

LEGEND

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

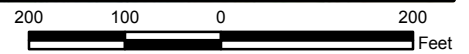
Bald Eagle Nest

GOLDER OBSERVED SPECIES

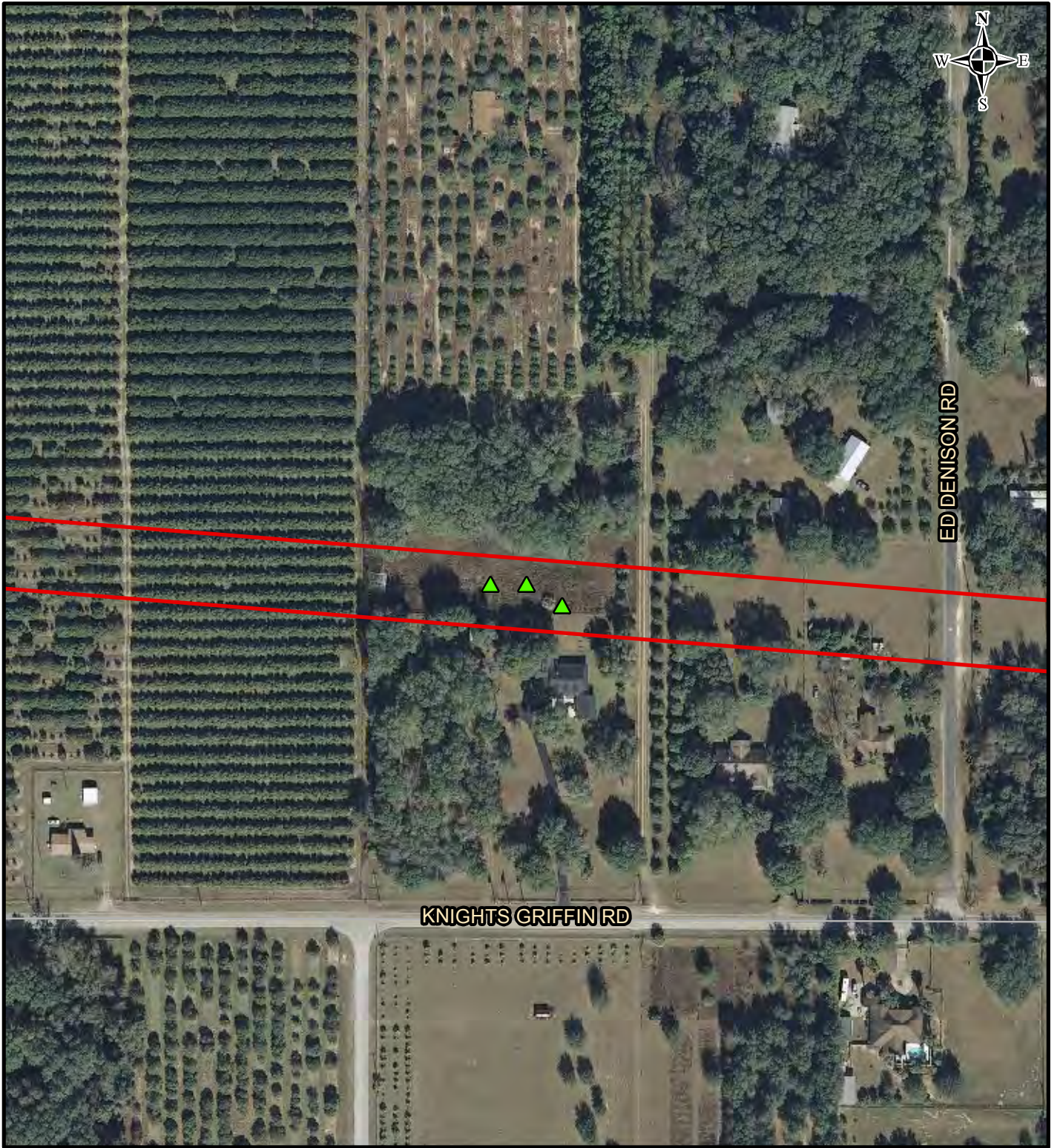
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|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
| Giant Orchid | Florida Scrub Jay | Tricolored Heron | |
| Sherman's Fox Squirrel | | | |

REFERENCE

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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p> <p>POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP</p>				
	MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	<p>FIGURE 4 PAGE 28 OF 62</p>
	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011		



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

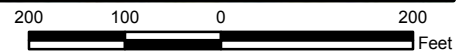
Bald Eagle Nest

GOLDER OBSERVED SPECIES

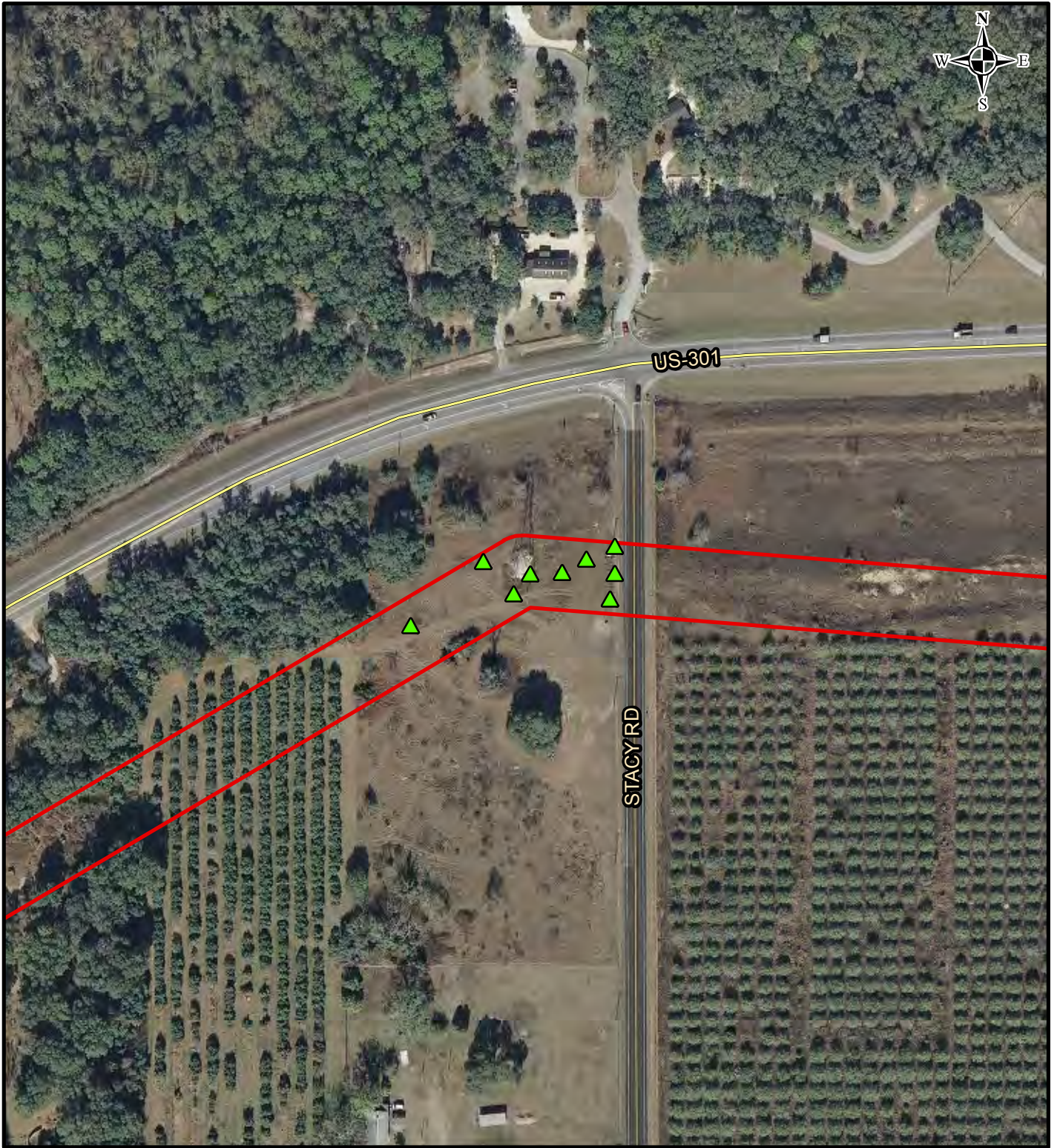
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PHP Preferred Right-of-Way ▲ Florida Natural Areas Inventory Occurrence

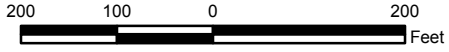
Bald Eagle Nest

GOLDER OBSERVED SPECIES

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|---|---|---|--|
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	DESIGN	JDG	02/18/2011
	GIS	JDG	02/18/2011
	CHECK	SAR	02/18/2011
	REVIEW	KB	02/18/2011
FIGURE 4			PAGE 30 OF 62

F:\PROJECTS\2010 PROJ\103-89627 Levy Project - USACE Section 404 Permit Support\A - Listed Species PHP Route\GIS\MXD\103-89627A005 FNAI.mxd



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PHP Preferred Right-of-Way ▲ Florida Natural Areas Inventory Occurrence

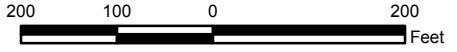
▲ Bald Eagle Nest

GOLDER OBSERVED SPECIES

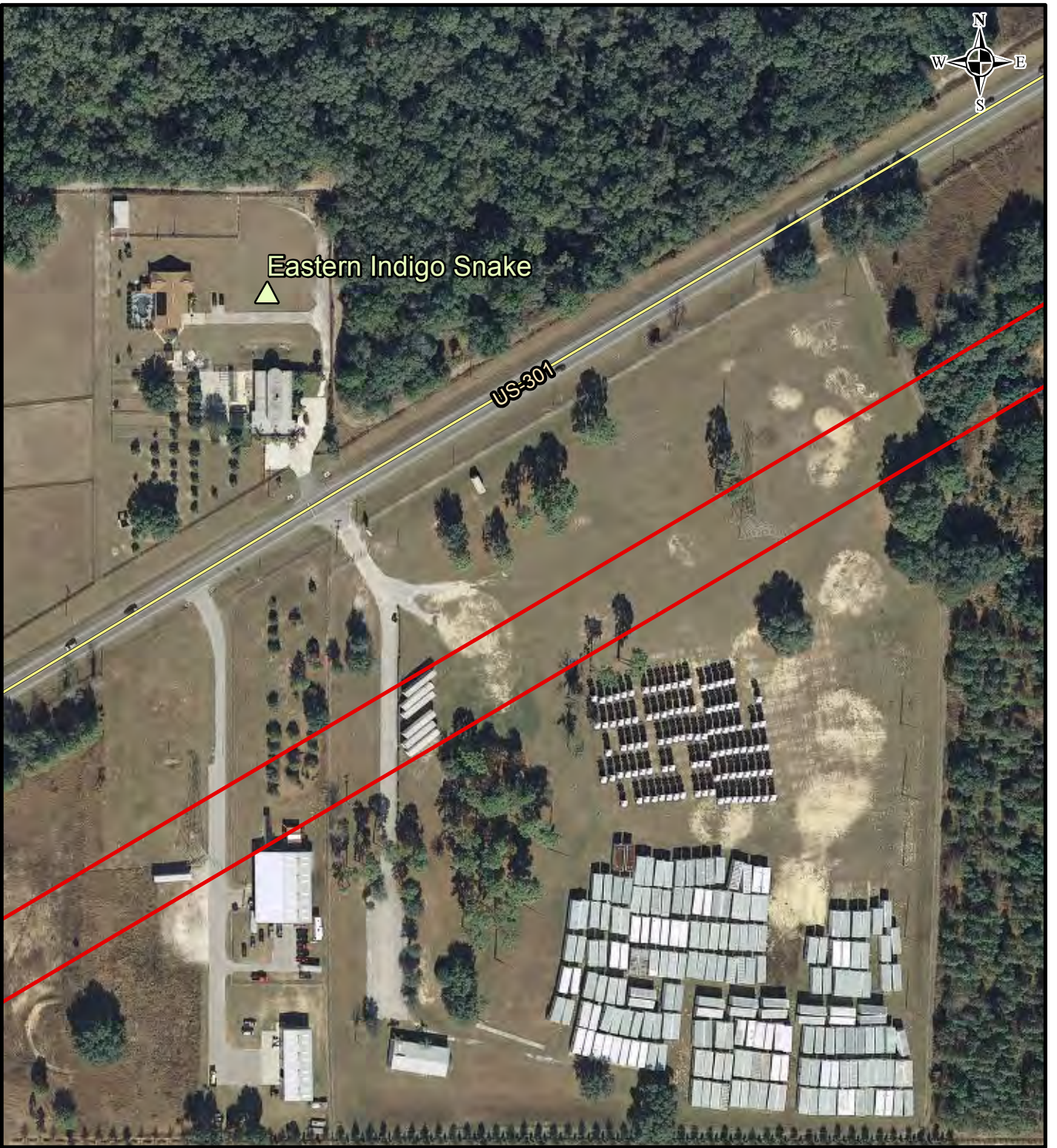
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POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP			
Progress Energy		MXD File No. 103-89627A005	SCALE AS SHOWN
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 31 OF 62
GIS	JDG	02/18/2011	
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PHP Preferred Right-of-Way Florida Natural Areas Inventory Occurrence

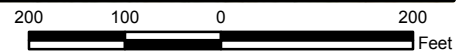
Bald Eagle Nest

GOLDER OBSERVED SPECIES

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	DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 32 OF 62
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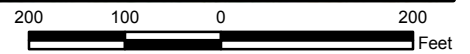
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GOLDER OBSERVED SPECIES

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	DESIGN	JDG	02/18/2011	<p>FIGURE 4 PAGE 33 OF 62</p>
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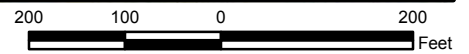
Bald Eagle Nest

GOLDER OBSERVED SPECIES

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 34 OF 62
GIS	JDG	02/18/2011	
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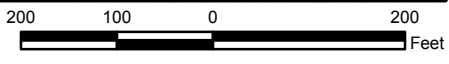


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PHP Preferred Right-of-Way ▲ Florida Natural Areas Inventory Occurrence

▲ Bald Eagle Nest



GOLDER OBSERVED SPECIES

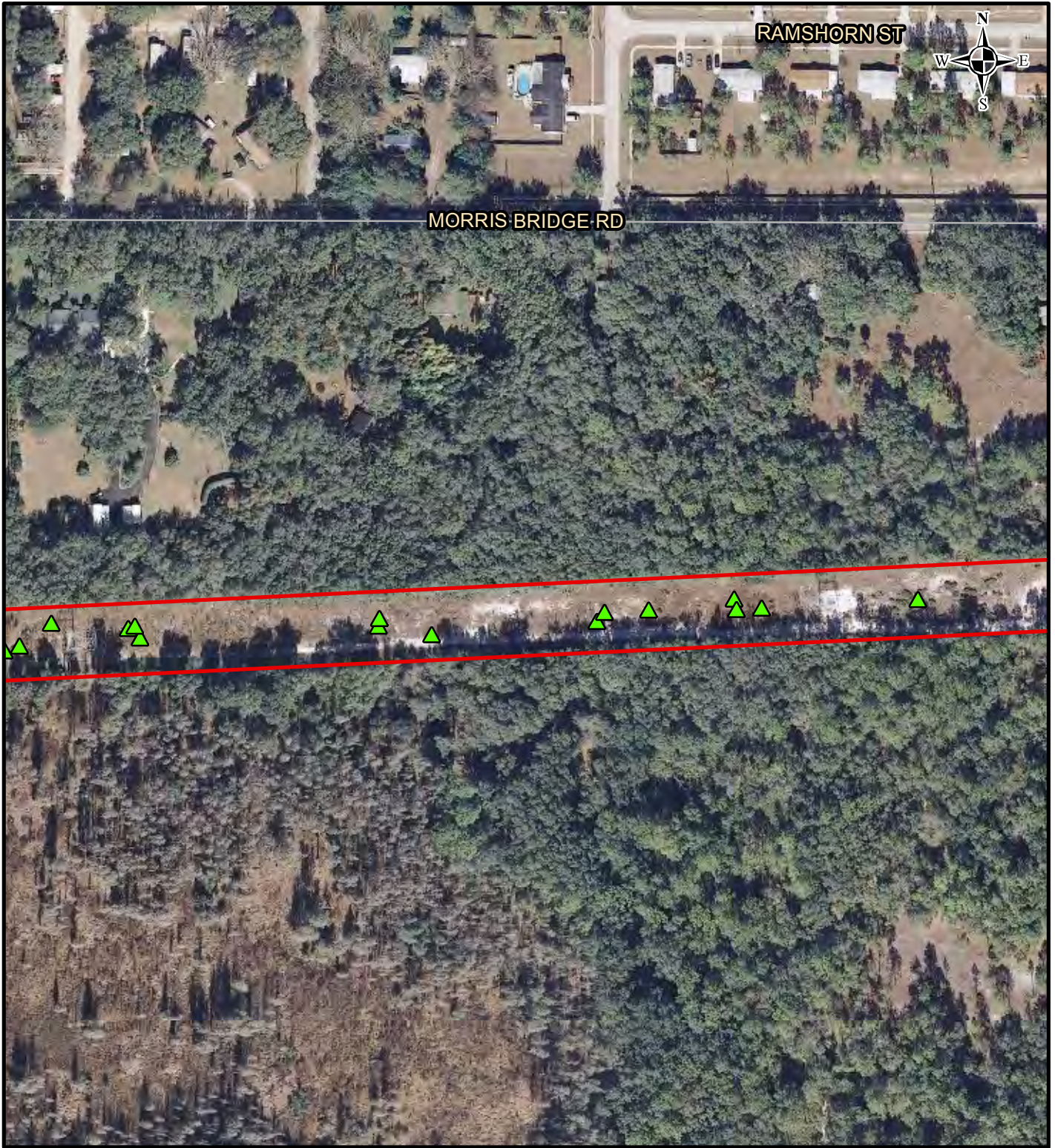
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|---|--|---|--|
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		MXD File No. 103-89627A005	SCALE AS SHOWN
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 35 OF 62
GIS	JDG	02/18/2011	
CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011	

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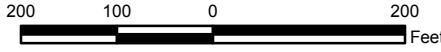
Bald Eagle Nest

GOLDER OBSERVED SPECIES

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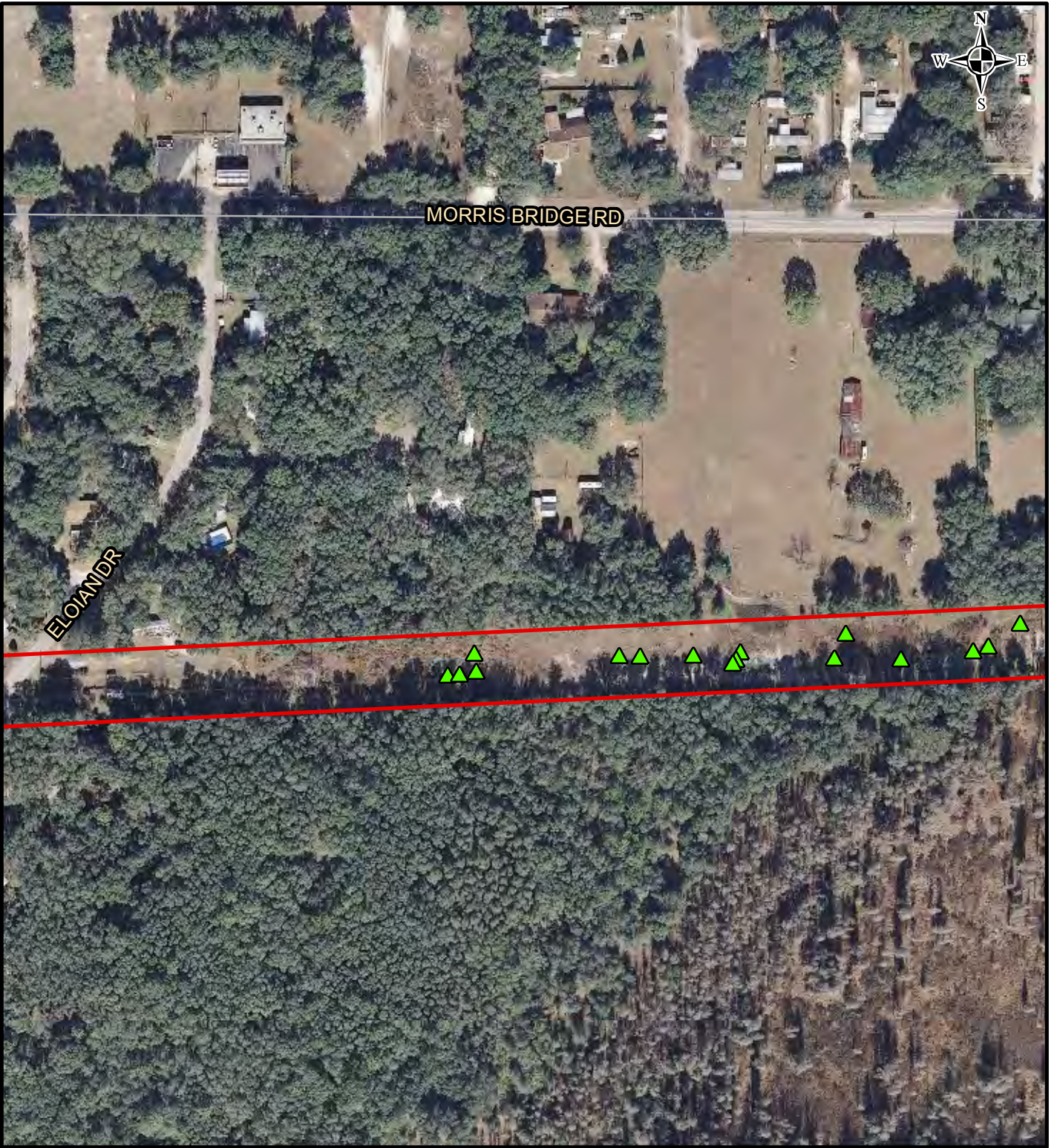
PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



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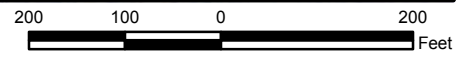
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PHP Preferred Right-of-Way Florida Natural Areas Inventory Occurrence

Bald Eagle Nest



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

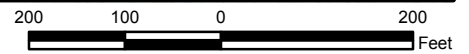
Bald Eagle Nest

GOLDER OBSERVED SPECIES

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|------------------------|-------------------------------|-------------------|-------------|
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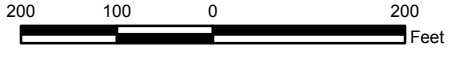
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- PHP Preferred Right-of-Way
- ▲ Florida Natural Areas Inventory Occurrence
- ▲ Bald Eagle Nest



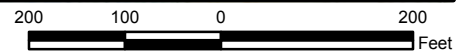
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|--|---|--|---|
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Progress Energy		MXD File No. 103-89627A005 DESIGN JDG 02/18/2011 GIS JDG 02/18/2011 CHECK SAR 02/18/2011 REVIEW KB 02/18/2011	SCALE AS SHOWN REV. 0
		FIGURE 4 PAGE 39 OF 62	



LEGEND

- PHP Preferred Right-of-Way
- Florida Natural Areas Inventory Occurrence
- Bald Eagle Nest

GOLDER OBSERVED SPECIES

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|---|---|--|---|
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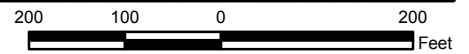
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



MXD File No. 103-89627A005			SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 40 OF 62	
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 PHP Preferred Right-of-Way △ Florida Natural Areas Inventory Occurrence

✎ Bald Eagle Nest

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PROGRESS ENERGY FLORIDA
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POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP

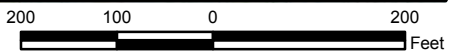


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LEGEND

- PHP Preferred Right-of-Way
- Florida Natural Areas Inventory Occurrence
- Bald Eagle Nest



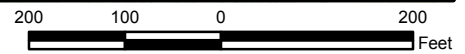
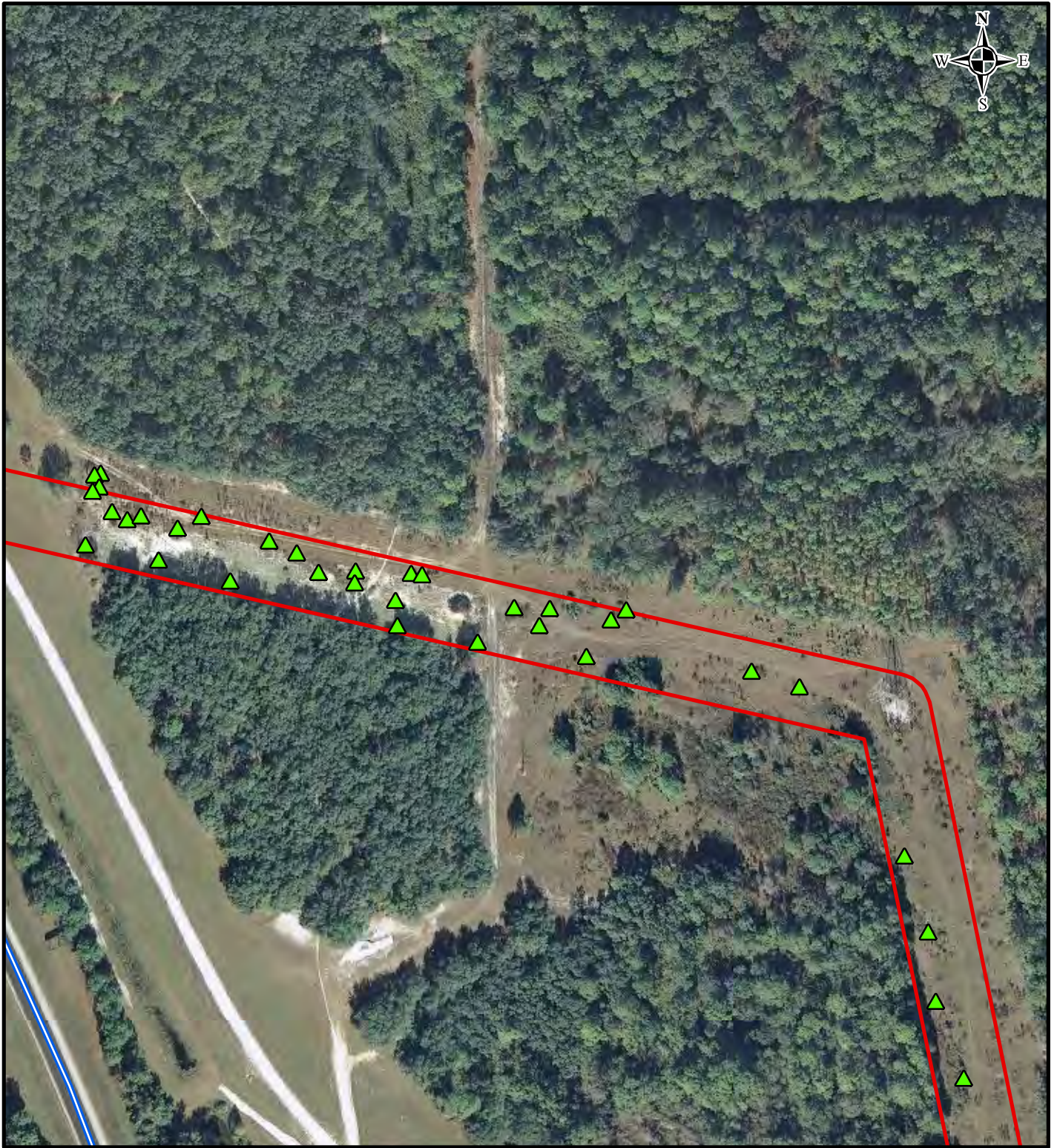
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| ▲ American Alligator | ◆ Bald Eagle Nest | ● Little Blue Heron | White Ibis |
| ▲ Eastern Indigo Snake | Southeastern American Kestrel | ● Bald Eagle | ● Wood Stork |
| ▲ Gopher Tortoise | ● Florida Sandhill Crane | ● Peregrine Falcon | Snowy Egret |
| ■ Giant Orchid | ● Florida Scrub Jay | Tricolored Heron | |
| ★ Sherman's Fox Squirrel | | | |

REFERENCE

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; Bald Eagle Nest Data: Florida Fish & Wildlife Conservation Commission, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008

PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP			
	MXD File No. 103-89627A005		SCALE AS SHOWN
	DESIGN	JDG	02/18/2011
	GIS	JDG	02/18/2011
	CHECK	SAR	02/18/2011
	REVIEW	KB	02/18/2011
FIGURE 4			PAGE 42 OF 62



LEGEND

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

Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
| Giant Orchid | Florida Scrub Jay | Tricolored Heron | |
| Sherman's Fox Squirrel | | | |

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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
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	DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 43 OF 62
	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
	REVIEW	KB	02/18/2011	

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

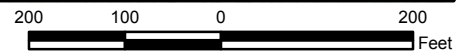
Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
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| Sherman's Fox Squirrel | | | |

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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p> <p>POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP</p>				
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	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
	REVIEW	KB	02/18/2011	

F:\PROJECTS\2010 PROJ\103-89627 Levy Project - USACE Section 404 Permit Support\A - Listed Species PHP Route\GIS\MXD\103-89627A005 FNAI.mxd



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

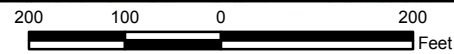
Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p> <p>POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP</p>				
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	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
	REVIEW	KB	02/18/2011	



LEGEND

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

Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
| Giant Orchid | Florida Scrub Jay | Tricolored Heron | |
| Sherman's Fox Squirrel | | | |

REFERENCE

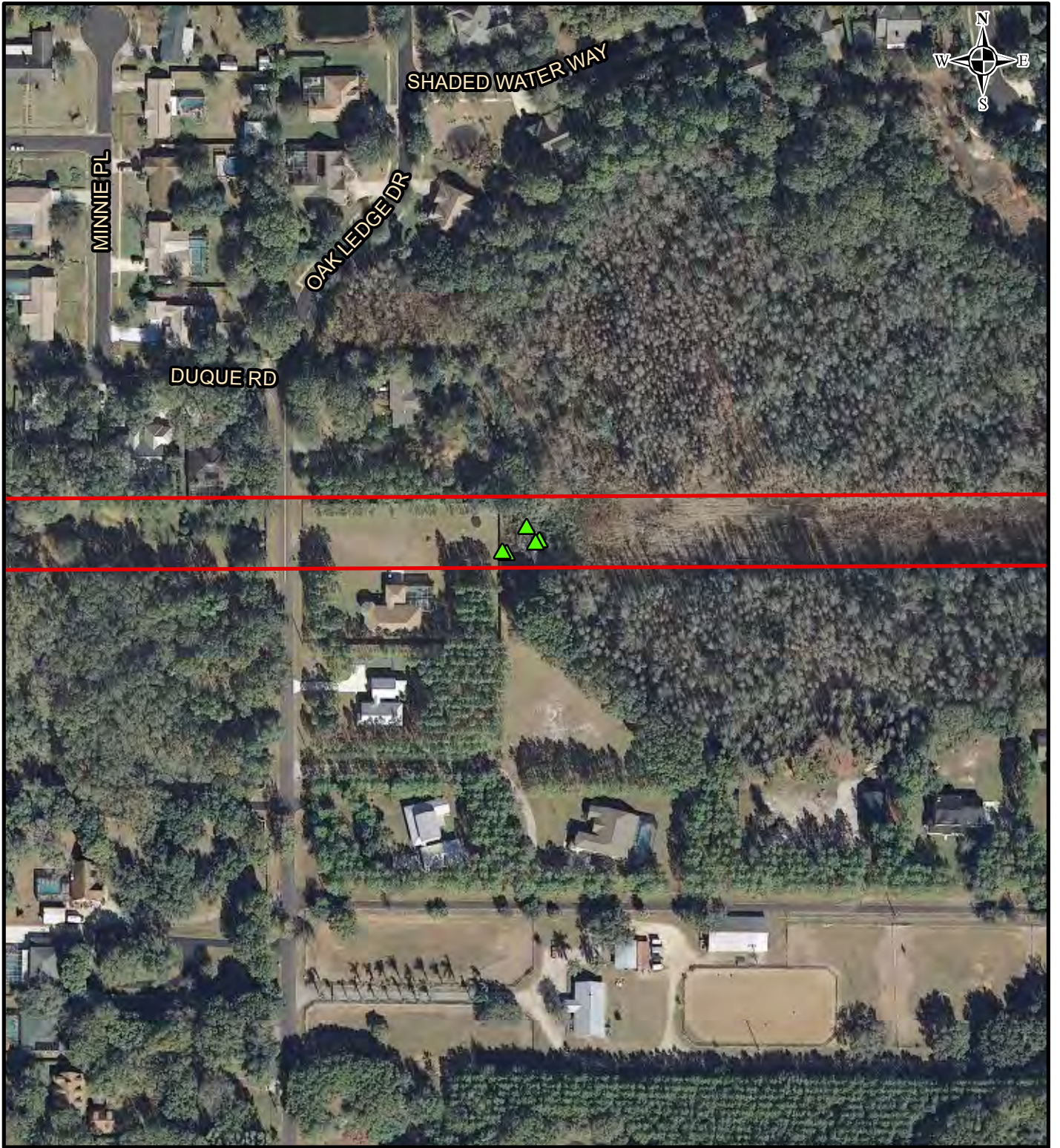
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 46 OF 62
GIS	JDG	02/18/2011	
CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011	



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

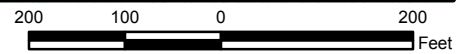
Bald Eagle Nest

GOLDER OBSERVED SPECIES

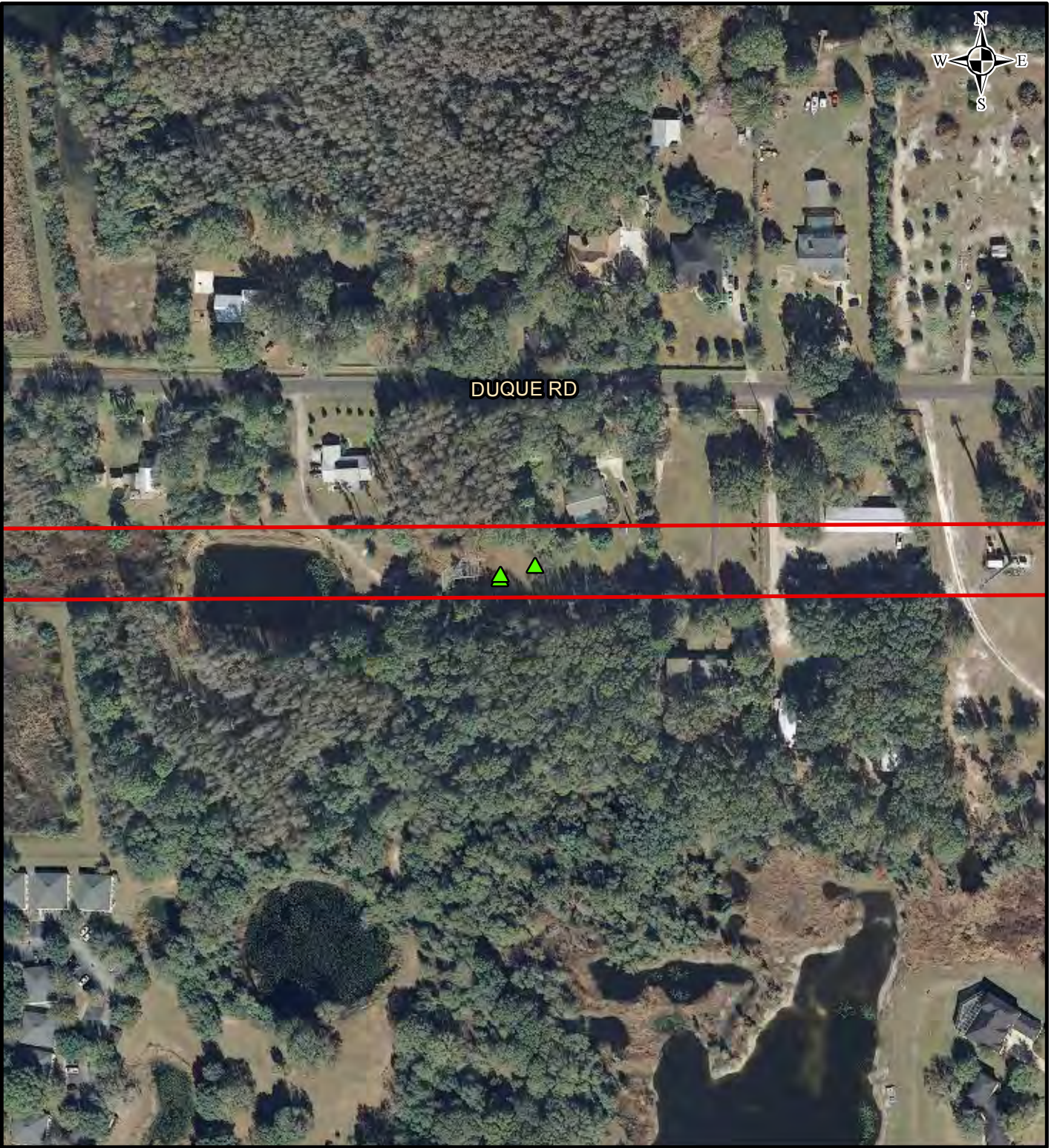
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|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
| Giant Orchid | Florida Scrub Jay | Tricolored Heron | |
| Sherman's Fox Squirrel | | | |

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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; Bald Eagle Nest Data: Florida Fish & Wildlife Conservation Commission, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008



<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p> <p>POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP</p>				
	MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	<p>FIGURE 4 PAGE 47 OF 62</p>
	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011		



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

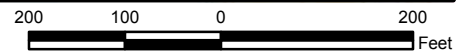
Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
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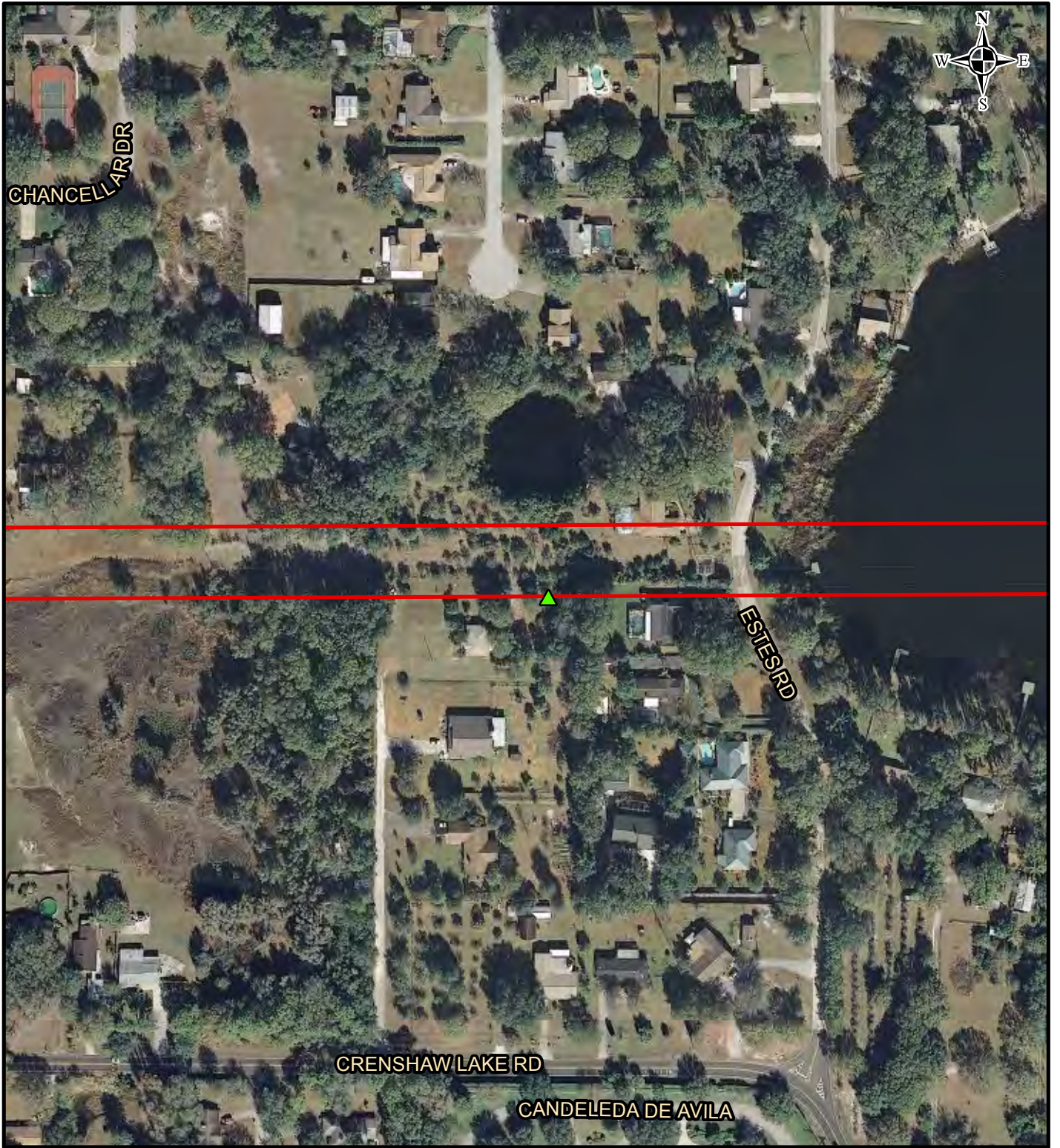


PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 48 OF 62
GIS	JDG	02/18/2011	
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REVIEW	KB	02/18/2011	



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

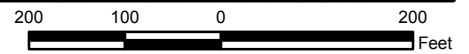
Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
	MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 49 OF 62
	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
	REVIEW	KB	02/18/2011	



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

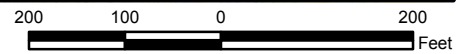
Bald Eagle Nest

GOLDER OBSERVED SPECIES

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|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
	MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
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	GIS	JDG	02/18/2011	
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	REVIEW	KB	02/18/2011	



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

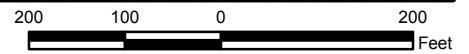
Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
	MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
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	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
	REVIEW	KB	02/18/2011	

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

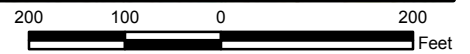
✪ Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|---|---|---|--|
| ▲ American Alligator | ◆ Bald Eagle Nest | ● Little Blue Heron | White Ibis |
| ▲ Eastern Indigo Snake | Southeastern American Kestrel | ● Bald Eagle | ● Wood Stork |
| ▲ Gopher Tortoise | ● Florida Sandhill Crane | ● Peregrine Falcon | Snowy Egret |
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
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DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 52 OF 62	
GIS	JDG	02/18/2011		
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REVIEW	KB	02/18/2011		



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

Bald Eagle Nest

GOLDER OBSERVED SPECIES

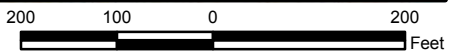
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|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
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	REVIEW	KB	02/18/2011	

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- PHP Preferred Right-of-Way
- Florida Natural Areas Inventory Occurrence
- ★ Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|---|---|--|---|
| ▲ American Alligator | ◆ Bald Eagle Nest | ● Little Blue Heron | White Ibis |
| ▲ Eastern Indigo Snake | Southeastern American Kestrel | ● Bald Eagle | ● Wood Stork |
| ▲ Gopher Tortoise | ● Florida Sandhill Crane | ● Peregrine Falcon | Snowy Egret |
| ■ Giant Orchid | ● Florida Scrub Jay | Tricolored Heron | |
| ★ Sherman's Fox Squirrel | | | |

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 54 OF 62
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PHP Preferred Right-of-Way Florida Natural Areas Inventory Occurrence

