

## 13.7 FNAI Letter



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April 11, 2014

David Alden  
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Florida Fish and Wildlife Conservation Commission  
Tallahassee, FL

Dear David,

By virtue of this letter we are updating and continuing our agreement that it is unnecessary for your office to request FNAI element occurrence data for each land management plan you prepare, under the following conditions:

- FNAI will continue to provide our Florida Element Occurrence GIS database to FWC on a quarterly update basis;
- The FNAI GIS data will be available to FWC staff for reference and incorporation as required in management plan review and preparation.

Our database manager, Frank Price, currently provides this update via ftp to FWC staff on a quarterly basis. Current FWC contacts for the quarterly update are Beth Stys and Ted Hoehn. We are pleased to continue this beneficial collaboration with the Florida Fish and Wildlife Conservation Commission.

Sincerely,

Gary Knight  
Director  
Florida Natural Areas Inventory



Florida Resources  
and Environmental  
Analysis Center

Institute of Science  
and Public Affairs

The Florida State University

*Tracking Florida's Biodiversity*

## 13.8 Prescribed Burn Plan

**Apalachicola River Wildlife and Environmental Area**  
**Conceptual Prescribed Burn Plan**



Prepared by:  
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Biological Scientist III

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## I. Introduction

**Purpose** – Fires, naturally occurring or man-induced, are an integral part of the ecology of the southern pine (*Pinus spp.*) region (Miller 1963) and have maintained a fire-dependent plant community in the southeast for countless years. Exclusion of fire reduces nutrient cycling and changes the vegetative community from an open canopy system to a closed one. The growth of dense brush shades out fire-dependent plants, including listed endangered and threatened species, and has an adverse affect on fire-dependent animals such as federally endangered red-cockaded woodpeckers (*Picoides borealis*). Exclusion of fires allows successional stages to occur until a climax hardwood community exists. Areas covered by dense brush lose much of their value to wildlife. For example, food and browse plants are less palatable, access is restricted and a predator's ability to capture prey is hampered. Additionally, heavy fuel accumulation results in increased wildfire hazard.

Prescribed burning is used extensively in forestry and wildlife management for fuel reduction, brush control, disease and insect control, site preparation and wildlife habitat improvement. It is a recommended tool for management of such game animals as white-tailed deer (*Odocoileus virginianus*), bobwhite quail (*Colinus virginianus*), mourning dove (*Zenaida macroura*) and wild turkey (*Meleagris gallopavo*) (U. S. Forest Service 1969, Stoddard 1971). The value of prescribed fire to these and other animals, such as raptors and some songbirds, are well documented (Givens 1962, Miller 1963, Stoddard 1963). Prescribed fire benefits wildlife by reducing underbrush density, thus improving access, promoting the growth of succulent vegetation and lowering browse to feeding height of deer. Additionally, it benefits aesthetic values and enhances growth and fruiting of important wildlife food plants, such as dewberries (*Rubus spp.*) and blueberries (*Vaccinium spp.*) (Halls 1977).

This plan will identify the potential burn units on Apalachicola River Wildlife and Environmental Area (ARWEA), describe vegetation types, discuss objectives of a prescribed burn plan for ARWEA, as well as firing techniques, firebreak needs, and methods for post burn monitoring.

**Area Description** – Apalachicola River WEA begins at the mouth of the Apalachicola River and extends north to the Brickyard cut-off and the Brother's River, with additional parcels further north along the Chipola River, near the vicinity of Wewahitchka. The northern boundary of ARWEA adjoins the Apalachicola River Water Management Area (Northwest Florida Water Management District) and the Apalachicola National Forest (U.S. Forest Service); the eastern boundary adjoins Tate's Hell State Forest (Florida Forest Service) and SR-65; the southern boundary adjoins East Bay, Apalachicola Bay, and the Jackson River; and the western boundary adjoins private timberland (Wimico Timber Company), Saul Creek Rd., the community of Howard's Creek, and St. Joe Timberlands (Tupelo Bend Waterfowl Management Area) ([Appendix 1 – Vicinity Map](#)).

The ARWEA contains 86,286 acres of land comprised of pine flatwoods, hardwood-flooded forests, bottomlands, wetland scrub shrub, inter-tidal marshes, maritime hammocks and ruderal areas. The Florida Fish and Wildlife Conservation Commission (FWC) has lead management responsibility on 64,026 acres; other lands are cooperatively managed with the Florida Forest Service (3,922 acres), NFWFMD (14,280 acres) and Florida Department of Environmental Protection (4,057 acres). Of the 64,026 acres on which FWC is lead, 20,666 acres have been designated as fire maintained, meaning that fire is essential for those natural vegetation communities and the animal species that rely on them. The remaining 43,360 acres may burn infrequently, primarily at edges adjacent to a fire maintained community.

- A. The major natural communities on the ARWEA include: tidal marsh, floodplain swamp, bottomland hardwood forest, mesic and wet flatwoods, pine plantation, wet prairie, basin marsh, baygall, dome swamp, basin swamp, and mesic and maritime hammocks. Descriptions of these communities specific to the ARWEA were prepared by the Florida Natural Areas Inventory (FNAI) and are included as [Appendix II](#). This plan will address areas of historic mesic flatwoods, wet flatwoods, wet prairies, and some bottomland hardwood forests. These communities were the target of the previous land owner for conversion to slash and loblolly pine plantation geared toward high volume fiber production. These areas were heavily disturbed, often clear-cut, double roller chopped, bedded and planted, and excluded fire of any type. Some pine plantation on ARWEA was thinned by the previous land owner or since the State's acquisition of the property and now exhibits some of the characteristics of the historic natural community, primarily in structure and to a lesser extent midstory and groundcover, and has been delineated as such by FNAI. This plan will also address fire maintained wetland communities including tidal and freshwater marsh.
- B. Fifty-four of the fifty-nine Objective Based Vegetation Management (OBVM) units defined on the ARWEA have fire maintained communities within their boundaries ([Appendix III](#)).

Objectives – We will use prescribed fire along with other management techniques to achieve a variety of long term and short term goals on ARWEA. Until the State purchase of the property the previous land owner had excluded fire from much of the area because of its conversion to silviculture. Our primary short term objectives are to reduce fuel loads and to minimize the number and stature of hardwood stems. Hardwoods often impede fire's movement across the landscape. As such, we will likely use mechanical and herbicide treatments in conjunction with a long term burn regime to reduce these species. The primary long term goal for prescribed fire on ARWEA is to restore the historic natural communities to the desired future conditions (DFC) set for these communities during the OBVM workshop. Additionally, habitat needs for management responsive focal wildlife species as identified in the Wildlife Conservation, Prioritization and Recovery (WCPR) strategy will be considered during

all management activities. Other objectives will be achieved by the implementation of the prescribed fire plan on ARWEA:

- 1) Improve and maintain habitat for wildlife, emphasizing quality habitat for threatened and endangered species, by increasing the production of grasses and forbs, increasing the quality of browse, and maintaining openings for foraging and travel lanes.
- 2) Improve and maintain habitat for management responsive area focal species as outlined in the WCPR strategy; including, but not limited to red-cockaded woodpecker, frosted flatwoods salamander (*Ambystoma cingulatum*), northern bobwhite, Bachman's sparrow (*Peucaea aestivalis*), and brown-headed nuthatch (*Sitta pusilla*).
- 3) Move the composition and structure of the mesic flatwoods, wet flatwoods, wet prairie and other historic natural communities towards the DFCs for shrub height and cover and ground cover as defined by OBVM.
- 4) Increase diversity of flora and fauna.
- 5) Enhance aesthetics and increase visibility by reducing dense understory vegetation.
- 6) Increase success of longleaf pine (*Pinus palustris*) regeneration.
- 7) Reduce the potential of wildfire by decreasing fuel loads.
- 8) Control exotic plant species.
- 9) Improve access for hunting and other outdoor recreation.
- 10) Control insects and disease (e.g., brown spot needle blight on longleaf pine seedlings).

## II. Burn Timing and Frequency

FWC will utilize a combination of dormant and growing season burns to meet the goals and objectives outlined above. Within units where fire has been excluded for long periods of time and fuel buildup is heavy dormant season burns will initially be used. Lower daytime temperatures will minimize crown scorch to the overstory and reduce the potential for tree mortality. This will also, over an extended period of time reduce hardwood stem density, but will not have the same effect as growing season fires. Growing season burns will be utilized to further reduce the stature and number of hardwood stems. Timing of growing season burns may also be targeted to facilitate desired vegetative responses, such as flowering and seed production of wiregrass (*Aristida stricta*), dwarf runner oak (*Quercus minima*) and other valuable wildlife forage species.

Burn frequency and scale will vary depending on the site and DFCs set for each natural community. Burn frequency will generally range between one to three years in mesic flatwoods, wet flatwoods and wet prairie communities, and 4-5 years for tidal and freshwater marsh communities. The availability of fine fuels and the structural data collected during the OBVM vegetation monitoring will help to determine the

required burn interval to reach the set DFCs. Due to the size and layout of burn units burns will be conducted on a large scale (i.e., burning multiple units together) to facilitate moving the natural community toward the DFC. In areas where practical, primarily the Saul Creek Unit in Gulf County, a designated Strategic Management Area (SMA) for Northern bobwhite, burns will be conducted on a smaller scale. A mosaic of burned and unburned areas, coupled with scattered wildlife openings and dense brush as escape cover, will benefit the bobwhite greatly. Burning in this manner will also decrease the negative impacts to breeding wildlife, leaving unburned areas adjacent to burned areas where wildlife may move to re-nest and forage until burned areas recover. Because of the rapid regeneration of many hardwood species, including undesirable invasive native species such as black titi (*Cliftonia monophylla*), white titi (*Cyrilla racemiflora* and *C. racemiflora* var. *parvifolia*), some oaks (*Quercus* sp.) and sweetgum (*Liquidambar styraciflua*), it is important to avoid allowing the understory to attain undesirable conditions. Repeated burning in the growing season should help expedite the reduction of dense understory vegetation, which in turn will facilitate timber marking and harvest, as well as promote improved herbaceous forage and woody browse production.

In order to decrease woody coverage and promote species which are more beneficial to wildlife, additional management techniques along with prescribed burning will be used, including but not limited to mowing, chopping, herbiciding and strip disking.

### III. Firing Techniques

Depending on the predetermined objectives for a given prescribed burn different firing techniques may be implemented to produce varying results. Often several different firing techniques are used within a burn unit to achieve more than one goal, or produce a mosaic of habitat within that unit.

Due to the geography of the area and the vegetation present on much of the area, access to and within stands is limited. Burn units are large, often divided by streams, sloughs, drains and swamps; navigating these areas is difficult to impossible, especially when safety is paramount. Due to these factors much of the prescribed burning on the ARWEA will be point source ignition, in the form of aerial ignition from a helicopter.

We will use the following techniques at some point during every burn; the scale of use on each prescribed burn will vary and will be dependent on fuel, weather conditions, and burn objectives. Some factors associated with various firing techniques which should be considered are listed below.

- 1) Backing fires: must be ignited along downwind control line (black line); good for use in heavy rough; low scorch probability; need continuous fuels to carry fire; won't burn well with high fine fuel moisture; low intensity but long residence time; short flame length; long burn time results in higher cost.

2) Heading fires: fast fire movement allows for large blocks to be burned; may not be good in heavy rough; can be used with high fine fuel moisture and relative humidity; higher probability of crown scorch; high intensity but short residence time; long flame length; fast moving fire results in lower cost.

3) Flanking fires: requires steady wind direction; best used in light to medium rough; moderate intensity, residence time and flame length relative to backing and heading fires.

4) Point source fires: exhibit characteristics of all three firing techniques above; most of area will be burned by heading and flanking fires, and little by backing fires; wind direction may be variable; low in-stand wind speed, and fine fuel moisture above 15% is preferred; ignition grid can be continually modified to accommodate changing fuels and weather.

#### IV. Firebreaks

Approximately 12 miles of dedicated firebreaks have been constructed where burn units are adjacent to the area perimeter boundary or around experimental vegetation plots. These firebreaks are disked with an agricultural harrow annually to maintain them free of woody vegetation.

Using existing firebreaks wherever possible minimizes the undesirable effects of line construction, such as soil disturbance, altered hydrologic processes and damage to unknown archaeological sites. ARWEA contains approximately 80 miles of FWC maintained roads and 19 miles of County maintained roads, all functioning as firebreaks. Several of the area's burn units are adjacent to bottomland forest/floodplain swamp associated with the Apalachicola River and its distributaries. The transition between the burn unit and these wetland systems makes an excellent natural firebreak, further reducing the need for additional firebreak construction, but also helps shape the ecotone. The ecotone, or transition between two different plant communities, is often some of the most productive and diverse habitat, which may also harbor certain threatened and endangered plant species. However, using wetlands as firebreaks requires extra caution during drought conditions. The floodplain swamps and bottomland hardwood areas serve as great firebreaks during wet conditions, but are inadequate during extended periods of drought. Even during normal conditions these areas may be dry enough to allow fire to "creep" deep into the swamp and even begin burning muck and peat. These areas could pose a threat of escape if not monitored continually during and after the burn. Also, checking to ensure moisture is present before burning will decrease the chance of an escape later.

We may construct temporary firebreaks, without disturbing the soil mechanically. In wet areas we may use rakes and/or leaf blowers to clear vegetative material and expose mineral or saturated soil. This technique allows us to conduct burns during periods

that facilitate burning of isolated wetlands. We may also use temporary “wet” lines. We may set a backing fire off of a freshly wet line of vegetation to create an initial black line in sparse or poorly burning vegetation. Creating wet lines requires caution and ongoing monitoring throughout the day as the vegetation continues to dry.

## V. Burn Units

- A. Fifty-nine OBVM units have been identified on ARWEA. Fifty-four of those OBVM units contain acreage classified as fire dependent, accounting for approximately 20,666 acres ([see map in Appendix III](#)).
- B. Burn Prescriptions – Here we provide items that should be addressed in a burn prescription, including both legal requirements and professional elements, but not prescriptions for individual burn units. A sample prescription form is included with this plan ([Appendix IV](#)).

### Legal Requirements:

- 1) Map of burn area
- 2) Stand/site description: overstory, understory, fuels
- 3) Personnel, equipment
- 4) Desired weather factors: surface and transport winds, relative humidity, temperature, dispersion index, fine-fuel moisture
- 5) Desired fire behavior factors: type of fire, flame length, rate of spread
- 6) Time and date prescription was prepared
- 7) Authorization date and time period
- 8) Smoke screening
- 9) Signature and certification number of Burn Manager

### Professional Elements:

- 10) Purpose, measurable goals & objectives
- 11) Safety

- 12) Description of fuel conditions
- 13) Season and time of day
- 14) Publicity
- 15) Ignition plan
- 16) Contingencies, control & mop up, declaring fire out
- 17) Evaluation & monitoring

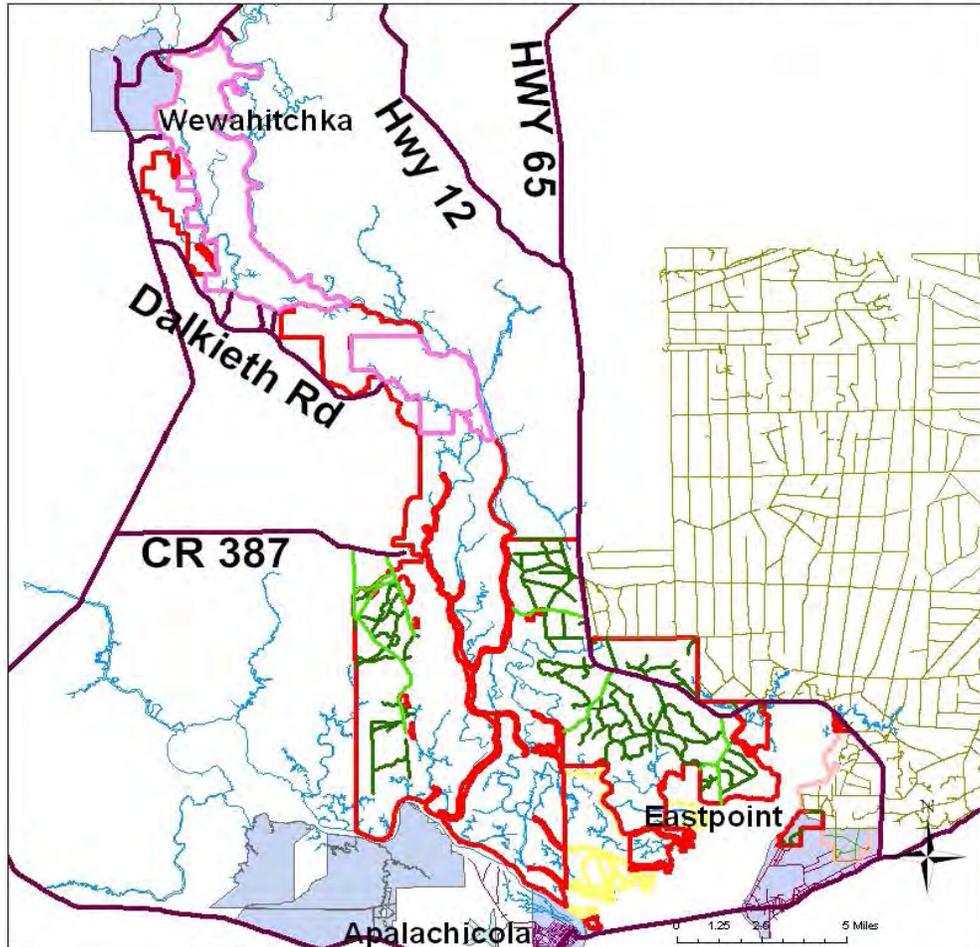
#### VI. Evaluation and Monitoring

Prescribed burn evaluation and monitoring is a continual process and can be broken down into three categories: pre-burn, during burn, and post burn. For several days or weeks leading up to the prescribed burn evaluation and monitoring of the existing site conditions and weather parameters will be conducted to ensure the appropriate conditions are present prior to ignition. During the ignition and burnout phases of each burn weather parameters and fire behavior will be continually observed for compliance with the prescribed parameters. A contingency plan will be a part of every burn plan that will inform decision making and actions should weather conditions or fire behavior become out of prescription during the burn. Post burn monitoring will involve subjective estimates of crown scorch, scorch height, percent of unit burned vs. unburned and we will evaluate these results against the prescribed parameters. Habitat changes over time will be tracked using fixed station photo points, monitored on an annual basis. Vegetation monitoring via OBVM will provide long term data to inform the area manager of the natural communities' condition compared to the DFC. This data also will allow the manager to make adjustments to the burn regime so that the DFC can be met or maintained. Various wildlife surveys will determine whether WCPR focal species are using the area and their response to management activities. These surveys include, but are not limited to, breeding bird point counts, Northern bobwhite fall covey counts, red-cockaded woodpecker nesting/reproductive surveys, and opportunistic observations.

# **Appendix I**

## **Vicinity Map**

## Apalachicola River WEA - Franklin and Gulf Counties



**Notes:**  
Vicinity Map



- ARWEA Agency Lead**  
**Lead Agency**
- █ Florida Fish and Wildlife Conservation Commission
  - █ Florida Department of Environmental Protection
  - █ Florida Forest Service
  - █ Northwest Florida Water Management District



Map Prepared By:  
Matthew Hortman, FWC  
12/11/2013

## **Appendix II**

### **Natural Community Descriptions**

## Community Descriptions

to accompany a

Vegetation Map of Apalachicola River Wildlife and Environmental Management Area

Florida Natural Areas Inventory

2003

**Alluvial River** – the Apalachicola River runs through the middle of the ARWEA, and its floodplain swamps dominate the Area’s central landscape. ARWEA encompasses large portions of the River’s main channel as well as the numerous creeks and smaller rivers that spread out towards the river’s mouth near the town of Apalachicola. Alluvial streams originate in uplands that are primarily composed of sandy clays and clayey-silty sands. Surface runoff is the primary water source for alluvial streams. Thus, alluvial stream waters are typically turbid due to a high content of suspended particulates, including clays, silts, sands, and organic debris. Fluctuations in water depths are dependent upon rainfall patterns and can be separated into two stages, a normal or low flow stage and a flood or high flow stage. During the low flow stage the water is confined within the stream banks, while during flood stage the water overflows the banks and inundates the adjacent floodplain communities. There are few alluvial streams in Florida, and all are restricted to the Panhandle.

**Basin Swamps** are forested wetlands that occur in large irregularly shaped depressions in mesic and wet flatwoods. There is typically a mix of evergreen and deciduous canopy trees and, in ARWEA, a dense understory of evergreen shrubs. Evergreen canopy tree dominants include slash pine (*Pinus elliotii*), and sweet bay (*Magnolia virginiana*), with rarely loblolly bay (*Gordonia lasianthus*). Deciduous trees are most often pond cypress (*Taxodium ascendens*) or bald cypress (*Taxodium distichum*), black gum (*Nyssa biflora*), and red maple (*Acer rubrum*). Often these deciduous trees form monotypic stands in deeper portions of the basin swamp. Understory species include black titi (*Cliftonia monophylla*), white titi (*Cyrilla racemiflora* and *C. racemiflora* var. *parvifolia*), sweet bay, swamp bay (*Persea palustris*), bayberry (*Myrica heterophylla*), sweet gallberry (*Ilex coriacea*), gallberry (*Ilex glabra*), and fetterbush (*Lyonia lucida*). Herbs are typically very sparse. Unlike Tate’s Hell State forest, ARWEA basin swamps do not contain large amounts of Atlantic white cedar (*Chamaecyparis thyoides*). The time since fire may explain species composition in different swamps. Red bay, sweet bay, loblolly bay and Atlantic white cedar will succeed slash pine and cypress if left without fire for very long periods of time (Clewell 1986, Laderman, 1989, Ewel 1990). The basin swamps on ARWEA, for the most part, are dominated by cypress, sweet bay and slash pine.

**Baygalls** are dense stands of evergreen trees and shrubs that occur in depressions or seepage areas where groundwater is at or near the surface for long periods of time. The most common type of baygall on ARWEA is characterized by thick, nearly impenetrable thickets of evergreen shrubs, primarily black titi (*Cliftonia monophylla*), white titi (*Cyrilla racemiflora* and *C. racemiflora* var. *parvifolia*). Baygall occurs in flatwoods depressions and on the edges of dome swamps and basin swamps. It has expanded considerably since the exclusion of fire from the landscape since the late 1940’s. In most locations in ARWEA, slash pines or sweet bay are important components and occur as emergent trees over the dense evergreen canopy. Another

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type of baygall on ARWEA is less common and has a dense canopy of sweet bay (*Magnolia virginiana*), swamp bay (*Persea palustris*) and, to a lesser extent, loblolly bay (*Gordonia lasianthus*), with black and white titi beneath. Other common species in baygalls are wax myrtle (*Myrica cerifera*), fetterbush (*Lyonia lucida*), sweet gallberry (*Ilex coriacea*), and sweet pepperbush (*Clethra alnifolia*). Herbs are sparse to non-existent. Bamboo vine (*Smilax laurifolia*) can form large tangles throughout the vegetation.

**Blackwater streams** originate in deep sandy lowlands where extensive wetlands with organic soils function as reservoirs, collecting rainfall and discharging it slowly. The acidic, tea-colored waters of blackwater streams are laden with tannins, particulates, and dissolved organic matter. Water temperatures fluctuate seasonally with air temperature, but are also dependent upon water depth and shading by adjacent vegetation. Blackwater streams are the most widely distributed and numerous riverine systems in the southeast coastal plain.

**Bottomland forests** occur within floodplain forests and swamps on higher ground that is rarely inundated except during unusual flood events. Much of the area classified as bottomland forest in ARWEA has likely experienced past human disturbances such as logging. Most areas are older loblolly pine stands that were almost certainly planted or seeded many years ago. However, these forests are now well developed, and can be considered a natural community. On ARWEA, bottomland forests typically have a dense canopy dominated by loblolly pine (*Pinus taeda*) with mixture of hardwoods that include red maple (*Acer rubrum*), water oak (*Quercus nigra*), and laurel oak (*Quercus hemisphaerica*). In wetter areas blackgum (*Nyssa biflora*), sweet bay (*Magnolia virginiana*) occur, and in some drier sites southern magnolia (*Magnolia grandiflora*) can be found. The understory and shrub layers contain American holly (*Ilex opaca*), American hornbeam (*Carpinus caroliniana*), wax myrtle (*Myrica cerifera*), witch hazel (*Hamamelis virginiana*), deerberry (*Vaccinium stamineum*), highbush blueberry (*Vaccinium corymbosum*), wild azalea (*Rhododendron* sp.), mayberry (*Vaccinium elliotii*), blue-stem palmetto (*Sabal minor*), Sebastian bush (*Sebastiania fruticosa*) and sweet pepperbush (*Clethra alnifolia*). Typical herbs include spikegrass (*Chasmanthium sessiliflorum*), sedges (*Carex* spp.), panic grasses (*Panicum* spp.), giant cane (*Arundinaria gigantea*), partridgeberry (*Mitchella repens*), sarsaparilla vine (*Smilax pumila*) and netted chain fern (*Woodwardia areolata*). Vines can be abundant and include muscadine (*Vitis rotundifolia*), cross vine (*Bignonia capreolata*), bamboo vine (*Smilax laurifolia*), and poison ivy (*Toxicodendron radicans*).

**Depression marshes** are herbaceous wetlands found in depressions in low flatlands. On ARWEA these are a minor component of the landscape, and quite botanically simple. They seem to be remnant portions of tidal marshes, occurring primarily in the Sand Beach Road area. These marshes are typically dominated by sawgrass (*Cladium jamaicense*), and less often with black needle rush (*Juncus roemerianus*). Soft rush (*Juncus effusus*) is commonly on the outer edges. On the edge of one marsh dwarf butterworts (*Pinguicula pumila*) were found.

**Dome swamps** are shallow, forested depressions that sometimes present a domed profile because trees are shorter in the shallower waters of the outer edge, gradually becoming taller in the deeper water of the interior. On ARWEA this profile has likely been altered due to past silvicultural site preparation practices that encroached on the outer edges of the dome swamps.

These swamps are dominated by pond cypress (*Taxodium ascendens*) and/or blackgum (*Nyssa biflora*). Slash pine (*Pinus elliotti*) and sweet bay (*Magnolia virginiana*) may also occur in the canopy. The understory varies from very shrubby and dense, to very open, with shrubs occurring only on hummocks surrounded by open water. Common understory shrubs include Virginia willow (*Itea virginica*), sweet pepperbush (*Clethra alnifolia*), fetterbush (*Lyonia lucida*), wax myrtle (*Myrica cerifera*), myrtle-leaved holly (*Ilex myrtifolia*), sweet gallberry (*Ilex coriacea*), white titi (*Cyrilla racemiflora* and *C. racemiflora* var. *parvifolia*), and black titi (*Cliftonia monophylla*). Vine-wicky (*Pieris phillyreifolia*) can sometimes be found also climbing hummocks or tree trunks. Herbs are sparse and include Virginia chain fern (*Woodwardia virginica*), royal fern (*Osmunda regalis*), pipeworts (*Eriocaulon* spp.), panic grasses (*Panicum* spp.), beakrushes (*Rhynchospora* spp.), sedges (*Carex* spp.), and yellow-eyed grasses (*Xyris* spp.).

**Floodplain forests** on ARWEA occur on slight elevations in the Apalachicola River system, such as levees, ridges or terraces, and are usually flooded for a portion of the growing season. Typical canopy species are water hickory (*Carya aquatica*), overcup oak (*Quercus lyrata*), diamondleaf oak (*Quercus laurifolia*), American elm (*Ulmus americana*), green ash (*Fraxinus caroliniana*), sweetgum (*Liquidambar styraciflua*), water oak (*Quercus nigra*) and red maple (*Acer rubrum*). These species also occur in the subcanopy and shrub layers, along with cabbage palm (*Sabal palmetto*), river birch (*Betula nigra*), possum haw (*Ilex decidua*), blue-stem palmetto (*Sabal minor*), St. Johns Wort (*Hypericum hypericoides*), Virginia willow (*Itea virginica*), elderberry (*Sambucus canadensis*), green haw (*Crataegus viridis*) and American hornbeam (*Carpinus caroliniana*). The herbaceous component of floodplain forests varies in abundance with time of year, hydrological regime, and shading by woody plants. Herbs were abundant in most floodplain forests visited during this survey, and include slender woodoats (*Chasmanthium laxum*) and Indian woodoats (*C. latifolium*), trailing blackberry (*Rubus trivialis*), sedge (*Carex* spp.), low panic grasses (*Dichanthelium* spp.), horned beakrush (*Rhynchospora corniculata*), giant cane (*Arundinaria gigantea*), and false indigobush (*Amorpha fruticosa*). Ferns are often common, and include netted chain fern (*Woodwardia areolata*), royal fern (*Osmunda regalis*), and sensitive fern (*Onoclea sensibilis*). Climbing fern (*Lygodium japonicum*) was found in several locations. The most commonly seen vine was Poison ivy (*Toxicodendron radicans*). Other vines include coral greenbriar (*Smilax walteri*), muscadine (*Vitis rotundifolia*), summer grape (*Vitis aestivalis*), peppervine (*Ampelopsis arborea*), and occasionally Clematis (*Clematis crispa*). Floodplain forests are seen primarily on river levees in the ARWEA, and quickly grade into lower, wetter floodplain swamp vegetation away from the levees.

**Floodplain marshes** on ARWEA occur within the floodplains of blackwater streams and in small areas within the vast floodplain swamps of the Apalachicola River. These are simple communities composed of sawgrass (*Cladium jamaicense*), and often grade into floodplain forest. Along the Apalachicola River there are also very narrow fringes of bulrush (*Scirpus validus*), arrowhead (*Sagittaria* spp.), and pickerelweed (*Pontederia cordata*) bordering floodplain forests and swamps. These narrow marshes were generally too narrow to map; they occur sporadically throughout the river.

**Floodplain swamps** are riverine forested wetlands inundated or saturated for large portions of the year. In ARWEA this community dominates the Apalachicola River floodplain. The canopy is dominated by bald cypress (*Taxodium distichum*), water tupelo (*Nyssa aquatica*), water hickory (*Carya aquatica*), and ogeechee lime (*Nyssa ogechee*). There are relatively pure stands of these species in permanently inundated areas; in other areas these species occur with a mixture of hardwoods that include red maple (*Acer rubrum*), black gum (*Nyssa biflora*), overcup oak (*Quercus lyrata*), American elm (*Ulmus Americana*), ash (*Fraxinus* spp.), and planer tree (*Planera aquatica*), diamond leaf oak (*Quercus laurifolia*), and sweet bay (*Magnolia virginiana*). Lietman et al. (1984) recognizes these two types of swamps as “tupelo-cypress,” which is inundated for more than 50% of the year, and “tupelo-cypress with mixed hardwoods,” that are similar in elevation, but have increased micro-topography where hummocks of land stay drier than the surrounding lands, allowing a greater variety of hardwoods to occur. Shrubs and small trees include water locust (*Gleditsia aquatica*), stiff cornel (*Cornus foemina*), planer tree (*Planera aquatica*) and Virginia willow (*Itea virginica*). Common herbs seen were swamp dock (*Rumex verticillatus*), lizard’s tail (*Sarurus cernuus*), pickerelweed (*Pontederia cordata*), swamp lily (*Crinum* spp.). Occasionally on the edges of the floodplain swamps and forests, particularly in small areas where sandbars occur at times of low water, black willow (*Salix nigra*) could form dense stands.

In the lower parts of ARWEA, where the Apalachicola River fans out into numerous smaller rivers (for example, the Little St. Marks, St. Marks, and East Rivers), this floodplain swamp vegetation grades almost imperceptibly into freshwater tidal swamp. This inclusion community contains many of the same species as floodplain swamps further upstream, but represents a transition to the tidal marshes. Trees here are more sparse and often fairly stunted, they are dominated by cypress and ogeechee lime, with sweet bay and cabbage palm more prominent than further upstream. The understory in these freshwater tidal swamps is typically yaupon (*Ilex vomitoria*), wax myrtle (*Myrica cerifera*), and red maple (*Acer rubrum*), and many of the same herbaceous species mentioned above for floodplain swamp. The invasive exotic, alligator weed (*Alternanthera philoxeroides*), is very common in the floodplain swamps and freshwater tidal swamps in the lower Apalachicola floodplain.

**Hydric hammocks** on ARWEA are dominated by slash pine and cabbage palm, and occur as forested wetland “fringes” where upland pine lands grade into tidal marshes primarily in the Sand Beach Road area. They also occur as small, low “islands” within marshes and along the shoreline of Blounts Bay and East Bay. Understory species are typically saplings of cabbage palm (*Sabal palmetto*), yaupon (*Ilex vomitoria*), sawgrass (*Cladium jamaicense*), black needlerush (*Juncus romerianus*), wax myrtle (*Myrica cerifera*), and marsh elder (*Iva frutescens*).

**Maritime hammocks** on ARWEA occur in the Sand Beach Road area in narrow bands along the shorelines of Blounts Bay and East Bay. The newly established foot trail at the south end of Sand Beach Road is a nice example. The maritime hammocks seen on ARWEA lands are dominated by live oak (*Quercus virginiana*), with cabbage palm (*Sabal palmetto*), pignut hickory (*Carya glabra*), water oak (*Quercus nigra*), southern magnolia (*Magnolia grandiflora*) also in the canopy. Understory trees and shrubs include southern red cedar (*Juniperus*

*silvicola*), deerberry (*Vaccinium stamineum*), American holly (*Ilex opaca*), yaupon (*Ilex vomitoria*), gum bumelia (*Sideroxylon lanuginosa*), winged sumac (*Rhus coccinea*), saw palmetto (*Serenoa repens*), beautyberry (*Callicarpa americana*), and buckeye (*Aesculus pavia*). Herbs include spikegrass (*Chasmanthium sessiliflorum*), low panic grasses (*Dichanthelium* spp.), beggar's lice (*Desmodium* spp.), coral bean (*Erythrina herbacea*), and milk pea (*Galactia volubilis*). Vines include Virginia creeper (*Parthenocissus quinquefolia*), muscadine (*Vitis rotundifolia*), and greenbrier (*Smilax* spp.). Spanish moss (*Tillandsia usneoides*) and resurrection fern (*Polypodium polypodioides*) are found on the branches of live oaks.

**Mesic flatwoods** are open pinelands that occur on higher ground within the ARWEA, with a low understory composed of varying mixtures of shrubs and grasses. In areas that have been well-burned, shrubs are low in stature, and grasses predominate; less frequently burned areas may be more shrub-dominated, but grasses still persist. On ARWEA mesic flatwoods have all experienced some form of disturbance due to past silvicultural activities, and only rarely are longleaf pine (*Pinus palustris*) found; more typically slash pine (*Pinus elliottii*) are in the canopy and subcanopy layers. Characteristic grasses include wiregrass (*Aristida stricta*), and Florida dropseed (*Sporobolus foridanus*). Characteristic shrubs are saw palmetto (*Serenoa repens*) and gallberry (*Ilex glabra*). Other shrubs found include fetterbush (*Lyonia lucida*), rusty lyonia (*L. fruticosa*), woolly-berry (*Gaylussacia mosteri*), dwarf huckleberry (*G. dumosa*), dwarf runner oak (*Q. minima*), and wicky (*Kalmia hirsuta*). Herbs include rose meadowbeauty (*Rhexia alifanum*), yellow eyed grasses (*Xyris* spp.), golden aster (*Pityopsis oligantha*), blazing star (*Liatris* spp.), deertonque (*Carphephorus odoratissimus*), and occasionally bracken fern (*Pteridium aquilinum*).

**Mesic hammocks** on ARWEA occur in very small patches ("oak domes") within pine plantations or mesic flatwoods. They are characterized by a canopy of live oak (*Quercus virginiana*). Other canopy and subcanopy trees include laurel oak (*Quercus hemisphaerica*), pignut hickory (*Carya glabra*) and cabbage palm (*Sabal palmetto*). Shrubs can be dense and patchy, and include yaupon (*Ilex vomitoria*), saw palmetto (*Serenoa repens*), and wild olive (*Osmanthus americanus*). Herbs are very sparse, but include large-fruited beakrush (*Rhynchospora megalocarpa*). Vines include jessamine (*Gelsimum* sp.), catbrier (*Smilax bonanox*), and muscadine (*Vitis rotundifolia*).

**Pine plantations** make up the majority of the upland areas and a large portion of historic wetland areas in ARWEA. These are large tracts of slash pine and loblolly pine plantation, in a variety of silvicultural stages. These plantations occur in areas were historically wet flatwoods, mesic flatwoods, wet prairie, and bottomland forest. Prior to acquisition by the state, these areas had been subjected to heavy site preparation techniques such as bedding and double roller-chopping. Where recent restoration activities such as thinning and burning have taken place, many of these plantations are beginning to resemble, at least in structure, the historic landscape, although deep beds or large equipment tire ruts remain throughout. When wiregrass and wirey beakrushes were seen in any abundance in a thinned plantation, FNAI classified the plantation as a wet or mesic flatwoods. Where the groundcover was completely dominated by weeds such as broomsedges (*Andropogon* spp.) or weedy shrubs black titi (*Cliftonia monophylla*), white titi (*Cyrilla racemiflora* and *C. racemiflora* var. *parvifolia*), and St. Johns Wort (*Hypericum* spp).

and where wiregrass (*Aristida stricta*) or wirey beakrushes (*Rhynchospora* spp.) were absent, the area was classified as pine plantation, even in these thinned stands. Denser pine plantations typically had very shrubby or vine-dominated understories with dense needle duff; in these plantations very rarely small wiregrass patches were found; although these tiny fragments of native groundcover offer clues to the historic vegetation, their existence was typically not common enough to merit classification of the denser plantation to a natural community type. However these pine plantation polygons, with small inclusions of natural communities, may be good places to target for restoration, as at least some historic groundcover persists, even in small patches. As ecological restoration, primarily prescribe fires and tree thinning take place on the WEA, more areas of wiregrass vegetation will certainly be revealed.

**Sandhill** vegetation is found only in the Magnolia Bluff tract in the southern portion of the ARWEA in two small areas within a larger matrix of scrubby and mesic flatwoods. The canopy is contains older longleaf pine, but is invaded with sand pine (*Pinus clausa*). The understory contains turkey oak (*Quercus laevis*), sand live oak (*Q. geminata*), bluejack oak (*Q. incana*), and saw palmetto (*Serenoa repens*). Herbs are sparse, and include wiregrass (*Aristida stricta*), large-fruited beakrush (*R. megalocarpa*), big threeawn grass (*Aristida condensata*), and low panic grasses (*Dichanthelium* spp.). Lichens are also common.

