

TWIN RIVERS STATE FOREST
10-YEAR LAND MANAGEMENT PLAN
EXHIBITS



Twin Rivers

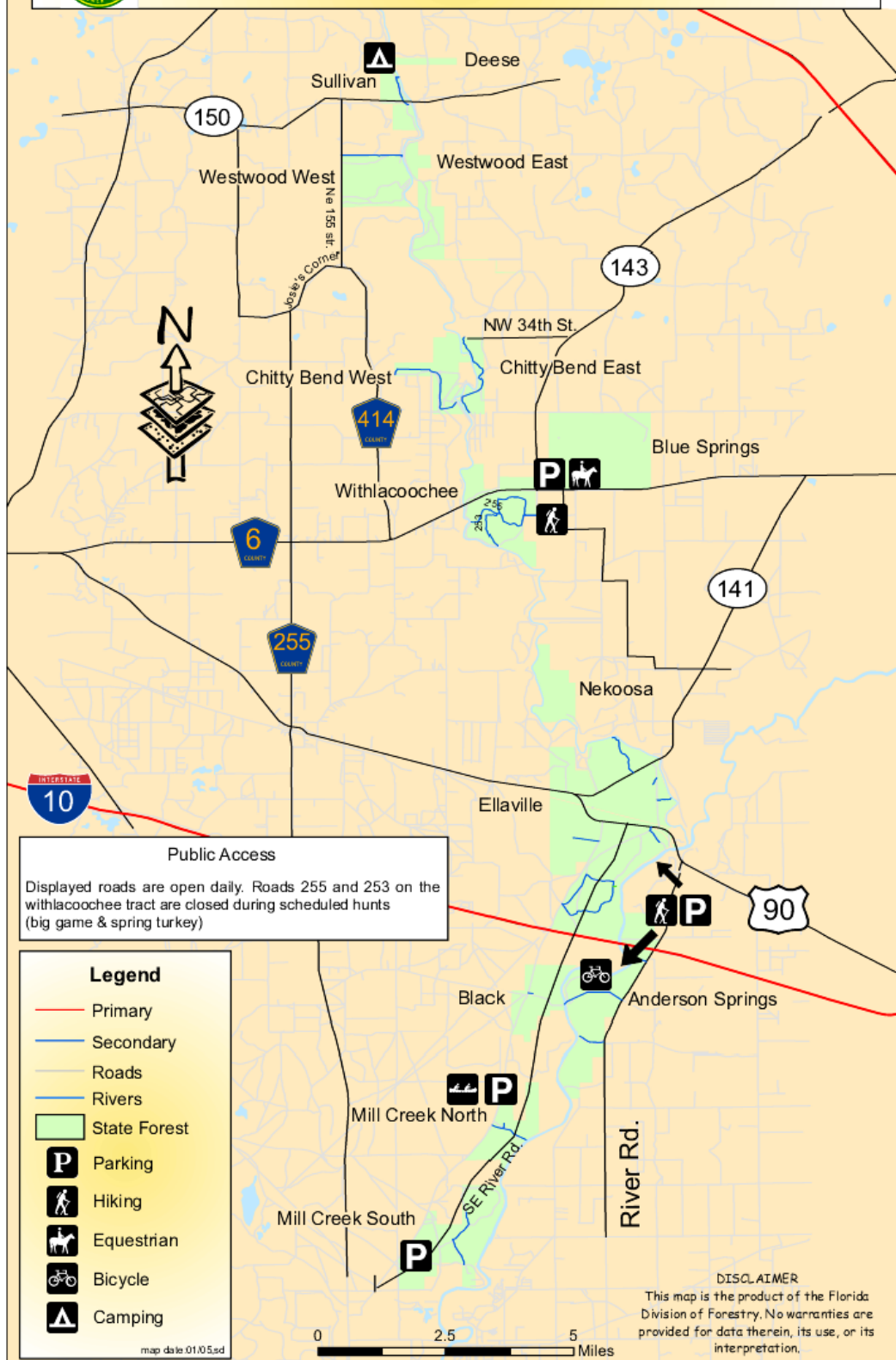


Exhibit A

Ten Year Management Accomplishment Summary

Twin Rivers State Forest 10-Year Accomplishment Report

Planting	ACTIVITIES		TRSF	BST	Damascus	Total
Reforestation / Restoration	V-blade Bareroot	Acre	625	178		803
	V-blade Containerized	Acre	122			122
	Hand Plant Containerized	Acre	223			223
Seedling Survival Checks	Survival Checks	Acre	970	178		1,148
Timber Inventory	Inventory update	Acre	4,927	2,281		7,208
	New Inventory	Acre	14,000		499	14,499
Site Preparation (Indicate treatment) (pre-plant)	Herbicide	Acre	876	150		1,026
	Burn	Acre	432	35		467
	Mow	Acre	55			55
Exotic Species Control (Indicate Species & Method)	Cogongrass	Acre	9	13		22
	Chinaberry	Acre	5			5
	Japanese Climbing Fern Grant	Acre	85			85
	Mimosa	Acre	12	1		13
	Autumn Olive	Acre		6,000		6,000
	AS Wisterian / Tung Oil	Acre	2			2
Timber Stand Improvement (post-plant)	Herbicide Treatment - Broadcast	Acre	674			674
	Mechanical Treatments - Mowing	Acre	200	403		603
Timber Sales	Clearcut	Acre	903	65		968
	Thinning	Acre	1,827			1,827
Recreation	Day Use	No.	112,168	8,100		120,268
	Overnight - Primitive	No.	1,457			1,457
Fire	Wildfire	No.	1	1		2
		Acre	5	3		8
	Prescribed Burning	Acre	14,200	8,322		22,522
Roads & Bridges	Roads Rebuilt	Miles	11			11
Boundary Maintenance	Maintenance / Marking	Miles	110	23		133
I&E Activities	Programs / Tours	No.	7	18		25
	Education / Research Projects	No.	1	1		2
Other Activities (Fill in Type)	Roads Mowed / Harrowed	Miles	551	480		1,031
	Inmate Labor Hours	No.	32,630	270		32,900
	Trails Maintained	Miles	50	15		65
	Trails Blazed	Miles	16			16
	Fence	Feet		10,560		10,560
	Special Events	No.		4		4

Exhibit B

Boundary Map



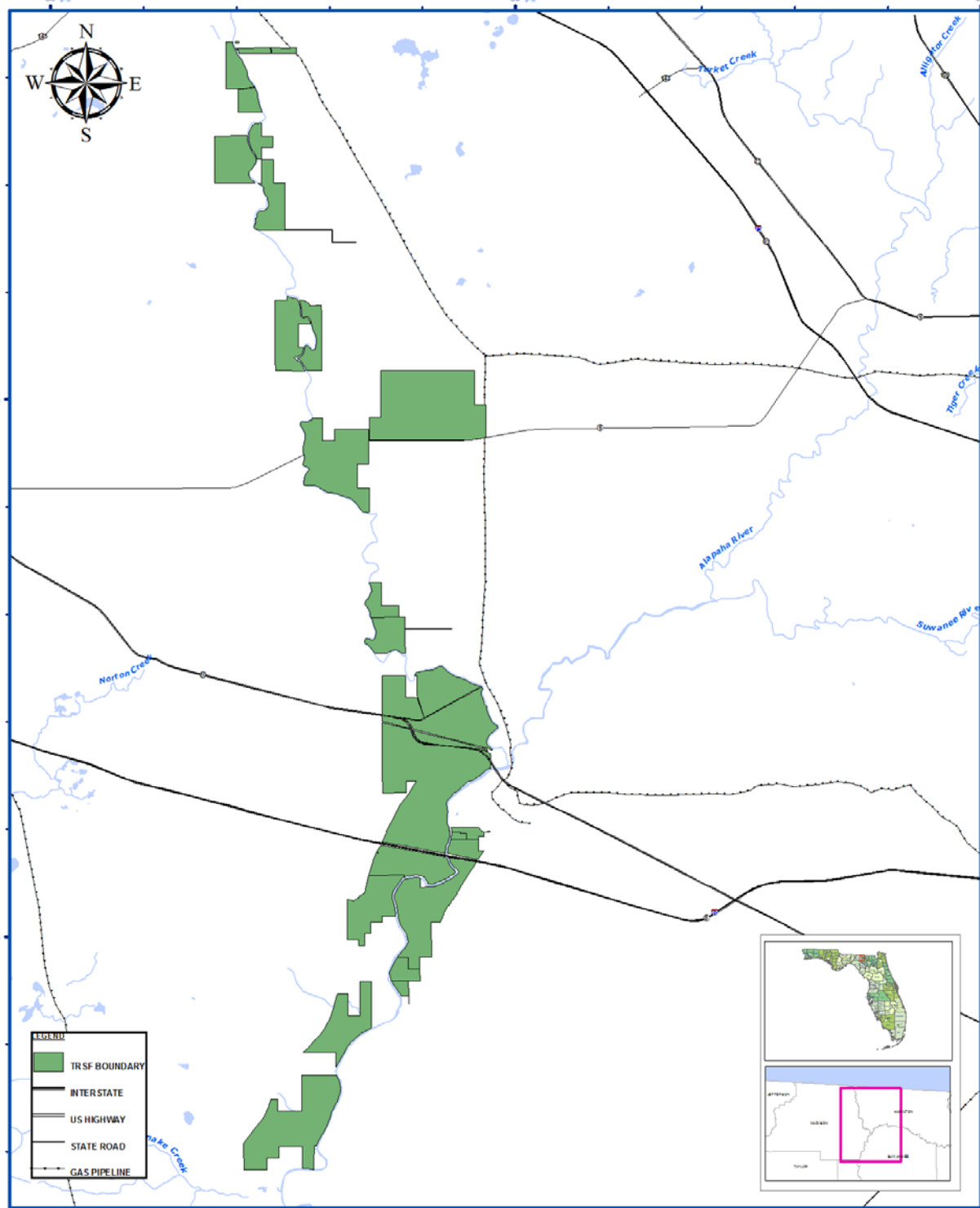
Twin Rivers State Forest

Boundary Map

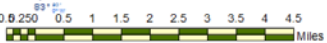
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
8317'

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Unmerged Area Boundary: boundary of
the Florida National Forest System.
Formerly USGS Defense Sites (FDS) from the
US Army Corps of Engineers.



- LEGEND**
- TRSF BOUNDARY
 - INTERSTATE
 - US HIGHWAY
 - STATE ROAD
 - GAS PIPELINE



Map Month/Year: June 2015

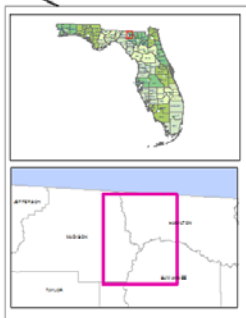


Exhibit C

Road Maps

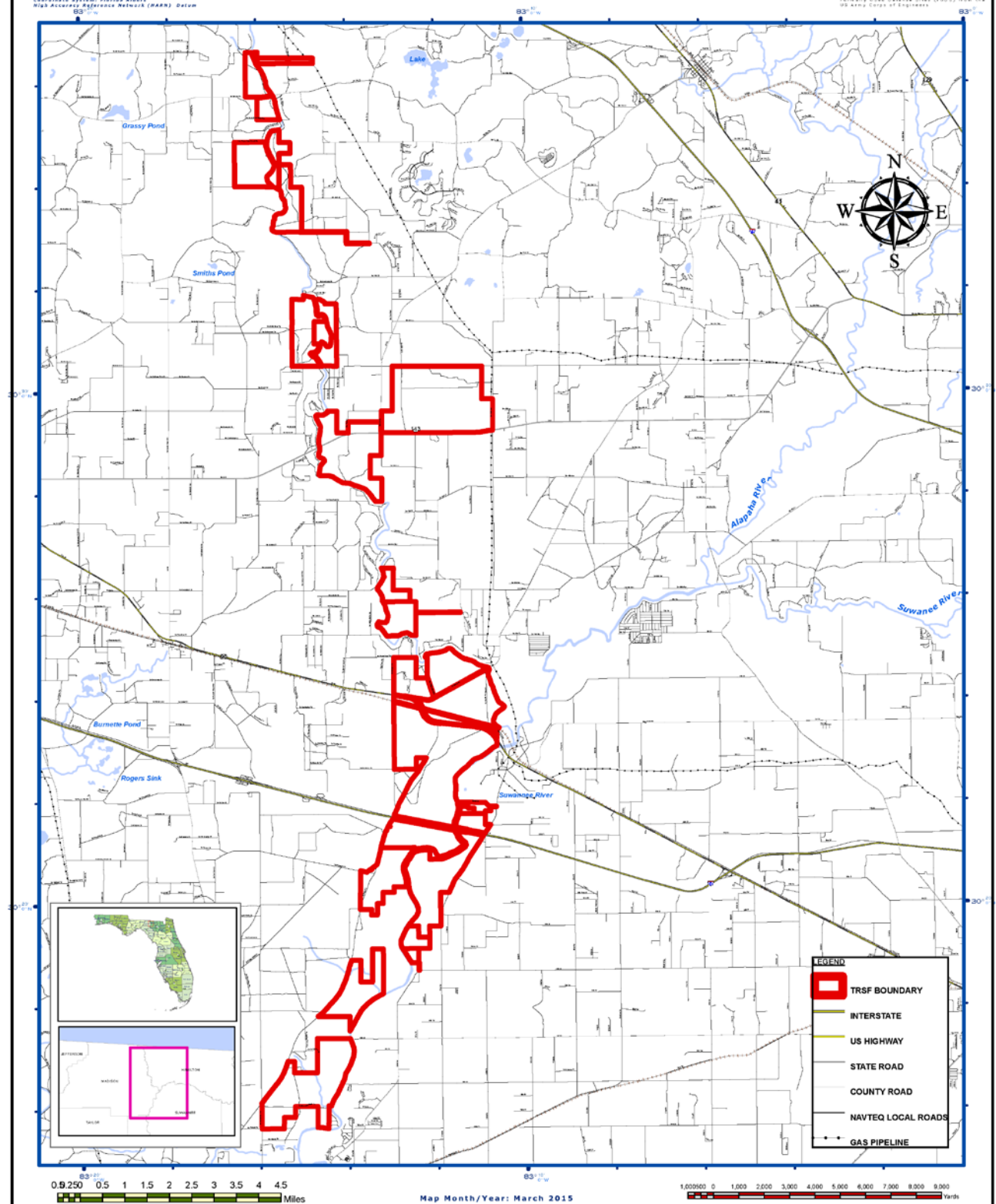


Road Map

Coordinate System: Florida Albers
High Accuracy Reference Network (NARN) Datum
83^{US}
NAD 83

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Florida Forest Service

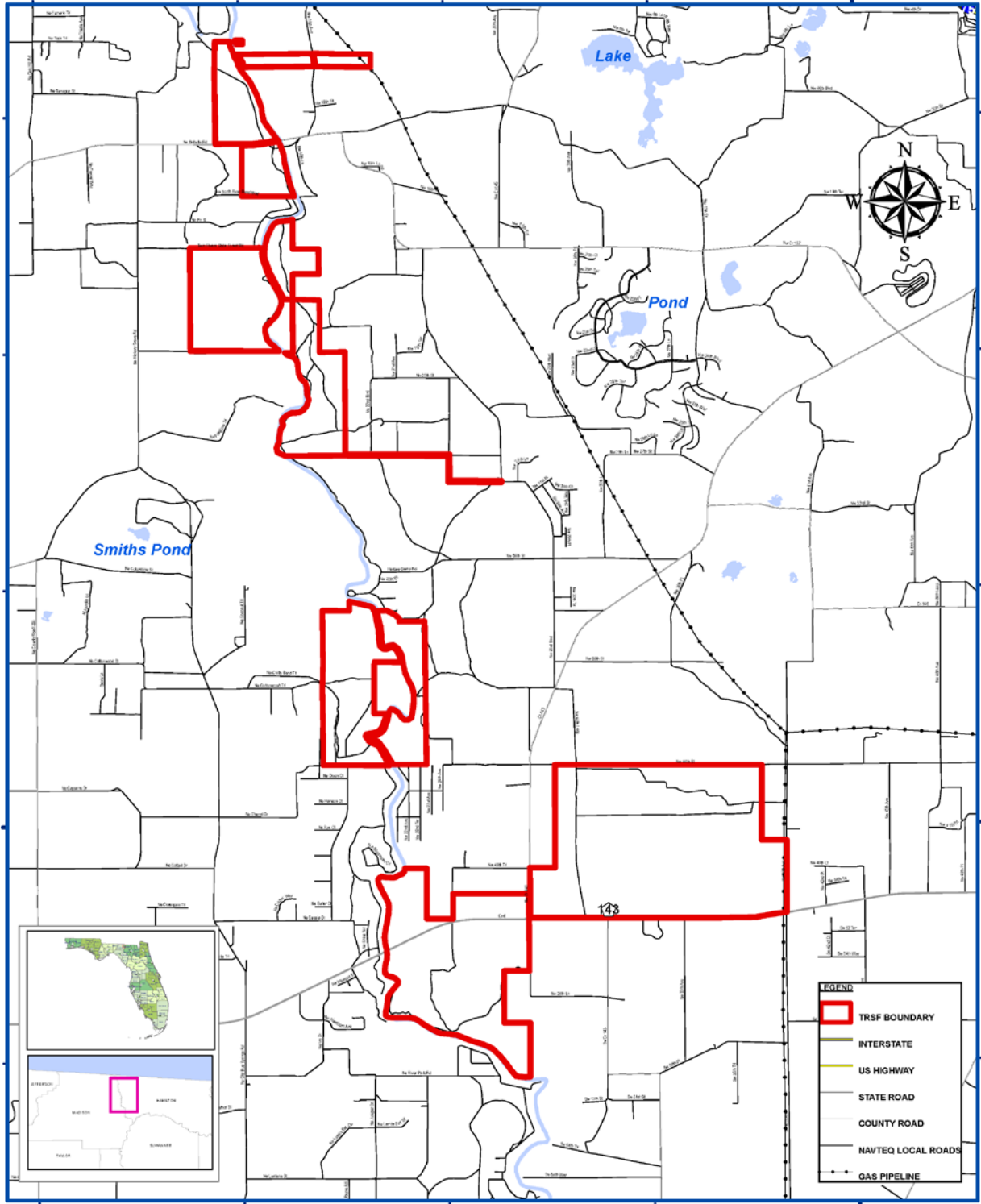
Coordinate System: Florida Albers
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Twin Rivers State Forest

Road Map - North Area

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Road map data courtesy of the
U.S. Army Corps of Engineers
83° 00' W



LEGEND	
	TRSF BOUNDARY
	INTERSTATE
	US HIGHWAY
	STATE ROAD
	COUNTY ROAD
	NAVTEQ LOCAL ROADS
	GAS PIPELINE

0.5 0.25 0 0.5 1 1.5
Miles

Map Month/Year: March 2015

1,000 500 0 1,000 2,000 3,000
Yards



Florida Forest Service

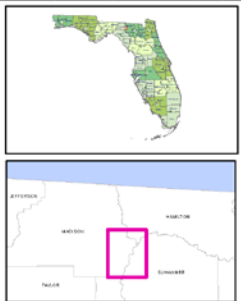
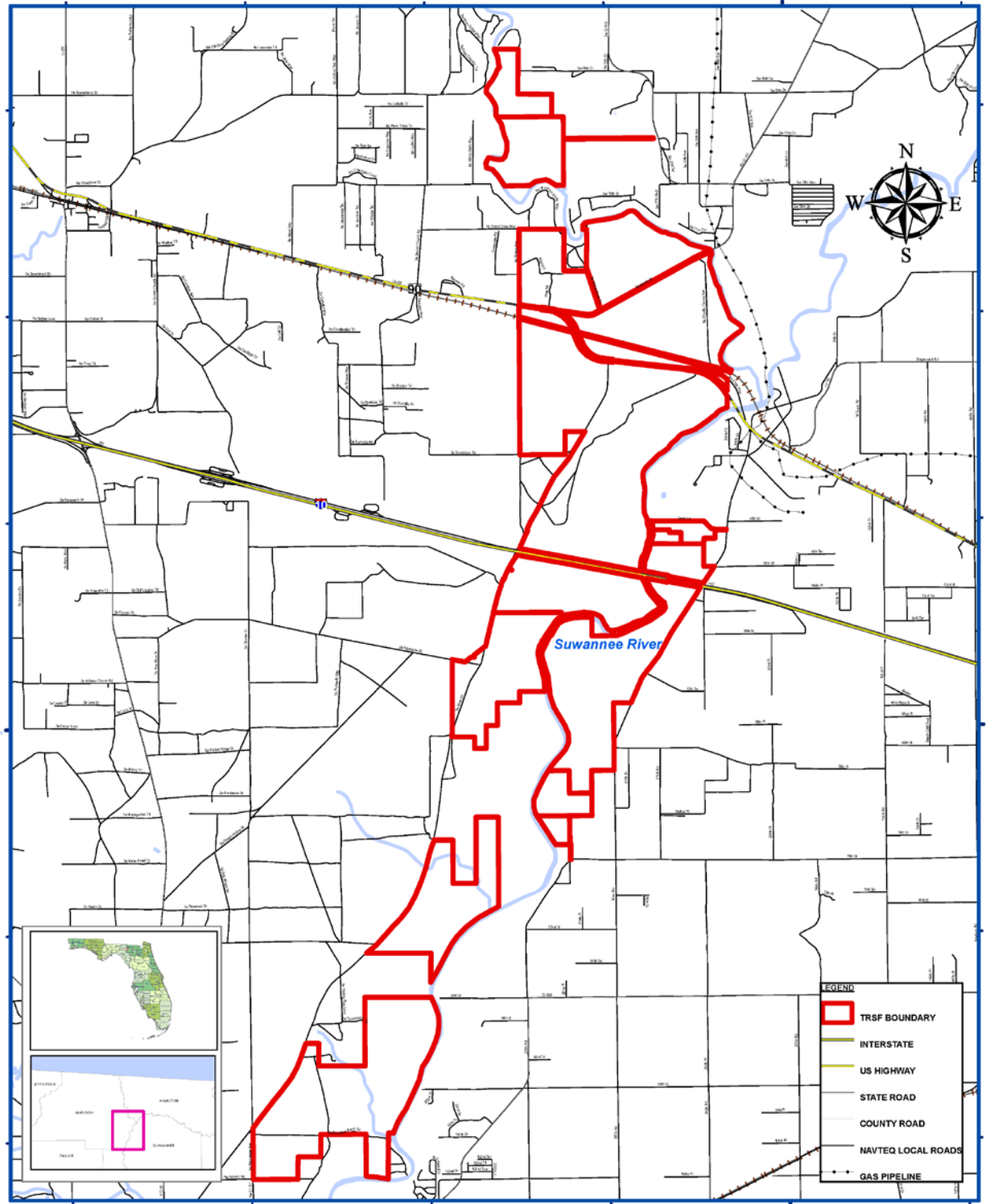
Coordinate System: Florida Albers
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Twin Rivers State Forest

Road Map - South Area

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- LEGEND**
- TRSF BOUNDARY
 - INTERSTATE
 - US HIGHWAY
 - STATE ROAD
 - COUNTY ROAD
 - NAVTEQ LOCAL ROADS
 - GAS PIPELINE

0.5 0.25 0 0.5 1 1.5 2 Miles

Map Month/Year: March 2015

1,000 500 0 1,000 2,000 3,000 4,000 Yards

Exhibit D

Forest Resources, Recreation & Improvements



Florida Forest Service

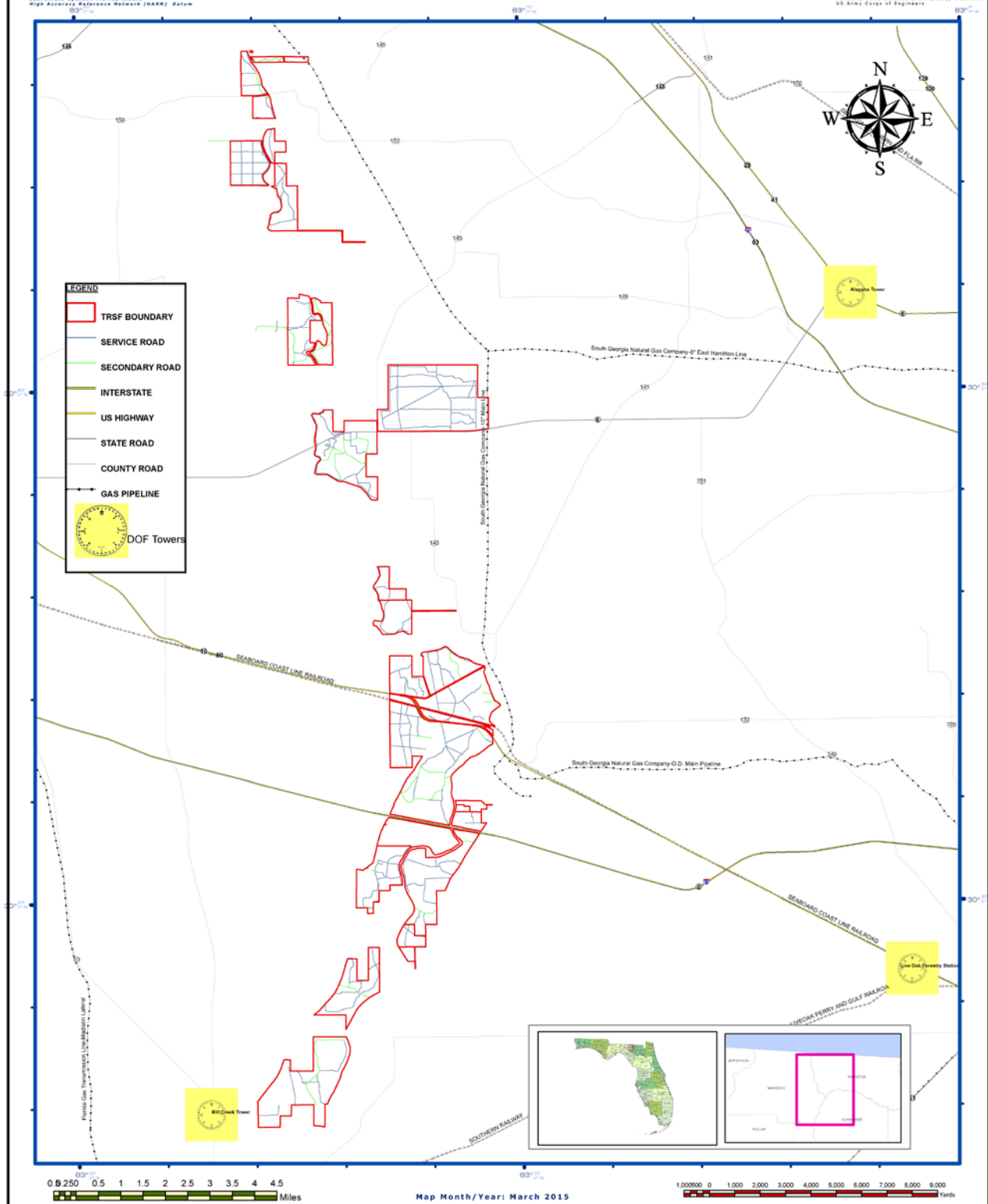
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Twin Rivers State Forest

Forestry Resources

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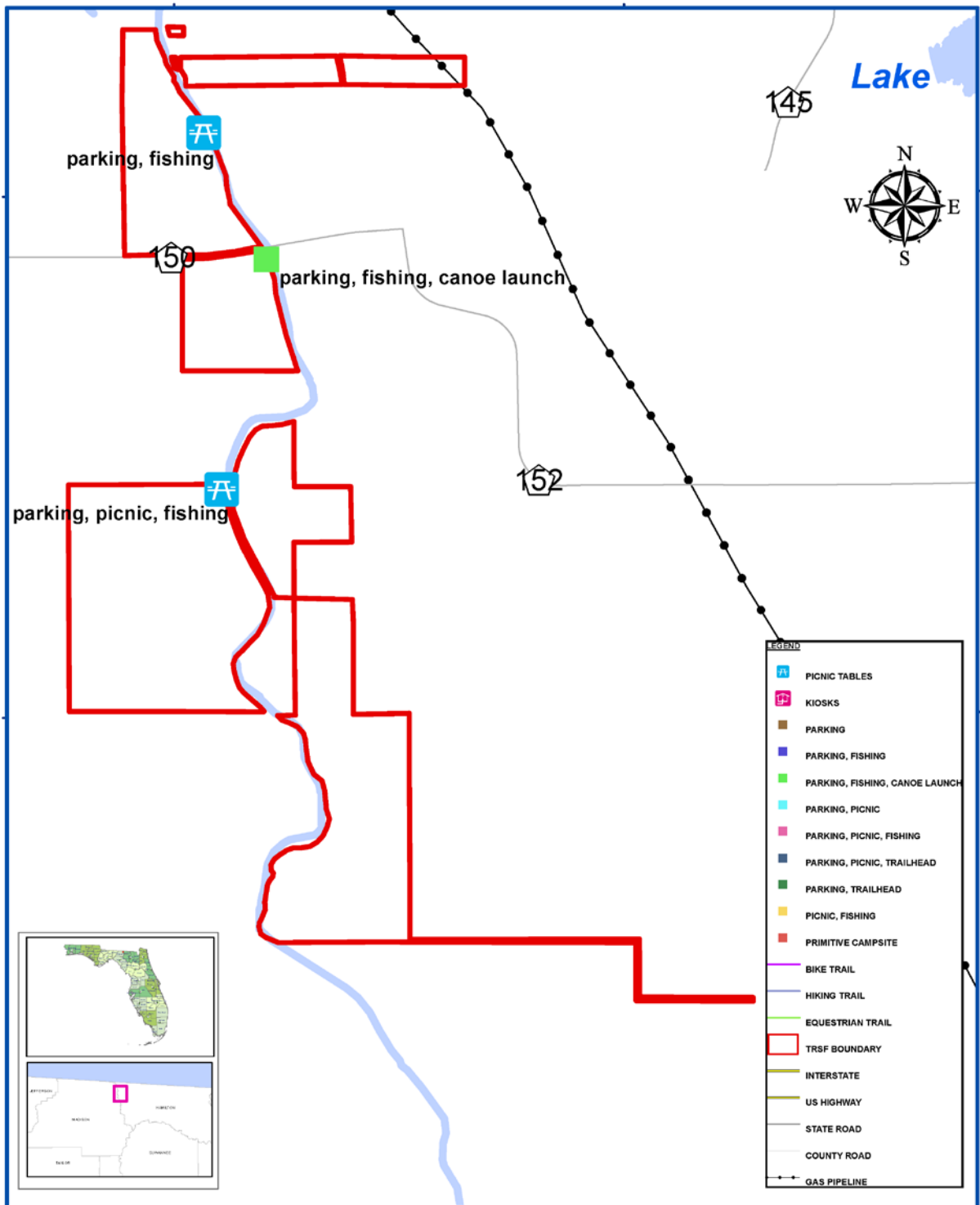
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Twin Rivers State Forest

Recreation & Facilities - Middle North

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0.5 0.25 0 0.5 Miles

Map Month/Year: March 2015

1,000 500 0 1,000 Yards



Florida Forest Service

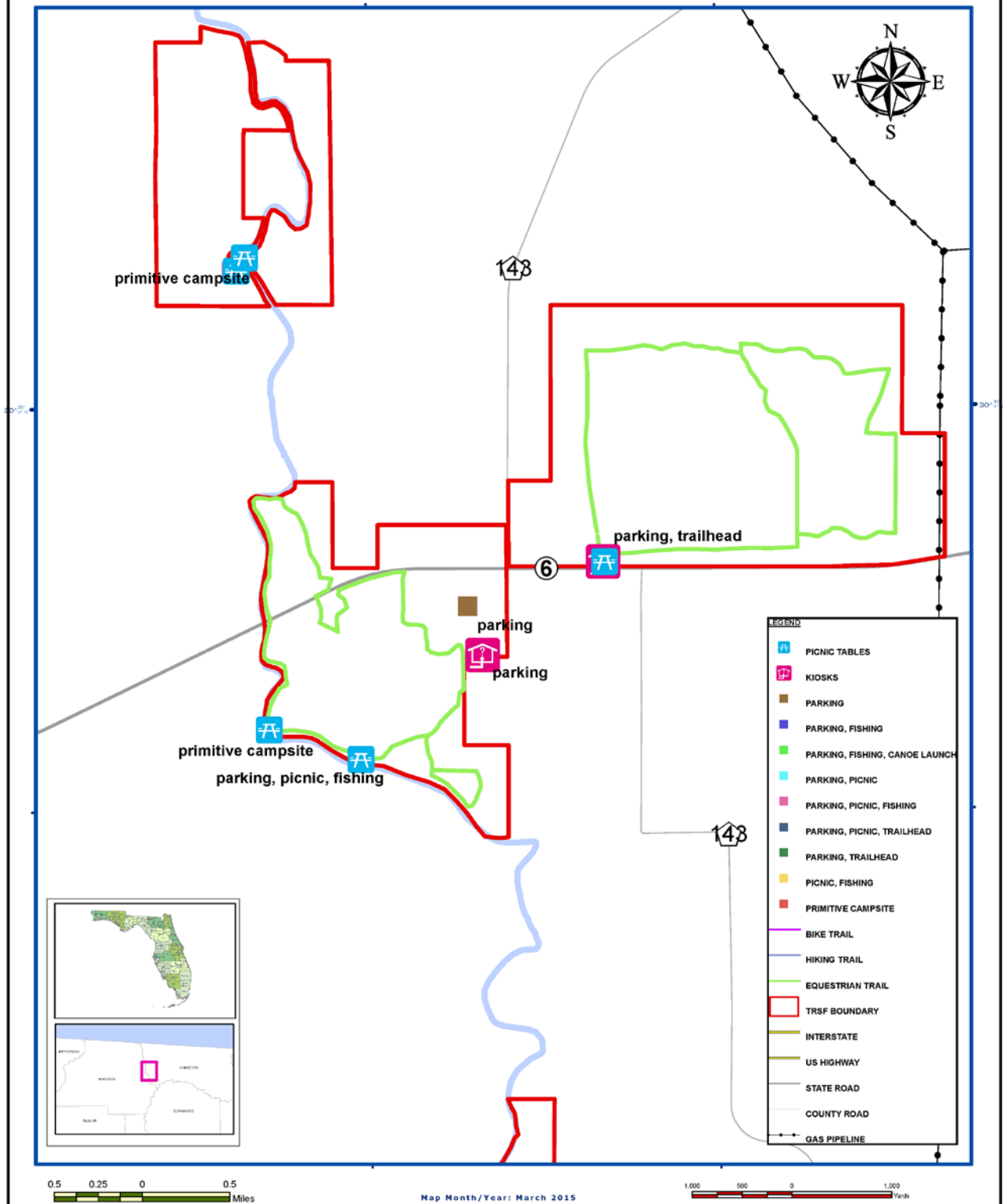
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Twin Rivers State Forest

Recreation & Facilities - Middle North

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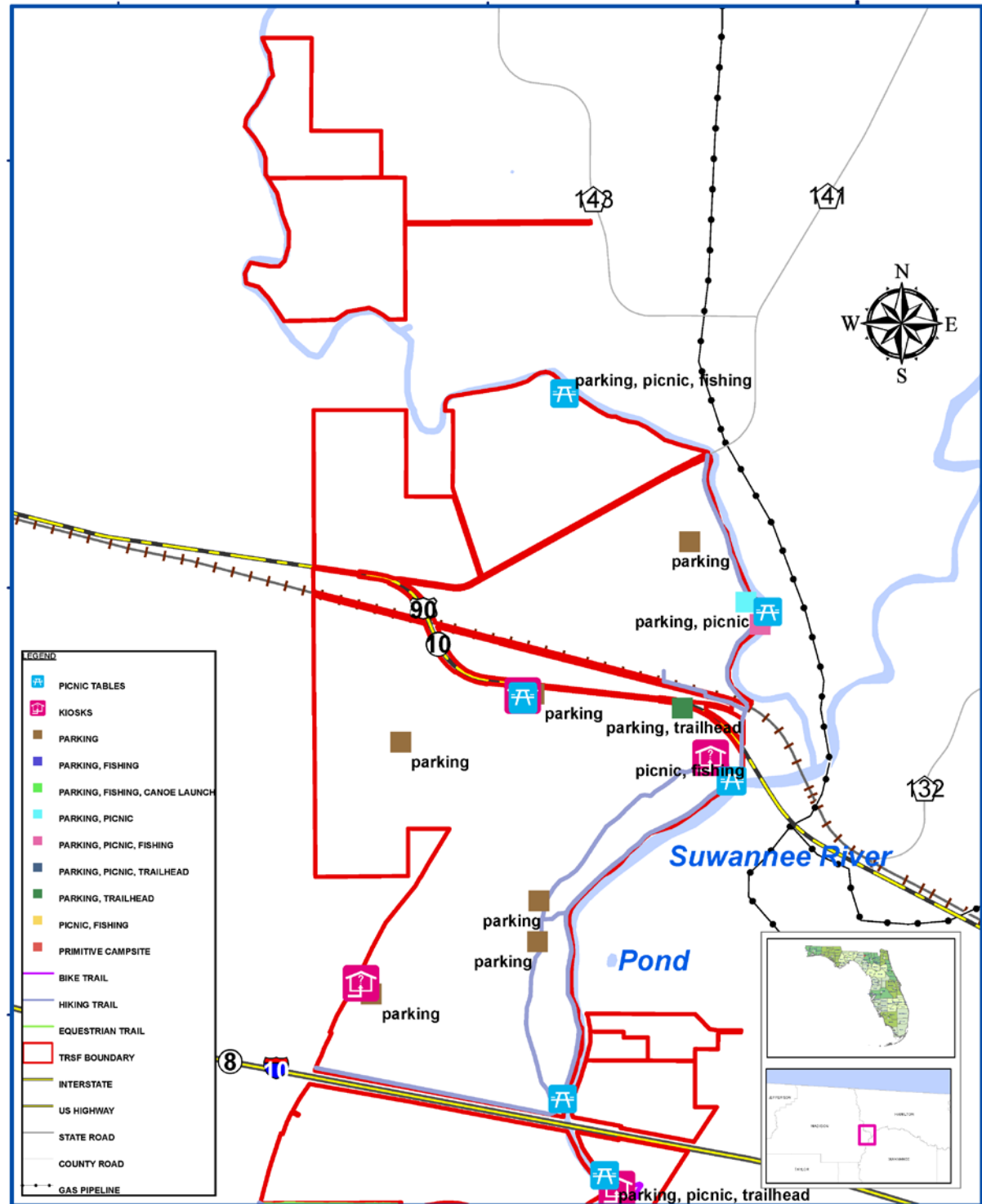
Florida Forest Service

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

Twin Rivers State Forest

Recreation & Facilities - Middle South

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8/2/10



0.5 0.25 0 0.5
Miles

Map Month/Year: March 2015

1,000 500 0 500 1,000
Yards



Florida Forest Service

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

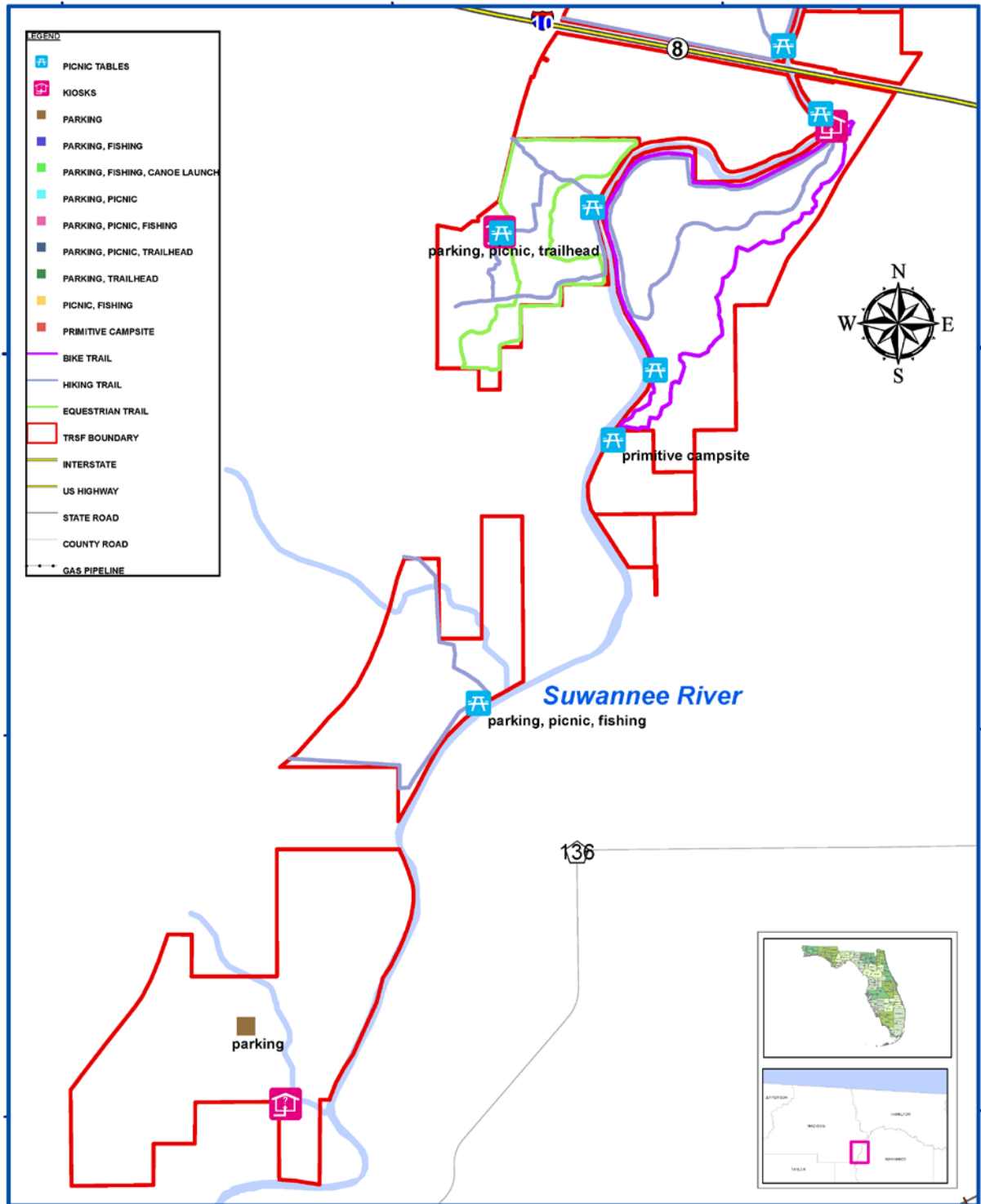
Twin Rivers State Forest

Recreation & Facilities - South End

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LEGEND	
	PICNIC TABLES
	KIOSKS
	PARKING
	PARKING, FISHING
	PARKING, FISHING, CANOE LAUNCH
	PARKING, PICNIC
	PARKING, PICNIC, FISHING
	PARKING, PICNIC, TRAILHEAD
	PARKING, TRAILHEAD
	PICNIC, FISHING
	PRIMITIVE CAMPSITE
	BIKE TRAIL
	HIKING TRAIL
	EQUESTRIAN TRAIL
	TRSF BOUNDARY
	INTERSTATE
	US HIGHWAY
	STATE ROAD
	COUNTY ROAD
	GAS PIPELINE



0.5 0.25 0 0.5
Miles

Map Month/Year: March 2015

1,000 500 0 1,000
Yards

Exhibit E

Tract Maps



Florida Forest Service

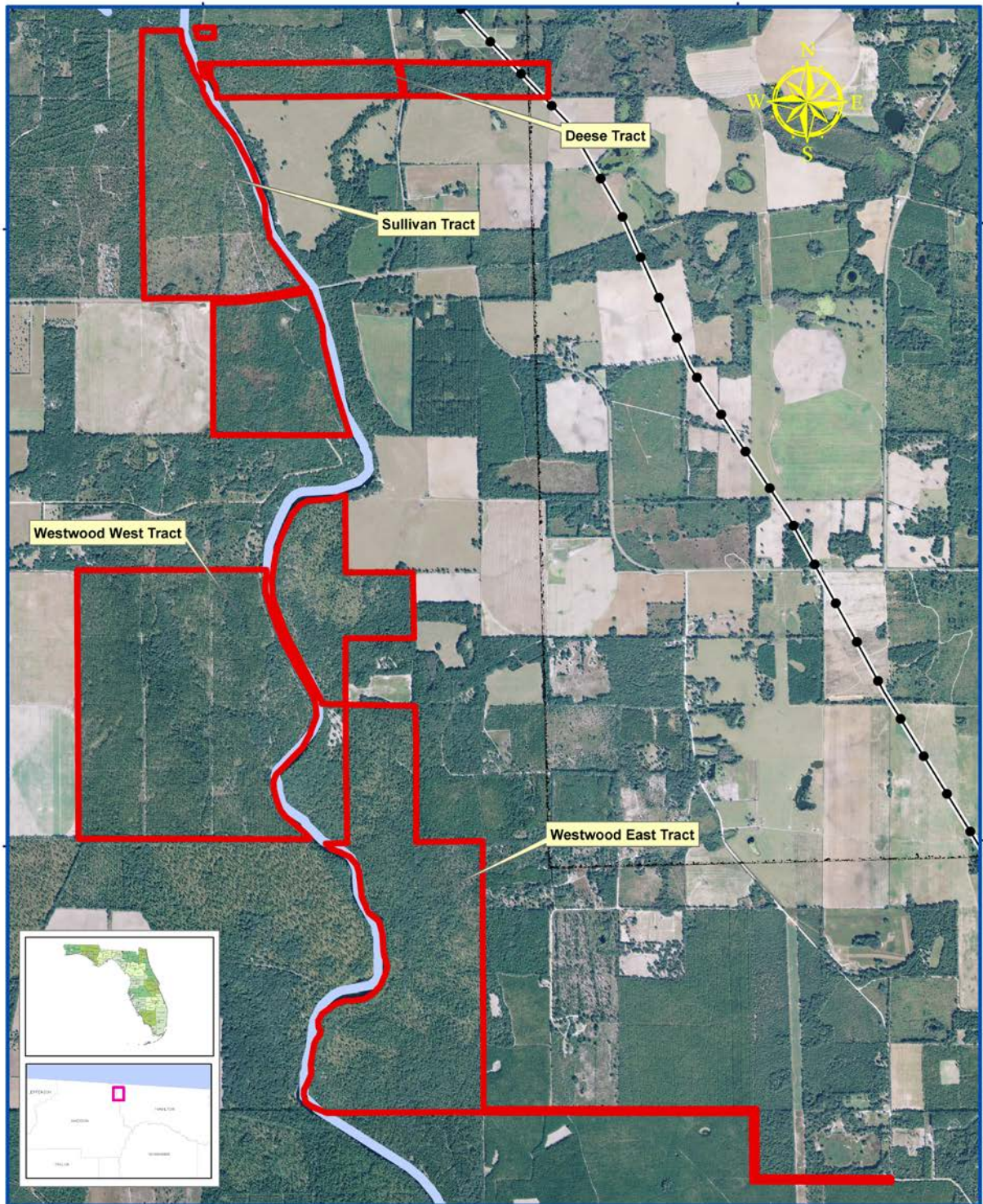
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Twin Rivers State Forest

