

BIOLOGICAL ASSESSMENT

for the

Beasley Pond Analysis Area

USDA Forest Service

Apalachicola National Forest Service

Liberty County, Florida

Prepared by

Brittany B. Phillips

Wildlife Biologist, Apalachicola National Forest Service

bbphillips@fs.fed.us 850-643-2282 ext. 1527

Reviewed by

Jeff Gainey, Forest Biologist

John Dunlap, Supervisory Biologist

Jason Drake, Forest Ecologist

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1. Introduction

The Apalachicola National Forest has proposed forest management and ecological restoration activities in the Beasley Pond Analysis Area. This Biological Assessment (BA) documents the expected effects of the proposed actions on species listed as endangered or threatened under the Endangered Species Act of 1973. Forest Service (FS) direction from the FS Manual, Chapters 2670-2674 guides the analysis process for determining the potential effects of agency actions on federally listed species. When the FS determines that proposed activities may have an effect on endangered or threatened species; are likely to jeopardize the continued existence of a proposed species; or result in the destruction or adverse modification of critical or proposed critical habitat, the Forest Service shall initiate consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with FS and USFWS policies for implementing Section 7 of the Endangered Species Act. The information in this document is the basis for the consultation process.

Affected area

This project is located in Liberty Co., FL on the central west portion of the Apalachicola District in compartments 25, 26, 27, 28 and one stand in compartment 29. The Beasley Analysis Area contains approximately 6,808 acres. The project area contains approximately 50 acres of loblolly pine plantations, 2,036 acres of immature and mature longleaf stands, 2,710 acres of immature and mature slash plantations, 1,401 acres of lowland or hardwood stringers along watercourses, 258 acres of undrained flatwoods, 330 acres of brush species and 23 acres of mixed bottomland hardwood and yellow pine stands. Prescribed burning is currently the only management activity taking place in these compartments; district-wide restoration of isolated wetlands through hardwood removal has been approved but implementation has not started in this project area. Both of these activities have been evaluated in previous BAs and consultation with the US Fish and Wildlife Service has been completed.

Maps of the analysis area and the proposed action can be found in the Appendix 1. Additional information about the current and desired conditions for the project area is in the draft EIS available on the project website (<http://www.fs.usda.gov/project/?project=42229>) or upon request.

Purpose and Need

The Revised Land and Resource Management Plan (i.e., the Forest Plan) outlines management goals for the National Forests of Florida, including the conservation and protection of declining natural communities, and uncommon biological, ecological, or geological sites (USDA, 1999a, p. 2-4). The Beasley Pond Analysis Area has been identified as containing important ecological and botanical resources, many of which have been negatively affected by past management activities. The primary purpose of the proposed action is to maintain, improve, and restore healthy forest and open savanna habitats through the following activities: thinning both longleaf and pine plantations to promote herbaceous groundcover growth, restoring remnant wet savannas to improve habitat for sensitive plants, federally threatened plants, and the federally threatened frosted flatwoods salamander, and controlling overabundant hardwood trees and brush species to

restore herbaceous groundcover. Secondary benefits include maintaining and improving red-cockaded woodpecker (RCW) habitat in flatwoods and upland pine habitats.

The ecological value of wet savannas were recognized in several places within the Forest Plan and accompanying Final Environmental Impact Statement (USDA 1999b). Four plant species listed as threatened or endangered under the Endangered Species Act of 1973 have been found on the Apalachicola District: Harper's beauty (*Harperocallis flava*), white birds-in-a-nest (*Macbridea alba*), Godfrey's butterwort (*Pinguicula ionantha*), and Florida skullcap (*Scutellaria floridana*). All of these species can occur within wet savannas or on the ecotone between wet savannas and adjacent swamps or flatwoods (USFWS 1983, 1994). Of the 295 recently confirmed occurrences of these species, 178 (~60%) are within or immediately adjacent to wet savanna habitats. These species also more frequently occur in higher quality savannas compared to lower quality savannas. Additionally, over half of critical habitat designated for the frosted flatwoods salamander (approximately 14,000 acres out of 23,000 acres) is within the Apalachicola National Forest (74 Fed. Reg. 26, p.6700-6774). The primary non-breeding habitat for this species is described as frequently burned, longleaf or slash pine flatwoods with dense wiregrass cover, but a large proportion of critical habitat occurs in current or historical wet savannas and 51 out of 60 documented breeding ponds are within or adjacent to areas identified as historical wet savanna.

Despite the ecological importance of wet savannas, restoration of sites degraded by past management was not directly addressed in the Forest Plan because at that time there was no systematic assessment of the condition and historical distribution of this diverse and important habitat. In 2011-2012, Florida Natural Areas Inventory (FNAI) biologists generated a GIS-based natural community map based on multiple years of georeferenced aerial photography, soil maps, LiDAR digital elevation models, vegetation plots, element occurrences of rare species and natural communities and ground-truthed GPS points (FNAI 2012). Soil samples (NRCS), plant surveys (FNAI 2012 and 2013) and stand assessment by Apalachicola National Forest staff support the conclusion that the stands proposed for savanna treatments were historically savannas. The historical communities within the Beasley Pond Analysis Area are in Figure 1 below. Detail descriptions of each natural community represented in the map can be found at the FNAI website, <http://www.fnai.org/naturalcommunities.cfm>.

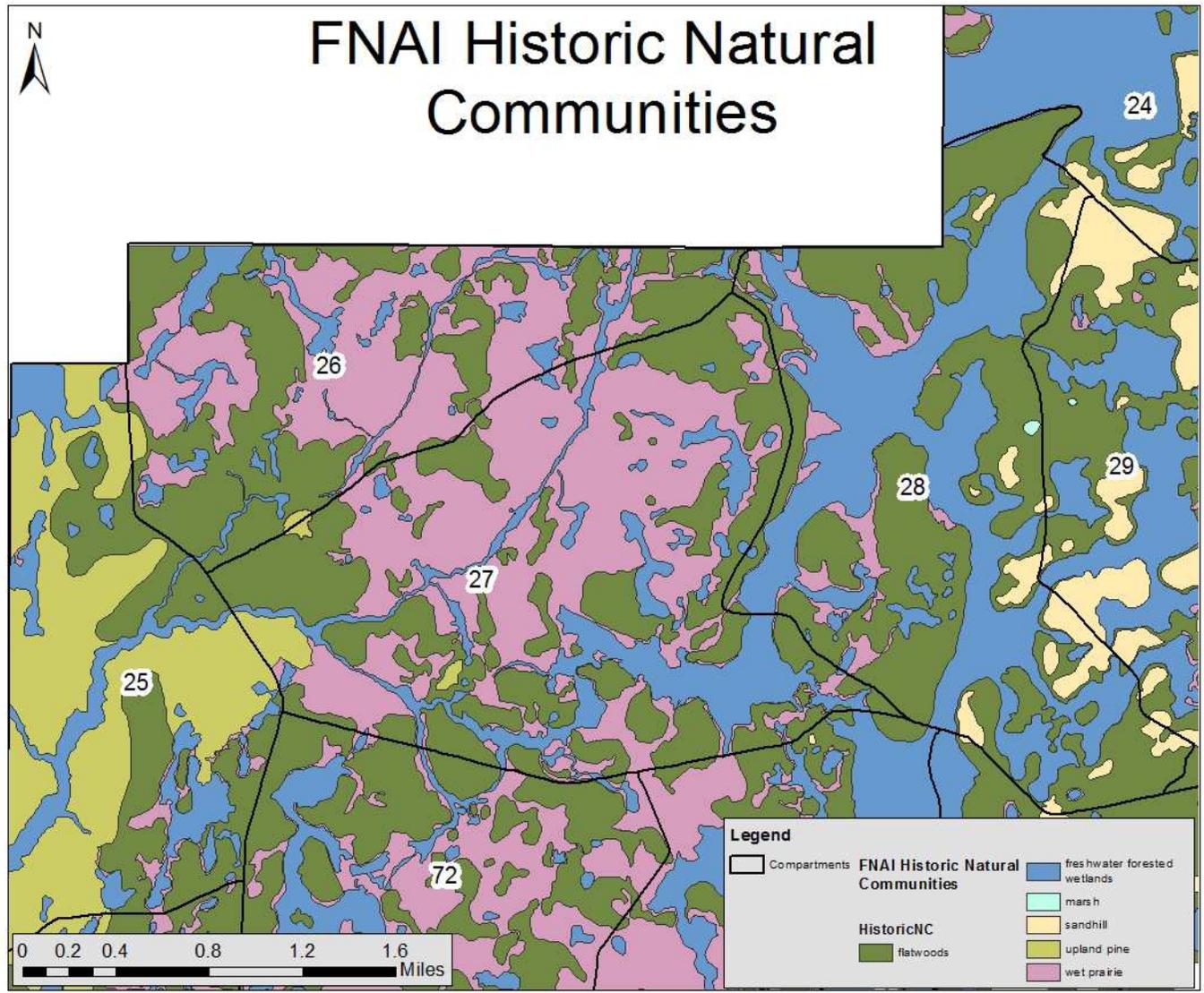


Figure 1. Map of historical natural communities in the Beasley Pond Analysis Area.

Many former wet savanna sites have been bedded, planted with slash pine and fertilized in the past. In other sites, past fire suppression has resulted in tree and woody shrub encroachment into savanna sites. In both cases, savanna restoration cannot be achieved without reducing tree density.

Proposed Action

The Forest Service is proposing harvesting and ecological restoration treatments on approximately 3,700 acres within the Beasley Pond Analysis Area (Figure 2). The primary purpose of this proposal is to maintain, improve, and restore a healthy forest ecosystem and to continue progress towards restoration of historic wet savannas. These actions are needed to implement the direction set forth in the Land and Resource Management Plan in order to achieve the desired future conditions for Management Areas 3.1, 7.1, and 7.2. Detailed descriptions of the proposed treatments are as follows:

- First or intermediate thinning of approximately 2068 acres of slash and longleaf pine stands. Stands range in age from 25 to 141 years old. Younger slash and longleaf pine plantations have a basal area (BA) ranging from 70 to 173 square-feet per acre. Thinning these stands would reduce the BA to an average of 50 square feet per acre thus opening the stands for sunlight penetration needed for continued growth and groundcover establishment.
- Conduct uneven-aged management cuts on 891 acres of mature longleaf pine. In areas of existing longleaf pine regeneration trees would be removed to create openings that would encourage seedling development and growth. Openings will range from ¼ -2 acres (average size of ½ acre) in size. The stand in its entirety will be thinned to 50 square feet per acre of basal area.
- Wet savanna restoration treatments on approximately 811 acres of savanna sites. Girdling will be used in stands that cannot be accessed for traditional logging operations (stands 19 and 41 in compartment 26 and stand 37 in compartment 27). All of these sites have either been planted over with slash pine or have been encroached upon by woody brush species and hardwood tree species. To restore these wet savanna sites a variable residual BA strategy will be implemented with groundcover condition serving as the trigger point for thinning intensity. In portions of the stand where herbaceous groundcover is deemed sufficient the Forest Service proposes to thin to a residual BA of 10-40 square feet per acre of standing live timber. Sufficient groundcover is needed when thinning to a lower BA in order to continue the use prescribed fire as a means of maintaining the open park-like structure associated with wet savannas. When groundcover conditions are deemed less than adequate to carry fire the Forest Service proposes to leave a residual BA of 40 in order to allow needle cast to serve as primary carrier of fire across the stand.
- Foliar application of the herbicide triclopyr (as needed) on 811 acres of wet savanna restoration sites for woody species control. Treatment would consist of using backpack sprayers only where there is a presence of woody vegetation that threatens the re-

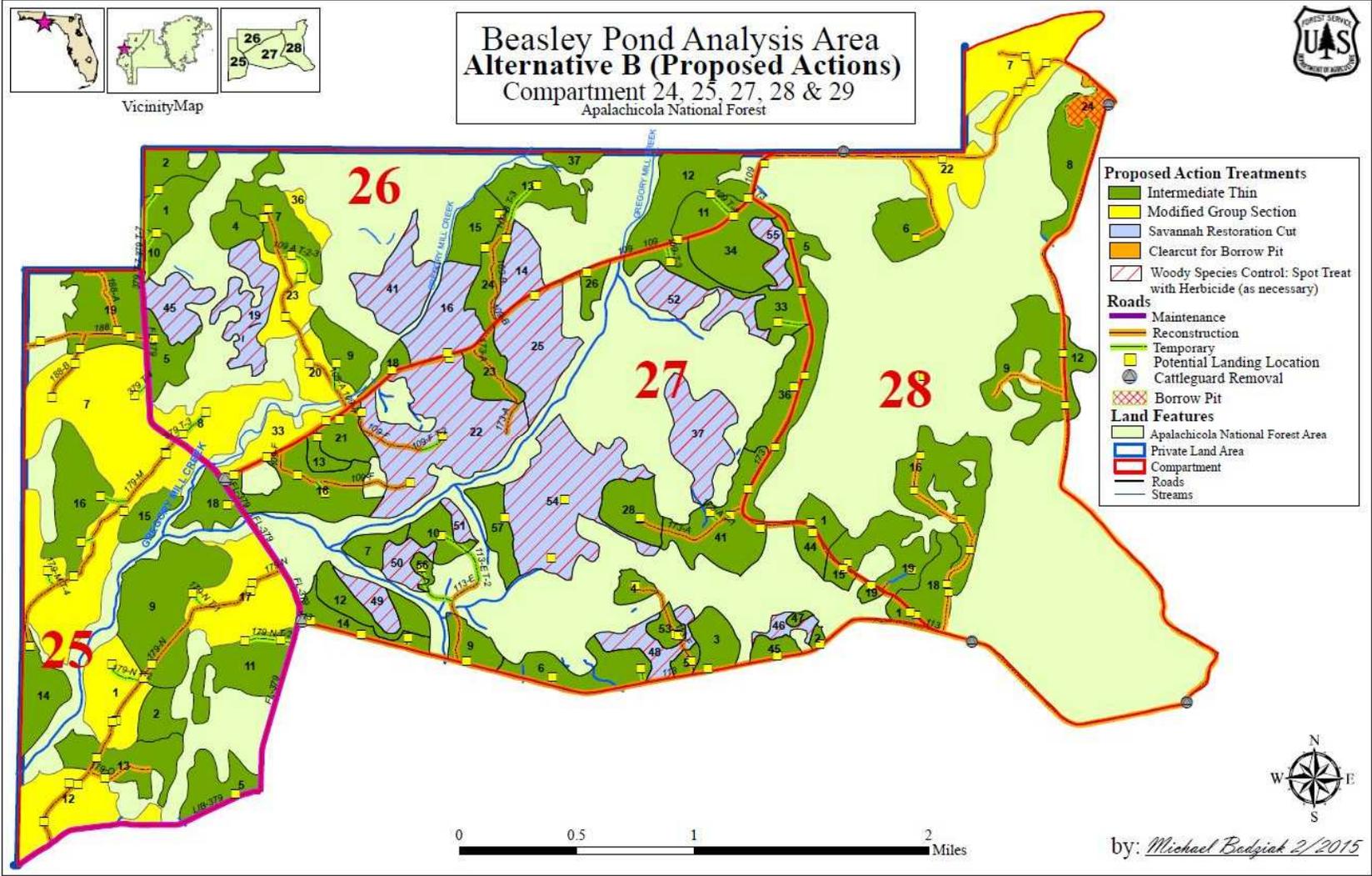
establishment of wet savanna plant species. If the savanna restoration areas do not show evidence of woody re-sprouting after harvest it will not receive chemical treatment.

- Clearcut 16 acres of slash pine plantation for borrow pit excavation to provide surface material for future road work.
- Remove six cattle guards from a closed cattle allotment (two on highway 379, two on FSR 113, and one on FSRs 174 and 109).

Connected actions necessary to facilitate the proposed action include maintenance of 7.5 miles of landlines, reconstruction of approximately 12.83 miles of system roads, temporary improvement and use of approximately 4 miles of non-system which provide access to pine plantations, and the maintenance of approximately 14.73 miles of system roads used to haul timber products from the analysis area.

If the proposed actions are approved, implementation would follow the standards below developed to comply with the National Forests in Florida Land and Resource Management Plan.

Figure 2. Map of proposed activities in the project area.



Coordination Measures

- If modifications are made to the proposed action, or if additional information regarding the effects of the project on listed species becomes available, the U.S. Fish and Wildlife Service (USFWS) would be notified and consultation would be reinitiated.
- There are isolated wetlands in the project area. Due to the poor condition of the harvest area, harvest would be allowed up to the ponds. Harvest will be restricted to these areas only when it is dry enough to allow for minimal soil disturbance.
- There will be no timber harvest within 1500 feet of known breeding ponds during flatwoods salamander breeding season (October 1st to May 1st) unless an exception is given by the USFS District Biologist. Exceptions that allow timber harvest and associated hauling may be granted by the District Biologist in coordination with the USFWS depending on weather. For example, logging could continue on into October-November if dry conditions persist and there have been no rain events that would trigger movement to the breeding ponds. Also, logging may be able to resume in the spring if the ponds have dried.
- If it becomes necessary to utilize FR173 as a haul route during flatwoods salamander breeding season, the USFS agrees to install culverts and silt fence or other appropriate measures to allow passage of flatwoods salamanders across the road.
- Maintenance and hauling on FR173-A and the non-system road in Compartment 28 Stand 6 will be done outside of flatwoods salamander breeding season. These roads will be brought up to grade but will not be ditched.
- The non-system road in Compartment 28 Stand 6 will be obliterated and closed to public access following the timber harvest.
- Contracts would contain penalty clauses to protect white-banded RCW trees.
- Log decks should be located no closer than 200 ft. from RCW cavity trees. *This cannot be avoided in all clusters in the project area due to hydric soil conditions. Exemptions needed are identified in the foraging analysis located in Appendix B. Six clusters are needing exemptions for this activity.*
- Timber and road contracts will prohibit harvest, hauling, and/or roadwork within active RCW clusters during the nesting season, April 1 through July 31. Exceptions will be made for hauling and/or roadwork on major numbered roads and highways (FS Level 5, 4, 3 Roads). Exceptions will also be made during nesting season if a biologist determines through direct observation that the cluster is no longer active, there is not a pair, or the young have fledged before July 31. *This cannot be avoided in all clusters in the project area due to hydric soil conditions. Exemptions needed are identified in the foraging analysis located in the Appendix B. Twelve clusters are needing exemptions for this activity.*

- Purchasers and contractors will be educated in gopher tortoise burrow identification. In potential gopher tortoise habitat, prohibit locating log landings, designated skid trails, and parking equipment within 25 feet of known gopher tortoise burrows. Heavy equipment operators will be instructed to maintain a 25 foot distance during operations when previously unknown burrows are encountered (USDA 2009).
- Purchasers and contractors will be advised of the possible presence of threatened, endangered, and sensitive species and will be instructed to avoid harming any wildlife they encounter, including snakes.
- Equipment cleaning measures would be required by contracts to prevent the introduction of non-native invasive plants.
- To protect aquatic species; pesticide application, timber harvesting activities, and road maintenance will adhere to the standards of Florida's Silvicultural Best Management Practices (BMPs). For a detailed discussion of these practices, see the Silviculture BMP Manual: http://freshfromflorida.s3.amazonaws.com/silvicultural_bmp_manual.pdf

Consultation History

On December 16, 2013 the Forest Service invited USFWS staff out to the project area to introduce the project and discuss potential issues related to threatened and endangered species. After this a draft BA was sent to USFWS for an informal review of foraging analysis. Based on those conversations and preliminary analysis, it was determined by Forest Service staff that formal consultation would be necessary. On December 19, 2014 Forest Service staff again met with USFWS to discuss the coordination measures for flatwoods salamanders that would be needed for this project. The flatwoods salamander coordination measures agreed upon by the group are located in the coordination measures section of the introduction.

2. Species considered

Analysis of the proposed action was conducted using the best available science, including references from science-based websites, books, papers, reports, state and federal databases, field surveys, and professional opinions. Information from field visits, plant surveys (conducted by the Florida Natural Areas Inventory in 2012 and 2013), project area habitat conditions, species habitat requirements, and species distributions were used to determine what species were likely to occur in the project area. The forest's GIS database was also examined to locate any records of threatened or endangered species in the project area or vicinity.

Currently there are 4 threatened and 7 endangered animals and 3 threatened and 1 endangered plant species known or expected to occur on the ANF. See Table 2 for species considered and included/excluded from analysis for this project. For species excluded from further analysis, it was determined that the proposed project would have **no effect** on them because they either are unlikely to occur within the project area based on surveys with negative results in potential habitat or suitable habitat is not present.

Table 1. Threatened and endangered species that are known to occur or potentially occur on the Apalachicola National Forest, and rationale for consideration in this analysis.

USFWS Endangered Species	Habitat	Occurrence within the Apalachicola National Forest	Considered but Excluded from Analysis	Considered in BA
Fat Three-Ridge mussel (<i>Amblema neislerii</i>)	Main channels of large to small rivers, not their tributaries	Apalachicola District	✓ ²	
Gray bat (<i>Myotis grisescens</i>)	Roost in dry caves	Wakulla District	✓ ²	
Harper's Beauty (<i>Harperocallis flava</i>)	Acidic boggy areas and seepage slopes in full sun on soils high in sand and peat	Apalachicola District	✓ ³	
Ochlockonee Moccasinshell (<i>Medionidus simpsonianus</i>)	Muddy sand and sandy substrate in moderate current	Thought to be extirpated in Leon and Wakulla County, Wakulla District	✓ ²	
Oval pigtoe (<i>Pleurobema pyriforme</i>)	Medium-sized creeks to small rivers with silty sand substrates	No known occurrences, but historically known within Leon, Columbia, and Baker County, Both Districts	✓ ²	
Red-cockaded woodpecker (<i>Picoides borealis</i>)	Open pine forests with large, old trees	Many active cluster sites, Both Districts		✓
Shinyrayed pocketbook (<i>Hamiota subangulata</i>)	Muddy sand and sand in slight to moderate current	Apalachicola and Wakulla Districts	✓ ²	
Wood stork (<i>Mycteria Americana</i>)	Shallow freshwater and estuarine wetlands	Apalachicola and Wakulla Districts	✓ ²	
USFWS Threatened Species	Habitat	Occurrence within the Apalachicola National Forest	Considered but Excluded from Analysis	Considered in BA
Eastern Indigo snake (<i>Drymarchon corais couperi</i>)	Sandhills with mature longleaf pine, turkey oaks and wiregrass	Both Districts		✓
Flatwoods Salamander (<i>Ambystoma cingulatum</i>)	Mesic longleaf pine-wiregrass flatwoods	Apalachicola District		✓
Florida Skullcap (<i>Scutellaria floridana</i>)	Dark, humus rich sands of pine-palmetto flatwoods, wet prairies, and savannas	Apalachicola District		✓
Godfrey's Butterwort (<i>Pinguicula ionantha</i>)	Seepage bogs, ditches, wet grassy pine flatwoods	Apalachicola District		✓
Gulf Sturgeon (<i>Acipenser oxyrinchus desotoi</i>)	Riverine habitats with hard clay, rubble and gravel bottom	No known occurrences	✓ ²	
Purple Bankclimber mussel (<i>Elliptioideus sloatianus</i>)	Sandy, fine gravel or muddy substrates in moderate current in rivers and streams	No known occurrences	✓ ²	
White Birds-in-a-Nest (<i>Macbridea alba</i>)	Seepage bogs, and savannas	Infrequent sightings		✓ ^{3*}

¹ Project areas are not within the species' range on the Apalachicola National Forest.

² Project areas are not currently appropriate or potentially appropriate habitat for the species.

³ Project areas surveyed and species not found.

^{3*} This species was surveyed for and not found. However, historical records indicate that it was once presence in the project area.

3. Effects of the proposed action on threatened and endangered species

Red-cockaded woodpecker

This species' historical range includes the southeastern Piedmont and Coastal Plain from New Jersey to Texas, and inland to Kentucky, Tennessee, Missouri, and Oklahoma. It is now virtually extirpated north of North Carolina and in all interior states except Arkansas. Populations are fragmented and most are small. Habitat mainly consists of open, mature pine woodlands, but this species can sometimes be found in deciduous or mixed pine-hardwoods located near pine woodlands. Optimal habitat is characterized as a broad savanna with a scattered over-story of large pines and a dense groundcover containing a diversity of grass, forb, and shrub species. Mid-story vegetation is usually sparse or absent. (NatureServe2013).

The Apalachicola National Forest contains the largest extant population of RCW and has continued to grow despite regular removal of fledglings for the species' translocation program. In 2003, when the revised RCW Recovery Plan (USFWS 2003) was finalized, the Apalachicola District was estimated to contain 486 active clusters. The current population estimate of 562 active clusters exceeds the contribution of 500 active clusters from the Apalachicola District to the Central Florida Panhandle Primary Population as stated in the Recovery Plan. The Beasley project area contains 35 active clusters as of 2014. The project area also contains four inactive clusters that are not being managed as recruitment clusters. These four clusters have been inactive for 10+ years. To evaluate the potential effects of the proposed activities on RCW habitat, we conducted a foraging habitat analysis following guidance in the RCW Recovery Plan and a 2005 USFWS memo clarifying the analysis process and its interpretation.

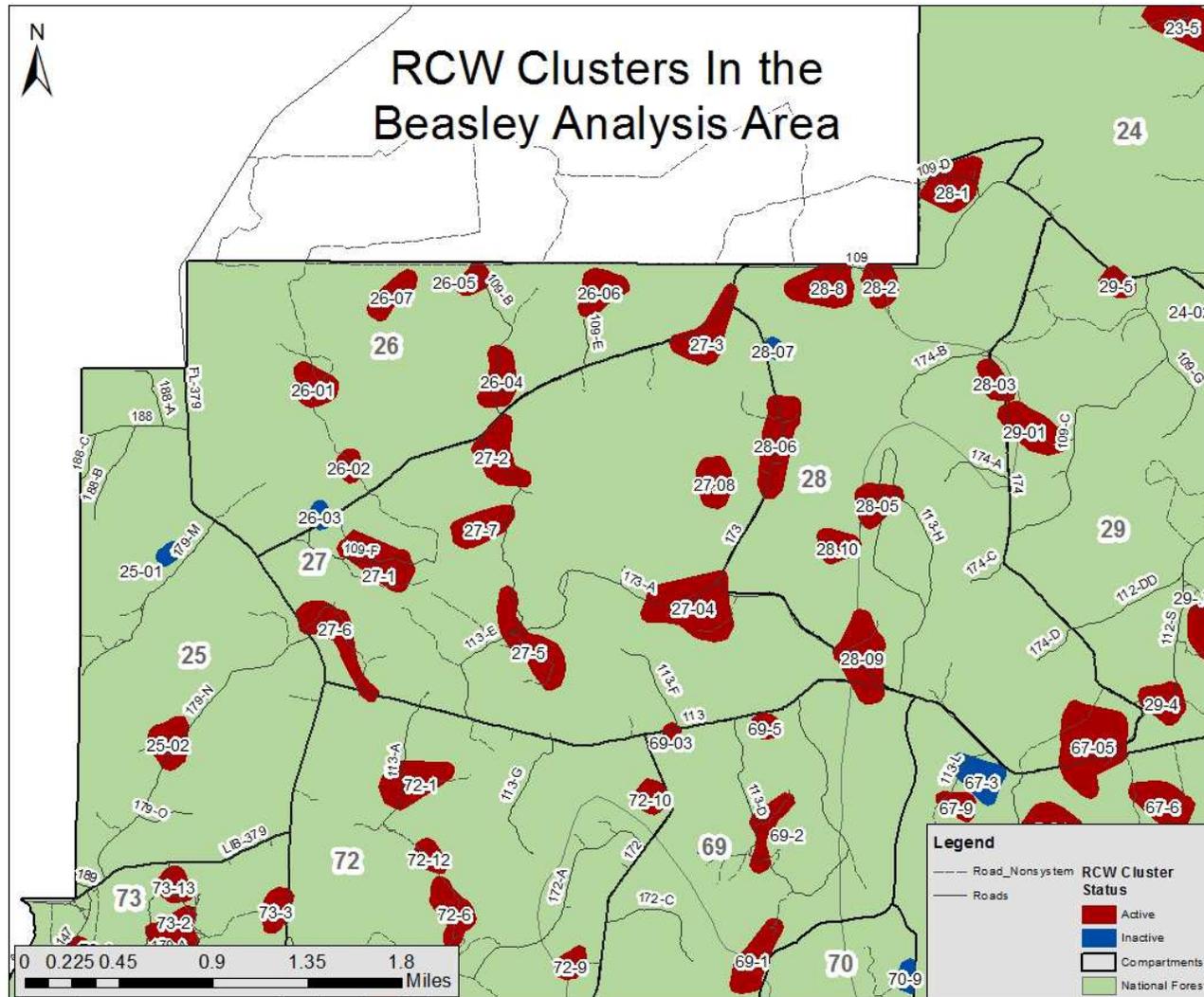


Figure 3. RCW clusters in the project area.

Effects of the proposed activities

The proposed action includes timber harvest activities that are commonly used in RCW habitat on the Apalachicola National Forest (thinning flatwood stands to a residual basal area of 50 ft²/acre) as well as savanna restoration harvests that have not been commonly used elsewhere on the forest. Potential effects of the activities proposed in the Beasley project include disturbance of RCW from timber harvest operations and alteration of foraging habitat.

Due to the wet soil conditions throughout much of the Beasley Pond project area, the timing of timber harvest may coincide with RCW breeding. Once the timber in a given burn unit has been marked with paint for harvest, the unit is not burned until the harvest is completed. Being able to quickly harvest an entire unit and get fire back on the landscape is an important part of the proposed savanna restoration, as well as overall forest management. Because many of the stands proposed for treatment are located in wet soils, timber harvest, hauling, and road construction operations would be limited to the driest times of the year. Although these opportunities may come in non-breeding season, for this project the Forest Service is proposing to also lift restrictions on timber harvest activities during the RCW breeding season (April 1 through July 31) so that work can be completed whenever soil conditions are appropriate. If these conditions occur during RCW breeding season, it may be necessary to conduct timber harvest and road construction operations near RCW clusters. Usually this disturbance would be avoided, but the importance of getting fire back into these areas combined with the extreme dryness needed for harvest make it necessary to take advantage of dry soil conditions whenever they occur, even during RCW breeding season.

Not all clusters would need restrictions waived. The 12 clusters needing operation restrictions waived are identified in Appendix B. Waiving these restrictions and proceeding with timber harvest, hauling, and road construction operations could disrupt breeding and chick rearing activities which could result in failed nesting attempts.

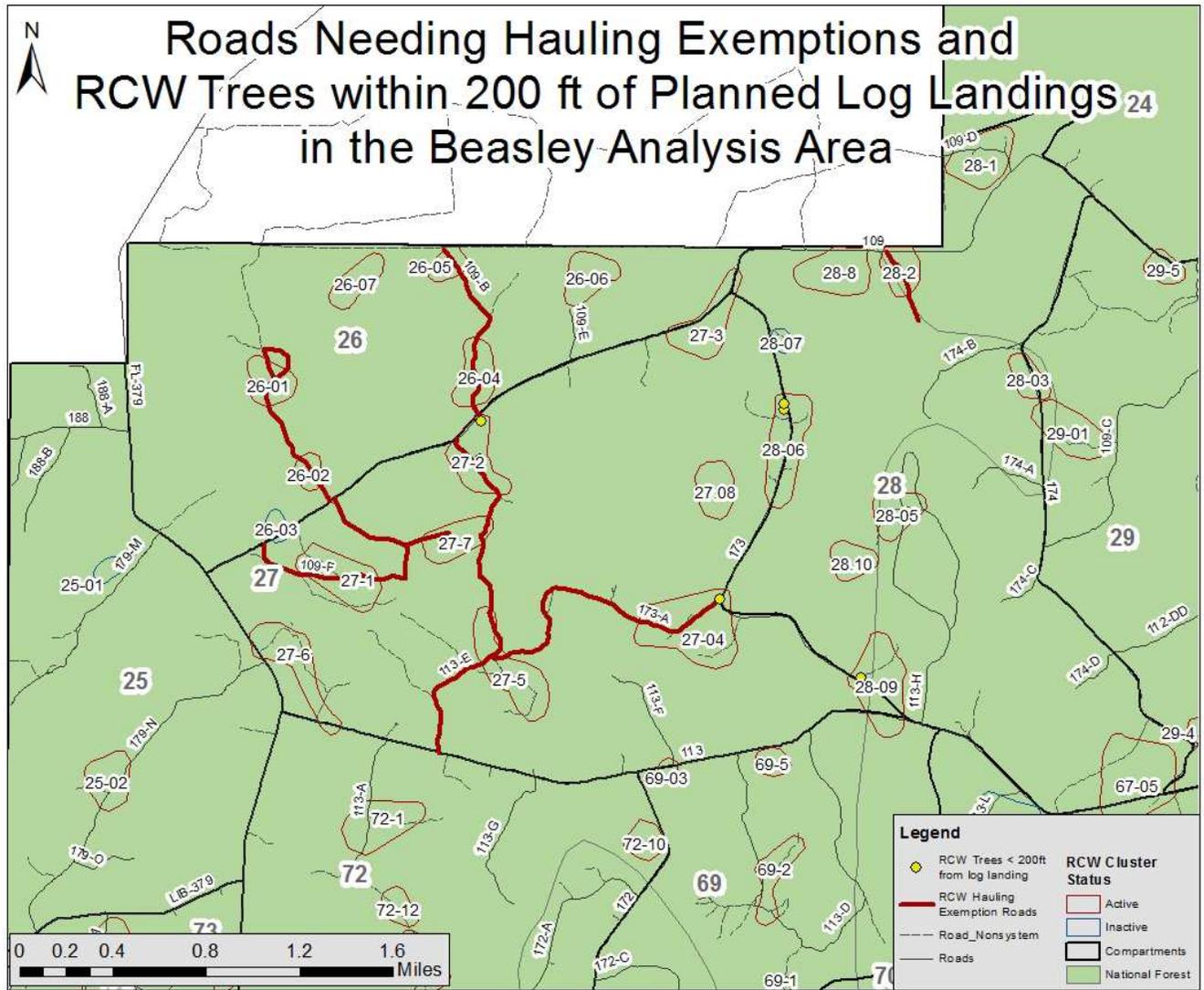


Figure 4. Roads and proposed log landings within 200ft of active trees for which seasonal restrictions would be waived.

