is the possibility that other measures apply, however, that may be determined by an inventory of the resources on the project.

Revenue Generating Potential

As mentioned above, timber sales will be conducted as needed to improve or maintain desirable ecosystem conditions. These sales will primarily take place in upland pine stands and will provide a variable source

(continued)

LONGLEAF PINE ECOSYSTEM: MAP 2 OF 4

GILCHRIST COUNTY

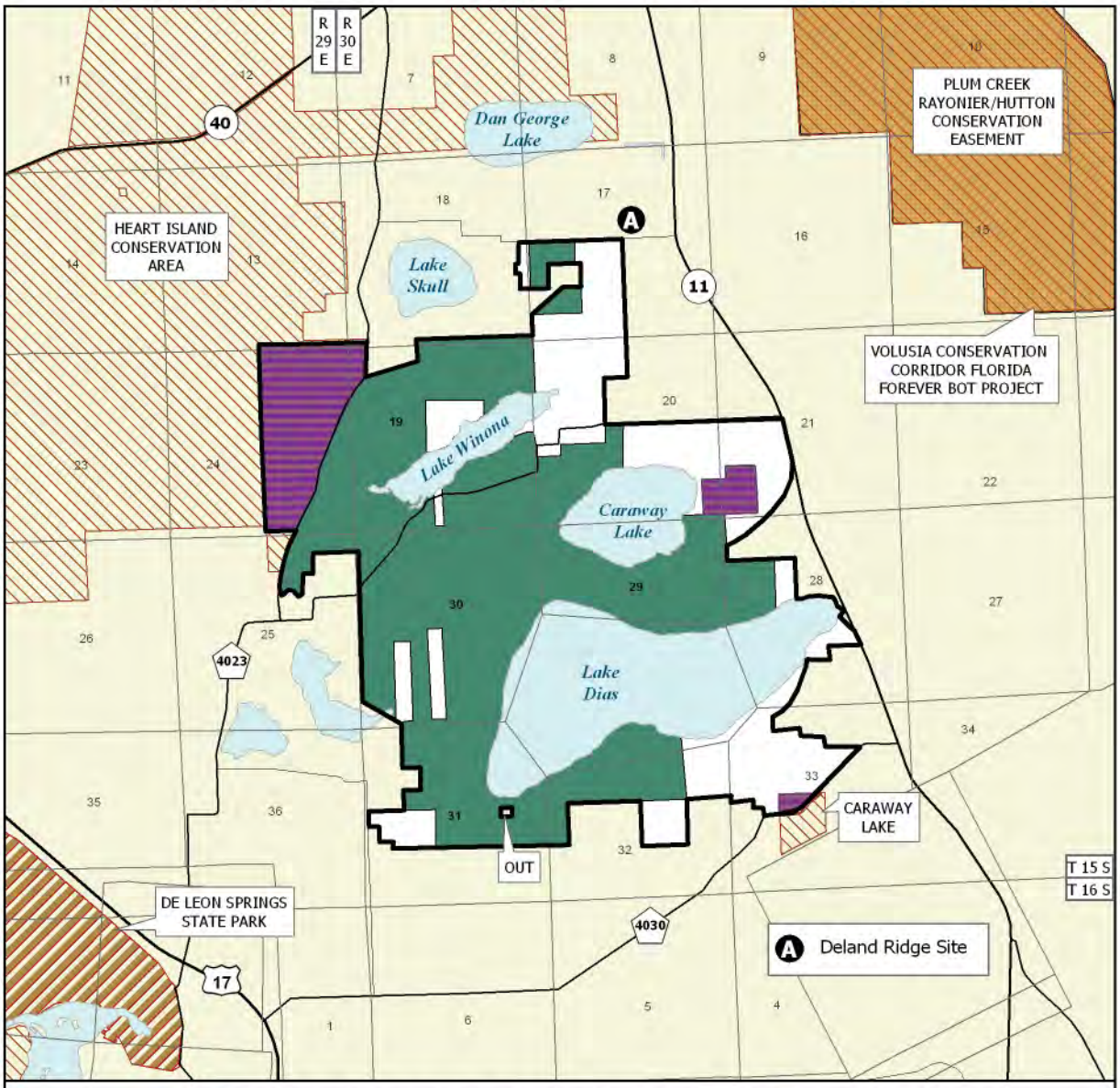
Florida Forever BOT Project Boundary

Essential Parcel(s) Remaining

Other Conservation Lands

0 0.5 1 2 Miles

SEPTEMBER 2006



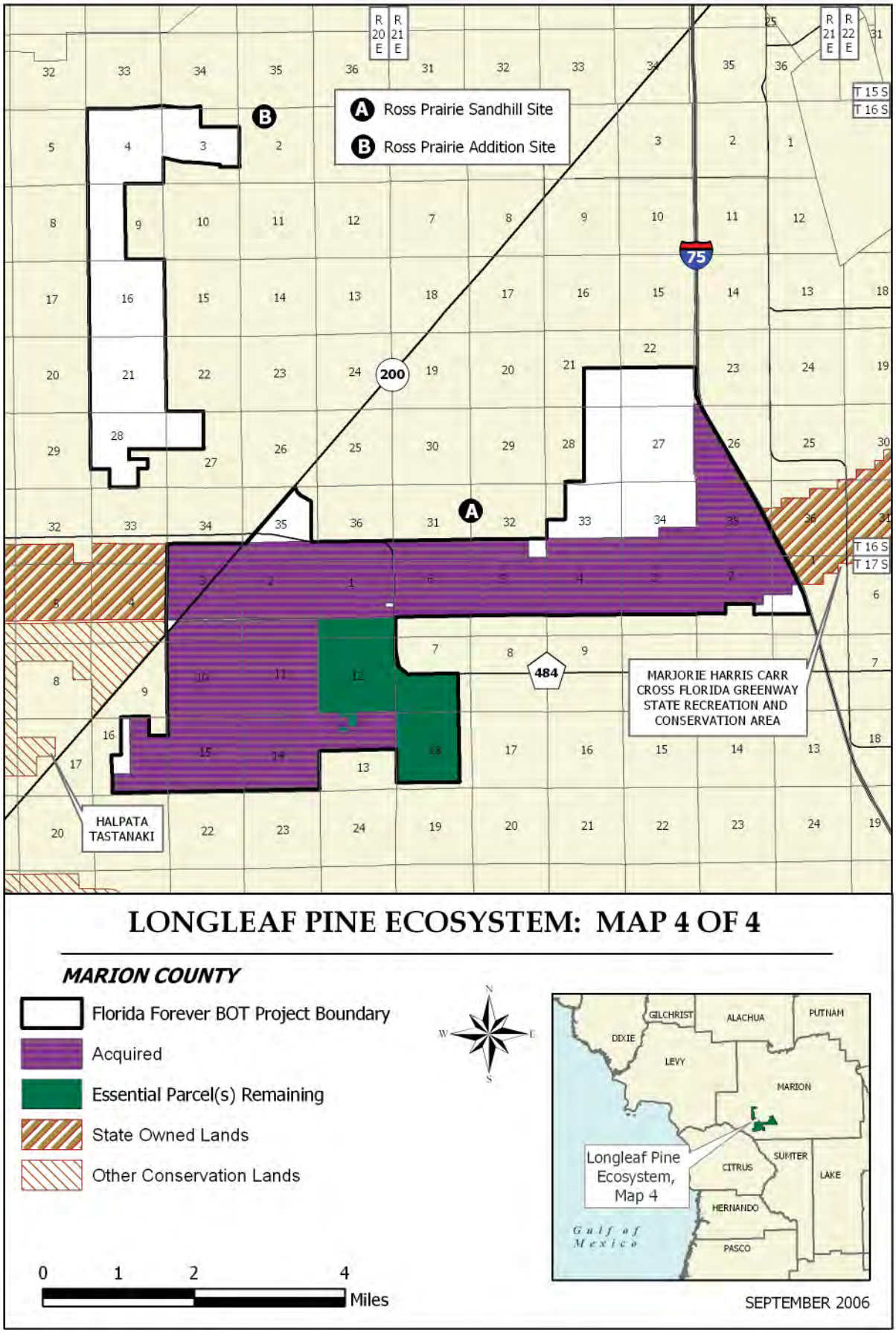
LONGLEAF PINE ECOSYSTEM: MAP 3 OF 4

VOLUSIA COUNTY

- Florida Forever BOT Project Boundary
- Acquired
- Essential Parcel(s) Remaining
- Other Florida Forever BOT Projects
- State Owned Lands
- Other Conservation Lands

0 0.5 1 2 Miles

APRIL 2009


A Ross Prairie Sandhill Site
B Ross Prairie Addition Site
R 20 E
R 21 E
R 22 E
T 15 S
T 16 S
T 17 S
75
200
484
MARJORIE HARRIS CARR CROSS FLORIDA GREENWAY STATE RECREATION AND CONSERVATION AREA
HALPATA TASTANAKI
LONGLEAF PINE ECOSYSTEM: MAP 4 OF 4
MARION COUNTY
Florida Forever BOT Project Boundary
Acquired
Essential Parcel(s) Remaining
State Owned Lands
Other Conservation Lands
N
W
E
S
0 1 2 4
Miles
GILCHRIST
ALACHUA
PUTNAM
DIXIE
LEVY
MARION
CITRUS
SUMTER
LAKE
HERNANDO
PASCO
Gulf of Mexico
Longleaf Pine Ecosystem, Map 4
SEPTEMBER 2006

of revenue dependent upon a variety of factors. Due to the existing condition of the timber resource on the property, revenue generating potential of this project is expected to be medium.

Capital Project Expenditures

Capital project expenditures will be needed on this parcel as listed below. They include relocation of the Trenton Work Center to this site to provide site management, security and public service. The existing Trenton Work Center is currently leased from the private sector and this lease is due to expire in 2005. It is not anticipated that the lease will be renewed. The existing house and barn on the property can be used for these facilities so that the expense associated with it can be reduced, although, they will require renovation. Reinforcing the fencing in the areas of residential development will be necessary to clearly establish the boundary with resources that cannot be easy burned or altered. It is anticipated that some the existing roads will be used as multi-use trails for hiking, horse back riding and off road biking. As such, visitor services in the disturbed area will be provided.

Management Costs and Sources of Revenue

It is anticipated that management funding will come from the CARL trust fund. Budget needs for interim management are estimated as follows.

Longleaf Pine Ecosystem:
Management Cost Summary/DOF

Category	1995/96	1996/97	1997/98
Source of Funds	CARL	CARL	CARL
Salary	$31,080	$41,013	$44,000
OPS	$0	$0	$0
Expense	$25,505	$11,302	$13,000
OCO	$40,626	$0	$10,000
FCO	$0	$0	$0
TOTAL	$97,211	$52,315	$67,000

Management Cost Summary/DOF (Deland Ridge)

Category	Startup	Recurring
Source of Funds	CARL	CARL
Salary	$0	$0
OPS	$0	$0
Expense	$7,000	$5,000
OCO	$0	$0
FCO	$0	$0
TOTAL	$7,000	$5,000

FLORIDA Natural Areas INVENTORY

Technical Assistance Provided by:

FREAC
FLORIDA RESOURCES & ENVIRONMENTAL ANALYSIS CENTER AT THE FLORIDA STATE UNIVERSITY

FOR IMMEDIATE RELEASE

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The Biodiversity Matrix Map Server is a new **screening tool** from FNAI that provides **immediate, free access** to rare species occurrence information statewide. This tool allows you to zoom to your site of interest and create a report listing documented, likely, and potential occurrences of rare species and natural communities.

The FNAI Biodiversity Matrix offers **built-in interpretation** of the likelihood of species occurrence for each 1-square-mile Matrix Unit across the state. The report includes a site map and list of species and natural communities by occurrence status: Documented, Documented-Historic, Likely, and Potential.

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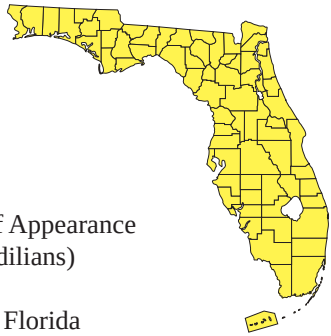
Please note: FNAI will continue to offer our Standard Data Report service as always. The Standard Data Report offers the most comprehensive information available on rare species, natural communities, conservation lands, and other natural resources.

APPENDIX B
LISTED SPECIES DESCRIPTIONS

AMERICAN ALLIGATOR
Alligator mississippiensis



Order: Crocodylia
Family: Alligatoridae
FNAI Ranks: G5/S4
U.S. Status: Threatened by Similarity of Appearance (to more endangered crocodilians)
FL Status: Species of Special Concern
Harvest of alligators and eggs is regulated by Florida Fish and Wildlife Conservation Commission.

© D. Bruce Means

juvenile © Jim Solomon

Description: A large, mostly black crocodilian with a broadly rounded snout. Young with yellow crossbands on back, tail, and sides; throat and belly white to creamy yellow at all ages. Head smooth in front of eyes; no prominently visible tooth in lower jaw when mouth is closed. Adults 6 -15 ft. (1.8 - 4.6 m); hatchlings about 9 in. (230 mm).

AMERICAN ALLIGATOR *Alligator mississippiensis*

Similar Species: Spectacled caiman (*Caiman crocodilus*), introduced in southern Florida, shares broadly rounded snout but rarely exceeds 6 ft. (1.8 m) and has curved bony crosswise ridge in front of eyes; varies from yellow-green to gray-brown with dark crossbands. American crocodile (*Crocodylus acutus*; see species account) is gray to brown and has long, tapered snout with prominently projecting fourth lower tooth when mouth is closed (except in very young).

Habitat: Most permanent bodies of fresh water, including marshes, swamps, lakes, and rivers. Occasionally wanders into brackish and salt water but rarely remains there.

Seasonal Occurrence: Most active from spring through fall, with nesting in late spring and hatching in summer. Inactive during cold weather, though some may bask on sunny winter days.

Florida Distribution: Statewide, though rare in Keys.

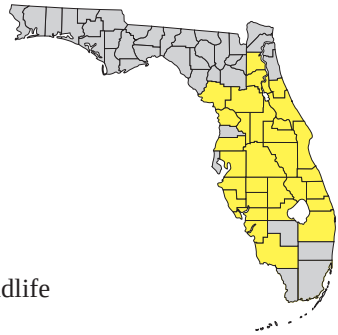
Range-wide Distribution: Southeastern Coastal Plain from North Carolina to Texas.

Conservation Status: Has recovered dramatically since 1960s. Populations are present on most federal, state, and private conservation lands where there is permanent fresh water. Several populations are now large enough to support controlled harvest. Threats include destruction and pollution of wetlands, including lakes and rivers.

Protection and Management: Protect wetlands of all types from ditching, filling, and pollution.

Selected References: Ashton and Ashton 1991, Bartlett and Bartlett 1999, Conant and Collins 1991, Deitz and Hines 1980, Delany and Abercrombie 1986, Kushlan 1974, Lazell 1989, Mount 1975, Neill 1971.

FLORIDA SCRUB-JAY
Aphelocoma coerulescens



Order: Passeriformes
Family: Corvidae
FNAI Ranks: G3/S3
U.S. Status: Threatened
FL Status: Threatened
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

© Tom Vezo

Description: Similar in size and shape to the familiar blue jay (*Cyanocitta cristata*). Crestless head, nape, wings, and tail are pale blue, and the back and belly pale gray. Juveniles have fluffy brown heads.