TRSF Tracts - North End

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0.5 0.25 0
Miles

Map Month/Year: March 2015

1,000 500 0
Yards



Florida Forest Service

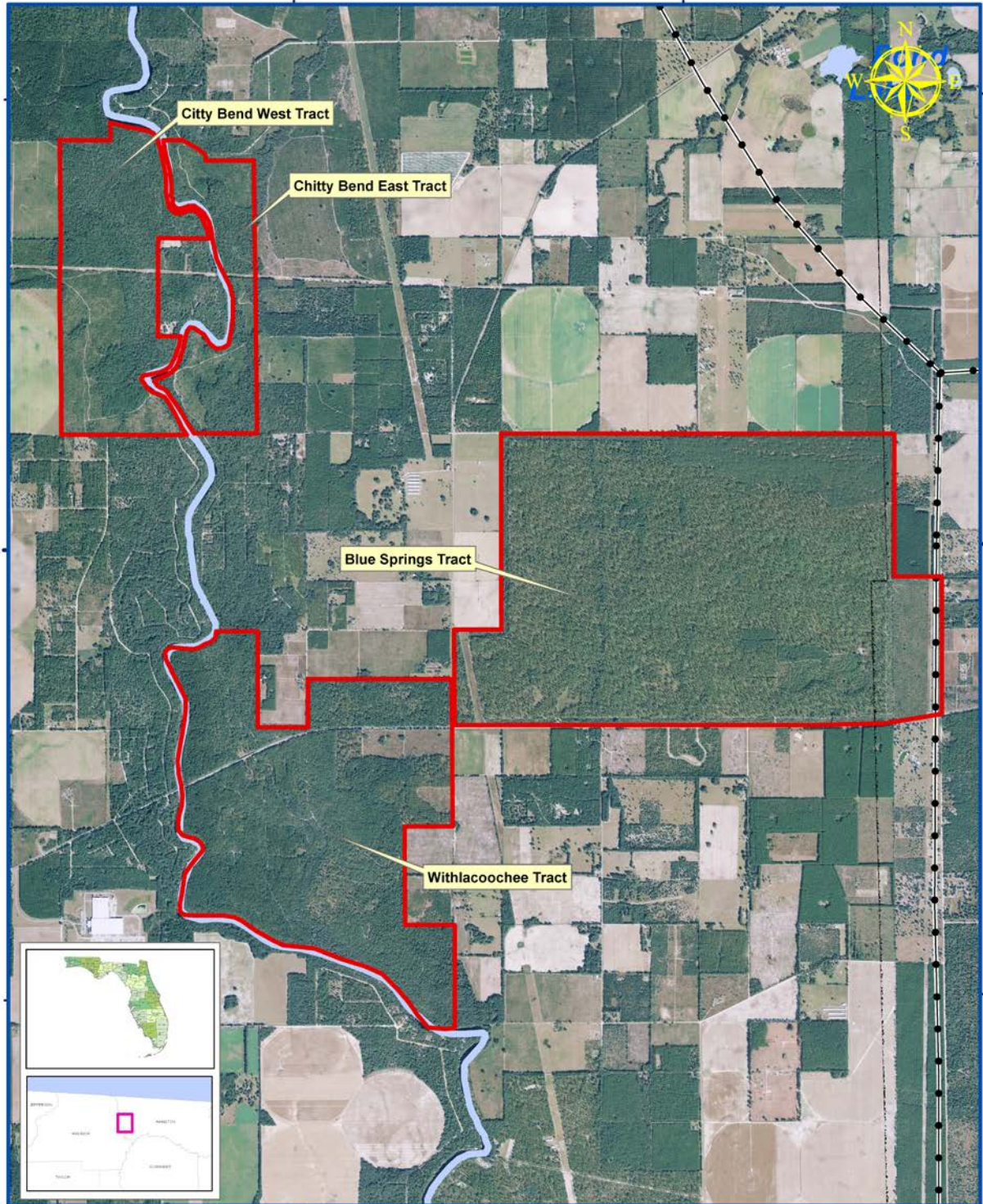
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

Twin Rivers State Forest

TRSF Tracts - Middle North

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Formerly USGS Defense Sites (FIDS) from the
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0.5 0.25 0 0.5
Miles

Map Month/Year: March 2015

1,000 500 0 1,000
Yards



Florida Forest Service

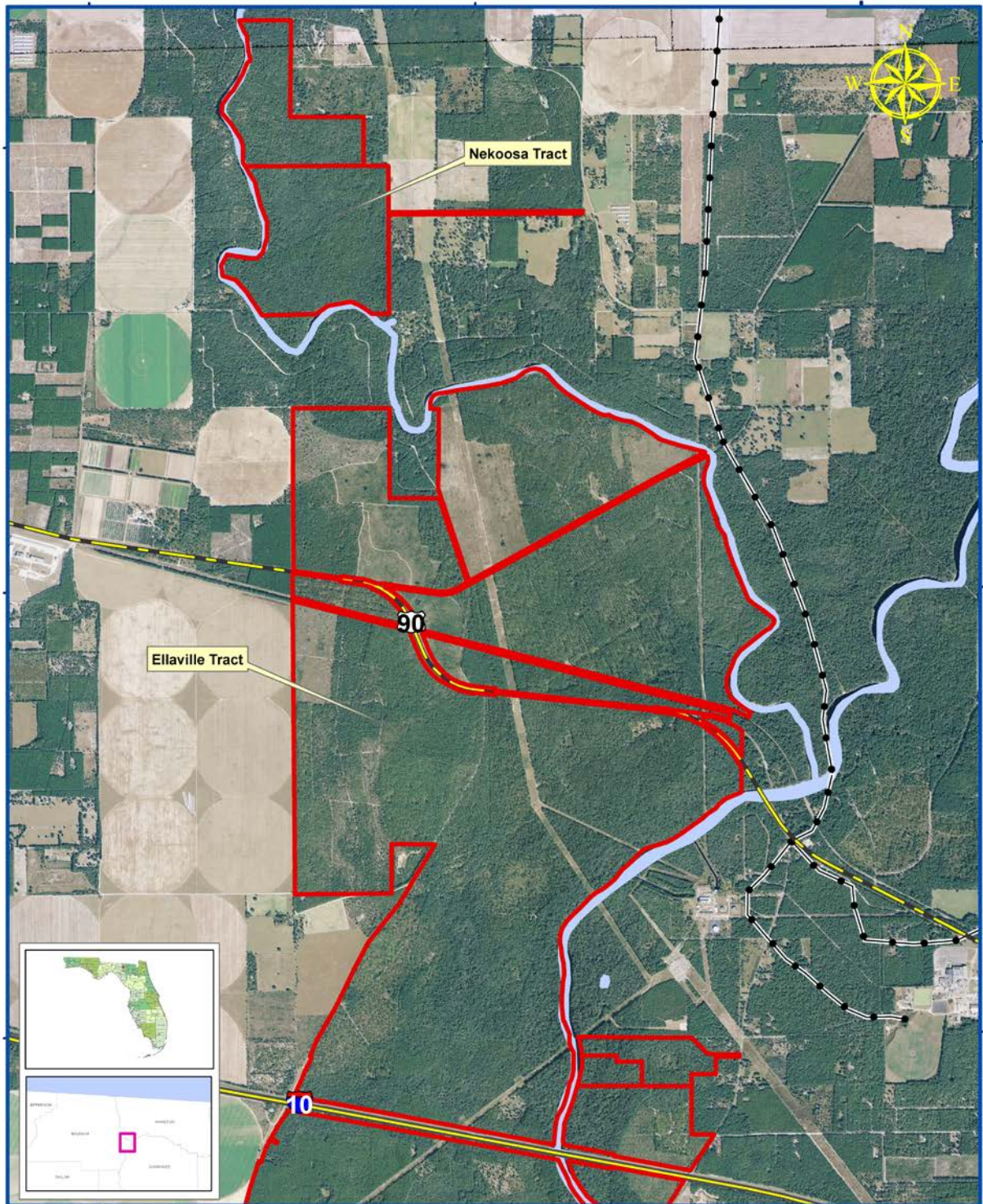
Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

Twin Rivers State Forest

TRSF Tracts - Middle South

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0.5 0.25 0 0.5 Miles

Map Month/Year: March 2015

1,000 500 0 500 1,000 Yards



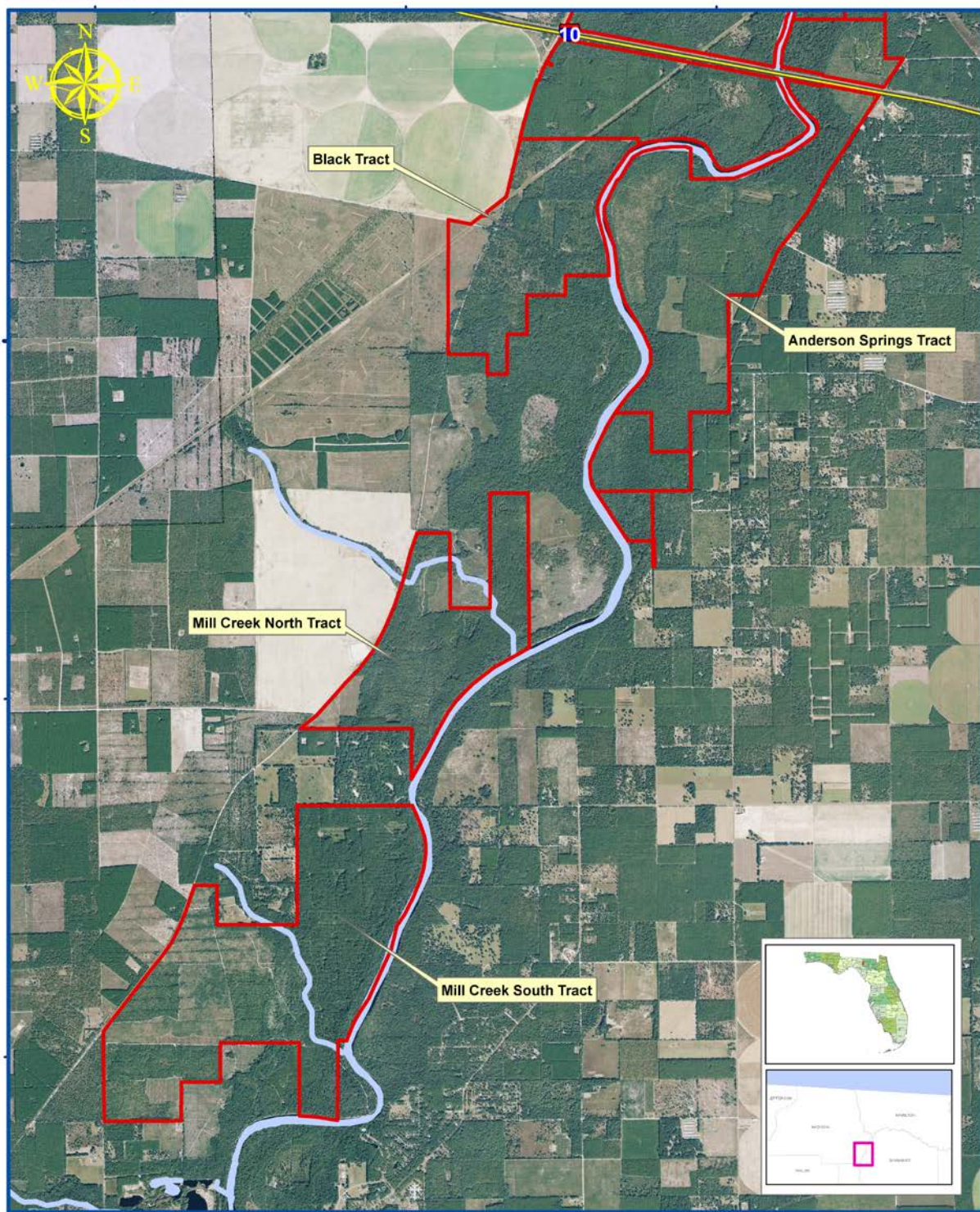
TRSF Tracts - South End

Coordinate System: Florida Albers
High Accuracy Reference Network (NARN) Datum

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Map Month/Year: March 2015

Exhibit F

Proximity to Significant Managed Lands



Twin Rivers State Forest

Managed Areas

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
8317

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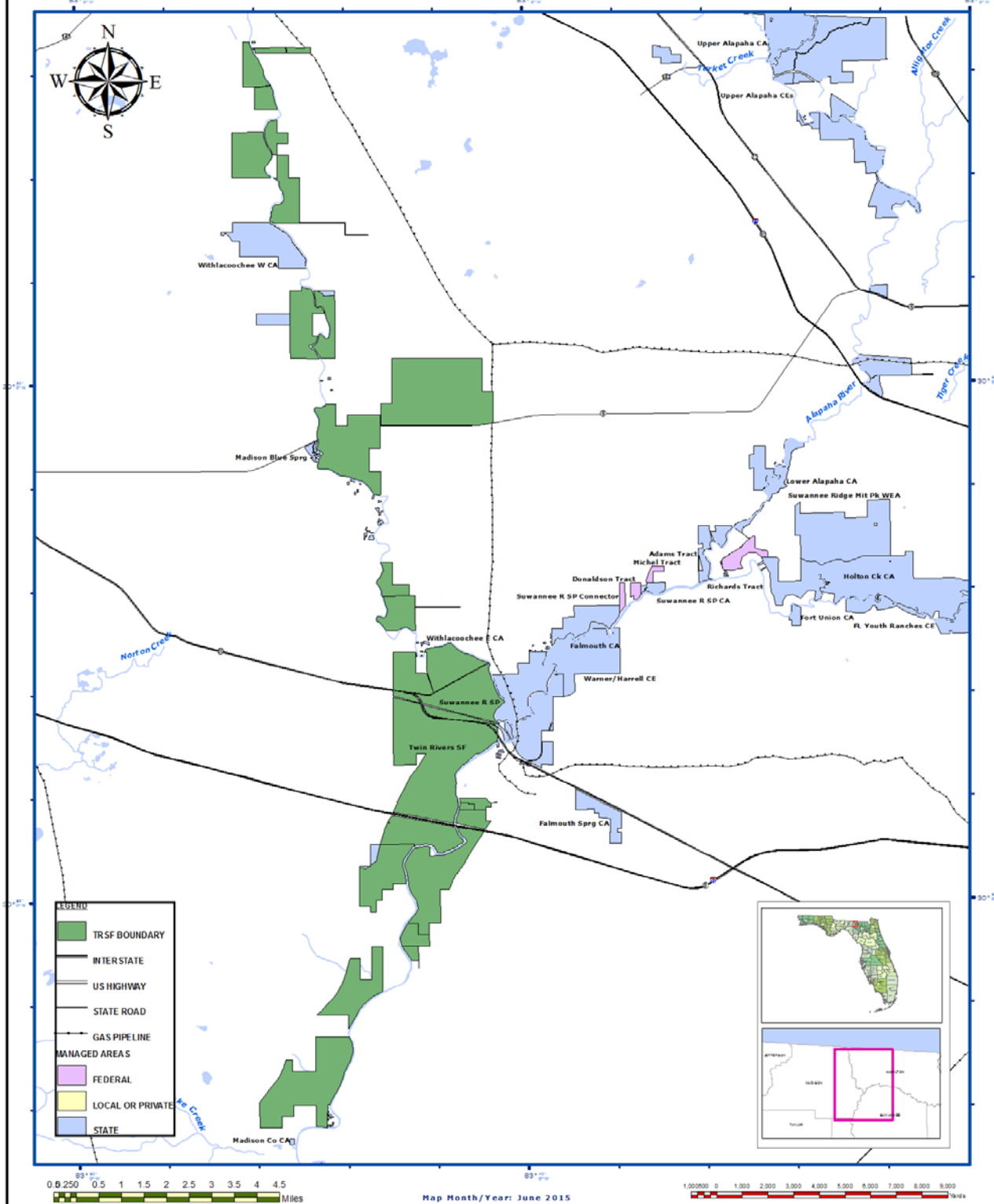


Exhibit G

Department of State Report on Archeological Sites and
Historical Sites

This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333 for project review information.

May 22, 2014

Jennifer Reed
Florida Forestry Service
3125 Conner Boulevard Tallahassee, FL 32399
Phone: 850-681-5828
Email: Jennifer.reed@freshfromflorida.com



In response to your inquiry of May 22, 2014 the Florida Master Site File lists eighty previously recorded archaeological sites, no resource groups, one historic cemetery, one historic bridge and one standing structure found within the **Twin Rivers State Forest** located in the counties of Suwannee, Hamilton and Madison.

When interpreting the results of our search, please consider the following information:

- This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.
- Because vandalism and looting are common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.
- While many of our records document historically significant resources, the documentation of a resource at the Florida Master Site File does not necessarily mean the resource is historically significant.
- Federal, state and local laws require formal environmental review for most projects. This search **DOES NOT** constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333.

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

A handwritten signature in cursive script that reads "Mary G. Berman".

Mary Berman
Archaeological Analyst
Florida Master Site File
mary.berman@dos.state.fl.us

OBJECTID	SiteID	SiteName	SiteType	Culture	SurvEval	SurveyNum	ShpoEval	PlotType	Shape_Leng	Shape_Area
18532	W000259	Westwood West III	Campsite (prehistoric); habitation (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Artifact scatter-high density (> 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00181665286	0.0000001180
18533	W000260	Drainer Hill	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Artifact scatter-high density (> 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00144244377	0.00000013600
18534	W000261	Bed Gough	Campsite (prehistoric); Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Artifact scatter-high density (> 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00195307284	0.00000017350
18535	W000262	Foot Twister	Campsite (prehistoric); habitation (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00138301383	0.00000012475
18536	W000263	Reche's Quarry North	Specialized site for procurement of raw materials; Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00091999900	0.00000015280
18537	W000264	Reche's Quarry South	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00075999800	0.00000013600
18538	W000265	T/Y Junction	Campsite (prehistoric); Specialized site for procurement of raw materials; Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.000208405385	0.00000013410
18539	W000266	Westwood Border South	Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Twentieth century American, 1900-present; Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00070953801	0.00000013615
18540	W000267	Bamboo Poles	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00165113473	0.00000011696
18541	W000268	Mill Creek Palms	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics); Turpentine camp	Twentieth century American, 1900-present; Prehistoric; Weeden Island, A.D. 450-1000	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00180700920	0.0000014426
18542	W000269	Lost Channel Quarry	Specialized site for procurement of raw materials; Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Lithic scatter/quarry (prehistoric); no ceramics); Artifact scatter low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00199047994	0.00000028025
18543	W000270	Penny Palisau	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00106403913	0.00000017985
18544	W000272	Power-line Spring	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics); Homestead; Land-terrestrial; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00152470209	0.00000016490
18545	W000274	Historic Homestead	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Artifact scatter-high density (> 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Nineteenth century American, 1821-1899	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00076305359	0.00000014195
18546	W000275	Pot Jack	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Artifact scatter-high density (> 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00090836323	0.00000014065
18547	W000276	Ground Nest	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00066524112	0.00000013320
18548	W000277	Picher	Building remains; habitation (prehistoric); Homestead; Land-terrestrial; Artifact scatter low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics	Nineteenth century American, 1821-1899; Twentieth century American, 1900-present; Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00279132336	0.00000014250
18549	W000278	Blue Dog	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric); no ceramics); Building remains; Historic earthworks; Land-terrestrial; Mill of unspecified function; Lumber mill;	Nineteenth century American, 1821-1899; Prehistoric	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.00236632953	0.00000014290
18550	W000279	Drew Bucky Sawmill Complex	River/Stream/Creek-riverine	Twentieth century American, 1900-present	Insufficient Information	19410	Not Evaluated by S+PO	NORM	0.01537105502	0.00000053364

OBJECTID	SiteID	SiteName	SiteType	Culture	SiteEval	SurveyNum	SiteEval	PlotType	Shape_Leng	Shape_Area
9191	H400547	FL 326	Land-terrestrial	Prehistoric with pottery	Eligible for NRHP	21431	Insufficient Information	NORM	0.00564665676	0.00000124222
9626	H400386	Dead Ferns	River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00186814953	0.000000244115
9627	H400387	Island Shoal Quarry	Specialized site for procurement of raw materials; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter)	Historic, Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00123999700	0.000000029600
9628	H400389	Log Shoals Overlook	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Ceramic scatter	Wooden Island, A.D. 450-1000	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00227960488	0.000000036305
9629	H400390	Head Long	Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00166402640	0.000000019110
9630	H400391	Raccoon Corner	Specialized site for procurement of raw materials; Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Ceramic scatter	Twentieth century American, 1900-present	Ineligible for NRHP	19410	Not Evaluated by SH-PO	NORM	0.00506697818	0.00000023660
9631	H400392	Down Draft	Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00338181808	0.000000082855
9632	H400394	Lithic Run	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00207481243	0.00000022925
9633	H400395	Coralina	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00223165281	0.000000036870
9634	H400396	Hawkeye	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00113954136	0.000000029660
9635	H400397	Southeast Swing	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00182755006	0.00000024035
9636	H400398	Southwest Swing	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00196859256	0.00000028350
9637	H400399	Tree Falls	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00399977007	0.00000112455
9638	H400400	South Tip	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00410015451	0.00000106830
9639	H400401	North Bend	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00308345190	0.000000050635
9640	H400402	West Point	Land-terrestrial; Historic refuse / dump; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Historic, Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00397885510	0.000000054905
9683	H400378	Turtle Shoals Overlook	Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15787	Not Evaluated by SH-PO	NORM	0.00196265929	0.00000027205
9684	H400379	West Bend	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00639473919	0.00000229114
9685	H400381	Pick Lake Ridge	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00068281626	0.00000003710
9687	H400382	Westwood East 1	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.00112978023	0.00000005890
9688	H400383	Tuckered	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by SH-PO	NORM	0.0017125746	0.00000016595

OBJECTID	SiteID	SiteName	SiteType	Culture	SurvEval	SurveyNum	ShpsEval	PlotType	Shape_Leng	Shape_Area
9889	H400384	Ichu Neck	Campsite (prehistoric); habitation (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Artifact scatter-dense (> 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00139959242	0.000000318895
9891	H400403	Horse Walks	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00446488647	0.00000140395
9892	H400404	Forrest Echo Sulf	Specialized site for procurement of raw materials; Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Historic town; Turpentine camp	Nineteenth century American, 1821-1899; Twentieth century American, 1900-present	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00329254826	0.00000082025
9893	H400405	Vivi	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00360405191	0.00000082450
9894	H400407	Horse Walks Hill	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00160657331	0.00000018000
9895	H400408	Coral Brar	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00265919553	0.00000047115
9896	H400409	Nekosco Junction	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Artifact scatter-dense (> 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00211092293	0.000000310455
9898	H400411	Rachuff Pass	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00168752454	0.00000018030
9899	H400412	Grab Snider	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00128574444	0.000000114660
17317	MD00057	OLD BRIDGE	Prehistoric lithics only, but not quarry	Nineteenth century American, 1821-1899; Twentieth century American, 1900-present; Historic	Insufficient Information	1410	Not Evaluated by Sh-PO	NORM	0.01453049115	0.0000045728
17318	MD00058	OLD ELAVILLE	Land-terrestrial; Lumber mill; Artifact scatter-low density (< 2 per sq meter); Historic town	Archaic, 8500 B.C.-1000 B.C.; Possible Paleo-Indian or Late Paleo-Indian	Insufficient Information	19573	Not Evaluated by Sh-PO	NORM	0.01510062581	0.000000318254
18455	MD00033	MADISON BLUE SPRINGS	Inundated land site; River/Stream/Creek riverine; Artifact scatter-low density (< 2 per sq meter)	Nineteenth century American, 1821-1899; Twentieth century American, 1900-present; Prehistoric baking pottery; Prehistoric	Not Evaluated by Recorder	19410	Not Evaluated by Sh-PO	NORM	0.00321215552	0.00000078600
18456	MD00035A	Governor Drew Mansion Site	Subsurface features are present; Homestead; Land-terrestrial; Pantheon; Historic well	Prehistoric baking pottery; Swift Creek, 300 B.C.-A.D.450	Eligible for NRHP	21569	Not Evaluated by Sh-PO	NORM	0.00170680216	0.00000023182
18482	MD00092	SUWANNEE RIVER BORROW PIT	Land-terrestrial	Prehistoric baking pottery; Swift Creek, 300 B.C.-A.D.450	Not Evaluated by Recorder	0	Not Evaluated by Sh-PO	NORM	0.00602479559	0.0000218201
18522	MD00226	TUL-1209A-01	Land-terrestrial	Prehistoric baking pottery; Swift Creek, 300 B.C.-A.D.450	Ineligible for NRHP	18532	Ineligible for NRHP	NORM	0.00507992350	0.00000168366
18523	MD00227	TUL-1209A-02	Land-terrestrial	Prehistoric baking pottery; Swift Creek, 300 B.C.-A.D.450	Ineligible for NRHP	18532	Ineligible for NRHP	NORM	0.00342086346	0.000000034830
18525	MD00237	East Ridge Overlook	Campsite (prehistoric); habitation (prehistoric); Land-terrestrial; Other: River/Stream/Creek riverine; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15797	Not Evaluated by Sh-PO	NORM	0.00129342251	0.00000011905
18527	MD00239	Downward Curve	Campsite (prehistoric); habitation (prehistoric); Land-terrestrial; Other: River/Stream/Creek riverine; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15797	Not Evaluated by Sh-PO	NORM	0.00114974145	0.000000009950
18529	MD00241	River Road South	Campsite (prehistoric); habitation (prehistoric); Land-terrestrial; Other: River/Stream/Creek riverine; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15797	Not Evaluated by Sh-PO	NORM	0.00135555521	0.00000011235
18530	MD00242	Picnic Shoals Quarry	Land-terrestrial; Other: Prehistoric quarry; River/Stream/Creek riverine; Artifact scatter low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15797	Not Evaluated by Sh-PO	NORM	0.00158787487	0.00000015780
18531	MD00258	West Side Hollow	Campsite (prehistoric); habitation (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by Sh-PO	NORM	0.00256249952	0.00000016555

OBJECTID	SiteID	SiteName	SiteType	Culture	SurvEval	SurveyNum	ShpoEval	PlotType	Shape_Leng	Shape_Area
18551	M/D00283	Clear Parking	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.00279127880	0.00000045055
18986	M/D00109	POWER PLANT	Habitation (prehistoric); Ceramic scatter; Prehistoric lithics only, but not quarry	Prehistoric lacking pottery; Prehistoric with pottery; First Spanish, Early 1600-1699	Eligible for NRHP	0	Not Evaluated by S-PO	NORV	0.01707195114	0.00001542548
18992	M/D00243	Next Rise North	Campsite (prehistoric); Land-terrestrial; Other; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.00287688640	0.00000059125
18993	M/D00244	Pine Zoom Path	Campsite (prehistoric); Habitation (prehistoric); Land-terrestrial; Other; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.0040130671	0.00000116090
18996	M/D00246	Deer Bone	Campsite (prehistoric); Land-terrestrial; Other; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter)	Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.00134613514	0.00000015900
18996	M/D00247	Tund Tread	Campsite (prehistoric); Land-terrestrial; Other; Artifact scatter-low density (< 2 per sq meter)	Archaic, 8500 B.C.-1000 B.C.; Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.00125576050	0.00000008705
18997	M/D00248	Bridge Boat Launch	Campsite (prehistoric); Land-terrestrial; Other; Artifact scatter-low density (< 2 per sq meter)	Archaic, 8500 B.C.-1000 B.C.; Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.00208021539	0.00000020205
18998	M/D00249	Rubbish Road	Campsite (prehistoric); Land-terrestrial; Other; Artifact scatter-low density (< 2 per sq meter)	Archaic, 8500 B.C.-1000 B.C.; Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.00194495379	0.00000002535
18999	M/D00250	Southrun	Campsite (prehistoric); Land-terrestrial; Other; Artifact scatter-low density (< 2 per sq meter)	Archaic, 8500 B.C.-1000 B.C.; Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.00081645906	0.00000004185
19000	M/D00251	Mulh Curves	Campsite (prehistoric); Land-terrestrial; Other; Artifact scatter-low density (< 2 per sq meter)	Archaic, 8500 B.C.-1000 B.C.; Prehistoric	Insufficient Information	15797	Not Evaluated by S-PO	NORV	0.00158689295	0.00000018420
19001	M/D00252	Thumbnail	Campsite (prehistoric); Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.00149518227	0.00000013445
19002	M/D00253	Blue Stripes	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.00274444720	0.00000046295
19004	M/D00255	Persimmon Overlook	Campsite (prehistoric); Land-terrestrial; Prehistoric quarry; River/Stream/Creek-riverine; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.0013779626	0.00000035658
19005	M/D00256	Westwood West I	Campsite (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.00074018288	0.00000003820
19006	M/D00257	Westwood West I	Campsite (prehistoric); Habitation (prehistoric); Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics); Variable density scatter of artifacts	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.00199748475	0.00000023350
29383	SU00206	ANDERSON SPRING	Habitation (prehistoric); Ceramic scatter; Prehistoric lithics only, but not quarry	Prehistoric	Eligible for NRHP	1410	Not Evaluated by S-PO	NORV	0.00265495117	0.00000053800
29426	SU00257	SCOTT WRECK	Historic shipwreck	American, 1821-present	Not Evaluated by Recorder	0	Not Evaluated by S-PO	NORV	0.00616291370	0.00000027356
29512	SU00369	Randall Wreck	River/Stream/Creek-riverine; Historic shipwreck	Historic	Insufficient Information		Not Evaluated by S-PO	NORV	0.0032603943	0.00000004410
29531	SU00422	Lonely Tree	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter)	Nineteenth century American, 1821-1899; Twentieth century American, 1900-present	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.00667815412	0.000000365477
29532	SU00423	Catch 22	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.0015193156	0.00000007255
29533	SU00424	3 Foot	Land-terrestrial; Artifact scatter-low density (< 2 per sq meter); Lithic scatter/quarry (prehistoric; no ceramics)	Prehistoric	Insufficient Information	19410	Not Evaluated by S-PO	NORV	0.00065794924	0.00000003415

Exhibit H

Management Procedures for Archaeological and Historical Sites and Properties

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties
(revised March 2013)

These procedures apply to state agencies, local governments, and non-profits that manage state-owned properties.

A. General Discussion

Historic resources are both archaeological sites and historic structures. Per Chapter 267, Florida Statutes, *‘Historic property’ or ‘historic resource’ means any prehistoric district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, and folklife resources. These properties or resources may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure trove, artifacts, or other objects with intrinsic historical or archaeological value, or any part thereof, relating to the history, government, and culture of the state.’*

B. Agency Responsibilities

Per State Policy relative to historic properties, state agencies of the executive branch must allow the Division of Historical Resources (Division) the opportunity to comment on any undertakings, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the project, permit, grant, etc.

State agencies shall preserve the historic resources which are owned or controlled by the agency.

Regarding proposed demolition or substantial alterations of historic properties, consultation with the Division must occur, and alternatives to demolition must be considered.

State agencies must consult with Division to establish a program to location, inventory and evaluate all historic properties under ownership or controlled by the agency.

C. Statutory Authority

Statutory Authority and more in depth information can be found at:
<http://www.flheritage.com/preservation/compliance/guidelines.cfm>

D. Management Implementation

Even though the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual. Specific information regarding individual projects must be submitted to the Division for review and recommendations.

Managers of state lands must coordinate any land clearing or ground disturbing activities with the Division to allow for review and comment on the proposed project. Recommendations may include, but are not limited to: approval of the project as submitted, cultural resource assessment survey by a qualified professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions, exterior alteration, or related new construction regarding historic structures must also be submitted to the Division of Historical Resources for review and comment by the Division's architects. Projects involving structures fifty years of age or older, must be submitted to this agency for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant. These must be evaluated on a case by case basis.

Adverse impacts to significant sites, either archaeological sites or historic buildings, must be avoided. Furthermore, managers of state property should make preparations for locating and evaluating historic resources, both archaeological sites and historic structures.

E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at:

http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf.

* * *

Questions relating to the treatment of archaeological and historic resources on state lands should be directed to:

Deena S. Woodward
Division of Historical Resources
Bureau of Historic Preservation
Compliance and Review Section
R. A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

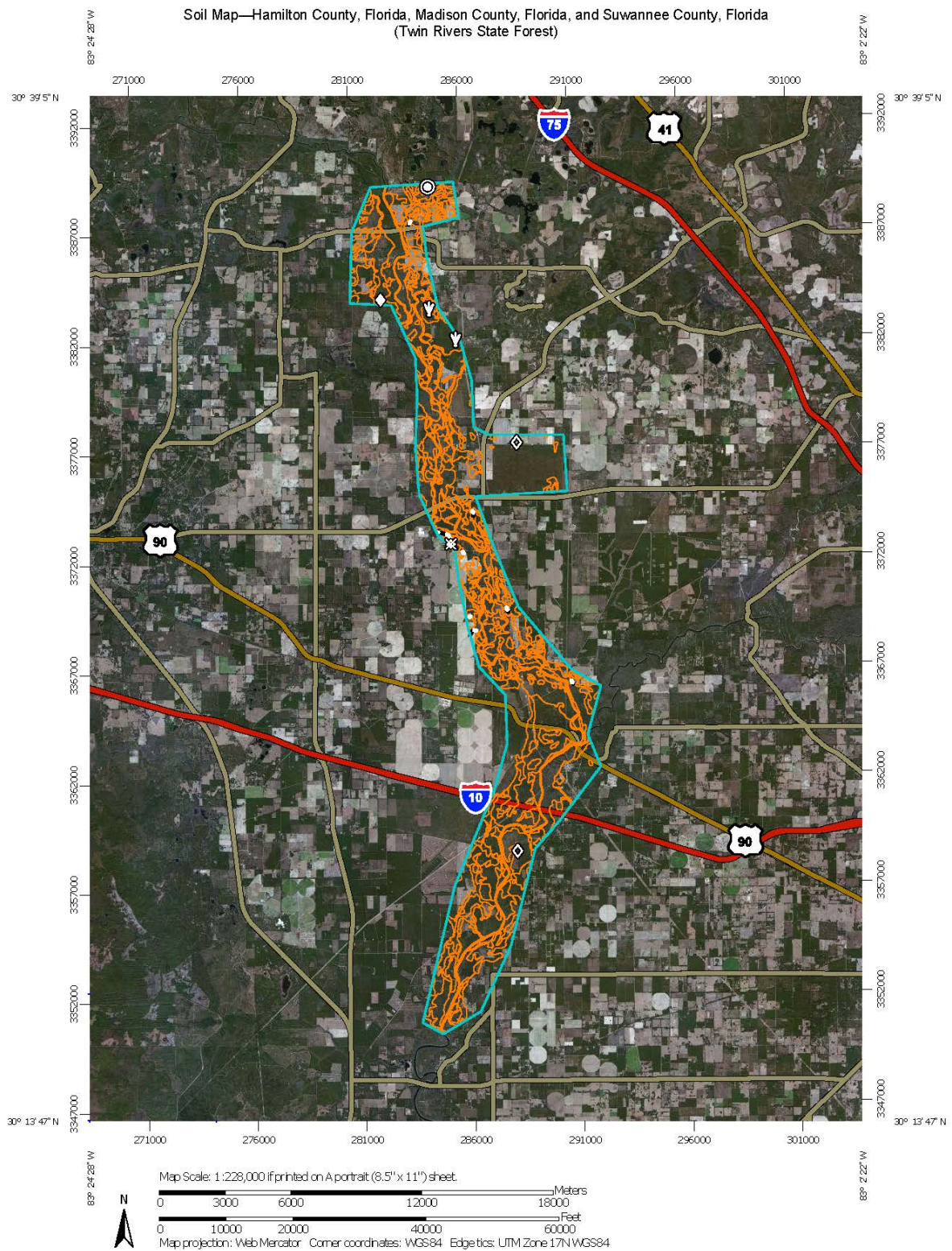
Phone: (850) 245-6425

Toll Free: (800) 847-7278

Fax: (850) 245-6435

Exhibit I

Soil Maps and Descriptions



MAP LEGEND

 Area of Interest (AOI)	 Area of Interest (AOI)	 Spoil Area
 Soils	 Soil Map Unit Polygons	 Stony Spot
	 Soil Map Unit Lines	 Very Stony Spot
	 Soil Map Unit Points	 Wet Spot
		 Other
		 Special Line Features
		
		
		
		
		
		
		
		
		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,800 to 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hamilton County, Florida
Survey Area Data: Version 12, Dec 4, 2013

Soil Survey Area: Madison County, Florida
Survey Area Data: Version 8, Dec 4, 2013

Soil Survey Area: Suwannee County, Florida
Survey Area Data: Version 10, Dec 4, 2013

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 9, 2010—Jan 14, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Hamilton County, Florida (FL047)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Albany fine sand, 0 to 5 percent slopes	207.4	0.6%
3	Alpin sand, 0 to 5 percent slopes	4,910.1	15.0%
4	Alpin sand, 5 to 8 percent slopes	126.8	0.4%
5	Blanton sand, 0 to 5 percent slopes	893.6	2.7%
6	Blanton sand, 5 to 8 percent slopes	228.6	0.7%
7	Kenansville fine sand, 0 to 5 percent slopes, occasionally flooded	642.0	2.0%
8	Chipleys sand, 0 to 5 percent slopes	30.3	0.1%
9	Foxworth sand, 0 to 5 percent slopes	157.7	0.5%
10	Lowndes sand, 0 to 5 percent slopes	66.1	0.2%
11	Lowndes sand, 5 to 8 percent slopes	158.8	0.5%
12	Lowndes and Norfolk soils, 8 to 12 percent slopes	131.5	0.4%
13	Mascotte sand	3.7	0.0%
15	Valdosta sand, 0 to 5 percent slopes	336.0	1.0%
16	Valdosta sand, 5 to 8 percent slopes	237.3	0.7%
17	Wadley sand, 5 to 12 percent slopes	1.8	0.0%
18	Wadley sand, 0 to 5 percent slopes	110.4	0.3%
19	Valdosta-Lowndes complex, 12 to 20 percent slopes	13.7	0.0%
20	Pamlico muck, depressional	32.4	0.1%
21	Plummer and Surrency soils, depressional	43.2	0.1%
22	Alpin fine sand, 0 to 5 percent slopes, occasionally flooded	1,545.1	4.7%
23	Blanton loamy sand, 0 to 5 percent slopes	213.2	0.7%
24	Ocilla loamy fine sand, 0 to 5 percent slopes	66.3	0.2%

Hamilton County, Florida (FL047)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
25	Wampee-Blanton complex, 8 to 12 percent slopes	56.8	0.2%
26	Mascotte and Plummer soils, occasionally flooded	117.2	0.4%
28	Wampee loamy sand, 5 to 8 percent slopes	59.9	0.2%
29	Bonneau sand, 0 to 5 percent slopes	3.8	0.0%
31	Wampee-Blanton complex, 12 to 20 percent slopes	8.2	0.0%
32	Norfolk loamy fine sand, 2 to 5 percent slopes	10.8	0.0%
34	Plummer sand	32.2	0.1%
35	Wahee fine sandy loam, 0 to 4 percent slopes, occasionally flooded	334.7	1.0%
36	Blanton fine sand, 0 to 5 percent slopes, occasionally flooded	1,122.2	3.4%
37	Eunola loamy fine sand, 0 to 5 percent slopes, occasionally flooded	1,210.5	3.7%
46	Stockade fine sandy loam	5.3	0.0%
47	Goldhead fine sand, 0 to 5 percent slopes	70.5	0.2%
48	Bivans loamy sand, 8 to 12 percent slopes	16.1	0.0%
49	Otela-Alpin complex, 0 to 5 percent slopes	40.2	0.1%
51	Bigbee fine sand, undulating, occasionally flooded	481.6	1.5%
54	Pits	3.8	0.0%
99	Water	232.4	0.7%
Subtotals for Soil Survey Area		13,962.1	42.7%
Totals for Area of Interest		32,710.4	100.0%

Madison County, Florida (FL079)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Albany sand, 0 to 5 percent slopes	58.8	0.2%
3	Alpin sand	2,628.6	8.0%
5	Blanton sand, 0 to 5 percent slopes	637.7	1.9%
6	Blanton sand, 5 to 8 percent slopes	26.9	0.1%
10	Lakeland sand, 0 to 5 percent slopes	334.7	1.0%

Madison County, Florida (FL079)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11	Lakeland sand, 5 to 8 percent slopes	45.1	0.1%
13	Lucy sand, 2 to 5 percent slopes	8.6	0.0%
14	Lucy sand, 5 to 8 percent slopes	21.3	0.1%
21	Cantey fine sandy loam	123.5	0.4%
26	Troup sand, 0 to 5 percent slopes	132.7	0.4%
27	Troup sand, 5 to 8 percent slopes	204.1	0.6%
28	Chipley fine sand, 0 to 5 percent slopes	8.6	0.0%
30	Ocilla sand, 0 to 5 percent slopes	5.3	0.0%
38	Goldsboro loamy sand, 2 to 5 percent slopes	2.7	0.0%
61	Alaga loamy sand, 0 to 5 percent slopes	30.7	0.1%
65	Lovett sand, 0 to 5 percent slopes	35.1	0.1%
66	Lovett sand, 5 to 8 percent slopes	22.0	0.1%
67	Udorthents, loamy	62.2	0.2%
77	Surrency, Plummer, and Cantey soils, frequently flooded	923.5	2.8%
78	Alpin fine sand, occasionally flooded	2,819.6	8.6%
79	Eunola fine sand, occasionally flooded	2,556.7	7.8%
80	Kenansville loamy fine sand, 0 to 5 percent slopes	2,925.9	8.9%
99	Water	347.4	1.1%
Subtotals for Soil Survey Area		13,961.8	42.7%
Totals for Area of Interest		32,710.4	100.0%

Suwannee County, Florida (FL121)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5	Blanton-Bonneau complex, 0 to 5 percent slopes	5.2	0.0%
7	Bigbee-Garcon-Meggett complex, occasionally flooded	1,025.3	3.1%
10	Blanton-Alpin complex, 0 to 5 percent slopes, occasionally flooded	594.0	1.8%

Suwannee County, Florida (FL121)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
13	Blanton-Alpin-Bonneau complex, 0 to 5 percent slopes	271.2	0.8%
14	Blanton-Bonneau complex, 5 to 8 percent slopes	7.8	0.0%
29	Alpin fine sand, 0 to 5 percent slopes	1,639.3	5.0%
30	Alpin fine sand, 5 to 12 percent slopes	18.6	0.1%
38	Alpin fine sand, 0 to 5 percent slopes, occasionally flooded	842.8	2.6%
61	Udorthents-Pits complex, 1 to 8 percent slopes	20.6	0.1%
65	Garcon-Eunola complex, 2 to 5 percent slopes, occasionally flooded	124.2	0.4%
69	Osier-Bibb-Albany complex, frequently flooded	83.8	0.3%
99	Water	153.9	0.5%
Subtotals for Soil Survey Area		4,786.5	14.6%
Totals for Area of Interest		32,710.4	100.0%

Component Legend

This report presents general information about the map units and map unit components in the selected area. It shows map unit symbols and names and the components in each map unit. It also shows the percent of the components in the map units, the kind of component, and the slope range of each component.