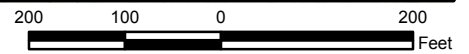
✎ Bald Eagle Nest

GOLDER OBSERVED SPECIES

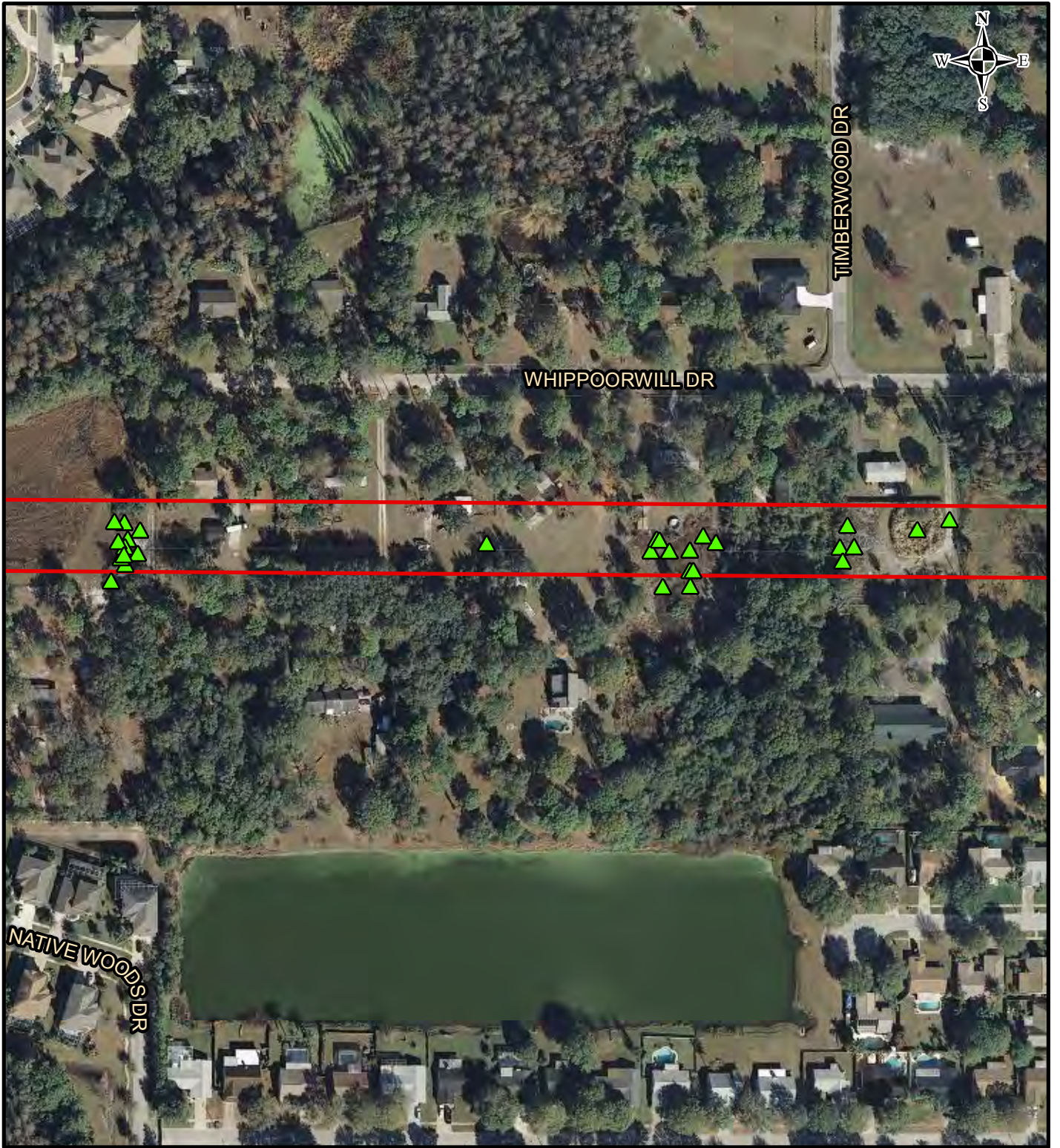
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|---|---|--|---|
| ▲ American Alligator | ◆ Bald Eagle Nest | ● Little Blue Heron | White Ibis |
| ▲ Eastern Indigo Snake | Southeastern American Kestrel | ● Bald Eagle | ● Wood Stork |
| ▲ Gopher Tortoise | ● Florida Sandhill Crane | ● Peregrine Falcon | Snowy Egret |
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| ★ Sherman's Fox Squirrel | | | |

REFERENCE

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; Bald Eagle Nest Data: Florida Fish & Wildlife Conservation Commission, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008



PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT																						
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP																						
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PHP Preferred Right-of-Way Florida Natural Areas Inventory Occurrence

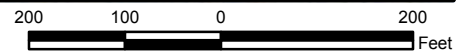
Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
	MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 56 OF 62
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	REVIEW	KB	02/18/2011	



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PHP Preferred Right-of-Way △ Florida Natural Areas Inventory Occurrence

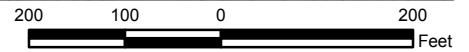
✪ Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|---|---|--|--|
| ▲ American Alligator | ◆ Bald Eagle Nest | ● Little Blue Heron | ○ White Ibis |
| ▲ Eastern Indigo Snake | ○ Southeastern American Kestrel | ● Bald Eagle | ● Wood Stork |
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| ■ Giant Orchid | ● Florida Scrub Jay | ○ Tricolored Heron | |
| ★ Sherman's Fox Squirrel | | | |

REFERENCE

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; Bald Eagle Nest Data: Florida Fish & Wildlife Conservation Commission, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008



PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP			
	MXD File No. 103-89627A005		SCALE AS SHOWN
	DESIGN	JDG	02/18/2011
	GIS	JDG	02/18/2011
	CHECK	SAR	02/18/2011
	REVIEW	KB	02/18/2011
FIGURE 4			PAGE 57 OF 62



LEGEND

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

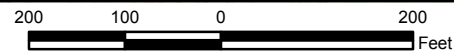
Bald Eagle Nest

GOLDER OBSERVED SPECIES

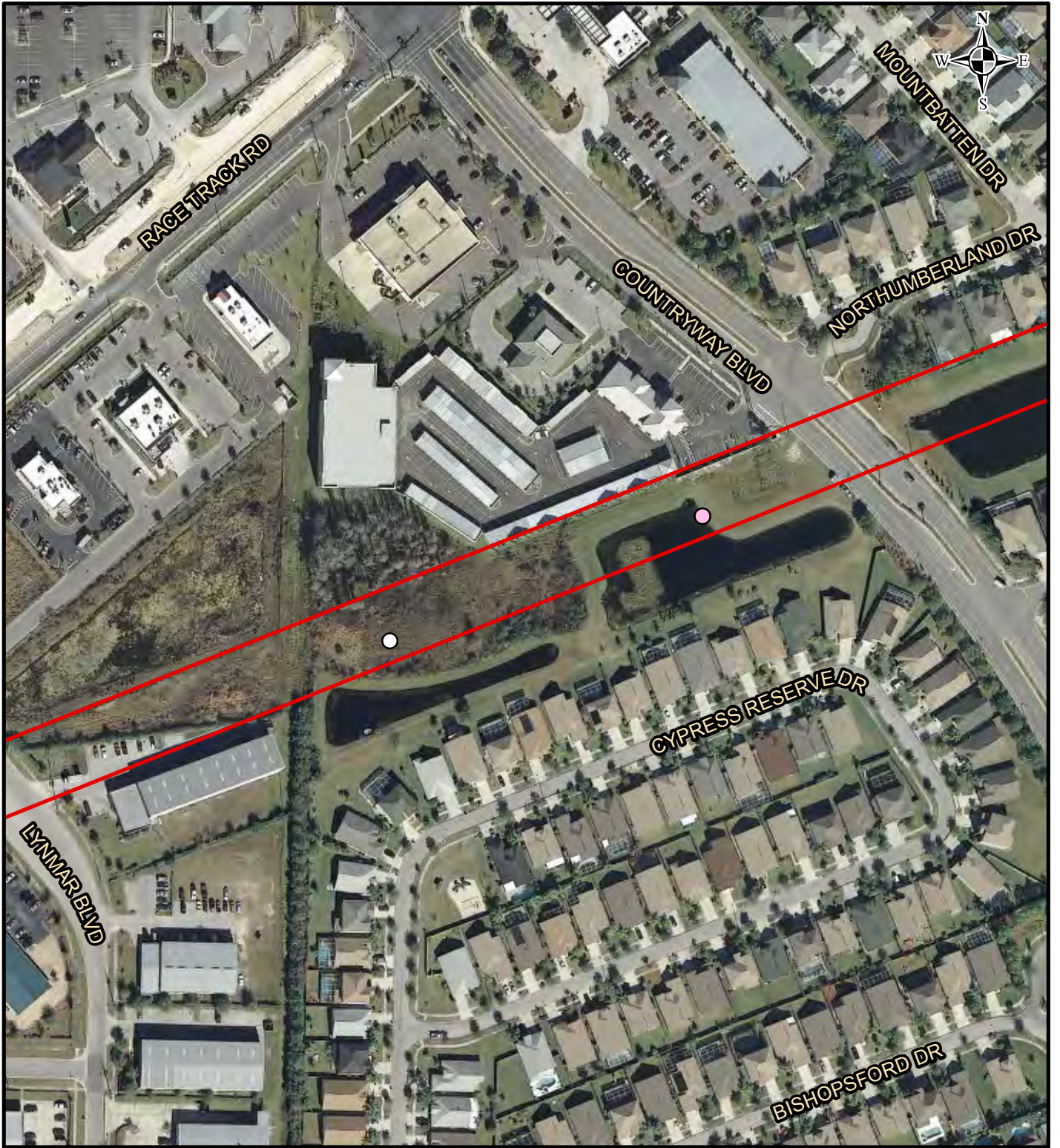
- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
| Giant Orchid | Florida Scrub Jay | Tricolored Heron | |
| Sherman's Fox Squirrel | | | |

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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; Bald Eagle Nest Data: Florida Fish & Wildlife Conservation Commission, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008



PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP				
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	DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 58 OF 62
	GIS	JDG	02/18/2011	
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	REVIEW	KB	02/18/2011	



LEGEND

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

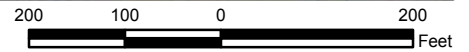
Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|------------------------|-------------------------------|-------------------|-------------|
| American Alligator | Bald Eagle Nest | Little Blue Heron | White Ibis |
| Eastern Indigo Snake | Southeastern American Kestrel | Bald Eagle | Wood Stork |
| Gopher Tortoise | Florida Sandhill Crane | Peregrine Falcon | Snowy Egret |
| Giant Orchid | Florida Scrub Jay | Tricolored Heron | |
| Sherman's Fox Squirrel | | | |

REFERENCE

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; Bald Eagle Nest Data: Florida Fish & Wildlife Conservation Commission, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008



<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p> <p>POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP</p>				
	MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	<p>FIGURE 4</p> <p>PAGE 59 OF 62</p>
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	CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011		

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PHP Preferred Right-of-Way ▲ Florida Natural Areas Inventory Occurrence

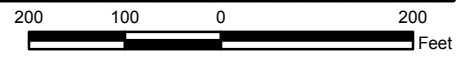
✖ Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|---|---|--|---|
| ▲ American Alligator | ◆ Bald Eagle Nest | ● Little Blue Heron | ○ White Ibis |
| ▲ Eastern Indigo Snake | ○ Southeastern American Kestrel | ● Bald Eagle | ● Wood Stork |
| ▲ Gopher Tortoise | ● Florida Sandhill Crane | ● Peregrine Falcon | ○ Snowy Egret |
| ■ Giant Orchid | ● Florida Scrub Jay | ○ Tricolored Heron | |
| ★ Sherman's Fox Squirrel | | | |

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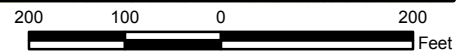
PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS LISTED SPECIES MAP			
		MXD File No. 103-89627A005	SCALE AS SHOWN
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 60 OF 62
GIS	JDG	02/18/2011	
CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011	

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LEGEND

- PHP Preferred Right-of-Way
- Florida Natural Areas Inventory Occurrence
- ♻️ Bald Eagle Nest



GOLDER OBSERVED SPECIES

- | | | | |
|---|---|---|---|
| <ul style="list-style-type: none"> ▲ American Alligator ▲ Eastern Indigo Snake ▲ Gopher Tortoise ■ Giant Orchid ★ Sherman's Fox Squirrel | <ul style="list-style-type: none"> ◆ Bald Eagle Nest ○ Southeastern American Kestrel ○ Florida Sandhill Crane ○ Florida Scrub Jay | <ul style="list-style-type: none"> ○ Little Blue Heron ○ Bald Eagle ○ Peregrine Falcon ○ Snowy Egret ○ Tricolored Heron | <ul style="list-style-type: none"> ○ White Ibis ○ Wood Stork |
|---|---|---|---|

REFERENCE

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; Bald Eagle Nest Data: Florida Fish & Wildlife Conservation Commission, 2009; Wood Stork Colony Data: U.S. Fish & Wildlife Service, 2009; Aerials: FDOT, 2008

PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 61 OF 62
GIS	JDG	02/18/2011	
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REVIEW	KB	02/18/2011	



LEGEND

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

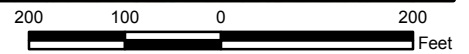
● Bald Eagle Nest

GOLDER OBSERVED SPECIES

- | | | | |
|---|--|--|---|
| ▲ American Alligator | ◆ Bald Eagle Nest | ● Little Blue Heron | White Ibis |
| ▲ Eastern Indigo Snake | Southeastern American Kestrel | ● Bald Eagle | ● Wood Stork |
| ▲ Gopher Tortoise | ● Florida Sandhill Crane | ● Peregrine Falcon | ● Snowy Egret |
| ■ Giant Orchid | ● Florida Scrub Jay | Tricolored Heron | |
| ★ Sherman's Fox Squirrel | | | |

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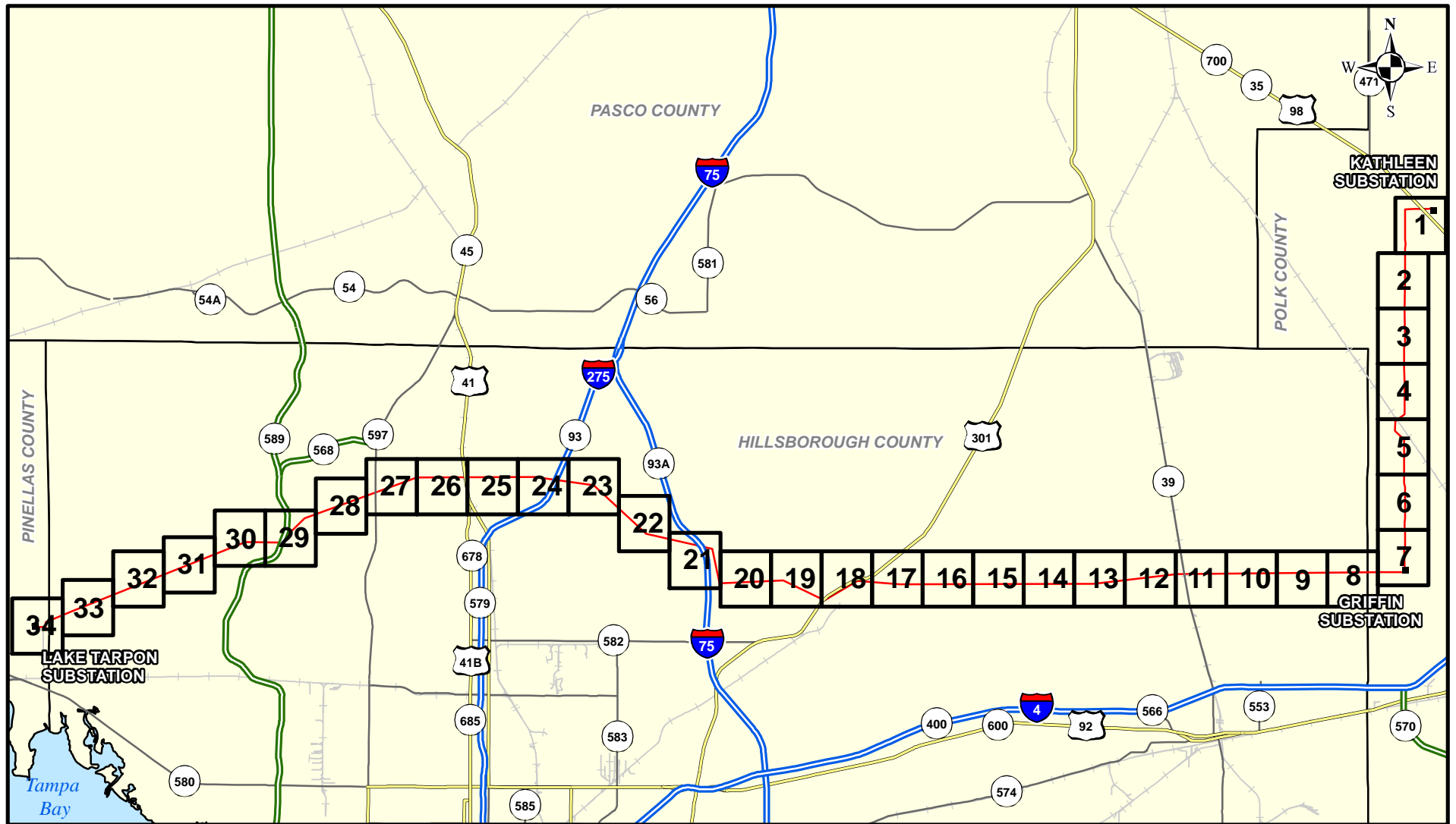


PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
LISTED SPECIES MAP



MXD File No. 103-89627A005		SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 4 PAGE 62 OF 62
GIS	JDG	02/18/2011	
CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011	

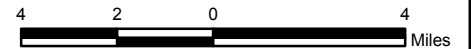


LEGEND

- Interstate
- Toll Road
- US Road
- State Road
- Railroad
- PHP 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
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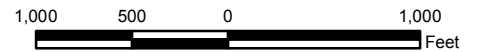


PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS SOILS MAP			
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	DESIGN	JDG	02/18/2011
	GIS	JDG	02/18/2011
	CHECK	SAR	02/18/2011
	REVIEW	KB	02/18/2011
			REV. 0 FIGURE 5 INDEX

FIGURE 5
POLK - HILLSBOROUGH - PINELLAS
SOIL CLASSIFICATION TABLE

SOIL ID	DESCRIPTION	COUNTY
2	Adamsville fine sand	Hillsborough
3	Archbold fine sand	Hillsborough
4	Arents, nearly level	Hillsborough
5	Basinger, Holopaw, and Samsula soils, depressional	Hillsborough
6	Broward-Urban land complex	Hillsborough
7	Candler fine sand, 0 to 5 percent slopes	Hillsborough
8	Candler fine sand, 5 to 12 percent slopes	Hillsborough
12	Chobee sandy loam, frequently flooded	Hillsborough
13	Eaton fine sand	Hillsborough
14	Eaton mucky sand, depressional	Hillsborough
15	Felda fine sand	Hillsborough
16	Felda fine sand, occasionally flooded	Hillsborough
17	Floridana fine sand	Hillsborough
18	Fort Meade loamy fine sand, 0 to 5 percent slopes	Hillsborough
19	Gainesville loamy fine sand, 0 to 5 percent slopes	Hillsborough
21	Immokalee fine sand	Hillsborough
23	Kendrick fine sand, 2 to 5 percent slopes	Hillsborough
25	Lake fine sand, 0 to 5 percent slopes	Hillsborough
26	Lochloosa-Micanopy fine sands, 0 to 5 percent slopes	Hillsborough
27	Malabar fine sand	Hillsborough
29	Myakka fine sand	Hillsborough
32	Myakka-Urban land complex	Hillsborough
33	Ona fine sand	Hillsborough
35	Orlando fine sand, 0 to 5 percent slopes	Hillsborough
36	Orsino fine sand, 0 to 5 percent slopes	Hillsborough
37	Paisley fine sand, depressional	Hillsborough
38	Pinellas fine sand	Hillsborough
41	Pomello fine sand, 0 to 5 percent slopes	Hillsborough
43	Quartzipsaments, nearly level	Hillsborough
46	St. Johns fine sand	Hillsborough
47	Seffner fine sand	Hillsborough
51	Haplaquents, clayey	Hillsborough
52	Smyrna fine sand	Hillsborough
53	Tavares-Millhopper fine sands, 0 to 5 percent slopes	Hillsborough
57	Wabasso fine sand	Hillsborough
59	Winder fine sand	Hillsborough
60	Winder fine sand, frequently flooded	Hillsborough
61	Zolfo fine sand	Hillsborough
99	Water	Hillsborough
3	Anclothe fine sand, depressional	Pinellas
10	EauGallie soils and Urban land	Pinellas
11	Felda soils and Urban land	Pinellas

SOIL ID	DESCRIPTION	COUNTY
12	Felda fine sand, depressional	Pinellas
13	Immokalee soils and Urban land	Pinellas
15	Manatee loamy fine sand	Pinellas
16	Matlacha and St. Augustine soils and Urban land	Pinellas
17	Myakka soils and Urban land	Pinellas
22	Pineda soils and Urban land	Pinellas
31	Wabasso soils and Urban land	Pinellas
99	Water	Pinellas
5	EauGallie fine sand	Polk
6	Eaton mucky fine sand, depressional	Polk
7	Pomona fine sand	Polk
9	Lynne sand	Polk
12	Neilhurst sand, 1 to 5 percent slopes	Polk
13	Samsula muck	Polk
14	Sparr sand, 0 to 5 percent slopes	Polk
15	Tavares fine sand, 0 to 5 percent slopes	Polk
16	Urban land	Polk
17	Smyrna and Myakka fine sands	Polk
19	Floridana mucky fine sand, depressional	Polk
20	Fort Meade sand, 0 to 5 percent slopes	Polk
21	Immokalee sand	Polk
23	Ona fine sand	Polk
25	Placid and Myakka fine sands, depressional	Polk
26	Lochloosa fine sand	Polk
30	Pompano fine sand	Polk
31	Adamsville fine sand	Polk
32	Kaliga muck	Polk
33	Holopaw fine sand, depressional	Polk
35	Hontoon muck	Polk
36	Basinger mucky fine sand, depressional	Polk
40	Wauchula fine sand	Polk
42	Felda fine sand	Polk
43	Oldsmar fine sand	Polk
44	Paisley fine sand	Polk
47	Zolfo fine sand	Polk
48	Chobee fine sandy loam, depressional	Polk
57	Haplaquents clayey	Polk
58	Udorthents, excavated	Polk
62	Wabasso fine sand	Polk
67	Bradenton fine sand	Polk
80	Chobee fine sandy loam, frequently flooded	Polk
86	Felda fine sand, depressional	Polk
87	Basinger fine sand	Polk
99	Water	Polk



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

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

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 2 OF 34	
GIS JDG 02/18/2011		
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LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

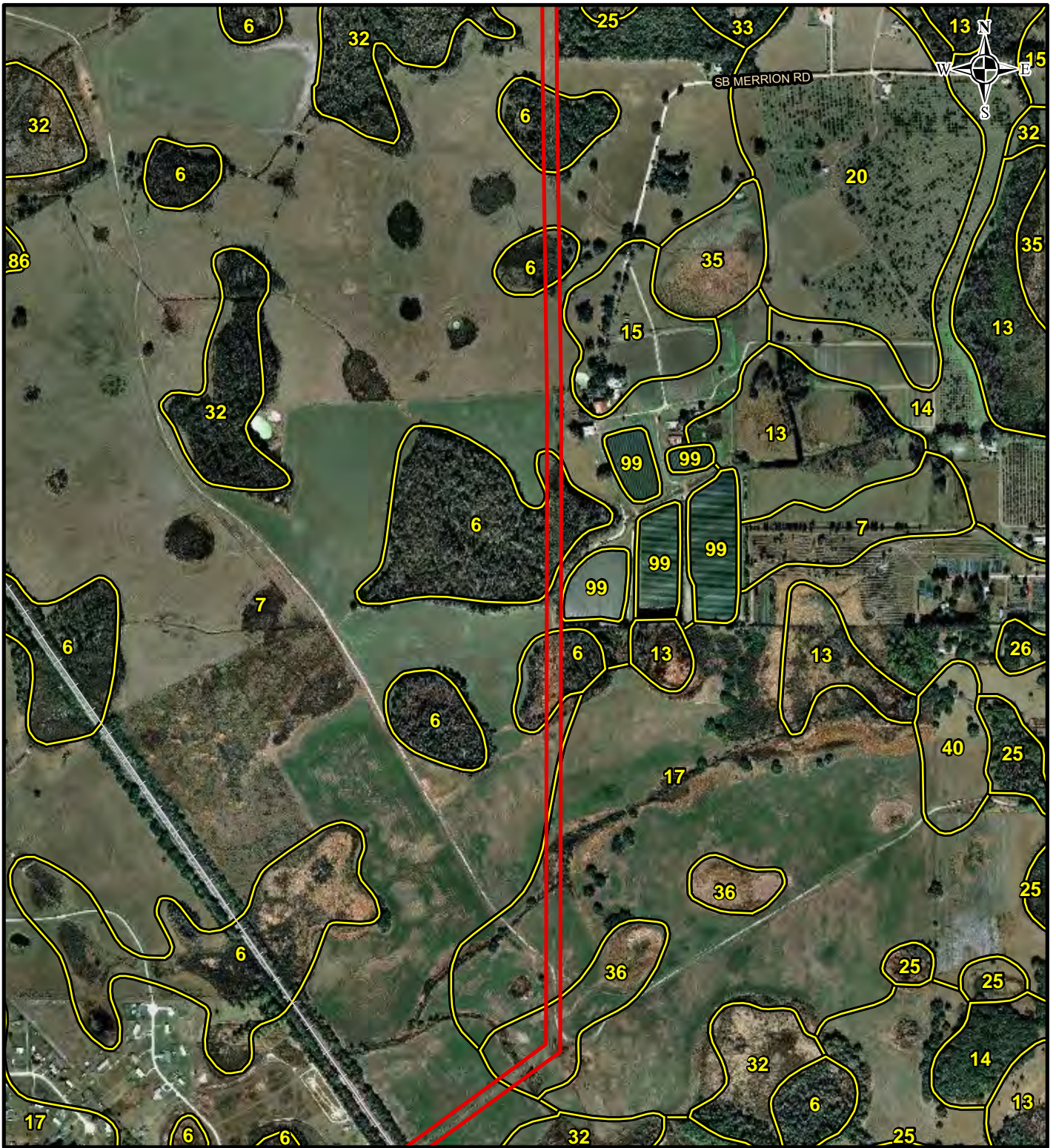
NOTE

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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS JDG 02/18/2011	PAGE 3 OF 34	
	CHECK SAR 02/18/2011		
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LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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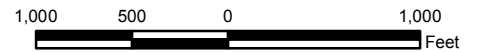
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
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	REVIEW	KB	02/18/2011
<p>FIGURE 5</p>			<p>PAGE 4 OF 34</p>



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary



NOTE

See Figure 5 Soil Identification Table for Soil Definitions

REFERENCE

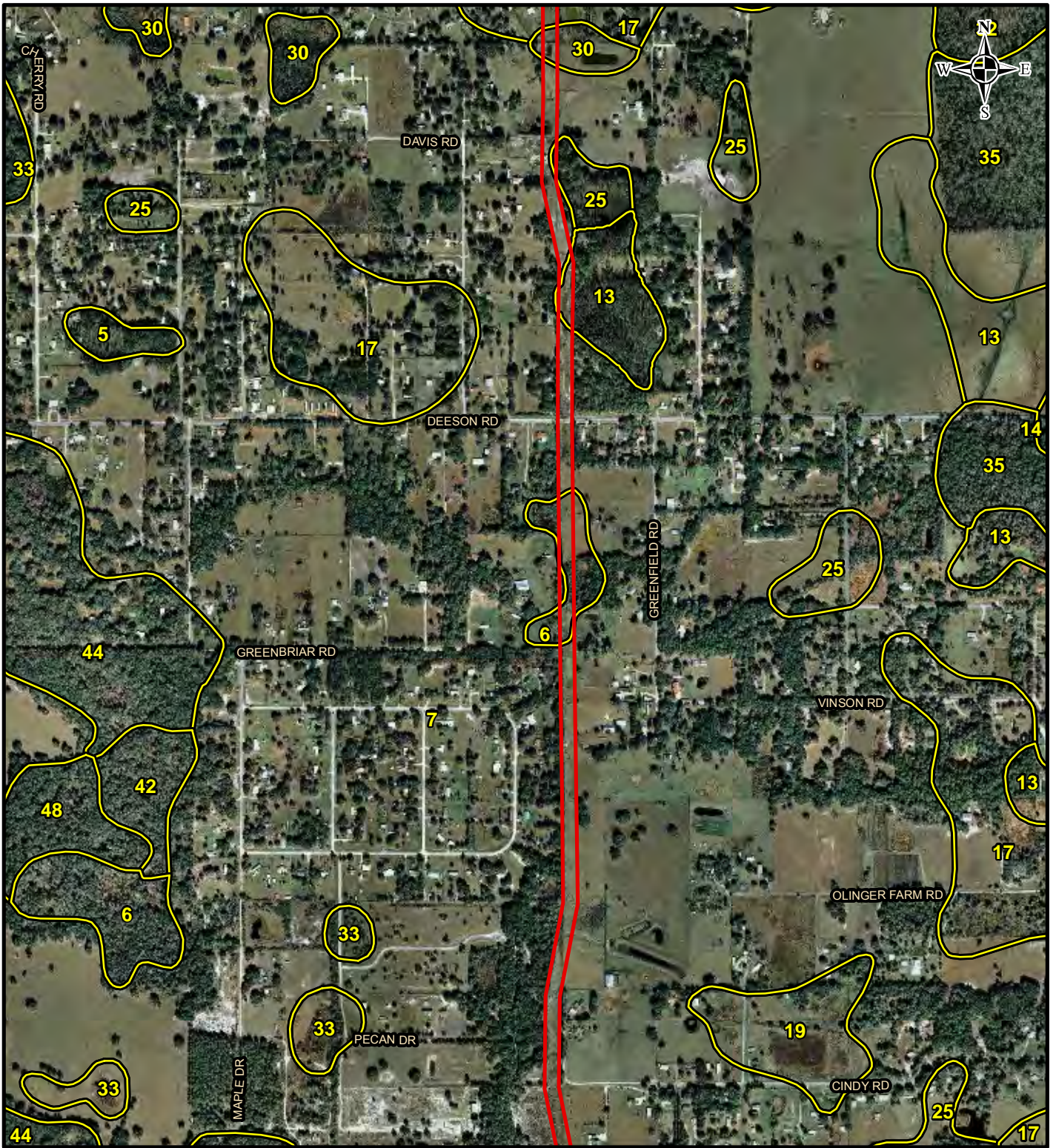
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 5 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
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LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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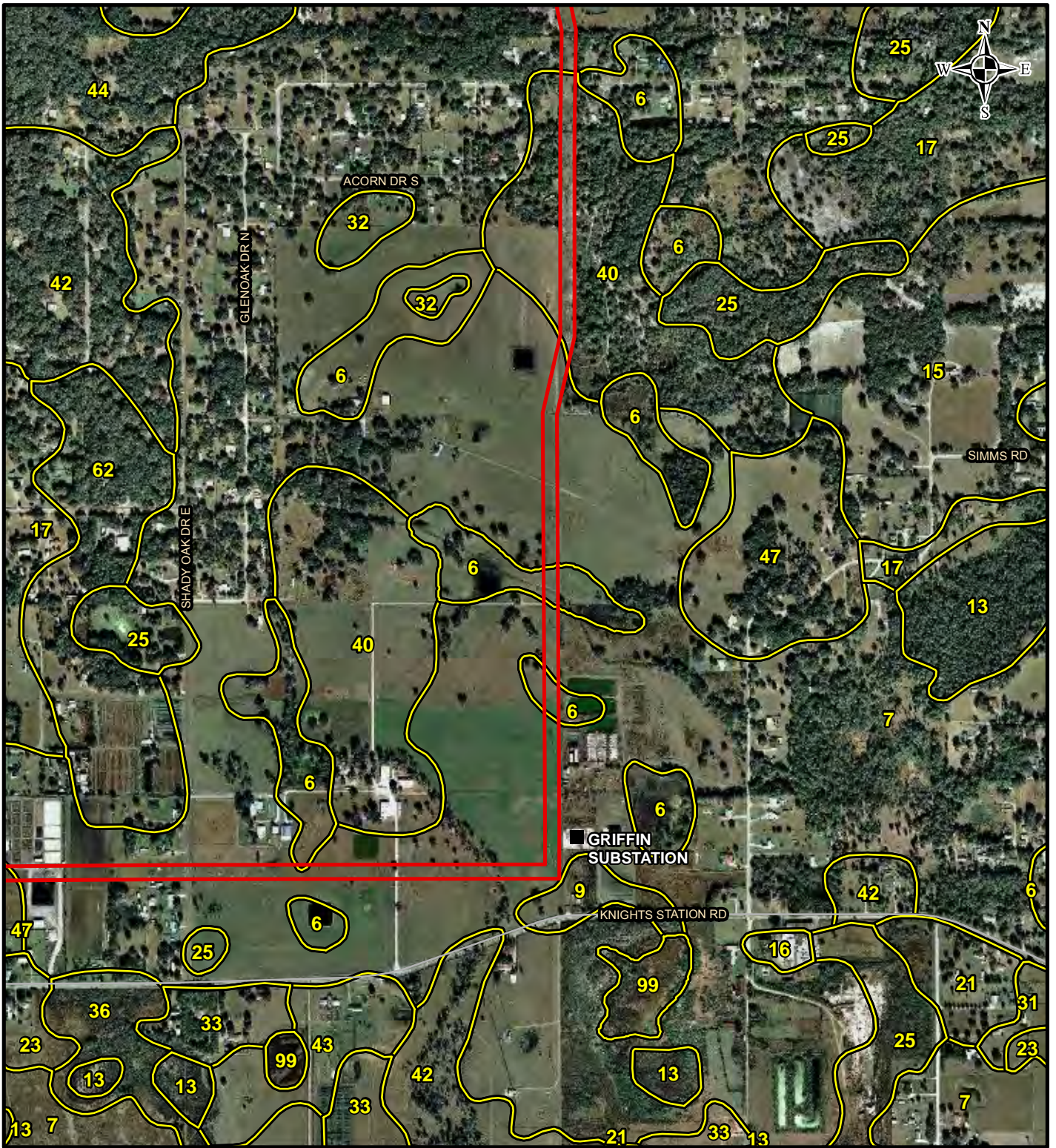
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 6 OF 34	
GIS JDC 02/18/2011		
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REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

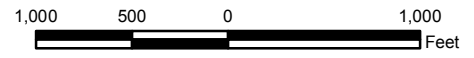
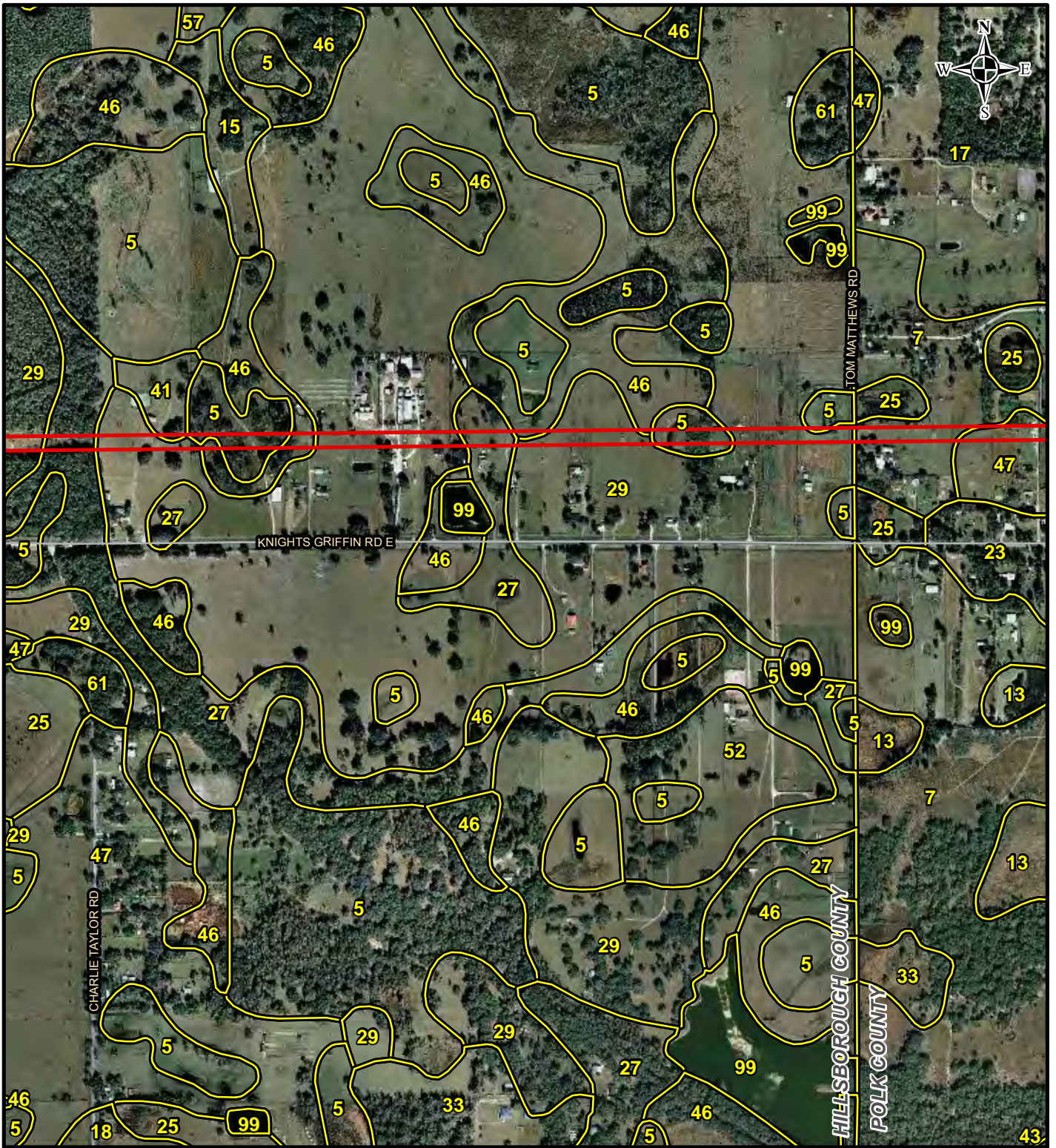
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS JDG 02/18/2011	PAGE 7 OF 34	
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LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

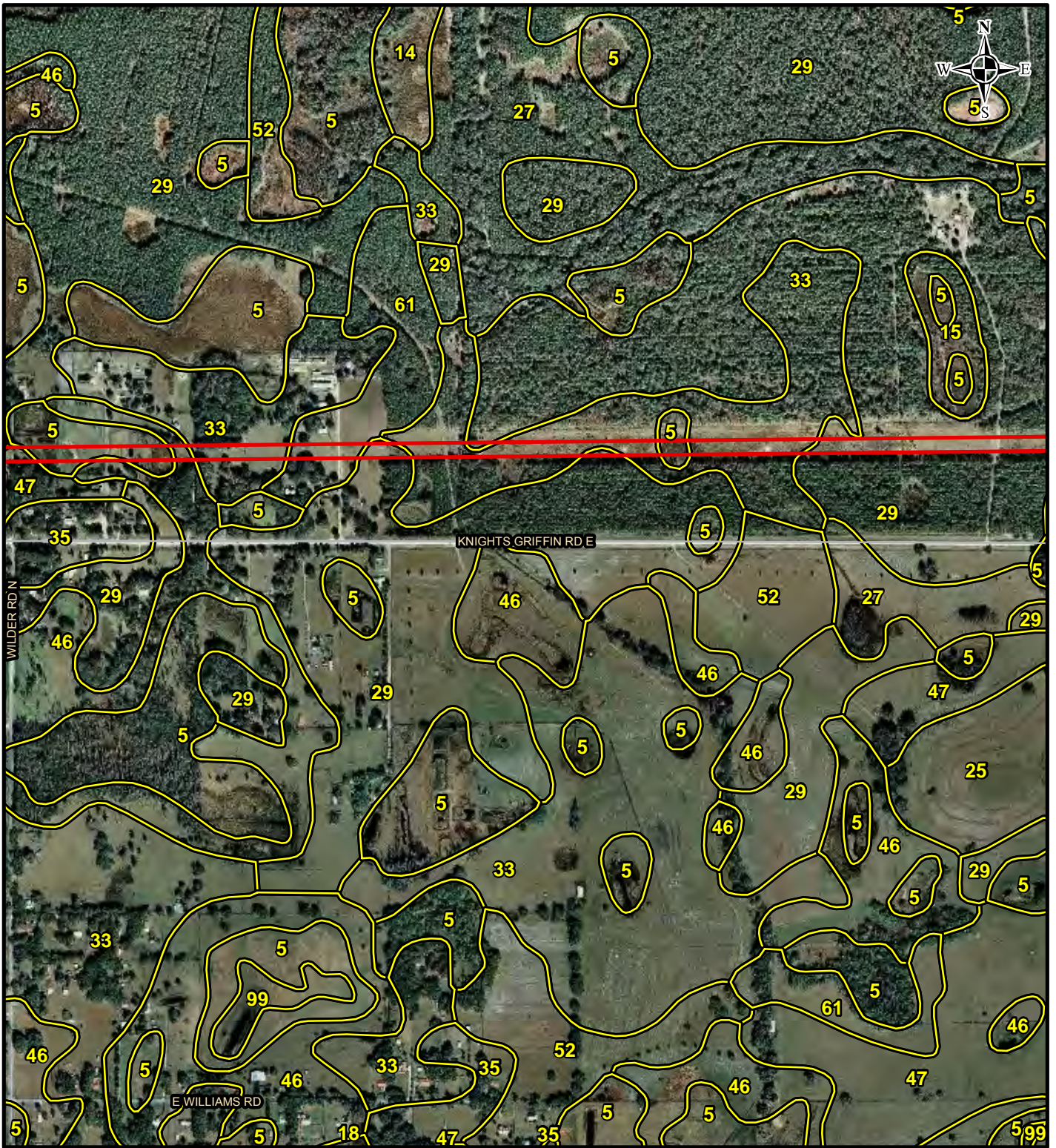
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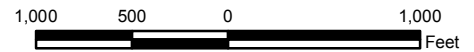
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS JDG 02/18/2011	PAGE 8 OF 34	
	CHECK SAR 02/18/2011		
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LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary



NOTE

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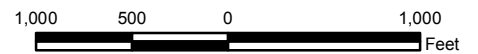
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 9 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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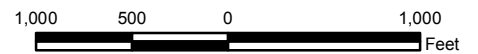
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	<p>FIGURE 5</p> <p>PAGE 10 OF 34</p>	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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REFERENCE

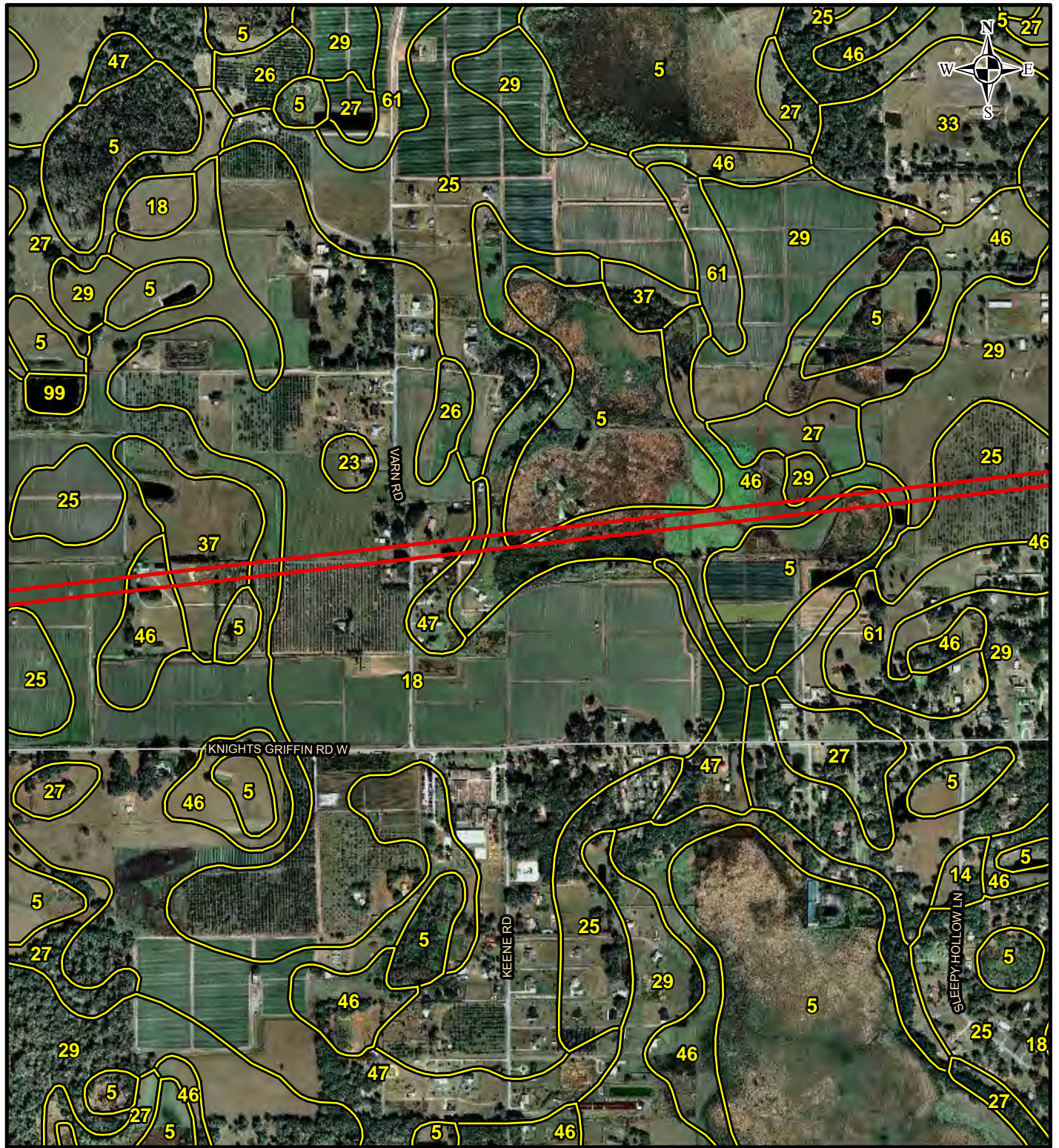
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 11 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