Effects from herbicide are expected to be negligible. This species forages on the bark of pine trees which would not be sprayed with herbicide so it is unlikely that individual birds would ingest enough contaminated insects to be affected.

Improving stand structure and reducing tree density by thinning would release herbaceous groundcover which is inversely related to basal area of canopy trees. Condition of the ground cover is an important factor influencing abundance of prey for RCWs. Group size and/or reproduction is negatively affected by dense stands of pines and positively correlated to percentage of herbaceous groundcover (James et al. 1997, 2001).

Savanna treatments (treatments planned for a residual BA ranging from 10-40) would lower the total BA of 8 stands (295 acres total) below the RCW managed stability standard (MSS). Currently none of these stands meet the Managed Stability Standard for foraging habitat, and all clusters containing these stands within their foraging partitions would have an increase in acres meeting MSS as a result of thinning treatments. Savanna treatments lowering the BA below 40 would cause a reduction in foraging habitat meeting the MSS one cluster in the analysis area, cluster 28.06. Cluster 28.06 actually has a net gain in acres meeting MSS due to proposed thinning treatments. However, this partition does not reach the minimum 3000 ft² needed to meet the MSS. Two savanna treatments (compartment 27 stands 52 and 55) reduce potential foraging habitat from above the MSS BA threshold of 80 to below MSS BA threshold of 40. Because the opportunity to provide the minimum 3000 ft² would be missed, indirect effects for this cluster would be negative. More information on each cluster can be found in Appendix B.

To evaluate the potential effects of the proposed activities on RCW habitat, we conducted a foraging habitat analysis following guidance in the RCW Recovery Plan and a 2005 USFWS memo clarifying the analysis process and its interpretation. In summary, implementation of the proposed timber harvest activities would not reduce foraging habitat below the MSS for any clusters or further reduce habitat for clusters already below the standard. The table below summarizes the effects of the project activities on RCW foraging habitat; Appendix B contains supporting description of the process, maps, stand data, and narrative analysis.

Table 2. Quarter mile partition foraging habitat (MSS and recovery standard)

Cluster	Acres in Partition	Current Condition			Future Condition		
		Acres Meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard	Acres meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard
25.02	125.7	0	0	0	107.4	5338.9	0
26.01	120	0	0	34.7	77.3	3514	34.7
26.02	116.1	4.7	312.1	4.7	80	3965	10.8
26.04	117.8	26.5	1764.2	26.3	84.6	3763.5	73.9
26.05	75.2	0	0	0	21.3	1064.9	0
26.06	87.7	20.6	1373.4	0	46.2	2574.1	0
26.07	123	0	0	7.2	9.1	435.6	9.1
27.01	112	28.5	1866.9	28.5	55.5	2735	53.2
27.02	99.9	0	0	32.3	96.7	4147.9	96.7
27.03	125.7	0	0	0	109.5	5474.5	79.7
27.04	123.2	5.2	343.2	5.2	79.8	3926.0	79.8
27.05	125.7	48.8	2828.9	2.3	53.5	3164.2	2.3
27.06	116.1	33.5	2098.4	64.4	73.1	3654.6	65.2
27.07	107.8	0	0	0	66.8	2670.3	66.8
27.08	125.3	0	0	0	36.1	1449.2	36.1
28.01	102	66.6	4362.8	66.6	66.6	3330.4	66.6
28.02	62	34.1	1860.8	0	43.9	2197.4	0
28.03	105.5	58.5	3236.0	10.5	63.2	3471.0	10.5
28.05	107.6	52.7	2744.4	0	52.7	2744.4	0
28.06	125.4	19.4	1280.4	19.4	45.7	2285.0	19.7
28.08	81.3	0.9	39.4	0	5.3	258	0
28.09	125.3	19.8	1131.5	0	45.8	2431.5	0

Cluster	Acres in Partition	Current Condition			Future Condition		
		Acres Meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard	Acres meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard
28.10	107.5	31.5	1946.0	0.0	34.3	2084.6	1.6
29.01	105.5	57.9	2661.8	21.7	57.9	2661.8	21.7
29.05	125.7	33.1	2021.1	33.1	33.1	2021.1	33.1
69.03	107.7	31.1	1863.5	33	73.8	4001	46.6
69.05	115	47.8	2400.5	14.2	61.8	3100.2	16.4
72.01	125.7	71.6	4549.5	71.6	71.6	4549.5	71.6
72.1	111.4	11.3	678.4	11.3	11.3	678.4	11.3
73.01	117.2	19.2	864.1	0.1	19.2	864.1	0.1
73.03	125.6	0	0	0	0	0	0
73.13	100.8	36.4	2181.8	53.2	55.3	3125.5	53.2

Table 3. Half mile partition foraging habitat (MSS and recovery standard, inclusive of area within 1/4mi partition)

Cluster	Acres in Partition	Current Condition			Future Condition		
		Acres Meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard	Acres meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard
25.02	415	0	0	13.7	230.7	111444	33.7
26.01	282.9	0	0	46.4	136.7	5945.2	75.1
26.02	219.8	4.7	311.3	6.9	123.6	6081.3	24.8
26.04	227.2	28.2	1879.4	37.7	119.8	5340.4	103.7

Cluster	Acres in Partition	Current Condition			Future Condition		
		Acres Meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard	Acres meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard
26.05	99.5	0.5	34.6	0	33.3	1665.6	0.5
26.06	150.9	24.1	1608	0	58.1	3228.4	2.1
26.07	200.1	0	0	11	34.3	1482.8	34.3
27.01	187.4	28.5	1867.7	28.5	89.5	4244.4	72.3
27.02	201.5	0	0	43.1	128.5	5418	128.5
27.03	247.8	3.7	244.8	3.7	156	7800.7	84.8
27.04	273.4	7.7	508.2	7.7	125.9	5829.3	118.8
27.05	369.7	51.2	3072.3	34.2	69.5	3987.3	39.6
27.06	352.1	46.2	2896.5	131.5	240	12000.5	191.1
27.07	223.4	0	0	0	85.5	3418.7	85.5
27.08	283.4	10.0	660.0	10.0	69.2	2922.4	69.2
28.01	303.2	91.2	5974.6	91.2	91.2	4560.7	91.2
28.02	140.8	45.6	2494.9	0.1	71	3549.5	0.1
28.03	275.9	106.2	6010.7	25.1	124.7	6935.6	25.1
28.05	248.7	57.2	2974.4	0	57.2	2974.4	0
28.06	207.8	27.0	1782.0	27.0	57.3	2865.0	27.8
28.08	126.9	4.5	247.2	2.4	17.3	848.5	2.4
28.09	317.1	29.2	1668.3	0	85.4	4478.3	0
28.10	216.0	31.7	1958.4	0	65.9	3667.0	1.9
29.01	350.7	92.0	4427.8	35.3	92.0	4427.8	35.3
29.05	429.9	61.3	3663.4	60.4	74	4299.8	60.4
69.03	158.7	31.1	1863.4	33	95.6	5088.7	59.4

Cluster	Acres in Partition	Current Condition			Future Condition		
		Acres Meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard	Acres meeting MSS	Total BA of 10+in trees in stands meeting MSS	Acres meeting recovery standard
69.05	166.7	53.2	2705.2	15.4	67.8	3436.0	18.2
72.01	392.9	103.2	6475.7	103.2	111.7	6758.9	105.8
72.1	287.1	11.3	678.4	11.3	12.6	742.5	12.6
73.01	168.9	25.4	1224.3	15.1	35.2	1712.9	15.1
73.03	179.6	0	0	0	15.3	765	0
73.13	182.8	42.4	1867.7	99.1	120.7	6440.5	99.1

The forest management activities proposed in the Beasley Pond project, when combined with past, present, and future management activities, are expected to be beneficial for RCWs. The proposed thinning treatments and woody vegetation control would open up the canopy stimulating groundcover. Trees in the thinned stands would continue to grow and stand structure would move toward the criteria for good quality foraging habitat described in the RCW Recovery Plan (USFWS 2003, p. 188-189). Previously approved and ongoing prescribed burning would improve and maintain these more open conditions favored by the RCW.

Determination of effect

Despite extensive habitat improvement resulting from the proposed timber thinning, implementation of the Beasley project activities is **likely to adversely affect** RCWs because nesting activities may be disrupted by timber harvest during the breeding season. Clusters that may be affected are identified in Appendix B.

Eastern indigo snake

The historical range of this species extended throughout the lower Coastal Plain of the southeastern United States, from southern South Carolina through Georgia to the Florida Keys, and west to southern Alabama and perhaps southeastern Mississippi. Current range includes southern Georgia and Florida (widely distributed throughout the state, south to the Keys, though perhaps very localized in the panhandle). The species is apparently very rare or extirpated in Alabama, Mississippi, and South Carolina, but recent reintroductions have been made in Florida, Alabama, Georgia, South Carolina, and Mississippi. Habitat includes sandhill regions dominated by mature longleaf pines, turkey oaks, and wiregrass; flatwoods; most types of hammocks; coastal scrub; dry glades; palmetto flats; prairie; brushy riparian and canal corridors; and wet fields. Occupied sites are often near wetlands and frequently are in association with gopher tortoise burrows (NatureServe 2013). The dependence on gopher tortoise burrows for refugia is a limiting factor for the eastern indigo snake in sandhill habitats (Moler 1992).

The eastern indigo snake is rare or absent on the ANF with the last confirmed sighting in the sandhill areas southwest of Tallahassee, FL in 1996 (Enge et al. 2013).

Effects of the proposed activities

Although suitable indigo snake habitat is present in the Beasley project area, occurrence of this species is unlikely given the lack of sightings throughout the forest or in the project area. The analysis below discloses potential effects of project activities if indigo snakes are present while also considering the low probability that this species currently occurs in the Beasley Pond Analysis Area. Heavy equipment used for timber harvest and other mechanical vegetation treatments have the potential to directly affect this species. It is unlikely that these snakes would be exposed to herbicide use and if they were present the likelihood of harm is not likely. Indirect effects are expected to be beneficial. Timber thinning and herbicide treatment would create an open midstory stimulating herbaceous groundcover preferred by this species.

In the panhandle of Florida, the eastern indigo snake is closely associated with gopher tortoises. Potential sandhill habitat in the proposed project area and adjacent to the proposed project area can be seen in the FNAI historic natural communities map (Figure 1). Project implementation would follow Forest Plan standards for gopher tortoise burrow protection, which would also

protect any snakes or other commensal species residing in the burrows. Indigo snake protective measures developed as part of the design criteria for the proposed project would further reduce the potential for negative effects to this species.

Cumulative effects are expected to be beneficial. Implementation of the proposed action when combined with previously approved prescribed burning is likely to improve eastern indigo snake habitat.

Determination of effect

Based on the likely absence of this species from the project area and the protection measures that would be taken if an indigo snake is encountered, the proposed action may affect, but is **not likely to adversely affect** the eastern indigo snake.

Frosted flatwoods salamander

This species' range includes the lower southeastern Coastal Plain of the United States from southern South Carolina southward to Marion County (north-central Florida) and disjunct sites westward through southern Georgia and northern Florida to the Apalachicola and Flint rivers (mid-Panhandle of Florida and northward) (NatureServe 2013). Habitat consists of pine flatwoods communities with wiregrass groundcover and scattered wetlands often dominated by cypress and gum. Frosted flatwoods salamanders usually breed in ponds that lack predatory fish and have emergent vegetation (Hipes et al 2001). Potential threats include conversion of pine flatwoods habitat for agriculture, silviculture, or commercial/residential development; drainage or enlargement (with subsequent introduction of predatory fishes) of breeding ponds; habitat alteration resulting from suppression of fire; mortality and collecting losses associated with crayfish harvest; and highway mortality during migration (NatureServe 2013).

Adult flatwoods salamanders migrate to breeding sites beginning as early as October, during or following rain events associated with passing fall and winter cold fronts (Palis, 1996; Palis, 1997). They often lay eggs in areas protected by vegetation while the ponds are dry. The eggs begin to develop immediately, but do not hatch until inundated by rising water levels in the pond basin (Bevelhimer et. al., 2008). This suggests that breeding activity and larval occupancy of breeding sites are tied to specific weather patterns in a given year. The majority of salamanders migrate at night (Palis 1997) and there is no evidence suggesting they are active during the day. The peak migration into the ponds occurs during October-December, with adults emigrating in December and January. Metamorphs typically emerge from the pond during the months of March, April, and May (Palis 1996).

Post-larval flatwoods salamanders are fossorial (live underground), and occupy crawfish burrows. (Neill, 1951; Palis 1996). Very little is currently known about adult upland habitat use or the distance away from breeding sites necessary to encompass the majority of a local population. In a literature review, Semlitsch (1998) summarized emigration distances for six species of *Ambystoma* salamanders related to but not including flatwoods salamanders, and concluded that 95% of a typical population lives within 539 ft. of a breeding location. However, it was noted that this distance is likely an underestimate of upland habitat required by flatwoods salamanders. Utilizing anecdotal observations from researchers, best management practices (BMP's) were recommended for flatwoods salamander habitat and suggested identifying a 1500'

buffer zone around breeding sites (USFWS 2005). Subsequently, USFWS (2009) determined 1500' as the appropriate distance necessary to protect breeding populations by designating this buffer zone as a primary constituent element of flatwoods salamander Critical Habitat.

The Apalachicola National Forest has the largest remaining concentration of known frosted flatwoods salamander populations, containing 21 of the 37 known populations whose presence has been verified since 1990. 14,820 acres of Critical Habitat have been designated on the Apalachicola National Forest by US Fish and Wildlife service under the Endangered Species Act. Within those populations, 69 individual sites are known to have been used by breeding flatwoods salamanders. These sites are referred to as "documented" ponds. Additionally, there are hundreds of "undocumented" or "potential" breeding sites that fall within historically appropriate habitat but at which flatwoods salamanders have never been observed. These undocumented ponds range in habitat quality from suitable for flatwoods salamanders to needing extensive restoration and prescribed fire application.

Although the Forest has the most robust habitat remaining for this species, populations on the forest appear to be declining. Out of the 69 known breeding sites, just 45 have seen breeding activity since 2002. Several years of recent drought has most likely resulted in unsuccessful breeding attempts by many individuals in the remaining populations, although accurate population estimates do not exist for this species. Forest Service and other agency biologists are currently working to determine habitat occupancy for flatwoods salamanders on the Forest, in order to more accurately gauge the status of the species.

Habitat degradation is considered a significant factor in the overall decline of flatwoods salamanders across the species range (USFWS 2009). On the Forest, historical conversion of wet longleaf flatwoods and wet savannas to slash pine plantation are believed to be a factor in local species decline. Slash plantations reduce the upland habitat available for use by adult flatwoods salamanders, and indirectly impact breeding pond habitat by contributing to an altered fire regime.

There are four documented ponds within the project area, as well as associated USFWS designated Critical Habitat. Flatwoods salamanders were originally observed at these sites in the mid 1990's. Observed use by flatwoods salamanders has not occurred in compartment 27 since that time, while larval salamanders the compartment 28 ponds have been observed as recently as 2011. There are also 29 undocumented flatwoods salamander breeding ponds, which are assumed to be unused by flatwoods salamanders based on poor habitat conditions and surveys completed by Forest biologists. Locations of the documented ponds and critical habitat can be seen in Figure 5.

Effects of the proposed activities

Since this species is fossorial, no direct impacts to individuals are expected because individuals would be underground when proposed activities are taking place. Timber harvest within 1500 feet of documented flatwoods salamander ponds would only occur outside of breeding season (October 1 to May 1).

Heavy equipment use could cause rutting which could alter the hydrology, negatively impacting the isolated wetlands. Rutting would be mitigated by only allowing heavy equipment to be used

when conditions are dry enough to minimize soil impacts. Log landings and temporary roads would be placed as to avoid hydrologic impacts to these wetlands. No new roads, including temporary roads would be allowed within 1500 feet of active salamander ponds.

Forest road 109 is located inside the 1500 feet buffer of two documented ponds. The land located north of this road is private land and would not provide quality upland habitat for flatwoods salamanders. Because of the poor habitat quality on the north side of the road it is not likely that salamanders would be crossing FR109 to access the breeding ponds.

Forest road 173 is located within 1500 feet of the other two documented salamander ponds and good upland habitat is present on both sides of this road. It is likely that adult flatwoods salamanders would cross this road during breeding season while traveling to or from the ponds. To avoid potential impacts to adults crossing FR 173, the Forest Service will install culverts and drift fences, allowing the animals' safe passage underneath the road. These installations would occur only if the portion of FR173, within the 1500 feet buffer is needed for hauling timber during the breeding season.

An existing, deeply rutted two-trail road in c. 28 stand 6 would be improved for access to timber. Improvements would be made to bring the existing road up to grade using native material, restoring sheet flow across the landscape. Maintenance to this road and forest road 173A would be conducted outside of the breeding season to avoid potential direct impacts to adults. After timber operations are complete, the road in c. 28 stand 6 would be obliterated and closed to public access.

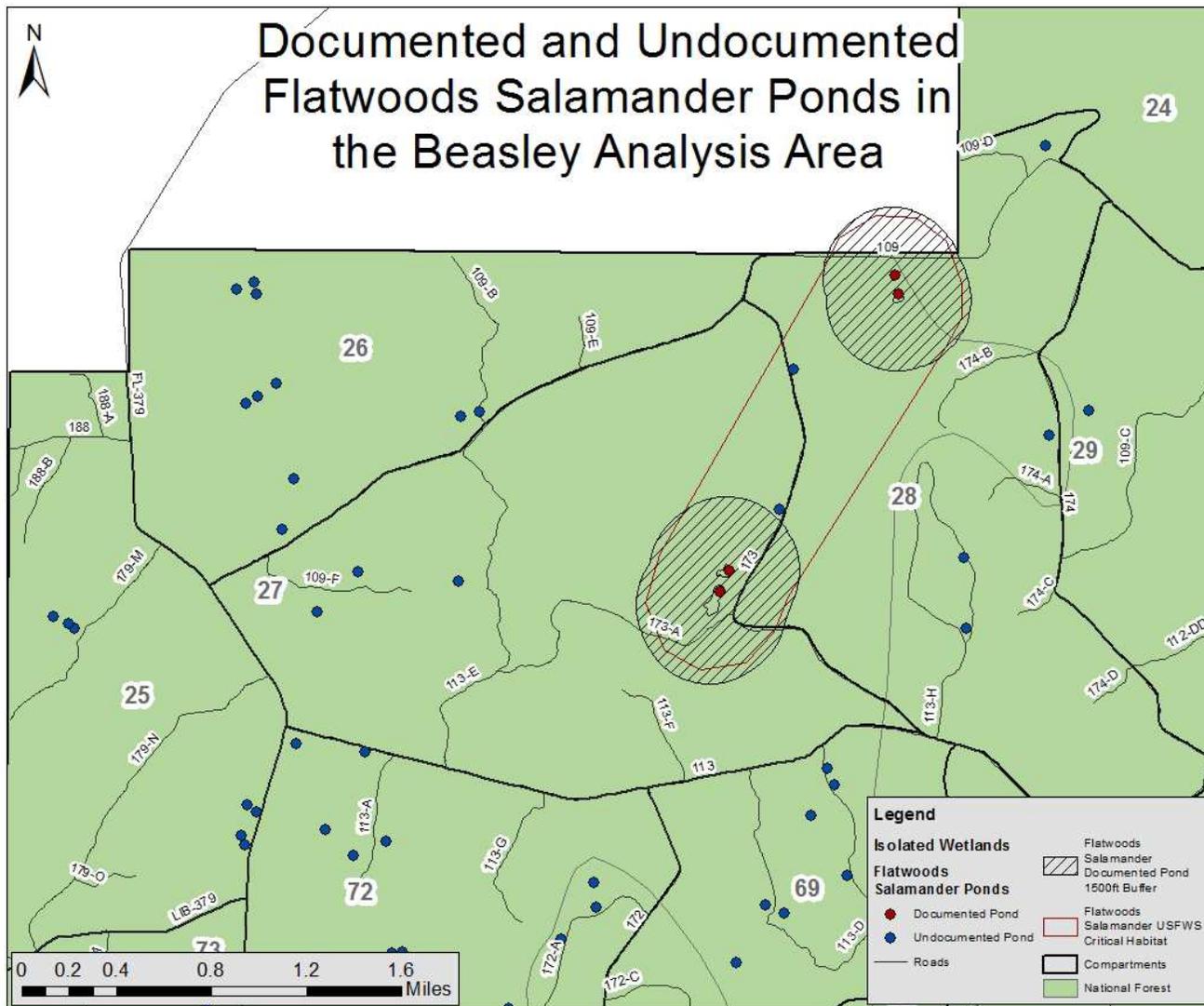


Figure 5. Documented and undocumented flatwoods salamander breeding ponds in the Beasley Analysis Area

Indirect effects from tree removal are expected to be beneficial. Pine thinning was recommended for c. 28 stand 6 and c. 27 stands 37 and 40 in the 2005 Management Plan for Flatwoods Salamander Populations on National Forests in Florida (Ripley and Printiss 2005). Thinning, girdling, and savanna restoration cuts would allow more light to reach forest floor stimulating herbaceous groundcover, a key component in flatwoods salamander habitat. Thinning, girdling, and savanna restorations cuts could also improve breeding habitat for this species. The isolated wetlands used by flatwoods salamanders are seasonal, filling with water in the winter months. Reducing tree density surrounding these wetlands could allow more water to reach the wetlands improving breeding conditions for this species. Improved groundcover would also allow fire to better impact the wetland ecotones, benefitting larval habitat (Ripley and Printiss 2005).

Herbicide is expected to have minimal indirect effects on the frosted flatwoods salamander. Acute toxicity is the adverse effects of pesticides that result either from a single exposure or from multiple exposures in a short period of time. Acute toxicity studies which include amphibians have shown triclopyr to be “practically non-toxic” to aquatic organisms using the EPA’s toxicity categories, with the exception of one formulation which is not labeled for use in the project area (SERA 2003b: SERA 2003; Trumbo and Waligora 2009). Triclopyr also falls below the risk quotient value designated by the EPA for federally listed species (Trumbo and Waligora 2009). Little is known about the long-term effects of herbicide on amphibians and the majority of those studies focus on broadcast agricultural applications, which allow for higher amounts of herbicide, drift, and potential runoff than proposed under the proposed action. All of the methods considered in this action apply herbicide directly to target vegetation reducing the possibility of runoff into water and accidental application to non-target vegetation. All Forest Service and herbicide label requirements would be followed regarding water and wetland use.

This project when combined with past, present, and future projects would be beneficial to flatwoods salamanders. Timber thinning and herbicide treatment when combined with prescribed fire would improve habitat in the project area by opening up the canopy and encouraging herbaceous understory vegetation to emerge. Improved herbaceous vegetation surrounding isolated wetlands would allow more fire to reach the wetlands improving habitat conditions for breeding habitat as well. Overall, the proposed activities in conjunction with previously approved and expected future activities would improve both upland and wetland habitat quality in the analysis area.

Determination of effect

Based on the analysis above, including relevant information from multiple sources, implementation of the proposed activities may affect, but is **not likely to adversely affect** the frosted flatwoods salamander.

Godfrey’s butterwort, Florida skullcap and white birds-in-a-nest

Because these three species occur in similar habitats, respond similarly to disturbances, and share a Recovery Plan (USFWS 1994), the effects of the alternatives will be discussed together.

Godfrey's butterwort occurs in Bay, Calhoun, Franklin, Gulf, and Liberty counties in Northwest Florida (NatureServe 2013). This species is found in seepage slopes, bogs, roadside ditches, depressions, and transition zones between wet pine flatwoods and wet prairies (Chafin et al 2000). Protection and management suggestions include prescribed burning on a two to three year rotation, avoiding herbicides along roadsides, avoiding rutting and compacting wetland soils, and avoiding the placement of firebreaks in wetland ecotones. The analysis area was surveyed in the growing seasons of 2012 and 2013 by Florida Natural Areas Inventory (FNAI) and several previously undocumented occurrences were discovered. Prior to these surveys no Godfrey's butterwort populations were known to exist in the project area. The majority of the populations, found in compartments 26, 27, and 28, are located in the ecotonal habitat between the flatwoods and the wetland edges, outside of the treatment stand boundaries (FNAI, 2013).

Florida skullcap is known from the Apalachicola region of the Florida panhandle from Liberty, Franklin and Gulf counties. It can be found in wet pine flatwoods, grassy margins of cypress stringers, seepage slopes, and transition zones between flatwoods and wetlands (Chapin et al 2000). Of the 31 known range-wide element occurrences (EOs), seven occur on the ANF and of those two are located in the analysis area. The majority of the Florida skullcap habitat surveyed on the forest has been focused around planned project areas. There are other compartments on the ANF that contain similar potential Florida skullcap habitat to those found in the Beasley Pond Analysis Area and likely contain additional Florida skullcap populations. However a forest-wide survey of all potential Florida skullcap habitat has not been conducted.

Compartments known to contain Florida skullcap can be seen in figure 6. The analysis area was surveyed in the growing seasons of 2012 and 2013 by FNAI. Populations were found in compartments 26, 27, and 28. In 2012, two populations were found in compartment 28 after a recent prescribed burn. In Compartment 27, surveys were conducted during this species' flowering period two months after the compartment was burned in February 2013. Almost 2000 flowering individuals were found at 4 locations within an approximately 2 square km area in the center of compartment 27. Plants were found not only in open wet prairie habitat but also in light shade under shrubs and scattered pines near the boundary between flatwoods or plantations and more open habitats (FNAI, 2013).

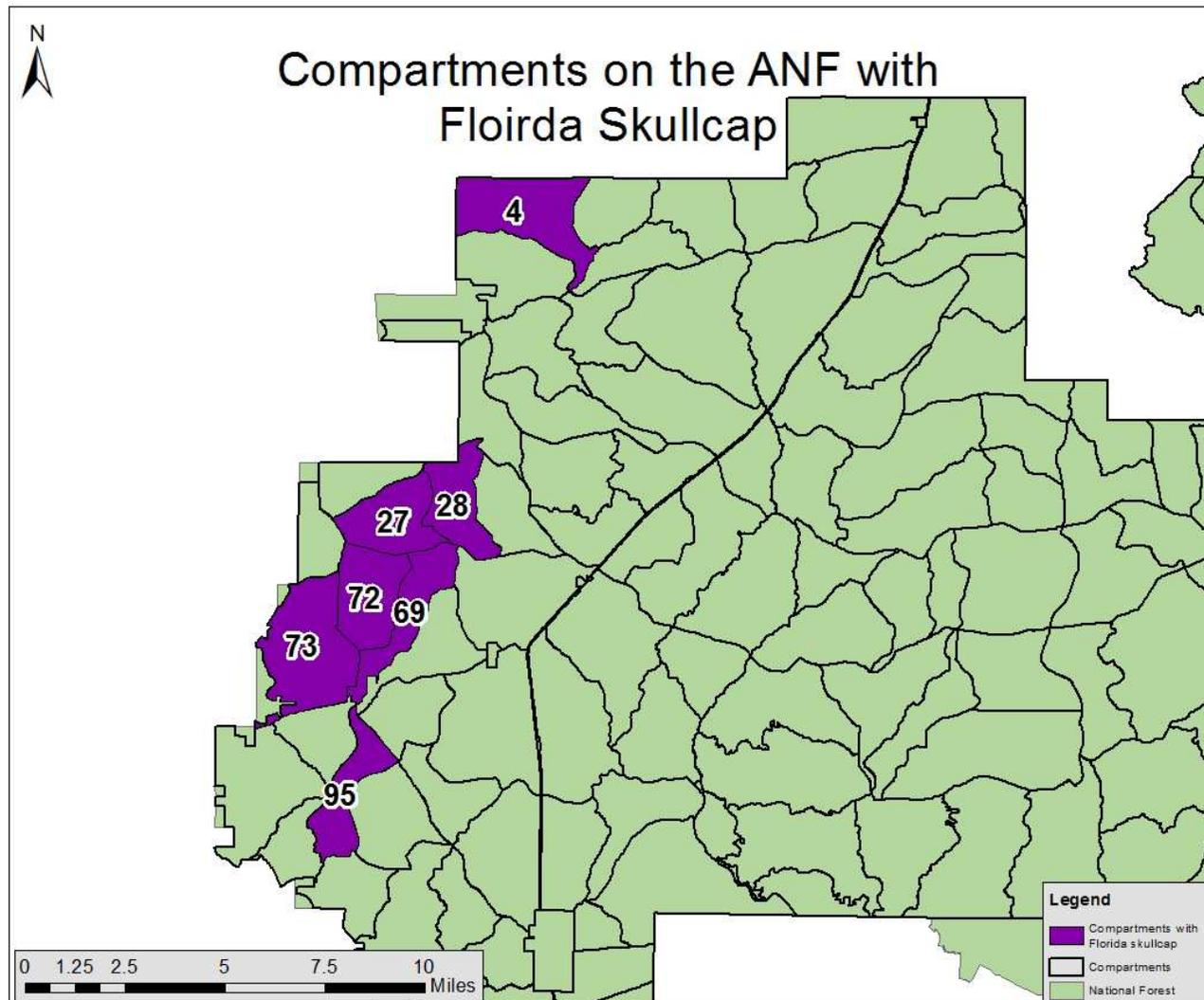


Figure 6. Compartment Locations of Florida Skullcap on the Apalachicola National Forest.

White birds-in-a-nest is endemic to the Florida Panhandle and can be found in wet to mesic flatwoods and associated roadsides or open areas. Protection and management suggestions include prescribed burning every 2 to 3 years, and avoiding conversion of flatwoods to pine plantations because mechanical site preparation and canopy closure kills this species (Chapin et al 2000). Historic records indicated that this species was once present in the analysis area. FNAI conducted surveys in 2012 and 2013 at the historic locations along with the rest of the analysis area and did not encounter any individuals.

Locations of Godfrey's butterwort and Florida skullcap are shown in Figures 7-10.

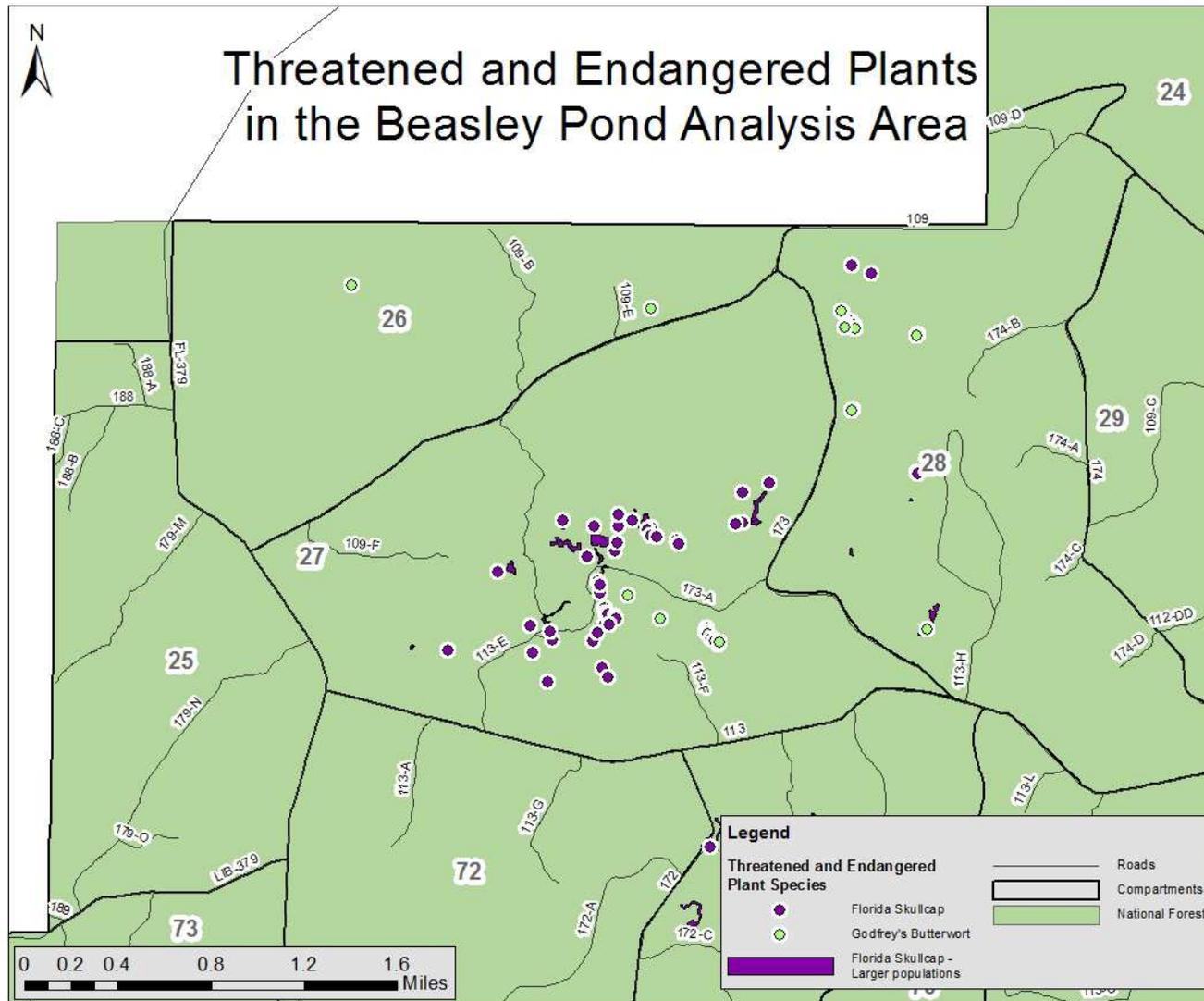


Figure 7. Locations of Godfrey's butterwort and Florida skullcap within the project area.