Report--Component Legend

Component Legend--Hamilton County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
2--Albany fine sand, 0 to 5 percent slopes	26,830						
		90	Albany	Series	0.0	3.0	5.0
		5	Plummer, non-hydric	Series	0.0	1.0	2.0
		5	Blanton	Series	0.0	3.0	5.0
3--Alpin sand, 0 to 5 percent slopes	29,070						
		90	Alpin	Series	0.0	3.0	5.0
		4	Albany	Series	0.0	3.0	5.0
		3	Chiple	Series	0.0	3.0	5.0
		3	Blanton	Series	0.0	3.0	5.0
4--Alpin sand, 5 to 8 percent slopes	1,305						
		90	Alpin	Series	5.0	7.0	8.0
		5	Albany	Series	0.0	3.0	5.0
		5	Blanton	Series	5.0	7.0	8.0
5--Blanton sand, 0 to 5 percent slopes	16,590						
		90	Blanton	Series	0.0	3.0	5.0
		10	Albany	Series	0.0	3.0	5.0
6--Blanton sand, 5 to 8 percent slopes	3,280						
		85	Blanton	Series	5.0	7.0	8.0
		8	Albany	Series	0.0	3.0	5.0
		7	Alpin	Series	5.0	7.0	8.0
7--Kenansville fine sand, 0 to 5 percent slopes, occasionally flooded	2,490						
		90	Kenansville	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		5	Ocilla	Series	0.0	3.0	5.0

Component Legend--Hamilton County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
8—Chipley sand, 0 to 5 percent slopes	6,720						
		90	Chipley	Series	0.0	3.0	5.0
		5	Potsburg, non-hydric	Series	0.0	0.9	2.0
		5	Mascotte, non-hydric	Series	0.0	0.9	2.0
9—Foxworth sand, 0 to 5 percent slopes	5,510						
		90	Foxworth	Series	0.0	3.0	5.0
		10	Albany	Series	0.0	3.0	5.0
10—Lowndes sand, 0 to 5 percent slopes	2,000						
		90	Lowndes	Series	0.0	3.0	5.0
		10	Norfolk	Series	2.0	4.0	5.0
11—Lowndes sand, 5 to 8 percent slopes	1,270						
		90	Lowndes	Series	5.0	7.0	8.0
		10	Valdosta	Series	5.0	7.0	8.0
12—Lowndes and Norfolk soils, 8 to 12 percent slopes	720						
		40	Lowndes	Series	8.0	10.0	12.0
		30	Norfolk	Series	8.0	9.0	10.0
		15	Wampee	Series	5.0	7.0	8.0
		15	Valdosta	Series	5.0	7.0	8.0
13—Mascotte sand	66,180						
		70	Mascotte, non-hydric	Series	0.0	0.9	2.0
		20	Mascotte, hydric	Series	0.0	0.9	2.0
		5	Potsburg, non-hydric	Series	0.0	0.9	2.0
		5	Sapelo, non-hydric	Series	0.0	1.0	2.0
15—Valdosta sand, 0 to 5 percent slopes	11,180						
		90	Valdosta	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		5	Lowndes	Series	0.0	3.0	5.0
16—Valdosta sand, 5 to 8 percent slopes	1,840						
		90	Valdosta	Series	5.0	7.0	8.0
		10	Lowndes	Series	5.0	7.0	8.0

Component Legend--Hamilton County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
17--Wadley sand, 5 to 12 percent slopes	580						
		87	Wadley	Series	5.0	9.0	12.0
		13	Foxworth	Series	0.0	3.0	5.0
18--Wadley sand, 0 to 5 percent slopes	1,940						
		90	Wadley	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		5	Alpin	Series	0.0	3.0	5.0
19--Valdosta-Lowndes complex, 12 to 20 percent slopes	360						
		67	Valdosta	Series	12.0	16.0	20.0
		28	Lowndes	Series	12.0	16.0	20.0
		3	Blanton	Series	0.0	3.0	5.0
		2	Wampee	Series	5.0	7.0	8.0
20--Pamlico muck, depressional	19,750						
		90	Pamlico	Series	0.0	0.5	1.0
		3	Pelham, hydric	Series	0.0	0.9	2.0
		3	Mascotte, non-hydric	Series	0.0	0.9	2.0
		2	Plummer, depressional	Series	0.0	0.6	2.0
		2	Pottsburg, hydric	Series	0.0	0.9	2.0
21--Plummer and Surrency soils, depressional	25,450						
		50	Plummer, depressional	Series	0.0	0.6	2.0
		33	Surrency, depressional	Series	0.0	0.4	1.0
		10	Mascotte, hydric	Series	0.0	0.9	2.0
		7	Pottsburg, non-hydric	Series	0.0	0.9	2.0
22--Alpin fine sand, 0 to 5 percent slopes, occasionally flooded	3,280						
		95	Alpin	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
23--Blanton loamy sand, 0 to 5 percent slopes	2,290						
		90	Blanton	Series	0.0	3.0	5.0
		5	Kenansville	Series	0.0	3.0	5.0
		5	Valdosta	Series	0.0	3.0	5.0

Component Legend--Hamilton County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
24—Ocala loamy fine sand, 0 to 5 percent slopes	3,550						
		90	Ocala	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		5	Pelham, non-hydric	Series	0.0	0.9	2.0
25—Wampee-Blanton complex, 8 to 12 percent slopes	1,115						
		54	Wampee	Series	8.0	10.0	12.0
		36	Blanton	Series	8.0	10.0	12.0
		4	Albany	Series	0.0	3.0	5.0
		3	Plummer, non-hydric	Series	0.0	1.0	2.0
		3	Mascotte, non-hydric	Series	0.0	0.9	2.0
26—Mascotte and Plummer soils, occasionally flooded	8,770						
		53	Mascotte	Series	0.0	0.9	2.0
		36	Plummer	Series	0.0	0.9	2.0
		11	Stockade	Series	0.0	0.7	2.0
28—Wampee loamy sand, 5 to 8 percent slopes	1,070						
		87	Wampee	Series	5.0	7.0	8.0
		7	Albany	Series	0.0	3.0	5.0
		6	Blanton	Series	5.0	7.0	8.0
29—Bonneau sand, 0 to 5 percent slopes	1,460						
		90	Bonneau	Series	0.0	3.0	5.0
		10	Norfolk	Series	2.0	4.0	5.0
31—Wampee-Blanton complex, 12 to 20 percent slopes	700						
		50	Wampee	Series	12.0	14.0	15.0
		37	Blanton	Series	12.0	16.0	20.0
		13	Albany	Series	0.0	3.0	5.0
32—Norfolk loamy fine sand, 2 to 5 percent slopes	585						
		90	Norfolk	Series	2.0	4.0	5.0
		4	Lowndes	Series	0.0	3.0	5.0
		3	Valdosta	Series	0.0	3.0	5.0
		3	Ocala	Series	0.0	3.0	5.0

Component Legend--Hamilton County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
34—Plummer sand	13,070						
		60	Plummer, non-hydric	Series	0.0	1.0	2.0
		30	Plummer, hydric	Series	0.0	1.0	2.0
		10	Sapelo, non-hydric	Series	0.0	1.0	2.0
35—Wahee fine sandy loam, 0 to 4 percent slopes, occasionally flooded	1,915						
		90	Wahee	Series	0.0	2.0	4.0
		5	Eunola	Series	0.0	3.0	5.0
		5	Ocilla	Series	0.0	3.0	5.0
36—Blanton fine sand, 0 to 5 percent slopes, occasionally flooded	2,660						
		90	Blanton	Series	0.0	3.0	5.0
		5	Alpin	Series	0.0	3.0	5.0
		5	Kenansville	Series	0.0	3.0	5.0
37—Eunola loamy fine sand, 0 to 5 percent slopes, occasionally flooded	4,520						
		90	Eunola	Series	0.0	3.0	5.0
		4	Blanton	Series	0.0	3.0	5.0
		3	Ocilla	Series	0.0	3.0	5.0
		3	Wahee	Series	0.0	2.0	4.0
46—Stockade fine sandy loam	1,240						
		90	Stockade	Series	0.0	0.7	2.0
		5	Pelham, hydric	Series	0.0	0.9	2.0
		5	Surrency, depressional	Series	0.0	0.4	1.0
47—Goldhead fine sand, 0 to 5 percent slopes	890						
		65	Goldhead, non-hydric	Series	0.0	3.0	5.0
		25	Goldhead, hydric	Series	0.0	3.0	5.0
		5	Wampee	Series	5.0	7.0	8.0
		5	Albany	Series	0.0	3.0	5.0
48—Bivans loamy sand, 8 to 12 percent slopes	820						
		85	Bivans	Taxadjunct	8.0	10.0	12.0
		5	Plummer, non-hydric	Series	0.0	1.0	2.0
		5	Wampee	Series	8.0	10.0	12.0
		5	Pelham, non-hydric	Series	0.0	0.9	2.0

Component Legend--Hamilton County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
49—Otela-Alpin complex, 0 to 5 percent slopes	1,010						
		59	Otela	Series	0.0	3.0	5.0
		28	Alpin	Series	0.0	3.0	5.0
		13	Ocilla	Series	0.0	3.0	5.0
51—Bigbee fine sand, undulating, occasionally flooded	4,800						
		90	Bigbee	Series	0.0	3.0	5.0
		10	Blanton	Series	0.0	3.0	5.0
54—Pits	50						
		100	Pits	Miscellaneous area	0.0	2.0	4.0
99—Water	3,480						
		100	Water	Miscellaneous area			

Component Legend--Madison County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
2—Albany sand, 0 to 5 percent slopes	42,220						
		90	Albany	Taxadjunct	0.0	3.0	5.0
		5	Plummer	Series	0.0	1.0	2.0
		5	Blanton	Series	0.0	3.0	5.0
3—Alpin sand	28,430						
		90	Alpin	Series	0.0	1.0	2.0
		4	Albany	Taxadjunct	0.0	3.0	5.0
		3	Chiple	Series	0.0	3.0	5.0
		3	Blanton	Series	0.0	3.0	5.0
5—Blanton sand, 0 to 5 percent slopes	65,740						
		90	Blanton	Series	0.0	3.0	5.0
		4	Albany	Taxadjunct	0.0	3.0	5.0
		3	Ocilla	Series	0.0	3.0	5.0
		3	Alpin	Series	0.0	1.0	2.0
6—Blanton sand, 5 to 8 percent slopes	3,700						
		90	Blanton	Series	5.0	7.0	8.0
		10	Alpin	Series	0.0	1.0	2.0

Component Legend--Madison County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
10--Lakeland sand, 0 to 5 percent slopes	4,200						
		90	Lakeland	Series	0.0	3.0	5.0
		10	Blanton	Series	0.0	3.0	5.0
11--Lakeland sand, 5 to 8 percent slopes	900						
		90	Lakeland	Series	5.0	7.0	8.0
		5	Blanton	Series	5.0	7.0	8.0
		5	Troup	Series	5.0	7.0	8.0
13--Lucy sand, 2 to 5 percent slopes	6,660						
		90	Lucy	Series	2.0	4.0	5.0
		10	Faceville	Series	2.0	4.0	5.0
14--Lucy sand, 5 to 8 percent slopes	3,580						
		86	Lucy	Series	5.0	7.0	8.0
		14	Faceville	Series	5.0	7.0	8.0
21--Cantey fine sandy loam	1,250						
		90	Cantey, depressional	Series	0.0	0.2	2.0
		3	Albany	Taxadjunct	0.0	3.0	5.0
		3	Ocilla	Series	0.0	3.0	5.0
		2	Surrency, depressional	Series	0.0	0.5	1.0
		2	Plummer, depressional	Series	0.0	0.5	1.0
26--Troup sand, 0 to 5 percent slopes	6,140						
		90	Troup	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		5	Lovett	Series	0.0	3.0	5.0
27--Troup sand, 5 to 8 percent slopes	3,960						
		95	Troup	Series	5.0	7.0	8.0
		5	Blanton	Series	5.0	7.0	8.0
28--Chipley fine sand, 0 to 5 percent slopes	2,920						
		90	Chipley	Series	0.0	3.0	5.0
		5	Albany	Taxadjunct	0.0	3.0	5.0
		5	Plummer	Series	0.0	1.0	2.0

Component Legend--Madison County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
30—Ocala sand, 0 to 5 percent slopes	14,980						
		90	Ocala	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		5	Goldsboro	Series	2.0	4.0	5.0
38—Goldsboro loamy sand, 2 to 5 percent slopes	660						
		90	Goldsboro	Series	2.0	4.0	5.0
		5	Plummer	Series	0.0	1.0	2.0
		5	Orangeburg	Series	2.0	4.0	5.0
61—Alaga loamy sand, 0 to 5 percent slopes	6,760						
		90	Alaga	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		5	Lucy	Series	2.0	4.0	5.0
65—Lovett sand, 0 to 5 percent slopes	19,110						
		90	Lovett	Series	0.0	3.0	5.0
		10	Bonifay	Series	0.0	3.0	5.0
66—Lovett sand, 5 to 8 percent slopes	4,950						
		95	Lovett	Series	5.0	7.0	8.0
		5	Blanton	Series	5.0	7.0	8.0
67—Udorthents, loamy	1,180						
		100	Udorthents	Taxon above family	0.0	1.0	2.0
77—Surrency, Plummer, and Cantey soils, frequently flooded	7,310						
		33	Surrency, frequently flooded	Series	0.0	0.5	1.0
		32	Plummer, frequently flooded	Series	0.0	0.5	1.0
		25	Cantey, frequently flooded	Series	0.0	0.5	1.0
		10	Sapelo, hydric	Series	0.0	1.0	2.0
78—Alpin fine sand, occasionally flooded	3,960						
		90	Alpin, occasionally flooded	Series	0.0	1.0	2.0
		5	Troup	Series	0.0	3.0	5.0
		5	Eunola	Series	0.0	1.0	2.0

Component Legend--Madison County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
79—Eunola fine sand, occasionally flooded	3,560						
		95	Eunola	Series	0.0	1.0	2.0
		5	Alpin, occasionally flooded	Series	0.0	1.0	2.0
80—Kenansville loamy fine sand, 0 to 5 percent slopes	3,630						
		90	Kenansville	Taxadjunct	0.0	3.0	5.0
		10	Alpin, occasionally flooded	Series	0.0	1.0	2.0
99—Water	5,400						
		100	Water	Miscellaneous area			

Component Legend--Suwannee County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
5—Blanton-Bonneau complex, 0 to 5 percent slopes	31,778						
		59	Blanton	Series	0.0	3.0	5.0
		36	Bonneau	Series	0.0	3.0	5.0
		5	Alpin	Series	0.0	3.0	5.0
7—Bigbee-Garcon-Meggett complex, occasionally flooded	10,733						
		40	Bigbee	Series	0.0	1.0	2.0
		30	Garcon	Series	0.0	1.0	2.0
		20	Meggett	Series	0.0	1.0	2.0
		5	Blanton	Series	0.0	1.0	2.0
		5	Chiple	Series	0.0	1.0	2.0
10—Blanton-Alpin complex, 0 to 5 percent slopes, occasionally flooded	11,925						
		45	Blanton	Series	0.0	3.0	5.0
		38	Alpin	Series	0.0	3.0	5.0
		7	Chiple	Series	0.0	3.0	5.0
		5	Albany	Series	0.0	3.0	5.0
		5	Foxworth	Series	0.0	3.0	5.0

Component Legend--Suwannee County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
13—Blanton-Alpin-Bonneau complex, 0 to 5 percent slopes	90,031						
		42	Blanton	Series	0.0	3.0	5.0
		33	Alpin	Series	0.0	3.0	5.0
		16	Bonneau	Series	0.0	3.0	5.0
		5	Albany	Series	0.0	3.0	5.0
		4	ChIPLEY	Series	0.0	3.0	5.0
14—Blanton-Bonneau complex, 5 to 8 percent slopes	3,646						
		51	Blanton	Series	5.0	7.0	8.0
		37	Bonneau	Series	5.0	7.0	8.0
		7	Alpin	Series	0.0	3.0	5.0
		5	Albany	Series	0.0	3.0	5.0
29—Alpin fine sand, 0 to 5 percent slopes	77,277						
		80	Alpin	Series	0.0	3.0	5.0
		10	Blanton	Series	0.0	3.0	5.0
		10	ChIPLEY	Series	0.0	3.0	5.0
30—Alpin fine sand, 5 to 12 percent slopes	2,167						
		85	Alpin	Series	5.0	9.0	12.0
		10	ChIPLEY	Series	5.0	6.0	8.0
		5	Blanton	Series	5.0	8.0	12.0
38—Alpin fine sand, 0 to 5 percent slopes, occasionally flooded	3,962						
		91	Alpin	Series	0.0	3.0	5.0
		5	Blanton	Series	0.0	3.0	5.0
		4	Foxworth	Series	0.0	3.0	5.0
61—Udorthents-Pits complex, 1 to 8 percent slopes	2,543						
		80	Udorthents	Taxon above family	1.0	5.0	8.0
		20	Pits	Miscellaneous area			
65—Garcon-Eunola complex, 2 to 5 percent slopes, occasionally flooded	588						
		55	Garcon	Series	0.0	1.0	2.0
		40	Eunola	Series	2.0	3.0	5.0
		5	Otela	Series	0.0	3.0	5.0

Component Legend--Suwannee County, Florida							
Map unit symbol and name	Map unit acres	Pct. of map unit	Component name	Component kind	Pct. slope		
					Low	RV	High
69—Osier-Bibb-Albany complex, frequently flooded	3,423						
		45	Osier	Series	0.0	1.0	2.0
		27	Bibb	Series	0.0	1.1	2.0
		18	Albany	Series	0.0	3.0	5.0
		10	Plummer	Series	0.0	1.0	2.0
99—Water	2,764						
		100	Water	Miscellaneous area			

Data Source Information

Soil Survey Area: Hamilton County, Florida
Survey Area Data: Version 12, Dec 4, 2013

Soil Survey Area: Madison County, Florida
Survey Area Data: Version 8, Dec 4, 2013

Soil Survey Area: Suwannee County, Florida
Survey Area Data: Version 10, Dec 4, 2013

For a Complete Map Unit Description Report, please contact the FFS at 850 / 681-5828

Exhibit J

Department of Environmental Protection
Outstanding Florida Waters



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

June 3, 2014

Ms. Jennifer Reed
Land Planning Coordinator
Florida Forestry Service
Florida Department of Agriculture & Consumer Services
The Conner Building
3125 Conner Boulevard - Room 237
Tallahassee, FL 32399-1650

RE: Land Use Plan for Twin Rivers State Forest

Dear Ms. Reed:

Thank you for your inquiry regarding the surface water quality classifications on and near Twin Rivers State Forest in Hamilton, Madison, and Suwannee Counties. A portion of the Suwannee River appears to run through Twin Rivers State Forest. The Suwannee River (including its floodplain) has been designated as Outstanding Florida Waters (subparagraph 62-302.700(9)(i)34., Florida Administrative Code (FAC)). Any surface waters on the site are classified as Class III waters (subparagraphs 62-302.400(16)(b)24., 62-302.400(16)(b)40., and 62-302.400(16)(b)61., FAC), which is the statewide default classification.

If you have any questions or need additional information, please feel free to contact me at the letterhead address (mail station 6511), by phone at 850/245-8429, or via E-mail at Eric.Shaw@dep.state.fl.us.

Sincerely,

Eric R. Shaw
Environmental Manager
Standards Development Section

Exhibit K

Water Resources Map



Florida Forest Service

Twin Rivers State Forest

Water Resources

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
This map was created by the Florida Forest Service
and is not intended to be used for any other purpose.
The Florida Forest Service does not warrant the
accuracy or completeness of the information
presented on this map. The Florida Forest Service
does not assume any liability for any errors or
omissions, or for any consequences arising from
the use of the information presented on this map.
Managed area boundaries courtesy of
the Florida Natural Areas Inventory
Formerly (State Wildlife Sites (FWS)) from the
US Army Corps of Engineers

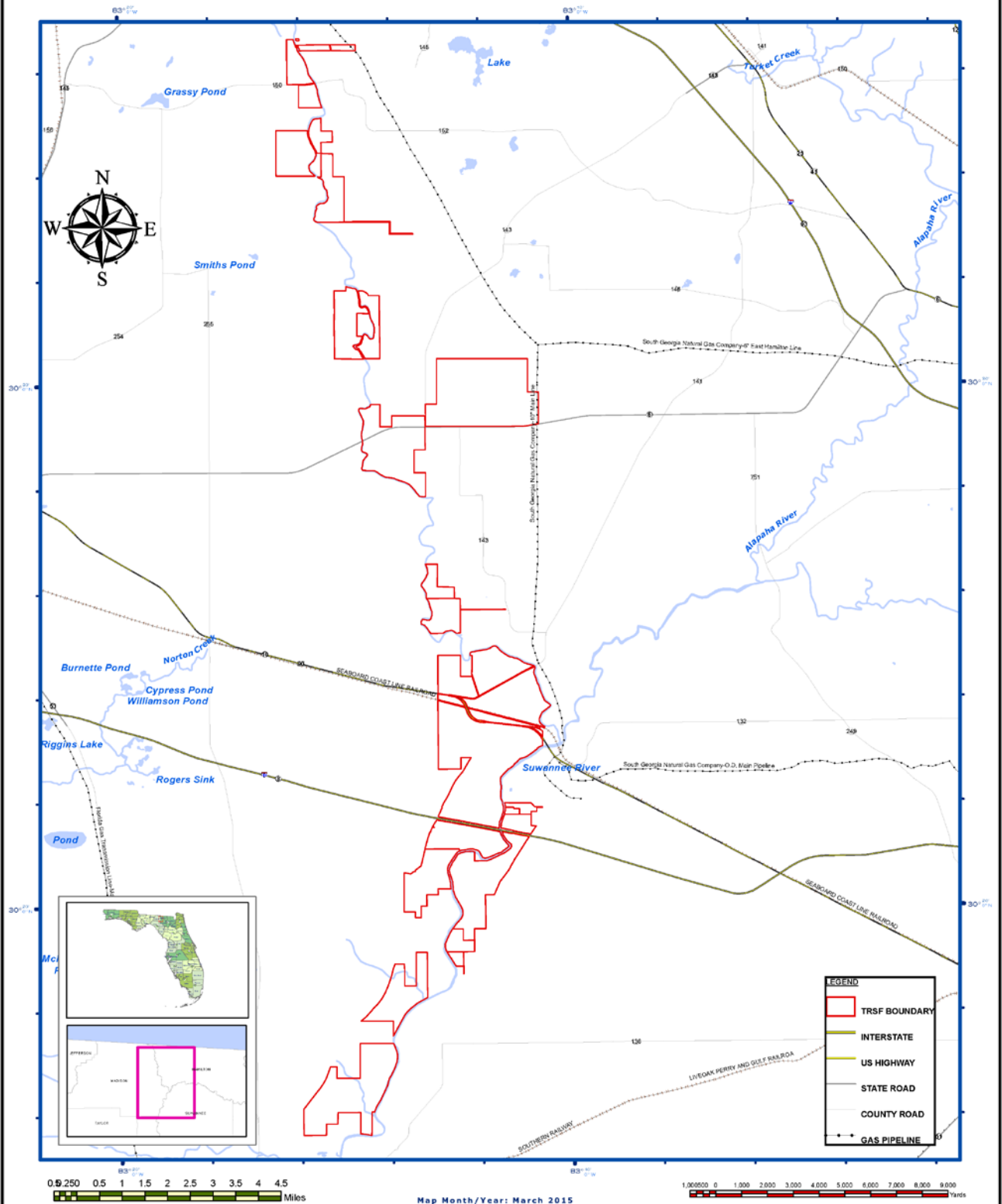


Exhibit L

Florida Natural Areas Inventory Response



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

June 5, 2014

Jennifer Reed
FL Dept of Agriculture & Consumer Services
Florida Forest Service
Conner Bldg., 3125 Conner Boulevard
Tallahassee, FL 32399-1650

Dear Ms. Reed,

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

Project: Twin Rivers State Forest
Date Received: 5/29/2014
Location: Madison, Hamilton, and Suwanee Counties

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

FNAI Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). 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.

Federally Listed Species

Our data include records of federally listed species, particularly *Drymarchon couperi* (Eastern Indigo Snake), on or very near this site (see enclosed map and tables for details). This statement should not be interpreted as a legal determination of presence or absence of federally listed species on a property.

The FNAI Element Occurrences data layer includes rigorously documented occurrences of rare species and natural communities. 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 occurrence labels indicate the general vicinity of the occurrence. This may be due to lack of precision of the source data, or an element that covers an extended area (such as a wide-ranging species or large natural community). Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

*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*



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.

Biodiversity Matrix

In addition to element occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models. The Biodiversity Matrix Report compiles several data sources – including Element Occurrences, occurrence-based species habitat models, predictive range models, and natural community maps – to provide a broader list of documented, likely, and potential species on or near the site. These species could be taken into consideration in field surveys, land management, and land use decisions. Note that the Biodiversity Matrix Report lists species and communities by square-mile Matrix Unit, rather than by the site of interest, so the Documented list may vary from the Element Occurrence Table supplied with this report. Also, note that this list aggregates results from all matrix units that overlap the site, so the location of the elements are somewhat obscured.

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

FNAI species predictive 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.

Land Acquisition Projects

This site appears to be located within the Longleaf Pine Ecosystem Florida Forever BOT Project – Ellaville Sandhill and the Florida's First Magnitude Springs Florida Forever BOT Project – Damascus Peanut Tract, which are parts of the State of Florida's Conservation and Recreation Lands land acquisition program. Descriptions of these projects are 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 specific land management authority over these lands until they are purchased.

The Inventory always recommends that professionals familiar with Florida's flora and fauna 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.

This report is made available at no charge due to funding from the Florida Department of Environmental Protection, Division of State Lands.

Thank you for your use of FNAI services. If I can be of further assistance, please contact me at (850) 224-8207 or at npasco@fnai.org.

Sincerely,

Nathan Pasco

Nathan Pasco
GIS / Data Services

Encl



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

FLORIDA Natural Areas INVENTORY

Element Occurrences

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

Conservation Lands

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

Land Acquisition Projects

- Florida Forever
- Board of Trustees Projects
- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

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

NOTE

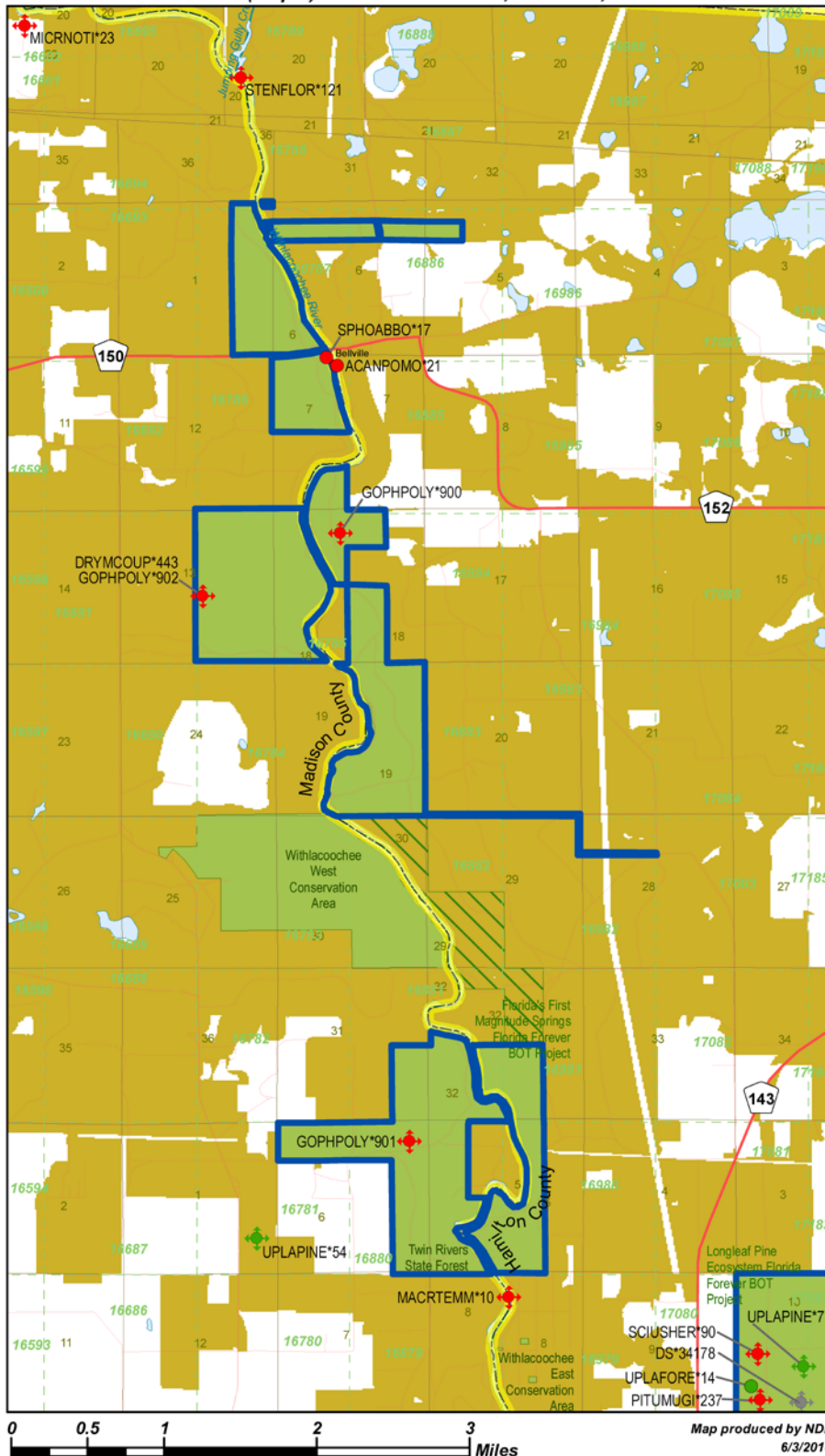
Map should not be interpreted without accompanying documents.

Site boundaries are approximate.



Twin Rivers State Forest (Map 1)

Madison, Hamilton, and Suwannee Counties



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www.fnal.org



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

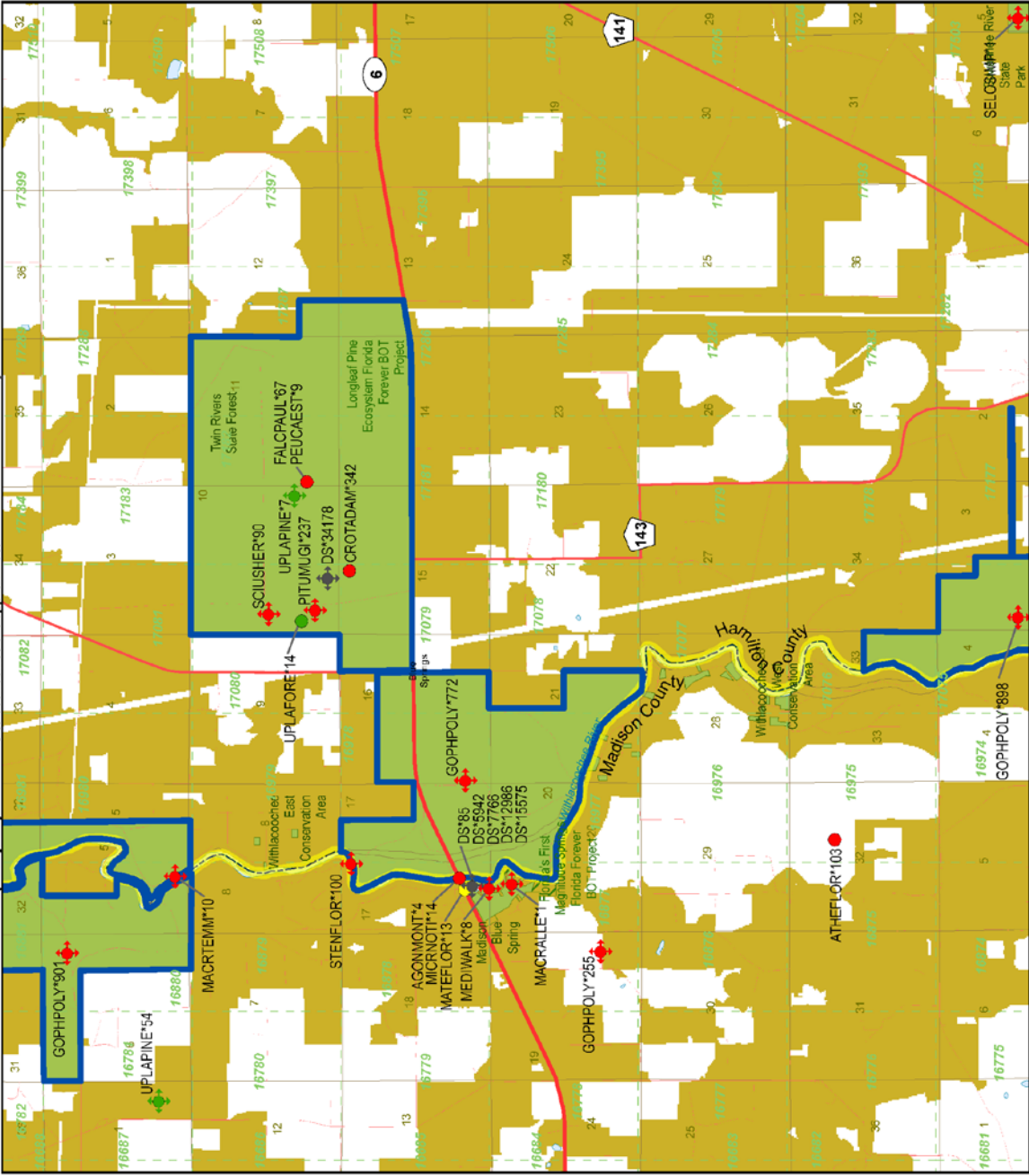
- FNAI Rare Species
- Habitat
- FNAI Biodiversity Matrix
- Square Mile Units
- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE
Map should not be interpreted without accompanying documents.

Twin Rivers State Forest (Map 2)

Site boundaries are approximate.

Madison, Hamilton and Suwanee Counties



Map produced by NDP
6/3/2014



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(850) 681-9364 Fax
www.fnai.org

FLORIDA Natural Areas INVENTORY

Element Occurrences

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

Conservation Lands

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

Land Acquisition Projects

- Florida Forever
- Board of Trustees Projects
- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

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

NOTE

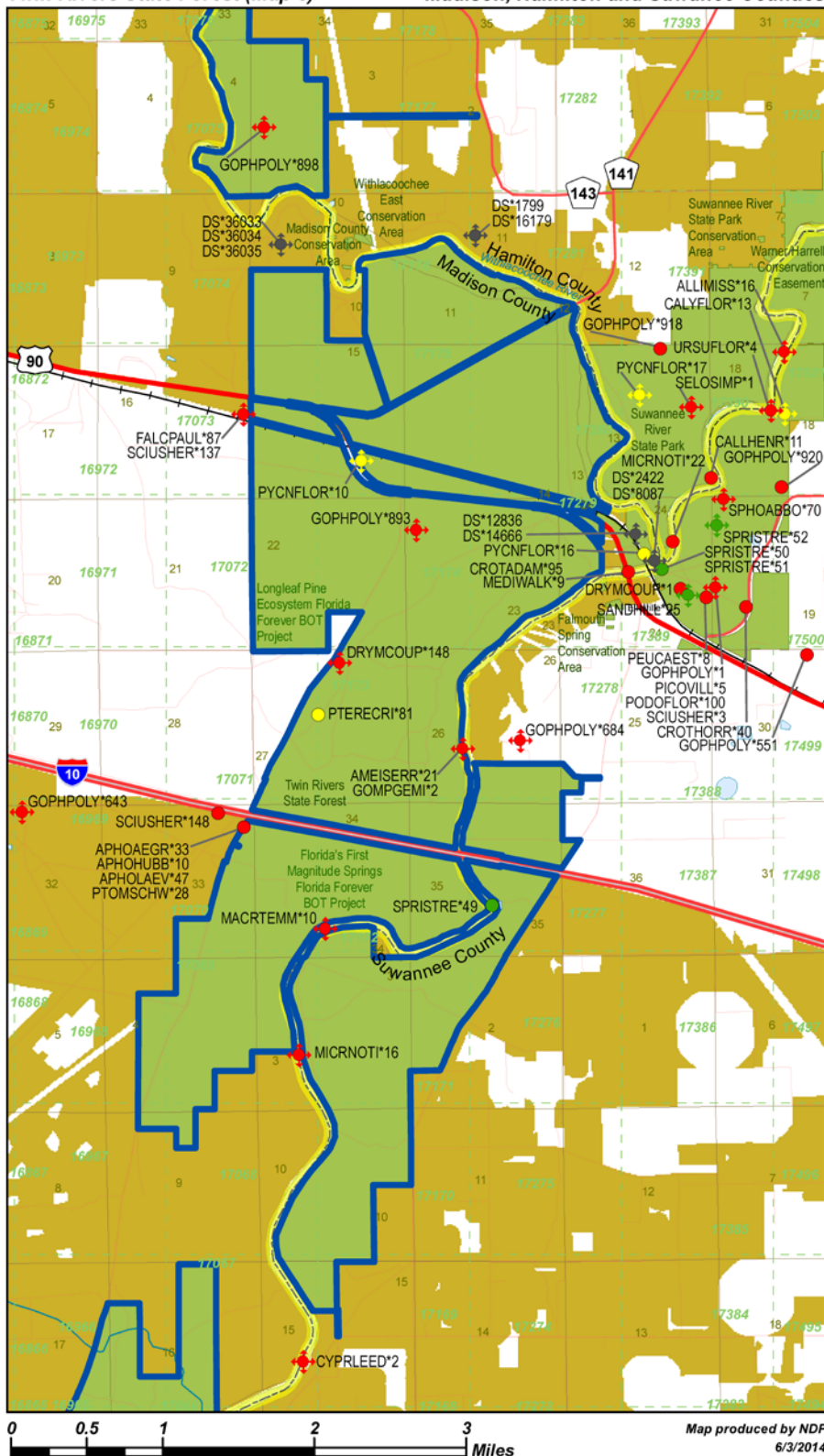
Map should not be interpreted without accompanying documents.

Site boundaries are approximate.



Twin Rivers State Forest (Map 3)

Madison, Hamilton and Suwannee Counties





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FLORIDA Natural Areas INVENTORY

Element Occurrences

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

Conservation Lands

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

Land Acquisition Projects

- Florida Forever
- Board of Trustees Projects
- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

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

NOTE

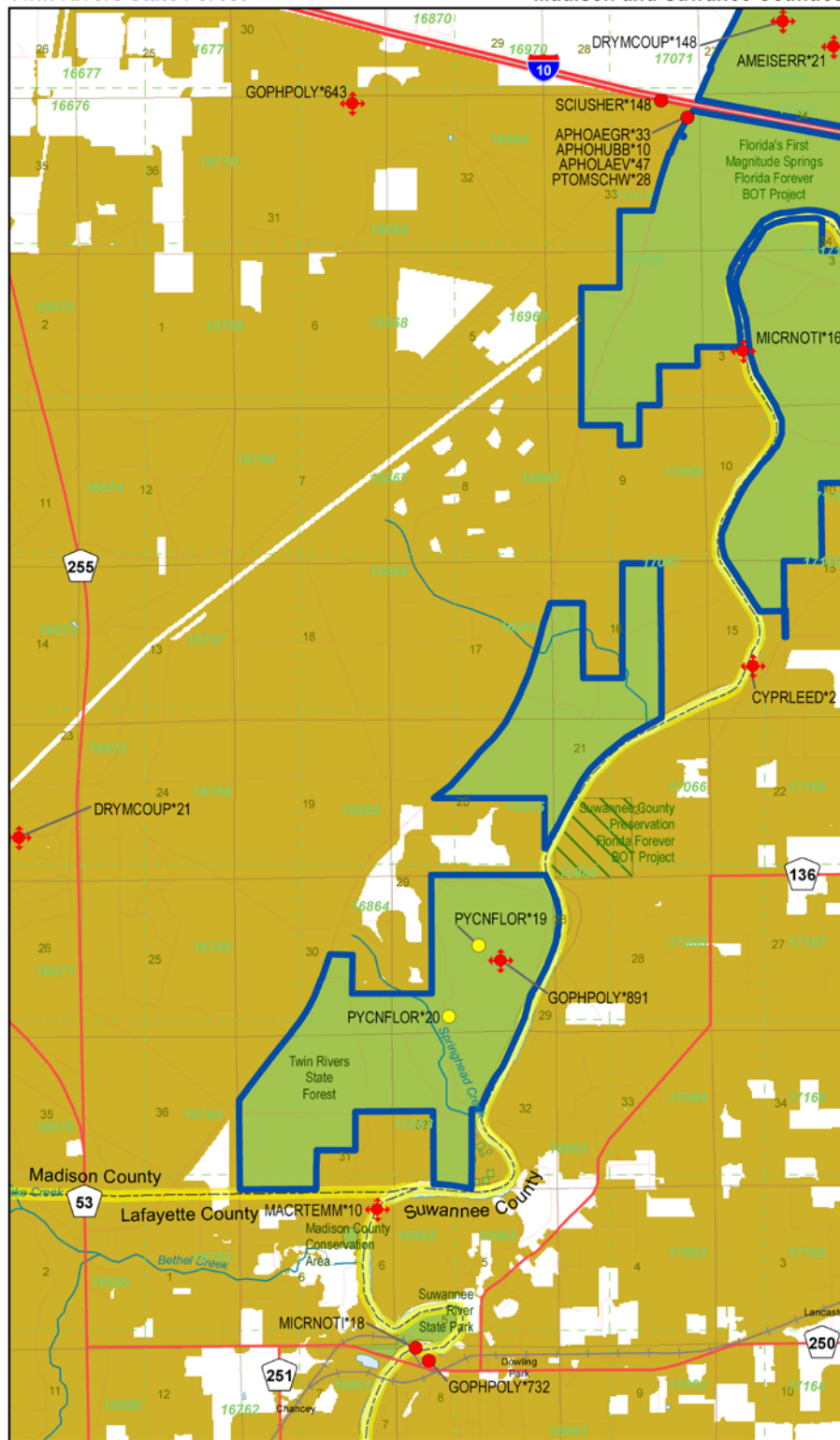
Map should not be interpreted without accompanying documents.

Site boundaries are approximate.



Twin Rivers State Forest

Madison and Suwannee Counties



Map produced by NDP
6/3/2014

FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
ACANPOM021	<i>Acantharchus pomotis</i>	Mud Sunfish	G4G5	S3	N	N	1989-08-08		1989-08-08: one specimen collected (UF-07999 (U08FSM01FLUS)).
AGONMONT*4	<i>Agonostomus monticola</i>	Mountain Mullet	G5	S3	N	N	1989-08-08	No general description given	1 SPECIMEN COLLECTED (UF-079993).
ALLMISS*16	<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)	1985-Pre	1985-Pre: Blackwater river(s).	1985-Pre: reported as seen occasionally in park, extent unknown (R. Noss interview of agency staff: PND BRO03FLUS; U83DRP01FLUS).
AMEISERR*21	<i>Ameiurus serracanthus</i>	Spotted Bullhead	G3	S3	N	N	1970-01-00	No general description given	Cox et al. caught 1 individual in 1 hour of electrofishing.
APHOAEGR*33	<i>Aphodius aegrotus</i>	Small Pocket Gopher Aphodius Beetle	G3G4	S3?	N	N	1997-11-15 – 1997-12-05	1997-12-05: No information given (U06SKE01FLUS).	1997-12-05: Four specimens were collected from 1997-11-11 to 1997-12-05, most likely at light or in malt and dung-baited pitfall traps set in pocket gopher burrows (U06SKE01FLUS; A01SKE02FLUS).
APHOHUBB*10	<i>Aphodius hubbelli</i>	Hubbell's Pocket Gopher Aphodius Beetle	GNR	S3?	N	N	1997-11-15 – 1997-12-05	1997-12-05: No information given (U06SKE01FLUS).	1997-12-05: One specimen was collected from 1997-11-15 to 1997-12-05, most likely in a malt and dung-baited pitfall trap in a pocket gopher burrow (U06SKE01FLUS; A01SKE02FLUS; A91SKE01FLUS).
APHOLAEV*47	<i>Aphodius laevigatus</i>	Large Pocket Gopher Aphodius Beetle	G3G4	S3?	N	N	1997-11-15 – 1997-12-05	1997-12-05: No information given (U06SKE01FLUS).	1997-12-05: Six specimens were collected from 1997-11-11 to 1997-12-05, most likely at light or in malt and dung-baited pitfall traps set in pocket gopher burrows (U06SKE01FLUS; A01SKE02FLUS).
ATHEFLOR*103	<i>Athene curicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	SSC	1999-SP-SU	1999: Agricultural - peanut field (U99BOW01FLUS).	1999: 2 adults and 2 young observed (U99BOW01FLUS).
CALLHENR*11	<i>Callophrys henrici</i>	Henry's Elfin	G5	S3S4	N	N	2012-03-12	2012-03-12: The butterflies were observed nectaring on sweetleaf at 6:00 PM (U12OWE01FLUS).	2012-03-12: Three adults observed (U12OWE01FLUS).
CALYFLOR*13	<i>Calycanthus floridus</i>	Sweet-shrub	G5	S2	N	LE	2004-01-05	2004-01-30: outside fenced yard at ranger residence within 200 m of river bank. Proximity to house indicates possibility that the plant is an old ornamental planting; however, the status as an ornamental planting is uncertain. Upland mixed forest grading	2004-01-05: This population was possibly introduced to this area. Clump of plants approximately 5m x 5m in size, seemingly healthy (PNDMCP01FLUS).

06/05/2014

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
CROTADAM*342	<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G4	S3	N	N	2010-10-28	2010: The tract of state forest is an oasis of upland pine and sandhill surrounded by pine plantations and row-crop agriculture.	2010-10-28: NeSmith heard, then observed one adult coiled next to tortoise burrow (F11FNA05FLUS; PNDNES03FLUS).
CROTADAM*95	<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G4	S3	N	N	1990	No general description given	1990: Observed on railway bed ca. 4.5 feet (U94MOL01FLUS).
CROTHORR*40	<i>Crotalus horridus</i>	Timber Rattlesnake	G4	S3	N	N	1993-05-17	On road adjacent to sandhill community.	1993-05-17: Park ranger found one adult 3' 8" long, dead on road.
CYPRLEED*2	<i>Cyprinella leedsii</i>	Bannerfin Shiner	G4	S3	N	N	1989-08-08	BLACKWATER STREAM.	2000 SPECIMENS COLLECTED BY VARIOUS COLLECTORS AT 38 LOCALITIES (SEE ATTACHED SHEETS) BETWEEN 1967 AND 1989. FREQUENTS MAIN CHANNEL OF RIVER AND LARGER TRIBUTARIES, TAKEN OVER SANDY BOTTOM IN MODERATE LOCALITIES.
DRYMCUP*1	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	FT	1982-PRE	1982-Pre: park contains extensive managed (by fire) sandhills, some xeric hammock, and floodplain hammock along river (P62MEE01FLUS).	1982-Pre: Meeks has observed at least one adult (ca. 7') annually for several years near or under Park Ranger's house (see F8F2JAC01FLUS for map) (P62MEE01FLUS).
DRYMCUP*148	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	FT	1970-Post	No general description given	1970-Post: observed by Brantley Goodson (FLGFC) (U82MOL01FLUS; Moler interview of Goodson, 1981-12-16).
DRYMCUP*443	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	FT	1992-11-10	Pine Plantation.	AOR.
DS*12836	Data Sensitive Element	Data Sensitive	G3G4	S3	N	N	1995-04-18	Data Sensitive	Data Sensitive
DS*12986	Data Sensitive Element	Data Sensitive	G2	S2	N	N	2004	Data Sensitive	Data Sensitive
DS*14666	Data Sensitive Element	Data Sensitive	G5	S3	N	N	1995-04-18	Data Sensitive	Data Sensitive
DS*15575	Data Sensitive Element	Data Sensitive	G3	S3	N	N	1985-08-30	Data Sensitive	Data Sensitive
DS*16179	Data Sensitive Element	Data Sensitive	G2G3	S2S3	N	N	1983-PRE	Data Sensitive	Data Sensitive
DS*1799	Data Sensitive Element	Data Sensitive	G3	S3	N	N	1983-PRE	Data Sensitive	Data Sensitive
DS*2422	Data Sensitive Element	Data Sensitive	G3	S3	N	N	1983-PRE	Data Sensitive	Data Sensitive
DS*34178	Data Sensitive Element	Data Sensitive	G2G3	S1S2	N	N	2009-03-06	Data Sensitive	Data Sensitive

06/05/2014

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
DS*36033	Data Sensitive Element		G3	S3	N	N	1994-Pre	Data Sensitive	Data Sensitive
DS*36034	Data Sensitive Element	Data Sensitive	G1G2	S1S2	N	N	1994-Pre	Data Sensitive	Data Sensitive
DS*36035	Data Sensitive Element	Data Sensitive	G2G3	S2S3	N	N	1994-Pre	Data Sensitive	Data Sensitive
DS*5942	Data Sensitive Element	Data Sensitive	G2G3	S2S3	N	N	1994-Pre	Data Sensitive	Data Sensitive
DS*7766	Data Sensitive Element	Data Sensitive	G2G3	S2S3	N	N	1985-08-30	Data Sensitive	Data Sensitive
DS*8087	Data Sensitive Element	Data Sensitive	G2G3	S2S3	N	N	1983-PRE	Data Sensitive	Data Sensitive
DS*85	Data Sensitive Element	Data Sensitive	G2G3	S2S3	N	N	1994-Pre	Data Sensitive	Data Sensitive
FALCPAUL*87	Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	ST	1994-03-09	Upland pine forest; canopy of ca. 70-year old longleaf, wiregrass groundcover; winter-burned up to 1994; see upland pine forest EOR #007.	1994-03-09: Jackson et al (F94JAC01FL) observed two kestrels exhibiting potentially territorial behavior. Confirmation of subspecific identification requires sightings after the May 1 "safe date."
FALCPAUL*87	Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3	N	ST	1988-07-26	Sandhill/Upland pine forest	1988-07-26: D.E. Runde, GFC, observed 1 bird perching.
GOMPGEIM*2	Gomphus geminatus	Twin-striped Clubtail	G3G4	S3	N	N	1995-04-24	1995-04-24: No description given (U09DEP01FLUS).	1995-04-24: Staff from the Florida Department of Environmental Protection collected this species (U09DEP01FLUS).
GOPHPOLY*1	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	2004-01-28	2004-01-28: approximately 200 acres of sandhill habitat available, bisected by a paved, well traveled county road (CR-132). Western polygon: well-maintained longleaf sandhill with a few overstory-sized hardwoods; groundcover of wiregrass, lopsided	2004-01-28: eastern polygon: approximately 4-6 active burrows, mostly adults, observed during walk-through; at least two had been excavated by dog or coyote. 2002-03-29: middle polygon: 44 tortoise burrows, 24 of which were active; all bur
GOPHPOLY*255	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1987-PRE	No general description given	1987-pre: TORTOISE MIDDEN AND BURROWS (U86DIE01FLUS).