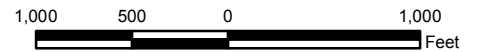
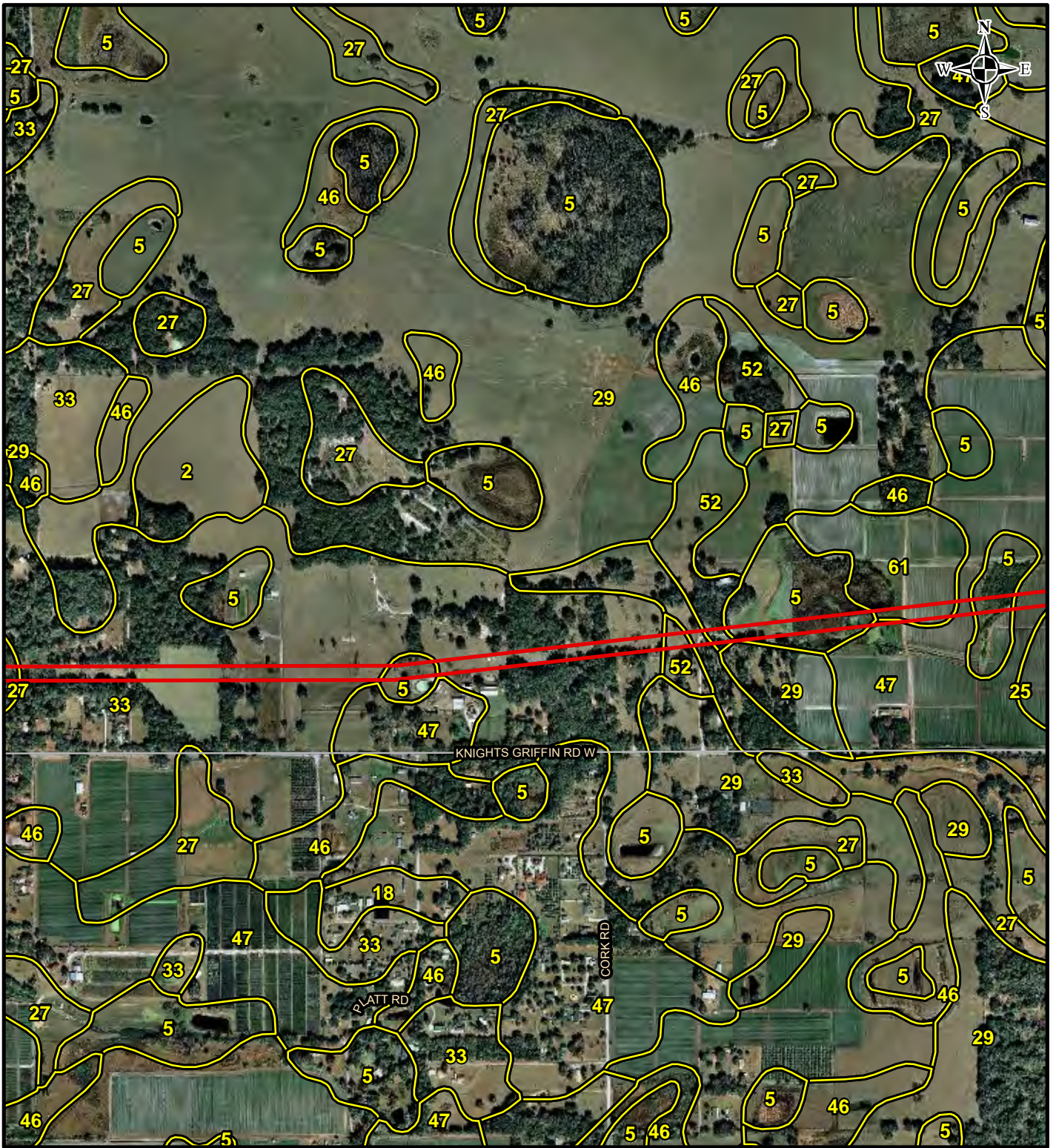
NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>				
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>				
	MXD File No. 103-89627A007		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	<p>FIGURE 5 PAGE 12 OF 34</p>
	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
	REVIEW	KB	02/18/2011	



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP

	MXD File No. 103-89627A007		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	FIGURE 5 PAGE 13 OF 34
	GIS	JDG	02/18/2011	
	CHECK	SAR	02/18/2011	
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LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE
See Figure 5 Soil Identification Table for Soil Definitions

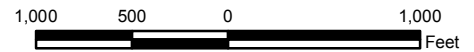
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS SOILS MAP			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS JDG 02/18/2011	PAGE 14 OF 34	
	CHECK SAR 02/18/2011		
	REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary



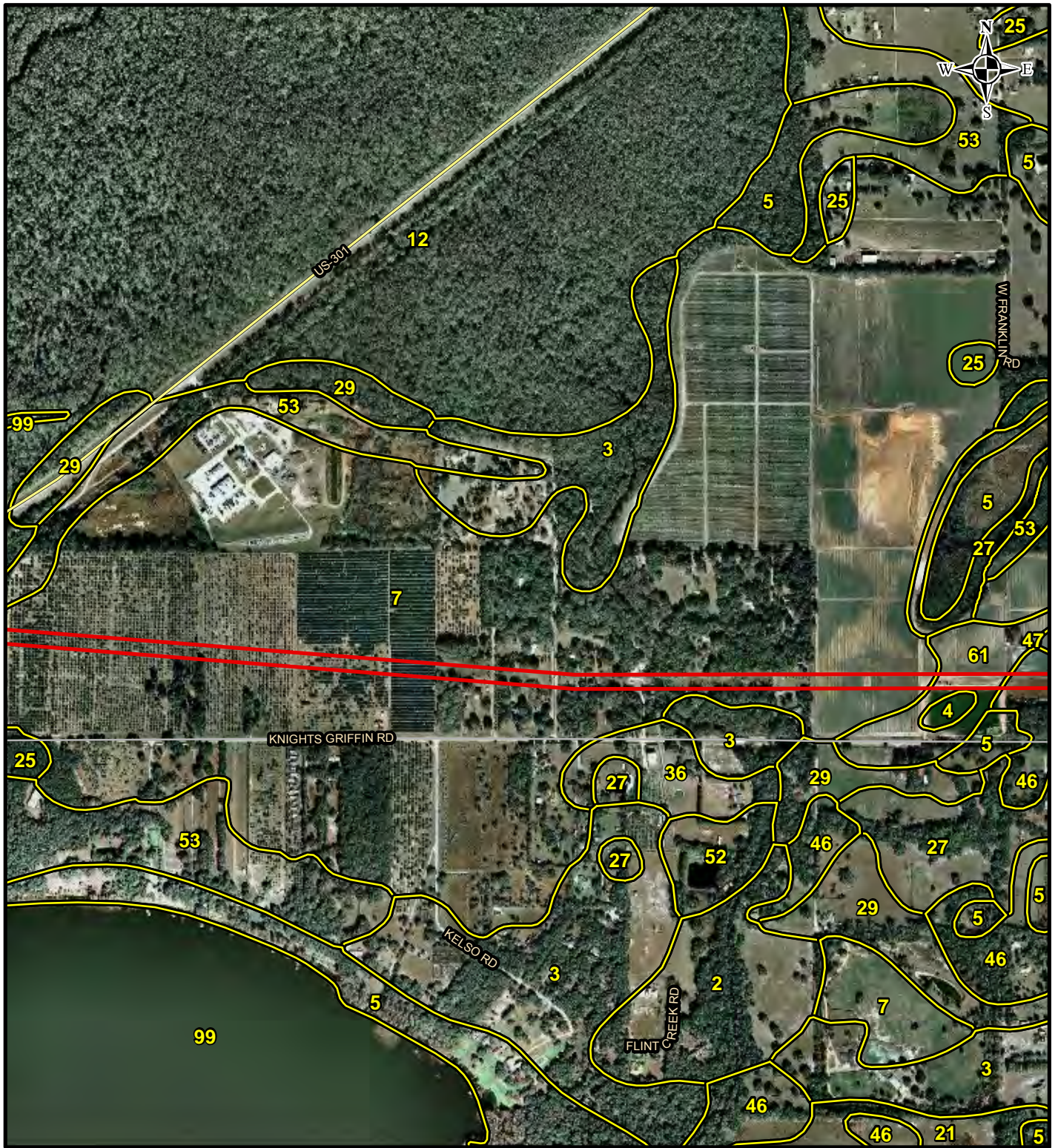
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS SAR 02/18/2011	PAGE 16 OF 34	
	CHECK SAR 02/18/2011		
	REVIEW KB 02/18/2011		



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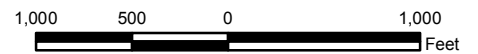
- PHP Preferred Right-of-Way
- Soil Boundary

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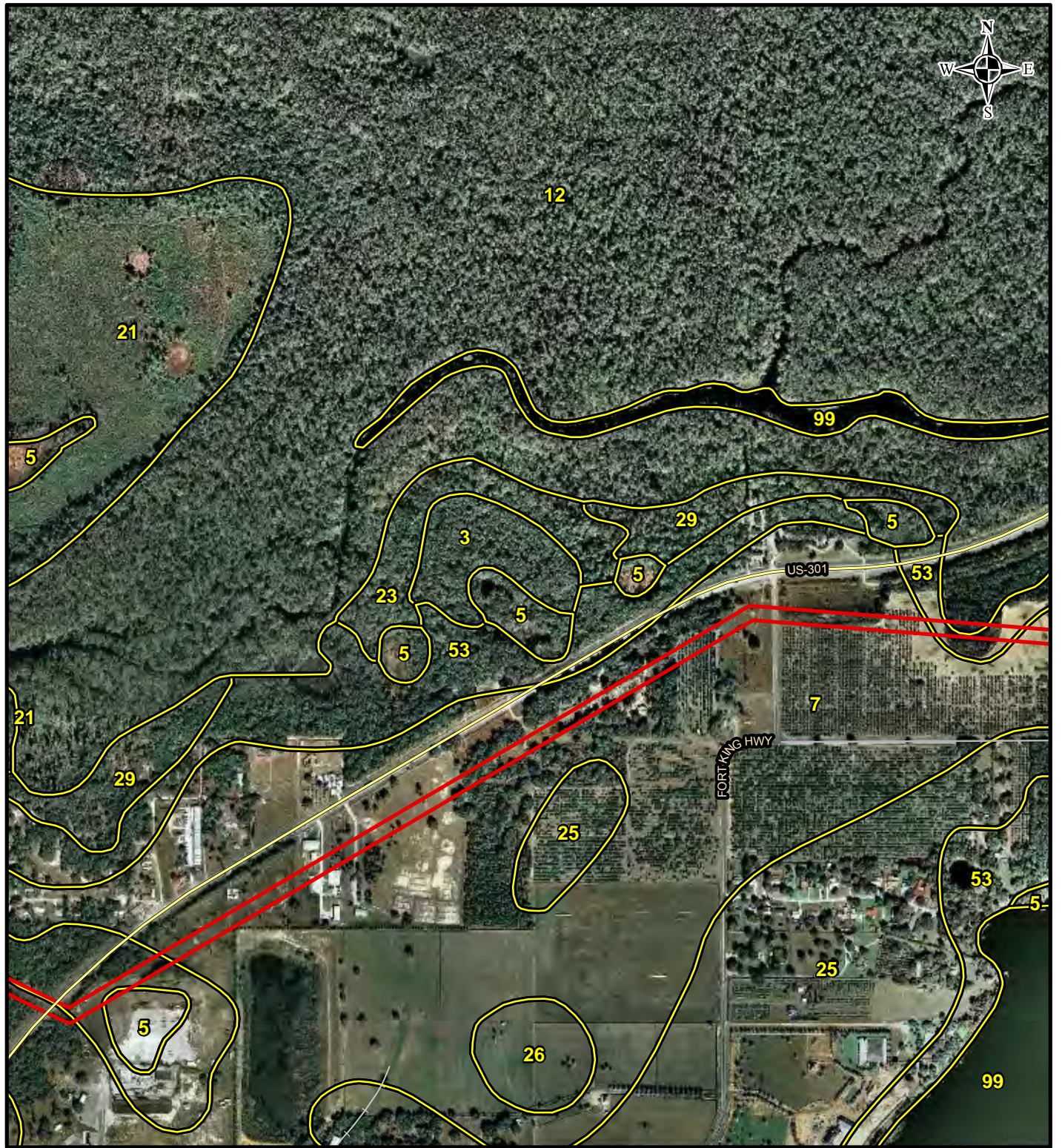


PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP

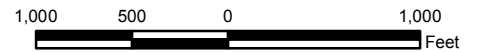


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DESIGN JDG 02/18/2011	FIGURE 5 PAGE 17 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary



NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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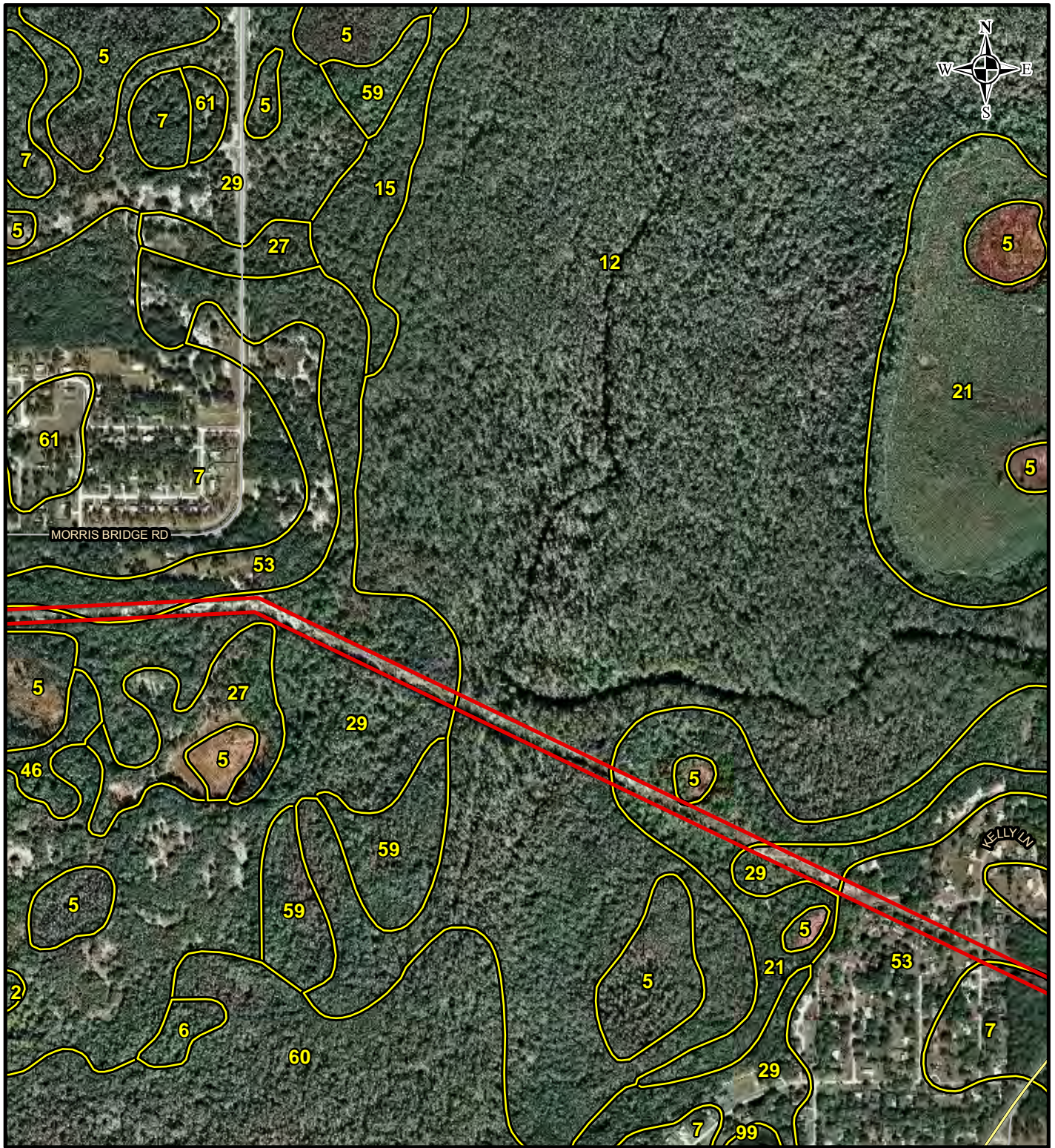
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 18 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

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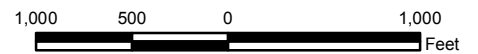
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 19 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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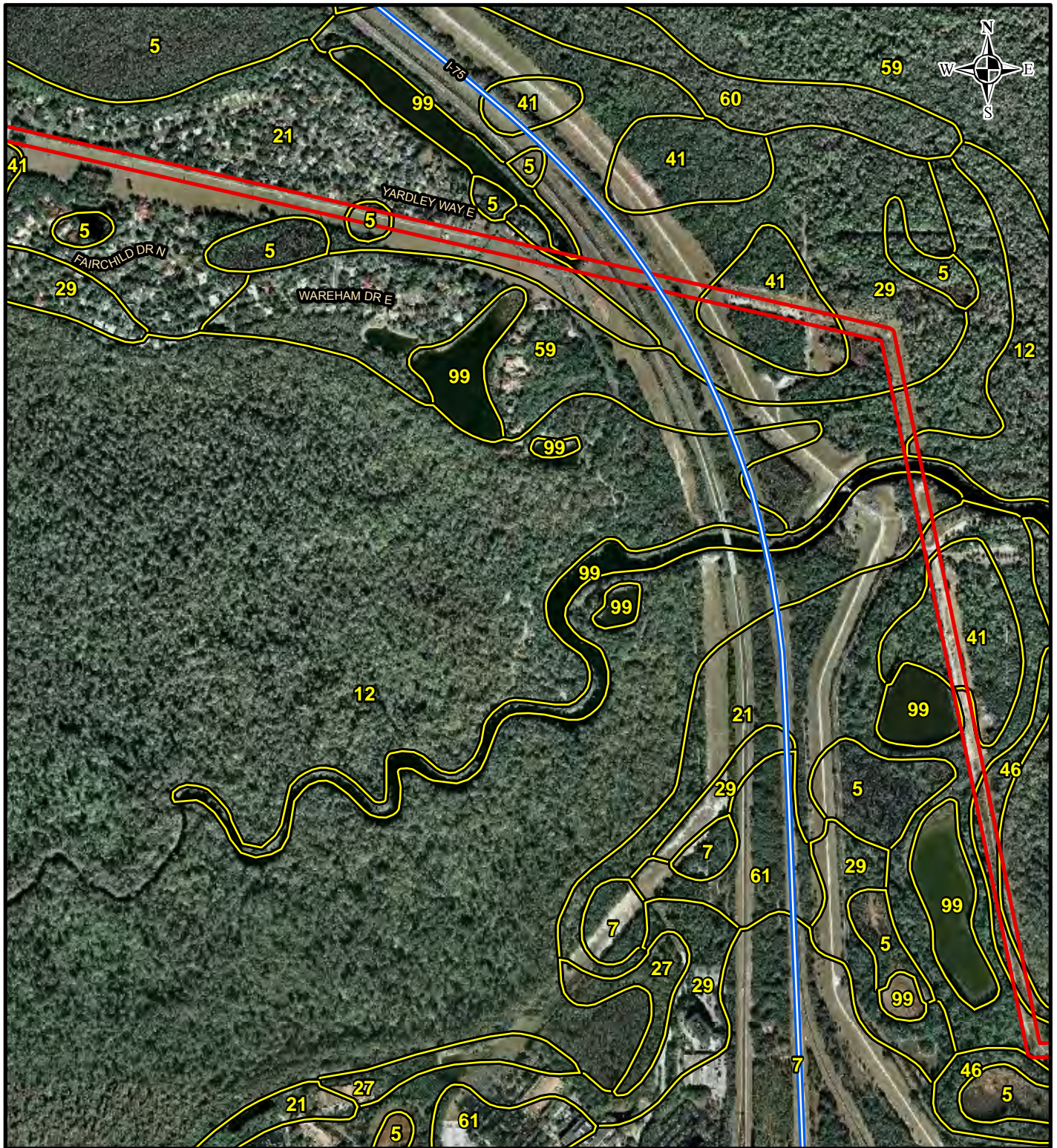
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	<p>FIGURE 5</p> <p>PAGE 20 OF 34</p>	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN	JDG 02/18/2011	<p>FIGURE 5 PAGE 21 OF 34</p>
	GIS	JDG 02/18/2011	
	CHECK	SAR 02/18/2011	
	REVIEW	KB 02/18/2011	



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

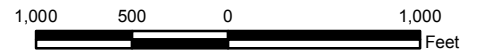
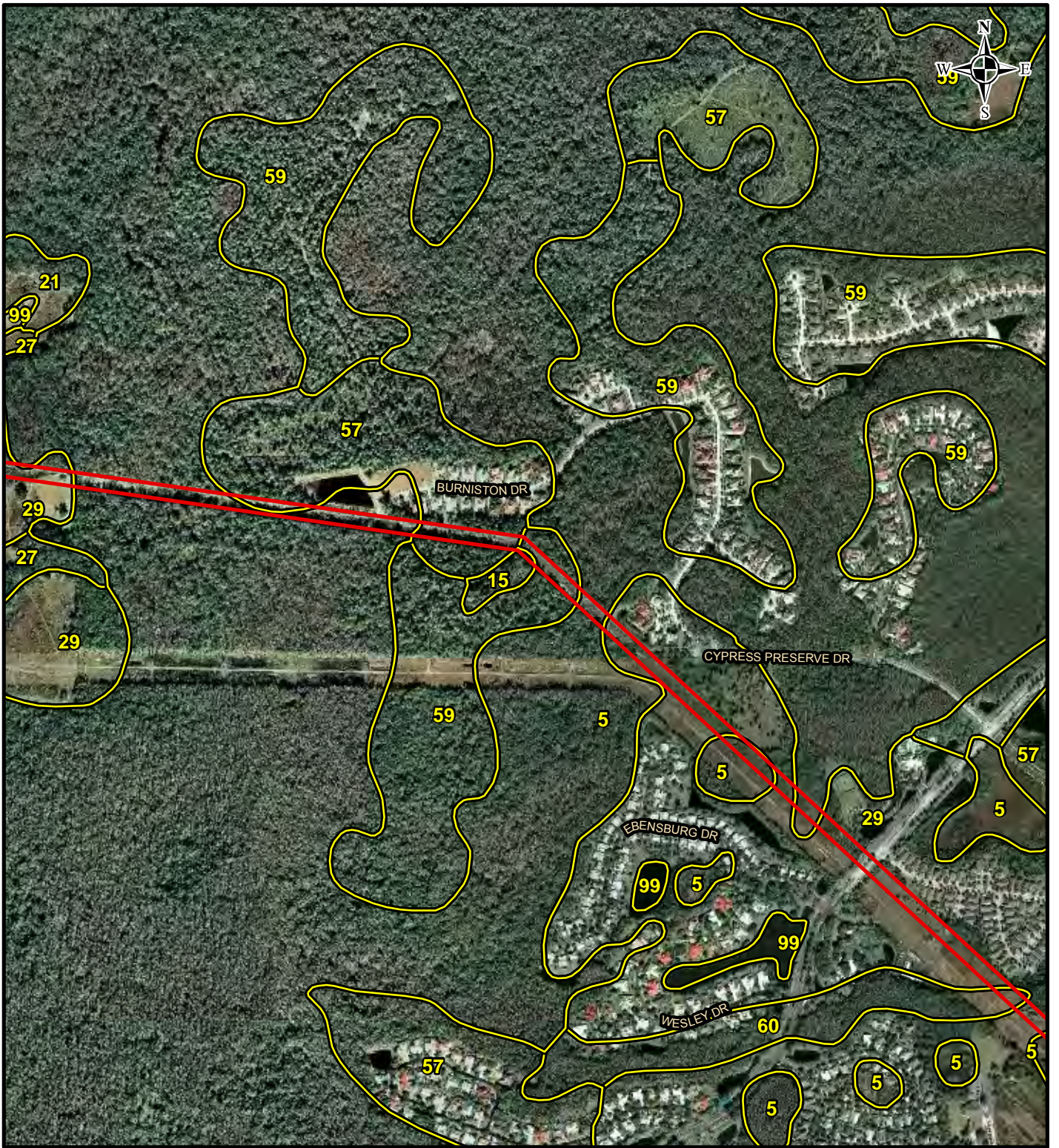
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS JDG 02/18/2011	PAGE 22 OF 34	
	CHECK SAR 02/18/2011		
	REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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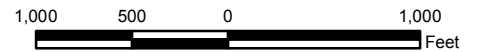
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 23 OF 34	
GIS JDC 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP

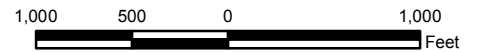


MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 24 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary



NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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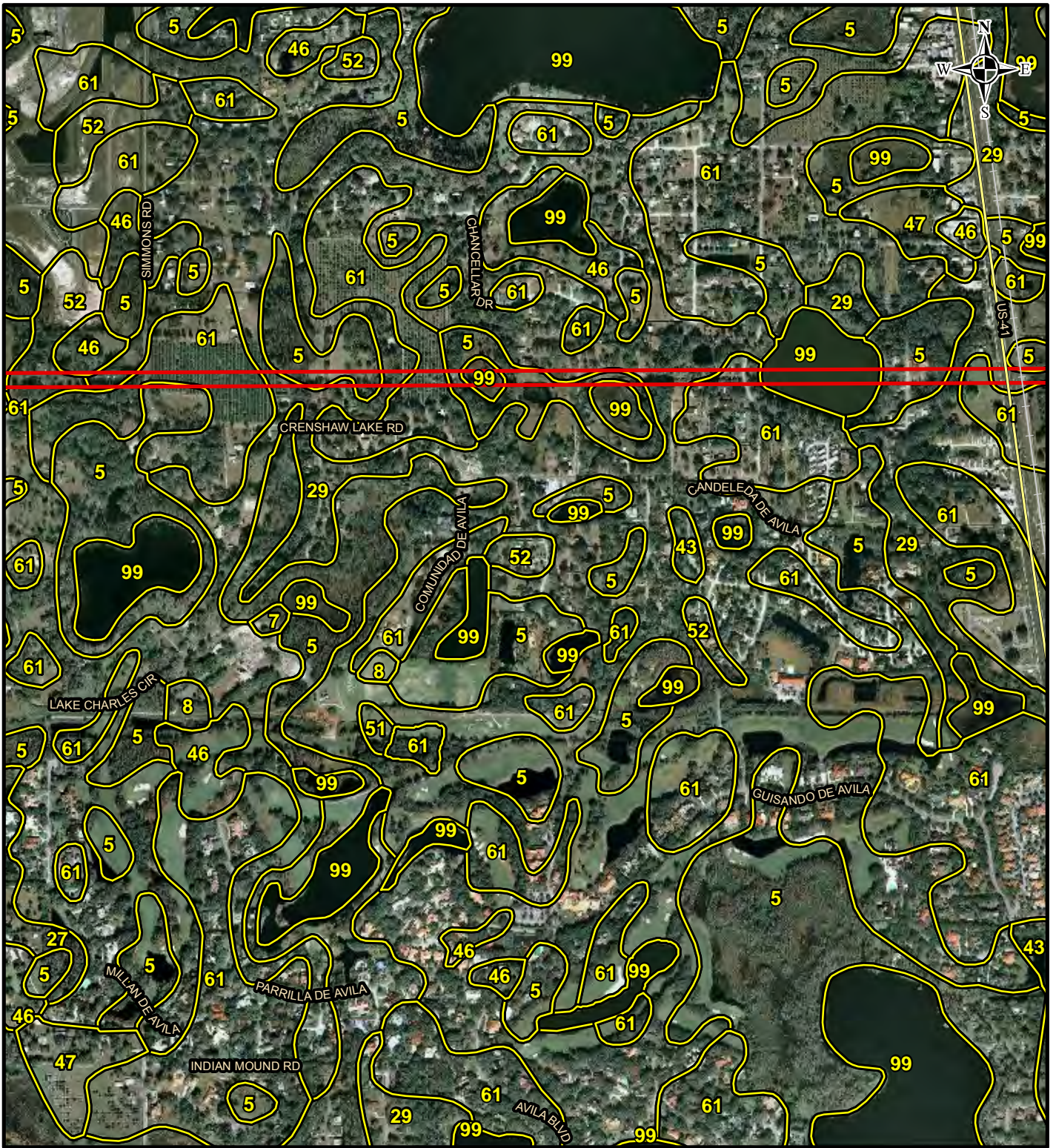
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 25 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

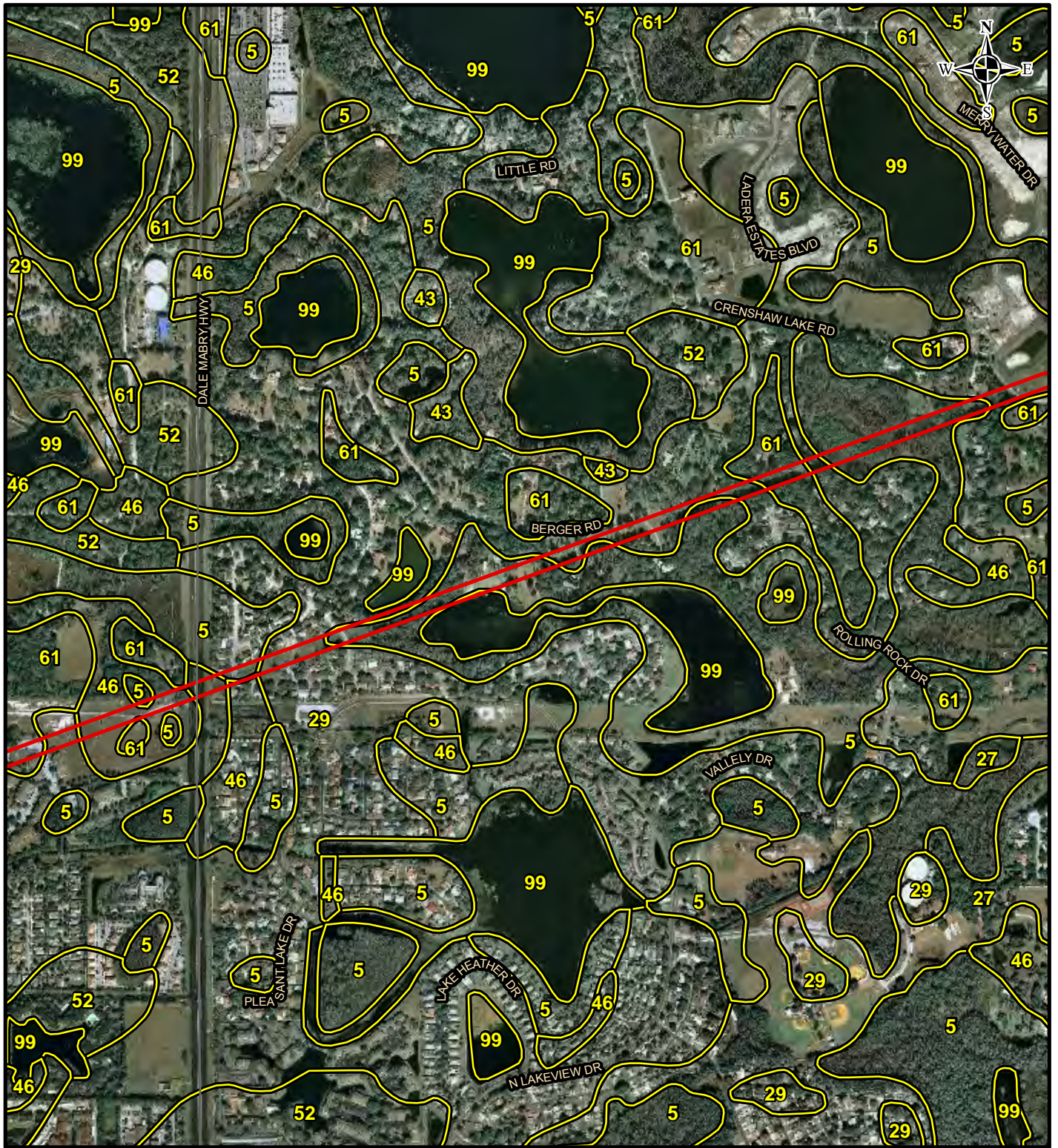
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS SAR 02/18/2011	PAGE 26 OF 34	
	CHECK SAR 02/18/2011		
	REVIEW KB 02/18/2011		



LEGEND

-  PHP Preferred Right-of-Way
-  Soil Boundary

NOTE


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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP

	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5 PAGE 27 OF 34	
	GIS JDG 02/18/2011		
	CHECK SAR 02/18/2011		
	REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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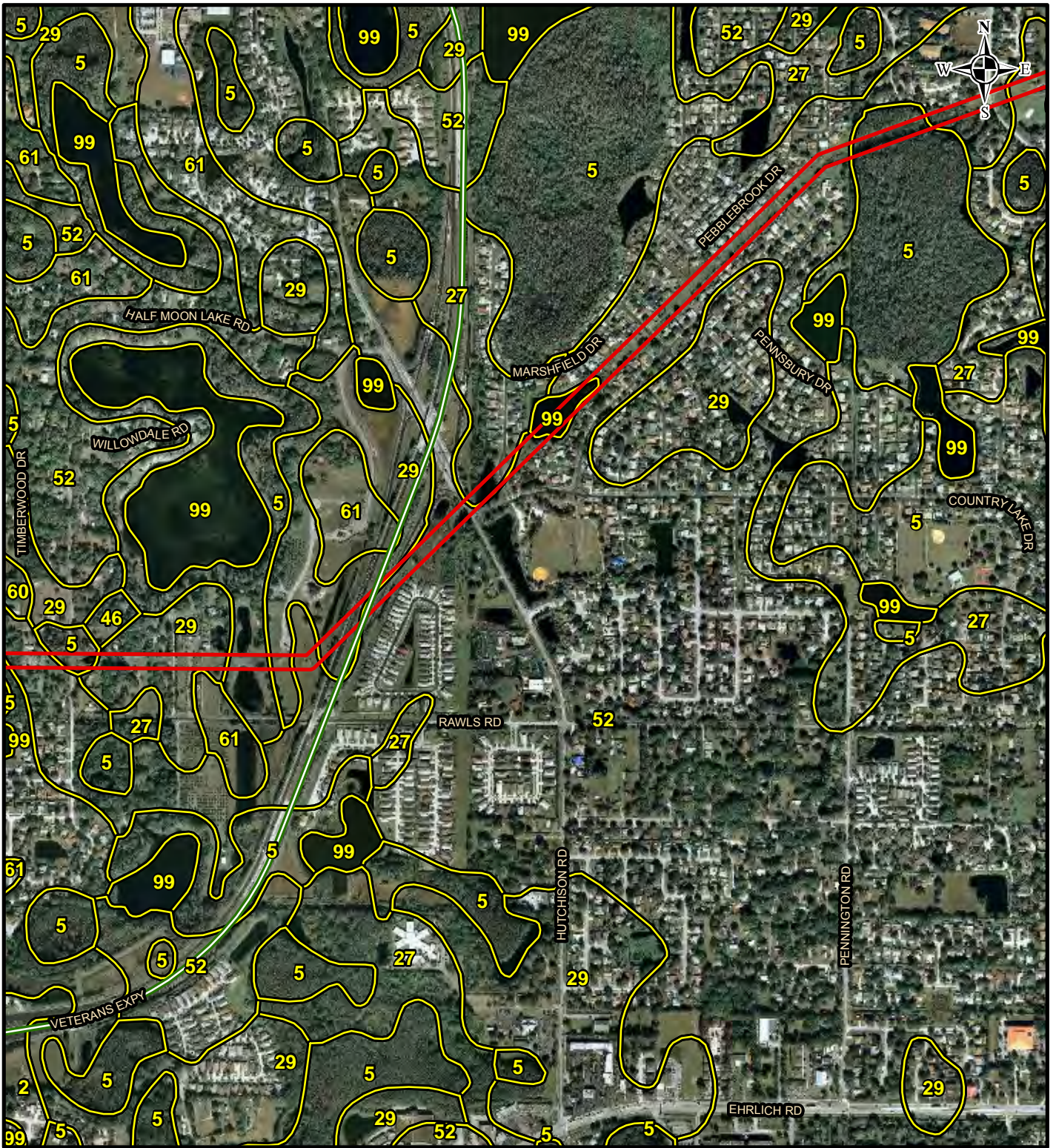
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 28 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

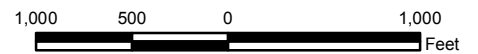
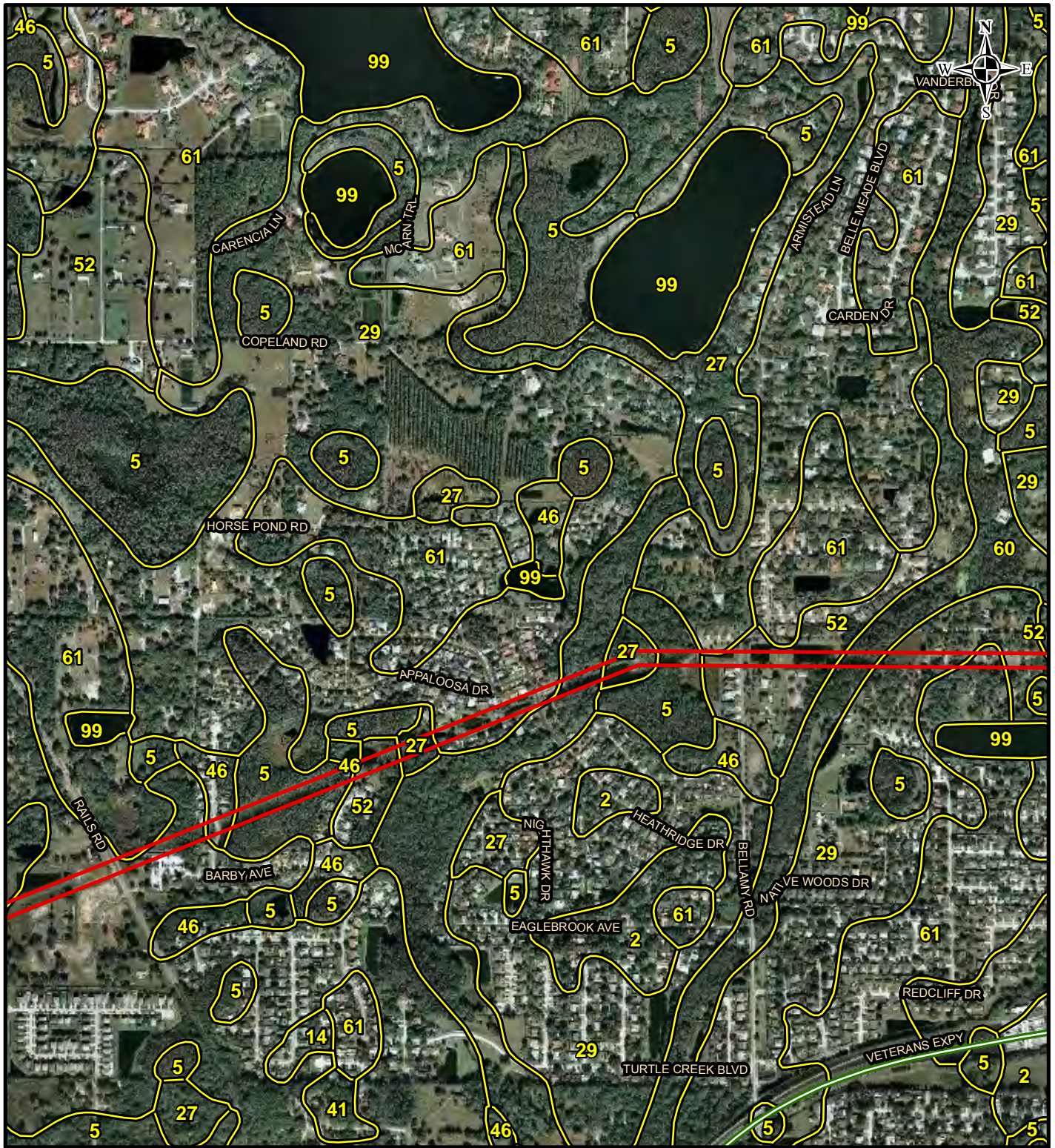
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<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SOILS MAP</p>			
	MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 5	
	GIS JDG 02/18/2011	PAGE 29 OF 34	
	CHECK SAR 02/18/2011		
	REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

See Figure 5 Soil Identification Table for Soil Definitions

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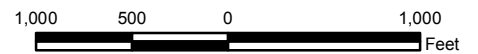
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 30 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	<p>FIGURE 5</p> <p>PAGE 31 OF 34</p>	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 32 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary

NOTE

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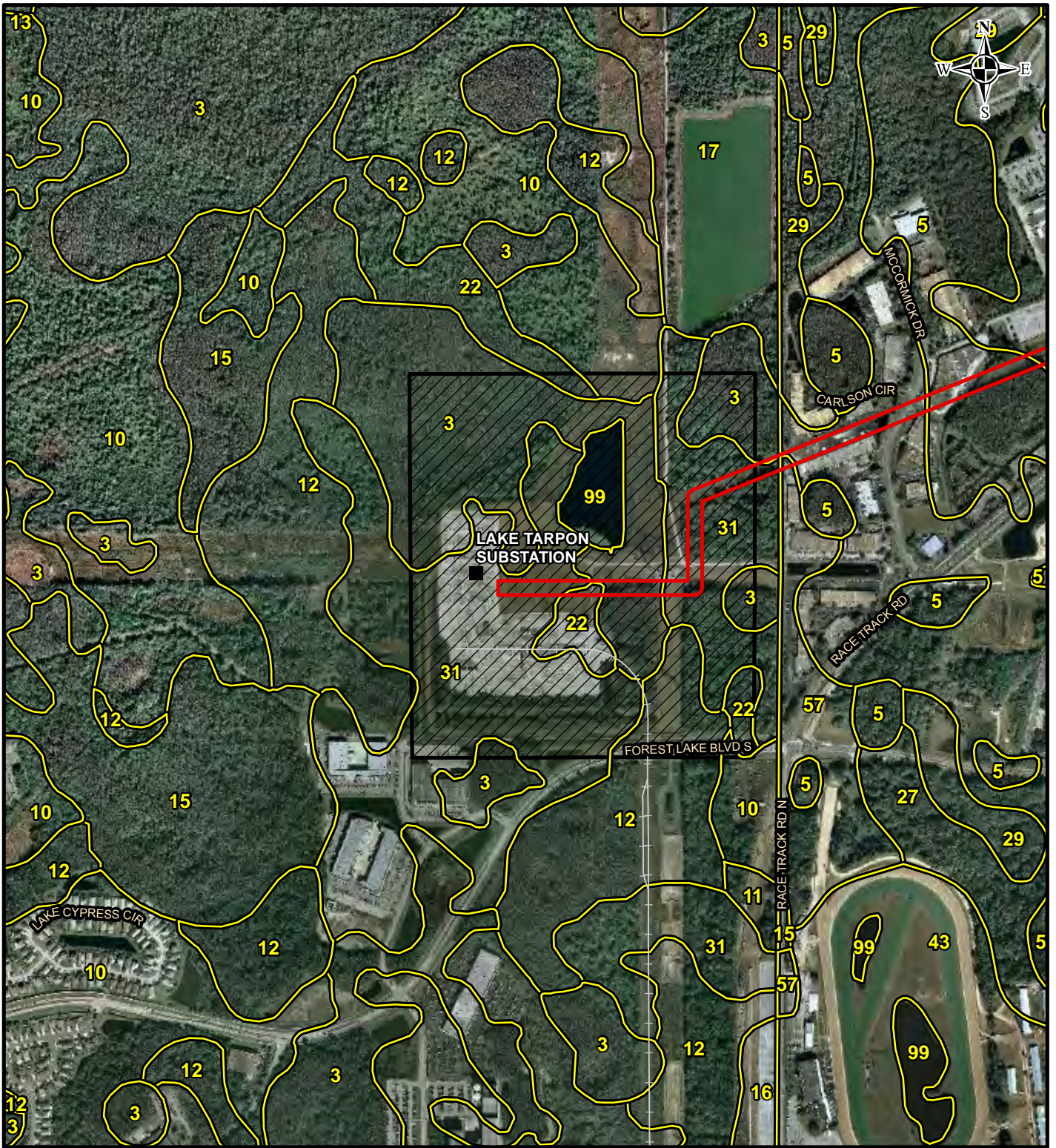
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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP

