Addendum 1 — Acquisition History

LAND ACQUISITION HISTORY REPORT					
Park Name	Alafia River Sta	te Park			
Date Updated	5/10/2016				
County	Hillsborough Co	unty, Florida			
Trustees Lease Number	Lease No. 4168				
Legal Description	A legal description is available upon request to the Department of Environmental Protection				
Current Park Size	7,717.81 acres				
Purpose of Acquisition	The State of Flor	ida acquired Alafia River State p	park to use it for public park and recr	eation.	
Acquisition History					
Parcel Name or Parcel DM-ID	Date Acquired	Initial Seller	Initial Purchaser	Size in acres	Instrument Type
MDID 301672	12/18/1996	Cytec Brewster Phosphates, Inc.	The Board of Trustees of the Internal Improvement Trust Fund of the State Florida (Trustees)	6,041.21	Trustee's Deed
MDID 10791	6/18/1996	Cytec Brewster Phosphates, Inc	Trustees	39.949	Special Warranty Deed
MDID 11245	6/18/1996	Cytec Brewster Phosphates, In	Trustees	19.559	Special Warranty Deed
Parcel Name or Lease Number	Date Leased	Initial Lessor	Initial Lessee	Current Term	Expiration Date
Leose No. 4168	1/23/1998	The Board of Trustees of the Internal Improment Trust Fund of the State of Florida	The State of Florida Deparmtnetnt of Environmental Protection, Division of Recreation and Parks	50 years	1/22/2048
	Type of			Term of the Outstanding	
Outstanding Issue	Instrument	Brief Description o	f the Outstanding Issue	lss	ue
Reverter	Trustee's Deed	If said lands are not used for public and reational purposes, the tilte will revert back to Cytec Brewster Phosphates. Inc		Perpetuity	

Addendum 2 — References Cited

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Addendum 3 — Soil Descriptions

Adamsville fine sand. [2, 1989]

The Adamsville series consists of deep, somewhat poorly drained soils. Adamsville fine sand soil is nearly level and poorly drained. The slope is less than 2 percent. These soils formed in sandy marine sediment. They are on broad ridges on the flatwoods. A seasonal high water table is at a depth of 20 to 40 inches for 2 to 6 months, and recedes to a depth of 60 inches during prolonged dry periods. Permeability is rapid. The available water capacity is low. These soils are hyperthermic, uncoated, Aqui Quartzipsamments.

Typically, this soil has a surface layer of very dark gray sand about 6 inches thick. The underlying material, to a depth of about 30 inches, is brown fine sand. Reaction ranges from very strongly acid to mildly alkaline throughout. Silt and clay make up less than 5 percent of the 10- to 40-inch control section. The texture is fine sand or sand. In most areas, this soil is used for improved pasture, citrus crops, or homesite or urban development. In a few areas, this soil is used for cultivated crops, or it is left in natural vegetation, which consists of bluejack oak, turkey oak, longleaf pine, and slash pine (mostly sandhill associations). The understory includes broomsedge bluestem, lopsided indiangrass, saw palmetto, and pineland threeawn.

Adamsville soils are closely associated on the landscape with Lochloosa, Pomello, Tavares and Zolfo soils. Lochloosa soils have an argillic horizon; Pomello and Zolfo soils have a spodic horizon. Pomello and Tavares soils are moderately well drained.

Archbold fine sand. [3, 1989]

The Archbold series consists of deep, moderately well-drained soils. These soils formed in sandy marine sediment. They are on low ridges on the flatwoods. The slope is less than 2 percent. In most years a seasonal high water table is at a depth of 42 to 60 inches for about 6 months; this recedes to a depth of 60 to 80 inches during prolonged dry periods. Permeability is rapid. The available water capacity is very low. These soils are hyperthermic, uncoated, Typic Quartzipsamments.

Typically, this soil has a surface layer of light gray fine sand about 2 inches thick. The underlying material is white fine sand to a depth of about 80 inches. In places, similar soils included in this mapping have a black or very dark brown subsoil. Other similar soils, in higher parts, are well drained. Reaction ranges from extremely acid to strongly acid throughout. Silt and clay make up less than 2 percent of the 10- to 40-inch control section.

In most areas, this soil has been left idle in "scrub" forest. A few areas are used for pasture or for homesite or urban development. The fine sand texture of the surface layer limits the use of equipment. The natural vegetation consists of sand pines. The understory includes pineland threeawn, pricklypear cactus, and saw palmetto.

This Archbold soil is in capability subclass VIs, in woodland group3S, and in the Sand Pine-Scrub Oak range site.

Arents, nearly level. [4, 1989]

This consists of nearly level, heterogeneous soil material. This material has been excavated, reworked and reshaped by earthmoving equipment. Arents are near urban centers, phosphate-mining operations, major highways and sanitary landfills.

Arents does not have an orderly sequence of soil layers. This map unit is not associated with or confined to a particular kind of soil. It is variable and contains discontinuous lenses, pockets or streaks of black, gray, grayish brow, brown or yellowish brown sandy or loamy fill material. The thickness of the fill material ranges from 30 to 80 inches or more. Also included are small areas of soil that has slope that ranges from 0 to 5 percent. Most soil properties are variable. The depth to the seasonal high water table varies with the amount of fill material and artificial drainage. Permeability and the available water capacity vary widely from one area to another. In most areas, the soil in the map unit has been left idle or is used for home sites, recreation and urban development. In a few areas, the soil is used for pasture. Where reclamation has been attempted, the overburden soils tend to be compacted from the heavy machinery used. Surface layers tend to become encrusted upon drying, preventing root penetration by young trees in the spring and fall dray seasons. Compaction further hinders water and root penetration. An individual assessment of each site is necessary to determine its potential for different uses. The soils in this map unit have not been assigned to a capability subclass, a woodland group, or range site.

Arents, very steep. [39, 1989]

This map unit consists of mounds of very steep, heterogenous soil material. These arents are the accumulation of material from phosphate mining operations. It is not associated with or confined to a particular kind of soil. Arents do not have an orderly sequence of soil layers. They are variable and contain discontinuous lenses, pockets or streaks of black, gray, grayish brown, brown or yellowish brown sandy or loamy excavated material. The thickness of the excavated material ranges from 3 to 15 feet or more. Included in this map unit are small areas of water. Most soil properties of Arents are variable. The depth to the seasonal high water table will vary with the amount of excavated material and artificial drainage. The permeability and the available water capacity vary widely from one area to another. Phosphate mining operations are inactive in most areas. Present land use and slope precludes the use of this map unit for cultivated crops, pasture, commercial trees, or building site development. An individual assessment of each site is necessary to determine its potential for different uses. The soils in the map unit have not been assigned to a capability subclass, to a woodland group, or to a range site.

Basinger, Holopaw and Samsula, depressional. [5, 1989]

The Basinger series consists of deep, very poorly drained soils. These soils formed in sandy marine sediment. They are in swamps and depressions and along drainages in the flatwoods, along the exterior of swamps or in shallow

depressions. A seasonal high water table is within 10 inches of the surface. The slope is less than 2 percent. These soils are siliceous, hyperthermic Spodic Psammaquents. Basinger soils are closely associated on the landscape with Holopaw, Myakka, Ona and Samsula. Holopaw soils have an argilic horizon. Myakka and Ona soils have a spodic horizon and are poorly drained. Samsula soils are organic.Reaction ranges from extremely acid to neutral throughout. Typically, the texture of the A horizon is fine sand, but the range includes muck or mucky fine sand. In Hillsborough county, often associated with cutthroat grass communities.

Candler fine sand, 0 to 5 percent slopes. [7, 1989]

The Candler series consists of deep, excessively drained soils. These soils formed in sandy marine sediment. They are on the uplands. The slope ranges from 0 to 12 percent. A seasonal water table is at a depth of more than 80 inches. Permeability is rapid. The available water capacity is very low. These soils are hyperthermic, uncoated Typic Quartzipsamments.

Typically, this soil has a surface layer of dark gray fine sand about 6 inches thick. Light yellowish brown fine sand is in the subsurface layer, to a depth of about 35 inches. Generally, the solum goes to 80 inches, consisting of fine sand, single grained, and few fine and medium roots. Reaction ranges from very strongly acid to medium acid throughout.

In most areas, this Candler soil is used for citrus crops. In a few areas, it is used for pasture or for homesite or urban development, The natural vegetation consists of bluejack oak, Chapman oak, scrub live oak, and turkey oak. The understory includes indiangrass, hairy panicum, panicum, and running oak.

This soil is moderately suited to pasture. The very low available water capacity limits the production of plants during extended dry periods, Proper stocking, pasture rotation, and timely deferment of grazing help keep the pasture in good condition.

The main management concerns for producing and harvesting timber are seedling mortality and equipment use limitations. The fine sand texture of the surface layer limits the use of equipment.

Candler soil is in capability subclass VIs, in woodland group 8S, and in the Longleaf Pine-Turkey Oak Hills range (mostly sandhill associations). These soils are closely associated on the landscape with Kendrick, Millhopper and Tavares soils. (Kendrick and Millhopper soils have an argillic horizon. Tavares soils are moderately well-drained.)

Felda fine sand, 0 to 5 % slopes. [16, 1989]

This soil is nearly level and poorly drained. It is on low terraces of major rivers and streams. It is flooded for very long periods following prolonged intense rains. The slope is 0 to 2 percent.

Typically, this soil has a surface layer of dark gray fine sand about 6 inches thick. The upper part of the subsurface layer, to a depth of about 12 inches, is grayish brown fine sand. The lower part, to a depth of about 22 inches, is light gray, mottled fine sand. The subsoil, to a depth of about 38 inches, is gray, mottled sandy clay loam. The substratum to a depth of about 80 inches is light brownish gray, mottled loamy sand.

In most years, a seasonal high water table fluctuates from the soil surface to a depth of about 10 inches for 2 to 6 months. Permeability is rapid in the surface and subsurface layers and is moderate to moderately rapid in the subsoil. The available water capacity is moderate.

In most areas, this Felda soil has been left idle in natural vegetation. In a few areas, it is used for pasture. The natural vegetation consists of red maple, cabbage palm, slash pine, and sweetgum. The understory includes saw palmetto, pineland threeawn, and waxmyrtle.

This Felda soil is in capability subclass IVw, in woodland group 10W, and in the Freshwater Marshes and Ponds range site. Reaction ranges from strongly acid to mildly alkaline in the A horizon and from slightly acid to moderately alkaline in the E, Bt, and C horizons.

Fort Meade loamy fine sand, 0 to 5 percent slopes. [18, 1989]

The Fort Meade series consists of deep, well-drained to excessively drained soils. These soils formed in sandy marine sediment. They are in the uplands. A seasonal high water table is at a depth of more than 72 inches. Permeability is rapid. The available water capacity is very low. The slope is nearly level to gently sloping, ranging from 0 to 5 percent. These soils are sandy siliceous, hyperthermic Quartzipsammentic Haplumbrepts.

Reaction ranges from strongly acid to neutral in the A horizon, and from very strongly acid to medium acid in the C horizon. Typically, surface layer is about 26 inc thick. The upper 7 inc is very dark gray loamy fine sand. The lower 19 inc is very dark grayish brown loamy sand. Underlying material is yellowish brown loamy sand to a depth of about 58 inches, and light yellowish brown loamy sand to 80 inches.

In most areas, Fort Meade soil is used for citrus or cultivated crops, or pasture. This soil may be suited to pasture if proper stocking, pasture rotations, and timely deferment of grazing are applied. The potential of this soil for production of slash pines is moderately high; the low to moderate available water capacity generally influences seedling survival in areas where understory plants are numerous. The natural vegetation consists of bluejack oak, live oak, turkey oak and slash pine(usually sandhill associations). The understory includes lopsided indiangrass, panicum, and pineland threeawn.

This Fort Meade soil is in capability subclass IIIs, in woodland group 10S, and in the Upland Hardwood Hammocks range site.

Immokalee fine sand. [21, 1989]

This soil is nearly level and poorly drained. It is on broad plains on the flatwoods. The slope is 0 to 2 percent. Typically, this soil has a surface layer of very dark gray fine sand about 8 inches thick. The subsurface layer, to a depth of 36 inches, is light gray fine sand. The upper part of the subsoil, to a depth of about 46 inches, is black fine sand. The middle part, to a depth of about 52 inches, is dark reddish brown fine sand. The lower part to a depth of about 80 inches is dark brown fine sand.

In most years, a seasonal high water table fluctuates from the soil surface to a depth of 10 inches for more than 2 months and recedes to a depth of 10 to 40 inches for 8 months or more. Permeability is rapid in the surface and subsurface layers and moderate in the subsoil. The available water capacity is low.

In most areas, this Immokalee soil is used for native pasture. In a few areas, it is used for cultivated crops, improved pasture, or citrus crops or for homesite or urban development. The natural vegetation consists of longleaf pine and slash pine The understory includes creeping bluestem, lopsided indiangrass, saw palmetto, pineland threeawn, and wax myrtle (usually mesic flatwoods associations).

The potential of this soil for the production of slash pines moderate. Equipment use limitations and seedling mortality are the main limitations. Planting and harvesting operations should be scheduled during dry periods. Water-tolerant trees should be planted. Bedding of rows helps to minimize the excessive wetness limitations.

This Immokalee soil is in capability subclass IVw, in woodland group 8W, and in the South Florida Flatwoods range site. Reaction ranges from extremely acid to medium acid throughout.

Lake fine sand, 0 to 5% slopes. [25, 1989]

This soil is nearly level to gently sloping and excessively drained. Typically, this soil has a surface layer of dark grayish brown fine sand about 4 inches thick. The underlying material extends to a depth of about 80 inches. The upper 24 inches is strong brown find sand. The next 40 inches is reddish yellow fine sand. The lower 12 inches is strong brown fine sand.

A seasonal high water table is at a depth of more than 80 inches. Permeability is rapid. The available water capacity is very low or low.

In most areas, this Lake soil is used for citrus crops. The natural vegetation consists of bluejack oak, Chapman oak, scrub oak, live oak, and turkey oak. The understory includes lopsided indiangrass, running oak, and pineland threeawn.

This soil is moderately suited to pasture. The very low or low available water capacity of the soil limits production of plants during extended dry periods. Proper stocking, pasture rotation, and timely deferment of grazing help keep the pasture in good condition. The potential of this soil for the production of slash pines is moderately high. The main management concerns are the equipment use limitations and seedling mortality.

This Lake soil is in capability subclass IVs, in woodland group 10S, and in the Longleaf Pine-Turkey Oak Hills range site. Reaction is very strongly acid or strongly acid throughout.

Leon fine sand. [Ls, 1918]

Leon fine sand consists of a light-gray, fine-textured sand, grading within a few inches into a lighter colored fine sand. This type is characterized by a dark-brown layer, locally called a "hard-pan" consisting of organic matter mixed with fine sand and some iron compounds. This hardpan layer ranges from 6-15 inches in thickness and is encountered within the 3-ft section, usually at a depth of 15-20 inches. It is underlain by a yellowish fine sand, which becomes lighter in color with depth, grading finally into white, compact fine sand. The color of the surface soil is affected by even slight differences in elevation and drainage, and in some of the lower lying positions it is dark gray to almost black owing to the accumulation of organic matter. Leon fine sand is one of the most widely distributed and extensive soil types in the county and is the principal flatwoods type. It is most extensive in the low flatwoods surrounding the bay shores and extending several miles inland. Large areas also occur in the northern and southern parts of the county. The elevation of the type ranges from a few inches or a few feet above sea level near the by to considerably more in the interior of the county. The surface is generally flat, with numerous depressions of varying size. In the southern part of the county the depressions consist of shallow, grassy ponds, and in the northern part of cypress ponds. Except where the larger streams pass through the type, the surface drainage is carried by intermittent streams or slough-like depressions. The flat surface hinders the run-off and more or less impervious hardpan retards percolation, consequently during wet spells water stands on the surface for a time. In dry seasons, the soil becomes very dry as the hardpan prevents the upward movement of moisture from the substratum. As a rule, without artificial drainage and irrigation, crops are uncertain.

Most of the type support a typical flatwoods growth of longleaf pine, scrub saw palmetto, wiregrass and broomsedge. The undergrowth includes some huckleberry and gallberry bushes and shrubby oaks. The pine trees as a rule are rather sparse and of small size. The scrub saw palmetto is small. The main use of the type is for turpentine collection and as a range for live stock. It affords good grazing, especially in the spring.

Malabar fine sand [27, 1989]

This soil is nearly level and poorly drained. It is in low-lying sloughs and shallow depressions on the flatwoods. The slope is 0 to 2 percent.

Typically, this soil has a surface layer of dark gray fine sand about 4 inches thick. The subsurface layer, to a depth of about 12 inches, is light brownish gray fine sand. The upper part of the subsoil, to a depth of about 30 inches, is brownish yellow fine sand. The next layer, to a depth of about 50 inches, is pale brown fine sand. The lower part, to a depth of about 66 inches, is gray, mottled fine sandy loam. The substratum to a depth of about 80 inches is grayish brown fine sand.

In most years, a seasonal high water table fluctuates from the soil surface to a depth of about 10 inches for 2 to 6 months. Permeability is rapid in the surface and subsurface layers, slow in the subsoil, and moderately rapid or rapid in the substratum. The available water capacity is very low or low. The depressions are subject to shallow flooding during heavy rains.

In most areas, this Malabar soil has been left idle in native vegetation. In some areas, the soil has been drained and is used for cultivated crops or pasture or for homesite or urban development. The natural vegetation consists of cabbage palm, longleaf pine, and slash pine. The understory includes broomsedge, bluestem, inkberry, maidencane, saw palmetto, and waxmyrtle.

The potential of this soil for the production of slash pines is moderately high. Seedling mortality and the equipment use limitation are the main limitations. Water-tolerant trees should be planted. Planting and harvesting operations should be scheduled during dry periods. Bedding of rows helps to minimize the excessive wetness limitation. Wetness limits the use of equipment.

This Malabar soil is in capability subclass IVw, in woodland group 10W, and in the Slough range site. Reaction ranges from strongly acid to moderately alkaline throughout.

Myakka fine sand [29, 1989]

This soil is nearly level and poorly drained. It is on broad plains on the flatwoods. The slope is 0 to 2 percent. Typically, this soil has a surface layer of very dark gray fine sand about 5 inches thick. The subsurface layer, to a depth of about 20 inches, is gray fine sand. The upper part of the subsoil, to a depth of about 25 inches, is black fine sand. The middle part, to a depth of 30 inches, is dark reddish brown fine sand. The lower part, to a depth of about 38 inches, is brownish yellow fine sand. The upper part of the substratum, to a depth of about 55 inches, is very pale brown fine sand. The lower part to a depth of about 50 inches is dark grayish brown fine sand.

In most years, a seasonal high water table fluctuates from the soil surface to a depth of 10 inches for 1 to 4 months and recedes to a depth of 40 inches during prolonged dry periods. Permeability is rapid in the surface and subsurface layers, moderate or moderately rapid in the subsoil, and rapid in the substratum. The available water capacity is low.

In most areas, this Myakka soil is used for native pasture or cultivated crops. In a few areas, it is used for improved pasture or citrus crops, or it is used for homesite or urban development. The natural vegetation consists of longleaf pine and slash pine. The understory includes gallberry, running oak, saw palmetto, pineland threeawn and waxmyrtle (usually mesic flatwoods associations).

The potential of this soil for the production of slash pines is moderate. The management concerns for producing and harvesting timber are the equipment use limitations and seedling mortality.

This Myakka soil is in capability subclass IVw, in woodland group 8W, and in the South Florida Flatwoods range site. Reaction ranges from extremely acid to slightly acid.

Norfolk fine sand (with hammock and scrub phases). [Ns, 1918]

Norfolk fine sand consists of light-gray to yellow-gray fine sand, about 6 inches deep, grading into a pale-yellow to bright-yellow fine sand, which extends to a depth of more than 3 feet. In some of the lower lying spots the surface soil is darker gray in color to a depth of about 12 inches and in some of the flatter areas both soil and subsoil are lighter colored than usual. The material is slightly coherent when moist, but is loose and incoherent when dry. The texture is uniform. Norfolk is one of the most extensive soils in Hillsborough county, and occupies the greater part of the uplands, main in an almost continuous belt several miles wide extending through the central part of the county in a NW – SE direction.

The topography is undulating, with ridges and hummcocks, and occasionally gently undulating to nearly flat areas. The surface is marked by numerous depressions or sink holes, some of which are occupied by ponds and lakes. The topography is generally favorable to cultivation. Drainage is excessive, the loose, porous structure of the type permitting rain water to percolate rapidly to lower levels. Seepage places or springs are numerous at the foot of the slopes to the flatwoods and along the banks of streams. Crops are apt to suffer from lack of moisture even in ordinary dry periods.

The forest growth consists mainly of longleaf pine and forked-leaf blackjack, turkey and water oak, with some live oak; scattering of saw palmetto. Parts of the type support an open forest of longleaf pine. The surface usually is covered with wiregrass and generally fits today's description of a sandhill mosaic; when the pine is removed, blackjack oak and turkey oak spread over the land.

Norfolk fine sand, scrub phase, supports a scrub growth similar to that of the St. Lucie fine sand, with scrub live oak, a shrub known as "rosemary' and some saw palmetto. Wiregrass is lacking. The surface soil to a depth of an inch or two is gray to brownish-gray fine sand, which extends to great depths with no essential difference between the lower stratum of the soil and the subsoil. The material is loose and incoherent. There are a few areas in the central part of the county and two along the Alafia River. The latter support a

mixed scrub and hammock vegetation. The phase is excessively drained and droughty, moisture passing through it rapidly to lower levels.

Norfolk fine sand, hammock phase, soil material consists of a slightly loamy fine sand, dark gray or brownish gray to light gray to a depth of 6-10 inches and pale yellow or amber yellow below. The surface soil in cultivated soils frequently has a brownish tinge, approaching the color of Gainesville fine sand. It is probably that a substratum of clay, limestone or hardpan occurs at no great depth. This phase occurs in scattered areas associated with the main type bordering lakes and streams through the uplands. It lies at elevations ranging from 1ft to 20 ft above water level. The natural drainage is good. Owing to the proximity of the phase to bodies of water and its slight elevation, the permanent water-table is not far below the 3-ft soil section. Uncleared areas support a heavy hammock growth consisting mainly of live oak, hickory and magnolia, with some Sabal, longleaf pine and other trees, and usually have a rather thick undergrowth of shrubs.

Orlando fine, 0 to 5% slopes. [35, 1989]

This soil is nearly level to gently sloping and well drained. It is on the uplands. Typically, this soil has a surface layer that is about 20 inches thick. The upper 8 inches is black fine sand. The lower 12 inches is very dark gray fine sand. The next layer, to a depth of about 22 inches, is dark grayish brown fine sand. The upper part of the underlying material, to a depth of about 60 inches, is yellowish brown fine sand. The lower part to a depth of about 80 inches is pale brown fine sand.

A seasonal high water table is below a depth of more than 72 inches. Permeability is rapid. The available water capacity is low.

In most areas, this Orlando soil is used for cultivated crops or citrus crops. In a few areas, it is used for pasture or for homesite or urban development. The natural vegetation consists of bluejack oak, live oak, turkey oak, and slash pine. The understory includes panicums, saw palmetto, and pineland threeawn.

The potential of this soil for the production of slash pine trees is moderately high. This soil has few limitations for woodland use and management. The low available water capacity adversely affects seedling survival in areas where understory plants are numerous. After harvesting, reforestation must be carefully managed to reduce competition from undesirable understory plants.

This Orlando soil is in capability subclass IIIs, in woodland group 10S, and in the Longleaf Pine-Turkey Oak Hills range site. Reaction ranges from very strongly acid to slightly acid in the A horizon and from very strongly acid to medium acid in the C horizon.

Orsino fine, 0 to 5% slopes. [36, 1989]

This soil is nearly level to gently sloping and moderately well drained. It is on the uplands and along slope breaks to stream channels.

Typically, this soil has a surface layer of gray fine sand about 2 inches thick. The upper part of the subsurface layer, to a depth of about 15 inches, is light gray fine sand. The lower part, to a depth of about 31 inches, is white fine sand. The upper part of the subsoil, to a depth of about 48 inches, is brownish yellow and very dark grayish brown fine sand. The lower part, to a depth of 72 inches, is yellow, mottled fine sand. The substratum to a depth of about 80 inches is pale brown fine sand.

In most years, a seasonal high water table is at a depth of 40 to 60 inches for more than 6 months and recedes to a depth of more than 60 inches during prolonged dry periods. Permeability is very rapid. The available water capacity is low or very low.

In most areas, this Orsino soil is used for pasture. In a few areas, it is used for homesite or urban development or is left in natural vegetation. The natural vegetation consists of turkey oak, sand pine, and slash pine. The understory includes sand heath, pineland threeawn, saw palmetto, and pricklypear cactus.

This Orsino soil is in capability subclass IVs, in woodland group 8S, and in the Sand Pine Scrub range site. Reaction ranges from extremely acid to medium acid throughout.

Pomello fine sand, 0 to 5% slopes. [41, 1989]

This soil is nearly level to gently sloping and moderately well drained. It is on low ridges on the flatwoods. Typically, this soil has a surface layer of very dark gray fine sand about 3 inches thick. The subsurface layer, to a depth of about 43 inches is light gray fine sand. The upper part of the subsoil, to a depth of about 46 inches, is dark brown fine sand. The lower part, to a depth of about 55 inches, is brown fine sand. The substratum to a depth of about 80 inches is grayish brown fine sand. Similar soils included in mapping, in some places, have a subsoil within 30 inches of the surface.

In most years, a seasonal high water table is at a depth of 24 to 40 inches for 1 to 4 months and recedes to a depth of 40 to 60 inches during dry periods. Permeability is very rapid in the surface and subsurface layers, moderately rapid in the subsoil, and rapid in the substratum. The available water capacity is very low.

In most areas, this Pomello soil is used for native pasture. The natural vegetation consists of longleaf pine, sand pine and slash pine. The understory includes creeping bluestem, lopsided indiangrass, running oak, saw palmetto and pineland threeawn. This soil is poorly suited to pasture.

The potential of this soil for the production of sand pines and slash pines is moderate. The main management concerns for producing and harvesting timber are the equipment use limitations and seedling mortality.

This Pomello soil is in capability subclass VIs, in woodland group 8S, and in the Sand Pine Scrub range site. Reaction ranges from very strongly acid to medium acid throughout.

Portsmouth fine sand (Hammock and prairie phase). [Ps, 1918]

The surface soil of the Portsmouth fine sand consists of a black fine sand 4-12 inches deep, containing a high percentage of organic matter - enough in places to give it a mucky texture. This is underlain, as a rule, by light-gray to nearly white fine sand. Within 3 ft of the surface, usually between 12 and 24 inches, there is a compact stratum of brown or black fine sand containing considerable organic matter and iron compounds and resembling a hardpan. Below this compact layer the material consists of a brownish-yellow or darkgray to nearly white, compact, water-soaked in sand extending to considerable depth. The hardpan layer may occur at any depth within the 3foot section. In places it directly underlies the dark surface soil and in others it lies below the 3-ft section. This soil occurs throughout the flatwoods section of the county, being most extensive in the southern and eastern parts. It is typically a flatwoods soil and is associated with the Leon fine sand, occupying the lower and more poorly drained positions. It is also associated with Scranton fine sand in the eastern part of the county, where it occupies lower slopes. The areas in the flatwoods have an almost perfectly flat and level surface. The type frequently occurs in strips around ponds and lakes and along streams or related stream depressions. Owing to the flat surface, the drainage is poor. Water stands on the surface after rains and is removed very slowly by lateral seepage and evaporation. The soil is dry during short periods, and as the hardpan substratum prevents the rise of capillary water, crops are likely to suffer for lack or moister at times. The larger part of this type is not cleared (in 1916) and supports a growth of longleaf pine, saw palmetto, gallberry, and broomsedge, with some wiregrass in the higher areas. Pine and saw palmetto attain a larger size than on the Leon fine sand. Gallberry is a characteristic growth and the type is locally referred to as "gallberry flatwoods." It constitutes some of the best natural grazing land in the flatwoods.

Portsmouth fine sand, hammock phase, consists of a black, more or less mucky fine sand, 8-12 inches deep, underlain by a gray, compact fine sand which becomes lighter in color with depth. In places, a compact stratum resembling hardpan is encountered an inch or two below the surface. This phase is not extensive and is developed mainly in the eastern and central parts of the county. It occurs as narrow areas along stream depressions or along small streams. The drainage is naturally poor. It supports a hammock growth consisting mainly of oak, magnolia, bay and cabbage palm with some pine and an undergrowth of shrubs.

Seffner fine sand. [47, 1989]

This soil is nearly level and somewhat poorly drained. It is on the rims of depressions and on broad, low ridges on the flatwoods. The slope is 0 to 2 percent.

per 9 inches is very dark gray fine sand, and the lower 4 inches is very dark gray, mottled fine sand. A transitional layer, to a depth of about 21 inches, is dark gray, mottled fine sand. The upper part of the underlying material, to a depth of about 35 inches, is very pale brown, mottled fine sand. The middle part, to a depth of about 63 inches, is light gray, mottled fine sand. The lower part to a depth of 80 inches is white, mottled fine sand.