Similar Species: The scrub-jay lacks the crest and white spotting on wings and tail that are characteristic of the blue jay.

Habitat: Inhabits fire-dominated, low-growing, oak scrub habitat found on well-drained sandy soils. May persist in areas with sparser oaks or scrub areas that are overgrown, but at much lower densities and with reduced survivorship.

Seasonal Occurrence: Extremely sedentary.

Florida Distribution: Restricted to peninsular Florida, with largest populations occurring in Brevard, Highlands, Polk, and Marion counties.

FLORIDA SCRUB-JAY *Aphelocoma coerulescens*

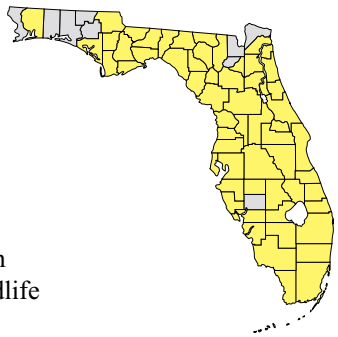
Range-wide Distribution: Same as Florida distribution.

Conservation Status: Recognized in 1995 as a distinct species from the scrub-jays in the western U.S., making it the only bird species whose entire range is restricted to Florida. Continuing loss, fragmentation, and degradation of scrub habitat has resulted in a decline of greater than 90 percent of the original pre-settlement population of Florida scrub-jays. Precipitous decline since the 1980s. A 1992 range-wide estimate gives an overall population of approximately 10,000 birds. Largest populations are found on federal lands (Merritt Island National Wildlife Refuge and Ocala National Forest), but are declining. Land management practices on these lands are of concern. Smaller populations are found scattered along Lake Wales Ridge in Polk and Highlands counties, with a major protected population at Archbold Biological Station. Cars and cats take toll on scrub-jays in developed areas. Scrub-jays are susceptible to population crashes because of catastrophic fires or disease, so protection of additional secure populations is essential.

Protection and Management: Acquire suitable xeric habitat in strategic locations among existing scrub-jay preserves to help mitigate the extensive fragmentation of this habitat. Continued existence of this species will depend on preservation and long-term management of suitable scrub habitat. Prescribed fire every 8 - 15 years that burns patchily, where few territories are burned completely, is optimal. Mechanical treatments, at least initially, may be required where fire cannot be used, although the long-term effects of this management practice are unknown.

Selected References: Fitzpatrick et al. 1991, Poole and Gill (eds.) 1996, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Stevenson and Anderson 1994, Thaxton and Hingtgen 1996.

LIMPKIN
Aramus guarauna



Order: Gruiformes
Family: Aramidae
FNAI Ranks: G5/S3
U.S. Status: None
FL Status: Species of Special Concern
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

Description: Large, long-billed, long-legged wader of swamps and marshes. Sports a deep brown color with white spotting and streaking. Bill is heavy and slightly decurved, allowing easy access to its preferred food, the apple snail (*Pomacea paludosa*). Call is an unmistakable loud, wild scream or wail.

© Karla Brandt

Similar Species: Long neck and bill of the limpkin help distinguish it from the slightly smaller, but similarly colored, immature night-herons (*Nycticorax* spp.). The immature white ibis (*Eudocimus albus*; see species account) has a long, decurved bill and long legs but is not brown all over with white flecking.

Habitat: Inhabits mangroves, freshwater marshes, swamps, springs and spring runs, and pond and river margins. Also lake margins in peninsular Florida and swales, strand swamps, sloughs, and impoundments in south Florida. May also forage in ruderal areas such as sugarcane fields and banks of irrigation canals. Wide range of nesting sites, including mounds of aquatic vegetation and marsh grasses, among cypress knees, and high in trees.

Seasonal Occurrence: Males generally appear to be resident where they breed, although there is some evidence of movement, possibly related to

food availability. A partial migration was documented with color-banded birds from Wakulla Springs (Wakulla County) and Alexander Springs (Lake County); most females left their breeding territories, for parts unknown, in mid-summer and returned in mid-winter. Observations of large concentrations of limpkins are usually attributed to regional drought conditions. Nesting generally occurs late February - May in north Florida and late January - March in central Florida, and possibly earlier in south Florida.

Florida Distribution: Scattered sites in the panhandle and northern Florida, but generally widespread in central and southern Florida.

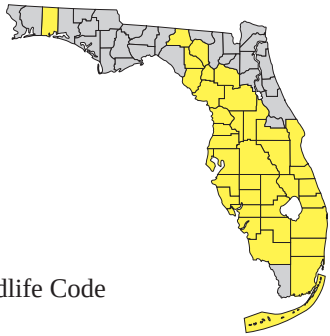
Range-wide Distribution: Resident in southeastern Georgia, Florida, Greater Antilles (rare or extirpated in Puerto Rico), and from southern Mexico to central Argentina.

Conservation Status: Occur on numerous lands owned by federal, state, and private entities, although this is no insurance against threats. A large and presumably stable population at Wakulla Springs State Park (Wakulla County) has experienced recent declines, possibly because of deteriorating water quality. Pollution, hydrological disruptions, and an increase in invasive plants threaten the health of the apple snail population and hence the limpkin.

Protection and Management: Maintain natural hydrological regimes and protect suitable habitat from pollution, development activities, and proliferation of exotic plants. Institute regular surveys and monitoring programs for both limpkins and apple snails, particularly in light of continued degradation and loss of Florida's wetlands.

Selected References: Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Stevenson and Anderson 1994.

FLORIDA BURROWING OWL
Athene cunicularia floridana



Order: Strigiformes
Family: Strigidae
FNAI Ranks: G4T3/S3
U.S. Status: None
FL Status: Species of Special Concern
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

© Barry Mansell

Description: Small, ground-dwelling owl with long legs, white chin stripe, round head, and stubby tail. Adults are boldly spotted and barred with brown and white. Juveniles plainer above with less spotting, and buffy below with little or no brown barring. Will often dig their own burrow and, prior to egg laying, will line burrow and entrance with various materials (e.g., grass clumps, palm fronds). After eggs are laid, entrance chamber is further adorned with more decorative and visible objects, such as paper scraps, plastics, tin foil, mirrors, graduation tassels, cigarette butts, and other non-natural materials.

FLORIDA BURROWING OWL *Athene cunicularia floridana*

Similar Species: Not likely to be confused with other owl species. Differs from western subspecies in having darker upper parts with less buffy brown, and whiter spotting.

Habitat: High, sparsely vegetated, sandy ground. Natural habitats include dry prairie and sandhill. Makes extensive use of ruderal areas such as pastures, airports, ball fields, parks, school grounds, university campuses, road right-of-ways, and vacant spaces in residential areas.

Seasonal Occurrence: Predominately nonmigratory; maintains home ranges and territories while nesting.

Florida Distribution: Largest populations occur in southwest and southeast Florida. Depending on habitat availability, small, patchily distributed populations occur in the Keys and along the interior ridges of Florida from Highlands County to Madison County. A single disjunct population occurs at Eglin Air Force Base in Okaloosa County.

Range-wide Distribution: Resident in Florida and the Bahamas.

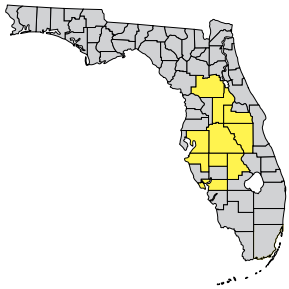
Conservation Status: Human activities have increased range in Florida but have exposed owls to additional threats. Largest concentrations of owls now reside in ruderal grasslands and lawns of residential and industrial areas. One of the largest populations is in Cape Coral, a large development in Lee County. Intensive cultivation and development of grasslands pose major threats. Permits for legal "take" of burrows also of concern. Human harassment (generally by children), predation by domestic animals, and vehicle collisions take toll on urban/ruderal birds. Predation by fire ants is also implicated in owl mortality.

Protection and Management: Educate residents in developments and owners of industrial or farm lands where owls occur to help limit harassment. Maintain optimum condition of natural and ruderal sites where owls occur; will likely require fire in natural areas and mowing in ruderal ones. Establish buffer zones and development plans that consider the needs of the owl, which may allow them to persist under otherwise precarious circumstances. Studies in Cape Coral showed owls appeared to prefer sites with between 25 and 75 percent of developable lots occupied.

Selected References: Bowen 2000, Poole and Gill (eds.) 1993, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Stevenson and Anderson 1994.

FLORIDA BONAMIA

Bonamia grandiflora (A.Gray) Hallier f.
Synonym: *Breweria grandiflora* A. Gray
Family: Convolvulaceae (morning-glory)
FNAI Ranks: G3/S3
Legal Status: US–Threatened FL–Endangered
Wetland Status: US–UPL FL–UPL



Gil Nelson

Field Description: Perennial trailing **vine** with stout **stems** up to 3 feet long; **leaves** 1 - 2 inches long, grading into small bracts at the end of the stem; oval with pointed tips, entire margins, short, silky hairs, and very short leaf stalks. **Flowers** 3 - 4 inches long, solitary, with 5 lobes and 5 leathery, unequal sepals in two series. **Flowers** bright blue with a white throat in the morning but fading to pale blue by early afternoon when they close; somewhat resembles a common morning-glory.

Similar Species: Florida bonamia is the only member of this genus in Florida; it is distinguished from common morning-glories by its small, oval leaves with entire margins and shorter, trailing (rather than high-climbing) stems. Several species of dawnflower (*Stylisma* spp.), also in the morning-glory family, occur in scrub, sandhill, and dry hammocks. Dawnflowers have small white flowers, slender stems, and non-leathery sepals.

Related Rare Species: Scrub stylisma (*Stylisma abdita*), state-endangered, has small white flowers, short stems, and very small leaves. It occurs in scrub and dry pinelands in central and south FL.

Florida bonamia *Bonamia grandiflora*

Habitat: Openings or disturbed areas in white sand scrub on central Florida ridges, with scrub oaks, sand pine, and lichens.

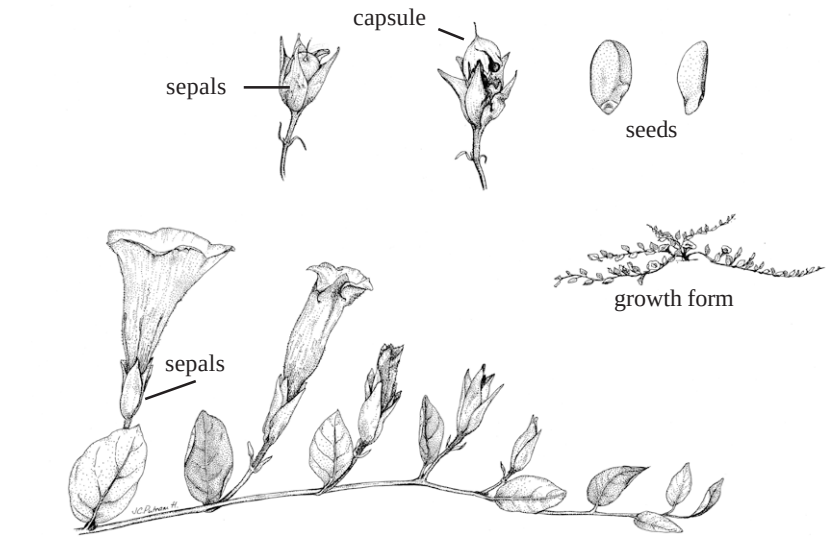
Best Survey Season: Flowers May–August, but leaves and vines are distinctive all year.

Range-wide Distribution: Endemic to central Florida scrub.

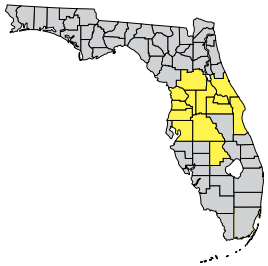
Conservation Status: Only 100 populations remain, of which about 35 are protected on 15 managed areas. It is most abundant in the Ocala National Forest. Florida bonamia habitat has been drastically reduced and fragmented by citrus groves, housing developments, and fire suppression.

Protection & Management: Apply periodic fires to stimulate flowering, seed set, and germination. Avoid soil disturbance and use of general herbicides in rights-of-way; control exotics such as cogongrass with grass-specific herbicides. Mow only during dormancy (fall-winter).

References: Christman and Judd 1990, Coile 2000, Hartnett and Richardson 1989, IRC 1999, Lee 1999, Small 1933, USFWS 1996, Ward 1979, Wunderlin 1998, Wunderlin and Hansen 2000a.



SAND BUTTERFLY PEA



Centrosema arenicola (Small) F.J. Herm.
Synonyms: *Bradburya arenicola* Small
Centrosema floridanum (Britton) Lakela
Family: Fabaceae (pea)
FNAI Ranks: G2/S2
Legal Status: US–Mgmt Concern FL–Endangered
Wetland Status: US–UPL FL–UPL

FNAI

Field Description: Perennial **vine** with **stems** up to 10 feet long twining over bushes. **Leaves** with 3 oval or lance-shaped **leaflets** to 2 inches long, dark green, somewhat leathery. **Flowers** 1.5 inches wide, purplish-blue (rarely pink or white), twisted so that large, notched banner petal is lowest. **Calyx** with 4 triangular lobes, the lower lobe forked, the upper lobes much shorter than the lower. Two small **bracts** beneath the flower partially hide the calyx. **Fruit** a flattened pod, 4.8 inches long, linear, with a long curving beak.

Similar Species: Common butterfly pea (*Centrosema virginianum*) stems are less than 5 feet long; leaflets are longer (to 2.8 inches), narrow, and linear; lighter green, not leathery; calyx lobes are all narrowly pointed and about the same size.

Related Rare Species: See scrub pigeon-wing (*Clitoria fragrans*) in this guide. Pigeon-wing is an erect herb, not a vine; its flowers are similar to sand butterfly pea flowers, but the banner petal is not notched; pods lack the long beak; and bracts at the base of the flower are tiny, not covering the calyx.

Sand butterfly pea *Centrosema arenicola*

Habitat: Sandhill, scrubby flatwoods, dry upland woods.