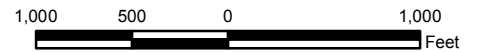


MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 33 OF 34	
GIS JDC 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
- Soil Boundary



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PROGRESS ENERGY FLORIDA
LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
SOILS MAP



MXD File No. 103-89627A007	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 5 PAGE 34 OF 34	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		

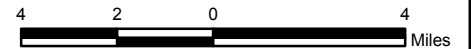


LEGEND

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

REFERENCE

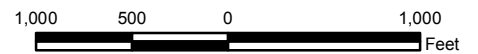
Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009;
 Roads: Florida Department of Transportation, 2010; Railroads: FDEP, 1992; County
 Boundary: U.S. Census Bureau, 2000





PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS GOPHER TORTOISE SUITABLE SOILS MAP			
	MXD File No. 103-89627A010		SCALE AS SHOWN
	DESIGN	JDG	02/18/2011
	GIS	JDG	02/18/2011
	CHECK	SAR	02/18/2011
	REVIEW	KB	02/18/2011
FIGURE 6 INDEX			REV. 0

FIGURE 6
POLK - HILLSBOROUGH - PINELLAS SOIL IDENTIFICATION
GOPHER TORTOISE SUITABLE SOILS

SOIL ID	DESCRIPTION	COUNTY
3	Archbold fine sand	Hillsborough
7	Candler fine sand, 0 to 5 percent slopes	Hillsborough
8	Candler fine sand, 5 to 12 percent slopes	Hillsborough
25	Lake fine sand, 0 to 5 percent slopes	Hillsborough
36	Orsino fine sand, 0 to 5 percent slopes	Hillsborough
41	Pomello fine sand, 0 to 5 percent slopes	Hillsborough
43	Quartzipsaments, nearly level	Hillsborough
53	Tavares-Millhopper fine sands, 0 to 5 percent slopes	Hillsborough
54	Tavares-Millhopper fine sands, 5 to 8 percent slopes	Hillsborough
12	Neilhurst sand, 1 to 5 percent slopes	Polk
15	Tavares fine sand, 0 to 5 percent slopes	Polk



LEGEND

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

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

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP

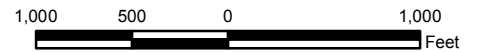


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DESIGN JDG 02/18/2011	FIGURE 6 PAGE 1 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
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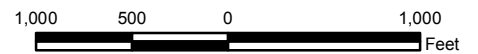
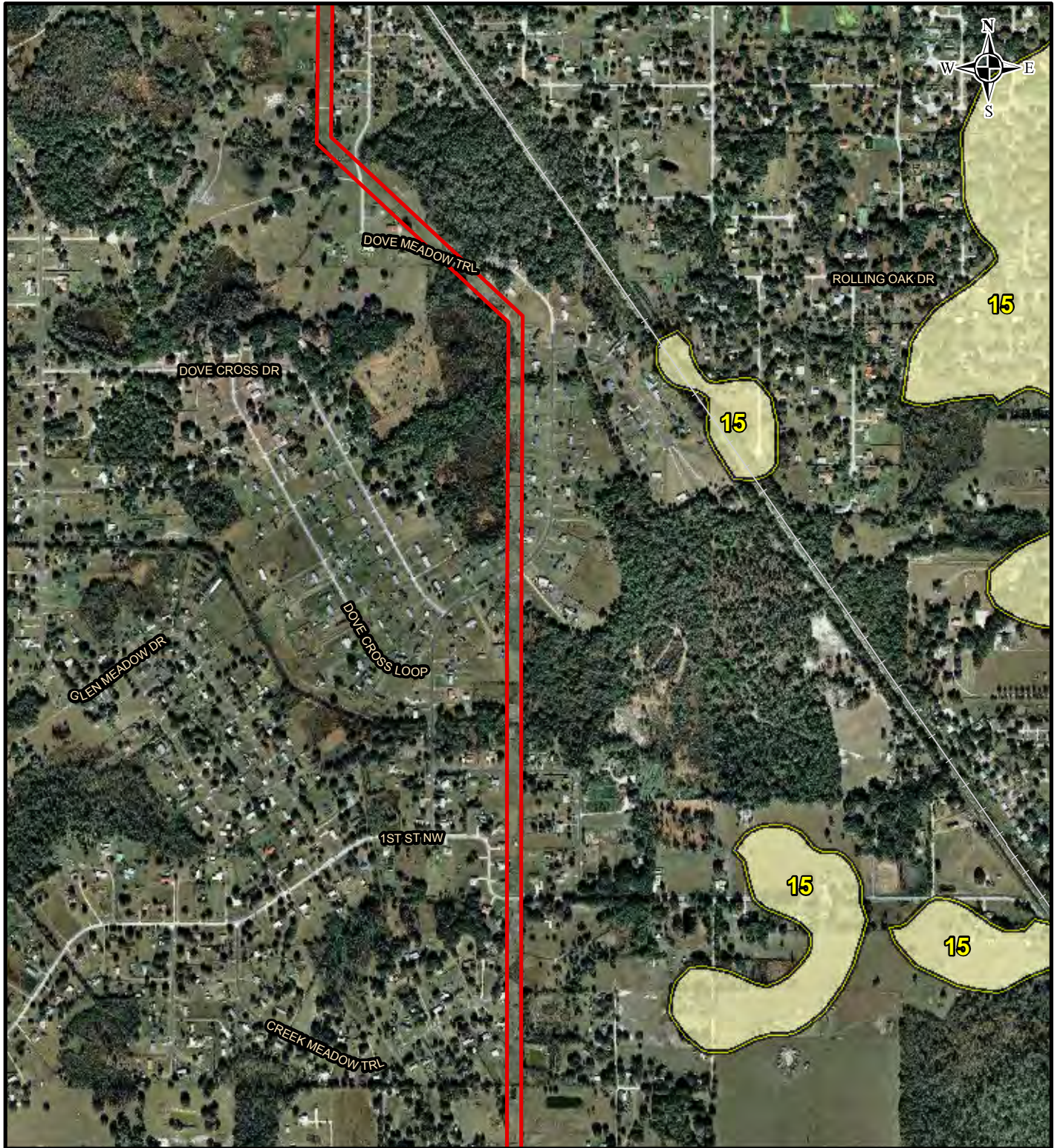
- PHP Preferred Right-of-Way
- Gopher Tortoise Acceptable Soil Type



NOTE
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS GOPHER TORTOISE SUITABLE SOILS MAP			
	MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 6	
	GIS JDG 02/18/2011	PAGE 2 OF 23	
	CHECK SAR 02/18/2011		
	REVIEW KB 02/18/2011		



LEGEND

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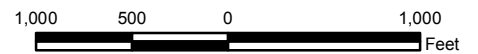
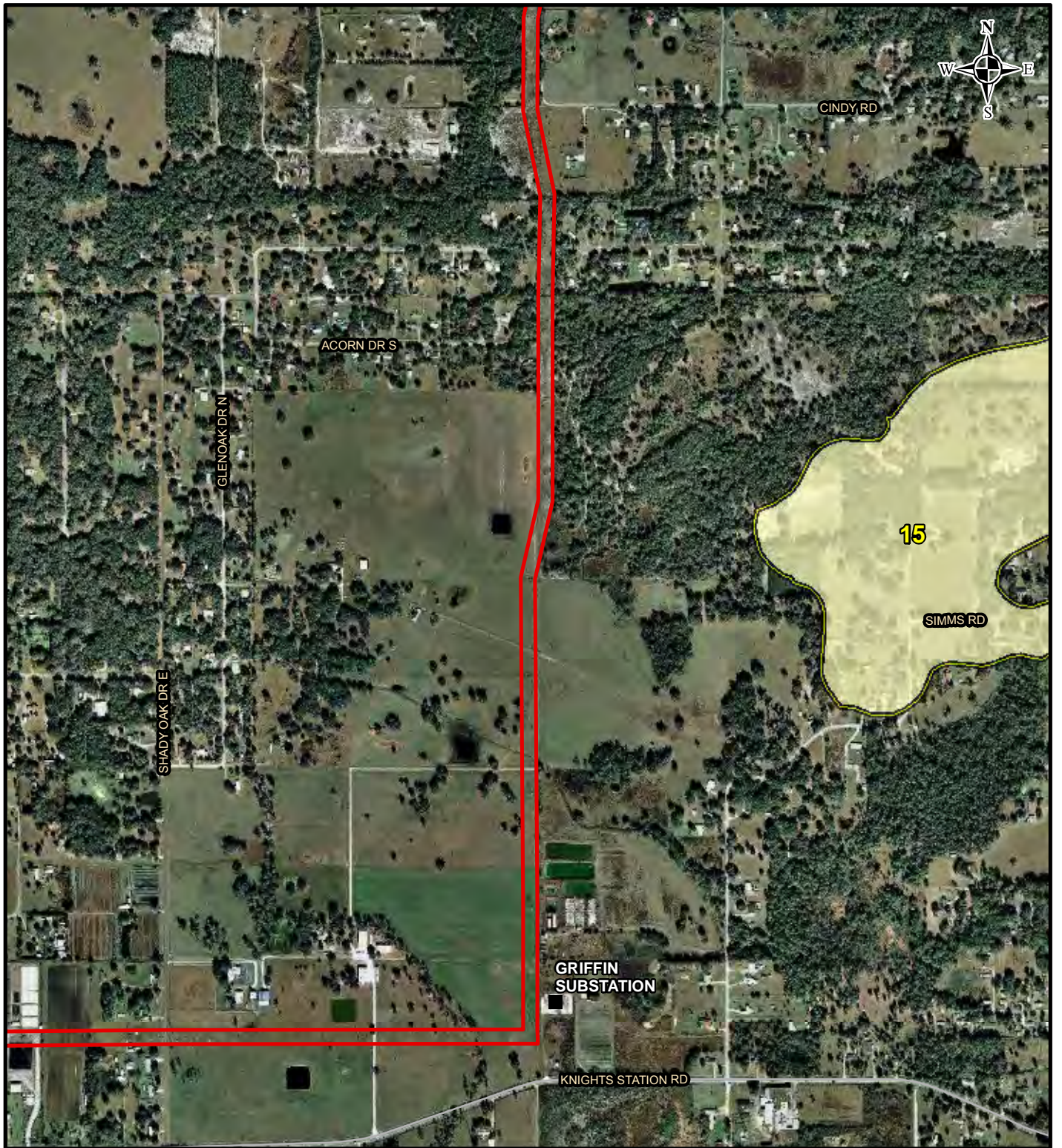
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 3 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



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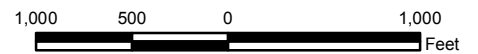
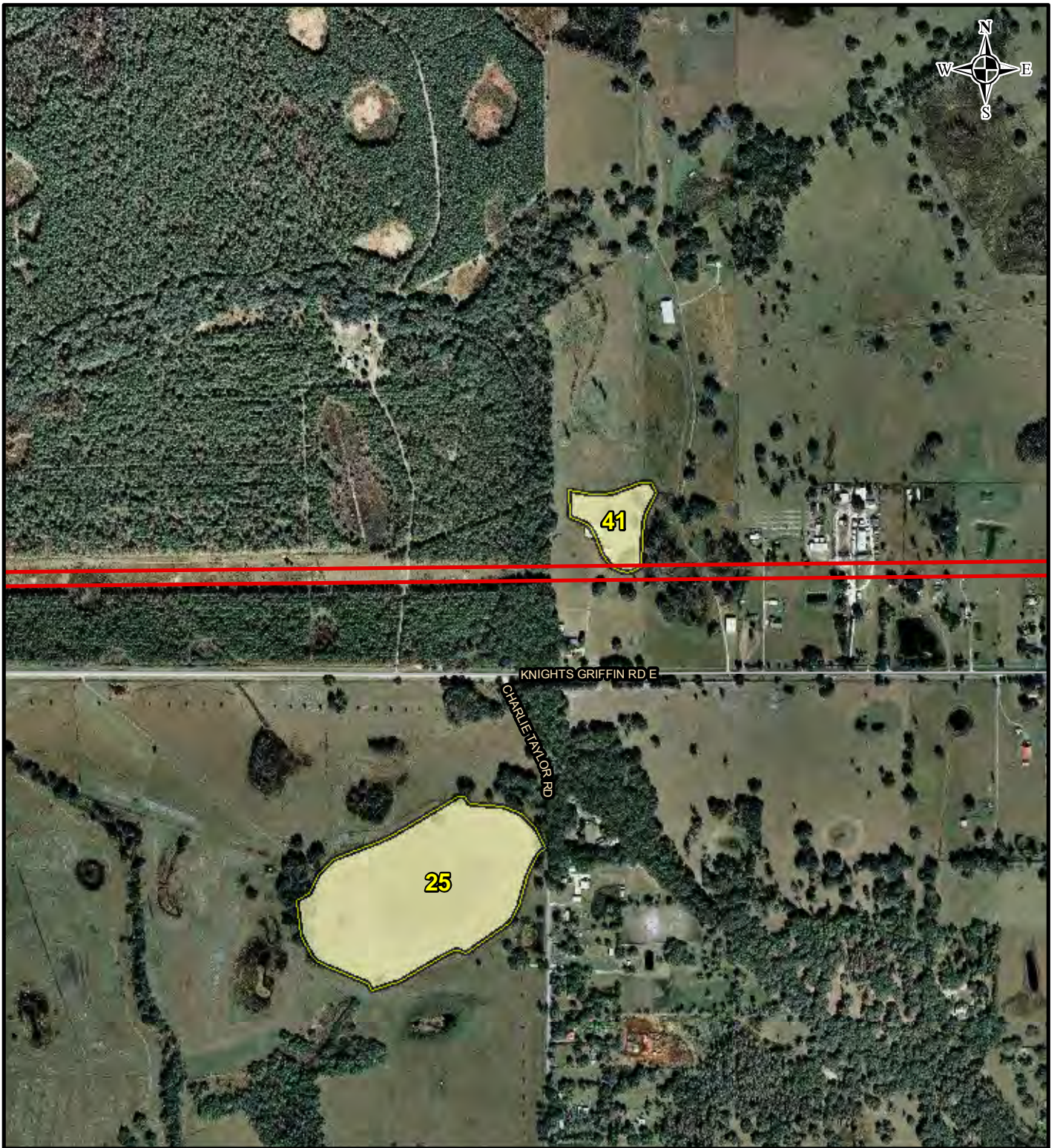
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 4 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



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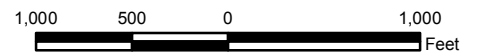
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009		SCALE AS SHOWN	REV. 0
DESIGN	JDG	02/18/2011	FIGURE 6 PAGE 5 OF 23
GIS	JDG	02/18/2011	
CHECK	SAR	02/18/2011	
REVIEW	KB	02/18/2011	



LEGEND

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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009		SCALE AS SHOWN	REV. 0
DESIGN	JDG 02/18/2011	FIGURE 6 PAGE 6 OF 23	
GIS	JDG 02/18/2011		
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REVIEW	KB 02/18/2011		



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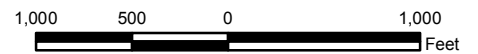
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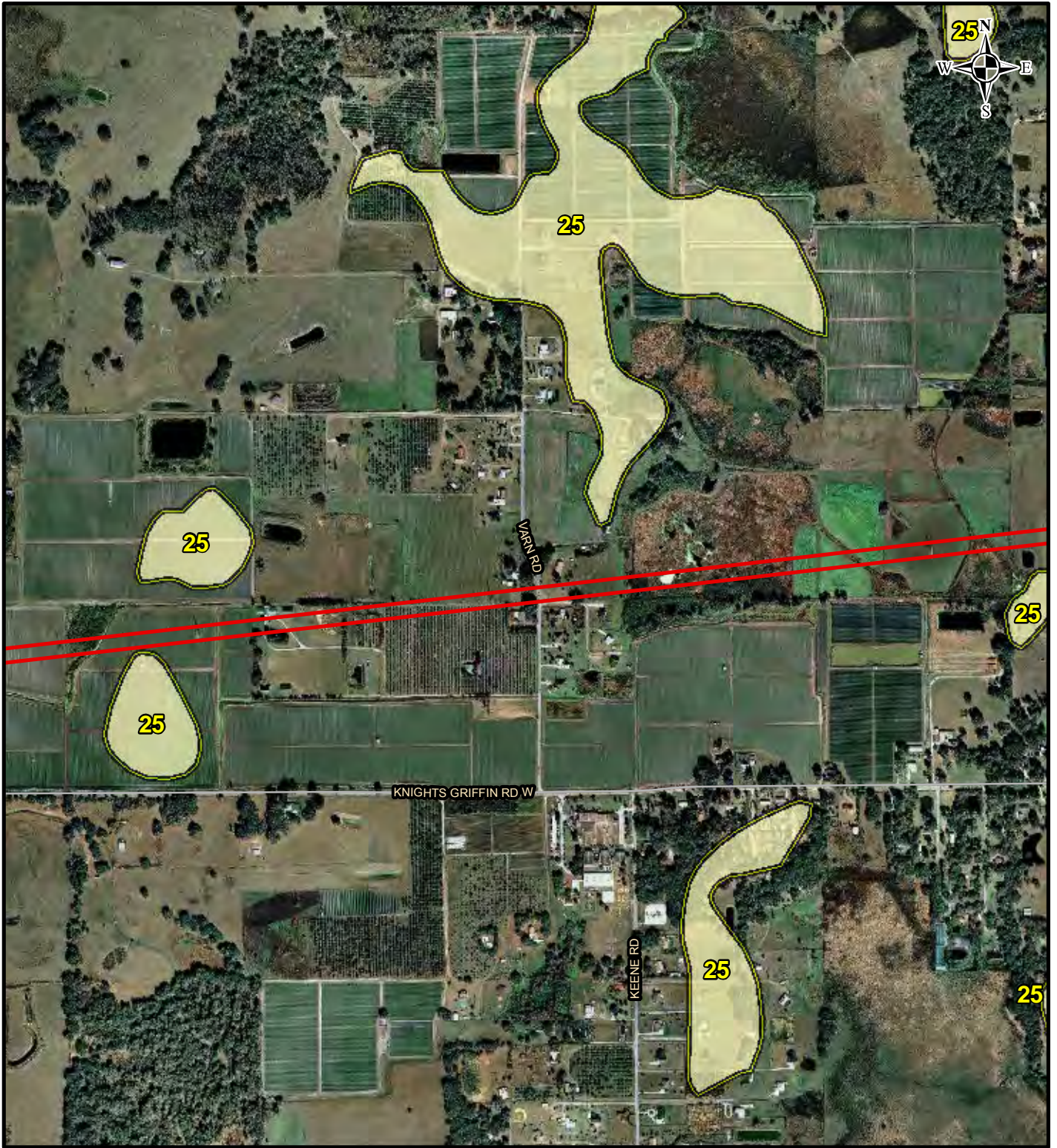
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP

	MXD File No. 103-89627A009		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	FIGURE 6 PAGE 7 OF 23
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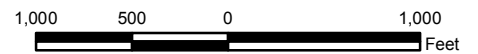
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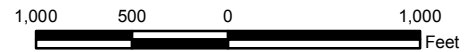
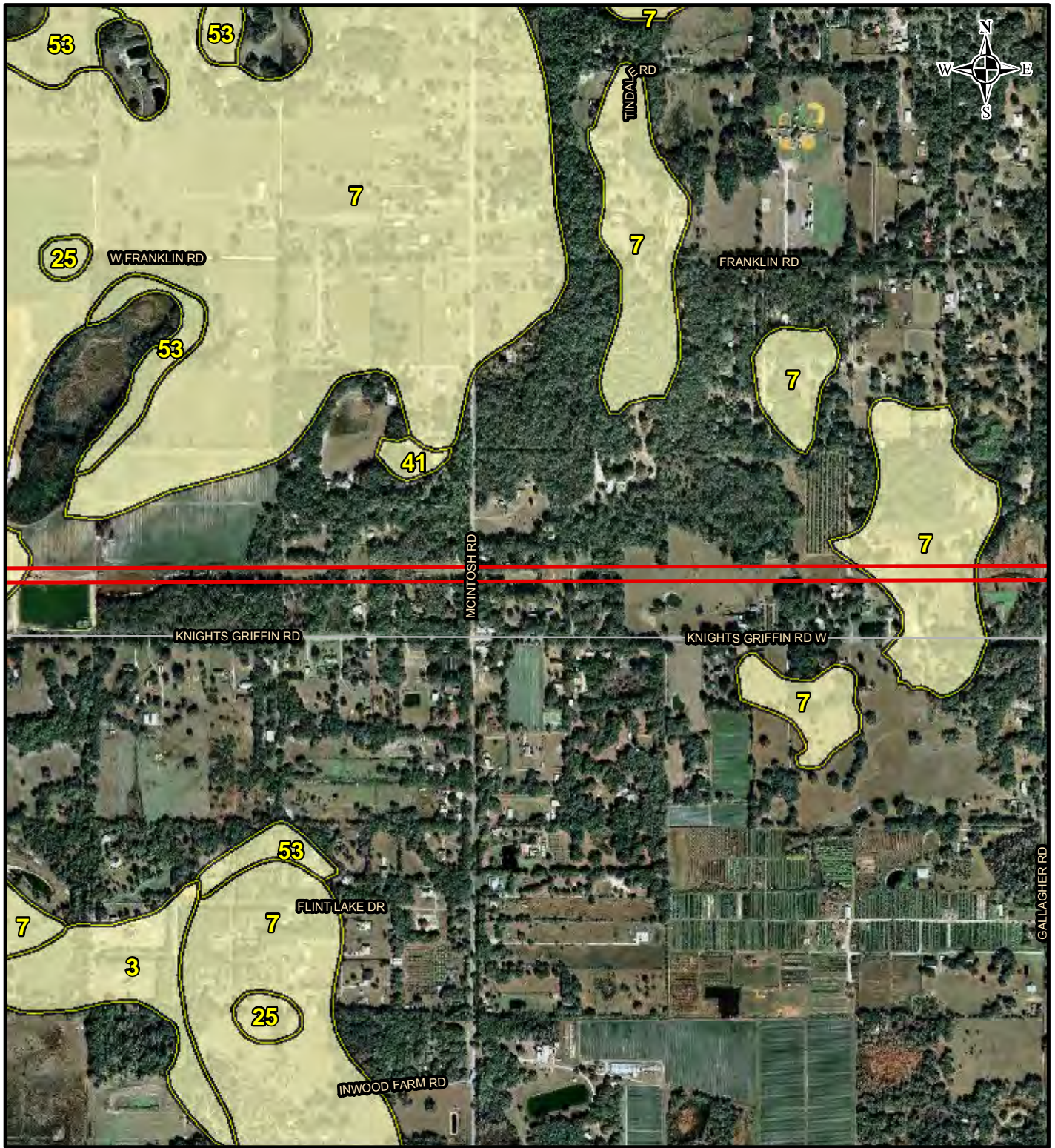


PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 8 OF 23	
GIS JDC 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



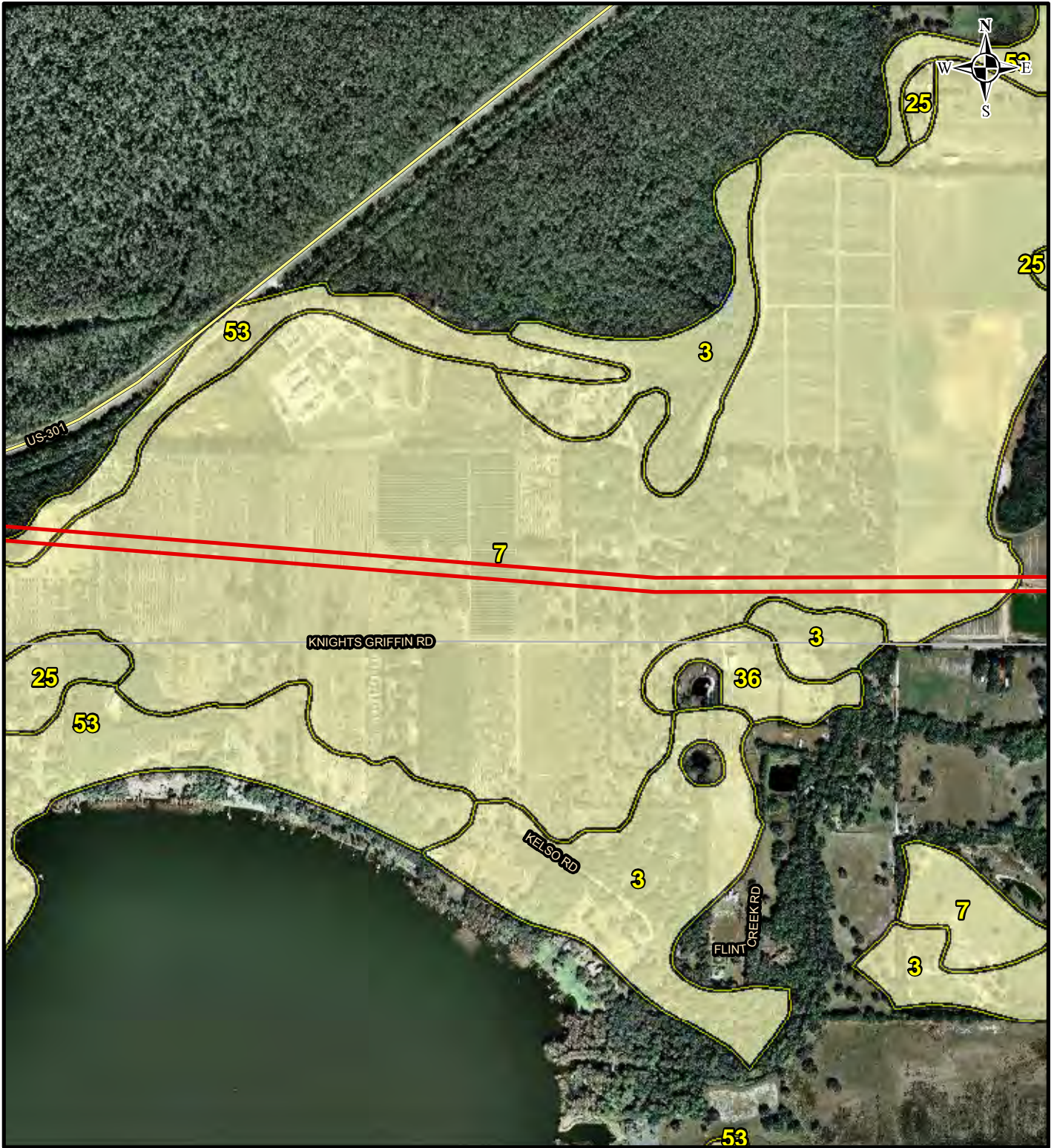
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS GOPHER TORTOISE SUITABLE SOILS MAP			
	MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 6 PAGE 9 OF 23	
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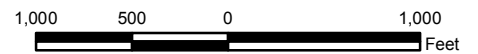
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP

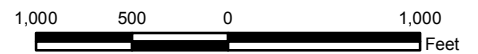


MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 10 OF 23	
GIS JDG 02/18/2011		
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REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 11 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



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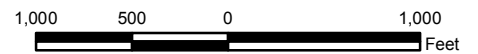
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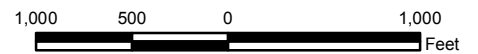


PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 12 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

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

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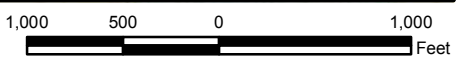
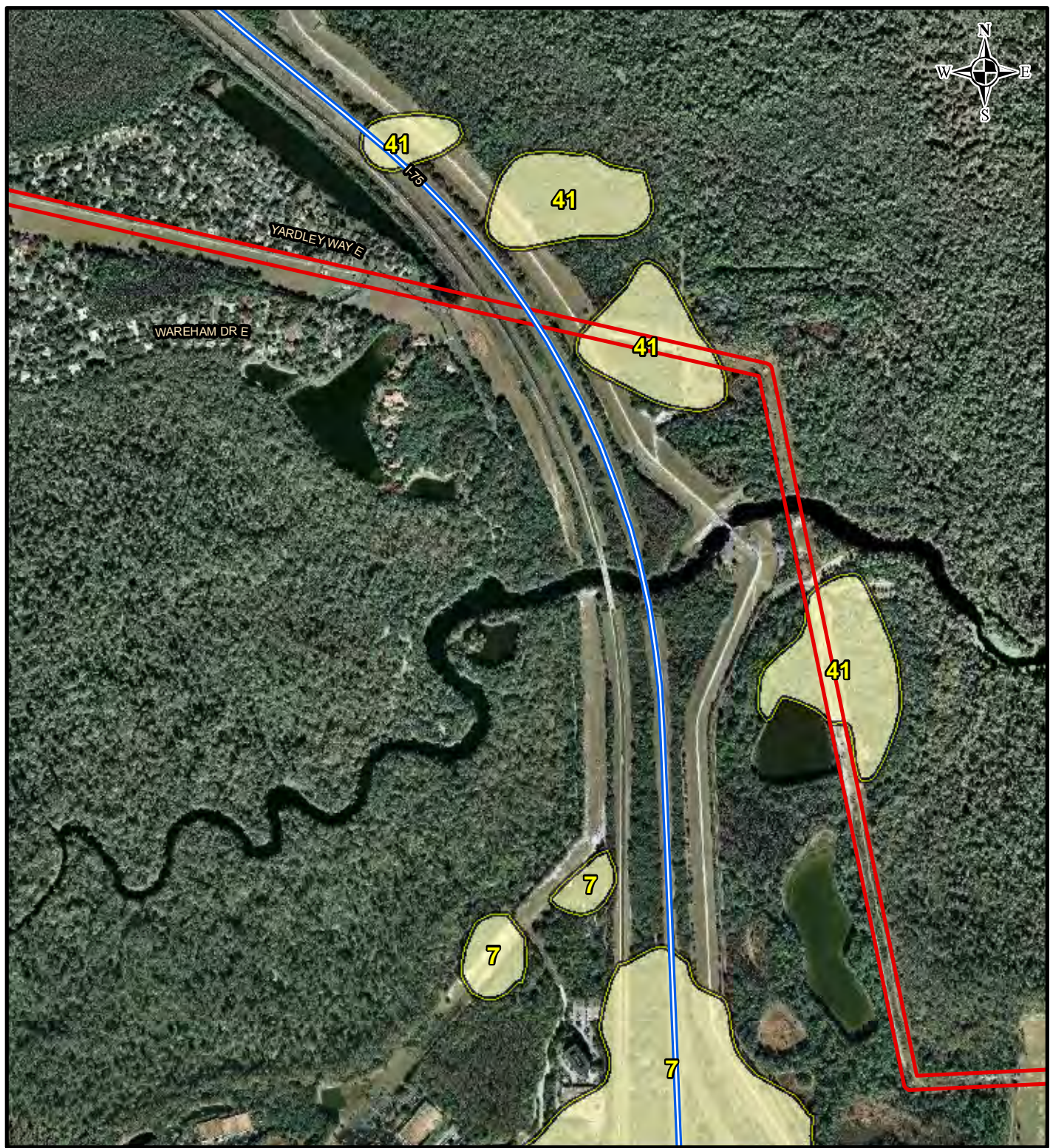
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 13 OF 23	
GIS JDG 02/18/2011		
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REVIEW KB 02/18/2011		



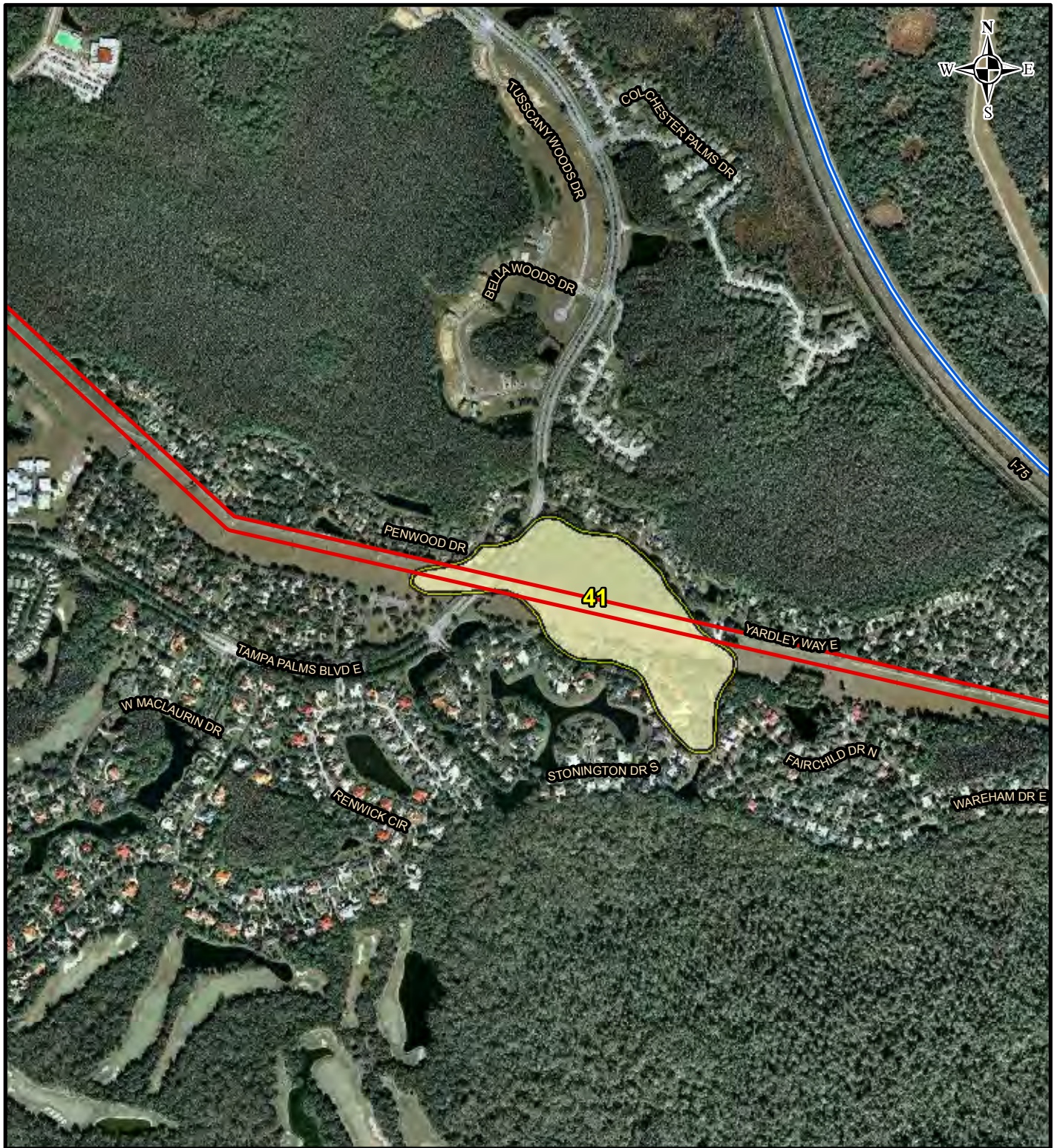
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS GOPHER TORTOISE SUITABLE SOILS MAP			
	MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
	DESIGN	JDG 02/18/2011	FIGURE 6 PAGE 14 OF 23
	GIS	JDG 02/18/2011	
	CHECK	SAR 02/18/2011	
	REVIEW	KB 02/18/2011	

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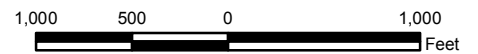
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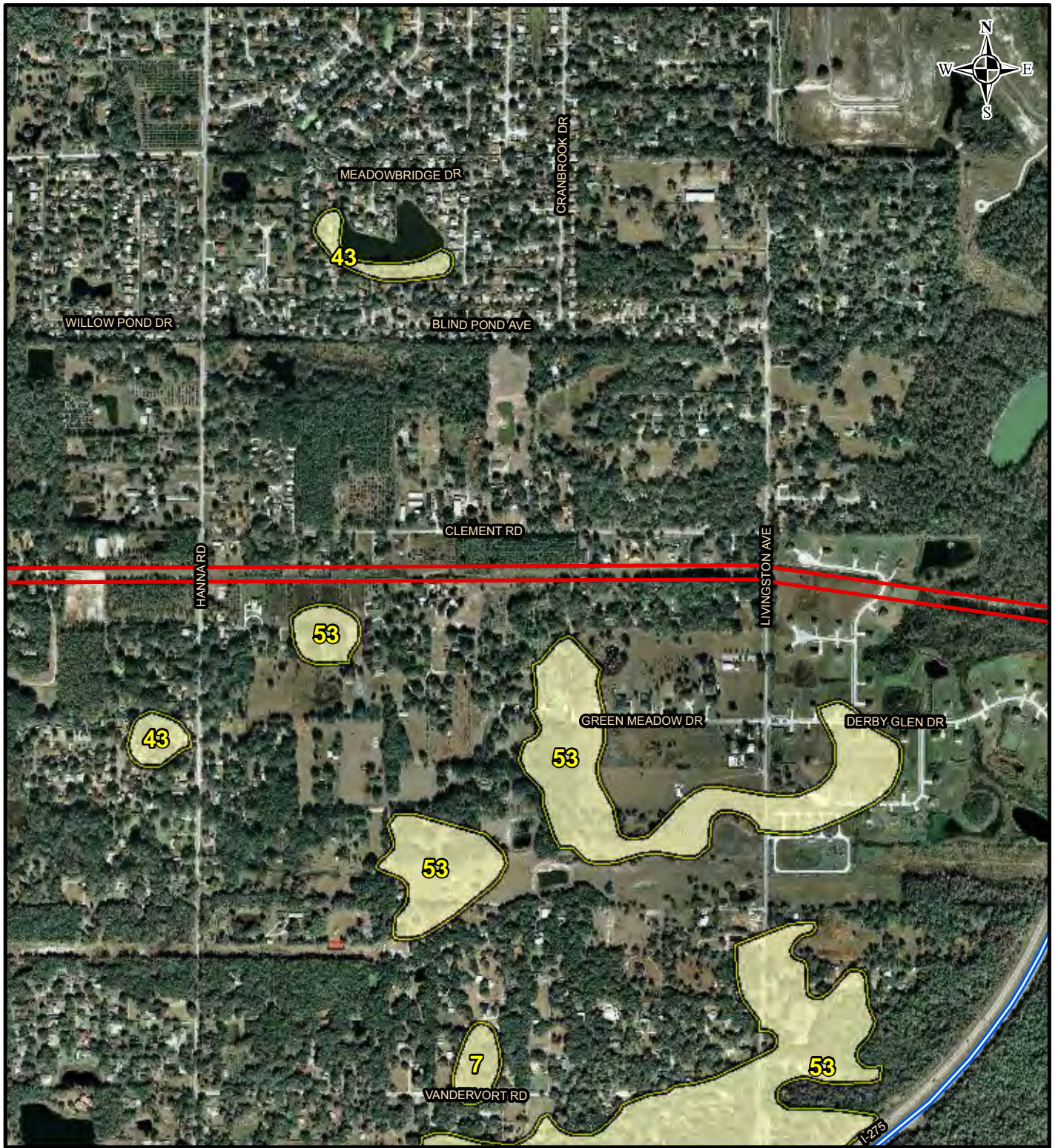


PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP

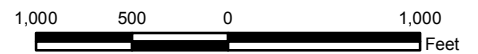


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DESIGN JDG 02/18/2011	FIGURE 6 PAGE 15 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

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



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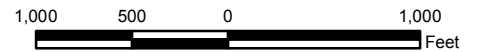
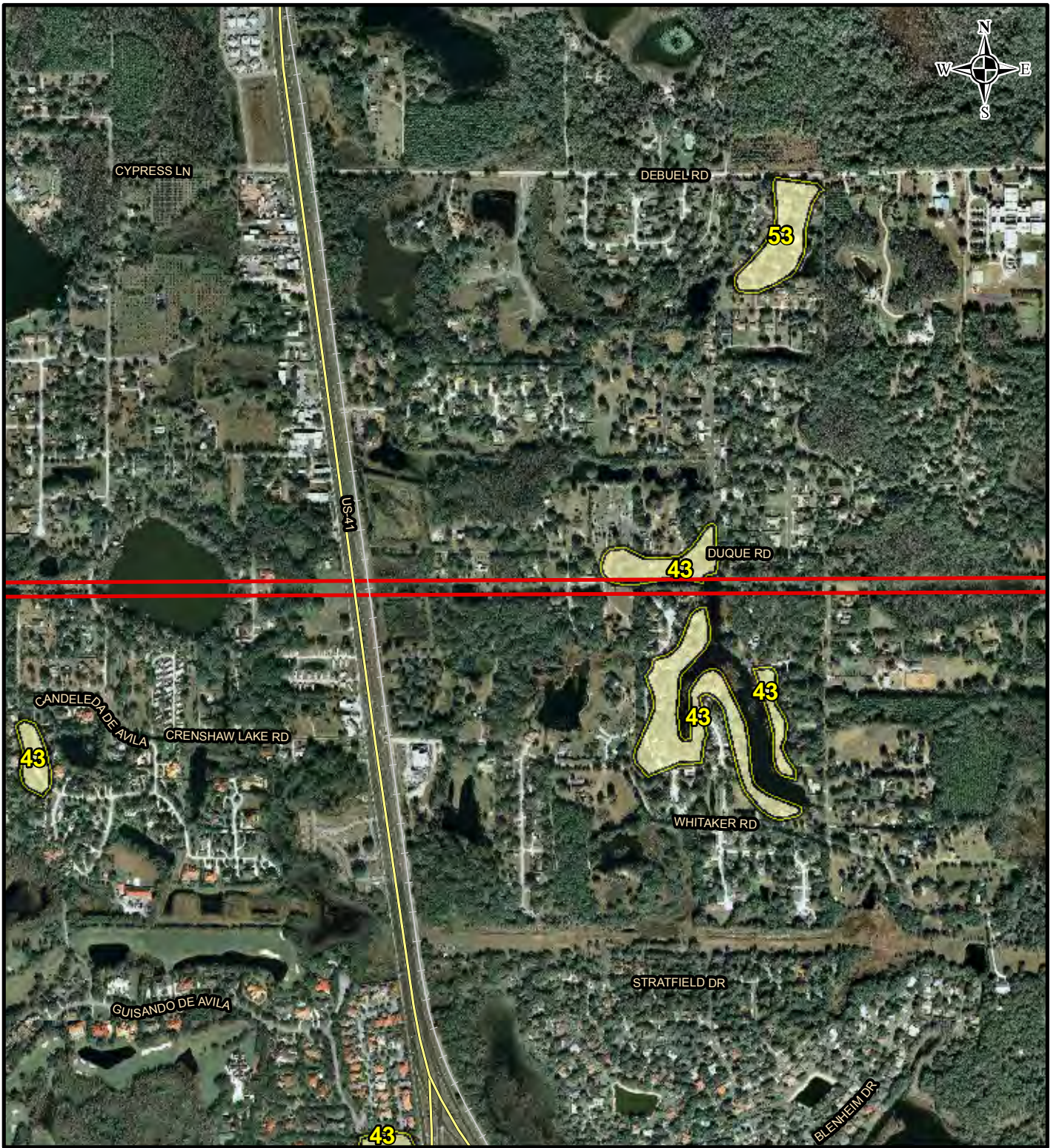
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
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GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