In most years, a seasonal high water table is at a depth of 20 to 40 inches for 2 to 6 months and recedes to a depth of less than 60 inches during prolonged dry periods. Permeability is rapid. The available water capacity is low or moderate.

In most areas, this Seffner soil is used for cultivated crops or pasture or for homesite and urban development. In a few areas, it is used for citrus crops or has been left idle in natural vegetation. The natural vegetation consists of longleaf pine, slash pine, and laurel oak. The understory includes creeping bluestem, grassleaf goldaster, lopsided indiangrass, saw palmetto, and pineland threeawn.

This Seffner soil is in capability subclass IIIw, in woodland group 10W, and in the Oak Hammocks range site. The texture is sand or fine sand to a depth of 80 inches or more. Reaction ranges from very strongly acid to neutral throughout.

Slickens. [50, 1989]

This miscellaneous area consists of level, very poorly drained accumulations of fine-textured material from phosphate mining operations. Slickens generally are confined in specially constructed basins or holding ponds. The basins are designed to allow water to flow through a series of holding ponds and allow the slickens to settle out. These areas are ponded for very long periods. The slope is less than 1 percent.

Slickens do not have an orderly sequence of soil layers. Typically, the slickens are gray or light gray and have mottles in various hues, values and chromas. Slickens are clayey and contain about 88 percent clay, 8 percent silt, and 4 percent sand. The clay mainly is montmorillonite but includes kaolinite, illite and attapulgite. The clayey material is fluid or very fluid throughout except, in some places, the upper few inches are firm.

In most years, undrained areas are ponded except during extended dry periods. A seasonal high water table fluctuates from the soil surface to a depth of about 10 inches. Permeability is very slow. The available water capacity is high.

Most areas in this map unit have been left idle. Slickens generally do not support vegetation. They also are too soft and boggy to support livestock. Slickens are not suited to cultivated crops, pasture or commercial trees. An individual assessment of each site is necessary to determine its potential for different uses.

The soils in this unit have not been assigned to a capability subclass, to a woodland group or to a range site.

Smyrna fine sand. [52, 1989]

This soil is nearly level and poorly drained. It is on broad, low-lying, convex swells on the flatwoods. The slope is 0 to 2 percent. Typically, the soil has a surface layer of very dark gray fine sand about 4 inches thick. The subsurface layer, to a depth of about 12 inches, is gray fine sand. The upper part of the subsoil, to a depth of about 15 inches, is dark brown fine sand. The lower part, to a depth of about 20 inches, is very dark grayish brown fine sand. The upper part of the substratum, to a depth of about 45 inches, is light brownish gray, mottled fine sand. The lower part to a depth of about 80 inches is brown fine sand. Similar soils included in mapping, in some areas, have a surface layer that is more than 8 inches thick.

In most years, a seasonal high water table fluctuates from the soil surface to a depth of 10 inches for more than 2 months and recedes to a depth of 10 to 40 inches for 6 months or more. Permeability is rapid in the surface and subsurface layers, moderate or moderately rapid in the subsoil, and rapid in the substratum. The available water capacity is low.

In most areas, this Smyrna soil is used for native pasture. The natural vegetation consists of longleaf pine and slash pine. The understory includes gallberry, running oak, saw palmetto, pineland threeawn and waxmyrtle.

The potential of this soil for the production of slash pines is moderately high. Equipment use limitations and seedling mortality are the main limitations. Water-tolerant trees should be planted. Planting and harvesting operations should be scheduled during dry periods. Bedding of rows helps to minimize the excessive wetness limitation.

This Smyrna soil is in capability subclass IVw, in woodland group 10W, and in the South Florida Flatwoods range site. The combined thickness of the A and E horizons is less than 20 inches. Reaction ranges from extremely acid to neutral in the A, E, and Bh horizons except where limed and is very strongly acid or strongly acid in the C horizon.

St. Johns fine sand. [46, 1989]

This soil is nearly level and poorly drained. It is on low-lying plains on the flatwoods. The slope is 0 to 2 percent. Typically, the upper part of the surface layer is black fine sand about 6 inches thick. The lower part, to a depth of about 12 inches, is very dark grayish brown fine sand. The subsurface layer,

to a depth of about 29 inches, is light brownish gray fine sand. The upper part of the subsoil, to a depth of about 36 inches, is black fine sand. The middle part, to a depth of about 46 inches, is dark reddish brown fine sand. The lower part, to a depth of about 50 inches, is dark yellowish brown fine sand. The substratum to a depth of about 80 inches is light brownish gray fine sand.

In most years, a seasonal high water table fluctuates from the soil surface to a depth of 15 inches for 2 to 6 months and recedes to a depth of 15 to 30 inches during prolonged dry periods. Permeability is rapid in the surface and subsurface layers, moderately slow or moderate in the subsoil, and rapid in the substratum. The available water capacity is moderate. In most areas, this St. Johns soil is used for native pasture.

The natural vegetation consists of longleaf pine and slash pine. The understory includes gallberry, running oak, saw palmetto, pineland threeawn and waxmyrtle.

The potential of this soil for the production of slash pines is moderately high. Equipment use limitations and seedling mortality are the main limitations.

This St. Johns soil is in capability subclass IIIw, in woodland group 10W, and in the South Florida Flatwoods range site. Reaction ranges from extremely acid to strongly acid throughout.

St. Lucie fine sand (including Flatwoods phase). Ss, 1918]

St. Lucie sand consists of a light-gray to nearly white fine sand of considerable depth. The immediate surface may be slightly grayish, owing to the presence of a small percentage of organic matter. Where the type merges into Leon fine sand and in flat areas, the hardpan typical of the Leon series may be encountered within or just below the 3-foot section, more often below. In places at relatively high elevations an orange-yellow sand underlies the type and occasionally it is encountered within 36 inches of the surface. A characteristic of the type is the glittering white appearance of the surface when dry and the soil is called locally "white sand." It occurs in a number of areas ranging in size from a few acres to a square mile or more throughout the central and southern parts of the county. The topography prevails with ridges and hummocks; the ridges usually being smooth and rounded. The natural drainage is excessive, the loose sandy character of the material permitting the rapid percolation of water. The soil is droughty, as indicated by the vegetation it supports. It is of no importance agriculturally, though on the east side of Florida this soil is used for growing pineapples. The forest growth is in marked contrast to that of other soils of the county, consisting mainly of spruce pine [??], with an undergrowth of scrub evergreen oak, rosemary, and saw palmetto. There is a sparse growth of wiregrass. The type is sometimes referred to as "scrub."

St. Lucie fine sand, flatwoods phase. This is identical with that of the main type except that a hardpan layer similar to that underlying the Leon fine sand is usually encountered at a depth of 40 to 60 inches, and occasionally with the

3-foot section. The phase represents a near approach to Leon fine sand. The phase is not extensive. It occurs in the southern and south-central parts of the county, closely associated with the St. Lucie and Leon fine sands. The surface is flat to slightly ridges, lying somewhat higher than the typical flatwoods. The phase has good to excessive drainage, but is not quite so droughty as the typical soil. The native vegetation is similar to that on the Leon fine sand, consisting mainly of longleaf pine with an undergrowth of dwarf saw palmetto and a cover of wiregrass and broomsedge. There are a few scattered clumps of scrub evergreen oak, which occasionally reach tree size. The longleaf pine growth is rather sparse but the trees are usually larger than on Leon fine sand.

Tavares-Millhopper fine sands, 0 to 5% slope. [53, 1989]

The soils in this map unit are nearly level to gently sloping and moderately well drained. They are in low-lying areas on the uplands and on low ridges on the flatwoods. Typically, the surface layer of the Tavares soil is dark grayish brown fine sand about 6 inches thick. The upper part of the underlying material, to a depth of about 32 inches, is pale brown fine sand. The middle part, to a depth of about 40 inches, is very pale brown fine sand. The lower part to a depth of about 80 inches is light gray fine sand.

Typically, the surface layer of the Millhopper soil is dark gray fine sand about 4 inches thick. The upper part of the subsurface layer, to a depth of about 9 inches, is brown fine sand. The next layer, to a depth of about 25 inches, is light yellowish brown fine sand. The next layer, to a depth of about 48 inches, is light gray, mottled fine sand. The lower part, to a depth of about 57 inches, is light gray fine sand. The upper part of the subsoil, to a depth of about 62 inches, is very pale brown, mottled sandy clay loam. The lower part to a depth of about 80 inches is gray, mottled sandy clay loam.

Tavares soil has a seasonal high water table at a depth of 40 to 80 inches for more than 6 months, and it recedes to a depth of more than 80 inches during prolonged dry periods. Millhopper soil has a seasonal high water table at a depth of 40 to 60 inches for 1 to 4 months, and it recedes to a depth of 60 to 72 inches for 2 to 4 months. Permeability of Tavares soil is rapid. Permeability of Millhopper soil is rapid in the surface and subsurface layers and moderate in the subsoil. The available water capacity is very low in Tavares soil and low in Millhopper soil.

In most areas, the soils in this map unity are used for pasture or homesite and urban development. In a few areas, they are used for cultivated crops or citrus crops or are left in natural vegetation. The natural vegetation consists of bluejack oak, turkey oak, live oak, and longleaf pine. The understory includes creeping bluestem, lopsided indiangrass, panicums and pineland threeawn.

The soils in this map unit are well suited to pasture. The very low or low available water capacity of the soils limits production of plants during extended dry periods. Proper stocking, pasture rotation and timely deferment of grazing help keep the pasture in good condition. The potential of these soils for the production of slash pines is moderately high. The main management concerns for producing and harvesting timber are the equipment use limitations and seedling mortality. The find sand texture of the surface layer limits the use of equipment. The very low or low available water capacity adversely affects seedling survival in areas where understory plants are numerous.

The soils in this map unit are in capability subclass IIIs, in woodland group 10S, and in the Longleaf Pine-Turkey Oak Hills range site. Soil reaction ranges from extremely acid to medium acid throughout. Silt and clay totals 5 percent or less between depths of 10 and 40 inches.

Winder fine sand, frequently flooded. [60, 1989]

This soil is nearly level and poorly drained. It is on the flood plains. This soil is flooded for very long periods following prolonged intense rain. Many areas are isolated by stream channels and steep escarpments. The slope is 0 to 2 percent.

Typically, this soil has a surface layer of black fine sand about 5 inches thick. The subsurface layer, to a depth of about 14 inches, is grayish brown fine sand. The upper part of the subsoil, to a depth of about 18 inches, is gray sandy clay loam and white fine sand. The lower part of the subsoil, to a depth of about 34 inches, is grayish brown, mottled sandy clay loam. The substratum, to a depth of about 80 inches, is light brownish gray fine sand. In most years, a seasonal high water table fluctuates from the soil surface to a depth of about 10 inches for 2 to 6 months. Permeability is rapid in the surface and subsurface layers, slow or very slow in the subsoil, and rapid in the substratum. The available water capacity is moderate.

In most areas, this Winder soil has been left idle in natural vegetation. In a few areas, it is used as pasture. The natural vegetation consists of Coastal Plain willow, red maple, cabbage palm and sweetgum. The understory includes buttonbush, maidencane, sawgrass, smartweed and sedges. In its natural state, this soil is generally not suited to cultivated crops or pasture.

This soil is generally not suited to the production of pines because of flooding or extended wetness. It may be suited to the production of cypress and hardwoods through natural regeneration.

This Winder soil is in capability subclass Vw and in woodland group 11W. This soil has not been assigned to a range site.

In the A to B/E horizons, reaction ranges from medium acid to mildly alkaline. In the Btg horizon, reaction ranges from neutral to moderately alkaline. In the 2Cg horizon, reaction is mildly alkaline or moderately alkaline.

Zolfo fine sand. [61, 1989]

This soil is nearly level and somewhat poorly drained. It is on broad, low ridges on the flatwoods. The slope is 0 to 2 percent. Typically, this soil has a surface layer of very dark gray fine sand about 3 inches thick. The upper part of the subsurface layer, to a depth of about 15 inches, is grayish brown, mottled fine sand. The middle part, to a depth of about 51 inches, is light gray, mottled fine sand. The lower part, to a depth of about 60 inches, is grayish brown fine sand. The subsoil to a depth of about 80 inches is dark brown fine sand.

In most years, a seasonal high water table is at a depth of 24 to 40 inches for more than 2 to 6 months and recedes to a depth of 60 inches during prolonged dry periods. Permeability is rapid in the surface and subsurface layers and moderate in the subsoil. The available water capacity is low.

In most areas, this Zolfo soil is used for citrus crops or pasture or for homesite or urban development. In a few areas, it is used for the cultivated crops or is left in natural vegetation. The natural vegetation consists of live oak, turkey oak, longleaf pine, and slash pine. The understory includes broomsedge, bluestem, lopsided indiangrass, saw palmetto and pineland threeawn.

This soil is moderately well suited to pasture. Proper stocking, pasture rotation, and timely deferment of grazing help keep the pasture in good condition.

The potential of this soil for the production of slash pines is moderately high. This soil has few limitations for woodland use and management. This Zolfo soil is in capability subclass IIIw, in woodland group 10W, and in the Upland Hardwood Hammocks range site. Reaction ranges from very strongly acid to neutral in the A and E horizons and from extremely acid to slightly acid in the Bh horizon.

Addendum 4 — Plant and Animal List

Common Name

Scientific Name

MYCOTES

Earth star Astraeus hygrometricus

LICHENS

Evans' reindeer lichen	Cladina evansii
Reindeer lichen	Cladina subtenuis
Cup lichen	Cladonia leporina

PTERIDOPHYTES

Ebony spleenwort	Asplenium platyneuron
Carolina mosquito fern	Azolla caroliniana
Toothed midsorus fern	Blechnum serrulatum
Southern grape-fern	Botrychium biternatum
Florida shield fern	Dryopteris Iudoviciana
Flakelet fern; Bramble fern	Hypolepis repens
Japanese climbing fern*	Lygodium japonicum
Old World climbing fern*	Lygodium microphyllum
Mariana maiden fern *	Macrothelypteris torresiana
Asian sword fern*	Nephrolepis brownii
Wild Boston fern	Nephrolepis exaltata
Adder's tongue fern	Ophioglossum petiolatum
Golden club	Orontium aquaticum
Cinnamon fern	Osmunda cinnamomea
Royal fern	Osmunda regalis var. spectabilis
Comb polypoidy	Pecluma ptilodon var. caespitosa BF, BG
Golden polypody	Phlebodium aureum
Resurrection fern	Pleopeltis polypodioides var. michauxianum
Whisk-fern	Psilotum nudum
Bracken fern	Pteridium aquilinum
Tailed bracken	Pteridium aquilinum var. pseudocaudatum
Meadow spike-moss	Selaginella apoda
Downy maiden fern	Thelypteris dentata
Hairy maiden fern	Thelypteris hispidula var. versicolor
Willdenow's maiden fern	Thelypteris interrupta
Widespread maiden fern	Thelypteris kunthii
Marsh fern	Thelypteris palustris
Marsh fern	Thelypteris palustris var. pubescens
Shoestring fern	Vittaria lineata
Netted chain fern	Woodwardia areolata
Virginia chain fern	Woodwardia virginica

Common Name

Scientific Name

GYMNOSPERMS

Eastern redcedar	Juniperus virginiana
Sand pine	Pinus clausa
Slash pine	Pinus elliottii
Bald-cypress	Taxodium distichum

ANGIOSPERMS

Monocots

Purple bluestem	Andropogon glomeratus var. glaucopsis
Bushy bluestem	Andropogon glomeratus var. hirsutior
Broomsedge bluestem	Andropogon virginicus
Chalky bluestem	Andropogon virginicus var. glaucus
Green silkyscale	Anthaenantia villosa
Nodding nixie	Aptera aphylla
Jack-in-the-pulpit	Arisaema triphyllum
Corkscrew threeawn	Aristida gyrans
Bottlebrush threeawn	Aristida spiciformis
Common carpetgrass	Axonopus affinis
Common carpetgrass	Axonopus fissifolius
Watergrass	Bulbostylis barbata
Capillary hairsedge	Bulbostylis ciliatifolia
Sandyfield hairsedge	Bulbostylis stenophylla
Ware's hairsedge	Bulbostylis warei
Florida scrub roseling	Callisia ornata
Golden canna	Canna flaccida
Greenwhite sedge	Carex albolutescens
Mohr's sedge	Carex atlantica subsp. capillacea
Brome-like sedge	Carex bromoides
Godfrey's sedge	Carex godfreyi
False hop sedge	Carex lupuliformis
Hop sedge	Carex lupulina
Coastal sandspur	Cenchrus spinifex
Spadeleaf coinwort	Centella asiatica
Shiny wood oats	Chasmanthium nitidum
Wild taro*	Colocasia esculenta
Common dayflower	Commelina diffusa
Erect dayflower	Commelina erecta
Seven-sisters	Crinium americanum
Bermudagrass	Cynodon dactylon
Poorland flatsedge	Cyperus compressus
Baldwin's flatsedge	Cyperus croceus
Marshland flatsedge	Cyperus distinctus
Sheathed flatsedge	Cyperus haspan

* Non-native Species

Alafia River State Park Plants

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Epiphytic flatsedge	. Cyperus lanceolatus	
Rusty flatsedge	. Cyperus odoratus	
Manyspike flatsedge	. Cyperus polystachyos	
Pinebarren flatsedge	Cyperus retrorsus	
Straw-color flatsedge	. Cyperus strigosus	
Tropica flatsedge	. Cyperus surinamensis	
Four-angle flatsedge	. Cyperus tetragonus	
Needle-leaf witchgrass	Dichanthelium aciculare	
Variable witchgrass	. Dichanthelium commutatum	
Cypress witchgrass	Dichanthelium dichotomum	
Dwarf cypress witchgrass	. Dichanthelium ensifolium va	r. breve
Lax-flower witchgrass	. Dichanthelium laxiflorum	
Hemlock witchgrass	Dichanthelium portoricense	
Southern crabgrass	. Digitaria ciliaris	
Reclining crabgrass	. Digitaria pentzii	
Blanket crabgrass	. Digitaria serotina	
Air potato*	. Dioscorea bulbifera	
Florida yam	. Dioscorea floridana	
Water hyacinth *	. Eichhornia crassipes	
Road grass	. Eleocharis baldwinii	
Yellow spikerush	. Eleocharis flavescens	
Viviparous spikerush	. Eleocharis vivipara	
Indian goosegrass*	Eleusine indica	
Butterfly orchid	. Encyclia tampensis	
Greenfly orchid	. Epidendrum conopseum	
Elliott lovegrass	Eragrostis elliottii	
Purple lovegrass	. Eragrostis spectabilis	
Coastal lovegrass	. Eragrostis virginica	
Centipedegrass*	. Eremochloa ophiuroides	
Saltmarsh fingergrass	. Eustachys glauca	
Pinewoods fingergrass	. Eustachys petraea	
Slendy fimbry	. Fimbristylis autumnalis	
Carolina fimbry	. Fimbristylis caroliniana	
Forked fimbry	. Fimbristylis dichotoma	
Hairy fimbry	. Fimbristylis puberula	
Saltmarsh umbrellasedge	. Fuirena breviseta	
Dwarf umbrellasedge	. Fuirena pumila	
Green-cross orchid	. Habenaria floribunda	
Waterspider false reinorchid	. Habenaria repens	
Needleroot airplant orchid	. Harrisella porrecta	
Hydrilla*	. Hydrilla verticillata	
Georgia spider-lily	. Hymenocallis crassifolia	
Alligator-lily	. Hymenocallis palmeri	
Yellow stargrass	. Hypoxis curtissii	
Cogongrass*	. Imperata cylindrica	
Prairie iris	. Iris hexagona	

* Non-native Species

Alafia River State Park Plants

0 N	Coloradigio Morros	Primary Habitat Codes
	Scientific Name	(for imperiled species)
Leathery rush	Juncus coriaceus	
Forked rush	Juncus dichotomus	
Soft rush	Juncus effusus subsp. solutus	5
Grassleaf rush	Juncus marginatus	
Many-head rush	Juncus polycephalus	
Needlepod rush	Juncus scirpoides	
Short-leaf flatsedge	Kyllinga brevifolia	
Slender-leaved flatsedge	Kyllinga pumila	
Bloodroot	Lachnanthes caroliana	
Whitehead bogbutton	Lachnocaulon anceps	
Southern cutgrass	Leersia hexandra	
Lesser duckweed	Lemna aequinoctialis	
Little duckweed	Lemna obscura	
Valdivia duckweed	Lemna valdiviana	
Southern Watergrass	Luziola fluitans	
Natalgrass*	Melinis repens	
Parrot's-feather *	Myriophyllum aquaticum	
Britton's beargrass	Nolina brittoniana	SC, RNC
Woodsgrass	Oplismenus hirtellus	
Beaked panicum	Panicum anceps	
Maidencane	Panicum hemitomon	
Torpedograss*	Panicum repens	
Redtop panicum	Panicum rigidulum	
Warty panicum	Panicum verrucosum	
Switchgrass	Panicum virgatum	
Sour paspalum	Paspalum conjugatum	
Seashore paspalum	Paspalum distichum	
Bahiagrass*	Paspalum notatum	
Thin paspalum	Paspalum setaceum	
Vasey grass*	Paspalum urvillei	
Spoonflower	Peltandra sagittifolia	
Green arrow arum	Peltandra virginica	
Savannah panicum	Phanopyrum gymnocarpon	
Water lettuce*	Pistia stratiotes	
Pickerelweed	Pontederia cordata	
Giant orchid	Pteroglossaspis ecristata	SIP
Needle palm	Rhapidophyllum hystrix	
Falling beak sedge	Rhynchospora caduca	
Bunched beak sedge	Rhynchospora cephalantha	
Beaksedge	Rhynchospora chalarocephala	3
Fringed beaksedge	Rhynchospora ciliaris	
Shortbristle horned beaksedge	Rhynchospora corniculata	
Fascicled beaksedge	Rhynchospora fascicularis	
Sandyfield beaksedge	Rhynchospora megalocarpa	
Bunched beaksedge	Rhynchospora microcephala	
Millet beaksedge	Rhynchospora miliacea	

* Non-native Species
| Common Name | Scientific Name | Primary Habitat Codes
(for imperiled species) |
|------------------------------|-------------------------------|--|
| | | |
| Scrub palmetto | . Sabal etonia | |
| Cabbage palm | . Sabal palmetto | |
| Silver plumegrass | . Saccharum alopecuroides | |
| India cupscale * | . Sacciolepis indica | |
| American cupscale | . Sacciolepis striata | |
| Little bluestem | . Schizachyrium scoparium | |
| Giant bulrush | . Schoenoplectus californicus | |
| Cuban bulrush | . Scirpus cubensis | |
| Fringed nutrush | . Scleria ciliata | |
| Netted nutrush | . Scleria reticularis | |
| Tall nutgrass | . Scleria triglomerata | |
| Saw palmetto | . Serenoa repens | |
| Coastal bristlegrass | . Setaria corrugata | |
| Yellow bristlegrass | . Setaria parviflora | |
| Jeweled blue-eyed grass | . Sisyrinchium xerophyllum | |
| Ear-leaf greenbrier | . Smilax auriculata | |
| Saw greenbrier | . Smilax bona-nox | |
| Saw-brier | . Smilax glauca | |
| Laurel greenbrier | . Smilax laurifolia | |
| Sarsaparilla vine | . Smilax pumila | |
| Coral greenbrier | . Smilax walteri | |
| Lopsided indiangrass | . Sorghastrum secundum | |
| American burr-reed | . Sparganium americanum | |
| Nodding ladies' tresses | . Spiranthes cernua | |
| Smutgrass* | . Sporobolus indicus | |
| Cowpea witchweed | . Striga gesnerioides | |
| Bantam-buttons | . Syngonanthus flavidulus | |
| Alligatorflag | . Thalia geniculata | |
| Wild pine | . Tillandsia fasciculata | HH, BF |
| Ballmoss | . Tillandsia recurvata | |
| Southern needleleaf | . Tillandsia setacea | |
| Florida airplant | . Tillandsia simulata | |
| Spanish moss | . Tillandsia usneoides | |
| Spreading airplant | . Tillandsia utriculata | HH, BF |
| Purpletop tridens | . Tridens flavus var. flavus | |
| Narrow-leaved cattail | . Typha latifolia | |
| Tropical signalgrass | . Urochloa distachya | |
| Paragrass * | . Urochloa mutica | |
| Arrowleaf elephant ear* | . Xanthosoma sagittifolium | |
| Short-leaf yellow-eyed grass | . Xyris brevifolia | |
| Carolina yellow-eyed grass | . Xyris caroliniana | |
| Elliott's yellow-eyed grass | . Xyris elliottii | |
| Richard's yellow-eyed grass | . Xyris jupicai | |
| Tall yellow-eyed grass | . Xyris platylepis | |
| Spanish bayonet | . Yucca aloifolia | |
| Adam's needle | . Yucca filamentosa | |

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Dicots		
Rosary pea*	. Abrus precatorius	
Three-seeded mercury	. Acalypha gracilens	
Red maple	. Acer rubrum	
Creeping spotflower	. Acmella oppositifolia var. rej	pens
Shy-leaf	. Aeschynomene americana	
Small-leaf thoroughwort	. Ageratina jucunda	
Bluemink	. Ageratum houstonianum	
False moneywort	. Alysicarpus ovalifolius	
Alyce-clover	. Alysicarpus vaginalis	
Common ragweed	. Ambrosia artemisiifolia	
Bastard indigo	. Amorpha fruticosa	
Pepper-vine	. Ampelopsis arborea	
Groundnut	. Apios americana	
Devil's walking stick	. Aralia spinosa	
Japanese ardisia*	. Ardisia japonica	
Snake root	. Aristolochia serpentaria	
Scarlet milkweed*	. Asclepias curassavica	
Aquatic milkweed	. Asclepias perennis	
Flag pawpaw	. Asimina obovata	
Smallflower pawpaw	. Asimina parviflora	
Netted pawpaw	. Asimina reticulata	
Silverling	. Baccharis glomeruliflora	
Saltbush	. Baccharis halimifolia	
Coastalplain honevcombhead.	. Balduina angustifolia	
Tarflower	. Beiaria racemosa	
Rattan-vine: suppleiack	. Berchemia scandens	
Beggarticks	. Bidens alba	
Spanish needles	. Bidens bipinnata	
Begger-ticks	Bidens mitis	
False-nettle	Boehmeria cylindrica	
India mustard: leaf mustard	Brassica iuncea	
American bluehearts	Buchnera americana	
Ashe's calamint	Calamintha ashei	SC RNC
American beautyberry	Callicarna americana	
Trumpet creeper	Campsis radicans	
Hairy hittergrass *	Cardamine hirsuta	
Florida nainthrush	Cambenhorus corvmbosus	
American hornbeam	Carpinus caroliniana	
Wild olive	Cartrema americana	
Water hickory	Carva aquatica	
Pianut hickory	Carva alabra	
Sugarberry	Coltis laovinata	
Butterfly nee	Controsoma virainianum	
Buttonbush	Conhalanthus occidentalis	
Dattollousi	Chamaperista fasiculata	
i ai ti luye pea	. Unamatunsia lasitulaid	

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Sensitive pea	. Chamaecrista nictitans var.	aspera
Florida alicia	. Chapmannia floridana	
Mexican tea*	. Chenopodium ambrosiodes	
Fringe tree	. Chionanthus virginicus	
Florida goldenaster	. Chrysopsis floridana	SC, RNC
Coastalplain goldenaster	. Chrysopsis scabrella	
Water hemlock	. Cicuta maculata	
Camphor tree *	. Cinnamonmum camphora	
Purple thistle	. Cirsium horridulum	
Nuttall's thistle	. Cirsium nuttallii	
Tangerine *	. Citrus reticulata	
Grapefruit, sweet orange *	. Citrus xaurantium	
Swamp leatherflower	. Clematis crispa	
Virgin's bower	. Clematis virginiana	
Turk's turban*	. Clerodendrum indicum	
Blue mistflower	. Conoclinium coelestinum	
Short-leaved rosemary	. Conradina brevifolia	
Dwarf Canadian horseweed	. Convza canadensis var. pus	illa
Florida coreopsis	. Coreopsis floridana	
Dogwood	. Cornus florida	
Swamp dogwood	Cornus foemina	
(Pale) smooth rattlebox	Crotalaria pallida var obova	ata
Rabbit-bells: Rattlebox	Crotalaria purshii	
Rabbitbells	Crotalaria rotundifolia	
Showy rattlebox	Crotalaria spectabilis	
Wooly croton	Croton alandulosus	
Titi	Cvrilla racemiflora	
Zarzabacoa comun	Desmodium incanum	
Panicled tick-trefoil	Desmodium naniculatum	
Threeflower ticktrefoil	Desmodium triflorum	
Carolina popysfoot	Dichondra caroliniensis	
Poor loe	Diodia teres	
Virginia buttonweed	Diodia virginiana	
Persimmon	Diospyros virginiana	
Wost Indian chickwood	Drymaria cordata	
Swamp twinflowor	Discharisto humistrata	
Vorba do tago	Eclipta alba	
Tall clophontsfoot	Elophantonus olatus	
Carolina scalvstom	Elephaniopus elatus	araliniancia
Elorida tassalflower	Emilia facharaii	ai Uili 1181 ISIS
Lilae tassel flower	Emilia sonchifolia	
Lildu lassel Huwer	. EITIIIIa SUTICITIUTIa Erochtitos biorosilfolius	
Fileweeu	. Erechnies meracifaliss	
	. Erigeron quercifollus	
	. Engeron strigosus	
Fragrant eryngo	. Eryngium aromaticum	
Baldwin's eryngo	. Eryngium baldwinii	