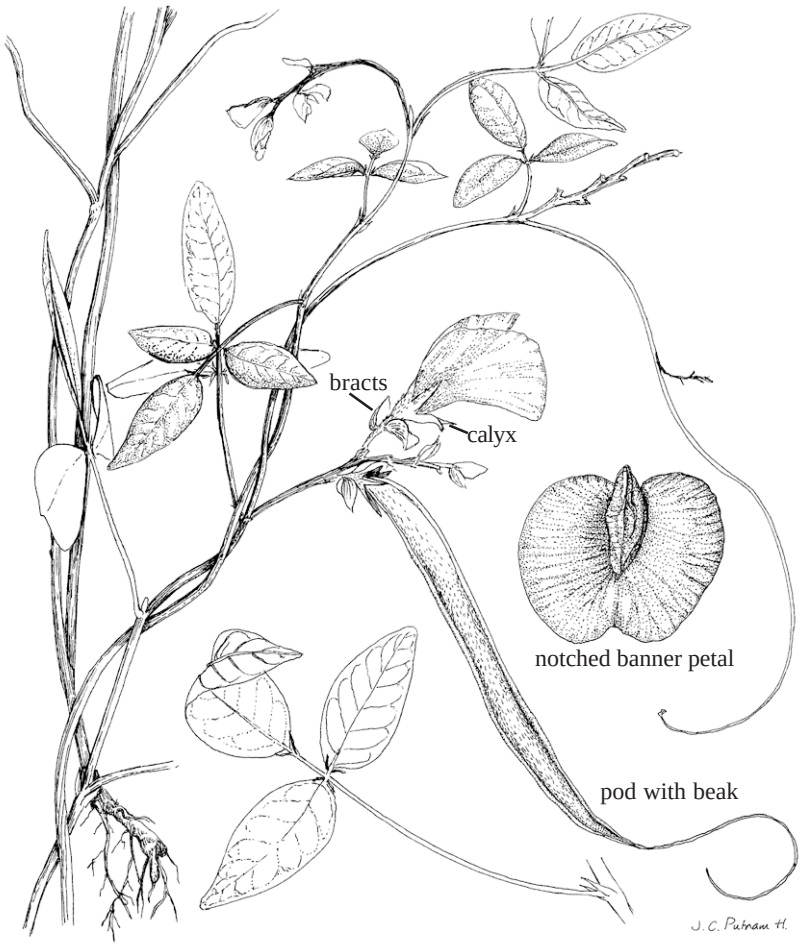
Best Survey Season: Flowers June–October. Each flower lasts one day.

Range-wide Distribution: Endemic to central FL.

Conservation Status: Very few plants have been seen in the last two decades; only 1 population is protected.

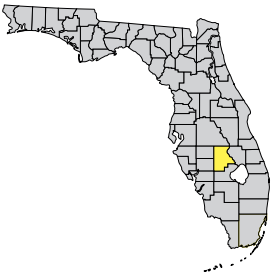
Protection & Management: Purchase and protect sandhill and other dry upland habitats. Burn sandhills and flatwoods every 2 - 3 years. Conduct surveys for more plants.

References: Coile 2000, Isely 1990, Small 1933, Wunderlin 1998, Wunderlin and Hansen 2000a.



GARRETT'S MINT

Dicerandra christmanii Huck & Judd
Synonyms: none
Family: Lamiaceae (mint)
FNAI Ranks: G1/S1
Legal Status: US–Endangered FL–Endangered
Wetland Status: US–UPL FL–UPL



Gil Nelson

Field Description (photo): Low **shrub**, to 1.3 feet tall, with numerous stiff but non-woody, erect, square stems rising from a woody base. **Leaves** about 1 inch long, opposite, entire, narrowly oblong with rounded tips, pitted with glands. **Flowers** 1 - 3 per whorl, less than 0.8 inch long, white or cream-colored with purple spots and lines; 2-lipped with rounded lobes and sharply bent tube; stamens with bright yellow anthers extend beyond the flower. Stems and leaves smell like eucalyptus.

Similar and Related Rare Species (drawing): Long-spurred mint (*Dicerandra cornutissima*), federal and state-endangered, resembles Garrett's mint in growth form; leaves are narrow, needle-like, and smell of mint; flowers are rose-purple with dark purple lines and dots, whitish throat, and sharply bent flower tube; stamens extend beyond flower, anthers are lavender or white with long, pointed spurs. Titusville balm (*Dicerandra thinicola*), found only in 2 scrub sites in Brevard County, resembles long-spurred mint but has purple anthers. Also see Lakela's mint (*Dicerandra immaculata*) in this guide.

Garrett's mint *Dicerandra christmanii*

Habitat: Garrett's mint: openings in oak scrub on the Lake Wales Ridge. Long-spurred mint: sand pine and oak scrub in Marion and Sumter counties.

Best Survey Season: Garrett's mint flowers July–November. Long-spurred mint flowers September–October.

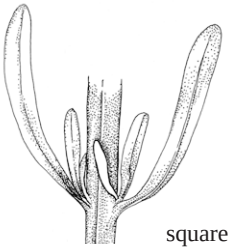
Range-wide Distribution: Both species are endemic to FL.

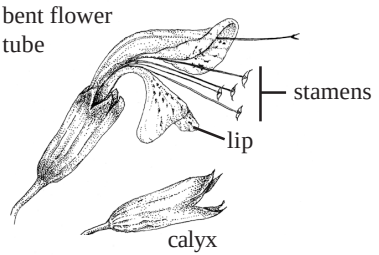
Conservation Status: Garrett's mint is known from 5 populations; only one population is protected. Long-spurred mint is known from 15 occurrences; only 6 are protected, all in a single conservation area.

Protection & Management: Purchase and protect privately owned sites. Control foot and off-road-vehicle traffic. Eradicate exotic pest plants. Use occasional fire to open up habitat and reduce competition.

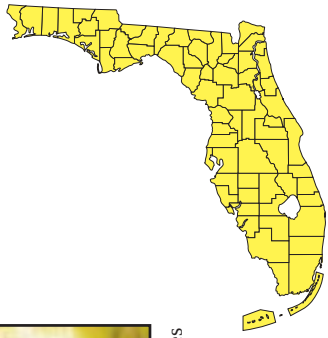
References: Coile 2000, Eisner et al. 1990, Huck 1981, Huck 1987, Huck et al. 1989, Kral 1983, Menges et al. 1999, USFWS 1986b, Wunderlin 1998, Wunderlin and Hansen 2000a.

Dicerandra cornutissima





EASTERN INDIGO SNAKE
Drymarchon corais couperi



Order: Squamata
Family: Colubridae
FNAI Ranks: G4T3/S3
U.S. Status: Threatened
FL Status: Threatened

© Dan Hipes

© Dan Hipes

Description: A very large, stout-bodied, shiny black snake reaching lengths as great as 8 ft. (244 cm). Black ventrally, but chin, throat, and sides of head may be reddish or (rarely) white. Scales typically smooth (no ridges), though adult males have keel on front half of some scales along back; anal scale undivided. Young similar to adults though often more reddish anteriorly, 17 - 24 in. (430 - 610 mm) at hatching. When encountered, often hisses, flattens neck vertically (from side to side), and vibrates tail, but rarely bites.

EASTERN INDIGO SNAKE *Drymarchon corais couperi*

Similar Species: Black racer (*Coluber constrictor*), which rarely exceeds 5 ft. (152 cm), is more slender, a duller sooty black usually with a white chin and throat, and has a divided anal scale. The mostly aquatic mud snake (*Farancia abacura*) is glossy black above and can grow to 6 ft. (183 cm), but has a reddish, rarely white, belly, with the coloration encroaching the sides, and a sharp-pointed tail tip.

Habitat: Broad range of habitats, from scrub and sandhill to wet prairies and mangrove swamps. In northern part of range, often winters in gopher tortoise burrows in sandy uplands but forages in more hydric habitats. Requires very large tracts to survive.

Seasonal Occurrence: Active nearly year-round in southern Florida but winters underground farther north. Lays eggs in May and June.

Florida Distribution: Statewide, including Upper and Lower Keys, but rare in panhandle.

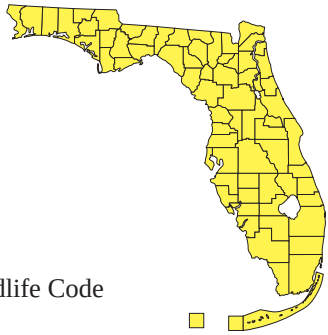
Range-wide Distribution: Florida and southern Georgia; formerly extended from southern South Carolina to southeastern Mississippi.

Conservation Status: Rare in most areas, though species has been recorded from many public lands statewide; however, whether most of these support viable populations is uncertain. Major threats are habitat loss, degradation, and fragmentation, with associated highway mortality. Other threats include gassing of tortoise burrows for rattlesnakes, collection for pets, and deliberate persecution, all of which are illegal.

Protection and Management: Protect very large tracts (> 5000 acres = 2025 ha) of appropriate natural habitat unfragmented by roads; use prescribed fire as needed. Maintain gopher tortoise populations and dead stumps to provide natural subterranean refugia. Enforce bans on tortoise burrow gassing and on collection or molestation of snake. Avoid construction of roads through unfragmented habitat. Educate public to avoid wanton destruction of large snakes.

Selected References: Ashton and Ashton 1988b, Conant and Collins 1991, Ernst and Barbour 1989, Georgia DNR 1999, Lazell 1989, Moler (ed.) 1992, Mount 1975, Tenant 1997.

LITTLE BLUE HERON
Egretta caerulea



Order: Ciconiiformes
Family: Ardeidae
FNAI Ranks: G5/S4
U.S. Status: None
FL Status: Species of Special Concern
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

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immature © Jerry Lee Gingerich, DVM

Description: Medium-sized heron, with purplish to maroon-brown head and neck; small white patch on throat and upper neck; and slate-blue body. Bill is black towards tip, especially during breeding season, with the other exposed areas on the head appearing dark gray to cobalt blue. Legs are grayish to green, becoming black in breeding season. Immature birds are mostly white with pale slate-gray tips on primary wing feathers. Legs of young birds are yellowish-green. Immature birds move into adult plumage during first spring and may be boldly white/blue, looking like tie-dyed shirts. Immature birds retain yellowish legs during second year.

Similar Species: Plumage and eye of reddish egret (*Egretta rufescens*; see species account) are lighter in color, and base of bill is pinkish. Reddish egret has distinctive foraging behavior. Snowy egret (*E. thula*; see species account) and cattle egret (*Bubulcus ibis*) may look like juvenile little blues,

but little blue has dark primary tips. Bill of snowy egret (*E. thula*) is solid black; snowy may have yellowish stripe up back of leg.

Habitat: Feeds in shallow freshwater, brackish, and saltwater habitats. Largest nesting colonies occur in coastal areas, but prefers foraging in freshwater lakes, marshes, swamps, and streams. Nests in a variety of woody vegetation types, including cypress, willow, maple, black mangrove, and cabbage palm. Usually breeds in mixed-species colonies in flooded vegetation or on islands.

Seasonal Occurrence: Mostly resident throughout year, but numbers in north Florida in winter are lower than numbers during spring, summer, and fall; becoming less abundant in Florida Keys.

Florida Distribution: Most recent population estimate is approximately 17,000 birds distributed among 240+ breeding colonies. Colonies are found nearly statewide, except rare in western panhandle and southern Florida Keys.

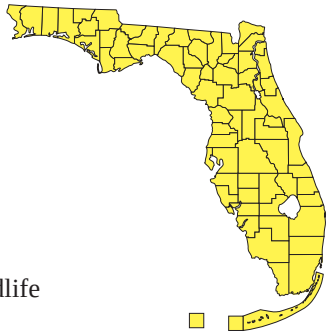
Range-wide Distribution: Breeds from Kansas, Missouri, and Tennessee to coastal Maine and south to Peru and central Brazil; range extends west to southern California and Sonora; winter range includes these areas and north to coastal Virginia; may wander to Canada after breeding season.

Conservation Status: Because the little blue heron lacks the showy plumes found on many other herons and egrets, this species did not suffer as much during the plume-hunting trade a century ago. Primary threats are alteration of natural hydroperiods in wetlands used for foraging and exposure to pesticides and heavy metal contamination. Population trends are downward, and breeding colonies have become smaller and more numerous. Illegal killings may occur since this species regularly forages at commercial fish farms and hatcheries. Long-term studies are needed on the possible adverse effects of cattle egrets, environmental contamination, and other threats.

Protection and Management: Protect breeding and foraging habitats through establishment of preserves and regulation of wetlands. Restore and maintain natural hydroperiods in degraded wetland areas. The Florida Fish and Wildlife Conservation Commission and the Department of Environmental Protection have developed setback distances around wading bird colonies of 330 ft. (100 m) to prevent human disturbance.

Selected References: Poole and Gill (eds.) 1995, Robertson and Woolfenden 1992, Rodgers and Smith 1995, Rodgers et al. (eds.) 1996, Runde et al. 1991, Stevenson and Anderson 1994.

SNOWY EGRET
Egretta thula



Order: Ciconiiformes
Family: Ardeidae
FNAI Ranks: G5/S3
U.S. Status: None
FL Status: Species of Special Concern
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

© Tom Vezo

Description: Medium-sized, all-white wading bird that has a "slight" appearance in comparison to other wading birds. Bill is black with a bright yellow, fleshy base, and the yellow extends back to the lores and eyes. Legs are black in adults; feet are bright yellow as though wearing gloves. Immatures have greenish legs that sometimes have a yellow streak on the back. Breeding-season adults have prominent plumes on shoulders, neck, and head.

Similar Species: Most often confused with juvenile little blue heron (*Egretta caerulea*; see species account), which is white with greenish-gray legs; however, tips of wing feathers are dusky, not pure white as in snowy egret. Little blue heron also has a bi-colored bill, not the solid black bill found on the snowy egret. Great egret (*Ardea alba*) has solid black legs and orangish bill; white morph of the reddish egret (*E. rufescens*; see species account) has two-toned bill and grayish legs; cattle egret (*Bubulcus ibis*) has orangish legs and bill.

Habitat: Nests both inland and in coastal wetlands with nests placed in many types of woody shrubs, especially mangroves and willows. Almost all nesting is over shallow waters or on islands that are separated from

shoreline by extensive open water. Feeds in many types of permanently and seasonally flooded wetlands, streams, lakes, and swamps, and in man-made impoundments and ditches. Usually prefers calm waters. A wide variety of wetland types must be available within 5 - 7 mi. (8 - 11 km) to support breeding colonies. Breeding success is tied to water-level fluctuations.

Seasonal Occurrence: Occurs in Florida in all seasons, but generally less common in winter, especially in western panhandle and northern counties.

Florida Distribution: Generally found throughout peninsular Florida; becoming less common inland in northern tier of counties (north of Alachua County) and in the western panhandle. Typically more common along coast throughout its range. Breeding documented for 43 Florida counties but more variable in western Florida panhandle and in some northern counties in the interior (north of Alachua County). Also rare or absent in southern Keys.

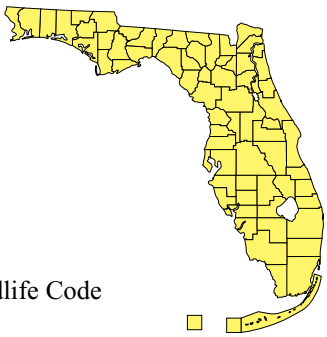
Range-wide Distribution: Northern limits of summer range extend from northern California to southern Montana, central Kansas, and Tennessee, east to Atlantic coast, and then north to coastal Maine; occurs south to southern Chile and central Argentina; winters in North America from northern California to Arizona, along the northern Gulf coast, and along Atlantic coast to South Carolina.

Conservation Status: Since the 1950s, numbers in Florida have been declining, possibly faster than declines of other herons and egrets. In 1989, this species was found in only 22 percent of the colonies where it formerly occurred. Persistent patterns of wetland destruction and alteration are probably eliminating large areas of essential habitat. Most impacts appear to affect quality of foraging habitat rather than areas immediately surrounding nesting colonies.

Protection and Management: Prevent rapid changes in water depth in managed wetlands that will likely adversely affect quality of foraging. Restore and maintain natural hydroperiods in degraded wetland areas. Protect breeding and foraging habitats through establishment of preserves and regulation of wetlands. The Florida Fish and Wildlife Conservation Commission and the Department of Environmental Protection have developed setback distances around wading bird colonies of 330 ft. (100 m) to prevent human disturbance.