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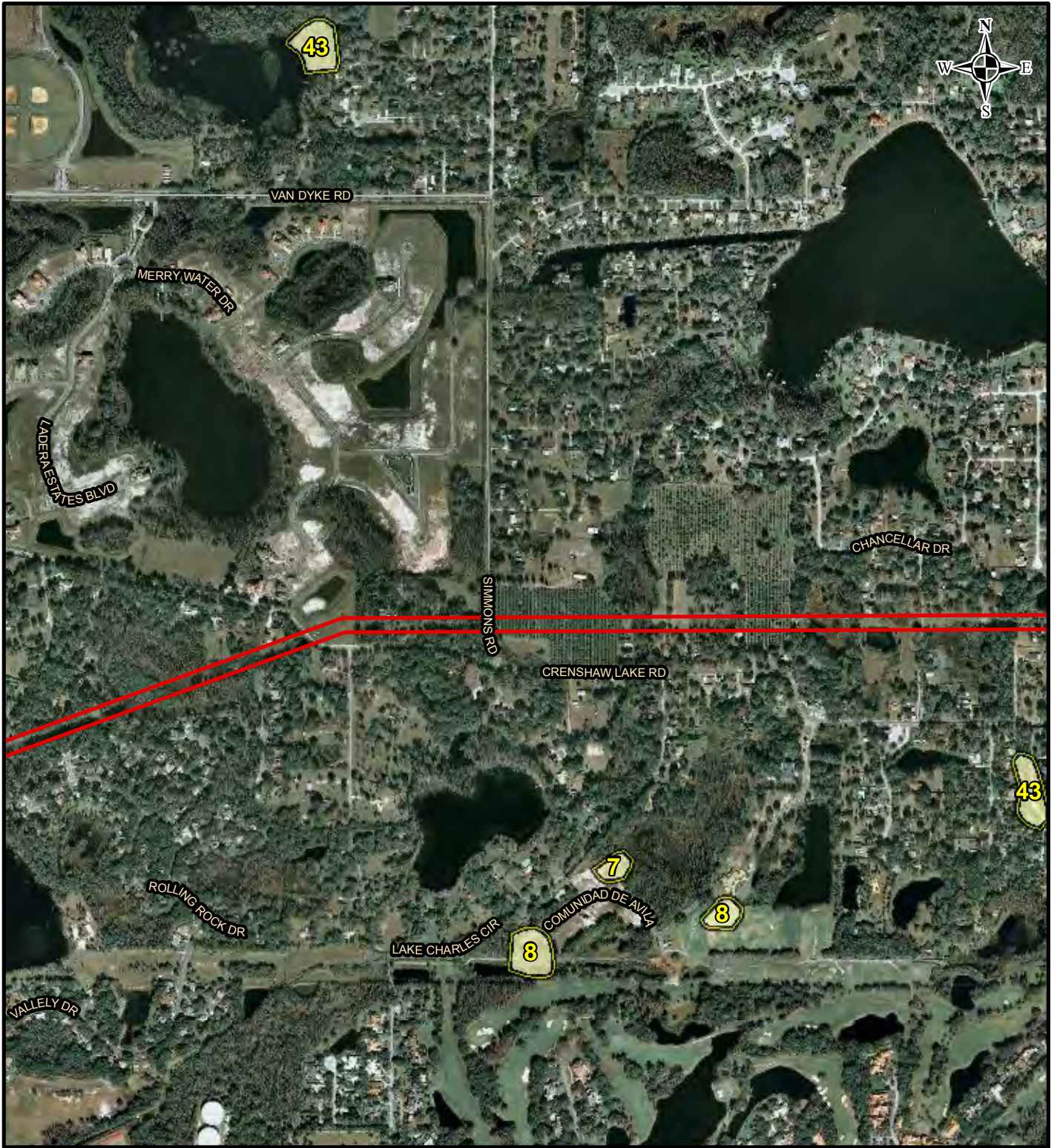
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PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS GOPHER TORTOISE SUITABLE SOILS MAP			
	MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	FIGURE 6 PAGE 17 OF 23	
	GIS JDG 02/18/2011		
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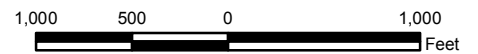
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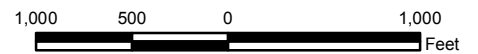
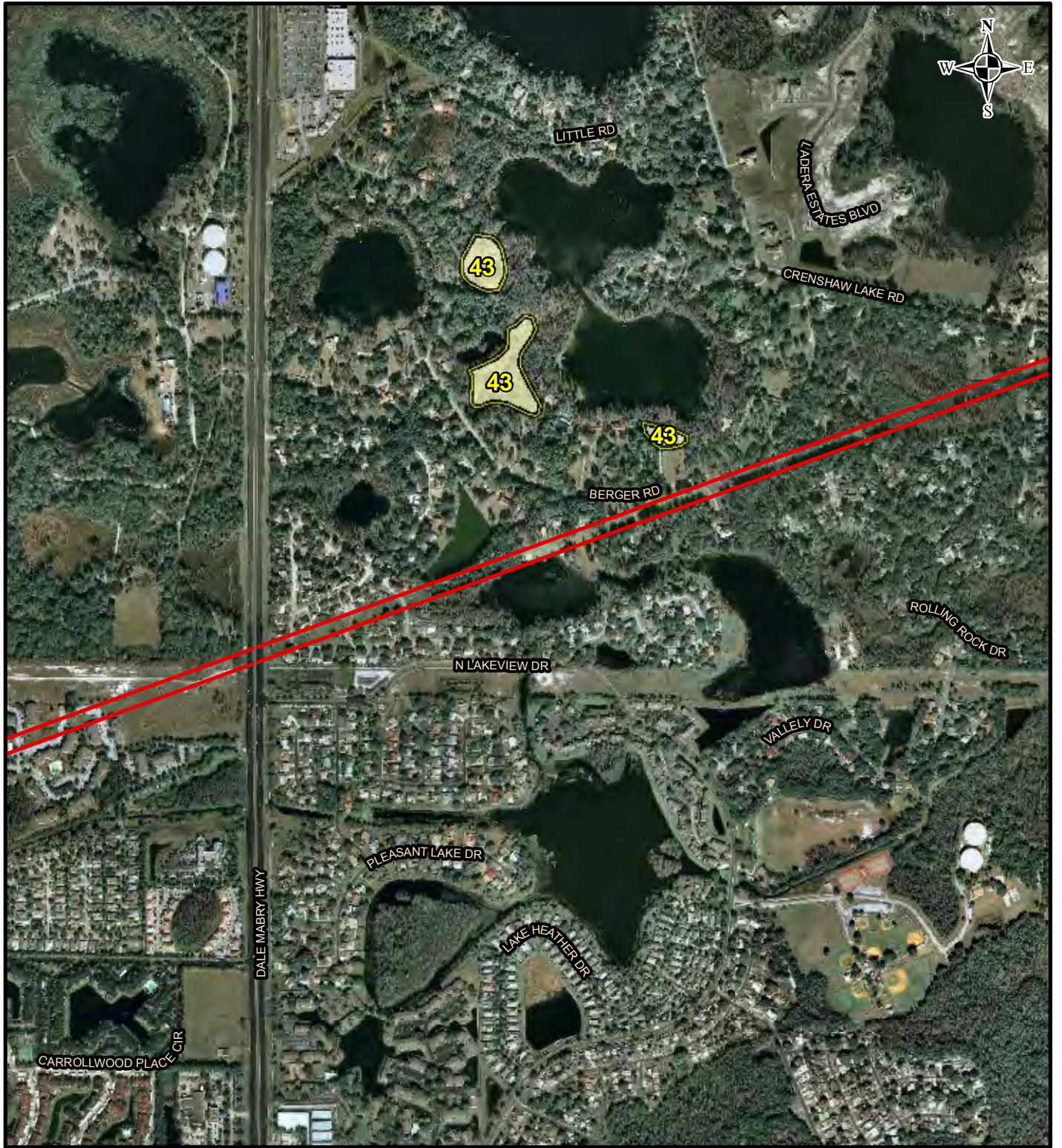


PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 18 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
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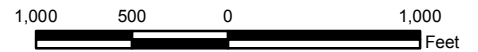
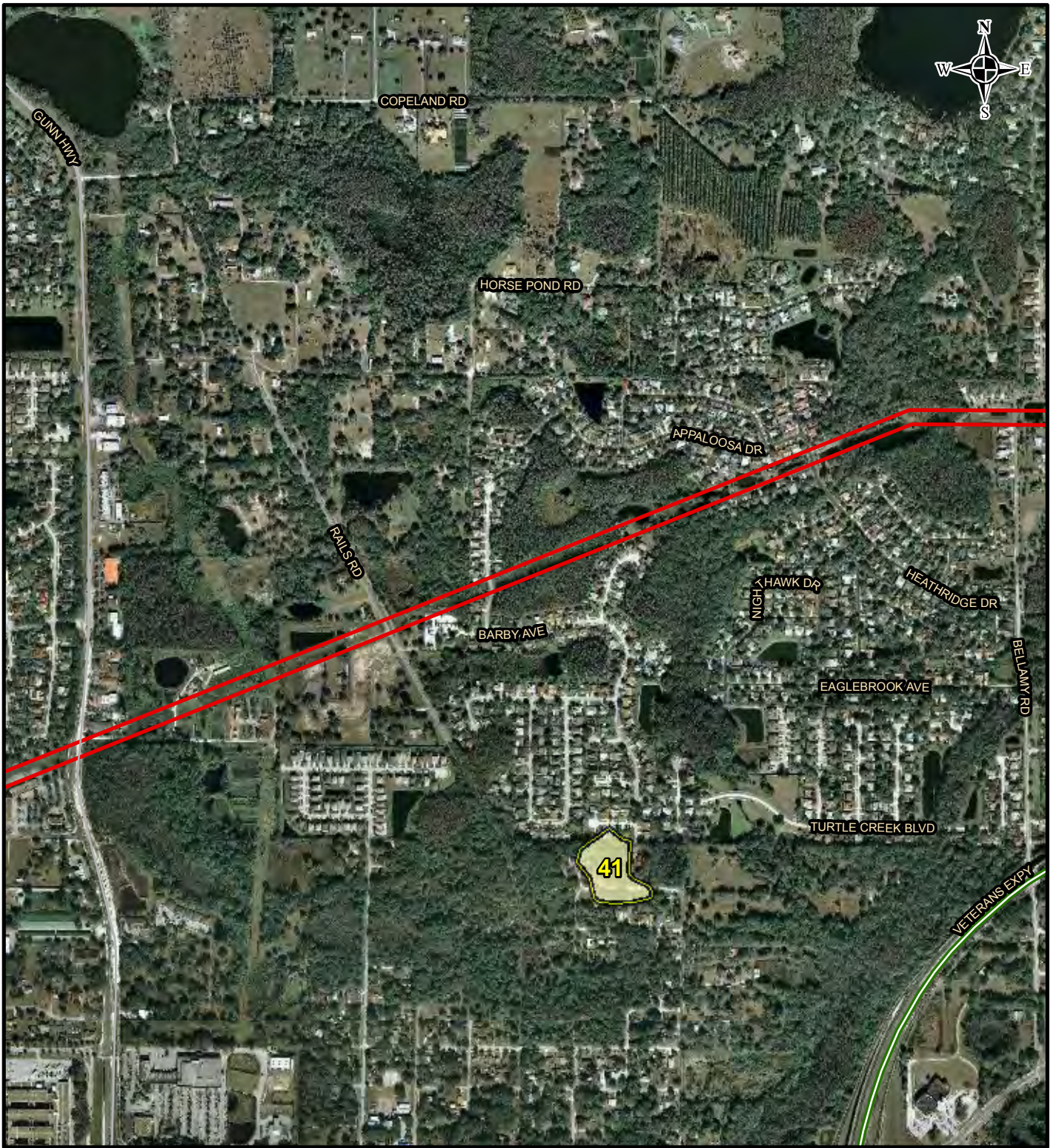
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 19 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

- PHP Preferred Right-of-Way
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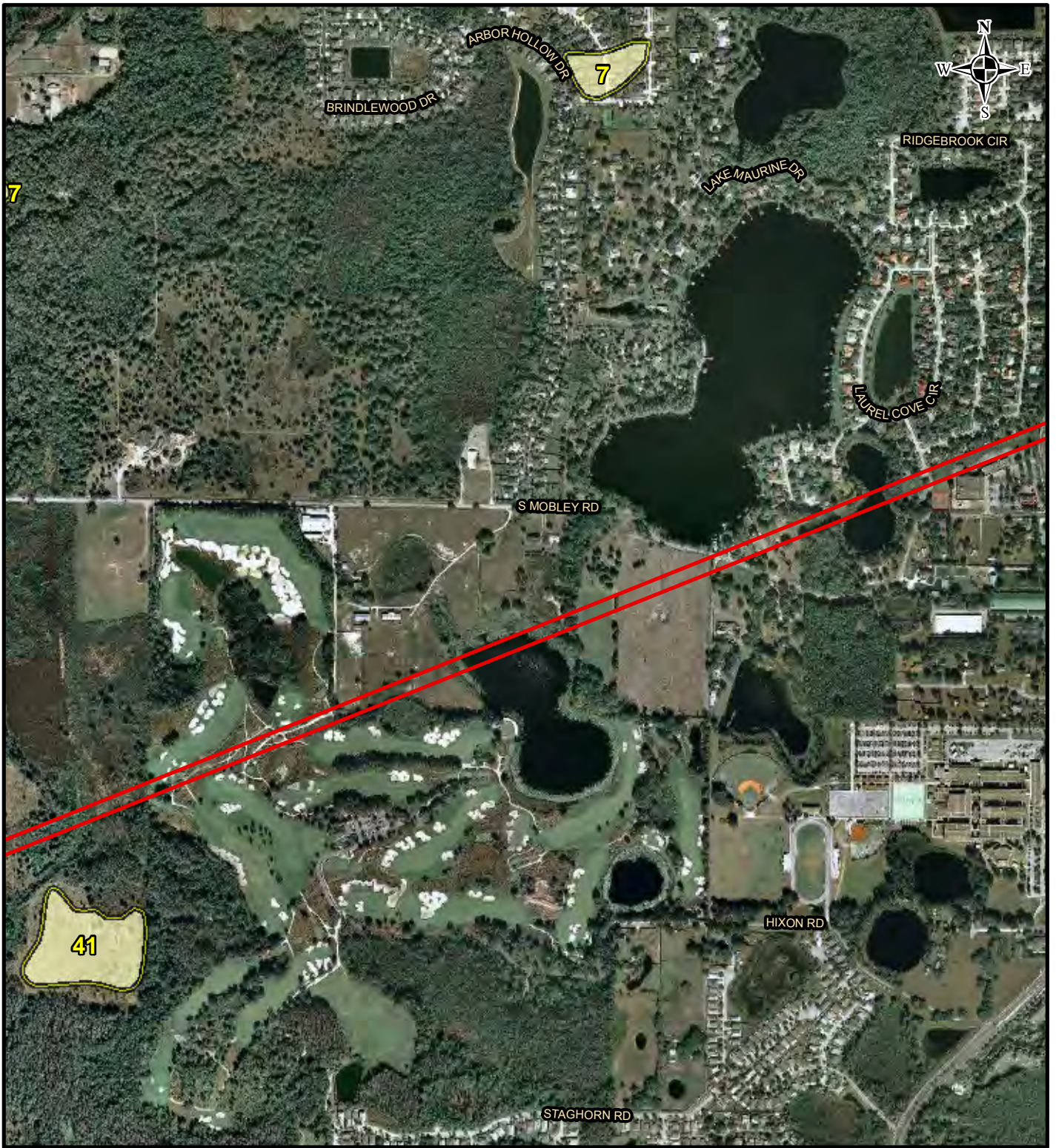
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PROGRESS ENERGY FLORIDA
 LEVY NUCLEAR PLANT

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 20 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



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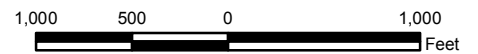
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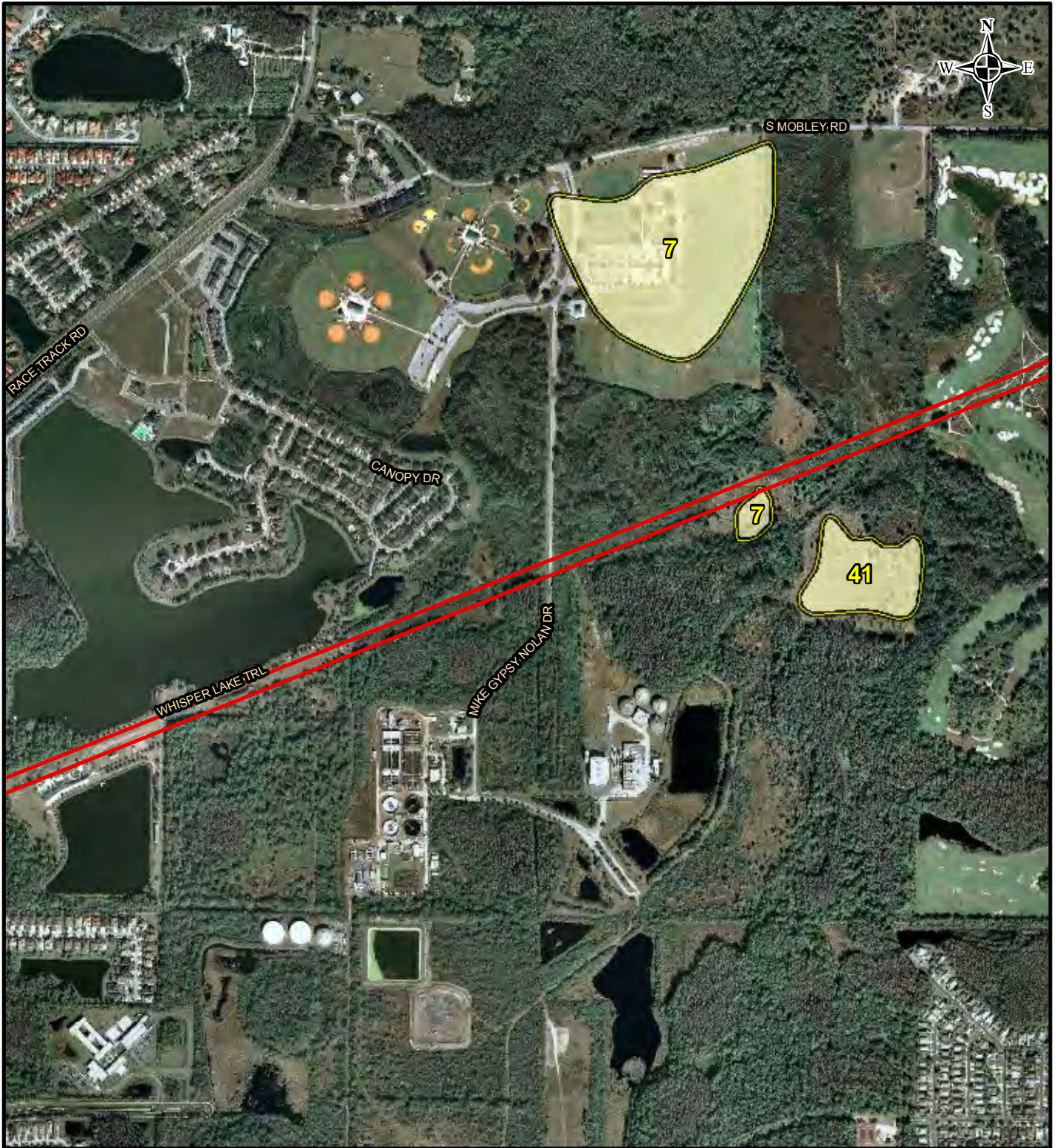


PROGRESS ENERGY FLORIDA
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POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP

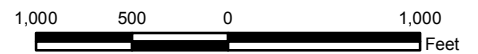


MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 21 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		



LEGEND

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



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

POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP

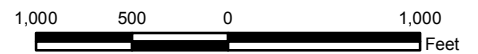


MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 22 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
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LEGEND

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POLK - HILLSBOROUGH - PINELLAS
 GOPHER TORTOISE SUITABLE SOILS MAP



MXD File No. 103-89627A009	SCALE AS SHOWN	REV. 0
DESIGN JDG 02/18/2011	FIGURE 6 PAGE 23 OF 23	
GIS JDG 02/18/2011		
CHECK SAR 02/18/2011		
REVIEW KB 02/18/2011		

APPENDIX A
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
CONDITIONS OF CERTIFICATION FOR TRANSMISSION LINES
(LEVY NUCLEAR POWER PLANT UNITS 1 & 2 PA08-51B)



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

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

November 30, 2009

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: Pinellas-Hillsborough-Polk
Date Received: November 24, 2009
Location: Pinellas, Hillsborough, and Polk Counties

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.

*Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.*

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.

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.



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

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.

Managed Areas

Portions of the site appear to be located within Lake Park and Cone Ranch, both managed by Hillsborough County. Portions of the site also appear to be located within the Lower Hillsborough Flood Detention Area and Upper Hillsborough, both 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 Green Swamp 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.

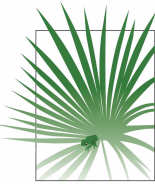
Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

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



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

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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

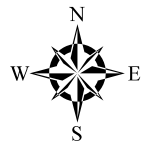
- Federal
- State
- Local
- Private
- State Aquatic Preserves

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

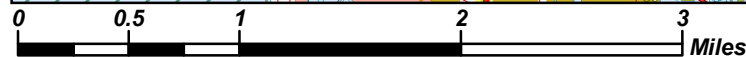
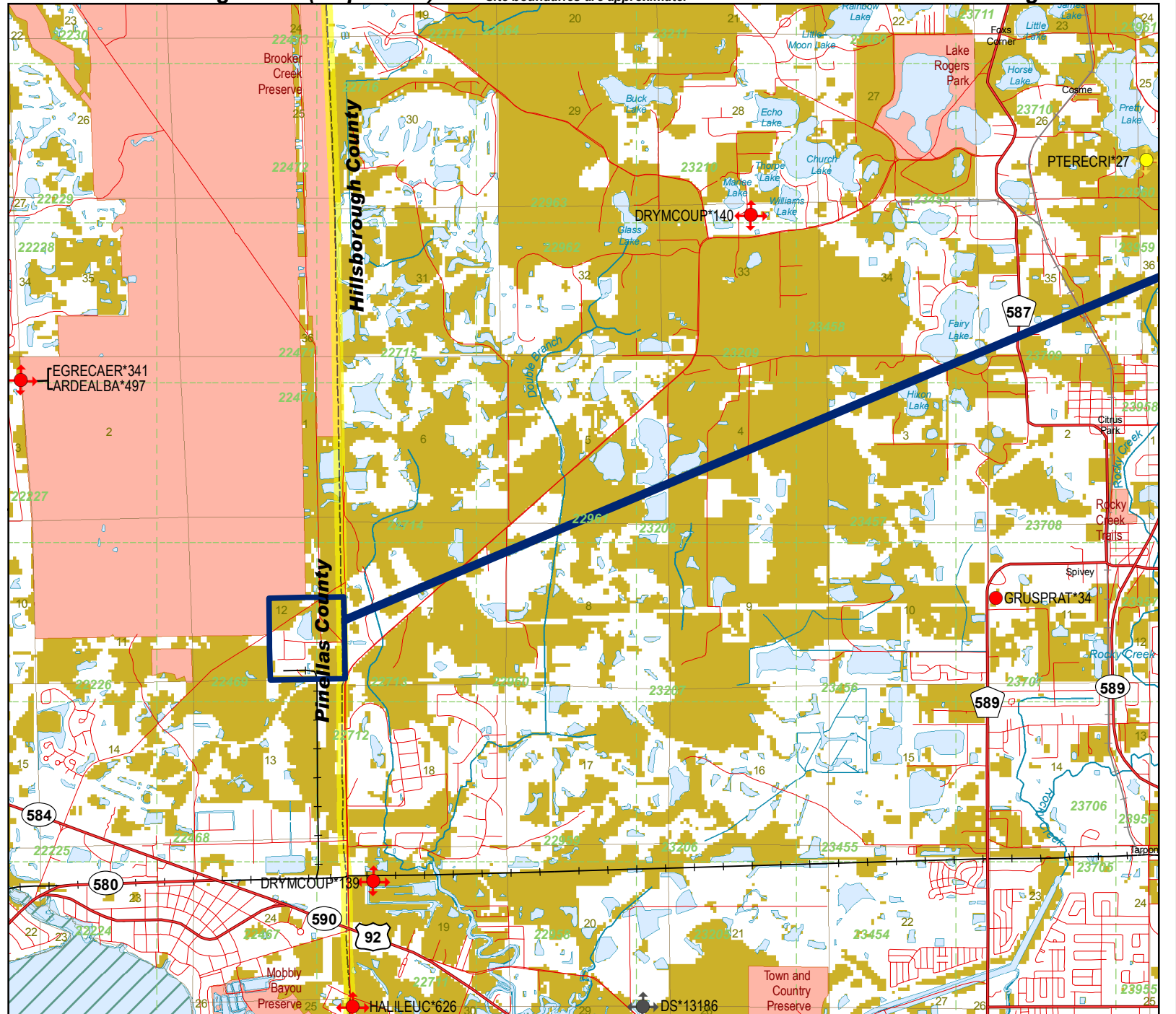


NOTE
Map should not be interpreted without accompanying documents.

Pinellas-Hillsborough-Polk (Map 1 of 7)

Site boundaries are approximate.

Pinellas and Hillsborough Counties



Map produced by ACN
Map Date: 30 NOV 2009



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Tallahassee, FL 32303
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(850) 681-9364 Fax
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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 1 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
DRYMCOUP*140	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1965-	No general description given	INDIGO OBSERVED BY J. S. GODLEY OR MARTY MARTIN IN 1965 (MOLER INTERVIEW OF GODLEY & MARTIN, 1982-03-27).
PTERECRI*27	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1977-09-13	1977-09-13: Open area in sandhill community (Wunderlin).	1977-09-13: Only one flowering specimen seen; specimen taken [f] (Wunderlin).
GRUSPRAT*34	Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT	1990-04-28	GRASSY (MOWED) FIELDS WITH SCATTERED CYPRESS PONDS ON E SIDE OF RD. SOME OF THE PONDS HAVE BEEN CONVERTED TO RETENTION PONDS.	3 INDIVIDUALS SEEN, 2 ADULTS AND 1 CHICK. 1995: REPORT FROM RESIDENT SAYS NO HABITAT LEFT FOR BIRDS.
DRYMCOUP*139	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1970-<	No general description given	INDIGO OBSERVED BY J.S GODLEY OR MARTY MARTIN PRIOR TO 1970 (MOLER INTERVIEW OF GODLEY & MARTIN, 1982-03-27).
DS*13186	Data Sensitive Element	Data Sensitive	G2	S2	N	LE	1960-08-12	Data Sensitive	Data Sensitive
ARDEALBA*497	Ardea alba	Great Egret	G5	S4	N	N	1988-06-14	Hole in cypress swamp.	1988/06/14: B.A. Millsap, GFC; PI-R-06 Cattle Egrets or immature Little Blue Herons? Total = B (includes GREG, LBHE).
EGRECAER*341	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-06-14	Hole in cypress swamp	1988/06/14: B.A. Millsap, GFC, observation. PI-R-06 Cattle Egrets or immature Little Blue Herons? "Total" = B (includes GREG, LBHE). 1988/06/15: K.J. McGowan, GFC, observation. Est. breeding pairs (=25). Nesting stages: Young flying/ready, nests abandone
HALILEUC*626	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2002, 2001, 2000; Unknown/not assessed - 1999; Status 1995-98: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST; 1991: DESTROYED, 0 YOUNG; 1990: PRODUCED 1 YOUNG; 1989: PRODUCED 1 YOUNG;



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

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Biodiversity Matrix Report Map 1 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 22469					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	G2T2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 22713					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	G2T2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N

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

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Biodiversity Matrix Report Map 1 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 22960

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	G2T2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 22961

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
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1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax

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Biodiversity Matrix Report Map 1 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	G2T2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 23208

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	G2T2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE

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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
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 23457

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Sandhill upland lake		G3	S2	N	N

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	G2T2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 23458

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
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Definitions: Documented - Rare species and natural communities documented on or near this site.

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Potential - This site lies within the known or predicted range of the species listed.



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

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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
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Sandhill upland lake		G3	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Linum carteri</i> var. <i>smallii</i>	Small's Flax	G2T2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 23709					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Sandhill upland lake		G3	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N

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Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax

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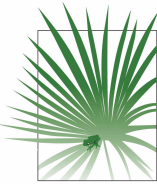
Biodiversity Matrix Report

Map 1 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

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Suite 200-C
Tallahassee, FL 32303
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(850) 681-9364 Fax
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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

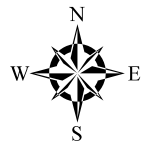
- Federal
- State
- Local
- Private
- State Aquatic Preserves

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

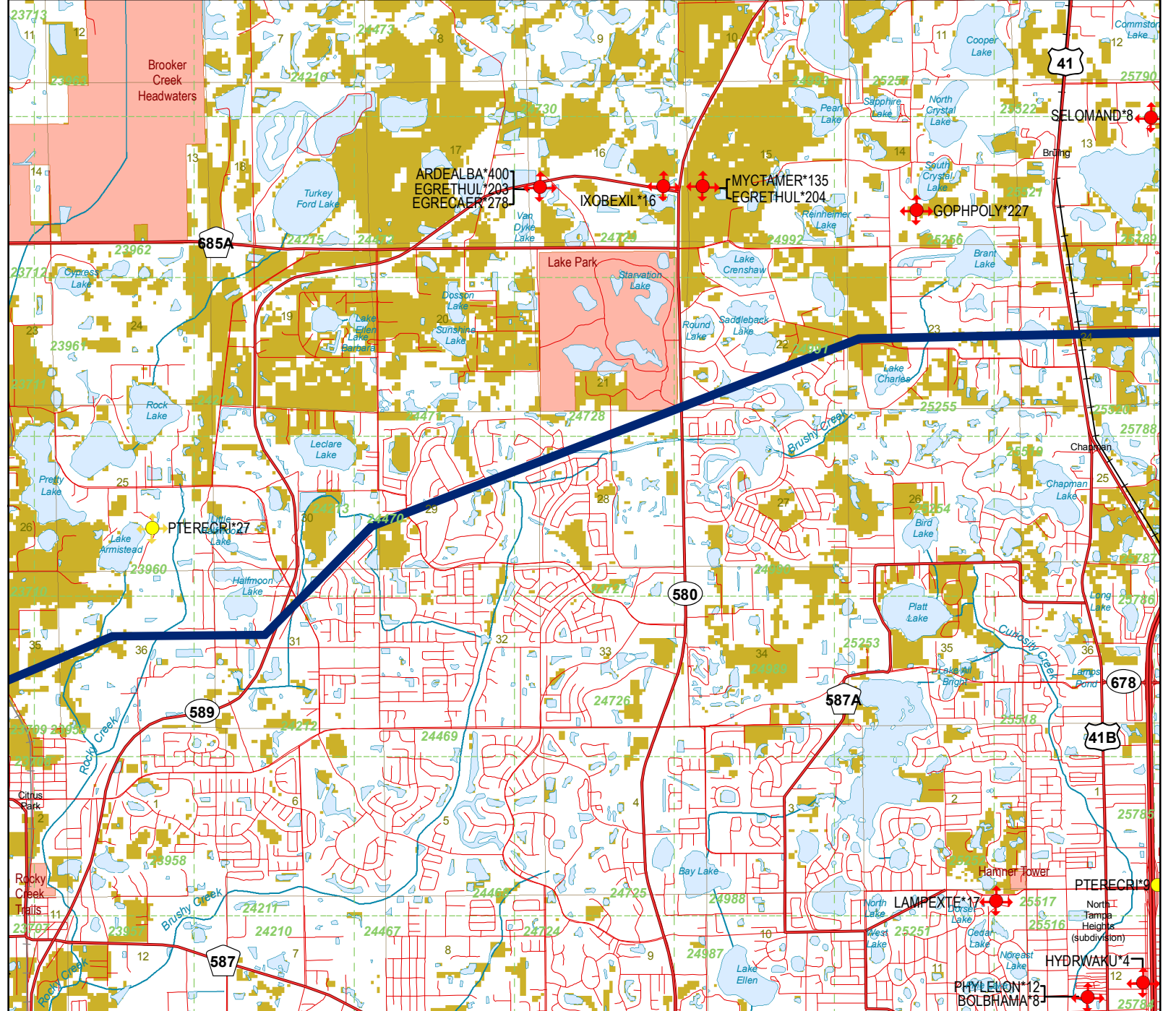


NOTE
Map should not be interpreted without accompanying documents.

Pinellas-Hillsborough-Polk (Map 2 of 7)

Site boundaries are approximate.

Hillsborough County



Map produced by ACN
Map Date: 30 NOV 2009



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(850) 681-9364 Fax
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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 2 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
PTERECRI*27	<i>Pteroglossaspis ecrinata</i>	Giant Orchid	G2G3	S2	N	LT	1977-09-13	1977-09-13: Open area in sandhill community (Wunderlin).	1977-09-13: Only one flowering specimen seen; specimen taken [f] (Wunderlin).
GOPHPOLY*227	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT	1987-pre	OLD FIELD	1987-pre: Species occurrence noted here in Diemer's unpublished map set (U86DIE01FLUS).
PTERECRI*9	<i>Pteroglossaspis ecrinata</i>	Giant Orchid	G2G3	S2	N	LT	1989-09-02	SANDY OAK WOODLANDS, QUERCUS VIRGINIANA VAR. GEMINATA AND QUERCUS LAEVIS DOMINANT.	1 PLANT, FLOWERING, IN LEAF.
EGRETHUL*204	<i>Egretta thula</i>	Snowy Egret	G5	S3	N	LS	1988-05-19	Cypress pond.	1988/05/19: K.J. McGowan, GFC. WOST young flying/ready and loafing on colony. 3 active WOST nests. SNEG and ANHI not nesting. No obs. on other spp (GRHE). "Total" (individuals?) = 15.
EGRETHUL*203	<i>Egretta thula</i>	Snowy Egret	G5	S3	N	LS	1988-05-19	Willows at lake edge.	1988/05/19: K.J. McGowan, GFC. Est. breeding pairs. GREG not nesting? CAEG incubating. LBHE incubating(most), hatching(most), downy(most), flying/ready. No obs. on other spp (SNEG, GRHE). "Total" = B.
LAMPEXTE*17	<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	LT	1960-11-22	No general description given	SPECIMEN IN USF COLLECTION, COLLECTED 22 NOVEMBER 1960.
MYCTAMER*135	<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE	1988-06-07	Cypress swamp	1988/06/07: K.J. McGowan, GFC. HI-R-05 One stork incubating. Several old nests. "Total" = A.
ARDEALBA*400	<i>Ardea alba</i>	Great Egret	G5	S4	N	N	1988-05-19	1988-05-19: Willows at lake edge (U97GFC02FLUS).	1988-05-19: K.J. McGowan, GFC; Est. breeding pairs. Great egret not nesting? Cattle egret incubating. Little blue heron incubating(most), hatching(most), downy(most), flying/ready. No obs. on other spp (snowy egret, great heron). Total = B.
EGRECAER*278	<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	LS	1988-05-19	Willows at lake edge.	1988/05/19: K.J. McGowan, GFC, observation. Est. breeding pairs. GREG not nesting? CAEG incubating. LBHE incubating (most), hatching (most), downy (most), flying/ready. No obs. on other spp (SNEG, GRHE). "Total" = B.
IXOBEXIL*16	<i>Ixobrychus exilis</i>	Least Bittern	G5	S4	N	N	1988-05-19	Strand Swamp	1988-05-19: K.J. McGowan, GFC, observed 1 bittern. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF.



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 2 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
SELOMAND*8	Selonodon mandibularis	Large-Jawed Cebrionid Beetle	G2G3	S2S3	N	N	1958-08-08	1958-08-08: No description given (B99GAL01FLUS).	1958-08-08: 1 specimen was collected and deposited at FSCA (B99GAL01FLUS). 1916-05-18: 3 specimens were collected and deposited at LACM (B99GAL01FLUS). 1916-05-10: 1 specimen was collected and deposited to LACM (B99GAL01FLUS).
PHYLELON*12	Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N	1966-08-29	1966-08-29: No description given (B89WOO01FLUS).	1966-08-29: One specimen was collected by T.J. Favoroso using a Steiner trap. 1965-08-12: T.J. Favoroso collected 2 specimens in a Japanese beetle trap. 1952-08: J. Gross collected 1 specimen (B89WOO01FLUS).
BOLBHAMA*8	Bolbocerosoma hamatum	Bicolored Burrowing Scarab Beetle	GNR	S3S4	N	N	1964-11-04	1964-11-04: No description given (B73WOO01FLUS).	1964-11-04: One specimen was collected by Jean Beem (B73WOO01FLUS).
HYDRWAKU*4	Hydroptila wakulla	Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N	1962-Pre	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: Specimens were collected before 1962 (U06RAS01FLUS).



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Biodiversity Matrix Report Map 2 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 23959					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 24212

Likely

<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
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Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT

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Biodiversity Matrix Report Map 2 of 7



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<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT

Matrix Unit ID: 24213

Likely

<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Sandhill upland lake		G3	S2	N	N

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 24470

Likely

<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
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Suite 200-C
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(850) 224-8207
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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 24727					
Likely					
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N

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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 24728

Likely

<i>Ardea alba</i>	Great Egret	G5	S4	N	N
<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	LS
<i>Egretta thula</i>	Snowy Egret	G5	S3	N	LS
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Ixobrychus exilis</i>	Least Bittern	G5	S4	N	N
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

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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: 24991					
Likely					
<i>Egretta thula</i>	Snowy Egret	G5	S3	N	LS
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Ixobrychus exilis</i>	Least Bittern	G5	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 25255

Likely

<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE

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Biodiversity Matrix Report Map 2 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebrioid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 25520

Likely

<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Sandhill upland lake		G3	S2	N	N

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cucularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE

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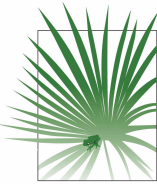
Florida Natural Areas Inventory

Biodiversity Matrix Report Map 2 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

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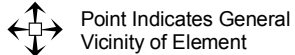


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Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
www.fnai.org

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Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive



- 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

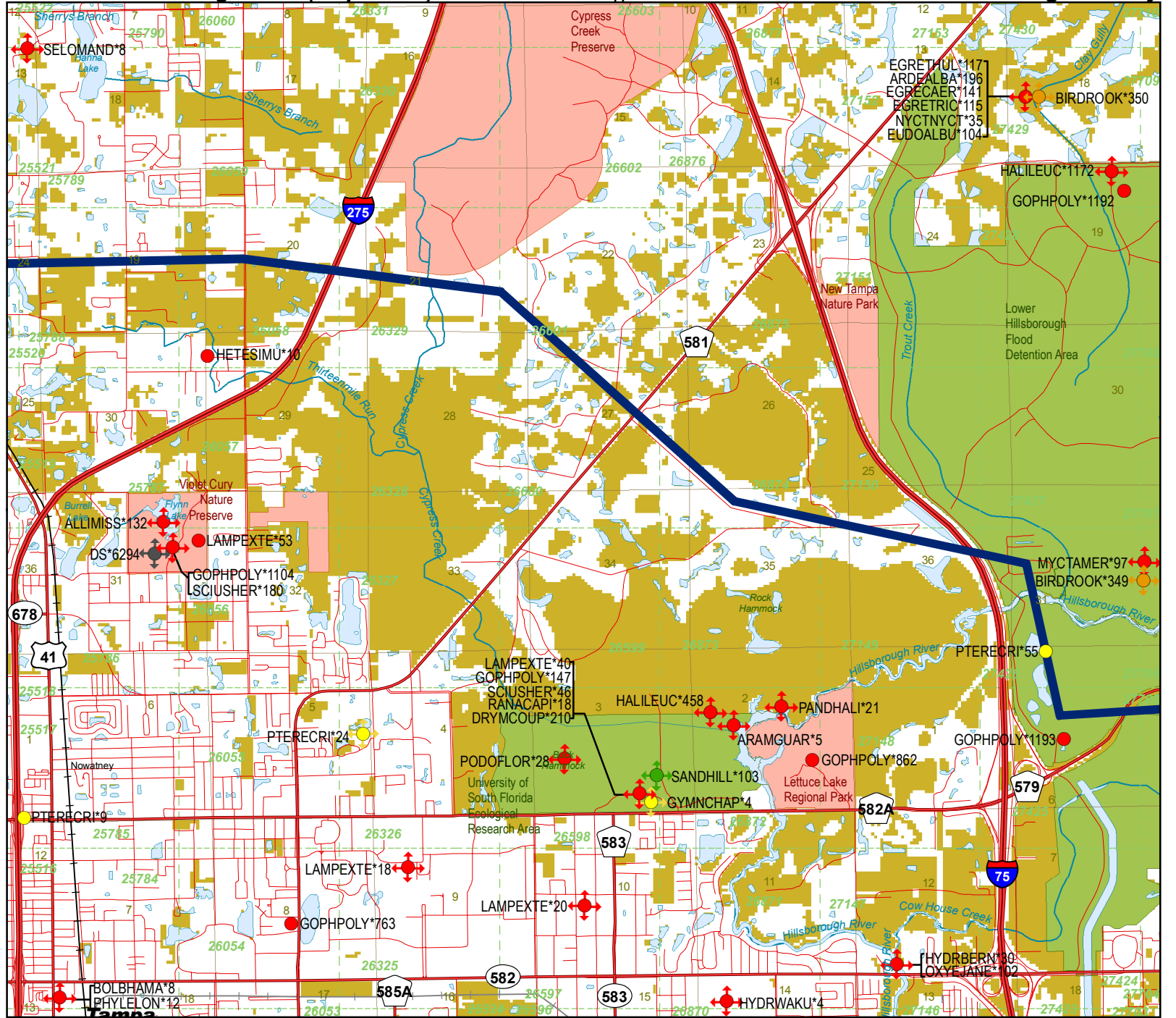


NOTE
Map should not be interpreted without accompanying documents.

Pinellas-Hillsborough-Polk (Map 3 of 7)

Site boundaries are approximate.

Hillsborough County



Map produced by ACN
Map Date: 30 NOV 2009



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 3 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
LAMPEXTE*18	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	1977-04-27	"TURKEY OAK SANDHILL HABITAT".	SPECIMEN FOUND CROSSING SAND ROAD AT 1730 HR, 27 APRIL 1977, BY LEO GARCIA.
PTERECRI*24	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1981-09-15	1981-09-15: Wet pinelands (R. Day).	1981-09-15: Specimen taken [fl] (R. Day).
PODOFLOR*28	Podomys floridanus	Florida Mouse	G3	S3	N	LS	1969	ISLAND OF SAND PINE SCRUB SURROUNDED BY WETLANDS OF HILLSBOROUGH RIVER.	2 USF SPECIMENS (ADULT M & F) COLL. 4 DEC 1969 BY R. JONES (ADJ-010,011).
LAMPEXTE*20	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	1974-11	DEVELOPED AREA ON FORMER SANDHILL.	1974-01-18: SPECIMEN COLLECTED DOR (DEAD ON ROAD) BY LARRY N. BROWN; BROWN COLLECTED A 2ND SPECIMEN IN NOVEMBER OR DECEMBER 1974 (S74BROSF). 1961-04-28: SINGLE SPECIMEN (GEW-1880) FOUND IN GARAGE (A62WOO01FL).
PTERECRI*9	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	1989-09-02	SANDY OAK WOODLANDS, QUERCUS VIRGINIANA VAR. GEMINATA AND QUERCUS LAEVIS DOMINANT.	1 PLANT, FLOWERING, IN LEAF.
GOPHPOLY*763	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1992-05-21	SANDHILL COMMUNITY WITH LONGLEAF PINE AND INTACT WIREGRASS GROUNDCOVER. QUERCUS LAEVIS, Q. GEMINATA, DIOSPYROS VIRGINIANA, BAPTISIA LECONTEI, LUPINUS DIFFUSUS, PSORALEA CANESCENS, PETALOSTEMON CARNEA, AND DYSCHORISTE OBLONGIFOLIA.	AT LEAST 5 BURROWS SCATTERED OVER CA. 10 ACRE SITE. ONE GOPHER TORTOISE SEEN AT ENTRANCE TO BURROW.
HETESIMU*10	Heterodon simus	Southern Hognose Snake	G2	S2	N	N	1994-POST	Overgrown sandhill succeeding to xeric oak hammock in absence of fire, with residential development but few fences; most homes built in 1983-1985 on 0.5->1-acre lots; Mushinsky yard (site of SIMUS observation) has palmetto understory, but most homes have	Post-1994: H. Mushinsky observed species in yard, though hasn't observed it in 2000-2001.
SCIUSHER*180	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1998	98-December: Oak hammock (U98BOW01FLUS).	00-01-24: Observed on site (U98BOW01FLUS).
ALLIMISS*132	Alligator mississippiensis	American Alligator	G5	S4	SAT	LS	1998	98-December: Freshwater lake (U98BOW01FLUS).	00-01-24: Observed on site (U98BOW01FLUS).



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 3 of 7)



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SCIUSHER*46	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1979-10-10	SANDHILL HABITAT WITH LONGLEAF OF VARIOUS AGES (NO OLD GROWTH), ON EDGE OF HILLSBOROUGH RIVER FLOODPLAIN.	SPECIMEN (UF-22166) COLL. 10 OCT 1979 BY L.N. BROWN (MN #6).
DS*6294	Data Sensitive Element	Data Sensitive	G2	S2	N	LE	1964-06-17	Data Sensitive	Data Sensitive
EGRECAER*141	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
BIRDROOK*350	Bird Rookery		G5	SNR	N	N	1988-06-07	No general description given	Multi-species rookery, 9 species. >1,000 birds 1988-06-07. Great Egret, Snowy Egret, Cattle Egret, Little Blue Heron, Tricolored Heron, Green-backed Heron, Black-crowned Night Heron, White Ibis, and Anhinga present 1988.
BIRDROOK*349	Bird Rookery		G5	SNR	N	N	1988-06-07	No general description given	Single-species rookery. 101-250 birds 1987-06-30, 1-10 birds 1988-05-27 and 1988-06-07. Wood Stork present 1987 and 1988.
EGRETRIC*115	Egretta tricolor	Tricolored Heron	G5	S4	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
PANDHALI*21	Pandion haliaetus	Osprey	G5	S3S4	N	LS*	1985-08-07	Blackwater Stream with Floodplain Swamp (cypress and hardwoods); emergent and floating vegetation, Pomocea eggs.	Nest (one) in large cypress on W. bank of Hillsborough River, two adult ospreys feeding in adjacent river.
RANACAPI*18	Rana capito	Gopher Frog	G3	S3	N	LS	1985-07-06	SANDHILL SURROUNDED BY FLOODPLAIN SWAMP (CYPRESS) OF HILLSBOROUGH RIVER; SANDHILL TIMBERED IN PAST BUT REGENERATING, A SMALL REMNANT OF PAST LARGE NC; USF BURNS EXPERIMENTALLY.	MUSHINSKY HAS OBSERVED ONE YOUNG INDIVIDUAL.
ARDEALBA*196	Ardea alba	Great Egret	G5	S4	N	N	1988-06-07	No general description given	Species present 1988-06-07.
NYCTNYCT*35	Nycticorax nycticorax	Black-crowned Night-heron	G5	S3	N	N	1988-06-07	No general description given	Species present 1988-06-07.