Common Name Scientific Name (for imperiled species))
Snakeroot	
Rattlesnake master Eryngium yuccifolium	
Southeastern coralbean Erythrina herbacea	
Hearts-a-busting Euonymus americana	
Dogfennel	
Yankeeweed Eupatorium compositifolium	
Mohr's thoroughwort Eupatorium mohrii	
False hoarhound Eupatorium rotundifolium	
Slender flattopped goldenrod Euthamia caroliniana	
Pop ash; Carolina ash Fraxinus caroliniana	
Pumpkin ash Fraxinus pensylvanica	
Drug fumitory Fumaria officinalis	
Elliott's milkpea Galactia elliottii	
Soft milkpea Galactia mollis	
Downy milkpea <i>Galactia regularis</i>	
Eastern milkpea Galactia volubilis	
Hairy bedstraw Galium pilosum	
Stiff marsh bedstraw Galium tinctorium	
Garberia SC, RNC	
Dwarf huckleberry Gaylussacia dumosa	
Blue huckleberry Gaylussacia frondosa var. tomentosa	
Yellow jessamine Gelsemium sempervirens	
Wild geranium: Cranesbill Geranium carolinianum	
Water locust <i>Gleditsia aquatica</i>	
Angular fruit milkvine Gonolobus suberosus MH, HH	
Loblolly-bay Gordonia lasianthus	
Rough hedge-hyssop Gratiola hispida	
Scrub hedge-hyssop Gratiola virginiana	
Witch hazel Hamamelis virginiana	
Innocence	
Hedyotis	
Pinebarren frostweed	
Fiorida scrub frostweed	
Campnorweed	
Hawkweed	
Round-lear bluet	
Warynower Marsh poppywort Hydrocotyle unibellata	
Sky flower	
Indian swampwood	
St. John's wort	
St. John S-wort	
Dwarf St John's-wort Hunericum mutilum	
St John's-wort Hypericum myrtifolium	
Atlantic St John's-wort Hypericum reductum	
Fourpetal St. John's-wort Hypericum tetrapetalum	

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Musky mint; Cluster bushmint.	Hyptis alata	
Tropical bittermint *	Hyptis mutabilis	
John Charles bittermint *	Hyptis verticillata	
Carolina holly	Ilex ambigua	
Dahoon holly	Ilex cassine	
Possum haw; Deciduous holly	Ilex decidua	
Inkberry; Gallberry	Ilex glabra	
American holly	Ilex opaca	
Hairy indigo*	Indigofera hirsuta	
Tievine	Ipomoea cordatotriloba	
Cypress vine*	Ipomoea quamoclit	
Little bell*	Ipomoea triloba	
Juba's bush	Iresine diffusa	
Virginia-willow	Itea virginica	
Looseflower waterwillow	Justicia ovata	
Japanese clover *	Kummerowia striata	
Wild lettuce	Lactuca floridana	
Grass-leaf lettuce	Lactuca graminifolia	
Spotted duckweed*	Landoltia punctata	
Shrub verbena*	Lantana camara	
Nodding pinweed	Lechea cernua	SC, RNC
Deckert's pinweed	Lechea deckertii	
Thymeleaf pinweed	Lechea minor	
Pineland pinweed	Lechea sessiliflora	
Piedmont pinweed	Lechea torreyi	
Virginia pepperweed	Lepidium virginicum	
Lead tree*	Leucaena leucocephala	
Chapman's blazing-star	Liatris chapmanii	
Slender blazing-star	Liatris gracilis	
Scrub blazing-star	Liatris ohlingerae	
Shortleaf blazing-star	Liatris tenuifolia var. quadrif	ora
Gopher apple	, Licania michauxii	
Canadian toadflax	Linaria canadensis	
Malaysian false pimpernel *	Lindernia crustacea	
Savannah false-pimpernel	Lindernia grandiflora	
Sweetgum	Liquidambar styraciflua	
Cardinal flower	Lobelia cardinalis	
Coral honeysuckle	Lonicera sempervirens	
Upright primrose-willow	Ludwigia decurrens	
River primrose-willow	Ludwigia leptocarpa	
Seaside primrosewillow	Ludwigia maritima	
Mexican primrosewillow	Ludwigia octovalvis	
Marsh primrose-willow	Ludwigia palustris	
Peruvian primrosewillow*	Ludwigia peruviana	
Hairy primrose-willow	Ludwigia pilosa	
Creeping primrose-willow	Ludwigia repens	

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Shrubby primrose-willow	Ludwigia suffruticosa	
Skyblue lupine	Lupinus diffusus	
Water hoarhound	Lycopus rubellus	
Rusty staggerbush	Lyonia ferruginea	
Coastalplain staggerbush	Lyonia fruticosa	
Maleberry	Lyonia ligustrina var. foliosif	lora
Fetterbush	Lyonia lucida	
Southern magnolia	Magnolia grandiflora	
Sweetbay	. Magnolia virginiana	
Snow squarestem	Melanthera nivea	
Chinaberry*	Melia azedarach	
Indian sweetclover	Melilotus indicus	
Creeping cucumber	Melothria pendula	
Shade mulflower	Micranthemum glomeratum	
Florida Key hempvine	Mikania cordifolia	
Climbing hempvine	Mikania scandens	
American partridgeberry	Mitchella repens	
Miterwort	Mitreola petiolata	
Indian chickweed	Mollugo verticillata	
Balsam pear*	Momordica charantia	
Spotted beebalm	Monarda punctata	
Red mulberry	Morus rubra	
Naked-stem dewflower *	Murdannia nudiflora	
Wax myrtle	Myrica cerifera	
Spatterdock	Nuphar advena	
Lotus lily; American lotus	Nuphar lutea subsp. advena	
Swamp tupelo	Nyssa sylvatica var. biflora	
Pine-barren white-top aster	Oclemena reticulata	
Sea beach eveningprimrose	Oenothera humifusa	
Cut-leaf evening primrose	Oenothera laciniata	
Flat-top mille graines	. Oldenlandia corymbosa	
Clustered mille graines	. Oldenlandia uniflora	
Prickly pear	. Opuntia humifusa	
Common yellow woodsorrel	. Oxalis corniculata	
Butterweed	. Packera glabella	
Skunk-vine*	. Paederia foetida	
Feay's palafox	. Palafoxia feayi	
Florida pellitory	. Parietaria floridana	
Virginia creeper	Parthenocissus quinquefolia	
Purple passionflower	. Passiflora incarnata	
Low peperomia	. Peperomia humilis	
Redbay	Persea borbonia	
Silk bay	. Persea borbonia var. humilis	;
Swamp bay	. Persea palustris	
Mistletoe	Phoradendron serotinum	
Red chokeberry	. Photinia pyrifolia	

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Chamber-bitter *	. Phyllanthus urinaria	
Cut-leaf ground cherry	. Physalis angulata	
Slenderleaf false dragonhead .	. Physostegia leptophylla	
Pokeweed	. Phytolacca americana	
Wild pennyroyal	. Piloblephis rigida	
Narrowleaf goldenaster	. Pityopsis graminifolia	
Virginia plantain	. Plantago virginica	
Stinking camphorweed	. Pluchea foetida	
Rosy camphorweed	. Pluchea longifolia	
Scrubby camphorweed	. Pluchea odorata	
Milkwort	. Polygala grandiflora	
October flower	. Polygonella polygama	
Large-flower jointweed	. Polygonella robusta	
Swamp smartweed	. Polygonum hydropiperoides	
Dotted smartweed	. Polygonum punctatum	
Smartweed	. Polygonum setaceum	
Rustweed	. Polypremum procumbens	
Parguayan purslane*	. Portulaca amilis	
Pink purslane	. Portulaca pilosa	
Marsh mermaidweed	. Proserpinaca palustris	
Carolina laurel-cherry	. Prunus caroliniana	
Scrub plum	. Prunus geniculata	RNC
Black cherry	. Prunus serotina	
Flatwoods plum	. Prunus umbellata	
Sweet everlasting	. Pseudognaphalium obtusifoli	um
Blackroot	. Pterocaulon pycnostachyum	
Mock bishopsweed	. Ptilimnium capillaceum	
Chapman's oak	. Quercus chapmanii	
Sand live oak	. Quercus geminata	
Bluejack oak	. Quercus incana	
Laurel oak; diamond oak	. Quercus laurifolia	
Myrtle oak	. Quercus myrtifolia	
Water oak	. Quercus nigra	
Live oak	. Quercus virginiana	
Pale meadow beauty	. Rhexia mariana	
Meadow beauty	. Rhexia petiolata	
Swamp honeysuckle	. Rhododendron viscosum	
Winged sumac	. Rhus copallinum	
One-leaf rhynchosia	. Rhynchosia michauxii	
Tropical Mexican-clover*	. Richardia brasiliensis	
Rough Mexican-clover*	. Richardia scabra	
Rouge plant	. Rivina humilis	
Blackberry	. Rubus argutus	
Sand blackberry	. Rubus cuneifolius	
Southern dewberry	. Rubus trivialis	
Carolina wild petunia	. Ruellia caroliniensis	

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Heartwing dock	. Rumex hastatulus	
Swamp dock	. Rumex verticillatus	
Shortleaf rosegentian	. Sabatia brevifolia	
Coastal rosegentian	. Sabatia calycina	
Lanceleaf rosegentian	. Sabatia difformis	
Carolina willow	. Salix caroliniana	
Lyre-leaf sage	. Salvia lyrata	
Florida key sedge	. Salvia riparia	
Elderberry	. Sambucus nigra subsp. cana	adensis
Water pimpernel	. Samolus ebracteatus	
Pineland pimpernel	. Samolus verlanderi var. par	viflorus
Snakeroot	. Sanicula canadensis	
Lizard's-tail	. Saururus cernuus	
Brazilian pepper*	. Schinus terebinthifolius	
Sweetbroom; licorice-weed	. Scoparia dulcis	
Florid scrub skullcap	. Scutellaria arenicola	
Rough skullcap	. Scutellaria integrifolia	
Sicklepod *	. Senna obtusifolia	
Coffee senna*	. Senna occidentalis	
White-topped aster	. Seriocarpus tortifolius	
Bladderpod	. Sesbania vesicaria	
Indian hemp	. Sida rhombifolia	
Common wireweed	. Sida ulmifolia	
Florida bully	. Sideroxylon reclinatum	
Scrub-buckthorn	. Sideroxylon tenax	
Common nightshade	. Solanum americanum	
Soda-apple; Cockroach-berry.	. Solanum capsicoides	
Tropical soda-apple*	. Solanum viarum	
Hollow goldenrod	. Solidago fistulosa	
Wand goldenrod	. Solidago stricta	
Spiny-leaf sow-thistle*	. Sonchus asper	
Florida hedgenettle	. Stachys floridana	
Common chickweed	. Stellaria media	
Queen's delight	. Stillingia sylvatica	
Pineland scalypink	. Stipulicida setacea	
American snowbell	. Styrax americana	
Climbing aster	. Symphyotrichum carolinianu	ım
Rice-button aster	. Symphyotrichum dumosum	
Saltmarsh aster	. Symphyotrichum subulatum	
Wavyleaf aster	. Symphyotrichum undulatum	1
Eastern poison ivy	. Toxicodendron radicans	
Marsh St. John's wort	. Triadenum virginicum	
Forked bluecurls	. Trichostema dichotomum	
White clover	. Irifolium repens	
Five-stamen burrbark*	. Iriumfetta pentandra	
American elm; Florida elm	. Ulmus americana	

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Caesarweed*	Urena lobata	
Sparkleberry	Vaccinium arboreum	
Highbush blueberry	Vaccinium corymbosum	
Shiny blueberry	Vaccinium myrsinites	
Deerberry	Vaccinium stamineum	
Florida valerian	Valeriana scandens	
Brazilian vervain	Verbena brasiliensis	
Frostweed	Verbesina virginica	
Possum haw	Viburnum nudum	
Walter's viburnum	Viburnum obovatum	
Hairypod cowpea	Vigna luteola	
Long-leaf violet	Viola lanceolata	
Swamp white violet	Viola primulifolia	
Florida violet	Viola sororia	
Summer grape	Vitis aestivalis	
Muscadine; fox grape	Vitis rotundifolia	
Southern rockbell	Wahlenbergia marginata	
Tallowwood; hog-plum	Ximenia americana	
Oriental false hawksbeard*	Youngia japonica	
Hercules'-club	Zanthoxylum clava-herculis	

		Primary Habitat Codes
Common Name	Scientific Name	(for imperiled species)

FISH

Yellow bullhead	Ameiurus natalis	BST, IAP
Brown bullhead	Ameiurus nebulosus	BST, IAP
Walking catfish*	Clarias batrachus	BST, IAP
American gizzard shad	Dorosoma cepedianum	BST
Threadfin shad	Dorosoma petenense	BST
Everglades pygmy sunfish	Elassoma evergladei	BST, FS
Lake chubsucker	Erimyzon sucetta	IAP
Swamp darter	Etheostoma fusiforme	IAP
Golden topminnow	Fundulus chrysotus	BST
Seminole killifish	Fundulus seminolis	IAP
Eastern mosquitofish	Gambusia holbrooki	IAP, BST
Least killifish	Heterandria formosa	IAP
Brown hoplo*	Hoplosternum littorale	IAP
Suckermouth catfish*	Hypostomus sp	IAP
Channel catfish	Ictalurus punctatus	BST, IAP
Flagfish	Jordanella floridae	IAP
Florida gar	Lepisosteus platyrhincus	BST
Warmouth	Lepomis gulosus	BST, IAP
Bluegill	Lepomis macrochirus	BST, IAP
Dollar sunfish	Lepomis marginatus	BST
Redear sunfish	Lepomis microlophus	BST, IAP
Spotted sunfish	Lepomis punctatus	BST, IAP
Bluefin killifish	Lucania goodei	IAP
Largemouth bass	Micropterus salmoides	BST
Pugnose minnow	Notropis emiliae	BST, IAP
Taillight shiner	Notropis maculatus	BST
Coastal shiner	Notropis petersoni	BST
Blue tilapia*	Oreochromis aureus	IAP
Sailfin molly	Poecilia latipinna	BST, IAP

AMPHIBIANS

Florida cricket frog	Acris gryllus dorsalis	HH
Oak toad	Anaxyrus quercicus	SFW
Southern toad	Anaxyrus terrestris	IAP
Greenhouse frog*	Eleutherodactylus planirostris	MTC
Eastern narrowmouth toad	Gastrophryne carolinensis	HH, BF
Green treefrog	Hyla cinerea	MEH, HH, BF
Squirrel treefrog	Hyla squirella	MEH, HH, BF
Gopher frog	Lithobates capito	SFW, RNC, SIP
Bullfrog	Lithobates catesbeianus	IAP
Pig frog	Lithobates grylio	IAP
Southern leopard frog	Lithobates sphenocephalus	HH, BF
Eastern spadefoot	Scaphiopus holbrookii	HH, BF

		Primary Habitat Codes
Common Name	Scientific Name	(for imperiled species)

REPTILES

Florida cottonmouth	Agkistrodon piscivorus conanti	BF, FS
American alligator	Alligator mississippiensis	BST, IAP
Green anole	Anolis carolinensis	HH
Cuban brown anole*	Anolis sagrei	MTC
Florida softshell	Apalone ferox	BST, FS, IAP
Six-lined racerunner	Aspidoscelis sexlineata	SC, RNC, SFW
Florida snapping turtle	Chelydra serpentina osceola	BST
Southern black racer	Coluber constrictor priapus	MTC
Eastern diamondback		
rattlesnake	Crotalus adamanteus	SC, RNC, SFW
Southern ring-necked snake	Diadophis punctatus punctatus	MEH
Eastern indigo snake	Drymarchon couperi	SC
Gopher tortoise	Gopherus polyphemus	SFW, RNC, SIP
Striped mud turtle	Kinosternon baurii	HH
Eastern kingsnake	Lampropeltis getula getula	MEH
Eastern coral snake	Micrurus fulvius	MEH
Florida water snake	Nerodia fasciata pictiventris	BST, IAP
Florida green water snake	Nerodia floridana	BST, IAP
Eastern corn snake	Pantherophis guttatus	MEH,SFW
Common five-lined skink	Plestiodon fasciatus	SFW, RNC, MEH
Southeastern five-lined skink	Plestiodon inexpectatus	SFW, RNC
Peninsula cooter	Pseudemys peninsularis	BST
Argentine black and white tegu	*	Salvator
merianae	SIP, DV	
Ground skink	Scincella lateralis	RNC, XH
Swamp snake	Seminatrix pygaea	BF, FS
Eastern garter snake	Thamnophis sirtalis sirtalis	MEH

BIRDS

Red-winged blackbird	Agelaius phoeniceus	IAP
Ruby-throated hummingbird	Archilochus colubris	MTC
Tufted titmouse	Baeolophus bicolor	MEH, HH
Cedar waxwing	Bombycilla cedrorum	OF
Northern cardinal	Cardinalis cardinalis	MTC
Northern flicker	Colaptes auratus	MTC
Gray catbird	Dumetella carolinensis	MEH
Florida sandhill crane	Grus canadensis pratensis	SIP
Loggerhead shrike	Lanius Iudovicianus	SIP
Northern mockingbird	Mimus polyglottos	MTC
Wood stork	Mycteria americana	BF, FS, BST, IAP
Great crested flycatcher	Myiarchus crinitus	MTC
Indigo bunting	Passerina cyanea	MEH, HH, SHF
Eastern towhee	Pipilo erythrophthalmus	SFW