**Scrubby flatwoods** are found only in the Magnolia Bluff unit. This upland community is similar to mesic flatwoods in structure and species composition, but with more xeric soils that support scattered clumps of myrtle oak (*Quercus myrtifolia*), sand live oak (*Q. geminate*), and Chapman's oak (*Q. chapmani*) in the tall and short shrub layers. Other typical species include saw palmetto (*Serenoa repens*), wiregrass (*Aristida stricta*) and dwarf live oak (*Quercus minima*).

**Strand swamps**, (also known as cypress stringers) are cypress (*Taxodium* spp.) drainage areas that are more shallow than blackwater creek systems; they are typically elongated shallow depressions or channels that are likely to be dry during periods of drought, and thus historically burned. Although very few of these were noted on ARWEA, many more may have existed historically but have been obscured or eliminated by past silvicultural practices. Strand swamp vegetation is characterized by an open cypress canopy, sometimes with fewer slash pines (*Pinus elliotii*) and sweetbay (*Magnolia virginiana*). The subcanopy and shrub layers are variable, often quite sparse, and the herbaceous layer is typically abundant. On ARWEA all strand swamps visited were rutted from heavy equipment used in silvicultural operations in the past. Shrubs in the understory are dominated typically by sandweed St. John's wort (*Hypericum fasciculatum*) and Chapman's St. John's wort (*H. chapmanii*), but other evergreen shrubs such as fetterbush (*Lyonia lucida*), and sweet gallberry (*Ilex coriacea*) may occur. Herbs are dominated by larger leaved beakrushes, such as floodland beakrush (*Rhynchospora imundata*), horned beakrush (*Rhynchospora corniculata*), or head beakrush (*Rhynchospora glomerata*). Other common herbs include yellow-eyed grasses (*Xyris* spp.), hatpins (*Eriocaulon* spp.), and panic grasses (*Panicum* spp.).

**Tidal marshes** are the dominant landscape feature associated with the mouth of the Apalachicola River. These marshes are dominated by saw grass (*Cladium mariscoides*);

however many other species are abundant, and form a vast mosaic of monotypic patches. The most common species include black needle rush (*Juncus roemerianus*), giant cord grass (*Spartina cynosuroides*), cattail (*Typha* spp.), and common reed (*Phragmites australis*). Often on the outer edges of these marshes is a band of great bulrush (*Scirpus validus*), arrowhead (*Sagittaria* spp.), pickerelweed (*Pontedaria cordata*). During survey of these marshes in May, the bright pink blossoms of obedient plant (*Physotegia leptophylla*) were often visible on the edges of these marshes. The invasive exotic, alligator weed (*Alternanthera philoxeroides*), is very common in the tidal marshes in the lower Apalachicola floodplain.

**Upland mixed forest** on ARWEA represents a few areas, and is poorly understood at the present time. This forest type is a mixture of pines and hardwoods, and is likely a result of two scenarios: long term fire exclusion in mesic flatwoods, or mesic hammocks or bottomland forests and have been planted with pines long ago. The best example of this vegetation type is east of the north end of Sand Beach Road; it is an area of that, according to FWC timber stand map data was planted in 1969. The forest is slash pine (*Pinus elliottii*) dominated, with a mixture of hardwoods that include water oak (*Quercus nigra*), sweetgum (*Liquidambar styraciflua*), live oak (*Q. virginiana*), red maple (*Acer rubrum*), and an occasional cabbage palm (*Sabal palmetto*). Beneath the canopy the vegetation is somewhat open, with shrubs that include gallberry (*Ilex glabra*), yaupon (*I. vomitoria*), deerberry (*Vaccinium stamineum*), mayberry (*Vaccinium elliottii*), wax myrtle (*Myrica cerifera*) and sparkleberry (*V. arboreum*). Saw palmetto (*Serenoa repens*) may occur, but is not dominant. Spikegrass (*Chasmanthium sessiliflorum*) is dominant in the groundcover and is abundant. Vines include Jessamine (*Gelsemium sempervirens*), muscadine (*Vitis rotundifolia*).

**Wet flatwoods** on ARWEA have a relatively open canopy of slash pine (*Pinus elliottii*) and an understory that varies widely in structure, from shrub-dominated, to open and grassy. The wettest portions of this map unit include areas of vegetation described on Tate's Hell State Forest as "wet savanna-cypress flats" (Kindell et al., 2000), where cypress (*Taxodium* spp.) may be scattered in the canopy. All examples visited, except those on the Magnolia Bluff tract, had experienced some form of disturbance from past silvicultural practices. Typical shrubs include black titi (*Cliftonia monophylla*), white titi (*Cyrilla racemiflora* var. *parvifolia*), sweet gallberry (*Ilex coriacea*), bitter gallberry (*I. glabra*), wax myrtle (*Myrica cerifera*), woolly-berry (*Gaylussacia mosieri*), and fetterbush (*Lyonia lucida*). In some areas, particularly where wet and mesic flatwoods intergrade, saw palmetto (*Serenoa repens*) can be present, but typically is not as abundant as in better drained mesic flatwoods. St. John's wort (*Hypericum* spp.) is also a common shrub in more open areas, particularly in deeper parts of vehicle ruts and between silvicultural beds. Bamboo vine (*Smilax laurifolia*) is common. Dominant graminoids include wiregrass (*Aristida stricta*), Chapman's beakrush (*Rhynchospora chapmanii*), other beakrushes (*Rhynchospora* spp.), panic grasses (*Panicum* spp.), and nutrushes (*Scleria* spp.). Other herbs are pipeworts (*Eriocaulon* spp.), and yellow-eyed grasses (*Xyris* spp.).

**Wet prairies** are grass- and sedge-dominated wetlands maintained by a high or perched ground water table and frequent fires. They occur in narrow seepage zones of saturated soil at the base of gentle slopes of stream drainages and in flat lowlands. In ARWEA wet prairies are dominated

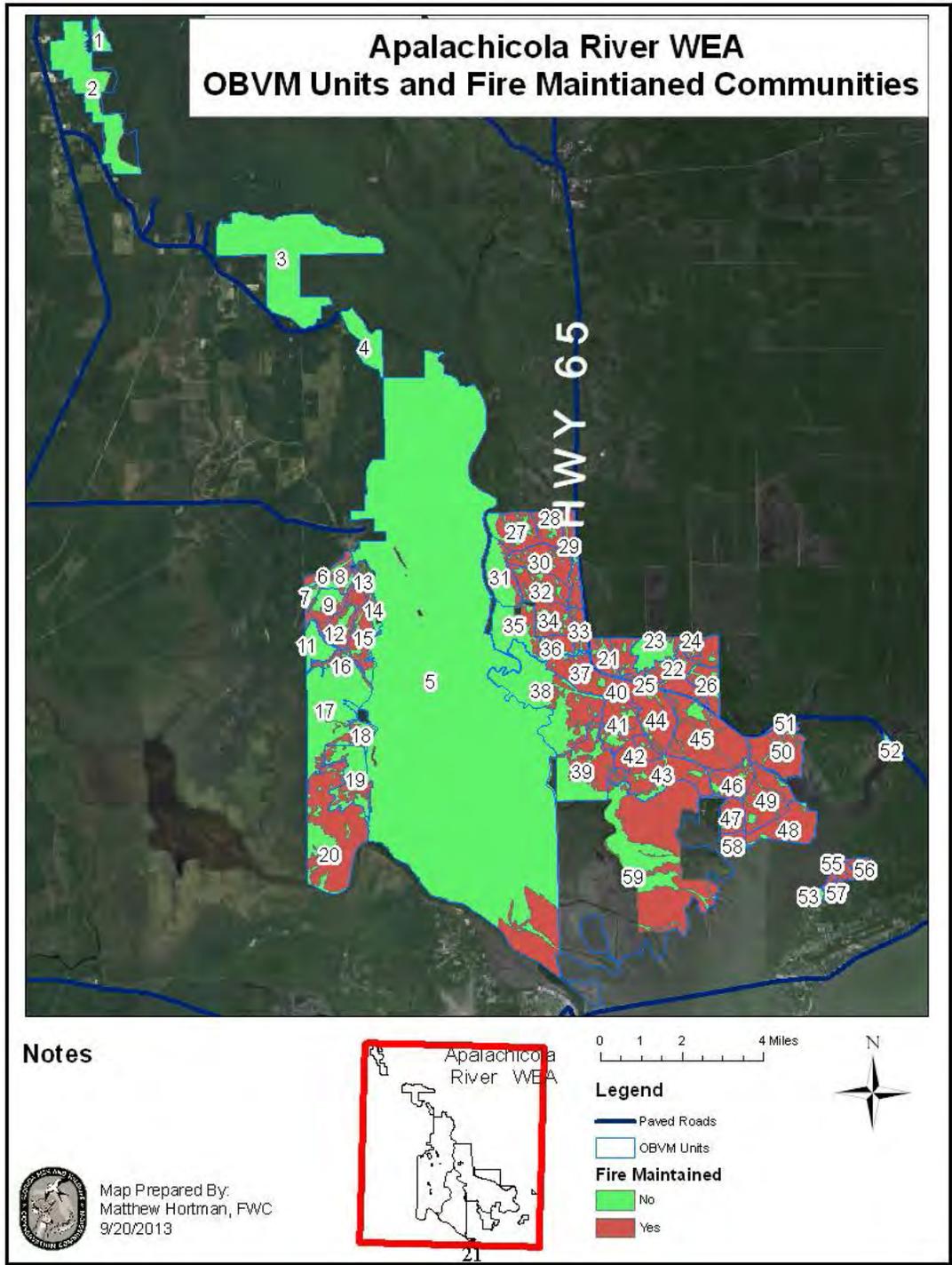
by wiregrass (*Aristida stricta*) and/or wiry beakrushes (*Rhynchospora* spp.), and are generally represented in small fragments within larger pine plantations that serve to offer clues to the historic vegetation. All mapped areas of wet prairie have experienced some sort of disturbance from past silvicultural practices. The largest example occurs in an old pine plantation/clear cut along Pool Loop Hammock Road. The presence of wiry beakrushes such as Chapman's beakrush (*R. chapmanii*), plumed beakrush (*R. plumosa*), or few-flowered beakrush (*R. oligantha*) along with wiregrass is key to identifying areas of wet prairie. Common shrubs are sandweed St. John's wort (*Hypericum fasciculatum*), Chapman's St. John's wort (*H. chapmanii*), and coastal plain St. John's wort (*Hypericum brachyphyllum*). Common herbs are goldcrest (*Lophiola americana*), redroot (*Lacnanthes caroliniana*), sundew (*Drosera capillaris*), yellow meadowbeauty (*Rhexia lutea*), and panic grasses (*Panicum* spp.). The yellow pitcherplant (*Sarracenia flava*) was occasionally seen in wet prairie fragments.

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## **Appendix III**

### **Map and Attribute Table of OBVM units and Fire Dependent Communities**



OBVM Unit ID	OBVM UNIT ACRES Total	Non Fire Maintained Acreage	Fire Maintained Acreage
1	162.9	162.9	0.0
2	1532.3	1532.3	0.0
3	3083.3	3083.3	0.0
4	493.8	493.8	0.0
5	28624.1	27598.2	1026.0
6	186.4	64.3	122.1
7	106.9	52.5	54.4
8	186.9	90.4	96.5
9	418.0	204.6	213.4
10	69.2	5.4	63.8
11	316.5	303.8	12.7
12	345.9	101.4	244.5
13	132.7	5.1	127.6
14	114.6	50.1	64.5
15	522.1	207.5	314.6
16	166.7	53.4	113.3
17	1787.9	1677.3	110.6
18	236.0	166.6	69.4
19	811.4	605.7	205.7
20	2116.1	472.2	1643.9
21	311.0	60.4	250.6
22	871.8	107.8	764.0
23	465.2	406.6	58.6
24	126.6	21.3	105.3
25	340.1	58.8	281.2
26	373.2	103.0	270.2
27	616.2	245.3	370.8
28	351.6	69.8	281.8
29	435.4	104.9	330.5
30	578.3	70.4	507.9
31	608.9	483.8	125.1
32	569.0	123.0	445.9
33	226.6	46.1	180.5
34	471.3	117.2	354.1
35	762.0	573.2	188.7
36	216.1	45.7	170.3
37	653.9	96.0	557.9
38	2012.7	1498.9	513.9
39	1240.4	616.4	624.0

40	216.7	0.0	216.7
41	702.1	157.3	544.9
42	330.1	21.6	308.5
43	1017.1	204.8	812.4
44	738.5	71.5	666.9
45	1515.9	186.6	1329.4
46	485.8	106.2	379.6
47	287.9	36.9	251.1
48	684.4	51.6	632.8
49	835.0	96.2	738.8
50	838.8	91.1	747.6
51	51.7	7.2	44.5
52	93.8	54.6	39.1
53	26.1	26.1	0.0
54	62.2	2.3	59.9
55	76.3	0.0	76.3
56	138.9	35.1	103.8
57	159.2	12.8	146.4
58	141.8	37.4	104.4
59	3873.1	1274.6	2598.5
<b>Total</b>	<b>64919.0</b>	<b>44253.1</b>	<b>20665.9</b>

## **Appendix IV**

### **Example Burn Prescription**

**APALACHICOLA RIVER WEA  
BLOODY BLUFF (North) PRESCRIBED BURN PLAN  
March 7<sup>th</sup>, 2012**

**1. Purpose and Objectives**

The main objective of this burn is to improve the wildlife habitat of the area. Prescribed burning will perpetuate fire adapted vegetative communities and enhance their wildlife value by increasing the abundance and diversity of indigenous wildlife species. It will revert the understory to an earlier successional stage and thus increase the quality and quantity of herbaceous forage. By reducing woody and herbaceous plant competition, the prescribed fire will also benefit the emerging longleaf pine seedlings planted within the Bloody Bluff Tract. In addition to the control of invasive or woody vegetation, another reason for control burning this area is for hazard reduction. Reduced fuel loadings will limit the intensities and frequency of wildfires. It is anticipated that areas with discontinuous, light fuels will not burn thus creating a mosaic vegetative pattern and a variety of cover and feeding sites for wildlife. Reduction of invasive hardwood shrubs in pine plantations and flatwoods communities of 60-80% is desirable. Crown scorch of less than 60% to overstory pines and longleaf pine seedling/sapling mortality of less than 5% are predicted.

**2. Description of Burn Unit**

Area: Bloody Bluff Tract, Franklin County

Burn Units: OBVM Units 6, 7, 39, 40, 43, and 45

Acreage: 3,198 (~500 acres of swamp)

LOCATION:

Section(s)	Township	Range
6, 7, 18	7S	7W
1, 2, 11-14	7S	8W

The center of the burn unit is located approximately ten miles north of the city of Apalachicola. A field based heliport for this burn is located just east of SR-65, across the railroad tracks next to Buck Siding Road, Tate's Hell State Forest (LAT/LON: *N 29° 53' 8.08"*, *W 84° 58' 31.30"*).

The area is bordered by the Apalachicola National Forest to the north, floodplain swamp of the Apalachicola River to the west, State Highway 65 (and Tate's Hell

State Forest) to the east, and Bloody Bluff Road to the south. There are also permanent residents and structures along the southwest boundary of the burn block just south of the Bloody Bluff Road. Bloody Bluff Road, North Boundary Road, SR-65, improved logging roads (named or numbered public access roads), bladed/disked firebreaks, and natural barriers will be used as control lines during the burn. There needs to be sufficient water in the hardwood swamp along the Apalachicola River to contain the proposed burn and act as a perimeter firebreak. OBVM Units 6, 7, 39, 40, 43, and 45 within the Bloody Bluff tract will be burned.

Burn History: The last time the proposed burn area was prescribed burned was in February 2008 using the Commission's helicopter and aerial ignition devices. The area north of Bloody Bluff Road up to the National Forest was burned in February 2008, that portion south of Bloody Bluff Road to Graham Creek was also burned in February 2008. The Bloody Bluff tract has been burned on a 2-4 year rotation since its acquisition in 1994. Prior to the state purchase of Bloody Bluff, the timber companies excluded fire except during site preparation operations for replanting pine plantations. Tate's Hell State Forest (DOF) to the east and the Apalachicola National Forest to the north are burned on a 3-5 year rotation. The federal land adjoining the Bloody Bluff Tract was most recently burned in the March of 2009.

Soils: Soils in the upland areas are composed of poorly drained deep fine sands to loamy sands. Wetland areas are composed of frequently flooded fine sands to deep organics (muck) in marsh habitats.

Plant Communities: Florida Natural Areas Inventory (FNAI) classified the dominant vegetation community types within this burn as pine plantation, wet flatwoods, mesic flatwoods and wet prairie. These communities were planted in slash or loblolly pine and had a residential cut 16 years ago prior to the state purchasing the property. The exact age of the various stands is unknown, but the majority of the remaining overstory pines are pole size timber (4.6 to 9.5 inches) with a crown closure of 50-75%. Approximately 40-70 pine trees per acre remain on site with a BA ranging from 30-50 sq ft. per acre. The height to the bottom of the crown for the slash/loblolly pine overstory is about 30 feet. The understory is a diverse mixture of woody and herbaceous species including titi, wax myrtle, saw palmetto, oaks, gallberry, sweet pepper bush, fetterbush, rusty lyonia, red bay, sweet bay, yaupon, hypericum, broomsedge, little bluestem, wiregrass and variety of other grasses and herbs. Fine fuels are light to absent between bedded rows and in areas of concentrated brush, otherwise fine fuels are generally medium to heavy on the bedded rows. Longleaf pine seedlings have been planted on the bedded rows within the pine plantations.

The upland pineland is interspersed with floodplain swamp, dome swamp, basin swamp, floodplain forest, bottomland forest, baygall, mesic hammock, and one small depression marsh. In particular the floodplain swamp, floodplain forest

and bottomland forest dominate along the western edge of the burn near the Apalachicola River floodplain. The floodplain, basin and dome swamps occur as broad depressions, linear strands or circular domes throughout the burn area. These areas are dominated by cypress, black gum, tupelos, oaks, red maple, and various hardwoods, but can also have slash pine and sweet bay. Floodplain forest and bottomland forest occur on slightly higher elevations in the swamp and have a mixture of hardwoods including red maple, water oak, laurel oak, overcup oak, diamondleaf oak, sweetgum, water hickory, elm, green ash, cabbage palm and loblolly pine. Baygall areas are dense stands of evergreen trees and shrubs that occur in flatwoods depressions. Baygall in the burn area are characterized by thick, nearly impenetrable thickets of evergreen shrubs, primarily black titi and white titi, but includes to a lesser degree bay trees (sweet, swamp and loblolly bays), wax myrtle, fetterbush, gallberry and sweet pepperbush. Wet prairie, although disturbed by past silvicultural practices and planted with slash pine, still retain characteristics of a grass and sedge dominated wetland. Wet prairies are dominated by wiregrass and/or wiry beakrushes with various *Hypericum* species as the most common shrubs. Mesic hammocks occur in very small patches within the pine plantations or mesic flatwoods. They are characterized by live oak and to a lesser degree laurel oak, pignut hickory and cabbage palm. There is one small depression marsh, a herbaceous wetland dominated by sawgrass.

**Fuels:** Fine fuels consist mostly of pine litter, grasses, palmetto fronds, and leaves of woody understory vegetation in the pine areas. The fine fuels (medium to heavy loading) are horizontally continuous on bedded pine rows and light to discontinuous between rows. In many areas the vertical arrangement between understory fine fuels (grasses, pine litter) and midstory shrubs is continuous up to 4 to 5 feet. Some fire shadow areas within the wet flatwoods or baygall ecotones have heavy needle cast, vines and dense titi that may act as undesirable ladder fuels. These potential problem areas are scattered throughout the proposed burn area and especially need to be watched along the North Boundary Road and near the private property on Bloody Bluff Road. The organic humus layer in the pine stands will be monitored to ensure adequate moisture exists prior to ignition in order to minimize duff smolder and residual smoke problems after the burn.

Several sites within the burn boundaries have been roller chopped, or gyro-trac. The sites were chopped in June of 2009 and the gyro-trac and whole tree chipping operation was conducted in late June, early July. The chopped sites in the northwest corner of the burn units are moderately to heavily loaded with pine and titi debris. The gyro-trac and whole tree chipping sites, throughout the burn unit, have low to medium loading as most material was removed from the sites. The roller chopped sites included mesic and wet flatwoods communities while the gyro-trac sites consist of historic wet prairie community.

**Topography:** Flat, with poorly drained sandy soils predominating. Slopes are gradual where the floodplain intergrades into the adjacent uplands. Elevations

can range from a few feet to only inches between uplands and wetlands resulting in dramatic changes in the vegetative communities and fire response. Drainages such as Graham Creek to the south may funnel residual smoke back to the east across State Road 65 at night and will be closely monitored for smoke management.

Special Features: Smoke concentration and drift will be carefully monitored during the burn to ensure problems don't occur or are minimized. Smoke sensitive areas of particular concern are the cities of Apalachicola and Eastpoint, US-98, SR-65, CR-387, Apalachicola airport and Weems hospital (Apalachicola). Smoke caution signs will be employed along SR-65 before the burn and other roads, as necessary.

Other special precautions in addition to monitoring the smoke include protecting private property, houses/structures, campers, and a cemetery along Bloody Bluff Road. At Bloody Bluff Landing (and possibly Van Horn Landing) need to secure vehicles, boat trailers, information sign and trash cans during the burn. Watch for spotovers on state land to the east (Tate's Hell State Forest) and federal land to the north (Apalachicola National Forest). Telephone pedestals and electric poles on Bloody Bluff Road and SR-65 as well as RCW cavity trees in OBVM burn units 6, 7 and 43 will be carefully monitored and secured as necessary. Two apiary lease sites will also need monitoring during the burn. Entrance signs and "named and numbered" road signs on the area will need protection. Logging debris piles and logging ramps along firebreaks will be watched for spotting, firewhirls, and smoke problems. Titi, palmetto fronds, and other volatile fuels along firebreaks will also be observed for spotover problems. Areas with organic layer buildup such as basin swamps, baygall, and other wetland communities will be avoided where possible during the ignition phase and will need to be monitored closely following the burn to detect and extinguish any prolonged ignition. Duff layers will be monitored for adequate moisture levels prior to the burn to avoid extended smolder and residual smoke problems.

**3. Map of Burn Area** (see attached map)

**4. Weather Factors**

Desired Weather Factors	Preferred	Acceptable Range
Surface wind speed	5-12 mph	4-15 mph
Surface wind direction	NE, E, SE	NE, E, SE, S, N
In stand wind speed	1-5 mph	1-9 mph
Transport wind speed	9-15 mph	8-25 mph
Minimum mixing height	>1700 feet	
Dispersion index (day)	35-70	20-85

Dispersion index (night)	3-6	1 (minimum)
Relative humidity	30-50%	25-65%
Maximum temperature		95 degrees F
Fine fuel moisture	8-20%	7-25%
Days since rain (>0.5 inch)	1 (min)	10 (max)

The local National Weather Service and Division of Forestry fire weather forecasts including spot weather forecasts for the burn area will be consulted prior to and the day of the burn. The BehavePlus fuel model with appropriate fuel moisture, weather and terrain variables included will be used to calculate maximum fire rate of spread (chains/hr) and flame height (feet) for the proposed burn.

### 5. Safety

A safety briefing including all items listed in the Pre-Burn Checklist (Action Summary) will be part of the pre-fire briefing. This briefing will provide the burn crew with an opportunity to review and understand the entire burn plan including contingencies, crew assignments, and equipment locations. All personnel need to wear proper fire protective clothing (Personal Protective Equipment) and be aware of escape routes and safety zones during the burn. Holding and firing forces will watch for spotovers, monitor smoke and be on the look out for other potentially hazardous situations. Visitors will be excluded from the interior of the burn during ignition. All communication will be conducted in normal English using hand held radios on talk group "FWC 5". FWC dispatch (wild 4) will be contacted directly for additional support or ambulance service in the event of an emergency medical situation. The helicopter will switch priority to emergency evacuation if necessary. Smoke signs on SR-65 will be located north and south of the burn prior to ignition. Florida Highway Patrol, Franklin County Sheriff's Office, and local FWC Wildlife Officers will be contacted and asked to provide additional patrols in the area during the burn. If wind shifts and smoke significantly impacts the visibility on SR-65, LE officers will slow traffic and implement one-way vehicle traffic, if necessary.

### Emergency Numbers

#### Police:

Florida Highway Patrol	911/245-7739
Franklin County Sheriff's Office	911/670-8500

#### Fire:

Sumatra Volunteer Fire Dept.	670-4757
Eastpoint Volunteer Fire Dept.	911/670-4299

City of Apalachicola Fire Dept.

911/653-4716

Injury: George E. Weems Hospital (Apal.)

653-8853

## **6. Fuel Conditions**

Fine dead fuel moisture is estimated at \_\_\_\_\_ (exposed vs. shaded fuels) based on the "Florida Fuel Moisture Calculation Chart". Target fuels will include all surface fuels in the pine plantations, mesic/wet flatwoods, wet prairies, and wetland ecotones. Non target fuels include organic soils in the floodplain swamps, basin swamps, baygalls, a depression marsh and some logging ramps with old debris piles. Direct ignition of these areas will be avoided as much as possible but close monitoring after the burn will be conducted to detect and extinguish any areas of prolonged ignition, in particular near SR-65 and perimeter firelines. Peat soils and duff layers along with depth to the water table will be monitored to ensure adequate moisture prior to ignition. KBDI (Keech-Byram Drought Index) below 500 and a significant rain (> 0.5 inch) within the last 10 days will lower the risk of peat or duff layer ignition.

## **7. Season and Time of Day**

A growing season burn is preferred for this unit as it received a dormant season burn last rotation due to weather conditions. If a growing season burn is unable to be performed a late dormant season will be conducted in order to keep the units in rotation.

This will be a daytime burn with test fire ignition at approximately 10 AM ET and aerial ignition beginning around noon after an adequate black line is established. The aerial ignition phase of the burn may last well into the late afternoon hours providing lower intensity levels and a more mosaic pattern to the burn.

## **8. Smoke Screening**

Smoke sensitive areas are houses and structures along Bloody Bluff Road (west, adjacent), river traffic along the Apalachicola River (west, adjacent), Howard Creek (west 3 mi), CR-387 (west 3 mi), SR-71 (west 11 mi), Port St. Joe (southwest 17 mi), Apalachicola Airport, city of Apalachicola, and Weems Hospital (south 8.5 mi), US-98 and John Gorrie Bridge (south 8.5 mi), Eastpoint (southeast 9 mi), SR-65 (east, adjacent) and Sumatra (north 8 mi).

The fire boss and weather specialist will monitor smoke drift to insure no problem areas exist, especially on cities, highways, airports, or health centers. SR-65 and CR-387 will be carefully monitored for smoke during the burn. Wind directions (with an easterly component) for both surface and transport winds will be selected to direct smoke away from sensitive areas and SR-65. A minimum mixing height of 1700 feet, transport winds of 9 mph minimum, and a predicted

dispersion index between 35-85 are prescribed to minimize smoke problems. A predicted night dispersion of 3 or more will also assist with alleviating residual smoke problems. Smoke caution signs will be employed along SR-65 and other roads, as necessary.

A smoke management map (attached) identifies smoke sensitive areas, wind directions, and distances from the prescribed burn. On the day of the burn the Division of Forestry Smoke Screening Tool will be utilized to predict smoke drift and potential problem areas from the prescribed burn.

Other special precautions in addition to monitoring the smoke are addressed under "Special Features" in Section 2, "Description of the Burn Unit". In particular, logging debris piles and logging ramps along firebreaks will be watched for spotting, firewhirls, and smoke problems. Titi and other volatile fuels in wetlands near firebreaks will also be observed for spotover problems and residual duff/peat smolder.

## 9. Publicity

The following list identifies the public agencies, organizations, adjacent landowners, and individuals to be notified by phone just prior to the prescribed burn:

U.S. Department of Agriculture Forest Service Apalachicola National Forest P.O. Box 579 Bristol, FL 32321 (Apalach Work Center) Steve Parrish (FMO)	850/643-2282 (main) 850/643-2131 850/926-3561 ext 6523 850/524-1244 (cell)
Fire Dispatch	850/523-8600
Apalachicola National Estuarine Research Reserve (ANERR) Dept. of Environmental Protection Lee Edmiston- Reserve Manager	850/670-7000
Matt Greene-St Joe Bay Buffer Preserve 108 Island Drive East Point, FL 32328	850/229-1787
Department of Agriculture and Consumer Services Division of Forestry Star Route, Box 1	

Carrabelle, FL 32322 850/697-3734  
Victor Rowland 850/519-3333 (cell)  
Forest Area Supervisor (F.A.S.)  
DOF Dispatcher 850/488-1871

Florida Department of Transportation  
17 Commerce Blvd.  
Midway, FL 32343  
Tom Shafer 850/922-7900  
VMS Maint. (Benny Jacobs) 850/544-4023 (cell)

Christopher Wilson (Sharleen)  
P.O. Box 1002 (Scott Road)  
Carrabelle, FL 32322 850/653-6598

A.J. and Maxine L. Taylor  
P.O. Box 353  
464 Bloody Bluff Road  
East Point, FL 32328 850/670-8617

Terry Faircloth  
P.O. Box 108  
468 Bloody Bluff Road 850/670-1070  
East Point, FL 32326 850/670-8997

Stanley and Willette Wilson  
HC1 Box 1261  
Tallahassee, FL 32310 850/962-4102

Franklin County Road Department  
376 Hwy 65  
Eastpoint, FL 32328 850/670-8640  
Hubert Chipman 850/899-7032 (cell)

Franklin County Sheriff's Office  
270 Hwy 65  
Eastpoint, FL 32328 911/670-8500

Apalachicola International  
Aviation Training Center  
8 Airport Road  
Apalachicola, FL 32320 850/653-2222

Florida Highway Patrol  
2100 Mahan Drive  
Tallahassee, FL 32308-6199

Dispatch

850/245-7739

FWC LE Carrabelle Office  
Charlie Wood (acting Lt.)

850/697-3764

In addition, notification flyers identifying the upcoming burn will be distributed to residents along Bloody Bluff Road and recreational users (campers, boaters) at the boat landings so they can secure their equipment or make alternative plans.

#### **10. Legal Requirements**

Authorization will be obtained from DOF the day of the burn. The burn will be conducted under the Certified Prescribed Burn Act and meet all statutory requirements.

**FS 590.125(3) Certified prescribed Burning (Summary)**, this section requires:

1. Certified burn manager be present on site from ignition to completion.
2. A written prescription must be prepared prior to receiving authorization from DOF.
3. Obtain specific consent of landowner or designee prior to authorization.
4. Authorization to burn from DOF prior to ignition.
5. Adequate firebreaks and sufficient personnel and firefighting equipment for the control of the fire.

#### **51-2.006 (2) Certified Prescribed Burn Managers (Summary)**

This section requires that the Certified Prescribed Burn Manager's (CPBM) certificate number be presented at the time of the authorization request and that a CPBM be onsite for the entire burn. The burn prescription will be onsite and available for inspection by a Department of Agriculture representative. This statute also lists the mandatory items that need to be contained and addressed in the prescription, all of which have been met or exceeded by this burn prescription.

In addition, it is the responsibility of the Burn Manager to:

1. Notify DOF at the time when the authorization is secured that the burn is being conducted under the provisions of the Certified Prescribed burn Act.
2. Inspect the burn unit prior to ignition to ensure that improved property and structures will be protected and to ensure that endangered species will not be adversely impacted by the burn.

3. Have a reliable communication link with DOF during the burn.
4. Notify DOF of any problems during the burn. DOF must be notified and immediate assistance requested if the fire escapes from the designated burn unit.
5. Be prepared after notification by DOF to extinguish the prescribed fire in two hours.
6. Be ready to implement contingency plans for any problems which may arise.

There are other legal requirements such as Federal laws pertaining to the Endangered Species Act, DEP Open Burning Rules, and other state laws and regulations that will be strictly adhered to during the burn.

#### **11. Firing Plan**

The firing plan will be finalized the morning of the burn depending on wind speed/direction, vegetation patterns and fire behavior of test burns. A combination of hand and aerial methods will be used during the ignition phase of the prescribed burn. Aerial ignition with the DAID (delayed aerial ignition device) machine will provide the most flexibility in terms of firing patterns, ease of movement across a rough, wet terrain, and the most rapid burn out time for the area.

Bladed or disked firelines (.36 miles) to bare mineral soils will be constructed prior to the scheduled burn date and will be re-inspected immediately prior to the burn.

Ignition will begin after the dew has dried off the grass and leaves, and weather parameters are within the prescription. A test fire within representative fuels will be conducted prior to all firing operations on the down wind corner of the burn perimeter near the anchor point. Only if the test fire is within acceptable limits to accomplish the burn objectives safely will the blackline be established.

The base line will be hand fired with drip torches (terra torch, if available) and secured with a backing fire prior to the aerial ignition. The helicopter will support the blackline operation on the ground by opening all 4 chutes on the DAID and dropping ping-pong balls adjacent to the hand-lit black line to fill in any gaps in the base line. The helicopter will continue to fire as close to the base line as possible on the down wind side of the tract and work upwind flying parallel transects. Spotting densities will be approximately 2-5 ping-pong balls per acre. During fire-spotting operations the helicopter should have a maximum air speed of less than 50 mph at a flying height of 200-300 feet. Hand ignition team members will use backing and flanking fires as the helicopter progresses upwind

to secure turns in the firebreak and problem areas along the burn perimeter. As units within the burn are ignited, the Fire Boss will monitor and evaluate changes in weather or fire effects and adjust the prescription as necessary.

A low to moderate fire intensity is desired during most of the prescribed burn. Wind direction and speed, humidity, fuel loads, fire behavior, and other weather and site conditions will be evaluated throughout the burn. Scorch of 40-60% is anticipated on slash/loblolly pine overstory that remains after the residential cut prior to state acquisition of Bloody Bluff. A cool, low to moderate intensity fire is needed for releasing planted long leaf pines from competition with minimum mortality the planted longleaf pines that are emerging from the grass stage and less than 5 feet in height. Attempts will be made to minimize scorch to overstory oaks, palms and pines in hardwood hammocks.

**12. Equipment and Personnel (Minimum Number)**

EQUIPMENT:  
NUMBER

Helicopter	1
DAID machine, ping pong balls, anti-freeze	1
Brush truck (500 gal)	1
Tractor/Plow	1
ATVs (1 w/ water tank, 1 w/ burn fuel tank)	2
Drip torches	4-6

4x4 vehicles for holding & patrolling firebreaks  
 Fire holding equipment (shovels, flaps, rakes, etc.)  
 Portable water packs  
 Hand radios (one per individual), cell phone (Fire Boss)  
 Personal Protection Equipment

PERSONNEL:

- Approximately 10 individuals will be needed.
- a. Three in helicopter, Pilot, DAID's operator and observer/Fire Boss.
  - b. Ground Supervisor (Weather Specialist)
  - c. One on tractor/plow unit (DOF)
  - d. Five for hand ignition and holding support including brush truck

A burn crew sign-in sheet on the day of the burn will list individuals and their fire training completed. The Burn Manager will be responsible for making sure that the proper training, standards and guidelines are met before individuals assigned to equipment or specific tasks are finalized. Individuals with no formal fire training and designated as "Crew Member Trainee" as outlined in the HSC

Internal Operating Policy for Prescribed Burning and Wildfire Suppression Standards will need to be under the direct supervision of a "Crew Member" that has completed the standard training for that position.

### **13. Contingency, Control and Mop-Up, Declaring Fire Out**

The holding crew will insure that the prescribed fire will not spread outside the designated fire perimeter. They will also direct the public to stay outside the burn area and make sure there are no safety hazards from fire activities and smoke. Areas of volatile fuels (i.e. titi, saw palmetto fronds) and pockets of heavy fuel loadings will be encountered along the North Boundary Road baseline and other perimeter firelines. As these areas are ignited they should be monitored for intense fire behavior and potential spotting outside the burn unit. Ignition crew members will allow the fire to burn away from the baseline under these conditions before resuming ignition along the fireline.

In the event of a spotover fire into any adjacent area, all firing will cease, and the escaped fire will be suppressed immediately with the brush truck, tractor/plow, ATV with water tank, and hand tools. If the fire escapes into an adjoining block of state land it may be burned out with drip torches or the helicopter rather than plowed out. If an escape fire is not contained immediately, the DOF dispatcher will be notified for backup assistance.

After the ignition/suppression phase has been completed the burn mop-up standards will be as follows: (1) extinguish all visible flame within 100 feet of SR-65, and within 50 feet of Bloody Bluff Rd, North Boundary Rd, and Scott Rd, and all perimeter firelines, (2) all spreading fire will be extinguished by 1930, (3) burn out or isolate unburned fuels within the unit adjacent to the fireline, (4) inspect aerial fuels, snags on perimeter firelines, fell snags away from line if necessary, and (5) re-inspect and clean out all firelines. There will be a contentions effort to mop-up all snags, stumps, logs, unburned fuel, and burning peat or duff within 100 feet of SR-65 to prevent residual smoke problems following the burn. Monitoring the burn unit will continue for several days after the burn and additional mop-up will be conducted as necessary to prevent smoke impacts to SR-65.

The fire will be declared out when the following standards are met: (1) mop-up has been completed and meets standards, (2) no combustion observed within burn unit or spotovers for one week, and (3) firelines are in satisfactory condition.