06/05/2014

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
GOPHPOLY*643	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1991-02-01	LONGLEAF PINE-OAK-WIREGRASS ASSOCIATION. APPEARS TO BE A SANDHILL WITH LITTLE RELIEF (VERY FLAT); UNDERSTORY CLEARED AND MODIFIED AT MAJORITY OF REST STOP, BUT NATURAL NEAR EDGES AND BEHIND BACK FENCE.	1991-02-01: D. Jackson observed 1 ADULT BURROW BUT DID NOT SEARCH FOR OTHERS. BURROW APPEARED TO HAVE RECENT ACTIVITY.
GOPHPOLY*684	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1991	UPLANDS ABOVE SINK AND FLOODPLAIN	ACTIVE BURROWS.
GOPHPOLY*732	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1991-03-22	EXTENSIVE DUMP, SURROUNDED BY SANDHILL.	NUMEROUS TORTOISES LIVE ON EDGE OF DUMP. MOLER NOTED TORTOISES AS COMMON IN SANDHILL SURROUNDING DUMP AREA, 1991-03-22.
GOPHPOLY*772	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	2010-10	1994: Upland pine forest (longleaf pine) N of HWY. 6; fairly open longleaf, mostly wiregrass groundcover, strip of sand pine at edge, with Geomys mounds on shoulder; S of HWY. 6; recent clearcut to successional oldfield. See upland pine forest EOR	2010-10: D. Hipes et al. observed a total of 573 active, 261 inactive, and 304 abandoned tortoise burrows in 413 acres (20%) of transects within 2,089 acres of potential gopher tortoise habitat at Blue Spring Longleaf tract of Twin Rivers SF (F11F)
GOPHPOLY*891	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1992	Loblolly plantation.	Occurrence on site.
GOPHPOLY*893	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1992	Well drained open areas.	Occurrence on site.
GOPHPOLY*898	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1992	Slash pine plantation/Upland mixed forest.	Five active burrows observed.
GOPHPOLY*900	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1992-03-26	1992-03-26: Slash pine plantation/upland mixed forest (U93BIO01FLUS).	1992-03-26: Four active burrows observed (U93BIO01FLUS).
GOPHPOLY*901	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1992	Slash pine plantation.	Scattered individuals [burrows?] observed.
GOPHPOLY*902	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	1992	Pine plantation.	Common along roadways and other open sites.
GOPHPOLY*918	Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST	2002	Burrows on edge of thick upland forest in the park. Open pasture to north.	2002: Observed active burrows along fire line in upland mixed forest south of open field (PNDMCP01FLUS). 1993-07-20: Three active burrows observed during cursory survey (F93SCH04FLUS).

06/05/2014

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
GOPHPOLY*920	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1993-07-20	None provided, but should not be too different from MARGNUM #61.	1993-07-20: Two active burrows observed during cursory survey (PNDSC03FLUS).
MACRALLE*1	<i>Macromia alleghaniensis</i>	Allegheny River Cruiser	G4	S1	N	N	1979-12-17	1979-12-17: No description given (U09DEP01FLUS).	1979-12-17: Staff from the Florida Department of Environmental Protection collected this species (U09DEP01FLUS).
MACRTEMM*10	<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	G3G4	S3	N	SSC	2010	Large river, mostly blackwater stream but also with substantial spring input. 2001-05: nest in upland pine forest just upslope from upland mixed forest and the Ichetucknee River (PNDL01FLUS).	Dozens of records from 1935 through 2010 throughout much of this system; following are most such records (see also summary in B69PR01FLUS). 2005-2010: Johnston et al. captured 84 in Santa Fe River, including 15 adults in area with high density o
MATEFLOR*13	<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE	1984-07-13	1984: WOODED HIGH BANK (NATURAL LEVEE) OF WITHLACOCHEE RIVER (S84GODFSFLUS).	1984: NONE GIVEN ON HERBARIUM LABEL.
MEDIWALK*8	<i>Medionidus walkeri</i>	Suwannee Moccasinshell	G1	S1	N	N	1954-09-09	1954-09-09: river about 40 meters wide, moderate to swift current, soft limestone bedrock, gravel, sand with organic and inorganic (litter) debris. Water tannic in main river, but clear on west bank, where influenced by Blue Spring (A56CLE01FLUS).	1987-10-09: Butler failed to find species (sample time >0.5 man-hours) (PNDBUT01FLUS). 1967: survey by Lee failed to document species. 1954-09-09: W. J. Clench collected specimen (UF-1860) (A56CLE01FLUS).
MEDIWALK*9	<i>Medionidus walkeri</i>	Suwannee Moccasinshell	G1	S1	N	N	1981-05-16	1987-10-09: river about 50 meters wide, dark water (visibility 0.72 meters), clear, sand, several logs and branches, rock (from RR and highway bridges, some gravel. Current slow (PNDBUT01FLUS).	1987-10-09: brief survey by Butler (0.5 hour) yielded no specimens (PNDBUT01FLUS). 1981-05-16: 1 dead specimen collected by G. Keferl. 1930-pre?: Six specimens (UF 4983, no date), collected by Bryant Walker.
MICRNOTI*14	<i>Micropterus notius</i>	Suwannee Bass	G3	S3	N	N	1989-08-08	No general description given	1 SPECIMEN COLLECTED ON 8 AUG 1989 (UF-079995).
MICRNOTI*16	<i>Micropterus notius</i>	Suwannee Bass	G3	S3	N	N	1963-11-06	LARGE BLACKWATER STREAM	2 SPECIMENS COLLECTED ON 6 NOV 1963 (UF-060238). U62HES01 STATES THAT FISH IS RARE ON SUWANNEE RIVER FROM ELLAVILLE TO BRANFORD.
MICRNOTI*18	<i>Micropterus notius</i>	Suwannee Bass	G3	S3	N	N	1978-11-20	Large blackwater stream.	2 specimens collected (UF-025955).

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
MICRNOTI*22	<i>Micropterus notius</i>	Suwannee Bass	G3	S3	N	N	1969-12-00	Blackwater Stream.	1 specimen caught December 1968, 11 specimens caught in 1969.
PEUCAEST*8	<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N	1996-04-04	1996-04-04: HEARD IN OLD PASTURE NOW IN PLANTED PINE. AREA IS ADJACENT TO WET FLATWOODS (PNDMUL02FLUS). 1983: TYPICAL SANDHILLS HABITAT; OPEN LONGLEAF PINE CANOPY OVER A DENSE GROUND COVER OF WIREGRASS AND SANDHILL HERBS; MOST OF THE TURKEY OAKS WITHIN T	1996-04-04: HEAR ONE INDIVIDUAL VOCALIZING (PNDMUL02FLUS). 1984-03-18: THREE SINGING MALES SEEN. EST. NUMBER OF INDIVIDUALS IN POP. UNKNOWN; ONLY ADULT INDIVIDUALS SEEN, ALL MALES ON TERRITORY.
PEUCAEST*9	<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N	1994-03-09	UPLAND PINE FOREST; CANOPY OF CA. 70-YEAR OLD LONGLEAF, WIREGRASS GROUND COVER; WINTER-BURNED UP TO 1994; SEE UPLAND PINE FOREST EOR #007. BIRDS ALSO OCCUR IN ADJACENT HABITAT, WHICH CONSISTS OF OVERGROWN FIELD WITH DENSE BROOMSEDGE AND OTHER GRASSES AND	1994-03-28: JACKSON ET AL. (F94JAC01FL) OBSERVED SPECIES (SINGING MALES) TO BE ABUNDANT THROUGHOUT SITE. 1984: LYNCH (U84LYN01,02FL) RECORDED SINGING MALES IN OLD FIELDS ADJACENT TO BLUE SPRING LONGLEAF.
PICOVILL*5	<i>Picoides villosus</i>	Hairy Woodpecker	G5	S3	N	N	1987-03-12	Animal detected in a relatively well-maintained sandhill. Longleaf pine dominants in overstory. Few overstory sized hardwoods. Groundcover including wiregrass, lopsided indiangrass, others in good condition. Some invasion by small off-site hardwoods.	1987-03-12: Listed in appendix of report as seen at site (U04MCP01FLUS, U95STO01FLUS). 1981: according to Brock, was listed as uncommon permanent resident by Noel Warner in list spanning 1971-1981; probable breeder (PNDBRO03FLUS).
PITUMUG*237	<i>Pituophis melanoleucus mugillus</i>	Florida Pine Snake	G4T3	S3	N	SSC	2010-10-28	Oasis of upland pine and sandhill surrounded by pine plantations and row-crop agriculture.	2010-10-28: Hipes observed one adult (4 ft plus) exiting a pocket gopher mound (F11FNA05FLUS).

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



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PODOFLOR100	<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	SSC	1987-03-12	2004-01-30: animals trapped in a relatively well-maintained sandhill. Longleaf pine dominant in overstory. Few overstory sized hardwoods. Groundcover including wiregrass, lopsided indiangrass, others, in good condition. Some invasion by small off-site	2002-05-28: no Podomys captured (see comments for methods) (U02DOO01FLS). (1995: trapped spring 1987 to spring 1988. At beginning of study P. floridanus and Peromyscus gossypinus most common, by 1988 dominance had shifted to Peromyscus polionotus (U95STO
PTERECR*81	<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT	2002-09-06	2002-09-06: Edge of two track dirt road, in sandhill. Scattered young planted Pinus elliotii, Quercus laevis, Q. geminata, Q. margareta. Groundcover of Aristida stricta, Sorghastrum secundum, Liatris spp., Chamaecrista fasciculata, and many other herba	2002-09-06: One plant observed in fruit, may be county record (PNDCA05FLUS).
PTOMSCHW28	<i>Plomaphagus schwarzi</i>	Schwarz' Pocket Gopher Plomaphagus Beetle	G3	S3	N	N	1997-11-15 – 1997-12-05	1997-12-05: No information given (U06SKE01FLUS).	1997-12-05: Nine specimens were collected from 1997-11-11 to 1997-12-05, most likely in malt and dung-baited pitfall traps set in pocket gopher burrows. (U06SKE01FLUS, A01PEC01FLUS).
PYCNFLOR*10	<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT	1970-07-12	CLEARING OF LONGLEAF PINE, TURKEY OAK RIDGE, BUT IN SMALL LOW AREAS WHERE MORE MOIST.	1970-07-12: FLOWERING.
PYCNFLOR*16	<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT	2001-06-18	2001-06-18: Plants along Rail ROW. Much Lygodium japonicum intermixed. Former upland pine or sandhill, now very degraded. Many water oaks/laurel oaks and loblolly pine (PNDMCP01FLUS). 1993-07-20: Disturbed edge of road in longleaf pine/shortlea	2001-06-18: four separate groups of plants located with a GPS. No data on plant number collected. Plants flowering (PNDMCP01FLUS). 1993-07-20: 200+ stems, flowering and fruiting; occupies area only 2 X 3 m (F93SCH04FLUS).

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FNAI ELEMENT OCCURRENCE REPORT on or near
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Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
PYCNFLOR*17	<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT	1999-09-30	1999-09-30: Plants located along gas pipeline ROW and in a cut over area east of the ROW that was formerly upland pine. Loblolly and hardwoods invading. Wiregrass present in patches, though area dominated by ruderals. Post oaks and longleaf pine to north	1999-09-30: This observation is an update to the linear group of plants observed by G. Shultz. This observation includes three separate groups of plants mapped as points with a GPS. The point farthest from the gas line contained 10 fruiting plants, the
PYCNFLOR*19	<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT	2000-10-11	2000-10-11: margin of cleared field and loblolly pine plantation. Area may not be in active plantation currently. Trees are widely spaced and over 70 ft. tall. Site appears to have been thinned in an effort at ecological restoration. Historically, co	2000-10-10: 3 individuals observed fruiting (PNDHOR04FLUS).
PYCNFLOR*20	<i>Pycnanthemum floridanum</i>	Florida Mountain-mint	G3	S3	N	LT	2000-10-10	MARGIN OF CLEARED FIELD AND LOBLOLLY PINE PLANTATION. AREA MAY NOT BE IN ACTIVE PLANTATION CURRENTLY. TREES ARE WIDELY SPACED AND OVER 70 FT TALL. SITE APPEARS TO HAVE BEEN THINNED IN AN EFFORT AT ECOLOGICAL RESTORATION? HISTORICALLY, COMMUNITY WAS PROBA	00-10-10: 4 individuals observed fruiting (PNDHOR04FLUS).
SANDHILL*25	Sandhill		G3	S2	N	N	2004	COVERING MOST OF PARK UPLANDS.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 2004-01-28) (U05FNA02FLUS). 2004-01-28: approximately 200 acres of sandhill habitat available, bisected by a paved, well traveled county road (CR-132). W
SCIUSHER*137	<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC	1988-07-26	Sandhill/Upland pine forest	1988-07-26: D.E. Runde, GFC, observed 1 squirrel.
SCIUSHER*148	<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC	1996-03-03	96-03-03: open canopied pine plantation in sandhill adjacent to quail plantation (PNDJAC01).	1996-03-03: one dead and one live fox squirrel observed along a three mile stretch of I-10 (PNDJAC01).

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FNAI ELEMENT OCCURRENCE REPORT on or near
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SCIUSHER*3	<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC	2004-03-19	2004-03-19: S. niger utilizing sandhill habitat. Pinus palustris canopy, few midstory oaks, but numerous Quercus laurifolia beginning invasion. In-tact ground cover (PNDMCP01FLUS). 1983: IN SANDHILL COMMUNITY.	2004-03-19: This is a multi-location EO. One adult fox squirrel observed crossing park drive (northern most observation). Same individual reportedly seen repeatedly. One juvenile roadkill observed at southernmost location (PNDMCP01FLUS). 2002: extant (G)
SCIUSHER*90	<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC	2013-10-10	Upland pine; canopy of ca. 70-year old longleaf, wiregrass groundcover, winter-burned up to 1994; see upland pine forest EOR #007.	2013: Hipes observed one individual crossing trail (PNDHIP01FLUS). 1994-03-09: Jackson et al. (NeSmith and Evans: F94JAC01FLUS) observed one individual on-site.
SELOSIMP*1	<i>Selodon simplex</i>	Simple Cebionid Beetle	G1	S1	N	N	1977-06-24 --1977-07-14	1977-07-14: No description given (B99GAL01FLUS).	1977-06-24 --1977-07-14: Twenty-five specimens were caught in a Malaise trap (B99GAL01FLUS). 1977-06-02 --1977-06-24: Two specimens were caught in a Malaise trap (B99GAL01FLUS).
SPHOABBO*17	<i>Sphodros abboti</i>	Blue Purse-web Spider	G4G5	S4	N	N	1998-05-07	1998-05-07: webs found at the bases of trees (U98MOL02FLUS).	1998-05-07: Species was collected on site by P. E. Moler (U98MOL02FLUS).
SPHOABBO*70	<i>Sphodros abboti</i>	Blue Purse-web Spider	G4G5	S4	N	N	1973	1973: Webs are found at bases of trees in mesic forest (A80GER01FLUS).	1973: Gertsch and Platnick (1980) recorded species as present here, based on a 1973 collection. More precise and updated record is needed (A80GER01FLUS).
SPRISTRE*49	Spring-run stream		G2	S2	N	N	2004	LOW LYING AREA W/ SOFT ORGANIC RICH SOIL IN ADJ. DEPRESSIONS; TREES IN & AROUND POOL; GENTLY SLOPING SIDES HEAVILY COVERED W/ LEAVES, BRANCHES, TRUNKS & OTHER ORGANIC DEBRIS	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1983-11-03) (U05FNA02FLUS). VENT IN SHALLOW SPRING POOL CA 17 M DIA. W/ 50 M LONG RUN. REPORTED TO HAVE DK. WATER W/ GOOD FLOW DURING LOW STAGES OF SUWANN
SPRISTRE*50	Spring-run stream		G2	S2	N	N	2004	LOCATED IN HIGH LIMESTONE BLUFF ON S BANK OF SUWANNEE	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1983-11-02) (U05FNA02FLUS). "CAVE" 2 M WIDE & 10 M DEEP. HORIZONTALLY; WATER FLOW TURBULENT CA 13-17 M TO RIVER THRU "V" SHAPED LIMESTONE RUN 3 M WIDE & 3

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SPRISTRE*51	Spring-run stream		G2	S2	N	N	2004	No general description given	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1983-11-02) (U05FNA02FLUS). POOL CA 7 M DIA. & 1-2 M DEEP. SINGLE VENT AT W END OF POOL. WATER EMERGES FROM BENEATH LIMESTONE LEDGE. LIMESTONE OUTCROPS AR
SPRISTRE*52	Spring-run stream		G2	S2	N	N	2002	2002: Lime Sink Run, also known as Dry Run, flows through a ravine for about 3000 feet before discharging into the Suwanne River (G02DRP01FLUS).	2002: flow is intermittent. Portions have been altered due to past creation of a swimming area through damming and dredging. The site is not used for swimming now, primarily due to low water levels (G02DRP01FLUS). 1982-08-06: no eodata (F82JAC01FLUS).
STENFLOR*100	<i>Stenacron floridense</i>	A Mayfly	G3G4	S3S4	N	N	1999-03-30	1999-03-30: No description given (U09DEP01FLUS).	1999-03-30: Staff from the Florida Department of Environmental Protection collected this species (U09DEP01FLUS).
STENFLOR*121	<i>Stenacron floridense</i>	A Mayfly	G3G4	S3S4	N	N	1998-12-07	1998-12-07: No description given (U09DEP01FLUS).	1998-12-07: This species was documented by Florida Department of Environmental Protection agency staff at three localities (U09DEP01FLUS).
UPLAFOR*14	Upland hardwood forest		G5	S3	N	N	2004	RELATIVELY SMALL, BUT STEEP SIDED SINKHOLES IN DRY UPLAND LONGLEAF PINE FOREST. A DRAMATIC SHIFT FROM PINE DOMINATED UPLANDS TO HARDWOOD SLOPES IS EVIDENT IN THESE SINKHOLES. SEE DOT AERIAL PHOTO PD 3801-4096 FLOWN ON 1988.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1992-07-07) (U05FNA02FLUS). IN THE EASTERN PART OF THE PROPERTY THERE ARE TWO RATHER DEEP, STEEP-SIDED SINKHOLES. THESE SINKHOLES ARE DOMINATED BY HARDWOOD
UPLAPINE*54	Upland pine		G3	S2	N	N	2004	Intact longleaf pine forest with scattered to dense oak understory and intact ground cover. Surrounded by agricultural and silvicultural development on all sides.	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Upland pine forest EO number 54 (see U10FNA01FLUS for updated community descriptions). 2004: Update to last obs date was based on interpretation of aerial photogr

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FNAI ELEMENT OCCURRENCE REPORT on or near
Twin Rivers State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
UPLAPINE7	Upland pine		G3	S2	N	N	2004	DRY UPLAND LONGLEAF PINE (PINUS PALUSTRIS) FOREST (ORZELL PREFERS TO CALL DRY UPLAND LONGLEAF PINE SAVANNA) WITH SOME MINOR INCLUSIONS OF LONGLEAF PINE-TURKEY OAK SANDHILL. REPRESENTATIVE OF SUWANNEE STRAITS PORTIONS OF NORTHERN HIGHLANDS PHYSIOGRAPHIC R	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Upland pine forest EO number 7 (see U10FNA01FLUS for updated community descriptions). 2004: Update to last obs date was based on interpretation of aerial photogra
URSUFLO74	<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	ST*	1995-11-10	1976, 1995: OBSERVATIONS HAVE BEEN IN FLOODPLAIN FOREST.	1995-11-10: Three to 3.5 foot tall and 5-6 foot long, 300lb, black bear observed in floodplain forest. Also sighted on river bank same day. No recorded sightings since, possibly moving through area (FNDMEEXFLUS). 1976: IN 1974, RANGER CLYDE NICHOLS OBSE



Florida Natural Areas Inventory

Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Documented					
<i>Aphodius aegrotus</i>	Small Pocket Gopher Aphodius Beetle	G3G4	S3?	N	N
<i>Aphodius hubbelli</i>	Hubbell's Pocket Gopher Aphodius Beetle	GNR	S3?	N	N
<i>Aphodius laevigatus</i>	Large Pocket Gopher Aphodius Beetle	G3G4	S3?	N	N
<i>Callophrys henrici</i>	Henry's Elfin	G5	S3S4	N	N
<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake	G4	S3	N	N
<i>Falco sparverius paulus</i>	Southeastern American Kestrel	G5T4	S3	N	ST
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
<i>Peucaea aestivalis</i>	Bachman's Sparrow		S3	N	N
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	G4T3	S3	N	SSC
<i>Pteroglossaspis ecrinata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Ptomaphagus schwarzi</i>	Schwarz' Pocket Gopher Ptomaphagus Be	G3	S3	N	N
<i>Pycnanthemum floridanum</i>	Florida Mountain-mint		S3	N	LT
<i>Sciurus niger shermani</i>	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Spring-run stream		G2	S2	N	N
<i>Stenacron floridense</i>	A Mayfly	G3G4	S3S4	N	N
Upland hardwood forest		G5	S3	N	N
Documented-Historic					
<i>Agonostomus monticola</i>	Mountain Mullet	G5	S3	N	N
<i>Macromia alleghaniensis</i>	Allegheny River Cruiser	G4	S1	N	N
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Micropterus notius</i>	Suwannee Bass	G3	S3	N	N
Likely					
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	G3T2	S2	LT	FT
<i>Crangonyx grandimanus</i>	Florida Cave Amphipod	G2G3	S2S3	N	N
<i>Crangonyx hobbsi</i>	Hobbs' Cave Amphipod		S2S3	N	N
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	FT
<i>Gomphus geminatus</i>	Twin-striped Clubtail	G3G4	S3	N	N
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle		S3	N	SSC
<i>Medionidus walkeri</i>	Suwannee Moccasinshell	G1	S1	N	N
Mesic flatwoods		G4	S4	N	N
<i>Procambarus pallidus</i>	Pallid Cave Crayfish	G2G3	S2S3	N	N
Sandhill		G3	S2	N	N
<i>Sphodros abbotti</i>	Blue Purse-web Spider	G4G5	S4	N	N
Upland pine		G3	S2	N	N
<i>Ursus americanus floridanus</i>	Florida Black Bear	G5T2	S2	N	ST*
Potential					
<i>Acantharchus pomotis</i>	Mud Sunfish	G4G5	S3	N	N
<i>Agrimonia incisa</i>	Incised Groove-bur	G3	S2	N	LE
<i>Alligator mississippiensis</i>	American Alligator	G5	S4	SAT	FT(S/A)
<i>Amblyscirtes alternata</i>	Dusky Roadside-Skipper	G2G3	S1S2	N	N
<i>Ambystoma cingulatum</i>	Frosted Flatwoods Salamander	G2	S2	LT	FT
<i>Ameiurus serracanthus</i>	Spotted Bullhead	G3	S3	N	N
Aquatic cave			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	SSC
<i>Brickellia cordifolia</i>	Flyr's Brickell-bush	G2G3	S2	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LT

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



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Florida Natural Areas Inventory Biodiversity Matrix Report



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>Cyprinella leedsi</i>	Bannerfin Shiner	G4	S3	N	N
<i>Dermochelys coriacea</i>	Leatherback Sea Turtle	G2	S2	LE	FE
<i>Forestiera godfreyi</i>	Godfrey's Swampprivet		S2	N	LE
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	ST
<i>Hartwrightia floridana</i>	Hartwrightia	G2	S2	N	LT
<i>Heterodon simus</i>	Southern Hognose Snake		S2	N	N
<i>Lithobates capito</i>	Carolina Gopher Frog	G3	S3	N	SSC
<i>Litsea aestivalis</i>	Pondspice	G3?	S2	N	LE
<i>Myotis austroriparius</i>	Southeastern Bat	G3G4	S3	N	N
<i>Notophthalmus perstriatus</i>	Striped Newt	G2G3	S2S3	C	N
<i>Picoides borealis</i>	Red-cockaded Woodpecker	G3	S2	LE	FE
<i>Pseudemys concinna suwanniensis</i>	Suwannee Cooter	G5T3	S3	N	SSC
<i>Remasellus parvus</i>	Swimming Little Florida Cave Isopod	G1G2	S1S2	N	N
<i>Rhexia parviflora</i>	Small-flowered Meadowbeauty	G2	S2	N	LE
<i>Selonodon simplex</i>	Simple Cebionid Beetle	G1	S1	N	N
<i>Xyris longisepala</i>	Karst Pond Xyris	G2G3	S2S3	N	LE

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Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

- 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.
- GH** = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
- GX** = Believed to be extinct throughout range.
- GXC** = Extirpated from the wild but still known from captivity or cultivation.
- 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.
- GU** = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
- GNA** = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- GNR** = Element not yet ranked (temporary).
- GNR TNR** = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

- S1** = Critically imperiled in Florida 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.
- S2** = Imperiled in Florida 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.
- S3** = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- S4** = Apparently secure in Florida (may be rare in parts of range).
- S5** = Demonstrably secure in Florida.
- SH** = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
- SX** = Believed to be extirpated throughout Florida.
- SU** = Unrankable; due to a lack of information no rank or range can be assigned.
- SNA** = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- SNR** = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

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.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
LE = Endangered: species in danger of extinction throughout all or a significant portion of its range.
LE, LT = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
LE, PDL = Species currently listed endangered but has been proposed for delisting.
LE, PT = Species currently listed endangered but has been proposed for listing as threatened.
LE, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
LT = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

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

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
F(XN) = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened 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. (ST* for *Ursus americanus floridanus* (Florida black bear) indicates that this status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. ST* for *Neovison vison* pop.1 (Southern mink, South Florida population) indicates that this status applies to the Everglades population only.)
SSC = 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. (SSC* indicates that a species has SSC status only in selected portions of its range in Florida. SSC* for *Pandion haliaetus* (Osprey) indicates that this status applies in Monroe county only.)
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 see: <http://www.doacs.state.fl.us/pi/>.

LE = Endangered: species of plants native to Florida 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; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
LT = Threatened: 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 number as to cause them to be Endangered.
N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: <http://www.natureserve.org/explorer/eorankguide.htm>

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

Exhibit M

Florida Fish and Wildlife Conservation Commission Response



**Florida Fish
and Wildlife
Conservation
Commission**

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Chairman
Jacksonville

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Tallahassee

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Greg Holder
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Karen Ventimiglia
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**Fish and Wildlife
Research Institute
Gil McRae**
Director

(727) 896-8626
(727) 823-0166 FAX

**FWRI
Information Sciences
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(850) 488-0588
(850) 410-5299 (FAX)

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resources for their long-term
well-being and the benefit
of people.*

**Fish and Wildlife
Research Institute**
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Tallahassee, Florida
32399-1600
Voice: (850) 410-0656

Hearing/speech-impaired:
(800) 955-8771 (T)
(800) 955-8770 (V)

MyFWC.com/Research

June 6, 2014

Ms. Jennifer Reed
Land Planning Coordinator
Department of Agriculture and Consumers Services
Florida Forest Service
3125 Conner Boulevard
Tallahassee, FL 32399-1650

Dear Ms. Reed:

This letter is in response to your request for listed species occurrence records and critical habitats for your project (Twin Rivers State Forest) located in Hamilton, Madison, and Suwannee Counties, Florida. Records from The Florida Fish and Wildlife Conservation Commission's database indicate that listed species occurrence data are located within project area. Enclosed are 8.5 x 11 maps showing listed species locations, SHCA for Cooper's hawk, black bear, burrowing owl and swallow-tailed kite, Prioritized SHCA's, species richness, priority wetlands for listed species, and land cover for the project site and surrounding area.

This letter and attachments should not be considered as a review or an assessment of the impact upon threatened or endangered species of the project site. It provides FWC's most current data regarding the location of listed species and their associated habitats.

Our SHCA recommendations are intended to be used as a guide. Land development and ownership in Florida is ever-changing and priority areas identified as SHCA might already have been significantly altered due to development or acquired into public ownership. Onsite surveys, literature reviews, and coordination with FWC biologists remain essential steps in documenting the presence or absence of rare and imperiled species and habitats within the project area.

Our fish and wildlife location data represents only those occurrences recorded by FWC staff and other affiliated researchers. It is important to understand that our database does not necessarily contain records of all listed species that may occur in a given area. Also, data on certain species, such as gopher tortoises, are not entered into our database on a site-specific basis.

Therefore, one should not assume that an absence of occurrences in our database indicates that species of significance do not occur in the area.

The Florida Natural Areas Inventory (FNAI) maintains a separate database of listed plant and wildlife species, please contact FNAI directly for specific information on the location of element occurrences within the project area.

Ms. Jennifer Reed
Page 2
June 6, 2014

Because FNAI is funded to provide information to public agencies only, you may be required to pay a fee for this information. County-wide listed species information can be located at their website (<http://www.fnai.org>).

Please credit the Florida Fish and Wildlife Conservation Commission in any publication or presentation of these data. If you have any questions or further requests, please contact me at (850) 488-0588 or gisrequests@myfwc.com.

Sincerely,

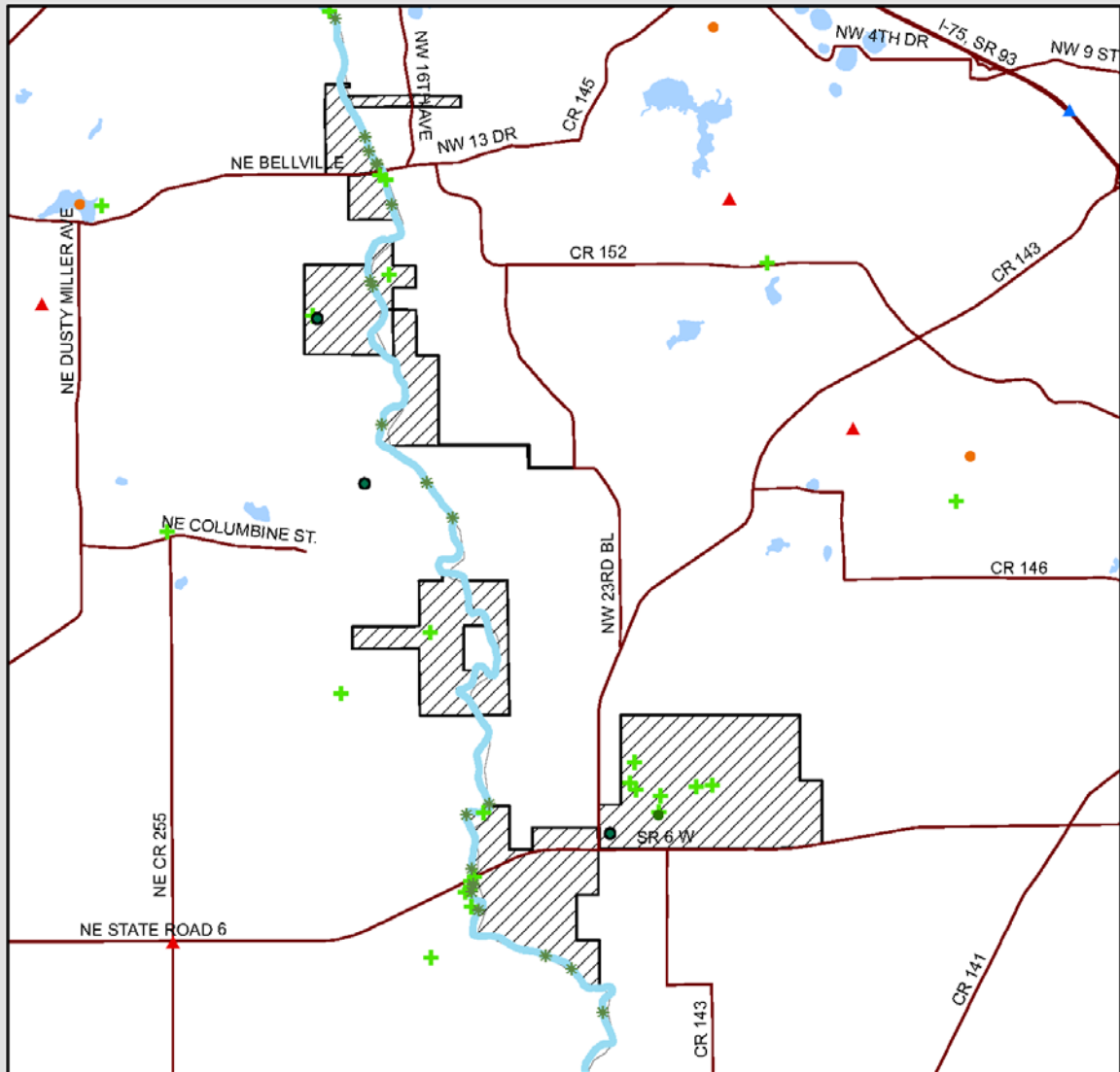


Jan Stearns
Staff Assistant

js
2014_6006
Enclosures

Species Occurrence

Twin Rivers State Forest



- | | |
|---------------------------|-----------------------------------|
| * Rare and Imperiled Fish | ▲ Bear Calls |
| ● Indigo Snake | ▲ Bear Mortality |
| ● Burrowing Owl | + Florida Natural Inventory Areas |
| ● Red Cockaded Woodpecker | □ County Boundary |
| ● Wading Bird Rookeries | ▨ Project Site |

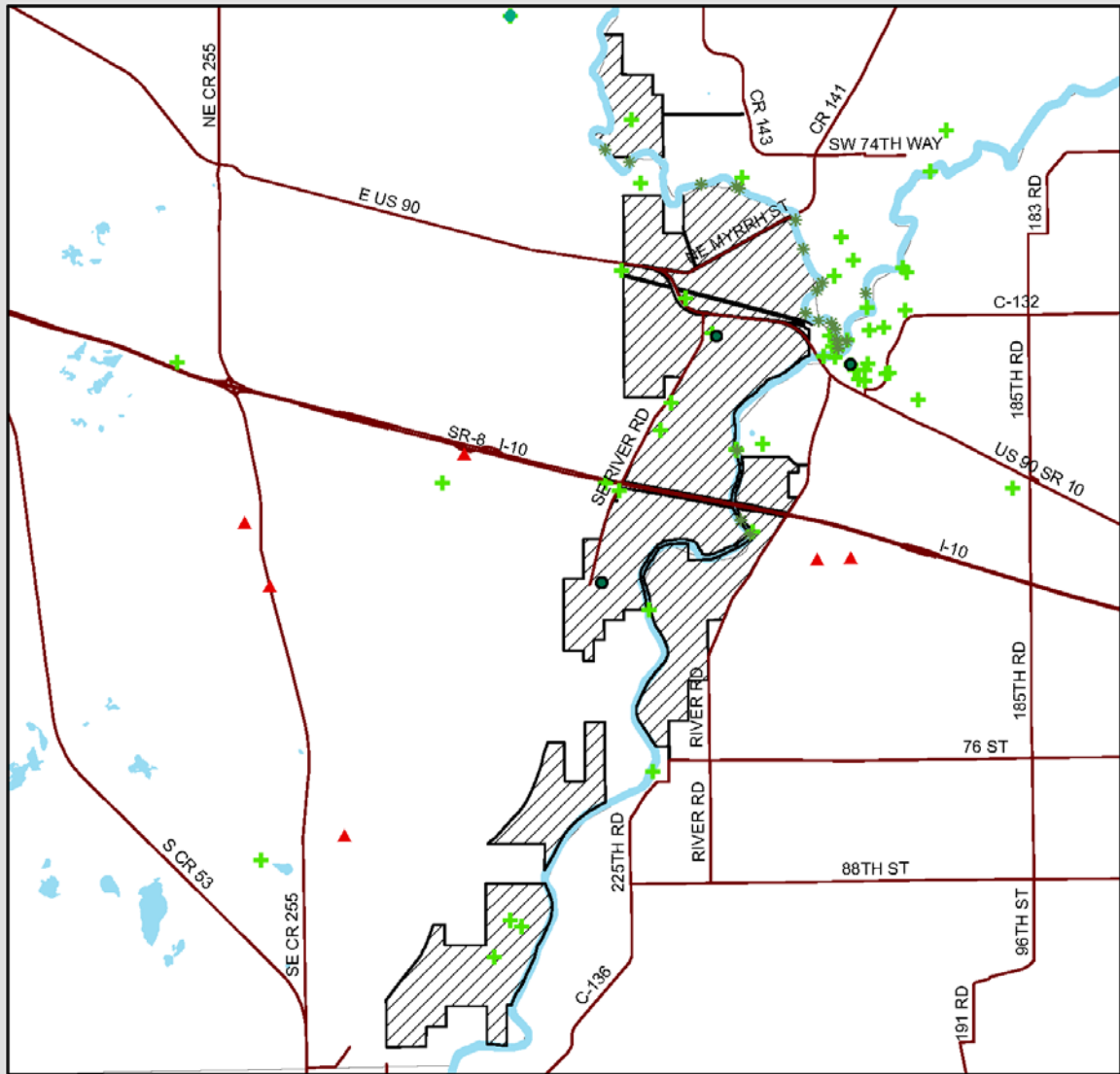
0 0.5 1 1.5 Miles



2014_6006

Species Occurrence

Twin Rivers State Forest



- | | |
|---------------------------|-----------------------------------|
| * Rare and Imperiled Fish | ▲ Bear Calls |
| ● Indigo Snake | ▲ Bear Mortality |
| ● Burrowing Owl | + Florida Natural Inventory Areas |
| ● Red Cockaded Woodpecker | □ County Boundary |
| ● Wading Bird Rookeries | ▨ Project Site |

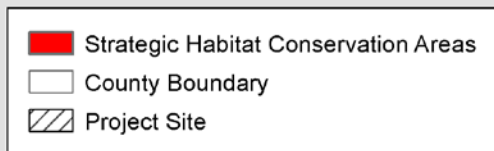
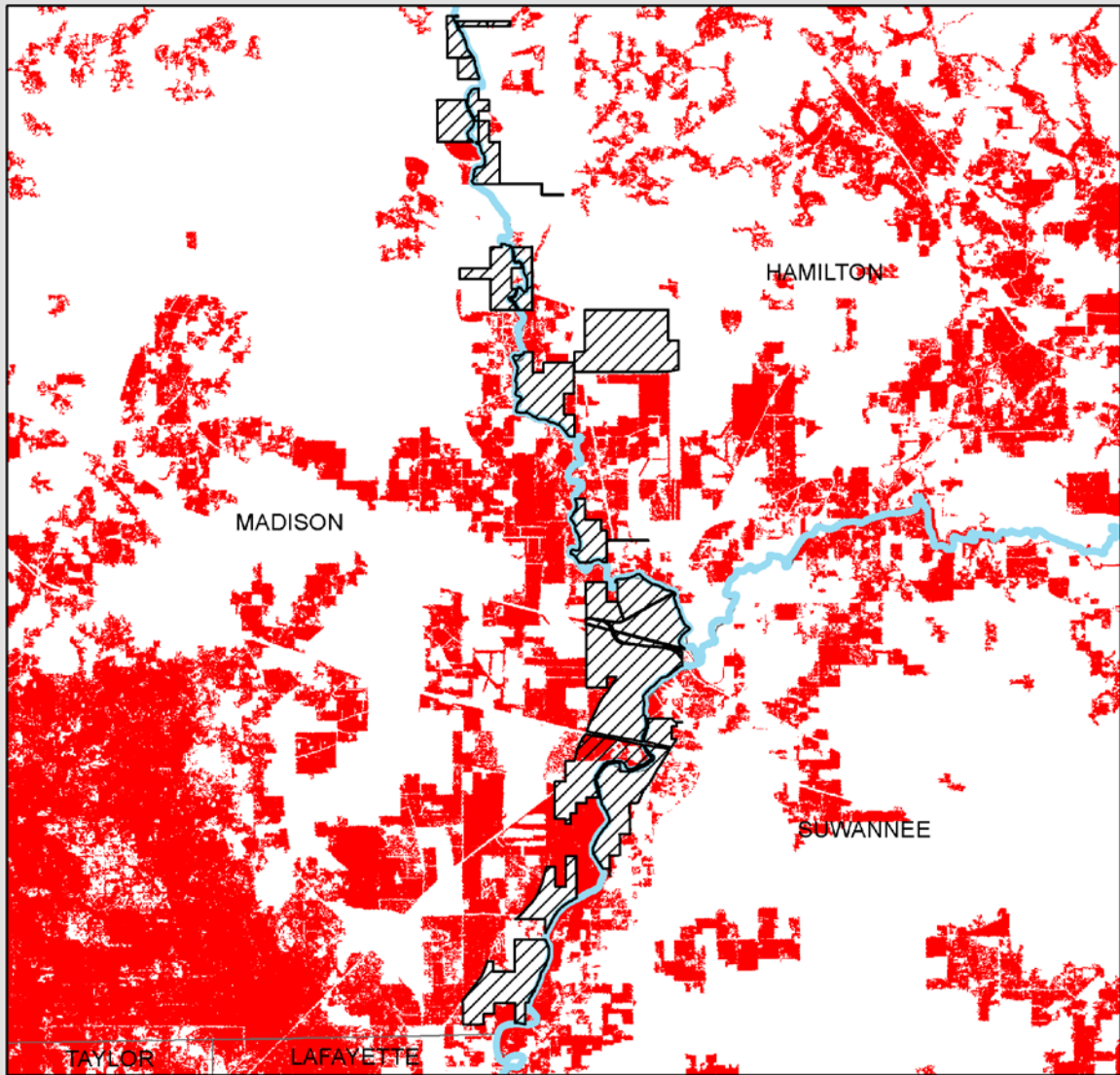
0 0.5 1 1.5 Miles



2014_6006

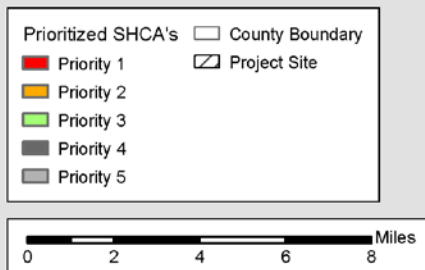
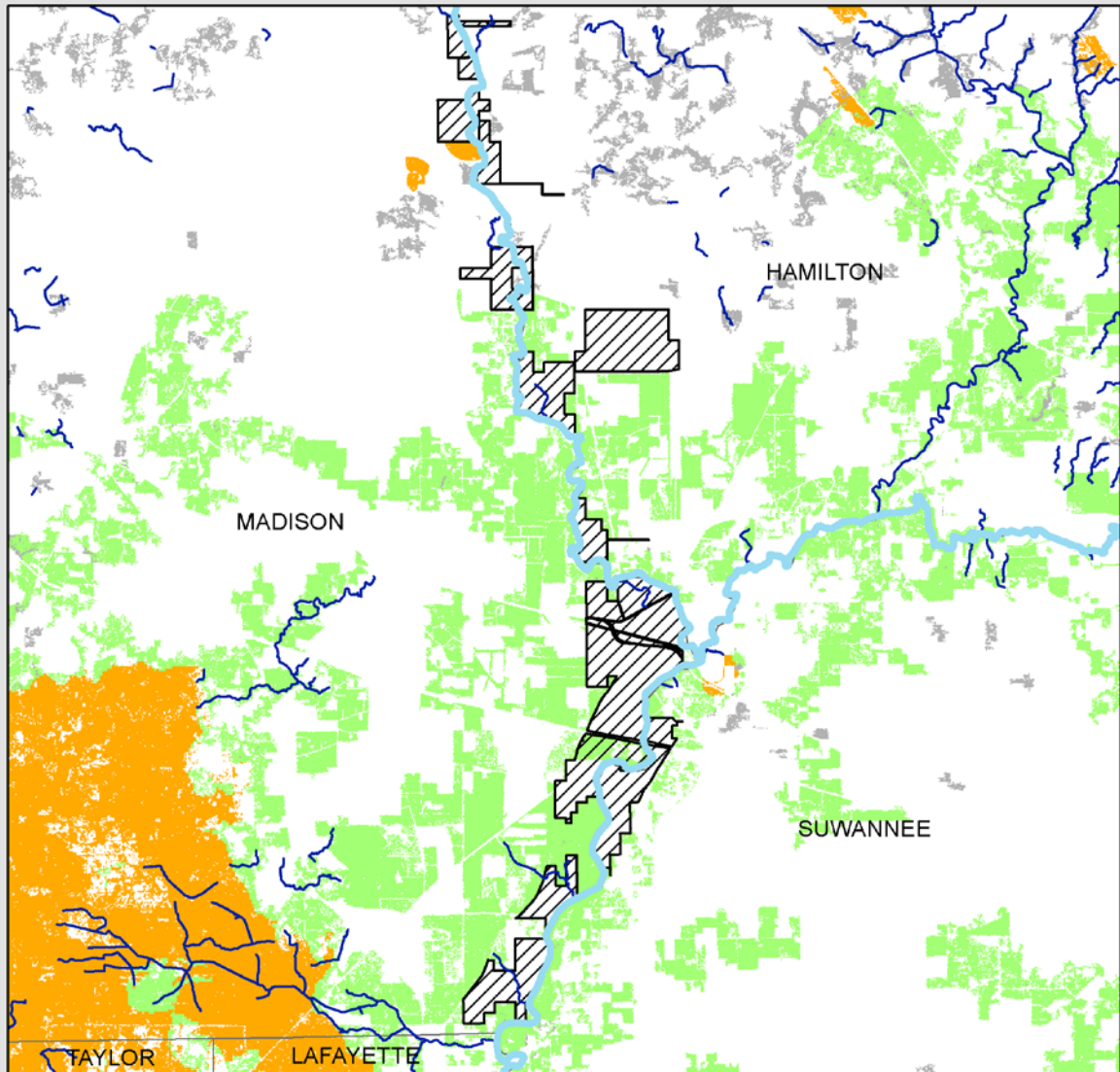
Strategic Habitat Conservation Areas

Twin Rivers State Forest



2014_6006

Prioritized SHCA's Twin Rivers State Forest

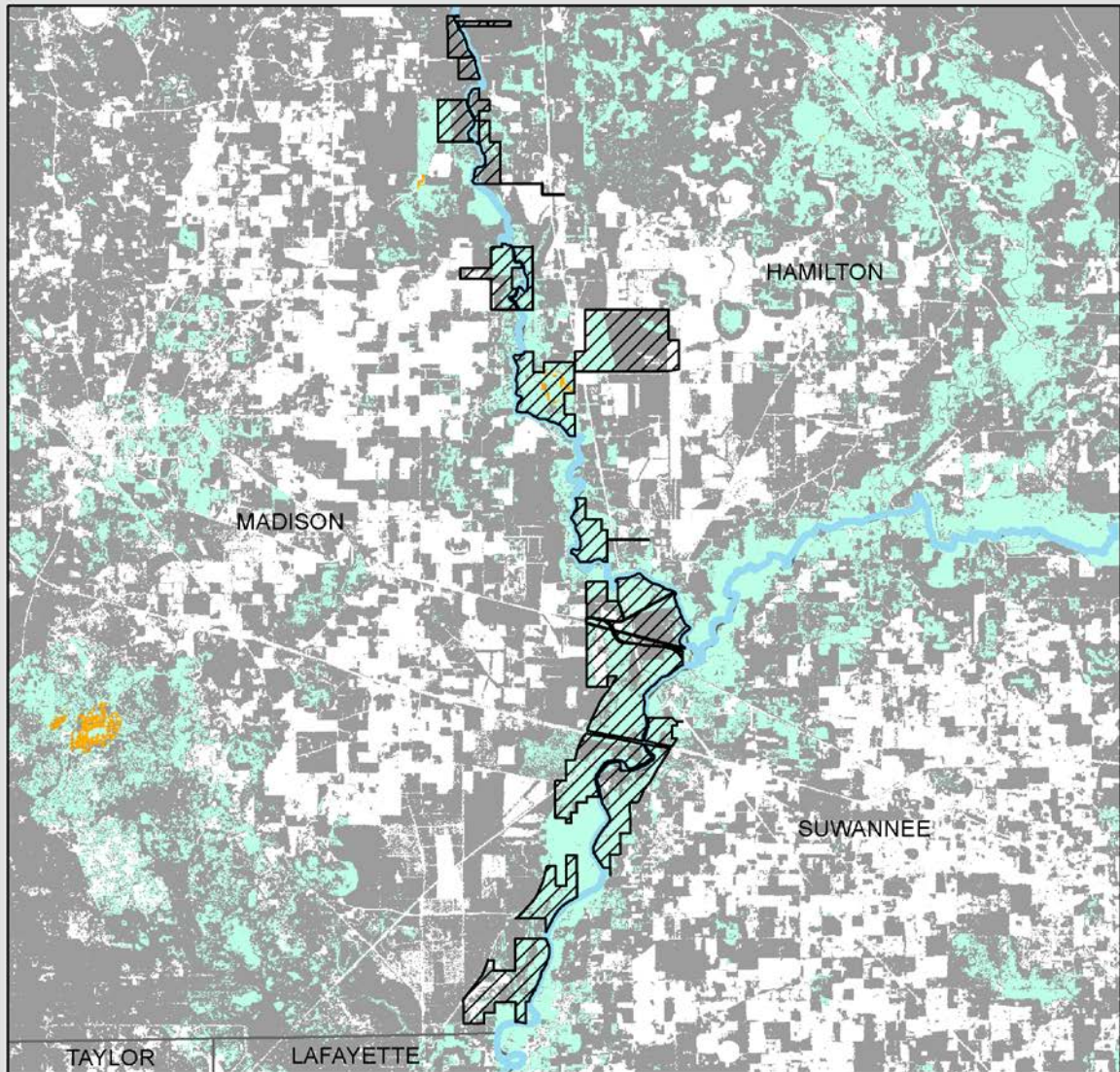


The prioritized SHCA map identifies 5 classes of SHCA based upon Heritage ranking criteria developed by The Nature Conservancy, the Natural Heritage Program Network, and the Florida Natural Areas Inventory. There are 2 possible ranks used to prioritize a species' SHCA: 1) the global rank based on a species worldwide status, and 2) the state rank based upon the species status in Florida. The state and global ranks are based upon many factors such as known occurrence locations, estimated abundance, range, amount of habitat currently protected, perceived levels of threats towards the species, and ecological fragility.