Summer tanager Piranga rubra MEH, SHF Purple martin Progne subis OF Ruby-crowned kinglet Regulus calendula MEH, SHF Brown-headed nuthatch Sitala sia. SIP Brown-headed nuthatch Sita pusilla SHF Eastern meadowlark Sturnella magna SIP European starling* Sturnus vulgaris SIP, DV Brown thrasher Toxostoma rufum MEH, SHF, SFW Eastern kingbird Tyrannus tyrannus MTC White-eyed vireo Vireo olivaceus BG, BF Blue-headed vireo Vireo solitarius BG, BF American crow Corvus brachyrhynchos MTC Fish crow SIP OF American crow Cyanocitta cristata MTC Blue jay Cyanocitta cristata MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus major MTC Wood duck Anas fulvigula IAP, BST Mottled duck Anas fulvigula IAP, BST <th>Common Namo</th> <th>Scientific Name</th> <th>Primary Habitat Codes</th>	Common Namo	Scientific Name	Primary Habitat Codes
Summer tanager. Piranga rubra MEH, SHF Purple martin Progne subis OF Ruby-crowned kinglet Regulus calendula MEH, SHF Eastern bluebird Sialla sia. SIP Brown-headed nuthatch. Sitta pusilla SHF Eastern bluebird Sialla sia. SIP Brown-headed nuthatch. Sitta pusilla SHF Eastern bluebird Tyrannus tyrannus MTC White-eyed vireo Vireo olivaceus BG, BF Red-eyed vireo Vireo olivaceus BG, BF Blue-headed vireo. Vireo olivaceus BG, BF American pipit Anthus rubescens SIP Chinney swift Bombycilla cedrorum OF American crow. Corvus ossifragus MTC Brown-headed cowbird Molothrus ster. SIP Boat-tailed grackle Quiscalus quiscula MTC Common grackle Quiscalus quiscula MTC Notthern pintail Anas discors IAP, BST Notthern pintail Anas duiscors IAP, BST Mottled duck Anas fuivigula IAP, B			(for imperfied species)
Summer tanager. Piranga rubra MEH, SHF Purple martin Progne subis OF Ruby-crowned kinglet. Regulus calendula. MEH, SHF Eastern bluebird Sialia sia. SIP Brown-headed nuthatch. Sitta pusilia SHF Eastern meadowlark. Sturnella magna. SIP. Drown headed nuthatch. Sitta pusilia SHF Eastern meadowlark. Sturnella magna. SIP. Drown hrasher Toxostoma rufum MEH, SHF, SFW Eastern kingbird Tyrannus tyrannus. MTC White-eyed vireo Vireo olivaceus BG, BF Blue-headed vireo Vireo olivaceus BG, BF Blue-headed vireo Vireo olivaceus BG, BF Chinney swift Bombycilla cedrorum OF American crow. Corvus ossifragus MTC Blue jay Cyanocitta cristat MTC Blue jay Cyanocitta cristat MTC Blue jay Cyanocitta cristat MTC Blue vinged teal Anas acuta IAP, BST Northern pintaii Anas discors IAP, BST			
Purple martin Progne subis OF Ruby-crowned kinglet Regulus calendula. MEH, SHF Eastern bluebird Sialia sia. SIP Brown-headed nuthatch. Sitta pusilia SHF Eastern meadowlark Sturnells magna SIP European starling* Sturnus vulgaris SIP, DV Brown thrasher Toxostoma rufum MEH, SHF, SFW Eastern kingbird Tyrannus tyrannus. MTC White-eyed vireo Vireo griseus. BG, BF Red-eyed vireo Vireo olivaceus BG, BF American pipit Anthus rubescens SIP Chimney swift Bombycilla cedrorum OF American crow Carvus ossifragus MTC Brown-headed cowbird Molothrus ater. SIP Boat-tailed grackle Quiscalus major MTC Brown-headed cowbird Molothrus ater. SIP Boat-tailed grackle Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Blue-winged teal Anas discors	Summer tanager	Piranga rubra	MEH, SHF
Ruby-crowned kinglet Regulus calendula. MEH, SHF Eastern bluebird Sialia sia. SIP Brown-headed nuthatch. Sitta pusilla SHF Eastern bluebird Sitta pusilla SIP European starling* Sturnus vulgaris SIP, DV Brown thrasher Toxostoma rufurn MEH, SHF, SFW Eastern kingbird Tyrannus tyrannus. MTC White-eyed vireo Vireo griseus BG, BF Red-eyed vireo Vireo solitarius BG, BF Blue-headed vireo Vireo solitarius BG, BF American crow Carvus brachyrhynchos MTC Fish crow Carvus brachyrhynchos MTC Blue jay Cyanocitta cristata MTC Boat-tailed grackle Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Blue-winged teal Anas discors IAP, BST Muscovy duck Cairina moschata IAP, BST Muscovy duck Cairina moschata IAP, BST Duble-crested cormorant Phalacrocara auritus IAP, BST Muscovy duck Cairina mos	Purple martin	Progne subis	OF
Eastern bluebirdSialia sia.SIPBrown-headed nuthatch.Sitta pusiliaSHFEastern meadowlark.Sturnus vulgaris.SIPEuropean starling*Sturnus vulgaris.SIPEuropean starling*Tyrannus tyrannus.MTCWhite-eyed vireoVireo griseus.BG, BFRed-eyed vireoVireo olivaceus.BG, BFBlue-headed vireoVireo solitarius.BG, BFAmerican pipitAnthus rubescens.SIPChimney swiftBombycilla cedrorumOFAmerican crowCorvus brachyrhynchosMTCBlue headed vireoVireo solitarius.MTCBlue jayCyanocitta cristataMTCBrown-headed cowbirdMolothrus ater.SIPBoat-tailed grackle.Ouiscalus majorMTCCommon grackle.Ouiscalus quisculaMTCWood duck.Aix sponsa.IAP, BSTNorthern pintailAnas acutaIAP, BSTMottled duck.Anas discorsIAP, BSTMottled duck.Calina moschata.IAP, BSTBlack-bellied whistling duck.Dendrocygna autumnalis.IAP, BSTDouble-crested cormorant.Phalacrocorax auritus.IAP, BSTDouble-crested cormorant.Phalacrocorax auritus.IAP, BSTPied-billed grebe.Podilymbus podiceps.IAP, BSTPied-billed grebe.Columbina passerina.MTCCommon ground-dove.Calumbina passerina.MTCCommon ground-dove.Calumbina passerina.MTCComm	Ruby-crowned kinglet	Regulus calendula	MEH, SHF
Brown-headed nuthatch. Sitta pusilia SHF Eastern meadowlark. Sturnella magna. SIP European starling* Sturnus vulgaris SIP, DV Brown thrasher. Toxostoma rufum. MEH, SHF, SFW Eastern kingbird. Tyrannus tyrannus. MTC White-eyed vireo Vireo olivaceus. BG, BF Bde-eyed vireo. Vireo solitarius. BG, BF American pipit. Anthus rubescens SIP Chinney swift. Bombycilla cedrorum OF American crow. Corvus brachyrhynchos MTC Brown-headed cowbird. Molothrus ater. SIP Brown-headed cowbird. Molothrus ater. SIP Boat-tailed grackle. Quiscalus quiscula MTC Wood duck. Aix sponsa. IAP, BST Northern pintail Anas discors IAP, BST Muscovy duck. Cairina moschata. IAP, BST Muscovy duck. Cairina moschata. IAP, BST Duble-crested cormorant. Phalacrocorax auritus. IAP, BST Double-crested cormorant. Phalacrocorax auritus. IAP, BST	Eastern bluebird	Sialia sia	SIP
Eastern meadowlark. Sturnella magna SIP European starling* Sturnus vulgaris SIP, DV Brown thrasher Toxostoma rufum MEH, SHF, SFW Eastern kingbird Tyrannus tyrannus MTC White-eyed vireo Vireo griseus BG, BF Blue-headed vireo Vireo solitarius BG, BF Chimney swift Bombycilla cedrorum OF American pipit Anthus rubescens SIP Chimney swift Bombycilla cedrorum OF American crow Corvus brachyrhynchos MTC Blue jay Cyanocilla cristata MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Mottled duck Anas discors IAP, BST Mutted duck Anas divigua IAP, BST Mutted duck Carina moschata IAP, BST Mutted duck Dendrocygna autumnalis IAP, BST Common ground-dove Columbia passerina MTC	Brown-headed nuthatch	Sitta pusilla	SHF
European starling* Sturnus vulgaris SIP, DV Brown thrasher Toxostoma rufum MEH, SHF, SFW Eastern kingbird Tyrannus tyrannus MTC White-eyed vireo Vireo griseus BG, BF Red-eyed vireo Vireo olivaceus BG, BF American pipit Anthus rubescens SIP Chimney swift Bombycilla cedrorum OF American crow Corvus basfiragus MTC Fish crow Corvus ossfiragus MTC Blue-headed owbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus major MTC Wood duck Anas acuta IAP, BST Northern pintail Anas acuta IAP, BST Northern pintail Anas discors IAP, BST Muscovy duck Calinul achloropus -ck IAP, BST Muscovy duck Calinul achloropus -ck IAP, BST Double-crested cormorant Phalacrocorax auritus <td>Eastern meadowlark</td> <td>Sturnella magna</td> <td> SIP</td>	Eastern meadowlark	Sturnella magna	SIP
Brown thrasher Toxostoma rufum MHL, SHF, SFW Eastern kingbird Tyrannus tyrannus. MTC White-eyed vireo Vireo griseus. BG, BF Red-eyed vireo Vireo solitarius. BG, BF Blue-headed vireo Vireo solitarius. BG, BF American pipit Anthus rubescens SIP Chinney swift Bombycilla cedrorum OF American crow. Corvus ossifragus MTC Fish crow Corvus ossifragus MTC Blue jay. Cyanocitta cristata MTC Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus quiscula MTC Wood duck. Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Blue-winged teal Anas fulvigula IAP, BST Muscovy duck Cairina moschata IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Rock dove Columbina passerina. MTC Wite-winged dove Zenaida asi	European starling*	Sturnus vulgaris	SIP, DV
Eastern kingbird Tyrannus tyrannus. MTC White-eyed vireo Vireo griseus. BG, BF Red-eyed vireo Vireo olivaceus. BG, BF Blue-headed vireo Vireo solitarius. BG, BF American pipit Anthus rubescens SIP Chimney swift Bombycilla cedrorum OF American crow. Corvus brachyrhynchos MTC Fish crow Corvus brachyrhynchos MTC Blue jay. Cyanocitta cristata MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus quiscula MTC Wood duck. Aix sponsa. IAP, BST Northern pintail Anas acuta IAP, BST Mottled duck Anas fulvigula IAP, BST Muscovy duck. Cairina moschata. IAP, BST Muscovy duck. Calinau chloropus -ck. IAP, BST Obube-crested cormorant. Phalacrocorax auritus. IAP, BST Pied-billed grebe Podilymbus podiceps IAP, BST Podilymbus podiceps IAP,	Brown thrasher	Toxostoma rufum	MEH, SHF, SFW
White-eyed vireo Vireo griseus BG, BF Red-eyed vireo Vireo solitarius BG, BF Blue-headed vireo Vireo solitarius BG, BF American pipit Anthus rubescens SIP Chimney swift Bombycilla cedrorum OF American crow Corvus brachyrhynchos MTC Fish crow Corvus ossifragus MTC Blue jay Cyanocitta cristata MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Nottled duck Anas discors IAP, BST Anhinga Anhinga anhinga IAP, BST Mutted duck Carina moschata IAP, BST Duble-crested cormorant Phalacrocorax auritus IAP, BST Duble-crested cormorant Phalacrocorax auritus IAP, BST Pied-billed grebe Podilymbus podiceps IAP, BST Podiwphus podiceps IAP, BST <	Eastern kingbird	Tyrannus tyrannus	MTC
Red-eyed vireo Vireo olivaceus BG, BF Blue-headed vireo Vireo solitarius BG, BF American pipit Anthus rubescens SIP Chimney swift Bombycilla cedrorum OF American crow Corvus brachyrhynchos MTC Bilue jay Cyanocitta cristata MTC Bue jay Cyanocitta cristata MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Blue-winged teal Anas discors IAP, BST Mottled duck Anas discors IAP, BST Anhinga IAP, BST Mutted duck Dendrocygna autumnalis IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Rock dove Columbin passerina MTC MTC Common ground-dove Columbina passerina MTC Common ground-dove <td>White-eyed vireo</td> <td>Vireo griseus</td> <td> BG, BF</td>	White-eyed vireo	Vireo griseus	BG, BF
Blue-headed vireo. Vireo solitarius BG, BF American pipit Anthus rubescens SIP Chimney swift Bombycilla cedrorum OF American crow. Corvus brachyrhynchos MTC Fish crow Corvus ossifragus MTC Blue jay. Cyanocitta cristata MTC Brown-headed cowbird Molothrus ater. SIP Boat-tailed grackle Quiscalus major MTC Common grackle. Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Blue-winged teal Anas discors IAP, BST Muscovy duck Cairina moschata IAP, BST Black-bellied whistling duck Dendrocygna autumnalis IAP, BST Duble-crested cormorant Phalacrocorax auritus IAP, BST Duble-crested cormorant Phalacrocorax auritus IAP, BST Duble-crested cormorant Phalacrocorax auritus IAP, BST Rock dove Columba livia SIP, DV Common ground-dove Columba invia SIP, DV Common groun	Red-eyed vireo	Vireo olivaceus	BG, BF
American pipitAnthus rubescensSIPChimney swiftBombycilla cedrorumOFAmerican crowCorvus brachyrhynchosMTCFish crowCorvus ossifragusMTCBlue jayCyanocitta cristataMTCBoat-tailed grackleQuiscalus majorMTCCommon grackleQuiscalus quisculaMTCWood duckAix sponsaIAP, BSTNorthern pintailAnas acutaIAP, BSTBlue-winged tealAnas discorsIAP, BSTMottled duckAnas fulvigulaIAP, BSTMottled duckCairina moschataIAP, BSTMuscovy duckCairina moschataIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumbai iviaSIP, DVCommon ground-doveColumbai iviaSIP, DVCommon ground-doveZenaida asiaticaMTCWhite-winged doveZenaida macrouraMTCBlac-pshinned hawkAccipiter striatusSIPSIPSate the lawkButeo jamaicensisOFRed-tailed hawkButeo jamaicensisOFRed-tailed hawkButeo jamaicensisOFRed-tailed hawkButeo jamaicensisSIPSwallow-tailed kiteElanoides forficatusSIPSwallow-tailed kiteElanoides forficatusSIPBade agleHaliaeetus leucocephalusSIP<	Blue-headed vireo	Vireo solitarius	BG, BF
Chimney swift Bombycilla cedrorum OF American crow Corvus brachyrhynchos MTC Fish crow Corvus ossifragus MTC Blue jay Cyanocitta cristata MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Biue-winged teal Anas discors IAP, BST Mottled duck Anas discors IAP, BST Mottled duck Anas discors IAP, BST Muscovy duck Cairina moschata IAP, BST Muscovy duck Calinula chloropus -k IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Rock dove Columba livia SIP, DV Common ground-dove Columbain passerina MTC White-winged dove Zenaida asiatica MTC Mourning dove Zenaida macroura	American pipit	Anthus rubescens	SIP
American crow.Corvus brachyrhynchosMTCFish crowCorvus ossifragusMTCBlue jay.Cyanocitta cristataMTCBrown-headed cowbirdMolothrus ater.SIPBoat-tailed grackleQuiscalus majorMTCCommon grackleQuiscalus quisculaMTCWood duckAix sponsaIAP, BSTNorthern pintailAnas acutaIAP, BSTBlue-winged tealAnas discorsIAP, BSTMottled duckAnas fulvigulaIAP, BSTMottled duckAnas fulvigulaIAP, BSTMuscovy duckCairina moschataIAP, BSTBlac-bellied whistling duckDendrocygna autumnalisIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumba liviaSIP, DVCommon ground-doveColumbina passerinaMTCEurasian collared doveZenaida macrouraMTCBlue-gray gnatcatcherPoliptila caeruleaMTCPoduring doveZenaida macrouraMTCBue-gray gnatcatcherPoliptila caeruleaMTCCooper's hawkAccipiter striatusSIPSharp-shinned hawkAccipiter striatusSIPSwallow-tailed kiteElanoides forficatusSIPAndreasFalco sparveriusSIPSwallow-tailed kiteElanoides forficatusSIPAndreasFalco sparveriusSIPSoutheastern American kestrel Falco sparveriusSIP <td>Chimney swift</td> <td>Bombycilla cedrorum</td> <td> OF</td>	Chimney swift	Bombycilla cedrorum	OF
Fish crowCorvus ossifragusMTCBlue jayCyanocitta cristataMTCBrown-headed cowbirdMolothrus aterSIPBoat-tailed grackleQuiscalus majorMTCCommon grackleQuiscalus quisculaMTCWood duckAix sponsaIAP, BSTNorthern pintailAnas acutaIAP, BSTBlue-winged tealAnas discorsIAP, BSTMottled duckAnas discorsIAP, BSTMottled duckAnas fulvigulaIAP, BSTMottled duckCairina moschataIAP, BSTBlack-bellied whistling duckDendrocygna autumnalisIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTRock doveColumbina passerinaMTCEurasian collared doveStreptopelia decaoctoMTCWhite-winged doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCBlue-gray gnatcatcherPolioptila caeruleaMTCBlue-gray gnatcatcherPolioptila caeruleaMTCSymp-shinned hawkAccipiter striatusSIPSwallow-tailed hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPSwallow-tailed kiteElanoides forficatusSIPBald eagleHaliaeetus leucocephalusSIPBald eagleHaliaeetus leucocephalusSIP	American crow	Corvus brachyrhynchos	MTC
Blue jay Cyanocitta cristata MTC Brown-headed cowbird Molothrus ater SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Blue-winged teal Anas discors IAP, BST Mottled duck Anas discors IAP, BST Muscovy duck Cairina moschata IAP, BST Black-bellied whistling duck Dendrocygna autumnalis IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Pied-billed grebe Podilymbus podiceps IAP, BST Pied-billed grebe Podilymbus podiceps IAP, BST Podoute-crested cormorant Phalacrocorax auritus IAP, BST Podoute-crested cormorant Phalacrocorax auritus IAP, BST Podoute-could dove Columbia passerina MTC Common ground-dove Columbia passerina MTC Woorning dove Zenaida asiatica MTC Mourning dove Zenaida macroura MTC	Fish crow	Corvus ossifragus	MTC
Brown-headed cowbird Molothrus ater. SIP Boat-tailed grackle Quiscalus major MTC Common grackle Quiscalus quiscula MTC Wood duck Aix sponsa IAP, BST Northern pintail Anas acuta IAP, BST Blue-winged teal Anas discors IAP, BST Mottled duck Anas fulvigula IAP, BST Anhinga Anhinga anhinga IAP, BST Muscovy duck Cairina moschata IAP, BST Black-bellied whistling duck Dendrocygna autumnalis IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Pied-billed grebe Podilymbus podiceps IAP, BST Rock dove Columba livia SIP, DV Common ground-dove Columbina passerina MTC White-winged dove Zenaida asiatica MTC Mourning dove Zenaida macroura MTC Blue-gray gnatcatcher Polioptila caerulea MTC Mourning dove Zenaida macroura MTC Bue-gray gnatcatcher Polioptila caerulea MTC SIP SIP <td>Blue jay</td> <td>Cyanocitta cristata</td> <td> MTC</td>	Blue jay	Cyanocitta cristata	MTC
Boat-tailed grackleQuiscalus majorMTCCommon grackleQuiscalus quisculaMTCWood duckAix sponsaIAP, BSTNorthern pintailAnas acutaIAP, BSTBlue-winged tealAnas discorsIAP, BSTMottled duckAnas fulvigulaIAP, BSTAnhingaAnas fulvigulaIAP, BSTMuscovy duckCairina moschataIAP, BSTBlack-bellied whistling duckDendrocygna autumnalisIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumbina passerinaMTCCommon ground-doveColumbina passerinaMTCWhite-winged doveZenaida macrouraMTCMourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCBorp-shinned hawkAccipiter striatusSIPNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPSwallow-tailed kiteElanoides forficatusSIPSwallow-tailed kiteFalco sparverius paulusSIPBald eagleHaliaeetus leucocephalusSIPSutheastern American kestrel Falco sparverius paulusSIPSutheastern American kestrel Falco sparverius paulusSIPSutheastern American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusSIP<	Brown-headed cowbird	Molothrus ater	SIP
Common grackleOuiscalus quisculaMTCWood duckAix sponsaIAP, BSTNorthern pintailAnas acutaIAP, BSTBlue-winged tealAnas discorsIAP, BSTMottled duckAnas fulvigulaIAP, BSTMottled duckAnas fulvigulaIAP, BSTMottled duckAnhinga anhingaIAP, BSTMuscovy duckCairina moschataIAP, BSTBlack-bellied whistling duckDendrocygna autumnalisIAP, BSTCommon moorhenGallinula chloropus -ckIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTRock doveColumba liviaSIP, DVCommon ground-doveColumba laviaMTCEurasian collared doveStreptopelia decaoctoMTCWhite-winged doveZenaida asiaticaMTCBue-gray gnatcatcherPolioptila caeruleaMTCBue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter striatusSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo JamaicensisOFRed-tailed hawkButeo JamaicensisSIPSwallow-tailed kiteElanoides forficatusSIPSwallow-tailed kiteElanoides forficatusSIPBald eagleHaliaeetus leucocephalusSIPSoutheastern American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusSIP	Boat-tailed grackle	Quiscalus major	MTC
Wood duckAix sponsaIAP, BSTNorthern pintailAnas acutaIAP, BSTBlue-winged tealAnas discorsIAP, BSTBlue-winged tealAnas fulvigulaIAP, BSTMottled duckAnas fulvigulaIAP, BSTAnhingaAnhinga anhingaIAP, BSTMuscovy duckCairina moschataIAP, BSTBlack-bellied whistling duckDendrocygna autumnalisIAP, BSTCommon moorhenGallinula chloropus -ckIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumba liviaSIP, DVCommon ground-doveColumbina passerinaMTCEurasian collared doveZenaida asiaticaMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter striatusSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPSoutheastern American kestrelFalco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Common grackle	Quiscalus quiscula	MTC
Northern pintailAnas acutaIAP, BSTBlue-winged tealAnas discorsIAP, BSTMottled duckAnas fulvigulaIAP, BSTMottled duckAnas fulvigulaIAP, BSTAnhingaIAP, BSTMuscovy duckCairina moschataIAP, BSTBlack-bellied whistling duckDendrocygna autumnalisIAP, BSTCommon moorhenGallinula chloropus -ckIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumba liviaSIP, DVCommon ground-doveColumbina passerinaMTCEurasian collared doveZenaida asiaticaMTCMourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter striatusSIPSharp-shinned hawkButeo lineatusSIPRed-tailed hawkButeo lineatusBGNorthern harrierCircus cyaneusSIPSwallow-tailed kiteElanoides forficatusSIPSwallow-tailed kiteFalco sparveriusSIPSoutheasterm American kestrelFalco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOsprevPandion haliaetusSIP	Wood duck	Aix sponsa	IAP, BST
Blue-winged teal Anas discors IAP, BST Mottled duck Anas fulvigula IAP, BST Anhinga Anhinga anhinga IAP, BST Muscovy duck Cairina moschata IAP, BST Black-bellied whistling duck Dendrocygna autumnalis IAP, BST Black-bellied whistling duck Dendrocygna autumnalis IAP, BST Common moorhen Gallinula chloropus -ck IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Pied-billed grebe Podilymbus podiceps IAP, BST Rock dove Columba livia SIP, DV Common ground-dove Columba lasserina MTC Eurasian collared dove Streptopelia decaocto MTC White-winged dove Zenaida asiatica MTC Mourning dove Zenaida macroura MTC Blue-gray gnatcatcher Polioptila caerulea MTC Cooper's hawk Accipiter striatus SIP Sharp-shinned hawk Buteo jamaicensis OF Red-tailed hawk Buteo jamaicensis OF Red-shouldered hawk Buteo lineatus SIP	Northern pintail	Anas acuta	IAP, BST
Mottled duckAnas fulvigulaIAP, BSTAnhingaAnhinga anhingaIAP, BSTMuscovy duckCairina moschataIAP, BSTBlack-bellied whistling duckDendrocygna autumnalisIAP, BSTCommon moorhenGallinula chloropus -ckIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumba liviaSIP, DVCommon ground-doveColumbina passerinaMTCEurasian collared doveZenaida asiaticaMTCWhite-winged doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter striatusSIPSharp-shinned hawkButeo jamaicensisOFRed-tailed hawkButeo lineatusBGNorthern harrierCircus cyaneusSIPSwallow-tailed kiteElanoides forficatusSIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOsprevPandion haliaetusSIP	Blue-winged teal	Anas discors	IAP, BST
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Muscovy duck.Cairina moschata.IAP, BSTBlack-bellied whistling duck.Dendrocygna autumnalisIAP, BSTCommon moorhenGallinula chloropus -ckIAP, BSTDouble-crested cormorant.Phalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumba liviaSIP, DVCommon ground-doveColumbina passerinaMTCEurasian collared doveStreptopelia decaoctoMTCWhite-winged doveZenaida asiaticaMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter striatusSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Anhinga	Anhinga anhinga	IAP, BST
Black-bellied whistling duck Dendrocygna autumnalis IAP, BST Common moorhen Gallinula chloropus -ck IAP, BST Double-crested cormorant Phalacrocorax auritus IAP, BST Pied-billed grebe Podilymbus podiceps IAP, BST Rock dove Columba livia SIP, DV Common ground-dove Columbina passerina MTC Eurasian collared dove Zenaida asiatica MTC White-winged dove Zenaida macroura MTC Mourning dove Zenaida macroura MTC Blue-gray gnatcatcher Polioptila caerulea MTC Cooper's hawk Accipiter cooperii SIP Sharp-shinned hawk Buteo jamaicensis OF Red-shouldered hawk Buteo lineatus BG Northern harrier Circus cyaneus IAP Swallow-tailed kite Elanoides forficatus SIP American kestrel Falco sparverius paulus SIP Bald eagle Haliaeetus leucocephalus MTC Osprev Pandion haliaetus SIP	Muscovy duck	Cairina moschata	IAP, BST
Common moorhenGallinula chloropus -ckIAP, BSTDouble-crested cormorantPhalacrocorax auritusIAP, BSTPied-billed grebePodilymbus podicepsIAP, BSTRock doveColumba liviaSIP, DVCommon ground-doveColumba lasserinaMTCEurasian collared doveStreptopelia decaoctoMTCWhite-winged doveZenaida asiaticaMTCMourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo JamaicensisOFRed-shouldered hawkElanoides forficatusSIPNorthern harrierFalco sparveriusSIPSwallow-tailed kiteFalco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIPUtheastern American kestrel Falco sparverius paulusSIPSIPSIPSIPSoutheastern American kestrel Falco sparverius paulusSIPSutheastern American hestrel Falco sparverius paulusSIPSutheastern American hestrel Falco sparverius paulusSIP	Black-bellied whistling duck	Dendrocygna autumnalis	IAP, BST
Double-crested cormorant.Phalacrocorax auritus.IAP, BSTPied-billed grebe.Podilymbus podiceps.IAP, BSTRock dove.Columba liviaSIP, DVCommon ground-dove.Columbina passerina.MTCEurasian collared dove.Streptopelia decaocto.MTCWhite-winged doveZenaida asiaticaMTCMourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caerulea.MTCCooper's hawk.Accipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawk.Buteo jamaicensis.OFRed-shouldered hawk.Buteo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatus.SIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagle.Haliaeetus leucocephalus.MTCOspreyPandion haliaetusSIP	Common moorhen	Gallinula chloropus -ck	IAP, BST
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Rock doveColumba liviaSIP, DVCommon ground-doveColumbina passerinaMTCEurasian collared doveStreptopelia decaoctoMTCWhite-winged doveZenaida asiaticaMTCWourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteFalco sparveriusSIPAmerican kestrelFalco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Pied-billed grebe	Podilymbus podiceps	IAP, BST
Common ground-doveColumbina passerinaMTCEurasian collared doveStreptopelia decaoctoMTCWhite-winged doveZenaida asiaticaMTCWourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Rock dove	Columba livia	SIP, DV
Eurasian collared doveStreptopelia decaoctoMTCWhite-winged doveZenaida asiaticaMTCMourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparveriusSIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Common ground-dove	Columbina passerina	MTC
White-winged doveZenaida asiaticaMTCMourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparveriusSIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Eurasian collared dove	Streptopelia decaocto	MTC
Mourning doveZenaida macrouraMTCBlue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparveriusSIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	White-winged dove	Zenaida asiatica	МТС
Blue-gray gnatcatcherPolioptila caeruleaMTCCooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparveriusSIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Mourning dove	Zenaida macroura	MTC
Cooper's hawkAccipiter cooperiiSIPSharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparveriusSIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Blue-grav gnatcatcher	Polioptila caerulea	MTC
Sharp-shinned hawkAccipiter striatusSIPRed-tailed hawkButeo jamaicensisOFRed-shouldered hawkButeo lineatusBGNorthern harrierCircus cyaneusIAPSwallow-tailed kiteElanoides forficatusSIPAmerican kestrelFalco sparveriusSIPSoutheasterm American kestrel Falco sparverius paulusSIPBald eagleHaliaeetus leucocephalusMTCOspreyPandion haliaetusSIP	Cooper's hawk	Accipiter cooperii	SIP
Red-tailed hawk	Sharp-shinned hawk	Accipiter striatus	SIP
Red-shouldered hawk Buteo lineatus BG Northern harrier Circus cyaneus IAP Swallow-tailed kite Elanoides forficatus SIP American kestrel Falco sparverius SIP Southeasterm American kestrel Falco sparverius paulus SIP Bald eagle Haliaeetus leucocephalus MTC Osprey Pandion haliaetus SIP	Red-tailed hawk	Buteo iamaicensis	OF
Northern harrier Circus cyaneus IAP Swallow-tailed kite Elanoides forficatus SIP American kestrel Falco sparverius SIP Southeasterm American kestrel Falco sparverius paulus SIP Bald eagle Haliaeetus leucocephalus MTC Osprey Pandion haliaetus SIP	Red-shouldered hawk	Buteo lineatus	BG
Swallow-tailed kite Elanoides forficatus SIP American kestrel Falco sparverius SIP Southeasterm American kestrel Falco sparverius paulus SIP Bald eagle Haliaeetus leucocephalus MTC Osprey Pandion haliaetus SIP	Northern harrier	Circus cvaneus	IAP
American kestrel	Swallow-tailed kite	Elanoides forficatus	SIP
Southeasterm American kestrel <i>Falco sparverius paulus</i>	American kestrel	Falco sparverius	SIP
Bald eagle	Southeasterm American kestre	Falco sparverius paulus	SIP
Osprev Pandion haliaetus SIP UC	Bald eagle	Haliaeetus leucocenhalus	MTC
	Osprev	Pandion haliaetus	SIP, UC

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Belted kingfisher	. Megaceryle alcyon	IAP, BST
Great horned owl	. Bubo virginianus	MEH, BG, BF, HH
Eastern screech-owl	. Megascops asio	BF, SHF
Barred owl	. Strix varia	HH, BF
Barn owl	. Tyto alba	SHF
Great egret	. Ārdea alba	IAP, BST
Great blue heron	. Ardea herodias	IAP, BST
American bittern	. Botaurus lentiginosus	IAP, BST
Cattle egret	. Bubulcus ibis	SIP
Green heron	. Butorides virescens	IAP, BST
Little blue heron	. Egretta caerulea	IAP, BST
Snowy egret	. Egretta thula	IAP, BST
Tricolored heron	. Egretta tricolor	IAP, BST
Black-crowned night-heron	. Nycticorax nycticorax	IAP, BST
White ibis	Eudocimus albus	IAP, BST
Least bittern	. Ixobrychus exilis	IAP, BST
American white pelican	. Pelecanus erythrorhynchos	OF
Brown pelican	. Pelecanus occidentalis	OF
Roseate spoonbill	. Platalea ajaja	IAP, BST, BF
Glossy ibis	. Plegadis falcinellus	IAP, BST, BF
Chuck-will's-widow	. Antrostomus carolinensis	SIP, MEH
Common nighthawk	. Chordeiles minor	MEH
Northern bobwhite	. Colinus virginianus	SIP, PP, MEH
Bobolink	. Dolichonyx oryzivorus	SIP
Wild turkey	. Meleagris gallopavo	SIP, MEH
Limpkin	. Aramus guarauna	IAP, BST
American coot	. Fulica americana	IAP, BST
Common gallinule	. Gallinula galeata	IAP, BST
Black rail	. Laterallus jamaicensis	IAP, BST
Purple gallinule	. Porphyrio martinicus	IAP, BST
King rail	. Rallus elegans	IAP, BST
Least sandpiper	. Calidris minutilla	IAP
Killdeer	. Charadrius vociferus	SIP
Gull-billed tern	. Gelochelidon nilotica	OF
Black-necked stilt	. Himantopus mexicanus	IAP
Caspian tern	. Hydroprogne caspia	OF
Ring-billed gull	. Larus delawarensis	OF
Laughing gull	. Leucophaeus atricilla	OF
Black-crowned night heron	. Nycticorax nycticorax	IAP, BST
Black skimmer	. Rynchops niger	OF
Common tern	. Sterna hirundo	OF
Least tern	. Sternula antillarum	OF
Royal tern	. Thalasseus maximus	OF
Sandwich tern	. Thalasseus sandvicensis	OF
Lesser yellowlegs	. Tringa flavipes	IAP
Greater yellowlegs	. Tringa melanoleuca	IAP

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Solitary sandpiper Bachman's sparrow Savannah sparrow Barn swallow Northern rough-winged	Tringa solitaria Aimophila aestivalis Passerculus sandwichensis Hirundo rustica	IAP SHF, MEH SHF, MEH OF
swallow Tree swallow Yellow-billed cuckoo Turkey vulture Black vulture Common yellowthroat Black and white warbler Northern waterthrush Northern parula Prairie warbler Yellow-throated warbler Yellow warbler Yellow warbler Pine warbler American redstart Pileated woodpecker Red-bellied woodpecker Red-headed woodpecker Carolina wren	Stelgidopteryx serripennis Tachycineta bicolor Coccyzus americanus Cathartes aura Coragyps atratus Geothlypis trichas Mniotilta varia Parkesia noveboracensis Setophaga americana Setophaga discolor Setophaga dominica Setophaga palmarum Setophaga palmarum Setophaga petechia Setophaga pinus Setophaga ruticilla Dryocopus pileatus Melanerpes carolinus Picoides pubescens Thryothorus ludovicianus	OF OF OF OF OF OF OF OF MEH, SHF, HH MEH, SHF, HH

MAMMALS

Southern short-tailed shrew	Blarina carolinensis	MEH, SH	IF
Dog	Canis familiaris	DV, SIP	
Coyote	Canis latrans	SIP	
Least shrew	Cryptotis parva	MEH, SH	F
Nine-banded armadillo	Dasypus novemcinctus	MTC	
Virginia opossum	Didelphis virginiana	MTC	
Domestic cat*	Felis catus	DV	
Southeastern pocket gopher	Geomys pinetis	SIP	
River otter	Lontra canadensis	BST	
Bobcat	Lynx rufus	MEH	
White-tailed deer	Odocoileus virginianus	MTC	
Cotton mouse	Peromyscus gossypinus	MEH	
Florida mouse	Podomys floridanus	SFW	
Raccoon	Procyon lotor	MTC	
Gray squirrel	Sciurus carolinensis	MTC	
Sherman's fox squirrel	Sciurus niger shermanii	MH, SHF	
Hispis cotton rat	Sigmodon hispidus	MTC	

Common Name	Scientific Name	Primary Habitat Codes (for imperiled species)
Wild hog*	Sus scrofa	MTC
Eastern cottontail	Sylvilagus floridanus	SC, MEH, XH
Marsh rabbit	Sylvilagus palustris	HH
Gray fox	Urocyon cinereoargentee	<i>us</i> MTC
Red fox*	Vulpes vulpes	MTC

TERRESTRIAL

Beach Dune	BD
Coastal Berm	СВ
Coastal Grassland	CG
Coastal Strand	CS
Dry Prairie	DP
Keys Cactus Barren	КСВ
Limestone Outcrop	LO
Maritime Hammock	MAH
Mesic Flatwoods	MF
Mesic Hammock	MEH
Pine Rockland	PR
Rockland Hammock	RH
Sandhill	SH
Scrub	SC
Scrubby Flatwoods	SCF
Shell Mound	SHM
Sinkhole	SK
Slope Forest	SPF
Upland Glade	UG
Upland Hardwood Forest	UHF
Upland Mixed Woodland	UMW
Upland Pine	UP
Wet Flatwoods	WF
Xeric Hammock	ХН

PALUSTRINE

Alluvial Forest	AF
Basin Marsh	BM
Basin Swamp	BS
Baygall	BG
Bottomland Forest	BF
Coastal Interdunal Swale	CIS
Depression Marsh	DM
Dome Swamp	DS
Floodplain Marsh	FM
Floodplain Swamp	FS
Glades Marsh	GM
Hydric Hammock	HH
Keys Tidal Rock Barren	KTRB
Mangrove Swamp	MS
Marl Prairie	MP
Salt Marsh	SAM
Seepage Slope	SSL
Shrub Bog	SHB
Slough	SLO
Slough Marsh	SLM
Strand Swamp	STS



Vet Prairie	WP

LACUSTRINE

Clastic Upland Lake	CULK
Coastal Dune Lake	CDLK
Coastal Rockland Lake	CRLK
Flatwoods/Prairie	FPLK
Marsh Lake	MLK
River Floodplain Lake	RFLK
Sandhill Upland Lake	SULK
Sinkhole Lake	SKLK
Swamp Lake	SWLK

RIVERINE

Alluvial Stream	AST
Blackwater Stream	BST
Seepage Stream	SST
Spring-run Stream	SRST

SUBTERRANEAN

Aquatic Cave	ACV
Terrestrial Cave	TCV

ESTUARINE

Algal Bed	EAB
Composite Substrate	ECPS
Consolidated Substrate	ECNS
Coral Reef	ECR
Mollusk Reef	EMR
Octocoral Bed	EOB
Seagrass Bed	ESGB
Sponge Bed	ESPB
Unconsolidated Substrate	EUS
Worm Reef	EWR

MARINE

Algal Bed	MAB
Composite Substrate	MCPS
Consolidated Substrate	MCNS
Coral Reef	MCR
Mollusk Reef	MMR
Octocoral Bed	МОВ
Seagrass Bed	MSGB
Sponge Bed	MSPB
Unconsolidated Substrate	MUS
Worm Reef	MWR

ALTERED LANDCOVER TYPES

Abandoned field/ Abandoned pasture	AFP
Agriculture	AG
Artificial pond	AP
Borrow Area	BA
Canal/ditch	CD
Clearcut pine plantation	CPP
Clearing	CL
Developed	DV
Impoundment	IM
Invasive exotic monoculture	IEM
Pasture - improved	PI
Pasture - semi-improved	PSI
Pine plantation	PP
Restoration natural community	RNC
Road	RD
Spoil area	SA
Successional hardwood forest	SHF
Utility corridor	UC

MISCELLANEOUS

Many Types of Communities	MTC
Overflying	OF

Addendum 5 — Imperiled Species Ranking Definitions

The Nature Conservancy and the Natural Heritage Program Network (of which FNAI is a part) define an <u>element</u> as 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 <u>element occurrence</u> (EO) is a single extant habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element.

Using a ranking system developed by The Nature Conservancy and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks to 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, estimated abundance (number of individuals for species; area for natural communities), range, estimated adequately protected EOs, relative threat of destruction, and ecological fragility.

Federal and State status information is from the U.S. Fish and Wildlife Service; and the Florida Fish and Wildlife Conservation Commission (animals), and the Florida Department of Agriculture and Consumer Services (plants), respectively.

FNAI GLOBAL RANK DEFINITIONS

G1	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme
	vulnerability to extinction due to some natural or fabricated factor
G2	Imperiled globally because of rarity (6 to 20 occurrences or less than
02	3000 individuals) or because of vulnerability to extinction due to some
	natural or man-made factor.
G3	Either very rare or local throughout its range (21-100 occurrences or
	less than 10,000 individuals) or found locally in a restricted range or
	vulnerable to extinction of 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. G2O)
G#T#O	same as above, but validity as subspecies or variety is questioned

GUdue to lack of information, no rank or range can be assigned (e.g., GUT2).