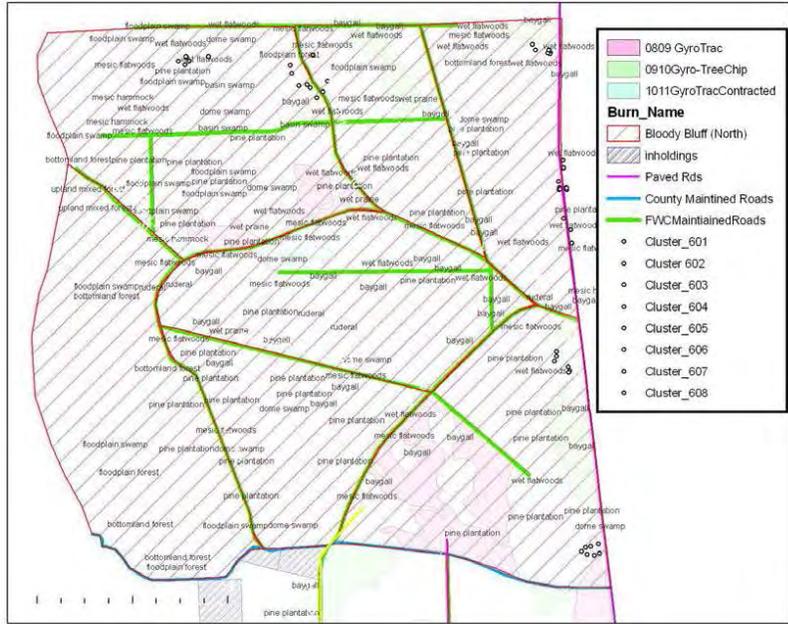
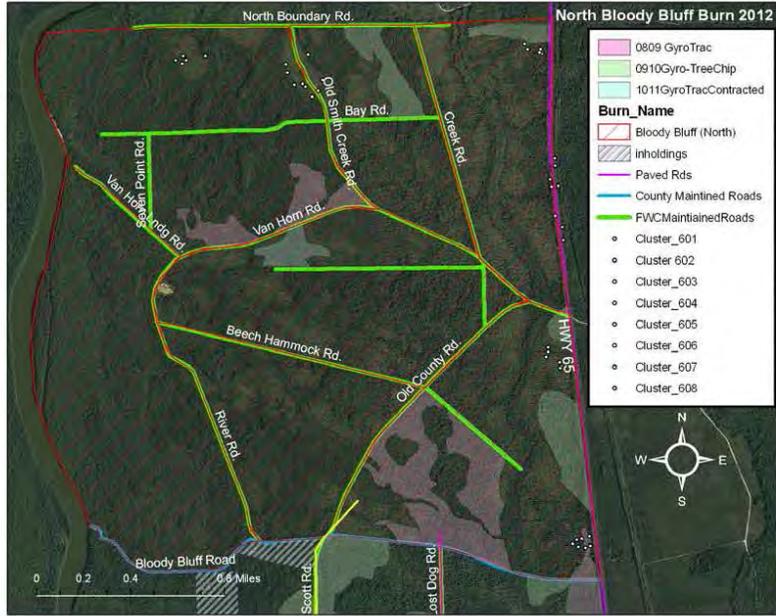
### **14. Evaluation/Monitoring**

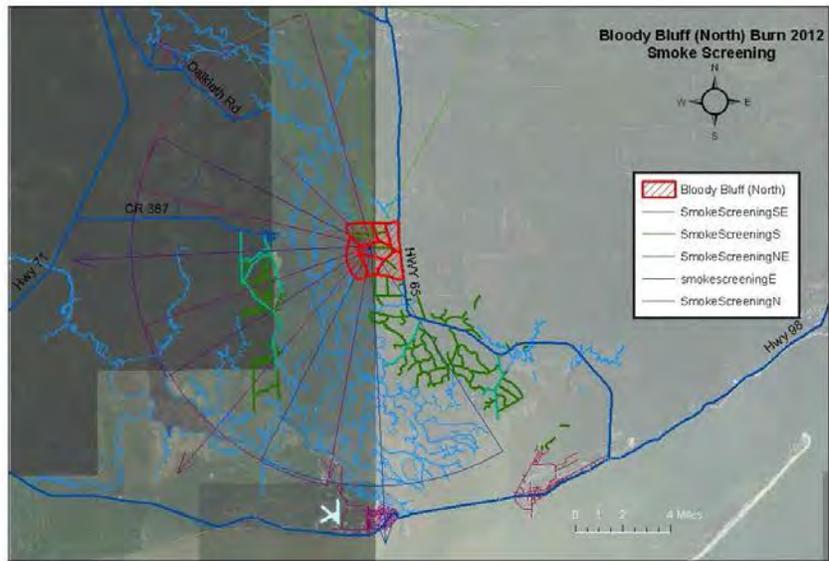
During the burn on site weather conditions will be recorded by the ground supervisor/weather specialist and relayed over the radio every hour. Fire behavior observations will also be monitored and recorded. A post burn evaluation will answer if measurable objectives were met. Before and after photos of the burn will document burn treatments and their effectiveness in

accomplishing restoration and habitat management goals. Analysis will be conducted to determine if burn day conditions were in prescription and if fire behavior was as expected.

Monitoring will be conducted before, during and after the burn. For example environmental conditions, fuel loads, wildlife observations, wildlife surveys, vegetation surveys, soil and duff conditions will be recorded before the burn as pre-treatment condition, then during the burn to determine direct impacts, and finally evaluated after the burn to determine responses to the burn prescription. Vegetative changes in species composition, density and structure in response to fire can be monitored through the Objective-Based Vegetation Monitoring program and stored in the Land Management Information System for future comparisons and analysis.

As part of the post burn evaluation process the actual accomplishments of the prescribed fire will be described and related to the desired objectives in the fire prescription. The evaluation will document and address fire behavior, environmental conditions, ecological results, cost/benefits, operational issues and problem areas which can lead to recommendations to improve future fire prescriptions and meet targeted management goals.







**Special Precautions:** Monitor smoke throughout burn, protect private property and boat landings, watch for spot-overs, and protect RCW trees, telephone pedestals, power poles, apiary lease sites, Bloody Bluff cemetery, entrance signs and road signs.

**Adjacent Landowners to Notify:** DOF, USFS, ANERR, Apalachicola Airport, FDOT, Franklin County Road Dept., FHP, Franklin Co. Sheriff's Office, apiary lease holders, residents along Bloody Bluff Road

PRE-BURN	BURN	POST BURN
WEATHER FACTORS	PREFERRED	ACTUAL
Surface Winds	5-15 mph, NE, E, SE, N, S	
Transport Winds	9 mph minimum	
Minimum Mixing Height	1700 ft	
Dispersion Index (Day)	35-80	
Dispersion Index (Night)	3 +	
Relative Humidity	30-50%	
Maximum Temperature	95° F	
Fine Fuel Moisture	8-20%	
Starting Time	9:30 A.M. EST	
Burn Technique	Backing, flank, spot, strip head (aerial ignition)	
Days Since Rain: 1-10 (3)	Date Burned:	
EVALUATION & MONITORING		
PRE-BURN	BURN	POST BURN
See attachments	See attachments	See attachments
PRE-BURN CHECKLIST		
<p>BURN MANAGER: Initial each item to indicate compliance.</p> <p><input type="checkbox"/> All prescription requisites met (preparation and day of burn)</p> <p><input type="checkbox"/> Authorization obtained</p> <p><input type="checkbox"/> Adjacent landowners notified</p> <p><input type="checkbox"/> Local contacts made day of burn to advise</p> <p><input type="checkbox"/> Smoke screening performed and documented</p> <p><input type="checkbox"/> All equipment required on scene and fully operational</p> <p><input type="checkbox"/> Each crew member has proper personal gear and clothing</p> <p><input type="checkbox"/> Smoke on the Highway signs in place, if needed</p> <p><input type="checkbox"/> Test burn performed and fire behavior within expectations.</p>		
<p><input type="checkbox"/> Objectives of burn</p> <p><input type="checkbox"/> Acreage of burn</p> <p><input type="checkbox"/> Hazards discussed</p> <p><input type="checkbox"/> Crew assignments made</p> <p><input type="checkbox"/> Ignition technique and pattern / Holding methods</p> <p><input type="checkbox"/> Location of extra equipment, fuel, water, vehicle keys</p> <p><input type="checkbox"/> Authority and communications</p> <p><input type="checkbox"/> Contingencies covered including escape routes and procedures</p> <p><input type="checkbox"/> Sources of nearest assistance</p> <p><input type="checkbox"/> Special instructions regarding smoke management, contact with public and others</p> <p><input type="checkbox"/> Questions?</p> <p><input type="checkbox"/> Crew members given opportunity to decline participation</p>		
<b>Prescription Prepared by:</b> Matthew Hortman		<b>Certification Number:</b>
<b>Title:</b> Wildlife Biologist		<b>Signature:</b>
<b>Date:</b> January 28, 2012		<b>Burn Manager:</b> Matthew Hortman

## 13.9 Apiary Agreements

**AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS**

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as "the COMMISSION," and DAX WILLIAMS, of 1616 Wildridge Road, Lynn Haven, Florida, 32444, telephone number 850-871-3531, hereinafter known as "the USER."

**WITNESSETH**

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin upon execution of the agreement and will end three (3) years from the date of execution.
2. The COMMISSION Agrees:
  - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4)(f) below.
  - b. To provide technical assistance for bear-proofing, if required by Area Biologist, of site(s) made available under this Agreement.
  - c. To allow the USER to place a total number of 200 hive boxes on the COMMISSION-managed property at the apiary site(s).
3. The USER Agrees:
  - a. To pay \$160.00 on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Terrestrial Habitat Conservation and Restoration Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.
  - b. To have no more than 200 hive boxes on the property at one time.

- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-19, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.
- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the

COMMISSION, its officers, agents, employees and representatives from any and all claims, losses, damages, injuries and liabilities whatsoever, whether for personal injury or otherwise, resulting from, arising out of or in any way connected with activities under this Agreement or activities occurring from any other source not under this Agreement and the USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands cover by this Agreement.

- l. To construct and maintain electric fences, if required by the Area Biologist at the Area Biologist's discretion, to provide protection of apiaries from black bear depredation consistent with the technical information bulletin attached to this agreement, and, if so required, to maintain an open buffer around the fencing of five (5) feet or more. (See Attachment A, Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage)
- m. To remove all personal property from the site within thirty (30) days of termination or expiration of this Agreement. The USER understands that after this time, all the USER'S personal property remaining on the WMA/WEA shall be deemed abandoned and become the property of the COMMISSION, which will be utilized or disposed of at the sole discretion of the COMMISSION, and that reasonable storage and/or disposal fees and/or costs may be charged to the USER.

4. The parties mutually agree:

- a. This Agreement is not transferable.
- b. The USER's failure to submit payment by the due date established herein may result in cancellation of the Agreement by the COMMISSION.
- c. The USER's failure to submit proof of general liability insurance or proof of annual renewal in compliance with (3)(j) above may result in cancellation of this Agreement by the COMMISSION.
- d. This Agreement shall be in effect for a period of three (3) years and issuance of a new agreement will be contingent upon a satisfactory performance evaluation and approval of the Area Biologist.
- e. Each apiary site shall be situated so as to be at least one-half (1/2) mile inward from state property lines and there shall be at least one (1) mile separation between sites. Exceptions to this rule must be reviewed by Area Biologist

presented to and approved by the Terrestrial Habitat Conservation and Restoration Section Leader.

- f. The CONTRACTOR shall save, hold harmless and indemnify the State of Florida and the COMMISSION against any and all liability, claims, judgments or costs of whatsoever kind and nature for injury to, or death of any person or persons and for the loss or damage to any property resulting from the use, service, operation or performance of work under the terms of this Contract, resulting from the acts or omissions of the CONTRACTOR, his subcontractor, or any of the employees, agents or representatives of the CONTRACTOR or subcontractor.
- g. This Contract with all incorporated attachments and exhibits represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Contract shall only be valid when they have been reduced to writing, and duly signed by each of the parties hereto, unless otherwise provided herein.
- h. The property covered by this Agreement is described as follows: Latitude 29.818473 North and Longitude 85.074229 West in the Saul Creek Unit in the property site(s) on Apalachicola River Wildlife and Environmental Area (WEA) and as represented by the Attachment B map.
- i. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- j. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.
- k. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuations of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last below written.

Day Utter  
USER SIGNATURE

Date: 05/04/12

John [Signature]  
Witness

Jeff [Signature]  
Witness

FLORIDA FISH AND WILDLIFE  
CONSERVATION COMMISSION  
David B. Johnson For Mike Brooks  
Mike Brooks, Section Leader  
Terrestrial Habitat Conservation and  
Restoration

Date: 7/10/12

[Signature]  
Witness

Magda Salinas  
Witness

Approved as to form and legality

Anthony [Signature]  
Commission Attorney

Date: 4/12/12

Attachment A: Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage

Attachment B: Map of Apiary Location for FWC Apiary on Apalachicola River Wildlife and Environmental Area (WEA)

## Attachment A

December 2001



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### Florida Fish and Wildlife Conservation Commission Technical Information Bulletin

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#### **Use of Electric Fencing to Exclude Bears and Prevent Property Damage**

Electric fencing has proven effective in deterring bears from entering landfills, apiaries (beehives), livestock pens, gardens, orchards, and other high-value properties. Numerous electrical fence designs have been used with varying degrees of success. Design, quality of construction, and proper maintenance determine the effectiveness of an electric fence. The purpose of this technical bulletin is to assist the property owner in understanding and implementing electrical fencing as a tool to exclude and prevent damage caused by black bears.

##### **Understanding Electric Fencing**

Electric fencing provides an electrical shock when an animal comes into contact with the electrically charged wires of the fence. People unfamiliar with electric fencing often are afraid that it will injure, permanently damage, or kill an individual or pet that contacts the fence. **This is not true!** A properly constructed electric fence is safe to people, pets, and bears.

##### **Components of Electric Fencing**

An electric fence is composed of four main elements: a charger, fence posts, wire, and the ground rod.

Fence Charger. On a small scale electric fence (like that typically needed for bear exclusion), the largest cost is normally the fence charger. A fence charger's job is to send an electrical pulse into the wire of the fence. Contrary to popular belief, there is not a continuous charge of electricity running through the fence. Instead the charger emits a short pulse or burst of electricity through the fence. The intensity and duration of the electrical pulse varies with the type of charger or controller unit. Chargers with a high-voltage, short duration burst capacity are the best because they are harder to ground out by tall grass and weeds. These types are also the safest, because, even though the voltage is high (5 kilovolts) the duration of the burst is very short (2/10,000 of a second) (FitzGerald, 1984).

Two basic energy sources for chargers are batteries (12-volt automotive type) and household current (110 volt). Battery-type chargers are typically cheaper to purchase but require more maintenance because of the necessity of charging the battery. The advantage of a battery powered charger is that it can be used in a remote location where 110-volt current is not available. Most units that are powered by a fully charged 12-volt deep-cycle batteries can last three weeks before needing a charge. Addition of a solar trickle charger will help prolong the duration of effective charge in 12-volt batteries.

Fence Posts. On small scale fences, the posts are normally the second largest expense involved in construction. Therefore, when planning an electric fence it is a good idea to utilize existing fencing in order to save money. If no existing fence is available, posts will need to be placed around the area needing protection. Posts may be wood, metal, plastic, or fiberglass. Wood and metal posts will need to have plastic insulators attached to them which prevent the electric wire from touching the post causing it to ground out. Plastic and fiberglass posts do not need insulators, the wire may be affixed directly to these posts. Wood and metal posts are typically more expensive and require the added expense of insulators, however, they are more durable and generally require less maintenance.

Wire. Fourteen to seventeen gauge wire is the most common size range used in electric fencing. Heavier wire (a lower gauge number) is more expensive but carries current with less resistance and is more durable (FitzGerald, 1984).

The two most common types of wire are galvanized and aluminum. Galvanized wire is simply a steel wire with a zinc coating to prevent rust, which makes the wire last longer. Some wire is more galvanized than others. The degree or amount of zinc coating that is around the core steel wire is measured in three classes. A class I galvanization means the wire has a thinner coating of zinc than a class II galvanization. Class III galvanized wire has the heaviest zinc coating and will last longer than the class I and class II wire (FitzGerald, 1984). In general, the cost of galvanized wire increases as the class or amount of galvanization increases.

Aluminum wire is typically more expensive than the galvanized wire. Some advantages of aluminum wire are: it will not rust, it conducts electricity four times better, and it weighs one-third less than steel wire.

The Ground Rod. The ground is an often overlooked, but critical part of an electric fence. Without a good ground, electricity will not flow through the wire. When an animal touches a charged wire, the body of the animal completes the electrical circuit and the animal feels the "shock". The current must travel from the charger through the wire to the animal and then back through the ground to the charger if the animal is to feel the shock. The soil acts as the return "wire" (ground) in the circuit. However, if a

bird was to land on a charged wire without touching the soil the bird would not complete the circuit and would be unaffected (FitzGerald, 1984). Some fence configurations use actual grounded wires within the fence to enhance the grounding system.

The ground may be a commercial ground rod or a copper tube or pipe driven six to eight feet in moist soil. Copper is expensive, so a copper coated steel pipe or any other good conducting metal pipe will work also. Very dry soil can effect the ability to create a good ground and has sometimes been a problem during drought conditions. Pipe may be a better choice than a solid rod during drought conditions, because water may be poured down the ground pipe to improve the ground. Some fence configurations use wires as the grounding system, rather than relying solely on the soil as a ground.

#### **Recommended Electric Fence to Deter Black Bears**

Conditions at fence sites will vary and will determine what the most effective fence configuration will be. Commission biologists welcome the opportunity to visit sites and provide custom tailored advice on constructing an effective electric fence. The following recommendation will cover most situations with low to moderate pressure from black bears. Use a five strand aluminum wire fence that is 40 inches high with wire spacing every eight inches apart using the previously mentioned wired grounding system (see Figure 1). The wire closest to the ground level (the lowest wire) should be a charged or "hot" wire. The second wire should be grounded. The third wire should be hot. The fourth wire should be grounded and the fifth wire should be hot. If using metal or wood posts, insulators must be used to keep the hot wires from grounding out. The cost of this type of electric fence utilizing fiberglass posts and a 110 volt fence charger is approximately \$200 for a 40' x 40' area (160 linear feet of fence).

##### Materials:

- 1 - 1, 312 foot roll (1/4 mile) 14 gauge aluminum electric fence wire
- 1 - 50 foot roll 12 gauge insulated wire
- 20 - 5 foot 5/8 inch dia fiberglass fence posts
- 5 - plastic gate handles
- 1 - 110 volt fence charger
- 1 - 10 foot ground pipe
- 4 - plastic electric fence signs

Installation. These instructions are for a square shape fence exclusion, but the process would be very similar for other applications. Drive 4 corner posts 1-foot deep into ground and stake with guy wires. Clip, rake, and keep clear any vegetation in a 15-inch wide strip under the fence and apply herbicide. Attach and stretch the aluminum wire at 8-inch increments starting 8 inches from ground level. A loop of wire

should be left on each wire at the first corner post. Once the wire has been stretched around the outside of all the corner posts back to the first post a plastic gate handle should be attached to each wire and the gate handles should be attached to each corresponding loop on the first corner post. Drive in the remaining 16 posts to the same depth at 8-foot intervals between corner posts. Secure each of the five wires to each of the posts with additional wire. Attach four plastic electric fence signs (one on each side) to the top wire of the fence. Attach a 12-gauge strand of insulated wire to the positive terminal of the fence charger and attach it to the first, third, and fifth wires of the fence. Attach another 12 gauge insulated wire to the negative terminal of the charger and attach this wire to the ground pipe which has been driven into the ground 6 to 8-feet deep. Attach another 12 gauge insulated wire from the negative terminal of the charger to the second and fourth wires on the fence. Plug the charger into a 110 volt power supply and the fence is in operation.

**Tips to improve the effectiveness of your electric fence to deter black bears:**

1. If using a 12-volt fence charger, ensure that the battery is charged; check every two weeks.
2. Make sure terminals on the charger and battery are free of corrosion.
3. Make sure hot wires are not being grounded out by tall weeds, fallen tree branches, broken insulators, etc.
4. If fence wires have been broken and repaired, make sure wires are corrosion free where they have been spliced together. Also, tighten the fence at each corner post as wires that have been spliced and are loose make poor connections.
5. Be sure to rake vegetation from under and around the outside of the fence as this may act as an insulator.
6. To improve the ground around the perimeter of the fence add a piece of 24 inch chicken wire laying on the ground around the outside of the fence. This should be connected to ground.
7. During periods of drought pour water down the ground pipe and around the ground pipe to improve the ground. Digging a 6 inch deep 6 inch diameter hole around the ground pipe and back filling with rock salt will also improve the ground. Additional ground pipes may also be added to portions of the fence farthest from the charger.
8. To ensure that the bear solidly contacts the charged portion of the fence, a bait like bacon strips, a can of sardines, or tin foil with peanut butter may be attached to one of the top hot wires. Make sure these do not contact the ground, thus

shorting out the fence.

9. When protecting a specific structure (like a shed or rabbit hutch), the fence should be placed 3 to 5 feet away from the structure (rather than on it) so that the bear encounters the fence before reaching the attractant.
10. Protect the fence charger from the elements by covering it with a plastic bucket or a wooden box.
11. Place plastic electric fence signs around the perimeter of your fence to improve visibility and to warn other people.

**LITERATURE CITED**

FitzGerald, James (1984), *The Best Fences*. Storey Publishing Bulletin A-92, Pownal, Vermont. p. 14-16.

**AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS**

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as "the COMMISSION," and Donald W. Harcus of 133 Causey Road, Wewahitchka, Florida 32465, telephone number (850) 827-1495, hereinafter known as "the USER."

**WITNESSETH**

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin March 30, 2013 and end on March 29, 2016.
2. The COMMISSION Agrees:
  - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4) (h) below.
  - b. To provide technical assistance for bear-proofing, if required by Area Biologist, of site(s) made available under this Agreement.
  - c. To allow the USER to place a total number of 200 hive boxes on the COMMISSION-managed property at the apiary sites.
3. The USER Agrees:
  - a. To pay \$160 on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Wildlife and Habitat Management Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.
  - b. To have no more than 100 hive boxes on each apiary site property at one time.

- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-19, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.
- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the



presented to and approved by the Wildlife and Habitat Management Section Leader.

- f. The CONTRACTOR shall save, hold harmless and indemnify the State of Florida and the COMMISSION against any and all liability, claims, judgments or costs of whatsoever kind and nature for injury to, or death of any person or persons and for the loss or damage to any property resulting from the use, service, operation or performance of work under the terms of this Contract, resulting from the acts or omissions of the CONTRACTOR, his subcontractor, or any of the employees, agents or representatives of the CONTRACTOR or subcontractor.
- g. This Contract with all incorporated attachments and exhibits represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Contract shall only be valid when they have been reduced to writing, and duly signed by each of the parties hereto, unless otherwise provided herein.
- h. The sites covered by this Agreement are described as being in the vicinity of or at the following latitude and longitude coordinates: The first site is: latitude 29 52.025 and longitude 85 05.303. The second site is latitude 29 53.443 and longitude 85 03.784 in the Apalachicola River Wildlife and Environmental Area and as represented by the Attachment B map.
- i. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- j. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.

- k. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuations of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last below written.

*Donald W. News*  
 USER SIGNATURE

Date: 4.5.13

*Dana Stevens*  
 Witness

*Leanna Roberts*  
 Witness

FLORIDA FISH AND WILDLIFE  
CONSERVATION COMMISSION

*D. B. For*  
 Mike Brooks/ Section Leader  
 Wildlife and Habitat Management

Date: 4/15/13

*Magda Salvia*  
 Witness

*[Signature]*  
 Witness

Approved as to form and legality

*[Signature]*  
 Commission Attorney

Date: 3.5.13

FWC Contract No. 12422

- Attachment A: Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage
- Attachment B: Map of Apiary Location for FWC Apiary on Apalachicola River Wildlife and Environmental Area

**AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS**

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as “the COMMISSION,” and Donald Smiley, of 161 Bozeman Circle, Wewahitchka, Florida, 32465, telephone number 850-814-9953, hereinafter known as “the USER.”

**WITNESSETH**

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin on 3/30/2013 and will end on 3/29/2016.
2. The COMMISSION Agrees:
  - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4) (h) below.
  - b. To provide technical assistance for bear-proofing, if required by Area Biologist, of site(s) made available under this Agreement.
  - c. To allow the USER to place a total number of 150 hive boxes on each apiary site of the COMMISSION-managed property.
3. The USER Agrees:
  - a. To pay \$240 on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Wildlife and Habitat Management Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.
  - b. To have no more than 150 hive boxes on each apiary site property at one time.

- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-19, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.
- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the

COMMISSION, its officers, agents, employees and representatives from any and all claims, losses, damages, injuries and liabilities whatsoever, whether for personal injury or otherwise, resulting from, arising out of or in any way connected with activities under this Agreement or activities occurring from any other source not under this Agreement and the USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands cover by this Agreement.

- i. To construct and maintain electric fences, if required by the Area Biologist at the Area Biologist's discretion, to provide protection of apiaries from black bear depredation consistent with the technical information bulletin attached to this agreement, and, if so required, to maintain an open buffer around the fencing of five (5) feet or more. (See Attachment A, Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage)
- m. To remove all personal property from the site within thirty (30) days of termination or expiration of this Agreement. The USER understands that after this time, all the USER'S personal property remaining on the WMA/WEA shall be deemed abandoned and become the property of the COMMISSION, which will be utilized or disposed of at the sole discretion of the COMMISSION, and that reasonable storage and/or disposal fees and/or costs may be charged to the USER.

4. The parties mutually agree:

- a. This Agreement is not transferable.
- b. The USER's failure to submit payment by the due date established herein may result in cancellation of the Agreement by the COMMISSION.
- c. The USER's failure to submit proof of general liability insurance or proof of annual renewal in compliance with (3) (j) above may result in cancellation of this Agreement by the COMMISSION.
- d. This Agreement shall be in effect for a period of three (3) years and issuance of a new agreement will be contingent upon a satisfactory performance evaluation and approval of the Area Biologist.
- e. Each apiary site shall be situated so as to be at least one-half (1/2) mile inward from state property lines and there shall be at least one (1) mile separation between sites. Exceptions to this rule must be reviewed by Area Biologist

presented to and approved by the Wildlife and Habitat Management Section Leader.

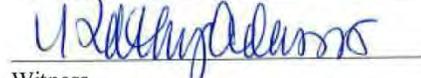
- f. The CONTRACTOR shall save, hold harmless and indemnify the State of Florida and the COMMISSION against any and all liability, claims, judgments or costs of whatsoever kind and nature for injury to, or death of any person or persons and for the loss or damage to any property resulting from the use, service, operation or performance of work under the terms of this Contract, resulting from the acts or omissions of the CONTRACTOR, his subcontractor, or any of the employees, agents or representatives of the CONTRACTOR or subcontractor.
- g. This Contract with all incorporated attachments and exhibits represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Contract shall only be valid when they have been reduced to writing, and duly signed by each of the parties hereto, unless otherwise provided herein.
- h. The sites covered by this Agreement are described as being in the vicinity of or at the following latitude and longitude coordinates: The first site is located at latitude 30 01.850 and longitude 85 09.939. The second site is located at latitude 29 51.139 and longitude 85 03.700 in the Apalachicola River Wildlife and Environmental Area and as represented by the Attachment B maps.
- i. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- j. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.

- k. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuations of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last below written.

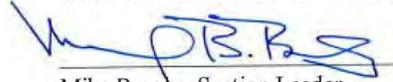
  
 USER SIGNATURE

Date: 3-29-2017

  
 Witness

  
 Witness

FLORIDA FISH AND WILDLIFE  
CONSERVATION COMMISSION

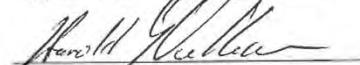
  
 Mike Brooks, Section Leader  
 Wildlife and Habitat Management

Date: 4-5-13

  
 Witness

  
 Witness

Approved as to form and legality

  
 Commission Attorney

Date: 3-5-13

FWC Contract No. 12421

- Attachment A: Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage
- Attachment B: Maps of Apiary Locations for FWC Apiary on Apalachicola River Wildlife and Environmental Area

Page 6 of 6

AMENDMENT NO. 1 TO AGREEMENT

THIS AMENDMENT TO AGREEMENT is entered into by and between the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION ("COMMISSION"), and Watkins Honey, Inc. 50 – 11<sup>th</sup> Street, Apalachicola, FL, 32320, telephone number (850) 653-8979 ("the USER"), and amends the AGREEMENT entered into between the COMMISSION and the USER dated April 5, 2013 and hereinafter referred to as the "ORIGINAL AGREEMENT."

IN CONSIDERATION of the mutual covenants and conditions set forth herein and in the ORIGINAL AGREEMENT, the parties agree to amend the ORIGINAL AGREEMENT as follows, which amendments shall govern to the exclusion of any provision of the ORIGINAL AGREEMENT to the contrary:

1. Section 1, TERM of the ORIGINAL AGREEMENT is hereby amended to read as follows:  
TERM: This Agreement will begin April 5, 2013 and end on April 4, 2016.

Section 2, paragraph c. of the ORIGINAL AGREEMENT is hereby amended to read as follows:

- c. To allow the USER to place a total number of 100 hive boxes on the COMMISSION-managed property at the apiary site.

Section 3, paragraph a. of the ORIGINAL AGREEMENT is hereby amended to read as follows:

- a. To pay \$80 on or before the execution date of this Agreement and each year thereafter on or before the anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to the Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Wildlife and Habitat Management Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

Section 3, paragraph b. of the ORIGINAL AGREEMENT is hereby amended to read as follows:

- b. To have no more that 100 hive boxes on the property at one time.

2. The ORIGINAL AGREEMENT is further amended to add a new paragraph f, in Section 3, which shall read as follows:

f. To maintain the boardwalk at the site during the term of this agreement in a reasonable safe state and to make any necessary repairs to maintain safe use of the boardwalk in a timely manner.

Paragraph f, in Section 3, of the ORIGINAL AGREEMENT is renumbered as Paragraph g.

Paragraph g, in Section 3, of the ORIGINAL AGREEMENT is renumbered as Paragraph h.

Paragraph h, in Section 3, of the ORIGINAL AGREEMENT is renumbered as Paragraph i.

Paragraph i, in Section 3, of the ORIGINAL AGREEMENT is renumbered as Paragraph j.

Paragraph j, in Section 3, of the ORIGINAL AGREEMENT is renumbered as Paragraph k.

Paragraph k, in Section 3, of the ORIGINAL AGREEMENT is deleted in its entirety.

3. The ORIGINAL AGREEMENT is further amended to add a new paragraph f, in Section 4, which shall read as follows:

f. The USER shall save, hold harmless and indemnify the State of Florida and the COMMISSION, its officers, agents, employees, and representatives against any and all liability, claims, judgments or costs of whatsoever kind and nature for injury to, or death of any person or persons and for the loss or damage to any property resulting from the use, service, operation or performance of work under the terms of this Agreement, including the use, service, operation or performance of work related to the boardwalk at the site, resulting from the acts or omissions of the USER, his subcontractor, or any of the employees, agents or representatives of the USER or subcontractor. The USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands covered by this Agreement. This paragraph shall only apply during the entirety of any period of time during which hive boxes are present at the apiary site.

Paragraph f, in Section 4, of the ORIGINAL AGREEMENT is deleted in its entirety.

Section 4, paragraph h, of the ORIGINAL AGREEMENT is hereby amended to read as follows:

h. The site covered by this Agreement is described as being in the vicinity of or at the following latitude and longitude coordinates: In Apalachicola River WEA the site is located: latitude 29 51.238 and longitude 85 01.388; and as represented by the Attachment B map.

Attachment B, of the ORIGINAL AGREEMENT is hereby amended to read as follows: Map of Apiary Location for FWC Apiary on Apalachicola River Wildlife and Environmental Area

All provisions of the ORIGINAL AGREEMENT not specifically amended herein shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have executed this AMENDMENT TO AGREEMENT on the date and year last written below.

George Watkins  
USER SIGNATURE

7/11/13  
Date

Spring Moser  
Witness  
Calvin F. Wat  
Witness

**FLORIDA FISH AND WILDLIFE  
CONSERVATION COMMISSION**

For Mike Brooks Acting Section Leader  
Mike Brooks - Section Leader  
Habitat & Species Conservation

7/9/13  
Date

Scott Sanders  
Witness  
[Signature]  
Witness

APPROVED as to form and legality

Anthony Pignone  
FWC Attorney  
6/24/13  
Date

**AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS**

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as “the COMMISSION,” and T’s Honey, LLC of 8011 Smith Creek Road, Tallahassee, Florida 32310, telephone number (850) 575-8898, hereinafter known as “the USER.”

**WITNESSETH**

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin April 5, 2013 and end on April 4, 2016.
2. The COMMISSION Agrees:
  - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4) (h) below.
  - b. To provide technical assistance for bear-proofing, if required by Area Biologist, of site(s) made available under this Agreement.
  - c. To allow the USER to place a total number of 400 hive boxes on the COMMISSION-managed property at the apiary sites.
3. The USER Agrees:
  - a. To pay \$320 on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Wildlife and Habitat Management Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.
  - b. To have no more than 200 hive boxes on each apiary site property at one time.

- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-19, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.
- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the

COMMISSION, its officers, agents, employees and representatives from any and all claims, losses, damages, injuries and liabilities whatsoever, whether for personal injury or otherwise, resulting from, arising out of or in any way connected with activities under this Agreement or activities occurring from any other source not under this Agreement and the USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands cover by this Agreement.

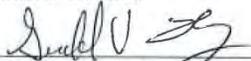
- l. To construct and maintain electric fences, if required by the Area Biologist at the Area Biologist's discretion, to provide protection of apiaries from black bear depredation consistent with the technical information bulletin attached to this agreement, and, if so required, to maintain an open buffer around the fencing of five (5) feet or more. (See Attachment A, Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage)
  - m. To remove all personal property from the site within thirty (30) days of termination or expiration of this Agreement. The USER understands that after this time, all the USER'S personal property remaining on the WMA/WEA shall be deemed abandoned and become the property of the COMMISSION, which will be utilized or disposed of at the sole discretion of the COMMISSION, and that reasonable storage and/or disposal fees and/or costs may be charged to the USER.
4. The parties mutually agree:
- a. This Agreement is not transferable.
  - b. The USER's failure to submit payment by the due date established herein may result in cancellation of the Agreement by the COMMISSION.
  - c. The USER's failure to submit proof of general liability insurance or proof of annual renewal in compliance with (3) (j) above may result in cancellation of this Agreement by the COMMISSION.
  - d. This Agreement shall be in effect for a period of three (3) years and issuance of a new agreement will be contingent upon a satisfactory performance evaluation and approval of the Area Biologist.
  - e. Each apiary site shall be situated so as to be at least one-half (1/2) mile inward from state property lines and there shall be at least one (1) mile separation between sites. Exceptions to this rule must be reviewed by Area Biologist

presented to and approved by the Wildlife and Habitat Management Section Leader.

- f. The CONTRACTOR shall save, hold harmless and indemnify the State of Florida and the COMMISSION against any and all liability, claims, judgments or costs of whatsoever kind and nature for injury to, or death of any person or persons and for the loss or damage to any property resulting from the use, service, operation or performance of work under the terms of this Contract, resulting from the acts or omissions of the CONTRACTOR, his subcontractor, or any of the employees, agents or representatives of the CONTRACTOR or subcontractor.
- g. This Contract with all incorporated attachments and exhibits represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Contract shall only be valid when they have been reduced to writing, and duly signed by each of the parties hereto, unless otherwise provided herein.
- h. The site covered by this Agreement is described as being in the vicinity of or at the following latitude and longitude coordinates: The first site is located: latitude 29 50.929 and longitude 84 59.949 and the second site is located: latitude 29 48.639 and longitude 84 58.865 in the Apalachicola River Wildlife and Environmental Area and as represented by the Attachment B map.
- i. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- j. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.

- k. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuations of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last below written.

  
 USER SIGNATURE

Date: 5/9/13

  
 Witness

  
 Witness

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

  
 Mike Brooks, Section Leader  
 Wildlife and Habitat Management

Date: 5-14-13

  
 Witness

  
 Witness

Approved as to form and legality

  
 Commission Attorney

Date: 3.5.13

FWC Contract No. 12429

Attachment A: Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage

Attachment B: Map of Apiary Locations for FWC Apiary on Apalachicola River Wildlife and Environmental Area

**AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS**

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as “the COMMISSION,” and Stanley Wilson of 382 Ted Langston Road, Sopchoppy, Florida 32359, telephone number (850) 962-4102, hereinafter known as “the USER.”

**WITNESSETH**

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin March 30, 2013 and end on March 29, 2016.
2. The COMMISSION Agrees:
  - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4) (h) below.
  - b. To provide technical assistance for bear-proofing, if required by Area Biologist, of site(s) made available under this Agreement.
  - c. To allow the USER to place a total number of 200 hive boxes on each apiary site of the COMMISSION-managed property.
3. The USER Agrees:
  - a. To pay \$160 on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Wildlife and Habitat Management Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.
  - b. To have no more than 200 hive boxes on each apiary site property at one time.

- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-19, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.
- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the



presented to and approved by the Wildlife and Habitat Management Section Leader.

- f. The CONTRACTOR shall save, hold harmless and indemnify the State of Florida and the COMMISSION against any and all liability, claims, judgments or costs of whatsoever kind and nature for injury to, or death of any person or persons and for the loss or damage to any property resulting from the use, service, operation or performance of work under the terms of this Contract, resulting from the acts or omissions of the CONTRACTOR, his subcontractor, or any of the employees, agents or representatives of the CONTRACTOR or subcontractor.
- g. This Contract with all incorporated attachments and exhibits represents the entire agreement of the parties. Any alterations, variations, changes, modifications or waivers of provisions of this Contract shall only be valid when they have been reduced to writing, and duly signed by each of the parties hereto, unless otherwise provided herein.
- h. The site covered by this Agreement is described as being in the vicinity of or at the following latitude and longitude coordinates: The site is located: latitude 29 53.629 and longitude 85 00.578 in the Apalachicola River Wildlife and Environmental Area and as represented by the Attachment B map.
- i. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- j. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.

- k. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuations of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last below written.

Stanley W. Wilson  
 USER SIGNATURE

Date: 3/29/13

[Signature]  
 Witness

Wesley D. Langston  
 Witness

FLORIDA FISH AND WILDLIFE  
 CONSERVATION COMMISSION

[Signature]  
 Mike Brooks, Section Leader  
 Wildlife and Habitat Management

Date: 4-5-13

[Signature]  
 Witness

[Signature]  
 Witness

Approved as to form and legality

[Signature]  
 Commission Attorney

Date: 3-5-13

FWC Contract No. 12427

- Attachment A: Florida Fish and Wildlife Conservation Commission (FWC) Technical Information Bulletin, December 2001, Use of Electric Fencing To Exclude Bears and Prevent Property Damage
- Attachment B: Map of Apiary Location for FWC Apiary on Apalachicola River Wildlife and Environmental Area

## **13.10 FWC Apiary Policy**

**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION**

# Apiary Policy

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Division of Habitat and Species Conservation

Issued by:  
Terrestrial Habitat Conservation and Restoration Section  
9/1/2010

Enclosed is the HSC/THCR Apiary Policy for all Florida Fish and Wildlife Conservation Commission's Wildlife Management Areas and Wildlife and Environmental Areas.

1:

## DIVISION OF HABITAT AND SPECIES CONSERVATION POLICY

Issued September 2010

**SUBJECT: APIARY SITES ON FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION  
WILDLIFE MANAGEMENT AREAS AND WILDLIFE AND ENVIRONMENTAL AREAS**

**STATEMENT OF PURPOSE:** It is the intent of this policy to determine which Florida Fish and Wildlife Conservation Commission (FWC) Wildlife Management Areas or Wildlife and Environmental Areas (WMA/WEA) may have apiary sites, and provides direction on site location, management and administration of said apiaries.