2014_6006

Species Richness

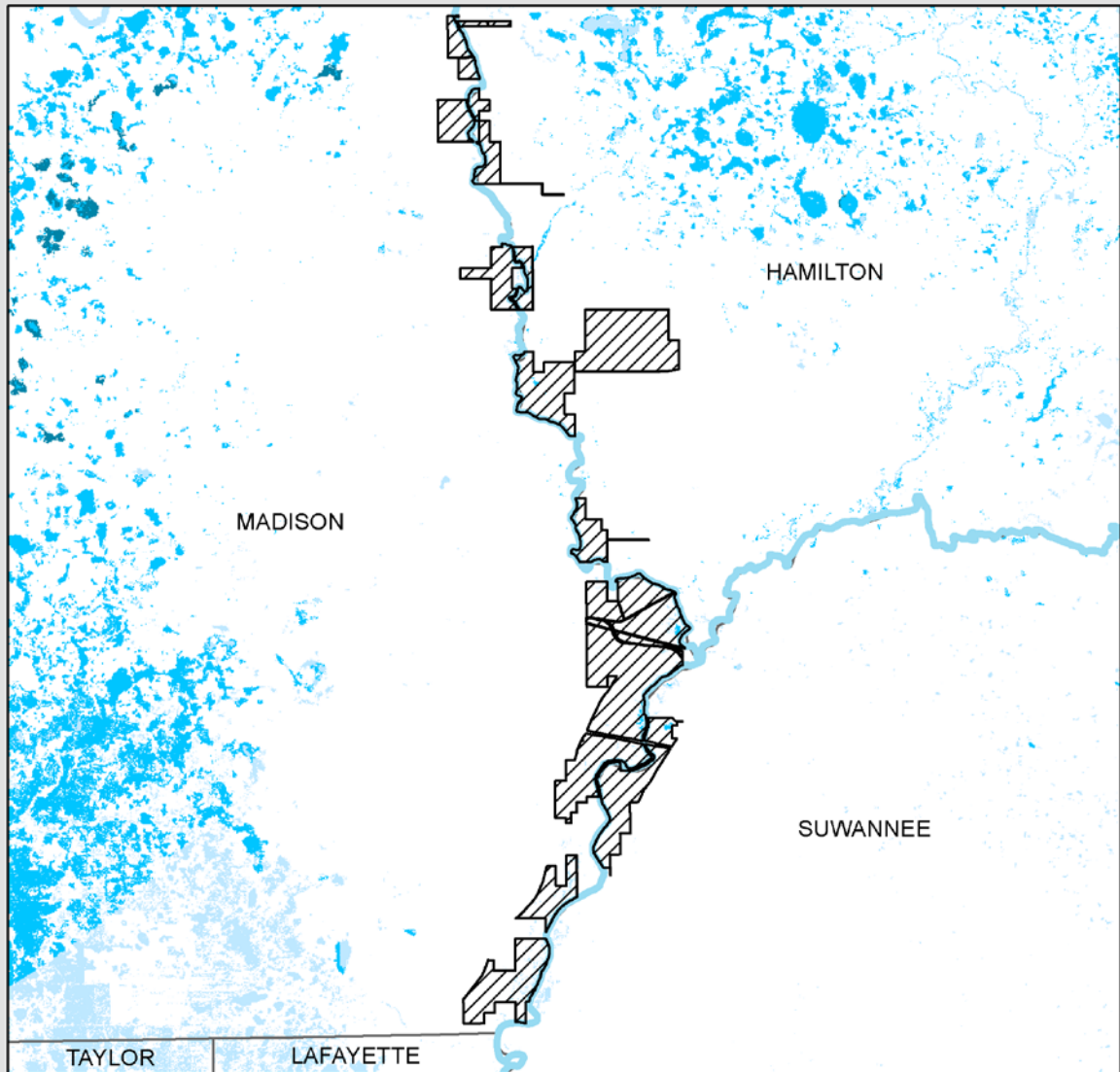
Twin Rivers State Forest



2014_6006

Priority Wetlands

Twin Rivers State Forest



Priority Wetlands

- 1-3 Species, Wetlands habitat
- 4-6 Species, Wetlands habitat
- 7-9 Species, Wetlands habitat
- 10-11 Species, Wetlands habitat

County Boundary

Project Site

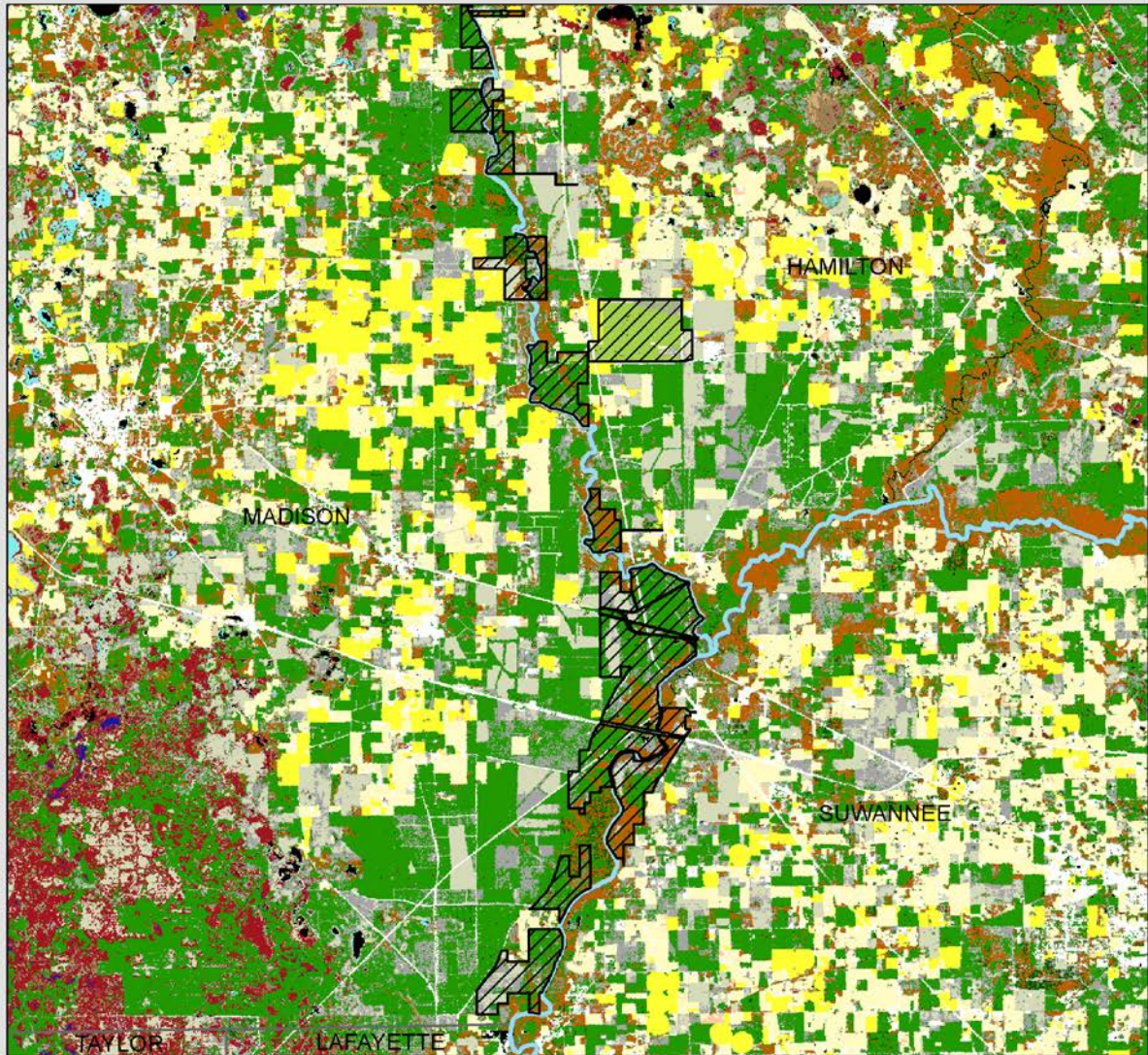
0 2 4 6 Miles



2014_6006

Florida Land Cover - 2003

Twin Rivers State Florida



2014_6006

Exhibit N

Florida Forever Projects



Florida Forever Projects

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

DISCLAIMER:
This data was created by the Florida Forest Service (FFS) Geographic Information System (GIS) staff using data from multiple sources. Data created by FFS is designed for use by FFS and its staff and is not intended to be used by other non-FFS departments or consultants. The Florida Forest Service disclaims the right to control, modify, or restrict this product for reasons other than those stated. The Florida Forest Service disclaims any warranty, either express or implied as to the accuracy or completeness of the information on this map.

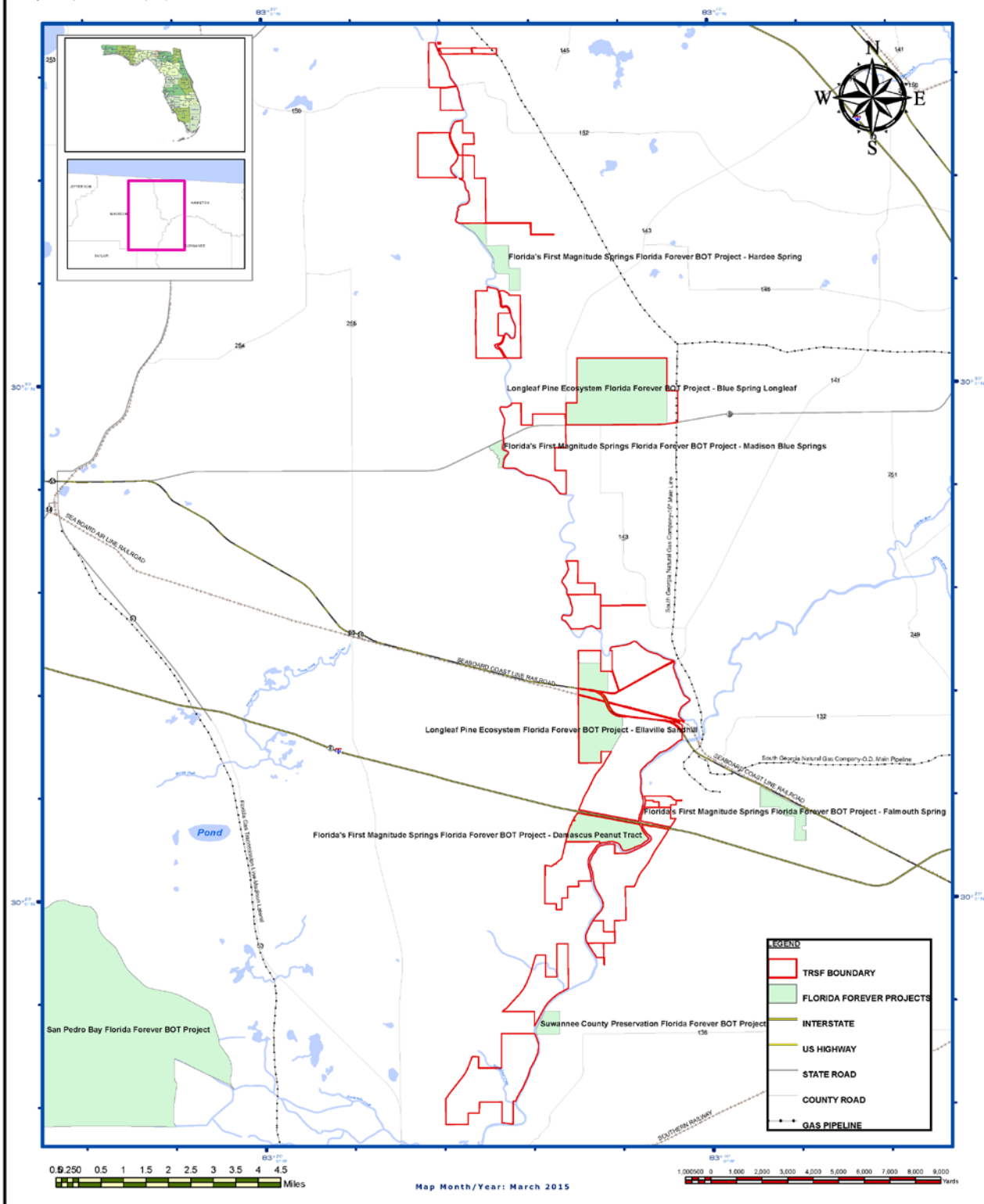
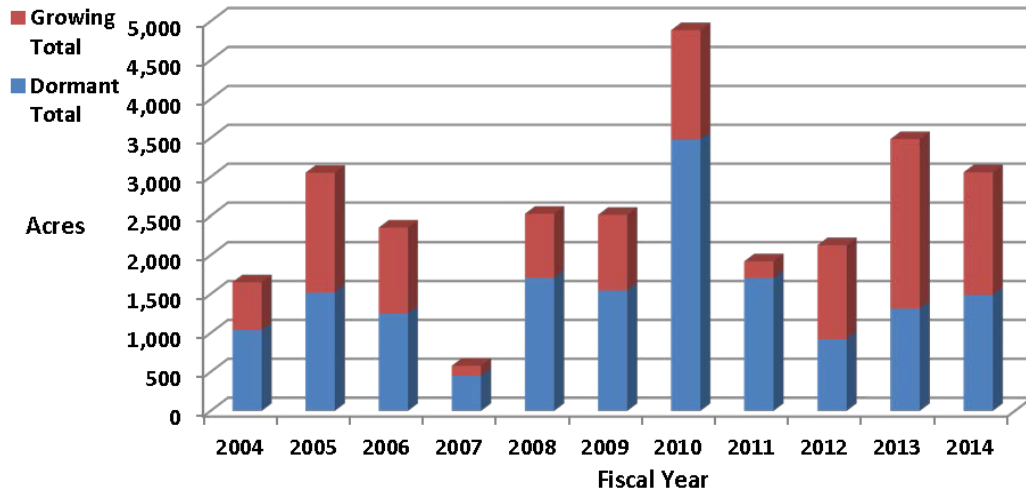


Exhibit O

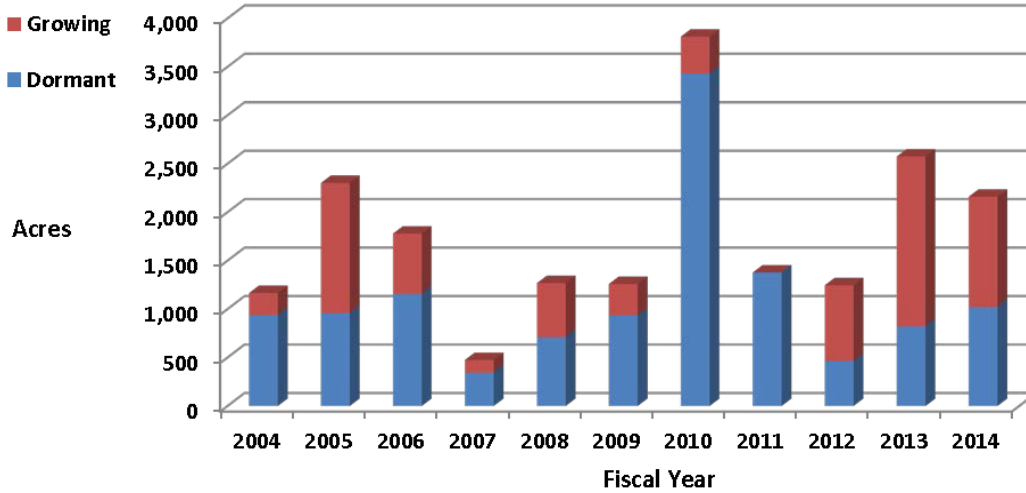
Fire History & Burnable Acres

10-Year Prescribed Burning Summary

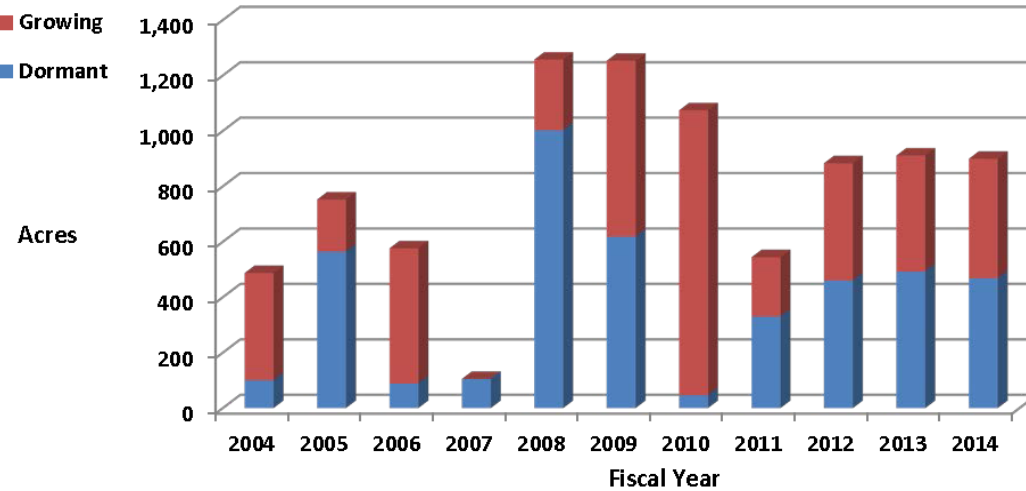
Twin Rivers State Forest



SRWMD Tract



Blue Springs Tract





Florida Forest Service

Twin Rivers State Forest

Burnable Acres

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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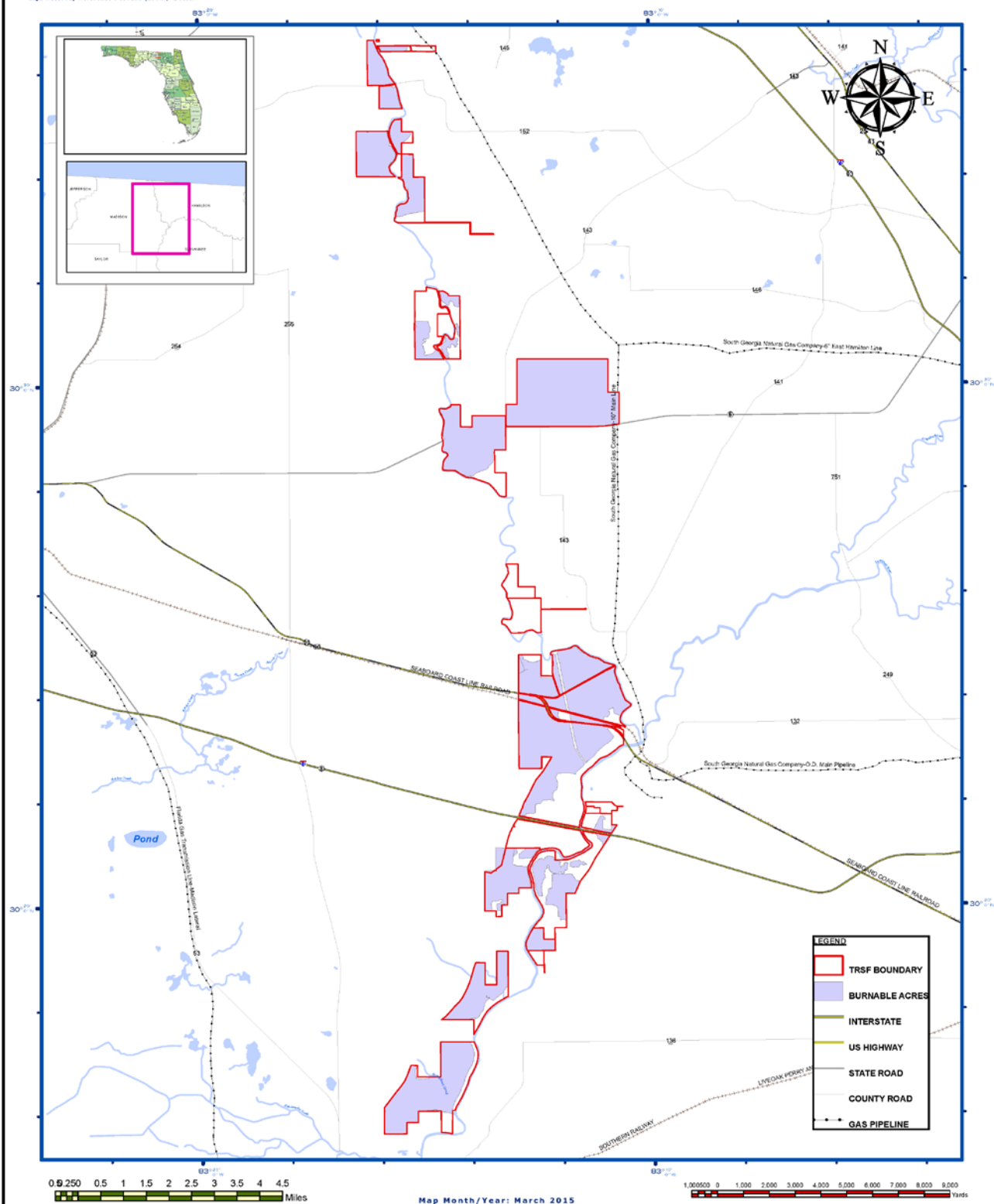


Exhibit P

Non-Native Invasive Species



Florida Forest Service

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) datum

Twin Rivers State Forest

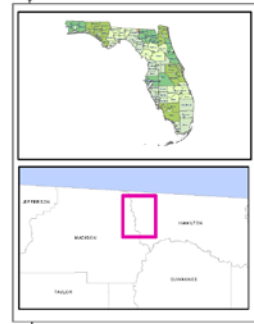
Non-Native Invasive Species - North

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Map data and boundaries courtesy of the Florida Natural Areas Inventory (FNAI) and the US Army Corps of Engineers.



- LEGEND**
- Non-Native Invasive Species**
- Chinaberry
 - Japanese climbing fern
 - Japanese honeysuckle
 - Mimosa
 - Silverthorn
 - Water hyacinth
- TRSF BOUNDARY**
- INTERSTATE**
- US HIGHWAY**
- GAS PIPELINE**



0.5 0.25 0 0.5 1 1.5 Miles

Map Month/Year: March 2015

1,000 500 0 1,000 2,000 3,000 Feet



Florida Forest Service

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) datum

Twin Rivers State Forest

Non-Native Invasive Species - South

DISCLAIMER:
This map was created by the Florida Forest Service
and is intended to provide a general overview of the
distribution of non-native invasive species. It is not
intended to be used for legal purposes. Data provided
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should not be used for any other purpose.
The Florida Forest Service does not warrant the
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provided on this map. The Florida Forest Service
accepts no liability for any errors or omissions
on this map.

Map area boundaries courtesy of
the Florida Natural Areas Inventory
from the 2005 National Atlas of the United States
US Army Corps of Engineers



- LEGEND**
- Non-Native Invasive Species**
- Chinaberry
 - Japanese climbing fern
 - Japanese honeysuckle
 - Mimosa
 - Silverthorn
 - Water hyacinth
- TRSF BOUNDARY**
- INTERSTATE**
- US HIGHWAY**
- GAS PIPELINE**

0.5 0.25 0 0.5 1 1.5 2
Miles

Map Month/Year: March 2015

1,000 500 0 1,000 2,000 3,000 4,000
Feet

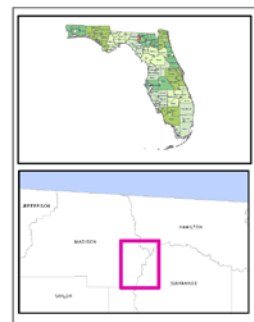


Exhibit Q

Twin Rivers Plant Survey

Plant Species Found on Twin Rivers State Forest

Scientific Name (*Non-Native Invasive)	Common Name (*Non-Native Invasive)
<i>Acalypha gracilens</i>	slender threeseed mercury
<i>Acanthaceae</i>	
<i>Agalinis fasciculatus</i>	false foxglove
<i>Agalinis sp.</i>	false foxglove
<i>Ageratina sp.</i>	snakeroot
<i>Andropogon gyrans</i>	Elliott's bluestem
<i>Andropogon sp.</i>	bluestem
<i>Andropogon ternarius</i>	splitbeard bluestem
<i>Andropogon virginicus</i>	broomsedge bluestem
<i>Aristida stricta</i> var. <i>beyrichiana</i>	wiregrass
<i>Aristolochia serpentaria</i>	Virginia snakeroot
<i>Arnoglossum floridanum</i>	Florida Indian plantain
<i>Asclepias tuberosa</i>	butterflyweed
<i>Asimina angustifolia</i>	slimleaf pawpaw
<i>Asimina incana</i>	woolly pawpaw
<i>Asimina obovatum</i>	bigflower pawpaw
<i>Asimina reticulata</i>	netted pawpaw
<i>Asplenium platyneuron</i>	ebony spleenwort
<i>Asplenium sp.</i>	spleenwort
<i>Asteraceae</i>	
<i>Balduina angustifolia</i>	coastalplain honeycomb-head
<i>Callicarpa americana</i>	beautyberry
<i>Carphephorus corymbosum</i>	Florida paintbrush
<i>Carya alba</i>	mockernut hickory
<i>Carya glabra</i>	pignut hickory
<i>Carya tomentosa</i>	mockernut hickory
<i>Castanea pumila</i>	chinquapin
<i>Celtis spp.</i>	
<i>Cenchrus sp.</i>	sandbur
<i>Centrosema virginianum</i>	spurred butterfly pea
<i>Chamaecrista fasciculata</i>	partridge pea
<i>Chrysopsis sp.</i>	goldenaster
<i>Cnidoscolus stimulosus</i>	tread softly
<i>Cornus florida</i>	flowering dogwood
<i>Croptilon divaricatus</i>	slender scratchdaisy
<i>Crotalaria pallida</i> *	smooth rattlebox
<i>Crotalaria rotundifolia</i>	rabbitbells
<i>Croton argyranthemus</i>	silver croton
<i>Cyperaceae</i>	
<i>Cyperus esculentus</i> *	chufa*
<i>Cyperus plukenetii</i>	plukenet's flatsedge

<i>Dalea pinnata</i>	summer farewell
<i>Desmodium sp.</i>	tick-trefoil
<i>Dichanthelium sp.</i>	witchgrass
<i>Digitaria ciliaris</i>	southern crabgrass
<i>Diodia teres</i>	poor joe
<i>Diospyros virginiana</i>	common persimmon
<i>Dyschoriste oblongifolia</i>	oblongleaf twinflower
<i>Elaeagnus pungens</i> *	silverthorn*
<i>Elaeagnus umbellata</i> *	autumn olive *
<i>Elephantopus elatus</i>	tall elephantsfoot
<i>Erigeron strigosus</i>	fleabane
<i>Eryngium yuccifolium</i>	button rattlesnakemaster
<i>Eupatorium capillifolium</i>	dog fennel
<i>Eupatorium compositifolium</i>	yankeeweed
<i>Eupatorium rotundifolium</i>	roundleaf thoroughwort
<i>Eustachys sp.</i>	fingergrass
<i>Euthamia caroliniana</i>	slender flattop goldenrod
<i>Fabaceae</i>	
<i>Fagus grandifolia</i>	American beech
<i>Galactia sp.</i>	milkpea
<i>Galium hispidulum</i>	coastal bedstraw
<i>Gaylussacia dumosa</i>	dwarf huckleberry
<i>Gelsemium sempervirens</i>	yellow jessamine
<i>Gnaphalium obtusifolium</i>	rabbit tobacco
<i>Gymnopogon ambiguus</i>	bearded skeletongrass
<i>Helianthemum carolinianum</i>	Carolina frostweed
<i>Heteropogon melanocarpus</i> *	sweet tanglehead
<i>Heteropogon sp.</i>	
<i>Heterotheca subaxillaris</i>	camphorweed
<i>Hieracium gronovii</i>	queen-devil
<i>Hieracium megacephalon</i>	coastalplain hawkweed
<i>Houstonia procumbens</i>	roundleaf bluet
<i>Hypericum gentianoides</i>	pineweeds
<i>Hypericum hypericoides</i>	St. Andrew's cross
<i>Ilex opaca</i>	
<i>Imperata cylindrica</i> *	cogon grass*
<i>Lechea sessiliflora</i>	pineland pinweed
<i>Lechea tenuifolia</i>	
<i>Lespedeza capitata</i>	roundhead lespedeza
<i>Lespedeza hirta</i>	hairy bush-clover
<i>Lespedeza sp.</i>	lespedeza
<i>Liatris gracilis</i>	slender gayfeather
<i>Liatris sp.</i>	blazing star
<i>Licania michauxii</i>	gopher apple

<i>Lupinus perennis</i>	
<i>Lygodium japonicum</i>	Japanese climbing fern
<i>Magnolia grandiflora</i>	southern magnolia
<i>Mimosa quadrivalvis</i>	sensitive briar
<i>Mitchella repens</i>	
<i>Monarda punctatum</i>	dotted horsemint
<i>Muhlenbergia capillaris</i>	hairawn muhly
<i>Myrica cerifera</i>	wax myrtle
<i>Oenothera biennis</i>	common evening primrose
<i>Orbexilum lupinellus</i>	piedmont leatherroot
<i>Osmunda cinnamomea</i>	cinnamon fern
<i>Paronychia americana</i>	American nailwort
<i>Parthenocissus quinquefolia</i>	
<i>Paspalum notatum</i> *	bahia grass*
<i>Paspalum sp.</i>	crowngrass
<i>Passiflora pallens</i>	pineland passion-flower
<i>Pinus elliottii</i>	slash pine
<i>Pinus echinata</i>	sand pine
<i>Pinus palustris</i>	longleaf pine
<i>Pityopsis graminifolia</i>	narrowleaf silkgrass
<i>Pityopsis sp.</i>	silkgrass
<i>Polygonella polygama</i>	October flower
<i>Prunus serotina</i>	black cherry
<i>Prunus umbellata</i>	flatwoods plum
<i>Pteridium aquilinum</i>	bracken fern
<i>Pterocaulon pycnostachyum</i>	blackroot
<i>Pycnanthemum floridanum</i>	Florida mountainmint
<i>Quercus falcata</i>	southern red oak
<i>Quercus hemisphaerica</i>	laurel oak
<i>Quercus incana</i>	bluejack oak
<i>Quercus laevis</i>	turkey oak
<i>Quercus laurifolia</i>	laurel oak
<i>Quercus margaretta</i>	sand post oak
<i>Quercus nigra</i>	water oak
<i>Quercus sp.</i>	oak
<i>Quercus stellata</i>	post oak
<i>Quercus virginiana</i>	live oak
<i>Rhus copallinum</i>	winged sumac
<i>Rhynchosia reniformis</i>	dollarleaf
<i>Rubus cuneifolius</i>	sand blackberry
<i>Ruellia caroliniensis</i>	Carolina wild petunia
<i>Ruellia sp.</i>	wild petunia
<i>Rumex hastatulus</i>	heartwing dock
<i>Sassafras albidum</i>	sassafras

<i>Sericocarpus tortifolius</i>	whitetop aster
<i>Setaria sp.</i>	foxtail
<i>Sideroxylon rufohirtum</i>	rufous Florida bully
<i>Smilax auriculata</i>	earleaf greenbrier
<i>Smilax bona-nox</i>	saw greenbrier
<i>Smilax glauca</i>	cat greenbrier
<i>Smilax smallii</i>	jacksonvine
<i>Solanum sp.</i>	nightshade
<i>Solidago fistulosa</i>	goldenrod
<i>Solidago odora</i>	sweet goldenrod
<i>Sorghastrum secundum</i>	lopsided indiangrass
<i>Sporobolus junceus</i>	pineywoods dropseed
<i>Stillingia sylvatica</i>	queen's delight
<i>Stylisma patens</i>	coastalplain dawnflower
<i>Stylodon carneum</i>	Carolina false vervain
<i>Stylosanthes biflora</i>	sidebeak pencil flower
<i>Symphyotrichum concolor</i>	eastern silver aster
<i>Symphyotrichum sp.</i>	aster
<i>Thelypteris kunthii</i>	southern shield fern
<i>Toxicodendron pubescens</i>	eastern poison oak
<i>Tragia urens</i>	wavyleaf noseburn
<i>Tragia urticifolia</i>	nettleleaf noseburn
<i>Trichostema dichotomum</i>	forked bluecurls
<i>Vaccinium arboreum</i>	sparkleberry
<i>Vaccinium corymbosum</i>	highbush blueberry
<i>Vaccinium elliotii</i>	Elliott's blueberry
<i>Vaccinium myrsinites</i>	shiny blueberry
<i>Verbenaceae</i>	
<i>Vernonia angustifolia</i>	tall ironweed
<i>Viola palmata</i>	early blue violet
<i>Viola sp.</i>	violet
<i>Vitis aestivalis</i>	summer grape
<i>Woodwardia areolata</i>	netted chain fern
<i>Woodwardia virginica</i>	Virginia chainfern
<i>Yucca filamentosa</i>	Adam's needle

Exhibit R

Current Natural Communities



Florida Forest Service

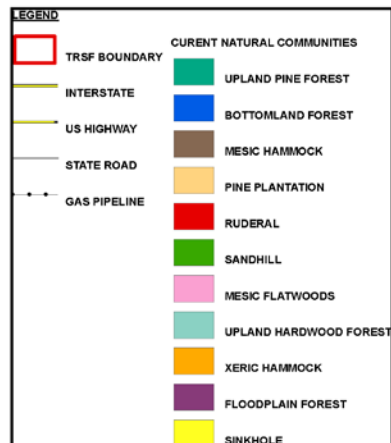
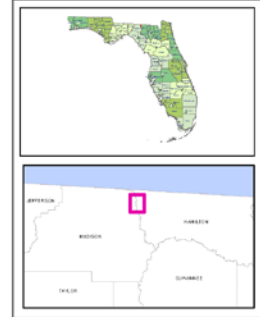
Coordinate System: Florida Albers
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Twin Rivers State Forest

Natural Communities - North End

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Miles

Map Month/Year: March 2015

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Yards



Florida Forest Service

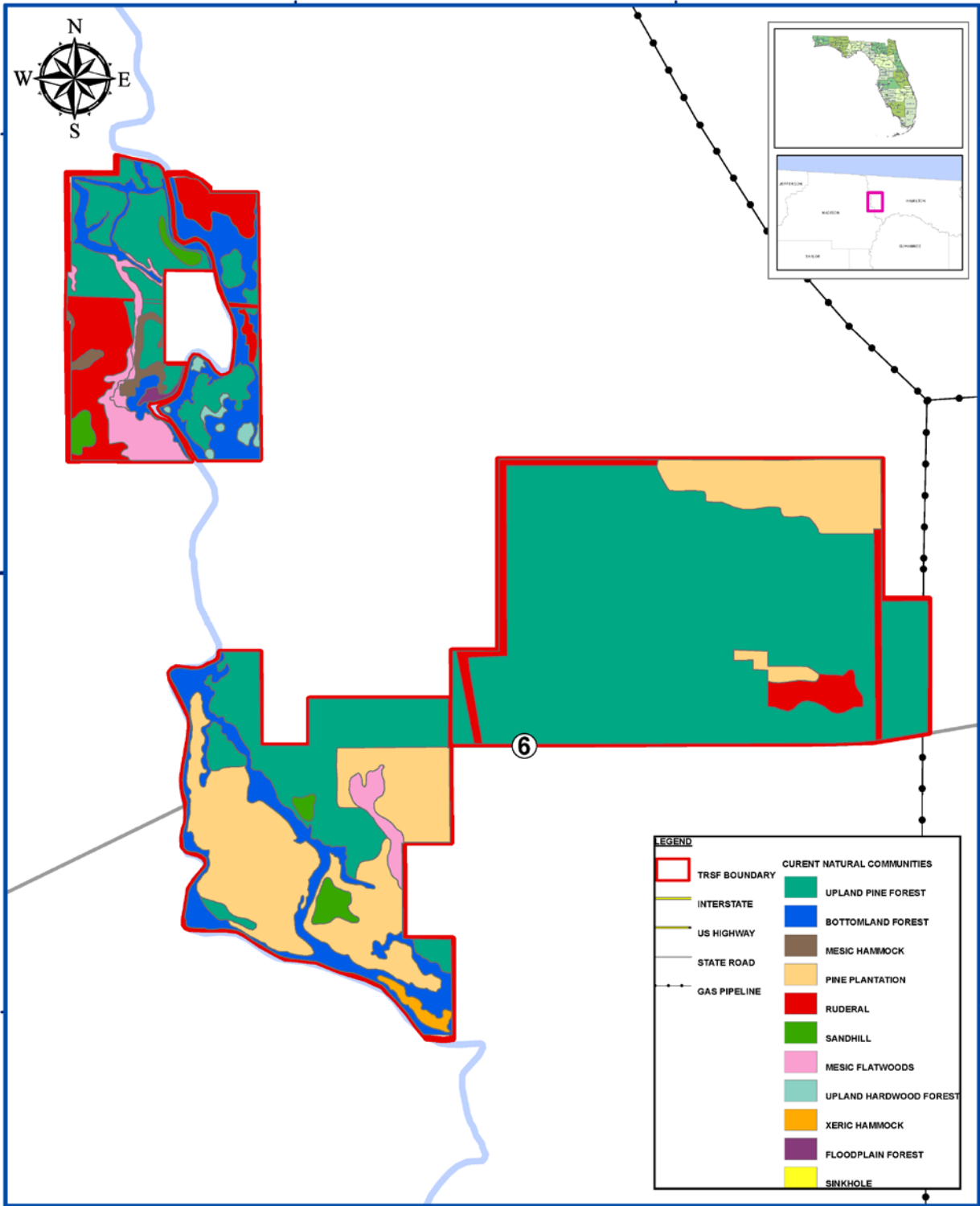
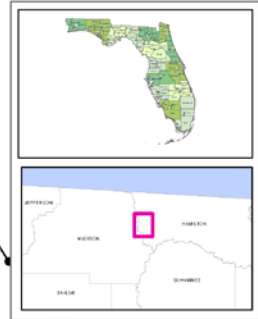
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Twin Rivers State Forest

Natural Communities - North Middle

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LEGEND	
	TRSF BOUNDARY
	INTERSTATE
	US HIGHWAY
	STATE ROAD
	GAS PIPELINE
CURRENT NATURAL COMMUNITIES	
	UPLAND PINE FOREST
	BOTTOMLAND FOREST
	MESIC HAMMOCK
	PINE PLANTATION
	RUDERAL
	SANDHILL
	MESIC FLATWOODS
	UPLAND HARDWOOD FOREST
	XERIC HAMMOCK
	FLOODPLAIN FOREST
	SINKHOLE

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Map Month/Year: March 2015

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Florida Forest Service

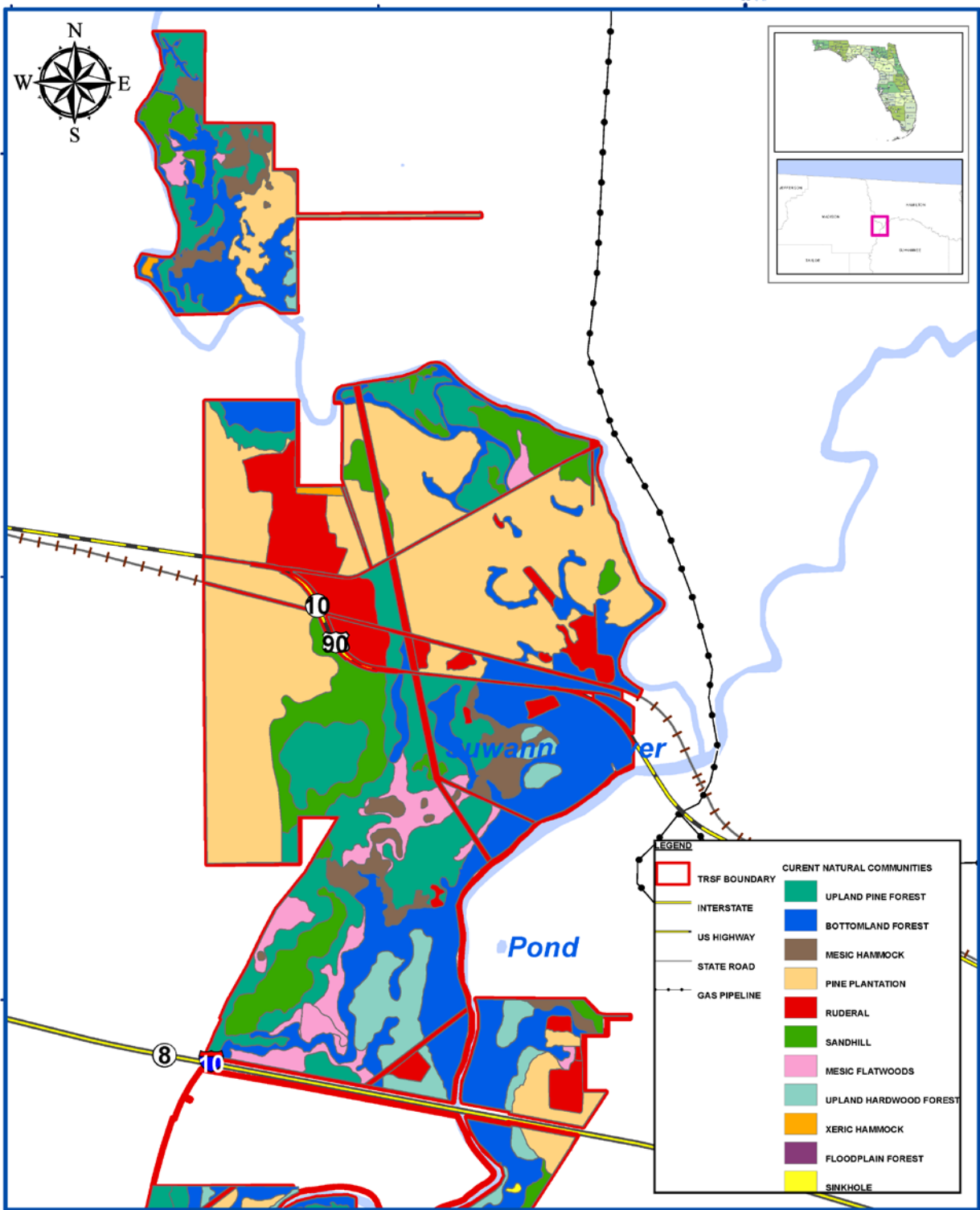
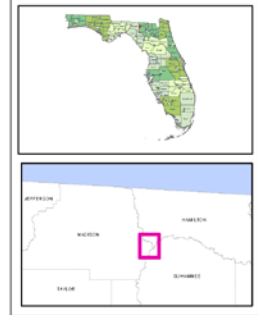
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Twin Rivers State Forest

Natural Communities - South Middle

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Map Month/Year: March 2015

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Florida Forest Service

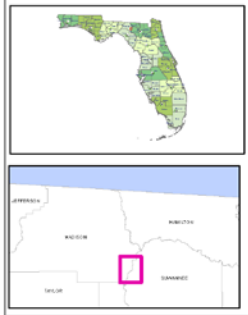
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Twin Rivers State Forest

Natural Communities - South End

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Suwannee River

LEGEND	
	TRSF BOUNDARY
	INTERSTATE
	US HIGHWAY
	STATE ROAD
	GAS PIPELINE
CURRENT NATURAL COMMUNITIES	
	UPLAND PINE FOREST
	BOTTOMLAND FOREST
	MESIC HAMMOCK
	PINE PLANTATION
	RUDERAL
	SANDHILL
	MESIC FLATWOODS
	UPLAND HARDWOOD FOREST
	XERIC HAMMOCK
	FLOODPLAIN FOREST
	SINKHOLE

0.5 0.25 0 0.5
Miles

Map Month/Year: March 2015

1,000 500 0 1,000
Yards

Exhibit S

Historic Natural Communities



Florida Forest Service

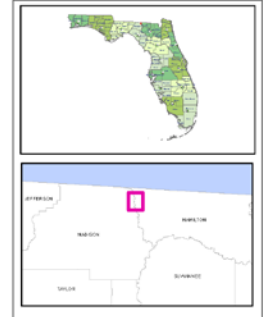
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Twin Rivers State Forest

Historic Natural Communities - North End

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Managed Area Boundaries courtesy of
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Florida Natural Areas Inventory (FNAI) from the
US Army Corps of Engineers



LEGEND	
	TRSF BOUNDARY
	INTERSTATE
	US HIGHWAY
	STATE ROAD
	GAS PIPELINE
HISTORIC NATURAL COMMUNITIES	
	UPLAND PINE FOREST
	BOTTOMLAND FOREST
	MESIC HAMMOCK
	SANDHILL
	MESIC FLATWOODS
	UPLAND HARDWOOD FOREST
	XERIC HAMMOCK
	FLOODPLAIN FOREST
	SINKHOLE