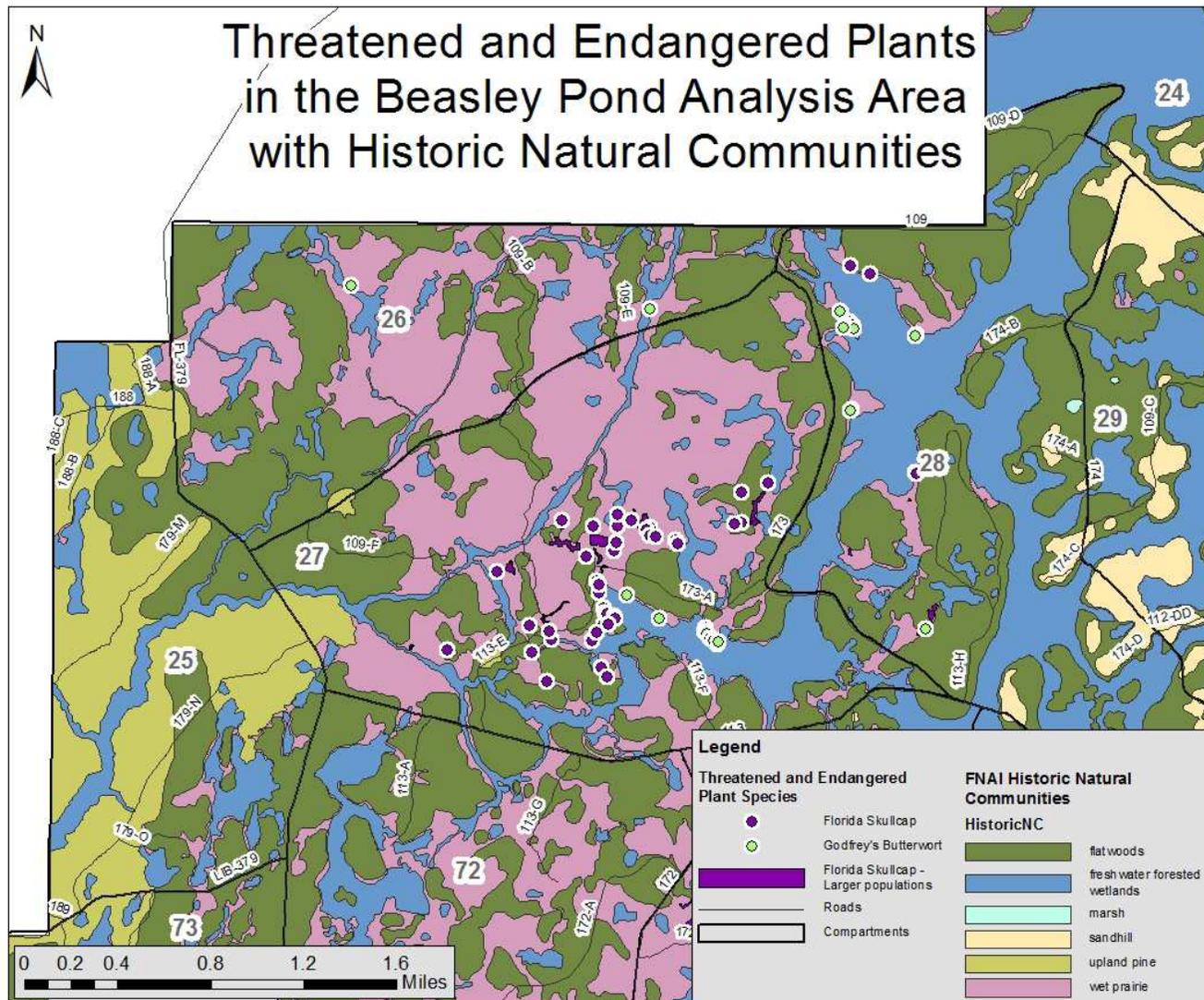


Figure 8. Listed plant locations in the context of historical natural communities.

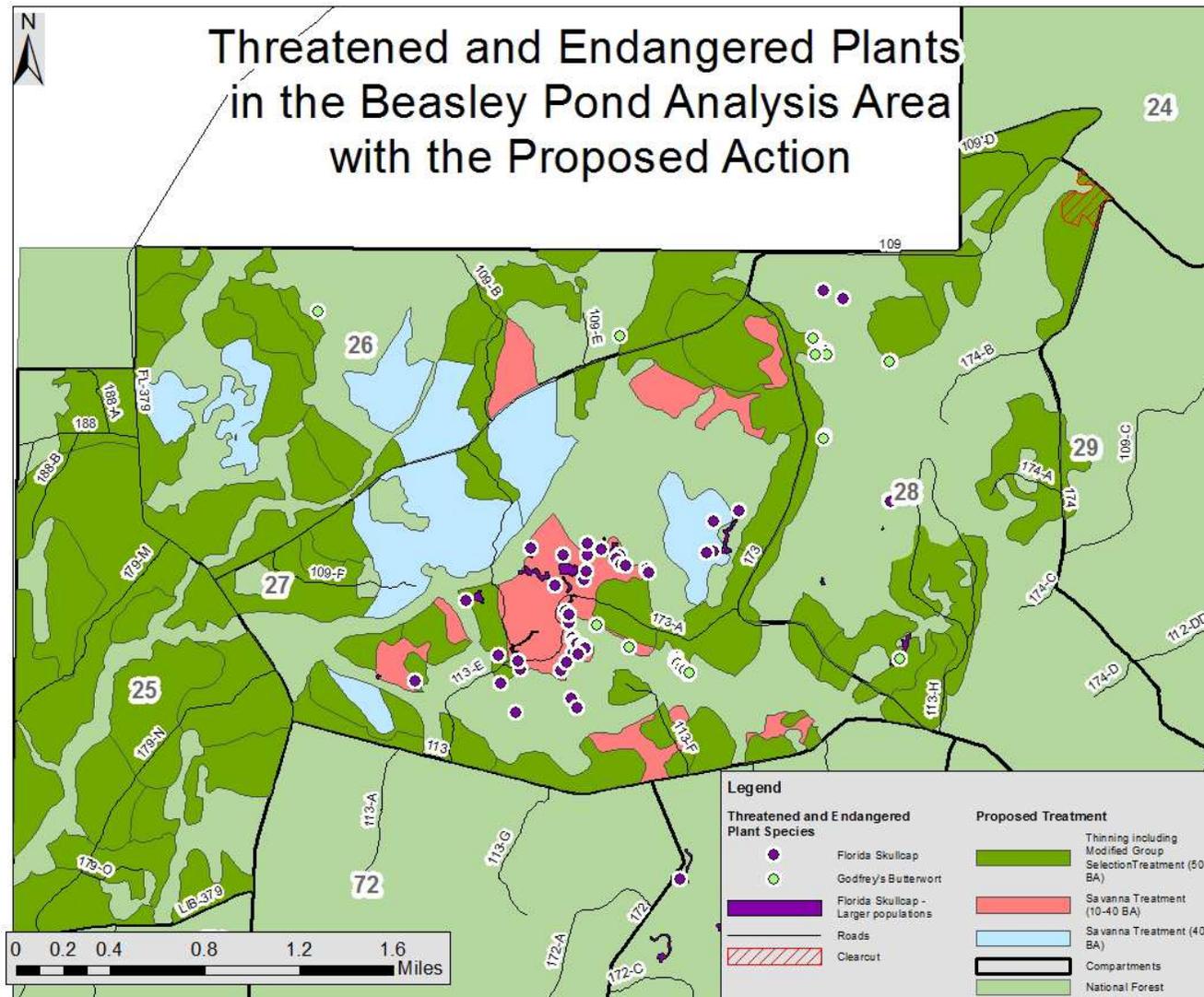


Figure 9. Threatened plant locations in relation to proposed timber harvest.

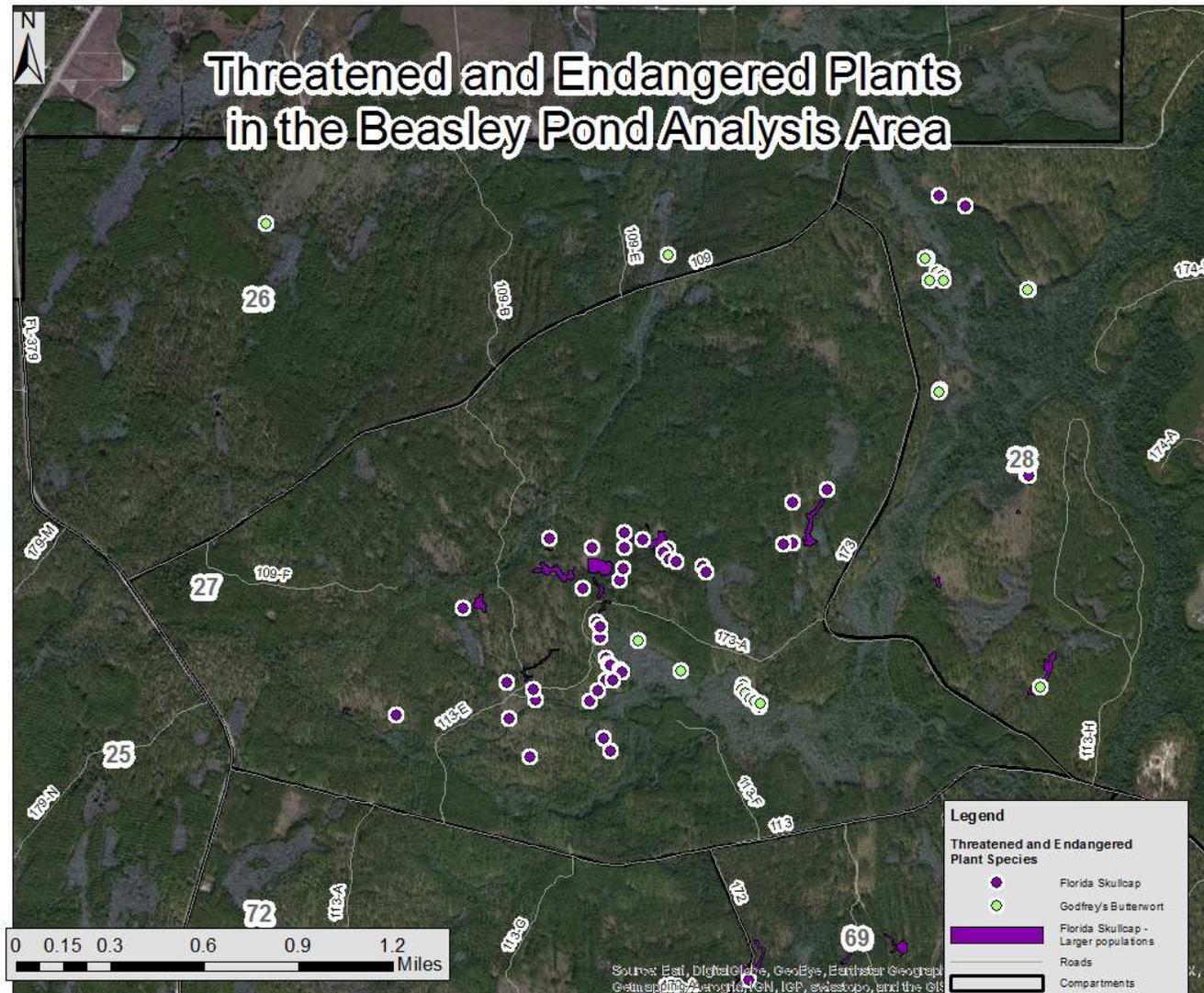


Figure 10. Threatened plant locations and current vegetation.

Effects of the proposed activities

Since Godfrey's butterwort is very sensitive to soil disturbance, populations located within treatment stands would be flagged and equipment would not be allowed within the flagged boundary. The majority of these populations are located outside the treatment stand boundaries in remnant wet savanna and cypress seepage bogs and would not be directly impacted by the proposed action.

There is suitable habitat for white birds-in-a-nest and historical records of this species' presence in the analysis area. However, no individuals have been found in recent survey attempts (FNAI 2012 and 2013). Because no individuals have been found in recent surveys and equipment would only be allowed in potential habitat sites during dry periods to minimize soil disturbance, potential negative direct effects are expected to be minimal for this species.

Florida skullcap was found in some stands and a large population of approximately 2,000 plants was found in compartment 27 (Map 8). During timber harvest, mechanical equipment would only be used during very dry periods to minimize potential negative effects caused by soil rutting and compaction. Even with these precautionary measures it is still possible that some individuals may be damaged or destroyed by heavy equipment. Given the large size of this population and measures to reduce impacts it is unlikely that implementation of these activities would damage or kill all Florida skullcap individuals.

Indirect effects for all three of these species are expected to be beneficial. Godfrey's butterwort, white birds-in-a-nest, and Florida skullcap are light dependent so thinning dense pine stands and wet savanna restoration are expected to improve habitat conditions for these species. Also, some Florida skullcap populations are found in habitat currently encroached by woody brush species such as titi and gallberry. With tree removal and direct herbicide application to targeted woody vegetation, conditions at those sites would be improved.

If herbicide is applied within 60 feet of known populations, plant locations would be flagged to avoid accidental spray. Herbicide would be applied directly to target woody vegetation reducing the chance of overspray effecting non-target vegetation.

Determination of Effect

The proposed action **may affect** but is **not likely to adversely affect** the Godfrey's butterwort and white birds-in-a-nest. Godfrey's butterwort occurrences are in already open wet savannas where no actions are proposed and populations within the treatment stands would be flagged so they would be avoided. White birds-in-a-nest has not been found in the analysis area in recent surveys, but potential and historic habitat would be improved as a result of project implementation.

The proposed action **may affect** and is **likely to adversely affect** Florida skullcap in the short-term because it would be very difficult to avoid all individuals due to the abundance of this species in the analysis area. Some individuals would likely be damaged or killed by timber harvest activities, but indirect and cumulative effects are expected to be beneficial for those remaining because habitat conditions would improve as a result of project implementation.

4. Summary of determinations and signature of preparers

Based on the information and analysis above, the following determinations of effects were made for the activities proposed in this project.

Species	Determination
Red-cockaded woodpecker	May affect, likely to adversely effect
Florida skullcap	May affect, likely to adversely effect
Godfrey's butterwort	May affect, not likely to adversely effect
Eastern indigo snake	May affect, not likely to adversely effect
Frosted flatwoods salamander	May affect, not likely to adversely effect

These determinations were made by qualified staff of the National Forest in Florida based on the best available science and other relevant information. If new information or changed circumstances affect these determinations, forest staff will reinitiate consultation pursuant to Forest Service policies and requirements under Sect. 7 of the Endangered Species Act.

Brittany B. Phillips

Date 03/20/2015

Brittany B. Phillips
Wildlife Biologist, Apalachicola National Forest

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Appendix A. Proposed action summary

CPMT	Stand	Acres	Forest Type	Age	Treatment	Triclopyr
25	1	62	21	86	Modified Group Selection	
25	2	21	22	54	Thin	
25	5	35	22	42	Thin	
25	7	285	21	81	Modified Group Selection	
25	9	114	22	42	Thin	
25	11	58	22	42	Thin	
25	12	76	21	86	Modified Group Selection	
25	13	54	22	31	Thin	
25	14	39	22	31	Thin	
25	15	21	22	31	Thin	
25	16	65	22	31	Thin	
25	17	91	21	83	Modified Group Selection	
25	18	27	21	83	Thin	
25	19	66	22	31	Thin	
26	1	30	22	72	Thin	
26	2	24	22	43	Thin	
26	4	19	22	43	Thin	
26	5	29	22	72	Thin	
26	7	50	22	31	Thin	
26	8	61	21	86	Modified Group Selection	
26	9	30	22	42	Thin	
26	10	11	22	43	Thin	
26	11	25	22	65	Thin	
26	12	63	21	43	Thin	
26	13	39	22	30	Thin	
26	14	31	22	54	Savannah Restoration Thin to 10-40 BA	31
26	15	31	22	72	Thin	
26	16	54	22	72	Savannah Restoration Thin to 40	54
26	18	10	22	42	Thin	
26	19	50	98	76	Savannah Restoration Thin to 40 (Girdle)	50
26	20	30	21	86	Modified Group Selection	
26	23	48	21	86	Modified Group Selection	
26	24	29	21	118	Thin	

CPMT	Stand	Acres	Forest Type	Age	Treatment	Triclopyr
26	33	32	21	86	Modified Group Selection	
26	36	11	21	86	Modified Group Selection	
26	37	10	22	31	Thin	
26	41	55	98	76	Savannah Restoration Thin to 40 (Girdle)	55
26	45	34	22	72	Savannah Restoration Thin to 40	34
27	1	7	21	25	Thin	
27	2	3	21	25	Thin	
27	3	27	22	43	Thin	
27	4	12	21	26	Thin	
27	5	7	22	72	Thin	
27	6	49	22	56	Thin	
27	7	16	21	85	Thin	
27	9	22	21	26	Thin	
27	10	23	22	43	Thin	
27	12	34	22	72	Thin	
27	13	10	21	87	Thin	
27	14	58	21	87	Thin	
27	15	8	21	25	Thin	
27	16	73	21	43	Thin	
27	19	4	21	25	Thin	
27	21	25	22	56	Thin	
27	22	164	22	72	Savannah Restoration Thin to 40	164
27	23	29	21	123	Thin	
27	25	77	22	54	Savannah Restoration Thin to 40	77
27	26	12	22	67	Thin	
27	28	37	22	54	Thin	
27	33	57	22	65	Thin	
27	34	58	21	141	Thin	
27	36	37	22	26	Thin	
27	37	63	21	56	Savannah Restoration Thin to 40 (Girdle)	63
27	41	71	22	56	Thin	
27	44	13	22	51	Thin	
27	45	11	22	72	Thin	
27	46	9	22	72	Savannah Restoration Thin to 10-40 BA	9

CPMT	Stand	Acres	Forest Type	Age	Treatment	Triclopyr
27	47	3	22	72	Thin	
27	48	30	22	72	Savannah Restoration Thin to 10-40 BA	30
27	49	19	22	72	Savannah Restoration Thin to 40 BA	19
27	50	19	21	85	Savannah Restoration Thin to 10-40 BA	19
27	51	8	22	43	Savannah Restoration Thin to 10-40 BA	8
27	52	41	22	67	Savannah Restoration Thin to 10-40 BA	41
27	53	12	22	77	Thin	
27	54	141	22	56	Savannah Restoration Thin to 10-40 BA	141
27	55	16	22	65	Savannah Restoration Thin to 10-40 BA	16
27	56	6	21	85	Thin	
27	57	28	21	56	Thin	
28	1	15	22	51	Thin	
28	5	52	21	81	Thin	
28	6	38	22	54	Thin	
28	7	91	21	81	Modified Group Selection	
28	8	46	22	44	Thin	
28	9	79	22	32	Thin	
28	16	87	22	32	Thin	
28	18	33	22	51	Thin	
28	19	51	22	93	Thin	
28	22	46	21	80	Modified Group Selection	
28	24	16	22	44	Clearcut Site For Borrow Pit Excavation	
29	12	15	22	32	Thin	
Totals		3786				811

Appendix B. Red-cockaded woodpecker foraging habitat analysis

Introduction

The purpose of this analysis was to evaluate the suitability of stands in the project area for RCW foraging habitat, allocate suitable stands or partial stands to foraging partitions for each cluster, and determine the effects of the proposed activities on the availability of foraging habitat. Stands were evaluated based on both the criteria for good quality foraging habitat (GQFH) under the recovery standard (USFWS 2003, p. 188-189) and the criteria for suitable foraging habitat under the standard for managed stability (i.e., the MSS; USFWS, p. 293). For both of the foraging habitat standards, current and future conditions were assessed at both the project level and the partition level.

Description of analysis process

The outline below summarizes the process used to produce the results described in this analysis:

I. Data collection and management

1. Active clusters defined by 2014 monitoring results
 - only active clusters were used for generating partitions and analyzing foraging habitat
 - the project area contains three inactive clusters
 - clusters located outside the project area but with partitions in the project area were initially considered but not subject to analysis because they are separated from the project area by more than 200ft of non-foraging habitat (the Hwy 65 right of way)
2. Foraging partitions were generated for 0.25 and 0.5 mile radii from the center of the cluster using ARC GIS to partition overlapping circles using Thiessen polygons
3. Slash and longleaf pine stands were evaluated for suitability as foraging habitat
 - all wetland, non-forest and hardwood stands were excluded
 - detailed stand data were not collected for some pine stands that clearly do not have characteristics of suitable foraging habitat and would not meet the standards after treatment (i.e., unthinned plantations less than 30yr old or stands isolated from clusters by more than 200ft of non-foraging habitat)
 - pine stands were evaluated according to both the recovery and managed stability standards using stand data collected with approved stand exam methods in 2013 and 2014

II. Conduct foraging habitat analysis based on current conditions

1. Foraging habitat evaluated for each partition
 - acres of stands meeting GQFH standard were summed within each partition
 - acres of stands meeting managed stability standard and the BA of >10in. diameter trees within those stands were summed within each partition

III. Conduct foraging habitat analysis based on post-treatment conditions

1. Assumed no change to partition size or shape because RCW population growth is uncertain but likely to be small between approval of proposed action and implementation
2. Assumed no change to stand age because the timing of implementation is uncertain but will likely to occur in the next 3yr.
3. Modified stand structural data (basal area and trees per acre by size class) to reflect silvicultural prescriptions
 - clearcut stands changed to 0 BA, 0 TPA for all tree size classes
 - thinning by removing rows in plantations reduced the BA of all size classes according to the pattern of rows being harvested (e.g., for second-row thinning the BA and TPA of all size classes were halved, for third-row thinning the BA and TPA of all size classes were multiplied by 2/3)
 - thinning mature stands to a target of 50 BA assumed removal of trees from the smaller size classes until the target is reached (i.e., thinning from below)
4. Repeat step II.1 with stand data updated to reflect post-treatment conditions

Project-level effects

None of the proposed actions would result in stands that currently meet foraging habitat criteria not meeting those criteria post-treatment. Currently, 31 stands in the project area meet the MSS. Timber thinning is proposed for 7 of those stands, but implementation of the action would not modify stand structure in such a way that it would no longer meet the MSS. 27 stands currently meet the recovery standard, and 10 of those are proposed for thinning that would also not modify stand structure in such a way that they would no longer meet the recovery standard.

Implementation of the proposed action would produce more area of RCW habitat. Thinning will result in 58 additional stands meeting MSS bringing the total to 89 stands meeting the MSS and 22 additional stands meeting the recovery standard bringing the total to 49 stands meeting the recovery standard. Additionally, thinning younger stands (less than 30 years) will encourage growth of remaining trees, allow more light to the understory and facilitate use of prescribed fire, all of which will benefit RCW habitat in the future.

Cluster-level effects

The effects of the proposed timber harvests on cluster-level foraging habitat were evaluated by comparing the area meeting the foraging standards before and after treatment. Stands isolated from the cluster center or adjacent pine stands by more than 200ft were not included in the area of foraging habitat.

The cluster-level effects analysis, maps and stand data tables on the following pages provide detailed information regarding the current conditions and effects of the proposed activities.

For each cluster, tables include structural data from stands in the foraging partitions displayed on the corresponding maps. Hardwood and midstory data were not included because there are few hardwood canopy trees within the project area and regular prescribed fire has reduced midstory

below the criteria in the recovery plan. Potential foraging stands (i.e., longleaf or slash pine stands) that are separated by more than 200ft from the cluster are included in the partition tables but are indicated with a strikethrough and are not included in the totals in the summary table above.

Post-treatment stand conditions were based on the specific prescription and the current stand conditions. For example, a 3rd row thin of a plantation would result in all structural values multiplied by 0.67 (because 1/3 of all trees would be removed regardless of size class). For select-tree thinning to a target of 50BA, the residual trees were removed from the smaller size classes to estimate future conditions, a prescription often referred to as thinning from below.

Table values and explanation:

Compartment – the larger area where the stand is located. Can be seen on the project RCW maps

Stand - stand numbers that correspond to labels on the attached cluster maps

Acres – the acres of the stand within the partition

Year of origin – the actual (for recent plantations) or estimated (for older plantation or naturally regenerated stands) year of last complete harvest

Total pine TPA – the total number of >5in diameter pine trees per acre within the stand

Total pine BA – the total area (ft²/acre) of >5in diameter pine trees per acre within the stand

TPA XX – the number of pine trees per acre in size class X

BA XX – the area (ft²/acre) of pine trees per acre in size class X

Meets MSS – Whether the stand meets the structural criteria for the managed stability standard (Yes/No)

Meets Recovery – Whether the stand meets the structural criteria for the recovery standard (Yes/No)

Acres MSS – the number of acres from a given stand that contribute to meeting the MSS for the partition (only non-zero if the stand meets MSS)

Total BA 10+in MSS – the BA of >10in diameter trees within the portion of a stand within the partition (only non-zero if the stand meets MSS)

Acres Recovery – the number of acres from a given stand that contribute to meeting the recovery standard for the partition (only non-zero if the stand meets the recovery standard)

Proposed treatment – the action proposed in the Beasely Pond project

Cluster 25.02

Currently there are no stands within the quarter or half mile foraging partitions that meet MSS. Stands located in the half mile partition are composed primarily of six young to intermediate aged slash pine stands, five mature longleaf stands and three non-foraging stands. Stands 14 and 7 are currently separated from the other foraging stands by over 200ft of non-foraging habitat, excluding these stands as possible foraging habitat. None of these stands currently meet MSS because the BA is too high, over 80 BA. All pine stands within the half mile partition except stand 6 would receive a thinning treatment reducing these stands to 50 BA. Regular thinning treatments and the modified group selection treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 25 stands 5, 11, 12, 13, 1, 2, 9, and 17 acres would meet MSS increasing total acres within the half mile partition meeting MSS to 230.7.

Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but this cluster would meet the MSS if the proposed action is implemented.

Quarter Mile Cluster Partition Current – 25.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA10 to 14 in	BA10 to 14 in	TPA14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres	
25	13	16.7	1982	Slash Pine	316.4	132	234.8	72	81.6	60	0	0	No	No	0.0	0.0	0.0	
25	1	60.0	1927	Longleaf Pine	134	84	58.2	20	67.2	52	8.6	12	No	No	0.0	0.0	0.0	
25	2	19.0	1959	Slash Pine	157.2	112	42.6	16	102.9	80	11.7	16	No	No	0.0	0.0	0.0	
25	9	11.7	1971	Slash Pine	201.8	126	79.6	30	110.8	82	11.4	14	No	No	0.0	0.0	0.0	
25	14	1.5	1982	Slash Pine	465.9	130	458.8	126	7.1	4	0	0	No	No	0.0	0.0	0.0	
25	3	2.6	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
25	4	14.1	1932	Undrained Flatwoods	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unkno wn	unknown	0.0	0.0	0.0	
															Totals	0.0	0.0	0.0

Quarter Mile Cluster Partition Future – Cluster 25.02

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA10 to 14 in	BA10 to 14 in	TPA14 in +	BA14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres		
25	13	16.7	First Thin	70.1	50.0	4.8	2.0	65.3	48.0	0.0	0.0	Yes	No	16.7	801.5	0.0		
25	1	60.0	Modified Group Selection	57.7	50.0	0.0	0.0	49.1	38.0	8.6	12.0	Yes	No	60.0	3001.5	0.0		
25	2	19.0	Thin	55.4	50.0	0.0	0.0	43.7	34.0	11.7	16.0	Yes	No	19.0	948.7	0.0		
25	9	11.7	Thin	60.0	50.0	0.0	0.0	48.6	36.0	11.4	14.0	Yes	No	11.7	587.2	0.0		
25	14	1.5	First Thin	173.4	50.0	167.7	46.8	5.7	3.2	0.0	0.0	No	No	0.0	0.0	0.0		
25	3	2.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0		
25	4	14.1	No Treatment	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0		
															Totals	107.4	5338.9	0.0

Half Mile Cluster Partition Current – Cluster 25.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
25	5	4.8	1971	Slash Pine	205.3	116.0	116.0	48.0	85.6	64.0	3.6	4.0	No	No	0.0	0.0	0.0
25	6	2.2	1930	Longleaf Pine	165.8	128.0	44.8	16.0	93.1	76.0	27.8	36.0	No	No	0.0	0.0	0.0
25	11	20.0	1971	Slash Pine	207.1	140.0	50.3	20.0	134.8	95.0	22.0	25.0	No	No	0.0	0.0	0.0
25	12	8.0	1927	Longleaf Pine	86.7	81.7	17.6	5.0	34.9	30.0	34.2	46.7	No	Yes	0.0	0.0	8.0
25	13	45.5	1982	Slash Pine	316.4	132.0	234.8	72.0	81.6	60.0	0.0	0.0	No	No	0.0	0.0	0.0
25	1	62.0	1927	Longleaf Pine	134.0	84.0	58.2	20.0	67.2	52.0	8.6	12.0	No	No	0.0	0.0	0.0
25	2	20.7	1959	Slash Pine	157.2	112.0	42.6	16.0	102.9	80.0	11.7	16.0	No	No	0.0	0.0	0.0
25	9	64.0	1971	Slash Pine	201.8	126.0	79.6	30.0	110.8	82.0	11.4	14.0	No	No	0.0	0.0	0.0
25	7	32.3	1932	Longleaf Pine	101.0	99.2	6.7	2.3	54.5	42.3	39.8	54.6	No	No	0.0	0.0	0.0

25	14	38.8	1982	Slash Pine	465.9	130.0	458.8	126.0	7.1	4.0	0.0	0.0	No	No	0.0	0.0	0.0	
25	17	5.7	1930	Longleaf Pine	92.9	106.7	0.0	0.0	35.2	30.0	57.6	76.7	No	Yes	0.0	0.0	5.7	
25	22	4.6	1930	Baldcypress-water tupelo	NA	No	No	0.0	0.0	0.0								
25	3	51.7	1925	Baldcypress-water tupelo	NA	No	No	0.0	0.0	0.0								
25	4	54.7	1932	Undrained Flatwoods	unknown	No	No	0.0	0.0	0.0								
		415.0													Totals	0.0	0.0	13.7

Half Mile Partition Future– Cluster 25.02

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+ in MSS	Acres Recovery	
25	5	4.8	Thin	65.1	50.0	0.0	0.0	61.5	46.0	3.6	4.0	Yes	No	4.8	241.2	0.0	
25	6	2.2	No Treatment	165.8	128.0	44.8	16.0	93.1	76.0	27.8	36.0	No	No	0.0	0.0	0.0	
25	11	20.0	Thin	57.5	50.0	0.0	0.0	35.5	25.0	22.0	25.0	Yes	Yes	20.0	997.9	20.0	
25	12	8.0	Modified Group Selection	38.0	50.0	0.0	0.0	3.8	3.3	34.2	46.7	Yes	Yes	8.0	398.7	8.0	
25	13	45.5	First Thin	70.1	50.0	4.8	2.0	65.3	48.0	0.0	0.0	Yes	No	45.5	2183.4	0.0	
25	1	62.0	Modified Group Selection	57.7	50.0	0.0	0.0	49.1	38.0	8.6	12.0	Yes	No	62.0	3102.3	0.0	
25	2	20.7	Thin	55.4	50.0	0.0	0.0	43.7	34.0	11.7	16.0	Yes	No	20.7	1035.8	0.0	
25	9	64.0	Thin	60.0	50.0	0.0	0.0	48.6	36.0	11.4	14.0	Yes	No	64.0	3200.2	0.0	
25	7	32.3	Modified Group Selection	36.4	50.0	0.0	0.0	0.0	0.0	36.4	50.0	Yes	Yes	32.3	1613.9	32.3	
25	14	38.8	First Thin	173.4	50.0	167.7	46.8	5.7	3.2	0.0	0.0	No	No	0.0	0.0	0.0	
25	17	5.7	Modified Group Selection	37.5	50.0	0.0	0.0	0.0	0.0	37.5	50.0	Yes	Yes	5.7	284.7	5.7	
25	22	4.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	No	No	0.0	0.0	0.0	
25	3	51.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	No	No	0.0	0.0	0.0	
25	4	54.7	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	No	No	0.0	0.0	0.0	
		415.0												Totals	230.7	11444.0	33.7

Cluster 26.01

Currently there are no stands in the quarter or half mile foraging partition that meet MSS. There are two stands that meet the recovery standard (compartment 27 stands 36 and 19) totaling 34.7 acres. Pine stands located in the half mile partition are comprised of eight young to intermediate aged slash stands, two mature longleaf stands, and three non-foraging stands. None of these stands currently meet MSS because the BA is too high, over 80 BA. Stands 45 and 19, labeled as a undrained flatwoods stand, would receive a savanna girdle treatment reducing the total BA in the stand to 40, and because of the high BA of pine found in this stand it would count as foraging habitat after treatment. This stand would receive a girdle treatment instead of thinning treatment due to the inability to access the stand with equipment. The remaining stands within the half mile partition except stand 39 would receive a thinning treatment reducing these stands to 50 BA. Regular thinning treatments, savanna thinning treatments, and the modified group selection treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 26 stands 10, 1, 4, 36, 9, 23, 19, 45, and 5 would meet MSS and would count as foraging habitat increasing MSS acres to 136.7 in the half mile partition.