### Definitions

**Apiary** – A place where bees and beehives are kept, especially a place where bees are raised for their honey.

**Apiary Site** – An area set aside on a WMA/WEA for the purpose of allowing a beekeeper to locate beehives in exchange for a fee as established by contract between the beekeeper and FWC.

**Apiary Wait List** – An apiary wait list will be maintained by the Terrestrial Habitat Conservation and Restoration (THCR) Section Leader's Office based on applications received from interested beekeepers. Only qualified apiarists will be added to the list. To become qualified the new apiarist must submit an application form and meet the criteria below under the section titled "Apiary Wait List and Apiary Application."

**Beekeeper/Apiarist** – A person who keeps honey bees for the purposes of securing commodities such as honey, beeswax, pollen; pollinating fruits and vegetables; raising queens and bees for sale to other farmers and/or for purposes satisfying natural scientific curiosity.

**Best Management Practices** – The Florida Department of Agriculture & Consumer Services (FDACS; Division of Plant Industry (DPI), Apiary Inspection Section, P.O. Box 147100, Gainesville, FL 332614-1416) provides Best Management Practices (BMP) for maintaining European Honey Bee colonies and FWC expects apiarists to follow the BMP.

**Hive/Colony** – Means any Langstroth-type structure with movable frames intended for the housing of a bee colony. A hive typically consists of a high body hive box with cover, honey frames, brood chambers and a bottom board and may have smaller super hive boxes stacked on top for the excess honey storage. A hive/colony includes one queen, bees, combs, honey, pollen and brood and may have additional supers stacked on top of a high body hive box.

### Establishment of Apiary Sites on WMA/WEA

During the development of an individual WMA/WEA Management Plan, apiaries will be considered under the multiple-use concept as a possible use to be allowed on the area. "Approved" uses are deemed to be in concert with the purposes for state acquisition, with the Conceptual State Lands Management Plan, and with the FWC agency mission, goals, and objectives as expressed in the agency strategic plan and priorities documents. Items to consider when making this determination can also include:

- Were apiaries present on the area prior to acquisition?
- Are there suitable available sites on the WMA/WEA?
- Will the apiary assist in pollination of an onsite FWC or offsite (adjacent landowner) citrus grove or other agricultural operation?

For those WMA/WEAs that have not considered apiaries in their Management Plan, upon approval of this policy Regional Staff will work with the Conservation Acquisition and Planning (CAP) staff and THCR Section leadership to determine if apiaries are an approved use on the area. If apiaries are considered an approved use then a request will be made to the Division of State Lands to allow this use as part of an amended Management Plan. This request will be made through the THCR's Section Leader's office and coordinated by the CAP.

Determination of apiary site locations on WMA/WEAs should be done using the following guidelines:

- Apiary sites should be situated so as to be at least one-half mile from WMA/WEA property boundary lines, and at least one mile from any other known apiary site. Exceptions to this requirement must be reviewed by the Area Biologist and presented to the THCR Section Leader for approval.
- Site should be relatively level, fairly dry, and not be prone to flooding when bees would normally be present.
- Site should be accessible by roads which allow reasonable transfer of hives to the site by vehicle.
- If a site is to be located near human activity, such as, an agricultural field, food plot, wildlife opening, campsites, etc., or if the site may be manipulated by machinery at a time when bees would be present, then the apiary site should be located at a minimum of 150 to 200 yards from the edge of that activity. This will ensure minimal disturbance to the bees and minimize incidents with anyone working in the area.

- It is preferable to have apiary sites located adjacent to or off roads whenever possible. If traditional apiary sites were located on roads and the Area Biologist determines that the site will not impact use of the road by visitors then it will be allowed.
- FWC Area Biologist shall select apiary site(s) and the site(s) selected should not require excessive vegetation clearing (numerous large trees, dense shrubs) or ground disturbance (including fill).

#### WMA/WEA Staff Responsibilities

Area Biologist on WMAs/WEAs with approved apiary sites will forward a GIS shapefile depicting all the apiary site polygon(s), including a name or number with coordinates for each apiary site, to the THCR Contract Manager.

Area Biologist will monitor each apiary site no less than once a year to determine if the beekeeper is abiding by the contract requirements. If violations are noted, staff should bring them to the attention of the beekeeper for correction. If violations continue staff should notify the THCR Contract Manager who will determine if or what additional action is warranted.

Area Biologist will establish and maintain firelines around the apiary site to ensure the apiary site is ready when a planned burn is scheduled.

Area Biologist will advise the beekeeper of burn plans, road work, gate closures, or other site conditions and management activities that may affect the beekeeper's ability to manage or access the apiary site.

Area Biologist is not responsible to ensure access roads are in condition suitable for beekeepers to access their hives with anything other than a four wheeled drive vehicle. (The site of the apiary may be high and dry, but the roads accessing them may be difficult to impossible to get a two wheeled drive vehicle into during extreme weather, e.g., heavy rainfall events.)

#### Apiary Wait List and Apiary Application

An electronic waiting list for apiary sites will be maintained by the THCR's Contract Manager for each WMA/WEA. To be placed on the waiting list an interested beekeeper must submit an apiary application form to the contract manager (See Enclosed Application Form). Each applicant will be considered based on the following criteria:

- Proof of a valid registration with the FDACS/DPI.
- Proof of payment of outstanding special inspection fees for existing sites.
- A validated history of being an apiary manager.
- Three references that can attest to the applicant's beekeeping experience.

If an apiary site becomes available on a WMA/WEA and there are beekeepers on the waiting list interested in that particular area, those individuals meeting the criteria above will be given preference. If there is more than one beekeeper meeting the criteria with their name on the list then a random drawing will be held by the THCR Contract Manager to determine who will receive the site. Beekeepers on the waiting list will be notified in writing of the random drawing's date/location and will be invited to attend. The individual's name selected during this drawing will be awarded the contract.

Apiary agreements are non-transferable. Each agreement serves as a contract between a specific individual or company and FWC, and the rights and responsibilities covered by an individual agreement cannot be transferred.

#### Contracts

Apiary contracts are for five (5) years and renewals are contingent upon a satisfactory performance evaluation by Area Biologist and concurrence of the THCR Section Leader. Approval is based on apiarist performance, adherence to rules and regulations and general cooperation. If an Area Biologist decides an apiarist whose contract is expiring is unacceptable he may recommend not approving the new contract. If this transpires then the wait list process using random selection will be used. If there is no apiarist on a current wait list then the apiarists who are in good standing with existing contracts will be notified to see if any want to be put on the wait list for the drawing. If none are interested then the site will be put on hold pending a valid request.

#### Pricing of Apiary Site(s)

Cost of each apiary site will be \$40 annually which will include up to 50 beehives. Additional beehives will be charged at the rate of \$40 per 50 beehives.

Pricing examples:

- A beekeeper is leasing 2 apiary sites with up to 100 beehives - the fee per year is \$80.
- A beekeeper is leasing 3 apiary sites with up to 200 beehives - the fee per year is \$160.

Note: The maximum number of hives/colonies allowed on an apiary site will be at the discretion of the apiarist. However, the apiarist is strongly recommended to follow the BMP as recommended by the FDACS/DPI. In addition to providing the BMP, FDACS/DPI's management has recommended 50 hives per site in pineland communities and no more than 100 hives per site in areas with bountiful resources. However, FWC will not dictate the number of hives on a site unless they create land management issues.

#### Bear Depredation Control at Apiary Site(s)

Beekeepers are required to consult with the WMA/WEA Area Biologist to see if electric fencing is required for their apiary sites. If the Area Biologist requires electric fencing then the

Beekeeper shall construct and maintain electric fences for each apiary site. Numerous electric fence designs have been used to varying success and FWC as a courtesy provides an electric fence technical information bulletin with each Agreement. This bulletin is attached in order to assist the Beekeeper and/or provide a design that has been proven to be reasonable effective.

SUBJECT MATTER REFERENCES

Apiary Inspection Law - Chapter 586, Florida Statutes (see <http://www.leg.state.fl.us/Statutes/>), Rule Chapter 5B-54, Florida Administrative Code (see [www.flrules.org](http://www.flrules.org)).

The Board of Trustees of the Internal Improvement Trust Fund – Recommended Apiary Agreement Guidelines For Apiaries & Revisions to an Agreement for Apiary Activities on State Lands on September 23, 1986  
[S:\HSC\THCR\APIARY.BACKUP.POLICY\dlissupport@dos.state.fl.us\\_20100903\\_111446.pdf](S:\HSC\THCR\APIARY.BACKUP.POLICY\dlissupport@dos.state.fl.us_20100903_111446.pdf)

Senate Resolution 580, September 21, 2006: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109\\_cong\\_bills&docid=f:sr580ats.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:sr580ats.txt.pdf)

Attachments

Sample Apiary Agreement W/Attachments (Map Placeholder & Electric Fence Bulletin)

Sample Apiary Site Application Form W/Mission Statement

Best Management Practices for Maintaining European Honey Bee Colonies

Sample of Random Selection Process Procedure

**APPROVED:**

\_\_\_\_\_  
Division Director or Designee

DATE: \_\_\_\_\_

## APIARY AGREEMENT

### AGREEMENT FOR APIARY ACTIVITIES ON STATE LANDS

THIS AGREEMENT is made by and between the Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600, hereinafter known as "the COMMISSION," and (Insert Name and Address of Apiarist Here), telephone number (Insert Phone Number of Apiarist Here), hereinafter known as "the USER."

#### WITNESSETH

In consideration of the mutual promises to be kept by each and the payments to be made by the USER, the parties agree as follows:

1. TERM: This Agreement will begin (Insert date here) or the date signed by both parties, whichever is later, and will end five (5) years from the date of execution. Issuance of a new five (5) year Agreement is contingent upon satisfactory performance evaluation by the Area Biologist and approval of the THCR Section Leader.
2. The COMMISSION Agrees:
  - a. To provide apiary sites on state lands, which will be identified by the COMMISSION staff and located on the property identified in (4)(f) below.
  - b. To provide technical assistance for bear-proofing, if required by Area Biologist, of sites made available under this Agreement.
  - c. To allow the USER to place a total number of (insert number of hive boxes here) hive boxes on the COMMISSION-managed property at the apiary site(s).
3. The USER Agrees:
  - a. To pay (Insert Total Dollars Here) on or before the execution date of this Agreement and each year thereafter on or before anniversary date of the original contract execution date, with check or money order payable to the Florida Fish and Wildlife Conservation Commission. All payments shall be remitted to The Florida Fish and Wildlife Conservation Commission, Finance and Budgeting, Accounting Section, PO Box 6150, Tallahassee, FL 32399-6150, and a copy of the check to The Florida Fish and Wildlife Conservation Commission, Terrestrial Habit Conservation and Restoration Section, Attn: Section Leader, 620 South Meridian Street, Tallahassee, Florida 32399-1600.

- b. To have no more than (Insert Number of Hive boxes here) hive boxes on the property at one time.
- c. To comply with the Florida Honey Certification and Honeybee Law, Chapter 586, Florida Statutes, and Rule 5B-54, Florida Administrative Code, and all other applicable federal, state, or local laws, rules or ordinances.
- d. To not damage, cut or remove any trees in the course of preparing for or conducting operations under this Agreement.
- e. To repair within 30 days of occurrence any damage to roads, trails, fences, bridges, ditches, or other public property caused by USER'S operations under this Agreement based on discretion of the COMMISSION to ensure the WMA/WEA management goals are met. All repairs will be coordinated with the Area Biologist to ensure management goals are met. If USER does not comply within the 30 day requirement, then the COMMISSION may use a third party to perform the repairs and charge the USER accordingly.
- f. To report any forest fires observed and to prevent forest fires during the course of operations under this Agreement.
- g. To abide by all WMA/WEA rules and regulations in addition to items in this Agreement.
- h. To notify the Area Biologist within 24 hours when a bear depredation event occurs.
- i. To post their name in an agreed upon location at each site covered by this Agreement or otherwise use an identifying system that is approved by the Area Biologist.
- j. To furnish proof of general liability insurance prior to starting apiary activities on state property or within 30 days of execution of this Agreement, whichever is earlier, and proof of annual renewal of the general liability insurance policy prior to or upon expiration date of the policy. The USER shall maintain continuous general liability insurance throughout the term of this Agreement for no less than \$300,000 for bodily injury and \$100,000 for property damage for each occurrence. Such a policy shall name the COMMISSION as the Certificate Holder. The USER's current certificate of insurance shall contain a provision that the insurance will not be canceled for any reason during the term of this Agreement except after thirty (30) days written notice to the COMMISSION.

- k. To be liable for all damage to persons or property resulting from operations under this Agreement, and to release, acquit, indemnify, save and hold harmless the COMMISSION, its officers, agents, employees and representatives from any and all claims, losses, damages, injuries and liabilities whatsoever, whether for personal injury or otherwise, resulting from, arising out of or in any way connected with activities under this Agreement or activities occurring from any other source not under this Agreement and the USER further agrees to assume all risks of loss and liabilities incidental to any natural or artificial condition occurring on state lands cover by this Agreement.
- l. To construct and maintain electric fences, if required by the Area Biologist at the Area Biologist's discretion, to provide protection of apiaries from black bear depredation consistent with the technical information bulletin attached to this agreement, and, if so required, to maintain an open buffer around the fencing of five (5) feet or more. (See Attachment 1)
- m. To remove all personal property from the site within thirty (30) days of termination or expiration of this Agreement. The USER understands that after this time, all the USER'S personal property remaining on the WMA/WEA shall be deemed abandoned and become the property of the COMMISSION, which will be utilized or disposed of at the sole discretion of the COMMISSION, and that reasonable storage and/or disposal fees and/or costs may be charged to the USER.

4. The parties mutually agree:

- a. This Agreement is not transferable.
- b. The USER's failure to submit payment by the due date established herein may result in cancellation of the Agreement by the COMMISSION.
- c. The USER's failure to submit proof of general liability insurance or proof of annual renewal in compliance with (3) (j) above may result in cancellation of this Agreement by the COMMISSION.
- d. This Agreement shall be in effect for a period of five (5) years and issuance of a new agreement will be contingent upon a satisfactory performance evaluation and approval of the Area Biologist and THCR Section Leader.
- e. Each apiary site shall be situated so as to be at least one-half (1/2) mile inward from state property lines and there shall be at least one (1) mile separation between sites. Exceptions to this rule must be reviewed by Area Biologist

presented to and approved by the Terrestrial Habitat Conservation and Restoration Section Leader.

- f. The property covered by this Agreement is described as follows: That the property sites (Insert Area Name) Wildlife Management Area are represented by Attachment 2.
- g. In accordance with Section 287.134, Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal or reply on a contract to provide goods or services to any public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant with any public entity; and may not transact business with a public entity.
- h. As part of the consideration of this Agreement, the parties hereby waive trial by jury in action brought by either party pertaining to any matter whatsoever arising out of or in any way connected with this Agreement. Exclusive venue for all judicial actions pertaining to this Agreement is in Leon County, Florida.
- i. This Agreement may be terminated by the COMMISSION upon thirty (30) days written notice to the USER in the event the continuation of the apiary activities are found to be incompatible with the COMMISSION'S management plans or for any other reason at the sole discretion of the COMMISSION.

**This Area Intentionally Left Blank**

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year last below written.

\_\_\_\_\_  
USER SIGNATURE

Date: \_\_\_\_\_

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Witness

FLORIDA FISH AND WILDLIFE  
CONSERVATION COMMISSION

\_\_\_\_\_  
Mike Brooks, Section Leader  
Terrestrial Habitat Conservation and  
Restoration

Date: \_\_\_\_\_

Approved as to form and legality

\_\_\_\_\_  
Commission Attorney

Date: \_\_\_\_\_

**AGREEMENT**  
**ATTACHMENT 1**

**Use of Electric Fencing to Exclude Bears  
And Prevent Property Damage**

Florida Fish and Wildlife Conservation Commission  
Technical Information Bulletin (2001)

Electric fencing has proven effective in deterring bears from entering landfills, apiaries (beehives), livestock pens, gardens, orchards, and other high-value properties. Numerous electrical fence designs have been used with varying degrees of success. Design, quality of construction, and proper maintenance determine the effectiveness of an electric fence. The purpose of this technical bulletin is to assist the property owner in understanding and implementing electrical fencing as a tool to exclude and prevent damage caused by black bears.

**Understanding Electric Fencing**

Electric fencing provides an electrical shock when an animal comes into contact with the electrically charged wires of the fence. People unfamiliar with electric fencing often are afraid that it will injure, permanently damage, or kill an individual or pet that contacts the fence. **This is not true!** A properly constructed electric fence is safe to people, pets, and bears.

**Components of Electric Fencing**

An electric fence is composed of four main elements: a charger, fence posts, wire, and the ground rod.

**Fence Charger.** On a small scale electric fence (like that typically needed for bear exclusion), the largest cost is normally the fence charger. A fence charger's job is to send an electrical pulse into the wire of the fence. Contrary to popular belief, there is not a continuous charge of electricity running through the fence. Instead the charger emits a short pulse or burst of electricity through the fence. The intensity and duration of the electrical pulse varies with the type of charger or controller unit. Chargers with a high-voltage, short duration burst capacity are the best because they are harder to ground out by tall grass and weeds. These types are also the safest, because, even though the voltage is high (5 kilovolts) the duration of the burst is very short (2/10,000 of a second) (FitzGerald, 1984).

Two basic energy sources for chargers are batteries (12-volt automotive type) and household current (110 volt). Battery-type chargers are typically cheaper to purchase but require more maintenance because of the necessity of charging the battery. The advantage of a battery powered charger is that it can be used in a remote location where 110-volt current is not available. Most units that are powered by a fully charged 12-volt deep-cycle batteries can last three weeks before needing a charge. Addition of a solar trickle charger will help prolong the duration of effective charge in 12-volt batteries.

**Fence Posts.** On small scale fences, the posts are normally the second largest expense involved in construction. Therefore, when planning an electric fence it is a good idea to utilize existing fencing in order to save money. If no existing fence is available, posts will need to be placed around the area needing protection. Posts may be wood, metal, plastic, or fiberglass. Wood and metal posts will need to have plastic insulators attached to them which prevent the electric wire from touching the post causing it to ground out. Plastic and fiberglass posts do not need insulators, the wire may be affixed directly to these posts. Wood and metal posts are typically more expensive and require the added expense of insulators, however, they are more durable and generally require less maintenance.

**Wire.** Fourteen to seventeen gauge wire is the most common size range used in electric fencing. Heavier wire (a lower gauge number) is more expensive but carries current with less resistance and is more durable (FitzGerald, 1984).

The two most common types of wire are galvanized and aluminum. Galvanized wire is simply a steel wire with a zinc coating to prevent rust, which makes the wire last longer. Some wire is more galvanized than others. The degree or amount of zinc coating that is around the core steel wire is measured in three classes. A class I galvanization means the wire has a thinner coating of zinc than a class II galvanization. Class III galvanized wire has the heaviest zinc coating and will last longer than the class I and class II wire (FitzGerald, 1984). In general, the cost of galvanized wire increases as the class or amount of galvanization increases.

Aluminum wire is typically more expensive than the galvanized wire. Some advantages of aluminum wire are: it will not rust, it conducts electricity four times better, and it weighs one-third less than steel wire.

**The Ground Rod.** The ground is an often overlooked, but critical part of an electric fence. Without a good ground, electricity will not flow through the wire. When an animal touches a charged wire, the body of the animal completes the electrical circuit and the animal feels the "shock". The current must travel from the charger through the wire to the animal and then back through the ground to the charger if the animal is to feel the shock. The soil acts as the return "wire" (ground) in the circuit. However, if a

bird was to land on a charged wire without touching the soil the bird would not complete the circuit and would be unaffected (FitzGerald, 1984). Some fence configurations use actual grounded wires within the fence to enhance the grounding system.

The ground may be a commercial ground rod or a copper tube or pipe driven six to eight feet in moist soil. Copper is expensive, so a copper coated steel pipe or any other good conducting metal pipe will work also. Very dry soil can effect the ability to create a good ground and has sometimes been a problem during drought conditions. Pipe may be a better choice than a solid rod during drought conditions, because water may be poured down the ground pipe to improve the ground. Some fence configurations use wires as the grounding system, rather than relying solely on the soil as a ground.

#### **Recommended Electric Fence to Deter Black Bears**

Conditions at fence sites will vary and will determine what the most effective fence configuration will be. Commission biologists welcome the opportunity to visit sites and provide custom tailored advice on constructing an effective electric fence. The following recommendation will cover most situations with low to moderate pressure from black bears. Use a five strand aluminum wire fence that is 40 inches high with wire spacing every eight inches apart using the previously mentioned wired grounding system (see Figure 1). The wire closest to the ground level (the lowest wire) should be a charged or "hot" wire. The second wire should be grounded. The third wire should be hot. The fourth wire should be grounded and the fifth wire should be hot. If using metal or wood posts, insulators must be used to keep the hot wires from grounding out. The cost of this type of electric fence utilizing fiberglass posts and a 110 volt fence charger is approximately \$200 for a 40' x 40' area (160 linear feet of fence).

#### **Materials:**

- 1 - 1, 312 foot roll (1/4 mile) 14 gauge aluminum electric fence wire
- 1 - 50 foot roll 12 gauge insulated wire
- 20 - 5 foot 5/8 inch dia fiberglass fence posts
- 5 - plastic gate handles
- 1 - 110 volt fence charger
- 1 - 10 foot ground pipe
- 4 - plastic electric fence signs

Installation. These instructions are for a square shape fence exclusion, but the process would be very similar for other applications. Drive 4 corner posts 1-foot deep into ground and stake with guy wires. Clip, rake, and keep clear any vegetation in a 15-inch wide strip under the fence and apply herbicide. Attach and stretch the aluminum wire at 8-inch increments starting 8 inches from ground level. A loop of wire should be left on each wire at the first corner post. Once the wire has been stretched around the outside of all the corner posts back to the first post a plastic gate handle should be attached to each wire and the gate handles should be attached to each

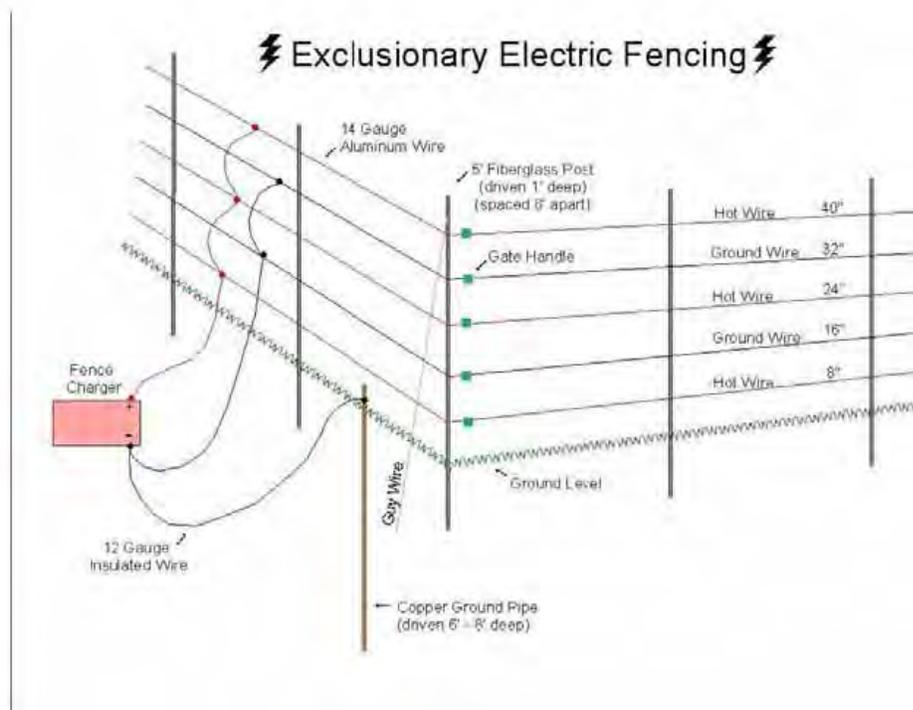
corresponding loop on the first corner post. Drive in the remaining 16 posts to the same depth at 8-foot intervals between corner posts. Secure each of the five wires to each of the posts with additional wire. Attach four plastic electric fence signs (one on each side) to the top wire of the fence. Attach a 12-gauge strand of insulated wire to the positive terminal of the fence charger and attach it to the first, third, and fifth wires of the fence. Attach another 12 gauge insulated wire to the negative terminal of the charger and attach this wire to the ground pipe which has been driven into the ground 6 to 8-feet deep. Attach another 12 gauge insulated wire from the negative terminal of the charger to the second and fourth wires on the fence. Plug the charger into a 110 volt power supply and the fence is in operation.

**Tips to improve the effectiveness of your electric fence to deter black bears:**

1. If using a 12-volt fence charger, ensure that the battery is charged; check every two weeks.
2. Make sure terminals on the charger and battery are free of corrosion.
3. Make sure hot wires are not being grounded out by tall weeds, fallen tree branches, broken insulators, etc.
4. If fence wires have been broken and repaired, make sure wires are corrosion free where they have been spliced together. Also, tighten the fence at each corner post as wires that have been spliced and are loose make poor connections.
5. Be sure to rake vegetation from under and around the outside of the fence as this may act as an insulator.
6. To improve the ground around the perimeter of the fence add a piece of 24 inch chicken wire laying on the ground around the outside of the fence. This should be connected to ground.
7. During periods of drought pour water down the ground pipe and around the ground pipe to improve the ground. Digging a 6 inch deep 6 inch diameter hole around the ground pipe and back filling with rock salt will also improve the ground. Additional ground pipes may also be added to portions of the fence farthest from the charger.
8. To ensure that the bear solidly contacts the charged portion of the fence, a bait like bacon strips, a can of sardines, or tin foil with peanut butter may be attached to one of the top hot wires. Make sure these do not contact the ground, thus shorting out the fence.
9. When protecting a specific structure (like a shed or rabbit hutch), the fence should be placed 3 to 5 feet away from the structure (rather than on it) so that the bear encounters the fence before reaching the attractant.
10. Protect the fence charger from the elements by covering it with a plastic bucket or a wooden box.
11. Place plastic electric fence signs around the perimeter of your fence to improve visibility and to warn other people.

**LITERATURE CITED**

FitzGerald, James (1984), *The Best Fences*. Storey Publishing Bulletin A-92, Pownal, Vermont. p. 14-16.



**AGREEMENT**  
**ATTACHMENT 2**

**Place Holder for Map**

**Of**

**Apiary Locations**

**At**

**WMA/WEA**

## APIARY SITE APPLICATION FORM

### Florida Fish and Wildlife Conservation Commission

**RETURN TO:** The Florida Fish and Wildlife Conservation Commission, 620 South Meridian Street, Tallahassee, FL 32399-1600. Please print or type all information. Attach additional sheets if necessary.

Name \_\_\_\_\_ Telephone Number \_\_\_\_\_

Mailing Address \_\_\_\_\_

City or Town \_\_\_\_\_ County \_\_\_\_\_ Zip Code \_\_\_\_\_

Physical Address (If Different from Mailing Address) \_\_\_\_\_

Company Name: \_\_\_\_\_

Email Address \_\_\_\_\_

Requested Wildlife Management or Wildlife and Environmental Area(s) (see attached list of WMA/WEAs with apiary sites):

WMA/WEA \_\_\_\_\_ County \_\_\_\_\_ # of Sites \_\_\_\_\_

WMA/WEA \_\_\_\_\_ County \_\_\_\_\_ # of Sites \_\_\_\_\_

WMA /WEA \_\_\_\_\_ County \_\_\_\_\_ # of Sites \_\_\_\_\_

WMA /WEA \_\_\_\_\_ County \_\_\_\_\_ # of Sites \_\_\_\_\_

Planned Number of Hives Per Site: \_\_\_\_\_ Permanent: \_\_\_ Seasonal: \_\_\_\_\_

Member of Beekeepers Association: Yes \_\_\_ No \_\_\_

Number of Years a Member \_\_\_\_\_

Name of Beekeepers Association: \_\_\_\_\_

Are you registered with Florida Department of Agriculture and Consumer Services/Division of Plant Industry (FDACS/DPI): \_\_\_ Yes \_\_\_ No \_\_\_ N/A If yes, please provide proof.

Are you current with any and all special inspection fees: \_\_\_ Yes \_\_\_ No \_\_\_ N/A. If yes, please provide proof.

Do you follow all recommended Best Management Practices from FDACS/DPI?: \_\_\_ Yes \_\_\_ No

If no, then please explain on a separate piece of paper.

Please provide below a chronological history of your beekeeping experience. If you need more space, please provide additional sheets:

**References:** If a new apiary contractor, please provide on a separate piece of paper at least 3 references who can verify your apiary experience. Provide each reference's name, address, phone number and email address (if applicable). Please attach reference sheet to this document and submit.

## **MISSION STATEMENT**

**Management  
Of  
Florida Fish and Wildlife Conservation Commission's  
Wildlife Management Areas  
And  
Wildlife and Environmental Areas**

The mission of the Florida Fish and Wildlife Conservation Commission (FWC) is to manage fish and wildlife resources for their long-term well-being and the benefit of the people. To aid in accomplishing this mission, one of FWC's management goals is to manage fire-adapted natural communities on our Wildlife Management and Environmental Areas (WMA/WEA) to support healthy populations of the plants and animal's characteristic of each natural community. In order to achieve this goal various habitat management techniques are used. These include prescribed burning, applications of herbicides and mechanical treatment of vegetation. These management efforts will take place at various times and locations on each of the FWC's WMA/WEAs. Staff on each WMA/WEA will work with and make users aware of these activities when necessary. Users must be aware and accept that these activities are necessary for the proper management of the area.

Note: This document is included as an attachment with each Application and executed Contract.

## **FDACS/DPI's BMP**

### **Florida Department of Agriculture & Consumer Services**

#### **BEST MANAGEMENT PRACTICES FOR**

#### **MAINTAINING EUROPEAN HONEY BEE COLONIES**

1. Beekeepers will maintain a valid registration with the Florida Department of Agriculture and Consumer Services/Division of Plant Industry (FDACS/DPI), and be current with any and all special inspection fees.
2. A Florida apiary may be deemed as European Honey Bee with a minimum 10% random survey of colonies using the FABIS (Fast African Bee Identification System) and/or the computer-assisted morphometric procedure (i.e., Universal system for the detection of Africanized Honey Bees (AHB) (USDA-ID) or other approved methods by FDACS on a yearly basis or as requested.
3. Honey bee colony divisions or splits should be queened with production queens or queen cells from EHB breeder queens following Florida's Best Management Practices.
4. Florida beekeepers are discouraged from collecting swarms that cannot be immediately re-queened from EHB queen producers.
5. Florida Beekeepers should practice good swarm-prevention techniques to prevent an abundance of virgin queens and their ready mating with available AHB drones that carry the defensive trait.
6. Maintain all EHB colonies in a strong, healthy, populous condition to discourage usurpation (take over) swarms of AHB.
7. Do not allow any weak or empty colonies to exist in an Apiary, as they may be attractive to AHB swarms.
8. Recommend re-queening with European stock every six months unless using marked or clipped queens and having in possession a bill of sale from an EHB Queen Producer.
9. Immediately re-queen with a European Queen if previously installed clipped or marked queen is found missing.
10. Maintain one European drone source colony (250 square inches of drone comb) for every 10 colonies in order to reduce supercedure queens mating with AHB drones.
11. To protect public safety and reduce beekeeping liability, do not site apiaries in proximity of tethered or confined animals, students, the elderly, general public, drivers on public roadways, or visitors where this may have a higher likelihood of occurring.
12. Treat all honey bees with respect.

**RANDOM**  
**SELECTION PROCESS**  
**FOR VACANT APIARY SITE**

When an apiary site becomes available the following procedure is used to randomly select the next apiarist (beekeeper) for an available apiary site on a WMA or WEA. Only those who have been evaluated and deemed qualified to be an apiarist on a WMA/WEA through the Apiary Application process will be eligible for this selection process. The steps below will be followed by the THCR Contract Manager when a site becomes available to be filled by a qualified apiarist:

1. The THCR Contract Manager will maintain an "Apiary Wait List Folder" on the THCR SharePoint for each WMA/WEA with apiary sites.
2. A wait list is either created or updated when an Apiary Application(s) is received by the THCR Contract Manager from a qualified apiarist.
3. Upon receipt of an apiary site application, the THCR Contract Manager will review the WMA/WEA folder to see if there is an "Apiary Wait List".
4. If a list exists then the qualified applicant will be added to the list.
5. When an apiary site becomes available if there are more than one qualified apiarist then these apiarists will be contacted by certified letter to determine their interest.
6. The letter will request a response within 10 working days to make them eligible for the random drawing.
7. If there is no response or is negative then that apiarist will not be included in the random drawing and the name will be removed from the waiting list\*.
8. If only one apiarist responds positively to the certified letter then the available site will be awarded to that interested apiarist.
9. If there are no apiarists on a wait list or all responses are negative then apiarists who currently have site(s) under Agreement and where not on the waiting list will be contacted to see if any have interest in the available site. If more than one responds then the random drawing process will be used to determine who will be awarded the site.

10. Steps to be performed by the THCR Contract Manager to execute the random selection for an available apiary site are listed below:

- a. The names of each interested apiarist will be noted on a 1" X 2" piece of paper and folded in half.
- b. The pieces of paper will be inserted into a "black film canister" which has a snap top and placed into a container and stirred up prior to the selection.
- c. A non-biased person will be selected to reach into the bowl (which will be held above the selection person's eyesight) and randomly select one of the canisters.
- d. The canister will be opened by the person performing the selection and the name is read aloud for those in attendance. Everyone in attendance will sign a witness sheet.
- e. The apiarist whose name is selected will be awarded the available site.
- f. A new Agreement will be developed by the THCR Contract Manager.

\*A new apiary application must be submitted once requestor's name is removed from a waiting list.

## **13.11 ARWEA Recreation Master Plan**

**Nature-Based Recreation  
Master Plan  
for  
Apalachicola River  
Wildlife and Environmental Area**



**Florida Fish and Wildlife Conservation Commission**  
Division of Wildlife – Bureau of Wildlife Management  
Nature-Based Recreation Program  
Nature-Based Recreation Master Plan

## Executive Summary

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The Florida Fish and Wildlife Conservation Commission (FWC) manages more than four million acres of land to protect fish and wildlife resources for the benefit of the citizens of Florida. Historically, wildlife management areas have been used for hunting and fishing, however the state's dramatic growth has steadily increased the need for additional recreation opportunities on FWC-managed lands.

In recognition of this need, the agency established a Nature-Based Recreation Program (NBR) within the Division of Wildlife's Bureau of Wildlife Management to plan and assist in the developing recreation opportunities focused on wildlife viewing. Six areas were chosen as pilot projects for this effort – Three Lakes, Fred C. Babcock/Cecil M. Webb, J.W. Corbett, Big Bend and Chassahowitzka wildlife management areas and the Apalachicola River Wildlife and Environmental Area.

Nature-based recreation planning workshops were held in each area attended by a multi-disciplinary team including staff from the Office of Informational Services, Division of Law Enforcement, Division of Wildlife regional biologists, area managers and NBR planning staff. Members of the public were involved through focus groups and survey research conducted in cooperation with the University of Florida School's of Forest Resources and Conservation.

The planning process considered:

- the specific purpose for which each WMA was acquired
- its significance
- an analysis of the WMA/WEA's natural resources and existing uses
- interpretive goals and themes
- the range of visitor experiences that should be offered
- the appropriate locations for various recreational activities, and
- indicators, standards and procedures to monitor visitor experience and resource conditions.

The NBR Master Plan provides a long-range vision for developing recreational opportunities on the area and for monitoring recreation-related use to avoid negative resource impacts and to ensure satisfactory visitor experiences. The recommended recreation enhancements include: installing interpretive kiosks at main entrances to orient visitors to the area and its recreation opportunities; developing paddling trails; picnic areas; short interpretive hiking trails and off-road cycling loops; wildlife viewing structures and an area brochure, birding list and paddling guide.

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## **Introduction**

### *Developing a Vision for the Future*



Since its inception, the Florida Fish and Wildlife Conservation Commission has strived to provide Floridians and visitors with high quality hunting and fishing opportunities. The demand to provide additional recreational opportunities on lands managed by the Commission has steadily increased with the growth of and demographic changes in, the state's population.

The rugged character and remote expanses of wildlife management areas provide numerous possibilities for nature-based recreation. Visitors can learn about Florida's wildlife and plant communities and its rich cultural heritage, hike, bike, ride or paddle while experiencing solitude uncommon in our rapidly growing state. However, low awareness, poor roads, and lack of appropriate facilities and staff have limited broader public use.

Recognizing both the need and the opportunity for nature-based recreation on its lands, the FWC established "improving wildlife viewing opportunities" and "increasing participation in nature-based recreation activities" among its priority goals. The NBR Program will contribute to achieving these goals by planning and assisting in the implementation of enhanced recreational and wildlife viewing opportunities and promoting their availability to the public.

## **Planning Framework**

Nature-based recreation program staff modified the Visitor Experience and Resource Protection (VERP) planning process developed by the National Park Service to prepare NBR plans for the six pilot areas. The VERP framework focuses on the impacts of visitor use on visitor experience and natural resources. Visitor behavior, use levels, types of use, timing of use, and location of use are all considered. The VERP framework provides a logical process and rationale for making decisions regarding carrying capacity issues. Careful monitoring and documentation of visitor experience and natural resource impacts as nature-based recreation plans are implemented will provide clear guidelines for limiting use if necessary.

Nine elements are integral to the VERP framework. Although the elements are numbered and may appear to follow a linear process, the elements within the VERP framework are dynamic.

### **VERP Planning Elements**

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- Element 1: Assemble an Interdisciplinary Project Team
- Element 2: Develop a Public Involvement Strategy
- Element 3: Development Statements of Area Purpose, Significance and Primary Interpretive Themes, Identify Planning Constraints
- Element 4: Analyze Area Resources and the Existing Visitor Use
- Element 5: Describe a Potential Range of Visitor Experiences and Resource Conditions
- Element 6: Allocate the Potential Zones to Specific Locations in the Area
- Element 7: Select Indicators/Specify Standards for each Zone; Develop a Monitoring Plan
- Element 8: Monitor Resource and Social Indicators
- Element 9: Take Necessary Management Action

### **Planning Team**

Planning teams made up of NBR staff, regional interpretive specialists, regional, district and area biologists, non-game biologists and law enforcement officers participated in three-day workshops to create conceptual plans for each area.

