

Exhibit I

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties

(revised February 2007)

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 in the following:

Chapter 253, F.S. – State Lands

Chapter 267, F.S. – Historical Resources

Chapter 872, F.S. – Offenses Concerning Dead Bodies and Graves

Other helpful citations and references:

Chapter 1A-32, F.A.C. – Archaeological Research

Chapter 1A-44, F.A.C. – Procedures for Reporting and Determining Jurisdiction Over Unmarked Human Burials

Chapter 1A-46, F.A.C. – Archaeological and Historical Report Standards and Guidelines

The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings

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, pre-testing of the project site by a certified archaeological monitor, 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, the following information, at a minimum, must be submitted for comments and recommendations.

Project Description – A detailed description of the proposed project including all related activities. For land clearing or ground disturbing activities, the depth and extent of the disturbance, use of heavy equipment, location of lay down yard, etc. For historic structures, specific details regarding rehabilitation, demolition, etc.

Project Location – The exact location of the project indicated on a USGS Quadrangle map, is preferable. A management base map may be acceptable. Aerial photos indicating the exact project area as supplemental information are helpful.

Photographs – Photographs of the project area are always useful. Photographs of structures are required.

Description of Project Area – Note the acreage of the project, describe the present condition of project area, and any past land uses or disturbances.

Description of Structures – Describe the condition and setting of each building within project area if approximately fifty years of age or older.

Recorded Archaeological Sites or Historic Structures – Provide Florida Master Site File numbers for all recorded historic resources within or adjacent to the project area. This information should be in the current management plan; however, it can be obtained by contacting the Florida Master Site File at (850) 245-6440 or Suncom 205-6440.

* * *

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

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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) 245-6333
Suncom: 205-6333
Fax: (850) 245-6438

Exhibit J

Wildlife Species List

Mammalian species occurring or known to have occurred on Pine Log State Forest, Bay and Washington Counties, Florida¹.

Common Name	Scientific Name
Virginia Opossum	<i>Didelphis virginiana</i>
Least Shrew	<i>Cryptotis parva</i>
Southern Short-tailed Shrew	<i>Blarina carolinensis</i>
Eastern Mole	<i>Scalopus aquaticus</i>
Yellow Bat	<i>Lasiurus intermedius</i>
Nine-banded Armadillo	<i>Dasypus novemcinctus</i>
Eastern Cottontail	<i>Sylvilagus floridanus</i>
Marsh Rabbit	<i>Sylvilagus palustris</i>
Gray Squirrel	<i>Sciurus carolinensis</i>
Fox Squirrel	<i>Sciurus niger</i>
Southern Flying Squirrel	<i>Glaucomys volans</i>
Southeastern Pocket Gopher	<i>Geomys pinetis</i>
Beaver	<i>Castor canadensis</i>
Eastern Woodrat	<i>Neotoma floridana</i>
Hispid Cotton Rat	<i>Sigmodon hispidus</i>
Cotton Mouse	<i>Peromyscus gossypinus</i>
Old Field Mouse	<i>Peromyscus polionotus</i>
House Mouse	<i>Mus musculus</i>
Black Rat	<i>Rattus rattus</i>
Norway Rat	<i>Rattus norvegicus</i>
Black Bear	<i>Ursus americanus</i>
Raccoon	<i>Procyon lotor</i>
Striped Skunk	<i>Mephitis mephitis</i>
River Otter	<i>Lutra canadensis</i>
Gray Fox	<i>Urocyon cinereoargenteus</i>
Red Fox	<i>Vulpes vulpes</i>
Coyote	<i>Canis latrans</i>
Bobcat	<i>Felis rufus</i>
Wild Hog	<i>Sus scrofa</i>
White-tailed Deer	<i>Odocoileus virginianus</i>

¹ Other mammalian species are likely to occur, however no formal small mammal surveys have been conducted. Occurrences are based on incidental observations by Florida Fish & Wildlife Conservation Commission area biologists and technicians or known record occurrences.

Avian species occurring or known to have occurred on Pine Log State Forest, Bay and Washington Counties, Florida.

Common Name	Scientific Name
Pied-billed Grebe	<i>Podilymbus podiceps</i>
Double-crested Cormorant	<i>Phalacrocorax auritus</i>
Anhinga	<i>Anhinga anhinga</i>
Great Blue Heron	<i>Ardea herodias</i>
Little Blue Heron	<i>Egretta caerulea</i>
Cattle Egret	<i>Bubulcus ibis</i>
Green Heron	<i>Butorides virescens</i>
Black Vulture	<i>Coragyps atratus</i>
Turkey Vulture	<i>Cathartes aura</i>
Wood Duck	<i>Aix sponsa</i>
Green-winged Teal	<i>Anas crecca</i>
Mallard	<i>Anas platyrhynchos</i>
Blue-winged Teal	<i>Anas discors</i>
Ring-necked Duck	<i>Aythya collaris</i>
Lesser Scaup	<i>Aythya affinis</i>
Bufflehead	<i>Bucephala albeola</i>
Hooded Merganser	<i>Lophodytes cucullatus</i>
Swallow-tailed Kite	<i>Elanoides forficatus</i>
Mississippi Kite	<i>Ictinia mississippiensis</i>
Northern Harrier	<i>Circus cyaneus</i>
Bald Eagle	<i>Haliaeetus leucocephalus</i>
Osprey	<i>Cathartes aura</i>
Sharp-shinned Hawk	<i>Accipiter striatus</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Red-shouldered Hawk	<i>Buteo lineatus</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
American Kestrel	<i>Falco sparverius</i>
Northern Bobwhite	<i>Colinus virginianus</i>
Wild Turkey	<i>Meleagris gallopavo</i>
American Coot	<i>Fulica americana</i>
Killdeer	<i>Charadrius vociferus</i>
Common Snipe	<i>Gallinago gallinago</i>
American Woodcock	<i>Scolopax minor</i>
Laughing Gull	<i>Larus atricilla</i>
Rock Dove	<i>Columbia livia</i>
Mourning Dove	<i>Zenaida macroura</i>
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Eastern Screech-Owl	<i>Otus asio</i>
Great Horned Owl	<i>Bubo virginianus</i>
Barred Owl	<i>Strix varia</i>

Avian species occurring or known to have occurred on Pine Log State Forest, Bay and Washington Counties, Florida. CON'T

Common Name	Scientific Name
Common Nighthawk	<i>Chordeiles minor</i>
Chuck-will's-Widow	<i>Caprimulgus carolinensis</i>
Chimney Swift	<i>Chaetura pelagica</i>
Ruby-throated Hummingbird	<i>Archilochus colubris</i>
Belted Kingfisher	<i>Ceryle alcyon</i>
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>
Hairy Woodpecker	<i>Picoides villosus</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Northern Flicker	<i>Colaptes auratus</i>
Pileated Woodpecker	<i>Dryocopus pileatus</i>
Red-cockaded Woodpecker	<i>Picoides borealis</i>
Eastern Wood-Pewee	<i>Contopus virens</i>
Eastern Phoebe	<i>Sayornis phoebe</i>
Great Crested Flycatcher	<i>Myiarchus crinitus</i>
Acadian Flycatcher	<i>Empidonax virescens</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Purple Martin	<i>Progne subis</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Bank Swallow	<i>Riparia riparia</i>
Barn Swallow	<i>Hirundo rustica</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Fish Crow	<i>Corvus ossifragus</i>
Carolina Chickadee	<i>Poecile carolinensis</i>
Tufted Titmouse	<i>Baeolophus bicolor</i>
Brown-headed Nuthatch	<i>Sitta pusilla</i>
White-breasted Nuthatch	<i>Sitta carolinensis</i>
Brown Creeper	<i>Certhia americana</i>
Carolina Wren	<i>Thryothorus ludovicianus</i>
Winter Wren	<i>Tragodytes tragodytes</i>
Golden-crowned Kinglet	<i>Regulus satrapa</i>
Ruby-crowned Kinglet	<i>Regulus calendula</i>
Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>
Eastern Bluebird	<i>Sialia sialis</i>
Hermit Thrush	<i>Catharus guttatus</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Brown Thrasher	<i>Toxostoma rufum</i>

Avian species occurring or known to have occurred on Pine Log State Forest, Bay and Washington Counties, Florida. CON'T

Common Name	Scientific Name
Cedar Waxwing	<i>Bombycilla cedrorum</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>
European Starling	<i>Sturnus vulgaris</i>
White-eyed Vireo	<i>Vireo griseus</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Northern Parula	<i>Parula americana</i>
Yellow-rumped Warbler	<i>Dendroica coronata</i>
Pine Warbler	<i>Dendroica pinus</i>
Black and White Warbler	<i>Mniotilta varia</i>
Prothonotary Warbler	<i>Protonotaria citrea</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Hooded Warbler	<i>Wilsonia citrina</i>
Summer Tanager	<i>Piranga rubra</i>
Scarlet Tanager	<i>Piranga olivacea</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Indigo Bunting	<i>Passerina cyanea</i>
Eastern Towhee	<i>Pipilo erythrophthalmus</i>
Bachman's Sparrow	<i>Aimophila aestivalis</i>
Swamp Sparrow	<i>Melospiza georgiana</i>
White-throated Sparrow	<i>Zonotrichia albicollis</i>
Dark-eyed Junco	<i>Junco hyemalis</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Eastern Meadowlark	<i>Sturnella magna</i>
Common Grackle	<i>Quiscalus quiscula</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Purple Finch	<i>Carpodacus purpureus</i>
American Goldfinch	<i>Carduelis tristis</i>
House Sparrow	<i>Passer domesticus</i>
Orchard Oriole	<i>Icterus spurius</i>

Reptilian species occurring or known to have occurred on Pine Log State Forest, Bay and Washington Counties, Florida.