Due to wet soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

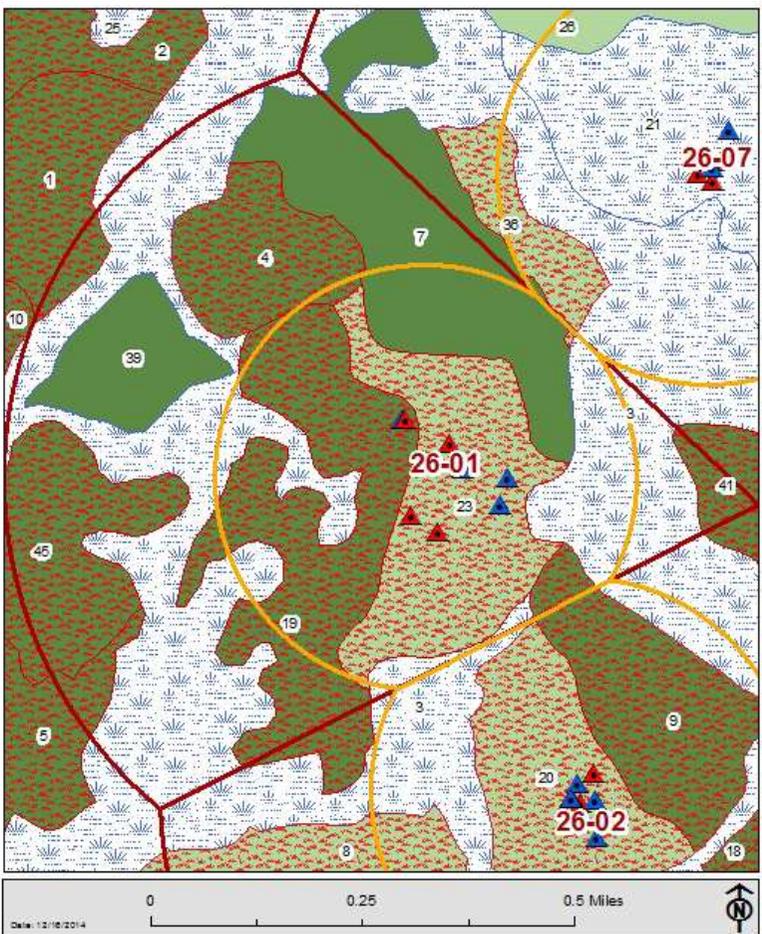
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but this cluster would gain acres that meet MSS if the proposed action is implemented. However if breeding season restriction are waived, this cluster may be disrupted during the breeding season which could lead to nest failure. There are 4 active trees in the cluster.

Cluster 26.01 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Cluster 26.01 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 26.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	4	0.6	1970	Slash Pine	223.9	105	166.2	65	57.7	40	0	0	No	No	0.0	0.0	0.0
26	7	18.2	1982	Slash Pine	645.4	166.7	627.4	156.7	18	10	0	0	No	No	0.0	0.0	0.0
26	36	0.1	1900	Longleaf Pine	79.2	92.5	14.3	5	5.4	5	59.4	82.5	No	Yes	0.0	0.0	0.1
26	9	2.4	1971	Slash Pine	169.8	130	22.1	10	138.5	110	9.1	10	No	No	0.0	0.0	0.0
26	23	39.6	1927	Longleaf Pine	155.8	85	95.8	35	51.6	40	8.3	10	No	No	0.0	0.0	0.0
26	19	34.5	<Null>	Undrained Flatwoods	107.1	83.3	26.5	6.7	50.4	36.7	30.2	40	No	Yes	0.0	0.0	34.5
26	3	24.5	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		120.0												Totals	0.0	0.0	34.7

Quarter Mile Cluster Partition Future – Cluster 26.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	4	0.6	Thin	79.0	50.0	21.3	10.0	57.7	40.0	0.0	0.0	Yes	No	0.6	25.5	0.0
26	7	18.2	Thin	172.9	50.0	154.9	40.0	18.0	10.0	0.0	0.0	No	No	0.0	0.0	0.0
26	36	0.1	Modified Group Selection	36.0	50.0	0.0	0.0	0.0	0.0	36.0	50.0	Yes	Yes	0.1	6.0	0.1
26	9	2.4	Thin	59.5	50.0	0.0	0.0	50.4	40.0	9.1	10.0	Yes	No	2.4	118.7	0.0
26	23	39.6	Modified Group Selection	59.9	50.0	0.0	0.0	51.6	40.0	8.3	10.0	Yes	No	39.6	1981.9	0.0
26	19	34.5	Savannah Restoration Thin to 40 (Girdle)	30.2	40.0	0.0	0.0	0.0	0.0	30.2	40.0	Yes	Yes	34.5	1382.0	34.5
26	3	24.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		120.0											Totals	77.3	3514.0	34.7

Half Mile Partition Current – Cluster 26.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	10	0.0	1970	Slash Pine	243.0	155.0	61.7	25.0	169.3	115.0	12.0	15.0	No	No	0.0	0.0	0.0
26	1	2.5	1941	Slash Pine	122.1	100.0	31.1	10.0	56.9	45.0	34.1	45.0	No	No	0.0	0.0	0.0
26	4	19.5	1970	Slash Pine	223.9	105.0	166.2	65.0	57.7	40.0	0.0	0.0	No	No	0.0	0.0	0.0
26	7	37.6	1982	Slash Pine	645.4	166.7	627.4	156.7	18.0	10.0	0.0	0.0	No	No	0.0	0.0	0.0
26	36	0.1	1900	Longleaf Pine	79.2	92.5	14.3	5.0	5.4	5.0	59.4	82.5	No	Yes	0.0	0.0	0.1
26	9	2.4	1971	Slash Pine	169.8	130.0	22.1	10.0	138.5	110.0	9.1	10.0	No	No	0.0	0.0	0.0
26	23	39.7	1927	Longleaf Pine	155.8	85.0	95.8	35.0	51.6	40.0	8.3	10.0	No	No	0.0	0.0	0.0
26	19	46.3	unknown	Undrained Flatwoods	107.1	83.3	26.5	6.7	50.4	36.7	30.2	40	No	Yes	0.0	0.0	46.3

26	45	23.1	1941	Slash Pine	127.0	100.0	29.7	10.0	68.7	52.5	28.5	37.5	No	No	0.0	0.0	0.0	
26	5	3.1	1941	Slash Pine	127.7	115.0	33.0	10.0	52.7	45.0	42.1	60.0	No	No	0.0	0.0	0.0	
26	41	3.0	1900	Undrained Flatwoods	unknown	0.0	0.0	0.0										
26	39	15.1	1937	Slash Pine	unknown	0.0	0.0	0.0										
26	3	90.5	1925	Baldcypress-water tupelo	NA	0.0	0.0	0.0										
		282.9													Totals	0.0	0.0	46.4

Half Mile Partition Future – Cluster 26.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
26	10	0.0	Thin	63.5	50.0	0.0	0.0	51.5	35.0	12.0	15.0	Yes	No	0.0	1.1	0.0	
26	1	2.5	Thin	40.4	50.0	0.0	0.0	6.3	5.0	34.1	45.0	Yes	Yes	2.5	123.7	2.5	
26	4	19.5	Thin	79.0	50.0	21.3	10.0	57.7	40.0	0.0	0.0	Yes	No	19.5	778.1	0.0	
26	7	37.6	Thin	172.9	50.0	154.9	40.0	18.0	10.0	0.0	0.0	No	No	0.0	0.0	0.0	
26	36	0.1	Modified Group Selection	36.0	50.0	0.0	0.0	0.0	0.0	36.0	50.0	Yes	Yes	0.1	6.0	0.1	
26	9	2.4	Thin	59.5	50.0	0.0	0.0	50.4	40.0	9.1	10.0	Yes	No	2.4	118.6	0.0	
26	23	39.7	Modified Group Selection	59.9	50.0	0.0	0.0	51.6	40.0	8.3	10.0	Yes	No	39.7	1985.1	0.0	
26	19	46.3	Savannah Restoration Thin to 40 (Girdle)	30.2	40.0	0.0	0.0	0.0	0.0	30.2	40.0	Yes	Yes	46.3	1850.8	46.3	
26	45	23.1	Savannah Restoration Thin to 40	31.8	40.0	0.0	0.0	3.3	2.5	28.5	37.5	Yes	Yes	23.1	925.0	23.1	
26	5	3.1	Thin	35.1	50.0	0.0	0.0	0.0	0.0	35.1	50.0	Yes	Yes	3.1	156.8	3.1	
26	41	3.0		unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0	
26	39	15.1	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0	
26	3	90.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		282.9												Totals	136.7	5945.2	75.1

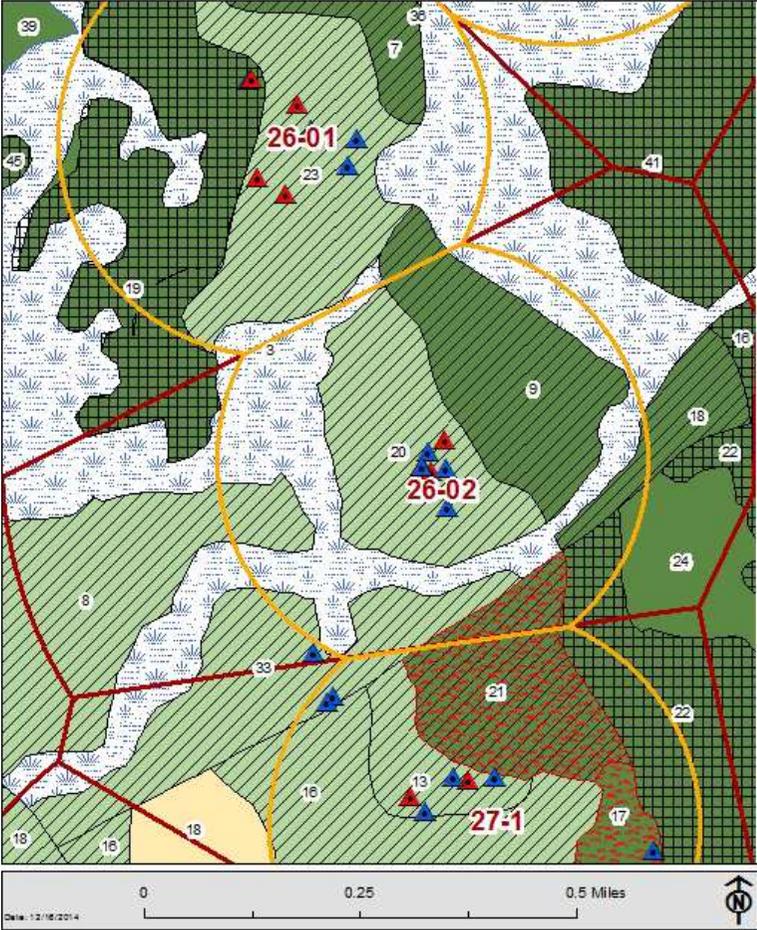
Cluster 26.02

This cluster currently only has one stand (stand 21) totaling 4.7 acres that meets the MSS and recovery standards in the half mile partition. Pine stands located in the half mile partition are comprised of five intermediate aged slash stands, three mature longleaf stands, and four non foraging stands. None of the remaining stands currently meet MSS because the BA is too high, over 80 BA. Compartment 26 stands 16 and 22, stand 16 classified as an undrained flatwoods stand, would receive savanna thinning treatments reducing the total BA in the stands to 40, and because of the high BA of pine found in these stands would count as foraging habitat after treatment. Compartment 26 stands 18,9, and 16 receive thinning treatments and compartment 26 stands 8, 33, and 20 would receive modified group selection treatments reducing these stands to 50 BA. Regular thinning treatments, and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 26 stands 8, 33, 20, 18, 9, and 16 would meet MSS along with compartment 27 stands 21 and 22. Implementation of the proposed action would increase the MSS acres to 123.6 acres in the half mile partition.

Due to hydric soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

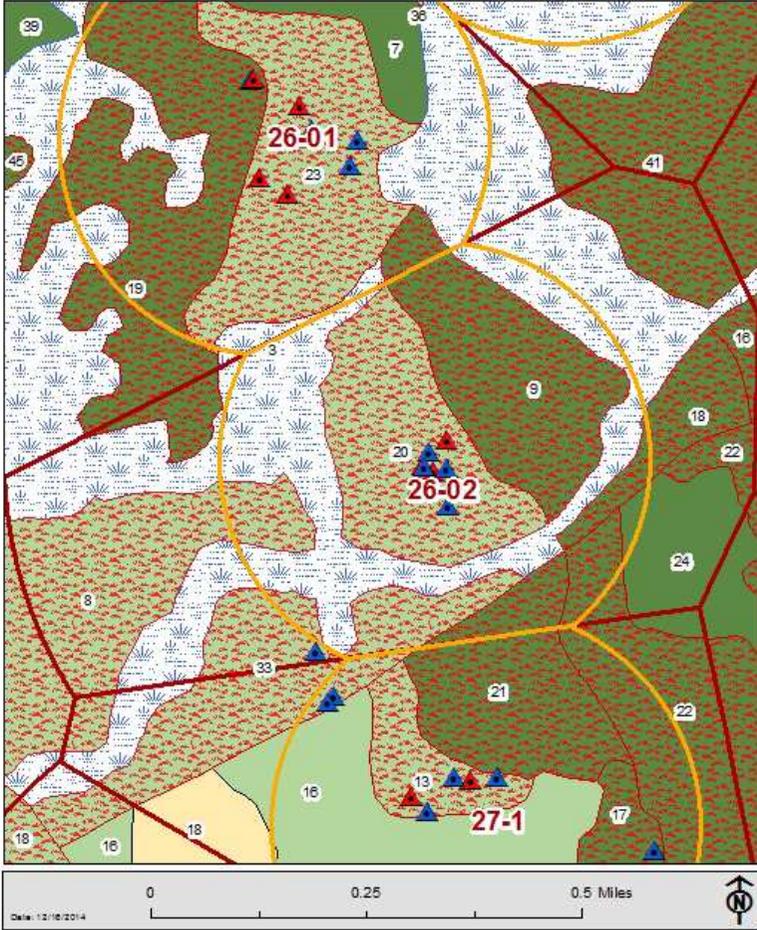
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but this cluster would meet the MSS if the proposed action is implemented. However due to the hydric soil conditions in the project area, breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure.

Cluster 26.02 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
Loblolly Pine		Loblolly Pine

Cluster 26.02 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
Loblolly Pine		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 26.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	8	4.5	1927	Longleaf Pine	136.1	98.7	35.4	10.7	84.9	68	15.8	20	No	No	0.0	0.0	0.0
26	33	7.6	1927	Longleaf Pine	125.8	83.3	60.3	26.7	50.7	36.7	14.8	20	No	No	0.0	0.0	0.0
26	20	29.6	1927	Longleaf Pine	145.3	103.3	44.2	20	98.1	80	3	3.3	No	No	0.0	0.0	0.0
26	18	2.6	1971	Slash Pine	207.7	146.7	69	26.7	92.5	66.7	46.2	53.3	No	No	0.0	0.0	0.0
26	9	27.5	1971	Slash Pine	169.8	130	22.1	10	138.5	110	9.1	10	No	No	0.0	0.0	0.0
27	21	4.7	1957	Slash Pine	55.7	66.7	0	0	22.3	20	33.4	46.7	Yes	Yes	4.7	312.1	4.7
27	22	3.6	1941	Slash Pine	168.4	122.5	60.3	18.3	68.8	54.2	39.3	50	No	No	0.0	0.0	0.0
27	24	0.9	1941	Slash Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
26	3	35.2	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		116.1												Totals	4.7	312.1	4.7

Quarter Mile Cluster Partition Future – Cluster 26.02

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	8	4.5	Modified Group Selection	53.3	50.0	0.0	0.0	37.5	30.0	15.8	20.0	Yes	No	4.5	226.0	0.0
26	33	7.6	Modified Group Selection	56.2	50.0	0.0	0.0	41.4	30.0	14.8	20.0	Yes	No	7.6	381.0	0.0
26	20	29.6	Modified Group Selection	60.3	50.0	0.0	0.0	57.3	46.7	3.0	3.3	Yes	No	29.6	1479.9	0.0
26	18	2.6	Thin	43.3	50.0	0.0	0.0	0.0	0.0	43.3	50.0	Yes	Yes	2.6	128.6	2.6
26	9	27.5	Thin	59.5	50.0	0.0	0.0	50.4	40.0	9.1	10.0	Yes	No	27.5	1372.8	0.0
27	21	4.7	Thin	7.0	50.0	0.0	0.0	3.7	3.3	33.4	46.7	Yes	Yes	4.7	234.0	4.7
27	22	3.6	Savannah Restoration Thin to 40	31.4	40.0	0.0	0.0	0.0	0.0	31.4	40.0	Yes	Yes	3.6	142.8	3.6
27	24	0.9	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
26	3	35.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		116.1											Totals	80.0	3965.0	10.8

Half Mile Partition Current – Cluster 26.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	8	27.7	1927	Longleaf Pine	136.1	98.7	35.4	10.7	84.9	68.0	15.8	20.0	No	No	0.0	0.0	0.0
26	33	14.0	1927	Longleaf Pine	125.8	83.3	60.3	26.7	50.7	36.7	14.8	20.0	No	No	0.0	0.0	0.0
26	20	29.6	1927	Longleaf Pine	145.3	103.3	44.2	20.0	98.1	80.0	3.0	3.3	No	No	0.0	0.0	0.0

Cluster 26.04

This cluster currently only has one stand (stand 24) totaling 28.2 acres that meets the MSS and two stands (stands 16 and 23) totaling 37.7 acres that meet the recovery standard in the half mile partition. Pine stands located in the half mile partition are comprised of six intermediate to mature aged slash stands, four mature longleaf stands, and two undrained flatwoods stands. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Stand 14 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In this type treatment area, parts of the stand with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stand with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stand because not enough fine fuels would be present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Stands 16 and 25 would receive savanna thinning treatments reducing the total BA in the stands to 40. Compartment 26 stands 15, 23, 24, and 26 would receive a thinning treatments reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 26 stands 8, 33, 20, 18, 9, and 16 would meet MSS along with compartment 27 stands 21 and 22. Implementation of the proposed action would increase the MSS acres to 119.8 acres in the half mile partition.

Due to hydric soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

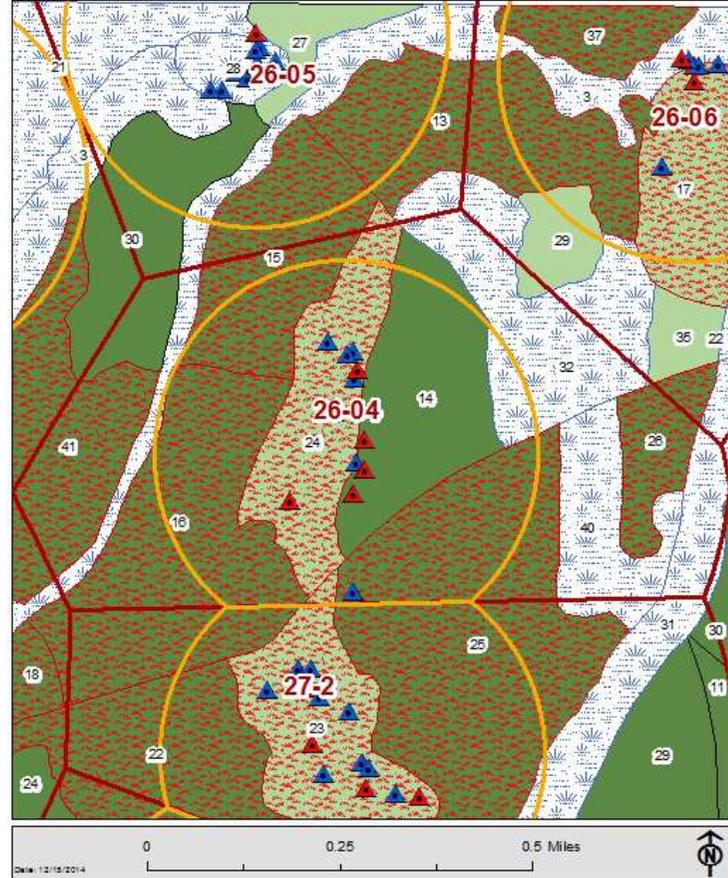
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but this cluster would meet the MSS if the proposed action is implemented. However due to the hydric soil conditions in the project area, breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure. There are 3 active trees in the cluster.

Cluster 26.04 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 26.04 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 26.04

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	15	10.7	1941	Slash Pine	231.7	120	127.4	42.9	96.8	68.6	7.6	8.6	No	No	0.0	0.0	0.0
26	16	25.6	1941	Undrained Flatwoods	96	110	0	0	44.5	40	51.5	70	No	Yes	0.0	0.0	25.6
26	24	26.5	1895	Longleaf Pine	115	80	41.1	13.3	55.3	43.3	18.6	23.3	Yes	No	26.5	1764.2	0.0
26	14	29.1	1959	Slash Pine	196	104	117	32	53.9	40	25	32	No	No	0.0	0.0	0.0
27	23	0.7	1890	Longleaf Pine	112.1	102.9	35.3	8.6	30	27.1	46.8	67.1	No	Yes	0.0	0.0	0.7
27	25	21.1	1959	Slash Pine	147	113.9	48.7	16.5	60	46.1	38.4	51.3	No	No	0.0	0.0	0.0
26	32	3.9	1932	Bottomland hardwood-yellow pine	unkn own	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
26	3	0.2	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		117.8													26.5	1764.2	26.3

Quarter Mile Cluster Partition Future – Cluster 26.04

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
26	15	10.7	Thin	66.0	50.0	0.0	0.0	58.4	41.4	7.6	8.6	Yes	No	10.7	535.8	0.0	
26	16	25.6	Savannah Restoration Thin to 40	29.4	40.0	0.0	0.0	0.0	0.0	29.4	40.0	Yes	Yes	25.6	1024.0	25.6	
26	24	26.5	Thin	52.7	50.0	0.0	0.0	34.1	26.7	18.6	23.3	Yes	Yes	26.5	1324.5	26.5	
26	14	29.1	Savannah Restoration Thin to 10-40 BA	7.8	10.0	0.0	0.0	0.0	0.0	7.8	10.0	No	No	0.0	0.0	0.0	
27	23	0.7	Thin	34.9	50.0	0.0	0.0	0.0	0.0	34.9	50.0	Yes	Yes	0.7	34.8	0.7	
27	25	21.1	Savannah Restoration Thin to 40	29.9	40.0	0.0	0.0	0.0	0.0	29.9	40.0	Yes	Yes	21.1	844.4	21.1	
26	32	3.9	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
26	3	0.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		117.8												84.6	3763.5	73.9	

Half Mile Partition Current – Cluster 26.04

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	15	16.1	1941	Slash Pine	231.7	120.0	127.4	42.9	96.8	68.6	7.6	8.6	No	No	0.0	0.0	0.0
26	16	37.1	1941	Undrained Flatwoods	96.0	110.0	0.0	0.0	44.5	40.0	51.5	70.0	No	Yes	0.0	0.0	37.1
26	24	28.2	1895	Longleaf Pine	115.0	80.0	41.1	13.3	55.3	43.3	18.6	23.3	Yes	No	28.2	1879.4	0.0
26	14	31.5	1959	Slash Pine	196.0	104.0	117.0	32.0	53.9	40.0	25.0	32.0	No	No	0.0	0.0	0.0
27	23	0.7	1890	Longleaf Pine	112.1	102.9	35.3	8.6	30.0	27.1	46.8	67.1	No	Yes	0.0	0.0	0.7
27	26	9.7	1946	Slash Pine	212.3	148.0	87.8	28.0	88.6	72.0	35.9	48.0	No	No	0.0	0.0	0.0
27	25	28.1	1959	Slash Pine	147.0	113.9	48.7	16.5	60.0	46.1	38.4	51.3	No	No	0.0	0.0	0.0

26	41	17.3	1900	Undrained Flatwoods	unkn own	unkn own	unkno wn	unknow n	unknown	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
26	29	0.8	1932	Longleaf Pine	unkn own	unkn own	unkno wn	unknow n	unknown	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
26	35	0.0	1932	Longleaf Pine	unkn own	unkn own	unkno wn	unknow n	unknown	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
26	32	22.8	1932	Bottomland hardwood- yellow pine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	30	0.1	1970	Slash Pine	unkn own	unkn own	unkno wn	unknow n	unknown	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
27	40	16.2	1946	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	3	5.8	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	7.3	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	5.7	1900	Slash Pine	unkn own	unkn own	unkno wn	unknow n	unknown	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
		227.2												Totals	28.2	1879.4	37.7

Half Mile Partition Future – Cluster 26.04

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
26	15	16.1	Thin	66.0	50.0	0.0	0.0	58.4	41.4	7.6	8.6	Yes	No	16.1	806.5	0.0
26	16	37.1	Savannah Restoration Thin to 40	29.4	40.0	0.0	0.0	0.0	0.0	29.4	40.0	Yes	Yes	37.1	1482.1	37.1
26	24	28.2	Thin	52.7	50.0	0.0	0.0	34.1	26.7	18.6	23.3	Yes	Yes	28.2	1410.9	28.2
26	14	31.5	Savannah Restoration Thin to 10-40 BA	7.8	10.0	0.0	0.0	0.0	0.0	7.8	10.0	No	No	0.0	0.0	0.0
27	23	0.7	Thin	34.9	50.0	0.0	0.0	0.0	0.0	34.9	50.0	Yes	Yes	0.7	34.8	0.7
27	26	9.7	Thin	38.4	50.0	0.0	0.0	2.5	2.0	35.9	48.0	Yes	Yes	9.7	483.9	9.7
27	25	28.1	Savannah Restoration Thin to 40	29.9	40.0	0.0	0.0	0.0	0.0	29.9	40.0	Yes	Yes	28.1	1122.1	28.1
26	41	17.3	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	29	0.8	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	35	0.0	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	32	22.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	30	0.1	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
27	40	16.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	3	5.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	7.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	5.7		unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
		227.2											Totals	119.8	5340.4	103.7

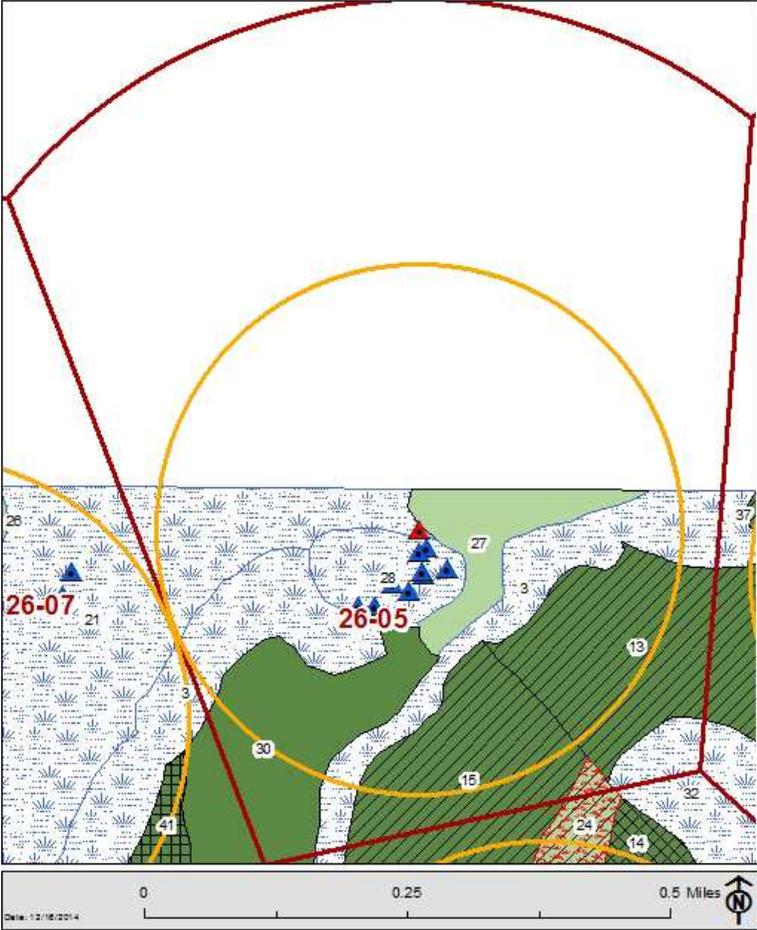
Cluster 26.05

This cluster currently only has one stand (stand 24) totaling 0.5 acres that meets the MSS in the half mile partition, and no stands that meet the recovery standards. Pine stands located in the half mile partition are comprised of three intermediate aged slash stands, two mature longleaf stands, and four non-foraging stands. None of the remaining pine stands currently meet MSS because the BA is too high, over 80 BA. Compartment 26 stands 13, 15 and 24 would receive thinning treatments reducing the total BA in the stands to 50. Regular thinning treatments and the modified group selection treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 26 stands 24, 13, and 15 would meet MSS. Implementation of the proposed action would increase the MSS acres to 33.3 acres in the half mile partition.

Due to hydric soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

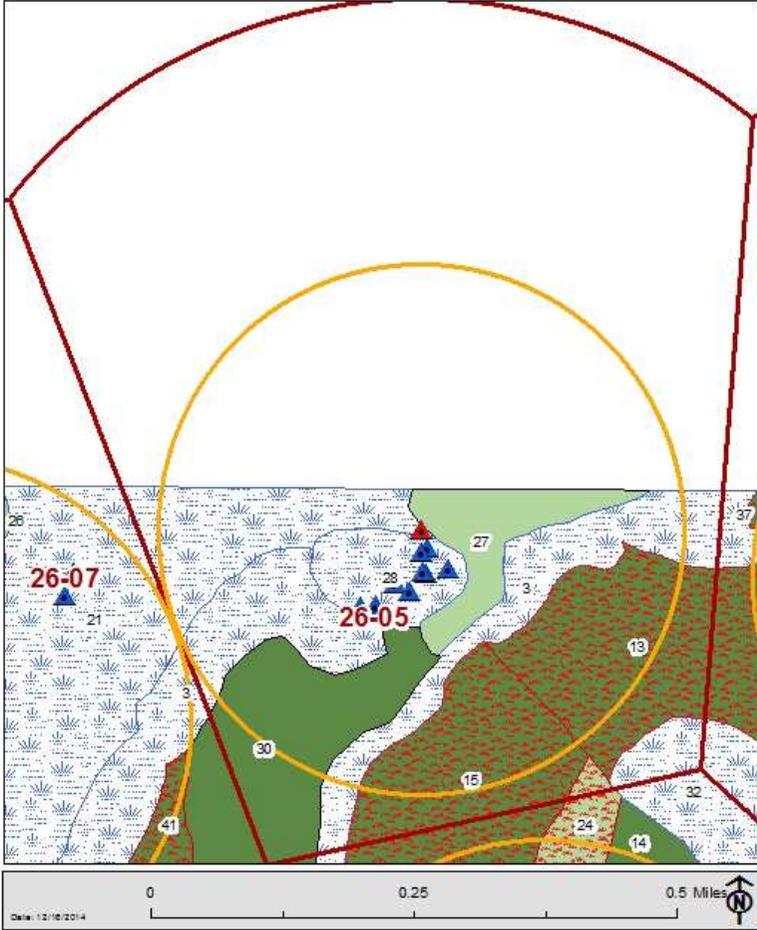
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented this MSS acres would increase in the foraging partition. However due to the hydric soil conditions in the project area, breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure. There is currently one active tree in the cluster.