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 3 of 7)



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DRYMCOU*210	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1984-10-03	SANDHILL SURROUNDED BY FLOODPLAIN SWAMP (CYPRESS) OF HILLSBOROUGH RIVER; SANDHILL TIMBERED IN PAST BUT REGENERATING A SMALL REMNANT OF PAST LARGE NC; USF BURNS EXPERIMENTALLY	MUSHINSKY HAS OBSERVED 6 ADULTS IN 3 YEARS (1982-1984); SNAKES USE SWAMP IN SUMMER, SANDHILL IN SPRING/ AUTUMN (+4 WINTER?)
MYCTAMER*97	Mycteria americana	Wood Stork	G4	S2	LE	LE	1988-06-07	No general description given	Species present 1987-06-30 (101-250 birds), 1988-05-27 (1-10 birds), and 1988-06-07 (1-10 birds).
GYMNCHAP*4	Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N	1974-10-24	Sandhill community.	Infrequent; specimen flowering and fruiting.
GOPHPOLY*147	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1989-09	SANDHILL SURROUNDED BY FLOODPLAIN SWAMP (CYPRESS) OF HILLSBOROUGH RIVER; SANDHILL TIMBERED IN PAST BUT REGENERATING, A SMALL REMNANT OF PAST LARGE NC; USF BURNS EXPERIMENTALLY.	POPULATION ESTIMATED AT 200-300, BASED ON CAPTURE OF 284 INDIVIDUALS FROM 1982-1991. GOOD, VIABLE POP., VERY ACTIVE COLONY. A83RAS01 EST. POP. DENSITY AT 17.1/HECTARE, MIXED AGES W/LARGE PROP. OF YOUNG. STUDIES OF FOOD HABITS (A89MAC01FL), LOW ANNUAL SUR
LAMPEXTE*40	Lampropeltis extenuata	Short-tailed Snake	G3	S3	N	LT	1984-02-02	SANDHILL SURROUNDED BY FLOODPLAIN SWAMP (CYPRESS) OF HILLSBOROUGH RIVER; SANDHILL TIMBERED IN PAST BUT REGENERATING, A SMALL REMNANT OF PAST LARGE NC; USF BURNS EXPERIMENTALLY.	MUSHINSKY FOUND ONE SNAKE UNDER TIN IN AREA THAT IS BURNED YEARLY IN MAY.
ARAMGUAR*5	Aramus guarauna	Limpkin	G5	S3	N	LS	1985-08-07	BLACKWATER STREAM WITH FLOODPLAIN SWAMP CYPRESS AND HARDWOODS; FLOATING & EMERGENT VEGETATING POMACEA EGGS.	PAIR OBSERVED ACTIVELY INTERACTING ALONG N BANK OF RIVER (D. JACKSON, 85-08-08).
EUDOALBU*104	Eudocimus albus	White Ibis	G5	S4	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
EGRETHUL*117	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-06-07	No general description given	Species present 1988-06-07.
GOPHPOLY*1104	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1998	98-December: Pine flatwoods and oak hammock (U98BOW01FLUS).	00-01-24: Observed on site (U98BOW01FLUS).
GOPHPOLY*862	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	1993-10-21	Sandy flatwoods.	21 Oct. 93: observed one individual feeding along road.



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PTERECRI*55	<i>Pteroglossaspis ecrinata</i>	Giant Orchid	G2G3	S2	N	LT	2000-08-26	2000-08-26: Plants occurring on powerline corridor in association with <i>Serenoa repens</i> , <i>Rhus copallina</i> , <i>Diospyros virginiana</i> , <i>Smilax auriculata</i> , <i>Elephantopus elatus</i> , <i>Euthamia caroliniana</i> , <i>Andropogon virginicus</i> , and <i>Cyperus</i> sp. Bounding either side of the	2000-08-26: 8 individuals (62% flowering) found in area of 900 square yards with marginal vigor(U03SCH03FLUS).
HALILEUC*1172	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	PS	N	2003	2005-07-12: Source does not provide a description.	Nest status: Active, 2003; Unknown status or not assessed, 2002, 2001, 2000, 1999;(U03FWC01FLUS)
SANDHILL*103	Sandhill		G3	S2	N	N	2004	Longleaf pine overstory, turkey oak, blue-jack oak mid-story, good wiregrass and rich herbaceous groundcover.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993) (U05FNA02FLUS). Occurrence on site.
HALILEUC*458	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2001, 2000, 1999; Unknown/not assessed - 2002;Status 1995-98: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST: 1984-1988 ACTIVE; FLEDGED YOUNG, UNKNOWN 1984-1986.
LAMPEXTE*53	<i>Lampropeltis extenuata</i>	Short-tailed Snake	G3	S3	N	LT	2001-05-03	2001-05-03: Fire-suppressed flatwoods/oak hammock (old sandhill?). Most of land surrounding this small preserve is in residential development (U01BOW01FLUS)	2001-05-03: Sheryl Bowman observed/photographed snake 3 May 2001 (U01BOW01FLUS).
GOPHPOLY*1192	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT	2006-07-28	2007-01-29: tortoise burrows are found in a large, actively managed mesic flatwoods that is part of a busy county park located in an urban setting (PNDGUL01FLUS).	2006-07-28: two active burrows observed in open mesic flatwoods within county park (F06FNA22FLUS).
GOPHPOLY*1193	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT	2006-08-01	2007-01-29: disturbed remnant sandhill is adjacent to Tampa Bypass Canal and associated spoil areas. Major roads form southern and western boundarys. The Hillsborough River and its associated floodplain surround the area to the north and east (PNDGUL01	2006-08-01: one burrow seen at edge of remnant sandhill beside weedy, exotic filled spoil area (F06FNA22FLUS).



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 3 of 7)



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OXYEFLO*4	Oxyethira florida	Florida Cream and Brown Microcaddisfly	G1G2	S1S2	N	N	1962-Pre	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: An unknown number of specimens were collected (U06RAS01FLUS).
SELOMAND*8	Selonodon mandibularis	Large-Jawed Cebrioid Beetle	G2G3	S2S3	N	N	1958-08-08	1958-08-08: No description given (B99GAL01FLUS).	1958-08-08: 1 specimen was collected and deposited at FSCA (B99GAL01FLUS). 1916-05-18: 3 specimens were collected and deposited at LACM (B99GAL01FLUS). 1916-05-10: 1 specimen was collected and deposited to LACM (B99GAL01FLUS).
PHYLELON*12	Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N	1966-08-29	1966-08-29: No description given (B89WOO01FLUS).	1966-08-29: One specimen was collected by T.J. Favoroso using a Steiner trap. 1965-08-12: T.J. Favoroso collected 2 specimens in a Japanese beetle trap. 1952-08: J. Gross collected 1 specimen (B89WOO01FLUS).
BOLBHAMA*8	Bolbocerosoma hamatum	Bicolored Burrowing Scarab Beetle	GNR	S3S4	N	N	1964-11-04	1964-11-04: No description given (B73WOO01FLUS).	1964-11-04: One specimen was collected by Jean Beem (B73WOO01FLUS).
HYDRWAKU*4	Hydroptila wakulla	Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N	1962-Pre	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: Specimens were collected before 1962 (U06RAS01FLUS).
HYDRBERN*30	Hydroptila berneri	Berner's Microcaddisfly	G4G5	S3	N	N	2007-04-03	2007-04-03: No description given other than that the locality was near a river (U09RAS01FLUS).	2007-04-03: Twenty-one specimens were collected using a 15 watt black light over an alcohol-filled white pan (U09RAS01FLUS, U08RAS01FLUS).
OXYEJANE*102	Oxyethira janella	Little-entrance Oxyethiran Microcaddisfly	G5	S4S5	N	N	2007-04-03	2007-04-03: No description given other than that the locality was near a river (U09RAS01FLUS).	2007-04-03: Twenty-seven specimens were collected using a 15 watt black light over an alcohol-filled white pan (U09RAS01FLUS, U08RAS01FLUS).



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Biodiversity Matrix Report Map 3 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 25788					
Likely					
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 26058

Documented

<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
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Likely

<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT

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Biodiversity Matrix Report Map 3 of 7



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<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 26329

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS

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Biodiversity Matrix Report Map 3 of 7



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<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebrioid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 26600

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebrioid Beetle	G2G3	S2S3	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 26601

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

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Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax

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Biodiversity Matrix Report Map 3 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebionid Beetle	G2G3	S2S3	N	N
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 26874

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	G3	S3	N	LT
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N

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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon mandibularis</i>	Large-Jawed Cebrioid Beetle	G2G3	S2S3	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 27149

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	G3T2	S2	LT	LS
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Aramus guarauna</i>	Limpkin	G5	S3	N	LS
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Pandion haliaetus</i>	Osprey	G5	S3S4	N	LS*
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT

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Biodiversity Matrix Report Map 3 of 7



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<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 27150

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 27425

Documented

<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
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Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

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Biodiversity Matrix Report Map 3 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Sandhill		G3	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Oxyethira florida</i>	Florida Cream and Brown Microcaddis	G1G2	S1S2	N	N
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 27426					
Documented					
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
Likely					
<i>Bird Rookery</i>		GNR	SNR	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	G3T2	S2	LT	LS
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N

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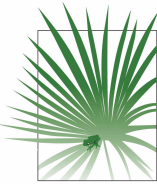
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Biodiversity Matrix Report Map 3 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Trichechus manatus</i>	Manatee	G2	S2	LE	LE

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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

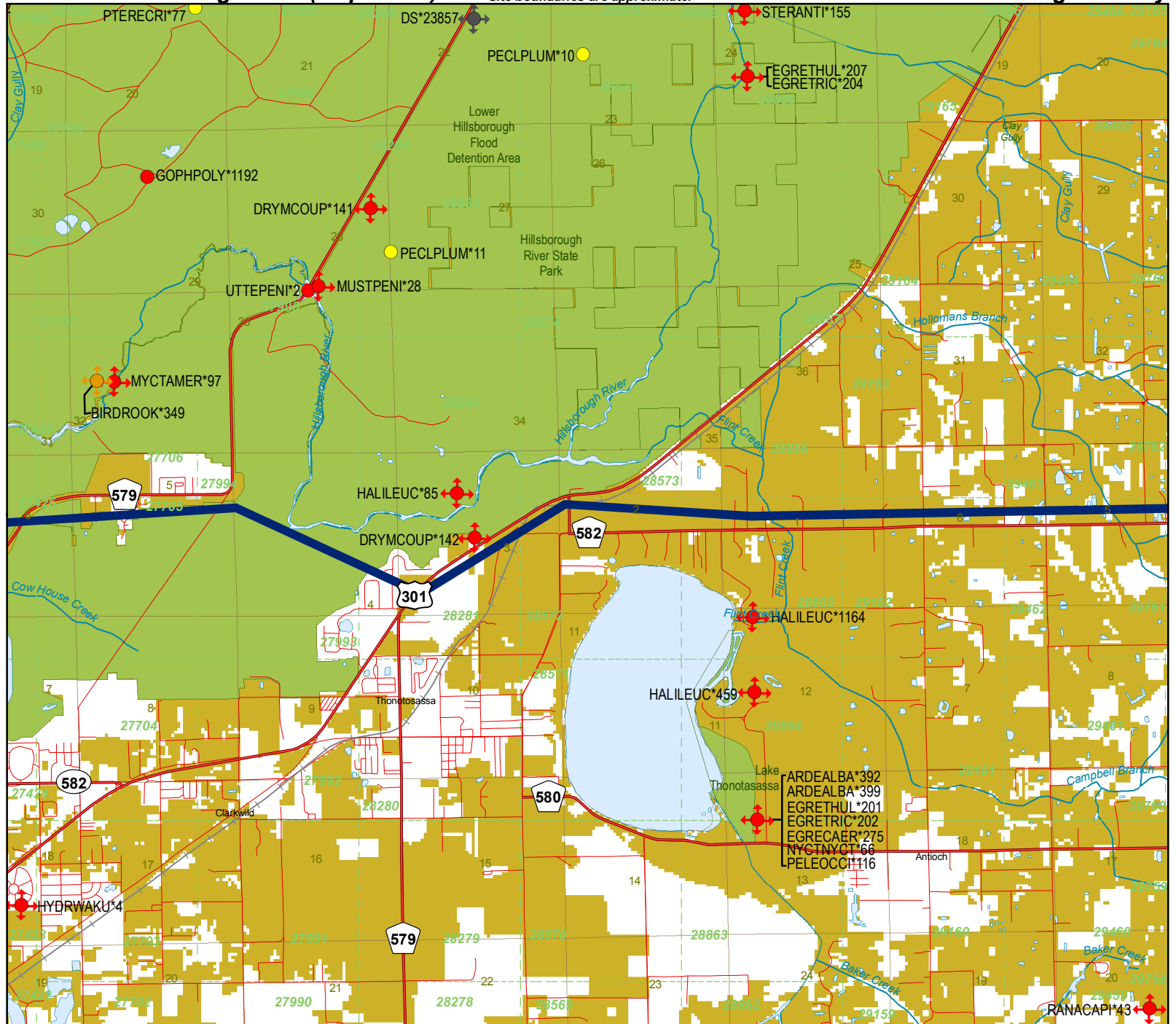


NOTE
Map should not be interpreted without accompanying documents.

Pinellas-Hillsborough-Polk (Map 4 of 7)

Site boundaries are approximate.

Hillsborough County



Map produced by ACN
Map Date: 30 NOV 2009



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 4 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
RANACAPI*43	Rana capito	Gopher Frog	G3	S3	N	LS	ZZ	No general description given	3 SPEC. (UK-7890-2), COLLECTOR N/A, DATE N/A.
EGRETHUL*201	Egretta thula	Snowy Egret	G5	S3	N	LS	1988-05-05	Willow stand in corner of lake, surrounded by larger trees on three sides.	1988/05/05: B.A. Millsap, GFC. HI-R-09 Brown Pelicans loafing at colony. "Total" = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO).
EGRECAER*275	Egretta caerulea	Little Blue Heron	G5	S4	N	LS	1988-05-05	Willow stand in corner of lake, surrounded by larger trees on three sides.	1988/05/05: B.A. Millsap, GFC, observation. HI-R-09 Brown Pelicans loafing at colony. "Total" = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO).
PELEOCCI*116	Pelecanus occidentalis	Brown Pelican	G4	S3	N	LS	1988-05-18	Willow stand in corner of lake, surrounded by larger trees on three sides.	1988: B.A. Millsap, GFC. HI-R-09 Brown Pelicans loafing at colony. "Total" = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO) on 5/05; K. J. McGowan - 5 juvenile pelicans seen on 5/09, and noted as not nesting on 5/18.
DRYMCOUP*142	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1970-	No general description given	INDIGO OBSERVED BY MARTY MARTIN IN 1970 (MOLER INTERVIEW OF GODLEY & MARTIN, 1982-03-27).
MUSTPENI*28	Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N	197?	Floodplain Forest	197?: L. N. Brown, ISU, observation. General reference. Tracks and scat observed. See L.N. Brown, pgs. 67-80 in B.C. Cowell, et al., Biological assessment of the Lower Hillsborough Flood Detention Area, Univ. South Florida, Tampa. 1974 (pg. 69).
BIRDROOK*349	Bird Rookery		G5	SNR	N	N	1988-06-07	No general description given	Single-species rookery. 101-250 birds 1987-06-30, 1-10 birds 1988-05-27 and 1988-06-07. Wood Stork present 1987 and 1988.
DRYMCOUP*141	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1974-	No general description given	INDIGO OBSERVED BY J.S. GODLEY OR MARTY MARTIN IN 1974 (MOLER INTERVIEW OF GODLEY & MARTIN, 1982-03-27).
STERANTI*155	Sterna antillarum	Least Tern	G4	S3	N	LT	1987-05-13	Dredge spoil	1987/05/13: G. Parsons, NAS, observed 50 nests (U97GFC02FLUS).
ARDEALBA*392	Ardea alba	Great Egret	G5	S4	N	N	1988-05-05	Willow stand in corner of lake, surrounded by larger trees on three sides.	1988/05/05: B.A. Millsap, GFC; HI-R-09 Brown Pelicans loafing at colony. Total = E (includes GREG, SNEG, CAEG, LBHE, ANHI, BRPE, DCCO).



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			Rank	Rank	Status	Listing			
EGRETHUL*207	<i>Egretta thula</i>	Snowy Egret	G5	S3	N	LS	1987-06-01	Floodplain swamp	1987/06/01: G. Parsons, NAS. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF
NYCTNYCT*66	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	G5	S3	N	N	1988-05-18	Lake	1988: K. J. McGowan, GFC - on 5/09 - ANHI and GBHE may be nesting here or across road.DCCO incubating (most), and feathered. CAEG incubating? and downy. BCNH young flying/ready; 5 juvenile BRPE seen. No obs. On other spp (GREG, SNEG, LBHE, TCHE, GRHE). "
MYCTAMER*97	<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE	1988-06-07	No general description given	Species present 1987-06-30 (101-250 birds), 1988-05-27 (1-10 birds), and 1988-06-07 (1-10 birds).
DS*23857	Data Sensitive Element	Data Sensitive	G5	S2	N	LE	1980-02-23	Data Sensitive	Data Sensitive
EGRETRIC*204	<i>Egretta tricolor</i>	Tricolored Heron	G5	S4	N	LS	1987-06-01	Floodplain swamp	1987/06/01: G. Parsons, NAS, observed 3 individuals. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF
ARDEALBA*399	<i>Ardea alba</i>	Great Egret	G5	S4	N	N	1988-05-09	Willow stand in corner of lake, surrounded by larger trees on three sides.	1988/05/09: K.J. McGowan, GFC; ANHI and GBHE may be nesting here or across the road. DCCO incubating(most), downy(most), and feathered. CAEG incubating? and downy. BCNH young flying/ready. 5 juv. BRPE seen. No obs. on other spp (GREG, SNEG, LBHE, TCHE, G
EGRETRIC*202	<i>Egretta tricolor</i>	Tricolored Heron	G5	S4	N	LS	1988-05-18	Willow stand in corner of lake, surrounded by larger trees on three sides.	1988/05/18: K.J. McGowan, GFC. Est. # breeding pairs. CAEG incubating(most) and downy young? LBHE with downy young? DCCO incubating,hatching?, downy, and renesting?. BRPE not nesting. No obs. on other spp (GBHE, TCHE, GRHE, BCNH). "Total" = D.
UTTEPENI*2	<i>Utterbackia peninsularis</i>	Peninsular Floater	G3	S2	N	N	1994-pre	No general description given	1994-Pre: collection of 13 specimens cited (A95BOG01FLUS).
PTERECRI*77	<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT	2003-08	2003-08: One individual found in mesic flatwoods which burned 2003-08-13 (F03FRE01FLUS).	2003-08: One plant found in flower (F03FRE01FLUS).
HALILEUC*1164	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	PS	N	2003	2005-07-12: Source does not provide a description.	Nest status: Active, 2003, 2002, 2001; Unknown status or not assessed, 2000, 1999;(U03FWC01FLUS)



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 4 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
HALILEUC*85	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	PS	N	2003	No general description given	Nest status 1999-2003: Active - 2003, 2002, 2001; Unknown/not assessed - 2000, 1999; Status 1995-98: Unknown/not assessed - 1998, 1997, 1996, 1995; (U03FWC01FLUS). Previous data (note different format) NEST: 1979-1981, 1983-1984 ACTIVE, USURPED BY OWL 19
HALILEUC*459	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	PS	N	1997	No general description given	Nest status 1999-2003: Inactive - 2003, 2001, 1999; Unknown/not assessed - 2002, 2000; Status 1995-98: Active - 1997, 1996, 1995; Inactive - 1998; (U03FWC01FLUS). Previous data (note different format) NEST: 1985, 1988 ACTIVE, GONE 1986, INACTIVE 1987; FL
PECLPLUM*10	<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE	2006-07-10	2006-11-02: Large hammock grades to floodplain swamp bordering the Hillsborough River to the east. Land to west is mostly disturbed flatwoods used for equestrian recreation (PNDGUL01FLUS).	2006-07-10: 100-200 plants observed as dominant epiphytes on trunks and lower limbs of <i>Quercus virginiana</i> as well as a few on <i>Sabal palmetto</i> in mesic hammock along road and trail (F06FNA22FLUS).
PECLPLUM*11	<i>Pecluma plumula</i>	Plume Polypody	G5	S2	N	LE	2006-07-11	2006-11-02: Extensive hammock in a mosaic with floodplain swamp along the Hillsborough River (PNDGUL01FLUS).	2006-07-11: 30-150 plants observed as epiphytes on lower trunks of <i>Quercus virginiana</i> , on <i>Q. virginiana</i> stump, and on a dying <i>Q. virginiana</i> ; occurring with <i>Pleopeltis polypodioides</i> , <i>Vittaria lineata</i> , and <i>Tillandsia setacea</i> ; in hydric hammock along road (
GOPHPOLY*1192	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT	2006-07-28	2007-01-29: tortoise burrows are found in a large, actively managed mesic flatwoods that is part of a busy county park located in an urban setting (PNDGUL01FLUS).	2006-07-28: two active burrows observed in open mesic flatwoods within county park (F06FNA22FLUS).
HYDRWAKU*4	<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microcaddisfly	G2	S2	N	N	1962-Pre	1962-Pre: No description given (U06RAS01FLUS).	1962-Pre: Specimens were collected before 1962 (U06RAS01FLUS).



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Biodiversity Matrix Report Map 4 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 27705					
Likely					
<i>Bird Rookery</i>		GNR	SNR	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 27993

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE

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Biodiversity Matrix Report Map 4 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 28281

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Sandhill		G3	S2	N	N

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chrysopsis floridana</i>	Florida Goldenaster	G1	S1	LE	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Hydroptila wakulla</i>	Wakulla Springs Vari-colored Microca	G1G2	S1S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT

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Biodiversity Matrix Report Map 4 of 7



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<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 28572

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Stilosoma extenuatum</i>	Short-tailed Snake	G3	S3	N	LT
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

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Tallahassee, FL 32303
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Biodiversity Matrix Report Map 4 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 28865					
Documented					
<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Andropogon arctatus</i>	Pine-woods Bluestem	G3	S3	N	LT
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 29162					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Andropogon arctatus</i>	Pine-woods Bluestem	G3	S3	N	LT
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE

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Suite 200-C
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Biodiversity Matrix Report Map 4 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 29462

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Andropogon arctatus</i>	Pine-woods Bluestem	G3	S3	N	LT
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT

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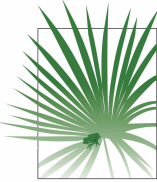
Florida Natural Areas Inventory

Biodiversity Matrix Report Map 4 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

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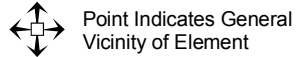


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(850) 681-9364 Fax
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Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive



Point Indicates General Vicinity of Element

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

Conservation Lands

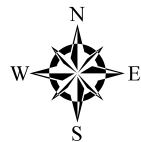
- Federal
- State
- Local
- Private
- State Aquatic Preserves

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

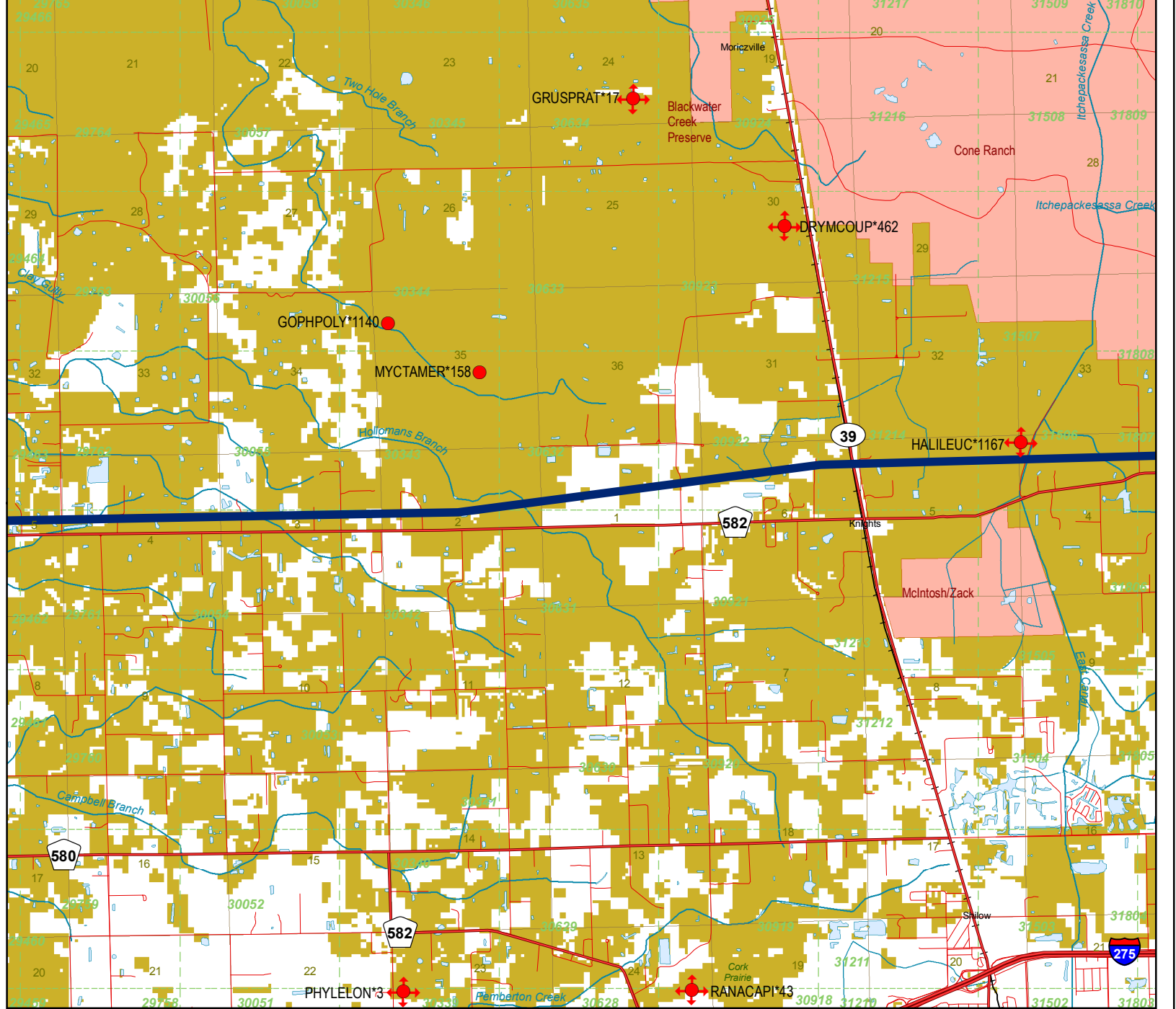


NOTE
Map should not be interpreted without accompanying documents.

Pinellas-Hillsborough-Polk (Map 5 of 7)

Site boundaries are approximate.

Hillsborough County



Map produced by ACN
Map Date: 30 NOV 2009



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 5 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
RANACAPI*43	Rana capito	Gopher Frog	G3	S3	N	LS	ZZ	No general description given	3 SPEC. (UK-7890-2), COLLECTOR N/A, DATE N/A.
DRYMCOUP*462	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1997-04-07	Herbaceous wetland surrounded by cypress system. Some evidence of agricultural/cattle ditching, probably disturbed around 1930.	1997-04-07: One snake seen in early stages of shed.
GRUSPRAT*17	Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT	1986-	SMALL PERMANENT PONDS SCATTERED THROUGHOUT AREA.	CA. 12-15 PAIRS FROM EARLY 1970'S THROUGH 1986.
GOPHPOLY*1140	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	2004-10-05	2004-10-05: Mesic flatwoods disturbed by cattle (PNDSCH03FLUS).	2004-10-05: One adult tortoise and active burrow (PNDSCH03FLUS).
MYCTAMER*158	Mycteria americana	Wood Stork	G4	S2	LE	LE	2004-10-05	2004-10-05: Edge of Taxodium ascendens dome swamp in improved pasture of bahia grass (PNDTAN01FLUS).	2004-10-05: Two adults foraging on edge of wetland (PNDTAN01FLUS).
HALILEUC*1167	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	2005-07-12: Source does not provide a description.	Nest status: Active, 2003, 2002, 2001, 2000; Unknown status or not assessed, 1999;(U03FWC01FLUS)
PHYLELON*3	Phyllophaga elongata	Elongate June Beetle	G2G4	S2S4	N	N	1939-08-19	1939-08-19: No description given (B89WOO01FLUS).	1939-08-19: Eleven specimens were collected at night by Hubbell and Friauf (B89WOO01FLUS).



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Biodiversity Matrix Report Map 5 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 29761					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT
Matrix Unit ID: 30054					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N

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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 30342

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 30343

Documented

<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
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Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
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Biodiversity Matrix Report Map 5 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Andropogon arctatus</i>	Pine-woods Bluestem	G3	S3	N	LT
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 30632

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Andropogon arctatus</i>	Pine-woods Bluestem	G3	S3	N	LT
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE

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Tallahassee, FL 32303
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Biodiversity Matrix Report Map 5 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS

Matrix Unit ID: 30922

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 31214

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE

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Tallahassee, FL 32303
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Biodiversity Matrix Report Map 5 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet	G2	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS

Matrix Unit ID: 31506

Documented

<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N
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Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

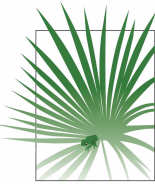
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Conradina brevifolia</i>	Short-leaved Rosemary	G2Q	S2	LE	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

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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

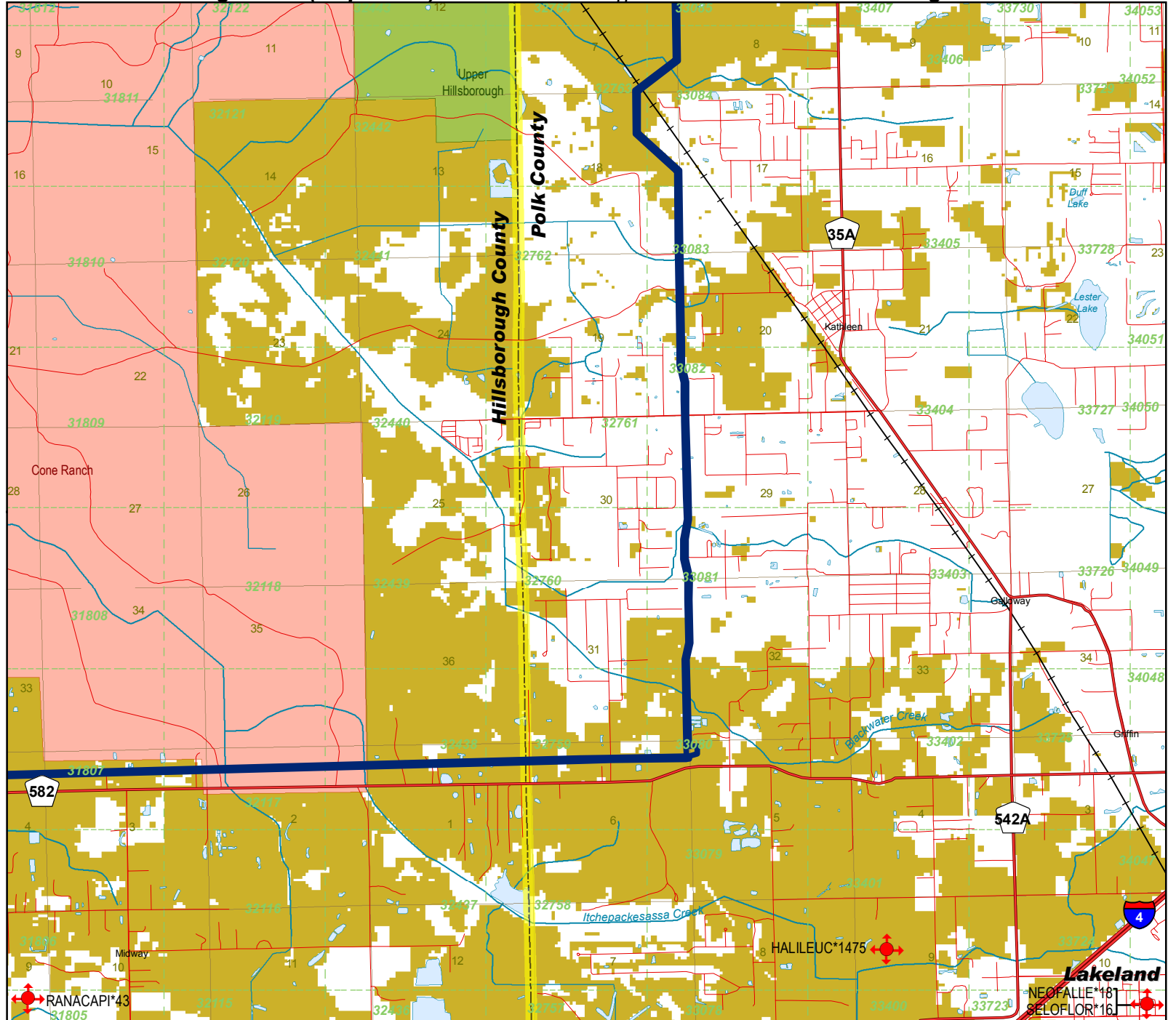


NOTE
Map should not be interpreted without accompanying documents.

Pinellas-Hillsborough-Polk (Map 6 of 7)

Site boundaries are approximate.

Hillsborough and Polk Counties



Map produced by ACN
Map Date: 30 NOV 2009



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ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 6 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation					Date	Description	EO Comments
			Rank	Rank	Status	Listing				
RANACAPI*43	Rana capito	Gopher Frog	G3	S3	N	LS	ZZ	No general description given	3 SPEC. (UK-7890-2), COLLECTOR N/A, DATE N/A.	
NEOFALLE*18	Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N	1970-11-09	No general description given	FSM SPECIMENS: ONE SPECIMEN FSM #10188, COLLECTED BY D.S. LEE 1970-11-09.	
HALILEUC*1475	Haliaeetus leucocephalus	Bald Eagle	G5	S3	PS	N	2003	2005-07-12: Source does not provide a description.	Nest status: Active, 2003, 2002, 2001, 2000, 1999;(U03FWC01FLUS)	
SELOFLOR*16	Selonodon floridensis	Florida Cebtrionid Beetle	G2G3	S2S3	N	N	1942-05-30	1942-05-30: No description given (B99GAL01FLUS).	1942-05-30: Five specimens were collected on this date. There in an undated record for two more specimens (B99GAL01FLUS).	



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Biodiversity Matrix Report Map 6 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 31807					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT
Matrix Unit ID: 32117					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE

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Biodiversity Matrix Report Map 6 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 32438

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 32759

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE

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Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 32763

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea ssp. chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 33080

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT

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Suite 200-C
Tallahassee, FL 32303
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Biodiversity Matrix Report Map 6 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea ssp. chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Selonodon floridensis</i>	Florida Cebrionid Beetle	G2G3	S2S3	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	LT*
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 33081

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N

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<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea ssp. chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 33082

Likely

<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea ssp. chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	LS

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Biodiversity Matrix Report Map 6 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 33083

Likely

<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea ssp. chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

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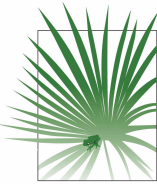
Florida Natural Areas Inventory

Biodiversity Matrix Report Map 6 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 33084					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chionanthus pygmaeus</i>	Pygmy Fringe Tree	G3	S3	LE	LE
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea</i> ssp. <i>chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

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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

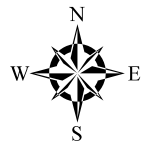
- Federal
- State
- Local
- Private
- State Aquatic Preserves

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

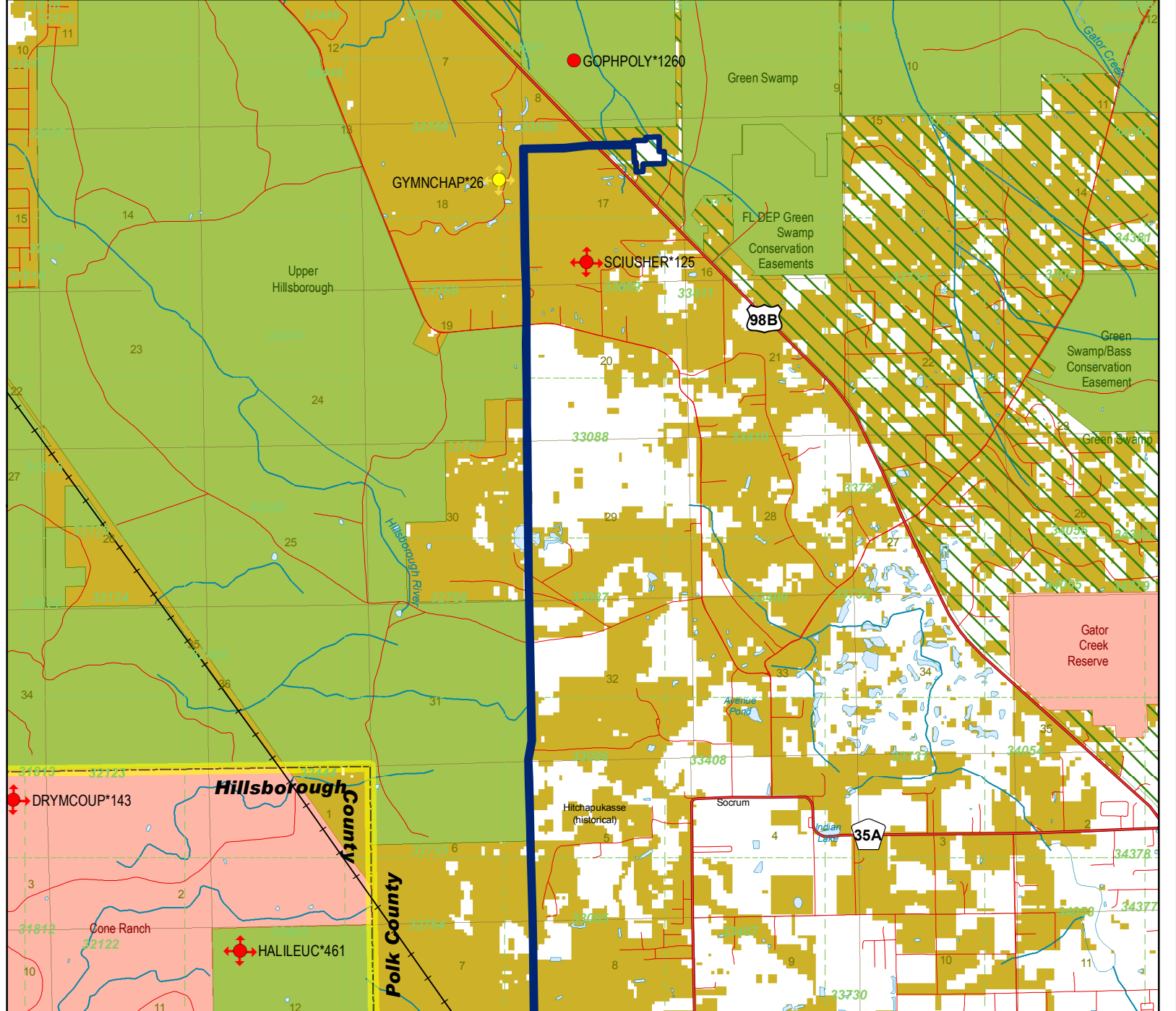


NOTE
Map should not be interpreted without accompanying documents.

Pinellas-Hillsborough-Polk (Map 7 of 7)

Site boundaries are approximate.

Hillsborough and Polk Counties



Map produced by ACN
Map Date: 30 NOV 2009



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Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR Pinellas-Hillsborough-Polk (Map 7 of 7)



Map Label	Scientific Name	Common Name	Global State Federal State Observation				Date	Description	EO Comments
			Rank	Rank	Status	Listing			
DRYMCOUP*143	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1970-	No general description given	INDIGO OBSERVED BY MARTY MARTIN IN 1970 (MOLER INTER- VIEW OF GODLEY & MARTIN, 1982-03-27).
SCIUSHER*125	Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS	1988-07-28	Cypress Swamp; Mesic Flatwoods.	1988-07-28: B.A. Millsap, GFC, observed 1 adult male.
GYMNCHAP*26	Gymnopogon chapmanianus	Chapman's Skeletongrass	G3	S3	N	N	1987-11-02	1987-11-02: Flatwoods (Hall).	1987-11-02: Infrequent; scattered in flatwoods; specimen taken [leaves, inflor., and few roots] (Hall).
HALILEUC*461	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: 1987-1988 ACTIVE; FLEDGED YOUNG 1987-1988.
GOPHPOLY*1260	Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT	2008-07-25	2008-07-25: one adult tortoise foraging in grassy road that passes through mesic flatwoods; area is moderately disturbed by a clearing and an ORV trail (PNDHER03FLUS).	2008-07-25: one adult tortoise foraging in grassy road that passes through mesic flatwoods (PNDHER03FLUS).



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

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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: 33085					
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chionanthus pygmaeus</i>	Pygmy Fringe Tree	G3	S3	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea ssp. chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 33086

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

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Biodiversity Matrix Report Map 7 of 7



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chionanthus pygmaeus</i>	Pygmy Fringe Tree	G3	S3	LE	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Eriogonum longifolium var. gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
<i>Zephyranthes simpsonii</i>	Rain Lily	G2G3	S2S3	N	LT

Matrix Unit ID: 33087

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Asplenium heteroresiliens</i>	Wagner's Spleenwort	GNA	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE

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Florida Natural Areas Inventory

Biodiversity Matrix Report Map 7 of 7



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<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Eumeces egregius lividus</i>	Blue-tailed Mole Skink	G5T2	S2	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea</i> ssp. <i>chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 33088

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS

Potential

<i>Agrimonia incisa</i>	Incised Groove-bur	G3	S2	N	LE
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Asplenium heteroresiliens</i>	Wagner's Spleenwort	GNA	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Bonamia grandiflora</i>	Florida Bonamia	G3	S3	LT	LE
<i>Calamintha ashei</i>	Ashe's Savory	G3	S3	N	LT
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat	G4T3	S3	LT	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N

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Florida Natural Areas Inventory

Biodiversity Matrix Report Map 7 of 7



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<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Nolina brittoniana</i>	Britton's Beargrass	G3	S3	LE	LE
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Paronychia chartacea ssp. chartacea</i>	Paper-like Nailwort	G3T3	S3	LT	LE
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Polygala lewtonii</i>	Lewton's Polygala	G3	S3	LE	LE
<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 33089

Likely

<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS

Potential

<i>Agrimonia incisa</i>	Incised Groove-bur	G3	S2	N	LE
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Asplenium heteroresiliens</i>	Wagner's Spleenwort	GNA	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE

Matrix Unit ID: 33090

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Florida Natural Areas Inventory

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Documented					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
Likely					
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	LS
Potential					
<i>Agrimonia incisa</i>	Incised Groove-bur	G3	S2	N	LE
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Asplenium heteroresiliens</i>	Wagner's Spleenwort	GNA	S1	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass	G3	S3	N	N
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Monotropsis reynoldsiae</i>	Pygmy Pipes	G1Q	S1	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Neofiber alleni</i>	Round-tailed Muskrat	G3	S3	N	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	LS
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Rostrhamus sociabilis plumbeus</i>	Snail Kite	G4G5T3Q	S2	LE	LE

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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 10,000 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>

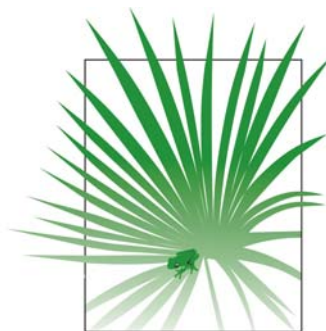
LE Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all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



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

FLORIDA
Natural Areas
INVENTORY

Green Swamp

Lake and Polk Counties

Group A Full Fee / Less-Than-Fee

Purpose for State Acquisition

The mosaic of cypress swamps, pine forests, and pastures known as the Green Swamp is a vital part of the water supply of central Florida. This project gives rise to four major river systems, has the highest groundwater elevation in the peninsula, and is important for maintaining the flow of water from the Floridan Aquifer. By preserving the mosaic of land use in this region, the Green Swamp Florida Forever project will protect the Floridan Aquifer and the several rivers; preserve a large area for wildlife; and provide areas for public recreation in the rapidly growing region between Tampa and Orlando. 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.