Common Name	Scientific Name
American Alligator	<i>Alligator mississippiensis</i>
Cottonmouth	<i>Agkistrodon piscivorus</i>
Diamondback Rattlesnake	<i>Crotalus adamanteus</i>
Dusky Pygmy Rattlesnake	<i>Sistrurus miliarius barbouri</i>
Eastern Coral Snake	<i>Micrurus fulvius</i>
Rat Snake	<i>Elaphe obsoleta</i>
Corn Snake	<i>Elaphe guttata. guttata</i>
Eastern Garter Snake	<i>Thamnophis sirtalis sirtalis</i>
Eastern Ribbon Snake	<i>Thamnophis sauritus sauritus</i>
Gulf Crayfish Snake	<i>Regina rigida rigida</i>
Florida Redbelly Snake	<i>Storeria obscura obscura</i>
Florida Brown Snake	<i>Storeria dekayi victa</i>
Southeastern Crowned Snake	<i>Tantilla coronata</i>
Florida Pine Snake	<i>Pituophis melanoleucus mugitus</i>
Southern Black Racer	<i>Coluber constrictor</i>
Florida Redbelly Snake	<i>Storeria occipitomaculata obscura</i>
Eastern Coachwhip	<i>Masticophis flagellum flagellum</i>
Eastern Indigo Snake	<i>Drymarchon corais couperi</i>
Eastern Hognose Snake	<i>Heterodon platirhinos</i>
Southern Hognose Snake	<i>Heterodon simus</i>
Ringneck Snake	<i>Diadophis punctatus</i>
Banded Water Snake	<i>Nerodia fasciata fasciata</i>
Florida Water Snake	<i>Nerodia fasciata pictiventris</i>
Rough Green Snake	<i>Opheodrys aestivus aestivus</i>
Eastern Mud Snake	<i>Farancia abacura abacura</i>
Scarlet Kingsnake	<i>Lampropeltis triangulum elapsoides</i>
Rough Earth Snake	<i>Virginia striatula</i>
Scarlet Snake	<i>Cemophora coccinea</i>
Green Anole	<i>Anolis carolinensis</i>
Eastern Glass lizard	<i>Ophisaurus ventralis</i>
Southern Fence Lizard	<i>Sceloporus undulatus undulatus</i>
Southeastern Five-lined Skink	<i>Eumeces egregius similis</i>
Southern Coal Skink	<i>Eumeces anthracinus pluvialis</i>
Broadhead Skink	<i>Eumeces laticeps</i>
Ground Skink	<i>Scincella lateralis</i>
Six-lined Racerunner	<i>Cnemidophorus sexlineatus</i>
Musk Turtle	<i>Sternotherus minor</i>
Gulf Coast Box Turtle	<i>Terrapene carolina major</i>
Florida Softshell Turtle	<i>Apalone ferox</i>

Reptilian species occurring or known to have occurred on Pine Log State Forest, Bay and Washington Counties, Florida. CON'T

Common Name	Scientific Name
Chicken Turtle	<i>Deirochelys reticularia</i>
Common Snapping Turtle	<i>Chelydra serpentina serpentina</i>
Gopher Tortoise	<i>Gopherus polyphemus</i>
Slider	<i>Trachemys scripta</i>
Eastern Mud Turtle	<i>Kinosternon subrubrum subrubrum</i>

Amphibian species occurring or known to have occurred on Pine Log State Forest, Bay and Washington Counties, Florida.

Common Name	Scientific Name
Two-toed amphiuma	<i>Amphiuma means</i>
One-toed amphiuma	<i>Amphiuma pholeter</i>
Reticulated Flatwoods Salamander	<i>Ambystoma bishopi</i>
Mole Salamander	<i>Ambystoma talpoideum</i>
Eastern Tiger Salamander	<i>Ambystoma tigrinum tigrinum</i>
Slimy Salamander	<i>Plethodon grobmahi</i>
Dwarf Salamander	<i>Eurycea quadridigitata</i>
Central Newt	<i>Notophthalmus viridescens</i> <i>louisianensis</i>
Eastern Lesser Siren	<i>Siren intermedia intermedia</i>
Rusty Mud Salamander	<i>Pseudotriton montanus</i>
Alabama Waterdog	<i>Necturus alabamensis</i>
Bullfrog	<i>Rana catesbeiana</i>
Bronze Frog	<i>Rana clamitans</i>
Pig Frog	<i>Rana grylio</i>
Southern Leopard Frog	<i>Rana utricularia</i>
Florida Cricket Frog	<i>Acris gryllus dorsalis</i>
Southern Chorus Frog	<i>Pseudacris nigrita nigrita</i>
Ornate Chorus Frog	<i>Pseudacris ornate</i>
Little Grass Frog	<i>Pseudacris ocularis</i>
Spring Peeper	<i>Hyla crucifer</i>
Squirrel Treefrog	<i>Hyla squirella</i>
Pinewoods Treefrog	<i>Hyla femoralis</i>
Bird-voiced Treefrog	<i>Hyla avivoca</i>
Gray Treefrog	<i>Hyla chrysoscelis</i>
Green Treefrog	<i>Hyla cinerea</i>
Barking Treefrog	<i>Hyla gratiosa</i>
Southern Toad	<i>Bufo terrestris</i>
Oak Toad	<i>Bufo quercius</i>
Eastern Narrow-mouthed Toad	<i>Gastrophryne carolinensis</i>
Eastern Spadefoot Toad	<i>Scaphiopus holbrookii holbrookii</i>

Exhibit K

Management Plan for the Flatwoods Salamander on Pine Log State Forest

Executive Summary

One larval flatwoods salamander was found in 1992, and 1 adult salamander was trapped in 2003 at a dome swamp in mesic flatwoods habitat on Pine Log State Forest. This represents the only known breeding pond for the species on the forest, although at least 5 suitable-looking wetlands occur within a 1-mi. radius. Interim guidelines of the Division of Forestry appear adequate to conserve the species, but we recommend girdling large pine trees in the pond basin known breeding pond to increase the hydroperiod by reducing transpiration and to stimulate herbaceous growth by increasing sunlight penetration and reducing needle litter. The present 3-year burning regime using growing season fires when feasible is suitable management for the flatwoods salamander and should promote wiregrass ground cover in upland habitat. Whenever possible, prescribed burning should be conducted during conditions that will allow fires to burn into wetlands to reduce encroachment by woody vegetation and to stimulate the growth of herbaceous vegetation in ecotones and pond basins.

INTRODUCTION

The flatwoods salamander (*Ambystoma cingulatum*) was listed by the U.S. Fish and Wildlife Service (USFWS) as a threatened species in 1999 and was subsequently listed by the Florida Fish and Wildlife Conservation Commission (FWC) as a Species of Special Concern. The flatwoods salamander will no longer meet the state criteria for listing as a Species of Special Concern if at least 129 self-sustaining populations can be maintained in perpetuity in Florida. In order to achieve this conservation goal, FWC plans to (1) maintain the 38 known Florida populations where they currently occur, (2) locate additional extant populations, and (3) possibly establish additional populations within the historic range of the species where suitable habitat occurs and populations have apparently been extirpated (Florida Fish and Wildlife Conservation Commission 2001). To achieve this first objective, FWC will develop site-specific management plans for each known flatwoods salamander population in cooperation with the private landowner or lead management agency.