Cluster 26.05 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Forest Type
RCW Partitions 0.25mi	BA 40	Longleaf Pine
RCW Partitions 0.50mi		Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 26.05 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Forest Type
RCW Partitions 0.25mi	BA 40	Longleaf Pine
RCW Partitions 0.50mi		Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 26.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	15	9.8	1941	Slash Pine	231.7	120	127.4	42.9	96.8	68.6	7.6	8.6	No	No	0.0	0.0	0.0
26	13	11.5	1983	Slash Pine	264.3	130	164	63.3	100.3	66.7	0	0	No	No	0.0	0.0	0.0
26	21	10.6	<Null>	Undrained Flatwoods	unkno wn	unkn own	unknow n	unknow n	unkno wn	unknow n	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
26	27	7.7	1925	Longleaf Pine	unkno wn	unkn own	unknow n	unknow n	unkno wn	unknow n	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
26	28	6.8	<Null>	Undrained Flatwoods	unkno wn	unkn own	unknow n	unknow n	unkno wn	unknow n	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
26	3	18.9	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	9.9	1900	Slash Pine	unkno wn	unkn own	unknow n	unknow n	unkno wn	unknow n	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
		75.2												Totals	0.0	0.0	0.0

Quarter Mile Cluster Partition Future – Cluster 26.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	15	9.8	Thin	66.0	50.0	0.0	0.0	58.4	41.4	7.6	8.6	Yes	No	9.8	489.4	0.0
26	13	11.5	Thin	75.2	50.0	0.0	0.0	75.2	50.0	0.0	0.0	Yes	No	11.5	575.5	0.0
26	21	10.6	No Treatment	unkn own	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
26	27	7.7	No Treatment	unkn own	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
26	28	6.8	No Treatment	unkn own	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
26	3	18.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	9.9	No Treatment	unkn own	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
		75.2											Totals	21.3	1064.9	0.0

Half Mile Partition Current – Cluster 26.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres
26	15	14.9	1941	Slash Pine	231.7	120.0	127.4	42.9	96.8	68.6	7.6	8.6	No	No	0.0	0.0	0.0
26	13	17.9	1983	Slash Pine	264.3	130.0	164.0	63.3	100.3	66.7	0.0	0.0	No	No	0.0	0.0	0.0
26	24	0.5	1895	Longleaf Pine	115.0	80.0	41.1	13.3	55.3	43.3	18.6	23.3	Yes	No	0.5	34.6	0.0
26	21	11.8	unknow n	Undrained Flatwoods	unkn own	unkn own	unkno wn	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	27	7.7	1925	Longleaf Pine	unkn own	unkn own	unkno wn	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	28	6.8	unknow n	Undrained Flatwoods	unkn own	unkn own	unkno wn	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	32	2.5	1932	Bottomland hardwood-yellow pine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	3	22.2	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	15.3	1900	Slash Pine	unkn own	unkn own	unkno wn	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
		99.5												Totals	0.5	34.6	0.0

Half Mile Partition Future – Cluster 26.05

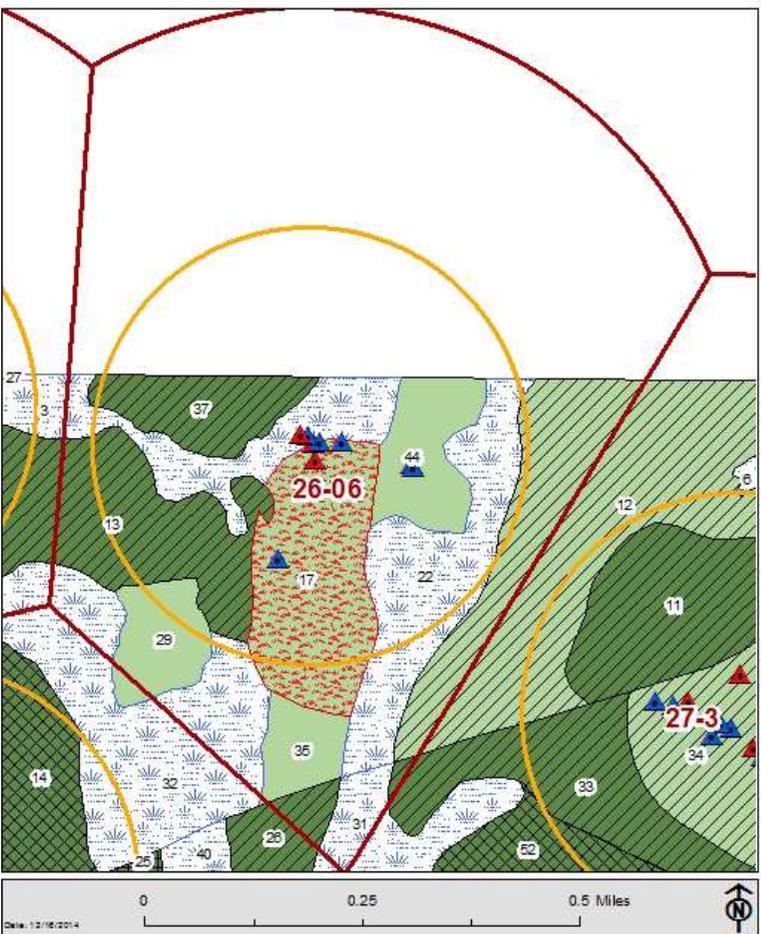
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+ in MSS	Acres Recovery
26	15	14.9	Thin	66.0	50.0	0.0	0.0	58.4	41.4	7.6	8.6	Yes	No	14.9	745.4	0.0
26	13	17.9	Thin	75.2	50.0	0.0	0.0	75.2	50.0	0.0	0.0	Yes	No	17.9	894.3	0.0
26	24	0.5	Thin	52.7	50.0	0.0	0.0	34.1	26.7	18.6	23.3	Yes	Yes	0.5	25.9	0.5
26	21	11.8	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unknown	unkno wn	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	27	7.7	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unknown	unkno wn	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	28	6.8	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unknown	unkno wn	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	32	2.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	3	22.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	15.3		unkno wn	unkn own	unkno wn	unkno wn	unknown	unkno wn	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
		99.5											Totals	33.3	1665.6	0.5

Cluster 26.06

This cluster currently only has one stand (compartment 26 stand 17) totaling 24.1 acres that meets the MSS in the half mile partition, and no stands that meet the recovery standards. Pine stands located in the half mile partition are comprised of four intermediate aged slash stands, four mature longleaf stands, and four non-foraging stands. None of the remaining pine stands currently meet MSS because the BA is too high, over 80 BA. Compartment 27 stand 12 is separated from the rest of the foraging stands by over 200ft of non-foraging habitat. Because of this separation, stand 12 is not counted as foraging habitat. Compartment 26 Stands 13 and 37 and compartment 27 stands 12, 26, and 33 would receive thinning treatments reducing the total BA in the stands to 50. Regular thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. Compartment 26 stand 37 is would be receiving a first thinning treatment which removes selected rows for harvest. In this stand all size classes would be reduced because all entire rows are removed. After treatment compartment 26 stands 13 and compartment 27 stands would meet MSS. Implementation of the proposed action would increase the MSS acres to 58.1 acres in the half mile partition.

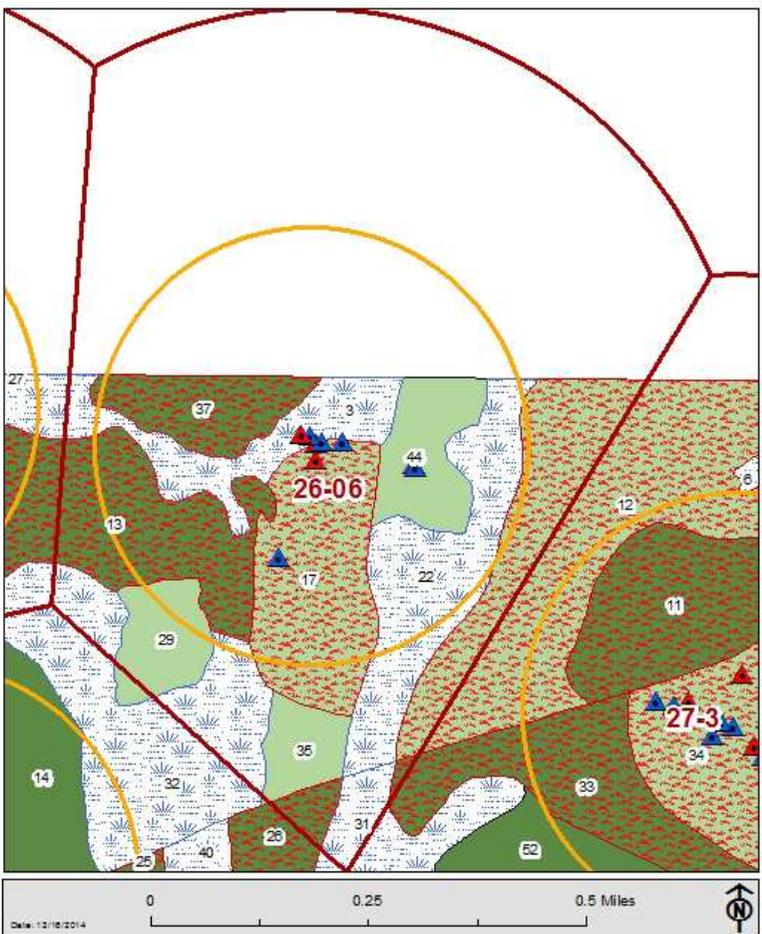
Conclusion: Not likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented this MSS acres would increase in the foraging partition.

Cluster 26.06 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Forest Type
RCW Partitions 0.25mi	BA 40	Longleaf Pine
RCW Partitions 0.50mi		Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 26.06 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Forest Type
RCW Partitions 0.25mi	BA 40	Longleaf Pine
RCW Partitions 0.50mi		Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 26.06

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	13	15.3	1983	Slash Pine	264.3	130	164	63.3	100.3	66.7	0	0	No	No	0.0	0.0	0.0
26	17	20.6	1932	Longleaf Pine	139.7	80	74.4	13.3	40.4	33.3	24.9	33.3	Yes	No	20.6	1373.4	0.0
26	42	0.9	1970	Slash Pine	475.2	444.3	58.5	22.9	444	88.6	2.7	2.9	No	No	0.0	0.0	0.0
26	37	10.2	1982	Slash Pine	256.3	120	194.8	66.7	50.1	40	11.4	13.3	No	No	0.0	0.0	0.0
26	29	1.7	1932	Longleaf Pine	unkn own	unkn own	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
26	32	0.4	1932	Bottomland hardwood-yellow pine	unkn own	unkn own	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
26	44	10.5	1932	Longleaf Pine	unkn own	unkn own	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unknown	0.0	0.0	0.0
26	22	16.1	1910	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	3	11.9	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		87.7												Totals	20.6	1373.4	0.0

Quarter Mile Cluster Partition Future – Cluster 26.06

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
26	13	15.3	Thin	75.2	50.0	0.0	0.0	75.2	50.0	0.0	0.0	Yes	No	15.3	766.4	0.0	
26	17	20.6	No Treatment	139.7	80.0	74.4	13.3	40.4	33.3	24.9	33.3	Yes	No	20.6	1373.4	0.0	
26	42	0.9	Thin	63.3	50.0	0.0	0.0	60.6	47.4	2.7	2.9	Yes	No	0.9	46.8	0.0	
26	37	10.2	First Thin	65.0	50.0	15.8	7.4	40.1	32.0	9.1	10.6	Yes	No	10.2	434.4	0.0	
26	29	1.7	No Treatment	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
26	32	0.4	No Treatment	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
26	44	10.5	No Treatment	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
26	22	16.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
26	3	11.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		87.7											Totals	46.2	2574.1	0.0	

Half Mile Partition Current – Cluster 26.06

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	13	21.0	1983	Slash Pine	264.3	130.0	164.0	63.3	100.3	66.7	0.0	0.0	No	No	0.0	0.0	0.0
26	17	24.1	1932	Longleaf Pine	139.7	80.0	74.4	13.3	40.4	33.3	24.9	33.3	Yes	No	24.1	1608.2	0.0
26	12	18.1	1970	Slash Pine	175.2	114.3	58.5	22.9	114.0	88.6	2.7	2.9	No	No	0.0	0.0	0.0
26	37	10.4	1982	Slash Pine	256.3	120.0	194.8	66.7	50.1	40.0	11.4	13.3	No	No	0.0	0.0	0.0
27	26	2.1	1946	Slash Pine	212.3	148.0	87.8	28.0	88.6	72.0	35.9	48.0	No	No	0.0	0.0	0.0
27	33	0.4	1948	Slash Pine	164.2	103.1	78.4	27.7	68.8	52.3	17.1	23.1	No	No	0.0	0.0	0.0
26	29	7.4	1932	Longleaf Pine	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unkno wn	unknown	0.0	0.0	0.0
26	35	5.7	1932	Longleaf Pine	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unkno wn	unknown	0.0	0.0	0.0
26	32	11.3	1932	Bottomland hardwood-yellow pine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	44	10.5	1932	Longleaf Pine	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unkno wn	unknown	0.0	0.0	0.0
26	22	22.8	1910	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	3	13.3	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	3.6	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		150.9													24.1	1608.2	0.0

Half Mile Partition Future – Cluster 26.06

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
26	13	21.0	Thin	75.2	50.0	0.0	0.0	75.2	50.0	0.0	0.0	Yes	No	21.0	1050.2	0.0	
26	17	24.1	No Treatment	139.7	80.0	74.4	13.3	40.4	33.3	24.9	33.3	Yes	No	24.1	1608.2	0.0	
26	12	18.1	Thin	63.3	50.0	0.0	0.0	60.6	47.1	2.7	2.9	Yes	No	18.1	903.3	0.0	
26	37	10.4	First Thin	65.0	50.0	15.8	7.4	40.1	32.0	9.1	10.6	Yes	No	10.4	444.6	0.0	
27	26	2.1	Thin	38.4	50.0	0.0	0.0	2.5	2.0	35.9	48.0	Yes	Yes	2.1	105.0	2.1	
27	33	0.4	Thin	52.5	50.0	0.0	0.0	35.4	26.9	17.1	23.1	Yes	No	0.4	20.4	0.0	
26	29	7.4	No Treatment	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	35	5.7	No Treatment	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	32	11.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
26	44	10.5	No Treatment	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
26	22	22.8	No	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	

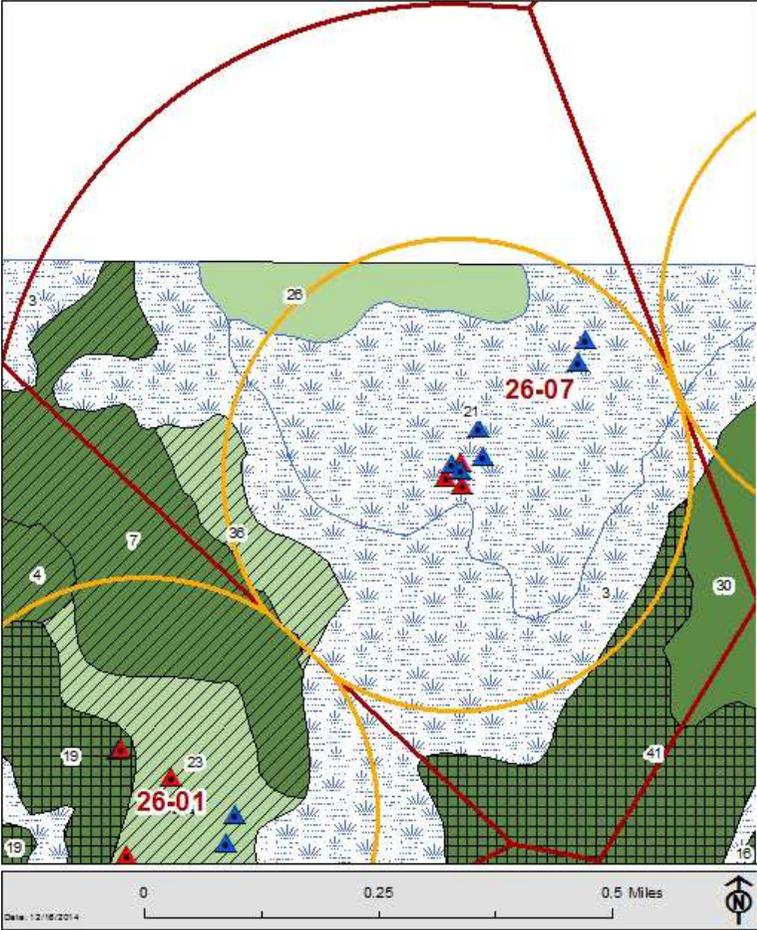
			Treatment														
26	3	13.3	No Treatment	NA	0.0	0.0	0.0										
27	31	3.6	No Treatment	NA	0.0	0.0	0.0										
		150.9												Totals	58.1	3228.4	2.1

Cluster 26.07

This cluster currently only has one stand (compartment 26 stand 36) totaling 11 acres that meets the recovery standard and no stands that meet the MSS in the half mile partition. Pine stands located in the half mile partition are comprised of two intermediate to mature aged slash stands, two mature longleaf stands, and three non-foraging habitat stands. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 26 stand 41 would receive a savanna girdle treatment reducing the total BA in the stand to 40. This stand would be girdled instead of being thinned because it is inaccessible to logging equipment. Compartment 26 stand 7 would receive a thinning treatment and compartment 26 stand 36 would receive a modified group selection treatment reducing these stands to 50 BA. Regular thinning treatments, savanna thinning treatments, and the modified group selection treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 26 stands 36 and 41 would meet MSS. Implementation of the proposed action would increase the MSS acres to 34.3 acres in the half mile partition.

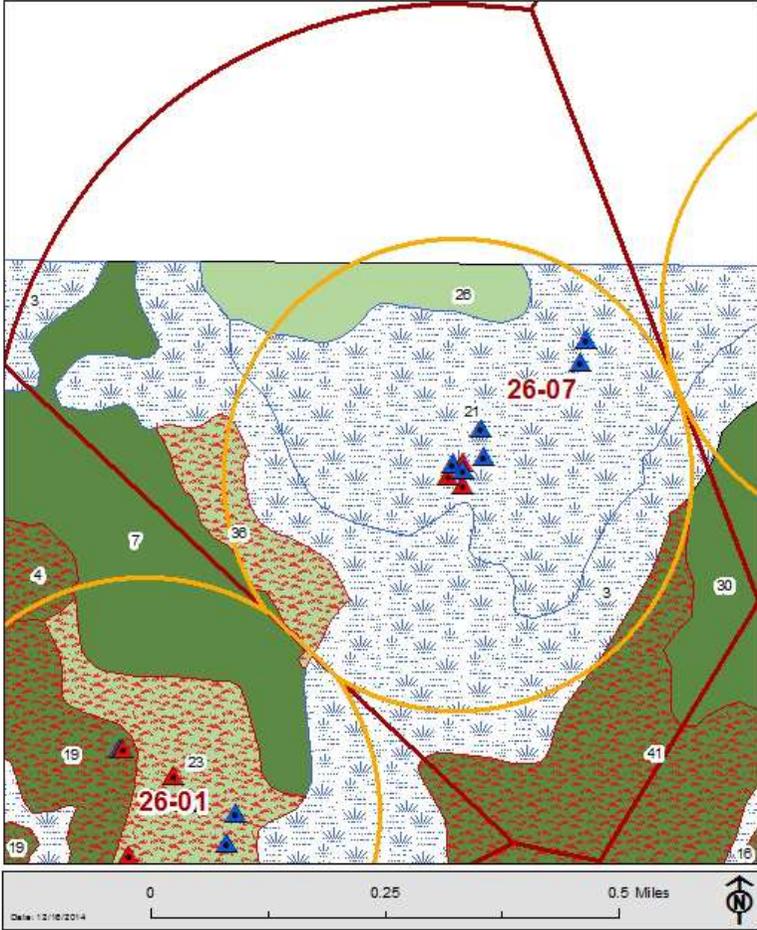
Conclusion: Not Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented this MSS acres would increase in the foraging partition.

Cluster 26.07 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
RCW Partitions 0.50mi	BA 10-40	Slash Pine
	BA 40	Scrub Oak
		Loblolly Pine

Cluster 26.07 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
RCW Partitions 0.50mi	BA 10-40	Slash Pine
	BA 40	Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 26.07

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	7	0.3	1982	Slash Pine	645.4	166.7	627.4	156.7	18	10	0	0	No	No	0.0	0.0	0.0
26	36	7.2	1900	Longleaf Pine	79.2	92.5	14.3	5	5.4	5	59.4	82.5	No	Yes	0.0	0.0	7.2
26	41	1.9	1900	Undrained Flatwoods	164.4	110	62.4	20	72	50	30.1	40	No	No	0.0	0.0	0.0
26	26	9.0	1925	Longleaf Pine	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unknown	0.0	0.0	0.0
26	21	63.5	<Null>	Undrained Flatwoods	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unknown	0.0	0.0	0.0
26	3	41.1	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	0.0	1900	Slash Pine	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unknown	0.0	0.0	0.0
		123.0												Totals	0.0	0.0	7.2

Quarter Mile Cluster Partition Future – Cluster 26.07

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
26	7	0.3	Thin	172.9	50.0	154.9	40.0	18.0	10.0	0.0	0.0	No	No	0.0	0.0	0.0	
26	36	7.2	Modified Group Selection	36.0	50.0	0.0	0.0	0.0	0.0	36.0	50.0	Yes	Yes	7.2	357.8	7.2	
26	41	1.9	Savannah Restoration Thin to 40 (Girdle)	30.1	40.0	0.0	0.0	0.0	0.0	30.1	40.0	Yes	Yes	1.9	77.8	1.9	
26	26	9.0	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
26	21	63.5	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
26	3	41.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
26	30	0.0	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
		123.0											Totals	9.1	435.6	9.1	

Half Mile Partition Current – Cluster 26.07

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	7	12.8	1982	Slash Pine	645.4	166.7	627.4	156.7	18.0	10.0	0.0	0.0	No	No	0.0	0.0	0.0
26	36	11.0	1900	Longleaf Pine	79.2	92.5	14.3	5.0	5.4	5.0	59.4	82.5	Yes	Yes	0.0	0.0	11.0

26	41	23.3	1900	Undrained Flatwoods	164.4	110.0	62.4	20.0	72.0	50.0	30.1	40.0	No	No	0.0	0.0	0.0
26	26	13.6	1925	Longleaf Pine	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
26	21	66.3	unkno wn	Undrained Flatwoods	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
26	3	64.9	1925	Baldcypress-water tupelo	NA	0.0	0.0	0.0									
26	30	8.2	1900	Slash Pine	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
		200.1												Totals	0.0	0.0	11.0

Half Mile Partition Future – Cluster 26.07

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+ in MSS	Acres Recovery
26	7	12.8	Thin	172.9	50.0	154.9	40.0	18.0	10.0	0.0	0.0	No	No	0.0	0.0	0.0
26	36	11.0	Modified Group Selection	36.0	50.0	0.0	0.0	0.0	0.0	36.0	50.0	Yes	Yes	11.0	549.5	11.0
26	41	23.3	Savannah Restoration Thin to 40 (Girdle)	30.1	40.0	0.0	0.0	0.0	0.0	30.1	40.0	Yes	Yes	23.3	933.3	23.3
26	26	13.6	No Treatment	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
26	21	66.3	No Treatment	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
26	3	64.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
26	30	8.2		unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
		200.1											Totals	34.3	1482.8	34.3

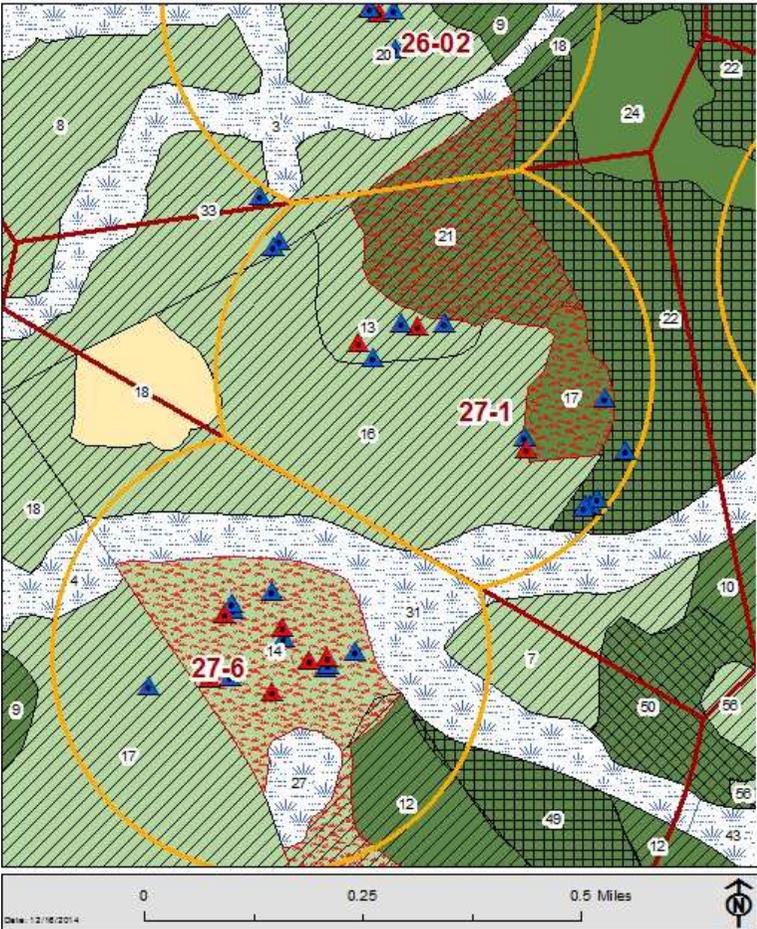
Cluster 27.01

This cluster currently has two stands (compartment 27 stands 21 and 17) totaling to 28.5 acres that currently meet both the MSS and the recovery standard in the half mile partition. Pine stands located in the half mile partition are comprised of five intermediate to mature aged slash stands, six mature longleaf stands, one loblolly stand, and three non-foraging habitat stands.

Compartment 27 stands 7, 10, 50, and 56 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the foraging habitat partition, they are not counted as foraging habitat for cluster 27.01. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stand 22 would receive a savanna thinning treatment reducing the total BA in the stand to 40. Compartment stands 13 and 21 would receive a thinning treatment and compartment 26 stands 8 and 33 would receive a modified group selection treatment reducing these stands to 50 BA. Regular thinning treatments, savanna thinning treatments, and the modified group selection treatments would primarily thin from below leaving the largest trees for foraging habitat. Compartment 27 stand 16 is would receive a first thinning treatment which removes selected rows for harvest. In this stand all size classes would be reduced because entire rows are taken out. After treatment compartment 26 stands 8 and 33 and compartment 27 stands 13, 17, 21, and 22 would meet MSS. Implementation of the proposed action would increase the MSS acres to 89.5 acres in the half mile partition. Due to hydric soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

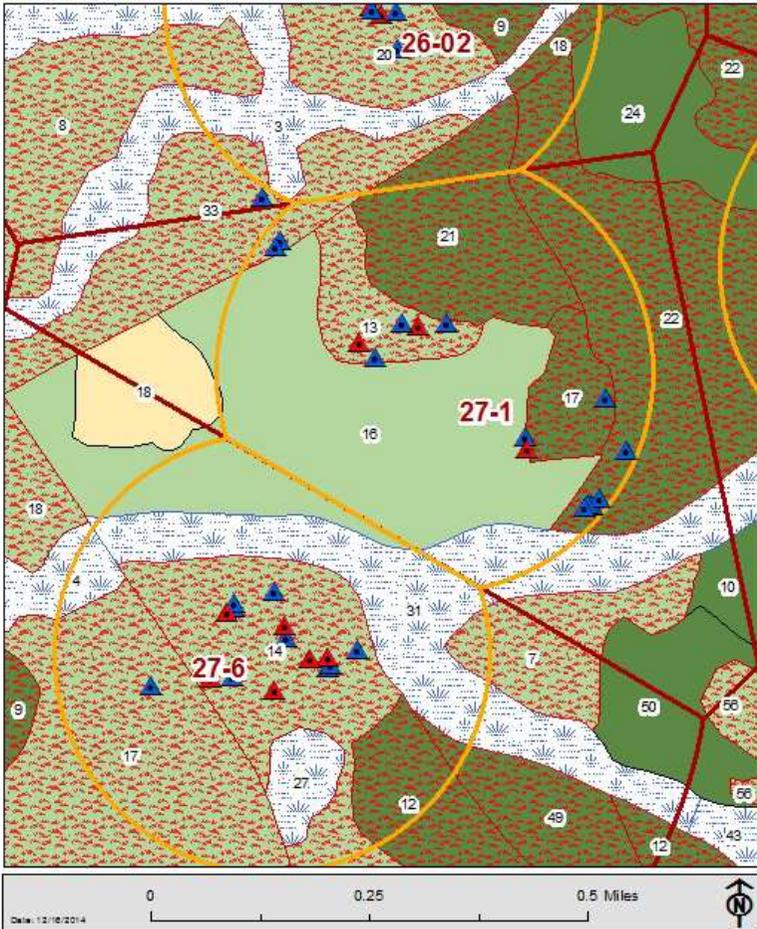
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase. However due to the hydric soil conditions in the project area, breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure. There are 3 active trees in the cluster.

Cluster 27.01 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 27.01 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 27.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	33	2.4	1927	Longleaf Pine	125.8	83.3	60.3	26.7	50.7	36.7	14.8	20	No	No	0.0	0.0	0.0
27	21	20.3	1957	Slash Pine	55.7	66.7	0	0	22.3	20	33.4	46.7	Yes	Yes	20.3	1356.7	20.3
27	13	10.1	1926	Longleaf Pine	135.5	86.7	74.7	20	29.6	23.3	31.2	43.3	No	No	0.0	0.0	0.0
27	16	51.5	1970	Longleaf Pine	258.9	83.6	248.4	74.5	10.4	7.3	0	1.8	No	No	0.0	0.0	0.0
27	17	8.1	1941	Slash Pine	79.3	70	20	7.1	29	24.3	30.3	38.6	Yes	Yes	8.1	510.1	8.1
27	22	14.6	1941	Slash Pine	168.4	122.5	60.3	18.3	68.8	54.2	39.3	50	No	No	0.0	0.0	0.0
27	18	0.1	1941	Loblolly Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
27	31	4.8	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		112.0												Totals	28.5	1866.9	28.5

Quarter Mile Cluster Partition Future – Cluster 27.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
26	33	2.4	Modified Group Selection	56.2	50.0	0.0	0.0	41.4	30.0	14.8	20.0	Yes	No	2.4	118.0	0.0	
27	21	20.3	Thin	7.0	50.0	0.0	0.0	3.7	3.3	33.4	46.7	Yes	Yes	20.3	1017.0	20.3	
27	13	10.1	Thin	39.7	50.0	0.0	0.0	8.5	6.7	31.2	43.3	Yes	Yes	10.1	504.1	10.1	
27	16	51.5	First Thin	140.8	50.0	132.5	42.8	8.3	5.8	0.0	1.4	No	No	0.0	0.0	0.0	
27	17	8.1	No Treatment	79.3	70.0	20.0	7.1	29.0	24.3	30.3	38.6	Yes	Yes	8.1	510.1	8.1	
27	22	14.6	Savannah Restoration Thin to 40	31.4	40.0	0.0	0.0	0.0	0.0	31.4	40.0	Yes	Yes	14.6	585.7	14.6	
27	18	0.1	No Treatment	unkno own	unkno own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
27	31	4.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		112.0												Totals	55.5	2735.0	53.2

Half Mile Partition Current – Cluster 27.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	8	2.0	1927	Longleaf Pine	136.1	98.7	35.4	10.7	84.9	68.0	15.8	20.0	No	No	0.0	0.0	0.0
26	33	15.2	1927	Longleaf Pine	125.8	83.3	60.3	26.7	50.7	36.7	14.8	20.0	No	No	0.0	0.0	0.0
27	21	20.4	1957	Slash Pine	55.7	66.7	0.0	0.0	22.3	20.0	33.4	46.7	Yes	Yes	20.4	1357.6	20.4
27	13	10.1	1926	Longleaf Pine	135.5	86.7	74.7	20.0	29.6	23.3	31.2	43.3	No	No	0.0	0.0	0.0
27	16	54.4	1970	Longleaf Pine	258.9	83.6	248.4	74.5	10.4	7.3	0.0	1.8	No	No	0.0	0.0	0.0

27	17	8.1	1941	Slash Pine	79.3	70.0	20.0	7.1	29.0	24.3	30.3	38.6	Yes	Yes	8.1	510.1	8.1	
27	22	33.8	1941	Slash Pine	168.4	122.5	60.3	18.3	68.8	54.2	39.3	50.0	No	No	0.0	0.0	0.0	
27	7	6.7	1928	Longleaf Pine	162.2	110.0	43.9	10.0	103.3	80.0	15.0	20.0	No	No	0.0	0.0	0.0	
27	56	1.2	1928	Longleaf Pine	113.1	100.0	0.0	0.0	99.3	80.0	13.8	20.0	No	No	0.0	0.0	0.0	
27	50	7.2	1928	Undrained Flatwoods	220.1	84.0	167.5	48.0	52.7	36.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	10	3.0	1970	Slash Pine	172.0	80.0	134.2	53.3	37.8	26.7	0.0	0.0	No	No	0.0	0.0	0.0	
27	18	6.3	1941	Loblolly Pine	unkno wn	unkno wn	unknow n	unknow n	unknow n	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknown	0.0	0.0	0.0
27	24	1.3	1941	Slash Pine	unkno wn	unkno wn	unknow n	unknow n	unknow n	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknown	0.0	0.0	0.0
26	3	3.9	1925	Baldcypress-water tupelo	NA	0.0	0.0	0.0										
27	31	13.9	1914	Pond Cypress	NA	0.0	0.0	0.0										
															Totals	28.5	1867.7	28.5

Half Mile Partition Future – Cluster 27.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
26	8	2.0	Modified Group Selection	53.3	50.0	0.0	0.0	37.5	30.0	15.8	20.0	Yes	No	2.0	98.8	0.0	
26	33	15.2	Modified Group Selection	56.2	50.0	0.0	0.0	41.4	30.0	14.8	20.0	Yes	No	15.2	761.6	0.0	
27	21	20.4	Thin	7.0	50.0	0.0	0.0	3.7	3.3	33.4	46.7	Yes	Yes	20.4	1017.7	20.4	
27	13	10.1	Thin	39.7	50.0	0.0	0.0	8.5	6.7	31.2	43.3	Yes	Yes	10.1	504.1	10.1	
27	16	54.4	First Thin	140.8	50.0	132.5	42.8	8.3	5.8	0.0	1.4	No	No	0.0	0.0	0.0	
27	17	8.1	No Treatment	79.3	70.0	20.0	7.1	29.0	24.3	30.3	38.6	Yes	Yes	8.1	510.1	8.1	
27	22	33.8	Savannah Restoration Thin to 40	31.4	40.0	0.0	0.0	0.0	0.0	31.4	40.0	Yes	Yes	33.8	1352.1	33.8	
27	7	6.7	Thin	53.7	50.0	0.0	0.0	38.7	30.0	15.0	20.0	Yes	No	6.7	332.6	0.0	
27	56	1.2	Thin	51.0	50.0	0.0	0.0	37.2	30.0	13.8	20.0	Yes	No	1.2	58.5	0.0	
27	50	7.2	Savannah Restoration Thin to 10-40 BA	14.6	10.0	0.0	0.0	14.6	10.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	10	3.0	Thin	87.9	50.0	50.1	23.3	37.8	26.7	0.0	0.0	No	No	0.0	0.0	0.0	
27	18	6.3	No Treatment	unkno wn	unkn own	unkno wn	unknow n	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	0.0	0.0	0.0
27	24	1.3	No Treatment	unkno wn	unkn own	unkno wn	unknow n	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	0.0	0.0	0.0
26	3	3.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
27	31	13.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
														Totals	89.5	4244.4	72.3

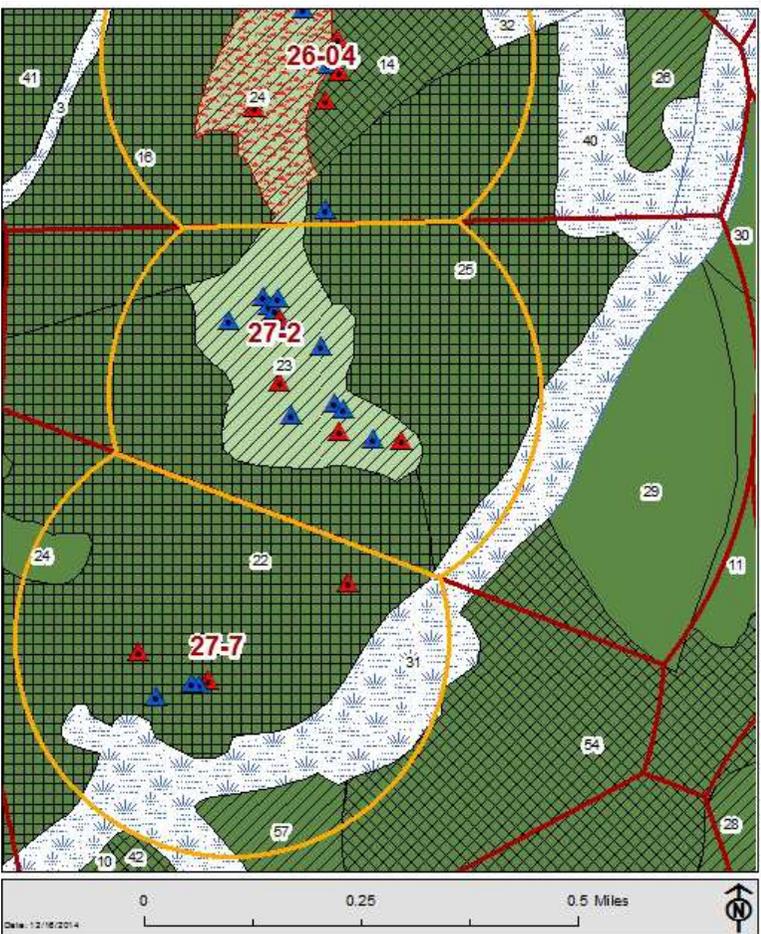
Cluster 27.02

This cluster currently has no stands that meet the MSS and 2 stands (compartment 26 stand 16 and compartment 27 stand 23 totaling 43.1 acres) that meet the recovery standard. Pine stands located in the half mile partition are comprised of six intermediate to mature aged slash stands, one mature longleaf stands, and three non-foraging habitat stands. One non-foraging stand characterized as an undrained flatwoods (compartment 26 stand 16) contains enough slash pine to receive treatment and is considered in foraging analysis. Compartment 27 stands 29, 30, and 54 would be separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the foraging habitat in the partition, they are not counted as foraging habitat for cluster 27.02. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 26 stand 16 and Compartment 27 stands 22 and 25 would receive a savanna thinning treatment reducing the total BA in the stand to 40. Compartment 27 stand 23 would receive a thinning treatment reducing this stand to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 26 stand 16 and compartment 27 stands 22, 23, and 25 would meet MSS and recovery standards. Implementation of the proposed action would increase the MSS acres to 128.5 acres in the half mile partition.