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Miles

Map Month/Year: March 2015

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Yards



Florida Forest Service

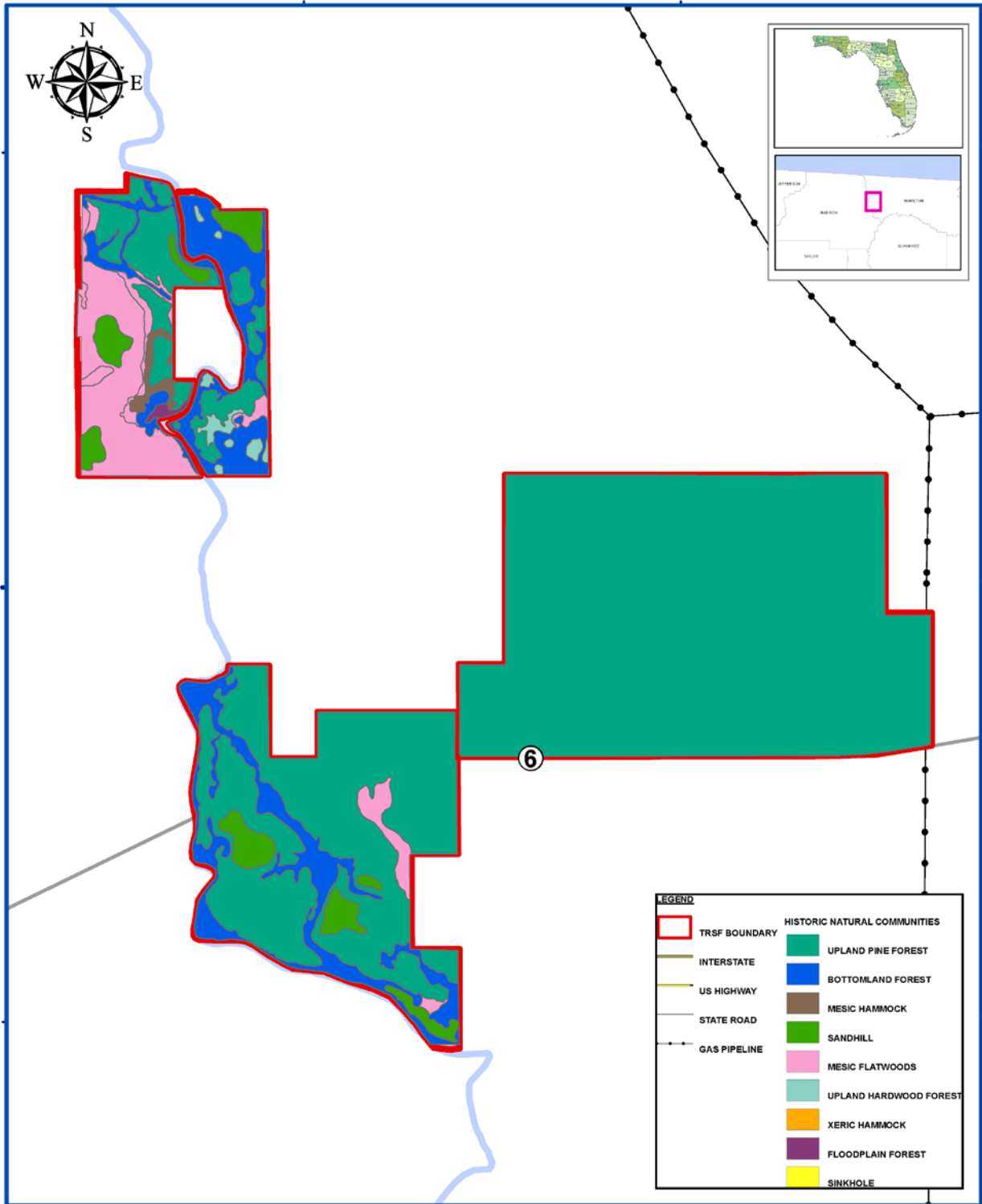
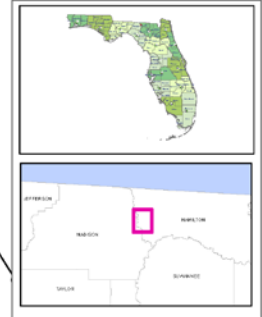
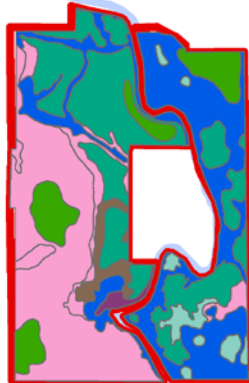
Twin Rivers State Forest

Historic Natural Communities - North Middle

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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Map Month/Year: March 2015

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Florida Forest Service

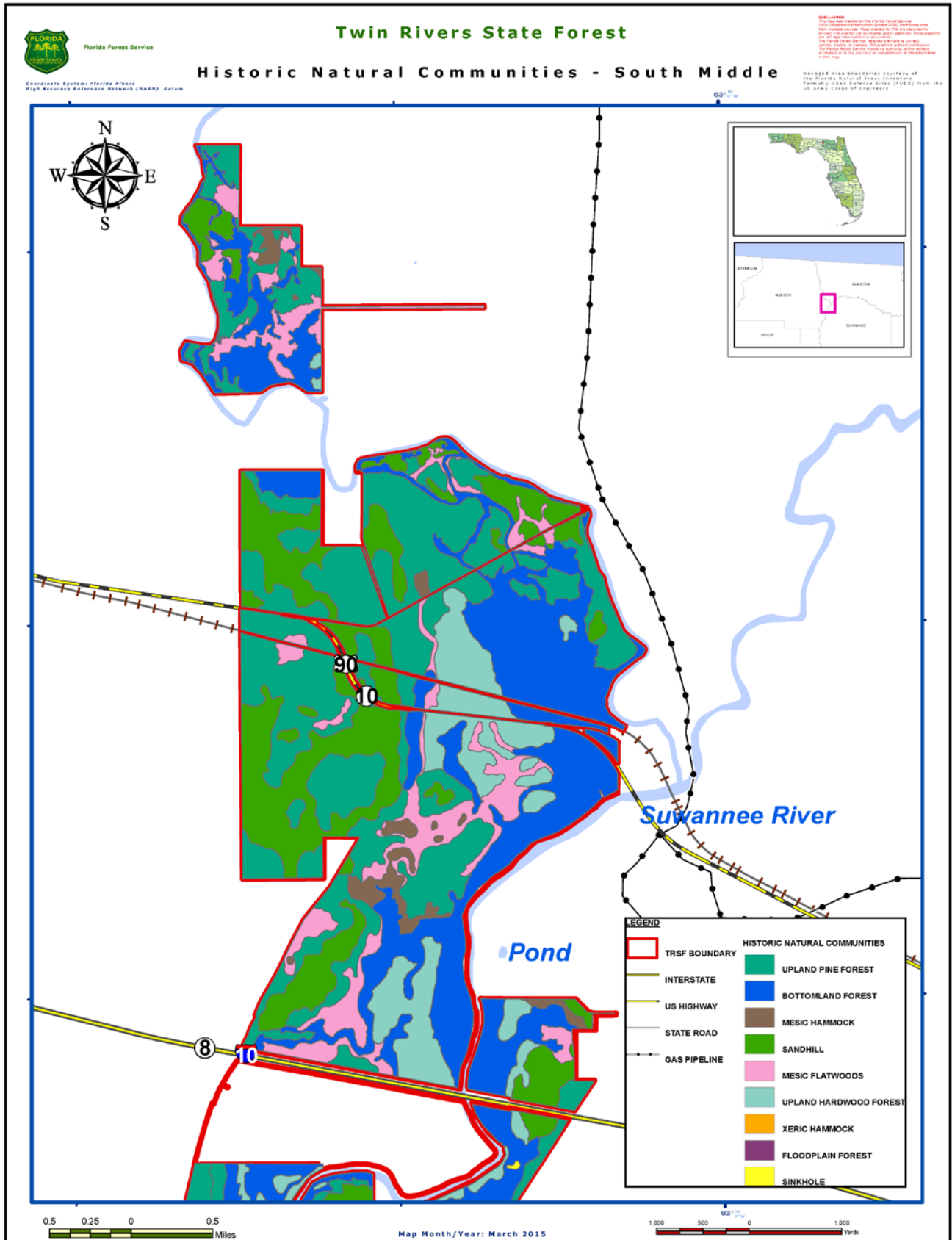
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Twin Rivers State Forest

Historic Natural Communities - South Middle

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Twin Rivers State Forest

Historic Natural Communities - South End

Coordinate System: Florida Albers
High Accuracy Reference Network (NARN) Datum

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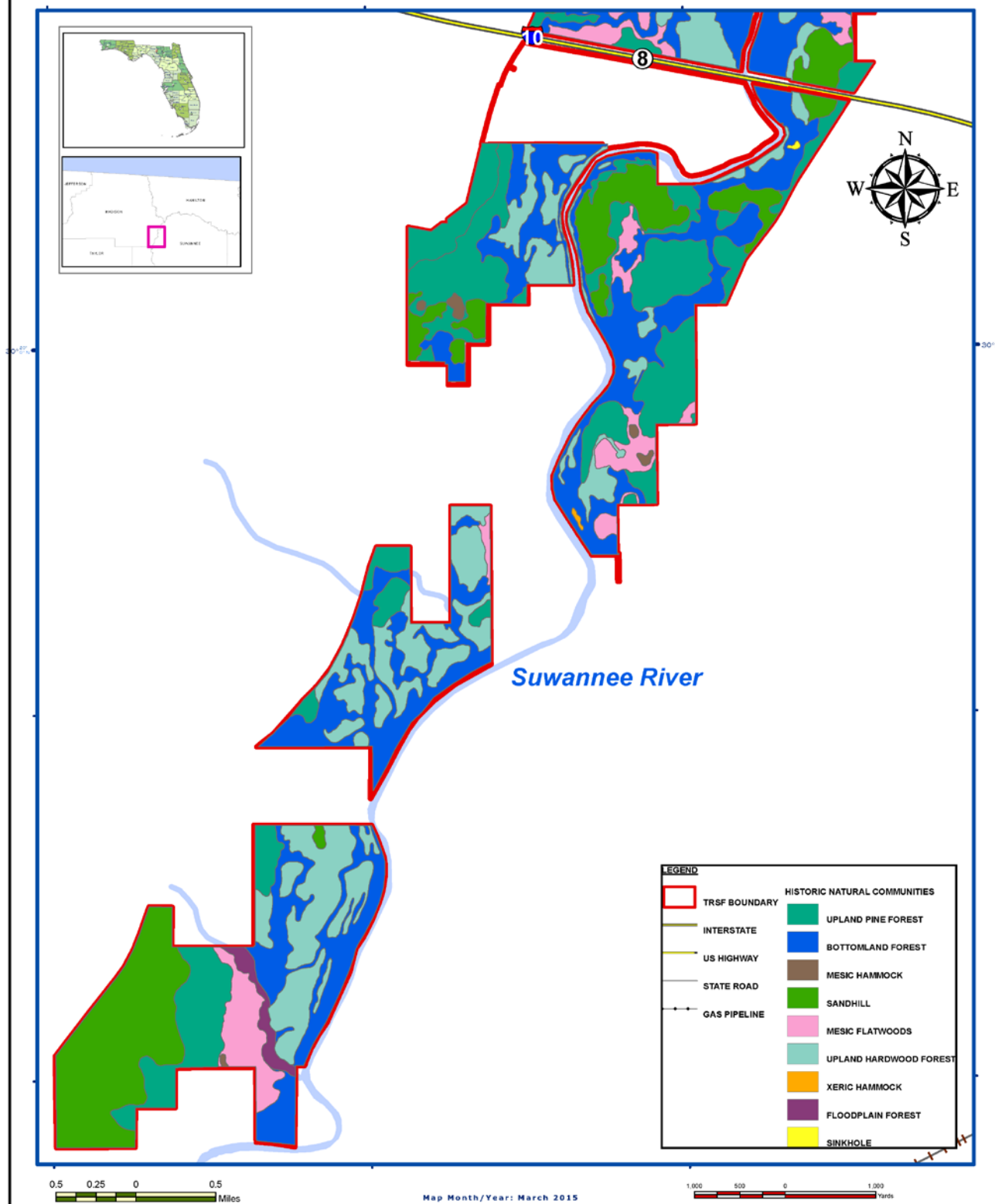


Exhibit T

Management Prospectus

Longleaf Pine Ecosystem

Hamilton, Gilchrist, Volusia and Marion Counties

Critical Natural Lands

Purpose for State Acquisition

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

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

expected to support most of the fauna, both game and nongame, typical of sandhill habitat. Evidence of one rare species, the gopher tortoise was found.

Manager

Florida Forest Service/FFS (aka Division of Forestry/DOF), Department of Agriculture and Consumer Services (Ross Prairie sites [except the Marjorie Harris Carr Cross Florida Greenway--MHC-- portion which is under an approved management lease to Office of Greenways and Trails--OGT], Blue Spring Longleaf, Bell Ridge, Deland Ridge). The FFS will manage Bell Ridge under a multiple-use management regime consistent with the State Forest system. The Office

General Description

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

Public Use

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

Longleaf Pine Ecosystem FNAI Elements	
Red-cockaded Woodpecker	G3/S2
Florida Scrub-jay	G2/S2
Florida Black Bear	G5T2/S2
Eastern Indigo Snake	G3/S3
Gopher Tortoise	G3/S3
Florida Mouse	G3/S3
Longspurred Mint	G1/S1
Sand Butterfly Pea	G2Q/S2
Giant Orchid	G2G3/S2
Incised Groove-bur	G3/S2
Short-tailed Hawk	G4G5/S1
Scrub Stylisma	G3/S3
24 rare species are associated with the project	

Placed on List 1993

Project Area (GIS Acres) 21,429

Acres Acquired (GIS) 11,736*

at a Cost of \$30,408,180

Acres Remaining (GIS) 9,693

with Estimated (Tax Assessed) Value of \$20,329,303

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

Longleaf Pine Ecosystem

Acquisition Planning

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

On 12/3/1998, LAMAC transferred the Deland Ridge and Chassahowitzka Sandhill sites to the Negotiation Impasse group.

On 7/29/1999, the Council added the 3,040 acre Ross Prairie Addition project to the Longleaf Pine Ecosystem project (Priority Group). On 12/9/1999 the Council approved the Bell Ridge project to be added to the Longleaf Pine Ecosystem project.

On 8/13/2010 ARC approved a 3,612-acre (\$528,396,412 just value) reduction to the project boundary due to residential/commerical/infrastructure disturbances.

Coordination

TNC, the Department of Transportation (DOT), the Trust for Public Lands (TPL), and the Florida Audubon Society are acquisition partners on this project.

Management Policy Statement

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

Management Prospectus

Qualifications for state designation The quality of the pine forests on the Blue Spring Longleaf and Ross

Prairie sites, and their size and diversity, make them suitable for state forests.

Manager DOF to manage (Ross Prairie sites [except the Marjorie Harris Carr Cross Florida Greenway portion already under an approved management plan by the OGT]; Blue Spring Longleaf; Bell Ridge; and Deland Ridge).

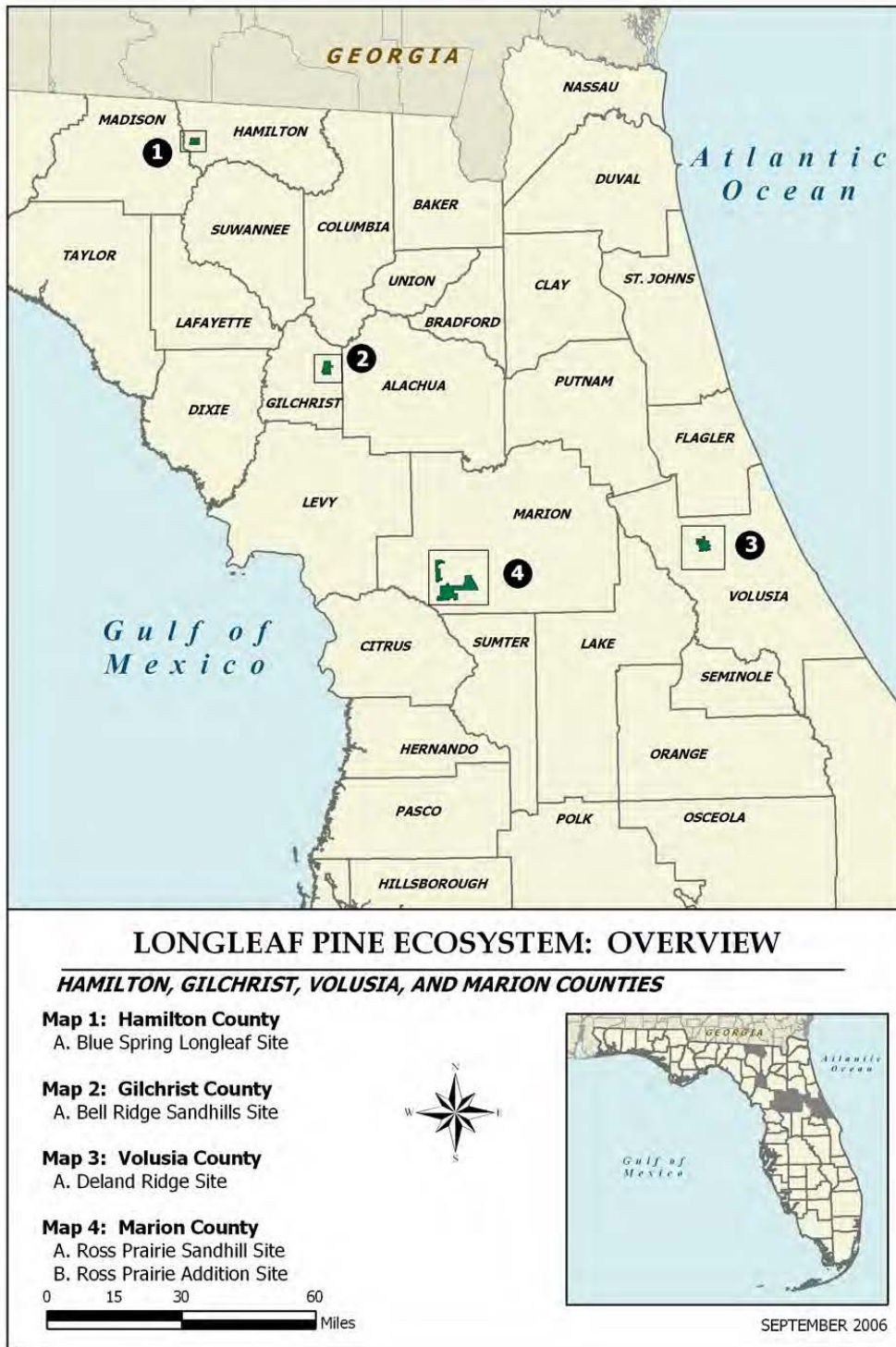
Bell Ridge: The FFS will manage the project under a multiple use management regime consistent with the State Forest system.

Conditions affecting intensity of management On the Blue Spring tract, there are no known major disturbances that will require extraordinary attention, so management intensity is expected to be typical for a state forest. On Ross Prairie, however, the construction of an extension of the Florida Turnpike may hinder fire management activities and public access to the forest.

Timetable for implementing management and provisions for security and protection of infrastructure The Blue Spring Longleaf tract and part of the Ross Prairie Sandhills tract have been acquired (the OGT is manager of lease for MHC Cross Florida Greenway portion). The FFS is now providing public access to these tracts for low-intensity, non-facilities-related outdoor recreation. Management on the Blue Spring Longleaf tract will concentrate on maintaining the existing open conditions and seeds will be collected with as little disturbance as possible to the resources. On all three tracts, the FFS will provide access to the public while protecting sensitive resources. The sites' natural resources and threatened and endangered plants and animals will be inventoried to provide the basis for a management plan. Long-range plans for these tracts will generally be directed toward restoring disturbed areas to their original conditions, as far as possible, as well as protecting threatened and endangered species. An all-season burning program will use, whenever possible, existing roads, black lines, foam lines and natural breaks to contain fires. Timber management will mostly involve improvement thinning and regeneration harvests. Plantations will be thinned and, where appropriate, reforested with species found in natural ecosystems. Stands will not have a targeted rotation age. Infrastructure will primarily be located in disturbed areas and will be the minimum required for management and public access. The FFS will promote environmental education.

Revenue-generating potential The FFS will sell timber as needed to improve or maintain desirable ecosystem conditions. These sales will provide a variable source of revenue, but the

Longleaf Pine Ecosystem



Longleaf Pine Ecosystem

revenue-generating potential for these tracts is expected to be low.

Cooperators in management activities The FFS will cooperate with and seek the assistance of other state agencies, local government entities and interested

Bell Ridge:

Management Policy

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

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

Management Prospectus

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

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

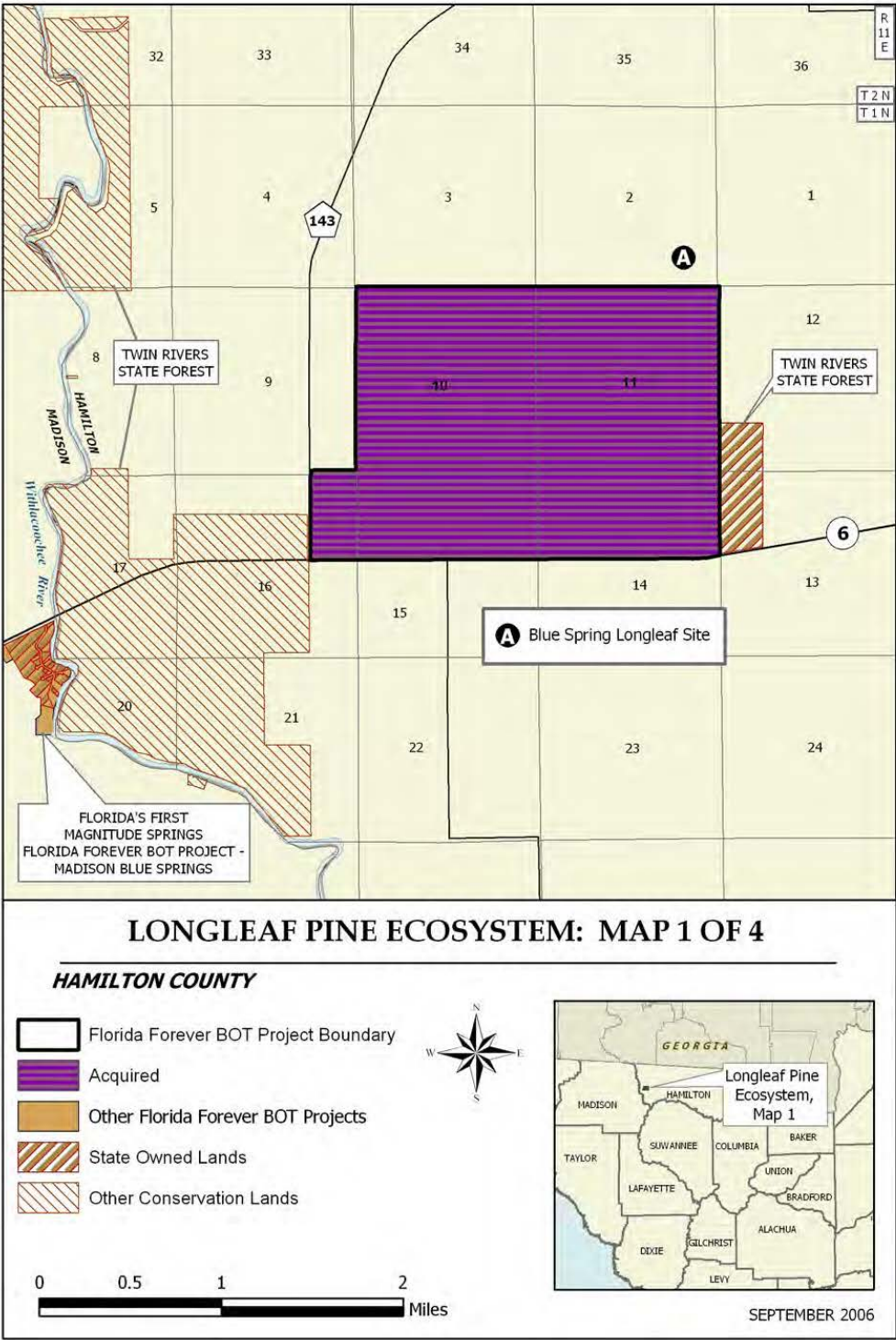
Qualifications for State Designation The major community represented on this project is sandhill. The project's size and diversity makes it desirable for use and management as a State Forest. Management by the FFS as a State Forest is contingent upon the state acquiring fee simple title to the entire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

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

Timetable for Implementing Management

Once the core area is acquired and assigned to the DOF, public access will be provided for low intensity outdoor recreation activities. The FFS proposes to manage the site as a new unit of the State Forest system, and the Waccasassa Forestry Center personnel will carry out initial management activities and coordinate public access and use. The FFS will cooperate with and seek the assistance of other state agencies, local government entities and interested parties as appropriate. Initial and intermediate management efforts will concentrate on site security, public and fire

Longleaf Pine Ecosystem



Longleaf Pine Ecosystem

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

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

Timber management activities will primarily consist of improvement thinning and regeneration harvests aimed at maintaining and perpetuating forest ecosystems. Stands will not have a targeted rotation age but will be managed to maintain a broad diversity of age classes ranging from young stands to areas with old growth characteristics. This will provide habitat for the full spectrum of species that would be found in the natural environment and enhance and maintain biodiversity. The resource inventory will be used to identify sensitive areas that need special attention, protection or management, and to locate areas that are appropriate for

any recreational or administrative facilities. Recreation and administrative infrastructure development will primarily be located in already disturbed areas and will be the absolute minimum required to allow public access for the uses mentioned above, to provide facilities to accommodate public use, and to administer and manage the property.

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

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

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

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

Revenue Generating Potential As mentioned above, timber sales will be conducted as needed to improve or maintain desirable ecosystem conditions. These sales will primarily take place in upland pine stands and will provide a variable source of revenue dependent upon a variety of factors. Due to the existing condition of the timber resource on the property, revenue generating potential of this project is expected to be medium.

Capital Project Expenditures Capital project expenditures will be needed on this parcel as listed below. They include relocation of the Trenton Work Center to this site to provide site management, security and public service. The existing Trenton Work Center is currently leased from the private sector and this lease

Longleaf Pine Ecosystem

is due to expire in 2005. It is not anticipated that the lease will be renewed. The existing house and barn on the property can be used for these facilities so that the expense associated with it can be reduced, although, they will require renovation. Reinforcing the fencing in the areas of residential development will be necessary to clearly establish the boundary with resources that cannot be easily burned or altered. It is anticipated that some of the existing roads will be used as multi-use trails for hiking, horse back riding and off road biking. As such, visitor services in the disturbed area will be

provided.

Management costs and sources of revenue It is anticipated that management funding will come from the CARL trust fund. Budget needs for interim management are estimated as follows:

Longleaf Pine Ecosystem: Management Cost Summary/FFS

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

Management Cost Summary/FFS (Deland Ridge)

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

Updated 2/23/2012

Florida's First Magnitude Springs

Walton, Washington, Bay, Jackson, Wakulla, Leon, Hamilton, Madison, Suwannee, Lafayette, Levy, Marion and Hernando Counties

Partnerships

Purpose for State Acquisition

Large springs of clear, continuously flowing water are among Florida's most famous and important natural and recreational resources. The cavernous, water-filled rocks of the Floridan Aquifer supply the largest springs. By preserving land around springs, this project will aid in the protection of springs, karst windows, and the Floridan Aquifer from the effects of commercial, residential, and agricultural runoff; clearcutting and mining; and unsupervised recreation. This project will ensure that Floridians and visitors from all over the world will be able to enjoy Florida springs for years to come.

Managers

Fish & Wildlife Conservation Commission (FWC) (Weeki Wachee Springs excluding the springhead, which is part of the Chassahowitzka Wildlife Management Area); Jackson County (Jackson Blue Springs); U.S. Forest Service (River Sink Springs); Division of Recreation & Parks (DRP) (St. Marks, Fannin, Troy, Gainer Springs, & Madison County Blue Springs); Walton County (Morrison Springs); Leon County (Church Sink); Marion County (Silver Springs); Department of Agriculture and Consumer Service's Florida Forest Service/FFS (formerly Division of Forestry/DOF) (Hardee Springs); Office of Greenways & Trails (OGT) (Fanning Springs); Northwest Florida Water Management

District (NFWFMD) (Gainer Springs); Suwannee River Water Management District (SRWMD) (Fanning Springs, Falmouth Springs); and Lafayette County (Lafayette Blue Springs).

General Description

Because of the thick, water-filled limestone underlying it, Florida has more large springs (including river rises and karst windows) than any other state or even country. Those discharging an average of 100 cubic feet of water per second or more are called first-magnitude springs. The 33 recognized springs in Florida are scattered in the northern peninsula and the eastern panhandle where the limestones of the Floridan Aquifer arch close to the surface. Each day, these 33 springs send out much more water than is used for drinking water by all the people in the state. The springs, with generally clear, continuously flowing waters, are among Florida's most important natural resources and some are famous tourist attractions. The tracts harbor at least seven FNAI-listed plants and eighteen FNAI-listed animals. The Weeki Wachee tract includes one of the best remaining scrubs on Florida's West Coast. Several archaeological or historic sites are known from these springs, from remains over 2000 years old to an historic Sinclair gas station. All these springs are vulnerable to development and unsupervised use.

Public Use

The project sites are designated for use as state parks,

Florida's First Magnitude Springs FNAI Elements	
Manatee	G2/S2
Florida Scrub-jay	G2/S2
Florida Black Bear	G5T2/S2
Gopher Tortoise	G3/S3
<i>Marianna Columbine</i>	G5T1Q/S1
Withlacoochee Tiny Sand-loving Scarab	G1/S1
Woodville Karst Cave Crayfish	G1/S1
Coastal Lowland Cave Crayfish	G1G2/S1S2
Gulf Moccasinshell	G2/S1
Oval Pigtoe	G2/S1S2
<i>Ashe's Magnolia</i>	G2/S2
<i>Sand Butterfly Pea</i>	G2Q/S2
43 rare species are associated with the project	

Placed on List	1991
Project Area (Acres)	14,175
Acres Acquired (GIS)	8,404*
at a Cost of	\$104,192,527*
Acres Remaining (GIS)	5,771
with Estimated (Tax Assessed) Value of \$13,133,020	
* Includes acreage acquired and funds spent by the SRWMD and a 130-acre donation on the Weeki Wachee Springs site.	

Florida's First Magnitude Springs

geological sites and wildlife and environmental areas, with high recreational potential for swimming, canoeing, camping and nature appreciation.

Acquisition Planning

On 12/7/1990, the Land Acquisition Advisory Council (LAAC) added the Florida's First Magnitude Springs – Phase I project to the CARL Priority list. This fee-simple acquisition, sponsored by the Department of Environmental Regulations, consisted of approximately 2,907 acres, 36 landowners, 136 parcels, and a taxable value (tav) of \$5,718,493. In 1990, five springs make up the project: Falmouth Spring (Suwannee County, 75 acres, 1 parcel, 1 landowner, tav \$45,000), Fannin Springs (Levy County, 525 acres, 98 parcels, 17 landowners, tav \$1,187,610), Gainer Springs (Bay County, 1,258 acres, 19 parcels, 7 landowners, tav \$3,256,739), River Sink Spring (Wakulla County, 105 acres, 4 parcels, 4 landowners, tav \$64,956), and St. Marks Springs (Leon County, 890 acres, 19 parcels, 6 landowners, tav \$1,164,188). According to the 1990 Project Design document, the DRP will manage St. Marks Springs. The US Forest Service will manage River Sink Spring. The OGT, DRP, and SRWMD will manage Fannin Springs. A lead manager has not been determined for Falmouth Springs. The lead manager is still unclear for Gainer Springs; however, the NFWMD and Bay County both expressed interest. A portion of the Fannin Springs sites have been acquired. The NFWMD has acquired 214 acres of the Gainer Springs sites.

On 6/28/1991, the LAAC approved a 218-acre addition to the Falmouth Springs site, located in Suwannee County, within the project boundary. It was sponsored by the landowner, Nemours Foundation, who already has acreage within the current boundary and is not willing to sell only a portion of the tract. The taxable value of the addition is \$129,600. SRWMD will manage if acquired.

On 12/10/1992, the LAAC approved Phase II that added three springs, 1,880 acres with a taxable value of \$5,180,452. This addition consisted of Jackson Blue Springs (Jackson County, 348 acres, 3 parcels, 2 landowners, tav \$256,556); Troy Spring (Lafayette County, 265 acres, 6 parcels, 2 landowners, tav \$261,897); and Weeki Wachee Springs (Hernando County, 1,267 acres, 59 parcels, 24 landowners, tav \$4,661,999). The FWC will manage the Weeki Wachee Springs sites. The DRP will manage the Troy Spring site. Jackson County will manage the Jackson Blue

Springs sites. Portions of Troy Spring, Weeki Wachee Springs, & Jackson Blue Springs sites have been acquired. On December 10, 1992, the LAAC also approved a fee-simple, 1,635-acre addition (Gainer Springs Expansion) and combined it with the Gainer Springs site. The majority of the addition is owned by Hunt Petroleum/Rosewood Timber Co. and St. Joe Paper. There are also several small ownerships. The estimated taxable value is \$3,000,000. Phase I was combined with the new Florida's First Magnitude Springs Phase II. The springs are located in Bay & Washington counties. The NFWMD will manage the 214-acre Harder tract that it acquired.

On 10/30/1995, the LAAC approved a fee-simple, 20-acre addition (Jackson Blue Springs) to the project boundary in Jackson County. It was sponsored by the two landowners, Carolyn D. Huff and Wayne Mixon, located along Spring Run of Merritts Mill Pond in Jackson County, and has a taxable value of \$258,790. Jackson County will manage. Both properties were acquired in 1997.

On 12/3/1998, the Land Acquisition Management Advisory Council (LAMAC) transferred the St. Marks Springs, River Sink Spring, Fannin Springs, and Gainer Springs sites to the Negotiation Impasse group.

On 7/29/1999, the LAMAC approved a fee-simple, 65-acre addition (Madison Blue Springs) in Madison County to the project boundary. It was sponsored by the landowners' representative, contains 45 parcels, 22 landowners, and a taxable value of \$604,000. The addition was designated as essential and added to the Priority portion of the project. Madison County will manage. Approximately 44 acres have been acquired.

On 8/22/2000, the ARC approved a fee-simple, 40-acre addition (Cypress Spring) in Washington County to the project boundary. The addition was sponsored by Conservation Properties for the landowner, Harold Vickers, and had a taxable value of \$131,400. Mr. Vickers was willing manage if acquired; however property was sold to a third party in 2002.

On 4/18/2003, the ARC approved a fee-simple, 200-acre addition (Morrison Springs) in Walton County to the project boundary with a taxable value of \$63,880. The addition was sponsored by Conservation Properties, Inc. and Walton County will manage the site. On 4/18/2003, the ARC approved a fee-simple, 4,552-acre addition (Silver Springs Addition) north of Silver

Florida's First Magnitude Springs

Springs in Marion County to the project boundary. The addition was sponsored by the Silver Springs Basin Working Group, consisted of one landowner, Avatar Properties Inc., and had a taxable value of \$3,406,945. The FFS will manage if acquired. On 8/15/2003, the ARC approved a fee-simple, 172-acre addition (Lafayette Blue Springs) in Lafayette County to the project boundary. The addition was sponsored by Conservation Properties, consisted of one landowner, Union Land & Timber Corp., 9 parcels, and a taxable value of \$97,000. Lafayette County will manage if acquired. On 10/17/2003, the ARC approved a fee-simple, 365-acre addition (Silver Springs Addition No. 2) in Marion County to the project boundary. The addition was sponsored by the Silver Springs Basin Working Group and the Marion County Audubon, Inc., consisted of one landowner, Seldin, 2 parcels, and a taxable value of \$2,889,223. Marion County will manage the site. In 2005, 330 acres were acquired. On 12/5/2003, the ARC approved a fee-simple, 1,717-acre addition (Jackson Blue Springs) in Jackson County to the project boundary. The addition, sponsored by Conservation Properties, consisted of 11 parcels, 5 landowners (Edinburgh Investment Corp; AJ Green; Howard Muncaster Partnership; LH Alford Farms Inc.; Doyle Green), and a taxable value of \$303,367. Jackson County will manage if acquired.

On 10/15/2004, the ARC approved a fee-simple, 5-acre addition (Church Sink) in Leon County to the project boundary. The addition was sponsored by the landowner, J. Lee Vause Trust, consisted of one parcel, and a taxable value of \$47,700. Leon County will manage if acquired.

On 10/13/2006, the ARC approved a fee-simple 305-acre addition (Hardee Spring) to the boundary in Hamilton County. The addition was sponsored by Harold Hardee, consisted of one parcel with a taxable value of \$57,001. The FFS will manage the site as part of the Twin Rivers Forest if acquired. In 2004, 159 acres were acquired.

In 7/2007, the BOT acquired 4,471 acres of the Avatar property in Marion County.

On 2/25/2009, the BOT acquired 54.74 acres from the Rakestraw family in the St. Marks Site.

On 1/6/2010, FFS purchased approximately 1 acre for

\$16,065 from Kaiser/TNC in the Indian Lake State Forest. On 5/11/2010, FFS purchased 0.12 of an acre for \$2,550. FFS will manage both purchases. In 7/2010 FFS purchased two parcels (.23 for \$5,100 and .12 for \$2,800) and will manage both. In 10/2010 FFS purchased 5 parcels (Silver spring Addition--Bloom, Dinkins, Dupras, Hanson, Szymialis ownerships) totalling 1/2 acre for a combined \$10,200 and will manage all. In 11/2010 FFS purchased and will manage 2 parcels (Silver Spring Addition--Stovall, Landry) or .29 acre for \$6,375.

On 5/2/2011, FFS purchased and will manage .23 acre (Jean & Giselle Raymond-\$12,000). On 8/3/2011, the Felburn Foundation donated 2.42 acres in Silver Springs (valued at \$100,000) for FFS to manage. On 9/16/2011, DRP purchased to manage 55.73 acres (Gerrell Plantation, Inc.-\$457,000), as an addition to Natural Bridge Historic State Park. On 11/15/2011, FFS purchased to manage .23 acres in Indian Lake State Forest (Potter-\$5,100).

Coordination

Hernando County has limited acquisition funds, but is very supportive of state acquisition efforts. The NFWFMD has acquired the 214-acre Harder tract in Gainer Springs.

Management Policy Statement

The primary goals of management of the Florida's First Magnitude Springs project are to preserve land around springs, karst windows, and springs to aid in the protection of the Floridan Aquifer from the effects of commercial, residential, and agricultural runoff; clearcutting and mining; and unsupervised recreation.

Management Prospectus

Qualifications for state designation Blue Spring has the diversity of resources and recreational opportunities to qualify as a state park. The location of the Weeki Wachee project adjacent to the Chassahowitzka Wildlife Management Area (WEA), as well as its sensitive natural resources, qualifies it as a WEA. River Sink spring is a first-magnitude karst window. This qualifies it as a state geological site. St. Marks, Fanning, Troy, Falmouth, and Gainer Springs have the diversity of resources and recreational opportunities to qualify as a state park.

Manager FWC (Weeki Wachee Springs excluding the

Florida's First Magnitude Springs

springhead, which is part of the Chassahowitzka WMA; Jackson County (Jackson Blue Springs); U.S. Forest Service (River Sink Springs); DRP (St. Marks, Fannin, Troy, Gainer Springs, and Madison County Blue Springs); Walton County (Morrison Springs); Leon County (Church Sink); Marion County (Silver Springs); FFS (Hardee Springs); OGT (Fanning Springs); NW-FWMD (Gainer Springs); SRWMD (Fannin Springs, Falmouth Springs); and Lafayette County (Lafayette Blue Springs).

Conditions affecting intensity of management River Sink and Blue Spring are moderate-need tracts, requiring more than basic resource management and protection. River Sink is a moderate-need tract, requiring more than basic resource management and protection. Gainer Springs is a high-need management area including public recreational use and development compatible with resource management.

Timetable for implementing management and provisions for security and protection of infrastructure Jackson County Blue Spring is now being used by the public and Jackson County has no plans to curtail activities. The County would continue to open the swim area in season and maintain year-round access for boating, fishing, and nature appreciation. The smaller second spring may need restrictions to ensure public safety and preservation of the limestone bluffs. A lifeguard will be on duty while the swim area is open. Access will be controlled primarily by fences. River Sink would immediately fall under the National Forests in Florida's Land and Resource Management Plan (Forest Plan). Within the first few years after acquisition, management activities would focus on site security, resource

inventory, removal of existing trash, and any necessary prescribed fire management. In the first year after Gainer Springs is acquired, the Division of Recreation and Parks will concentrate on site security, natural and cultural resource protection, and the development of a plan for long-term public use and resource management. **Revenue-generating potential** The Blue Springs swim area generated \$21,946 in revenue in fiscal year 1992-93 and \$13,045 in fiscal year 1993-94. DRP expects Gainer Springs to generate no significant revenue initially. The amount of any revenue generated would depend on the nature and extent of public use and facilities. As facilities are developed, River Sink may become a national recreational fee area. Fees collected from use of this area would be activities of the Federal Government. It is estimated that the area will receive more than 5,000 visits annually once it is developed.

Cooperators in management activities Jackson County expects the FWC to cooperate in managing wildlife on the Blue Springs project area. Other appropriate agencies may wish to become involved in the project. As funds become available and subject to public approval, the USDA Forest Service may enter into a cooperative agreement to manage the property.

Updated 4/12/2012

Management Cost Summary Data

USFS - River Sink Springs: No additional funds are expected from the Forest Service. Each district ranger office will manage with its existing staff.

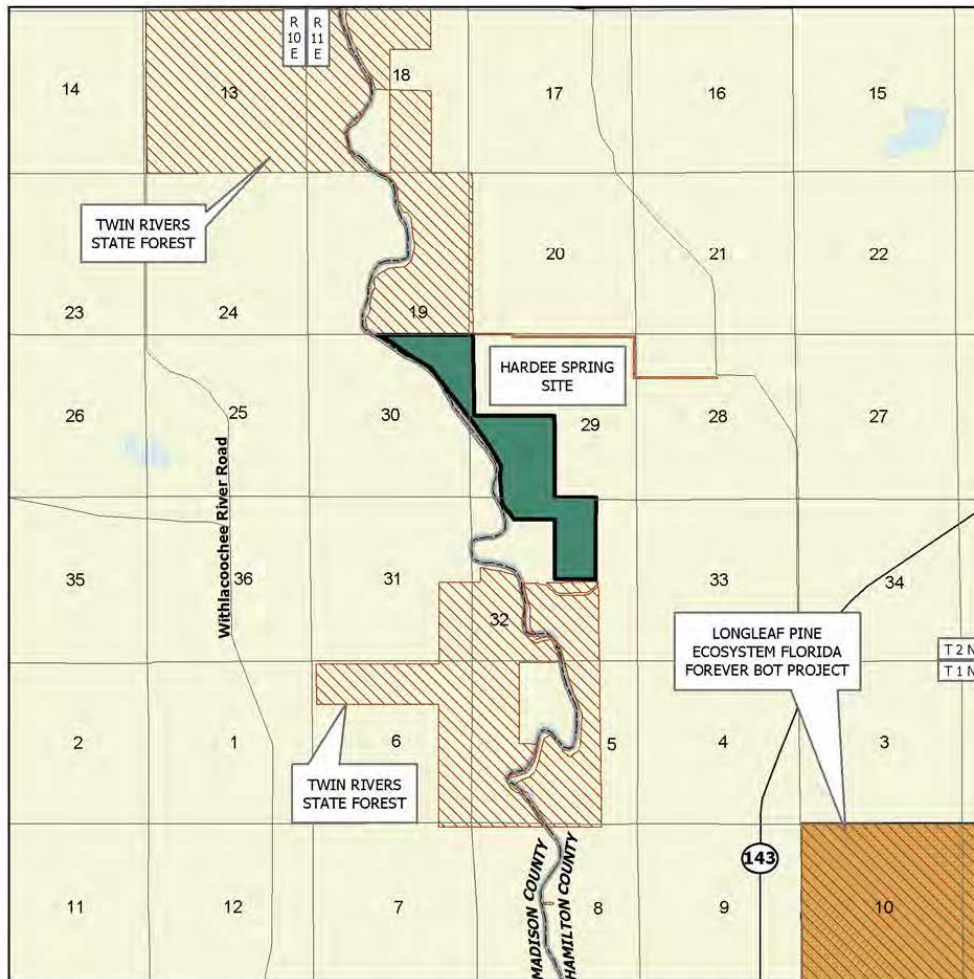
DRP—St. Marks

Category Source of Funds	Startup Federal	Recurring Federal	Startup CARL	Recurring CARL
Salary	\$0	\$5,000	\$22,167	\$22,167
OPS	\$0	\$0	\$7,280	\$7,280
Expense	\$3,000	\$5,000	\$5,424	\$5,424
OCO	\$0	\$0	\$6,978	\$6,978
FCO	\$0	\$0	\$0	\$0
TOTAL	\$3,000	\$10,000	\$41,849	\$41,849

Florida's First Magnitude Springs



Florida's First Magnitude Springs



FLORIDA'S FIRST MAGNITUDE SPRINGS: MAP 8 OF 15

HAMILTON COUNTY

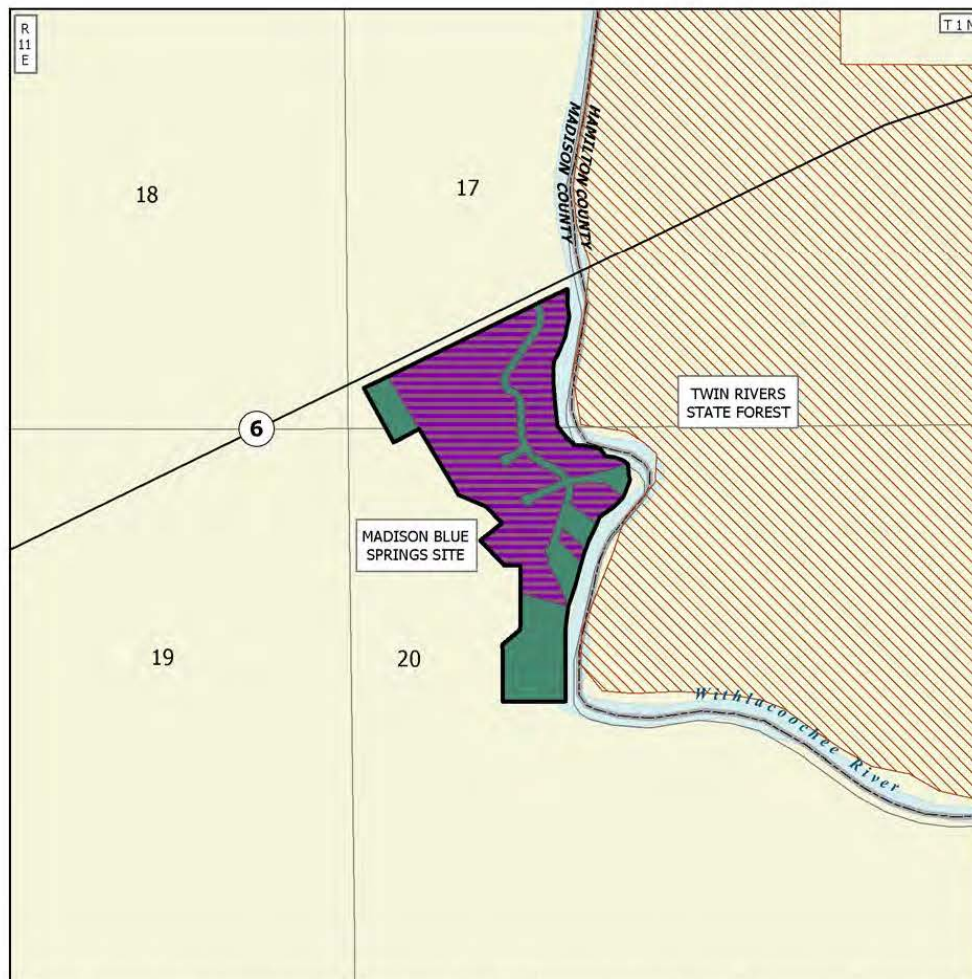
-  Florida Forever BOT Project Boundary
-  Essential Parcel(s) Remaining
-  Other Florida Forever BOT Projects
-  Other Conservation Lands

0 0.75 1.5
Miles



OCTOBER 2006

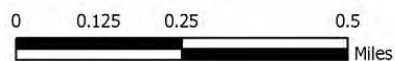
Florida's First Magnitude Springs



FLORIDA'S FIRST MAGNITUDE SPRINGS: MAP 9 OF 15

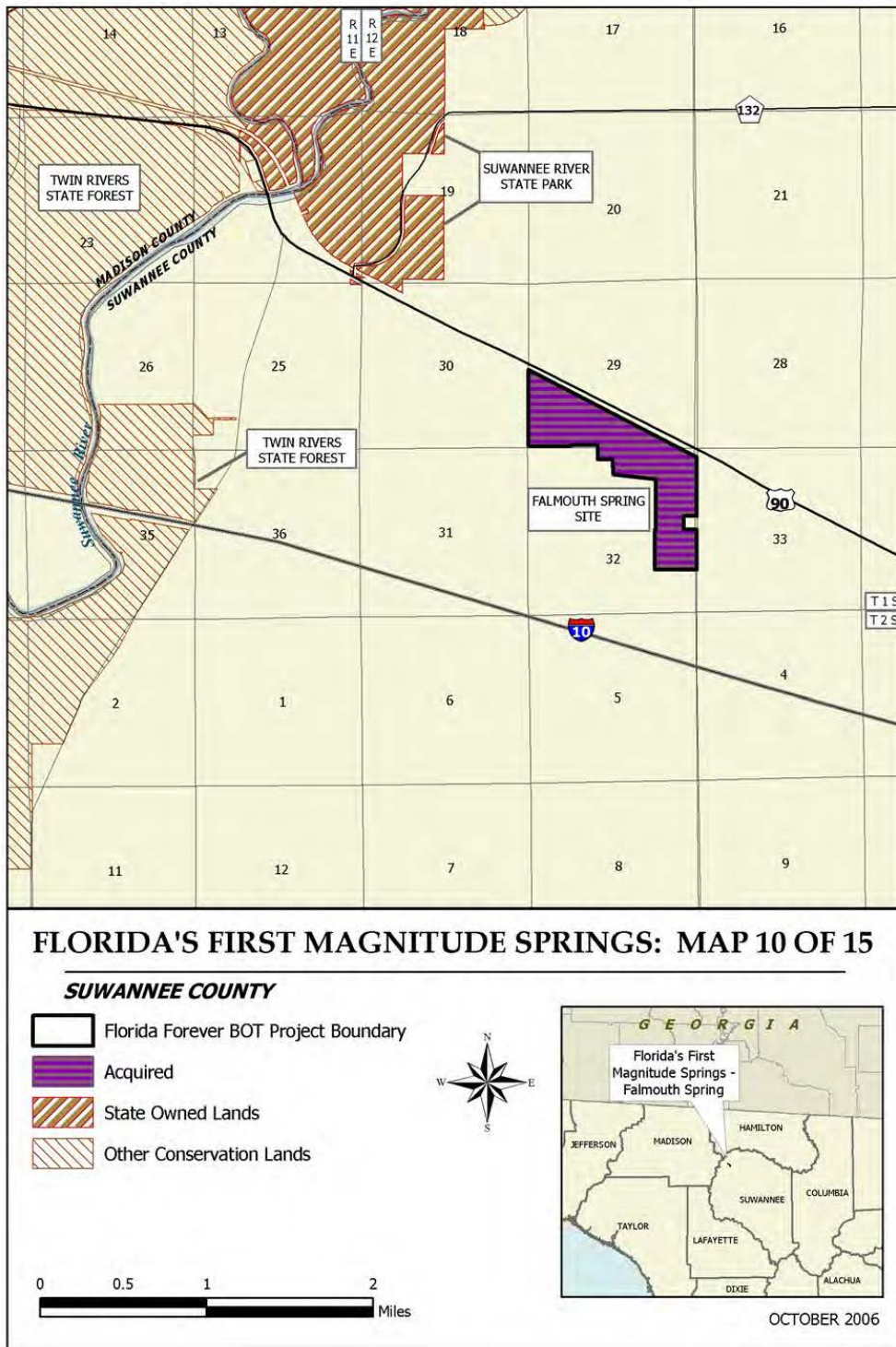
MADISON COUNTY

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



OCTOBER 2006

Florida's First Magnitude Springs



Florida's First Magnitude Springs

Management Cost Summary

OGT—Fanning Springs

Category	1996/97	1997/98	1998/99
Source of Funds	LATF, CFBCTF, GR	GR	GR
Salary	\$0	\$0	\$68,593
OPS	\$73,699	\$55,000	\$65,000
Expense	\$17,720	\$10,000	\$229,155
OCO	\$0	\$0	\$49,414
FCO	\$0	\$0	\$430,000
TOTAL	\$90,820	\$65,000	\$77,162

Jackson County - Blue Spring

Category	Startup	Recurring
Source of Funds	County	County
Salary	\$20,000	\$20,000
OPS	\$60,000	\$25,000
Expense	\$25,000	\$15,000
OCO	\$30,000	\$30,000
FCO	\$50,000	\$10,000
TOTAL	\$185,000	\$100,000

FWC - Weeki Wachee Spring

Category	Start Up	1995/96
Source of Funds	CARL	CARL
Salary	\$0	\$0
OPS	\$3,000	\$3,000
Expense	\$10,000	\$10,000
OCO	\$0	\$0
FCO	\$0	\$0
TOTAL	\$13,000	\$13,000



OGT - Troy Spring

Category	1996/97	1997/98	1998/99
Source of Funds	LATF, CFBCTF	None	GR
Salary	\$0	\$0	\$0
OPS	\$14,027	\$0	\$30,000
Expense	\$2,445	\$0	\$35,000
OCO	\$0	\$0	\$44,000
FCO	\$0	\$0**	\$220,000
TOTAL	\$16,472*	\$17,928***	\$329,000

*No appropriation was received for FY 1995/96, as such funds were taken from other projects to fund Troy Springs.