Typical upland habitats for adult flatwoods salamanders are open, mesic pine flatwoods and savannas (i.e., prairies) that are maintained by frequent fire and have a ground cover dominated by wiregrass (*Aristida beyrichiana*) and diverse forbs. Historically, these habitats had an overstory of predominantly longleaf pine (*Pinus palustris*), but slash pine (*P. elliottii*) is now common in many areas due to fire suppression, harvest of longleaf pine, and planting of slash pine. A midstory is typically absent, but low-growing shrubs, such as saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), and blueberries (*Vaccinium* spp.) are often present. Flatwoods salamanders are typically not associated with flatwoods that have densely planted pines and a history of intensive mechanical site preparation, such as root raking or bedding, that has severely reduced the ground cover (Means et al. 1996; Palis 1996).

Breeding sites for the flatwoods salamander are typically small (<5 acres or <2 ha), shallow, isolated wetlands that completely dry annually. Suitable breeding sites can range from dense-canopied swamps to treeless, grassy depression marshes, roadside ditches, and shallow borrow pits (Palis 1996). Overstory species include pond cypress (*Taxodium ascendens*), blackgum

(*Nyssa sylvatica* var. *biflora*), and slash pine, and midstory species include myrtle-leaved holly (*Ilex myrtifolia*), Chapman's St. John's-wort (*Hypericum chapmanii*), titi (*Cyrilla racemiflora*), and other shrubs. Submerged, herbaceous vegetation must be present to shelter larval salamanders, but the extent of herbaceous ground cover in the pond basin depends upon the closure and composition of the canopy and midstory vegetation, hydroperiod, and fire history. Ideal breeding ponds have a sparse canopy and a dense, herbaceous ground cover that may include beakrushes (*Rhynchospora* spp.), sedges (*Carex* spp.), panic grasses (*Panicum* and *Dichanthelium* spp.), bluestems (*Andropogon* spp.), three-awned grass (*Aristida affinis*), plumegrasses (*Erianthus* spp.), sawgrass (*Cladium jamaicense*), nutrush (*Scleria baldwinii*), hatpins (*Eriocaulon* spp.), and yellow-eyed grasses (*Xyris* spp.) (Palis 1996). Ditching of wetlands may prevent successful salamander reproduction by shortening the hydroperiod (Palis 1996).

Breeding sites are typically encircled by an ecotone dominated by wiregrass and other "bunch" grasses. This graminaceous ecotone between the pond and surrounding uplands is important because it provides terrestrial egg-laying sites, cover for larvae when inundated (Palis 1996), and possibly year-round habitat for juveniles and adults (D. Hipes and D. Printiss, Florida Natural Areas Inventory, Tallahassee, pers. commun.). Plow lines around wetlands tend to be detrimental to salamander populations because they often prevent wetlands and associated ecotones from burning, allowing the invasion of woody vegetation.

PAST AND PRESENT LAND MANAGEMENT

The following information was obtained from the Five Year Resource Management Plan for the Pine Log State Forest (Division of Forestry 2000). Pine Log State Forest (PLSF) was bought by the State in 1936, at which time most of the area had been cut over and subjected to annual fires. Initially, several small slash pine plantations were planted and fire protection was implemented. Most tree planting occurred during 1943–50 and 1958–61, when most plantable land on the tract was reforested, primarily with slash pine. The Division of Forestry (DOF) is the lead management agency and manages PLSF for multiple uses, including timber management, recreation, wildlife, water management, and environmental education.

The forest contains 6,911 acres (2,798 ha), of which 988 acres (400 ha) are mesic flatwoods. Plant associations in mesic flatwoods include longleaf pine-wiregrass-runner oak (*Quercus pumila* and *Q. minima*) and longleaf/slash pine-saw palmetto-gallberry. Most mesic flatwoods consist of even-aged stands of slash pine that have been managed in the past by clearcutting, single pass chopping, winter burning, and row planting of seedlings. Future management of these slash pine plantations will use prescribed burning, selective thinning, and reforestation or natural regeneration treatments (i.e., selective seed tree or shelterwood harvesting) to restore them to naturally regenerating stands with the appropriate composition of longleaf and slash pines. Timber harvesting and seedbed preparation will be conducted so as to minimize disturbance to the ground cover vegetation, fauna, and ecosystem values. Skid trails and log landings will be restored after harvesting to minimize site disturbance and alteration of site hydrology. Areas with high stand densities and reduced ground cover will be thinned. The

flatwoods community will be scheduled on a growing season fire rotation as soon as fuel loading and stand age permit.

There are 702 acres (284 ha) of wet flatwoods that are typically situated between mesic flatwoods and basin swamps. The overstory contains pond pine (*Pinus serotina*), slash pine, longleaf pine, and loblolly bay (*Gordonia lasianthus*). There is a dense shrub layer of gallberry, greenbriers (*Smilax* spp.), fetterbush (*Lyonia lucida*), and staggerbush (*L. ferruginea*). The scarcity of pyrogenic live fuels results in longer fire frequencies than mesic flatwoods, and the fires tend to be more catastrophic when the pine needles and accumulated duff become flammable during dry conditions. The DOF's primary management activities in wet flatwoods are prescribed fire to reduce fuel loading and thinning during harvest operations in adjacent mesic flatwoods. The scarcity of grassy ground cover and the dense shrub layer in most wet flatwoods probably provide unsuitable habitat for the flatwoods salamander.

There are 57 acres (23 ha) of dome swamps, some of which provide potential breeding habitat for the flatwoods salamander. The canopy of dome swamps is typically dominated by pond cypress, although myrtle-leaved holly and slash pine may also be present. Dome swamps may have a grassy depression marsh in their center, and many dome swamps on PLSF are bordered by mostly intact grassy fringes (ecotones) that are maintained by growing season fires. However, dome swamps in heavily timbered areas and on boundaries generally have suffered considerable hydrological alteration and prolonged fire exclusion, resulting in degraded grassy ecotones and a closed canopy of pines. The DOF's primary management goals for dome swamps are to implement growing season burns every 2 to 5 years and to rehabilitate old firelines wherever possible so the swamps can be burned within larger blocks. No timber harvesting is scheduled in dome swamps through 18 December 2005.

The frequency of prescribed burn rotations on PLSF varies from 1 to 4 years. Firebreaks make maximum use of existing woods roads and wetlands, and whenever possible, use foam lines or natural breaks instead of traditional plowed firelines. Plowed firelines will be harrowed and allowed to revegetate naturally.

FLATWOODS SALAMANDER SURVEY HISTORY

Palis (1992) sampled 4 ponds on PLSF on 22 February 1992 and found 1 small larva (25.5 mm total length) in 34 dipnet sweeps in a dome swamp (30°25'03"N, 85°52'57"W) in Compartment 1 (Fig. 1). H. Cooper (USFWS, Panama City, Florida, pers. commun.) unsuccessfully sampled 7 ponds in Compartments 1 and 2 on 11 March 1999, but he did not sample the known pond. The known pond and nearby ponds were dry during site visits in 2002, but 1 adult flatwoods salamander was captured in a drift fence at the known pond on 19 April 2002 (Fig. 2).

DESCRIPTION OF FLATWOODS SALAMANDER SITE

The only known breeding pond for the flatwoods salamander is a dome swamp that Palis (1992) described as having a mostly closed canopy of pond cypress, myrtle-leaved holly, slash pine, and sweetbay (*Magnolia virginiana*). The shrub layer contains canopy species, sweet pepperbush (*Clethra alnifolia*) and vine-wicky (*Pieris phillyreifolia*). Ground cover in the pond includes *Cyperus*, *Carex*, *Dichanthelium*, *Eriocaulon*, *Panicum*, *Andropogon*, and *Rhynchospora*. The dome swamp is 2.1 acres (0.85 ha) in size

The known pond was characterized by FWC personnel as having canopy (>5 m tall) closure of 26–50%, with the predominant species being slash pine and lesser amounts of pond cypress and myrtle-leaved holly. Shrub (0.5–5 m tall) coverage was 6–25% and consisted primarily of myrtle-leaved holly. Ground cover by herbaceous emergents in the pond basin was sparse due to shading and leaf litter produced by canopy and shrub species. The pond ecotone was primarily grassy with pine straw, but the grassy ecotone was narrow and an old fireline was present.