G?.....Not yet ranked (temporary)

- 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 or local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction of other factors.
- S4.....apparently secure in Florida (may be rare in parts of range)
- S5..... demonstrably secure in Florida
- SHof historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
- SX..... believed to be extinct throughout range
- SA.....accidental in Florida, i.e., not part of the established biota
- SE.....an exotic species established in Florida may be native elsewhere in North America
- SNregularly occurring but widely and unreliably distributed; sites for conservation hard to determine
- SUdue to lack of information, no rank or range can be assigned (e.g., SUT2).
- S?.....Not yet ranked (temporary)
- NNot currently listed, nor currently being considered for listing, by state or federal agencies.

LEGAL STATUS

FEDERAL

(Listed by the U. S. Fish and Wildlife Service - USFWS)

- LEListed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species that is in danger of extinction throughout all or a significant portion of its range.
- PE.....Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
- LTListed as Threatened Species. Defined as any species that is likely to become an endangered species within the near future throughout all or a significant portion of its range.
- PT.....Proposed for listing as Threatened Species.
- CCandidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.

E(S/A) Endangered due to similarity of appearance.

T(S/A) Threatened due to similarity of appearance.

EXPE, XE..... Experimental essential population. A species listed as experimental and essential.

EXPN, XN.... Experimental non-essential population. A species listed as experimental and non-essential. Experimental, nonessential populations of endangered species are treated as threatened species on public land, for consultation purposes.

<u>STATE</u>

ANIMALS .. (Listed by the Florida Fish and Wildlife Conservation Commission - FWC)

FE Federally-designated Endangered

- FT Federally-designated Threatened
- FXN......Federally-designated Threatened Nonessential Experimental Population
- FT(S/A) Federally-designated Threatened species due to similarity of appearance
- ST..... Listed as Threatened Species by the FWC. 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 therefore is destined or very likely to become an endangered species within the near future.
- SSC..... Listed as Species of Special Concern by the FWC. 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 that, in the near future, may result in its becoming a threatened species.

PLANTS (Listed by the Florida Department of Agriculture and Consumer Services - FDACS)

- LEListed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.
- LTListed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered.

Addendum 6 – Cultural Information

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: <u>http://www.flheritage.com/preservation/compliance/guidelines.cfm</u>

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.

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

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_docum entation_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

The criteria to be used for evaluating eligibility for listing in the National Register of Historic Places are as follows:

- **1)** Districts, sites, buildings, structures, and objects may be considered to have significance in American history, architecture, archaeology, engineering, and/or culture if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
 - a) are associated with events that have made a significant contribution to the broad patterns of our history; and/or
 - b) are associated with the lives of persons significant in our past; and/or
 - c) embody the distinctive characteristics of type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or
 - **d)** have yielded, or may be likely to yield, information important in prehistory or history.
- 2) Ordinarily cemeteries, birthplaces, or graves of historical figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; properties primarily commemorative in nature; and properties that have achieved significance within the past 50 years shall not be considered eligible for the *National Register*. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:
 - a) a religious property deriving its primary significance from architectural or artistic distinction or historical importance; or
 - **b)** a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
 - c) a birthplace or grave of an historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or
 - d) a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, distinctive design features, or association with historic events; or a reconstructed building, when it is accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and no other building or structure with the same association has survived; or a property primarily commemorative in intent, if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
 - e) a property achieving significance within the past 50 years, if it is of exceptional importance.

Restoration is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural or architectural values.

Stabilization is defined as the act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Addendum 7 — Timber Management Analysis

1. Management Context and Best Management Practices

Timber management at Alafia River State Park (Alafia River) is based on the desired future condition (DFC) of a management zone or natural community (NatCom) as determined by the DRP Unit Management Plans, along with guidelines developed by the FNAI. In most cases, the DFC will be closely related to the historic NatCom. However, it is important to note, that in areas where the historic community has been severely altered by past land use practices, the DFC may not always be the same as the historic NatCom. All timber management activities undertaken will adhere to or exceed the current Florida Silvicultural Best Management Practices (BMPs) and Florida Forestry Wildlife BMPs for State Imperiled Species. DRP shall take all measures necessary to protect water quality and wildlife species of concern while conducting timber management activities. DRP has contracted with a private sector, professional forest management firm to complete this timber assessment: F4 Tech.

2. Purpose of Timber Management Activities

Timber management activities may be conducted to help improve or maintain current conditions to achieve the associated DFC. Timber management will primarily be conducted in upland NatComs. Candidate upland NatCom types may include mesic flatwoods, wet flatwoods, sandhill, upland pine, and upland mixed woodland along with scrubby flatwoods, scrub, and altered landcover types where DFC has been established, i.e. pine plantations. There will likely be no scheduled timber management activities in historically hardwood-dominated or wetland NatCom types, e.g., upland hardwood forest, hydric hammock, and slope forest. In some circumstances, timber management may include the harvesting and removal of overstory invasive/exotic trees. Descriptions of community types are detailed in the in the Resource Management Component.

3. Potential Silvicultural Treatments

Several silvicultural treatments may be considered and utilized over the next ten years. The various types of timber harvests may include pine thinning, targeted hardwood overstory removal, and clearcutting. Silvicultural treatments will be selectively implemented to minimize potential impacts to water and soil resources, non-target vegetation, and wildlife (see BMPs). Depending upon the condition and marketability of the timber being manipulated, it is possible to generate revenue from the harvest. It is also possible the timber removal could be a cost to DRP. In all decisions, the mission of preserving and restoring natural communities will be the guiding factor.

Thinning is conducted to reduce the basal area (BA) or density of trees/stems in a stand to improve forest health and growth conditions for residual trees. Allowing trees more room to grow has the potential to increase tree and forest vigor, which helps mitigate the potential for damaging insect and disease outbreaks. Most tree harvesting/removals also increase sunlight reaching the forest floor and fine fuels that facilitate consistent fire return intervals and responses, which can benefit

groundcover vegetation abundance, species richness, and overall ecological diversity. The disruption of natural fire regimes and fire return intervals can often result in the need to remove undesirable or overstocked hardwood stems that currently occupy growing space in the canopy and sub-canopy. Clearcutting may be used to support restoration goals by removing off-site pine or hardwood species and is a precursor to establishing site-appropriate species. It can also be used to control insect infestations that are damaging or threatening to forest resources and ecosystem conditions.

On occasion, salvage cuts may need to be conducted to remove small volumes of wood damaged by fire, wind storm, insect or other natural causes. The decision to harvest the affected timber will depend on the threat to the surrounding stands, risk of collateral ecological damage, and the volume/value of the trees involved. For example, small, isolated lightning-strike and beetle kills are a natural part of a healthy ecosystem and normally would not be cut. However, if a drought caused the insect infestation to spread, the affected trees and buffer zone might have to be removed to prevent significant damage.

4. Inventory Data and Potential Actions per Management Zone

A total of 4,109 acres associated with three (3) upland NatCom types that are potential candidates for timber management were assessed. From June to July 2018, an inventory based on field plots was conducted across and within these areas to quantify overstory, midstory and understory conditions. Various park-level and NatCom-level summary statistics can be found in the following tables.

This timber assessment was based on management zone and NatCom boundary GIS data provided by DRP in September 2018. It is not intended to be prescriptive. Stakeholders and DRP staff are encouraged to view this timber assessment and inventory data as supplemental information for future consideration. Given the dynamic nature of property ownership and land management activities at Alafia River, together with the timeframe required to create or update a UMP, it is possible that some tabular data may be dated. Therefore, NatCom acreages and recent treatments that occurred after the September 2018 period may not be reflected in the following tables.

Table 1. General Summary Statistics						
Number of management zones	57					
Upland natural community acres	4,109					

Mesic Flatwoods (2,675.1 acres)

Longleaf pine (*Pinus palustris*) is the preferred overstory pine species in the region. The FNAI reference site in this region for mesic flatwoods contains longleaf pine at a basal area (BA) of 10 to 50 square feet per acre with non-pine at a density of 0 trees per acre (TPA). The following table shows the overstory condition for this natural community at Alafia River and target overstory condition for mesic flatwoods in this region

		Current Average Overstory Conditions							Target Overstory Conditions	
MZ ID	Mesic Flatwoods (Acres)	Pine BA (ft2/ac)	Pine TPA	Pine Volume (tons/ac)	Non- Pine BA (ft2/ac)	Non- Pine TPA	Non-Pine Volume (tons/ac)	Total Pine and Non- Pine Volume (tons/ac)	FNAI Reference Condition Pine BA Range (ft2/ac)	FNAI Reference Condition Non-Pine TPA Range
AR-02A	12.1									
AR-02B	12.1									
AR-03	0.3									
AR-04A	0.3									
AR-04C	12.3									
AR-04D	21.0	0.0	0.0	0.0	65.0	112.0	24.3	24.3	10 - 50	0 - 0
AR-05A	18.0									
AR-05B	25.7	15.0	21.5	10.8	25.0	33.1	0.0	10.8	10 - 50	0 - 0
AR-05C	7.5									
AR-07	39.5	140.0	354.3	74.9	4.0	13.5	2.9	77.8	10 - 50	0 - 0
AR-08	6.5									
AR-10	46.3	0.0	0.0	0.0	90.0	84.7	72.9	72.9	10 - 50	0 - 0
AR-11	6.7	5.0	2.3	4.6	40.0	114.1	20.2	24.8	10 - 50	0 - 0
AR-12	134.5	32.5	46.2	20.4	38.8	31.7	4.3	24.7	10 - 50	0 - 0
AR-13	144.1	87.5	125.6	63.3	0.0	0.0	0.0	63.3	10 - 50	0 - 0
AR-14	33.5	42.5	49.0	29.8	40.0	205.2	5.5	35.3	10 - 50	0 - 0
AR-15	168.8	6.7	34.4	3.8	30.0	68.7	15.9	19.8	10 - 50	0 - 0
AR-16	83.3	23.8	35.6	16.5	6.3	34.4	0.0	16.5	10 - 50	0 - 0
AR-17	199.0	26.0	44.7	17.0	20.0	91.2	7.8	24.8	10 - 50	0 - 0
AR-18	48.0	0.0	0.0	0.0	85.0	337.9	18.3	18.3	10 - 50	0 - 0
AR-19A	49.9	0.0	0.0	0.0	30.0	67.8	24.3	24.3	10 - 50	0 - 0
AR-19B	153.9	23.8	26.8	16.8	41.3	74.2	14.4	31.2	10 - 50	0 - 0
AR-19C	42.0									

Alafia River State Park Timber Management Analysis

		Current Average Overstory Conditions							Target Overstory Conditions	
MZ ID	Mesic Flatwoods (Acres)	Pine BA (ft2/ac)	Pine TPA	Pine Volume (tons/ac)	Non- Pine BA (ft2/ac)	Non- Pine TPA	Non-Pine Volume (tons/ac)	Total Pine and Non- Pine Volume (tons/ac)	FNAI Reference Condition Pine BA Range (ft2/ac)	FNAI Reference Condition Non-Pine TPA Range
AR-20A	21.6	0.0	0.0	0.0	30.0	32.5	27.5	27.5	10 - 50	0 - 0
AR-20B	6.3									
AR-22B	10.0									
AR-23	7.2									
AR-24B	16.6									
AR-25	0.9									
AR-29	22.3	0.0	0.0	0.0	15.0	20.4	12.4	12.4	10 - 50	0 - 0
AR-30	14.6	0.0	0.0	0.0	105.0	229.4	63.6	63.6	10 - 50	0 - 0
AR-31A	23.5	0.0	0.0	0.0	80.0	188.2	54.3	54.3	10 - 50	0 - 0
AR-31B	6.9									
AR-32	2.6									
AR-33A	1.7									
AR-33B	3.6									
AR-35	21.4									
AR-36A	109.1	36.7	41.6	26.9	45.6	88.8	3.4	30.2	10 - 50	0 - 0
AR-36B	5.0									
AR-37	51.1	60.0	70.2	37.9	25.0	107.5	7.9	45.8	10 - 50	0 - 0
AR-38A	37.6	17.5	36.5	11.4	50.0	105.0	13.0	24.5	10 - 50	0 - 0
AR-38B	95.4	32.5	32.8	19.7	40.0	168.5	14.6	34.3	10 - 50	0 - 0
AR-39	52.2	45.0	60.5	27.3	35.0	83.9	6.3	33.6	10 - 50	0 - 0
AR-40	49.6	0.0	0.0	0.0	77.5	135.4	15.7	15.7	10 - 50	0 - 0
Not Identified*	850.5									
Total	2,675.1									
*Management Zone boundaries are mapped but alpha-numeric identifiers are missing.										

Alafia River State Park Timber Management Analysis
Sandhill (1,002.4 acres)

Longleaf pine (*Pinus palustris*) is the preferred overstory pine species in the region. The FNAI reference site in this region for sandhill contains longleaf pine at a basal area (BA) of 20 to 60 square feet per acre with non-pine species at between 0 and 79 trees per acre (TPA). The following table shows the overstory condition for this natural community at Alafia River and target overstory condition for sandhill in this region.

				Current Ave	age Overst	tory Con	ditions		Target O Cond	verstory itions
MZ ID	Sandhill (Acres)	Pine BA (ft2/ac)	Pine TPA	Pine Volume (tons/ac)	Non- Pine BA (ft2/ac)	Non- Pine TPA	Non-Pine Volume (tons/ac)	Total Pine and Non- Pine Volume (tons/ac)	FNAI Reference Condition Pine BA Range (ft2/ac)	FNAI Reference Condition Non-Pine TPA Range
AR-01	22.6									
AR-06	22.5									
AR-10	66.4									
AR-14	161.9	0.0	0.0	0.0	70.0	106.0	14.3	14.3	20 - 60	0 - 79
AR-15	54.7									
AR-16	1.2									
AR-17	48.6	60.0	116.7	37.4	30.0	148.2	7.0	44.5	20 - 60	0 - 79
AR-18	160.3	35.0	43.9	24.7	32.5	74.9	1.0	25.7	20 - 60	0 - 79
AR-19B	47.7	35.0	28.9	24.3	25.0	26.8	1.7	26.0	20 - 60	0 - 79
AR-19C	61.3									
AR-23	30.0									
AR-24A	3.3									
AR-24B	0.2									
AR-25	84.5	14.0	13.6	9.9	66.0	83.5	12.9	22.8	20 - 60	0 - 79
AR-28	66.1	6.0	6.4	4.0	68.0	140.4	4.0	8.0	20 - 60	0 - 79
AR-32	4.1									
AR-36A	3.5									
AR-39	83.6	42.0	96.0	23.1	36.0	89.8	5.1	28.2	20 - 60	0 - 79

				Current Ave	rage Overst	tory Con	ditions		Target C Cond	Verstory itions
MZ ID	Sandhill (Acres)	Pine BA (ft2/ac)	Pine TPA	Pine Volume (tons/ac)	Non- Pine BA (ft2/ac)	Non- Pine TPA	Non-Pine Volume (tons/ac)	Total Pine and Non- Pine Volume (tons/ac)	FNAI Reference Condition Pine BA Range (ft2/ac)	FNAI Reference Condition Non-Pine TPA Range
Not Identified*	80.1									
Total	1,002.4									
*Management Zon	ne boundarie	s are mappe	ed but al	pha-numeric id	dentifiers are	missing	•			•

Scrubby Flatwoods (398.9 acres)

Longleaf pine (*Pinus palustris*) is the preferred overstory pine species in the region. The FNAI reference site in this region for scrubby flatwoods contains longleaf pine at a basal area (BA) of 10 to 60 square feet per acre with non-pine at a density of between 0 and 26 trees per acre (TPA). The following table shows the overstory condition for this natural community at Alafia River and target overstory condition for scrubby flatwoods in this region.

				Current Ave	rage Overst	tory Con	ditions		Target O Cond	verstory itions
MZ ID	Scrubby Flatwoods (Acres)	Pine BA (ft2/ac)	Pine TPA	Pine Volume (tons/ac)	Non- Pine BA (ft2/ac)	Non- Pine TPA	Non-Pine Volume (tons/ac)	Total Pine and Non- Pine Volume (tons/ac)	FNAI Reference Condition Pine BA Range (ft2/ac)	FNAI Reference Condition Non-Pine TPA Range
AR-01	120.3	0.0	0.0	0.0	14.3	68.9	3.4	3.4	20 - 60	0 - 26
AR-03	9.8	0.0	0.0	0.0	50.0	146.9	4.4	4.4	20 - 60	0 - 26
AR-04A	33.7	3.3	22.0	0.7	11.7	12.6	0.0	0.7	20 - 60	0 - 26
AR-04B	0.3									
AR-04C	0.2									
AR-04D	5.7	0.0	0.0	0.0	160.0	520.0	0.0	0.0	20 - 60	0 - 26
AR-06	3.0									
AR-08	1.8									
AR-09	6.6	0.0	0.0	0.0	40.0	199.9	0.0	0.0	20 - 60	0 - 26
AR-14	70.0	13.3	11.9	11.1	103.3	128.1	3.2	14.3	20 - 60	0 - 26

				Current Ave	rage Overst	tory Con	ditions		Target C Cond	verstory itions
MZ ID	Scrubby Flatwoods (Acres)	Pine BA (ft2/ac)	BA Pine Pine ac) TPA (tons/ac	Pine Volume (tons/ac)	Non- Pine BA (ft2/ac)	Non- Pine TPA	Non-Pine Volume (tons/ac)	Total Pine and Non- Pine Volume (tons/ac)	FNAI Reference Condition Pine BA Range (ft2/ac)	FNAI Reference Condition Non-Pine TPA Range
AR-15	2.6									
AR-16	82.2	0.0	0.0	0.0	10.0	58.5	0.0	0.0	20 - 60	0 - 26
AR-21	51.4	13.3	11.5	10.9	83.3	113.9	18.5	29.3	20 - 60	0 - 26
AR-35	11.4									
Total	398.9									

Alafia River State Park Timber Management Analysis

Addendum 8 — Land Management Review

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMORANDUM

To:	Aric Larson, Governmental Operations Consultant III	
	Division of State Lands	

FROM: Parks Small, Chief, Bureau of Natural and Cultural Resources Division of Recreation and Parks

NetHowell

Digitally signed by Howell_C Date: 2015.11.17 14:35:38 -05'00'

Sine Murray, Chief, Office of Park Planning Division of Recreation and Parks

Digitally signed by Murray_SM Date: 2015.11.20 16:57:27 -05'00'

SUBJECT: Response to Draft Land Management Review (LMR) Alafia River State Park

The Land Management Review draft report provided to Division of Recreation and Parks (DRP) determined that management of Alafia River State Park

by the DRP met the two tests prescribed by law. Namely, the review team concluded that the land is being managed for the purposes for which it was acquired and in accordance with the land management plan.

Attached is DRP's Managing Agency Response to the draft LMR report. The responses were prepared via a coordinated effort of the park, district office, and our offices.

Thank you for your attention.

2015 Land Management Review Team Report for Alafia River State Park

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1. Introduction

Section 259.036, F.S. requires a periodic on-site review of conservation and recreation lands titled in the name of the Board of Trustees to determine (1) whether the lands are being managed for the purposes for which they were acquired and (2) whether they are being managed in accordance with their land management plan adopted pursuant to s. 259.032, F.S. In case where the managed areas exceed 1,000 acres in size, such a review must be scheduled at least every five years. In conducting this review, a statutorily constructed review team "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."

The land management review teams are coordinated by the Division of State Lands and consist of representatives from the Division of Recreation and Parks (DEP), the Florida Forest Service (DACS), the Fish and Wildlife Conservation Commission, the local government in which the property is located, the DEP District in which the parcel is located, the local soil and water conservation district, a conservation organization member, and a local private land manager.

Each Land Management Review Report is divided into three sections. Section 1 provides the details of the property being reviewed as well as the overall results of the report. Section 2 provides details of the Field Review, in which the Review Team inspects the results of management actions on the site. Section 3 provides details of the Land Management Plan Review, in which the team determines the extent to which the Management Plan provides for and documents adequate natural and recreational resource protection.

Finally, each report may also contain an Appendix that lists individual team member comments. This is a compilation of feedback, concerns or other thoughts raised by individual team members, but not necessarily indicative of the final consensus reached by the Land Management Review Team.

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Name of Site: Alafia River State Park Managed by: DRP Acres: 6,314.90 Purpose(s) for Acquisition: To be man

 Purpose(s) for Acquisition: To be managed for the protection and preservation of natural and cultural resources, and to provide compatible outdoor natural resource based recreational opportunities.

 Acquisition Program(s): Donation
 Original Acquisition Date: 12/19/96

 Area Reviewed: Entire Property
 Last Management Plan Approval Date: 10/15/04

Agency Manager and Key Staff Present:

Coy Helms, Park Manager

Review Team Members Present (voting)

- DRP: Rosalind Rowe
- FWC: Victor Echaves
- FFS: Walter Mallett
- DEP: Kevin MacLachlan (not present)
- Other Non-Team Members Present (attending)
 - Aric Larson, DEP/DSL

1.2 Property Map

- SWCD:
- Local gov't: Ken Bradshaw
- Conservation organization: Michael Bubb

County: Hillsborough County

Review Date: 8/10/15

• Private land manager:



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1.3. Overview of Land Management Review Results

Is the property managed in accordance with the purposes for which it was acquired?

Yes = 5, No = 0

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

Table 1 shows the average scores received for each applicable category of review. *Field Review* scores refer to the adequacy of management actions in the field, while *Management Plan Review* scores refer to adequacy of discussion of these topics in the management plan. Scores range from 1 to 5 with 5 signifying excellence. For a more detailed key to the scores, please see *Appendix A*.

Field Review	Management Plan Review
2.65	2.08
3.53	1.93
3.09	1.97
2.40	1.80
3.23	2.33
3,30	2,65
3.37	2.36
2.17	N/A
	Field Review 2.65 3.53 3.09 2.40 3.23 3.30 3.30 3.37 2.17

1.3.1 Consensus Commendations for the Managing Agency

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

- The team commends DRP for diligence with exotic plant control on the western portion of the park. (5+, 0-)
- The team commends DRP for utilization of wetland damage mitigation as a means for restoring the littoral shelf on impoundment banks. (5+, 0-)

1.3.2. Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The next management plan update should include information about how these recommendations have been addressed:

 The team recommends that DRP seek improvements in the ability to distribute exotic plant locations/coverages and treatment status to field staff (e.g. GIS, hardcopy maps, etc.). (5+, 0-)

Managing Agency Response: Agree. A new database (Natural Resource Tracking System) was developed for DRP, and is now being implemented for tracking exotic plant locations, coverages, and treatment status. Field staff training is currently underway so they can access the

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information they need on exotics in the park. The database is linked to a mapping tool. District Biologist will continue to assist with surveys, mapping, and provide hardcopy maps to staff.

 The team recommends that DRP coordinate with FFS to obtain a comprehensive timber assessment with appropriate recommendations. (5+, 0-)

Managing Agency Response: Agree. Park management will work to obtain and implement a comprehensive timber assessment with appropriate recommendations.

3. The team recommends that DRP explore funding opportunities for the expansion of the bathhouse facility in the campground area to meet current and future demand. (5+, 0-)

Managing Agency Response: Agree. An expansion to the campground bathhouse has been funded and has gone out to bid.

 The team recommends that DRP explore alternate strategies for the proper disposal of recreational vehicle (RV) waste. (5+, 0-)

Managing Agency Response: Agree. Options are being explored to separate the RV dump station from the bathhouse septic system.

5. The team recommends that DRP develop a short-term goal to address immediate concerns associated with the culvert failure in AR31B. (5+, 0-)

Managing Agency Response: Agree. The culvert is being re-engineered and designed to prevent a similar failure in the future. Contractors are being sought for installation.

 The team recommends that DRP develop a long-term goal to complete a comprehensive parkwide hydrologic assessment, and explore cooperative opportunities to obtain funding. (5+, 0-)

Managing Agency Response: Agree. This goal has been explicitly stated in the draft management plan update, and a proposed project for its implementation has been identified and included for future funding. However, Division funding is appropriated annually by the Florida Legislature. This funding is allocated at the Division and District levels in order to best meet annual operational and resource management needs.

2. Field Review Details

2.1 Field Review Checklist Findings

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

1. Natural Communities; specifically baygall, bottomland forest, floodplain swamp, and blackwater stream:

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2. Environmental Education & Outreach, specifically recreational opportunities:

2.2. 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 3.0 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan update should include information on how these items have been addressed:

1. Listed species, specifically listed animal and plant species in general, received below average scores. The review team is asked to evaluate, based on their perspective, whether management actions are sufficient for protection and preservation of the species.

Managing Agency Response: Agree. Additional listed species monitoring will be pursued by park staff and District Biologists. Priorities will include species of the undisturbed floodplain, scrub species, and those who would benefit from habitat enhancement activities through exotic plant treatment, prescribed fire, and wetland restoration.

2. Natural Resources Survey; specifically sport fish or their habitat monitoring, listed species or their habitat monitoring, other non-game species or their habitat monitoring, fire effects monitoring, and other habitat management effects monitoring, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether survey and monitoring of the resources or their habitats are sufficient.

Managing Agency Response: Agree. Primary inventory and monitoring focus must be on species that require special management attention. An all-species inventory generally must be a lower priority than actually conducting actions to manage habitats. As needed, costs for an inventory will be included in the Unit Management Plan, but can only be allocated as funds become available on a statewide priority needs basis.

 Forest Management; specifically timber inventory, timber harvesting, reforestation/afforestation, and site preparation, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether forest management is sufficient.

Managing Agency Response: Agree. The park has scattered patches of old pine plantation and experimental tree plantings, and large areas of successional hardwood forest that should all be evaluated for their timber potential. Park management will work with foresters to implement a full assessment and will incorporate subsequent recommendations in the next park plan.

4. Hydrologic/Geologic function (Hydro-Alteration); specifically roads/culverts, ditches, hydroperiod alteration, and dams, reservoirs or other impoundments, received below average

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scores. The review team is asked to evaluate, based on information provided by the managing agency, whether consideration of past and present hydrologic and geologic functions are sufficient.

Managing Agency Response: Agree. Resources are required to provide a full-park hydrology assessment and set of recommendations for proper reclamation and management of the disturbances at the park. Hundreds of acres are in Impoundment/Artificial Pond water areas, most of which lack the normal topography and benefits of natural wetlands, and further are not safe to access. However, Division funding is appropriated annually by the Florida Legislature. This funding is allocated at the Division and District levels in order to best meet annual operational and resource management needs. Any deemed increase in Division Budget/staffing will follow the established legislative budget request process.

 Public Access, specifically parking, received a below average score. The review team is asked to evaluate, based on information provided by the managing agency, whether public access is sufficient.

Managing Agency Response: Agree. The parking area at the picnic area could benefit from a redesigned layout that would increase parking and provide improved access to park visitors.

6. Management Resources, specifically waste disposal, sanitary facilities, buildings, equipment, staff and funding, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether management resources are sufficient.

Managing Agency Response: Agree. Work to improve the waste disposal for RVs at the campground is being investigated.