The workshop format included touring the area and reviewing the purposes for which the area was acquired. Planning team members then developed a broad interpretive theme and discussed its influence on the planning process. Area and NBR staff presented an inventory of existing resources and uses of the area as well as planned or existing recreational development on nearby public lands.

The team members considered the strengths, weaknesses, opportunities and threats related to nature-based recreation on the area and generated a matrix of possible recreational activities and user groups. The planning team then broke into two groups and used this information to develop conceptual plans for the area.

Several key factors emerged from the planning workshops and were incorporated in all NBR plans:

- Clearly delineate primary and secondary entrances
- Establish visitor contact points to communicate important information to the public
- Create opportunities for wildlife viewing

- Accommodate a range of visitor experiences
- Preserve visitors' sense of solitude and limit impact on natural resources by concentrating recreation facilities and more intense uses in small "developed" zones and along existing road corridors.

This document incorporates concepts from the planning workshops as well as public input obtained through the use of focus groups and survey research conducted in cooperation with the University of Florida School of Forest Resources and Conservation.

### **Nature-based Recreation Study**

To help determine what types of activities and experiences were most desired on wildlife management areas, the University of Florida was contracted to conduct a study of visitors to the area and the region. The goal of the study was to identify preferred recreation opportunities from the perspective of diverse groups of outdoor recreationists.

The initial phase was a focus group of area stakeholders. Stakeholders identified by the FWC as representatives of existing or potential user groups were invited to participate in two-hour focus/nominal group sessions held in each area. The meetings first addressed the participants' desired nature-based recreation opportunities and then focused on their major concerns with nature-based recreation use of the area. Participants ranked their ten most preferred opportunities and most important concerns from a list generated by the group. To identify the top ten opportunities and concerns, the scores for each opportunity and concern were totaled and ranked from highest to lowest. Recreation opportunities that emerged from the focus group were used to construct a survey of Community Stakeholders and a Visitor Survey. These surveys were conducted on Babcock/Webb WMA and ARWEA as well as recreation areas near each of these management areas.

The focus group findings indicate that stakeholders strongly support maintaining hunting and fishing opportunities. Other topics common to the meetings included the desire for areas to maintain their natural quality; that the areas be managed for passive recreation; that the FWC monitor and manage the impacts of recreation and ensure that sufficient resources will be devoted to recreation management if additional opportunities are developed.

### **The NBR Master Plan and the Conceptual Management Plan**

The NBR Master Plan provides long-range guidance for the design and implementation of recreation enhancements on WMA/WEAs. The NBR goals and objectives should be considered as an area's Conceptual Management Plan (CMP) is updated. Management area and NBR program staff will work together to incorporate selected projects into an appendix to the CMP. As annual work plans and budgets are developed, NBR program staff can assist with developing cost estimates for NBR-related construction such as interpretive kiosks, boardwalks or trails and estimates of hours required for NBR-related tasks such as trail maintenance. NBR staff will design interpretive materials for the areas in consultation with management area staff.

## Recreation and Interpretation: a means to an end

The draft NBR plan generated during the planning workshop has been modified by significantly strengthening the emphasis placed on integrating recreation and interpretive planning. Using this approach, the type of recreational experience offered and the location of recreation amenities provided, is strongly influenced by the interpretive goals for the area. Recreation opportunities thus become a means to an end - reaching new visitors with important concepts about an area's natural resources, wildlife and wildlife management. The interpretive goals and themes listed in this section were developed by considering the significance of the area, the purposes for which the area was acquired and its management objectives.



### A. Primary Interpretive Themes

1. **The vast floodplain forests of the lower Apalachicola River (including the Wildlife and Environmental Area) protect, feed and nurture Apalachicola Bay.**
2. **The Apalachicola River Wildlife and Environmental Area (ARWEA) is a key tract within a complex of contiguous public lands in the lower floodplain of the river. The area's outstanding wildlife habitats, including floodplain forests, sawgrass marshes, and pine flatwoods, support significant populations of both rare and common wildlife.**

These two themes should be considered in the design of amenities offered to nature-based recreationists and should be bolstered by the following secondary material:

The Apalachicola River is formed by the confluence of the Chattahoochee and Flint Rivers near the point where Florida, Alabama and Georgia converge. The Apalachicola is the lower portion of a massive drainage system that originates in the Blue Ridge Mountains in northeast Georgia, and drains much of the state of Georgia and eastern Alabama before entering Florida. At times, the river marks the eastern boundary of the ARWEA; elsewhere, it flows through the center of the property. Numerous creeks and river tributaries also flow through the property, offering nearly unlimited recreational potential for anglers and paddlers.

The river is characterized by a wide floodplain and heavy sediment load; its fresh water, nutrients, detritus and sediments maintain a complex system of interrelated physical and biological activities in the lower river and bay, which are essential to the sustenance of extremely

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productive fisheries in Apalachicola Bay. The floodplain forest and marsh also filter out pollutants and silt and buffer the area from storms, storing and slowly releasing vast amounts of water. The area serves as a vital nursery ground, 85% of all Gulf species must spend their juvenile and larval stages in the marsh.

The natural resources of Apalachicola—freshwater fish, and upland game species, in particular—have been used by humans since Paleoindians first arrived twelve thousand years ago. Twenty-seven archeological and historic sites have been located on the ARWEA. From the beginning, the Apalachicola River has been an important historical artery for human transportation.

Around the turn of the 19<sup>th</sup> century, like much of Florida, this landscape was subjected to heavy lumbering, and agricultural conversion. The upland plant communities of the ARWEA were historically pine flatwoods, with a much more open and grassy aspect than they have today. Slash pine and evergreen shrubs now dominate those habitats, a legacy of intensive timbering and silviculture, and attendant alterations in hydrology. The Commission, in cooperation with Division of Forestry, will plan and institute a reforestation program to restore wildlife habitat on selected upland sites. And in cooperation with the Northwest Florida Water Management District and the Corps of Engineers, natural water regimes will be re-established to the extent practicable. Considerable progress toward restoring natural water regimes has been made by establishing a series of breeches and plugs into the major levees and ditches in the Saul Creek Tract and installing hardened low water crossings on improved roads throughout the area.

The Apalachicola ecosystem's diverse habitats support the highest species density of amphibians and reptiles in North American, north of Mexico, as well as the greatest number of freshwater fish species (86) in Florida. Fifty-two species of mammals occur in the river basin. For many years, the bay has supported the largest oyster harvesting industry in Florida, as well as extensive shrimping and commercial fishing. Also occurring are 1162 species of vascular plants, 362 species of mollusks, 308 species of birds and two species of endangered bats (Indian and Gray). The area contains an extensive hardwood floodplain with the largest natural stand of tupelo in the U.S., the source of the tupelo honey that many claim "the best honey in the world."

Since the predominant economic base in the river and bay is based on harvesting natural resources therein, protecting the natural functions that sustain these resources is critical to the state. Human populations in central Florida are increasing, particularly on the coast south, east and west of Apalachicola River WEA. Careful land management can ensure that these extensive wild lands continue to offer healthy habitat to a wide variety of aquatic and upland wildlife species, as well as a good selection of nature-based recreational opportunities.

#### B. Visitor Experience Goals

At Apalachicola River WEA, the FWC will provide opportunities for visitors and area residents to:

Learn information and stories associated with major interpretive themes, and other related information, through interpretive materials accompanying welcome kiosks, and hiking and biking and paddling trails.

Become oriented to and participate in recreational activities on Apalachicola River WEA, and adjoining natural areas.

Have an enjoyable recreational experience without impairing the natural and cultural values of the site.

Become acquainted with wildlife and natural plant communities on Apalachicola River WEA.

Understand Apalachicola River WEA's natural, cultural and commercial history, in context with the history and prehistory of Florida.

Understand the management role and goals of the FWC on Apalachicola River WEA.

Appreciate the longstanding, sustainable traditions of hunting and fishing on Apalachicola.

The FWC should continue to gather quantitative information concerning:

- The number of visitors to the area
- Patterns of visitation (daily, weekly, seasonally, yearly)
- Length of stay
- Origin
- Motivations for visiting and preferred experiences
- What they already know about the area, and primary interpretive themes

## Nature-based Recreation on Apalachicola River WEA

Since the ARWEA was established in 1974, with the purchase of lands through the Environmental Endangered Lands and Conservation and Recreation Lands Programs, the primary public uses have been hunting and fishing and primitive camping. The ARWEA's CMP specifies the recreational uses consistent with the purposes for acquisition and the agency's mission as: hunting, fishing, wildlife observation, hiking, bicycling, horseback riding and primitive camping.

### Current Uses

According to the results of a mail survey of hunters on ARWEA, approximately 4,475 user days were expended during year 2000 archery, muzzleloading and general gun seasons. The area is very popular with squirrel hunters many of whom set up camps and enjoy fishing as well as hunting. Deer, turkey, dove, quail, snipe and waterfowl are all popular game species for hunters on ARWEA. Hunting is most active during general gun season (small game and fall turkey seasons coincide with general gun), which runs from late November through the end of January.



Fishing is excellent with many anglers taking advantage of the opportunities that exist on ARWEA. Estimates of fishing effort on the upper river indicate that more than 20,000 user hours are expended between March and April (CMP, 1997). The Commission has accommodated this interest recently by improving ramps at Whiskey George Creek, Gardner's Landing and Bloody Bluff. All have handicapped access.

Commercial outfitters frequently bring patrons to paddle on ARWEA, Graham Creek and the East River in particular. Wildlife watchers are occasionally seen driving area roads. There are no developed trails on the area to accommodate hikers, cyclists or equestrians.

### Recreation Potential

The ARWEA could accommodate a range of recreational activities while offering visitors solitude and the sense of being immersed in the natural world. In addition to hunting and fishing, the planning team identified several activities that might be enhanced on ARWEA.

The planning team recommended as most appropriate: scenic viewing tours, paddling, photography, hiking, primitive camping, self-guided wildlife viewing and wildlife watching walks. Launch sites for paddlers and primitive camp platforms along paddling trails, wildlife

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observation facilities, improved roads to developed sites and wildlife viewing trails were identified as the most appropriate types of facilities. (See Appendix 1 for the complete list)

The preferred recreational opportunities that emerged from the ARWEA focus group were:

- various types of trails
- fishing
- primitive camping
- swimming
- hunting, and
- opportunities to visit and learn about historic/archeological sites.



Focus group participants also wanted some areas left “wild” with no roads. The top concerns that emerged from the focus group were potential environmental degradation – destruction of habitat, trash and noise and water pollution. The group was also concerned with potential conflicts among user groups, enforcement problems and the potential loss of a wilderness experience.

The Community Survey employed a mail-in questionnaire of 191 community stakeholders identified by the Commission. The response rate was 48 percent. The Visitor Survey was distributed on-site at five recreation areas in the region including ARWEA. The response rate was 61 percent. The results indicate that visitors preferred only slightly developed settings (having roads, scenic vistas, pullouts, car campgrounds with limited facilities, rest stops and picnic areas) and that efforts should primarily focus on enhance existing opportunities with better roads, picnic areas, trails and some turnouts as opposed to a variety of new facilities.

The researchers found that respondents were not enthusiastic about any of the potential recreation opportunities listed. They speculate that since visitors were frequent and repeat visitors to natural areas within the region, it could be that visitors are achieving their desired experiences and see little need for different activities. Therefore, they recommend that nature-based recreation development should begin by improving access to, or simply letting people know more about, existing recreation opportunities, improving access, and developing and distributing easy to read maps and brochures.

Survey results show that visitors are interested in learning opportunities and that most people prefer to learn by getting out and exploring natural areas. Interpretive trails, vegetation walks and self-guided driving tours were all desired opportunities. Most respondents were not interested in social activities like organized tours. These findings should be considered in the development of facilities. For example, trails should be designed with pull-outs or side loops to allow for more spacing between groups, picnic tables should be spaced with vegetative cover

separating individual sites instead of one large picnic area. Specific actions recommended by the researchers:

- Construct a trail with vegetation identified
  - Develop trails that highlight natural communities of the area; identify any potential connections with trails through nearby areas
  - Provide access to more diverse fishing opportunities (including disabled access)
  - Identify and establish non-motorized, multiple-use trails
  - Design and provide paddling trails
  - Construct observation towers off major transportation routes
  - Build viewing stands at birding sites
  - Design a self-guided driving tour with turnouts and interpretation
  - Identify and provide interpretation of historical and cultural sites
  - Investigate potential partnerships with related organizations to enhance recreation and environmental education opportunities
- (See Appendix 2 for Nature-based Recreation Study Findings and Recommendations)

## Turning plans into on-the-ground amenities

The goals and objectives in this section focus primarily on the east side of river. The planning workshops did not fully develop recommendations for the west side of ARWEA. Among the ideas mentioned were “enhancing existing dove fields and picnic area with a bike trail and bank fishing” and “creating a linkage with the town of Howard Creek by locating a fishing platform and interpretive kiosk on the river.” Additionally, paddling opportunities will expand into the northern and western parts of the area. Further NBR planning should be undertaken to develop specific recommendations for the west side of river.

### Goals and objectives:

#### **Goal A. Ensure that all recreation amenities support wildlife management, wildlife viewing and interpretive goals.**

1. Site viewing facilities on previously disturbed properties wherever possible.
2. Preserve a sense of solitude and limit impact on natural resources by concentrating recreation uses in small “developed” zones and along existing road corridors.
3. Avoid sensitive areas such as eagles nests or bogs and route trails to avoid fragmenting habitat.
4. Incorporate wildlife viewing ethics into all interpretive materials.
5. Incorporate interpretive themes into all brochures, trail guides and other materials produced to support recreation opportunities.
6. Install interpretive panels as appropriate at all recreation facilities
7. Work with OIS staff to integrate ARWEA into Great Florida Birding Trail

#### **Goal B. Orient visitors to the area and its recreation opportunities**

1. Develop and install entrance kiosk at Sand Beach Road that provides a high quality map and information about available recreation opportunities.
2. Develop area brochure and birding list and stock with hunting maps in brochure racks at entrance kiosk
3. Develop secondary information panels at all major water access points
4. Establish a visitor contact point in Eastpoint.

#### **Goal C. Develop wildlife viewing and/or picnicking areas at Cash Creek, Sand Beach, Graham Creek and Bloody Bluff**

##### **Goal C1: Cash Creek Viewing Site**

1. Determine if DOT will provide assistance with a scenic viewing pulloff near Cash Creek. If a pull off is not feasible pursue objective 2.
2. Obtain permits for a standard viewing platform just west of the unimproved boat ramp at Cash Creek as well as two parking spaces
3. Design and install rail-mounted interpretive sign for viewing platform

**Goal C2: Sand Beach Site**

1. Repair wildlife viewing tower at Sand Beach.
2. Complete interpretive trail
3. Determine feasibility of vault toilet at site.
4. Monitor level of use to determine if vault toilet is warranted.

**Goal C4: Butcher Pen**

1. Install kayak launch
2. Install interpretive sign

**Goal C3: Graham Creek**

1. Develop picnic facilities
2. Install interpretive sign

**Goal C4:**

1. Monitor level of use at Gardner Landing to determine if toilet facilities are warranted.
2. Install interpretive sign

**Goal C5: Bloody Bluff**

1. Install camping pads, fire rings and picnic tables at Bloody Bluff campsite.
2. Design and implement two interpretive trails from campsite – one to river and one to cemetery.
3. Install interpretive sign at cemetery.

**Goal D: Design and Implement a Comprehensive Trail System for Hikers, Off-Road Cyclists and Paddlers**

Comments: Trails can provide a variety of experiences from a one or two mile loop to multi-day backcountry expeditions. Cyclists, paddlers and hikers range from novice to enthusiast. The challenge desired and time spent engaging in the activity increase accordingly. However, all users will likely spend several hours on the area and thus present an opportunity to develop a more in-depth understanding and appreciation of ARWEA. Cyclists and paddlers especially, tend to be the most likely to adopt new outdoor recreation activities and may be interested in fishing and hunting once exposed to these activities. (Appendix 3, Marketing Plan).

**Goal D1: Hiking Trail System**

Comments: While ARWEA could easily accommodate the trail system rated highly in the visitor study and in the planning workshops, present staffing levels make establishing, maintaining and monitoring the impacts of an extensive trail system problematic. Land-based trails present the greatest potential for conflict among

current and new user groups and among trail users on multi-use trails, especially as numbers of users increases. Initial planning and implementation of land-based trails should focus on interpretive trail loops at wildlife viewing or other destination points. Trails can be nested to reduce impacts. As staffing levels permit and user demand (and volunteers) increase it may be possible to expand trail opportunities.

#### Interpretive Trail Objectives

1. Design interpretive trails at Sand Beach and Bloody Bluff (2)
2. Design, produce and install trailhead signs
3. Develop brochures keyed to numbered posts and/or interpretive signs

#### Hiking Trail Objectives

1. Scout potential trail loops (approximately 3 to 5 miles) at water access points
2. Design and produce trailhead signs
3. Clear and blaze routes

#### Backcountry Trail

Comments: During the planning workshops interest was expressed in establishing a backcountry trail extending from Sand Beach to the Florida National Scenic Trail (FNST) that runs east/west just north of the ARWEA. The Florida Trail Association is supportive of the concept of a connection and would assist with planning a route. However the local chapter does not have enough active members to develop (or more importantly, to help maintain) additional trails. It may be possible to emulate the FNST model and hire a "trail boss" and use Student Conservation Association volunteers to construct such a trail.

#### Objectives:

1. Delineate potential routes on a topographic map
2. Scout potential routes to determine best alternatives, avoiding sensitive areas and including scenic features
3. Clear and blaze trail
4. Build structures as necessary to cross wet areas
5. Establish designated campsites as desired
6. Develop trailheads at each end of the trail
7. Design and print trail map

#### Goal D2: Cycling Trails

Comment: According to the Outdoor Recreation in Florida 2000 report, bicycle riding is among the most popular resource-based activities in this region of the state. The report projects a need for resources and facilities to meet regional demand for

bicycle riding opportunities. Off-road cycling enthusiasts prefer challenging off-road, single-track routes, however novices and families may find the less traveled roads on ARWEA provide pleasant cycling.

Objectives:

1. Determine scenic routes using existing unimproved roads and trails
2. Delineate routes on maps of the area

### **Goal D3: Paddling Trails**

Comment: The many waterways on ARWEA offer outstanding paddling opportunities. Paddling, especially kayaking is an increasingly popular sport and presents an effective way to explore, watch wildlife and fish. Building on initial work by a local paddling outfitter, NBR staff have designed a paddling trail system on the lower portion of ARWEA. Trails range from half-day to multi-day trips. A guide to the trail system has been developed and printed and is being distributed to paddling groups with a survey instrument soliciting their comments and suggestions and their interest in volunteering to support the ARWEA paddling trail system.

1. Compile review of guide from paddlers, revise guide accordingly
2. Investigate and pursue funding opportunities to support future printing costs
3. Investigate feasibility of repairing the well at Sand Beach to support existing multi-day paddling trail
4. Install paddling launch at Butcher Pen
5. Review potential routes on in northern and western portions of the area
6. Scout routes and possible campsites by air, boat and kayak
7. Develop draft descriptions of trail routes
8. Have volunteers of varying abilities ground truth descriptions in canoes and kayaks
9. Install markers and launch facilities as necessary to support the trail
10. Develop, print and distribute guide(s)

### **Goal E: Develop a Scenic/Wildlife Viewing Driving Tour**

Comments: Driving tours can accommodate the casual visitor, those who are older or who have impaired mobility and allow comfortable use of areas in hot, humid summer months. Routes should be designed to incorporate scenic vistas and likely wildlife viewing spots. The best design would be a one-way (for safety) low profile (narrow and inconspicuous) road with numerous pull-offs.

Most of the roads within ARWEA traverse pine plantation and do not provide particularly scenic vistas. Some roads are narrow and have deep ditches making them hazardous for this

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purpose. However, if a suitable route can be designated, a tour could be a valuable means to reach these visitors with information about how the Commission is restoring ARWEA and can help them envision how the area will change over time and understand the benefits restoration will provide.

1. Design a route(s) that incorporates wildlife viewing and/or cultural sites as well as management and restoration projects.
2. Improve and/or maintain roads along the route(s) to provide year-round, two-wheel drive access
3. Create and/or maintain openings at suitable points along the route to increase the likelihood of viewing wildlife.
4. Develop an interpretive driving tour guide keyed to numbered posts and/or interpretive signs easily visible from a car.

Goal F: Manage recreational use to minimize negative resource impacts and maximize visitor satisfaction

1. Implement monitoring strategy to assess resource impacts
2. Institute corrective management actions if indicators begin to approach standards
3. Utilize calendars (on NBR website and other publications) to publicize hunting seasons and encourage use outside general gun season.

### **Challenges and Strategies**

There are numerous challenges facing the effective implementation and management of nature-based recreation opportunities on ARWEA. Challenges and proposed strategies to address them are discussed in this section.

#### **Challenges:**

- The potential audience for the amenities we are providing at ARWEA is growing. According to the 2001 Census data, about half a million people live in Franklin County and the seven counties surrounding it (Gulf, Liberty, Wakulla, Leon, Calhoun, Gadsden and Bay), and like most of Florida, population trends are steadily increasing. According to the nature-based recreation study, we know that slightly less than half of our present visitors live in the region; just over half visit from out of state. Another potential market will be out-of-state vacationers at St. George Island and in the town of Apalachicola.
- Expectations for public use of the area will continue to grow. This will occur even faster if the area is promoted to any degree. As recreational uses expand in scope and increase in volume, resource impacts and conflicts among user groups may occur.
- Dumping and illegal structures are a problem on the area, especially at water access sites where individuals and groups camp for extended periods.

- There is no organized volunteer group to help support nature-based recreation activities on ARWEA.
- The majority of recreational amenities proposed for ARWEA are located on the east side of the river along US 65 where most public access to the area is found. There are no Commission offices on the east side of the river. As a result, monitoring and managing current recreational use is difficult.
- Area staff are busy with existing management responsibilities. There is no staff person with outdoor recreation management experience and expertise assigned to the area.
- Significant staff and financial resources are being expended on an area where revenue is not recouped from day use fees or management area stamps.

Strategies:

- Assign an additional staff person with appropriate education and experience to be responsible for implementing recreational trails, maintaining recreational amenities, monitoring recreation related resource impacts and visitor satisfaction, and recruiting, training and supervising volunteers.
- Design and build a facility in East Point to provide a visitor and volunteer contact point, space for a concessionaire, educational exhibits and gift shop as well as office space for an NBR staff person and other commission staff as desired.
- Contract with a concessionaire to provide livery services, wildlife viewing/paddling tours, houseboat rental, etc.
- Continue to seek cooperation from Franklin County for support in law enforcement patrols, litter collection and mowing of vegetation at recreation sites.
- Obtain cooperation from Commission law enforcement personnel in enforcing camping regulations.

## **Recreation Management Zones**

Recreation studies demonstrate that visitors come to recreate on public lands with many different expectations. Providing a variety of settings allows visitors to select the type of experience they desire, simplifies management and reduces conflicts between visitors who are seeking different types of experiences. In this section are the zones delineated by the planning team. Each zone is described in terms of the type of experience it offers, the natural resources related to the experience and the level of management required. Linear zones are delineated within some larger zones.

### **Primitive Zone**

This zone offers an experience of solitude deep in a natural landscape with no evidence of human development. This zone encompasses sensitive natural resources, access is difficult and the number of people should be limited. Only limited recreation and interpretation opportunities should be developed in this zone. A minimal level of management is necessary for resource protection and safety.

#### **Backcountry Trail**

The Backcountry Trail is a linear zone within the Primitive Zone consisting of a primitive trail. The corridor extends 5 feet (1.5 meters) on each side of the trail centerline to take into account impacts caused by trail maintenance work and by occasional visitor movements off the trail. The Backcountry Trail offers the visitor a sense of adventure and challenge. Substantial time commitment and physical exertion is required to use the trail. The probability of encountering other visitors or FWC staff is low. A low level of management is necessary (periodic trail maintenance).

#### **Unimproved Road Zone**

This zone encompasses all roads in the WMA except the scenic driving tour and its spurs. For monitoring purposes, the zone extends 20 feet (6m) from the centerline. The visitor experience is generally dependent on a vehicle or bicycle. Cycling or driving offers visitors enjoyment from observing wildlife and the natural environment. The probability of encountering other visitors is low to moderate, and low for encountering FWC staff. In some cases, visitors will need four-wheel-drive vehicles to use the roads. A low level of management is necessary (establishing and maintaining road signs).

### **Semi-primitive Zone**

Like the primitive zone, the semi-primitive zone provides a sense of being immersed in a natural landscape with opportunities for solitude. Observation structures, boardwalks, fishing platforms, interpretative signs, and unpaved trails are the only types of recreational facilities in this zone. A moderate level of management is provided for resource protection and safety.

### Hiking Trails

Hiking Trails are narrow, moderate-use trail corridors. The corridor extends 5 feet (1.5 meters) on each side of the trail centerline to take into account impacts caused by trail maintenance work and by occasional visitor movements off the trails. Visitors must commit some time and effort on the trail. The probability of encountering other visitors is moderate to high (although there are opportunities for solitary experiences) and low for encountering FWC staff. A moderate level of management is provided for resource protection and safety purposes (e.g. more frequent trail monitoring for maintenance, approximately 3 times per year).

### Scenic Driving Zone

This zone consists of improved roads that will be utilized for scenic views, wildlife viewing and interpretation stops. The zone is a fairly narrow corridor. For monitoring purposes, the zone extends 50 feet (15m) from the centerline of the road. The visitor experience is generally dependent on a vehicle or bicycle. The probability of encountering other visitors is high, and moderate for encountering FWC staff. Most facilities should be universally accessible. A moderate level of management is necessary to ensure resource protection and public safety (maintaining roads to allow year round two-wheel drive accessibility; periodic clearing of openings for wildlife viewing, frequent litter collection).

### **Developed Zone**

The developed zone is an area with visitor facilities such as campgrounds, visitor centers and picnic areas. The visitor's experience in this zone is highly social. Trails may be paved or hardened. Visitors and facilities are intensively managed in this zone for resource protection and safety purposes. Staff should be on hand to monitor visitor behavior and attend to maintenance needs. The most intensive interpretation is provided in the developed zone. This is the only zone in which building construction is permitted.

### **Sensitive Resource Protection Zone**

Sensitive resource protection zones encompass areas with rare and endangered species, archaeological/historical sites, or fragile habitats. This zone cannot support any visitor impact. Only limited and strictly controlled access should be allowed for interpretation purposes.

## Indicators and Standards

A major premise of the VERP process is that management zone characteristics, which are qualitative in nature, must be translated into quantitative measures through the use of indicators and standards. Measurable indicators for monitoring key aspects of the visitor's experience and resources at Apalachicola River WEA are described hereafter. Standards represent the point at which visitor experience and resource conditions become unacceptable. Indicators should be monitored for each zone, and when necessary, management actions taken to ensure that visitor use and resource impacts remain within the established standards.

### Provisional Resource Indicators and Standards

These indicators and standards are provisional and should be tested to ensure they are feasible to monitor and provide useful data. They should be revised as necessary after field-testing and then maintained. Indicators measure both resource and social conditions and should be measured annually. If indicators show that conditions are approaching or exceeding a standard, monitoring frequency may need to be increased to determine if corrective management actions are having the desired effect.

#### Social Indicators and Standards:

ZONE	INDICATORS	STANDARDS
Back Country Trail and Paddling Trail	Conflicts between different groups	No conflicts during Hunting season
	Number of groups encountered per day	1 group of 2 to 4
Developed (wildlife viewing facilities, picnic areas)	People at one time (PAOT) per zone	3 – 4 groups of 3 each
	Parking congestion	Parking area at 75% capacity
Sensitive Resource Protection Zone	PAOT	0
Backcountry Road Zone	Number of parties (vehicles) encountered	0 – 1
Scenic Touring Zone	Number of vehicles encountered	1 – 2

#### Resource Indicators and Standards:

- Trail Widening
- Density of Social (unofficial) Trails
- Road Widening
- Ground Cover (percent cover)
- Frequency of litter

**Trail Width** – Some variance in tread width is acceptable and even preferred. But, if sections of the trail seem to be widening due to use (such as hikers cutting corners, avoiding unfavorable tread, etc) document existing and potential problem areas and specify exact location so immediate corrective action can be taken.

Trail type	Tread Width (m)	Cleared Width (m)	Grade	Height (m)
Hiking Trails	0.6	1.2	Max. 10%	2.1
Biking	Desirable 2.4 Min. 1.5	Same	Max. 8%	2.1
Equestrian	1	2.4	Max. 10%	Min. 3.5

Source: National Recreation and Park Association

- 1 = width is at standard
- 2 = width exceeds standard in a few spots
- 3 = trail widening and social trail observed in numerous areas

**Erosion** – Observers should visually estimate erosion based on the following criteria:

- 1 = Very Little
- 2 = Some: Tree roots or standing water evident
- 3 = Moderate: Exposed trees or rocks but little evidence of widening, some exposed soil
- 4 = Extensive: Tree roots exposed and damaged. Many exposed patches of soil. On trails, ruts formed and evidence of widening
- 5 = Very Extensive: Eroded to substrate or tree roots severely damaged. On trails, ruts significant and significant evidence of widening. Extensive stretches of exposed soil.

**Litter** – Observers should estimate the amount of litter collected along trails or in developed areas based on the following criteria:

- 1 = None
- 2 = Very Little, <5 pieces.
- 3 = Some, 5 – 10 pieces
- 4 = Extensive, 10 – 15 pieces
- 5 = Very Extensive, 15 + pieces

**Sanitation** – To determine the need for toilet facilities, note the amount of litter associated with human waste

## **Monitoring**

Resource and visitor data should be regularly collected in a consistent manner to determine if standards are being exceeded. This task should be incorporated into the work plan for the area. Monitoring data can demonstrate if visitor use is exceeding capacity and will support decisions to limit recreational access if necessary.

An initial survey should be conducted to serve as a baseline and monitoring should be conducted annually. Traffic counters can be installed at Sand Beach or other roads as desired to generate data on vehicles entering the area. Photo stations should be set and photos taken each time the area is monitored.

## **Trail Maintenance**

Trail conditions should be inspected approximately once every 3 months. Ideally, volunteers can assist in checking trails and document litter, erosion, and trail widening, vandalism, trail obstructions, wet conditions and informal trails. A logbook may be placed near the trail for users to document any experiences on the trail, including species seen, obstructions or hazards, signage problems and general comments.

Example Monitoring Form

Observer: \_\_\_\_\_

Date: \_\_\_\_\_

Site: \_\_\_\_\_

Litter Rank (circle one):

1 = None

3 = Some, 5 – 10 pieces

5 = Very Extensive, 15 + pieces

2 = Very Little, < 5 pieces

4 = Extensive, 10 – 15 pieces

Comments:

Were there any erosion problems? Please note the exact location and rank according to following criteria:

1 = Very Little

2 = Some: Tree roots or standing water evident

3 = Moderate: Exposed roots/rocks but little evidence of widening, some patches of exposed soil.

4 = Extensive: Many tree roots exposed, many spots of exposed soil, ruts and/or trail widening.

Comments:

The hiking trail should be between about 3 and 4 feet wide. Please rank overall trail width.

1 = 3 ft. (OK)

3 = 5 ft. (exceeding standards)

2 = 4 ft. (just about "normal")

4 = 6 ft. (unacceptable)

If there were problem areas, please describe condition and exact location:

How many other groups of hikers did you encounter along the trail? How many vehicles were in the parking lot?

\_\_\_\_ groups    \_\_\_\_ approx. # in the group    \_\_\_\_ vehicle in parking area

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## Recreation and Wildlife Viewing Facilities Guidelines

Careful design and placement of recreational facilities can provide suitable visitor experiences and minimize impacts to the natural and cultural history of the area. The following guidelines should be incorporated into all recreational and wildlife viewing facilities planned for the area:

- **Entrances**

Should welcome visitors to the area, identify the Commission, describe the range of potential experiences on the area, describe the wildlife viewing experiences by season, time of day or wildlife event.

- **Auto Tours**

Pull-outs should be placed only at truly interesting features, consider if they are seasonal in nature. If so, interpretive information should mention this. Interpretive panels or brochures should mention wildlife or other sites that might be missed. Turnouts should be located to allow viewing but not disturb wildlife.

- **Viewing towers**

Each ramp should focus visitor attention to a different habitat or feature. The structure should include wildlife identification or other interpretive information. The structure should be surrounded by and focused on wildlife and habitat, rather than being the focus itself.

- **Trails**

Trails should be described at the trailhead with length or time required. If the focus is wildlife viewing include best seasons. Interpretive panels or brochure stops should be well-spaced and focused by season and should not exceed  $\frac{1}{2}$  to  $\frac{3}{4}$  of a mile.



General considerations in developing facilities:

- Consider physical characteristics and the historical and natural character of the location
- Adapt parking lots, buildings, and other physical developments to existing topography
- Retain on site surface water run-off generated by development
- Use porous pavements where surface hardening is required
- Consider sewage disposal needs
- Use native plants representative of the area for all landscaping
- Design and build trails and observation structures to avoid disturbing wildlife and to minimize negative impacts such as erosion
- Use elevated boardwalks in wet areas and swamps and walkovers to protect dunes

Universal Access

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Nature-based Recreation facilities and programs must be developed and implemented in compliance with the Americans with Disabilities Act. All facilities in developed zones should be universally accessible. Recreation facilities in semi-primitive or primitive zones should be planned to be accessible to the degree possible except where:

- compliance will cause harm to cultural, historic or religious sites or significant natural features or characteristics
- compliance will substantially alter the nature of the setting or purpose of the facility or portion of the facility
- compliance would require construction methods or materials prohibited by federal, state or local regulations or statutes, or
- compliance would not be feasible due to terrain or prevailing construction practices.

## Appendix 1 – Planning Team Workshop Documentation

### S.W.O.T. Analysis

During its workshop, the planning team members analyzed what they felt were the Strengths, Weaknesses, and Opportunities and Threats (S.W.O.T.) for the area. The strengths can be described as a permanent part of the character of the area that is inherent (i.e. expansive habitat) and can be enhanced or protected as needed. Weaknesses are limitations that can be overcome to improve the management of the area. Opportunities are improvements and additions that can be made to improve the management of the area. Threats are things that may harm the visitor experience or the ecological health of the area and cannot easily be changed. These strengths, weakness, opportunities and threats were identified by each team member, recorded and discussed as a group.

#### Strengths

- Access to waterways
- Vast nearly pristine flood plain forest and marsh
- Inter-agency cooperation in management of area
- Vistas and landscape
- 1300 plus endangered and threatened species
- Relationship to the seafood industry
- Tourism industry

#### Weaknesses

- Traditional users may object to expanded use
- Control over access
- Public likely to be resistant to any change in use
- Lack of houseboat/long term-camping regulations
- Lack of adequate law enforcement staff
- No management stamp required
- Lack of facilities; equipment storage, visitor center and field office

#### Opportunities

- Rising interest in Eco-tourism, proximity to St. George and Apalachicola audience
- Wonderful fishing, boating and kayaking opportunities
- Town of Apalachicola has unique cultural heritage
- Provide wilderness experiences

#### Threats

- Water Quality and quantity, issues from Georgia and Alabama
- Not enough personnel (man power) to expand widely with project/options
- Conflicts with other user groups

**POSSIBLE ACTIVITIES**

Possible Activities	1	2	3	4	5	6	7	TOTAL
Hunting	3	3	3	3	3	3	3	21
Recreational boating	3	3	3	3	3	3	3	21
Scenic Viewing (towers)	3	3	3	3	3	3	3	21
Fishing	3	3	3	3	3	3	3	21
Kayaking	3	3	3	3	3	3	3	21
Photography	3	3	3	3	3	3	3	21
Canoeing	3	3	2	3	3	3	3	20
Hiking	3	3	3	3	3	3	2	20
Back Country Primitive Camping	3	3	3	1	3	3	3	19
Self-guided Wildlife Viewing Trails	2	3	3	3	3	3	2	19
Wildlife Watching - Walks	2	3	2	3	3	3	3	19
Automobile Touring	2	3	3	3	2	3	2	18
Relaxation/Reflection	2	3	3	3	3	2	2	18
Archery	3	3	3	3	2	2	2	18
Interpretive Driving Tours	2	3	3	3	2	3	2	18
Wildlife Watching - Blinds	2	3	2	3	2	3	2	17
Picnicking	3	3	3	3	2	2	1	17
Regional/State Trail Connections	3	3	2	3	2	2	1	16
Developed Area Camping	3	3	2	1	3	2	2	16
Frog gigging	3	3	2	2	2	1	3	16
Crabbing	3	3	2	N	3	2	2	15
Wildlife Watching-guided	1	2	2	2	3	3	2	15
Dog Walking	3	3	2	2	2	1	2	15
Bicycling Off-road	1	3	2	3	2	2	1	14
Exercise (walking/running)	3	2	2	3	2	1	1	14
Movie (commercial filming)	1	2	2	2	3	1	2	13
Trapping	3	2	3	N	N	2	3	13
Swimming	3	1	2	2	2	1	2	13
Wildlife watching - festivals	1	2	2	2	2	2	2	13
Mule and Cart Rides	1	3	1	3	1	1	2	12
Wildlife Watching - Training	1	2	1	2	2	2	2	12
Tree Canopy Trail	1	1	2	1	2	3	2	12
Bicycling on-road	1	N	2	3	3	1	1	11
Horseback Riding	2	3	1	1	2	1	1	11
Tram Tours	1	2	1	3	2	1	1	11
Airplane Tours	1	3	2	X	X	2	2	10
Sailing	1	2	1	N	2	1	2	9
Sun Bathing	3	X	1	1	1	1	1	8
Tubing	2	1	2	1	1	N	1	8
Sailboarding	1	2	1	1	1	1	1	8

## CONSENSUS OF APPROPRIATE VISITOR EXPERIENCES

### Recreational Activities:

Most Appropriate	Least Appropriate
Hunting	Swamp Buggy Tours
Recreational Boating	Airboat Tours
Scenic Viewing Tours	Snorkeling/SCUBA
Fishing	ATV Tours
Kayaking	Water Skiing
Photography	Shooting Range
Hiking	ATV Riding
Back-country primitive camping	Jet Skiing
Self-guided wildlife viewing trails	
Wildlife watching walks	

### Facilities:

Most Appropriate	Least Appropriate
Canoe/kayak launch sites	Skeet Range
Wildlife Observation towers	Skeet range and Sporting Clay Concession
Build or improve roads	Horse Stalls
Install silent approach trails with directional and interpretive signs to blinds located at viewing sites	Tram and tram road for concession-guided tours
Primitive camp platforms on paddle trails	Pier and docking for pontoon and/or airboat tour concession
Plant, maintain and identify wildlife food plots and openings for hunters and wildlife viewing	Establish carrion feeding pits and install snags to attract and view eagles and vultures

### Environmental Education/Interpretation:

Most Appropriate	Least Appropriate
Plant ID	Youth Camp
Explore habitats	Activities and games
Wildlife investigation	
Environmental Restoration activities	
Explore Culture and Anthropology	

### Nature Based Recreation Concept Development Mapping

#### Main Concepts Team 2

- Provide handicapped access boat launch facilities
- Longleaf pine restoration with interpretation
- Potential for pull-offs and wayside exhibit along 65 to interpret natural history
- Outdoor classroom, encourage ecotourism and passive recreation

Use Dept. of Environmental Protection staff to distribute literature and potential for concession  
Rentals at site near DEP office  
Bass fishing boat launch

Main Concepts Team 1

Create linkage with town of Howard Creek by locating a fishing platform and interpretative kiosk on the river  
Enhance existing dove fields and picnic area with bike trail and bank fishing opportunities  
Provide scenic drive pull-offs along SR 65. D.O.T. may assist with financing for pull-offs  
Have local paddling association designate and help maintain canoe/kayak trails

## Appendix 4 – Regional Context

The Apalachicola River WEA is part of a complex of more than one million acres of conservation lands. These adjacent public lands provide an opportunity for cooperative planning to maximum the nature-based recreation opportunities in the region (e.g. providing trail connectivity).