The known pond is situated just north of an unnamed woods road and approximately 0.1 mi. (160 m) west of Road C-2. The pond is situated in mesic flatwoods containing naturally regenerated longleaf pine, including large sawtimber (Stand 1-7; Fig. 3). In February 2002, canopy closure in the uplands around the pond was 6–25%. The ground cover was predominantly *Aristida beyrichiana* and *Sporobolus*, and the shrub cover was predominantly gallberry and saw palmetto. Five other stand types predominate within 1,500 ft (457 m) of the pond, which represents DOF's farthest habitat protection buffer related to timber harvesting (discussed below). In sandhill habitat southeast of the pond is a longleaf pine plantation (Stand 1-11; Fig. 3) that was planted in 1989 after roller chopping. Northeast of the pond is a clearcut situated in sandhill habitat (Stand 1-20; Fig. 3) that was planted in longleaf pine in January 2000 after site preparation and prescribed burning in October 1999. Prior to clear cutting, the site was a slash pine plantation planted in 1964. South and east of the pond is a slash pine plantation in primarily mesic flatwoods habitat (Stand 1-9; Fig. 3) that was planted in 1963 and thinned in 1994–95 by removing every fifth row and selected trees in other rows. West of the pond on the other side of floodplain swamp habitat (Stand 1-18) is a slash pine plantation in mesic flatwoods habitat that was planted in 1965 and thinned in 1985 (Stand 1-21; Fig. 3). Uplands in the area were last burned during late March and early April in 1999 (except for Stand 1-20), and a similar burn was conducted in 1995. December–February burns were conducted in 1992 and 1989.

PRESENT MANAGEMENT ACTIVITIES

The DOF is in Year 2 of a 5-year management plan (Division of Forestry 2000). In DOF's management plan, interim management guidelines for the flatwoods salamander are to be followed for known breeding ponds and the surrounding flatwoods community. Natural communities that are to be considered for management for the flatwoods salamander are mesic flatwoods, wet flatwoods, dome swamp, and basin swamp. Management includes maintaining groundcover flora with prescribed growing-season fire and by thinning plantations. Fire will be allowed to burn into dry ponds to prevent complete canopy closure and to stimulate the growth of herbaceous emergents. No clearcuts are planned in Compartment 1 through 30 June 2007,

and selective thinning of stands is not planned within 550 ft (168 m) of the known breeding pond.

Following is a summary of DOF's interim guidelines for the flatwoods salamander:

Timber Harvesting: No clearcutting within 550 ft (168 m) of the Habitat Protection Buffer (HPB); $\leq 25\%$ of the HPB within the next 950 ft (290 m) may be clearcut; otherwise, only selective harvesting should be conducted during dry periods and at ≥ 10 -year intervals if possible; maintain 45–50 sq ft basal area/acre within the entire 1,500-ft (457-m) buffer; no harvesting within the wetland.

Log Landings: Log landings and loading areas are to be located outside the 1,500-ft (457-m) buffer; minimize skid trails and orient them parallel to the wetland margin.

Site Preparation: No intensive mechanical site preparation such as root raking, discing, stumping, or bedding; light chopping and spot raking of logging debris is allowed; pesticides may be used only when fire is an unreasonable operation, but no aerial application of pesticides.

Road Construction: No road construction that would significantly alter natural drainage patterns to or from the wetland; provide adequate water flow underneath the road surface of all above grade roads.

Prescribed Burning: Maximize the use of fire in the HPB to promote the type of ground cover favored by the flatwoods salamander.

Miscellaneous Activities: Exercise caution in the HPB when operating heavy equipment and clearing for boundary lines, trail construction, road maintenance, or wild food plots/track counts.

Deviation from these guidelines may be granted by the Forest Management Bureau on a case by case basis when justified by special circumstances (e.g., insect/disease outbreaks, wildfire) and where the area involved has been unsuccessfully sampled for the presence of flatwoods salamanders.

OBJECTIVES

1. Restore or maintain suitable upland and breeding habitat for the flatwoods salamander, which typically consists of open-canopied pine forests or savannas with a wiregrass-dominated ground cover.
2. Maintain or restore wide, grassy ecotones around the known breeding pond and nearby wetlands that provide potential breeding habitat.

3. Enhance habitat conditions (i.e., hydroperiod, herbaceous vegetation, canopy closure, water quality) for the flatwoods salamander in the basin of the known breeding pond and nearby wetlands that provide potential breeding habitat.
4. Document the continued existence of the known population at least once during each 5-year period (2002–06, 2007–11, etc.).
5. Identify new breeding ponds for the known population and identify new populations.

PROPOSED MANAGEMENT AND SURVEY ACTIVITIES AND SCHEDULES

The interim management guidelines for the flatwoods salamander on PLSF should be adequate. Clear cutting occurred in 1998–99 near the outer extent of the 550-ft (168-m) HPB around the known pond (Stand 1-20; Fig. 3), but it was conducted in sandhill habitat, which is considered unsuitable for flatwoods salamanders. Clarification is needed in the last paragraph of the interim guidelines that refers to deviations under special circumstances where the area involved has been unsuccessfully sampled for the presence of flatwoods salamanders. We consider “unsuccessful” sampling to be finding no larval salamanders after conducting dipnet surveys during at least 3 “good” sampling years. We define a good sampling year as one in which rainfall has completely filled pond basins and inundated ecotonal edges by at least 1 January.

The known breeding pond could be improved for flatwoods salamanders by opening up the canopy. This pond has a relatively dense canopy predominated by large slash pines, which are suppressing herbaceous vegetation via their shade and needle litter. Evapotranspiration by these pines also may be shortening the hydroperiod of the pond. We recommend that pines in the pond basin be killed by girdling during the growing season in 2002 (Table 1).

Upland stands west of Highway 79 in Compartment 1 were scheduled for a spring burn in 2002, and subsequent prescribed burns are planned for every 3 years during the growing season whenever possible (Table 1), depending upon fuel loads and weather. Dry conditions precluded the spring burn in 2002, but burning might be conducted in June if conditions permit. If Compartment 1 is not burned in 2002, it will be scheduled for burning in 2003. Prescribed burning at approximately 3-year intervals represents suitable management for the flatwoods salamander. Growing season (April–September) burns, preferably after April, would be more beneficial to the flatwoods salamander than dormant season (October–March) burns. Growing season burns would reduce shrub cover and litter in the pond basin, stimulating the growth of herbaceous emergents, enhancing the wetland/upland ecotone, and stimulating the reproduction of wiregrass in the surrounding uplands. Dormant season burning may affect migrating adult salamanders (October–January) and dispersing post-metamorphic salamanders (March–April) by removing the pine needle litter and groundcover vegetation that may provide moist microhabitat conditions and cover from predators (Palis 1992).

Other wetlands on PLSF are also likely used for breeding by the flatwoods salamander. There are at least 5 other wetlands on PLSF that could potentially be used as breeding sites by the flatwoods salamander within 1 mi. (1.6 km) of the known pond (D. J. Spiering and T. R.

McCoy, FWC, Panama City, pers. commun.; Fig. 1). This 1-mi. radius is based on the limited data available on the movements of adult flatwoods salamanders into surrounding uplands (Florida Fish and Wildlife Conservation Commission 2001). The southern boundary of the population is Pine Log Creek, and the potential western population boundary extends beyond the PLSF boundary (Fig. 1). Other wetlands in the area would appear to provide more suitable breeding habitat than the known pond does presently. For example, the wetland approximately 0.6 mi. (1 km) NNW of the known pond that is bisected by Road C-5 looks like a better breeding site (Fig. 1). It has a sparse canopy of myrtle-leaved holly, and herbaceous emergent vegetation occurs over most of the basin. However, siltation from Road C-5 during runoff from rains is a problem and should be rectified.

Population Survey Schedule: For the purposes of the FWC's management plan for the flatwoods salamander, extant populations are those that have been confirmed since 1990 (Florida Fish and Wildlife Conservation Commission 2001). Statewide population surveys are presently being conducted, and in the future, populations will be considered extant if they were verified in the past 5-year period (assuming good sampling years occurred). The only record for the flatwoods salamander on PLSF was from 1992, but the drift-fence capture in 2002 confirmed the continued existence of the species. Since 1996, inadequate fall/winter rains have limited the success of larval surveys throughout most of the species' range, and many populations have probably had no recruitment.

The FWC will continue dipnetting at least twice per year for larval salamanders during good sampling years at the known pond, the 5 identified potential breeding sites within a 1-mi. radius, and other ponds that were visited during 2002 and ranked as potential breeding sites (Table 1). A "potential" pond has some grassy vegetation present in the pond basin or along the edge, a narrow grassy ecotone at the very least, the surrounding uplands area in marginal to excellent condition, and a hydroperiod appropriate for larval development. Potential ponds that have been unsuccessfully dipnetted for ≥ 3 good sampling years, which may occur over a period of ≥ 10 years, will no longer need to be sampled. Sampling of the known breeding pond may continue after 3 years of unsuccessful sampling, but the population will no longer be considered extant if at least 10 years have passed since the last salamander was recorded. Once a larval flatwoods salamander has been found at a pond in 2002–06, the pond does not have to be sampled again until the next 5-year survey period (2007–11).