Field Review Item	Reference #		An	onym	ous T	eam	Memb	pers		Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Hammock	I.A.2	4	4	4	4	3				3.80
Xeric Hammock	I.A.3	3	4	4	4	3				3.60
Baygall	I.A.4	4	X	X	X	4				4.00
Bottomland Forest	1.A.5	4	4	4	3	5				4.00
Floodplain Swamp	1.A.6	4	4	4	3	5				4.00
Hydric Hammock	1.A.7	4	4	3	3	4				3.60
Blackwater Stream	I.A.8	4	4	4	4	5				4.20
			1	Vatura	l Com	munit	ies Av	erage S	core	3.89
Listed Species: Protection & Preserv	ation (I.B)									
Animals (in general)	I.B.1	3	3	3	1	3				2.60

2.3. Field Review Checklist and Scores

Plants (in general)	1.B.2	3	3	3	2	3		2.80
		S	1		Listed	Species	Average Score	2.70
Natural Resources Survey/Menitoring Resource								
Sport fish or their babitat monitoring		1 2	2	2	1	4		7 20
Listed species or their babitat monitoring	1.0.1	3	2	7	1	4		2.40
Other non-game species or their habitat	1.6.2	1	2	-				2.40
monitoring	1.C.3	2	2	2	1	4		2,20
Fire effects monitoring	1.C.4	2	2	3	1	3		2.20
Other habitat management effects monitoring	1.C.5	3	2	2	1	4		2.40
Invasive species survey / monitoring	1.C.6	4	3		1	5		3.25
		-						
Cultural Resources (Archeological & Historic site	rs) (II.A, II.B)	1.	-					2.00
Cultural Res. Survey	11.A	4	3	4	3	4		3.60
Protection and preservation	Т п.в	4		3 Cult	1	4	Augure Care	3.00
			-	Cult	ural K	esources	Average Score	5,50
Resource Management, Prescribed Fire (III.A)							6	
Area Being Burned (no. acres)	III.A1	3	4	4	2	2	1 1 1	3.00
Frequency	III.A.2	4	4	4	2	4		3,60
Quality	III.A.3	4	4	5	X	2		3,75
	Reso	urce Ma	nager	ment,	Prescri	ibed Fire	Average Score	3.45
Restoration (III R)								
Tampa Bay Site	III B 1	4	4	4	2	4	1 1 1	3.60
	1	1 -			Res	toration	Average Score	3.60
							in a cinge score	
Forest Management (III.C)	1	1	-		-		the star is	_
Timber Inventory	III.C.1	1	1	1	1	3		1.40
Timber Harvesting	III.C.2	X	1	1	1	3		150
Reforestation/Afforestation	III.C.3	X	1	1	1	2		1,25
Site Preparation	III.C.4	X	1	1	1	3		1,50
	-	-		Fores	t Mana	agement	Average Score	141
Non-Native, Invasive & Problem Species (III.D)								
Prevention		-						
prevention - plants	III.D.1.a	4	4	3	1	4		3.20
prevention - animals	III.D.1.b	3	3	4	2	4		3.20
prevention - pests/pathogens	III.D.1.c	3	1	4	X	5		3.25
Control								
control - plants	III.D.2.a	4	3	2		4		3.25
control - animals	III.D.2.b	3	4	3		4		3.50
control - pest/pathogens	III.D.2.c	3	1	4		4		3.00
	Non-f	Native, I	nvasiv	e & Pi	oblem	Species	Average Score	3.23
Hydrologic/Goologic function Hudro. Alteration	(III E 1)					-		
Roads/culverts	III.E.1.a	14	2	2	5	2		2.90
Ditchas	IIIE16	2	3	1	2	2		2.00
Dituites	III E 1 c	2	3	4	2	2		2.00
Hudro-period Alteration	11.E.1.C	2	1	2	2 V	2		2.40
Hydro-period Alteration		1 4	1	3	~	2		2.23
Hydro-period Alteration Dams, Reservoirs or other impoundments	Hudrologia/C	oplogia	funet	on U	dro Al	toration	Average Searc	7.56

Ground Water Monitoring (III.E.2)								
Ground water quality	III.E.2.a	3	3	4	3	3		3.20
Ground water quantity	III.E.2.b	3	3	4	3	2		3.00
		1	Grou	nd Wa	ter M	onitoring A	verage Score	3.10
Surface Water Monitoring (III E.3)			-	-				
Surface water quality	III.E.3.a	4	4	5	3	2		3.60
Surface water quantity	III.E.3.b	4	4	5	3	2		3.60
	Tanada	1	Surfa	ce Wa	ter M	onitoring A	verage Score	3.60
P								
Resource Protection (III.F)	1.00.5.1	1 2	3	2	1.2		1 1	2.05
Cotoo & forming		3	3	3	3	3		3.00
Signage	III.F.Z	2	2	3	2	2	-	3.20
law anforcement presence	111 E A	2	2	4	v	5	-	2.75
Law enforcement presence	1 10.1.54	13	1.3	Rosol	Irco D	rotection A	verage Score	2.70
the second second second			-	Resou	arceri	Otection	verage score	0100
Adjacent Property Concerns (III.G)					_			-
Land Use	Luic t -	1 2	1		1 v		1 1	2.25
Expanding development	III.G.1.a	3	3	4	X	3	-	3145
Innolaings/additions	111.6.2	L	3	4	3	4		3.50
Public Access & Education (IV.1, IV.2, IV. Public Access	3, IV.4, IV.5)	1		1			1 11 1	_
Roads	IV.1.a	3	3	3	4	4		3.40
Parking	IV.1.b	2	2	2	1	4		2.20
Environmental Education & Outreach	L Avera to	1	1		1		1 1	1
Wildlife	IV.2.a	4	4	4	3	4	1.1	3.80
Invasive Species	IV.Z.b	4	3	4	3	4		3.60
Habitat Management Activities	IV.2.c	4	3	4	3	3	10-04-00	3.40
Interpretive facilities and signs	IV.3	3	3	4	4	5	1	3.80
Recreational Opportunities	IV.4	4	4	4	4	5	-	4.20
Management of Visitor Impacts	IV.5	3	3	3	3	4		3,20
		-	Publi	c Acce	ss & E	ducation A	verage Score	3.45
Management Resources (V.1, V.2, V.3. V Maintenance	.4)							_
Waste disposal	V1a	12	3	2	1	3	11	2 20
Sanitary facilities	V.1.b	2	2	3	2	3	1 1 1 1 1 1	2.40
Infrastructure	1.000					1 - 1	1	
Buildings.	V.2.a	3	2	4	2	3	12-11-11-1	2.80
Equipment	V.2.b	1	2	3	1	3		2.00
Staff	V.3	1	2	3	1	4	1.1	2.20
Funding	V.4	1	2	1	1	2		1.40
			Ma	nagen	nent R	esources A	verage Score	2.17
	Color Code:	Exce	llent	Ab	ove	Below	Poor	
	aven coup.	-		Ave	ssing	Average		See Appendix / for detail
				V	ote	Information	1	
							Dama 0	

3. Land Management Plan Review Details

3.1 Items Requiring Improvements 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 3.0 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The next management plan update should address the checklist items identified below:

 Natural Communities; specifically mesic hammock, baygall, bottomland forest, floodplain swamp, hydric hammock and blackwater stream, received below average scores. This is an indication that the management plan does not sufficiently address current or desired condition and/or future management actions to protect or restore.

Managing Agency Response: Agree. The Unit Management Plan is currently being revised. The draft Plan addresses natural communities more completely.

 Listed species Protection & Preservation, specifically for animal and plant species in general, received a below average score. This is an indication that the management plan does not sufficiently address protection and preservation of species.

Managing Agency Response: Agree. The next Plan draft addresses listed species more completely.

3. Natural Resources Survey and Monitoring Resources, specifically sport fish or their habitat monitoring, listed species or their habitat monitoring, other non-game species or their habitat monitoring, fire effects monitoring, other habitat management effects monitoring, and invasive species survey/monitoring, received below average scores. This is an indication that the management plan does not sufficiently address survey or monitoring.

Managing Agency Response: Agree. The next Plan draft addresses natural resource survey and monitoring more completely.

4. Cultural Resources, specifically cultural resource survey, and protection and preservation, received below average scores. This is an indication that the management plan does not sufficiently address survey or protection and preservation of cultural resources.

Managing Agency Response: Agree. The next Plan draft addresses cultural resources more completely.

 Resource Management, Prescribed Fire; specifically area being burned, frequency, and quality, received below average scores. This is an indication that the management plan does not sufficiently address current or desired condition and/or future management actions to protect or restore.

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Managing Agency Response: Agree. The next Plan draft addresses prescribed fire more completely.

6. Restoration, specifically of the Tampa Bay site, received a below average score. This is an indication that the management plan does not sufficiently address restoration.

Managing Agency Response: Agree. The next Plan draft addresses restoration including the Tampa Bay site more completely.

7. Forest Management; specifically timber inventory, timber harvesting, reforestation/afforestation, and site preparation, received below average scores. This is an indication that the management plan does not sufficiently address forest management.

Managing Agency Response: Agree. The next Plan draft addresses forest management more completely.

 Non-native, Invasive & Problem Species; specifically prevention of plants, animals, pests/pathogens and control of pests/pathogens, received below average scores. This is an indication that the management plan does not sufficiently address prevention and control of non-native, invasive and problem species.

Managing Agency Response: Agree. The next Plan draft addresses non-native, invasive and problem species more completely.

 Hydrologic/Geologic function, Hydro-Alteration; specifically roads/culverts, ditches, hydroperiod alteration, and dams, reservoirs or other impoundments, received below average scores. This is an indication that the management plan does not sufficiently address hydrologic and geologic function.

Managing Agency Response: Agree. The next Plan draft addresses hydrology more completely.

10. Ground Water Monitoring, specifically ground water quality and quantity, received a below average score. This is an indication that the management plan does not sufficiently address ground water quality and quantity.

Managing Agency Response: Agree. The next Plan draft addresses ground water monitoring more completely.

11. Surface Water Monitoring, specifically quality and quantity, received a below average score. This is an indication that the management plan does not sufficiently address surface water quality monitoring.

Managing Agency Response: Agree. The next Plan draft addresses surface water monitoring more completely.

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12. Resource Protection, specifically boundary survey, gates & fencing, signage, and law enforcement presence, received below average scores. This is an indication that the management plan does not sufficiently address resource protection.

Managing Agency Response: Agree. The next Plan draft addresses resource protection more completely.

13. Adjacent Property Concerns; specifically expanding development, inholdings/additions, discussion of potential surplus land determination and surplus lands identified, received below average scores. This is an indication that the management plan does not sufficiently address adjacent property concerns.

Managing Agency Response: Agree. The next Plan draft addresses adjacent property concerns more completely.

14. Public Access, specifically roads and parking, received below average scores. This is an indication that the management plan does not sufficiently address public access.

Managing Agency Response: Disagree, Public access improvements are adequately addressed in the current plan and will be addressed in the Unit Management Plan currently being revised. Division funding for facility development is appropriated annually by the Florida Legislature. This funding is allocated at the Division and District levels in order to best meet annual operational and resource management needs.

15. Environmental Education & Outreach; specifically pertaining to wildlife, invasive species, habitat management activities, interpretive facilities and signs, and management of visitor impacts, received below average scores. This is an indication that the management plan does not sufficiently address environmental education and outreach.

Managing Agency Response: Agree. The next Plan draft will address environmental education and outreach more completely.

Plan Review Item	Reference #		An	onym	ous T	eam I	Memb	ers		Average
· · · · · · · · · · · ·		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Hammock	I.A.2	2	4	2	3	2		1		2.60
Xeric Hammock	I.A.3	2	4	2	3	4	Ē		1	3.00
Baygall	1.A.4	2	3	2	2	4				2.60
Bottomland Forest	I.A.5	2	3	2	2	4		3		2.60
Floodplain Swamp	I.A.6	2	3	2	3	4				2.80
Hydric Hammock	I.A.7	2	3	2	2	4				2.60
Blackwater Stream	1.A.8	2	3	2	2	5			1000	2.80

3.2 Management Plan Review Checklist and Scores

			J	Vatura	l Com	munities /	Average Score	2.71
Listed Species: Protection & Preservation (I.B)								
Animals (in general)	I.B.1	11	3	2	2	1		1.80
Plants (in general)	1.B.2	1	3	2	2	1		1.80
() Barris	T the set	1			Lister	Species /	Average Score	1.80
Natural Resources Survey/Monitoring Resource	s (I.C)	1.					1 1 1	1.70
Sport fish or their nabitat monitoring	1.0.1	1	2	1	1	1		1,20
Other peoples or their habitat monitoring	1.0.2	1	2	1	1	1		1,20
monitoring	1.C.3	1	2	1	1	1		1.20
Fire effects monitoring	1.C.4	1	2	1	1	1		1,20
Other habitat management effects monitoring	1.C.5	1	2	1	1	3		1.60
Invasive species survey / monitoring	1.C.6	1	3	1	1	3	1 2 2 2 2 2 2	1.80
Cultural Resources (Archeological & Historic site	s) (ILAILB)							
Cultural Resource Survey	ILA	1	4	3	2	4		2.80
Protection and preservation	II.B	1		3	2	4		2.50
	1.000	1 -		Cult	ural R	esources	Average Score	2.65
						100	COLUMN DOCUMENT	-
Resource Management, Prescribed Fire (III.A)	1	1.	-	1	2	-	1	100
Area Being Burned (no. acres)	III.A.1	1	2	1	2	2		1.00
Preddency	III.A.2	1	2	1	2	2		1.00
Quality	III.A.3		2	1 Dont	Drocer	2	Augrage Seare	1.00
Contraction of the second	Reso	urce wa	mager	nent,	Flesci	ibeu rite i	Average Score	1.00
Restoration (III.B)		-		_			to to i	
Tampa Bay Site	III.B.1	1	3		1	4		2.25
		-			Res	toration	Average Score	2.25
Forest Management (III.C)								
Timber Inventory	III.C.1	1	1	1	1	2		1,20
Timber Harvesting	III.C.2	1	1	1	1	2		1.20
Reforestation/Afforestation	III.C.3	1	1	1	1	4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.60
Site Preparation	III.C.4	1	1	1		4		1.75
				Fores	t Man	gement	Average Score	1.44
New Matter Incodes & Ducklass Constant (III D)					-			_
Non-Native, Invasive & Problem Species (III.D)		_	_	_		_		_
prevention - plants	IIIE1a	11	2	1	2	4	1 1 1	7.20
prevention - primals	III E 1 b	1	2	1	2	2		2.20
prevention - nests/nethogens	III E 1 c	1	2	1	1	A		1.80
Control	million	1. *	-	+	-	-		2.00
control - plants	III.E.2.a	T	3	2		4		3.00
control - animals	III.E.2.b		3	2		4		3.00
control - pest/pathogens	III.E.2.c		1	1		4		2.00
en de perspecte	Non-I	Vative. I	nvasiv	e & Pi	oblen	Species /	Average Score	2.33
	des al la							
Hydrologic/Geologic function, Hydro-Alteration	(III.E.1)	1					1 1 1	~ 10
Koads/culverts	III.F.1.a	1 1	3	1	3	4		2.40

	the second se		1	1	1.5.1	0	_		
Ditches	III.F.1.b	1	3	1	3	4	100	11.00	2.40
Hydro-period Alteration	III.F.1.c	1	2	1	2	3		dining and	1.80
Dams, Reservoirs or other impoundments	III.F.1.e	1	1	1	1	1			1.00
	Hydrologic/G	ieologic	functi	on, Hy	dro-A	teration	Average :	Score	1,90
Ground Water Monitoring (III.E.2)								_	
Ground water quality	III.F.Z.a	1	3	1	4	2			2.20
Ground water quantity	III.F.2.b	1	3	1	4	1		1.2.1	2.00
	100 March 100	-	Grou	nd Wa	ter Ma	onitoring	Average !	Score	2.10
Surface Water Monitoring (III.E.3)									
Surface water quality	III.F.3.a	1	3	1	3	2	1.1		2.00
Surface water quantity	III.F.3.b	1	3	1	3	1		1	1.80
			Surfa	ce Wa	ter Mo	nitoring	Average S	Score	1.50
Resource Protection (III. F)									
Boundary survey	10.61	1 1	3	1	2	4	1		2 20
Gates & fencing	111.6.7	1	3	1	7	4			2.20
Signage	111.63	1	3	1	2	4		-	2 20
Law enforcement presence	111.6.4	1	3	1	1	4			2.00
eaw enroreement presence	1	1 -		Resou	Irco Dr	otection	Average	Score	2.00
the second se			_				riserage .		
Adjacent Property Concerns (III.G)									
Land Use	The second second	-						-	
Expanding development	III.H.1.a	1	3	2	Z	4	100	1.000	2.40
Inholdings/additions	III.H.2	1	3	1	2				1,75
Discussion of Potential Surplus Land Determination	Ш.Н.З	1	3	1		2			1.75
Surplus Lands Identified?	III.H.4	1	1	5		2			2.25
B.LP. A									
Public Access & Education (IV.1, IV.2, IV.3, IV.	4, (V.5)		_	_	_	_	_	-	_
Public Access	IV 1 a	1.1	2	2	1 7	A L	1	-	7 60
Parking	IV.1.d	1	3	2	2	3	-	-	2.00
Environmental Education & Outreach	10.1.0	1 *	1.2	3	4		-		2,40
Wildlife	11/2 =	11	2	2	2	AL	1		2.40
Invasive Species	IV.2.h	1	3	2	2	3	-	_	2 20
Habitat Management Activities	IV 2 c	1	2	2	2	4			2.40
Interpretive facilities and signs	IV.3	1	3	3	3	4			2.80
Recreational Opportunities	17.4	1	3	4	3	5			3,20
Management of Visitor Impacts	IV.5	1	2	2	3	5			2.60
menepantent ar tratter impacta	110.0	1.4	Publi	C Acco	SS & F	lucation	Average	Score	2.58
		-	TAD	- Acce	33 GK E1	acation	Average :	~ore [2.00
Managed Area Uses (VI.A, VI.B)									
Existing Uses		1			1.5		-	-	
Camping	VI.A.1	5	5	5	S	5	-		5.00
Fishing	VI.A.2	5	5	5	5	5	-		5.00
Wildlife Viewing	VI.A.3	5	5	5	5	5			5.00
Provide a series states in Full second in the	VI A A	5	5	1	5	5			4 80
Environmental Education	¥1.A.4		-	-				1	9.00

Boating	LVIAG		E I	5			1		1.90
Libing	VI.A.0	4 E	5	5	5	5	-	-	4,60
Reveling	VI.A.7	2	2	5	5	5	-		5.00
Horseback Piding	VI.A.O	4	4	5	5	5	-	-	4.00
HUISEDACK Riding	VI.A.9	4	2	3	3	2	-	-	4.80
Cattle Grazing	VI.A.10	3	4	5	4	5			4.20
Proposed Uses	T				_		-	-	Income
Concessions	VI.B.1	3	4	5	4	5	_		4.20
	Color Code:	Exce	llent	464	ove Dee	Below	/	Poor	See
		1		Alle	lage	Average			Appendi
				Vo	sing ote	Insumicia	lion		for det

Appendix A: Scoring System Detail Explanation of Consensus Commendations:

Often, the exceptional condition of some of the property's attributes impress review team members. In those instances, team members are encouraged to offer positive feedback to the managing agency in the form of a commendation. The teams develop commendations generally by standard consensus processes or by majority vote if they cannot obtain a true consensus.

Explanation of Consensus Recommendations:

Subsection 259.036(2), F.S., specifically states that the managing entity shall consider the findings and recommendations of the land management review. We ask team members to provide general recommendations for improving the management or public access and use of the property. The teams discuss these recommendations and develop consensus recommendations as described above. We provide these recommendations to the managing agency to consider when finalizing the required tenyear management plan update. We encourage the manager to respond directly to these recommendations and include their responses in the final report when received in a timely manner.

Explanation of Field Review Checklist and Scores, and Management Plan Review Checklist and Scores:

We provide team members with a checklist to fill out during the evaluation workshop phase of the Land Management Review. The checklist is the uniform tool used to evaluate both the management actions and condition of the managed area, <u>and</u> the sufficiency of the management plan elements. During the evaluation workshop, team members individually provide scores on each issue on the checklist, from their individual perspective. Team members also base their evaluations on information provided by the managing agency staff as well as other team member discussions. Staff averages these scores to evaluate the overall conditions on the ground, and how the management plan addresses the issues. Team members must score each management issue 1 to 5: 1 being the management practices are clearly insufficient, and 5 being that the management practices are excellent. Members may choose to abstain if they have inadequate expertise or information to make a cardinal numeric choice, as indicated by an "X" on the checklist scores, or they may not provide a vote for other unknown reasons, as indicated by a blank. If a majority of members failed to vote on any issue, that issue is determined to be irrelevant to management of that property or it was inadequately reviewed by the team to make an intelligent choice. In either case staff eliminated the issue from the report to the manager.

Average scores are interpreted as follows:

Scores 4.0 to 5.0 are Excellent

Scores 3.0 to 3.99 are Above Average

Scores 2.0 to 2.99 are Below Average

Scores 1.0 to 1.99 are considered Poor

Page 16 of 16

Addendum 9—Advisory Group Summary and Public Comments

Local Government Representative

The Honorable Lesley Miller Jr., Chair Hillsborough County Board of County Commissioners

Agency Representatives

Bryon Maxwell, Park Manager Division of Recreation and Parks Alafia River State Park

Michael Edwards Florida Forest Service

Danon Moxley Florida Fish and Wildlife Conservation Commission

Jason O'Donoughue Florida Department of State Division of Historical Resources

Colleen Kruk Southwest Florida Water Management District

Betty Jo Tompkins Hillsborough County Soil and Water Conservation District

Jason Chilson Hillsborough County Environmental Lands Program

Marilyn Hett Hillsborough County Tourist Development Council

Local Private Property Owners

Kyle Varnum Local Resident

Environmental and Conservation Group Representative

Mable Patterson Florida Native Plant Society Suncoast Chapter

Anne Whitehall Eagle Audubon Society

Recreational User Group Representatives

Shane Richeson Swamp Mountain Bike Club

Jaqueline Vizzie Myakka River Riders

Angelo Giambrone Alafia Trail Crew

Subject Matter Expert

Steven Richardson, Director Reclamation Research Florida Polytechnic University

Citizen Support Organization

LeRoy Dennison, President Friends of Alafia

Park Concessionaire

Carlos Mirabel UBC Bikes The advisory group meeting to review the proposed unit management plan (UMP) for Alafia River State Park was held at the Bloomingdale Regional Public Library on March 28, 2019 at 10:30 am.

Lesley Miller, Jason O'Donoughue, Colleen Kruk, Marilyn Hett, Kyle Varnum, Anne Whitehall, and Jackie Vizzie were not in attendance. LeRoy Dennison, Jackie Vizzie, Jason O'Donoughue, and Michael Edwards provided written comments prior to the meeting, which are summarized below. All other appointed advisory group members were present. Attending staff were Bryon Maxwell, Chris Becker, Rosalind Rowe, and Tyler Maldonado.

Mr. Maldonado began the meeting by explaining the purpose of the advisory group and reviewing the meeting agenda. He provided a brief overview of the Division of Recreation and Parks' (DRP) planning process and summarized public comments received during the previous evening's public meeting. Mr. Maldonado then asked each member of the advisory group to express his or her comments on the plan.

During the two-week public comment period following the advisory group meeting, numerous comments were submitted to DRP from members of the public on the draft UMP for Alafia River State Park. The major themes of these comments are as follows:

 Most of the comments received referenced the proposed RV campground and cabin area, and the comments were generally opposed to those concepts.
 Frequent visitors to the park, particularly equestrian users, were concerned that these developments could potentially disrupt equestrian trails and increased usage of these trails by non-equestrian users could cause conflicts.

Summary of Advisory Group Comments

Danon Moxley (Florida Fish and Wildlife Conservation Commission) stated that he reviewed the management plan by first reviewing the Land Management Review (LMR) addendum. He wanted to see if and how the LMR comments were implemented in the management plan update. He commented that it was difficult to determine if the LMR suggestions were implemented and stated that the LMR comments should be the guide for developing the management plan update. He suggested including an advisory group cover page that showed where and how the LMR comments were included in the management plan update. He asked about imperiled species monitoring efforts and what they entailed. He noted inadequate discussion in the plan about aquatic exotic species and suggested considering aquatic exotic species harvest events or contracts as a source of additional revenue for the park. He pointed out incorrect condition assessment categories in the cultural resources inventory table. He found nothing to address LMR comments about monitoring sport fish and other non-game species or about monitoring fire and other habitat management effects. He noted that plan does not address ground water monitoring. He pointed out that the LMR low scores and comments regarding protection through fencing, signage, and law enforcement were not addressed beyond a sentence or two in the discussion of the scrub communities.

Alafia River State Park Advisory Group Summary Report

Shane Richeson (*Swamp Mountain Bike Club*) commented on the progress of trail development at the park and in the community in general. He stated that many are beginning to understand the economic impact of trail connectivity and cited examples of other successful trail destinations that have become economic engines for their community. He talked about efforts being made to develop a land trail connection between the Balm Boyette Nature Preserve and Alafia River State Park, as well as broader trail connectively aspirations. He stated that he plans to work with Hillsborough County on an easement to establish the Boyette-Alafia connectivity and hopes to work with the park to develop safe and efficient trail access.

Jason Chilson (*Hillsborough County Conservation and Environmental Lands*) indicated his willingness to work with the state park in areas such as resource management when possible.

Steven Richardson (*Florida Polytechnic University*) expressed slight concern with cattle grazing taking place at the park, but also noted that it is a recognized vegetation and invasive species management technique. He acknowledged the exotic and invasive plant species management objectives, stating that they were broad objectives and the details would need to be worked out at a later date when resources are allocated to implement the necessary large-scale restoration efforts.

Carlos Mirabel (*UBC Bikes*) stated that he would like to see expanded recreational opportunities at the park. He encouraged additional refinement and improvement of the park's recreational amenities. He expressed his belief that the park could continue to grow in popularity and suggested the park could become a fishing destination similar to Tenoroc Fish Management Area in Lakeland.

Mable Patterson (*Florida Native Plant Society, Suncoast Chapter*) commented that she was impressed with the prescribed fire objectives and the progress made at the park. She expressed concern that the park does not have a dedicated biologist given the scale of resource management needs. It was stated that the Park Service Specialist at the park leads restoration and resource management efforts and collaborates regularly with district biologists on projects. She urged the park to avoid impacts to native species. She agreed that it would be imperative to monitor the progress of the cattle grazing activities and asked about any research that shows the benefit of such land management techniques. She encouraged the park to coordinate with the Florida Native Plant Society on volunteer opportunities.

Betty Jo Tompkins (*Hillsborough Soil and Water Conservation District*) stated that she is focused on the educational aspect of conservation and encouraged the park to improve and expand educational opportunities available to visitors and volunteers. She mentioned that high school students often need volunteer hours for scholarship eligibility and the park would be great place for young students to get involved in their local community. She commented on the need to increase funding for conservation and recreation. She urged advisory group members to engage in outreach opportunities and advocate for conservation efforts.

Alafia River State Park Advisory Group Summary Report

Michael Edwards (*Florida Forest Service*) expressed concerns with the management plan similar to Mr. Moxley and the unclear way in which LMR comments were incorporated in the plan. He suggested incorporating groundwater monitoring protocols to address the LMR comment. He commented on the timber management assessment conducted for the park. He stated that some areas could be thinned, and other understocked areas could benefit from tree planting. He suggested including burnable acres per management zone and total burnable acres, as well as smoke management protocols, to address LMR comments. Mr. Edwards also submitted written comments after the advisory group meeting, which are summarized below.

LeRoy Dennison (*Friends of Alafia*) stated that as the President of the Friends of Alafia, his main job is to support the park. He mentioned that the Citizen Support Organization (CSO) helps overcome the park's staffing and funding deficiencies by coordinating volunteers and fundraising. He acknowledged that the park has multiple categories of users, and it is important to minimize negative interactions between the users. Mr. Dennison also submitted written comments prior to the advisory group meeting, which are summarized below.

Angelo Giambrone (*Alafia Trail Crew*) commented that he hopes to contribute to Alafia becoming the number one mountain biking destination and noted that the park is already nationally ranked. He suggested that mountain biking is the park's main attraction and encouraged the park to improve amenities to attract additional visitors. He recommended developing ADA-accessible trails and marketing the trails as a new activity at the park. He noted that the park has growth potential, stating that new activities and amenities are needed. He expressed his support for the development proposals in the draft management plan but expressed some concern with the future implementation of the proposed unified entrance to the park.

Summary of Advisory Group Written Comments

LeRoy Dennison (*Friends of Alafia*) provided numerous comments on the content of the management plan. He noted that the biking trail skill levels should range from beginning, intermediate, advanced, and expert. He pointed out inconsistencies in the naming of the South Prong of the Alafia River (South Prong of the Alafia River vs. Alafia River). He identified that the Swamp Mountain Biking group changed its name (formerly SWAMP) and transferred its responsibilities to the Friends of Alafia. He suggested including Manatee and Polk County in the demographic analysis. He noted a correction in the adjacent conservation lands and the amenities that are offered. He disagreed with the recreational amenity analysis offered by the Statewide Comprehensive Outdoor Recreation Plan, which suggests that unpaved bike trails in Hillsborough County are below the statewide median. He pointed out inconsistent recreational facility inventory and trail mileage data. He suggested adding parcels to the optimum boundary map. Mr. Dennison provided comments in the main document, so his comments cannot be attached to this summary. **Jason O'Donoughue** (*Department of State, Division of Historical Resources*) noted discrepancies in the number of archaeological sites recorded in the management plan and stated that three sites need to be added to the park's inventory. He wrote that the "Significance" reported for several cultural resources should be revised. He suggested revisions to the management plan's cultural resource objectives. The written comments submitted by Mr. O'Donoughue are attached below.

Jaqueline Vizzie (*Myakka River Riders*) provided written comments that she collected from members of the equestrian group. She wrote that the equestrian day use parking area does not have water for the horses to drink or cool off. She commented that the main equestrian entrance at the north of the park is getting difficult to enter and exit because of heavy traffic from the County Road. She suggested moving the whole parking lot near the barn, close to areas that have water. She noted that the campground that was once intended for equestrian users has become a destination for RV camping and equestrians now have difficulty reserving a campsite. She stated that many members voiced dissatisfaction with Reserve America, both in procedures and pricing. She also noted that there have been complaints that the water by the barn is not clean enough for horses to drink. The written comments submitted by Ms. Vizzie are attached below.

Michael Edwards (*Florida Forest Service*) summarized the comments he gave during the advisory group meeting and provided those comments in writing after the meeting. Only the additional comments that were not included above are included here. He wrote that each natural community needs specific goals and objectives describing how the desired future conditions will be accomplished. He recommended including specifically how threatened and endangered species will be monitored. He wrote the management plan should describe specific goals and objectives for monitoring and surveying natural resources. He commented that appropriate staff should be required to be up-to-date on Archaeological Research and Monitoring trainings. He stated the management plan needs to state how the park plans to address the control of pests and pathogens. He wrote the management plan needs to state the process for determining if the park has any lands that should be declared as surplus. The written comments provided by Mr. Edwards are attached below.

Staff Recommendations

The staff recommends approval of the proposed management plans for Alafia River State Park as presented, with the following significant changes:

- The proposed Lake Heron RV Campground concept will be removed from the management plan. The concept will be replaced by a proposed primitive equestrian campground in the same general area of the park.
- The proposed cabin area concept will be relocated from the northern portion of the park to an area to the north of the proposed Thatcher Road day use area.