Selected References: Poole and Gill (eds.) 2000, Robertson and Woolfenden 1992, Rodgers and Smith 1995, Rodgers et al. (eds.) 1996, Runde et al. 1991, Stevenson and Anderson 1994.

TRICOLORED HERON
Egretta tricolor



Order: Ciconiiformes
Family: Ardeidae
FNAI Ranks: G5/S4
U.S. Status: None
FL Status: Species of Special Concern
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

© Karla Brandt

Description: Medium-sized heron with a slender neck. Body color appears two-toned with dark slate coloration on head, neck, and body that contrasts with white rump, belly, and undertail. A reddish-brown and white streak extends along the front of the neck. During breeding season, adults have white head plumes and rufous to whitish shoulders. Young birds (<1 year) have more reddish-brown on head, neck, and mantle; otherwise similar to adults.

Similar Species: Little blue heron (*Egretta caerulea*; see species account) and reddish egret (*E. rufescens*; see species account) have solid dark colors; great blue heron (*Ardea herodias*) is larger and has white streak down neck but dark belly and underparts. Great blue heron also has a dark swath that extends back from eye and contrasts with lighter colored top of head.

Habitat: Most nesting colonies occur on mangrove islands or in willow thickets in fresh water, but nesting sites include other woody thickets on islands or over standing water. Prefers coastal environments. Feeds in a variety of permanently and seasonally flooded wetlands, mangrove swamps, tidal creeks, ditches, and edges of ponds and lakes. Seasonal variation in water levels are particularly critical to nesting success, so alteration of wetlands used during breeding season can have negative consequences.

TRICOLORED HERON *Egretta tricolor*

Seasonal Occurrence: Permanent resident and found throughout Florida in all seasons, except rare in winter in western Panhandle. Also somewhat less common inland in recent years, particularly during winter.

Florida Distribution: Most numerous along coast. Generally becoming less numerous in northern tier of counties (Alachua County northward). Nesting in panhandle and northern interior more variable and restricted leading to few inland reports in panhandle.

Range-wide Distribution: Occurs during breeding season from California to Texas and along northern Gulf coast; along Atlantic coast to Maine; south to central Brazil; leaves northern portion of range in winter.

Conservation Status: Once described as the most abundant heron in the state, but now much less common in interior. Long-term population trends are uncertain, but apparently declining. Need information on marked individuals to document in more detail the species' movement and wetland utilization patterns.

Protection and Management: Approximately 25 percent of nesting colonies occur in disturbed water impoundments or dredge-material islands, so management opportunities exist. Create new nesting sites or stabilize established sites through management. Survey and monitor to document population trends.

Selected References: Poole and Gill (eds.) 1997, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Runde et al. 1991, Stevenson and Anderson 1994.

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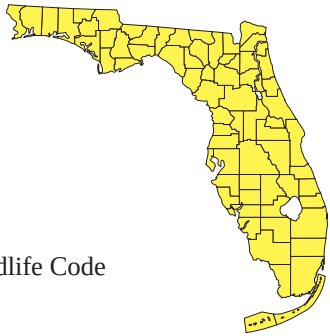
WHITE IBIS
Eudocimus albus



Order: Ciconiiformes
Family: Threskiornithidae
FNAI Ranks: G5/S4
U.S. Status: None
FL Status: Species of Special Concern
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

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Description: Medium-sized wading bird with long, downward-curving bill. Adults white except for black tips on wings and pink to reddish coloration on exposed flesh around face, bill, and legs. Young birds are dark brown on wings, neck, head, and tail, but noticeable white patches occur on back and belly. Juveniles begin to acquire adult coloration near end of first year but retain some brown feathers on head and neck until third year.

Similar Species: Glossy ibis (*Plegadis falcinellus*) also has a downward-curving bill but is uniformly dark. Adult glossy ibis has purplish coloration, and young birds are uniformly brown. An immature glossy ibis could be mistaken for a juvenile white ibis, but glossy ibis lacks the white patch on the back (best seen during flight) and belly is dark, not white. Bills of all egrets and herons are straight, not curved.

Habitat: Found in a wide variety of habitats, including freshwater and brackish marshes, salt flats and salt marsh meadows, many types of forested wetlands, wet prairies, swales, seasonally inundated fields, and man-made ditches. Adults prefer foraging in freshwater areas when feeding young. Young birds do not grow when fed a salty diet or when access to fresh water

is limited. Forage by feeling with their bills and may forage effectively in turbid waters. Nests are placed on a variety trees, shrubs, and vines, and tend to be closer to ground than other colonially nesting wading birds.

Seasonal Occurrence: May be found throughout Florida during all seasons, but numbers in north Florida are smaller and diminish sharply in winter. Numbers also vary depending on local water levels and conditions. Spring and fall movements can be spectacular, with hundreds of individuals observed moving in long, V-shaped lines. Much of movement pattern seems nomadic; large-scale movements occur in other seasons in response to changing water levels. Dates of spring movements can be mid-February, and fall movements may begin in July and peak in September and October. In non-breeding season, Florida probably supports much of population that breeds to north in Georgia and North and South Carolina.

Florida Distribution: Found throughout Florida, but breeding season distributions more closely restricted to breeding colonies. Breeding sites rare in panhandle and may be less common in Keys. Seem to be nomadic when selecting annual nesting sites, so numbers can vary considerably from year to year.

Range-wide Distribution: Breeds from California south through Central America along Pacific coast; from northern South America through Caribbean and Antilles and north Gulf coast (with inland nesting in northern South America and southeastern U.S.); northward along Atlantic coast to Virginia.

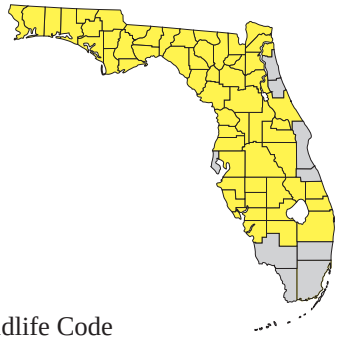
Conservation Status: Population declines in Florida appear to have been pronounced over the past decades (around 50 percent from 1970 to 1990). However, declines in Florida have been offset to some degree by increasing numbers in other nearby states. Range-wide declines in Florida and neighboring states are believed to be occurring, but these can be difficult to document in the absence of thorough surveys.

Protection and Management: Protect colonial nesting sites from human disturbance. Florida Fish and Wildlife Conservation Commission and Department of Environmental Protection have developed setback distances around wading bird colonies of 330 ft. (100 m) to prevent such disturbance. These guidelines may serve to protect individual colonies, but primary long-term threat is degradation of wetlands through destruction, alteration, pollution, salinization, and other forms of disturbance. Large-scale restoration efforts in the Everglades, Lake Okeechobee, Kissimmee River, and elsewhere should prove beneficial.

Selected References: Poole and Gill (eds.) 1992, Robertson and Woolfenden 1992, Rodgers and Smith 1995, Rodgers et al. (eds.) 1996, Runde et al. 1991, Stevenson and Anderson 1994.

SOUTHEASTERN AMERICAN KESTREL

Falco sparverius paulus



Order: Falconiformes
Family: Falconidae
FNAI Ranks: G5T4/S3
U.S. Status: None
FL Status: Threatened
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

© Tom Vezo

Description: Smallest falcon in U.S. and similar in size to the familiar mourning dove (*Zenaida macroura*). Sexes distinctive: male has blue-gray wings, while female is larger and has more uniformly rufous back and wings. Both sexes have a mustached black-and-white facial pattern with strong perpendicular lines extending below eye and near ear, and a black band at base of rufous tail. Falcons in general have long, pointed wings and long tails, similar to doves. The alarm call, given frequently in flight, is *killy, killy, killy.*

Similar Species: The merlin (*Falco columbaris*), another falcon found in Florida, is larger and lacks the rufous back and tail found on kestrels. The sharp-shinned hawk (*Accipiter striatus*) has rounded wings and also lacks the rufous tail and back. Both the merlin and sharp-shinned hawk also are generally not found in Florida in summer (May - early September).

SOUTHEASTERN AMERICAN KESTREL *Falco sparverius paulus*

Habitat: Found in open pine habitats, woodland edges, prairies, and pastures throughout much of Florida. Availability of suitable nesting sites is key during breeding season. Nest sites are tall dead trees or utility poles generally with an unobstructed view of surroundings. Sandhill habitats seem to be preferred, but may also occur in flatwoods settings. Open patches of grass or bare ground are needed in flatwoods settings, since thick palmettos prevent detection of prey.

Seasonal Occurrence: Found throughout Florida year-round, but seasonal occurrence is complicated by arrival of northern migrants in winter. The subspecies that breeds in Florida is listed, but northern migrants are not listed. Northern migrants generally arrive in September and depart by March, but there are records outside these dates. All birds found in the breeding season (April through early September) should be treated as the listed subspecies.

Florida Distribution: Wintering birds found throughout Florida (including the Keys), but the breeding subspecies is non-migratory and most common in peninsular Florida, rare in the panhandle. Breeding subspecies appears to be extirpated from former nesting areas in south Florida (Miami-Dade County).

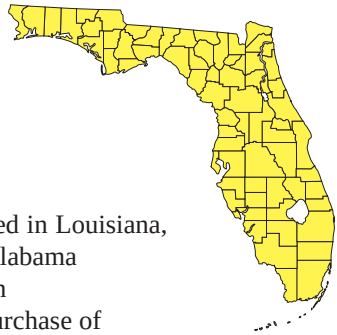
Range-wide Distribution: Found throughout most of North and South America, but the listed subspecies is restricted to the southeastern U.S., occurring from Louisiana east to South Carolina and south through the Florida peninsula.

Conservation Status: Population trends cannot be determined from available survey programs. Natural nesting and foraging habitats have certainly declined, as sandhill and open flatwoods habitats are converted to intensive agricultural lands and residential development. Pasture lands may be used by the breeding species but often lack snags used for nesting sites.

Protection and Management: A key habitat feature necessary for breeding is a suitable cavity tree. Cavity trees are usually excavated in large pines and, less frequently, oaks by various woodpeckers. Manage for dead tree snags on public lands. Nest-box programs have been used to augment populations in many areas. Protect large blocks of natural habitats; open fields and pastures also are needed to provide adequate foraging habitat.

Selected References: Loftin 1992, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Stevenson and Anderson 1994, Stys 1993, Wood et al. 1988.

GOPHER TORTOISE
Gopherus polyphemus



Order: Testudines
Family: Testudinidae
FNAI Ranks: G3/S3
U.S. Status: None in Florida; Threatened in Louisiana, Mississippi, and western Alabama
FL Status: Species of Special Concern
Florida prohibits take, possession, sale, or purchase of tortoises or their parts except by permit.

© Dan Hipes

juvenile
© Dan Hipes

Description: A medium-sized turtle (to 10 in. = 254 mm) fully adapted for life on land. Upper shell brown and relatively flat above; lower shell yellowish, without hinge, and projecting forward, especially in male; skin brown to dark gray. Forelimbs greatly expanded for digging; hind limbs reduced, stumpy, lacking any form of webbing between toes. Lower shell of male somewhat concave. Young: scales of carapace often with yellow centers, skin yellowish to tan; approximately 2 in. (51 mm) shell length at hatching.

Similar Species: The only other native land turtle in Florida, the box turtle (*Terrapene carolina*), is distinguished by its smaller size (to 8 in. =

203 mm), less stout feet, moveable hinge on lower shell, and often but not always by black and yellow upper shell. Tortoise burrows, which are useful in determining species' presence, typically have lower, flatter profile than more rounded burrows of armadillos; this reflects differences in cross-sectional shapes of the two animals.

Habitat: Typically found in dry upland habitats, including sandhills, scrub, xeric oak hammock, and dry pine flatwoods; also commonly uses disturbed habitats such as pastures, oldfields, and road shoulders. Tortoises excavate deep burrows for refuge from predators, weather, and fire; more than 300 other species of animals have been recorded sharing these burrows.

Seasonal Occurrence: Above-ground activity is greatly reduced during cold weather, with tortoises in northern Florida remaining below ground for months. Nonetheless, burrows are relatively conspicuous year-round.

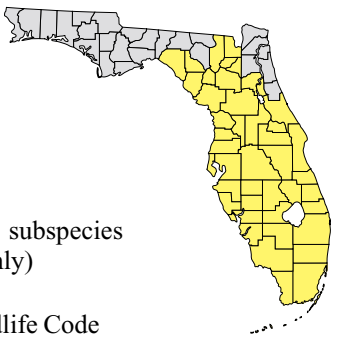
Florida Distribution: State-wide except absent from the Everglades and Keys.

Range-wide Distribution: Lower Southeastern Coastal Plain, extending from southern South Carolina southward through lower Georgia and Florida and westward through southern Alabama, Mississippi, and extreme southeastern Louisiana.

Conservation Status: Despite its widespread occurrence throughout Florida, there is considerable concern about the declining abundance of this species. Much of its native habitat has been lost to agriculture, citriculture, forestry, mining, and urban and residential development. Although protected populations occur on many state, federal, and private conservation lands, recent development of a severe respiratory disease threatens even those.

Protection and Management: Manage large, undivided tracts of upland habitat to maintain native vegetative conditions; this generally requires periodic prescribed fire beneath trees to reduce brush and favor growth of grasses and forbs. Avoid building roads and houses in xeric uplands. Because of risk of introducing tortoises infected with respiratory disease to uncontaminated populations, tortoises should not be relocated except under strictly controlled programs.

FLORIDA SANDHILL CRANE
Grus canadensis pratensis



Order: Gruiformes
Family: Gruidae
FNAI Ranks: G5T2T3/S2S3
U.S. Status: Endangered (nonmigratory subspecies in Cuba and Mississippi only)
FL Status: Threatened
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

Description: A tall, long-necked, long-legged bird with a clump of feathers that droops over the rump. Adult is gray overall, with a whitish chin, cheek, and upper throat, and dull red skin on the crown and lores (lacking in immatures); feathers may have brownish-red staining resulting from preening with muddy bill. Immature has pale to tawny feathers on head and neck and a gray body with brownish-red mottling. Flies with neck extended. Their distinctive rolling call can be heard from far away.

Similar Species: Indistinguishable from greater sandhill crane (*Grus canadensis tabida*), which winters in Florida. Greater sandhill crane generally arrives in Florida in October and leaves in March, so the date observed or definite evidence of reproduction may be used to differentiate the two. Great blue heron (*Ardea herodias*) is sometimes mistakenly

identified as a crane. This heron lacks the bald, red crown of the sandhill and flies with its neck tucked in, typical of herons and egrets. Whooping crane (*G. americana*) is white.

Habitat: Prairies, freshwater marshes, and pasture lands. Avoids forests and deep marshes but uses transition zones and edges between these and prairies or pasture lands. Will frequent agricultural areas like feed lots and crop fields, and also golf courses and other open lawns, especially in winter and early spring. Nest is a mound of herbaceous plant material in shallow water or on the ground in marshy areas. Favors wetlands dominated by pickerelweed and maidencane.

Seasonal Occurrence: Nonmigratory. Very sedentary, although may forage widely. Large influx of northern migratory subspecies in winter (October - March).