Population Management Schedule: If feasible, flatwoods habitat and associated wetlands will be burned in Compartment 1 in June 2002. If burning cannot occur in 2002, it will be rescheduled for 2003 (Table 1). Ideally, burns should be conducted when most wetlands are dry. Another growing season burn should be scheduled for 2005 or 2006 (Table 1). Pine trees in the known breeding pond should be girdled during the growing season in 2002 (Table 1).

CONTACT PERSONS

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Table 1. Schedule of population management and survey activities for the flatwoods salamander on Pine Long State Forest, 2002–06.

Date	Activity
June 2002 or Spring/Summer 2003	Burn Compartment 1, including known breeding pond
Summer 2002	Girdle pine trees in known breeding pond
January–April 2003	Dipnet twice for larvae in known breeding pond and all potential ponds
January–April 2004	Dipnet twice for larvae in known breeding pond and all potential ponds unsuccessfully sampled in 2003
January–April 2005	Dipnet twice for larvae in known breeding pond and all potential ponds unsuccessfully sampled in 2003–04
Spring/Summer 2005	Burn Compartment 1 if previous fire was in 2002
January–April 2006 ¹	Dipnet twice for larvae in known breeding pond and all potential ponds unsuccessfully sampled in 2003–05
Spring/Summer 2006	Burn Compartment 1 if previous fire was in 2003

¹ This survey is unnecessary if the 3 preceding years were good sampling years.

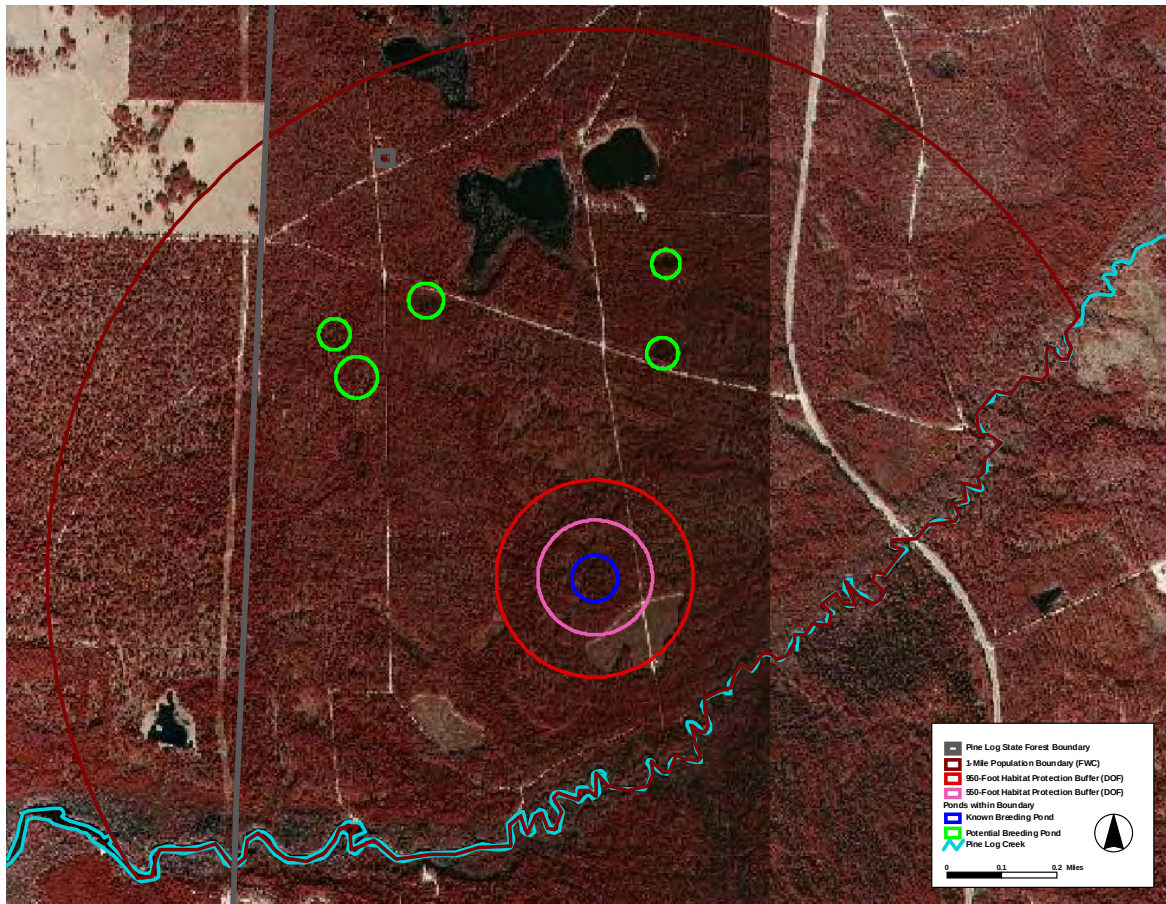


Fig. 1. Map of Pine Log State Forest showing the known flatwoods salamander breeding pond, other potential breeding ponds, Division of Forestry habitat protection buffer zones, and the potential salamander population boundary.



Fig. 2. Adult flatwoods salamander captured in a drift fence on Pine Log State Forest, Washington County, 19 April 2002 (photograph by Todd McCoy).

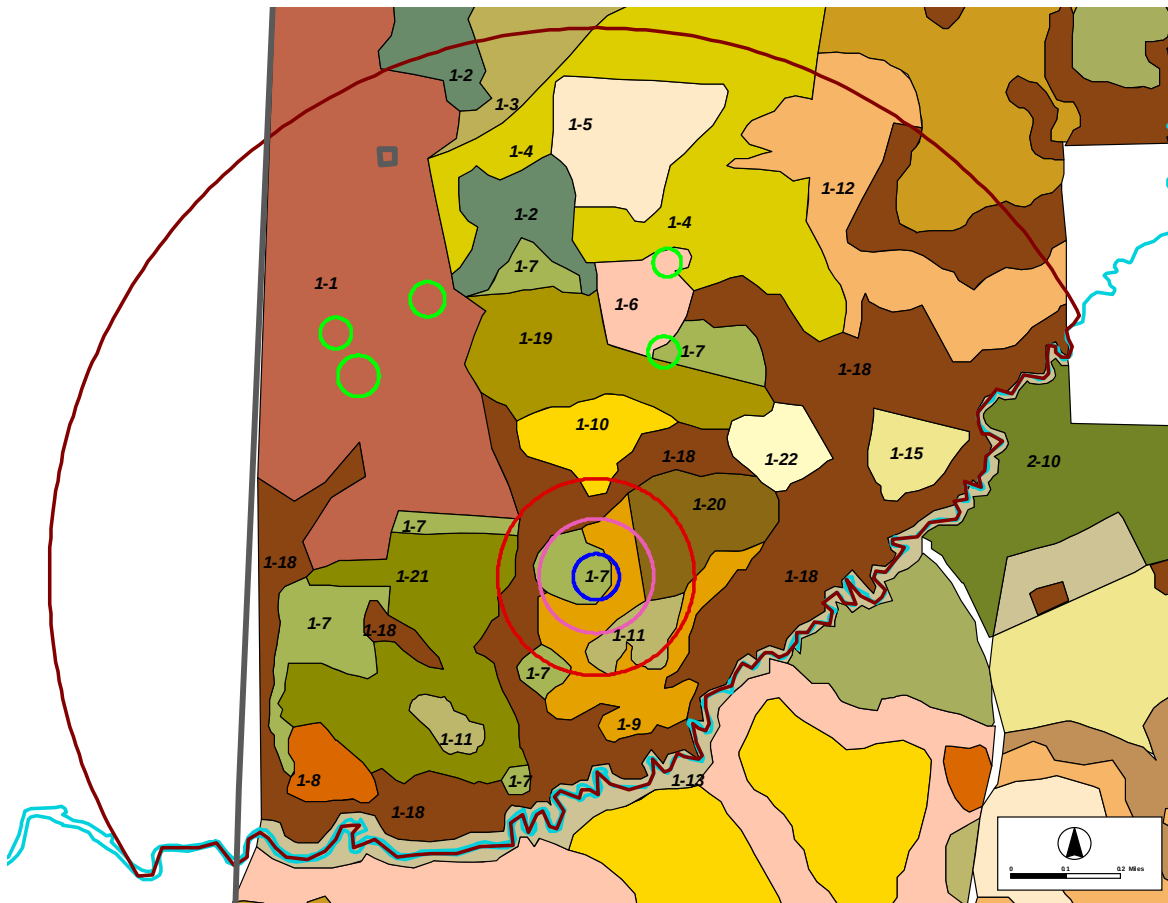


Fig. 3. Map of Pine Log State Forest showing ponds and buffer zones (see Fig. 1) overlaid on Division of Forestry forest stand numbers. Information on stands within 1,500 ft (red circle) of the known flatwoods salamander breeding pond (blue circle) can be found in the report.