Staff recommendations continued:

- Rather than developing a new campground at the park, it will be proposed to redevelop the existing campground. The existing campground redesign will utilize the current location to reconfigure and add sites to the campground.
- The proposed Three Finger Lake trailhead and picnic area concept will be changed to an equestrian trailhead and trailer parking area. The proposed paddling launch, bike racks, and horse corral will be removed.
- Access to the proposed Three Finger Lake equestrian trailhead and primitive equestrian campground will be changed from a paved road to a stabilized road. Existing park management roads will be used, where possible.

Notes on Composition of the Advisory Group

Florida Statutes Chapter 259.032 Paragraph 10(b) establishes a requirement that all state land management plans for properties greater than 160 acres will be reviewed by an advisory group:

"Individual management plans required by s. 253.034(5), for parcels over 160 acres, shall be developed with input from an advisory group. Members of this advisory group shall include, at a minimum, representatives of the lead land managing agency, co-managing entities, local private property owners, the appropriate soil and water conservation district, a local conservation organization, and a local elected official."

Advisory groups that are composed in compliance with these requirements complete the review of State park management plans. Additional members may be appointed to the groups, such as a representative of the park's Citizen Support Organization (if one exists), representatives of the recreational activities that exist in or are planned for the park, or representatives of any agency with an ownership interest in the property. Special issues or conditions that require a broader representation for adequate review of the management plan may require the appointment of additional members. The Division's intent in making these appointments is to create a group that represents a balanced cross-section of the park's stakeholders. Decisions on appointments are made on a case-by-case basis by Division of Recreation and Parks staff.



FLORIDA DEPARTMENT OF STATE

RON DESANTIS Governor LAUREL M. LEE Secretary of State

March 27, 2019

Tyler Maldonado Office of Park Planning Florida Department of Environmental Protection Division of Recreation and Parks 3900 Commonwealth Boulevard, MS 525 Tallahassee, FL 32399

Dear Mr. Maldonado,

Thank you for inviting the Division of Historical Resources (DHR) to participate in the advisory group review of the draft unit management plan for Alafia River State Park. We have completed our review and have the following comments and recommendations:

- We note a discrepancy between your records and those of the Florida Master Site File (FMSF). Table 4 of the management plan (pp. 67–68) lists 25 archaeological sites and 1 resource group, and 3 historic cemeteries. However, 3 additional archaeological sites are located within the park but not accounted for in the plan. These are: HI00347, HI00575, and HI00576. I have attached the FMSF records for these sites. Please add them to your inventory.
- 2. The "Significance" reported for many of the resources does not accurately reflect the assessments of the State Historic Preservation Officer (SHPO). As you note on page 66, only 3 of the cultural resources within the park have been evaluated by the SHPO: HI04041, HI04042, and HI05343. All of these were determined to be ineligible for listing on the National Register of Historic Places. All other resources should be listed in Table 4 as "Not Evaluated."
- 3. On page 66, you state that "nine sites may be considered destroyed: HI00354, HI00577, HI01043, HI05370, HI05372, HI05373, HI05374, HI05379, and HI09688." That leaves 19 sites intact (including the 3 missing from your inventory), as well as 1 resource group and 2 historic cemeteries. However, in several places (pg. 66 and 79) you refer to only seven sites that are presumed intact. Please clarify this discrepancy.

Division of Historical Resources R.A. Gray Building • 500 South Bronough Street• Tallahassee, Florida 32399 850.245.6300 • 850.245.6436 (Fax) • FLHeritage.com



- 4. The total number of cultural resources given throughout the report will need to be updated based on the above comments (e.g., page 66).
- 5. With regard to your goals and objective for cultural resources, (pg. 79):
 - a. Annual monitoring of all archaeological and historical resources should be included as an action.
 - b. Objective B should be to locate and assess all recorded sites that are still in need of evaluation. Staff from DHR's Public Lands Archaeology program (PLA) are available to conduct a cultural resources reconnaissance survey, assess known sites, and provide management recommendations.

Please let us know if you have any questions or concerns regarding these comments. Thank you again for inviting us to participate and for your diligence in preserving, promoting, and interpreting Florida's cultural heritage.

Sincerely,

- Olan

Jason O'Donoughue Archaeologist III Public Lands Archaeology Bureau of Archaeological Research Division of Historical Resources Florida Department of State B. Calvin Jones Center for Archaeology 1001 DeSoto Park Drive Tallahassee, Florida 32301

Enclosures: ARSP-missing-sites.xlsx

Hi: I won't be able to meet with the advisory group on Thursday. Enclosed are some of the comments posted by the River Riders members regarding improvements to Alafia River State Park.

On the equestrian Day Use parking:

1. No water for the horses to drink or cool off.

2. Entrance is getting difficult to egress and leave, because of the heavy traffic from the main street.

Some suggestions on the day use parking lot were, to move the whole parking lot near the barn, close to areas that do have water.

Thus, there would be access to water. This would also help with the entrance comment since the entrance would be through the main entrance.

On the overnight equestrian camping area:

1. Because of non horse campers taking over the equestrian area 6 to 11 months before the desired date, persons with horses are not able to put reservations through Reserve America since the area is booked already. The idea was to make this area for equestrians only and to be used by non horse campers only in a hardship situation.

2. Many of our members voiced a dissatisfaction with Reserve America both in procedures and prices.

3. There were complaints that the water by the barn is not clean enough for the horses to drink.

Thank you, Jaqueline Vizzi

Advisory Group Comments for Alafia River State Park 2019 Draft UMP

By: Michael Edwards, Senior Forester Florida Forest Service-Other Public Lands 4/5/19

I attended the Management Plan Advisory Group Meeting for the Alafia River State Park on March 28, 2019. Below I have summarized the comments I made during the meeting. I also have written some additional comments, post meeting, that I want to add. I mostly focused on the Resource Management Component of the UMP.

- Natural Communities- Each natural community. needs specific goals and objectives describing how the desired future conditions of the nat, comm. will be accomplished.
- Timber Assessment and Timber Sale- F4-Tech provided a recent Timber Assessment, (addendum 7). According to their data, there are stands in the Sandhill, mesic flatwoods and plantation communities that could use a timber thinning (basal area equal to or greater than 80 square feet per acre). These stands should be thinned to a BA of 30-40 sq.ft./ac. to manage for groundcover and wildlife habitat. There are also stands that could use reforestation/afforestation (BA less than 30 sq. ft./ac.). I suggest developing a site prep and reforestation/afforestation plan to include in the 2019 draft UMP.
- Treated and Endangered Species- This section in the 2004 UMP received a poor rating in the 2015 LMR Report. I recommend that the 2019 draft UMP mentions specific goals and objectives on how the specific T&E species found in ARSP will be managed. Also make sure the T&E plant and animal list is up to date for the 2019 draft UMP. The 2005 LMR Report identifies floodplain and scrub species specifically.
- Monitoring- This section in the 2004 UMP averaged a poor score from the 2015 LMR Report. The 2019 draft UMP should describe specific goals and objectives for monitoring and surveying of natural resources, in the following categories;
 - Sport fish or their habitat
 - Listed species
 - Other non-game species
 - Fire effects
 - Other habitats
 - Invasive species
- Cultural Resources- The draft 2019 UMP should mention requiring appropriate staff are up-todate on the ARM training.
- Prescribed Fire- The 2019 Draft UMP could mention how FPS address smoke management. If applicable, FPS is encouraged to cooperate with the Florida Forest Service on wildland urban interface (WUI) mitigation burning/projects.
- Non-native, Invasive and problem Species- The 2019 draft UMP needs to address the control of
 pest/pathogens. FPS park managers should develop a public education/interpretation plan at the
park entrance, trail heads, and camp sites addressing the restricted movement of firewood. This is the primary movement of most forest pests. The website https://www.dontmovefirewood.org/ has free resources available. The FPS can contact the FFS Forest Health Section Biologist; Jeffrey.Eickwort@FreshFromFlorida.com, for forest health advice.

- Groundwater monitoring- The 2019 draft UMP should mention ground water monitoring (quality
 and quantity). If this isn't something FPS monitors, that would be good to at least mention, or
 identify if another agency monitors the ground water on ARSP and if the data is utilized by FPS.
- Adjacent Property Concerns- The 2019 draft UMP needs to discuss the process/system that managers use to determine if ARSP has any surplus lands.
- Resource Protection- The 2015 LMR Report scored this section below average. I couldn't find this information in the draft 2019 UMP.

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF RECREATION AND PARKS

OFFICE OF PARK PLANNING



ALAFIA RIVER STATE PARK

PUBLIC COMMENTS

From: Robert Warthen <robert.rwarthen1@gmail.com>
Sent: Sunday, March 31, 2019 7:09 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia State Park improvements proposed

Mr. Maldonaado,

Dear Sir, I was impressed with the presentation your office made on March 27th of this year concerning the Alafia River State Park. It is pleasing to see that the state is interested in the continuing efforts to increase the potential use of the available properties for recreational activities. As I expressed in the meeting about the Three Fingers Equestrian parcel; in my opinion, this area must, or should, be left as is. There are several reasons for this:

This area is a quiet, peaceful, provides a pleasant ride, with some very beautiful scenery.

This area has with it a verity of trails that allow riders to choose their estimated ride time limit for riding. It also provides areas for walk, trot, and canter.

Equestrian riders ride the trails because they want to be in the natural Florida outdoors. Adding anything that would detract from this, would be an upset to the balance of this beautiful natural area.

This is not an active cattle range, which limits the quantity of nuisance flies, especially in the hot, humid summers. This adds appeal of the Equestrian rider.

Lastly I would suggest that we take very careful considerations in how we view our increase use of the properties that we have available to us, and to try to avoid potential threats to losing these areas to over use and overcrowding, which already provide prime opportunities for our outdoor activities as they are. While I realize that the job you, and others, have to ensure the fair and equitable use of these lands is challenging, we should never allow money to be the end goal, for this will defeat the purpose: "To enjoy the Florida outdoors, safe and free from over use and overcrowding, and destroying the habitat and the natural beauty that our state has."

Thank you, Bob Warthen <u>Robert.rwarthen1@gmail.com</u> 863-797-5873

From:	Maldonado, Tyler
То:	Baxley, Demi
Subject:	FW: Alafia State Park Management Plan
Date:	Monday, April 1, 2019 3:11:58 PM

From: rjb1998@aol.com <rjb1998@aol.com>
Sent: Thursday, March 28, 2019 10:30 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia State Park Management Plan

Tyler,

Thank you for taking the time and having the meeting yesterday evening regarding the Alafia State Park Management Plan. What a challenge it has to be for you and your department to balance the wants, needs, and wishes of so many groups. There was some meaningful feedback given at the meeting. I would have been interested in hearing the biologist and park manager opinion on development impact on the natural aspects of the park, as well as the functional impact of these proposals. It's a nice park, and the staff is very good, and I'm glad the state of Florida continues to put an emphasis on our natural resources. There's a reason so many people enjoy these parks.

Also, I would like to also say that my family and I over the many years have enjoyed the many state parks of Florida.

A few concerns about the development of the north side:

- disruption of current trails and peaceful riding, equestrian or biking or hiking.
- The north access would have road which potentially would cut right up the middle of the current recreation area as well across a gopher tortoise habitat.
- disruption of the little bit of "natural" habitat currently there. There are gopher tortoise areas in those north areas, as well as few deer as well. Any development or the process of development would disrupt this.
- While I appreciate our out of state visitors, we need to be careful that the current stakeholders in this park and Florida residents do not give up the benefit of the north side of the park in favor of providing more facilities to be booked by those out of state. The benefit of many who use the park day in and day out, year round, should not be compromised in favor of providing facilities to be booked and used through the winter months by the out of state visitors disproportionately to Florida residents.
- I would like to see more shaded (not pavilions) picnic options in the park. Currently for day use, those options are few. There are a few individual tables scattered.
- It would be great to add camp sites, but with minimal impact to existing natural areas of the park.
- Cabins are a low priority for me, as the impact of sewer, water, maintenance, etc. in my opinion would outweigh the benefit or "return".
- It would be good to know about what options there are for the many acres of "restoration areas" to the east side of the river? Maybe the future cabin/campground plans could be there?
- I think river access and opportunity for enjoyment of the river would be good. Currently, access or even viewing is limited.

Additional opinion regarding the fee structure for camping:

If it's not already been done, there should be some overall analysis state-wide on the pricing model for camping for out of state guests versus Florida residents, as well as availability preferences for Florida residents. At \$22, it's pretty cheap, especially with a dump station, and water and electricity at each site. It would be nice for the state park system to be able to obtain additional funds that would improve and maintain its state parks.

Thanks again for taking the time for the meetings and input requests.

Sincerely, Robert J. Boone

From: jgvizzi@verizon.net <jgvizzi@verizon.net>
Sent: Tuesday, March 26, 2019 2:01 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: alafia

Hi: I won't be able to meet with the advisory group on Thursday. Enclosed are some of the comments posted by the River Riders members regarding improvements to Alafia River State Park.

On the equestrian Day Use parking:

1. No water for the horses to drink or cool off.

2. Entrance is getting difficult to egress and leave, because of the heavy traffic from the main street.

Some suggestions on the day use parking lot were, to move the whole parking lot near the barn, close to areas that do have water.

Thus, there would be access to water. This would also help with the entrance comment since the entrance would be through the main entrance.

On the overnight equestrian camping area:

1. Because of non horse campers taking over the equestrian area 6 to 11 months before the desired date, persons with horses are not able to put reservations through Reserve America since the area is booked already. The idea was to make this area for equestrians only and to be used by non horse campers only in a hardship situation.

2. Many of our members voiced a dissatisfaction with Reserve America both in procedures and prices.

3. There were complaints that the water by the barn is not clean enough for the horses to drink.

Thank you, Jaqueline Vizzi

From: Ron Haertlein <rondoth@gmail.com>
Sent: Tuesday, April 02, 2019 11:51 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia River state park 10yr plan

G'day Tyler,

this was my first public meeting, entertaining. i liked the presentation. i also like the plan..

an observation, the equestrians were very vocal about keeping "THEIR" section of the park as is.. but here's my take, i've only been active in this park for 4 years, as a mt biker i see volunteers from the community build & maintain the trails. what i don't see is equestrian volunteers, i see the park & it's volunteers mowing & trimming. and my pet peeve is, equestrians seem like they're only 10% of the users, while taking the bulk of the park's resources to keep their trails rideable.. and mtb is 75% of usage and gets barely any resources allocated...

camping, yes to opening it up.. perhaps 15 equestrian sites up north, off Reserve America, rough or not...

30-60 sites where the existing camp sites are. even campers 75% or more come to ride the MTB trails..

and is there a way to get a minor fee added, a quarter per car, allocated to the CSO, it takes \$\$\$\$ to buy materials to keep trails at their optimum. our goal is to make all trails rideable all year round.. and having to deal with a high water table give use challenges that places with Mountains have no idea of... LOL

thanks for listening to my rambles,

ron

From: Janet Schneider <jm_schneider@msn.com>
Sent: Tuesday, April 02, 2019 7:01 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Cc: Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: Alafia River State Park proposed management plan

Dear Mr. Maldonado,

I was very distressed to hear of the location of the proposed additions at the Alafia River State Park. Horse people are heavy users of its trails, and--as I understand you heard at the meeting--have strong concerns about your proposed build-up of features and density around the trails.

The goal of any person using Florida State Park trails is to get away into nature. Situating a large campground, adding cabins, and increasing the density of users in the center of the trails destroys the ability of hikers, bikers and horse people to actually enjoy the natural environment. Building a road to connect all your proposed "enhancements" will also destroy the ambiance and environment.

Horse people must, of necessity, always be aware of safety. A biker coming at speed around a corner can cause a horse to spook. Walking a trail beside pavement engenders anxiety, since we all know that cars do not obey speed limits and have, at times, actually veered toward horses just to watch them jump. Crossing pavement is hazardous to horses' hooves and increases the danger of slipping and falling. Running children do not always understand that horses are not big dogs. These are only a few of the challenges horse people face, often thanks to planners who do not understand and will not adjust plans to accommodate all users of the park.

I strongly protest all the so-called "enhancements" to Alafia State Park. While they will probably bring more overnight people to the park, they will also lose many of your staunch users and supporters by destroying the many features of the park that we now enjoy. Please remember that the mission of the Florida Park System is the show the natural Florida, not turn it into another vacation resort.

Sincerely,

Janet Schneider 2821 Knights Station Road Lakeland, Florida 33810 863-858-6848

From:	<u>Maldonado, Tyler</u>
To:	<u>Baxley, Demi</u>
Subject:	FW: Alafia Horse Trails,
Date:	Wednesday, April 3, 2019 9:52:11 AM
Attachments:	image001.png
	image002.png
	image003.png

From: Julie A Magruder <Julie_Magruder@Progressive.com>
Sent: Wednesday, April 03, 2019 7:47 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; eric.drapler@floridadep.gov
Subject: Alafia Horse Trails,

Dear Mr. Maldonado and Mr. Drapler,

I was recently made aware of the plans to develop part of the horse trails at Alafia River State Park, please...do not allow this to happen!

We have way too much building and development going on in Hillsborough County already and Alafia, much like all state parks, is a place we riders go to escape the insanity of the congestion in our county. The proposed additions to the park are simply more of the same....way too much congestion on too little of land. Apparently our county is on target to develop every single inch of available land, it's disgusting. Please do not allow Alafia River State Park to fall into this trap.

Please save and preserve the horse trails as they are today!

Thank you,

Julie Magruder Registered Voter in Hillsborough County Frequent Alafia River State Park Equestrian Trails user

Julie Magruder PROGRESSIVE | Talent Advisor Group Contingent Workforce Management, Sr. 4030 Crescent Park Drive Riverview, FL 33578 813-804-6606

Rethink Progressive: <u>www.progressive.com/careers</u>



-----Original Message-----From: Barbara Carlin <bcarlin801@aol.com> Sent: Wednesday, April 03, 2019 7:48 AM To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us> Subject:

Hello, I am an avid trail horse woman in Florida . I've just heard that you're planning on decimating the Alafia trail system to replace with campgrounds. Alafia is the absolute best trail system in the state of Florida. It's so popular, it's hard to get a reservation to stay so you have to think about it in advance. The trails are well marked and footing is perfect. The overhead coverage on most of the trails are amazing and perfect for riding. I can't imagine the government taking this away from the horse back riders . Just in Lee and Collier there are over 5,000 horses. And yes, we do go to Alafia. Please reconsider this motion.

Barbara K Carlin Fort Myers, Fla

Sent from my iPad

From: Michael Canfield <mcanfiel@mail.usf.edu>
Sent: Wednesday, April 03, 2019 8:25 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Equestrian trails

Hello,

I am writing regarding the proposed reuse of the Alafia park moving away from offering as many equestrian services.

My first fear is that this will of course eliminate one of the few remaining trail areas within Hillsborough that offers any real quality of experience.

I recognize that there may be some element of preservation, but I feel that the extensive planning takes away too much from the horse experience.

I do not mind the evolution, however I would like to see it mirror the traditional land use of that region. Consider offering a premium equestrian experience alongside the proposed reuse. For example, more stalls (charge of course, revenue streams matter) and create the opportunity for a culture of all purpose use.

Right now the feeling is that the changes will entirely decimate the equestrian area - I think perception here matters and ensuring that you will keep at least some of them would help the changes.

I get that ownership is dying in hillsborough - it sucks because its a ton of fun to own them, just too expensive.

Our parks system does a great job really, I just wish we had more opportunity for horse camping within this area than we currently do.

But its probably expensive, not all horse owners are created equal, and many will not clean up after their horse.

Michael Canfield Manager, USF IT

--

From: Sylvia Warren <horselady41@hotmail.com>
Sent: Wednesday, April 03, 2019 1:36 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; eric.drapler@floridadep.gov.
Subject: Save the Equestrian Trails and facilities at Alafia (and ALL Parks!)

I love to ride the Florida Parks by horseback. I also like to be able to horse camp. I have a paid year Pass to the Florida Parks.

It is real nice to have facilities like stalls, wash racks, water and wonderful trails to go enjoy my horse and the outdoors.

With cities and towns expanding, the countryside is slowly getting smaller with less dirt roads and undeveloped land to ride horses on.

The Florida Parks are all we will have left when development expands throughout private lands.

PLEASE keep the Equestrians in mind, included, and happy as you do future planning in the Florida Parks !

Sincerely,

Sylvia Warren

From:	Maldonado, Tyler
То:	<u>Baxley, Demi</u>
Subject:	FW: Alacua River State Park
Date:	Thursday, April 4, 2019 10:12:27 AM

-----Original Message-----From: Bernadette Schoppman <mikeandsamsmom@yahoo.com> Sent: Wednesday, April 03, 2019 6:03 PM To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us> Cc: eric.drapler@floridadep.gov Subject: Alacua River State Park

As an equestrian who rides at Alafia fairly frequently, I object to the new plans to infringe on our riding trails!! We go to ride in nature, not to doge bikes and hikers and campers. Most horses do not like bikes, and it seems most bikers do not realize that they can easily spook a horse and cause a serious accident when they come racing out of the woods without warning. We try to educate them when this happens so they will be more careful next time. My friends and I stick to the "horses only" trails but have encountered lost bikers on horse trails numerous times. Please don't take these trails away from us, there are very few places nearby as beautiful to ride at. We are respectful of the rules and would just like to continue to enjoy the beauty of this state park. Why should another group get to overtake our trails when they have existing facilities in place already??

Thanks you for your consideration.

Sincerely, Bernadette Schoppman

Sent from my iPhone

From:	Maldonado, Tyler
To:	<u>Baxley, Demi</u>
Subject:	FW: Alafia River State Park UMP
Date:	Thursday, April 4, 2019 10:12:34 AM

-----Original Message-----From: kturbevi@tampabay.rr.com <kturbevi@tampabay.rr.com> Sent: Thursday, April 04, 2019 8:53 AM To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us> Subject: Alafia River State Park UMP

It is my understanding that it was suggested that the proposed new RV campground in the horse trail section of Alafia, become a primitive equestrian campground. Great idea! All that would be needed would be water as horses require a lot. Depending on how close the proposed bathroom is from the campground, a portable potty might be needed. Whatever it takes to keep this campground off of Reserve America needs to happen.

Alafia's horse trails & camp sites have been much used by equestrians for many, many years. The barn & paddocks are evidence of this. The addition of the other proposed items should NOT be put in the horse trail area because of the possible conflict. Horses are prey animals which means they think 'something' is out to eat them all of the time...like squirrels. The traffic of bouncing trailers of kayaks & boats would be a scare to the horses. Bike racks should not be in this area as bikers should not be in this area as they have their own very large area. The cabins, recreational hall, & camp store should be located nearer the RV campground for more usage....not in the horse trail area.

Thank you for your work in helping the Florida State Parks grow!

Karen Turbeville

From: Lindsay Roth <lindsayroth@coreconstruction.com>
Sent: Thursday, April 04, 2019 8:55 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; eric.drapler@floridadep.gov
Subject: Alafia River State Park Changes

To Those It May Concern:

Good morning,

I write to you today as a life-long equestrian located in the Sarasota area. I have been hauling my horses to Alafia for decades, enjoying all the trails with my equestrian friends. It is our favorite place to go trail riding for hours in any direction from home. I have been trail riding at Alafia twice in the past 3 weeks and plan to go again for an equestrian related event this coming Sunday. I am deeply concerned about the changes being proposed to the park that would negatively impact the horse trails/amenities.

I HIGHLY OBJECT to the addition of cabins, another RV campground, the kayak & paddling launch, more bike racks, the horse corral, the recreational hall, and the camp store! These additions would be located in the area of and directly in the way of the horse trails! Also please consider changing the 30-site RV campground to a primitive equestrian campground. This small corner of the park should be reserved for only horses & hikers as it is now! *High density traffic areas and horses do not mix!*

Thank you for reading.

Respectfully,

Lindsay Roth Marketing

CORE Construction Services of Florida, LLC

8027 Cooper Creek Boulevard, Suite 110 | University Park, FL 34201-3002 P: 941-343-4300 | F: 941-552-0245 | C: 941-928-6473 E: LindsayRoth@COREconstruction.com W: COREconstruction.com

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From: Tara Harter <taraharter@mail.usf.edu>
Sent: Thursday, April 04, 2019 10:13 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia Equestrian Trails Need Preserved

Hello Mr.Maldonado and Mr.Draper,

My name is Tara Harter, a resident to Lithia and an Environmental Science graduate student. Additionally, I have been working with the South West Florida Water Management District, in the SWIM section, on many restoration projects.

I am saddened to find out about future plans for the Alafia State Park Equestrian Trails. While our population continues to increase many natural habitats for animals are lost. Not only do I enjoy riding my horse out in Alafia's beautiful park but I am concerned for the impact that the wildlife will also endure.

I hope that Alafia's natural habitat and wildlife are considered when making decisions for the park to become more of a tourist destination. We need to be advocates for the plants and animals that regard Alafia Stare Park as their home and that is not by disturbing their habitat.

Thank you for your time and consideration.

Sincerely, Tara Harter

From:	<u>Maldonado, Tyler</u>
To:	Baxley, Demi
Subject:	FW: Alafia equestrians
Date:	Friday, April 5, 2019 9:30:58 AM

From: Amy Sheridan <sheridan_amy@hotmail.com>
Sent: Thursday, April 04, 2019 10:33 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; Draper, Eric
<Eric.Draper@dep.state.fl.us>
Subject: Alafia equestrians

Please do not do anything to infringe in the access to the beautiful horse trails at Alafia state park. So much of the area is becoming housing developments and the wild areas are being taken away. This is such a lovely place and it would be such a shame to reduce access to horses and lose the wonder of the state park. Please do not take away or reduce the number of horse trails! Please, places like this are what makes the area so special. Florida equestrians adore this gorgeous park and our access to places like this continue to be taken away. Please don't let that happen to Alafia.

Thank you

Amy

From:	Maldonado, Tyler
То:	Baxley, Demi
Subject:	FW: Alafia State Park - Conceptual Land Use Plan
Date:	Friday, April 5, 2019 9:31:10 AM
Attachments:	image001.png

From: Lisa Wolfson <info@lisawolfson.net>
Sent: Thursday, April 04, 2019 5:19 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; Draper, Eric
<Eric.Draper@dep.state.fl.us>
Subject: Alafia State Park - Conceptual Land Use Plan

Hello Tyler & Eric,

I am a horseback rider who has enjoyed the trails at Alafia State Park for the past ten years. There are so few equestrian friendly parks in Hillsborough County. I just read the Conceptual Land Use Plan for the park and have serious concerns.

The plan to develop deep into the park, in my opinion, is reckless and counter productive to the conservation goals outlined in the report. If additional development is to be made, wouldn't it make more sense to locate any cabins, campsites and retail near the front of the park? To construct domiciles & retail deep into the heart of the park will create chaos, cause pollution, drive out wildlife, destroy habitat and ruin the park.

I respectfully request that more public input be sought prior to implementation of this plan. Many many people in the horse community, including myself, are just today learning about this proposed plan via word of mouth and social media. We would appreciate the opportunity to share our suggestions.

Thank you for your consideration.



Lisa Wolfson Realtor, Top-Producer WOLFSON TURNER TEAM Signature Realty Associates 2234 Lithia Center Lane Valrico, FL 33547

From:	<u>Maldonado, Tyler</u>
То:	Baxley, Demi
Subject:	FW: Alafia Horse Trails
Date:	Friday, April 5, 2019 9:31:21 AM

From: Velvet Arnold <velvet.arnold@hotmail.com>
Sent: Thursday, April 04, 2019 7:55 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: Alafia Horse Trails

Hello Tyler and Eric,

It has just come to my attention that you're planning to decimate the horse trails at Alafia State Park.

I strongly oppose this plan! Alafia is one of the few safe options to ride a horse for some distance. Roads are too busy and narrow...its very unsafe. As you know, horses are herd animals and are jumpy by nature - think a 1200+ deer. No matter the amount of training, they can jump and dart/spook at anytime. Horses are NOT compatible with MULTI-USE trails! This is unsafe for us riders/others and completely unfair to take away this option from us. There are already endless options for other trail users...let us keep our trails!

Florida has the largest number of horses in the country...the equestrian community is already feeling the squeeze from the increasing population and urban sprawl.

DO NOT TAKE OUR TRAILS!!!!

Velvet Arnold Bradenton, FL

(850) 612-0181

From:	Maldonado, Tyler
То:	Baxley, Demi
Subject:	FW: Equestrians at Alafia River State Park
Date:	Friday, April 5, 2019 9:31:30 AM

-----Original Message-----From: TomandJo@Mail.com <tomandjo@mail.com> Sent: Friday, April 05, 2019 8:12 AM To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us> Subject: Equestrians at Alafia River State Park

You must rethink your plan to replace some of the best & most beautiful horse trails in FL with a 30-site campground, cabins , etc.

it would be such a travesty to deny this area to Equestrians who not only have enjoyed riding here for years but have worked hard to maintain the area with facilities-built a barn, etc, & ensure the trails remain a safe place to enjoy the beauty of nature. A campground, cabins & more will destroy all of this. Pls reconsider your plans and leave the trails as they are!!

Thank you. Jo Iwanski

Ft Myers

Sent from Jo Iwanski's iPhone

From: Mandy Parks <mparks@laneengineering.com>
Sent: Friday, April 05, 2019 9:47 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Cc: Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: Proposed Recreational Amenities at Alafia State Park

Mr. Maldonado,

As an avid user of Florida state parks and public land for both equestrian and non-equestrian activities for over 30 years, I strongly urge to consider the following in regards to the information presented at the March 27th public meeting that would result in shifting non-equestrian focused activities into the predominantly equestrian area of the park.