Florida Distribution: Most of peninsular Florida within appropriate habitat, though not as common south of Lake Okeechobee. Rarely reported west of Taylor County.

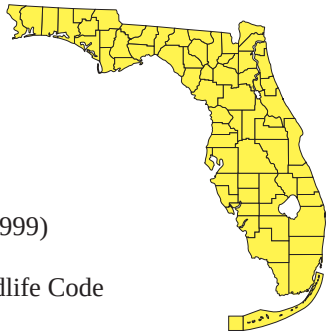
Range-wide Distribution: Florida range plus extreme southeastern Georgia (Okefenokee Swamp).

Conservation Status: Population estimate in 1975 of approximately 4,000 birds (25 percent are nonbreeding subadults) is still considered accurate. Habitat availability will become more and more of concern as Florida continues to lose open rangeland and native prairie to development and more intensive agricultural uses (e.g., citrus, row crops). Nesting success in human-altered areas is well below that of native areas. Shallow wetlands used by cranes are easily affected by drainage of adjacent uplands even if they are not directly disturbed. Florida sandhill cranes are found on federal and state lands and on local government lands (e.g., wellfields).

Protection and Management: Because of large home-range requirements, public lands do not protect large populations of cranes. Aquire land, through fee-simple acquisition and conservation easements on suitable ranchlands, in areas that bolster existing protected populations. Periodic fire important to retard invasion of woody vegetation in crane habitat. Filling drainage ditches to restore natural hydrological conditions important in some areas.

Selected References: Poole and Gill (eds.) 1992, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Stevenson and Anderson 1994, Toland 1999a.

BALD EAGLE
Haliaeetus leucocephalus



Order: Falconiformes
Family: Accipitridae
FNAI Ranks: G4/S3
U.S. Status: Threatened
(proposed for delisting in 1999)
FL Status: Threatened
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

© Tom Vezo

immature
© Barry Mansell

Description: Adult has white head, white tail,and large, bright yellow bill; other plumage is dark. Immatures dark with variable amounts of light splotching on body, wings, and tail; head and bill are dark. In flight wings are broad and wide and held horizontally, presenting a flat profile when soaring and gliding. Flies with slow, powerful wing-beats.

Similar Species: At a distance, in flight, eagle's size and lack of white in wings should help differentiate it from the crested caracara (*Caracara cheriway*; see species account), which also has a white head. Flattened aspect of the eagle's wings is unlike the teetering, V-shaped flight of the turkey vulture (*Cathartes aura*).

Habitat: Most commonly includes areas close to coastal areas, bays, rivers, lakes, or other bodies of water that provide concentrations of food sources, including fish, waterfowl, and wading birds. Usually nests in tall trees (mostly live pines) that provide clear views of surrounding area. In Florida Bay, where there are few predators and few tall emergent trees, eagles nest in crowns of mangroves and even on the ground.

BALD EAGLE *Haliaeetus leucocephalus*

Seasonal Occurrence: In extreme southern Florida, most adults are resident, but most birds in northern and central Florida migrate north out of state after breeding season (late May - July). Juveniles and younger birds mostly migrate north in summer and may range as far as Canada. Also, in winter, some birds from northern populations migrate to northern Florida.

Florida Distribution: Florida has largest breeding population of any state outside Alaska. Breeds throughout most of peninsular Florida and Keys, mainly along coast in eastern panhandle, and is rare in western panhandle. Greatest concentrations of nesting eagles occur around Lake Kissimmee in Polk and Osceola counties, around Lake George in Putnam, Volusia, and Lake counties, lakes Jessup, Monroe, and Harney in Seminole and Volusia counties, along Gulf coast north of Tampa, and Florida Bay and southwest peninsula area.

Range-wide Distribution: North America. Breeding range extends from Alaska, across Canada, south to Baja California, the Gulf coast and Florida Keys, although very local in the Great Basin and prairie and plains regions in interior U.S., where range has expanded to include Nebraska and Kansas. Non-breeding range is generally throughout breeding range except in far north, most commonly from southern Alaska and southern Canada southward.

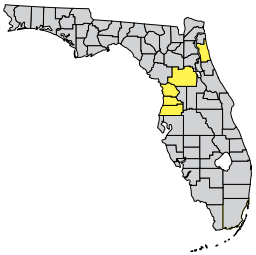
Conservation Status: Original population in Florida could be found throughout state and likely numbered well over 1,000 pairs. Population declined sharply after late 1940s, reaching a low of 120 active nests in 1973, and by 1978 was considered rare as a breeder. Use of pesticide DDT and related compounds and development of coastal habitat are probably chief causes of decline. Numbers have steadily increased, especially since 1989. In 1993, 667 active territories were reported, and in 1999, 996 active nests were recorded. Major threats include habitat loss because of development and commercial timber harvest; pollutants and decreasing food supply are also of concern.

Protection and Management: Monitored annually by Fish and Wildlife Conservation Commission (FFWCC). Continue acquisition of breeding territories and protection of foraging and roosting sites. Incorporate information known about buffer zones around nesting areas into state and local development regulations to help mitigate losses as Florida's human population continues to expand. Monitor pesticides and other environmental contaminants that affect reproduction and food supply.

Selected References: FFWCC 2001, Kale (ed.) 1978, Poole and Gill (eds.) 2000, Robertson and Woolfenden 1992, Rodgers et. al. (eds.) 1996, Stevenson and Anderson 1994.

FLORIDA PYGMY-PIPES

Monotropsis reynoldsiae (A. Gray) A. Heller
Synonyms: *Schweintizia reynoldsiae* A. Gray
Family: Ericaceae (heath)
FNAI Ranks: G1Q/S1
Legal Status: US–none FL–Endangered
Wetland Status: US–UPL FL–UPL



Alfred R. Schotz

Field Description: Perennial **herb**, lacking chlorophyll, parasitic on underground fungi that are associated with roots of trees. **Stems** 1.5 - 5 inches tall, fleshy; dull white, purplish, or brown; stems usually in clusters, at first curved, becoming erect with age. **Leaves** scale-like, less than 0.25 inch long, spiraled around the stem, same color as stem. **Flowers** several, at top of stem, nodding, white or lavender, slightly fragrant; **petals** united into a bell-shaped tube; **sepals** short, about half the length of flower. **Fruit** a small, dark pink berry.

Similar Species (drawing, upper right): Common pygmy-pipes (*Monotropsis odorata*) have long sepals, about the same length as the purple flower. Indian-pipes (*Monotropa* uniflora) have white stems with a single white flower at the top; the petals are not united into tube.

Related Rare Species: Pine-sap (*Monotropa hypopithys*), state-endangered, has yellow, pink, or red stems with several flowers at the top of the stem; petals are not united into a tube and fall soon after opening.

Florida pygmy-pipes *Monotropsis reynoldsiae*

Habitat: Upland mixed hardwood forest, mesic and xeric hammock, sand pine and oak scrub.

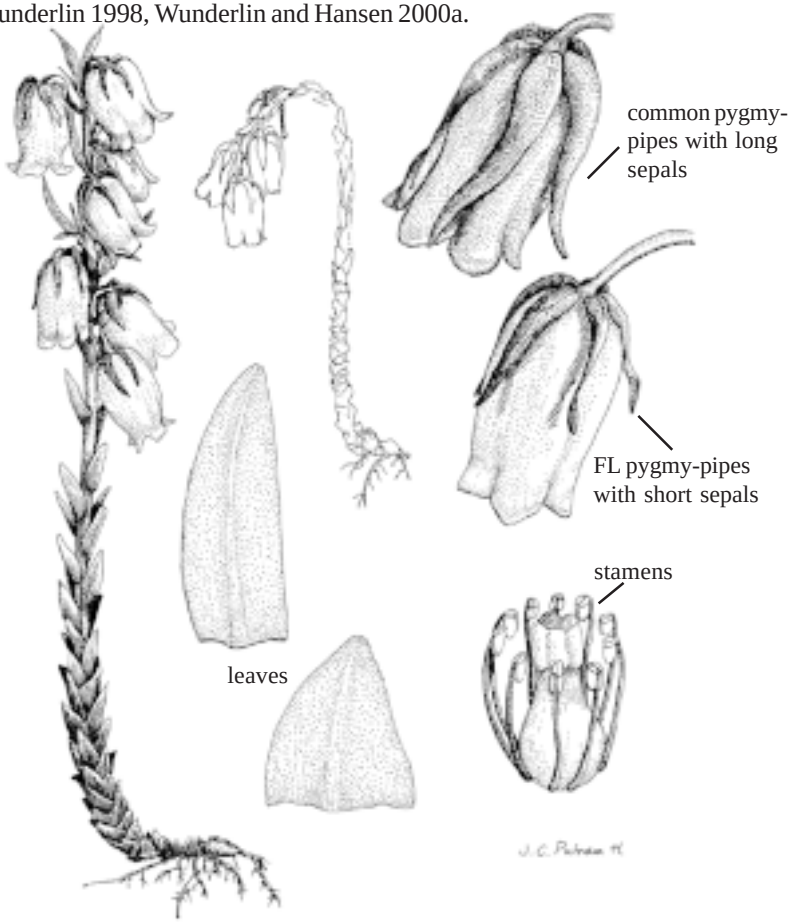
Best Survey Season: Flowers January–February.

Range-wide Distribution: Endemic to central FL.

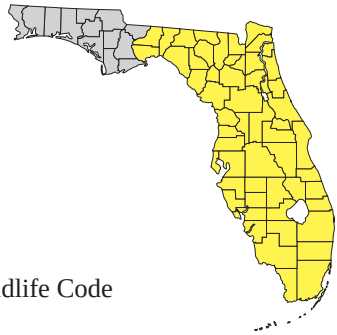
Conservation Status: Only 6 populations are currently known, most on conservation lands.

Protection & Management: Avoid logging and other ground disturbing activities in mesic forests and scrub. Protect plants from trampling and off-road-vehicles.

References: Coile 2000, Epstein 1994, Ward 1979, Wunderlin et al. 1980c, Wunderlin 1998, Wunderlin and Hansen 2000a.

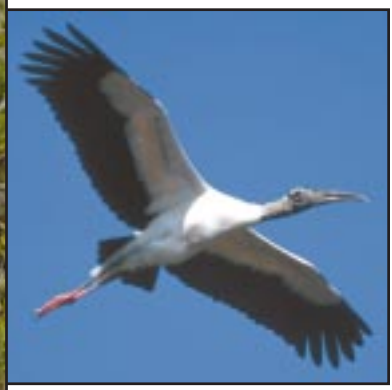


WOOD STORK
Mycteria americana



Order: Ciconiiformes
Family: Ciconiidae
FNAI Ranks: G4/S2
U.S. Status: Endangered
FL Status: Endangered
U.S. Migratory Bird Treaty Act and state Wildlife Code prohibit take of birds, nests, or eggs.

immatures © Barry Mansell



© Barry Mansell

Description: Very large, white wader with black in wings and a short black tail. Soars with neck and legs extended, displaying its long, broad wings; black flight feathers contrast with white along length of wings. Legs are dark and feet are beige. Adults have bare, scaly, dark-gray heads and necks and long, heavy, decurved bills. Head and neck of immature storks have grayish brown feathering, and their bills are yellowish.

Similar Species: American white pelicans (*Pelecanus erythrorynchos*) have a similar wing pattern and also soar but have short legs, white tail, and do not fly with necks extended. White ibis (*Eudocimus albus;* see species account) is much smaller and only has black on wing tips. Great egret (*Ardea alba*) lacks black on wings.

Habitat: Nests colonially in a variety of inundated forested wetlands, including cypress strands and domes, mixed hardwood swamps, sloughs,

and mangroves. Increasingly nesting in artificial habitats (e.g., impoundments and dredged areas with native or exotic vegetation) in north and central Florida. Forages mainly in shallow water in freshwater marshes, swamps, lagoons, ponds, tidal creeks, flooded pastures and ditches, where they are attracted to falling water levels that concentrate food sources (mainly fish).

Seasonal Occurrence: Post-breeding dispersal carries large numbers from more southern locales to more northern parts of range; in winter, northern birds move south. Annual and long-term use of nesting sites is very dependent on feeding conditions, which may be affected dramatically by altered hydrologic patterns. Colonies may form late November - early March in south Florida and February - March in central and northern Florida.

Florida Distribution: Locally rare to abundant in the peninsula and Big Bend, but generally rare or lacking in panhandle and the Florida Keys. Uncommon to rare in winter in north.

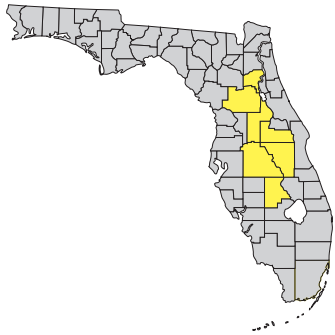
Range-wide Distribution: In U.S., breeds locally in South Carolina, Georgia, and Florida (formerly west to Texas). South, locally in lowlands from Mexico and northern Central America to South America (to western Ecuador, eastern Peru, Bolivia, northern Argentina), and rarely in Cuba and the Dominican Republic. Winters throughout breeding range except in South Carolina and Georgia.

Conservation Status: Many known breeding sites occur within public and private conservation lands. Dramatic decline in the large colonies (>500 individuals) formerly found in south Florida, and trend toward fewer birds distributed among smaller, more numerous colonies in central and northern Florida. Very sensitive to manipulation of water regimes and loss of wetland habitat, which affect both nesting sites and feeding areas.

Protection and Management: Survey colony sites and important feeding areas regularly. Essential to protect wetland areas, closely monitor water quality, and manage hydrologic patterns that consider the needs of the wood stork.

Selected References: Poole and Gill (eds.) 1999, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Runde et al. 1991, Stevenson and Anderson 1994.

SAND SKINK
Neoseps reynoldsi



Order: Squamata
Family: Scincidae
FNAI Ranks: G2/S2
U.S. Status: Threatened
FL Status: Threatened

© Barry Mansell

sand skink trails
© Steven P. Christman

Description: A small, cylindrical, beige to grayish, nearly legless lizard with smooth, shiny scales. Adults 4 - 5 in. (100 - 330 mm) total length. Forelegs tiny, each with only a single toe, and fitting into a groove on lower body; hind legs slightly larger and with two toes. Snout wedge-shaped, eyes tiny, ear openings absent. Species' presence readily detected by distinctive sine-wave trails left in sand as lizard "swims" just beneath surface.

SAND SKINK *Neoseps reynoldsi*

Similar Species: Two other small skinks, the ground skink (*Scincella lateralis*) and two subspecies of the mole skink (*Eumeces egregius lividus* [see species account] and *E. e. onocrepis*), occur within or near the range of the sand skink. Both have relatively small but fully developed limbs, with five toes on each foot. The ground skink is widespread and is bronze to brown, with a dark lateral stripe and light belly. Mole skinks vary geographically, but typically have light dorsolateral stripes and a tail that is different in color (e.g., red, yellow, blue) from the body. All salamanders lack scales.

Habitat: Principally rosemary scrub, but also in sand pine and oak scrubs, scrubby flatwoods, turkey oak ridges within scrub, and even along edges of citrus groves occupying former scrub. Requires loose sand (for burrowing) with large patches of sparse to no groundcover or canopy; scattered shrubs and lichens often present.