Exhibit L

Management Prospectus

CONSERVATION AND RECREATION LANDS MANAGEMENT PROSPECTUS

Pine Log

DIVISION OF FORESTRY DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

Management Goals

Pine Log State Forest is Florida's first state forest in 1936, Pine Log State Forest, is located north of Panama City Beach in Florida's panhandle. The forest occupies 6973.14 acres in Bay and Washington Counties. The Division of Forestry proposes to manage the project in accordance with, and in a manner designed to accomplish, the acquisition goals and objectives as approved by the Land Acquisition Advisory Council. These goals and objectives are hereby incorporated by reference.

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

Qualifications for State Designation

Major communities for this project are comprised of Flatwoods (Hydric, and Mesic) Blackwater Streams, Basin swamp, Bottomland Forest, Sandhill Lake, dome Swamp and Sandhills. The project's size and diversity makes it highly desirable for use and management as a state forest.

Conditions Affecting Intensity of Management

There are areas of cutover lands that will require reforestation and restoration efforts. These areas however will not be able to be replanted soon due to the current budget. These clear-cuts will need to be maintained to keep vegetation at a manageable level in order to plant when the budget allows.

Timetable for Implementing Management

The Division of Forestry is currently providing public access for low intensity, non-facilities related outdoor recreation activities. Until the full complement of positions is appropriated, public access will be coordinated through the Division of Forestry's Chipola River District Headquarters and management activities will be conducted utilizing district personnel. The Division of Forestry will cooperate with and seek the assistance of other state agencies, local government entities and interested parties as appropriate.

Initial or intermediate management efforts are concentrating on site security, public and fire management access, resource inventory, and removal of existing trash. Steps are being taken to insure that the public is provided appropriate access while simultaneously affording protection of sensitive resources. Vehicular use by the public is confined to designated roads and unnecessary access points will be closed. An inventory of the site's natural resources and threatened and endangered flora and fauna will be conducted to provide the basis for formulation of a management plan.

Prior to collection of necessary resource information, management proposals for this project can only be conceptual in nature. Long-range plans for this property will generally be directed toward the restoration of disturbed areas and maintenance of natural communities. To the greatest extent practical, disturbed sites will be restored to conditions that would be expected to occur in naturally functioning ecosystems. Management activities will also stress enhancement of the abundance and spatial distribution of threatened and endangered species.

An all season burning program is being established utilizing practices that incorporate recent research findings. Whenever possible, existing roads, black lines, foam lines and natural breaks are utilized to contain and control prescribed and natural fires.

Timber management activities will primarily consist of improvement thinnings and regeneration harvests aimed at maintaining and perpetuating forest ecosystems. Plantations will be thinned to achieve a more natural appearance and, where appropriate, will be reforested with species that would typically be found in a naturally functioning ecosystem. Stands will not have a targeted rotation age but will be managed to maintain a broad diversity of age classes ranging from young stands to areas with old growth characteristics. This will provide habitat for the full spectrum of species that would be found in the natural environment.

The resource inventory will be used to identify sensitive areas that need special attention, protection or management, and to locate areas that are appropriate for any recreational or administrative facilities. Infrastructure development will primarily be located in already disturbed areas and will be the absolute minimum required to allow public access for the uses mentioned above, to provide facilities to accommodate public use, and to administer and manage the property.

The Division will promote recreation and environmental education in the natural environment. As a general practice, if it is determined that a new recreation area is needed, low impact, rustic facilities will be the only kind developed. High impact, organized recreation areas will be discouraged because of possible adverse effects on the natural environment. Unnecessary roads, firelines and hydrological disturbances will be abandoned and/or restored to the greatest extent practical.

Revenue Generating Potential

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

Management Costs and Sources of Revenue

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

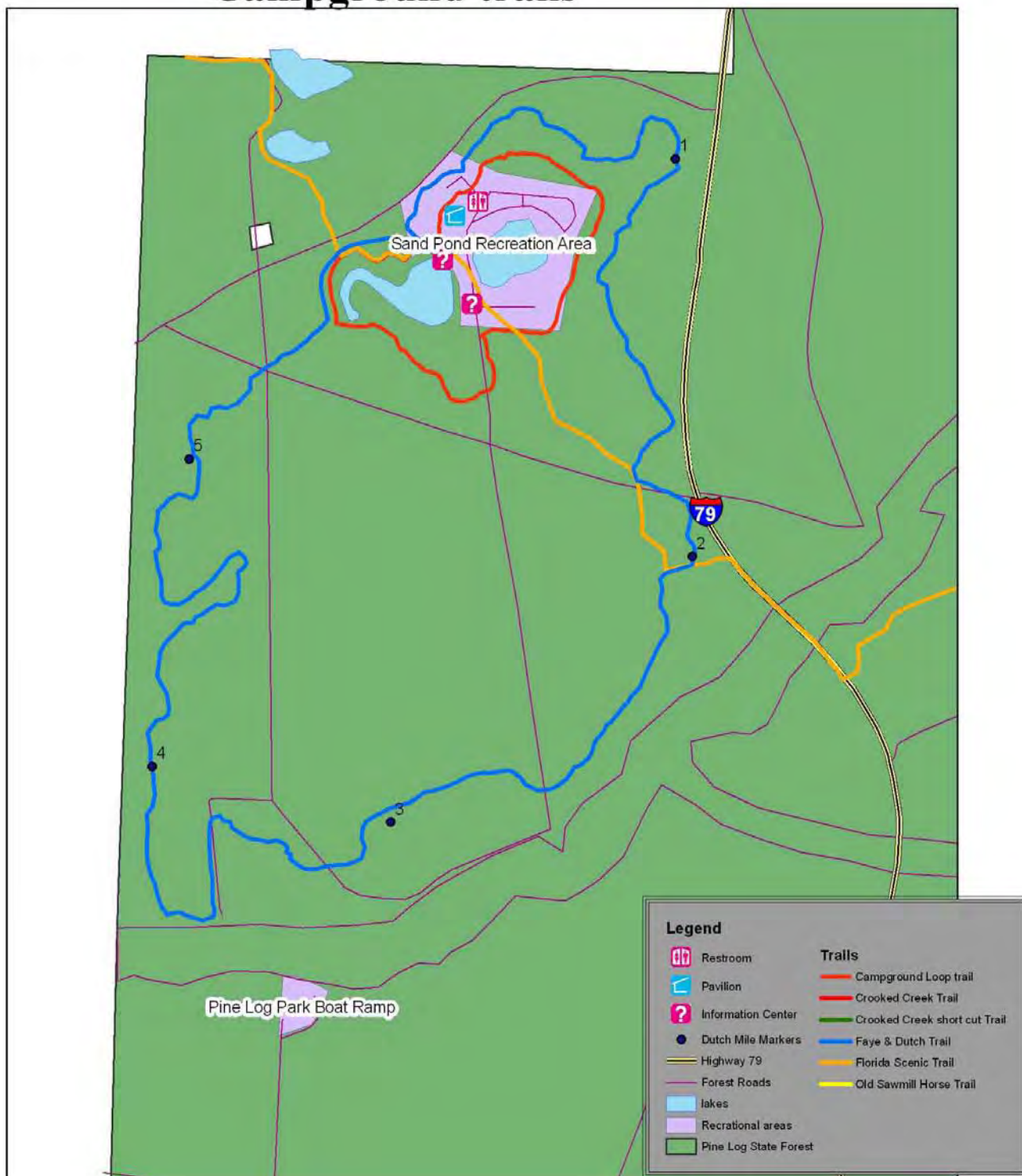
SALARY (4 FTE'S)	\$105,640
EXPENSE	\$20,000
OPERATING CAPITAL OUTLAY	<u>\$741,300</u>
TOTAL	\$866,940
 SALARY	
Senior Forest Ranger (1) @ \$28,140	\$28,140
Forest Ranger (2) @ \$24,500	\$49,000
Forester (1)	\$28,500
 EXPENSE	 \$20,000
 OPERATING CAPITAL OUTLAY	
Pickup Truck, 4x4, diesel (2) @ \$23,000	\$46,000
Farm Tractor,	\$10,000
Harrow, 7 foot	\$14,000
Water Tank & Pump (2) @ \$1,400	\$2,800
Mobile Radio (7) @ \$1,200	\$8,400
Bush Hog	\$4,500
Portable Radio (4) @ 800	\$3,200
4-wheeler with fire Pod	\$7,200
Disc, 7 foot	\$12,000
Transports and 650j Dozers (2) & \$180,000	\$360,000
Lowboy Transport and D6 Dozer	\$188,000
Tanker	\$21,500
Frontend Loader	\$25,000
Road Grader	\$30,000
Gravelly Mower	\$3,000
John Deere 4x4 Gator	\$5,000
Box Blade	\$700