Due to hydric soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

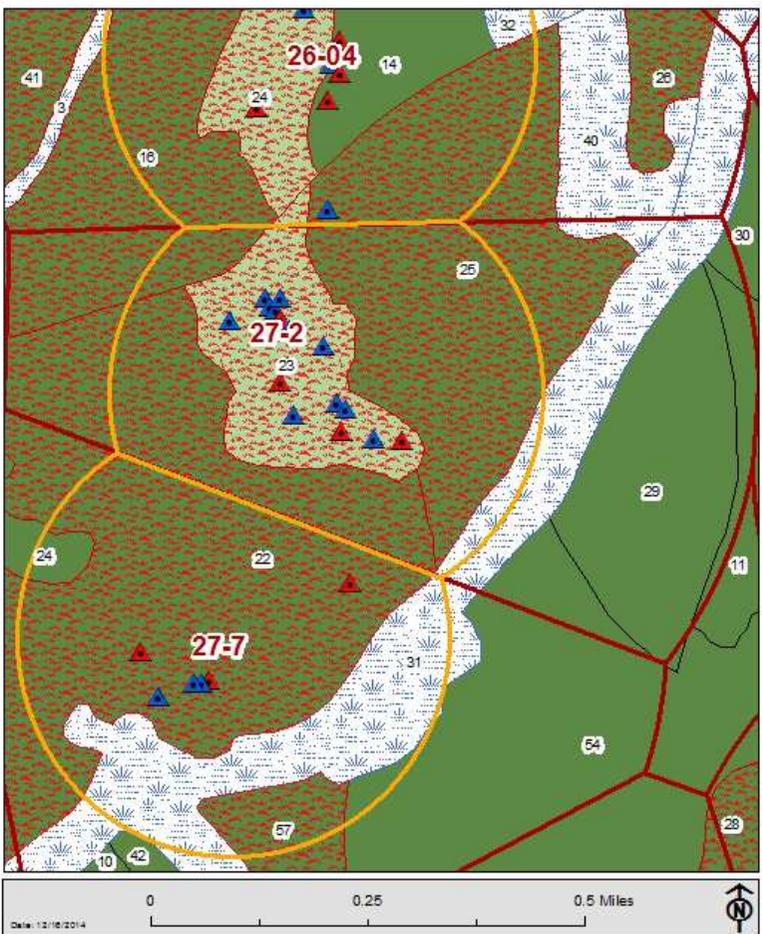
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented this foraging partition would meet both the MSS and recovery standard. However due to the hydric soil conditions in the project area, breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure. There are 4 active trees in the cluster.

Cluster 27.02 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Cluster 27.02 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 27.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	16	4.4	1941	Undrained Flatwoods	96	110	0	0	44.5	40	51.5	70	No	Yes	0.0	0.0	4.4
27	23	28.0	1890	Longleaf Pine	112.1	102.9	35.3	8.6	30	27.1	46.8	67.1	No	Yes	0.0	0.0	28.0
27	22	26.4	1941	Slash Pine	168.4	122.5	60.3	18.3	68.8	54.2	39.3	50	No	No	0.0	0.0	0.0
27	25	38.0	1959	Slash Pine	147	113.9	48.7	16.5	60	46.1	38.4	51.3	No	No	0.0	0.0	0.0
27	31	3.2	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
Totals															0.0	0.0	32.3

Quarter Mile Cluster Partition Future – Cluster 27.02

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	16	4.4	Savannah Restoration Thin to 40	29.4	40.0	0.0	0.0	0.0	0.0	29.4	40.0	Yes	Yes	4.4	174.2	4.4
27	23	28.0	Thin	34.9	50.0	0.0	0.0	0.0	0.0	34.9	50.0	Yes	Yes	28.0	1399.8	28.0
27	22	26.4	Savannah Restoration Thin to 40	31.4	40.0	0.0	0.0	0.0	0.0	31.4	40.0	Yes	Yes	26.4	1055.4	26.4
27	25	38.0	Savannah Restoration Thin to 40	29.9	40.0	0.0	0.0	0.0	0.0	29.9	40.0	Yes	Yes	38.0	1518.6	38.0
27	31	3.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
Totals														96.7	4147.9	96.7

Half Mile Partition Current – Cluster 27.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	16	15.1	1941	Undrained Flatwoods	96.0	110.0	0.0	0.0	44.5	40.0	51.5	70.0	No	Yes	0.0	0.0	15.1
27	23	28.0	1890	Longleaf Pine	112.1	102.9	35.3	8.6	30.0	27.1	46.8	67.1	No	Yes	0.0	0.0	28.0
27	22	36.5	1941	Slash Pine	168.4	122.5	60.3	18.3	68.8	54.2	39.3	50.0	No	No	0.0	0.0	0.0
27	54	6.8	1959	Slash Pine	147.8	100.0	66.0	22.5	64.8	55.0	17.0	22.5	No	No	0.0	0.0	0.0
27	25	48.8	1959	Slash Pine	147.0	113.9	48.7	16.5	60.0	46.1	38.4	51.3	No	No	0.0	0.0	0.0
27	29	37.1	1946	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
27	11	5.4	1970	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0

27	30	1.0	1970	Slash Pine	unkno wn	0.0	0.0	0.0										
27	40	1.9	1946	Pond Cypress	NA	0.0	0.0	0.0										
27	31	20.9	1914	Pond Cypress	NA	0.0	0.0	0.0										
		201.5													Totals	0.0	0.0	43.1

Half Mile Partition Future– Cluster 27.02

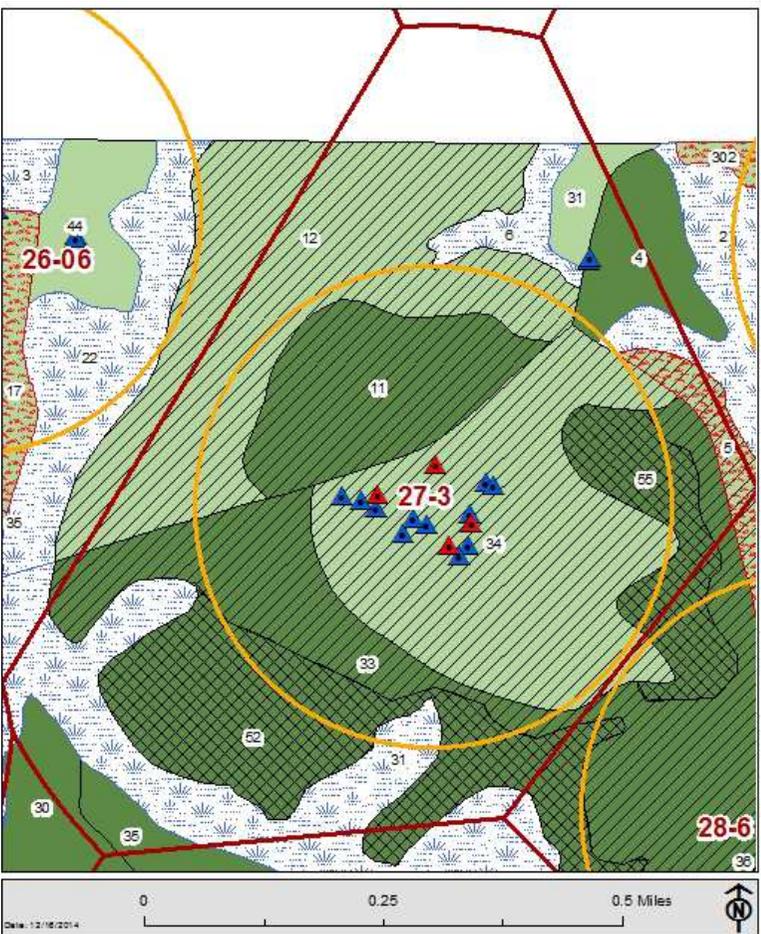
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
26	16	15.1	Savannah Restoration Thin to 40	29.4	40.0	0.0	0.0	0.0	0.0	29.4	40.0	Yes	Yes	15.1	606.0	15.1	
27	23	28.0	Thin	34.9	50.0	0.0	0.0	0.0	0.0	34.9	50.0	Yes	Yes	28.0	1399.8	28.0	
27	22	36.5	Savannah Restoration Thin to 40	31.4	40.0	0.0	0.0	0.0	0.0	31.4	40.0	Yes	Yes	36.5	1458.9	36.5	
27	54	6.8	Savannah Restoration Thin to 10-40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0	
27	25	48.8	Savannah Restoration Thin to 40	29.9	40.0	0.0	0.0	0.0	0.0	29.9	40.0	Yes	Yes	48.8	1953.3	48.8	
27	29	37.1	No Treatment	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
27	11	5.4	No Treatment	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
27	30	1.0	No Treatment	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
27	40	1.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
27	31	20.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		201.5												Totals	128.5	5418.0	128.5

Cluster 27.03

This cluster currently has no stands that meet either the MSS or recovery standard. Pine stands located in the half mile partition are comprised of seven intermediate to mature aged slash stands, four mature longleaf stands, and three non-foraging stands. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stands 52 and 55 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In these treatment areas, parts of the stands with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stands with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stands because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. The compartment 26 stands 11 and 12, compartment 27 stands 33 and 34, and compartment 28 stand 5 would receive a thinning treatments reducing these stands to 50 BA. Regular thinning treatments, savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 26 stands 11 and 12, compartment 27 stands 33 and 34, and compartment 28 stand 5 would meet MSS. Implementation of the proposed action would increase the MSS acres to 156 acres in the half mile partition.

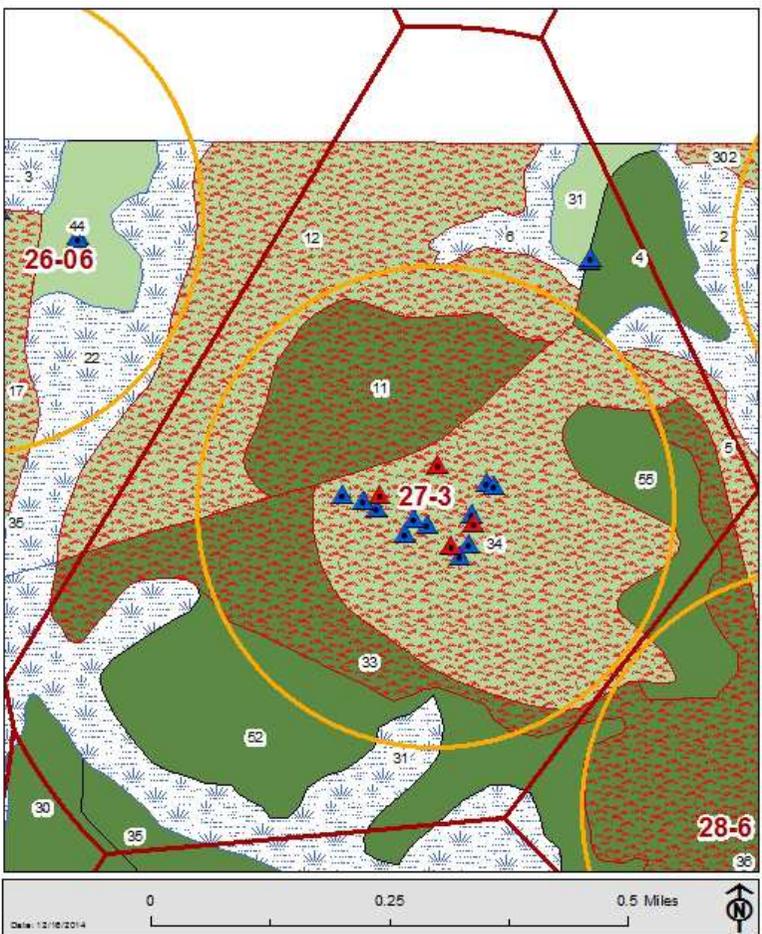
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but this cluster would meet the MSS if the proposed action is implemented.

Cluster 27.03 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
		Loblolly Pine

Cluster 27.03 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 27.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres
26	11	24.6	1948	Slash Pine	176.9	113.3	89.5	20	49.5	33.3	37.9	60	No	No	0.0	0.0	0.0
26	12	13.0	1970	Longleaf Pine	175.2	114.3	58.5	22.9	114	88.6	2.7	2.9	No	No	0.0	0.0	0.0
27	34	55.0	1872	Longleaf Pine	160.4	104.7	64.1	18.8	73.8	57.6	22.5	28.2	No	No	0.0	0.0	0.0
27	52	7.2	1948	Slash Pine	163.4	102.5	80.8	22.5	56.8	45	25.8	35	No	No	0.0	0.0	0.0
27	33	16.8	1948	Slash Pine	164.2	103.1	78.4	27.7	68.8	52.3	17.1	23.1	No	No	0.0	0.0	0.0
27	55	7.2	1948	Slash Pine	127.3	80	72.3	25	43.1	35	11.8	20	No	No	0.0	0.0	0.0
28	4	0.2	1959	Slash Pine	179.1	96	94	16	50.5	36	34.5	44	No	No	0.0	0.0	0.0
28	5	0.0	1932	Longleaf Pine	118.7	76	50	10	42.7	34	25.9	32	Yes	Yes	0.0	0.0	0.0
26	6	0.0	<Null>	unknown	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
27	31	1.4	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	0.1	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		125.7												Totals	0.0	0.0	0.0

Quarter Mile Cluster Partition Future – Cluster 27.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres	
26	11	24.6	Thin	31.6	50.0	0.0	0.0	0.0	0.0	31.6	50.0	Yes	Yes	24.6	1231.7	24.6	
26	12	13.0	Thin	63.3	50.0	0.0	0.0	60.6	47.1	2.7	2.9	Yes	No	13.0	648.2	0.0	
27	34	55.0	Thin	50.4	50.0	0.0	0.0	27.9	21.8	22.5	28.2	Yes	Yes	55.0	2752.1	55.0	
27	52	7.2	Savannah Restoration Thin to 10-40 BA	7.4	10.0	0.0	0.0	0.0	0.0	7.4	10.0	No	No	0.0	0.0	0.0	
27	33	16.8	Thin	52.5	50.0	0.0	0.0	35.4	26.9	17.1	23.1	Yes	No	16.8	842.4	0.0	
27	55	7.2	Savannah Restoration Thin to 10-40 BA	5.9	10.0	0.0	0.0	0.0	0.0	5.9	10.0	No	No	0.0	0.0	0.0	
28	4	0.2	No Treatment	179.1	96.0	94.0	16.0	50.5	36.0	34.5	44.0	No	No	0.0	0.0	0.0	
28	5	0.0	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	0.0	0.0	0.0	
26	6	0.0	No Treatment	unkno own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
27	31	1.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	0.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		125.7											Totals	109.5	5474.4	79.7	

Half Mile Partition Current – Cluster 27.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	11	24.6	1948	Slash Pine	176.9	113.3	89.5	20.0	49.5	33.3	37.9	60.0	No	No	0.0	0.0	0.0
26	12	44.6	1970	Longleaf Pine	175.2	114.3	58.5	22.9	114.0	88.6	2.7	2.9	No	No	0.0	0.0	0.0
27	34	56.5	1872	Longleaf Pine	160.4	104.7	64.1	18.8	73.8	57.6	22.5	28.2	No	No	0.0	0.0	0.0
27	52	34.0	1948	Slash Pine	163.4	102.5	80.8	22.5	56.8	45.0	25.8	35.0	No	No	0.0	0.0	0.0
27	33	26.6	1948	Slash Pine	164.2	103.1	78.4	27.7	68.8	52.3	17.1	23.1	No	No	0.0	0.0	0.0
27	55	10.6	1948	Slash Pine	127.3	80.0	72.3	25.0	43.1	35.0	11.8	20.0	No	No	0.0	0.0	0.0
28	4	5.3	1959	Slash Pine	179.1	96.0	94.0	16.0	50.5	36.0	34.5	44.0	No	No	0.0	0.0	0.0
28	5	3.7	1932	Longleaf Pine	118.7	76.0	50.0	10.0	42.7	34.0	25.9	32.0	Yes	Yes	3.7	244.8	3.7
26	31	3.3	1970	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
26	6	5.2	unkno wn	unknown	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
27	30	3.4	1970	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
27	35	3.3	1970	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
27	31	24.6	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	2.2	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		247.8												Totals	3.7	244.8	3.7

Half Mile Partition Future– Cluster 27.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
26	11	24.6	Thin	31.6	50.0	0.0	0.0	0.0	0.0	31.6	50.0	Yes	Yes	24.6	1231.7	24.6	
26	12	44.6	Thin	63.3	50.0	0.0	0.0	60.6	47.1	2.7	2.9	Yes	No	44.6	2232.5	0.0	
27	34	56.5	Thin	50.4	50.0	0.0	0.0	27.9	21.8	22.5	28.2	Yes	Yes	56.5	2823.2	56.5	
27	52	34.0	Savannah Restoration Thin to 10-40 BA	7.4	10.0	0.0	0.0	0.0	0.0	7.4	10.0	No	No	0.0	0.0	0.0	
27	33	26.6	Thin	52.5	50.0	0.0	0.0	35.4	26.9	17.1	23.1	Yes	No	26.6	1327.9	0.0	
27	55	10.6	Savannah Restoration Thin to 10-40 BA	5.9	10.0	0.0	0.0	0.0	0.0	5.9	10.0	No	No	0.0	0.0	0.0	
28	4	5.3	No Treatment	179.1	96.0	94.0	16.0	50.5	36.0	34.5	44.0	No	No	0.0	0.0	0.0	
28	5	3.7	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	3.7	185.4	3.7	
26	31	3.3	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
26	6	5.2	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0

27	30	3.4	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unkno wn	unknown	0.0	0.0	0.0
27	35	3.3	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unknow n	unknow n	unknow n	unknow n	unkno wn	unknown	0.0	0.0	0.0
27	31	24.6	No Treatment	NA	0.0	0.0	0.0									
28	2	2.2	No Treatment	NA	0.0	0.0	0.0									
		247.8											Totals	156.0	7800.7	84.8

Cluster 27.04

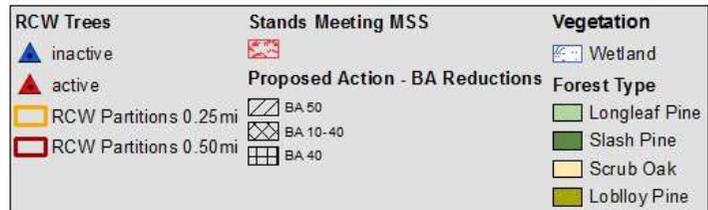
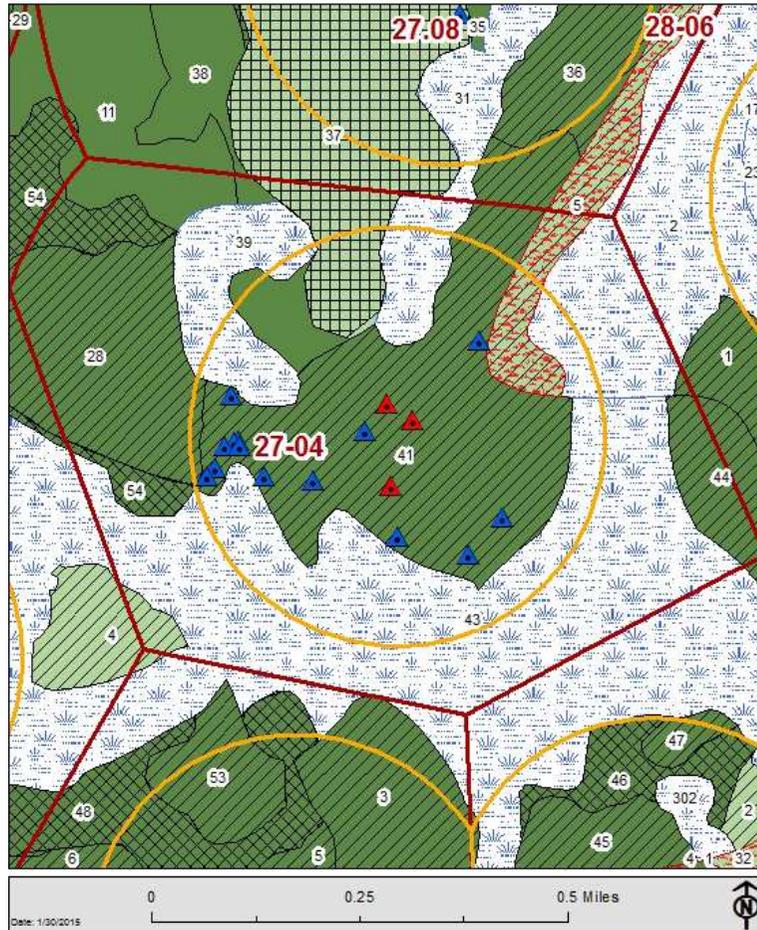
This cluster currently only has one stand (compartment 28 stand 5) totaling 7.7 acres that meets both the MSS and recovery standard. Pine stands located in the half mile partition are comprised of nine intermediate to mature aged slash stands, three mature longleaf stands, and seven non-foraging stands. Compartment 27 stands 44 and 4 and compartment 28 stand 1 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the foraging habitat in partition, they are not counted as foraging habitat for cluster 27.04. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum.

Compartment 27 stands 48 and 54 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In these treatment areas, parts of the stands with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stand with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stands because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Compartment 27 stand 37 would receive a savanna thinning treatment reducing the total BA in the stands to 40. Compartment 27 stands 3, 28, 53, and 41 and compartment 28 stand 5 would receive a thinning treatment reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 3, 28, 53, 37, and 41 and compartment 28 stand 5 would meet MSS. Implementation of the proposed action would increase the MSS acres to 125.9 acres in the half mile partition.

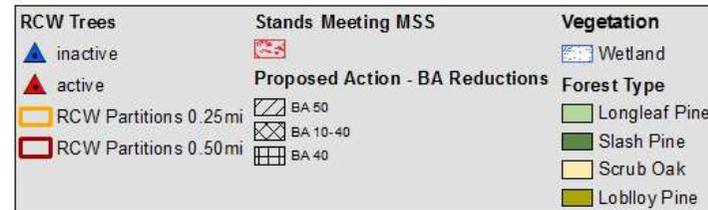
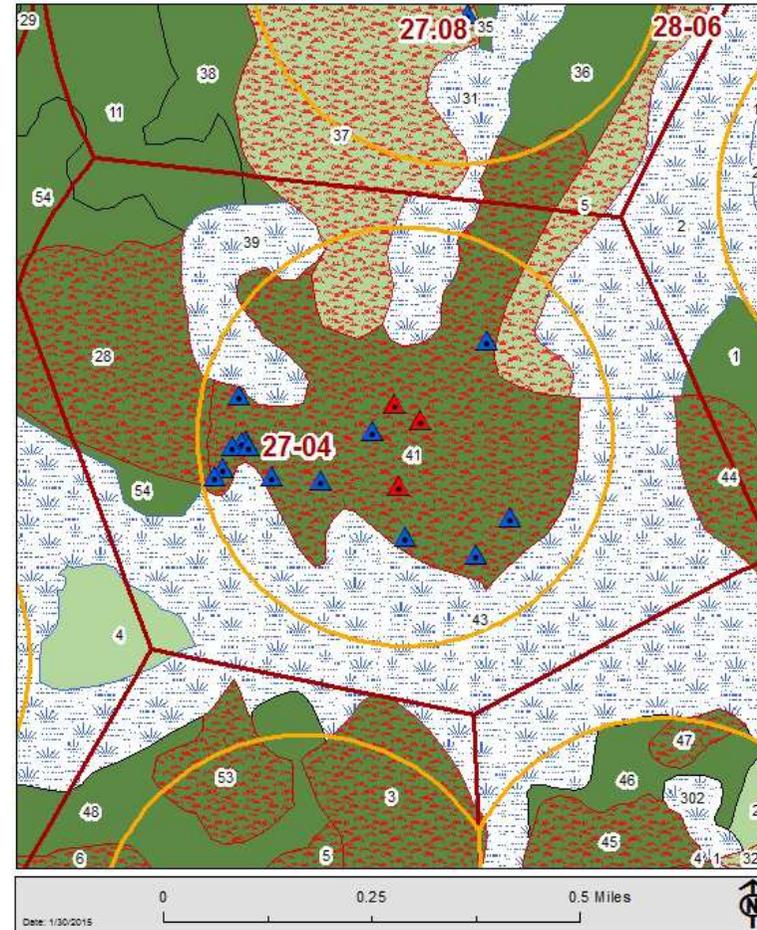
Due to hydric soil conditions and this cluster being located within the 1500 ft buffer of documented flatwoods salamander ponds, harvest, hauling, and road construction restrictions during the RCW breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance or direct salamander mortality. Also a log landing would need to be placed within 200 ft of an inactive cavity tree due to hydric conditions in the stand. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but this cluster would meet the MSS if the proposed action is implemented. However due to the hydric soil conditions in the project area, RCW breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure. There are 7 active trees in the cluster.

Cluster 27.04 Pre-treatment conditions with proposed harvests



Cluster 27.04 Post-treatment conditions



Quarter Mile Cluster Partition Current – Cluster 27.04

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA1 4 in +	MSS Current	Recovery Current	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	28	1.0	1959	Slash Pine	221.7	130	119.5	45	83.4	60	18.9	25	No	No	0.0	0.0	0.0
27	37	6.4	1957	Longleaf Pine	194.5	105	106.6	32.5	62.5	42.5	25.3	30	No	No	0.0	0.0	0.0
27	41	67.2	1957	Slash Pine	108	90	24.2	6.7	54.9	44.4	29	38.9	No	No	0.0	0.0	0.0
28	5	5.2	1932	Longleaf Pine	118.7	76	50	10	42.7	34	25.9	32	Yes	Yes	5.2	343.2	5.2
27	39	5.7	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	43	30.4	<Null>	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	3.5	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	3.8	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		123.2												Totals	5.2	343.2	5.2

Quarter Mile Cluster Partition Future – Cluster 27.04

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
27	28	1.0	Thin	53.7	50.0	0.0	0.0	34.8	25.0	18.9	25.0	Yes	Yes	1.0	50.0	1.0
27	37	6.4	Savannah Restoration Thin to 40 (Girdle)	40.0	40.0	0.0	0.0	14.7	10.0	25.3	30.0	Yes	Yes	6.4	256.0	6.4
27	41	67.2	Thin	42.7	50.0	0.0	0.0	13.7	11.1	29.0	38.9	Yes	Yes	67.2	3360.0	67.2
28	5	5.2	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	5.2	260.0	5.2
27	39	5.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	43	30.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	3.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	3.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		123.2											Totals	79.8	3926.0	79.8

Half Mile Partition Current – Cluster 27.04

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA14 in +	BA1 4 in +	MSS Current	Recovery Current	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	44	7.1	1962	Slash Pine	253.7	140.0	136.7	46.7	108.9	83.3	8.0	10.0	No	No	0.0	0.0	0.0
27	3	0.0	1970	Slash Pine	201.0	123.3	97.9	40.0	91.9	70.0	11.1	13.3	No	No	0.0	0.0	0.0
27	4	1.9	1987	Longleaf Pine	401.1	100.0	401.1	100.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0
27	54	8.2	1959	Slash Pine	147.8	100.0	66.0	22.5	64.8	55.0	17.0	22.5	No	No	0.0	0.0	0.0
27	28	30.7	1959	Slash Pine	221.7	130.0	119.5	45.0	83.4	60.0	18.9	25.0	No	No	0.0	0.0	0.0
27	37	11.1	1957	Longleaf Pine	194.5	105.0	106.6	32.5	62.5	42.5	25.3	30.0	No	No	0.0	0.0	0.0
27	41	69.3	1957	Slash Pine	108.0	90.0	24.2	6.7	54.9	44.4	29.0	38.9	No	No	0.0	0.0	0.0
28	5	7.7	1932	Longleaf Pine	118.7	76.0	50.0	10.0	42.7	34.0	25.9	32.0	Yes	Yes	7.7	508.2	7.7
28	1	0.3	1962	Slash Pine	223.8	128.0	96.5	20.0	100.5	76.0	26.9	32.0	No	No	0.0	0.0	0.0
27	11	6.6	1970	Slash Pine	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
27	38	0.8	1946	Slash Pine	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0
27	39	16.7	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	43	87.8	NA	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	8.5	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	16.4	1920	Baldcypress- water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		273.2											Totals		7.7	508.2	7.7

Half Mile Partition Future– Cluster 27.04

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
27	44	7.1	Thin	60.3	50.0	0.0	0.0	52.3	40.0	8.0	10.0	Yes	No	7.1	355.0	0.0	
27	3	0.0	Thin	59.3	50.0	0.0	0.0	48.2	36.7	11.1	13.3	Yes	No	0.0	0.1	0.0	
27	4	1.9	Thin	200.6	50.0	200.6	50.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	54	8.2	Savannah Restoration Thin to 10-40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0	
27	28	30.7	Thin	53.7	50.0	0.0	0.0	34.8	25.0	18.9	25.0	Yes	Yes	30.7	1535.0	30.7	
27	37	11.1	Savannah Restoration Thin to 40 (Girdle)	40.0	40.0	0.0	0.0	14.7	10.0	25.3	30.0	Yes	Yes	11.1	444.0	11.1	
27	41	69.3	Thin	42.7	50.0	0.0	0.0	13.7	11.1	29.0	38.9	Yes	Yes	69.3	3465.2	69.3	
28	5	7.7	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	7.7	385.0	7.7	
28	1	0.3	Thin	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	11	6.6	No Treatment	unk now n	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0

27	38	0.8	No Treatment	unk now n	unkn own	unkno wn	unknown	0.0	0.0	0.0							
27	39	16.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	43	87.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	8.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	16.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		273.2												Totals	125.9	5829.3	118.8

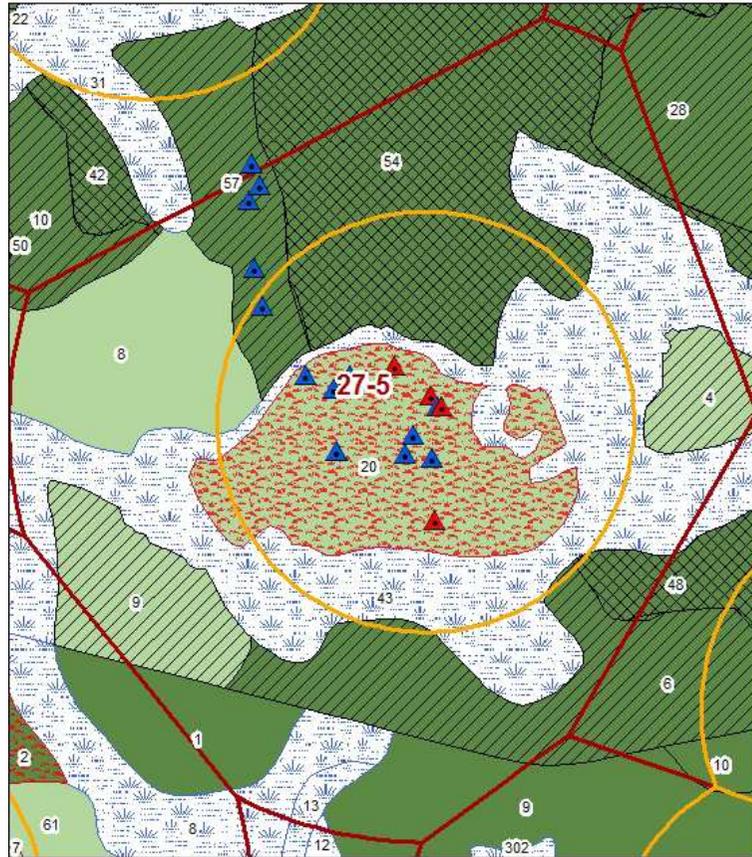
Cluster 27.05

This cluster currently only has one stand (compartment 27 stand 20) totaling 51.2 acres that meets the MSS and one stand (compartment 27 stand 8) totaling 34.2 that meets the recovery standard. Pine stands located in the half mile partition are comprised of eight intermediate to mature aged slash stands, 4 mature longleaf stands, and six non-foraging stands. Compartment 27 stands 6, 9, and 48 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the foraging habitat in partition, they are not counted as foraging habitat for cluster 27.05. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stands 48 and 54 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In these treatment areas, parts of the stands with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stands with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stands because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Compartment 27 stands 4, 10, 28, and 57 would receive a thinning treatment reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 20, 28, and 57 would meet MSS. Implementation of the proposed action would increase the MSS acres to 95.2 acres in the half mile partition.