Managers

The Fish and Wildlife Conservation Commission (FWC) is recommended as the manager for most of the project area. The Department of Environmental Protection's Division of Recreation and Parks (DRP) will manage the Overstreet Ranch and the area adjacent to Lake Louisa State Park, with Sections 3, 4, and 5, T24S, R26E being the southern extent of its management.

General Description

The project is a critical hydrological resource: it en-

compasses the headwaters of four major rivers; the Withlacoochee, Oklawaha, Hillsborough, and Peace; and has the highest ground water elevation in the Peninsula. It is therefore considered critical to the recharge of the Floridan Aquifer. For this reason, it has been designated an Area of Critical State Concern. The area is a complex mosaic of disturbed uplands and wetlands intermixed with higher quality swamps. It is estimated that 90% of the native upland vegetation in the project has been disturbed by agriculture and development, but the project does contain some uplands with natural communities such as flatwoods and sandhills. The project has a moderate potential for archaeological or historical sites. The wetlands are threatened by sand mining and the uplands are threatened by residential, commercial and high-intensity recreational development.

Public Use

The project will become a wildlife management area and a state park, providing for such activities as hunting, hiking and nature appreciation. The less than fee parcel qualifies as a wildlife management area. The amount and nature of public use will be negotiated with the landowners.

Acquisition Planning

On December 10, 1992, the Land Acquisition Advisory Council (LAAC) added the Green Swamp project to the CARL Priority list. This fee-simple & less-than-fee acquisition, sponsored by the Department of Environmental Regulations, consisted of approximately 230,000 acres, divided into Phase I (126,800 acres) and II (103,200 acres), multiple owners, and a 1991 taxable

Placed on list	1992
Project Area (Acres)	233,598*
Acres Acquired	69,447**
at a Cost of	\$115,321,102**
Acres Remaining	164,151
with Estimated (Tax Assessed) Value of	\$194,407,313

*Previously only Phase 1 reported

**includes acreage acquired & funds expended by the Southwest Florida and St. Johns River Water Management Districts

Green Swamp	
FNAI Elements - July 2009	
Gopher Tortoise	G3/S3
Eastern Indigo Snake	G3/S3
Florida Mouse	G3/S3
Swallow-tailed Kite	G5/S2
<i>Celestial Lily</i>	G2/S2
Florida Sandhill Crane	G5T2T3/S2S3
Short-tailed Hawk	G4G5/S1
Peninsular Floater	G3/S2
<i>Scrub Plum</i>	G3/S3
<i>Florida Bonamia</i>	G3/S3
30 rare species are associated with the project	

value of \$272,628,200. Two non-contiguous Phase I areas have been identified based on relative intactness of their natural communities. In general, priority areas are the relatively large contiguous parcels and strategic smaller parcels. In Lake County, the northern half of the western Phase I area extends south to the county line, less the subdivisions. Specifically in the Lake Louisa area, the Bradshaw ownership (acquired) is the most important tract.

The Black Bear Land Company, Ray, and Oswalt ownerships have also been acquired. Other large ownerships have been mapped and appraised.

On October 30, 1996, the LAAC approved a fee-simple, 3,598-acre addition to the project boundary. The addition was distributed as follows: Phase I, 890 acres with a taxable value of \$995,830 and Phase II, 2,708 acres with a taxable value of \$3,030,000. The addition was sponsored by the DEP, consisted of multiple owners, and a total taxable value of \$4,025,830. LAAC also moved 19,000 acres from Phase II to Phase I and approved the deletion of the priority areas designation within Phase I.

On December 15, 1996, the Overstreet (acquired in 2006) and portions of the Jahna (acquired in a conservation easement) ownerships (11,383 acres) were transferred to the CARL Less-Than-Fee category.

On April 6, 2001, the Acquisition & Restoration Council (ARC) established a Florida Forever (FF) priority list consisting of Groups A & B. The Green Swamp Less-Than-Fee acreage went to Group A and the Full-Fee acreage went to Group B.

On June 6, 2002, the ARC approved combining the Green Swamp full-fee and less-than-fee categories into one Group A Less-Than-Fee category. Parcels can still be acquired in full-fee if appropriate.

Coordination

The Green Swamp Land Authority has acquired 17,948 acres within the project boundary and expended \$13,848,442. The SWFWMD has acquired considerable acreage adjacent to and partly within the overall project boundary. Section 51, ch. 99-2478, provided for the deletion of the provision setting out the membership of the Green Swamp Land Authority and that “[henceforth, the Green Swamp Land Authority shall mean the Department of Environmental Protection for purposes of [Section 380.0677, F.S.,] and statutes related thereto.”

Management Policy Statement

The primary goals of management of the Green Swamp Florida Forever project are: to conserve and protect lands within areas of critical state concern; to conserve and protect significant habitat for native species or endangered and threatened species; 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; and to provide areas, including recreational trails, for natural-resource-based recreation.

Management Prospectus

Qualifications for state designation The Green Swamp Florida Forever project has the size and wildlife resources to qualify as a wildlife management area.

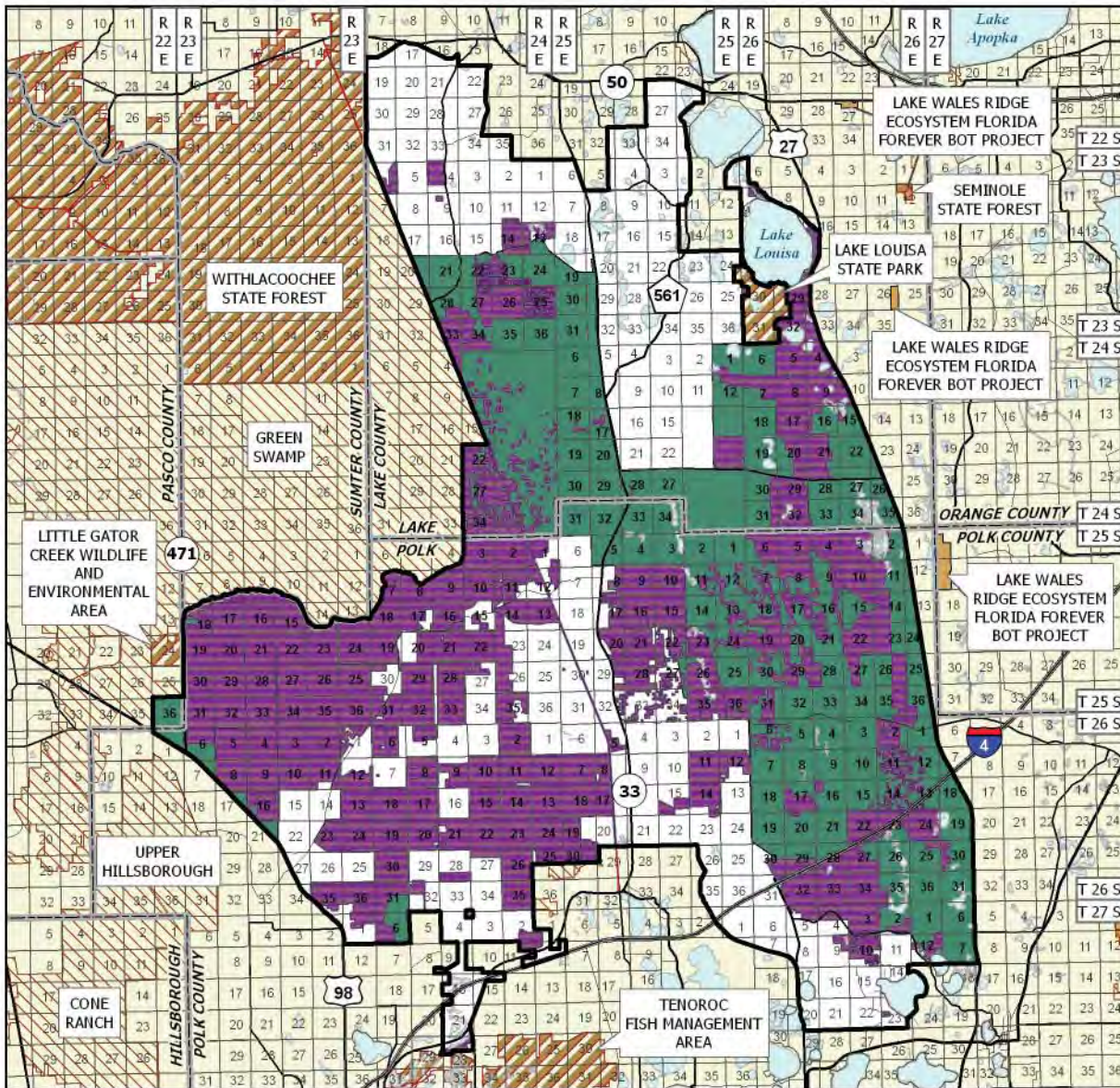
Manager DEP has been recommended as manager.

Conditions affecting intensity of management The primary management tools in the area to be managed by FWC involve prescribed introduction of fire and control of human access. Some pine forests will require restoration. The portion of the project adjacent to Lake Louisa, to be managed by DRP, is a high-need management area with emphasis on public recreational use and development and major resource restoration. The majority of the properties in this area are or were citrus groves. The portion of the project known as the Overstreet Ranch to be managed by DRP is within the Department of Transportation’s Hillsborough Watershed mitigation/restoration area. The southwest portion has been identified for potential mitigation.

Timetable for implementing management and provisions for security and protection of infrastructure

Within the first year after acquisition, FWC’s management activities will concentrate on site security, natural and cultural resource protection, and the development of a plan for long-term public use and resource management that is consistent with the goals and objectives stated for this project. Long-term management will include restoration of natural pine forests. Growing-season fire will be important in this restoration. FWC will emphasize the provision of old-growth forest, but for game species will also provide areas of successional vegetation in pine areas adjacent to wetlands. FWC also plans to provide high-quality habitat and protection for listed wildlife species. FWC will keep public facilities to a minimum, hiking and horseback trail in upland areas, and perhaps interpretive centers and wildlife observation towers in selected areas.

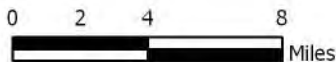
Green Swamp - Group A / Full Fee / Less-Than-Fee



GREEN SWAMP

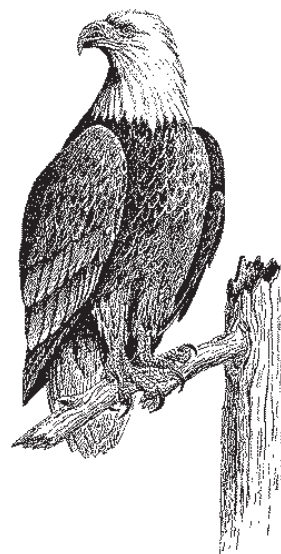
LAKE AND POLK COUNTIES

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



APRIL 2009

Revenue-generating potential FWC expects no significant revenue from this project initially, but will continue to offer hunting opportunities. For the area next to Lake Louisa State Park, DRP also expects no significant revenue to be generated initially. After acquisition, it will probably be several years before any significant public use facilities are developed in the Lake Louisa area, and the amount of any revenue generated will depend on the nature and extent of public use and facilities.



Management Cost Summary/FWC

Category	1996/97	1997/98	1998/99
Source of Funds	CARL	CARL	CARL
Salary	\$18,290	\$43,100	\$77,650
OPS	\$0	\$0	\$1,000
Expense	\$43,280	\$37,900	\$30,000
OCO	\$0	\$28,500	\$29,200
FCO	\$0	\$0	\$0
TOTAL	\$61,570	\$109,500	\$137,850

Management Cost Summary/DRP

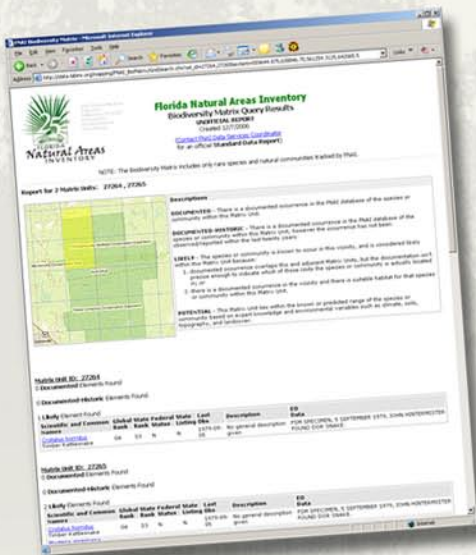
Category	1996/97	1997/98	1998/99
Source of Funds	SPTF/CARL	SPTF/CARL	SPTF/CARL
Salary	\$103,834	\$106,949	\$110,157
OPS	\$12,254	\$12,000	\$12,000
Expense	\$19,268	\$22,000	\$22,000
OCO	\$29,807	\$0	\$0
FCO	\$0	\$0	\$0
TOTAL	\$135,356	\$140,949	\$144,157

FOR IMMEDIATE RELEASE

FNAI's Biodiversity Matrix Online



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.

Try it today:

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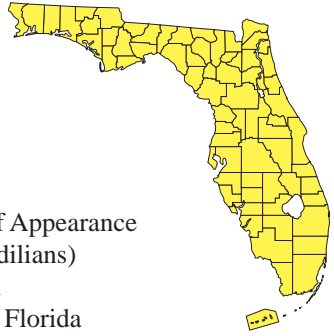
Please note: FNAI will continue to offer our Standard Data Report service as always. The Standard Data Report offers the most comprehensive information available on rare species, natural communities, conservation lands, and other natural resources.

APPENDIX B
FLORIDA NATURAL AREAS INVENTORY ELEMENT OCCURRENCE REPORT

AMERICAN ALLIGATOR

Alligator mississippiensis

- Order:** Crocodylia
Family: Alligatoridae
FNAI Ranks: G5/S4
U.S. Status: Threatened by Similarity of Appearance
(to more endangered crocodylians)
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 crocodylian 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.

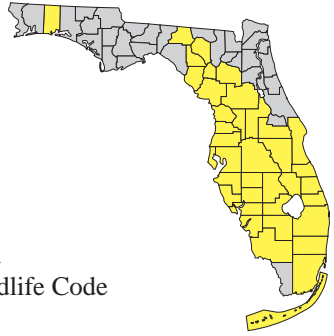
Conservation Status: Has recovered dramatically since 1960s. Populations are present on most federal, state, and private conservation lands where there is permanent fresh water. Several populations are now large enough to support controlled harvest. Threats include destruction and pollution of wetlands,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

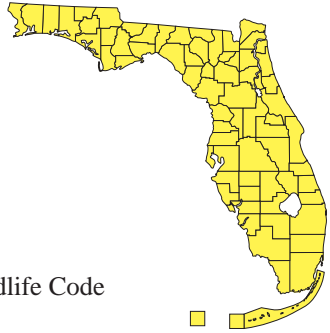
Protection and Management: Educate residents in developments and owners of industrial or farm lands where owls occur to help limit harassment. Maintain optimum condition of natural and ruderal sites where owls occur; will likely require fire in natural areas and mowing in ruderal ones. Establish buffer 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.

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.



© Tom Vezo



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,

LITTLE BLUE HERON

Egretta caerulea

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.

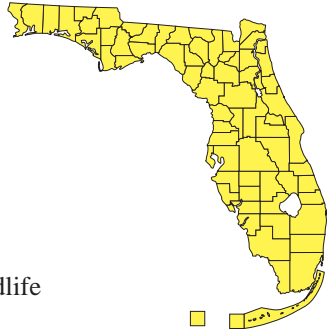
Protection and Management: Protect breeding and foraging habitats through establishment of preserves and regulation of wetlands. Restore and maintain natural hydroperiods in degraded wetland areas. The Florida Fish and Wildlife Conservation Commission and the Department of Environmental Protection have 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

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

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

Egretta thula

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.

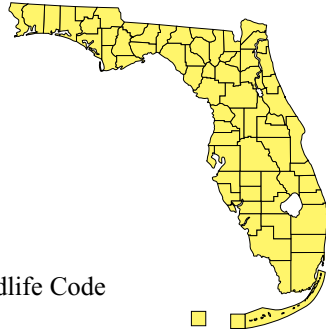
Protection and Management: Prevent rapid changes in water depth in managed wetlands that will likely adversely affect quality of foraging. Restore and maintain natural hydroperiods in degraded wetland areas. Protect breeding and foraging habitats through establishment of preserves and regulation of wetlands. 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.



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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.

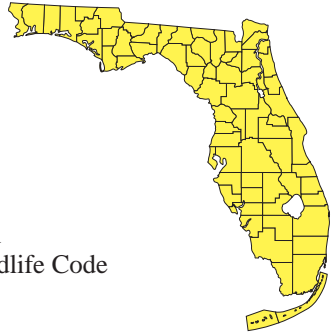
Selected References: Poole and Gill (eds.) 1997, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Runde et al. 1991, Stevenson and Anderson 1994.



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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

WHITE IBIS

Eudocimus albus

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 colonial 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.

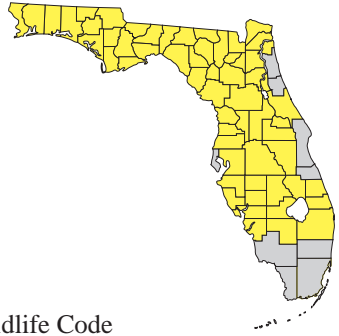
Conservation Status: Population declines in Florida appear to have been pronounced over the past decades (around 50 percent from 1970 to 1990). However, declines in Florida have been offset to some degree by increasing numbers in other nearby states. Range-wide declines in Florida and neighboring states 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 *Falco sparverius paulus* KESTREL

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).

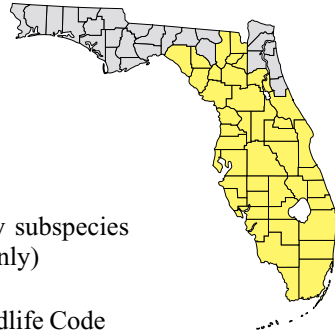
Range-wide Distribution: Found throughout most of North and South America, but the listed subspecies is restricted to the southeastern U.S., occurring from Louisiana east to South Carolina and south through the Florida peninsula.

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.

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.



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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

FLORIDA SANDHILL CRANE *Grus canadensis pratensis*

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. Acquire 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.

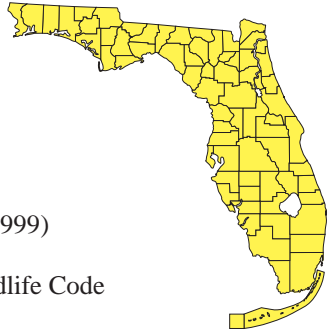
Selected References: Poole and Gill (eds.) 1992, Robertson and Woolfenden 1992, Rodgers et al. (eds.) 1996, Stevenson and Anderson 1994, Toland 1999a.

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.



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immature

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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.

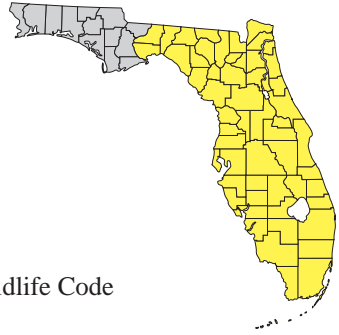
Conservation Status: Original population in Florida could be found throughout state and likely numbered well over 1,000 pairs. Population declined sharply after late 1940s, reaching a low of 120 active nests in 1973, and by 1978 was considered rare as a breeder. Use of pesticide DDT and related compounds 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.

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
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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 erythrorhynchos*) 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,

WOOD STORK

Mycteria americana

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.

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.



juvenile
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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. =

GOPHER TORTOISE

Gopherus polyphemus

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.

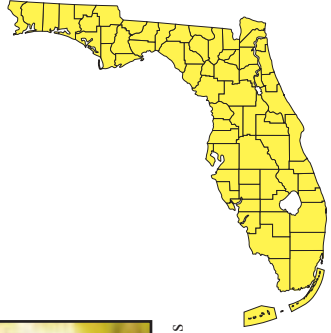
Conservation Status: Despite its widespread occurrence throughout Florida, there is considerable concern about the declining abundance of this species. Much of its native habitat has been lost to agriculture, citriculture, forestry, mining, and urban and residential development. Although protected populations 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.

EASTERN INDIGO SNAKE

Drymarchon corais couperi

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



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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.

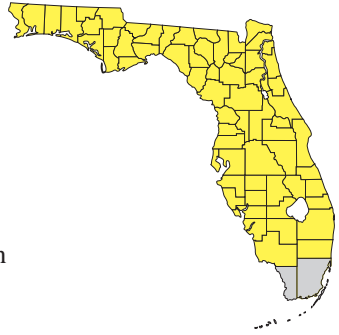
Protection and Management: Protect very large tracts (> 5000 acres = 2025 ha) of appropriate natural habitat unfragmented by roads; use prescribed fire as needed. Maintain gopher tortoise populations and dead stumps to provide natural subterranean refugia. Enforce bans on tortoise burrow gassing and 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.

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



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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

GOPHER FROG

Rana capito

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. sevosus*) 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.

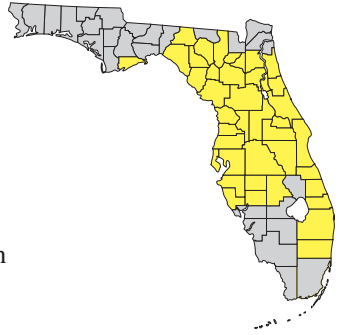
Protection and Management: Maintain large tracts of native vegetation in sandy, upland habitats that include wetlands. Allow fires to burn through dry wetland basins in addition to uplands. Manage uplands for gopher tortoises. See recommendations for striped newt (*Notophthalmus perstriatus*).

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.

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.

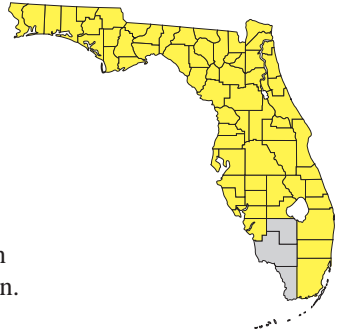
Range-wide Distribution: Same as Florida distribution.

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.

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.



© Dan Hipes



© Dale R. Jackson

© Dan Hipes

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

FLORIDA PINE SNAKE *Pituophis melanoleucus mugitus*

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.

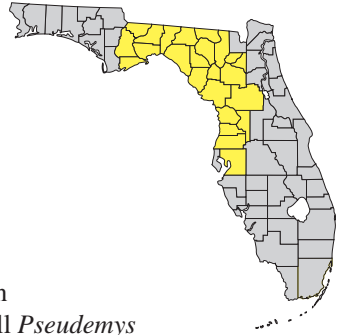
Conservation Status: Occurs on many state and federal lands in Florida. Threats include collection for pets (now restricted); highway mortality; and habitat loss and fragmentation from development, intensive agriculture, and mining.

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.

SUWANNEE COOTER

Pseudemys concinna
suwanniensis



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

State possession limit of two river cooters (all *Pseudemys concinna*, including *suwanniensis*), but none during closed season April 15 - July 31; illegal to buy or sell species or its parts.

© Dale R. Jackson



© Dale R. Jackson



juvenile
© Ghislaine Guyot



Description: A medium-sized to large (to 17 in. = 430 mm shell length) freshwater basking turtle characterized by a nearly black upper shell (carapace) with fine yellow markings, and an orange-yellow lower shell (plastron) with a variable amount of black pigment (often fading in adults) along the seams between scales. Fine yellow lines midway along the carapace (on the large costal scales) often in form of concentric circles or backward-facing C's. Bridge and underside of carapacial rim with complete set of black spots, often containing concentric yellow circles. Head and neck bear yellow stripes but no blotches; iris of eye often light blue-green; hind feet black above.

SUWANNEE COOTER *Pseudemys concinna suwanniensis*

Similar Species: May co-occur with several other cooters and sliders. Most have straight yellow to red lines or bars on scales of carapace, rather than circles or C's. Plastron of Florida cooter, *Pseudemys floridana*, is plain yellow; that of slider, *Trachemys scripta*, is yellow but usually with two or more black spots toward front and rear; and that of Florida red-bellied turtle, *P. nelsoni*, is generally plain yellow-orange to reddish, although young individuals may have black spots and semi-circles. Slider has a yellow blotch or solid dark color rather than stripes behind each eye, and vertical stripes on skin on either side of tail. Compare also Barbour's map turtle (*Graptemys barbouri*; see species account). Another race of river cooter (*P. c. concinna*), with somewhat broader yellow and orange lines on carapace and stripes on hind feet, occurs west of the Apalachicola, with the two intergrading in the Apalachicola region.

Habitat: Rivers and large streams, including alluvial, blackwater, and spring-run streams, often with dense aquatic vegetation upon which species feeds. Occasionally enters estuaries at river mouths. Basks extensively on logs and floating vegetation mats. Nests on high banks and bars above floodplain.

Seasonal Occurrence: Present year-round but less conspicuous in cold weather; basks regularly from spring through fall and on warm winter days; nests late March - early August, with hatchlings emerging in both fall and spring.

Florida Distribution: Gulf coastal rivers from vicinity of Tampa Bay (Alafia River) north- and westward to approximately the Ochlockonee River west of Tallahassee, beyond which it intergrades with other subspecies of river cooters.

Range-wide Distribution: Nearly restricted to Florida, but extends upstream in the Suwannee River system into southern Georgia. Other subspecies of river cooter inhabit much of the southeastern United States, with populations extending north to Illinois and west to Texas.

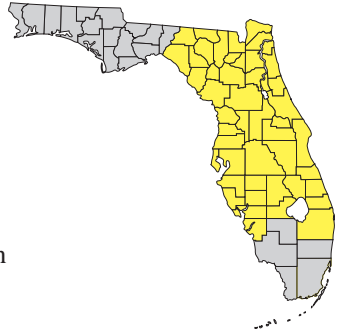
Conservation Status: Although populations have declined, this turtle is still relatively common in many rivers. Large stretches of several inhabited rivers are bordered by or included within public lands. Pollution poses a potential threat to all rivers and may have extirpated the Fenholloway River population.

Protection and Management: Continue public acquisition of river corridors; monitor and regulate water quality of inhabited rivers. Enforce legal restrictions on harvest (some evidence of recent poaching exists).

Selected References: Ashton and Ashton 1991, Bartlett and Bartlett 1999, Conant and Collins 1991, Ernst et al. 1994, Jackson and Walker 1997, Moler (ed.) 1992.

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



© Jerry Lee Gingerich, DVM

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.

GIANT ORCHID

Pteroglossaspis ecristata (Fernald) Rolfe

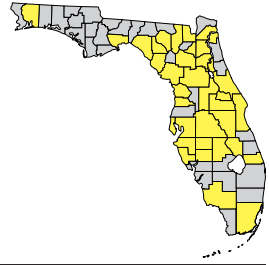
Synonym: *Eulophia ecristata* (Fernald) Ames

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.

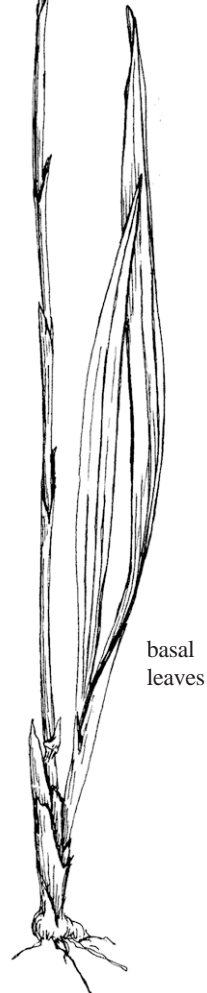
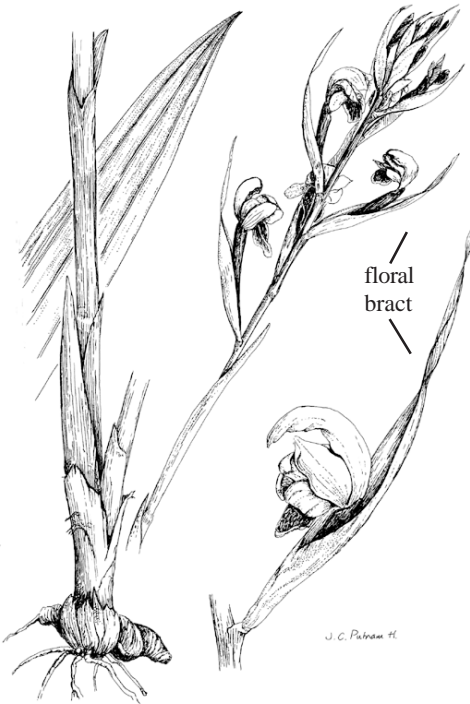
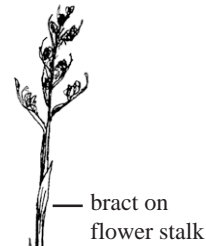
Best Survey Season: Flowers July–September, fruits September–November.

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.



GIANT ORCHID

Pteroglossaspis ecristata (Fernald) Rolfe

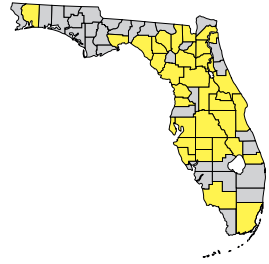
Synonym: *Eulophia ecristata* (Fernald) Ames

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.

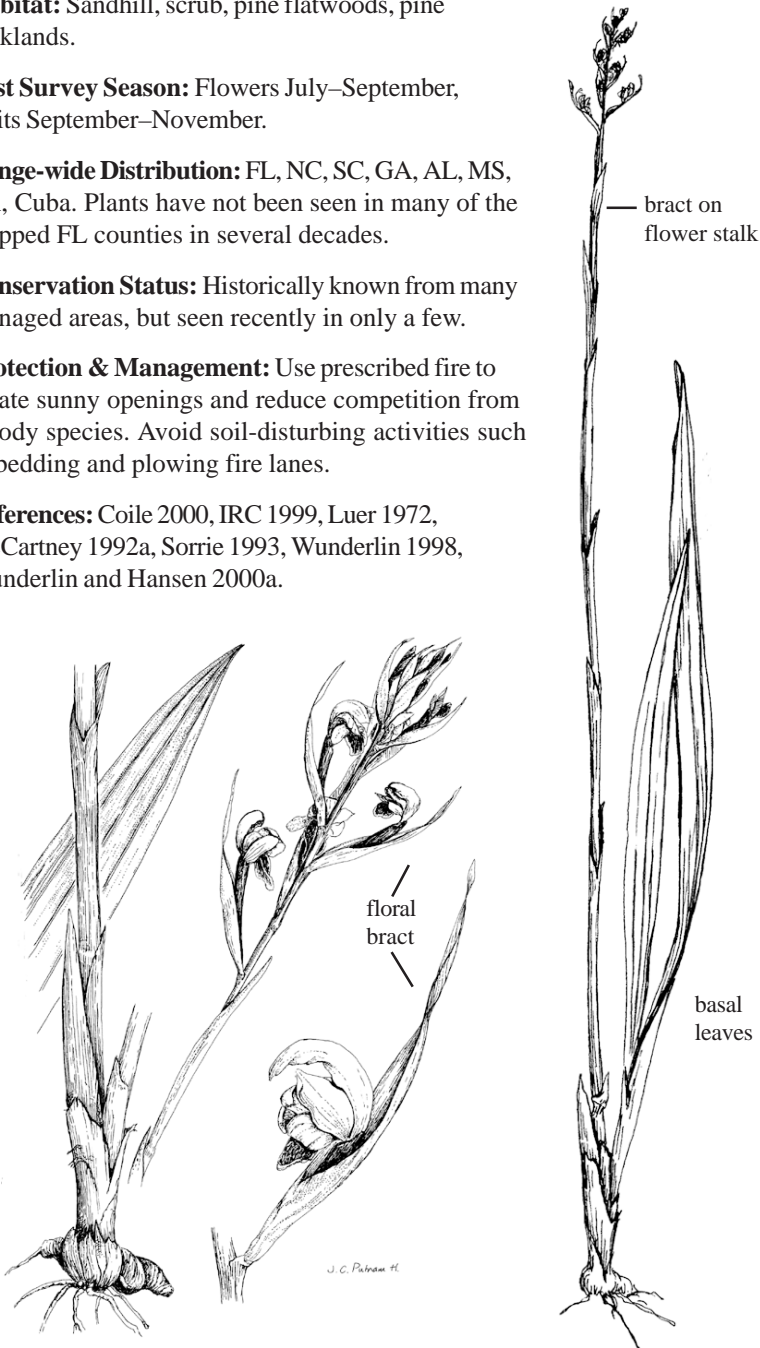
Best Survey Season: Flowers July–September, fruits September–November.

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.



CELESTIAL LILY

Nemastylis floridana Small

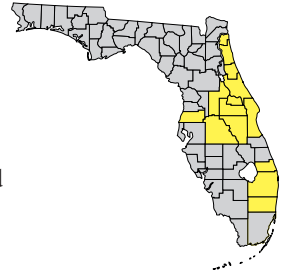
Synonyms: none

Family: Iridaceae (iris)

FNAI Ranks: G2/S2

Legal Status: US—Mgmt Concern FL—Endangered

Wetland Status: US—OBL FL—FACW



Alfred R. Schotz

Field Description: Perennial **herb** from a bulb with a single, tall, slender **stem**, occasionally branching on robust plants. **Basal leaves** few, grass-like, sometimes more than 2 feet long. **Stem leaves** small and scattered along the stem. **Flowers** more than 1.5 inches across, with 6 dark blue, spreading **petals and sepals (tepals)**; flowers open around 4 pm and close by dusk. **Stamens** with 3 coiled, yellow anthers; **style** divided into 6 narrow, pointed branches. **Fruit** an erect, oval capsule, about 0.5 inch long.

Similar Species: Blue-eyed grasses (*Sisyrinchium* spp.) are also in the iris family; they have much smaller blue flowers that are open throughout the day in the spring and summer. Celestial lily is the only iris-like species in FL to open in the late afternoon in the fall.

Related Rare Species: See Bartram's ixia (*Calydorea coelestina*), state-endangered, in this guide.

Celestial lily

Nemastylis floridana

Habitat: Wet flatwoods, prairies, marshes, cabbage palm hammocks edges.

Best Survey Season: Flowers from 4-6 pm, August–October.

Range-wide Distribution: Endemic to eastern counties of FL, primarily in the St. Johns River drainage.

Conservation Status: Once widespread in eastern FL, this species now occurs in about 15 managed areas, where it may be locally abundant if its habitat is frequently burned.

Protection & Management: Burn flatwoods and prairies every 2 - 3 years. Protect wetlands from draining, ditching, and conversion to pasture and pine plantation.

References: Coile 2000, Goldblatt 1975, Kral 1983, MacKiernan and Norman 1979, Small 1931b, Ward 1979, Wunderlin 1998, Wunderlin and Hansen 2000a.



TOOTHED LATTICE-VEIN FERN

Thelypteris serrata (Cav.) Alston

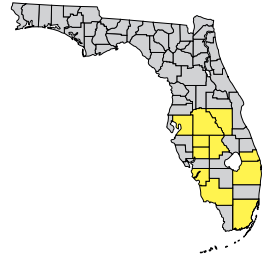
Synonyms: *Meniscium serratum* Cav.

Family: Thelypteridaceae (maiden or marsh fern)

FNAI Ranks: G5/S2

Legal Status: US—none FL—Endangered

Wetland status: US—none FL—FACW



Gil Nelson

Field Description (photo and drawing, left: Fern with large, evergreen fronds 2 - 6 feet long, with hairy, brown or tan leafstalks. **Leaflets** 4 - 10 inches long, 1.5 inches wide, with hairy veins and sharply hook-toothed margins. **Sori** in many, parallel rows between veins on underside of leaflets.

Similar and Related Rare Species (see drawing, right): Lattice-vein fern (*Thelypteris reticulata*), state-endangered, is also a large evergreen fern with fronds to 6 feet long; leaflets are paired, 8 - 12 inches long and 2.5 inches wide, with entire, wavy, or round-toothed margins. It occurs in wet hammocks and cypress swamps in Broward, Collier, Dade, and Lee counties.

Stately maiden fern (*Thelypteris grandis*), state-endangered, has fronds to 5 feet long divided into finely cut leaflets, similar to the common marsh fern (*Thelypteris kunthii*); it occurs only in swamps in Collier County. Grid-scale maiden fern (*Thelypteris patens*), state-endangered, also resembles the common maiden fern; it occurs in 2 rockland hammocks in Dade County. See also creeping star-hair fern (*Thelypteris reptans*) in this guide.

Toothed lattice-vein fern

Thelypteris serrata

Habitat: Cypress swamps, sloughs, floodplains.

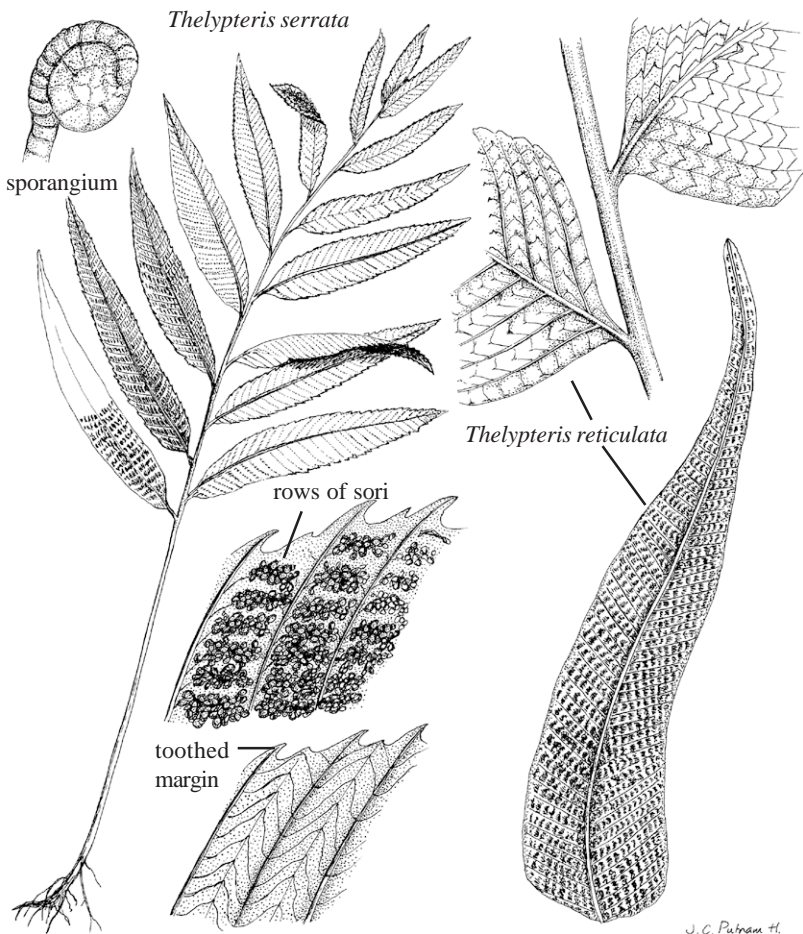
Best Survey Season: All year.

Range-wide Distribution: FL, Mexico, West Indies, Central and South America.

Conservation Status: Toothed lattice-vein fern occurs in several conservation areas and is also somewhat protected by wetland regulations.

Protection & management: Avoid logging, draining, or developing wetlands.

References: Coile 2000, FNA 1993, IRC 1999, Lellinger and Evans 1985, Nelson 2000, Wunderlin 1998, Wunderlin and Hansen 2000, Wunderlin and Hansen 2000a.



FLORIDA GOLDENASTER

Chrysopsis floridana Small

Synonyms: *Heterotheca floridana* (Small) R. W. Long

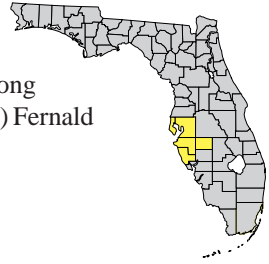
Chrysopsis mariana (L.) Elliott var. *floridana* (Small) Fernald

Family: Asteraceae (composite)

FNAI Ranks: G1/S1

Legal Status: US–Endangered FL–Endangered

Wetland Status: US–UPL FL–UPL



Billy B. Boothe

Field Description: Perennial **herb**, 10 - 16 inches tall, with woody base and woolly, erect branches rising from a rosette of densely woolly, spoon-shaped leaves. **Stem leaves** 0.5 - 1.2 inches long, densely woolly, somewhat wider above the middle with rounded tips, slightly clasping the stem; sometimes crowded and overlapping on lower stem. **Leaves** on upper stems about the same size as lower leaves, which are smooth or woolly but never glandular. **Flower heads** about 1 inch across, in flat-topped clusters of up to 25 heads at the top of the stem, with golden yellow disk and ray flowers, surrounded by 3 - 4 series of small **bracts**. **Stalks of flower heads** with stalked glands.

Similar Species: Coastalplain goldenaster (*Chrysopsis scabrella*) has narrower, pointed, glandular, non-woolly leaves on upper stems. Maryland goldenaster (*Chrysopsis mariana*) leaves have pointed tips and are reduced in size up the stem; hairs on leaves and stems more cobwebby than woolly.

Related Rare Species: See Godfrey's goldenaster (*Chrysopsis godfreyi*) and Cruise's goldenaster (*Chrysopsis gossypina* ssp. *cruiseana*) in this guide.

Florida goldenaster

Chrysopsis floridana

Habitat: Sunny, bare patches of sand in sand pine scrub; low sand ridges of excessively well drained, fine sands; railroad and highway rights-of-way.

Best Survey Season:

Flowers late summer–fall.

Range-wide Distribution:

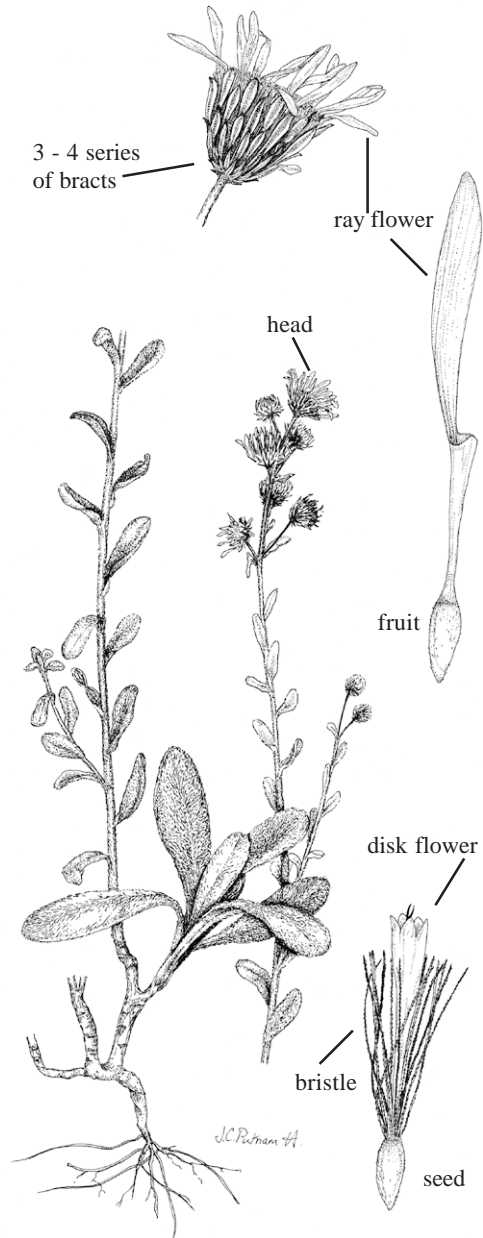
Endemic to west-central FL.

Conservation Status: About 20 populations are known, almost half on conservation lands.

Protection & Management:

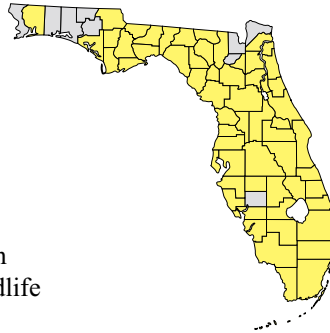
Avoid mechanical disturbance, such as mowing, off-road-vehicle use, and clearing, to soil and ground cover; avoid use of herbicides in rights-of-way. Use prescribed fire in scrub and other xeric habitats to create a mosaic of habitats. Control exotic pest plants.

References: Coile 2000, Lambert and Menges 1996, Semple 1981, USFWS 1988, USFWS 1998, Ward 1979, Wunderlin et al. 1981a, Wunderlin and Hansen 2000a.



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

LIMPKIN

Aramus guarauna

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.