	741,300

Exhibit M

Pine Log Recreation Maps

Pine Log State Forest Campground trails

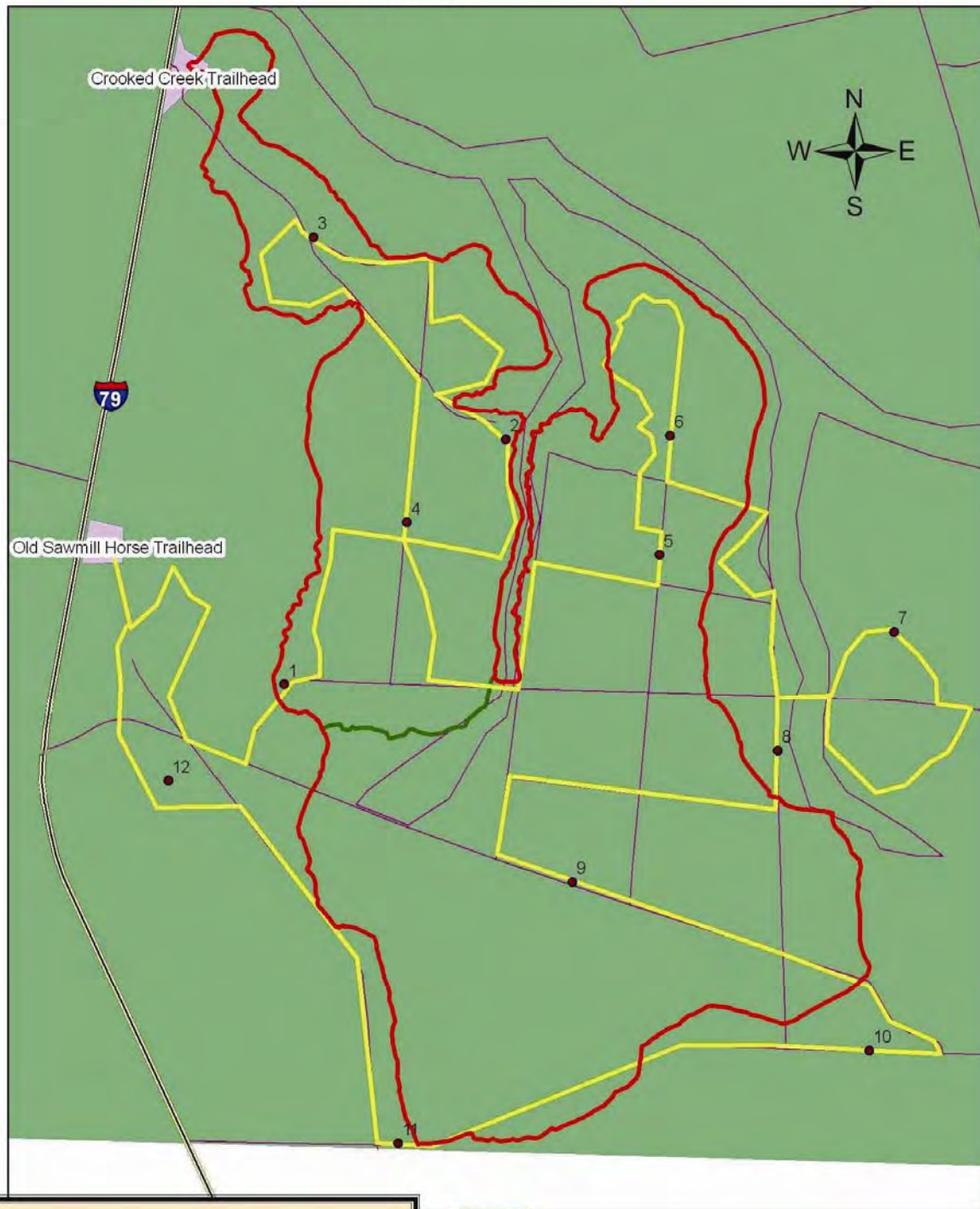


Map prepared by
Joe Vanderwerff Jr
January 30th 2009



0 0.3 0.6 1.2 Miles

Pine Log State Forest Trails



Legend

- | | |
|----------------------------|---------------------------------|
| ● Horse Trail Mile Markers | Trail |
| ● Dutch Mile Markers | — Campground Loop trail |
| — highway 79 | — Crooked Creek Trail |
| — Forest Road | — Crooked Creek short cut Trail |
| — Recreational Areas | — Faye & Dutch Trail |
| — Pine Log State Forest | — Florida Scenic Trail |
| | — Old Sawmill Horse Trail |