- 1. Please make the proposed 30-site RV area a primitive equestrian campground.
- 2. Please do not place recreation halls, camp store, kayak/canoe launches, and other public gathering focused areas in the area of the horse trails

The Alafia state park is truly a gem that is currently shared by many types of users, in mostly separate areas, in harmony. Moving high volume, non-equestrian activities into the equestrian area is both unfair to equestrian users of the park as well as extremely dangerous for all parties. A "yield" sign showing the (horse, biker, and hiker) will hardly be sufficient to provide guidance to the public for the potential interactions that will take place.

Ultimately, the proposed changes as they stand will drastically reduce equestrian use of the park. Sadly, equestrians will be forced to go elsewhere to safer and ever dwindling spaces reserved for their enjoyment.

Mandy L. Parks, PE <u>mparks@lane.engineering</u> 813-758-4858

From:	Maldonado, Tyler
To:	Baxley, Demi
Subject:	FW: ALAFIA SAVE THE HORSE TRAILS, NO DEVELOPMENT
Date:	Friday, April 5, 2019 10:58:52 AM

From: Lark Campisano <campisa7@aol.com>
Sent: Friday, April 05, 2019 10:47 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: ALAFIA SAVE THE HORSE TRAILS, NO DEVELOPMENT

Dear Sir, I am from Fort Myers, FL and I also belong to the South FL Trail Riders in Miami. We camp/ride horses in Alafia regularly therefore helping support the local economy. We do not want any development in this area. Please speak against that.

Lark Campisano 239-731-3265

From:	<u>Maldonado, Tyler</u>
To:	Baxley, Demi
Subject:	FW: 10-YEAR PLAN FOR ALAFIA STATE PARK
Date:	Friday, April 5, 2019 12:09:27 PM
Attachments:	image003.png

From: Heidi Habhegger <hhabhegger@neminc.com>
Sent: Friday, April 05, 2019 12:07 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Cc: Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: 10-YEAR PLAN FOR ALAFIA STATE PARK

I understand there is consideration to decimate the horse trails at Alafia State Park in favor or building an additional campground with cabins and additional roads, that will interfere with the current horse trail paths.

This is very disconcerting. Alafia is known as having the most beautiful equestrian trails in the state of florida. We utilize them quite often in the summer months when it is very hot, due the extensive shade on the majority of the trail paths.

These trails co-exist with a labyrinth of off-road mountain biking trails as well. Is it within the 10-year plan to decimate these as well?

I do not see how these two systems of trails would not affect the other. And if your intention is to keep the cycling trails, the equestrian trails should remain as well.

I can understand if some of the mileage is used for this new campsite project, but cannot imagine the complete equestrian trail system would have to be eliminated. This does not make much sense.

Alafia is a beautiful place, utilized by people that participate in numerous outdoor activities. I would hate to lose it to development and paved roads.

I urge you to reconsider this in your 10-year proposal, and come up with alternatives, in order to save the equestrian trails.

Speaking for myself and many other equestrian users of the park, we would understand if the state park system could even impose a yearly use fee that would allow us to bring our horses, these monies would then be able to allocated to maintenance of the trials and the general welfare of the park.

My best regards,

Heidi Habhegger Sarasota, Florida 941.780.4431

From: Mary Abraham <maryaabraham@gmail.com>
Sent: Friday, April 05, 2019 1:36 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia

It has come to our attention that someone is trying to take away our wonderful horse park. We high tied our horses for years, and then the barn got built and it was even more wonderful to go there. I don't know who is behind this but it needs to be stopped. Mary Abraham, Calloosa Saddle Club, North Ft. Myers, Fl.

Sent from Mail for Windows 10

From: Mary Abraham <maryaabraham@gmail.com>
Sent: Friday, April 05, 2019 1:51 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia

Please don't take away from the equestrians the best park we have in Florida! We waited so long to have a barn instead of high tying and now you want to take it all away. Please reconsider, Mary Abraham, Caloosa Saddle Club, North Ft. Myers, Fl.

Sent from Mail for Windows 10

From: Jerry Knapp <jdknapp@gmail.com>
Sent: Friday, April 05, 2019 9:48 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alifia

Please keep Alifia as it is! We love riding our horses there.

DeAnne Knapp 12501 Astor Place Fort Myers, FL 33913 From: Mitzie Newsome <huminbird1@gmail.com>
Sent: Saturday, April 06, 2019 1:30 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia River State Park

Hi, my name is Diane Newsome and a friend just told me bout a recent meeting about our favorite horseback riding area, Alafia River State Park. I have had a sinus infection for the last 3 weeks so havent been able to ride much but I would have come to the meeting if I had known about it. Could you please call me so I can find out more about this issue? My number is 613-966-8784. Sincerely, Diane Newsome, owner of SugarHawk Stables in Lithia FL

From:	<u>Maldonado, Tyler</u>
То:	<u>Degagne, Demi</u>
Subject:	FW: PLS KEEP THE TRAILS
Date:	Monday, April 15, 2019 10:19:37 AM

-----Original Message-----From: Steffany dragon <steffany.dragon@gmail.com> Sent: Saturday, April 06, 2019 5:28 PM To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; Draper, Eric <Eric.Draper@dep.state.fl.us> Subject: PLS KEEP THE TRAILS

> Dear Sirs:

> We are very concerned about the proposed changes or elimination of the Alafia State Park Equestrian Trails. We have a very strong equine industry here & the trails have been a very important part of life for the many equine & nature enthusiasts alike for years. This trail is not only important for the quality of life of humans & horses (the horses truly benefit from and need more, not fewer trails) but also for the wildlife appreciating the habitat the trails provide. Horseback riding is an ideal way to experience the beauty of Florida's native plant & animal life that does not disturb it. We truly hope you reconsider your plans now that we have brought the high importance of the trails to your attention, as well as the negative impact it would have to lose them, on plant, animal and human lives, alike!

. DI

> Please keep us informed,

> Steffany

> Sent from my iPhone

From: Vicki Lawry <vicshadyl@gmail.com>
Sent: Sunday, April 07, 2019 4:44 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alf planning meeting

April 7 2019

Tyler,

First thank you for having this meeting. However, many people asked how was the information simulated out to the public. I have no idea but it was very poorly announced.

After the meeting it was blasted on FB with incorrect information as if DEP is trying to rid Alafia River State Park of equestrians. In some ways I have to agree with the image of all these different user groups placed in one area in the north section of the park named Three Finger Lakes.

We are not against recreating on multi use trails but it is extremely important that we have separation on some parts of the trail system including a parking lot. The cost of a new road from the main entrance to the north along 39 to the now exiting parking area to the east of this so called new parking area (Three Fingers Lake) would eat a huge chunk of money. This will also be removing some of the equestrian trails. The same will happen where the proposed Three Finger Lake parking area that has so much crammed onto a small area will also be removing sections of our trails. Oh lets not forget the 30 site campground & cabins!

Why place so much in such a small amount of usable land? Why not wait & expand when made available the MOSAIC land?

Placing horses & large horse trailers in a congested area with other users will be creating a safety issue for all users, Why would anyone think that all of this in one area is ascetically pleasing. How many slots? Loss of revenue if we are turned away due to a lack of parking. Sometimes the north parking is so full we park on the other side of the gate in the field. Asphalt is is highly dangers to load & unload a horse due to slipping. Why the parking by the main area was left in grass.

A horse corral not needed for day time use. Restroom yes, pavilions are nice but most of use stay near our trailers & or load & leave. Remember we have a living animal that doesn't get placed on the bike rack of my vehicle or a kayak tied to the roof. These objects need no attention!

I do understand other users use pavilions and they are nice to have and I am not saying no. Its cost. NO BIKE RACKS! If bikers start to use the trails in the north section whats left.

I stated that myself & others volunteered for years to bring Alafia River State Park to what we envisioned the park would be like. We worked out a plan for separate trail users and multi-use trails. An equestrian campground that we have a hard time trying to get in with reservations. Why would we have to move when a barn that was built by sweat equity is in the existing campground! This whole process needs to be reviewed over & over and back to the drawing table each time. Please don't wait for a meeting of commits to show possible changes. Somehow the user groups need to be brought into the beginning process. Information before a planned meeting. Yes lets invite the community properly it is our park after all.. I voted 2x on preservation 2000 funding. I am a tax payer! I do write my concerns to my senators. Looking forward to a response..Thank you, Vicki Lawry 813-601-0228 From: Maureen Vos <movos@Tampabay.rr.com>
Sent: Monday, April 08, 2019 11:57 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: ALAFIA RIVER STATE PARK PLANS

Dear Mr. Maldonado,

As the owner of 6 horses and a frequent trail rider at the Alafia River State Park, I write to state my objections to the proposed plans for changes to the Alafia River State Park.

I ride my horses there (with friends) to enjoy nature and quiet. I generally stick to the north west side of the park so that I do not encounter bicycles and not too many hikers over there. I have been thrown from horses twice on the bike side of the park due to the quiet whirr of the bikes going by in the bushes, woods, near the trails, and suddenly surprising the horses. I have a few friends this has also happened to. Of course, I am not faulting the bicyclists. They were doing nothing wrong, just minding their own business, but my horses are not bombproof, so I stay away from the bicycle areas. There is (presently) lots of room to do that.

However, if the new plan takes place and an RV park and bicycle racks are put on the north west side of the park, then there is no sanctuary for horseback riders from the people who don't understand horses and bicycles. Currently, we do encounter hikers on the horse trails and they are always polite and respectful, but if those plans that I saw are enacted, then there will be so many more people, families. It's going to be a tourist destination with all that RV parking. Our enjoyment of the horse trails will effectively be gone and so, we horse people will have to be gone also. The very things we go there to enjoy, will be gone.

There are currently, IMO, plenty of picnic areas in the park and I'm not looking for a horse corral. There could never be enough corrals for all the horses anyways. I want to trail ride, maybe enjoy a light snack with friends and go home. At times, there are a LOT of horses in the park. A month ago, we came across 20 riders on a trail ride together and many other rider groups on the trails that day. Do we really want MORE? What's that going to do to the eco system. I realize that that is mostly a weekend situation. The park is mostly deserted during my week day rides. But, I believe the "tourists" are going to come on the weekends for the most part.

It is a shame that most of us day riders had no idea that there was a meeting, so of course we didn't come. I only found out because I saw a post on the Myakka River Riders Facebook page afterward.

Please consider either another meeting, or a change in the plans.

Thanks for taking the time to read this comment.

Sincerely,

Maureen Vos 8725 Erie Lane, Parrish, FL 34219 From: liz2004@tampabay.rr.com <liz2004@tampabay.rr.com>
Sent: Monday, April 08, 2019 7:51 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Cc: Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: Proposed Recreational Amenities at Alafia State Park

Mr. Maldonado,

I frequently ride my horse at Alafia State Park. I've read about the proposed changes to the park, and the information presented at the March 27th public meeting (adding non-equestrian focused activities into the predominantly equestrian area of the park).

The proposed types of mixed use activities in close proximity to the equestrian areas could cause stress and fear in the horses, which would endanger the horses and their handlers. Please reconsider this plan and keep the equestrian area a safe place for our use. If the proposed changes are incorporated, I feel that it would discourage equestrians like myself from using the park.

Referencing the proposal specifically:

- 1. Please do not place recreation halls, camp store, kayak/canoe launches, and other public gathering focused areas in the area of the horse trails
- 2. Please make the proposed 30-site RV area a primitive equestrian campground.

Sincerely,

Liz Barksdale 813-920-3861

From:	Maldonado, Tyler
То:	Degagne, Demi
Subject:	FW: Alafia River State Park HORSE Trails
Date:	Monday, April 15, 2019 10:20:00 AM

From: Amy Chenard <a.chenard@aol.com> Sent: Tuesday, April 09, 2019 10:10 AM To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; Draper, Eric <Eric.Draper@dep.state.fl.us> **Subject:** Alafia River State Park HORSE Trails

Hello,

I just saw a FB post that there was a planning meeting to decide the fate of the horse trails at Alafia River State Park. I load up my trailer with my horses and friends and use the park often. Please tell me this is "fake" news since losing the ability to ride in the beautiful park would break my heart. We are developing too much, too fast and losing everything amazing that Florida is. The last thing we need is more roads, more cabins, and more building. I beg you to reconsider this decision for the sake of the wildlife, and the tax paying citizens like myself who find peace in this beautiful setting. Amy Chenard

Sarasota, FL
From:	Maldonado, Tyler
То:	Degagne, Demi
Subject:	FW: Alafia State Park - Equestrian Trails
Date:	Monday, April 15, 2019 10:20:04 AM

From: kbpfxhnt@gmail.com <kbpfxhnt@gmail.com>
Sent: Tuesday, April 09, 2019 1:21 PM
To: FLStateParkPlanning <FLStateParkPlanning@dep.state.fl.us>; Maldonado, Tyler
<Tyler.Maldonado@dep.state.fl.us>; Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: Alafia State Park - Equestrian Trails

Good Afternoon,

I am a 20 year resident of Hillsborough County, and Alafia State Park is a treasure because of its horse trails. Please listen to my fellow equestrians that our trails are constantly being threatened and almost never being expanded. Hikers and bikers have so many alternatives to their form of recreation. Horses do not. It is the writing on the wall for us equestrians, that if mixed use on horse trails are allowed, that someone will complain about the horses, and the horse trails or accessibility by horses will be eliminated. The horse community need assurance that their form of recreation is not threatened.

I was not at the recent March meeting presenting the plan, but I am conveying to you that the horse community on Facebook is highly agitated and mobilizing. I hope you can find a way to hear their concerns and assure them in writing that you are indeed protecting the horse trails for our use too.

Cordially, Katie Parker 450 Knights Run Ave Tampa, FL 33602 From: Maxwell, Bryon
Sent: Tuesday, April 09, 2019 5:01 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Fwd: Draft Changes to Alafia State Park

FYI

Bryon Maxwell Park Manager Alafia River State Park 813-917-2816 ------ Forwarded message ------From: Jan and Tom McDonald <<u>janetandtommcd@gmail.com</u>> Date: Apr 9, 2019 4:47 PM Subject: Draft Changes to Alafia State Park To: "Maxwell, Bryon" <<u>Bryon.Maxwell@dep.state.fl.us</u>> Cc: Cynthia Huffman <<u>rhuf926999@verizon.net</u>>

Dear Ranger Maxwell: I have received a large number of comments to the proposed draft change to the park that would entail the closing of the north or equestrian entrance. To date, I have found that no accidents have occurred at the north entrance due to trailers entering the park. The consensus of the comments made to me were that the park users were very afraid that the closure of the north entrance and the re-routing of all trucks and trailers and cars with hikers and ham radio club members would result in a back log of vehicles.

These vehicles, some of which would be trucks with long trailers, could be forced to line up at the main park entrance and forced to stay along side the busy SR 39 roadway. This is an unsafe area to have trailers with horses park. It would be creating congestion and a dangerous situation.

Unfortunately, I have seen the tragedy of a trailer with horses that was rammed by a trailer truck that was unable to stop. I do not want to see this happen near Alafia State Park. Trucks frequent SR 39 and sometimes travel at speeds in excess of the limit. Please do not create an unsafe situation. If the north entrance must be closed then a long turning lane must be created for all the vehicles trying to enter the park at the main entrance. Alternatively, could the current service road that is used for the hunter paces be turned into an equestrian entrance.?

I know that you and everyone in the park value the safety of all the park visitors. Please consider these suggestions and the concerns of a large group of equestrians.

Thank you for your anticipated assistance. Jan

From: Elizabeth "Betty" Gentry <gentrysceltickennels@yahoo.com>
Sent: Wednesday, April 10, 2019 3:30 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: Alafia Horse Trails

Please leave them alone! We ride there regularly. It's beautiful wide open terrain and always beautiful wild life!! If you take out the horse trails, people would have no where loca to ride their horses and enjoy the beauty of our area! Please leave them alone! We live within 15 miles of the park, and it's why we moved here!

Elizabeth Gentry

Sent from Yahoo Mail for iPhone

From:	<u>Maldonado, Tyler</u>
То:	<u>Degagne, Demi</u>
Subject:	FW: Alafia state park
Date:	Monday, April 15, 2019 10:20:25 AM

From: qmixer@aol.com <qmixer@aol.com>
Sent: Wednesday, April 10, 2019 3:55 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia state park

This is in rretards to the expansion of TV camp sites in Alafia, the horse trails are alreav limited as please don't take away more of the trails. The combination of campers and horses aren'tgoing to be good, there are so few places left to ride. Thank you *Sent from my Sprint Phone*.

From: Ellen Alence <vetellen11@gmail.com>
Sent: Wednesday, April 10, 2019 8:39 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia River State Park

Good evening.

I have been a southeast Hillsborough County resident for 18 years.

I frequently utilize Alafia River State Park with my family and friends. Activities that I regularly participate in at his location are:

- 1) Riding the equestrian trails
- 2) Participating in the hunter pace equestrian events.
- 3) Running the trails with my dog.
- 4) Running in the trail races run by Tampa Races
- 5) Mountain biking

With all of the uncontrolled growth allowed by Hillsborough County, Alafia River State Park remains a gem. A gem where Florida residents can enjoy outdoor activities. Please don't take this away from us by adding cabins and other "amenities" that just aren't needed.

A lot of the RV sites are taken by out of state people. If you need more camping, maybe further restrict stays by out of state people.

As far as adding canoeing or kayaking, there is already canoeing and kayaking available right up the road at Alderman Ford.

If you want to add things, please do not do so at the expense of the existing activities, like the equestrian trails, which are also used by hikers and runners.

In this day and age with all the untethered growth and lack of face to face contact with people (vs electronics and social media), being able to go out to Alafia River State Park either alone or with family and friends is a blessing.

Being a frequent user of this facility, the camaraderie and sense of community is invigorating. Please do not add "things" that take away from what is already there and being utilized by residents.

If you are looking to add, why not enhance what is there? Better and expanded parking (both sides)? Mounting blocks along the equestrian trails? Maybe create crosscountry equestrian trails (add jumps).

Please don't take away our equestrian trails or bike trails.

Thank you.

Dr. Ellen Alence

From:	<u>Maldonado, Tyler</u>
To:	<u>Degagne, Demi</u>
Subject:	FW: 10 year plan for the Alafia River State Park.
Date:	Monday, April 15, 2019 10:20:42 AM
To: Subject: Date:	Degagne, Demi FW: 10 year plan for the Alafia River State Par Monday, April 15, 2019 10:20:42 AM

From: Lynn Ryder <Lryder2@tampabay.rr.com>
Sent: Wednesday, April 10, 2019 9:37 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: 10 year plan for the Alafia River State Park.

Hello,

While I appreciate the time and effort used to hold the public meeting on the 10 year plan for the park, I can't help but be concerned about the information provided related to that plan. Several members of the equestrian community spoke at the meeting and they all voiced concerns over placing new camp grounds in the area currently being used as a riding site with numerous horse trails. This planned development would impact the riding trails and the general wilderness feel. New Camp grounds and mixed use areas will bring more paved roads. The roads would diminish the natural feel and look of the area. It will reduce the available riding area. There was a discussion regarding safety for the horses, riders and campers when all of the users are coming together in one area. Families camping with their children don't want to worry about keeping their children safe around these animals. And children want to run and play and be loud. They should be allowed to do all of that but not around the horses . If the new campgrounds are located away from the current equestrian trails, everyone would benefit.

I believe everyone wants to see the park expand and grow but not at the expense of services and natural areas already in use. Those areas should be left alone . Thank you for taking the time to read my opinion.

Lynn Ryder 817 Old Welcome Rd. Lithia, Florida 33547



Virus-free. <u>www.avast.com</u>

From: Cheryl Decker <cdecker71@gmail.com>
Sent: Thursday, April 11, 2019 9:35 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Alafia State Park Horse Trails

Good day sir

I am emailing you in regards to the Alafia state park horse trails that are tentatively scheduled to be removed due to adding other amenities such as an extra campsite.

I strongly ask that you don't touch the horse trails. That state park is huge and there should be plenty of room to accommodate the other amenities that you'd like to add without destroying or taking away what the equestrian riders love at that park. I can't believe that there wouldn't be other options to still add new amenities to that park without bothering what is already there for the equestrian riders. How about you look into adding more equestrian trails?

I hope you please listen to all of our concerns destroying the equestrian trails and I hope to hear response back from you.

Thank you have a great day.

Concerned Equestrian Rider Cheryl Decker

Have a great day. Cheryl From: Ellen May <oakgrovearabians@gmail.com>
Sent: Thursday, April 11, 2019 11:27 AM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; Draper, Eric <Eric.Draper@dep.state.fl.us>
Subject: Alafia State Park Equestrian Use

My family is from Florida although I now live in Arkansas. I return every year with my horse to enjoy Florida's natural beauty, weather, people and most especially, to horse camp and trail ride. I have long said Alafia State Park is one of my favorite places to ride anywhere in the US (I have ridden trails in all 48 states).

For years, I have known to book early if I have any hope of having a camping site there. I usually go mid-week and discover that I am the only or one of a very few horse campers there. Locals may come over to day ride, but those hoping to camp with their horse have virtually been pushed out by RV campers. I am glad to see the park being enjoyed by so many bikers, hikers, canoes, fishermen and such but please leave room for the horse people too!

I have suggested to staff and volunteers in the past, that it is a real shame the lovely barn and pens donated by Friends of Alafia remain so seldom used. Is there some reason the areas near the barn which are already open, level, partially shaded and close to the bath house can't be permitted as a primitive (water is already there for horses) equestrian camping area?

Thank you for your consideration. I look forward to your response. Ellen May Winslow, Arkansas 479 236 2550 From: Rosemary Arway <Rarway@hotmail.com>
Sent: Thursday, April 11, 2019 10:43 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>; eric.drapler@floridadep.gov
Subject: Alafia River State Park

Hello,

PLEASE, PLEASE do<u>NOT</u> change anything at Alafia State Park with regard to the existing horse facilities and camping. It is absolutely the BEST place in Florida and you all have done such a wonderful job in maintaining this beautiful equestrian park.

It would be unforgivable to change anything and the equestrians in our state would REALLY appreciate your commitment to keeping it the same.

Please recognize that there are limited places for us to enjoy nature with our horses. Please do not take this away or change it in any manner.

With appreciation, Rosemary Arway

From:	<u>Maldonado, Tyler</u>
To:	<u>Degagne, Demi</u>
Subject:	FW: Proposed Changes at Alafia River State Park
Date:	Monday, April 15, 2019 10:21:17 AM

From: Maureen Vos <movos@Tampabay.rr.com>
Sent: Saturday, April 13, 2019 5:14 PM
To: Maldonado, Tyler <Tyler.Maldonado@dep.state.fl.us>
Subject: Proposed Changes at Alafia River State Park

1. The proposed new RV campground should be a primitive EQUESTRIAN CAMPGROUND, similar to Colt Creek's. Water/bathroom under future discussion. The new campground for equestrians may take away some trails but it will be worth it.

NO WE DON'T NEED MORE CAMPGROUND AND/OR the things that go with it. DON'T WANT IT. WE DO NOT WANT TO LOSE TRAILS TO A CAMPGROUND or anything else.

2. The park will keep only one park entrance. An interior road will run along side HWY 39 to get to the north area parking/trail head. From this road, a road will run along the power line to get to the new EQUESTRIAN CAMPGROUND with an off road leading directly into the campground.

NO! We do not want a road inside the park taking away the trail that runs up Hwy 39, nor a road down the power line trail. What is wrong with the way it is now. We put our money into the box to use the park. We don't need congestion, nor another road inside the park.

What should horse people email about BY April 12th? Do away with the addition of cabins, another RV campground, kayak & paddling launching, bike racks, horse corral, recreational hall, and camp store that would be located in the area of the horse trails. Change the 30-site RV campground to a primitive equestrian campground. This small corner of the park should be reserved for only horses & hikers as it is now!

NO! We don't want more cabins, RVs, more launching areas, bike racks. We don't need a horse corral (what good is A horse corral). Definitely don't need a camp store in the horse trails. ARE YOU ALL INSANE?

We need the quiiet horse trails. That's what we need. Most of us just use this small area to ride in. Please don't take it away from us.

Maureen Belknap-Vos Frequent user of the horse trails at Alafia River State Park Addendum 10 — Local Government Comprehensive Plan Compliance



Hillsborough County City-County Planning Commission

Resolution

Item: Consistency Determination: Alafia River State Park Unit Management Plan

	AYE	NAY	ABSENT	DATE: June 10, 2019
Mitch Thrower, Chair			X	
Jacqueline Wilds, Vice-Chair	Х			mital Frower
jel M Joseph, Member at Large	х			
John Dicks	Х			
Derek Doughty, PE	Х			Derek Doughty Chair
Theodore Trent Green, RA	Х			
Karen Kress, AICP	Х		2	C
Michael Maurino	X		· · · · · · · · · · · · · · · · · · ·	MelisivEznuitar
Cody Powell	Х			
Jennifer Willman	Х			
Melissa E Zornitta, AICP Executive Director			S	Melissa E. Zornitta, AICP Executive Director

The following resolution was adopted:



developed a Comprehensive Plan for unincorporated Hillsborough County, the Future of Hillsborough Comprehensive Plan for Unincorporated Hillsborough County; and

WHEREAS, the Hillsborough County City-County Planning Commission

WHEREAS, the Hillsborough County City-County Planning Commission is the Local Planning Agency responsible for long-range comprehensive planning in Hillsborough County; and

WHEREAS, Hillsborough County City-County Planning Commission staff reviewed the Alafia River State Park Unit Management Plan (May 2019 ARC Draft); and

Plan Hillsborough planhillsborough.org planner@plancom.org 813-272-5940 601 E Kennedy Bivd 18th Floor Tampa, FL, 33602

WHEREAS, the Alafia River State Park Unit Management Plan focuses on natural resource protection and restoration and providing outdoor, natural, resource-based recreational opportunities; and

WHEREAS, Hillsborough County is experiencing rapid population growth and development; and

Resolution

Alafia River State Park Unit Management Plan June 10, 2019

WHEREAS, the Alafia River State Park has a Future Land Use designation of Natural Preservation (N) which recognizes lands of significant environmental importance set aside primarily for conservation and natural resource based recreation purposes; and

WHEREAS, the site is zoned for Agricultural Mining (AM), which protects viable long-term agricultural lands from urban and suburban encroachment by encouraging agricultural, residential, and related uses on parcels of at least twenty (20) acres; and

WHEREAS, the management plan provides an inventory of resources on site and documents ongoing and needed management activities and facilities; and

WHEREAS, the Hillsborough County City-County Planning Commission reviewed the draft management plan update, and considered the adopted Goals, Objectives, and Policies of the *Future of Hillsborough Comprehensive Plan for Unincorporated Hillsborough County* as follows:

Conservation and Aquifer Recharge Element

Objective 13: The County shall protect and conserve significant wildlife habitat, and shall ensure a no net loss of essential wildlife habitat in Hillsborough County.

Objective 14: Populations of listed species occurring in Hillsborough County shall be maintained through the preservation and management of essential wildlife habitat and the implementation of the following policies. Where feasible and appropriate, the abundance and distribution of populations of such species shall be increased.

Objective 15: The County shall minimize the spread of exotic nuisance species and shall incorporate programs to control such species into the management plans for County-owned lands, with the objective of a 90 percent reduction of exotic nuisance plants from previously uncontrolled levels. The County shall conserve and use, and shall continue to require the conservation and use of native plant species in the developed landscape. The County shall also continue to protect lands designated Conservation and Preservation Areas within pending and approved development projects.

Objective 16: The County shall continue to increase the acreage of natural preserve lands and to ensure their protection and proper use.

Recreation and Open Space Element

Objective 2: The County shall continue providing improvements for public access to parks and recreational facilities and waterfront lands, including beaches and shores, by implementing the policies listed below.

Policy 3.1: The County, through such programs as the Environmental Lands Acquisition and Protection Program, shall continue to identify, secure, and manage open space for the purpose of conservation, preservation, and provision of open space corridors and park and recreational needs.

Resolution

Alafia River State Park Unit Management Plan June 10, 2019

Future Land Use Element

Policy 9.1: Each land use plan category shall have a set of zoning districts that may be permitted within that land use plan category, and development shall not be approved for zoning that is inconsistent with the plan.

Policy 9.2: Developments must meet or exceed the requirements of all land development regulations as established and adopted by Hillsborough County, the state of Florida and the federal government unless such requirements have been previously waived by those governmental bodies.

Policy 11.4: Recreational development must be compatible with and sensitive to the surrounding natural systems.

Objective 13: New development and redevelopment shall not adversely impact environmentally sensitive areas and other significant natural systems as described and required within the Conservation and Aquifer Recharge Element and the Coastal Management Element of the Comprehensive Plan.; and

WHEREAS, Planning Commission staff determined that the Alafia River State Park Unit Management Plan is consistent with the Goals, Objectives, and Policies of the *Future of Hillsborough Comprehensive Plan for Unincorporated Hillsborough County.*

NOW, THEREFORE, BE IT RESOLVED, that the Hillsborough County City-County Planning Commission finds the Alafia River State Park Unit Management Plan **CONSISTENT** with the *Future of Hillsborough Comprehensive Plan for Unincorporated Hillsborough County*.