Conservation Areas Adjacent to Apalachicola River WEA		
Name	Acres	Major Habitat/Recreation
Apalachicola National Forest	564,000	Pine Flatwoods/trails of various types, hunting, fishing, boating, paddling, off-road cycling, horseback riding, picnicking, primitive and developed camping, historic sites
Tate's Hell State Forest	144,508	Pine Flatwoods/hunting, fishing, canoeing, boating, primitive camping, 1 hiking and 1 nature trail
Apalachicola National Estuarine Research Reserve	246,766*	Estuary/boating, fishing, trails
Apalachicola River Water Management Area	35,506	Bottomland Hardwoods/wildlife viewing, fishing, hiking, canoeing, boating, hunting, primitive camping
Ed Ball WMA	59,326	Pine Flatwoods/Hunting
St. George Island State Park		Beach/Dune/Developed and primitive camping, cabins, hiking, boating, fishing, wildlife viewing
*includes St. Vincent's Island, WMD lands and the WEA		

The regional economy is dependent on natural resources and/or tourism. Apalachicola and Port St. Joe have numerous small ecotourism businesses and Port St. Joe has recently established a wildlife festival. A significant amount of commercial timberland near ARWEA is being proposed for residential development.

Community	Population	Economic Base
Port St. Joe	3664	Tourism, Recreational Fishing
Wewahitchka	1722	Timber, Honey
Howard Creek	Less than 10,000	Residential
Apalachicola	2334	Fisheries, Tourism
Eastpoint	1303	Fisheries, Tourism
St. George Island		Tourism
Source: US Census Bureau 1990 and 2000		

## **Appendix 5 - WEA Resources**

### Staff:

2 Wildlife Biologists  
1 Wildlife Officer  
2 Technicians

### FWC Facilities and Equipment

An equipment storage compound is located at Howard Creek on the west side of the Apalachicola River. Four vehicles, two boats, two tractors and a bulldozer, dump truck and backhoe are available for use in managing the area.

### Entrances, Boundary Markers and Gates

The WEA has an extensive network of dirt roads. Bloody Bluff and Sand Beach roads are maintained by Franklin County. The Commission is improving a network of roads within the area, installing low water crossing and posting road signs. Access to the area is largely unlimited. Motor vehicles are limited to named and numbered roads and vehicles are prohibited from Catfish Creek levee road and, seasonally, in posted dove fields. The primary entrance on the east side of the area is designated as Sand Beach Road. There is a large entrance sign erected at its intersection with Highway 65 and smaller signs are posted at the designated secondary entrances. Landmark signs are located at the northern and southern boundary along 65 as are signs designating boat ramps. There are no entrance signs on the west side of the river.

### Food Plots

On the west side of the Apalachicola River, the WEA staff maintain 160 acres of planted dove fields.

### Cultural Resources

There are 27 designated cultural sites on the area. Many are Native American camps and burial sites. Historic sites include Bloody Bluff, Creels Town, a turpentine plant, an African American cemetery and Creels Side Camp.

### Natural Resources

The WEA comprises more than 60,000 acres of uplands, floodplain forests, and estuarine communities. Up to 75 percent of the WEA regularly inundates. A comprehensive description of the WEA's plant communities and associated wildlife can be found in the CMP. Sensitive areas include 15 acres of seepage bog, wading bird rookeries along the St. Marks and Apalachicola and north of Sand Beach, eagle nests (north of Sand Beach and near Cash Creek) and RCW cavity trees along Highway 65.

## Bibliography

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- 1994 Protecting Cultural Landscapes: Planning Treatment and Management of Historic Landscapes. U.S. National Park Services, Washington D.C., [www2.cr.nps.gov/tps/briefs/brief36.htm](http://www2.cr.nps.gov/tps/briefs/brief36.htm) Washington D.C.

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- 1997 Conceptual Management Plan for the Chassahowitzka Wildlife Management Area. Game and Fresh Water Fish Commission, Tallahassee, Florida.

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- 1992 Interpretacion Ambiental. North American Free Press, Golden, Colorado.

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- 1993 Guiding Principals of Sustainable Design. U.S. National Park Services, Denver Service Center, Denver, Colorado.

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- 1997 VERP – The Visitor and Resource Protection (VERP) Framework: A Handbook for Planners and Managers. U.S. National Park Service, Denver Service Center, Denver, Colorado.
- 1994 Interpretation Planning. U.S. National Park Service, Denver Service Center, Denver, Colorado.

Stoll, Andrew

- 2000 Master Plan for Jeannette Kawas National Park in Tela, Honduras. University of Florida Thesis Document. Gainesville, FL

## COST ESTIMATES

**Per site:**

**Cash Creek Wildlife Observation Site**

Stabilized Parking.....	\$ 2,500
Observation Platform.....	\$ 15,000
Permit.....	\$ 350
Rail-mounted interpretive panel.....	\$ 375

**Bloody Bluff Campsite** (anticipate approx. 4 sites)

Stabilized Tent Sites (primitive/4 people ea).....	\$ 500/ea
Picnic Tables.....	\$ 500/ea
Interpretive Trails (Approximately 4 days to clear and blaze)	
Trailhead panel and frame.....	\$ 800
Bloody Bluff cemetery panel and frame.....	\$ 800
Trail Brochure.....	\$ 750

**Graham Creek Picnic Site**

Tables.....	\$ 500/ea
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**Additional elements:**

<b>Footbridge</b> .....	\$ 15,000
30' span	

<b>Boardwalk</b> .....	\$ 165/LF
6' elevated with handrails	

<b>Toilet Facilities</b> .....	\$ 13,000
CXT Concrete Toilet Building (single vault)	
Price includes freight [to Tallahassee area]	
and installation	

<b>Visitor Center</b> .....	\$200,000
Not including exhibits or classrooms	

Cost estimates (with exception of toilet facilities) are based on Items List generated by Division of Recreation and Park, Office of Park Planning

**13.12 Management Procedures Guidelines – Management of  
Archaeological and Historical Resources and Master Site File  
List**

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

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

### A. General Discussion

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

### B. Agency Responsibilities

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

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

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

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

### C. Statutory Authority

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

### D. Management Implementation

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

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

professional archaeologist, modifications to the proposed project to avoid or mitigate potential adverse effects.

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

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

#### E. Minimum Review Documentation Requirements

In order to have a proposed project reviewed by the Division, certain information must be submitted for comments and recommendations. The minimum review documentation requirements can be found at: [http://www.flheritage.com/preservation/compliance/docs/minimum\\_review\\_documentation\\_requirements.pdf](http://www.flheritage.com/preservation/compliance/docs/minimum_review_documentation_requirements.pdf).

\* \* \*

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

Deena S. Woodward  
Division of Historical Resources  
Bureau of Historic Preservation  
Compliance and Review Section  
R. A. Gray Building  
500 South Bronough Street  
Tallahassee, FL 32399-0250  
Phone: (850) 245-6425  
Toll Free: (800) 847-7278  
Fax: (850) 245-6435

# Environmental Resource Analysis

## Cultural Resources

Analysis Shape Type: Polygon

Analysis Timestamp: 02042014 11:41:27

Shape Name: Unnamed polygon centered at -85.016772 °, 29.90582 °

Boundary Area: 65694.51 acres

Buffer Area: 0 acres

Total Area: 65694.51 acres

Cultural Resources										
Florida Sites										
SITE NAME	SITEID	SITETYPE1	SITETYPE2	SITETYPE3	SITETYPE4	SITETYPE5	SITETYPE6	HUMANREMN	Total Area (acres)	Percent of Area
APALACHICOLA 8.5 WRECK	GU00115	Historic shipwreck							0.75	0 %
BEANFIELD NORTH	GU00091	Habitation (prehistoric)	Land-terrestrial		Variable density scatter of artifacts				3.03	0 %
BEANFIELD SOUTH	GU00090	Habitation (prehistoric)	Land-terrestrial		Variable density scatter of artifacts				2.21	0 %
BHR-EP1	FR00801	Artifact scatter-low density (< 2 per sq meter)							0.89	0 %
BLEACHED BONES	FR00752	Artifact scatter-low density (< 2 per sq meter)							2.09	0 %
BLOODY BLUFF LANDING	FR00876	Artifact scatter-low density (< 2 per sq meter)	Turpentine camp	Wharf / Dock / Pier					1.90	0 %
BLOODY BLUFF SOUTH	FR00739	Land-terrestrial	Prehistoric midden(s)	Other	Artifact scatter-low density (< 2 per sq meter)				1.80	0 %
CREELS	FR00863	Historic burial(s)	Land-terrestrial	Lumber mill	Historic road segment	Historic town	Turpentine camp	YES	273.06	0.42 %
CREELS SIDE CAMP	FR00878	Turpentine camp							4.56	0.01 %
DEAD FIELD HOUSE	GU00037	Historic refuse / Dump	Artifact scatter-low density (< 2 per sq meter)	Ceramic scatter					2.38	0 %
DOUGLAS CREEK BORROW PIT	GU00049	Artifact scatter-low density (< 2 per sq meter)	Ceramic scatter						1.70	0 %
FIREBREAK CIRCLE	GU00040	Artifact scatter-low density (< 2 per sq meter)	Single artifact or isolated find						2.23	0 %
FORMER SHELL MOUND	GU00053	Prehistoric shell midden	Prehistoric shell scatter						6.81	0.01 %
FORT GADSDEN WRECK	GU00009	Historic shipwreck							3.94	0.01 %
GARDENER'S LANDING SHELL MOUND	FR00806	Prehistoric shell midden	Artifact scatter-low density (< 2 per sq meter)						0.47	0 %
GARDNER LANDING	FR00759	Artifact scatter-low density (< 2 per sq meter)							1.44	0 %
GIBBY'S BOAT	GU00122	Historic shipwreck							0.33	0 %
INGRAM CREEK STEAMBOAT	GU00123	Historic shipwreck							0.22	0 %

J.B. LOVETT CABIN SITE	GU00100	Building remains	Wharf / Dock / Pier							0.09	0 %
MARGE MARTIN	GU00046	Land-terrestrial	Artifact scatter-low density (< 2 per sq meter)							0.75	0 %
NEW ROADCUT	GU00092	Habitation (prehistoric)	Land-terrestrial							1.30	0 %
NORTH BEVERLY	FR00886	Naval stores-related	Historic town							0.52	0 %
OVERGROWN ROAD	GU00038	Artifact scatter-low density (< 2 per sq meter)	Ceramic scatter							0.86	0 %
PITCHER PLANT	FR00751	Lithic scatter/quarry (prehistoric: no ceramics)	Prehistoric lithics only, but not quarry							3.05	0 %
PORTER LAKE BARGE	FR00917	Historic shipwreck								0.37	0 %
PORTER LAKE STEAMBOAT	FR00916	Historic shipwreck								1.18	0 %
SAM'S CREEK CUTOFF SHELL MOUND	FR00754	Prehistoric burial(s)	Prehistoric shell midden	Tidal-estuarine	Saltwater submerged site	Wetland-palustrine-usually dry	YES			4.02	0.01 %
SAND BEACH HAMMOCK	FR00864	Campsite (prehistoric)	Land-terrestrial	Prehistoric shell midden	Prehistoric midden(s)	Artifact scatter-dense (> 2 per sq meter)	Historic well			4.92	0.01 %
SAUL'S CREEK ROAD EAST	GU00033	Land-terrestrial	Prehistoric lithics only, but not quarry							5.33	0.01 %
SAUL'S CREEK ROAD WEST	GU00035	Land-terrestrial	Artifact scatter-low density (< 2 per sq meter)			Ceramic scatter				1.92	0 %
TANK BOAT	GU00121	Historic shipwreck								0.99	0 %
THANK YOU MA'AM CREEK	FR00754	Prehistoric burial(s)	Campsite (prehistoric)	Habitation (prehistoric)	Land-terrestrial	Prehistoric shell midden	Freshwater submerged site	YES		3.81	0.01 %
THREE PINE CLEARING	GU00042	Artifact scatter-low density (< 2 per sq meter)	Ceramic scatter							1.38	0 %
TOTAL:										340.27	0.52 %
<b>Florida Structures</b>											
<b>SITE NAME</b>				<b>SITEID</b>				<b># Features</b>			
Brothers River Apiary				FR00968				1			
				TOTAL:				1			
<b>Historical Cemeteries</b>											
<b>SITE NAME</b>				<b>SITEID</b>				<b>Total Area (acres)</b>		<b>Percent of Area</b>	
BLOODY BLUFF CEMETERY				FR00861				0.31		0 %	
				TOTAL:				0.31		0 %	
<b>Historic Bridges</b>											
No Records Found											
<b>National Register of Historic Places</b>											
No Records Found											
<b>Resource Groups</b>											
No Records Found											
<b>Field Survey</b>											
<b>TITLE</b>										<b>Total Area (acres)</b>	<b>Percent of Area</b>
Archaeological and Historical Survey of Florida Power Corporation 250 KV Transmission Lines River Crossings										71.39	0.11 %
Cultural resource assessment survey of the Bob Holt Realty property near East Point, Florida.										5.25	0.01 %
Cultural resources assessment of the lower Apalachicola River environmentally endangered lands tract-Franklin and Gulf Counties, Florida										30,781.03	46.86 %
Archaeological Investigations of the 1994 Record Flood Impacts in the Apalachicola Valley, Northwest Florida										15,134.03	23.04 %
An Inventory and Assessment of Cultural Resources Within Tate's Hell State Forest, Franklin and Liberty Counties, Florida										316.50	0.48 %
An Inventory and Assessment of Historical Resources within the Apalachicola River Wildlife and Environmental Area, Franklin and Gulf Counties, Florida										48,521.23	73.86 %
Apalachicola Valley Remote Areas Archaeological Survey, Northwest Florida (V. I The Survey and Sites Located)(V. II 8GU14; 8GU94)										673.30	1.02 %
A Cultural Resource Assessment of the Tiner Telecommunications Tower in East Point, Franklin County, Florida										84.14	0.13 %

CRAS of Proposed Apalachicola Cell Tower, Franklin County, Florida	114.86	0.17 %
A Cultural Resource Reconnaissance of the Proposed Twin Lakes Residential Development, Franklin County, Florida	1.23	0 %
Cultural Investigations in the Apalachicola and Chattahoochee River Valleys in Florida, Alabama, and Georgia: History, Archeology, and Underwater Remote Sensing	722.97	1.1 %
Archaeological and Historical Survey: Deadhead Logging Permit Survey, Brothers River: Pre-Cut Timber Recovery Permit Application Number 23-0266804-001-DF, Gulf and Franklin Counties, Florida	360.12	0.55 %
Phase I Reconnaissance Survey of the Northwest Florida Water Management District Beaverdam Creek, Altha, & Upper Chipola River Tracts, Apalachicola & Chipola River Water Management Areas, Calhoun, Jackson, & Liberty Counties, Florida (FDHR Grant #S1315)	122.16	0.19 %
TOTAL:	96,908.22	147.52 %

**13.13 Operational Plan Fiscal Year 2013-2014 and Land Management  
Uniform Cost Accounting Council Terms**

## Land Management Uniform Accounting Council Categories and Subcategories

### 1. Resource Management

- a. Exotic Species Control. -- Invasive exotic plant and animal removal activities and costs for inventorying, planning, preparing, executing, evaluating, monitoring and reporting. Also includes equipment, chemicals, protective clothing and supplies. Includes nuisance native feral animal and plant control.
- b. Prescribed Burning. -- Prescribed burning activities and costs for assessing, planning, preparing, executing, evaluating and reporting. Also includes equipment, protective clothing and supplies.
- c. Cultural Resource Management. -- Management activities and costs for assessing, planning, executing, evaluating and reporting, and for all maintenance, restoration or monitoring activities for prehistoric and historic sites, features and collection objects.
- d. Timber Management. -- Activities and costs related to the establishment of a stand of potentially merchantable timber, harvest of merchantable timber, and cultural treatments intended primarily to improve the growth and overall health of a stand of merchantable timber. Also includes activities and costs related to the cutting of merchantable timber in natural community and habitat restoration projects.
- e. Hydrological Management. -- Hydrological management and restoration activities and costs for assessing, monitoring, planning, preparing, executing, evaluating and reporting. Includes water level management, repair, removal or back-filling of ditches, canals, berms and dams. Also includes water quality and water quantity monitoring.
- f. Other. -- All other resource management activities and costs not captured in other specific subcategories. Examples include natural community and habitat restoration through other techniques; plant, animal or biological community survey, monitoring and research; listed species management; technical assistance; and evaluating and commenting on resource impacts to parks.

### 2. Administration

- a. Central Office/Headquarters. -- Headquarters units conducting general administration of land under management by the agency. Includes upper management direction, administration and fiscal, budget, personnel, purchasing and record keeping required for operations oversight and specific programs. Includes all duties unless they specifically relate to other categories or subcategories.
- b. Districts/Regions. -- Sub-state administrative districts or regions conducting general administration of the properties under their management. Includes all

duties, unless they specifically relate to other categories or subcategories. General operating costs of district or region administrative facilities are included.

- c. Units/Projects. -- Conducting general administration duties at a specific management unit (state park, state forest, state wildlife management area, etc.). Includes supervisory duties, fiscal and record keeping duties, and any other duties that do not specifically relate to other categories or subcategories. General operating costs for the property, such as utilities, telephones and garbage collection, are included.

### **3. Support**

- a. Land Management Planning. -- Developing land management plans required by Sec. 253.034, F.S. Includes researching and compiling plan information, materials and maps, coordinating planning activities, conducting review activities (internal reviews, public meetings, advisory group meetings, ARC, etc.), and promulgating draft plans and final plans.
- b. Land Management Reviews. -- Planning, organizing and conducting land management reviews by teams created under Sec. 259.036, F.S. Includes preparing and responding to land management review reports. Also includes similar work conducted as part of internal agency land management reviews.
- c. Training/Staff Development. -- Staff training and development costs incurred in any facet of the agency's land management activities.
- d. Vehicle Purchase. -- Acquisition of any vehicle purchased primarily for land management purposes or to support any category of land management activity by the agency.
- e. Vehicle Operation and Maintenance. -- Costs of operating and upkeep of any vehicle used by the agency to support any category of land management activity.
- f. Other. -- Any other support activity or cost not captured by other categories or subcategories.

### **4. Capital Improvements**

- a. New Facility Construction. -- Use of Fixed Capital Outlay (FCO) or other budget authority for all new facility design and construction activities. Includes new roads, parking and all other infrastructure.
- b. Facility Maintenance. -- Use of Fixed Capital Outlay (FCO) or other budget authority for all repairs or renovations to existing facilities, roads or other infrastructure. Also includes ADA accessibility improvements and renovations.

### **5. Visitor Services/Recreation**

- a. Information/Education Programs. -- Interpretive, environmental education and marketing programs that explain or promote the agency's mission or instill in visitors an understanding and appreciation for Florida's natural and cultural resources and their proper use and care. Includes signs, brochures, maps and other public information materials that are produced or disseminated.
- b. Operations. -- Includes the non-administrative and non-support costs involved in providing public access to lands. Includes all actions required to manage visitor activities in a way to ensure safe and enjoyable use by the public. Includes routine maintenance, cleaning and other work required to provide safe and efficient utilization of facilities and resources that support visitor use and recreation. Includes protection activities required by staff to safeguard natural and cultural resources, facilities, material, staff and visitors.

**6. Law Enforcement**

The provision of all activities for enforcing criminal, conservation and boating laws on land, freshwater and marine environments and all costs associated with these services. Includes the provision of uniform patrol. Includes overt and covert criminal investigations. Includes regulation of commercial wildlife trade. Also includes the direction and administration of all law enforcement programs and activities, and all associated costs.

**Land Management Uniform Accounting Council Categories and FWC Activity Codes**

**Resource Management**

Exotic Species Control

- 210 Exotic species control
- 211 Exotic plant control (mechanical)
- 212 Exotic plant control (chemical)

Prescribed Burning

- 205 Prescribed burning
- 206 Prescribed burning C growing season (April 1 to September 30)
- 207 Prescribed burning C dormant season (October 1 to March 31)
- 208 Firebreaks

Cultural Resource Management

- 201 Cultural resource management

Timber Management

- 202 Timber management

Hydrological Management

- 215 Hydrology management
- 216 Dams, dikes, levees
- 217 Canals
- 218 Water level management
- 194 Lake restoration

## Other

- 185 GIS
- 186 Biometrics
- 200 RESOURCE MANAGEMENT
- 203 Tree and shrub planting
- 213 Wildlife management
- 214 Listed Species management
- 219 Upland restoration
- 282 Herbaceous seeding
- 283 Clearings
- 289 Native vegetation management (mechanical)
- 290 Native vegetation management (chemical)
- 221 Animal surveys
- 228 Inland aerial surveys
- 235 Vegetation and plant surveys
- 250 MONITORING AND ASSESSMENTS
- 252 Biomedical monitoring
- 253 Ecological monitoring
- 256 Habitat monitoring analysis
- 263 Nest box monitoring
- 264 Population demographics
- 295 Biological data collection, analysis, and reporting
- 275 Permits and authorizations
- 276 Commission rule development and review
- 277 Relocation
- 278 CITES tags
- 281 Other resource management
- 284 Feeding/watering
- 285 Nest structures
- 286 Population control
- 287 Stocking enhancements/population augmentation
- 288 Nuisance animal complaints
- 293 Mortality investigations
- 294 Program coordination and implementation C inter- and intra-agency coordination and program implementation at the section, bureau, or division level
- 296 Habitat protection technical assistance
- 750 URTD assessment
- 789 Site Preparation – GCR
- 790 Irrigation – GCR
- 791 Seed Collection – Hand
- 792 Seed Collection – Mechanical
- 793 Herbicide Maintenance Treatment

## **Administration**

### Central Office/Headquarters

- 100 ADMINISTRATION C administrative tasks, including preparation of forms, word processing, photocopying, filing, and other clerical/secretarial duties.

104 Budget/purchasing/accounting

**Support**

Land Management Planning

103 Meetings C includes workshops, conferences, staff, and other meetings.

204 Resource planning

Land Management Reviews

209 Land Management Reviews

101 Project inspection C field inspections of projects.

Training/Staff Development

150 PERSONNEL MANAGEMENT C recruitment, hiring, training, counseling, and supervising.

Vehicle Purchase

128 New Vehicle and Equipment Purchase

Vehicle Operation and Maintenance

923 FEM C vehicles/equipment

Other

140 REPORT WRITING/EDITING/MANUSCRIPT PREPARATION

141 Grant applications

180 SYSTEMS ADMINISTRATION AND MANAGEMENT

182 Data management

184 Metadata development and management

187 IT

188 Web development

721 Geospatial analysis techniques

191 Stamp design coordination

226 Human dimensions surveys

**Capital Improvements**

New Facility Construction

910 New facility construction C buildings/structures

912 New construction C roads/bridges

913 New construction C trails

914 New construction C fences

Facility Maintenance

920 Facility and equipment maintenance (FEM) C buildings/structures

921 FEM C utilities

922 FEM C custodial functions

925 FEM C boating access

926 FEM C roads/bridges

927 FEM C trails

928 FEM C fences

**Visitor Services/Recreation**

Information/Education Programs

145 Technical bulletin

Operations

311 Boundary signs

- 312 Informational signs
- 320 Outreach and education C attending or developing educational or informational materials or events for the public
- 327 Becoming an Outdoor Woman C enhancement
- 331 Wings Over Florida
- 339 Range safety operations
- 341 Public use administration (hunting)
- 342 Public use administration (non-hunting)
- 350 Customer service support C disseminating written or verbal information or assistance to the public
- 700 STUDIES
- 740 EVALUATIONS AND ASSESSMENTS

## **Law Enforcement**

### **FWC Activity Code Numeric Listing**

- 100 ADMINISTRATION C administrative tasks, including preparation of forms, word processing, photocopying, filing, and other clerical/secretarial duties.
- 101 Project inspection C field inspections of projects.
- 103 Meetings C includes workshops, conferences, staff, and other meetings.
- 104 Budget/purchasing/accounting
- 128 New Vehicle and Equipment Purchase
- 140 REPORT WRITING/EDITING/MANUSCRIPT PREPARATION
- 141 Grant applications
- 145 Technical bulletin
- 150 PERSONNEL MANAGEMENT C recruitment, hiring, training, counseling, and supervising.
- 180 SYSTEMS ADMINISTRATION AND MANAGEMENT
- 182 Data management
- 184 Metadata development and management
- 185 GIS
- 186 Biometrics
- 187 IT
- 188 Web development
- 191 Stamp design coordination
- 194 Lake restoration
- 200 RESOURCE MANAGEMENT
- 201 Cultural resource management
- 202 Timber management
- 203 Tree and shrub planting
- 204 Resource planning
- 205 Prescribed burning
- 206 Prescribed burning C growing season (April 1 to September 30)
- 207 Prescribed burning C dormant season (October 1 to March 31)
- 208 Firebreaks
- 209 Land Management Reviews
- 210 Exotic species control

211	Exotic plant control (mechanical)
212	Exotic plant control (chemical)
213	Wildlife management
214	Listed Species management
215	Hydrology management
216	Dams, dikes, levees
217	Canals
218	Water level management
219	Upland restoration
221	Animal surveys
226	Human dimensions surveys
228	Inland aerial surveys
235	Vegetation and plant surveys
250	MONITORING AND ASSESSMENTS
252	Biomedical monitoring
253	Ecological monitoring
256	Habitat monitoring analysis
263	Nest box monitoring
264	Population demographics
275	Permits and authorizations
276	Commission rule development and review
277	Relocation
278	CITES tags
281	Other resource management
282	Herbaceous seeding
283	Clearings
284	Feeding/watering
285	Nest structures
286	Population control
287	Stocking enhancements/population augmentation
288	Nuisance animal complaints
289	Native vegetation management (mechanical)
290	Native vegetation management (chemical)
293	Mortality investigations
294	Program coordination and implementation C inter- and intra-agency coordination and program implementation at the section, bureau, or division level
295	Biological data collection, analysis, and reporting
296	Habitat protection technical assistance
311	Boundary signs
312	Informational signs
320	Outreach and education C attending or developing educational or informational materials or events for the public
327	Becoming an Outdoor Woman C enhancement
331	Wings Over Florida
339	Range safety operations
341	Public use administration (hunting)
342	Public use administration (non-hunting)

- 350 Customer service support C disseminating written or verbal information or assistance to the public
- 700 STUDIES
- 721 Geospatial analysis techniques 740 EVALUATIONS AND ASSESSMENTS
- 750 URTD assessment
- 789 Site Preparation – GCR
- 790 Irrigation – GCR
- 791 Seed Collection – Hand
- 792 Seed Collection – Mechanical
- 793 Herbicide Maintenance Treatment
- 910 New facility construction C buildings/structures
- 912 New construction C roads/bridges
- 913 New construction C trails
- 914 New construction C fences
- 920 Facility and equipment maintenance ( FEM) C buildings/structures
- 921 FEM C utilities
- 922 FEM C custodial functions
- 923 FEM C vehicles/equipment
- 925 FEM C boating access
- 926 FEM C roads/bridges
- 927 FEM C trails
- 928 FEM C fences

**Apalachicola River WEA Operational Plan Cost Estimate - Fiscal Year 2013-2014**

Activity Title	Staff Days	Salary	FuelCost	Other	Total
100 Administration	12.00	\$2,405.28	\$158.88	\$1,584.80	\$4,148.96
101 Project inspection	10.00	\$2,004.40	\$132.40	\$0.00	\$2,136.80
103 Meetings	20.00	\$4,008.80	\$264.80	\$1,000.00	\$5,273.60
104 Budget/purchasing/accounting	25.00	\$5,011.00	\$331.00	\$0.00	\$5,342.00
128 New Vehicle and Equipment Purchases	5.00	\$1,002.20	\$66.20	\$8,500.00	\$9,568.40
140 Report writing/editing/manuscript preparation	15.00	\$3,006.60	\$198.60	\$0.00	\$3,205.20
150 Personnel management	35.00	\$7,015.40	\$463.40	\$3,000.00	\$10,478.80
163 Program Supervision	10.00	\$2,004.40	\$132.40	\$500.00	\$2,636.80
182 Data management	35.00	\$7,015.40	\$463.40	\$0.00	\$7,478.80
185 GIS	30.00	\$6,013.20	\$397.20	\$500.00	\$6,910.40
200 Resource Management	0.00	\$0.00	\$0.00	\$15,000.00	\$15,000.00
201 Cultural resource management	5.00	\$1,002.20	\$66.20	\$250.00	\$1,318.40
202 Timber management	20.00	\$4,008.80	\$264.80	\$42,427.00	\$46,700.60
203 Tree and shrub planting	15.00	\$3,006.60	\$198.60	\$250.00	\$3,455.20
204 Resource planning	63.00	\$12,627.72	\$834.12	\$2,500.00	\$15,961.84

Activity Title	Staff Days	Salary	FuelCost	Other	Total
206 Prescribed burning - growing season	50.00	\$10,022.00	\$662.00	\$6,905.00	\$17,589.00
207 Prescribed burning - dormant season	75.00	\$15,033.00	\$993.00	\$42,937.00	\$58,963.00
208 Firebreaks	10.00	\$2,004.40	\$132.40	\$500.00	\$2,636.80
212 Exotic plant control (chemical)	40.00	\$8,017.60	\$529.60	\$20,000.00	\$28,547.20
215 Hydrology Management	15.00	\$3,006.60	\$198.60	\$1,500.00	\$4,705.20
218 Water level management	5.00	\$1,002.20	\$66.20	\$500.00	\$1,568.40
219 Upland restoration	20.00	\$4,008.80	\$264.80	\$1,000.00	\$5,273.60
221 Animal surveys	85.00	\$17,037.40	\$1,125.40	\$11,196.00	\$29,358.80
228 Inland aerial surveys	6.00	\$1,202.64	\$79.44	\$18,448.00	\$19,730.08
235 Vegetation and plant surveys	20.00	\$4,008.80	\$264.80	\$250.00	\$4,523.60
281 Other resource management	0.00	\$0.00	\$0.00	\$0.00	\$0.00
282 Herbaceous seeding	60.00	\$12,026.40	\$794.40	\$6,000.00	\$18,820.80
285 Nest structures	5.00	\$1,002.20	\$66.20	\$500.00	\$1,568.40
288 Nuisance animal complaints	0.00	\$0.00	\$0.00	\$0.00	\$0.00
289 Native vegetation management (mechanical)	60.00	\$12,026.40	\$794.40	\$20,989.00	\$33,809.80
290 Native vegetation management (chemical)	5.00	\$1,002.20	\$66.20	\$1,000.00	\$2,068.40
291 Technical assistance	15.00	\$3,006.60	\$198.60	\$0.00	\$3,205.20
294 Program coordination and implementation	110.00	\$22,048.40	\$1,456.40	\$2,000.00	\$25,504.80
311 Boundary signs	5.00	\$1,002.20	\$66.20	\$250.00	\$1,318.40
312 Informational signs	11.00	\$2,204.84	\$145.64	\$1,000.00	\$3,350.48
320 Outreach and education	6.00	\$1,202.64	\$79.44	\$500.00	\$1,782.08
341 Public use administration (hunting)	3.00	\$601.32	\$39.72	\$0.00	\$641.04
342 Public use administration (non-hunting)	20.00	\$4,008.80	\$264.80	\$30,000.00	\$34,273.60
350 Customer service support	8.00	\$1,603.52	\$105.92	\$750.00	\$2,459.44
910 New facility construction -- buildings/structures	0.00	\$0.00	\$0.00	\$0.00	\$0.00
920 FEM -- buildings/structures	55.00	\$11,024.20	\$728.20	\$27,070.00	\$38,822.40
922 FEM -- custodial functions	7.00	\$1,403.08	\$92.68	\$1,000.00	\$2,495.76
923 FEM -- vehicles/equipment	75.00	\$15,033.00	\$993.00	\$23,670.00	\$39,696.00
925 FEM -- boating access	8.00	\$1,603.52	\$105.92	\$500.00	\$2,209.44
926 FEM -- roads/bridges	45.00	\$9,019.80	\$595.80	\$58,490.00	\$68,105.60
928 FEM -- fences	11.00	\$2,204.84	\$145.64	\$500.00	\$2,850.48
<b>All totals</b>	<b>1,135.00</b>	<b>\$227,499.40</b>	<b>\$15,027.40</b>	<b>\$352,966.80</b>	<b>\$595,493.60</b>

## **13.14 FWC Agency Strategic Plan**

**Florida Fish and Wildlife Conservation Commission**  
**Agency Strategic Plan**  
2014 – 2019

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**Theme One – Florida’s Fish and Wildlife Populations and Their Habitats**

**Goal 1: Ensure the sustainability of Florida’s fish and wildlife populations.**

Strategies:

1. Manage listed species so they no longer meet Florida’s endangered and threatened listing criteria.
2. Manage species to keep them from meeting Florida’s endangered and threatened listing criteria.
3. Anticipate and address fish and wildlife species’ conservation needs in light of adaptation to long-term environmental changes.
4. Develop, acquire and apply the appropriate biological and sociological science to inform fish and wildlife conservation decisions.
5. Inform and guide partners regarding how their regulations, policies, procedures and other actions affect fish and wildlife conservation.
6. Protect fish and wildlife species through effective outreach and enforcement.

**Goal 2: Ensure sufficient habitats exist to support healthy and diverse fish and wildlife populations.**

Strategies:

1. Use science to determine quantity, quality and location of the habitats most critical to sustain healthy and diverse fish and wildlife populations.
2. Protect lands and waters critical to sustaining healthy and diverse fish and wildlife populations through diverse incentive programs.
3. Manage habitats to sustain healthy and diverse fish and wildlife populations.

## **Theme Two – Interactions with Fish and Wildlife, including Fishing, Hunting, Boating and Wildlife Viewing Opportunities**

**Goal 1: Provide residents and visitors with quality fishing, hunting, boating and wildlife viewing opportunities that meet their needs and expectations while providing for the sustainability of those natural resources.**

Strategies:

1. Develop, acquire and use the appropriate biological and sociological science necessary to provide sustainable fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of user groups while providing for the sustainability of those resources.
2. Manage fish and wildlife populations to provide sustainable fishing, hunting, and wildlife viewing opportunities.
3. Develop and maintain widely available, diverse and accessible fishing, hunting, boating and wildlife viewing opportunities that meet the needs and expectations of residents and visitors while providing for the sustainability of those resources and emphasizing partnerships with both public and private landowners.
4. Recruit and manage sustainable levels of resident and visitor participation in fishing, hunting, boating and wildlife viewing.
5. Provide targeted fishing, hunting, boating and wildlife viewing programs for youth, the disabled and veterans.

**Goal 2: Enhance the safety and outdoor experience of those who hunt, fish, boat and view wildlife.**

Strategies:

1. Provide and promote opportunities for residents, and visitors to learn safety practices for fishing, hunting, boating and wildlife viewing.
2. Enhance the boating safety and waterway experience of residents and visitors through improved access, management, education and enforcement.
3. Promote Florida's outdoor environment as a safe and healthy recreational option for residents and visitors.
4. Address the growing disconnect between people and nature by marketing and providing opportunities and education for diverse age, race, gender, ethnic and other demographic sectors.

**Goal 3: Use minimal regulations to manage sustainable fish and wildlife populations, manage access to fish and wildlife resources, and protect public safety.**

Strategies:

1. Continually evaluate proposed and existing regulations, based on resource management benefits, public safety concerns, and economic and social impacts, to improve or eliminate regulations as warranted.
2. Coordinate with partners and stakeholders to ensure that appropriate authorities and regulations exist to maintain sustainable fish and wildlife populations.
3. Implement and enforce regulations in an informative, proactive and influential manner to enrich resident and visitors' outdoor experience while safeguarding the natural resources.

**Goal 4: Minimize adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants that are known, or have a potential, to cause adverse impacts.**

Strategies:

1. Manage species and their habitats, as well as species and human interactions, to eliminate or reduce the adverse environmental, social, economic and health and safety impacts from native and non-native fish, wildlife and plants.
2. Effectively communicate to residents, visitors and businesses how to be safe and act responsibly when interacting with or possessing fish, wildlife and plants.
3. Manage captive and non-native wildlife movement and trade through proactive and responsive enforcement, regulation and education, with an emphasis on species that pose a high risk to our native fish and wildlife.
4. Enhance partnerships to address adverse environmental, social, economic and health and safety impacts from fish, wildlife and plants and ensure a consistent and integrated approach with FWC.

**Theme Three – Sharing Responsibility for Fish and Wildlife Conservation and Management with an emphasis on developing conservation values in our youth**

**Goal 1: Ensure current and future generations support fish and wildlife conservation.**

Strategies:

1. Expand and promote the Florida Youth Conservation Centers Network through leveraging FWC programs and staff, and developing public and private partnerships and sponsorships.

2. Develop and deliver standardized youth conservation curricula and fishing, hunting, boating and wildlife viewing outdoor activity programs, and assist with adapting programs and curricula to meet the needs of diverse communities.
3. Foster stewardship and shared responsibility for fish and wildlife conservation through conservation education programs.
4. Expand marketing and outreach to reach diverse audiences and engage all staff in priority outreach initiatives.