Map prepared by
Joe Vanderwerff Jr
January 30th 2009

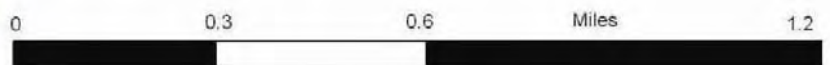


Exhibit N

Burn Unit Map

Pine Log State Forest Burn Unit map

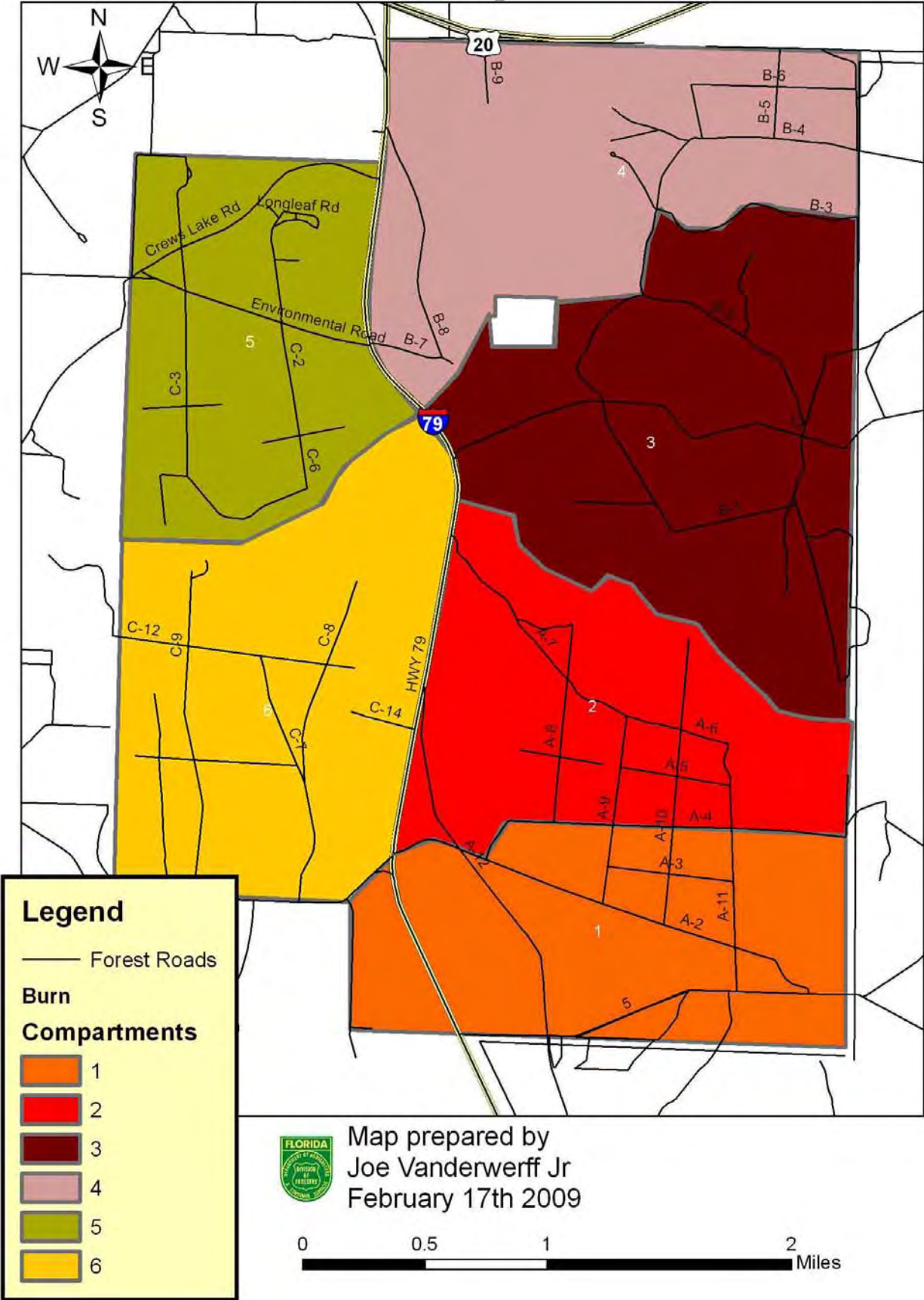


Exhibit O

Pine Log Natural Communities

Pine Log State Forest Natural Communities

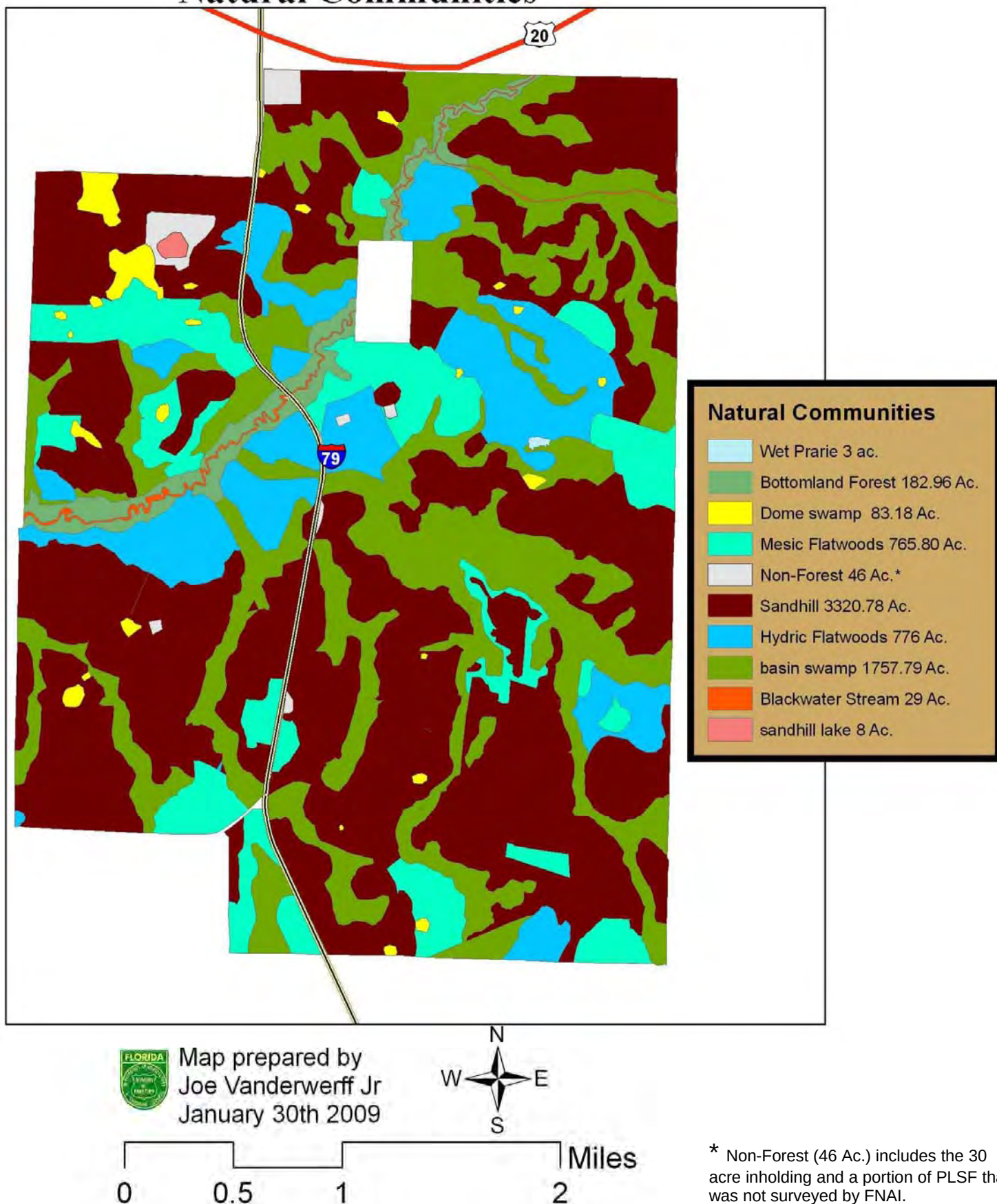
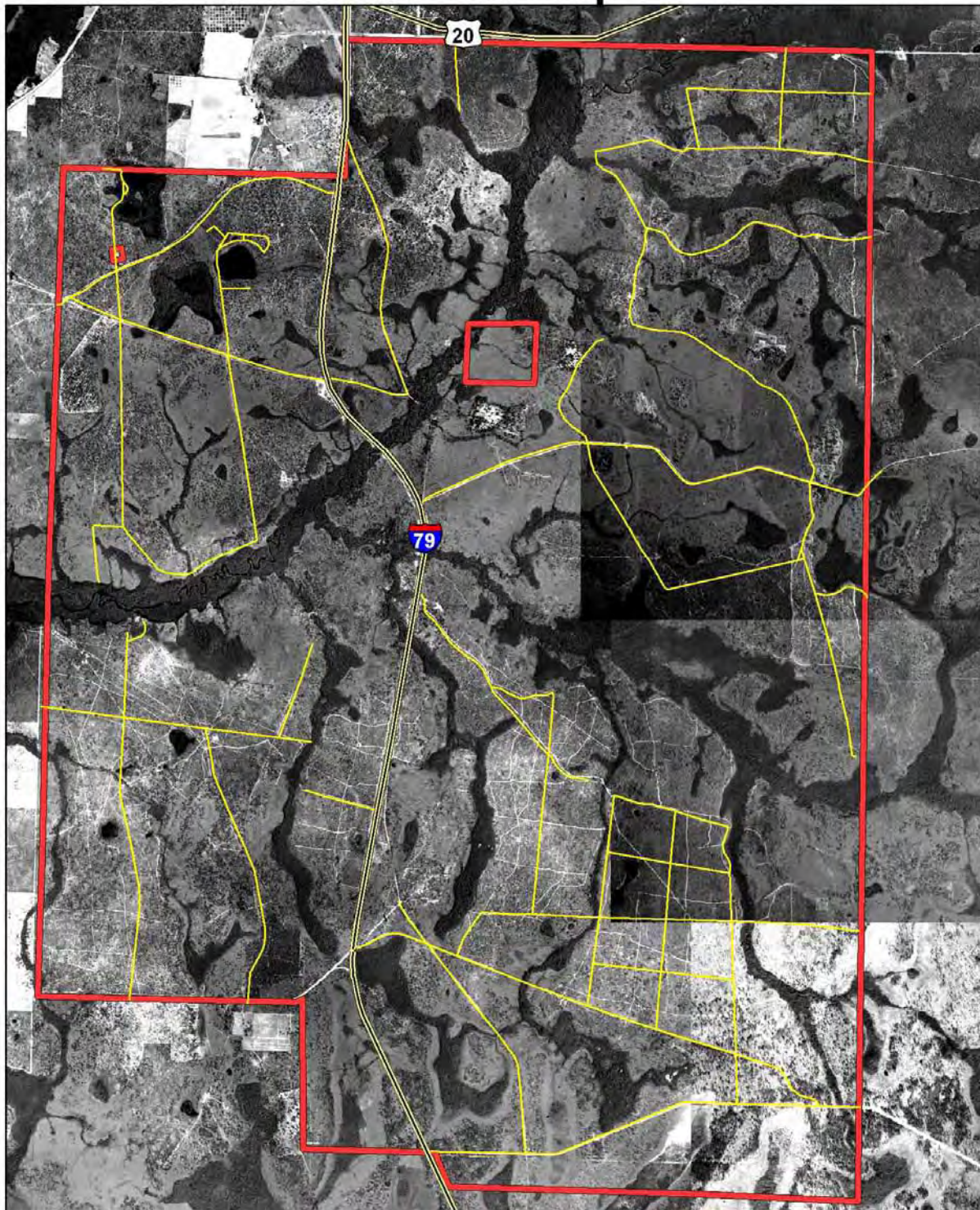


Exhibit P

Historical Map

Pine Log State Forest 1949 Historical Map



Map prepared by
Joe Vanderwerff
February 17th 2009

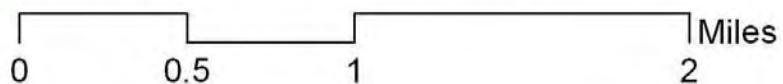


Exhibit Q

Sensitive Area Map

Pine Log State Forest Enviromentally sensitive Areas