**No appropriation was received for FY 1996/97.

***This is the projected amount to be spent in 1996/97.

Estimated startup and recurring costs have not been developed by Hernando County.

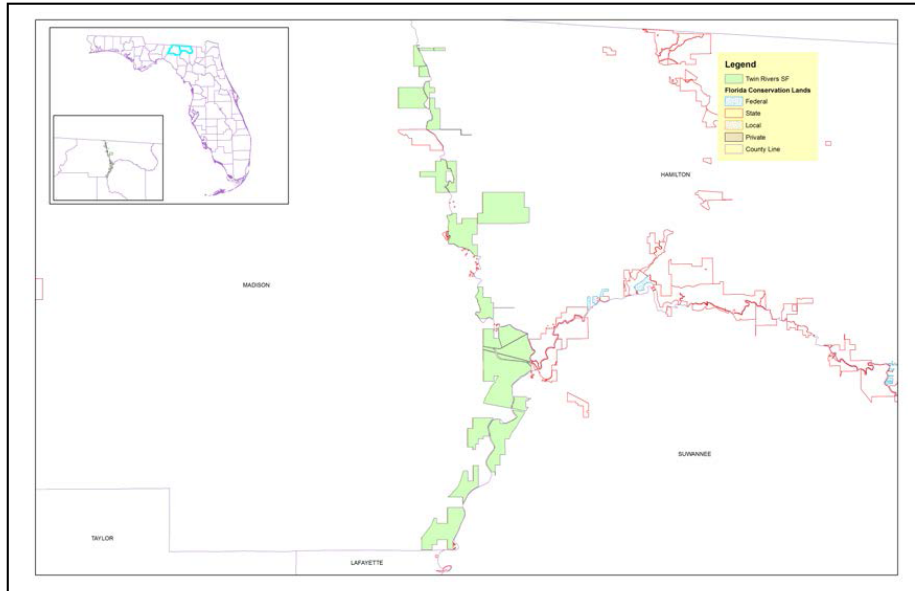
Exhibit U

Land Management Reviews

Name of Site: Blue Springs Longleaf Pine Tract – Twin Rivers SF **County:** Hamilton

Managed by: Department of Agriculture and Consumer Services **Acres:** 14,882
Florida Forest Service **Area Reviewed:** 2,080 acres

Review Date: 12/13/11 **Management Plan Approval Date:** 12/13/06



Review Team Determination

Managed in accordance with
Acquisition purpose? Yes =6, No =0



Management practices, including public access,
in compliance with the management plan? Yes =6 No =0



Categories	Management Plan Review	Field Review
Natural Communities	0.69	4.89
Listed Species	0.25	3.42
Natural Resource Survey	0.66	4.21
Cultural Resources	1.00	4.08
Prescribed Fire	1.00	5.00
Restoration	0.75	4.27
Exotic Species	0.87	4.35
Hydrology	N/A	N/A
Groundwater Monitoring	N/A	N/A
Surface Water Monitoring	N/A	N/A
Resource Protection	1.00	4.46
Adjacent Property Concerns	0.94	5.00
Public Access & Education	0.98	4.17
Management Resources	N/A	N/A
Managed Area Uses	1.00	N/A
Buildings, Equipment, Staff & Funding	N/A	3.38

Consensus Commendations to the Managing Agency

The following commendations resulted from discussion and vote of the review team members.

1. The team commends the FFS staff for their excellent and proactive burning program that incorporates two year rotations and growing season burns. (VOTE: 6+, 0-)

★★★★★★

2. The team commends the staff for their efforts to utilize natural regeneration of longleaf pine, and recommends documentation of the efficacy of various strategies. (VOTE: 6+, 0-)

★★★★★★

3. The team commends the staff for their consistent treatments of invasive exotic plants. (VOTE: 6+, 0-)

★★★★★★

4. The team commends the FFS staff on their quail habitat management and their quail hunting quotas based on population data. (VOTE: 6+, 0-)

★★★★★★

5. The team commends the FFS staff for their excellent cooperation with FWC personnel. (VOTE: 6+, 0-)

★★★★★★

6. The team commends the FFS staff for the continued efforts to maintain a high quality upland pine community. (VOTE: 6+, 0-)

★★★★★★

Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The management plan must include responses to the recommendations identified below.

1. The team recommends that FFS develop and implement guidelines for internal use to prevent the introduction and spread of invasive exotic plants. (VOTE: 6+, 0-)

★★★★★★

Managing Agency Response: FFS will utilize existing Department policies and procedures as well as the guidelines within the State Forest Handbook. Also, a workshop will be conducted at the local field office in Live Oak for the Rangers and Senior Rangers to be able to better recognize and identify the more prevalent invasive/exotic plant species that occur in the North Florida area.

Guidelines are already in place for private contractors doing work on the State Forests, as the manager may insert language in the contract to accommodate for spraying of equipment prior to ingress and other protocols as appropriate to prevent the introduction and spread of invasive exotic plants.

2. The team recommends that the FFS assess the most appropriate strategies for long-term management approach to maintaining an old growth, uneven aged upland pine forest with desired stand characteristics that encompass the full age spectrum of age classes. (VOTE: 6+, 0-)

★★★★★★

Managing Agency Response: Prior to harvesting in any of the intact longleaf pine forest, FFS staff consider the various silvicultural methodologies as shelterwood with retention, modified group selection, small gap creation and other techniques that mimic natural disturbance patterns to successfully establish and maintain an uneven-aged stand structure. Specific silvicultural method(s) for harvesting/thinning specific stands are not typically addressed in the ten-year management plan. Barring the need for a salvage harvest, no thinning is anticipated here until merchantable pine basal area reaches a minimum of 65 to 75 square feet per acre, as outlined in the State Forest Handbook.

Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

- Natural Communities, regarding upland pine forest, sinkhole and pond.
- Listed Species, regarding animal inventory.
- Natural Resources Survey/Management Resources, regarding listed species or habitat monitoring, other non-game species or habitat monitoring, fire effects monitoring, other habitat management effects monitoring and invasive species survey/monitoring.
- Cultural Resources, regarding cultural resource survey and protection and preservation.
- Resource Management, Prescribed Fire, regarding area being burned (no. acres), frequency and quality.
- Restoration of Ruderal Areas, regarding former slash pine plantation longleaf pine.
- Forest Management, regarding timber inventory, timber harvesting, reforestation/afforestation and site preparation.
- Non-Native, Invasive & Problem Species, regarding prevention of plants, animals and pests/pathogens.
- Control, regarding plants and pest/pathogens.
- Resource Protection, regarding boundary survey, gates and fencing, signage and law enforcement presence.
- Adjacent property concerns, regarding inholdings/additions.
- Public Access & Education, regarding roads and parking.
- Environmental Education & Outreach regarding wildlife, invasive species, habitat management activities, interpretive facilities and signs, recreational opportunities and management of visitor impacts.
- Maintenance & Infrastructure, regarding buildings, equipment and staffing.

Items Requiring Improvement Actions in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than .5 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

1. Management of natural communities, specifically pond, with documentation in the management plan.

Managing Agency Response: The current plan lists three natural community types on the tract. These are upland pine, upland hardwood forest, and sinkhole communities. The pond is not listed as a natural community, because it appears to be a man made pond. Being that it does not appear to be natural, it should be addressed in the water resources bullet under Renewable and Non-renewable resources in the Resource section.

2. Increased protection of listed species, specifically animal and plant inventory, with documentation in the management plan.

Managing Agency Response: Goal 1 in the ten-year management plan for the current period was to restore, maintain and protect all native ecosystems; including the health and diversity of native biological communities (flora & fauna) associated with these natural areas. The primary performance measures for this goal have been completed. Goal 2 for the plan period was to ensure long-term viability of populations and native species considered rare, endangered, threatened or of special concern. The performance measure was to have a survey completed. At this time, a gopher tortoise survey of the entire property has been completed in the plan period. A copy of the results of this survey is available at the FFS office in Live Oak. A plant survey would be the next step and will be completed as resources allow (see #3 below for

comments on "monitoring"). The data collected and results from such surveys and ongoing monitoring activities will be documented in some detail in the next ten-year management plan.

3. Natural resources survey/management resources, more specifically listed species or habitat monitoring and other habitat management effects monitoring, with documentation in the management plan.

Managing Agency Response: FFS staff have made contacts with FNAI, Florida Native Plant Society, and our FFS Conservation Plant Biologist, who, will coordinate the fieldwork to develop a better baseline floristic survey. This will be completed as continued interest, budgets, volunteer efforts allow. FFS will also investigate appropriate habitat monitoring opportunities, including photoplots, vegetative structure measurements related to fire response, etc. The next management plan update will provide greater information on these monitoring activities and the data collected.

4. Managed Area Uses, proposed uses, more sheltered pavilion, with documentation in the management plan.

Managing Agency Response: The current plan addresses the construction of a sheltered picnic pavilion and short looped nature trail at the parking area. This was planned to have an area that school groups could utilize on field trips for forest education. Since the writing of the plan, state forest and school budgets have been reduced. These budget reductions along with the remote location of the tract have eliminated the need for the pavilion.

PLAN REVIEW		1	2	3	4	5	6	AVERAGE
Natural Communities (I.A)								
Upland Pine Forest	I.A.1	1	1	1	1	1	0	0.83
Sinkhole	I.A.3	1	1	1	1	1	1	1.00
Pond	I.A.4	0	0			1	0	0.25
Listed species:Protection & Preservation (I.B)								
Animal Inventory	I.B.1	0	0	0	1	1	0	0.33
Plant Inventory	I.B.2	0	0	0	1	0	0	0.17
Natural Resources Survey/Management Resources (I.C)								
Listed species or habitat monitoring	I.C.2	0	0	0	1	1	0	0.33
Other non-game species or habitat monitoring	I.C.3	0	0	0	1	1	0	0.33
Fire effects monitoring	I.C.4	1	1	1	1	1	1	1.00
Other habitat management effects monitoring	I.C.5	1		0	1	1	1	0.80
Invasive species survey / monitoring	I.C.6	1	1	1	1	1	0	0.83
Cultural Resources (Archeological & Historic sites) (II.A,II.B)								
Cultural Res. Survey	II.A	1	1	1	1	1	1	1.00
Protection and preservation	II.B	1	1	1	1	1	1	1.00
Resource Management, Prescribed Fire (III.A)								
Area Being Burned (no. acres)	III.A.1	1	1	1	1	1	1	1.00
Frequency	III.A.2	1	1	1	1	1	1	1.00
Quality	III.A.3	1	1	1	1	1	1	1.00
Restoration of Ruderal Areas (III.B)								
Former Slash Pine Plantation → Longleaf Pine	III.B.1	0	1	1	1	1	1	0.83
Former Ag Field → Longleaf	III.B.2	0	1	1	1	1	0	0.67
Forest Management (III.C)								
Timber Inventory	III.C.1	1	1	1	1	1	1	1.00

Timber Harvesting	III.C.2	0	1	1	1	0	1	0.67
Reforestation/Afforestation	III.C.3	0	1	1	1	1	0	0.67
Site Preparation	III.C.4	0	1	1	1	1	0	0.67
Non-Native, Invasive & Problem Species (III.E)								
Prevention								
prevention - plants	III.E.1.a	0	1	1	1	1	0	0.67
prevention - animals	III.E.1.b	1	1	1	1	1	1	1.00
prevention - pests/pathogens	III.E.1.c		1	1	1	1	1	1.00
Control								
control - plants	III.E.2.a	1	1	1	1	1	0	0.83
control - pest/pathogens	III.E.2.c	1	1	1	1	1	0	0.83
Resource Protection (III.G)								
Boundary survey	III.G.1	1	1	1	1	1	1	1.00
Gates & fencing	III.G.2	1	1	1	1	1	1	1.00
Signage	III.G.3	1	1	1	1	1	1	1.00
Law enforcement presence	III.G.4	1	1	1	1	1	1	1.00
Adjacent Property Concerns (III.H)								
Land Use								
Inholdings/additions	III.H.2	1	1	1	1	1	1	1.00
Discussion of Potential Surplus Land Determination	III.H.3	1	1	1	1	1	1	1.00
Surplus Lands Identified?	III.H.4	1	1	1	1	1	0	0.83
Public Access & Education								
Public Access								
Roads	IV.1.a	1	1	1	1	1	1	1.00
Parking	IV.1.b	1	1	1	1	1	1	1.00
Environmental Education & Outreach								
Wildlife	IV.2.a	1	1	1	1	1	1	1.00
Invasive Species	IV.2.b	1	1	1	1	1	1	1.00
Habitat Management Activities	IV.2.c	1	1	1	1	1	1	1.00
Interpretive facilities and signs	IV.3	1	1	1	1	1	1	1.00
Recreational Opportunities	IV.4	1	1	1	1	1	1	1.00
Management of Visitor Impacts	IV.5	1	1	1	1	1	0	0.83
Managed Area Uses								
Existing Uses								
Multiple Use Trails	VI.A.1	1	1	1	1	1	1	1.00
Picnicking	VI.A.2	1	1	1	1	1	1	1.00
Silviculture	VI.A.3	1	1	1	1	1	1	1.00
Bird Dog Training	VI.A.4	1	1	1	1	1	1	1.00
Wildlife Observations	VI.A.5	1	1	1	1	1	1	1.00
Hunting	VI.A.6	1	1	1	1	1	1	1.00
Proposed Uses								
Sheltered Pavilion	VI.B.2	0	0	0	0	0	0	0.00

Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 2.5 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

1. The need for management resources maintenance and infrastructure, regarding funding, with documentation in the management plan.

Managing Agency Response: Due to budget constraints for the past several years, additional funding has not been available. The forest staff will continue to identify needed resource management and public access activities in order to submit the appropriate budget requests. However, with available funding being limited, FFS will likely have to continue to manage this property with a tight budget. Focus of existing funding and staffing will be to continue the active burn program and to seek outside support (e.g. FWC) and volunteers to assist with resource monitoring.

FIELD REVIEW		1	2	3	4	5	6	AVERAGE
Natural Communities (I.A)								
Upland Pine Forest	I.A.1	4	5	5	5	5	5	4.83
Sinkhole	I.A.3	5	5	5	5	5	4	4.83
Pond	I.A.4		X			5		5.00
Listed species:Protection & Preservation (I.B)								
Animal Inventory	I.B.1	4	4	4	4	5	3	4.00
Plant Inventory	I.B.2	1	3	3	4	3	3	2.83
Natural Resources Survey/Management Resources (I.C)								
Listed species or habitat monitoring	I.C.2	4	5	3	4	5	3	4.00
Other non-game species or habitat monitoring	I.C.3	4	4	4	4	5		4.20
Fire effects monitoring	I.C.4	4	4	4	4	5	4	4.17
Other habitat management effects monitoring	I.C.5	4		3	4	5	4	4.00
Invasive species survey / monitoring	I.C.6	5	5	3	5	5	5	4.67
Cultural Resources (Archeological & Historic sites) (II.A,II.B)								
Cultural Res. Survey	II.A	3	5	4	2	5	3	3.67
Protection and preservation	II.B	X	X	4	X	5	X	4.50
Resource Management, Prescribed Fire (III.A)								
Area Being Burned (no. acres)	III.A1	5	5	5	5	5	5	5.00
Frequency	III.A.2	5	5	5	5	5	5	5.00
Quality	III.A.3	5	5	5	5	5	5	5.00
Restoration of Ruderal Areas (III.B)								
Former Slash Pine Plantation → Longleaf Pine	III.B.1	4	4	4	4	5	4	4.17
Former Ag Field → Longleaf	III.B.2	4	2	2	4	4	3	3.17
Forest Management (III.C)								
Timber Inventory	III.C.1	5	4	5	4	5	4	4.50
Timber Harvesting	III.C.2	5	4	5	5	5	5	4.83
Reforestation/Afforestation	III.C.3	5	X	4	5	5	4	4.60

Site Preparation	III.C.4	5	4	4	4	5	4	4.33
Non-Native, Invasive & Problem Species (III.E)								
Prevention								
prevention - plants	III.E.1.a	4	4	4	5	4	3	4.00
prevention - animals	III.E.1.b	X	5	4	4	5	4	4.40
prevention - pests/pathogens	III.E.1.c	4	4	4	5	5	5	4.50
Control								
control - plants	III.E.2.a	5	4	4	5	5	4	4.50
control - pest/pathogens	III.E.2.c	5	4	4	4	4	5	4.33
Resource Protection (III.F)								
Boundary survey	III.G.1	5	5	4	5	5	5	4.83
Gates & fencing	III.G.2	5	4	4	4	5	5	4.50
Signage	III.G.3	5	4	4	4	5	5	4.50
Law enforcement presence	III.G.4	5	X	4	3	X	4	4.00
Adjacent Property Concerns (III.G)								
Land Use								
Inholdings/additions	III.H.2	X	X	5	X	5	X	5.00
Public Access & Education								
Public Access								
Roads	IV.1.a	5	4	5	3	3	4	4.00
Parking	IV.1.b	5	4	5	4	5	4	4.50
Environmental Education & Outreach								
Wildlife	IV.2.a	5	3	4	5	4	3	4.00
Invasive Species	IV.2.b	5	4	4	5	4	3	4.17
Habitat Management Activities	IV.2.c	4	4	4	4	4	3	3.83
Interpretive facilities and signs	IV.3	4	4	4	4	5		4.20
Recreational Opportunities	IV.4	5	5	4	4	5	3	4.33
Management of Visitor Impacts	IV.5	5	4	4	4	5	4	4.33
Management Resources								
Maintenance								
Infrastructure								
Buildings	V.2.a	4	4	4	4	5	4	4.17
Equipment	V.2.b	4	4	4	4	4	4	4.00
Staff	V.3	4	3	3	4	5	4	3.83
Funding	V.4	1	1	2	2	1	2	1.50

Florida Forest Service Manager and Key Staff Present:

- Steve Carpenter, Forest Supervisor II
- Matt Bridges, Forester
- Brad Ellis, Forestry Resource Administrator

APPENDIX:

The following comments represent individual comments, and may not represent the consensus of the land management review team.

I.A. Natural Communities

- The upland pine needs to have a variety of age classes of southern red oak, mockernut hickory & other appropriate hardwoods as well as various age classes of longleaf pine. Upland hardwood forest – reassess may not really have this natural community. There may be an additional natural community present on the forest. From west to east the hardwood component changes. On the westside of the forest there is more turkey oak & blue jack, on the east there is southern red oak mockernut & laurel oak. It needs to be determined if these could be sandhill & upland pine rather than just upland pine.
- During mgmt. plan revision revisit natural community MAP – probably do not have upland hardwood forest and some upland pine in NW corner maybe. Sandhill (Turkey Oak – Blue Jack) overall all condition of forest is excellent.
- Re-evaluate plant communities – possible addition of sinkhole lake, elimination of upland hardwood forest.
- Excellent job of burning the upland pine forest. FFS has moved to a goal of a two year burn cycle with majority of the burning in the growing season. Ground cover was diverse and prolific. In the northeastern zones where hardwoods had become too dense, FFS has mowed and burned these acres with good results. It appears that this zone can now be maintained with just prescribed fire. A couple of sites totaling about 150 acres or so were in the distant past planted to slash pine. All of these stands are receiving regular fire, which was improved ground cover quality. One stand has been clear cut in the past and subsequently replanted to longleaf pine. More work is needed to research and identify the small pond community, which is not addressed in the current mgmt. plan.

I.B. Listed Species

- The plan needs lists of actual plants & animals known to be present on the site not just list of species possibly present. It is not known if there are listed plants at Blue Springs. Include FNAI's 1992 plant survey. There is no list of plants occurring in the forest.
- Plan update needs to address listed animal protection and monitoring and listed plant species inventory & monitoring need to be addressed.
- For animal inventory: recommend monitoring by incidental observation for plant inventory: FNAI plant survey should be included in plan & expand effort to identify listed plant species.
- Suggest FFS adopt an incidental observation protocol for listed species to be used by staff. There is currently no plant list for the forest nor does one exist in the plan. Additional effort is needed to find a source of funding or volunteers to conduct a floristic survey.

I.C. Natural Resource Survey/Monitoring Resources

- Excellent cooperation with FWC staff in completing semiannual quail surveys-the data from which is used to establish the “take” for the hunt. Suggest FFS incorporate photo monitoring into the habitat monitoring.

II.A.B. Cultural Resources (Archaeological and Historic Sites)

- Two of the local staff are trained as archaeological site monitors. No FMSF listed sites occur on the forest. DHR does not recommend a survey here as being a very high priority.

III.A. Resource Management

- Excellent Rx Fire Program - fire program is progressively improving.
- Superb efforts to implement and continue a two-year (goal: 1 to 3 yrs.) rotation throughout the property, including a focus on growing season fire. All areas have had at least two burns in the last four years. Great burn program!

III.C. Restoration

- The plan breaks out the types of areas very well but needs to address future restoration actions better.
- The old field recommend not renewing pinestraw contract and restore Rx fire to field. This as soon as marketable.
- Identify “old fields” as former agriculture & “pine plantation” as former or current slash pine.

- More effort is needed to assess long-term restoration goals as it relates to groundcover establishment in old ag fields once pinestraw operation ceases.

III.D. Forest Management

- Plan update needs to address long term strategy for maintaining uneven aged forest with old growth characteristic future harvesting should enhance the forest with carefully managed marking & monitoring.
- Plan should address long term objectives for age distribution of trees & outline a mechanism to achieve these objectives.
- A timber inventory was completed in 2008 on all stands. Excellent work to log out and salvage beetle killed timber with no damage observed from skidders & log trucks. Very adaptive approach to burn these clearcut areas in preparation of natural seed fall from adjacent longleaf pine-rather than await funding for “artificial reforestation?” Seed cache at this point looks very good. These sites will not be burned for several years.

III.E. Non-native, Invasive & Problem Species

- FFS needs to develop preventative measures to clean equipment so that it does not spread exotic plants.
- Continued effort is needed to establish and implement a protocol for cleaning equipment that has worked in area of invasives (eg. cogon grass) before moving to another property. Good efforts to continue treatment of existing cogon grass sites. A recently discovered site has now been treated. Excellent continuing efforts by FFS staff, with support by FWC, to eradicate an extensive population of autumn olive. Continued effort is needed to treat climbing fern in a small sinkhole community. No feral hog activity was observed.

III.F. Resource Protection

- Property boundary along public highways is all well fenced and signed as a “State Forest”.

III.G. Adjacent Property Concerns

- Plan should mention significance of connected public lands to the west.
- Mgt. plan identifies no additional property needs.

IV. Public Access and Education

- Vehicular access policy should be defined & posted – what are the requirements for a special use permit?
- The short educational nature trail was not installed due to distance from schools and low public demand. Public access is walk in, by foot or horse, from a public parking area along SR6. Vehicle access onto the tract is allowed to hunters and to the general public was first secure a use permit from the forest office in Live Oak. This level of public access seems sufficient for this rural, small tract with such unique and pristine habitat.

V. Infrastructure/ Management Resources

- Need a new bushhog & 4 wheeler. Need some additional biological support of inventories etc. The funding to operate the Blue Springs tract needs to be doubled for them to cover their current costs. The staff does an excellent job stretching their current funding.
- Funding to conduct needed plant survey work plus additional funding for land management activities would be helpful.
- Implementation of management plan requires \$12,000/yr. compared to current allocation of about \$5,500/year.
- Additional funding is needed for professional biological/botany support services for plant/animal inventories as well to pay for fuel & transportation costs. Good support coming from FWC staff to assist in burning program and a tremendous support overall in the mgt. of this property.

VI. A. Managed Area Uses

- Quail habitat is outstanding and demand for quota permits has increased greatly in last year.

VI. B. Uses Proposed in the Management Plan

- Blue Springs does not need a sheltered pavilion. This should be removed from the plan. This would most likely cause a garbage problem on the site.
- Seems to be little demand for a picnic pavilion. Such an improvement would require more attention to litter/garbage collection.

**Land Management Review of
Blue Springs Tract/Twin Rivers State Forest
Lease No. 4047
December 13, 2006**

Prepared by Division of State Lands Staff

*Keith Singleton, Land Acquisition & Management Planner
Cindy Morris, Administrative Assistant*

For

Blue Springs Tract/Twin Rivers State Forest Review Team

FINAL

January 3, 2007

Land Manager:	DACS
Area:	2088.44
County:	Hamilton
Mgmt. Plan Revised:	10/15/2004
Mgmt. Plan Due:	10/15/2014

Management Review Team Members

Agency Represented	Team member Appointed	Team member In attendance
DOF	John Barrow	John Barrow
DRP	Anne Barkdoll	Anne Barkdoll
FWC	Jeremy Dixon	Jeremy Dixon
TNC	Mike Wisenbaker	Mike Wisenbaker
Observer (FNAI)	Carolyn Kindell	
DOF	Brad Ellis	
DOF	Steve Carpenter	

Process for Implementing Regional Management Review Teams

Legislative Intent and Guidance:

Chapter 259.036, F. S. was enacted in 1997 to determine whether conservation, preservation, and recreation lands owned by the state Board of Trustees of the Internal Improvement Trust Fund (Board) are being managed properly. It directs the Department of Environmental Protection (DEP) to establish land management review teams to evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions, and archaeological features. The teams also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan. If a land management plan has not been adopted, the review shall consider the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices are in compliance with the management policy statement and management prospectus for that property. If the land management review team determines that reviewed lands are not being managed for the purposes for which they were acquired or in compliance with the adopted land management plan, management policy statement, or management prospectus, DEP shall provide the review findings to the Board, and the managing agency must report to the Board its reasons for managing the lands as it has. A report of the review team findings is given to the managing agency under review, the Acquisition and Restoration Council, and the Governor and Cabinet and made available by site on the web at www.dep.state.fl.us/lands/landmgt/maps/default.htm.

Review Site

The management review team for Blue Springs Tract/Twin Rivers State Forest considered approximately 2088.44 acres in Hamilton County that are managed by the Division of Forestry. The team evaluated the extent to which current management actions are sufficient, whether the land is being managed for the purpose for which it was acquired, and whether actual management practices, including public access, are in compliance with the management plan. The management plan update is due on October 15, 2014.

Review Team Determination

Is the land being managed for the purpose for which it was acquired?

After completing the checklist, team members were asked to answer "yes" or "no" to this question. All team members agreed Blue Springs Tract/Twin Rivers SF is being managed for the purpose for which it was acquired.

Are actual management practices, including public access, in compliance with the management plan?

After completing the checklist, team members were asked to answer "yes" or "no" to this question. All team members agreed Blue Springs Tract/Twin Rivers SF is in compliance with the management plan.

Commendations to the Managing Agency

1. The team commends the manager on the outstanding prescribed fire management of this site. (VOTE 4+, 0-)
2. The team recognizes that the Blue Springs Tract is one of the finest examples of longleaf pine-wiregrass forests in existence. We commend and support DOF's overall goal to maintain this property in its natural, old growth condition. (VOTE: 4+, 0-)
3. The team commends the manager on his aggressive control of Russian olive and cogongrass at this site. (VOTE 4+, 0-)
4. The team commends the manager and DOF on the management of visitor impacts at this site. (VOTE 4+, 0-)
5. The team commends DOF's work toward the removal of off-site pine and the replanting of longleaf in the oldfield areas. (VOTE 4+, 0-)

Exceptional Management Actions

The following items received high scores on the review team checklist (see attachments), which indicates that management actions exceeded expectations.

Exceptional management actions:

- Management of the upland pine forest, upland hardwood forest and sinkhole communities.
- Management and protection of the listed plants and animals.
- Protection and preservation of the cultural resources.
- Area, frequency and quality of the prescribed burns.
- Restoration of the pine plantations and old fields.
- Management of the wildlife habitat.
- Control of invasive animals and plants.
- Gates and fencing, boundary surveys, signage, and law enforcement presence.
- Public access including roads, parking, recreational opportunities and interpretive facilities and signs, environmental education and buildings.

Recommendations and Checklist Findings

The management plan must include responses to the recommendations and checklist items that are identified below.

Recommendations

The following recommendations resulted from a discussion and vote of review team members.

1. The team recommends that DOF consider augmenting groundcover restoration in the oldfield and old plantation sites with direct seeding of site-collected native seed. (VOTE: 4+, 0-)

Manager's Response: This will be considered as a long term goal. In the short term the site will be maintained by prescribed fire and sound timber management and the groundcover will be evaluated in the future to see if direct seeding is necessary.

2. The team recommends that DOF conduct a floristic survey of the property. VOTE: 4+, 0-)

Manager's Response: The Division of Forestry's (Division) philosophy is to manage the entire ecosystem and through restoration and appropriate management the desirable plants and animals will flourish. Much work has been done to identify and monitor populations of listed species, and the Division will continue to monitor forest habitats and collect information that will establish a more complete species list.

Checklist findings

The following items received low scores on the review team checklist (see Attachment 1), which indicates that management actions, in the field, were insufficient (f) or that the issue was not sufficiently addressed in the management plan (p). These items need to be further addressed in the management plan update.

1. Discussion in the management plan of the need to monitor ground water quality and quantity. (p,f)

Manager's Response: This is not the within the Divisions purview to conduct. The Division will coordinate with the Suwannee River Water Management District should they decide it necessary to monitor.

2. Discussion in the management plan to address the adjacent property concerns including expanding development and inholdings and additions. (p,f)

Manager's Response: There are no inholdings within this State Forest. The DOF acquisition program reviews and prioritizes potential acquisitions statewide and can not guarantee the acquisition of these adjacent properties .

Team Member's Comments

Natural Communities: protection and maintenance: (I.A)

- Looks to be very well managed properties. Need to check to see if underlain by Hawthorn formation.
- The upland pine section of the management plan does not sufficiently address the southern red oak and other hard woods that should be a component of this plant community. There are very few canopy red oaks and mockernut hickories, etc., in the forest.

Listed Species: protection and preservation (I.B1, I.B.2)

- A plant survey needs to be conducted at this site for rare and common plants. Perhaps a gopher tortoise survey is needed. Need a list of animal species that actually occur on the site.
- Some work needs to be done to survey for threatened and endangered species, such as plants and animals.

Prescribed Fire (Natural Community Maintenance): (III.A)

- The frequency of burns should be a 3 year rotation or less.

- In terms of quality there may be too few southern red oaks, mockernut hickories and sand post oaks.

Restoration of Disturbed Natural Communities: (III.B)

- The restoration of the slash pine plantation to the longleaf canopy is progressing well. No native ground cover restoration is occurring in these old fields and plantations. Nature ground cover restoration should occur in the old fields and former plantations.

Wildlife Management (III.C)

- There is currently no hunting allowed.
- For quail management, growing season prescribed fire at 1 to 2 year rotations is preferable.

Non-native Invasive and Problem Species: (III.D)

- Cogon grass, Russian olive and centipede grass has not been eradicated.
- Herbicide these species, cogon grass, Russian olive and centipede grass. Need to revise management plan to indicate that the cogon grass has not been eradicated.

Adjacent Property Concerns: (III.G)

- Expanding development and inholdings and additions are not a big problem at present, but could possible be in the future. It would be preferable to square off the boundaries.
- Need to review and determine if the optimum boundary map should be revised.
- The plan does not adequately address an optimum boundary and desired acquisitions for future ability to manage the property and strengthen the connection to other conservation lands.

Public Access and Education: (IV.1; IV.2; IV.3; IV.4)

- This site does not need a picnic shelter. The plan should be revised to remove reference to the picnic shelter.

Management Resources: (V.2. V.3; V.4)

- The building could be closer to the tract, but otherwise adequate. A bulldozer is needed.

Review Team Determination

Purpose for Acquisition

- The property was purchased to be maintained as a unique, once common, ecosystem. This longleaf-wiregrass ecosystem is one of the best representatives of its kind in Florida.

Management Plan Compliance

- The area is mainly being maintained with prescribed fire.

Exceptional Management Actions

- Outstanding - prescribed burns on tract. Aggressive control of cogon grass and Russian olive. Removal of slash pines and replacement with longleaf to old growth conditions. Exceptional management of human impacts on tract.
- The burn program is good, however, it could be improved by moving forward a more frequent growing season of burning.

Recommendations for Improving Management of this Site:

- More biological surveys and research on natural communities and inhabitants. Restoration of groundcover in select areas.
- Need to control centipede and Bahia ground cover.
- More frequent burning of 1 to 2 years, geared toward the growing season.

PLAN REVIEW		1	2	3	4	AVERAGE
Natural Communities (I.A)						
Upland Pine Forest	I.A.1	1	1	0	1	0.75
Upland Hardwood Forest	I.A.2	1	1	1	1	1.00
Sinkhole	I.A.3	1	1		1	1.00
Listed species: Protection & Preservation (I.B)						
Animals	I.B.1	1	1		1	1.00
Plants	I.B.2	1	1	0	1	0.75
Cultural Resources (Archeological & Historic sites) (II.A,II.B)						
Cultural Res. Survey	II.A		1	1	1	1.00
Protection and preservation	II.B	1	1	1	1	1.00
Resource Management, Prescribed Fire (III.A)						
Area Being Burned (no. acres)	III.A.1	1	1	1	1	1.00
Frequency	III.A.2	1	1	1	1	1.00
Quality	III.A.3	1	1	1	1	1.00
Restoration of Ruderal Areas (III.B)						
Pine Plantation	III.B.1	1	1	1	1	1.00
Old Fields	III.B.2		1		1	1.00
Wildlife Management (III.C)						
Wildlife Habitat	III.C.1	1	1	1	1	1.00
Non-Native, Invasive & Problem Species (III.D)						
Animals	III.D.1		1	0	1	0.67
Plants	III.D.2	1	1		0	0.67
Ground Water Monitoring (III.E.2)						
Ground water quality	III.E.2.a			0	0	0.00
Ground water quantity	III.E.2.b	1	1	0	0	0.50
Resource Protection (III.F)						
Boundary survey	III.F.1	1	1	1	1	1.00
Gates & fencing	III.F.2	1	1	1	1	1.00
Signage	III.F.3	1	1	1	1	1.00
Law enforcement presence	III.F.4	1	1	1	1	1.00
Adjacent Property Concerns (III.G)						
Land Use						
Expanding development	III.G.1a	0	0	0	0	0.00

Inholdings/additions	III.G.2	0	1	0	0	0.25
Public Access & Education						
Public Access-Maintenance						
Roads	IV.1a	1	1	1	1	1.00
Parking	IV.1b	1	1	1	0	0.75
Recreational Opportunities	IV.2	1	1	1	1	1.00
Management of Visitor Impacts	IV.3		1	1	1	1.00
Interpretive facilities and signs	IV.4	1	1	1	1	1.00
Environmental education/outreach	IV.5			1	1	1.00
Managed Area Uses						
Existing Uses						
Multiple use trails	VI.A.1	1	1	1	1	1.00
Picnicking	VI.A.2	1	1	1	1	1.00
Bird dog Training	VI.A.3	1	1	1	1	1.00
Wildlife Observations	VI.A.4	1	1	1	1	1.00
Uses Proposed in Mgmt. Plan						
Hunting	VI.B.1	1	1	1	1	1.00

FIELD REVIEW		1	2	3	4	AVERAGE
Natural Communities (I.A)						
Upland Pine Forest	I.A.1	4	4	4	4	4.00
Upland Hardwood Forest	I.A.2	5	5	x	5	5.00
Sinkhole	I.A.3	5	5	x	5	5.00
Listed species: Protection & Preservation (I.B)						
Animals	I.B.1	4	4	4	4	4.00
Plants	I.B.2	3	5	4	5	4.25
Cultural Resources (Archeological & Historic sites) (II.A,II.B)						
Cultural Res. Survey	II.A	x	4	5	5	4.67
Protection and preservation	II.B	5	4	x	5	4.67
Resource Management, Prescribed Fire (III.A)						
Area Being Burned (no. acres)	III.A1	5	5	5	5	5.00
Frequency	III.A.2	5	5	5	5	5.00
Quality	III.A.3	5	5	4	5	4.75
Restoration of Ruderal Areas (III.B)						
Pine Plantation	III.B.1	5	4	4	5	4.50
Old Fields	III.B.2	x	4	x	5	4.50
Wildlife Management (III.C)						
Wildlife Habitat	III.C.1	5	4	4	3	4.00
Non-Native, Invasive & Problem Species (III.D)						
Animals	III.D.1	x	4	4	5	4.33
Plants	III.D.2	3	5	x	5	4.33
Ground Water Monitoring (III.E.2)						
Ground water quality	III.E.2.a			x	x	0.00
Ground water quantity	III.E.2.b	3	3	x	x	3.00
Resource Protection (III.F)						
Boundary survey	III.F.1	5	4	3	5	4.25
Gates & fencing	III.F.2	5	4	3	5	4.25
Signage	III.F.3	5	3	3	5	4.00
Law enforcement presence	III.F.4	5	3	3	5	4.00
Adjacent Property Concerns (III.G)						
Land Use						
Expanding development	III.G.1a	1	4	x	3	2.67
Inholdings/additions	III.G.2	1	3	x	3	2.33

Public Access & Education						
Public Access-Maintenance						
Roads	IV.1a	5	4	5	5	4.75
Parking	IV.1b	5	4	5	5	4.75
Recreational Opportunities	IV.2	5	5	4	5	4.75
Management of Visitor Impacts	IV.3	x	5	5	5	5.00
Interpretive facilities and signs	IV.4	5	4	4	5	4.50
Environmental education/outreach	IV.5	x	4	4	5	4.33
Management Resources						
Maintenance						
Waste disposal	V.1a	x	4	x	3	3.50
Sanitary facilities	V.1b	x	4	x	3	3.50
Infrastructure						
Buildings	V.2a	4	4	4	4	4.00
Equipment	V.2b	3	4	4	2	3.25
Staff	V.3	5	3	4	1	3.25
Funding	V.4	3	3	4	3	3.25

**Suwannee River Water Management District
Land Management Review Team Report
FY 2014**

Executive Summary

District staff conducted two Land Management Review Team meetings and tours in 2014. The reviews focused on activities that were conducted in FY 2013. Areas of review included water resources, natural resource management, public use and facilities on representative areas.

The review of the Withlacoochee and Middle Suwannee basins focused on the 12,584 acres of District fee lands managed by the Florida Forest Service under a lease at Twin Rivers State Forest. This review was conducted on March 20, 2014.

The second review of District managed land was in the Lower Suwannee and Waccasassa River basins. This area encompasses 15,821 acres of fee lands and 43,470 acres of Conservation Easement lands. This inspection was held on April 24, 2014.

The Team was asked to score whether the District was achieving its objectives using a scale of:

- 0 – not meeting objectives;
- 1 – meeting objectives and
- 2 – exceeding objectives.

Ten objectives were scored on each inspection ranging from a low score of 1.0 for rare species resources on Twin Rivers State Forest to a high score of 1.77 for Public use on the Lower Suwannee and Waccasassa. Water resource objectives were scored 1.43 at TRSF and 1.46 in Lower Suwannee/Waccasassa. The overall average score was 1.36 at TRSF and 1.51 at Lower Suwannee/Waccasassa, both meeting and exceeding the objectives.

In terms of the statutory requirements; Is the land being “managed for the purposes for which it was acquired”; the score was 1.54 at TRSF and 1.65 at Lower Suwannee/Waccasassa, indicating that efforts were meeting and exceeding this guideline. The scores of 1.27 and 1.58 respectively for being “in accordance with the management plan” also represents acceptance by the team of efforts being made on the ground to be consistently meet or exceed standard in implementing the Board's objectives.

The review team scores indicate approval of plans and methods to implement Governing Board objectives and Florida statutes in managing lands under the District ownership.

Introduction

Florida Statute 373.591 requires that the District annually establish Land Management Review Team(s) (LMRT) to determine if lands titled to the Governing Board are being managed for the purposes for which they were acquired and in accordance with land management objectives. Staff will report the Review Team's findings which shall be presented to the Governing Board by October 1 of each year. This report was prepared in compliance with the statute.

Background

The first trip reviewed the lands managed by the Florida Forest Service in Twin Rivers State Forest in the Withlacoochee River basin and a portion of the Middle Suwannee River basin. The second trip was led by staff and included lands in the Lower Suwannee River and Waccasassa River basins.

Twin Rivers State Forest

On March 20, 2014, staff and representatives of the Florida Forest Service (FFS) led a field tour of lands in Twin Rivers State Forest (TRSF). This review area totals about 12,584 acres of fee lands. The main area of emphasis on the tour was silvicultural activities used by the FFS to restore the natural communities on TRSF and the BMPs utilized to protect water and cultural resources.

Eighteen individuals representing private landowners, interests groups and agencies participated in the tour. Staff provided the "Land Management Report 2013", Attachment 1, for activities completed in fiscal year 2013 and the blank SRWMD Land Management Review Team Excellence in Land Management Scorecard, Attachment 2, to the members for their use. FFS staff provided a five year summary of land management accomplishments at TRSF, Attachment 3.

A group presentation and various field presentations were conducted to allow the review team to see activities and ask questions about the land management program as a whole and also its implementation on these selected lands.

Lower Suwannee and Waccasassa River Basins

On April 24, 2014, staff led a field tour of lands in the Lower Suwannee and Waccasassa River Basins in Gilchrist and Levy Counties. This review area totals about 15,821 acres of fee lands and 43,470 acres of Conservation Easement lands. The main area of emphasis on the tour was protection of surfacewater resources while managing public use and natural community management; management of lands during the current flood event and the many cooperators involved in the management of District lands in these basins.

Sixteen individuals representing private landowners, interests groups and agencies participated in the tour. Staff provided the "Land Management Report 2013" for activities completed in fiscal year 2013, the SRWMD "Land Management Review Team

April 24, 2014” booklet, Attachment 4, and the blank SRWMD Land Management Review Team Excellence in Land Management Scorecard to the members for their information and use.