Due to hydric soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

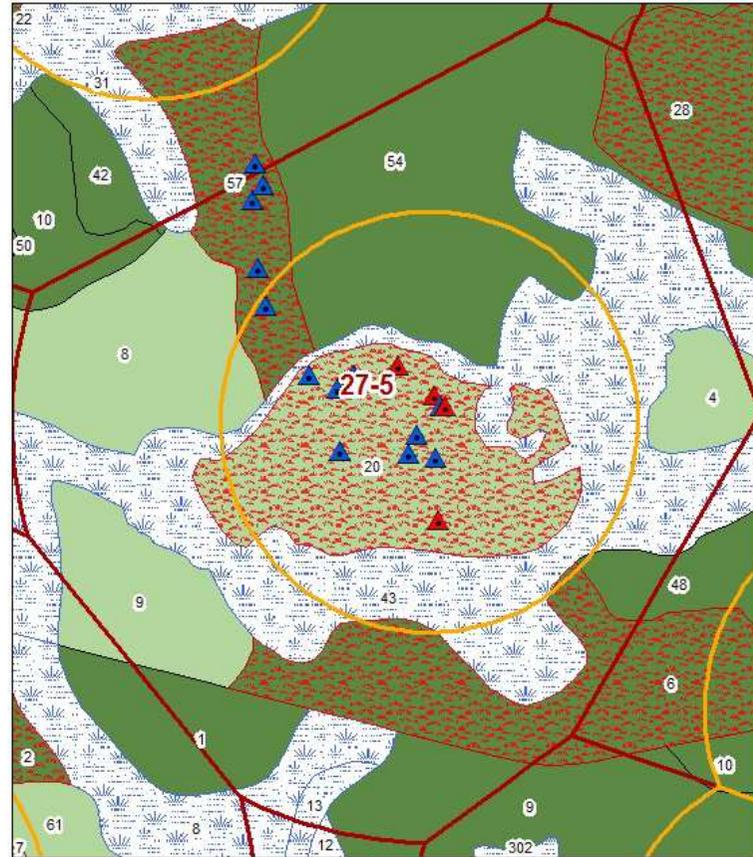
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase. However due to the hydric soil conditions in the project area, breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure. There are 4 active trees in the cluster.

Cluster 27.05 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Cluster 27.05 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 27.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres							
27	8	2.3	1928	Longleaf Pine	61.7	76.7	9.5	3.3	20.9	13.3	31.2	60	No	Yes	0.0	0.0	2.3							
27	20	48.8	1928	Longleaf Pine	95.4	71.4	29.3	11.4	45.5	34.3	20.6	25.7	Yes	No	48.8	2928.9	0.0							
27	57	4.7	1959	Slash Pine	237.3	100	135.6	20	83.7	60	17.9	20	No	No	0.0	0.0	0.0							
27	54	25.5	1959	Slash Pine	147.8	100	66	22.5	64.8	55	17	22.5	No	No	0.0	0.0	0.0							
27	6	0.7	1957	Slash Pine	110.7	84	34.6	10	50.3	41	25.8	33	No	No	0.0	0.0	0.0							
27	48	0.1	1941	Undrained Flatwoods	122.9	126.7	12.1	3.3	55.2	46.7	55.6	76.7	No	No	0.0	0.0	0.0							
27	43	43.5	<Null>	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0							
															125.7						Totals	48.8	2928.9	2.3

Quarter Mile Cluster Partition Future – Cluster 27.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres								
27	8	2.3	No Treatment	61.7	76.7	9.5	3.3	20.9	13.3	31.2	60.0	No	Yes	0.0	0.0	2.3								
27	20	48.8	No Treatment	95.4	71.4	29.3	11.4	45.5	34.3	20.6	25.7	Yes	No	48.8	2928.9	0.0								
27	57	4.7	Thin	59.8	50.0	0.0	0.0	41.9	30.0	17.9	20.0	Yes	No	4.7	235.3	0.0								
27	54	25.5	Savannah Restoration Thin to 10-40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0								
27	6	0.7	Thin	46.7	50.0	0.0	0.0	20.9	17.0	25.8	33.0	Yes	Yes	0.7	34.8	0.7								
27	48	0.1	Savannah Restoration Thin to 10-40 BA	7.2	10.0	0.0	0.0	0.0	0.0	7.2	10.0	No	No	0.0	0.0	0.0								
27	43	43.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0								
															125.7						Totals	53.5	3164.2	2.3

Half Mile Partition Current – Cluster 27.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres
27	9	20.0	1987	Longleaf Pine	595.1	160.0	572.3	146.7	22.8	13.3	0.0	0.0	No	No	0.0	0.0	0.0
27	8	34.2	1928	Longleaf Pine	61.7	76.7	9.5	3.3	20.9	13.3	31.2	60.0	No	Yes	0.0	0.0	34.2
27	20	51.2	1928	Longleaf Pine	95.4	71.4	29.3	11.4	45.5	34.3	20.6	25.7	Yes	No	51.2	3072.3	0.0
27	4	9.4	1987	Longleaf Pine	401.1	100.0	401.1	100.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0
27	57	12.9	1959	Slash Pine	237.3	100.0	135.6	20.0	83.7	60.0	17.9	20.0	No	No	0.0	0.0	0.0
27	54	65.0	1959	Slash Pine	147.8	100.0	66.0	22.5	64.8	55.0	17.0	22.5	No	No	0.0	0.0	0.0
27	28	5.4	1959	Slash Pine	221.7	130.0	119.5	45.0	83.4	60.0	18.9	25.0	No	No	0.0	0.0	0.0
27	10	2.6	1970	Slash Pine	172.0	80.0	134.2	53.3	37.8	26.7	0.0	0.0	No	No	0.0	0.0	0.0

27	6	28.1	1957	Slash Pine	110.7	84.0	34.6	10.0	50.3	41.0	25.8	33.0	No	No	0.0	0.0	0.0
27	48	4.0	1941	Undrained Flatwoods	122.9	126.7	12.1	3.3	55.2	46.7	55.6	76.7	No	No	0.0	0.0	0.0
27	42	0.1	1970	Slash Pine	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0						
27	43	107.1	unkno wn	Brush Species	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0						
27	31	0.5	1914	Pond Cypress	NA	0.0	0.0	0.0									
72	9	11.5	1958	Slash Pine	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0						
72	13	2.1	unkno wn	Undrained Flatwoods	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0						
72	1	9.0	1960	Slash Pine	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0						
72	8	6.5	1920	Brush Species	NA	0.0	0.0	0.0									
72	12	0.1	1940	Brush Species	NA	0.0	0.0	0.0									
		369.7												Totals	51.2	3072.3	34.2

Half Mile Partition Future – Cluster 27.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	9	20.0	Thin	159.3	50.0	136.5	36.7	22.8	13.3	0.0	0.0	No	No	0.0	0.0	0.0
27	8	34.2	No Treatment	61.7	76.7	9.5	3.3	20.9	13.3	31.2	60.0	No	Yes	0.0	0.0	34.2
27	20	51.2	No Treatment	95.4	71.4	29.3	11.4	45.5	34.3	20.6	25.7	Yes	No	51.2	3072.3	0.0
27	4	9.4	Thin	200.6	50.0	200.6	50.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0
27	57	12.9	Thin	59.8	50.0	0.0	0.0	41.9	30.0	17.9	20.0	Yes	No	12.9	645.0	0.0
27	54	65.0	Savannah Restoration Thin to 10-40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0
27	28	5.4	Thin	53.7	50.0	0.0	0.0	34.8	25.0	18.9	25.0	Yes	Yes	5.4	270.0	5.4
27	10	2.6	Thin	87.9	50.0	50.1	23.3	37.8	26.7	0.0	0.0	No	No	0.0	0.0	0.0
27	6	28.1	Thin	46.7	50.0	0.0	0.0	20.9	17.0	25.8	33.0	Yes	Yes	28.1	1404.6	28.1
27	48	4.0	Savannah Restoration Thin to 10-40 BA	7.2	10.0	0.0	0.0	0.0	0.0	7.2	10.0	No	No	0.0	0.0	0.0
27	42	0.1	No Treatment	unkno wn	unkno wn	unkno wn	unk now n	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
27	43	107.1	No Treatment	unkno wn	unkno wn	unkno wn	unk now n	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
27	31	0.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	9	11.5	No Treatment	unkno wn	unkno wn	unkno wn	unk now n	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0

72	13	2.1	No Treatment	unkno wn	unkno wn	unkno wn	unk now n	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
72	1	9.0	No Treatment	unkno wn	unkno wn	unkno wn	unk now n	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
72	8	6.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	12	0.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		369.7											Totals	69.5	3987.3	39.6

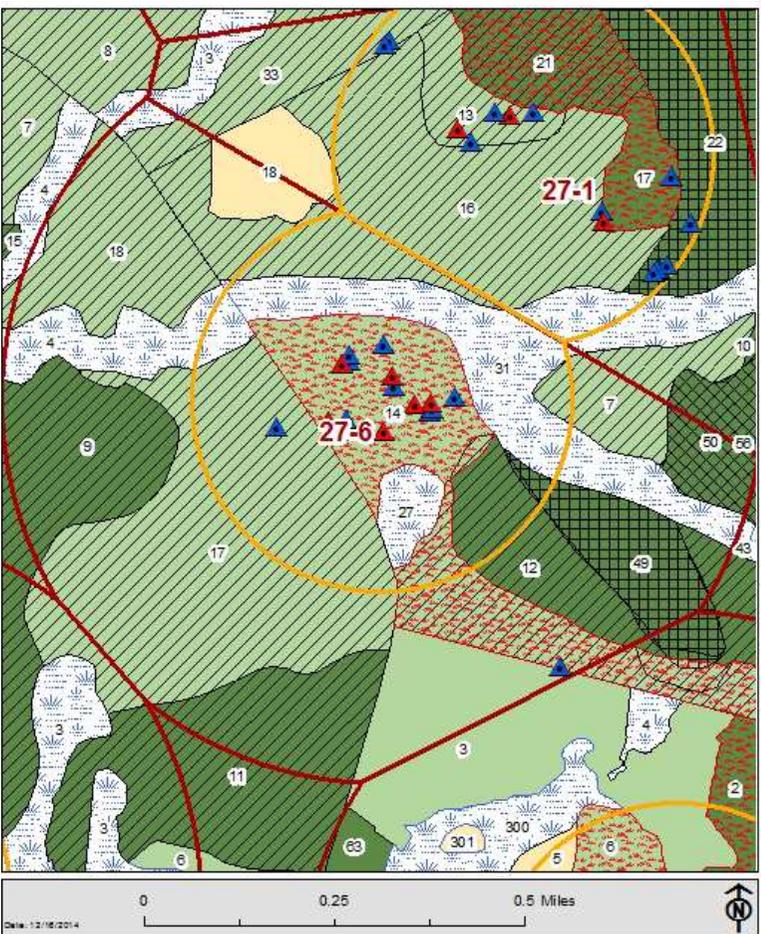
Cluster 27.06

This cluster currently only has one stand (compartment 27 stand 14) totaling 46.2 acres that meets both the MSS and recovery standard and one stand (compartment 25 stand 17) totaling 85.3 acres that meets only the recovery standard in the half mile partition. Pine stands located in the half mile partition are comprised of four intermediate to mature aged slash stands, seven mature longleaf stands, one loblolly stand, and five non-foraging stands. Compartment 27 stands 7, 16, 18, and 50 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the partition away from the cluster, they are not counted as foraging habitat for cluster 27.06. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum except for compartment 27 stand 14 which has a BA of 76.4. Compartment 27 stand 49 would receive savanna thinning treatment reducing the total BA in the stands to 40. Compartment 27 stands 12 and compartment 27 stands 9, 11, and 18 would receive a thinning treatment reducing these stands to 50 BA. Compartment 27 stand 14 and compartment 25 stand 17 would receive modified group selection cuts reducing the total BA to 50. Regular thinning treatments, modified group selection treatments, and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 12, 14, and 49 and compartment 25 stands 9, 11, 17, and 18 would meet MSS. Implementation of the proposed action would increase the MSS acres to 240 acres in the half mile partition.

Due to the hydric soil conditions in the project area and the abundance of cavity trees a log landing would need to be placed within 200ft of a cavity tree which could disturb the bird using that tree. This tree is currently inactive but could become active before project implementation. In this cluster logging activities would be conducted outside of the breeding season reducing possible negative impacts to nesting.

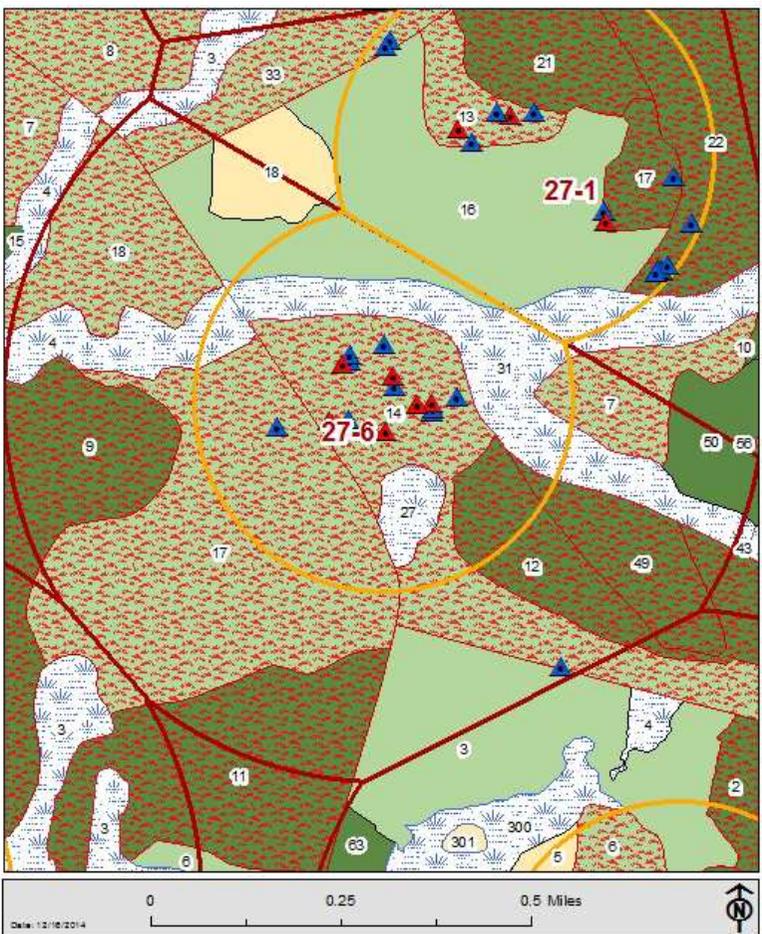
Conclusion: Likely to Adversely Affect (LAA) –This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase. However due to the hydric soil conditions in the project area and the abundance of cavity trees a log landing would need to be placed within 200ft of a cavity tree. This cluster has 5 active trees in the cluster. However, the log landing is only expected to affect the individual using the tree closest to the landing. Because activities would be conducted outside of the breeding season and the tree is separated from the other cavity trees only one individual would be affected by the landing.

Cluster 27.06 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 27.06 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 27.06

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	16	9.8	1970	Longleaf Pine	258.9	83.6	248.4	74.5	40.4	7.3	0	1.8	No	No	0.0	0.0	0.0
27	49	0.8	1941	Slash Pine	199.7	116	120.8	48	59.3	44	19.5	24	No	No	0.0	0.0	0.0
27	14	33.5	1926	Longleaf Pine	76.4	68.9	18.7	6.1	35.2	29.4	22.5	33.3	Yes	Yes	33.5	2098.4	33.5
27	12	7.9	1941	Slash Pine	175.9	120	59	20	102.6	80	14.4	20	No	No	0.0	0.0	0.0
27	7	1.7	1928	Longleaf Pine	162.2	110	43.9	40	103.3	80	15	20	No	No	0.0	0.0	0.0
25	17	30.9	1930	Longleaf Pine	92.9	106.7	0	0	35.2	30	57.6	76.7	No	Yes	0.0	0.0	30.9
27	27	5.3	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	23.7	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
25	4	2.4	1932	Undrained Flatwoods	unknow n	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
		116.1												Totals	33.5	2098.4	64.4

Quarter Mile Cluster Partition Future – Cluster 27.06

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
27	16	9.8	First Thin	140.8	50.0	132.5	42.8	8.3	5.8	0.0	1.4	No	No	0.0	0.0	0.0	
27	49	0.8	Savannah Restoration Thin to 40	54.5	40.0	0.0	0.0	35.0	26.0	19.5	24.0	Yes	Yes	0.8	40.2	0.8	
27	14	33.5	Modified Group Selection	42.5	50.0	0.0	0.0	20.0	16.7	22.5	33.3	Yes	Yes	33.5	1673.4	33.5	
27	12	7.9	Thin	52.9	50.0	0.0	0.0	38.5	30.0	14.4	20.0	Yes	No	7.9	393.6	0.0	
27	7	1.7	Thin	53.7	50.0	0.0	0.0	38.7	30.0	15.0	20.0	Yes	No	1.7	83.1	0.0	
25	17	30.9	Modified Group Selection	37.5	50.0	0.0	0.0	0.0	0.0	37.5	50.0	Yes	Yes	30.9	1547.3	30.9	
27	27	5.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
27	31	23.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
25	4	2.4	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
		116.1											Totals	73.1	3654.6	65.2	

Half Mile Partition Current – Cluster 27.06

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
26	33	2.9	1927	Longleaf Pine	125.8	83.3	60.3	26.7	50.7	36.7	14.8	20.0	No	No	0.0	0.0	0.0
27	46	48.6	1970	Longleaf Pine	258.9	83.6	248.4	74.5	40.4	7.3	0.0	1.8	No	No	0.0	0.0	0.0
27	49	15.1	1941	Slash Pine	199.7	116.0	120.8	48.0	59.3	44.0	19.5	24.0	No	No	0.0	0.0	0.0
27	14	46.2	1926	Longleaf Pine	76.4	68.9	18.7	6.1	35.2	29.4	22.5	33.3	Yes	Yes	46.2	2896.5	46.2
27	12	20.7	1941	Slash Pine	175.9	120.0	59.0	20.0	102.6	80.0	14.4	20.0	No	No	0.0	0.0	0.0
27	7	9.5	1928	Longleaf Pine	162.2	110.0	43.9	10.0	103.3	80.0	15.0	20.0	No	No	0.0	0.0	0.0
27	50	6.9	1928	Undrained Flatwoods	220.1	84.0	167.5	48.0	52.7	36.0	0.0	0.0	No	No	0.0	0.0	0.0
25	11	19.1	1971	Slash Pine	207.1	140.0	50.3	20.0	134.8	95.0	22.0	25.0	No	No	0.0	0.0	0.0
25	9	25.3	1971	Slash Pine	201.8	126.0	79.6	30.0	110.8	82.0	11.4	14.0	No	No	0.0	0.0	0.0
25	18	25.5	1930	Longleaf Pine	93.2	92.0	9.1	4.0	49.7	44.0	34.5	44.0	No	No	0.0	0.0	0.0
25	17	85.3	1930	Longleaf Pine	92.9	106.7	0.0	0.0	35.2	30.0	57.6	76.7	No	Yes	0.0	0.0	85.3
27	27	5.3	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	48	6.1	1941	Loblolly Pine	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unknow n	unknow n	unknow n	unknow n	0.0	0.0	0.0
26	3	1.3	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	31	32.4	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
25	4	14.8	1932	Undrained Flatwoods	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unknow n	unknow n	unknow n	unknown	0.0	0.0	0.0
72	3	17.2	2014	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unknow n	unknow n	unknow n	unknown	0.0	0.0	0.0
		352.1												Totals	46.2	2896.5	131.5

Half Mile Partition Future – Cluster 27.06

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
26	33	2.9	Modified Group Selection	56.2	50.0	0.0	0.0	41.4	30.0	14.8	20.0	Yes	No	2.9	144.8	0.0
27	46	48.6	First Thin	140.8	50.0	132.5	42.8	8.3	5.8	0.0	1.4	No	No	0.0	0.0	0.0
27	49	15.1	Savannah Restoration Thin to 40	54.5	40.0	0.0	0.0	35.0	26.0	19.5	24.0	Yes	Yes	15.1	756.5	15.1
27	14	46.2	Modified Group Selection	42.5	50.0	0.0	0.0	20.0	16.7	22.5	33.3	Yes	Yes	46.2	2309.8	46.2
27	12	20.7	Thin	52.9	50.0	0.0	0.0	38.5	30.0	14.4	20.0	Yes	No	20.7	1036.2	0.0
27	7	9.5	Thin	53.7	50.0	0.0	0.0	38.7	30.0	15.0	20.0	Yes	No	9.5	474.3	0.0
27	50	6.9	Savannah Restoration Thin to 40-40 BA	14.6	10.0	0.0	0.0	14.6	10.0	0.0	0.0	No	No	0.0	0.0	0.0
25	11	19.1	Thin	57.5	50.0	0.0	0.0	35.5	25.0	22.0	25.0	Yes	Yes	19.1	952.9	19.1
25	9	25.3	Thin	60.0	50.0	0.0	0.0	48.6	36.0	11.4	14.0	Yes	No	25.3	1264.7	0.0
25	18	25.5	Thin	41.3	50.0	0.0	0.0	6.8	6.0	34.5	44.0	Yes	Yes	25.5	1272.8	25.5

25	17	85.3	Modified Group Selection	37.5	50.0	0.0	0.0	0.0	0.0	37.5	50.0	Yes	Yes	85.3	4262.9	85.3
27	27	5.3	No Treatment	NA	0.0	0.0	0.0									
27	18	6.1	No Treatment	unknown	0.0	0.0	0.0									
26	3	1.3	No Treatment	NA	0.0	0.0	0.0									
27	31	32.4	No Treatment	NA	0.0	0.0	0.0									
25	4	14.8	No Treatment	unknown	0.0	0.0	0.0									
72	3	17.2	No Treatment	unknown	0.0	0.0	0.0									
		352.1											Totals	240	12000.5	191.1

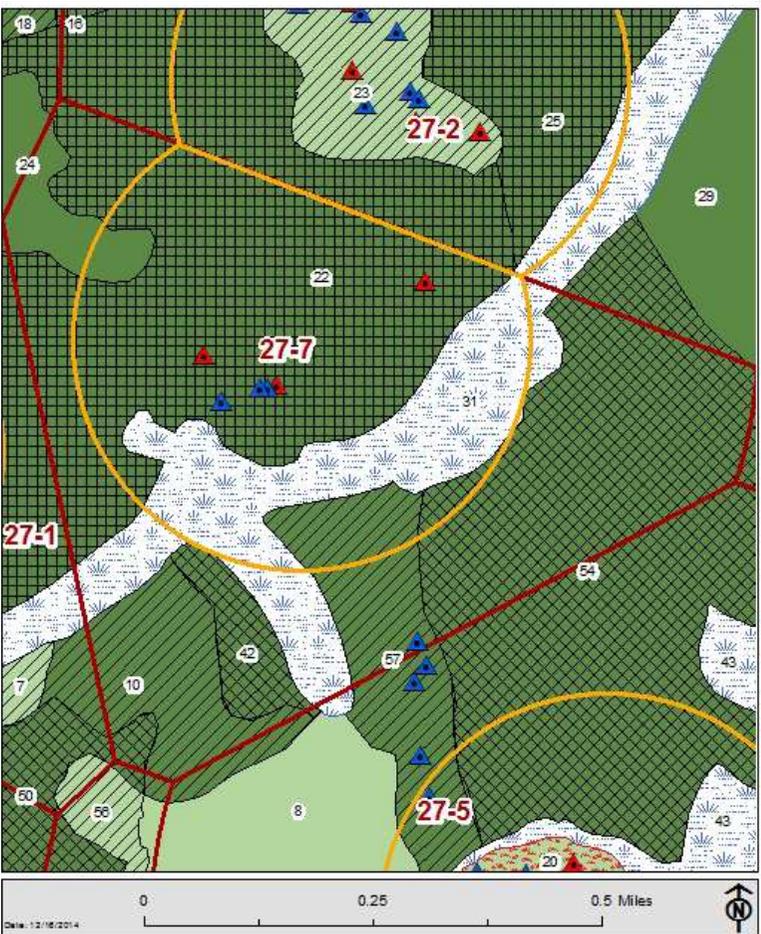
Cluster 27.07

This cluster currently contains no stands within the half mile partition that meet the MSS or recovery standard. Pine stands located in the half mile partition are comprised of seven intermediate to mature aged slash stands and three non-foraging stands. One non-foraging stand compartment 27 stand 50 is classified as an undrained flatwoods but because it contains enough pines to be harvested and is being considered for treatment it will be counted in the foraging analysis. Compartment 27 stands 10, 54, and 57 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the partition away from the cluster, they are not counted as foraging habitat for cluster 27.07. The pine stands that currently do not meet MSS have basal areas equal to or over 80, the MSS maximum. Compartment 27 stands 50 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In this treatment area, parts of the stand with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stand with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stand because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Compartment 27 stand 22 would receive a savanna treatment reducing the total basal area to 40. Savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stand 22 would meet MSS. Implementation of the proposed action would increase the MSS acres to 85.5 acres in the half mile partition.

Due to hydric soil conditions, hauling and road construction restrictions during the breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

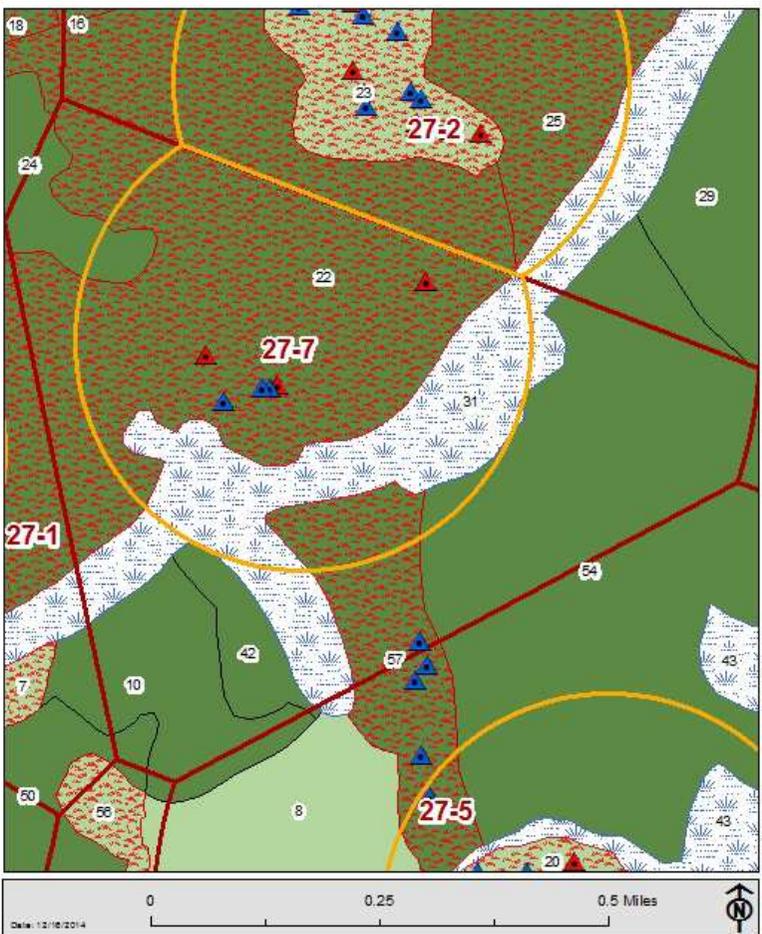
Conclusion: Likely to Adversely Affect (LAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase. However due to the hydric soil conditions in the project area, breeding season restrictions (hauling and road construction) would need to be waived which could lead to nest failure.