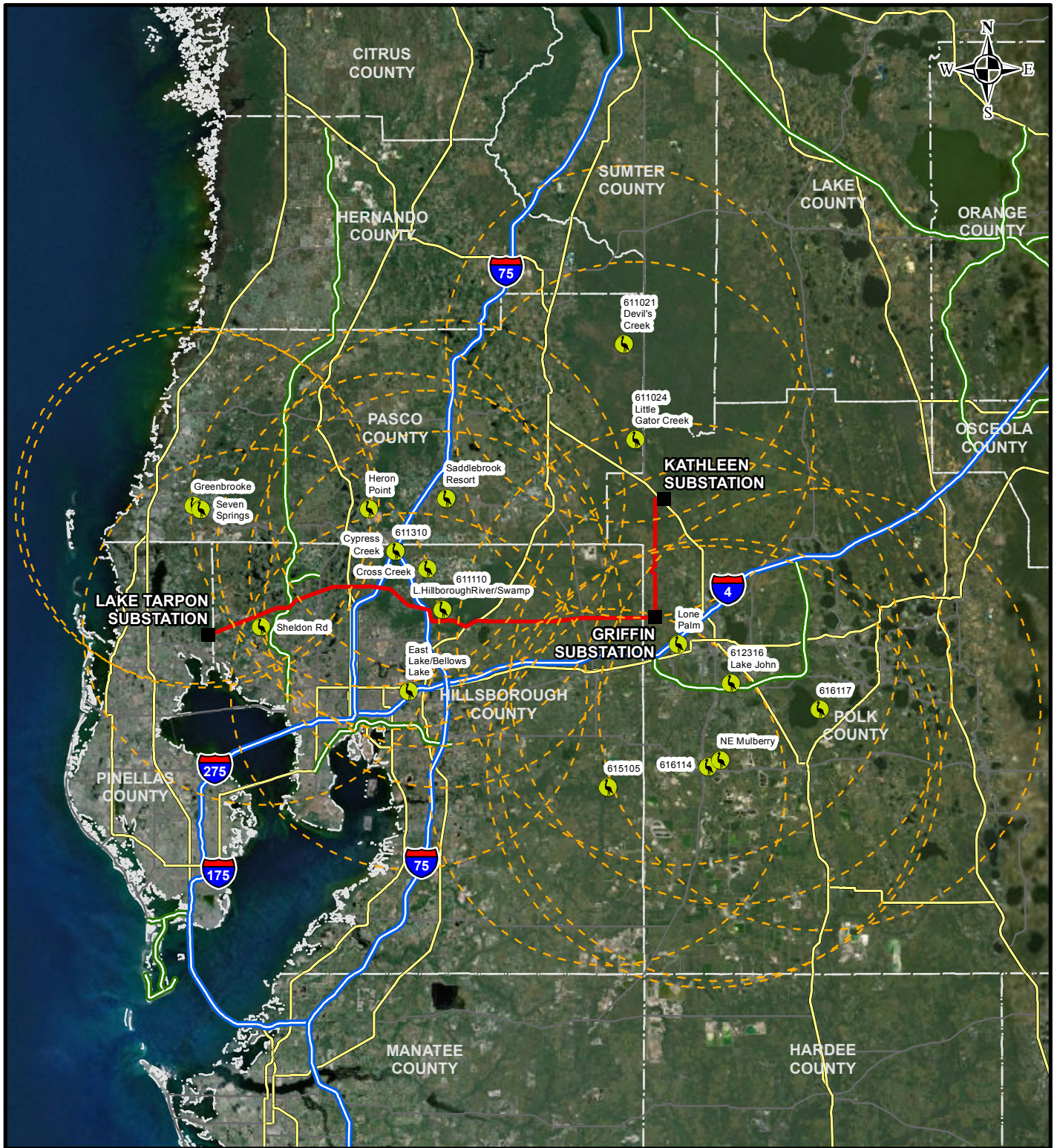
Range-wide Distribution: Resident in southeastern Georgia, Florida, Greater Antilles (rare or extirpated in Puerto Rico), and from southern Mexico to central Argentina.

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.

APPENDIX C
LISTED SPECIES DESCRIPTIONS

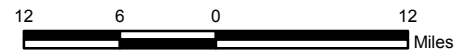


LEGEND

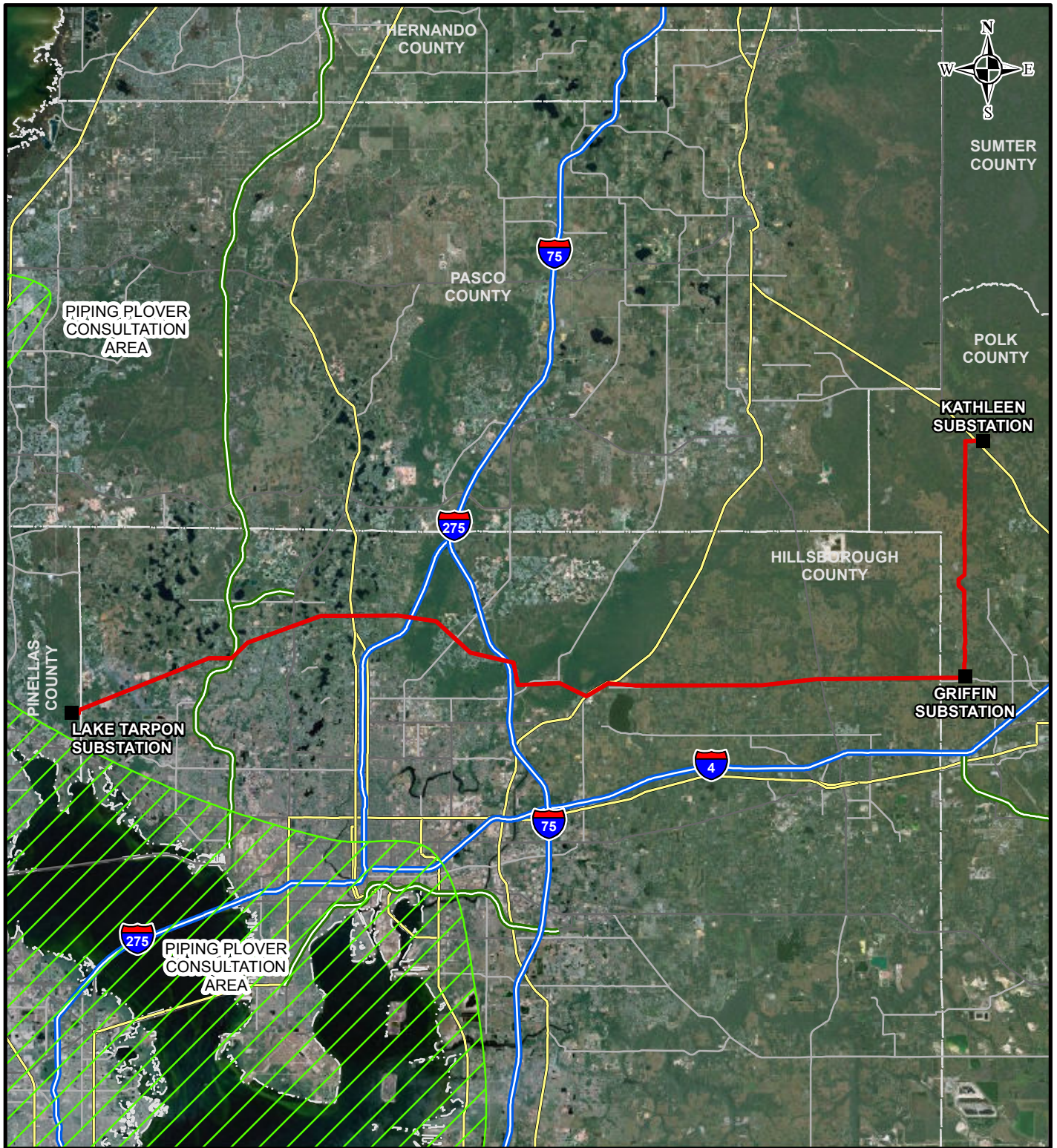
- Substation
- Florida Wood Stork Nesting Colony
- PHP Preferred Right-of-Way
- Wood Stork Forage Area
- County Boundary
- Interstate
- Toll Road
- US Road
- State Road

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			
POLK - HILLSBOROUGH - PINELLAS WOOD STORK NESTING COLONIES & FORAGE AREAS			
	MXD File No.	103-89627A011	SCALE AS SHOWN
	DESIGN	JDG 02/18/2011	REV. 0
	GIS	JDG 02/21/2011	APPENDIX C FIGURE 1
	CHECK	SAR 02/21/2011	
	REVIEW	KB 02/21/2011	



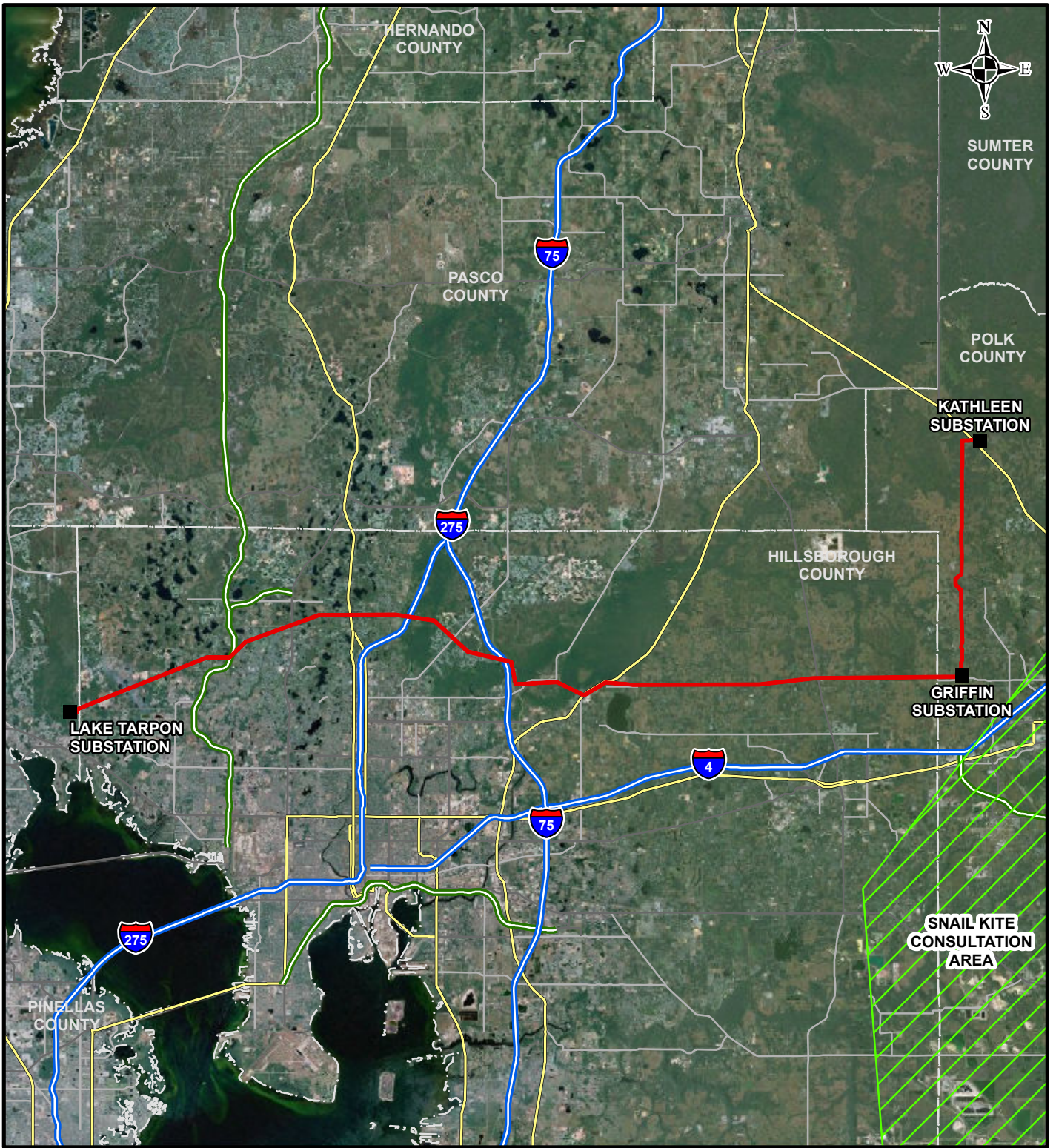
LEGEND

- Substation
- ▭ PHP Preferred Right-of-Way
- ▨ Piping Plover Consultation Area
- ▭ County Boundary
- ▬ Interstate
- ▬ Toll Road
- ▬ US Road
- ▬ State Road
- ▬ County Road

REFERENCE

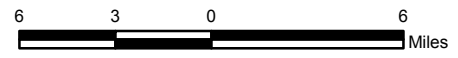
Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Piping Plover Consultation Area: U.S. Fish and Wildlife Service, 2003; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS PIPING PLOVER CONSULTATION AREA			
	MXD File No.	103-89627A012	SCALE AS SHOWN
	DESIGN	JDG 02/18/2011	REV. 0
	GIS	JDG 02/21/2011	APPENDIX C FIGURE 2
	CHECK	SAR 02/21/2011	
	REVIEW	KB 02/21/2011	



LEGEND

- Substation
- ▭ PHP Preferred Right-of-Way
- ▨ Snail Kite Consultation Area
- ▭ County Boundary
- ▬ Interstate
- ▬ Toll Road
- ▬ US Road
- ▬ State Road
- ▬ County Road

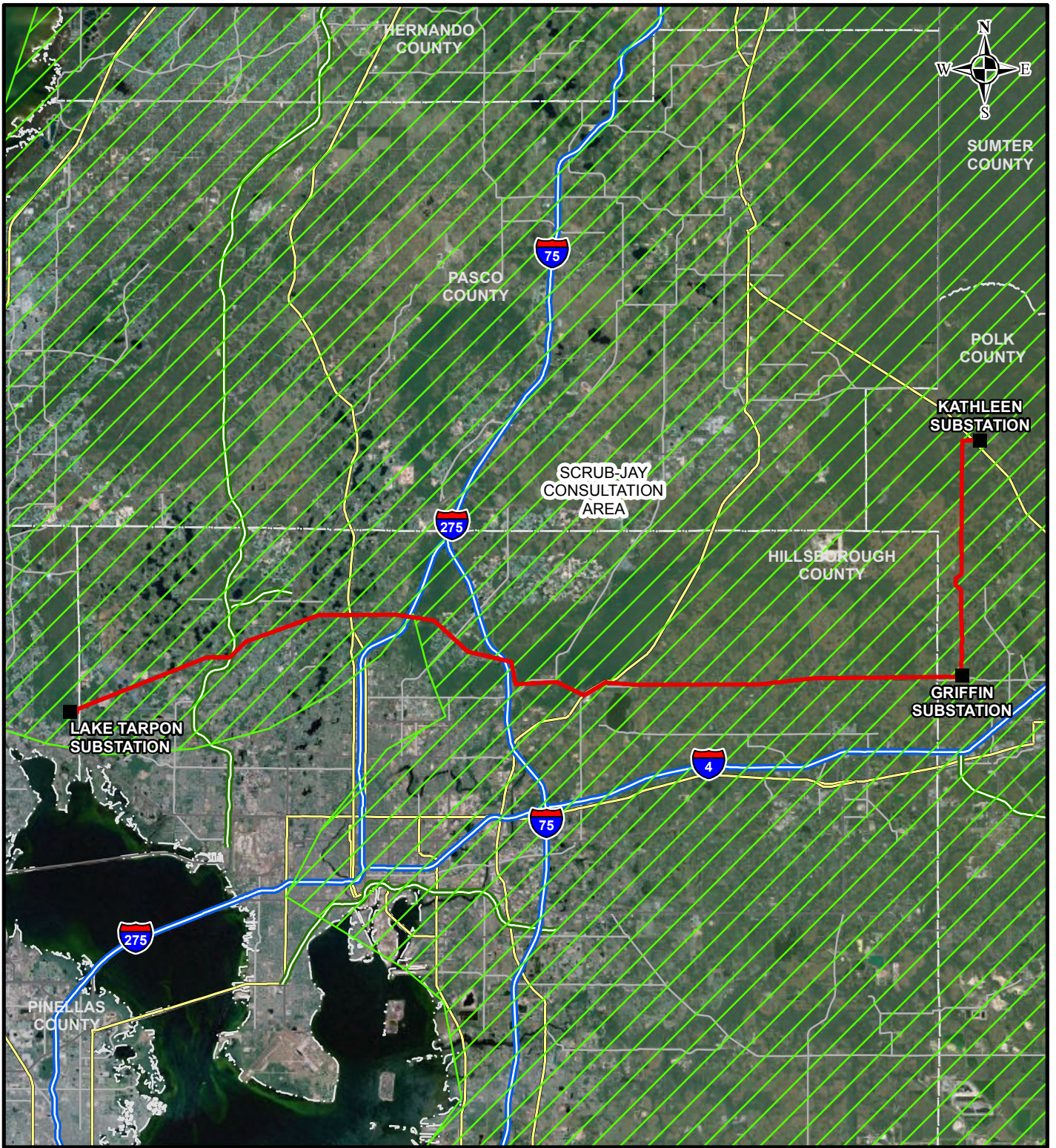


REFERENCE

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

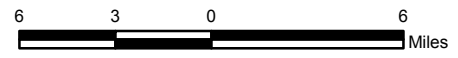
PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS SNAIL KITE CONSULTATION AREA			
	MXD File No.	103-89627A013	SCALE AS SHOWN
	DESIGN	JDG 02/18/2011	REV. 0
	GIS	JDG 02/21/2011	APPENDIX C FIGURE 3
	CHECK	SAR 02/21/2011	
	REVIEW	KB 02/21/2011	

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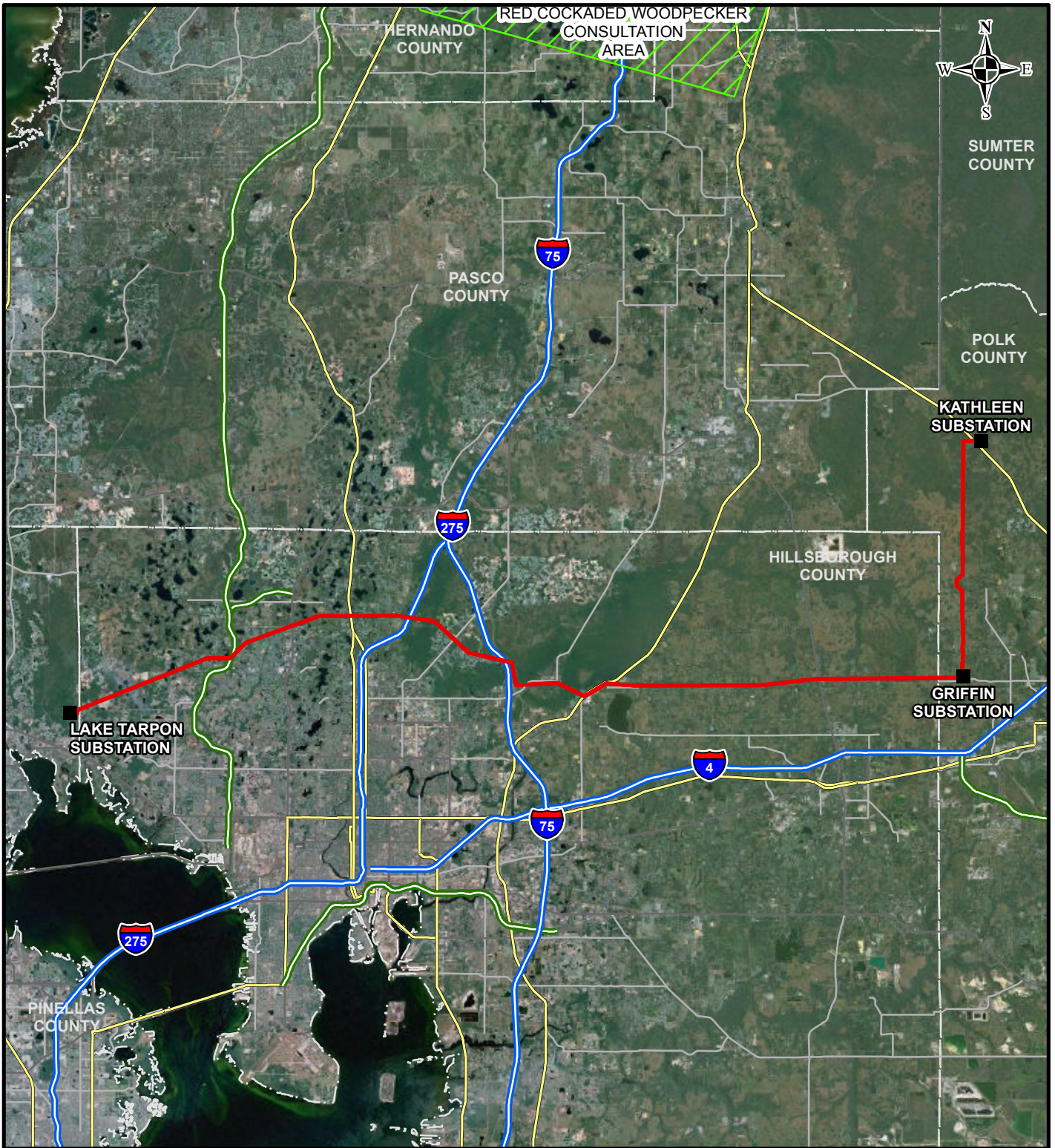
- Substation
- ▭ PHP Preferred Right-of-Way
- ▨ Scrub Jay Consultation Area
- ▭ County Boundary
- ▬ Interstate
- ▬ Toll Road
- ▬ US Road
- ▬ State Road
- ▬ County Road



REFERENCE

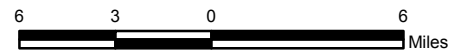
Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Snail Kite Consultation Area: U.S. Fish and Wildlife Service, 2003; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

<p>PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT</p>			
<p>POLK - HILLSBOROUGH - PINELLAS SCRUB JAY CONSULTATION AREA</p>			
	MXD File No. 103-89627A014	SCALE AS SHOWN	REV. 0
	DESIGN	JDG 02/18/2011	<p>APPENDIX C FIGURE 4</p>
	GIS	JDG 02/21/2011	
	CHECK	SAR 02/21/2011	
	REVIEW	KB 02/21/2011	



LEGEND

- Substation
- ▭ PHP Preferred Right-of-Way
- ▨ Red Cockaded Woodpecker Consultation Area
- ▭ County Boundary
- ▬ Interstate
- ▬ Toll Road
- ▬ US Road
- ▬ State Road
- ▬ County Road



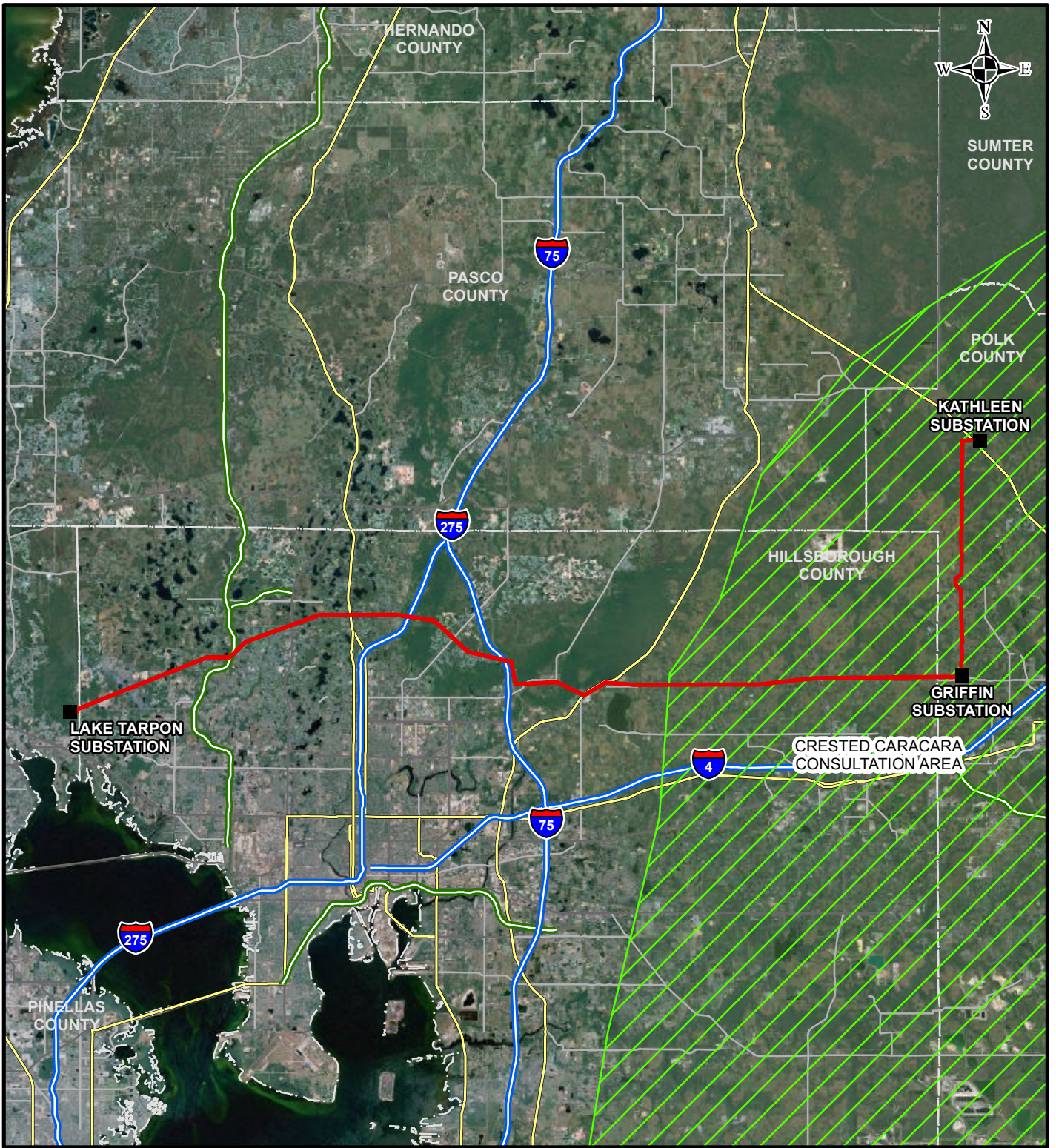
REFERENCE

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**

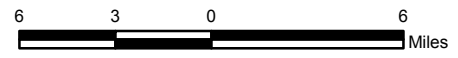
**POLK - HILLSBOROUGH - PINELLAS
RED COCKADED WOODPECKER CONSULTATION AREA**

	MXD File No. 103-89627A015		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	APPENDIX C FIGURE 5
	GIS	JDG	02/21/2011	
	CHECK	SAR	02/21/2011	
	REVIEW	KB	02/21/2011	



LEGEND

- Substation
- ▭ PHP Preferred Right-of-Way
- ▨ Crested Caracara Consultation Area
- ▭ County Boundary
- ▬ Interstate
- ▬ Toll Road
- ▬ US Road
- ▬ State Road
- ▬ County Road

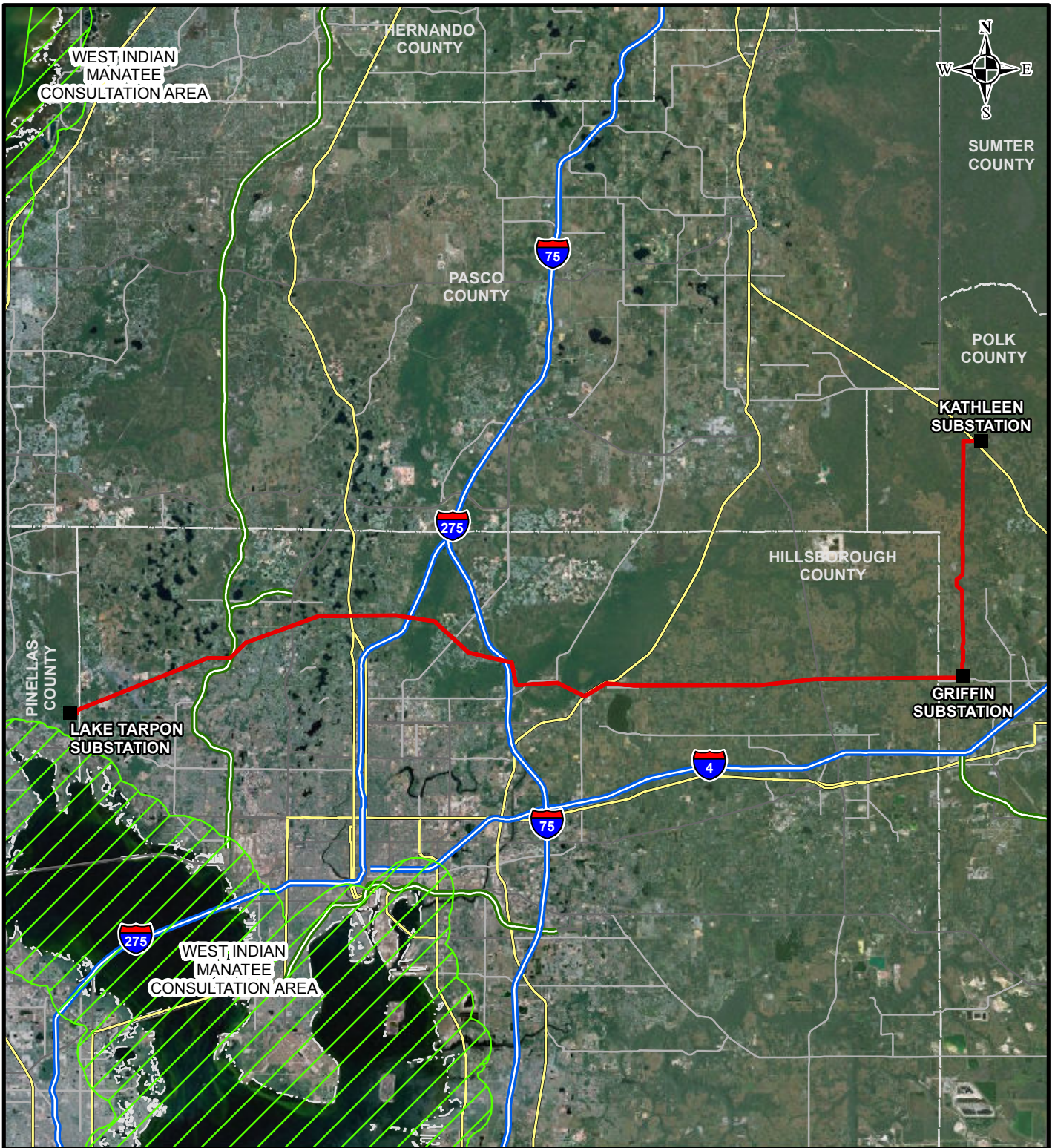


REFERENCE

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

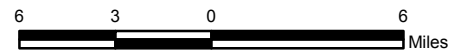
PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS CRESTED CARACARA CONSULTATION AREA			
	MXD File No. 103-89627A016	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	APPENDIX C FIGURE 6	
	GIS JDG 02/21/2011		
	CHECK SAR 02/21/2011		
	REVIEW KB 02/21/2011		

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LEGEND

- Substation
- PHP Preferred Right-of-Way
- West Indian Manatee Consultation Area
- County Boundary
- Interstate
- Toll Road
- US Road
- State Road
- County Road

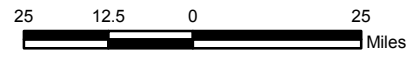
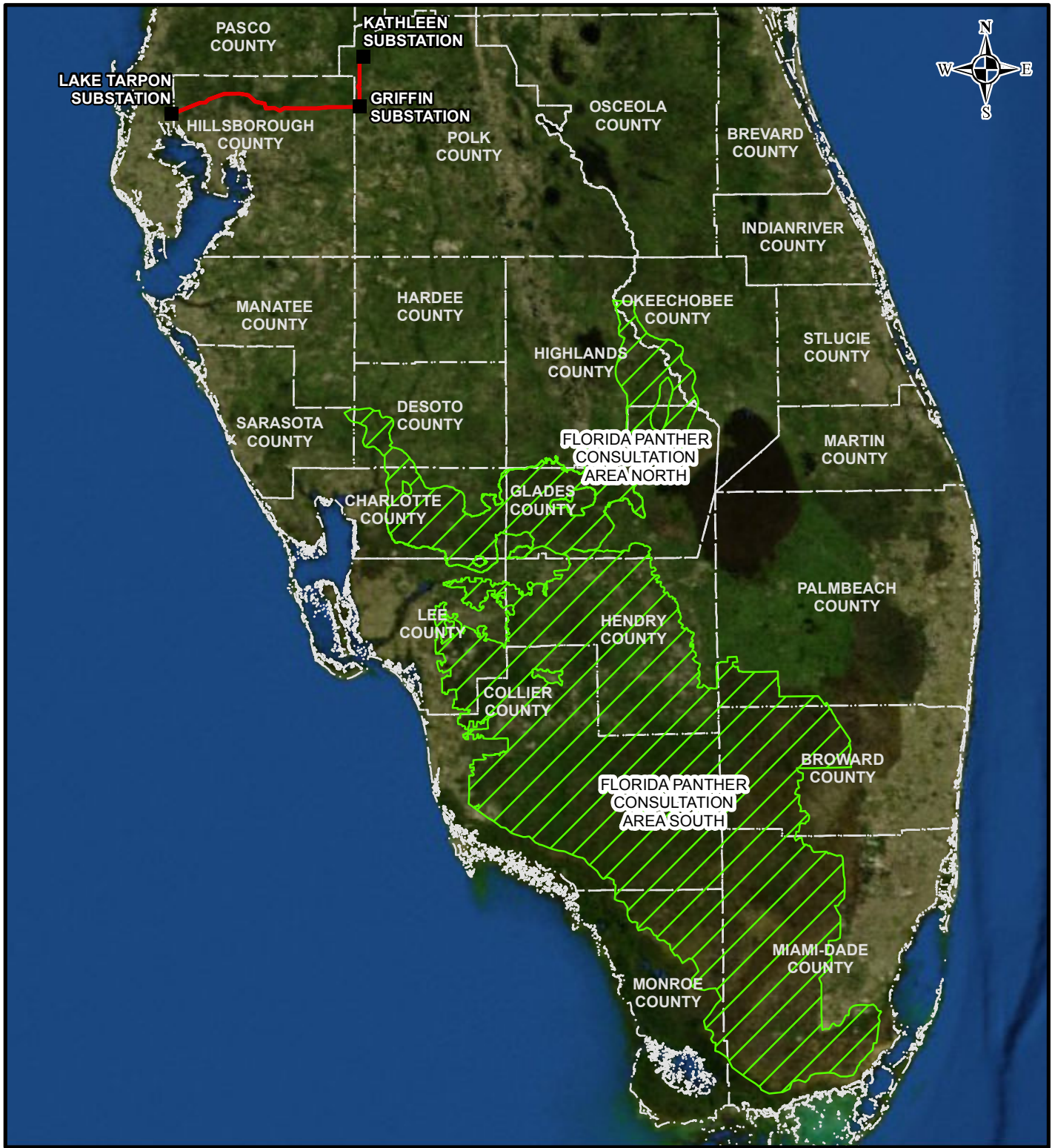


REFERENCE

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			
POLK - HILLSBOROUGH - PINELLAS WEST INDIAN MANATEE CONSULTATION AREA			
	MXD File No. 103-89627A017	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	APPENDIX C FIGURE 7	
	GIS JDG 02/21/2011		
	CHECK SAR 02/21/2011		
	REVIEW KB 02/21/2011		

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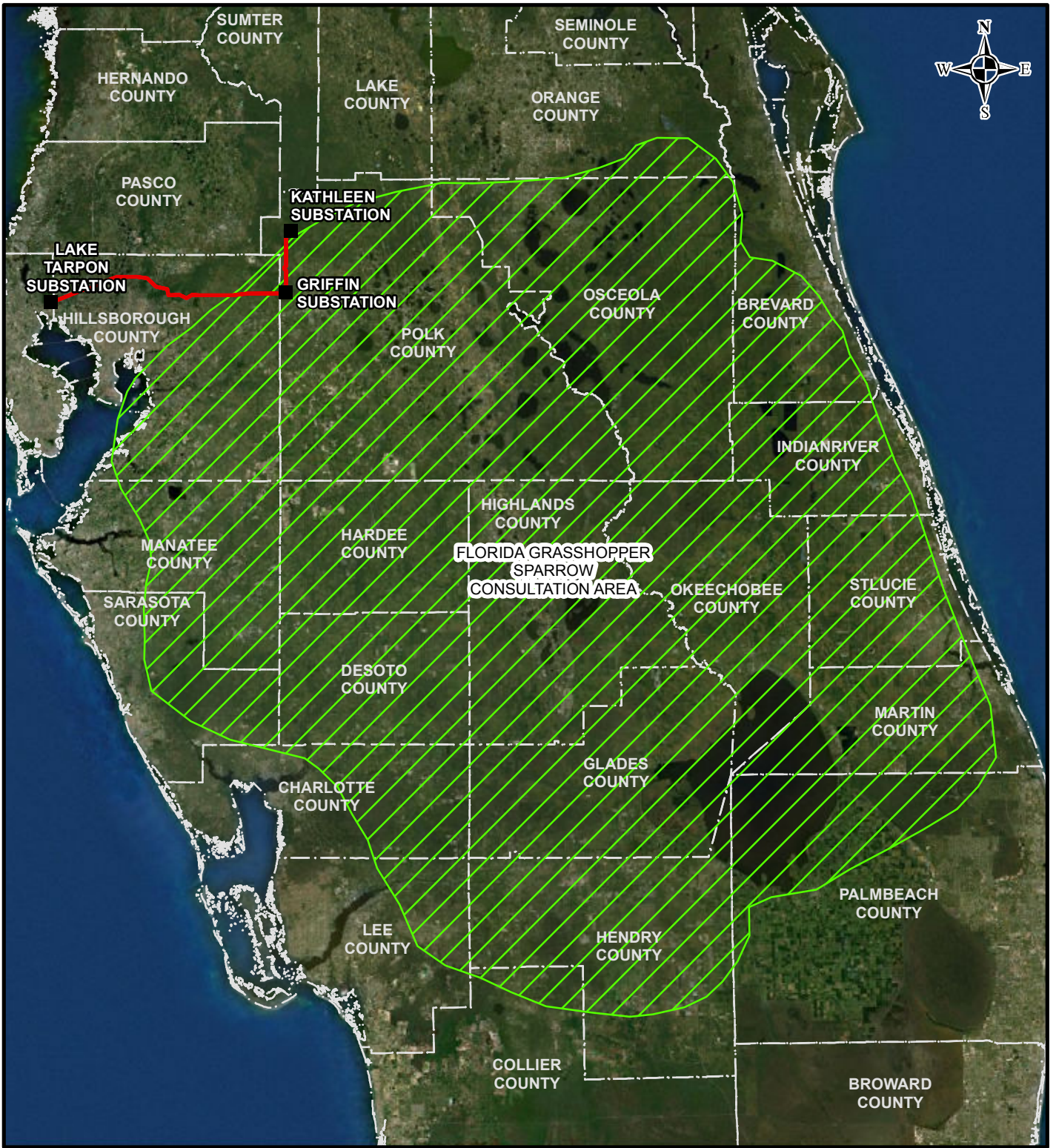
LEGEND

- Substation
- PHP Preferred Right-of-Way
- Florida Panther Consultation Area
- County Boundary

REFERENCE

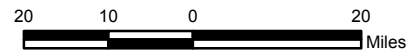
Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Florida Panther Consultation Area: U.S. Fish and Wildlife Service, 2006; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT			
POLK - HILLSBOROUGH - PINELLAS FLORIDA PANTHER CONSULTATION AREA NORTH			
	MXD File No. 103-89627A018	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	APPENDIX C FIGURE 8	
	GIS JDG 02/21/2011		
	CHECK SAR 02/21/2011		
	REVIEW KB 02/21/2011		



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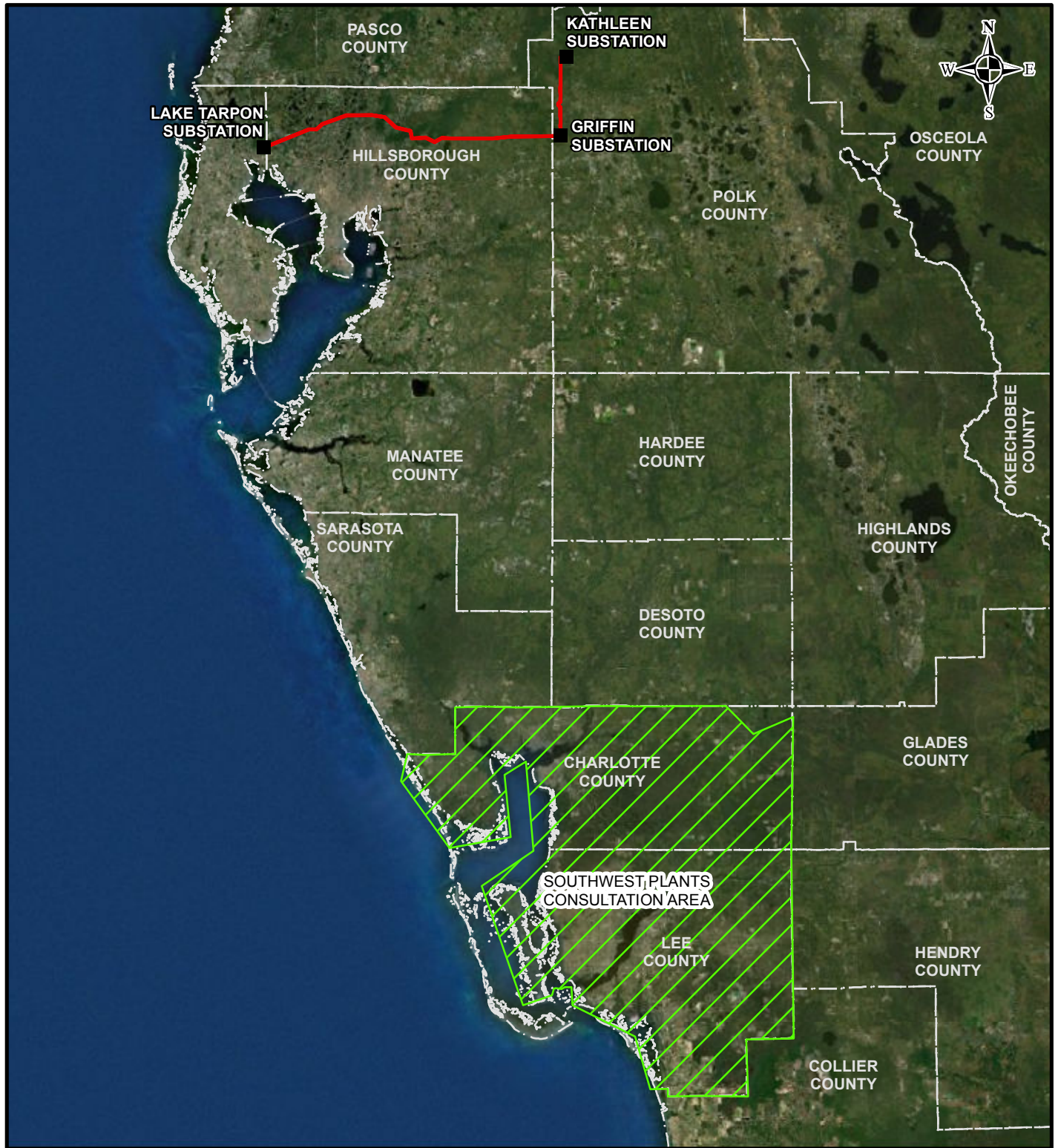
- Substation
- ▭ PHP Preferred Right-of-Way
- ▨ Florida Grasshopper Sparrow Consultation Area
- - - County Boundary



REFERENCE

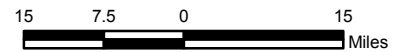
Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Florida Grasshopper Sparrow Consultation Area: U.S. Fish and Wildlife Service, 2003; County Boundaries: U.S. Census Bureau, 2000; Aerial: i-cubed, 2009

PROGRESS ENERGY FLORIDA LEVY NUCLEAR PLANT				
POLK - HILLSBOROUGH - PINELLAS FLORIDA GRASSHOPPER SPARROW CONSULTATION AREA				
	MXD File No. 103-89627A019		SCALE AS SHOWN	REV. 0
	DESIGN	JDG	02/18/2011	APPENDIX C FIGURE 9
	GIS	JDG	02/21/2011	
	CHECK	SAR	02/21/2011	
	REVIEW	KB	02/21/2011	



LEGEND

- Substation
- PHP Preferred Right-of-Way
- Southwest Plants Consultation Area
- County Boundary



REFERENCE

Substations and Right-of-Way: Progress Energy Florida & Golder Associates Inc., 2009; Roads: Florida Department of Transportation, 2010; Southwest Plants 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			
POLK - HILLSBOROUGH - PINELLAS SOUTHWEST PLANTS CONSULTATION AREA			
	MXD File No. 103-89627A020	SCALE AS SHOWN	REV. 0
	DESIGN JDG 02/18/2011	APPENDIX C FIGURE 10	
	GIS JDG 02/21/2011		
	CHECK SAR 02/21/2011		
	REVIEW KB 02/21/2011		