Seasonal Occurrence: Present year-round, but difficult to observe. Most active March - June.

Florida Distribution: Central Ridge, from Marion to Highlands County. Most abundant on Lake Wales and Winter Haven ridges in Polk and Highlands counties; relatively rare and localized on Mount Dora Ridge in Marion and Lake counties.

Range-wide Distribution: Same as Florida distribution.

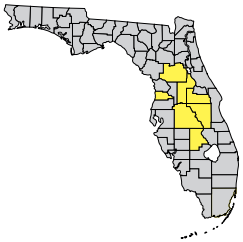
Conservation Status: Occurs within a series of disjunct state, federal, and private conservation lands. Most original habitat destroyed for citrus and development.

Protection and Management: Protect all remaining patches of Central Ridge scrub. Management may entail infrequent prescribed fire. Include protection of native scrub as a major management objective of Ocala National Forest.

Selected References: Ashton and Ashton 1991, Bartlett and Bartlett 1999, Conant and Collins 1991, Moler (ed.) 1992, Telford 1959, U.S. Fish and Wildlife Service 1987.

BRITTON'S BEARGRASS

Nolina brittoniana Nash
Synonyms: none
Family: Agavaceae (agave)
FNAI Ranks: G2/S2
Legal Status: US–Endangered FL–Endangered
Wetland Status: US–UPL FL–UPL



Bruce F. Hansen

Gary Knight

Field Description: Perennial **herb** with long, stiff **leaves** in a grass-like clump rising from a bulbous stem. **Young leaves** erect; **older leaves** up to 6 feet long and 0.5 inch wide, spreading on the ground. **Flowering stalk** 3 - 6 feet tall, topped by a large, showy cluster of small, white flowers. **Flowers** 6-parted, **male and female flowers** usually on separate plants. **Fruit** a papery, symmetrical, 3-lobed capsule, persisting through the summer.

Similar Species: Spanish bayonets (*Yucca* spp.) have large flowers and erect, fleshy leaves with spiny tips.

Related Rare Species: Florida beargrass (*Nolina atopocarpa*), state-threatened, is similar but has leaves less than 0.2 inch wide and usually less than 3 feet long; flowers greenish-white; fruit asymmetrically lobed. It is locally abundant in Panhandle and central FL flatwoods.

Britton's beargrass *Nolina brittoniana*

Habitat: Scrub, sandhill, scrubby flatwoods, and xeric hammock.

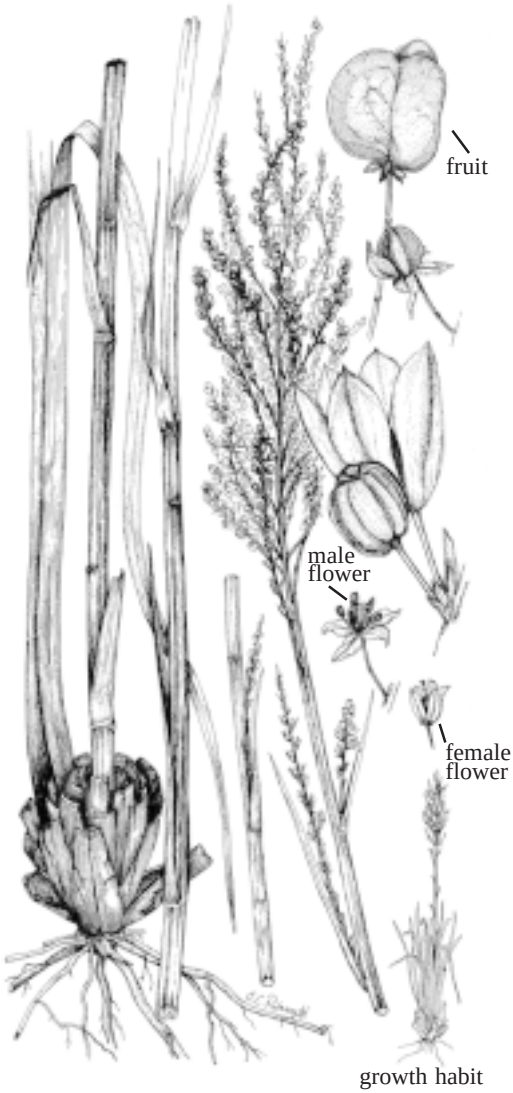
Best Survey Season: Flowers March–May, but fruits, leaves, and growth habit are distinctive all year.

Range-wide Distribution: Endemic to central peninsular FL.

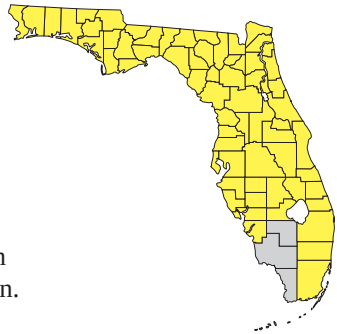
Conservation Status: More than 90% of Britton's beargrass habitat has been lost to agriculture and development. About 100 populations remain, with half of these occurring on 10 conservation areas.

Protection & Management: Apply prescribed fire to stimulate flowering and eliminate competition by shrubs and trees. Complete purchases of Lake Wales Ridge scrub sites.

References: Coile 2000, Kral 1983, Menges et al. 1996, TNC 1995, USFWS 1998, Ward 1979, Wunderlin 1998, Wunderlin and Hansen 2000a.



FLORIDA PINE SNAKE
Pituophis melanoleucus mugitus



Order: Squamata
Family: Colubridae
FNAI Ranks: G4T3?/S3
U.S. Status: None
FL Status: Species of Special Concern
State possession limit of one snake per person.

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Description: A large, stocky, tan or rusty colored snake with an indistinct pattern of large blotches on a lighter background; blotches more distinct posteriorly; venter white. May be dark brown in far western panhandle, where it intergrades with another subspecies. Body muscular, with keeled scales and undivided anal scale. Head relatively small, snout somewhat

pointed, four prefrontal scales, rostral scale extending upward between internasal scales. Adults 4 - 7 ft. (122 - 213 cm) or longer; young 15 - 24 in. (380 - 610 mm) at hatching. May hiss loudly and vibrate tail when encountered.

Similar Species: Most Florida snakes have only two prefrontal scales, and the rostral scale does not split the two internasals. Blotches of red rat snakes (*Elaphe guttata*) are smaller, more numerous (nearly 40), and more distinct. Eastern coachwhip (*Masticophis flagellum*) is more slender, usually darker anteriorly, lacks blotches, and has smooth scales and divided anal scale.

Habitat: Habitats with relatively open canopies and dry sandy soils, in which it burrows. Especially sandhill and former sandhill, including oldfields and pastures, but also sand pine scrub and scrubby flatwoods. Often coexists with pocket gophers and gopher tortoises.

Seasonal Occurrence: Spends most of time below ground; occasional surface activity from spring through fall, especially May - October. Eggs laid June - August; hatch in September and October.

Florida Distribution: Most of panhandle and peninsula south to Lake Okeechobee, extending southward along eastern ridge to Dade County, but absent from Keys. Possibly extirpated from some of more heavily developed counties such as Pinellas.

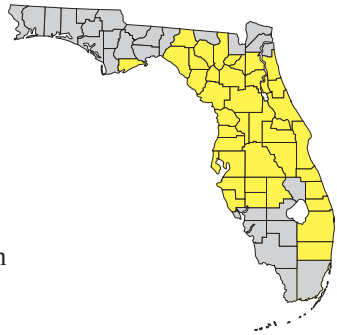
Range-wide Distribution: Southern South Carolina, southern Georgia, and most of Florida.

Conservation Status: Occurs on many state and federal lands in Florida. Threats include collection for pets (now restricted); highway mortality; and habitat loss and fragmentation from development, intensive agriculture, and mining.

Protection and Management: Maintain large, unfragmented blocks of xeric natural communities; can tolerate some habitat degradation. Manage habitats with fire to prevent succession to closed canopy forests.

Selected References: Ashton and Ashton 1988b, Conant and Collins 1991, Ernst and Barbour 1989, Franz 1986, Moler (ed.) 1992, Mount 1975, Tenant 1997.

FLORIDA MOUSE
Podomys floridanus



Order: Rodentia
Family: Cricetidae
FNAI Ranks: G3/S3
U.S. Status: None
FL Status: Species of Special Concern

© James Layne

Podomys foot
© Dan Hipes

Peromyscus gossypinus foot
© Dan Hipes

Description: A large mouse (7.3 - 8 in. = 179 - 203 mm), brownish to tawny above and whitish below. Flanks are often chestnut or orangish. Hind feet are large (0.86 - 1.1 in. = 23 - 28 mm), generally with five pads (plantar tubercles). Tail (3.12 - 3.8 in. = 80 - 95 mm) is indistinctly bicolored: gray-brown above, whitish below. Often has a faint skunk-like odor.

FLORIDA MOUSE *Podomys floridanus*

Similar Species: Distinguished from all other mice within its range by the presence of five plantar tubercles on the hind feet versus six or seven in *Peromyscus* spp. Oldfield mouse (*Peromyscus polionotus*) is generally smaller (4.7 - 6.0 in. = 122 - 153 mm) with a proportionally shorter tail (1.6 - 2.4 in. = 40 - 60 mm) that is sharply bicolored. Cotton mouse (*Peromyscus gossypinus*) is slightly smaller, but overlaps in body measurements to the degree that the number of plantar tubercles is the best distinguishing characteristic.

Habitat: Xeric upland communities with sandy soils, including scrub, sandhill, and ruderal sites where they inhabit burrows of the gopher tortoise (*Gopherus polyphemus*; see species account). In the absence of gopher tortoises, Florida mice will dig their own burrows or use those of oldfield mice.

Seasonal Occurrence: Active year-round except on especially cold nights.

Florida Distribution: Occurs from north-central Florida south to Highlands and Sarasota counties and along the Atlantic coast from St. Johns County south to Miami-Dade County.

Range-wide Distribution: Same as Florida distribution.

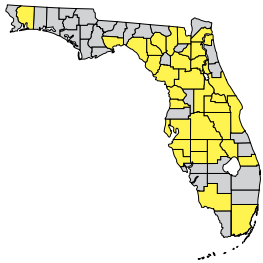
Conservation Status: Protected on several conservation lands throughout central Florida. Largest populations may occur within Ocala National Forest and the scrubs along Lake Wales Ridge.

Protection and Management: Preserve areas supporting sandhill and scrub. Use prescribed fire to maintain openings in scrub and encourage the growth of grasses and forbs important for food and cover. Protect populations of gopher tortoises.

Selected References: Brown 1997, Humphrey (ed.) 1992, Layne 1990, Lazell 1989, Whitaker 1996.

GIANT ORCHID

Pteroglossaspis ecristata (Fernald) Rolfe
Synonym: *Eulophia ecristata* (Fernald) Ames
Family: Orchidaceae (orchid)
FNAI Ranks: G2/S2
Legal Status: US–Mgmt Concern FL–Threatened
Wetland Status: US–none FL–UPL



Dan Hipes

Field Description: Perennial **herb** with 2 - 4 **basal leaves** 6 - 28 inches long and 0.5 - 1.5 inches wide, erect, pleated, with 3 - 5 strong veins. **Flower stalk** 1 - 5.5 feet tall, leafless except for a few bracts, with a terminal spike of 5 - 30 flowers. **Flowers** twisted in toward the stalk, with a stiff floral bract, 2.5 inches long, beneath each flower. **Sepals and petals** yellow-green, folded forward over the lip; **lip** 3-lobed, without a crest, the prominent central lobe maroon with green margins. **Fruit** a rounded capsule, pointed upwards.

Similar Species: In flower, giant orchid resembles no other species. Its leaves resemble those of other orchids, such as grasspink (*Calopogon tuberosus*), wild coco (*Eulophia alta*), a S FL wetland species, and pinepink (*Bletia purpurea*), found mostly in pine rocklands and cypress swamps. Giant orchid leaves resemble those of saw palmetto seedlings, but are softer.

Related Rare Species: Over 70 orchid species are listed as threatened or endangered in FL.

Giant orchid *Pteroglossaspis ecristata*

Habitat: Sandhill, scrub, pine flatwoods, pine rocklands.

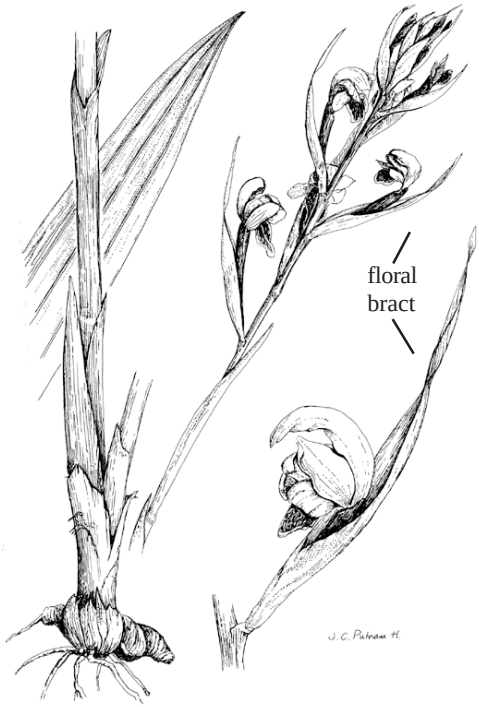
Best Survey Season: Flowers July–September, fruits September–November.

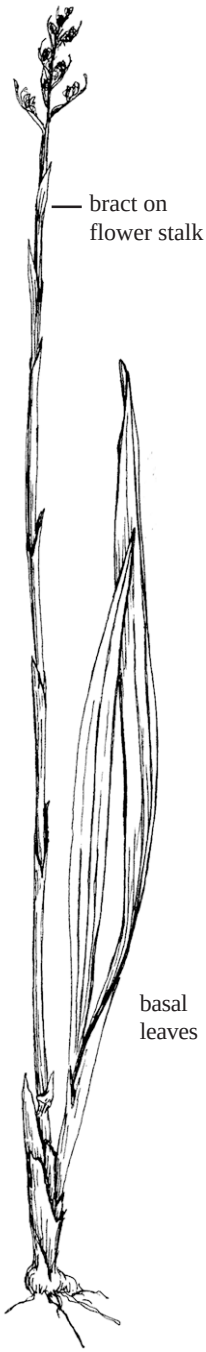
Range-wide Distribution: FL, NC, SC, GA, AL, MS, LA, Cuba. Plants have not been seen in many of the mapped FL counties in several decades.

Conservation Status: Historically known from many managed areas, but seen recently in only a few.

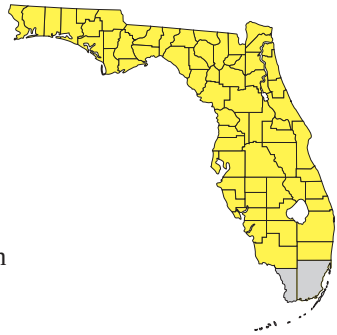
Protection & Management: Use prescribed fire to create sunny openings and reduce competition from woody species. Avoid soil-disturbing activities such as bedding and plowing fire lanes.

References: Coile 2000, IRC 1999, Luer 1972, McCartney 1992a, Sorrie 1993, Wunderlin 1998, Wunderlin and Hansen 2000a.