Presentations were made in the Otter Springs Lodge by staff and representatives of Gilchrist County and ForVets, Inc. In the afternoon, Levy County staff made a presentation at Levy Blue Springs regarding the spring and joint management of Devils Hammock with the District. Field discussions were led by staff at Otter Springs and Devils Hammock Tracts.

The District “Excellence in Land Management” (ELM) program was established to quantify land management operations in meeting the objectives set forth by the Governing Board in the District Land Management Plan (DLMP). The review team was provided with the ELM Scorecard to document their determination on whether the activities they saw or discussed were deficient, meeting, or exceeding the objectives adopted by the Governing Board. The team also scored, using the same criteria, whether actions were in compliance with statutes (259.036, F.S.).

The ELM scorecard is annually calculated based on completed District land management operations from the prior year(s). Review team members score District land management efforts on the following scale:

- 0 – District is not meeting the objectives of the DLMP
- 1 – District is meeting the objectives of the DLMP
- 2 – District is meeting and exceeding the objectives outlined in the DLMP

The ELM scores represent the average totaled from all participating member’s scores.

Results

The scores at TRSF ranged from 1.0 for rare species to 1.64 for public use. The two lowest scoring items were for rare species (1.0) and fiscal responsibility (1.23). The two highest scoring were public use (1.64) and communications (1.57). Ten out of 140 individual scores were for “0” or not meeting standards. Staff will review these items with TRSF staff to determine how to address these potential items. The overall score was 1.36 which is meeting and exceeding standards. On both statutory questions, TRSF scored 1.54 for managing consistent with purpose acquired and 1.27 for managing consistent with land management objectives of the District.

The scores for the Lower Suwannee/ Waccasassa ranged from 1.23 for groundcover resources to 1.77 for public use. The two lowest were groundcover (1.23) and rare species (1.27). The two highest were communications (1.69) and public use (1.77). Fiscal responsibility scored 1.67. The overall score was 1.51; with scores of 1.65 and 1.58 for the statutory questions. One score of 0.5 for rare species was below standards.

SRWMD Excellence in Land Management Scorecard

2014 Land Management Review Team Report Withlacoochee and Middle Suwannee Basins March 20, 2014 District Land Management Plan Objectives

RESOURCE PROTECTION

1. Water Resource Objectives

Score: 1.43

- Minimize structural floodplain management on District-managed lands.
- Maintain surface and groundwater quantity and quality during land management activities by using enhanced Silviculture Best Management Practices (BMPs).
- Restore hydrologic regimes to the Desired Future Condition (DFC) where possible.
- Maintain water control structures so they achieve their intended function.

Water Resource Comments

The District owned lands are being protected and maintained in accordance with the objectives set for the in the District Land Management Plan.
Great job @ Anderson, need work @ (river access site? Not complete on paper).
Water resource objectives were not a central feature of this meeting.
Very impressive job. Especially important with aquifer springs.
Use of fireplow for firelanes is not always best from hydrology perspective.
Terrific job keeping on top.
Your efforts are very evident.
Excellent
If there is insufficient burnable dicots on a plot, wait until there is! Use fire, not herbicide! Stop the application of all herbicides for pine plantation management and any other dicot (native) plant control, other than spot treatment to eliminate exotic plants. This use is a giant uncontrolled experiment with unknown consequences to wildlife.

2. Soils, Topography, and Natural Community Objectives

Score: 1.29

- Minimize soil degradation (erosion, compaction).
- Manage and/or restore historic natural communities for a given site to DFC levels.
- Update and maintain reference maps as soon as new information is available.

Soils, Topography, and Natural Community Comments

District staff and the Forestry staff are doing an excellent job of managing historic natural communities.
Erosion is a problem because of the flooding, etc.
Basically, a very good job. Natural communities could be tough to document/restore.
Saw less emphasis on natural community restoration than I've seen on other District lands. FFS seems to be heavily timber-production oriented.
The controlled burns & efforts to maintain property show excellent results.
Clearcut areas (206A) that are being left without reforestation are contributing to erosion and are not in compliance with DLMP specification for natural community management. FFS should be required to reforest within a specified time. Reforestation funds should have been allocated prior to the clearcutting. If funds are lacking, cooperative land management agencies should be approached for help in acquisition and planting of longleaf seedlings. Consider contacting Chris Demers, Forestry Stewardship Program (cdemers@ufl.edu), for improving interactions with cooperative agencies.
Stay as far away as possible with pine planting from sinkholes. Instead of clearcutting everything and disrupting all soil (& soil living vertebrates & invertebrates and all ground cover plants) using heavy equipment, keep equipment off significant areas and do the clearing using handheld equipment.

3. Ground Cover Resource Objectives

Score: 1.43

- Monitor the grass, herbaceous and shrub layers to detect if the resource falls outside the DFC parameter range.
- Reduce degradation of the existing native groundcover.
- Reintroduce or supplement current native ground covers with local stock from District lands or cooperating land management agencies.

Ground Cover Resource Comments

More groundwater restoration is needed. The burning is adequate, but more planting of native groundcover is needed.
Monitoring and maintenance of native groundcover is obvious and impressive. Efforts to reintroduce wiregrass is working very well.
Great burn and replant wiregrass programs. Need more.
Participation in a research project on wiregrass regeneration extends the District's activities significantly.
Good job!
Lot of good work on restoring wiregrass/long leaf.
This seemed to be a very low priority on Twin Rivers land.
Prudent use of herbicides is well documented.
The ground cover is very good.
On nearly all properties viewed, the grass and herbaceous groundcover vegetation failed to meet DLMP objectives. The existing seed bank is poorly represented by grasses and the regenerating forbs and wildflowers are low in species number. Repetitive burning, as planned, will not suffice. FFS should augment all properties, including Black Tract, with native seed for groundcover restoration. If groundcover resources are unavailable, contact the District or the Forestry Stewardship Program or Anne Barkdoll, DEP, who is an experienced regional contact for groundcover seeding technique (Anne.Barkdoll@dep.state.fl.us).
The three agencies, SRWMD, FFS & FFWCC, have their hands tied behind their backs by the Florida Legislature, Governor, and business interests. The staffs want to protect the resource, but are not given free-reign to do so. Planting longleaf pine, using fire, and providing reasonable, controlled public access must continue. Deer populations must be reduced still further through hunting. But there are hundreds of trees in addition to one pine & hundreds of other plants. These agencies should have an <u>EMPOWERED</u> group of botanists on staff.

4. Timber Resource Objectives

Score: 1.43

- Manage for natural community heterogeneity to attain a multi-aged and vertically diverse forest, including select dominant and/or old growth trees and snags.

- Maintain the dominant and co-dominant tree species within the DFC parameter range.
- Reforest within DFC parameters using techniques that minimize damage to other natural community resources.
- Maintain an accurate and current forest resource inventory.
- Ensure that commercial harvests provide the maximum financial returns that are possible with the consistent attainment of natural resource values.

Timber Resource Comments

I was very impressed with the knowledge and commitment of District and Forestry staff.
The program is sustained with minimum inputs.
Good job generally. May conflict with a goal of maximum financial return.
Reforestation is exceeding what I expected.
Do plans exist to replant lost longleaf seedlings from the 2012-2013 planting season? 70% survival left 561 trees/A, does FFS plant to meet the 726 trees/A DLMP?
These lands are now within the use radius of Gainesville's 104 MW Biomass Plant, which started operation in October, 2013. Hardwoods <u>must not</u> be completely cut down to feed this electricity monster, which by contract <u>must</u> be fully operational at 104 megawatts for the next 30 years. <u>All</u> revenue from thinning & clear-cutting must go back into the forest management budget, as well as increasing the supply of general revenue.
Management techniques are starting to show the transition from pine plantation to more natural looking stands, more longleaf, grasses for fire fuels, Keep up the prescribed burning.

5. Rare Species Resource Objectives

Score: 1.0

- Identify and monitor rare species on District lands.
- Protect and manage biodiversity on District lands.
- Provide District staff with the most current rare species locations, status, and Rare Species BMPs.
- Maintain and/or increase existing rare and imperiled species populations.

Rare Species Comments

Objectives are being met and exceeded.
They are doing well with people they have but need to do more rare plant species surveys.
Seems to be going well.
Didn't see evidence of significant emphasis on rare species.
Obvious knowledge of rare and endangered species w/habitat adjustment as required for protection.
I do not recall discussion of rare species, perhaps because current habitat is not particularly supportive? Overall species diversity will not be well managed until intact communities are represented. I saw approachment of this goal at the upland Ellaville Tract only.
This is primarily a timber and hunting operation which has almost nothing to do with wildlife/plant biodiversity. Wildlife and plant diversity was historically very high this close to the Suwannee River & Panhandle. Obviously the re-planting with longleaf pine & extensive burning are commendable, but the use of any herbicide must be stopped. It is well known that garlon kills amphibian tadpoles at very low concentration. In addition these products enter the aquifer and destroy cave organisms, such as cave salamanders. As pointed out, the area is loaded with sinkholes! Open entry points to the surficial aquifer.

6. Cultural and Historic Resource Objectives**Score: 1.29**

- Document location of significant cultural and historical resources on District-managed lands and share information with the Division of Historic Resources within the Department of State.
- Protect and prevent negative impacts to cultural and historical resources during all activities.
- Monitor the condition of cultural and historical resources on District-managed lands.

Cultural and Historic Resource Comments

Objectives are being met and exceeded.
Doing a good job fencing around historic structures, etc.

Good research of preservable area.
Obvious knowledge of cultural resources and adjustment as required for protection.
Keeping the historic resources exceeds my expectation.
Excellent
I see no archeological/anthropological inventory or research for the last five years mentioned in mailed report. An old cemetery was pointed out on the field trip but we did not stop. Heavy equipment used almost everywhere on this = very damaging +15,000 acres. No money spent at all, yet \$1,341,000 generated from timber sales. Salaries must be paid out of general revenue using timber sale money for habitat restoration & management.

7. Aesthetic and Visual Resource Objectives

Score: 1.29

- Maintain or enhance overall visual quality of District lands.
- Minimize or mitigate short-term negative appearances of land management activities.

Aesthetic and Visual Resource Comments

Objectives are being met.
Good work on keeping up good visual appearances with reduction of improper use/vandalism.
<u>Beautiful!</u>
Most of the managed lands that we viewed today were in early phases of restoration, void of groundcover, and short on aesthetics. Sites treated in the past with Velpar ULW, however, are especially lacking in visual appeal, perhaps due to the broad spectrum impact of hexazinone on, not just the targeted oaks and other trees, but on the lower growing shrubs and flowering herbs. A little chinquapin, blueberry, holly are to be expected in upland pine forests that are managed with fire and add to habitat value (e.g. turkey). With the broadcast of Velpar ULW, however, we see understory shrubs are eliminated and a wide array of flowering herbs reduced. Regeneration of these species depends on a soil seed bank, whereas regeneration after fire quickly recurs from basal parts. Typically, sites that have been in production have poor native seed banks, thus use of Velpar in tracts slated to be managed according to the historic natural community is questionable.
In another 50 years, the uplands may be as promised, a long-leaf pine uneven aged

group of many non-continuous stands. However, I doubt it, because timber cutting for salaries and hunting revenue are at present the obvious objectives. No one mentioned nor wrote about what percentage of costs on public land is paid for out of general revenue. It should be almost 100%, since the public is getting enormous benefits from this non-urban property they own.

8. PUBLIC USE

Score: 1.64

- Provide opportunities for resource-based recreation compatible with water resource protection.
- Protect health and safety of visitors.
- Use cooperating agencies and volunteers whenever possible.

Public Use Comments

I was very impressed with the cooperation between District staff and Forestry staff.
Good job reworking and maintaining recreation areas for public safety and controlling erosion.
There is considerable emphasis on providing appropriate recreation opportunities.
The District has always protected the public. Keeps us advised during flood conditions via the web site.
A good basic job. Web site might need a little work – EZ access, graded activities, etc.
Numerous opportunities available.
Having cooperating agencies maintain the property saves many dollars.
Obviously these acres receive very heavy use. The report does not indicate how much of this is for hunting, but probably the majority of the 21,273 day users were on the public lands for this purpose. No mention was made of illegal ATV use, but this undoubtedly is a problem, along with the vandalism. The SRWMD, FWC (FFWCC) & FFS should offer courses for volunteers (paid) to provide a constant presence on these 15,000 + acres, with radios to call in armed reinforcement when public land violations are observed. This would be dangerous work in any event, but necessary to reduce arson & ATV damage & gate vandalism. <u>NO</u> hunting should be allowed within 500 feet of FFWCC food plots, for deer viewing only! This must be posted and enforced.

9. COMMUNICATIONS

Score: 1.57

- District land management is operating under a current Board approved DLMP.
- District staff held an annual Land Management Review Team meeting to review the previous fiscal year's activities and showcase land management operations.
- District land management staff represented the District to the public and peers through articles in District Newsletter, Public Workshops, Training Opportunities, Presentations, etc.

Communication Comments

Objectives are being met and exceeded.
Doing a great job! The District's outreach to the public is great!
Excellent job of communication via workshops.
Communications is very good.
LMRT meeting to review: Great! Continue! LMS to the public and peers: No discussion during field trip = don't know. All state agencies: Water Management Districts, Florida Fish & Wildlife Conservation Commission and Florida Forest Service, are under constant economic pressure to maximize the revenue coming out of the lands, rather than using taxation and fees. The Governor selects only business people to control these agencies through the Boards, Commission, etc., and demands totally inadequate paid staffing to carry out what is left of Florida law. The Florida Legislature no longer serves the public good, as happened briefly from the 1970's to early 1990's.

10. FISCAL RESPONSIBILITY

Score: 1.23

- Protect and manage resources on District lands in an efficient manner within the limits of the annual operating budget.
- Revenues generated from land management will be from operations conducted to achieve resource objectives.
- The District will implement the Payment in Lieu of taxes program for eligible counties.

Fiscal Responsibility Comments

Objectives are being met. I would like to see more funding and resources made available to the management of these lands.

Good, efficient job of property management. Much better than many governmental agencies.
Limited opportunity to judge.
Funds received from timber sales should be used for reforestation.
Good use & cooperation between State bodies.
Once again the outside management of lands saves money.
District land resources are not being properly managed when FFS does not budget to replant longleaf seedlings nor to actively restore groundcover. Nevertheless, timber sales were made and a large section of property was sold. How does fiscal responsibility compare with management ethics? Perhaps I am missing too much information to fairly score.
Under the present Florida Legislature and Governor, many long serving, highly qualified and dedicated employees have been summarily fired without cause, whereas the budget of the Florida Department of Transportation budget remained untouched. The housing mania in Florida brought on our recession, as well as the lack of Federal Regulation, under 8 years of President Bush & two very costly wars. The result has been the financial end of the Florida Forever Act and necessary completion of the public land purchase along Florida's rivers & in the uplands. Hopefully, Legacy Lands will pass in November & restore the land buying program.

Other General March LMRT Comments:

The District lands are being managed very appropriately. All objectives are being met and exceeded.
District lands are being managed appropriately with a diversity of partners.
Appreciate the District keeping up with gates and keeping the area safe.
A good job of balancing objectives that are difficult to balance. Efficient management, good public experience, endangered species, etc.
With exceptions noted in my previous comments.
<u>Absolutely!</u>
Physical, hydrological and archaeological features as well as public access all appear well provided for. Natural community management objectives however appear not well

met as indicated previously by the paucity of groundcover and by clearcuts left unplanted with longleaf. I am not given the impression that this land has been managed for 19 years under District Plans. I do not feel the FFS maintains the standards to the level that District land managers display themselves on their own lands.
The final objective for converting purchased tree farm monocultures is an old growth, uneven age stand of longleaf pine. This is one fine objective but there needs to be diversification. All the over one hundred species of other trees, mostly dicots, are being totally ignored and presumed to come back naturally during the controlled burn process. Instead it will be necessary to start a state run native tree nursery & start getting closer to the historic forest habitat diversity through deliberate replanting.
Disposal of "surplus" lands has removed lands valuable to the conservation needs of not only water resources, but also lands valuable to public recreation, endangered and otherwise rare species and natural communities "restoration". It has also resulted in additional urban interface which makes management more difficult and expensive, especially burning. It has removed buffers along streams to leaching of fertilizer into the waterways and has increased the removal of water through irrigation systems. Selling lands that are truly surplus (meaning non-contiguous outlying parcels) is desirable and justifiable; selling lands that do have conservation and recreation value is not justifiable.
I feel that the District staff and the Forestry Service staff are doing a wonderful job. Thank you!
Good Job.
Twin Rivers management might broaden its purview beyond timber.
<u>Great job.</u>
Management shows a definite effort.
If District Land Managers were more closely involved in the management of Twin Rivers, perhaps the 2010-2011 application of Velpar ULW by FFS to 94 A of longleaf might have been forestalled through timely prescribed burning? Same goes for the site preparation with Velpar of 290A in 2011-2012? The District objectives clearly define their management focus to be on designated core areas, those that can be burned without chemical pre-treatments. So then why does it appear that FFS is falling back on aerial broadcast herbicide use as nearly routine? District managers might better step in when they feel District objectives are not being upheld. This includes providing seedlings and seed if needed for FFS to maintain standards in reforestation and groundcover.
I don't see much of anything going on with presently protected state plants and animals, other than killing them with herbicides & ignoring them. Monitoring money must be increased and re-introduction efforts also need to be at least tried. As/Just one

example, pine beetle infestations by exotics plus their fungi probably would be less damaging if native insect populations were not so decimated by clearcutting 40 acres or more at a time.

Statutory Compliance

Florida Statute 259.036, states that the Land Management Review Teams shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions, or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan.

Average LMRT Score	
Are District lands are being managed in a manner consistent with the purpose for which they were acquired, including public access?	1.54
Are District land managers implementing the District Land Management Plan? This includes sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions, and/or archaeological features.	1.27

**SRWMD Excellence in Land Management Scorecard
2014 Land Management Review Team Report
Lower Suwannee and Waccasassa River Basins
April 24, 2014
District Land Management Plan Objectives**

RESOURCE PROTECTION

3. Water Resource Objectives

Score: 1.46

- Minimize structural floodplain management on District-managed lands.
- Maintain surface and groundwater quantity and quality during land management activities by using enhanced Silviculture Best Management Practices (BMPs).
- Restore hydrologic regimes to the Desired Future Condition (DFC) where possible.
- Maintain water control structures so they achieve their intended function.

Water Resource Comments

Considerable effort is devoted to restoring original hydrologic condition.
Didn't observe first two of list of focusing today's review. Second two were commendable. Report sounds good.
While I am not proficient in all technical aspects of the program, I do understand and appreciate the dedication and professionalism of the District staff as well as their partners with various agencies. With all the criticism of government agencies by the media and even some of our elected officials, it is very refreshing to see the results of a well-organized, though underfunded, operation such as this.
Need more funds to plant and restore longleaf pine.
Ideally, the District would have 1) the money to annually buy more 100-yr. floodplain land along the Suwannee River & its tributaries, and 2) force private land owners to clean up their septic tanks and 3) regulate fertilizer application on agricultural land and 4) continue to establish Best Management Practices for dairies & beef cattle operations. Also regulate private pine plantation management (fire & herbicide).
The District is doing an outstanding job to maintain surface and groundwater quality by incorporating BMPs in all its land management activities. No recs for improvement, just continue the outstanding work.

May need to determine different management objectives as to how water control structures are set. May need drawdowns for Mallory Swamp for example so prescribed burns can be accomplished.

4. Soils, Topography, and Natural Community Objectives

Score: 1.46

- Minimize soil degradation (erosion, compaction).
- Manage and/or restore historic natural communities for a given site to DFC levels.
- Update and maintain reference maps as soon as new information is available.

Soils, Topography, and Natural Community Comments

Boat ramps improved to avoid erosion. Excellent use of up-to-date remote sensing techniques.
Not emphasized on today's trip. Report sounds good.
Have a very accurate supply of reference maps.
Really love the Lidar!
Logging of district land allows for soil degradation and erosion. What is the difference between a timber company and SRWMD logging? Row planted pines harvested regularly don't allow for build-up of decaying vegetation that enriches the soil & holds it in place.
During site preparation after pine plantation clear cuts, <u>minimize</u> soil disturbance during re-planting of long-leaf pines & slash pines (wet sites only for this species).

3. Ground Cover Resource Objectives

Score: 1.23

- Monitor the grass, herbaceous and shrub layers to detect if the resource falls outside the DFC parameter range.
- Reduce degradation of the existing native groundcover.
- Reintroduce or supplement current native ground covers with local stock from District lands or cooperating land management agencies.

Ground Cover Resource Comments

No emphasis on today's field visit. I know District does some of this, but no evidence today.
Does a good job of maintaining ground cover.
It is my opinion the District is meeting and exceeding all of the objectives outlined in the DLMP. Thank you!
Continue control burns of upland pine plantations, with <u>no</u> use of herbicides, except for spot treatments to kill exotic plant invasions.

4. Timber Resource Objectives**Score: 1.46**

- Manage for natural community heterogeneity to attain a multi-aged and vertically diverse forest, including select dominant and/or old growth trees and snags.
- Maintain the dominant and co-dominant tree species within the DFC parameter range.
- Reforest within DFC parameters using techniques that minimize damage to other natural community resources.
- Maintain an accurate and current forest resource inventory.
- Ensure that commercial harvests provide the maximum financial returns that are possible with the consistent attainment of natural resource values.

Timber Resource Comments

Opportunities are seized when dealing with exceptionally wet environments.
Lots of emphasis on financial outcomes. District sounds increasingly like FFS.
Great research into a difficult "natural" community.
Manages timber in order to receive maximum income.
Very impressed with "handling" of log-cutting operations.
Have not seen multi-age, multi-species replanting or of significant snags in logged areas. Logging and mono culture destroys the complex composition of soil nutrients.
Do not destroy existing mesic hammock habitat for wood chips to burn for electricity to increase pine plantations for profit. With the operation of the 104 MW Biomass Plant at Deerhaven in Alachua County, the temptation to do this has been greatly increased.

Unfortunately, this plant must be operated at full capacity for 30 years starting Oct. 2013, and is not owned by Gainesville Reg. Utilities.

5. Rare Species Resource Objectives

Score: 1.27

- Identify and monitor rare species on District lands.
- Protect and manage biodiversity on District lands.
- Provide District staff with the most current rare species locations, status, and Rare Species BMPs.
- Maintain and/or increase existing rare and imperiled species populations.

Rare Species Comments

Little mention in today's visit. Good that sites are GIS located.

Nice management of rare species.

Unauthorized vehicle use near ponds destroys amphibian and fish nursery areas. Logging destroys habitat.

The District does almost nothing here, except for rare contracted plant & animal surveys. The District should hire a minimum of two full-time people to do continuous plant & vertebrate surveys of District lands & invertebrate surveys in uplands & lowlands.

6. Cultural and Historic Resource Objectives

Score: 1.54

- Document location of significant cultural and historical resources on District-managed lands and share information with the Division of Historic Resources within the Department of State.
- Protect and prevent negative impacts to cultural and historical resources during all activities.
- Monitor the condition of cultural and historical resources on District-managed lands.

Cultural and Historic Resource Comments

Staff is aware of culturally and historically significant sites.

Vigilance and attention are good, as is ensuring that forest managers are aware of sites.

Make sure they locate historical resources.
The District should work much more closely with staff at the Florida Museum of Natural History (Anthropology) & Museum of Florida History in Tallahassee to gain a much deeper understanding of cultural & historic resources on District lands and the entire 100-year floodplain of the Suwannee River and its tributaries.

7. Aesthetic and Visual Resource Objectives

Score: 1.54

- Maintain or enhance overall visual quality of District lands.
- Minimize or mitigate short-term negative appearances of land management activities.

Aesthetic and Visual Resource Comments

Not mentioned or observed.
Great use of county agreements to facilitate resources.
As a hiker & member of FTA, we appreciate how the FNST is preserved during land management activities.
I have observed logging companies allowed to leave areas damaged, with timber waste and deep ruts. Trails that aren't mowed don't encourage legitimate, non-motorized use.
Minimize the size of pine clear-cuts. Reduce forest roads which are unnecessary and costly to maintain. Of course, do all that is possible to minimize vandalism and arson and littering.

8. PUBLIC USE

Score: 1.77

- Provide opportunities for resource-based recreation compatible with water resource protection.
- Protect health and safety of visitors.
- Use cooperating agencies and volunteers whenever possible.

Public Use Comments

Lots of recreational opportunities; very good use of partnerships.
Not favorably impressed with county partnership and their perception of spring management as swimming pool.
Great use of county agreements to facilitate resources..

Make efforts to protect visitors.
I am impressed by the District's broad cooperative planning/interaction with other agencies (DEP, USFWS, WMA, FWC and individual counties). This collaborative effort seems to be facilitating the best possible public use and oversight, as well as the best utilization of staff and resources.
Again, as a hiker & member of FTA, we appreciate the SRWM District's concern for recreation & the health & safety of hikers & other users.
Wish there was a formal SRWMD volunteer system for better monitoring of holdings. Thank you for access to the beautiful and peaceful land.
I do not know why Gilchrist County government can't manage Otter Springs Park and Campground <u>directly</u> rather than contracting out the job totally to injured veterans to manage ("ForVets, Inc.") = \$30,000,000 project. I hope this new contract will be successful, but am not convinced by the presentation. I am a 26-year veteran of the US Navy & Naval Reserve, so definitely am in favor of hiring <u>all</u> veterans for employment in government jobs. I have found no information about "ForVets, Inc." on the internet. I assume "free housing" for resident veterans provided by the Federal Government?

9. COMMUNICATIONS

Score: 1.69

- District land management is operating under a current Board approved DLMP.
- District staff held an annual Land Management Review Team meeting to review the previous fiscal year's activities and showcase land management operations.
- District land management staff represented the District to the public and peers through articles in District Newsletter, Public Workshops, Training Opportunities, Presentations, etc.

Communication Comments

Land Management Review Team meetings are effective.
Tours are excellent.
Facebook is a great way to share information. I will visit as soon as I get back to a computer.
We all appreciated the way District staff helped the Review team understand the fiscal years' activities & land management operations. Job well done!

More publicity about water and soil conservation would help people understand why the holdings are protected.

Amazingly good considering the lack of support from state government politicians. Considering that the Florida Legislature and the Governor would prefer to privatize practically everything, and District staffing has been reduced as a result, as well as eliminating the independent taxing authority of the District, I am gratified that they have not yet been successful in totally destroying water regulation in Florida.

10. FISCAL RESPONSIBILITY

Score: 1.67

- Protect and manage resources on District lands in an efficient manner within the limits of the annual operating budget.
- Revenues generated from land management will be from operations conducted to achieve resource objectives.
- The District will implement the Payment in Lieu of taxes program for eligible counties.

Fiscal Responsibility Comments

Sale of surplus properties generates revenue for purchase of hydrologically, ecologically, and culturally significant properties.

District budget is too small, given its responsibilities. They do well with what they've got.

You all do so much with your tiny budget. Thanks!

All 5 water management districts must have their independent taxing authority restored by state government. And Legacy Lands hopefully will pass in November, providing \$6,000,000,000 over 20 years for additional public land purchases, including 100-year flood plains & swamps. Buying back Florida for the public good was not completed under P2000 & Florida Forever Act but will be completed if Legacy Lands passes.

The District is doing an excellent job with available resources. I know it has been a struggle keep up the good work.

Smaller staff now; more contracting of essential management tools; cutting back/cutting out on some management activities to meet reduced budget.

Other General LMRT Comments:

More funds would help address all DLMP objectives to the desired degree.

Manages District land well.

If Otter Springs, Levy Blue Springs and Devil's Hammock are indicative of management practice across the District, then I would rank them as meeting/exceeding expectations.
Yes they are.
Obviously I think these Land Management Review Teams are a good idea, as long as they are not a rubber stamp of approval for all District practices. It is impossible to manage Florida's public lands properly while cutting water management district budgets and eliminating jobs and accumulated expertise.
<u>Excellent Job!</u>
They District is handling the increased rainfall in a timely manner. And informing the public about flooding & its dangers.
I have no idealistic objections to contracting work out to private entities and other state agencies and institutions, but this cannot be done by cutting the District budget. The people of Florida cannot survive without clean water; and natural systems provide this free of cost, assuming the habitats are not destroyed to make homes for more and more people, paying less & less.
I hope the County did the right thing to have the ForVets manage RV Park. I cannot comment on the ForVets organization because this is the first association I have had with them.
Note: Due to flooding of the Suwannee, our field trip was of limited scope, taking place 1) inside the Otter Springs Park & Campground "Springs Lodge", 2) we also stopped at "Blue Spring" at the headwaters of the Waccasassa River, and 3) and one site inside Devil's Hammock, on the afternoon driving tour, after a drive in from State Road 24.

Statutory Compliance

Florida Statute 259.036, states that the Land Management Review Teams shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions, or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan.

Average LMRT Score

Are District lands are being managed in a manner consistent with the purpose for which they were acquired, including public access?	1.65
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Are District land managers implementing the District Land Management Plan? This includes sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions, and/or archaeological features.	1.58
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Exhibit V

Compliance with Local Comprehensive Plan

From: [Jeanne Bass](#)
To: [Reed, Jennifer](#)
Subject: Ten-Year Resource Management Plan for Twin Rivers State Forest
Date: Thursday, February 11, 2016 11:41:57 AM

Hi Jennifer,

After reviewing your plan, it is my opinion that your Ten-Year Resource Management Plan for the Twin Rivers State Forest is consistent with our Madison County Local Comprehensive Plan.

If there is anything else you need, just let us know!

Yours truly,

Jeanne Bass

County Land Use Planner
Madison County Planning & Zoning
P. O. Box 539
229 SW Pinckney Street, Suite 219
Madison, FL 32340
850-973-3179
planner@madisoncountyfl.com

Visit our website at: www.madisoncountyfl.com

Reed, Jennifer

From: Ronald Meeks [ronaldrm@suwgov.org]
Sent: Thursday, April 07, 2016 11:16 AM
To: Carpenter Jr, Steven
Cc: ronaldrm@suwcounty.org; Reed, Jennifer
Subject: Re: Twin Rivers State Forest Management Plan

Please be advised that the Resource Management Plan for the Twin Rivers State Forest is consistent with the Suwannee County Comprehensive Plan.

Sincerely,

Ron Meeks
Planning & Zoning Director for Suwannee County

On Thu, Apr 7, 2016 at 9:45 AM, Carpenter Jr, Steven <Steven.Carpenter@freshfromflorida.com> wrote:

Mr. Meeks,

The attached letter was sent to you regarding the resource management plan for Twin Rivers State Forest. The Anderson Springs tract of the Forest is located in Suwannee County. In order to finalize the resource management plan, I need to know if it is consistent with Suwannee County's Local Comprehensive Plan. Please contact myself or Jennifer Reed ([850-681-5828](tel:850-681-5828)) regarding this issue. Thank you.

Steve Carpenter

Forestry Supervisor II

Florida Forest Service

Florida Department of Agriculture and Consumer Services

[386-208-1460](tel:386-208-1460)

Steven.Carpenter@freshfromflorida.com

Twin Rivers and Big Shoals State Forest

7620 133rd Road

Live Oak, FL 32060

www.FreshFromFlorida.com

Exhibit W

State Forest Management Plan Advisory Group Summary

Management Plan Advisory Group Introductory Meeting

Twin Rivers State Forest

January 19, 2016

11:30 a.m.

Meeting Minutes

MPAG Members Present:

- | | |
|--------------------|---|
| • Samuel Leneave | Center Manager, Florida Forest Service (FFS) |
| • Scotland Talley | Florida Fish and Wildlife Conservation Commission (FWC) |
| • Bill Mckinstry | Suwannee River Water Management District (SRWMD) |
| • Craig Liney | Division of Recreation and Parks, Department of Environmental Protection (DRP/DEP), Suwannee River State Park |
| • James W. Brown | Chairman, Madison County Soil and Water Conservation District |
| • Andy Jackson | District Chairman, Suwannee County Soil and Water Conservation District |
| • Carol Sullivan | Florida Native Plant Society |
| • Richard McCulley | Private Landowner |
| • Jeff Glenn | Hiking Group |
| • Chris Menhennett | Hunting Group |
| • Edwin McCook | Paddling Group |
| • Bob Wallace | Biking Group |
| • Beth Burnam | Hamilton County Commissioner |
| • Rick Davis | Madison County Commissioner |
| • Ricky Gamble | Suwannee County Commissioner |

MPAG Members Not Present:

- | | |
|-----------------|---|
| • Jimmy Daniels | Equestrian Group |
| • Scott Wynn | Vice Chairman, Hamilton County Soil and Water Conservation District |

Staff:

- Steve Carpenter, FFS
- Glenn Davis, FFS
- Paul Williams, FFS
- Jennifer Reed, FFS
- Bill Korn, FFS
- Cat Ingram, FFS

Note: No members of the general public were present.

Meeting Start Time: 11:30 a.m.

- Mr. Korn opened the meeting with the introductions of Florida Forest Service staff and Management Plan Advisory Group (MPAG) members.

- Mr. Korn continued by explaining the purpose, statutory requirements and management plan development process within which the MPAG members are called upon to provide input into the draft land management plan.
- Mr. Korn also explained the Sunshine Law's role in the MPAG public hearings and MPAG member appointment timeframe.
- FFS staff listed how the meetings were appropriately advertised to the public.
- Mr. Korn provided a rundown of the various approvals the draft land management plan must go through both before and after the MPAG public hearings have occurred.
- Mr. Talley moved to elect Mr. Leneave as MPAG Chair. Mr. Brown seconded the motion. No opposition; the motion was approved.

Meeting End Time: 11:47 a.m.

Public Hearing
Twin Rivers State Forest
January 19, 2016
12:00 p.m.

Meeting Minutes

MPAG Members Present:

- | | |
|--------------------|---|
| • Samuel Leneave | Center Manager, Florida Forest Service (FFS) |
| • Scotland Talley | Florida Fish and Wildlife Conservation Commission (FWC) |
| • Bill McKinstry | Suwannee River Water Management District (SRWMD) |
| • Craig Liney | Division of Recreation and Parks, Department of Environmental Protection (DRP/DEP), Suwannee River State Park |
| • James W. Brown | Chairman, Madison County Soil and Water Conservation District |
| • Andy Jackson | District Chairman, Suwannee County Soil and Water Conservation District |
| • Carol Sullivan | Florida Native Plant Society |
| • Richard McCulley | Private Landowner |
| • Jeff Glenn | Hiking Group |
| • Chris Menhennett | Hunting Group |
| • Edwin McCook | Paddling Group |
| • Bob Wallace | Biking Group |
| • Beth Burnam | Hamilton County Commissioner |
| • Rick Davis | Madison County Commissioner |
| • Ricky Gamble | Suwannee County Commissioner |

MPAG Members Not Present:

- | | |
|-----------------|---|
| • Jimmy Daniels | Equestrian Group |
| • Scott Wynn | Vice Chairman, Hamilton County Soil and Water Conservation District |

Staff:

- Steve Carpenter, FFS
- Glenn Davis, FFS
- Paul Williams, FFS
- Jennifer Reed, FFS
- Bill Korn, FFS
- Cat Ingram, FFS

Note: No members of the general public were present.

Meeting Start Time: 12:01 p.m.

- Mr. Korn began the meeting and gave a general overview of the purpose of the public hearing.
- Mr. Korn gave the group a general history on the background of ten-year land management plans for TRSF. Talking points included were acquisition history, the different tracts that make

up the forest and a change in overall plan organization from two separate documents from two different entities (FFS & WMD), into one combined current document.

- The group discussed the new change regarding the organization of the document.
- Mr. Carpenter gave a PowerPoint presentation on the draft land management plan.
- Mr. Korn opened up the floor for a question/answer session.
- Mr. McCook inquired about Japanese climbing fern, its occurrence on private property and what FFS is doing to eradicate the plant outside of the state forest. Mr. Carpenter answered and discussed the options for treatment when working with private landowners.
- Mr. Korn ended the meeting, as no public was present to interface with FFS staff regarding the TRSF draft plan.

Meeting End Time: 12:38 p.m.

Management Plan Advisory Group Meeting
Twin Rivers State Forest
January 19, 2016
1:00p.m.

Meeting Minutes

MPAG Members Present:

- | | |
|--------------------|---|
| • Samuel Leneave | Center Manager, Florida Forest Service (FFS) |
| • Scotland Talley | Florida Fish and Wildlife Conservation Commission (FWC) |
| • Bill McKinstry | Suwannee River Water Management District (SRWMD) |
| • Craig Liney | Division of Recreation and Parks, Department of Environmental Protection (DRP/DEP), Suwannee River State Park |
| • James W. Brown | Chairman, Madison County Soil and Water Conservation District |
| • Andy Jackson | District Chairman, Suwannee County Soil and Water Conservation District |
| • Carol Sullivan | Florida Native Plant Society |
| • Richard McCulley | Private Landowner |
| • Jeff Glenn | Hiking Group |
| • Chris Menhennett | Hunting Group |
| • Edwin McCook | Paddling Group |
| • Bob Wallace | Biking Group |
| • Beth Burnam | Hamilton County Commissioner |
| • Rick Davis | Madison County Commissioner |
| • Ricky Gamble | Suwannee County Commissioner |

MPAG Members Not Present:

- | | |
|-----------------|---|
| • Jimmy Daniels | Equestrian Group |
| • Scott Wynn | Vice Chairman, Hamilton County Soil and Water Conservation District |

Staff:

- Steve Carpenter, FFS
- Glenn Davis, FFS
- Paul Williams, FFS
- Jennifer Reed, FFS
- Bill Korn, FFS
- Cat Ingram, FFS

Note: No members of the general public were present.

Meeting Start Time: 1:00 p.m.

- Mr. Korn started the meeting by going over the meeting structure that would take place and specifics regarding staff and member responsibilities regarding the meeting minutes in the coming days/weeks.
- Mr. Korn, after deliberating with the Management Plan Advisory Group (MPAG) regarding process preference, declared a “page-by-page” format would be the way the group would be advising on the draft plan.
- Mr. Talley discussed the potential implications involving possible future hunting activities on the Damascus Tract of Twin Rivers State Forest (TRSF).
- Mr. Davis, Mr. Carpenter and Mr. McKinstry discussed harvesting, acreages, and the Water Management District (WMD) surplus land process.
- Mr. Jackson inquired about potential negative connotations regarding utilizing WMA status on the state forest. Mr. Carpenter discussed implications. Mr. Talley discussed examples of different state lands which utilize different Wildlife Management Area (WMA) formats and aspects. Mr. Korn and Mr. Leneave discussed Operation Outdoor Freedom (OOF) rules in comparison to WMA rules.
- Mr. Liney, Mr. McCook, Mr. McCulley, and Mr. Korn discussed the control of non-native, invasive species and the possible addition to the draft plan of a pertinent objective with associated performance measures that would mention coordination of treatment with private landowners. Also discussed were the topics of herbicide banks and a related Natural Resources Conservation Service (NRCS) program.
- Mr. Jackson mentioned adding the appropriate Soil and Water Conservation District to the objective.
- Mr. McKinstry mentioned the WMD’s acceptance of a previous change to the plan.
- Mr. Liney inquired about timber revenue and its potential use for reforestation. Mr. Korn and Mr. Carpenter discussed the Incidental Trust Fund, as well as the different relationship WMD’s have to revenue and what types of activities timber sale funding may be directed to for other properties.
- Mr. Talley requested the addition of a structure be added to the infrastructure list.
- Mr. Korn interpreted the DHR process regarding archeological sites and monitoring protocols on FFS-managed state-owned properties. Since this property had over 25 sites, FFS will work with DHR to determine appropriate priorities for annual monitoring.
- Mr. Talley and Mr. McKinstry discussed the potential presence of burrowing owls and the pertinent Florida Natural Areas Inventory (FNAI) list. FFS staff agreed to review the shapefiles to determine the status of the burrowing owl and whether the location of the historic siting was actually on the state forest.
- Mr. Talley discussed the black bear in relation to the FNAI list in the draft plan. Mr. Korn, Mr. McCook, Mr. Talley, and Mr. Jackson discussed other imperiled species of similar and/or different situations in terms of how they are listed by various entities.
- Mr. Talley vocally agreed to a change that occurred on page 26 regarding the 2008 Gopher Tortoise survey.
- Mr. Glenn inquired about verbiage regarding “multi-use management” and how that phrase is interpreted when referencing specific trails and whether they’d be multi-use. Mr. Carpenter, Mr. Talley, Mr. McCook, and Mr. Korn discussed usage of trails and a language change pertinent to that section of the draft plan. Mr. McCully, Mr. McCook, and Mr. Wallace continued to discuss trail uses. Of particular concern was the hiking trail that followed along the shore of the Suwannee and Withlacoochee Rivers and potential negative impacts from equestrian use. Mr. Carpenter mentioned that the Five-Year Recreational Plan will mention specifics. All agreed to

include language that FFS would assess trail uses and where appropriate they would be designated "single-use" trails.

- Mr. Liney and Mr. Korn discussed the Five-Year Operational plans in more detail.
- Mr. Jackson questioned the percentage of TRSF that will be restored to longleaf pine. Mr. Carpenter discussed the restoration situation of the forest.
- Ms. Sullivan presented a correction in the natural community section of the draft plan related to the scientific name for mockernut hickory.
- Mr. Carpenter stated FFS staff would look into the specific name of a code/abbreviation on page 48.
- Mr. McKinstry asked if specific acreages in relation to certain activities could be laid out for the Mill Creek South Tract section of the draft plan to achieve documentation of a baseline. Mr. Carpenter, Mr. Korn, and Mr. McKinstry discussed the proposition and added a clarifying sentence to the section that defined the approximate 30 acres that remain needing stand longleaf pine restoration.
- Mr. Jackson asked that the current name for the local energy company (Duke) replace the outdated name (Progress) in the draft plan.
- Mr. McCook inquired about using the WMD name for a specific tract. Mr. Carpenter, Mr. Talley, and Mr. Korn discussed the name as it is in FWC's brochure and the best way to relay the area in the TRSF draft plan.
- Mr. McCook inquired as to whether or not the other tracts will be included in the WMA. Mr. Carpenter discussed WMA additions with Mr. McKinstry, Mr. Korn, and Mr. McCook. Mr. McCook discussed WMD assessments of TRSF tracts. Mr. Leneave and Mr. Korn discussed potential verbiage changes regarding WMAs and TRSF tracts. MPAG group came to a consensus to change verbiage in the Goals and Objectives section that would allow for an ongoing assessment of ALL the forest tracts for inclusion into the current WMA system. Mr. McKinstry suggested a verbiage change to the recreation section regarding continued assessment for additional uses.
- Mr. Talley asked that an acronym be added to the acronym list: Florida Natural Scenic Trail (FNST).
- Mr. Korn stated that the group had concluded going over the text portion of the draft plan. He inquired whether anyone had any suggested changes to any of the exhibits. No changes to the exhibits were recommended by MPAG members.
- Mr. Korn went around the table and asked each MPAG member final thoughts/comments.
- Mr. Wallace inquired whether the corridors of recreational trails were left intact following clearcuts. Mr. Carpenter discussed the fate of such corridors. Mr. Korn stated that details regarding corridors are an operational issue and related issues are perhaps best examined by the liaison group.
- Mr. Wallace inquired about the access of off-highway vehicles and equestrians on TRSF recreational trails and whether FFS discourages illegal use on trails. Mr. Carpenter discussed FFS's use of FWC law enforcement on state forests. Mr. Wallace inquired about the use of signage on the TRSF recreational trails. Mr. Carpenter discussed FFS's use of signage and the potential of future coordination with user groups to accomplish signage on TRSF recreational trails. Mr. Talley commented on the potential public usage of the FWC wildlife alert hotline. Mr. Korn and Mr. Carpenter continued to discuss the topic. FFS agreed to look at the current trailhead signage to determine if adequate.
- Mr. Liney commented that the draft plan is well-written and commended FFS for past accomplishments on TRSF, given limited resources.

- Ms. Burnam stated that the TRSF MPAG was a good experience for her.
- Mr. McCulley thanked FFS for taking care of Florida's forests.
- Ms. Sullivan agreed with Mr. Liney.
- FFS staff clarified how long within the FFS and WMD draft plan review/approval process the MPAG members are obligated to uphold the Sunshine Law.
- The MPAG members agreed to consensus regarding the edits put forth during the meeting for the TRSF draft plan. The MPAG members agreed that FFS should move forward with the draft plan approval process.
- Mr. Leneave made a motion to adjourn. Mr. Wallace seconded the motion.

Meeting End Time: 2:37 p.m.

Exhibit X

State Forest Summary Budget

Twin Rivers State Forest Summary Budget

	TWIN RIVERS STATE FOREST LANDS MGT. ONLY 13-14 EXPENDITURES -	Percentage of Total for FY 2013-14	TRSF Based Upon LMUAC Resource Management Funding Need
Resource Management	\$ 137,983	30.40%	\$ 482,685.01
Exotic Species Control	\$ 4,664	2.50%	\$ 39,694.49
Prescribed Burning	\$ 92,091	5.80%	\$ 92,091.22
Cultural Resources Management	\$ 187	0.10%	\$ 1,587.78
Timber Management	\$ 18,842	10.10%	\$ 160,365.74
Hydrological Management	\$ 1,306	0.70%	\$ 11,114.46
<i>OTHER RESOURCE MANAGEMENT</i>	\$ 20,894	11.20%	\$ 177,831.32
Listed Species Management	\$ -		\$ -
Forest Pest and Disease	\$ -		\$ -
Plant Conservation Program	\$ -		\$ -
State Forest Research Projects	\$ -		\$ -
Boundary Surveys for State Forests	\$ -		\$ -
Other Activities Also Include:	\$ -		\$ -
Liaison Community Meetings / Boundary Line Maintenance / Forest Inventories and Various Other Activities / Wildfire Suppression on State Forests			
			\$ -
Administration	\$ 14,551	7.80%	\$ 123,846.81
Central Office Headquarters	\$ 14,551	7.80%	\$ 123,846.81
District/Regions	\$ -		\$ -
Units/Projects	\$ -		\$ -
	\$ -		\$ -
Support	\$ 55,033	29.50%	\$ 231,815.83
Land Management Planning	\$ 3,358	1.80%	\$ 28,580.03
Land Management Reviews	\$ 560	0.30%	\$ 4,763.34
Training/Staff Development	\$ 10,633	5.70%	\$ 90,503.44
Vehicle Purchase	\$ 746	0.40%	\$ 6,351.12
Vehicle Operations and Maintenance	\$ 27,796	14.90%	\$ -
	\$ -		\$ -
OTHER SUPPORT	\$ 11,939	6.40%	\$ 101,617.90
State Forest Land Acquisition Support			\$ -
Other Support Activities Also Include:	\$ -		\$ -
Computer Maintenance / Radio Maintenance / Technical Support / Management of Apiary and Cattle Leases / State Forest Easements and Other Various Activities	\$ -		\$ -
			\$ -
Capital Improvements	\$ 36,377	19.50%	\$ 309,617.03
New Facility Construction	\$ 8,581	4.60%	\$ 73,037.86
Facility Maintenance	\$ 27,796	14.90%	\$ 236,579.17
			\$ -
Visitor Services/Recreation	\$ 23,879	12.80%	\$ 203,235.79
Information/Education	\$ 5,410	2.90%	\$ 46,045.61
Operations	\$ 18,469	9.90%	\$ 157,190.18
			\$ -
Law Enforcement	\$ -	0.00%	\$ -
Total	\$ 186,551	100.00%	\$ 1,587,779.64

Exhibit Y

Arthropod Control Information