**Goal 2: Ensure residents, visitors, stakeholders and partners are engaged in the processes of developing and implementing conservation programs.**

Strategies:

1. Foster a common vision among partners and the FWC to maintain and enhance fish and wildlife populations and their habitats through interagency coordination, mutually beneficial goals and initiatives.
2. Engage residents, visitors, stakeholders and partners to understand their perspectives, develop and implement conservation programs, and implement fishing, hunting, boating and wildlife viewing management activities.
3. Use citizen science to enhance conservation programs.

**Goal 3: Increase opportunities for residents and visitors, especially youth, to actively support and practice fish and wildlife conservation stewardship.**

Strategies:

1. Inform residents and visitors about conservation stewardship and encourage their active involvement in achieving conservation of fish and wildlife.
2. Provide and promote opportunities for residents and visitors, especially youth, to participate in conservation stewardship activities, including FWC volunteer opportunities.

**Goal 4: Encourage communities to conserve lands and waters critical to sustaining healthy and diverse fish and wildlife populations.**

Strategies:

1. Provide communities with the necessary assistance to help them obtain the social and economic benefits of local conservation lands.
2. Provide residents and visitors with relevant information on the social and economic benefits of conservation, fishing, hunting, boating, and wildlife viewing.

3. Support community events and programs that promote fish and wildlife conservation.

#### **Theme Four – Responsive Organization and Quality Operations**

##### **Goal 1: Integrate our commitment to benefit the community and enhance the economy through our conservation efforts and public service.**

###### Strategies:

1. Identify and implement ways to support Florida businesses and job growth while managing fish and wildlife.
2. Identify and promote opportunities for staff to benefit local communities through participation in approved activities where FWC resources can be used (for example, the Florida State Employees' Charitable Campaign, the Guardian ad Litem Program, mentoring programs, FWC Disaster Response Teams, and American Red Cross Disaster Services).
3. Provide residents and visitors with reliable and current information on Florida's fish and wildlife.
4. Continue to attract visitors by providing top-quality fishing, hunting, boating and wildlife viewing opportunities.

##### **Goal 2: Provide resources and support for the safety and protection of residents and visitors, our natural and cultural resources, and for emergency responses to critical incidents and environmental disasters.**

###### Strategies:

1. Identify existing and emerging risks to the safety of residents and visitors and foster internal collaboration and external partnerships necessary to effectively manage, reduce or eliminate those risks.
2. Provide immediate and effective disaster response and recovery through mutual-aid efforts with local, state and federal partners.
3. Provide search, rescue, and recovery services in coordination with local, state and federal entities to ensure the safety of residents and visitors.
4. Protect natural and cultural resources through proactive and responsive enforcement efforts.

##### **Goal 3: Ensure the FWC has highly effective and adaptive business practices.**

###### Strategies:

1. Address emerging biological, social and economic trends, anticipate impacts and take advantage of opportunities to accomplish FWC's mission.

2. Expect each employee to be an ambassador for FWC and its mission to Florida's diverse residents and visitors.
3. Provide efficient and effective service to Florida's diverse residents, visitors, and FWC staff.
4. Foster a diverse, accountable, responsive and skilled workforce who effectively serves Florida's residents and visitors.
5. Manage existing and secure additional resources necessary to achieve fish and wildlife conservation and meet residents, visitor and stakeholder needs.
6. Create and maintain an effective business model that supports the FWC's mission by using continuous improvement approaches that foster a collaborative and professional culture.

## 13.15 GRASI MOU

MEMORANDUM OF AGREEMENT BETWEEN  
THE PRINCIPAL DEPUTY ASSISTANT SECRETARY OF THE AIR FORCE FOR  
INSTALLATIONS, ENVIRONMENT AND LOGISTICS  
PENTAGON, WASHINGTON, D.C. 20330  
AND  
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION  
TALLAHASSEE, FL 32399  
FOR THE PROVISION OF MILITARY TRAINING ON STATE LANDS

THIS MEMORANDUM OF AGREEMENT (hereafter, the "Agreement") is made and entered into by and between Office of the Principal Deputy Assistant Secretary of the Air Force for Installations, Environment and Logistics (hereinafter, "Air Force") and Florida Fish and Wildlife Conservation Commission (hereinafter, "Commission").

WITNESSETH:

WHEREAS, the Air Force, in order to successfully accomplish mission requirements has a need for expanded training opportunities in Northwest Florida beyond the current Department of Defense lands and training areas, and

WHEREAS, the Commission is responsible for managing, protecting, maintaining, and developing over 1.4 million acres of state conservation land ("Commission Lead-Managed Lands"), and

WHEREAS, the Parties have mutually concluded that it is desirable, practicable, and beneficial for the Parties to enter this Agreement to the mutual benefit of both and the goal is to work together in an effort to enhance both Parties' ability to carry out their respective missions.

NOW, THEREFORE, BE IT AGREED THAT:

1. Military training operations on the Commission Lead-Managed Lands in Northwest Florida can be compatible for both Parties without unreasonable impacts to resources if conducted with the proper planning and coordination.
2. Commission staff and Air Force personnel will work together to develop a detailed "Annual Operations Plan" that:
  - a. Establishes a framework through which military training exercises may be conducted on State-owned Commission Lead-Managed Lands. This framework may include other appropriate instruments within the jurisdiction of both Parties.
  - b. Identifies number and locations of compatible available sites in the Northwest Florida region, to be defined as "training sites".
  - c. Provides detailed maps showing boundaries delineating training areas.
  - d. Details limitations of liability between the parties.
  - e. Estimates the frequency of use of the sites.
  - f. Indicates the types of compatible training allowed and the training activities that are expected to be prohibited.
  - g. Establishes procedures for requesting, cancelling, coordinating and notification of the use of training sites.

- h. Identifies options for compensation or reimbursement for the Commission providing lands for training through cash payment or in-kind services.
- i. Establishes a feedback mechanism to assess the usefulness of the training site for the Air Force and the impact, if any, upon the mission of the Commission.
- j. Identifies and clarifies the Air Force's responsibility with regard to the National Environmental Policy Act (NEPA).

**EXECUTION OF THIS AGREEMENT:**

- 3. This Agreement shall become effective upon the date last signed below, and shall remain in full force and effect until cancelled by mutual agreement of the Parties, or upon the provision of at least sixty (60) days advance written notice from the Party desiring to terminate this Agreement to the other Party. Upon becoming effective, this Agreement shall supersede all previous agreements between the Parties on the same subject.
- 4. Unless a notice of change of address is given, any and all notices shall be delivered to the parties at the following addresses:

**Commission**

Mike Brooks  
 Section Leader  
 Wildlife and Habitat Management Section  
 620 South Meridian Street  
 Tallahassee, Florida 32399-1600  
 (850) 488-3831

**Air Force**

Kathleen I. Ferguson, P.E.  
 Principal Deputy Assistant Secretary  
 (Installations, Environment & Logistics)  
 Pentagon, Washington, D.C.  
 (703) 697-6300

IN WITNESS WHEREOF, authorized representatives of the Parties have affixed their signatures hereto, in recognition and acceptance of the terms, conditions and obligations set forth and or assumed under this Agreement.

**Florida Fish and Wildlife  
 Conservation Commission:**

Signature on file

Nick Wiley, Executive Director

**Department of the Air Force:**

\_\_\_\_\_  
 Kathleen I. Ferguson, P.E.  
 Principal Deputy Assistant Secretary  
 (Installations, Environment & Logistics)  
 Pentagon, Washington, D.C.

DATE: 3-25-13

DATE: \_\_\_\_\_

APPROVED AS TO FORM  
 AND LEGAL SUFFICIENCY  
  
 Commission Attorney

- h. Identifies options for compensation or reimbursement for the Commission providing lands for training through cash payment or in-kind services.
- i. Establishes a feedback mechanism to assess the usefulness of the training site for the Air Force and the impact, if any, upon the mission of the Commission.
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**Commission**

Mike Brooks  
 Section Leader  
 Wildlife and Habitat Management Section  
 620 South Meridian Street  
 Tallahassee, Florida 32399-1600  
 (850) 488-3831

**Air Force**

Kathleen I. Ferguson, P.E.  
 Acting Assistant Secretary  
 (Installations, Environment & Logistics)  
 Pentagon, Washington, D.C.  
 (703) 697-6300

IN WITNESS WHEREOF, authorized representatives of the Parties have affixed their signatures hereto, in recognition and acceptance of the terms, conditions and obligations set forth and or assumed under this Agreement.

**Florida Fish and Wildlife  
 Conservation Commission:**

\_\_\_\_\_  
 Nick Wiley, Executive Director

DATE: \_\_\_\_\_

**Department of the Air Force:**

Signature on file

Acting Assistant Secretary  
 (Installations, Environment & Logistics)  
 Pentagon, Washington, D.C.  
 MAR 22 2013

DATE: \_\_\_\_\_

## 13.16 ARSA MOU

**MEMORANDUM OF  
UNDERSTANDING (MOU)**

**APALACHICOLA REGIONAL  
STEWARDSHIP ALLIANCE**

Participating Agencies/Organizations

Florida Fish and Wildlife Conservation Commission  
Florida Department of Environmental Protection  
Florida Division of Forestry  
The Nature Conservancy  
Northwest Florida Water Management District  
U. S. Fish and Wildlife Service  
U. S. Forest Service  
Bureau of Land Management  
National Interagency Prescribed Fire Training Center

**I. Background**

The Parties agree to collectively initiate and implement a strategy for the conservation and stewardship of the natural resources managed by the participants within the alliance known as the Apalachicola Regional Stewardship Alliance (ARSA) in northwest Florida. ARSA is a unique public/private landowner collaboration seeking to address conservation needs and opportunities on over one million acres in northwest Florida. Northwest Florida has been identified by The Nature Conservancy as a national "hot spot" of biodiversity due to the region's remarkable assemblage of plants and animals and the threats posed by incompatible development and habitat fragmentation. This area encompassed by ARSA consists of the Apalachicola River corridor, barrier islands, a large portion of the Big Bend, and hundreds of thousands of acres of longleaf pine and wiregrass habitats (i.e. sandhill, mesic flatwoods, wet flatwoods and upland pine). This diverse and complex landscape is host to Department of Defense installations, a National Forest, two National Wildlife Refuges, State Forests and Wildlife Management Areas, State Parks and Coastal/Aquatic Managed Areas, Northwest Florida Water Management District properties and abundant forested privately owned properties.

Due to the complex and resource intensive nature of land management in the region, no one landowner or agency consistently has the capacity to address all of the stewardship issues that arise. However, it is recognized that within the group of participants, meaningful partnerships could be made for mutual benefit to address these land management challenges. Chief among these challenges for all Partners is prescribed fire. Not only is this activity complex and resource intensive, but also it is the most important ecological process for the majority of the ARSA

region. With few exceptions, Florida's plant and animal communities have co-evolved with the presence of routine and wide ranging fires. Once a product of natural ignitions, fire has in recent history been utilized as a tool first by the Native Americans, then by the European settlers. Because of this familiarity with fire, many of our native plant and animal species are now dependent upon the presence of various cycles of fire from the two to three year burning rotation of a longleaf pine-wire-grass savannah to the burn cycles of scrub and basin swamps which are measured in decades.

As responsible environmental managers, it is our mission to keep the natural process of fire within our remaining natural areas. Fire can be used as a method of ecosystem maintenance, to maintain a population of threatened plants or animals and as a successful method to reduce the natural buildup of flammable vegetation. The positive results of prescribed fire are consistently observed as large wildfires lose momentum when they spread into areas recently treated with prescribed fire. Also, cost relationships associated with fighting wildfire vs. applying prescribed fire have been estimated conservatively to be 50 to 1.

Although restoring the natural fire regime to partner lands is an important focus of ARSA; we also recognize that there are many other areas of land management expertise that could potentially be shared between alliance partners including the following:

- Ground cover restoration
- Hydrologic restoration
- Invasive exotic species control
- Rare species management
- Ecological monitoring
- Law enforcement
- Timber and/or vegetation management
- Cultural resources
- Visitor management
- Outreach and Public Affairs
- Volunteer Opportunities

Therefore all parties to this MOU may not necessarily be involved in fire management, or be able to participate in collaborative fire events, as discussed in a subsequent section of this MOU.

## II. Objectives

This Memorandum of Understanding (MOU) is hereby entered into this \_\_\_\_ day of \_\_\_\_\_, 2010 between The Florida Department of Agriculture, Division of Forestry (FDOF), Florida Department of Environmental Protection, (DEP), the Florida Fish and Wildlife Conservation Commission (FWC), the US Fish and Wildlife Service (USFWS), US Forest Service (USFS), Bureau of Land Management (BLM), National Interagency Prescribed Fire Training Center, (PFTC), Northwest Florida Water Management District (NFWFMD) and The Nature Conservancy (TNC), (collectively, "Parties" or "Partners"), covering reciprocal fire use, as well as providing mutual assistance for other land management activities, sharing information, and communicating to the public our mutual management successes in meeting both individual and common goals related to this MOU. This MOU establishes the Apalachicola Regional

Stewardship Alliance (ARSA), which will provide staffing and equipment to conduct prescribed fires on lands administered by the participating Parties, cooperate with fire training and education opportunities, and will promote public understanding and acceptance of prescribed fire in this region. In many instances a prescribed burning program is limited by its personnel, equipment, or local weather. It is the intent of this cooperative effort that by uniting skills, tools, and abilities that the combined burning accomplished by the ARSA will exceed the sum total of the respective agencies and entities on their own. This MOU also provides for the sharing of information concerning land management and ecosystem restoration techniques. Lastly, it is the intent that this MOU serve as a vehicle for sharing of resources to promote ground cover restoration. These resources could include but would not be limited to seed collecting and planting equipment, personnel, as well as providing sites for the collection of native ground cover seed.

### III. Goals

- (1) Protect, restore and manage lands that will sustain the high biodiversity of the region.
- (2) Conduct biannual meetings (location to rotate amongst Partners) to share information concerning the land management expertise identified above, share updates related to ongoing projects and to discuss/schedule potential resource needs.
- (3) Increase the fire management capacity of all Partners involved with this MOU.
- (4) Continuously maintain a chairperson whose term will not exceed one year. Chair will rotate amongst participating Partners. Nominations and voting will be conducted at the end of each chairperson's one-year term.

To achieve these goals within the ARSA, the Parties will, subject to each Party's legal authorities, regulations, policies, programmatic priorities and availability of funding:

- Freely share land management expertise and resources as practicable and per agency/landowner policy.
- Enhance communication and coordination among participants and other interested parties to identify opportunities for collaborative fire events. Among other benefits, this will facilitate coordination and operational success during emergency incidents such as wildfire and tropical weather.
- Seek federal, state, regional, local and private funding to support prescribed fire activities and training.
- Promote the education of interested private individuals and corporate landowners on fire management activities.
- Work to achieve landscape-level conservation through increased sharing of ecosystem management goals across agency boundaries.

- Provide opportunities for both prescribed fire and wildfire training for all participants in the form of standardized National Wildfire Coordinating Group (NWCG) training and on the ground mentoring.

#### **IV. Statement of Mutual Benefit and Interest**

The U. S. Fish and Wildlife Service desires to work with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. The Service desires to fulfill this mission by working in cooperation with agencies, individuals, non-profit organizations and other entities.

The U.S. Forest Service desires to support acquisition and management initiatives to deal more effectively with fire and fuels build up, invasive species, loss and fragmentation of open spaces, and unmanaged recreation as they relate to the adjoining Apalachicola National Forest and the Florida National Scenic Trail corridor.

The Florida Department of Environmental Protection desires to sustain biodiversity, protect water resources, link protected natural areas, and provide outdoor recreation opportunities to a growing population of residents and tourists.

The Florida Department of Agriculture and Consumer Services, Division of Forestry, desires to protect and manage Florida's forest resources through a stewardship ethic assuring these natural resources will be restored, conserved and maintained so as to provide sustainable forest management, sound resource protection, and maximum responsible public access for recreational opportunities now and for future generations.

The Florida Fish and Wildlife Conservation Commission desires to create a sustainable and healthy future for Florida's fish, wildlife, and their habitats and to provide recreational opportunities that foster stewardship of natural resources. FWC will contribute to a landscape-level approach by integrating its habitat management into the landscape matrix, leveraging partnerships and collaborating with other scientific disciplines.

The Northwest Florida Water Management District desires to conserve and protect water resources, including aquifer recharge area, wetlands, springs, lakes and streams, while providing public access, general public recreation and restoration and protection of habitats in their natural state and condition.

The Nature Conservancy desires to preserve the plants, animals, and natural communities that represent global diversity of life by protecting the lands and waters they need to survive. The Nature Conservancy will work with partners to preserve and manage high priority conservation areas and functioning natural systems across the ecoregion by cooperating in joint prescribed fires and joint fire training sessions.

The Bureau of Land Management desires to support partnerships and management initiatives that enhance habitat improvement for native and special status species, promote species recovery, use fire to restore and maintain fire dependent plant communities, use effective integrated pest management techniques to control invasive species, and reduce excessive fuels on forest lands.

The National Interagency Prescribed Fire Training Center desires to participate with hosting agencies and organizations to train prescribed fire specialists, and conduct prescribed fire operations in accordance with prescribed fire plans that address a wide-range of land management objectives set forth in Land Management Plans.

## **V. Liability**

Each Party agrees that it will be responsible for any and all risks of personal injury and property damage attributable to the negligent acts or omissions of itself and its officers, employees, and agents acting within the scope of their employment to the extent provided by law. Nothing herein shall constitute a waiver of sovereign immunity under Florida Statute 768.28 or the Federal Tort Claims Act.

Each Party agrees that it will be responsible for repairs to its own equipment which may become damaged through negligent acts or normal wear and tear during the course of a prescribed burn or other land management activities or as a result of their employee's actions. Damage to its equipment through negligent acts by another Partner's employees will be reimbursed for the cost of repair to the equipment by the damaging Partner.

No Party, just by entering into this agreement, shall create or increase its liability. This provision is solely for the benefit of the Parties signing and shall not confer any rights to any persons not signing.

## **VI. Prescribed Burning Operations and Responsibilities**

### **A. Common Responsibilities**

1. All prescribed burns performed under this MOU will be conducted in complete compliance with all laws regulating the use of prescribed fire; specifically Chapter 590.125(3) F.S., Chapter 5I-2.006 F.A.C. and, when applicable, the specific policies regarding prescribed burning of a Party. Specific prescribed burning policies of the Parties are listed in Appendix B. (Specific Agency/Organization Requirements)
2. Each Party to the MOU will be responsible for providing its own Personal Protective Equipment (PPE) for its participating employees.
  - a. Required PPE minimums must be National Fire Protection Agency (NFPA) certified:
    - Nomex clothing
    - Hardhat
    - Leather gloves

- Leather boots
- Eye protection
- Fire shelter
- Hand held radio

These minimums are for the general MOU only. More stringent requirements may apply on prescribed burns at sites of certain Parties to this MOU. See Appendix B (Specific Agency/Organization Requirements) for additional PPE needed for burns conducted with that specific Party to the MOU.

3. Minimum Training Requirements for Parties:  
National Wildfire Coordinating Group (NWCG) Courses

- a.
- S130 – Basic Wildland Fire Suppression
  - S190 – Introduction to Wildland Fire Behavior
  - I100 – Introduction to the Incident Command System
  - L180 – Human Factors on the Fire Line
- Or
- Florida Inter-agency Basic Prescribed Fire Training Course

b. Burn boss must be state of Florida certified burner that has participated in at least 10 prescribed burns.

Specific training requirements may be needed to participate on prescribed burns at sites of certain Parties to this MOU. See Appendix B (Specific Agency/Organization Requirements) for training required for burns conducted with that specific Party to the MOU.

Parties to this MOU are encouraged to involve trainees in prescribed burning operations. In all cases, however, such persons will be identified as trainees and will work under the direct supervision of qualified personnel.

4. Prescribed burning assistance conducted under this MOU will not be reimbursable to any Party participating in ARSA unless otherwise provided through separate interagency agreements. Each Party will absorb the costs incurred by it in performing tasks associated with this initiative. Nothing contained herein shall be construed to limit any Party's ability to apply for or receive any federal or state grants for work hereunder.

B. Responsibility of Requesting Party

1. The requesting Party will assume all responsibilities for prescribed burns conducted on its property or property for which it has management authority, including:
- Preparing burn prescriptions
  - Preparing smoke screening plans and smoke mitigation

- Preparing site for burning and managing the burn
  - Obtaining Prescribed Burn Permits or Authorizations
2. Prior to the burn, the requesting Party must supply the following to other Parties providing assistance with the burn:
    - Burn operations plan and site map(s). Burn prescription will be provided if requested
    - Safety and operational briefings
    - Radio access for each person as deemed appropriate by the Burn Manager
  3. The requesting Party will make every effort to have its own Certified Burn Manager in charge of the burn.
  4. Any rented or contracted private sector resources (equipment or personnel) will be paid for by the Party ordering those resources.
  5. Subject to the liability provisions of Section V, suppression costs for escaped prescribed burns conducted under this MOU will be paid by the Requesting Party.

**C. Responsibility of Assisting Party**

1. It shall be the goal of this working group that all Parties to this MOU will attempt to participate in at least two interagency prescribed burns per year. Participation is defined as providing available personnel and equipment to burn operations.
2. Parties providing assistance agree to work under the direction of the requesting Party or their designee(s) and will perform their duties in a safe and efficient manner.

**VII. Publicity & Media Relations**

Public relations and media contacts associated with any ARSA burning operations will be managed by the Party to this MOU managing the burn. During media events, every effort will be made to promote the cooperative, inter-agency nature of any burn being conducted by the ARSA. In order for one Party to use another Party's name, logo or insignia on any published media, such as Web page, printed publication or audiovisual production, permission must be granted from such other Party. A written request must be submitted and approval granted in writing.

**VIII. Miscellaneous**

1. Nothing in this MOU authorizes any of the Parties to obligate or transfer any funds. Specific work projects or activities that involve the transfer of funds, or property among the various agencies and offices will require execution of separate agreements and be contingent upon the availability of appropriated funds. Such activities must be

independently authorized by appropriate statutory authority. This MOU does not provide such authority. Negotiation, execution, and administration of each such agreement must comply with all applicable statutes and regulations. Each party operates under its own laws, regulations, and policies, subject to the availability of appropriated funds. Nothing in this MOU is intended to alter, limit, or expand the agencies' statutory and regulatory authority.

2. This MOU takes effect upon the signature of all parties and shall remain in effect for five years from the date of execution. Modifications within the scope of this MOU must be made by mutual consent of the parties, by the issuance of a written modification signed and dated by all properly authorized, signatory officials, prior to any changes being performed. Requests for modification should be made, in writing, at least 30 days prior to implementation of the requested change. Any Party to this MOU may terminate or withdraw membership at any time before the date of expiration by providing written notice to all other Parties to this MOU at the addresses set forth in Appendix A.
3. The terms and conditions contained in the MOU will be reviewed annually by participating Parties in order to consider possible changes to the MOU, including the addition of new Parties. Amendments to this MOU must be in writing and signed by all of the Parties hereto.
4. Any information furnished to any government agency under this instrument is subject to the Freedom of Information Act (5 U.S.C. 552) and the public records laws of the State of Florida. This MOU in no way restricts any of the Parties from participating in similar activities with other public or private agencies, organizations, and individuals. All Parties will handle their own activities and utilize their own resources, including the expenditure of their own funds, in pursuing these objectives. Each Party will carry out its separate activities in a coordinated and mutually beneficial manner. This MOU is not intended to, and does not create, any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity, by a Party against the United States, its agencies, its officers, or any person.
5. Any communications affecting the operations covered by this MOU given by any of the parties is sufficient only if in writing and delivered in person, mailed, or transmitted electronically by e-mail or fax, as follows:  
  
To the Program Manager listed for that agency, at the address specified in Appendix A of this MOU.  
  
Notices are effective when delivered in accordance with this provision, or on the effective date of the notice (if specified therein), whichever is later.
6. Pursuant to 41 U.S.C. 22, no United States member of, or United States delegate to, Congress shall be admitted to any share or part of this MOU, or benefits that may arise therefrom, either directly or indirectly.

7. **AUTHORIZED REPRESENTATIVES.** By signature below, the Partner certifies that the individuals listed in this document as representatives of the Partner are authorized to act in their respective areas for matters related to this MOU.

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**Appendix A: Participating Agency / Organization Contacts and \*Addresses**

**Florida Division of Forestry**

Ken Weber  
Tallahassee Forestry Center Manager  
865 Geddie Road  
Tallahassee, FL 32304  
850-414-1131

**Bureau of Land Management**

Bruce Dawson  
Field Manager, Jackson Field Office  
411 Briarwood Drive, Suite 404  
Jackson, MS. 39206  
601-977-5400

**Florida Department of Environmental Protection**

Parks Small  
Mail Station 530  
3900 Commonwealth Blvd.  
Tallahassee, FL 32399  
850-245-3104

**Florida Fish and Wildlife Conservation Commission**

Philip (Phil) D. Manor  
Apalachicola River WEA Field Office  
558 South Murphy Road  
Wewahitchka, FL 32465  
850-827-2934 (Office)  
850-819-9534 (Mobile)

**Northwest Florida Water Management District**

Tyler Macmillan  
Chief, Bureau of Land Management Operations  
81 Water Management Drive  
Havana, FL 32333-4712  
850-539-5999

**US Fish and Wildlife Service**

James Burnett  
North Florida Refuges Complex Manager  
P. O. Box 68  
St. Marks, FL 32355  
850-925-6121

**U.S. Forest Service**

Marcus Beard  
Apalachicola National Forest District Ranger  
57 Taff Drive  
Crawfordville, FL 32327  
850-926-3561 (Office)  
850-570-9103 (Mobile)

**The Nature Conservancy**

Zachary Prusak  
222 S. Westmonte Drive; Suite 300  
Altamonte Springs, FL 32714  
407-682-3664 (Office)

**National Interagency Prescribed Fire Training Center**

Mike Dueitt  
Center Director  
3250 Capital Circle SW  
Tallahassee, FL 32310  
850-523-8631

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\*Address of where the document will be controlled.

**Appendix B:  
Specific Agency/Organization Requirements.**

**Agency/Organization Name:** Florida Division of Forestry

**Primary Point of Contact for Party:**

Name: Ken Weber

Position Title: Tallahassee Forestry Center Manager

Address: 865 Geddie Road  
Tallahassee, FL 32304

Phone: 850-414-1131

**Additional PPE requirements (for parties helping your agency/organization).**

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**Training requirements (for parties helping your agency/organization).**

S130 – Basic Wildland Fire Suppression, S190 – Introduction to Wildland Fire Behavior, I100 – Introduction to the Incident Command System, and L180 – Human Factors on the Fireline (collectively)

Or

Florida Inter-agency Basic Prescribed Fire Training Course

**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

- Prescribed fires conducted on DOF properties will require a DOF employee as burn boss and they must be qualified as a Certified Burn Manager
- When burn parameters seem extreme or unsafe, DOF may opt out of participating in scheduled burns

- DOF existing agreements will not be superseded by the ARSA agreement. However any DOF participation in prescribed burns, in which fees are not assessed, will be considered as fulfilling the ARSA agreement
- DOF aircraft is not offered for inclusion as potential shared resources.

**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

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**Appendix B:  
Specific Agency/Organization Requirements.**

**Agency/Organization Name:** Florida Department of Environmental Protection (DEP)

**Primary Point of Contact for Party:**

Name: Parks Small

Position Title: Chief, Bureau of Natural and Cultural Resources

Address: Division of Recreation and Parks  
Mail Station 530  
3900 Commonwealth Blvd.  
Tallahassee, FL 32399

Phone: 850-245-3104

**Additional PPE requirements (for parties helping your agency/organization).**

Requirements outlined in Section 6.2.a are acceptable; additional requirements may be added on a case-by-case basis at the burn boss or site manager's discretion in accordance with DEP standards.

**Training requirements (for parties helping your agency/organization).**

Requirements outlined in Section 6.3.a are acceptable for crew; additional requirements for crew boss or burn boss may be added on a case-by-case basis at the burn boss or site manager's discretion in accordance with DEP standards.

**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

No DEP vehicles will be loaned unless operated by a DEP employee.

**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

None

**Appendix B:  
Specific Agency/Organization Requirements.**

**Agency/Organization Name:** FL Fish and Wildlife Conservation Commission

**Primary Point of Contact for Party:**

Name: Philip (Phil) D. Manor

Position Title: District Biologist – Northwest Region/Eastern District

Address: Apalachicola River WEA Field Office  
558 South Murphy Road  
Wewahitchka, FL 32465

Phone: 850-827-2934 (Office)  
850-819-9534 (Mobile)

**Additional PPE requirements (for parties helping your agency/organization).**

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**Training requirements (for parties helping your agency/organization).**

S130 – Basic Wildland Fire Suppression, S190 – Introduction to Wildland Fire Behavior,  
I100 – Introduction to the Incident Command System, and Standards for Survival (collectively)

Or

Florida Inter-agency Basic Prescribed Fire Training Course

**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

Any loan of motor-operated equipment by the Florida Fish and Wildlife Conservation  
Commission must be accompanied by an agency employee-operator.

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**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

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**Appendix B:  
Specific Agency/Organization Requirements**

**Agency/Organization Name:** Northwest Florida Water Management District

**Primary Point of Contact for Party**

Name: Tyler Macmillan

Position Title: Chief, Bureau of Land Management Operations

Address: 81 Water Management Drive  
Havana, FL 32333-4712

Phone: (850) 539-5999

**Additional PPE requirements (for parties helping your agency/organization).**

Same as listed in Section IV.A.2a.

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**Training requirements (for parties helping your agency/organization).**

S130 – Basic Wildland Fire Suppression, S190 – Introduction to Wildland Fire Behavior,  
I100 – Introduction to the Incident Command System, and Standards for Survival (collectively)

Or

Florida Inter-agency Basic Prescribed Fire Training Course

**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

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**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

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**Appendix B:  
Specific Agency/Organization Requirements**

**Agency/Organization Name:** Apalachicola National Forest

**Primary Point of Contact for Party**

Name: Marcus Beard

Position Title: District Ranger

Address: 57 Taff Drive, Crawfordville, FL 32327

Phone: 850-926-3561

**Additional PPE requirements (for parties helping your agency/organization).**

Standard PPE requirements required for all resources. Handheld radios are issued for in accordance with "Redbook" (Interagency Standards for Fire and Fire Aviation Operations NFES 2424) guidance on supervisory span of control, but not all personnel will have a radio.

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**Training requirements (for parties helping your agency/organization).**

S130 – Basic Wildland Fire Suppression, S190 – Introduction to Wildland Fire Behavior, I100 – Introduction to the Incident Command System, and Standards for Survival  
Only NWCG PMS 310-1 fully-qualified personnel and trainees shall be engaged in interagency wildland and prescribed fire operations.

**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

Prescribed fires conducted on USFS lands will require a USFS employee as burn boss.

When two or more burn parameters are extreme, USFS may opt out of participating in scheduled burn.

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USFS aircraft or leased aircraft is not offered for inclusion as potential shared resources.

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**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

The parties shall acknowledge U.S. Forest Service support in any publications, audiovisuals, and electronic media developed as a result of this MOU.

Any of the parties' contributions made under this MOU do not by direct reference or implication convey U.S. Forest Service endorsement of that party's products or activities.

Any of the parties shall immediately inform the U.S. Forest Service if they or any of their principals are presently excluded, debarred, or suspended from entering into covered transactions with the federal government according to the terms of 2 CFR Part 180. Additionally, should any of the parties or any of their principals receive a transmittal letter or other official Federal notice of debarment or suspension, then they shall notify the U.S. Forest Service without undue delay. This applies whether the exclusion, debarment, or suspension is voluntary or involuntary.

**Appendix B:  
Specific Agency/Organization Requirements**

**Agency/Organization Name:** The Nature Conservancy

**Primary Point of Contact for Party**

Name: Zachary Prusak  
Position Title: Fire Manager  
Address: 222 S. Westmonte Dr, Suite 300  
Altamonte Springs, Fl, 32714  
Phone: (407) 682-3664

**Additional PPE requirements (for parties helping your agency/organization).**

Standard PPE requirements needed for all resources.

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**Training requirements (for parties helping your agency/organization).**

S130 – Basic Wildland Fire Suppression, S190 – Introduction to Wildland Fire Behavior,  
I100 – Introduction to the Incident Command System, and Standards for Survival (collectively)

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**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

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**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

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**Appendix B:  
Specific Agency/Organization Requirements**

**Agency/Organization Name:** Bureau of Land Management

**Primary Point of Contact for Party**

Name: Bruce Dawson  
Position Title: Field Manager, Jackson Field Office  
Address: 411 Briarwood Drive, Suite 404  
Jackson, MS. 39206  
Phone: 601-977-5400

**Additional PPE requirements (for parties helping your agency/organization).**  
Standard PPE requirements required for all resources. Handheld radios are issued for  
in accordance with "Redbook" (Interagency Standards for Fire and Fire Aviation  
Operations NFES 2424) guidance on supervisory span of control, but not all personnel will  
have a radio.

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**Training requirements (for parties helping your agency/organization).**

- S130- Basic Fire Suppression
- S190- Introduction to Wildland Fire Behavior
- I100- Introduction to the Incident Command System
- L180 Human Factors on the Fireline
- Standards for Survival
- At least one certified burner acting as a burn boss that has participated in at least 10 prescribed burns.
- One certified ignition specialist.

**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

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**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

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**Appendix B:  
Specific Agency/Organization Requirements**

**Agency/Organization Name:** US Fish & Wildlife Service

**Primary Point of Contact for Party**

Name: James Burnett  
Position Title: North Florida Refuges Complex Manager  
Address: P. O. Box 68, St. Marks, FL 32355  
Phone: 850-925-6121

**Additional PPE requirements (for parties helping your agency/organization).**

Standard PPE requirements required for all resources. Handheld radios are issued for in accordance with "Redbook" (Interagency Standards for Fire and Fire Aviation Operations NFES 2424) guidance on supervisory span of control, but not all personnel will have a radio.

**Training requirements (for parties helping your agency/organization).**

S130 – Basic Wildland Fire Suppression, S190 – Introduction to Wildland Fire Behavior, I100 – Introduction to the Incident Command System, and Standards for Survival (Collectively). Only NWCG PMS 310-1 fully-qualified personnel and trainees shall be engaged in interagency wildland and prescribed fire operations. Signatories to the NWCG recognize the qualifications of the other signing agency's or organization's personnel. Contractors and consultants hired by the USFWS must meet PMS 310-1 qualifications for the position they will be filling.

**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

When a USFWS employee is requested to serve as a Prescribed Burn Boss for a cooperating organization, a written Prescribed Burn Plan is required, and must meet the content requirements of the Interagency Prescribed Burn Plan Template. The written Prescribed Burn Plan shall contain a listing of contingency resources and the standard operating procedures for converting or transitioning a prescribed burn to a wildfire.

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**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

The FWS can treat fuels on private lands under the authority of the Wyden Amendment which is Codified in the Title 16, Chapter 18, Section 1011 of the Code of Federal Regulations or the Interior Appropriation Act. To comply with the CFR there must be a signed agreement between the FWS and the specific private landowner. The roles, responsibilities, and risk and liability concerns need to be reflected in an appropriate formal agreement between the FWS and the specific landowner.

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The FWS's Partners for Fish & Wildlife program under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.), Fish and Wildlife Coordination Act 16 U.S.C. 742a-j), and partners for Fish and Wildlife Act of 2006 (16 U.S.C. 3771 et seq.) provides opportunity for additional prescribed burning assistance and an appropriate funding mechanism to private landowners under appropriate formal agreement.

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**Federal personnel engaged in fire operations must be supervised by NWCG-qualified individuals or by individuals authorized to perform such duties by an organization that is a signatory to the NWCG.**

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**Appendix B:  
Specific Agency/Organization Requirements**

**Agency/Organization Name:** National Interagency Prescribed Fire Training Center

**Primary Point of Contact for Party**

Name: Mike Dueitt  
Position Title: Center Director  
Address: 3250 Capital Circle SW, Tallahassee, FL 32310  
Phone: 850-523-8631 Cell Phone: 850-766-1254

**Additional PPE requirements (for parties helping your agency/organization).**

Standard PPE requirements required for all resources. Handheld radios are issued for in accordance with "Redbook" (Interagency Standards for Fire and Fire Aviation Operations NFES 2424) guidance on supervisory span of control, but not all personnel will have a radio.

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**Training requirements (for parties helping your agency/organization).**

NWCG PMS 310-1.

S130 – Basic Wildland Fire Suppression, S190 – Introduction to Wildland Fire Behavior, I100 – Introduction to the Incident Command System, and Standards for Survival (Collectively). Only NWCG PMS 310-1 fully-qualified personnel and trainees shall be engaged in interagency wildland and prescribed fire operations. Signatories to the NWCG recognize the qualifications of the other signing agency's or organization's personnel.

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**Additional rules or stipulations regarding equipment/personnel lending to other agencies/organizations.**

When a NIPFTC team member is requested to serve as a Prescribed Burn Boss for a cooperating organization, a written Prescribed Burn Plan is required, and must meet the content requirements of the Interagency Prescribed Burn Plan Template. The written Prescribed Burn Plan shall contain a listing of contingency resources and the standard operating procedures for converting or transitioning a prescribed burn to a wildfire.

**Further Partner specific concerns, regulations, requirements, or information not addressed or mentioned in main body of MOU document.**

NIPFTC teams will have a designated Chief of Party. In the event that the Chief of Party determines that the prescribed burn project can not be safely implemented, or has serious concerns about the advisability of burning, and is unable to reach agreement to rectify the situation, he or she reserves the right to decline participation.

**Federal personnel engaged in fire operations must be supervised by NWCG-qualified individuals or by individuals authorized to perform such duties by an organization that is a signatory to the NWCG.**

\* Signature page on file

## **13.17 Florida Coastal Office Sublease**

SAS1

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

SUBLEASE AGREEMENT

Sublease Number 3584-01

THIS SUBLEASE AGREEMENT, is made and entered into this 12<sup>th</sup> day of January 2001, between the FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION hereinafter referred to as "SUBLESSOR" and the FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF COASTAL AND AQUATIC MANAGED AREAS hereinafter referred to as "SUBLESSEE."

WITNESSETH:

In consideration of covenants and conditions set forth herein, SUBLESSOR subleases the below-described premises to SUBLESSEE on the following terms and conditions:

1. ACKNOWLEDGMENTS: The parties acknowledge that title to the subleased premises is held by the Board of Trustees of the Internal Improvement Trust Fund ("TRUSTEES") and is currently managed by SUBLESSOR as the Magnolia Bluff Tract under TRUSTEES' Lease Number 3584.
2. DESCRIPTION OF PREMISES: The property subject to this sublease, is situated in the County of Franklin, State of Florida, and is more particularly described in Exhibit "A" attached hereto and hereinafter referred to as the "subleased premises."
3. TERM: The term of this sublease shall be for a period concurrent with Lease Number 3584, unless sooner terminated pursuant to the provisions of this sublease.
4. PURPOSE: SUBLESSEE shall manage the subleased premises only

for the establishment and operation of administrative office, land base and maintenance shop, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 6 of this sublease.