GOPHER FROG
Rana capito (formerly *R. areolata*)



Order: Anura
Family: Ranidae
FNAI Ranks: G3G4/S3
U.S. Status: None
FL Status: Species of Special Concern

© Dan Hipes

Description: A medium-sized, boldly spotted frog with a chunky appearance: body short and plump, head large with somewhat rounded snout, legs relatively short. Back with somewhat warty skin and prominent, often bronze-colored longitudinal ridge on each side behind eye. Dorsal pattern of irregularly shaped dark spots on background that may be cream, gray, or brown. Chin and throat spotted, belly usually unmarked posteriorly. Adults 2.5 - 4 in. (63 - 102 mm) (excluding legs). Call resembles a deep snore. Tadpole large, to 3.5 in. (89 mm), globose, olive green, with large black spots on sides of tail.

Similar Species: Leopard frog (*Rana sphenocephala*), which may share breeding ponds with gopher frog, has large, dark brown spots on a green to

brown background; however, body is more slender, snout very pointed, and throat and chin plain white. Tadpoles of the two species are very similar. Southern toad (*Bufo terrestris*) has dry, very warty skin, no raised ridges along edges of back, a pair of large raised glands behind eyes, and blunt snout. Spadefoot toad (*Scaphiopus holbrookii*) has vertical black pupils in golden eyes, dry skin, and a pair of hourglass-like lines rather than spots on back. All treefrogs have enlarged pads on toes.

Habitat: Dry, sandy uplands, chiefly sandhill and scrub, that include isolated wetlands or large ponds within about 1 mi. (1.7 km). Occasional in dry pine flatwoods, xeric hammock, and disturbed examples of above. Breeds chiefly in seasonally flooded, temporary ponds, but also in some permanent waters. Nocturnal, normally spending daytime in stumpholes, tunnels, or burrows, especially those of gopher tortoise (*Gopherus polyphemus).*

Seasonal Occurrence: Migrates to ponds for breeding from October through April, though may also breed during summer in central and southern Florida.

Florida Distribution: Most of state excluding Everglades and Keys; potential but not documented for some counties indicated on map. Two subspecies: dusky gopher frog (*R. c. sevosa*) in western panhandle, Florida gopher frog (*R. c. aesopus*) in peninsula and eastern panhandle.

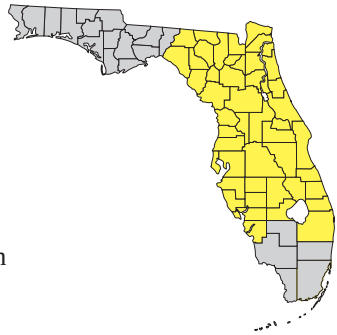
Range-wide Distribution: Southeastern Gulf and Atlantic Coastal Plains, from North Carolina to eastern Louisiana.

Conservation Status: Many protected conservation lands in Florida support gopher frogs, although attention to managing and protecting breeding habitat and migratory pathways is often insufficient.

Protection and Management: Maintain large tracts of native vegetation in sandy, upland habitats that include wetlands. Allow fires to burn through dry wetland basins in addition to uplands. Manage uplands for gopher tortoises. See recommendations for striped newt (*Notophthalmus perstriatus*).

Selected References: Ashton and Ashton 1988a, Bartlett and Bartlett 1999, Conant and Collins 1991, Franz 1986, Franz and Smith 1999, Moler (ed.) 1992, Mount 1975.

SHERMAN'S FOX SQUIRREL
Sciurus niger shermani



Order: Rodentia
Family: Sciuridae
FNAI Ranks: G5T3/S3
U.S. Status: None
FL Status: Species of Special Concern

Description: A large (23 - 28 in. = 600 - 700 mm) tree squirrel with highly variable dorsal fur color ranging from nearly all black (uncommon) to silver, with variations of black over silver and silver over black. Underside is tan. Head is generally black; ears and muzzle are often white. Tail is long, nearly the length of the head and torso. Nests are usually in oak trees and are constructed of oak leaves and Spanish moss.

Similar Species: Gray squirrel (*Sciurus carolinensis*) is smaller (less than 19 in. = 500 mm).

Habitat: Sandhills (high pine), pine flatwoods, and pastures and other open, ruderal habitats with scattered pines and oaks. Depends on a variety of oak trees for seasonal food and nest material. Longleaf pine cones and seeds are important foods.

SHERMAN'S FOX SQUIRREL *Sciurus niger shermani*

Seasonal Occurrence: Active year-round.

Florida Distribution: Subspecies range was originally defined as running from the Aucilla River east to Nassau County and south to the Caloosahatchee River in southwestern Florida and to Miami-Dade County along the east coast. Some researchers extend the range westward to the Apalachicola River. Southern fox squirrel (*S. n. niger*) occurs throughout most of the panhandle; mangrove fox squirrel (*S. n. avicennia*) occurs southwest of Lake Okeechobee.

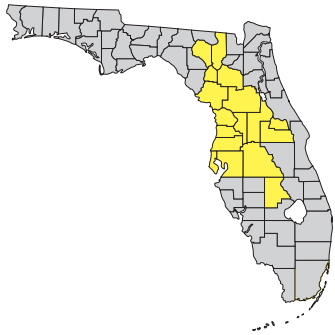
Range-wide Distribution: Peninsular Florida (excluding southwestern portion) north to central Georgia.

Conservation Status: Although present in several conservation areas, Sherman's fox squirrel has been eliminated from much of its former habitat as a result of conversion to pine plantation, row crops, or development.

Protection and Management: Preserve longleaf pine/wiregrass communities, particularly sandhills. Burn habitat every two to five years (April - July if possible) to control shrubby vegetation and maintain park-like conditions.

Selected References: Brown 1997, Hall 1981, Humphrey (ed.) 1992, Whitaker 1996.

SHORT-TAILED SNAKE
Stilosoma extenuatum



Order: Squamata
Family: Colubridae
FNAI Ranks: G3/S3
U.S. Status: None
FL Status: Threatened

Description: An extremely slender, spotted snake with a cylindrical body rarely exceeding 20 in. (510 mm) total length; even very large specimens two ft. (61 cm) long are only the diameter of a pencil. Grayish ground color with 50 - 80 dark brown blotches lacking darker edges and often separated by areas of yellow to red along back, and alternating with a series of smaller blotches on sides; belly with many dark blotches. Tail, as measured posteriorly to the anal scale, comprises only 7 - 10 percent of total length. Head small, no wider than body; scales smooth (no keels); anal scale undivided.

Similar Species: All other Florida snakes have tails greater than 10 percent of total length. Young rat snakes (*Elaphe*) and black racers

(*Coluber*) are strongly blotched but have heads substantially wider than neck. Anal scale of racer is divided, while most scales on back and upper sides of rat snakes bear a single low keel. Kingsnake (*Lampropeltis getula*) may have large black blotches but is more heavy-bodied and grows much larger. Mole kingsnake (*L. calligaster*) is similar but lacks areas of orange or yellow between blotches, which are dark-edged.

Habitat: Dry upland habitats, principally sandhill, xeric hammock, and sand pine scrub. A secretive burrower only rarely seen above ground or under cover objects.

Seasonal Occurrence: Most above-ground activity occurs in October and November, with a few sightings in March and April.

Florida Distribution: Northern and central peninsula, from the Suwannee River to Highlands County.

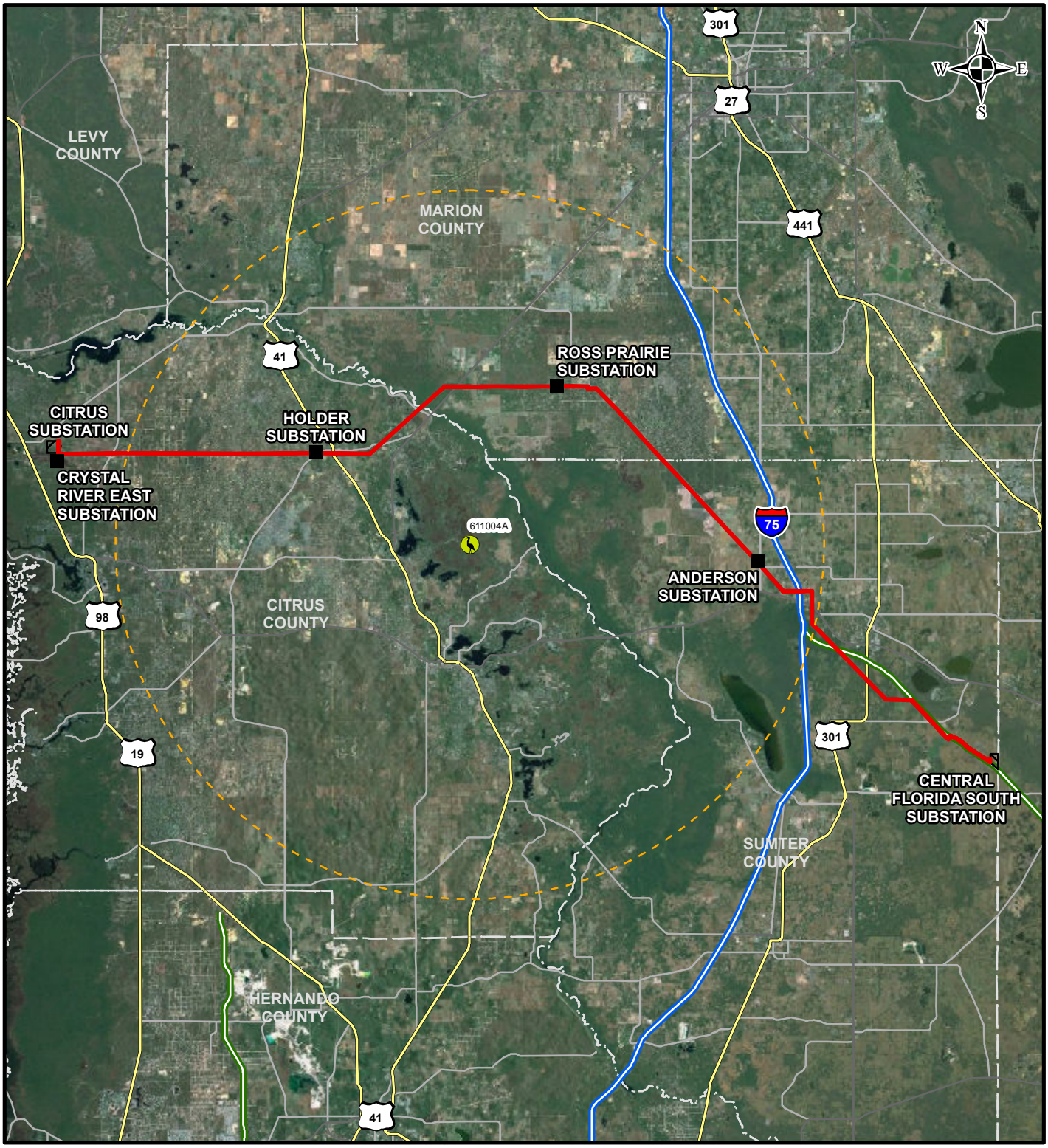
Range-wide Distribution: Restricted to Florida.

Conservation Status: Occurs on some state and federal lands, including Ocala National Forest. Decline directly related to loss and conversion of habitat for citrus, mining, silviculture, and development.

Protection and Management: Maintain upland longleaf pine and sand pine scrub habitats with prescribed fire as needed. Able to tolerate some disturbance, including limited harvest of longleaf pine and low-density development.

Selected References: Ashton and Ashton 1988b, Conant and Collins 1991, Ernst and Barbour 1989, Moler (ed.) 1992, Tenant 1997.

APPENDIX C
LISTED SPECIES CONSULTATION AREAS



LEGEND

- Substation
- Florida Wood Stork Nesting Colony
- Wood Stork Forage Area
- Citrus Substation
- Central Florida South Substation
- LCFS Preferred Right-of-Way
- County Boundary
- Interstate
- Toll Road
- US Road
- State Road
- County Road

6 3 0 6 Miles

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Florida Wood Stork Nesting Colonies and Forage Areas: US Fish & Wildlife Service, 2010; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
WOOD STORK NESTING COLONIES & FORAGE AREAS

Progress Energy

MXD File No. 103-89627C012			SCALE AS SHOWN	REV. 0
DESIGN	JG	03/01/2011	APPENDIX C	
GIS	JG	03/01/2011		
CHECK	SR	03/01/2011	FIGURE 1	
REVIEW	KB	03/01/2011		

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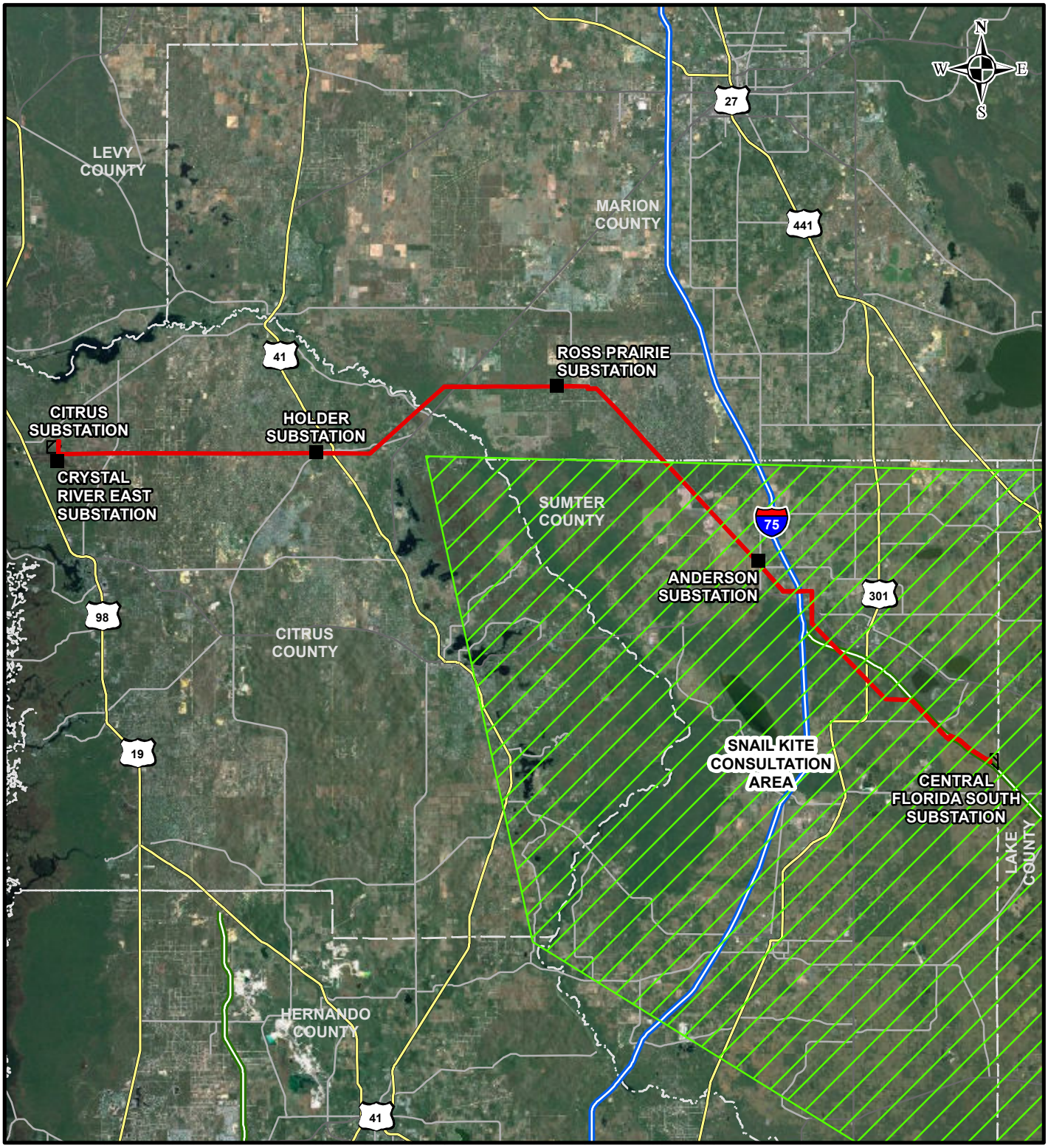