5. QUIET ENJOYMENT AND RIGHT OF USE: SUBLESSEE shall have the right of ingress and egress to, from and upon the subleased premises for all purposes necessary to the full quiet enjoyment by said SUBLESSEE of the rights conveyed herein.

6. MANAGEMENT PLAN: SUBLESSEE shall prepare and submit a Management Plan for the subleased premises, in accordance with Section 253.034, Florida Statutes, and subsection 18-2.021(4), Florida Administrative Code, within twelve months of the effective date of this sublease. The Management Plan shall be submitted to the TRUSTEES for approval through SUBLESSOR and the Division of State Lands. The subleased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the subleased premises without the prior written approval of the TRUSTEES and SUBLESSOR until the Management Plan is approved. The Management Plan shall emphasize the original management concept as approved by the TRUSTEES on the effective date of this sublease which established the primary public purpose for which the subleased premises are to be managed. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by SUBLESSEE, SUBLESSOR and the TRUSTEES at least every five years. SUBLESSEE shall not use or alter the subleased premises except as provided for in the approved Management Plan without the advance written approval of the TRUSTEES and SUBLESSOR. The Management Plan prepared under this sublease shall identify management strategies for exotic species,

if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management.

7. CONFORMITY: This sublease shall conform to all terms and conditions of that certain lease between the TRUSTEES and SUBLESSOR dated October 11, 1983, a copy of which is attached hereto as Exhibit "B", and SUBLESSEE shall, through its agents and employees, prevent the unauthorized use of the subleased premises or any use thereof not in conformance with this sublease.

8. ASSIGNMENT: This sublease shall not be assigned in whole or in part without the prior written consent of the TRUSTEES and SUBLESSOR. Any assignment made either in whole or in part without the prior written consent of the TRUSTEES and SUBLESSOR shall be void and without legal effect.

9. RIGHT OF INSPECTION: The TRUSTEES and SUBLESSOR or their duly authorized agents shall have the right at any time to inspect the subleased premises and the works and operations thereon of SUBLESSEE in any matter pertaining to this sublease.

10. PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures, improvements, and signs shall be constructed at the expense of SUBLESSEE in accordance with plans prepared by professional designers and shall require the prior written approval of SUBLESSOR as to purpose, location, and design. Further, no trees, other than non-native species, shall be removed or major land alterations done by SUBLESSEE without the prior written approval of SUBLESSOR. Removable equipment and removable improvements placed on the subleased premises by SUBLESSEE which do not become a permanent part of the subleased premises realty will remain the property of SUBLESSEE and may be removed by SUBLESSEE upon termination of this sublease.

Page 3 of 21  
Sublease No: 3584-01  
Revised 03/10/2000

11. INSURANCE REQUIREMENTS: SUBLESSEE shall procure and maintain fire and extended risk insurance coverage, in accordance with Chapter 284, F.S., for any buildings and improvements located on the subleased premises by preparing and delivering to the Division of Risk Management, Department of Insurance, a completed Florida Fire Insurance Trust Fund Coverage Request Form and a copy of this sublease immediately upon erection of any structures as allowed by paragraph 4 of this sublease. A copy of said form and immediate notification in writing of any erection or removal of structures or other improvement on the subleased premises and any changes affecting the value of the improvements will be submitted to SUBLESSOR and the Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.

12. LIABILITY: SUBLESSEE shall assist in the investigation of injury or damage claims either for or against SUBLESSOR, the TRUSTEES or the State of Florida pertaining to SUBLESSEE'S respective areas of responsibility under this sublease or arising out of SUBLESSEE'S respective management programs or activities and shall contact SUBLESSOR regarding the legal action deemed appropriate to remedy such damage or claims.

13. ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this sublease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Section 253.034, Florida Statutes, shall be reviewed by the

Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the subleased premises.

14. EASEMENTS: All easements including, but not limited to utility easements, are expressly prohibited without the prior written approval of the TRUSTEES and SUBLESSOR. Any easement not approved in writing by the TRUSTEES and SUBLESSOR shall be void and without legal effect.

15. SUBSUBLEASES: This sublease is for the purposes specified herein and any subsubleases of any nature are prohibited, without the prior written approval of the TRUSTEES and SUBLESSOR. Any subsublease not approved in writing by the TRUSTEES and SUBLESSOR shall be void and without legal effect.

16. ENVIRONMENTAL AUDIT: At SUBLESSOR's discretion, SUBLESSEE shall provide SUBLESSOR with a current Phase I environmental site assessment conducted in accordance with the Department of Environmental Protection, Division of State Land's standards prior to termination of this sublease, and if necessary a Phase II environmental site assessment.

17. SURRENDER OF PREMISES: Upon termination or expiration of this sublease, SUBLESSEE shall surrender the subleased premises to SUBLESSOR. In the event no further use of the subleased premises or any part thereof is needed, written notification shall be made to SUBLESSOR and the Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3800 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, at least six months prior to the release of all or any part of the subleased premises. Notification shall include a legal description, the

lease number, and this sublease number and an explanation of the release. The release shall only be valid if approved by the TRUSTEES and SUBLESSOR through the execution of a release of sublease instrument executed with the same formality as this sublease. Upon termination or expiration of this sublease, all improvements, including both physical structures and modifications to the subleased premises, shall become the property of SUBLESSOR and the TRUSTEES unless SUBLESSOR gives written notice to SUBLESSEE to remove any or all such improvements at the expense of SUBLESSEE. The decision to retain any improvements upon termination of this sublease shall be at SUBLESSOR'S sole discretion. Prior to surrender of all or any part of the subleased premises, SUBLESSOR shall perform an on-site inspection and the keys to any buildings on the subleased premises shall be turned over to SUBLESSOR. If the subleased premises and improvements located thereon do not meet all conditions as set forth in paragraphs 21 and 22 herein, SUBLESSEE shall pay all costs necessary to meet the prescribed conditions.

18. BEST MANAGEMENT PRACTICES: SUBLESSEE shall implement applicable Best Management Practices for all activities conducted under this sublease in compliance with Paragraph 18-2.018(2)(h), Florida Administrative Code, which have been selected, developed, or approved by the TRUSTEES and SUBLESSOR or other land managing agencies for the protection and enhancement of the subleased premises.

19. PUBLIC LANDS ARTHROPOD CONTROL PLAN: SUBLESSEE shall identify and subsequently designate to the respective arthropod control district or districts within one year of the effective date of this sublease all of the environmentally sensitive and biologically highly productive lands contained within the

subleased premises, in accordance with Section 388.4111, Florida Statutes and Chapter 5E-13, Florida Administrative Code, for the purpose of obtaining a public lands arthropod control plan for such lands.

20. MINERAL RIGHTS: This sublease does not cover petroleum or petroleum products or minerals and does not give the right to the SUBLESSEE to drill for or develop the same. However, SUBLESSEE shall be fully compensated for any and all damages that might result to the subleasehold interest of SUBLESSEE by reason of such exploration and recovery operations.

21. UTILITY FEES: SUBLESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water, telephone, and other public utilities to the subleased premises and for having all utilities turned off when the subleased premises are surrendered.

22. MAINTENANCE: SUBLESSEE shall maintain the real property contained within the subleased premises and any improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the subleased premises free of trash or litter, maintaining all planned improvements as set forth in the approved Management Plan, meeting all building and safety codes in the location situated and maintaining any and all existing roads, canals, ditches, culverts, risers, and the like in as good condition as the same may be on the effective date of this sublease.

23. ENTIRE UNDERSTANDING: This sublease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of the TRUSTEES and SUBLESSOR.

24. BREACH OF COVENANTS, TERMS, OR CONDITIONS: Should SUBLESSEE breach any of the covenants, terms, or conditions of this

sublease, SUBLESSOR shall give written notice to SUBLESSEE to remedy such breach within sixty days of such notice. In the event SUBLESSEE fails to remedy the breach to the satisfaction of SUBLESSOR within sixty days of receipt of written notice, SUBLESSOR may either terminate this sublease and recover from SUBLESSEE all damages SUBLESSOR may incur by reason of the breach including, but not limited to, the cost of recovering the subleased premises or maintain this sublease in full force and effect and exercise all rights and remedies herein conferred upon SUBLESSOR.

25. NO WAIVER OF BREACH: The failure of SUBLESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms, and conditions of this sublease shall not be construed as a waiver of such covenants, terms and conditions, but the same shall continue in full force and effect, and no waiver of SUBLESSOR of any one of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by SUBLESSOR.

26. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the subleased premises is held by the TRUSTEES. SUBLESSEE shall not do or permit anything to be done which purports to create a lien or encumbrance of any nature against the real property contained in the subleased premises including, but not limited to, mortgages or construction liens against the subleased premises or against any interest of the TRUSTEES and SUBLESSOR therein.

27. PARTIAL INVALIDITY: If any term, covenant, condition or provision of this sublease shall be ruled by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder

shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

28. CONDITIONS AND COVENANTS: All of the provisions of this sublease shall be deemed covenants running with the land included in the subleased premises, and construed to be "conditions" as well as "covenants" as though the words specifically expressing or imparting covenants and conditions were used in each separate provision.

29. TIME: Time is expressly declared to be of the essence of this sublease.

30. DAMAGE TO THE PREMISES: (a) SUBLESSEE shall not do, or suffer to be done, in, on, or upon the subleased premises or as affecting said subleased premises or adjacent properties, any act which may result in damage or depreciation of value to the subleased premises or adjacent properties, or any part thereof.

(b) SUBLESSEE shall not generate, store, produce, place, treat, release, or discharge any contaminants, pollutants, or pollution, including, but not limited to, hazardous or toxic substances, chemicals, or other agents on, into, or from the subleased premises or any adjacent lands or waters in any manner not permitted by law. For the purposes of this sublease, "hazardous substances" shall mean and include those elements or compounds defined in 42 USC Section 9601 or which are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency (EPA) and the list of toxic pollutants designated by the United States Congress or the EPA or defined by any other federal, state, or local statute, law, ordinance, code, rule, regulation, order, or decree regulating, relating to, or imposing liability, or standards of conduct concerning any hazardous, toxic or dangerous waste, substance,

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material, pollutant or contaminant. "Pollutants" and "pollution" shall mean those products or substances defined in Chapters 376 and 403, Florida Statutes, and the rules promulgated thereunder, all as amended or updated from time to time. In the event of LESSEE'S failure to comply with this paragraph, LESSEE shall, at its sole cost and expense, promptly commence and diligently pursue any legally required closure, investigation, assessment, cleanup, decontamination, remediation, restoration, and monitoring of (1) the subleased premises, and (2) all off-site ground and surface waters and lands affected by SUBLESSEE'S such failure to comply, as may be necessary to bring the subleased premises and affected off-site waters and lands into full compliance with all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, orders and decrees, and to restore the damaged property to the condition existing immediately prior to the occurrence which caused the damage. SUBLESSEE'S obligations set forth in this paragraph shall survive the termination or expiration of this lease. Nothing herein shall relieve SUBLESSEE of any responsibility or liability prescribed by law for fines, penalties and damages levied by governmental agencies, and the cost of cleaning up any contamination caused directly or indirectly by SUBLESSEE'S activities or facilities. Upon discovery of a release of a hazardous substance or pollutant, or any other violation of local, state, or federal law, ordinance, code, rule, regulation, order, or decree relating to the generation, storage, production, placement, treatment, release, or discharge of any contaminant, SUBLESSEE shall report such violation to all applicable governmental agencies having jurisdiction, and to SUBLESSOR, all within the reporting periods of the applicable agencies.

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Revised 03/10/2000

31. PAYMENT OF TAXES AND ASSESSMENTS: SUBLESSEE shall assume full responsibility for and shall pay all liabilities that accrue to the subleased premises or to the improvements thereon, including any and all drainage and special assessments or taxes of every kind and all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the subleased premises during the effective period of this sublease.

32. RIGHT OF AUDIT: SUBLESSEE shall make available to the TRUSTEES or SUBLESSOR all financial and other records relating to this sublease and the TRUSTEES or SUBLESSOR shall have the right to audit such records at any reasonable time. This right shall be continuous until this sublease expires or is terminated. This sublease may be terminated by SUBLESSOR should SUBLESSEE fail to allow public access to all documents, papers, letters or other materials made or received in conjunction with this sublease, pursuant to Chapter 119, Florida Statutes.

33. NON-DISCRIMINATION: SUBLESSEE shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the subleased premises or upon lands adjacent to and used as an adjunct of the leased premises.

34. COMPLIANCE WITH LAWS: SUBLESSEE agrees that this sublease is contingent upon and subject to SUBLESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules, and laws of the State of Florida or the United States or of any political subdivision or agency of either.

35. GOVERNING LAW: This sublease shall be governed by and interpreted according to the laws of the State of Florida.

36. SECTION CAPTIONS: Articles, subsections and other captions contained in this sublease are for reference purposes only and are in no way intended to describe, interpret, define, or limit the scope, extent or intent of this sublease or any provisions thereof.

37. ADMINISTRATIVE FEE: SUBLESSEE shall pay TRUSTEES an annual administrative fee of \$300 pursuant to Chapter 18-2.020(8), Florida Administrative Code. The initial annual administrative fee shall be payable within thirty days from the date of execution of this sublease agreement and shall be prorated based on the number of months or fraction thereof remaining in the fiscal year of execution. For purposes of this sublease agreement, the fiscal year shall be the period extending from July 1 to June 30. Each annual payment thereafter shall be due and payable on July 1 of each subsequent year.

38. SPECIAL CONDITION: SUBLESSEE shall allow those types of recreational uses on the subleased premises which are approved by SUBLESSOR.



STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF COASTAL AND AQUATIC MANAGED AREAS

Witness Ellen L Stere  
Print/Type Witness Name

Witness Larry E. Noll  
Print/Type Witness Name

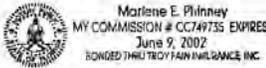
By: [Signature] (SEAL)  
Anna Marie Hartman  
Print/Type Name  
Title: Director

"SUBLESSEE"

STATE OF FLORIDA  
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 10 day of January, 2001, by Anna Marie Hartman, as Director, Office of Coastal and Aquatic Managed Areas, State of Florida Department of Environmental Protection, who is/are personally known to me or who has produced \_\_\_\_\_ as identification.

Marlene E. Phinney  
Notary Public, State of Florida  
Marlene E. Phinney  
Print/Type Notary Name



Commission Number: CC749735  
Commission Expires: 6/9/02

Consented to by the TRUSTEES on 12th day of January, 2001.

Gloria C. Nelson  
GLORIA C. NELSON, OPERATIONS AND MANAGEMENT CONSULTANT MANAGER, BUREAU OF PUBLIC LAND ADMINISTRATION, DIVISION OF STATE LANDS, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Approved as to Form and Legality  
By: [Signature]  
DEP Attorney

**EXHIBIT "A"**  
**Legal Description of the Subleased Premises**

Begin at the Northeast corner of Section 19, Township 8 South, Range 6 West, Franklin County, Florida; and thence run  $S02^{\circ}00'03''W$  along the East boundary of said Section 19 a distance of 2666.89 feet to the Southeast corner of the Northeast Quarter of said Section 19; thence run  $N89^{\circ}32'40''W$  along the South Boundary of said Northeast Quarter 3414.31 feet to a point on the Northeasterly boundary of Lot 76 of the North Bayshore Drive Addition (an unrecorded plat); thence run  $N59^{\circ}53'46''W$  along said boundary of lot 76 a distance of 187.46 feet to a concrete monument; thence run  $N30^{\circ}06'47''E$  along the Easterly boundary of North Bayshore Drive Addition 839.56 feet to a concrete monument marking the Northeast corner of Lot 80 of said North Bayshore Drive Addition; thence run  $N59^{\circ}53'00''W$  along the North boundary of said Lot 80 a distance of 364.69 feet to the Easterly right of way of East Bay Drive; thence  $N29^{\circ}52'32''E$  along the Eastern right of way of East Bay Drive 141.74 feet; thence run  $N58^{\circ}01'01''E$  along the Southeasterly right of way of East Bay Drive 278.98 feet to the Northeast corner of Lot 84 of said North Bayshore Drive Addition; thence run  $N59^{\circ}56'58''W$  along the North boundary of said Lot 84 a distance of 33.97 feet to a concrete monument in the centerline of East Bay Drive; thence continue  $N59^{\circ}56'58''W$  along the North boundary of said Lot 84 a distance of 434.71 feet to a concrete monument; thence continue  $N59^{\circ}56'58''W$  along the North boundary of said Lot 84 a distance of 17.00 feet to the approximate mean high water line of East Bay; thence run in a Northeasterly direction along the mean high water line of East Bay to a point on the North line of section 19 which bears  $N41^{\circ}11'24''E$  1611.05 feet; thence run  $S87^{\circ}59'57''E$  along the North line of section 19 for 2617.52 feet to the POINT OF BEGINNING.

Containing 203.6 acres more or less.

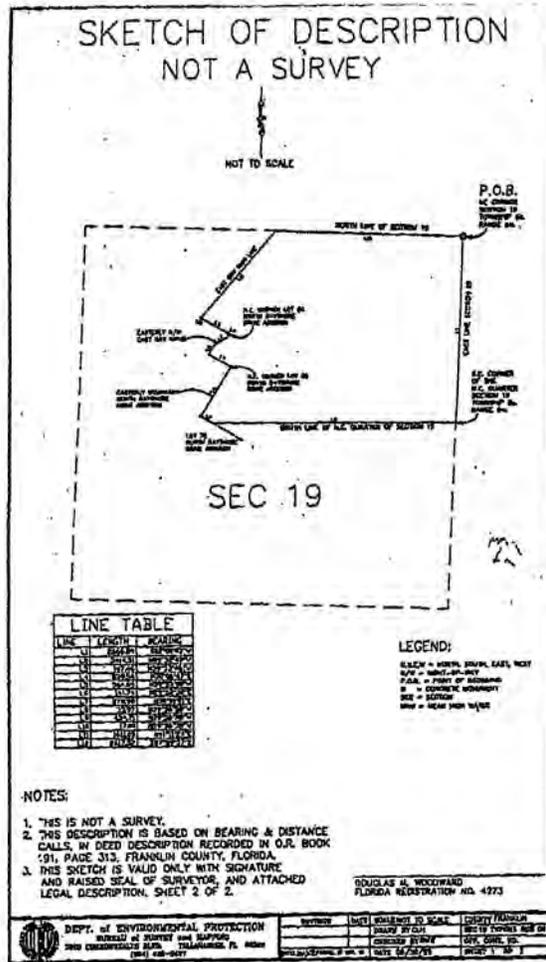


EXHIBIT "B"

MULTIPLE AGENCY MANAGEMENT LEASE  
FOR  
LOWER APALACHICOLA RIVER  
ENVIRONMENTALLY ENDANGERED LANDS

LEASE NO. 770-9003 3584

THE BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, referred to herein as the "Board" and the STATE OF FLORIDA DEPARTMENT OF NATURAL RESOURCES, DIVISION OF STATE LANDS, referred to herein as "State Lands", as agent for the Board, do hereby grant to the STATE OF FLORIDA GAME AND FRESH WATER FISH COMMISSION, referred to herein as the "Commission", the STATE OF FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, DIVISION OF FORESTRY, referred to herein as "Forestry", and the STATE OF FLORIDA DEPARTMENT OF STATE, DIVISION OF ARCHIVES, HISTORY, AND RECORDS MANAGEMENT, referred to herein as "Archives and History", management responsibilities for the Lower Apalachicola River Environmentally Endangered Lands (EEL), located in Gulf and Franklin County, Florida described as follows and subject to all existing encumbrances:

(See exhibit "A" attached hereto and made a part hereof)

TO HAVE AND TO HOLD the above described property for a period of twenty (20) years.

WITNESSETH:

The Board, the Commission, Forestry, and Archives and History, for and in consideration of the covenants hereinafter contained, do hereby covenant as follows:

1. The lands shall be managed in accordance with the original concept, as approved by the Board on January 9, 1977, which established the primary purposes for which this tract was acquired, including: protection of fish and wildlife values; the long-term preservation of fishery and shellfish resources in Apalachicola Bay;

protection of the natural plant communities; and the restoration and preservation of the extensive river floodplain and marsh lands for safeguarding of the Apalachicola River and Bay water quality.

Activities of the parties shall be governed by and in compliance with the goals and objectives contained in the Management Plan for the Lower Apalachicola River EEL tract when approved by the Board and shall be coordinated, through the primary managing agency, with the Apalachicola River Estuarine Sanctuary Coordinator, Department of Natural Resources, Division of Recreation and Parks.

2. The Commission shall be the primary managing agency. As such, it shall coordinate and oversee all activities on the property; initiate appropriate management programs to meet the intent of the goals and objectives stated herein; coordinate preparation and periodic revision of the Management Plan; coordinate and monitor all management activities undertaken by others; and, compile and submit such reports as may be required of the managing agencies.

3. The Commission shall: provide a permanent staff position to plan and supervise management of the property; administer and regulate campsites; restore natural hydroperiods; manage wildlife habitat; provide specific management recommendations and protection for all wildlife; regulate hunting, fishing and nongame activities; and, assist in patrolling and providing required law enforcement to prevent poaching, to protect threatened and endangered species, and to protect archaeological and historic sites from looting and other unauthorized activities.

4. Forestry shall: provide advice and on-site assistance to the Commission in implementing a prescribed burning program; initiate prescribed burning on forested areas in cooperation with the Commission; respond to and take charge of any wildfire; and, oversee any timber planting and harvesting activities based on a consensus reached by all participating managing agencies. Forestry shall administer and oversee apiary leases and assist in patrol of the area.

5. Archives and History shall: evaluate the cultural resources of the property in accordance with its authority under Chapter 267,

Florida Statutes; provide recommendations to the Commission for long-range management and protection; and, review contemplated activities that might impact such cultural resources.

6. Any management conflict between any of the managing agencies shall be resolved, if possible, by consensus of the primary managing agency and the affected managing agencies which are parties to this Lease. If a consensus cannot be reached, conflicts shall be submitted through State Lands to the Board for resolution.

7. It is understood by all parties that all management activities specified by this Lease shall be designed to conserve, protect and enhance the lands covered by this Lease as provided for by Chapter 259, Florida Statutes.

8. It is further understood and agreed that in addition to the management responsibilities specified herein, the following will be applicable:

- A. A Management Plan for this tract shall be prepared by the primary managing agency, in accordance with Section 253.034, Florida Statutes and in cooperation with the other managing agencies, within 12 months of the execution date of this Lease and shall be submitted to the Board for approval through State Lands, acting as agent for the Board.

The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by the managing agencies and the Board at no greater than five-year intervals. Annual work plans and management activities shall be reviewed by the primary managing agency prior to implementation and submitted to State Lands on an annual basis.

- B. The managing agencies shall not use or alter the property except as provided for in the approved Management Plan without the advance written approval of State Lands, acting as agent for the Board. Any managing agency proposing an activity that requires physical alteration of the property shall notify the primary managing agency prior to initiating that activity. The primary managing

agency, in turn, shall notify other affected managing agencies.

- C. The Board may, on occasion, after discussion with and concurrence by the managing agencies, authorize compatible uses of the property by other parties during the life of this Lease.
- D. The Board, or its duly authorized agent, may at any time inspect the works and operations of the managing agencies in any matter pertaining to this Lease. Should any agency fail to keep or perform any of its responsibilities as designated by the Management Plan or program provided for herein, the Board shall notify the specific agency(ies) of such non-performance. If correction or justification is not made after sixty days of receipt of written notice, the Board may terminate any agency's participation in the Lease by providing thirty days written notice of such pending action. Any notice will be in writing from the Director of the Division of State Lands, as agent for the Board.
- E. This Lease shall remain in effect until such time as the Board may terminate it in recognition of a greater public purpose consistent with Chapter 259, Florida Statutes. If a greater public purpose should be determined, the Board, in consultation with the managing agencies, shall have the right to amend or terminate this Lease by providing a reasonable time period to effectuate such an amendment or termination of activities. Any notice of such action shall be in writing from the Director of the Division of State Lands, as agent for the Board. Each agency herein shall have the right to terminate its participation in this management lease upon 60 days written notice to the Board and shall have up to 6 months to conclude its activities hereunder.

9. This Lease and any rights and privileges contained herein are for the sole use of the managing agencies and shall not be assigned or transferred to another party without the advance approval of the

Board. The managing agencies shall have the right to enter and occupy the property for the purposes necessary to meet their designated responsibilities, including protection of the property. The agencies' agents and employees shall take all reasonable measures to provide security against property damage, property degradation and unauthorized uses.

10. The managing agencies agree to assist in the investigation of injury or damage claims either for or against the State or the Board pertaining to their respective areas of responsibilities, or arising out of their respective management programs and activities, and to contact the lead agency regarding whatever legal action they deem appropriate to remedy same.

IN TESTIMONY WHEREOF, the lawfully designated agent of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida and the State of Florida Game and Fresh Water Fish Commission, the State of Florida Department of Agriculture and Consumer Services, Division of Forestry, and the State of Florida Department of State, Division of Archives, History and Records Management have hereunto set their hands in the City of Tallahassee, Florida, on the 11<sup>th</sup> day of October, A.D. 19 83.

THE BOARD OF TRUSTEES OF THE INTERNAL  
IMPROVEMENT TRUST FUND OF THE STATE OF  
FLORIDA



By: Harold M. Gifford  
DIRECTOR, DIVISION OF STATE LANDS  
AGENT FOR THE BOARD OF TRUSTEES  
OF THE INTERNAL IMPROVEMENT TRUST  
FUND OF THE STATE OF FLORIDA

FOR THE MANAGING AGENCIES:

By: Robert M. Beatty  
STATE OF FLORIDA GAME AND FRESH  
WATER FISH COMMISSION

Approved as to form and legality  
By: Leslie M. Deed  
Resident Attorney

By: Dave Connor  
STATE OF FLORIDA DEPARTMENT OF  
AGRICULTURE AND CONSUMER SERVICES

By: Randall Kelley  
STATE OF FLORIDA  
DEPARTMENT OF STATE, Division of  
Archives, History and Records  
Management

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Lease No. 770-9003

APPROVED AS TO  
FORM & LEGALITY  
By: John P. Sullivan  
DEPARTMENT ATTORNEY

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Sublease No. 3584-01  
Revised 03/10/2000

Florida Fish and Wildlife Conservation Commission | Apalachicola River WEA Management Plan

## **13.18 Arthropod Control Plans**



CHARLES H. BRONSON  
COMMISSIONER

Florida Department of Agriculture and Consumer Services  
Division of Agricultural Environmental Services

**ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS**

Chapters 388.4111, F.S. and 5E-13.042(4)(b), F.A.C.  
Telephone: (850) 922-7011

**For use in documenting an Arthropod control plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein.**

Name of Designated Land:  
Apalachicola River Wildlife and Environmental Area

Is Control Work Necessary:       Yes       No

Location:  
376 HWY 65, Eastpoint, Florida Franklin County

Land Management Agency:  
Florida Fish and Wildlife Conservation Commission

Are Arthropod Surveillance Activities Necessary?       Yes       No  
If "Yes", please explain:

Arthropod surveillance is necessary only if there is probable and/or immediate threat to public safety/animal health or if there is a public health emergency declared by the Florida Department of Health (FDOH), per Chapter 388.

Which Surveillance Techniques Are Proposed?  
Please Check All That Apply:

- |   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Landing Rate Counts | <input checked="" type="checkbox"/> Light Traps | <input type="checkbox"/> Sentinel Chickens |
| <input checked="" type="checkbox"/> Citizen Complaints  | <input checked="" type="checkbox"/> Larval Dips | <input type="checkbox"/> Other             |

If "Other", please explain:

Arthropod Species for Which Control Is Proposed:  
Mosquitos (all species)

Proposed Larval Control:

Proposed larval monitoring procedure:  
Are post treatment counts being obtained.  Yes  No

Biological Control of Larvae:

Might predacious fish be stocked:  Yes  No  
Other biological controls that might be used:

Material to be Used for Larviciding Applications:

(Please Check All That Apply:)

- Bti
- Bs
- Methoprene
- Non-Petroleum Surface Film
- Other, please specify:

Please specify the following for each larvicide:

Chemical or Common name: Vectolex WDG and Vectobac 12AS Typically these are the biological larvicides we use on Public Lands.

Ground  Aerial

Rate of application: Consistent with Label instructions

Method of application: Larviciding of the Apalachicola River or its distributaries is prohibited, unless approved in writing by the FWC land manager or designee, treatment shall only be conducted in case of an emergency, as declared by the FL Department of Health, per Chapter 388. Standing pools of water may be treated if surveillance techniques approved in this plan indicate a need. Any larviciding on the ARWEA will require written approval from the FWC land manager or his designee. Franklin County Mosquito Control (FCMC) position: we will most likely not ever larvicide on this property unless there is a public health emergency declared by FDOH.

Proposed Adult Mosquito Control:

Aerial adulticiding  Yes  No  
Ground adulticiding  Yes  No

Please specify the following for each adulticide:

Chemical or common name: Aerial: Dibrom Ground: Permethrin or Malathion

Rate of application: Consistent with label instructions

Method of application: Aerial adulticiding shall only be done in case of an emergency, as declared by FL Department of Health per Chapter 388. Ground adulticiding will only be conducted whenever surveillance techniques described in this plan indicate a need and after obtaining written approval from the FWC land manager or his designee. The District will have to show an immediate need to increase control activities due to an immediate threat to public safety. FCMC's position: we will most likely not ever use adulticide on this property unless there is a public health emergency declared by FDOH.

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:

District will notify the land manager or his designee if surveillance techniques described in this plan indicate a need for additional control activities. FCMC's position: We will need to address aerial fly patterns to be treated in the event of an emergency prior to flights.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

Yes  No

Records Location: 376 HWY 65, Eastpoint Florida 32328 Franklin County

How long are records maintained:  
5 years

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?  
Ditch Maintenance

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed?  
No. FCMC's position: if FWC would so chose to investigate the areas of source reduction of standing water and routine ditch maintenance for water runoff, mosquito habitat could be altered in a positive way.

Include proposed operational schedules for water fluctuations:  
"None"

List any periodic restrictions, as applicable, for example peak fish spawning times.  
When bee yards are occupied, ground spraying needs to be conducted after dark to minimize adverse effects to honey bees. Inform bee keepers in advance of any application or spraying.

Proposed Modification of Aquatic Vegetation:

none. FCMC's position: if FWC would so chose to investigate areas of aquatic weeds blocking water flow, this too can reduce breeding spots for mosquitoes.

Land Manager Comments:

All control activities on Apalachicola River WEA must be approved by the FWC land manager or designee. The district must show the need to increase control activities due to an immediate threat to public safety.

Arthropod Control Agency Comments:

Most, if not all, control activities performed from FCMC on this property will be due to a declared public health emergency by FDOH. This district will interact and assist Apalachicola River WEA with plans of source reduction if the area so wishes.

 11/18/13  
Signature of Lands Manager or Representative Date

 10/20/13  
Signature of Mosquito Control Director / Manager Date



CHARLES H. BRONSON  
COMMISSIONER

Florida Department of Agriculture and Consumer Services  
Division of Agricultural Environmental Services

**ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS**

Chapters 388.4111, F.S. and 5E-13.042(4)(b), F.A.C.  
Telephone: (850) 922-7011

**For use in documenting an Arthropod control plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein.**

Name of Designated Land:  
Apalachicola River Wildlife and Environmental Area

Is Control Work Necessary:       Yes       No

Location:  
558 S. Murphy Rd. Wewahitchka, FL 32465

Land Management Agency:  
Florida Fish and Wildlife Conservation Commission

Are Arthropod Surveillance Activities Necessary?       Yes       No  
If "Yes", please explain:

Arthropod surveillance is necessary only if there is probable and/or immediate threat to public safety/animal health or if there is a public health emergency declared by the Florida Department of Health (FDOH), per Chapter 388.

Which Surveillance Techniques Are Proposed?  
Please Check All That Apply:

- Landing Rate Counts       Light Traps       Sentinel Chickens
- Citizen Complaints       Larval Dips       Other

If "Other", please explain:

Arthropod Species for Which Control is Proposed:  
Mosquitos (all species)

Proposed Larval Control:

Proposed larval monitoring procedure:  
Are post treatment counts being obtained:  Yes  No

Biological Control of Larvae:

Might predacious fish be stocked:  Yes  No  
Other biological controls that might be used:

Material to be Used for Larvaciding Applications:

(Please Check All That Apply:)

- Bti
- Bs
- Methoprene
- Non-Petroleum Surface Film
- Other, please specify:

Please specify the following for each larvacide:

Chemical or Common name: Vectolex WDG and Vectobac 12AS Typically these are the biological larvicides we use on Public Lands.

Ground  Aerial

Rate of application: Consistent with Label instructions

Method of application: Larviciding of the Apalachicola River or its distributaries is prohibited, unless approved in writing by the FWC land manager or designee, treatment shall only be conducted in case of an emergency, as declared by the FL Department of Health, per Chapter 388. Standing pools of water may be treated if surveillance techniques approved in this plan indicate a need. Any larviciding on the ARWEA will require written approval from the FWC land manager or his designee. Gulf County Mosquito Control (GCMC) position: we will most likely not ever larvicide on this property unless there is a public health emergency declared by FDOH.

Proposed Adult Mosquito Control:

Aerial adulticiding       Yes       No  
Ground adulticiding       Yes       No

Please specify the following for each adulticide:

Chemical or common name: Aerial: Dibrom    Ground: Permethrin or Malathion

Rate of application: Consistent with label instructions

Method of application: Aerial adulticiding shall only be done in case of an emergency, as declared by FL Department of Health per Chapter 388. Ground adulticiding will only be conducted whenever surveillance techniques described in this plan indicate a need and after obtaining written approval from the FWC land manager or his designee. The District will have to show an immediate need to increase control activities due to an immediate threat to public safety. GCMC's position: we will most likely not ever use adulticide on this property unless there is a public health emergency declared by FDOH.

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:

District will notify the land manager or his designee if surveillance techniques described in this plan indicate a need for additional control activities. GCMC's position: We will need to address aerial fly patterns to be treated in the event of an emergency prior to flights.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

Yes       No

Records Location: 1001 10<sup>th</sup> Street Port St. Joe, FL 32456

How long are records maintained:  
5 years

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?  
None

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:  
No. GCMC's position: if FWC would so chose to investigate the areas of source reduction of standing water and routine ditch maintenance for water runoff, mosquito habitat could be altered in a positive way.

Include proposed operational schedules for water fluctuations:  
"None"

List any periodic restrictions, as applicable, for example peak fish spawning times.  
When bee yards are occupied, ground and aerial spraying needs to be conducted after dark to minimize adverse effects to honey bees. Inform bee keepers in advance of any application or spraying.

Proposed Modification of Aquatic Vegetation:

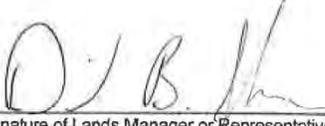
none. GCMC's position: if FWC would so chose to investigate areas of aquatic weeds blocking water flow, this too can reduce breeding spots for mosquitoes.

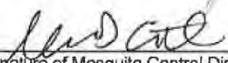
Land Manager Comments:

All control activities on Apalachicola River WEA must be approved by the FWC land manager or designee. The district must show the need to increase control activities due to an immediate threat to public safety.

Arthropod Control Agency Comments:

Most, if not all, control activities performed from GCMC on this property will be due to a declared public health emergency by FDOH. This district will interact and assist Apalachicola River WEA with plans of source reduction if the area so wishes.

  
Signature of Lands Manager or Representative      Date 11/18/13

  
Signature of Mosquito Control Director / Manager      Date 11/5/13

### **13.19 Franklin County and Gulf County Letters of Compliance with Comprehensive Plans**

# FRANKLIN COUNTY



REPLY TO

BOARD OF COUNTY COMMISSIONERS  
33 MARKET STREET, SUITE 203  
APALACHICOLA, FL 32320  
(850) 653-8861, EXT. 100  
FAX (850) 653-4795

REPLY TO

PLANNING & BUILDING DEPT.  
34 FORBES STREET  
APALACHICOLA, FL 32320  
(850) 653-9783  
FAX (850) 653-9799

June 18, 2014

Florida Fish and Wildlife Conservation Commission  
Division of Habitat and Species Conservation  
620 South Meridian Street  
Tallahassee, FL 32399-1600

RE: Apalachicola River Wildlife and Environmental Area Management Plan

Dear Commissioners:

Franklin County staff has reviewed the above referenced document and it is in compliance with the Franklin County Comprehensive Plan. Thank you for giving us the opportunity to review this plan.

If you need anything further, please feel free to contact me at the above address or call (850) 653-9783, ext 156.

Sincerely,

Rachel L. Ward,  
Zoning Administrator

**PINKI JACKEL**  
District One

**CHERYL SANDERS**  
District Two

**NOAH LOCKLEY, JR.**  
District Three

**JOSEPH PARRISH**  
District Four

**WILLIAM MASSEY**  
District Five

**BOARD OF COUNTY COMMISSIONERS  
GULF COUNTY, FLORIDA  
PLANNING DEPARTMENT  
DAVID RICHARDSON, PLANNER**

1000 CECIL G. COSTIN, SR. BLVD., • ROOM 311 PORT ST. JOE, FLORIDA 32456 • PHONE (850) 227-9562 • FAX (850) 227-9563

## Memorandum

**To:** Jennifer Tucker  
Florida Fish and Wildlife Conservation Commission  
Division of Habitat and Species Conservation  
Land Conservation and Planning

**Date:** 10/29/2014

**Subject:** Apalachicola River WEA Management Plan

In reviewing the ARWEA Management Plan, Gulf County supports common sense natural resource protection, however, the County had expressed major concern regarding the Optimal Conservation Planning Boundary (OCPB). With the response given by FFWCC staff regarding the OCPB, Gulf County has determined that the ARWEA Management Plan does not contravene the Gulf County Comprehensive Plan.

If you have any comments or questions, feel free to contact this office at 850-227-9562 between the hours of 8:00 am and 5:00 pm, Monday through Friday.

Sincerely,

**Gulf County Board of County Commissioners**



David Richardson  
Planner/Floodplain Administrator

CARMEN L. McEMORE  
District 1

WARD MCDANIEL  
District 2

JOANNA BRYAN  
District 3

TAN SMILEY  
District 4

WARREN YEAGER  
District 5