LEGEND

- Substation
- Citrus Substation
- Central Florida South Substation
- LCFS Right-of-Way
- Snail Kite Consultation Area
- County Boundary
- Interstate
- Toll Road
- US Road
- State Road
- County Road

6 3 0 6 Miles

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Snail Kite Consultation Area: U.S. Fish and Wildlife Service, 2003; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SNAIL KITE CONSULTATION AREA

Progress Energy

MXD File No. 103-89627C013			SCALE AS SHOWN	REV. 0
DESIGN	JG	03/01/2011	APPENDIX C FIGURE 2	
GIS	JG	03/01/2011		
CHECK	SR	03/01/2011		
REVIEW	KB	03/01/2011		

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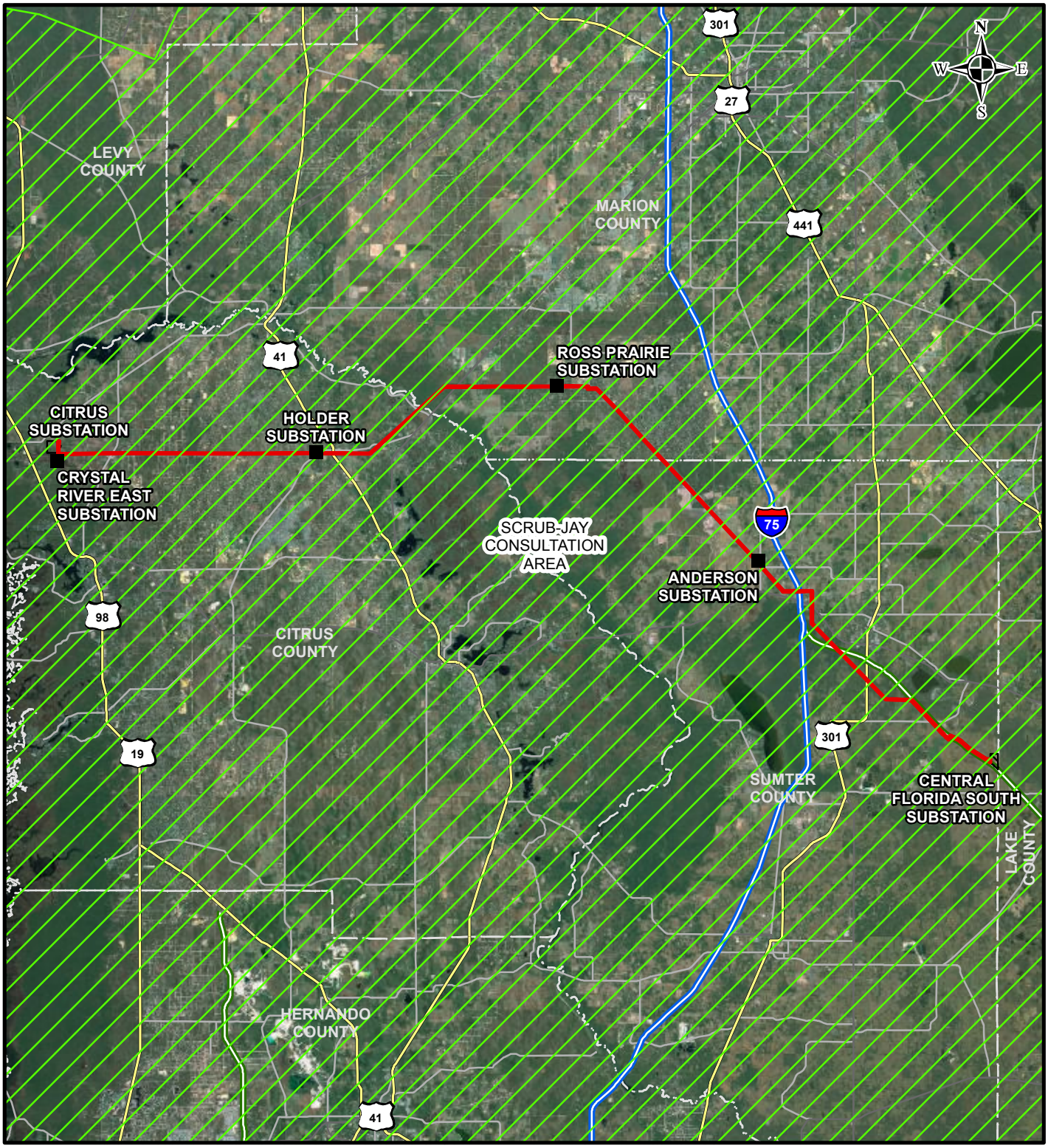

LEGEND

- Substation
- Citrus Substation
- Central Florida South Substation
- LCFS Preferred Right-of-Way
- Scrub Jay Consultation Area
- County Boundary
- Interstate
- Toll Road
- US Road
- State Road
- County Road

6 3 0 6 Miles

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Snail Kite Consultation Area: U.S. Fish and Wildlife Service, 2003; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH SCRUB JAY CONSULTATION AREA

Progress Energy

MXD File No. 103-89627C014			SCALE AS SHOWN	REV. 0
DESIGN	JG	03/01/2011	APPENDIX C FIGURE 3	
GIS	JG	03/01/2011		
CHECK	SR	03/01/2011		
REVIEW	KB	03/01/2011		

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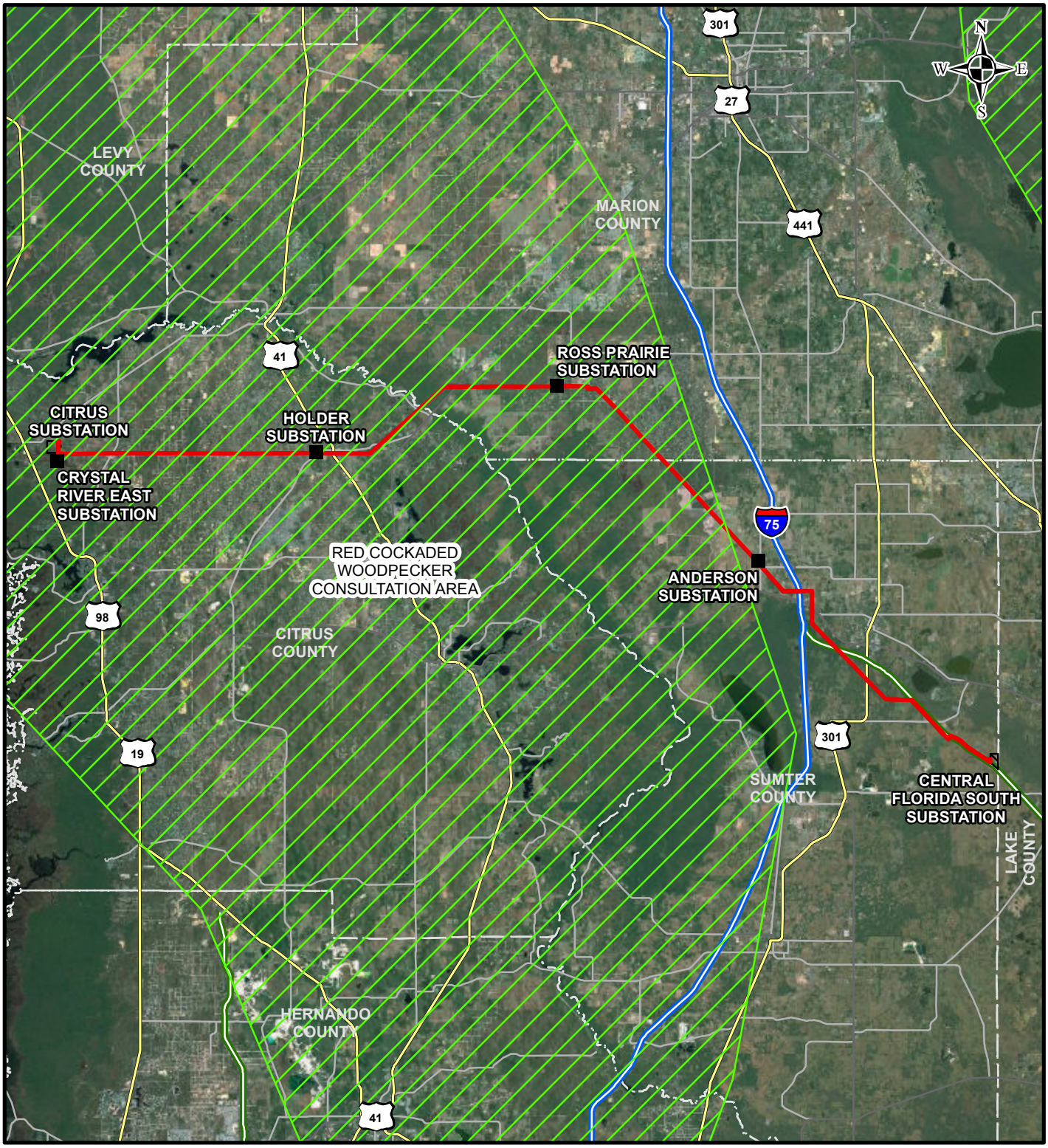

LEGEND

- Substation
- Citrus Substation
- Central Florida South Substation
- LCFS Preferred Right-of-Way
- Red Cockaded Woodpecker Consultation Area
- County Boundary
- Interstate
- Toll Road
- US Road
- State Road
- County Road

6 3 0 6 Miles

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Red Cockaded Woodpecker Consultation Area: U.S. Fish and Wildlife Service, 2003; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
RED COCKADED WOODPECKER CONSULTATION AREA

Progress Energy

MXD File No. 103-89627C015			SCALE AS SHOWN	REV. 0
DESIGN	JG	03/01/2011	APPENDIX C	
GIS	JG	03/01/2011		
CHECK	SR	03/01/2011	FIGURE 4	
REVIEW	KB	03/01/2011		

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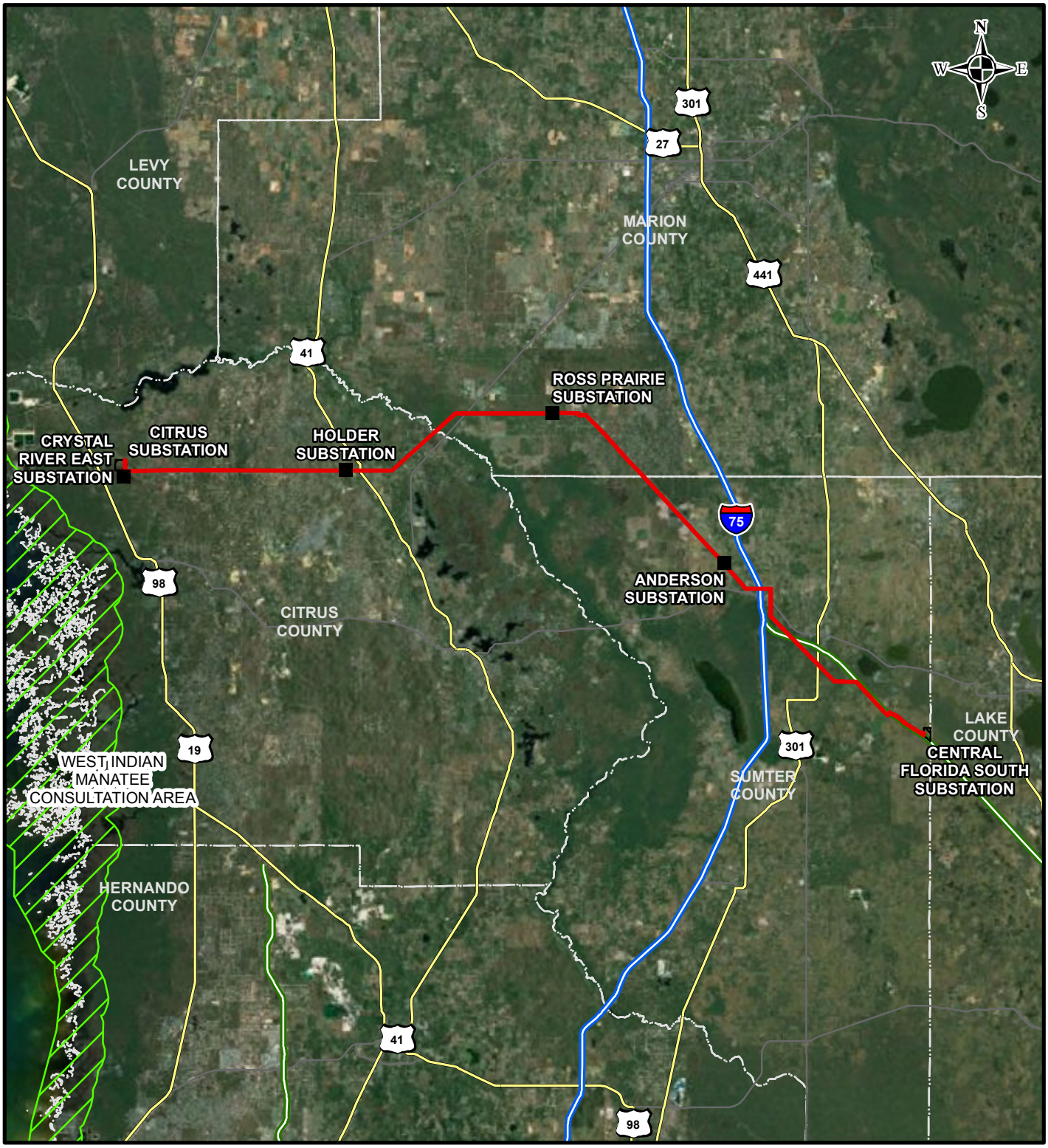

LEGEND

- Substation
- Citrus Substation
- Central Florida South Substation
- LCFS Preferred Right-of-Way
- West Indian Manatee Consultation Area
- County Boundary
- Interstate
- Toll Road
- US Road
- State Road

7 3.5 0 7 Miles

REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; West Indian Manatee Consultation Area: U.S. Fish and Wildlife Service, 2003; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

LEVY - CENTRAL FLORIDA SOUTH
WEST INDIAN MANATEE CONSULTATION AREA

Progress Energy

MXD File No. 103-89627C016			SCALE AS SHOWN	REV. 0
DESIGN	JG	03/01/2011	APPENDIX C	
GIS	JG	03/01/2011		
CHECK	SR	03/01/2011	FIGURE 5	
REVIEW	KB	03/01/2011		

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