Cluster 27.07 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Cluster 27.07 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 27.07

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	22	66.8	1941	Slash Pine	168.4	122.5	60.3	18.3	68.8	54.2	39.3	50	No	No	0.0	0.0	0.0
27	57	6.9	1959	Slash Pine	237.3	100	135.6	20	83.7	60	17.9	20	No	No	0.0	0.0	0.0
27	54	1.8	1959	Slash Pine	147.8	100	66	22.5	64.8	55	17	22.5	No	No	0.0	0.0	0.0
27	24	2.3	1941	Slash Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
27	42	0.0	1970	Slash Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
27	31	30.1	1914	Pond Cypress	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
		107.8													0.0	0.0	0.0

Quarter Mile Cluster Partition Future – Cluster 27.07

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	22	66.8	Savannah Restoration Thin to 40	31.4	40.0	0.0	0.0	0.0	0.0	31.4	40.0	Yes	Yes	66.8	2670.3	66.8
27	57	6.9	Thin	59.8	50.0	0.0	0.0	41.9	30.0	17.9	20.0	Yes	No	6.9	344.0	0.0
27	54	1.8	Savannah Restoration Thin to 10 40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0
27	24	2.3	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
27	42	0.0	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
27	31	30.1	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
		107.8												66.8	2670.3	66.8

Half Mile Partition Current – Cluster 27.07

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	22	85.5	1941	Slash Pine	168.4	122.5	60.3	18.3	68.8	54.2	39.3	50.0	No	No	0.0	0.0	0.0
27	57	14.7	1959	Slash Pine	237.3	100.0	135.6	20.0	83.7	60.0	17.9	20.0	No	No	0.0	0.0	0.0
27	54	46.6	1959	Slash Pine	147.8	100.0	66.0	22.5	64.8	55.0	17.0	22.5	No	No	0.0	0.0	0.0
27	50	1.3	1928	Undrained Flatwoods	220.1	84.0	167.5	48.0	52.7	36.0	0.0	0.0	No	No	0.0	0.0	0.0

27	40	16.6	1970	Slash Pine	172.0	80.0	134.2	53.3	37.8	26.7	0.0	0.0	No	No	0.0	0.0	0.0
27	29	0.0	1946	Slash Pine	unkno wn	unknown	0.0	0.0	0.0								
27	24	7.7	1941	Slash Pine	unkno wn	unknown	0.0	0.0	0.0								
27	42	7.5	1970	Slash Pine	unkno wn	unknown	0.0	0.0	0.0								
27	31	43.5	1914	Pond Cypress	NA	0.0	0.0	0.0									
		223.4												Totals	0.0	0.0	0.0

Half Mile Partition Future – Cluster 27.07

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
27	22	85.5	Savannah Restoration Thin to 40	31.4	40.0	0.0	0.0	0.0	0.0	31.4	40.0	Yes	Yes	85.5	3418.7	85.5	
27	57	14.7	Thin	59.8	50.0	0.0	0.0	41.9	30.0	17.9	20.0	Yes	No	14.7	737.1	0.0	
27	54	46.6	Savannah Restoration Thin to 10-40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0	
27	50	1.3	Savannah Restoration Thin to 10-40 BA	14.6	10.0	0.0	0.0	14.6	10.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	40	16.6	Thin	87.9	50.0	50.1	23.3	37.8	26.7	0.0	0.0	No	No	0.0	0.0	0.0	
27	29	0.0	No Treatment	unkn own	unkn own	unknow n	unknow n	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	0.0	0.0	0.0
27	24	7.7	No Treatment	unkn own	unkn own	unknow n	unknow n	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	0.0	0.0	0.0
27	42	7.5	No Treatment	unkn own	unkn own	unknow n	unknow n	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	0.0	0.0	0.0
27	31	43.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		223.4											Totals	85.5	3418.7	85.5	

Cluster 27.08

This cluster currently only has one stand (compartment 28 stand 5) totaling 10 acres that meets both the MSS and the recovery standard. Pine stands located in the half mile partition are comprised of nine intermediate to mature aged slash stands, two mature longleaf stands, and two non-foraging stands. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stands 52 and 54 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In these treatment areas, parts of the stands with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stands with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stands because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use these stands for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Compartment 27 stand 37 would receive a savanna girdle treatment instead of a savanna thinning treatment reducing total BA in the stand to 40 because of this stand's inaccessibility to logging equipment. Compartment 27 stands 36 and 41 and compartment 28 stand 5 would receive a thinning treatment reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 37 and 41 and compartment 28 stand 5 would meet MSS. Implementation of the proposed action would increase the MSS acres to 69.2 acres in the half mile partition.

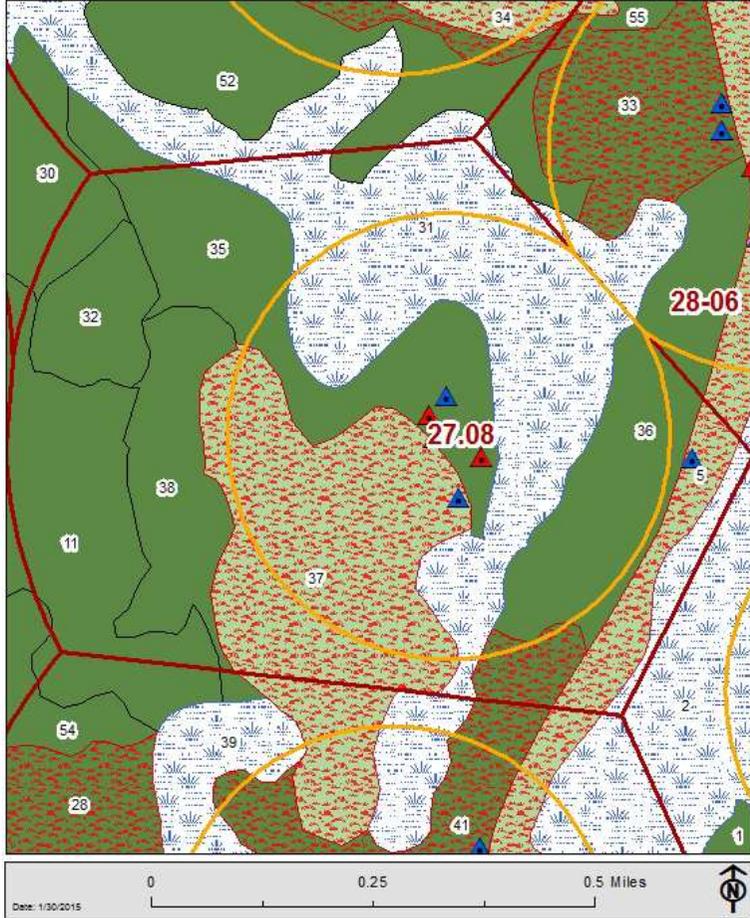
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 27.08 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Cluster 27.08 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 27.08

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA10 to 14 in	BA10 to 14 in	TPA14 in +	BA14 in +	MSS Current	Recovery Current	MSS Acres	Total BA 10+ in MSS	Recovery Acres
27	36	20.7	1987	Slash Pine	311	85.7	286.4	68.6	24.6	17.1	0	0	No	No	0.0	0.0	0.0
27	37	35.4	1957	Longleaf Pine	194.5	105	106.6	32.5	62.5	42.5	25.3	30	No	No	0.0	0.0	0.0
27	41	0.7	1957	Slash Pine	108	90	24.2	6.7	54.9	44.4	29	38.9	No	No	0.0	0.0	0.0
27	35	18.6	1970	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
27	31	49.9	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
Totals															0.0	0.0	0.0

Quarter Mile Cluster Partition Future – Cluster 27.08

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres	
27	36	20.7	Thin	144.0	50.0	119.4	32.9	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0	
27	37	35.4	Savannah Restoration Thin to 40 (Girdle)	40.0	40.0	0.0	0.0	14.7	10.0	25.3	30.0	Yes	Yes	35.4	1416.0	35.4	
27	41	0.7	Thin	42.7	50.0	0.0	0.0	13.7	11.1	29.0	38.9	Yes	Yes	0.7	33.2	0.7	
27	35	18.6	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
27	31	49.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
Totals															36.1	1449.2	36.1

Half Mile Partition Current – Cluster 27.08

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA10 to 14 in	BA10 to 14 in	TPA 14 in +	BA14 in +	MSS Current	Recovery Current	MSS Acres	Total BA 10+ in MSS	Recovery Acres
27	36	25.3	1987	Slash Pine	311.0	85.7	286.4	68.6	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0
27	54	0.2	1959	Slash Pine	147.8	100.0	66.0	22.5	64.8	55.0	17.0	22.5	No	No	0.0	0.0	0.0
27	36	25.0	1987	Slash Pine	311.0	85.7	286.4	68.6	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0
27	54	0.1	1959	Slash Pine	147.8	100.0	66.0	22.5	64.8	55.0	17.0	22.5	No	No	0.0	0.0	0.0
27	37	53.7	1957	Longleaf Pine	194.5	105.0	106.6	32.5	62.5	42.5	25.3	30.0	No	No	0.0	0.0	0.0
27	41	5.5	1957	Slash Pine	108.0	90.0	24.2	6.7	54.9	44.4	29.0	38.9	No	No	0.0	0.0	0.0
27	52	1.2	1948	Slash Pine	163.4	102.5	80.8	22.5	56.8	45.0	25.8	35.0	No	No	0.0	0.0	0.0
28	5	10.0	1932	Longleaf Pine	118.7	76.0	50.0	10.0	42.7	34.0	25.9	32.0	Yes	Yes	10.0	660.0	10.0
27	11	28.0	1970	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0

27	32	11.7	1890	Slash Pine	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unknown	0.0	0.0	0.0	
27	30	4.1	1970	Slash Pine	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unknown	0.0	0.0	0.0	
27	35	35.3	1970	Slash Pine	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unknown	0.0	0.0	0.0	
27	38	12.1	1946	Slash Pine	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unknown	0.0	0.0	0.0	
27	31	66.7	1914	Pond Cypress	NA	NA	0.0	0.0	0.0									
28	2	4.6	1920	Baldcypress- water tupelo	NA	NA	0.0	0.0	0.0									
															Totals	10.0	660.0	10.0

Half Mile Partition Future – Cluster 27.08

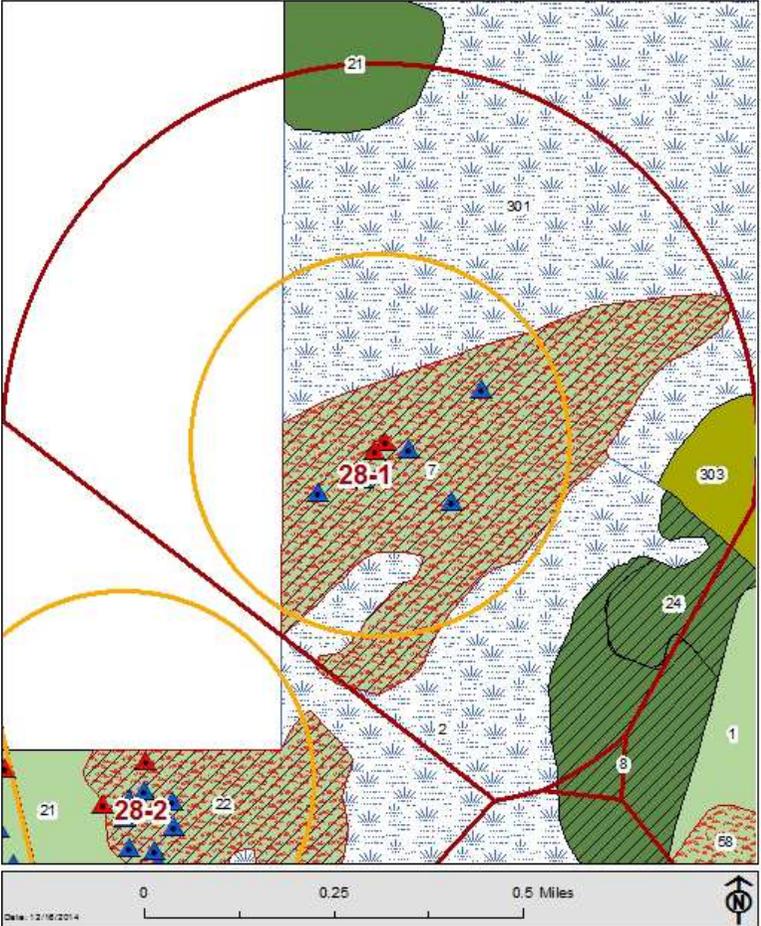
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
27	36	25.3	Thin	144.0	50.0	119.4	32.9	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0	
27	54	0.2	Savannah Restoration Thin to 10-40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0	
27	36	25.0	Thin	144.0	50.0	119.4	32.9	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0	
27	54	0.1	Savannah Restoration Thin to 10-40 BA	7.6	10.0	0.0	0.0	0.0	0.0	7.6	10.0	No	No	0.0	0.0	0.0	
27	37	53.7	Savannah Restoration Thin to 40 (Girdle)	40.0	40.0	0.0	0.0	14.7	10.0	25.3	30.0	Yes	Yes	53.7	2147.4	53.7	
27	41	5.5	Thin	42.7	50.0	0.0	0.0	13.7	11.1	29.0	38.9	Yes	Yes	5.5	275.0	5.5	
27	52	1.2	Savannah Restoration Thin to 10-40 BA	7.4	10.0	0.0	0.0	0.0	0.0	7.4	10.0	No	No	0.0	0.0	0.0	
28	5	10.0	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	10.0	500.0	10.0	
27	11	28.0	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0	
27	32	11.7	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0	
27	30	4.1	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0	
27	35	35.3	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0	
27	38	12.1	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	0.0	0.0	0.0	
27	31	66.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	4.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
														Totals	69.2	2922.4	69.2

Cluster 28.01

This cluster currently contains one stand (compartment 28 stand 7) totaling 91.2 acres that meets both the MSS and recovery standard within the half mile partition. Pine stands located in the half mile partition are comprised of three intermediate to mature aged slash stands, one mature longleaf stand, and three non-foraging stands. Compartment 28 stands 8 and 24 and compartment 24 stand 21 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the foraging habitat in the partition, they are not counted as foraging habitat for cluster 28.01. The pine stands that currently do not meet MSS have basal areas over 80, the MSS maximum. Compartment 28 stand 7 would receive a modified group selection treatment reducing the total basal area to 50. The modified group selection treatment would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 28 stand 27 would continue to meet MSS and the recovery standard. Implementation of the proposed action would maintain MSS acres at 91.2 in the half mile partition.

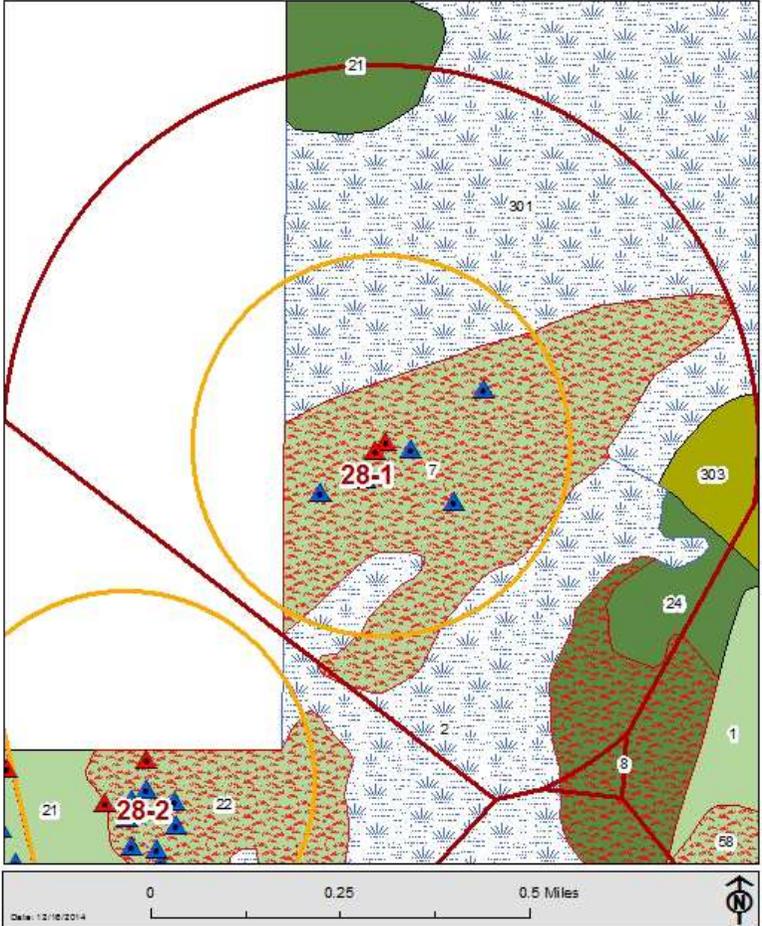
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster would not lose acres meeting MSS or the recovery standard if this project was implemented, and total BA within the quarter mile partition would not decrease below 3000 ft².

Cluster 28.01 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Cluster 28.01 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	MSS	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 50	Longleaf Pine
BA 10-40	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
0.50mi		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 28.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
28	7	66.6	1932	Longleaf Pine	83.1	72.7	17.3	7.3	38.4	29.1	27.4	36.4	Yes	Yes	66.6	4362.8	66.6	
24	301	27.8	1926	Sweetbay-swamp tupelo-red maple	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	7.7	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		102.0													Totals	66.6	4362.8	66.6

Quarter Mile Cluster Partition Future – Cluster 28.01

Compartment	Stand	ACRES	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
28	7	66.6	Modified Group Selection	45.3	50.0	0.0	0.0	17.9	13.6	27.4	36.4	Yes	Yes	66.6	3330.4	66.6	
24	301	27.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	7.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		102.0												Totals	66.6	3330.4	66.6

Half Mile Partition Current – Cluster 28.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	8	13.9	1969	Slash Pine	208.5	84.0	126.6	32.0	74.9	44.0	7.0	8.0	No	No	0.0	0.0	0.0
28	24	10.8	1969	Slash Pine	264.9	80.0	231.0	60.0	33.9	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	7	91.2	1932	Longleaf Pine	83.1	72.7	17.3	7.3	38.4	29.1	27.4	36.4	Yes	Yes	91.2	5974.6	91.2
24	301	115.0	1926	Sweetbay-swamp tupelo-red maple	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
24	21	9.0	1970	Slash Pine	unkn own	unkn own	unkn own	unkn own	unkn own	unkn own	unkn own	unkn own	unknown	unknown	0.0	0.0	0.0
24	303	10.2	1926	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	53.1	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		303.2												Totals	91.2	5974.6	91.2

Half Mile Partition Future – Cluster 28.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	8	13.9	Thin	78.5	50.0	0.0	0.0	71.5	42.0	7.0	8.0	Yes	No	13.9	693.6	0.0
28	24	10.8	Clearcut Site For Borrow Pit Excavation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0

28	7	91.2	Modified Group Selection	45.3	50.0	0.0	0.0	17.9	13.6	27.4	36.4	Yes	Yes	91.2	4560.7	91.2
24	301	115.0	No Treatment	NA	0.0	0.0	0.0									
24	21	9.0	No Treatment	unknown	0.0	0.0	0.0									
24	303	10.2	No Treatment	NA	0.0	0.0	0.0									
28	2	53.1	No Treatment	NA	0.0	0.0	0.0									
		303.2											Totals	91.2	4560.7	91.2

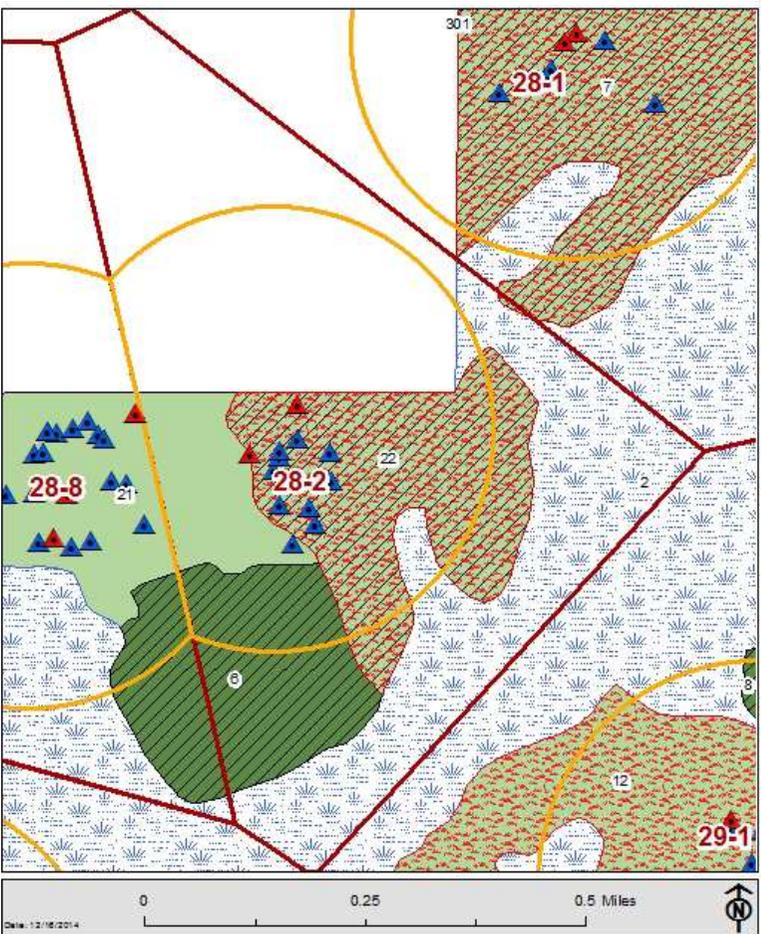
Cluster 28.02

This cluster currently contains two stands (compartment 28 stands 7 and 22) totaling 45.6 acres that meets the MSS within the half mile partition. Pine stands located in the half mile partition are comprised of one intermediate aged slash stands, three mature longleaf stands, and one non-foraging stand. Compartment 28 stand 7 and 22 would receive a modified group selection treatments and compartment 28 stand 6 would receive a thinning treatment reducing the total basal area in these stands to 50. The modified group selection treatments and thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 28 stands 6, 7, and 22 would meet the MSS. Implementation of the proposed action would increase MSS acres to 71 in the half mile partition.

Due to hydric soil conditions and this cluster being located within the 1500 ft buffer of documented flatwoods salamander ponds, harvest, hauling, and road construction restrictions during the RCW breeding season would need to be waived to remove timber in a timely manner without causing soil disturbance or direct salamander mortality. These activities conducted within 200ft of the cluster could disturb nesting activities which could result in failed nesting attempts.

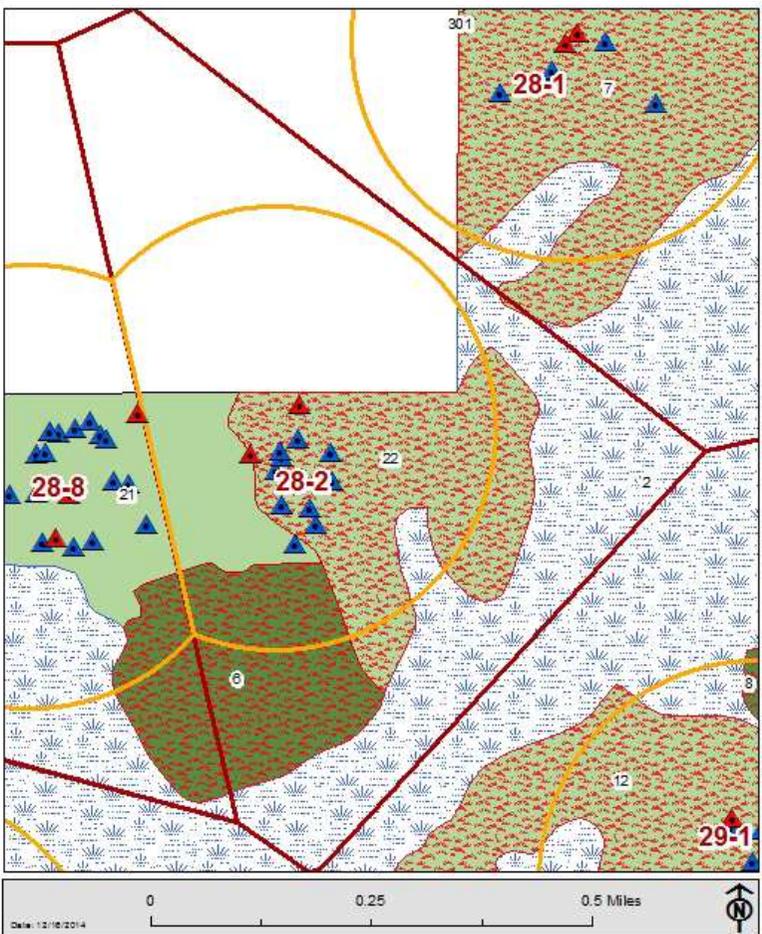
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 28.02 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
RCW Partitions 0.50mi		Loblolly Pine

Cluster 28.02 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
RCW Partitions 0.50mi		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 28.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
28	22	34.1	1933	Longleaf Pine	98.1	70.9	44.5	16.4	36.2	29.1	17.4	25.5	Yes	No	34.1	1860.8	0.0	
28	6	9.9	1959	Slash Pine	219.2	102.9	155.1	54.3	61.5	45.7	2.7	2.9	No	No	0.0	0.0	0.0	
28	21	14.8	1933	Longleaf Pine	80	52.5	39.5	17.5	32.1	25	8.3	10	No	No	0.0	0.0	0.0	
28	2	3.3	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
															Totals	34.1	1860.8	0.0

Quarter Mile Cluster Partition Future – Cluster 28.02

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
28	22	34.1	Modified Group Selection	47.9	50.0	0.0	0.0	30.5	24.5	17.4	25.5	Yes	No	34.1	1704.1	0.0	
28	6	9.9	Thin	66.1	50.0	0.0	0.0	63.4	47.1	2.7	2.9	Yes	No	9.9	493.3	0.0	
28	21	14.8	No Treatment	80.0	52.5	39.5	17.5	32.1	25.0	8.3	10.0	No	No	0.0	0.0	0.0	
28	2	3.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
														Totals	43.9	2197.4	0.0

Half Mile Partition Current – Cluster 28.02

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
28	22	45.5	1933	Longleaf Pine	98.1	70.9	44.5	16.4	36.2	29.1	17.4	25.5	Yes	No	45.5	2485.2	0.0	
28	6	25.3	1959	Slash Pine	219.2	102.9	155.1	54.3	61.5	45.7	2.7	2.9	No	No	0.0	0.0	0.0	
28	21	14.8	1933	Longleaf Pine	80.0	52.5	39.5	17.5	32.1	25.0	8.3	10.0	No	No	0.0	0.0	0.0	
28	7	0.1	1932	Longleaf Pine	83.1	72.7	17.3	7.3	38.4	29.1	27.4	36.4	Yes	Yes	0.1	9.7	0.1	
28	2	55.1	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
															Totals	45.6	2494.9	0.1

Half Mile Partition Future – Cluster 28.02

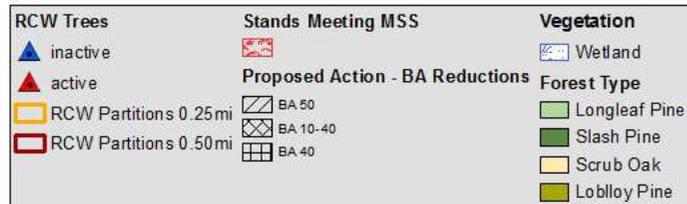
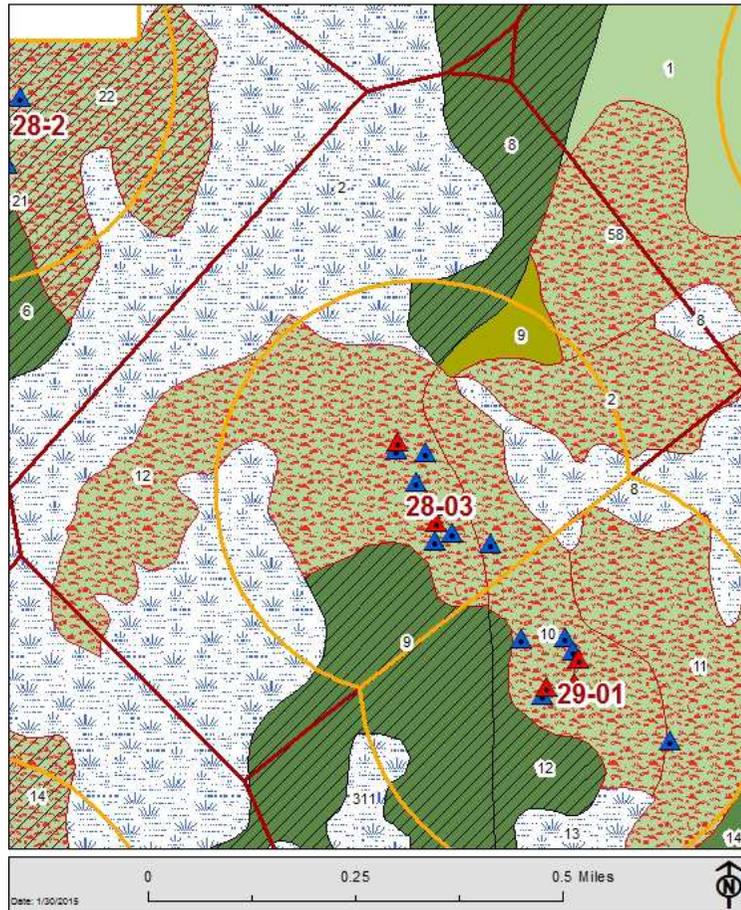
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
28	22	45.5	Modified Group Selection	47.9	50.0	0.0	0.0	30.5	24.5	17.4	25.5	Yes	No	45.5	2275.8	0.0	
28	6	25.3	Thin	66.1	50.0	0.0	0.0	63.4	47.1	2.7	2.9	Yes	No	25.3	1266.4	0.0	
28	21	14.8	No Treatment	80.0	52.5	39.5	17.5	32.1	25.0	8.3	10.0	No	No	0.0	0.0	0.0	
28	7	0.1	Modified Group Selection	45.3	50.0	0.0	0.0	17.9	13.6	27.4	36.4	Yes	Yes	0.1	7.4	0.1	
28	2	55.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
														Totals	71.0	3549.5	0.1

Cluster 28.03

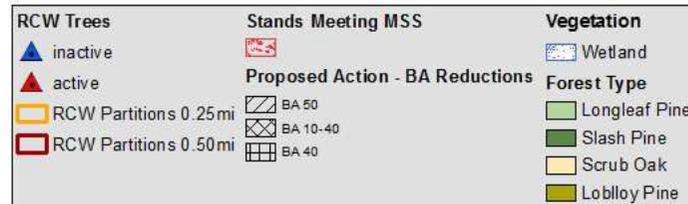
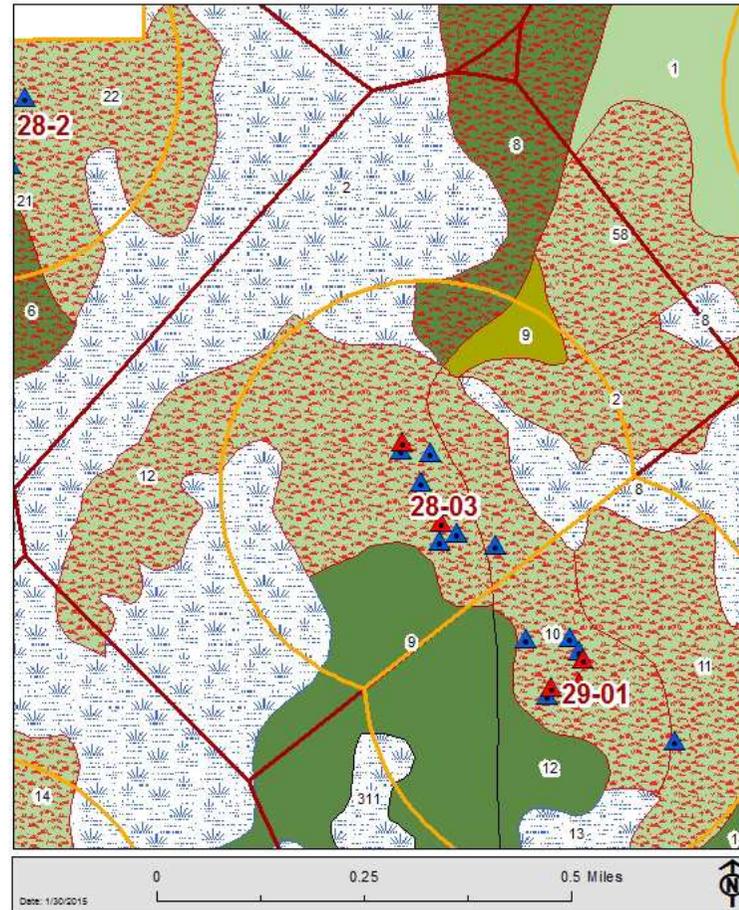
This cluster currently contains five stands (compartment 28 stand 12 and compartment 29 stands 2, 10, 11 and 58) totaling 106.2 acres that meet the MSS within the half mile partition. Pine stands located in the half mile partition are comprised of two intermediate aged slash stands, six mature longleaf stands, and three non-foraging stands. Compartment 28 stands 8 and 9 would receive a thinning treatment reducing the total basal area in these stands to 50. The thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 28 stands 8 and 12 and compartment 29 stands 2, 10, 11, and 58 would meet the MSS. Implementation of the proposed action would increase MSS acres to 124.7 in the half mile partition.

Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 28.03 Pre-treatment conditions with proposed harvests



Cluster 28.03 Post-treatment conditions



Quarter Mile Cluster Partition Current – Cluster 28.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	8	4.7	1969	Slash Pine	208.5	84	126.6	32	74.9	44	7	8	No	No	0.0	0.0	0.0
28	9	12.6	1981	Slash Pine	375.7	107.5	326.2	77.5	49.5	30	0	0	No	No	0.0	0.0	0.0
28	12	39.5	1920	Longleaf Pine	102.5	70	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	39.5	2275.2	0.0
29	58	0.3	1925	Longleaf Pine	75.9	60	13.8	2.5	42.1	32.5	20	25	Yes	Yes	0.3	17.3	0.3
29	2	8.5	1925	Longleaf Pine	100.4	72	34.9	12	45.4	36	20	24	Yes	No	8.5	510.0	0.0
29	10	10.2	1920	Longleaf Pine	57.3	47.5	16.5	5	21.2	17.5	19.5	25	Yes	Yes	10.2	433.5	10.2
28	2	16.5	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	8	8.8	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	9	4.4	1980	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		105.5												Totals	58.5	3236.0	10.5

Quarter Mile Cluster Partition Future – Cluster 28.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	8	4.7	Thin	78.5	50.0	0.0	0.0	71.5	42.0	7.0	8.0	Yes	No	4.7	235.0	0.0
28	9	12.6	Thin	119.4	50.0	69.9	20.0	49.5	30.0	0.0	0.0	No	No	0.0	0.0	0.0
28	12	39.5	No Treatment	102.5	70.0	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	39.5	2275.2	0.0
29	58	0.3	No Treatment	75.9	60.0	13.8	2.5	42.1	32.5	20.0	25.0	Yes	Yes	0.3	17.3	0.3
29	2	8.5	No Treatment	100.4	72.0	34.9	12.0	45.4	36.0	20.0	24.0	Yes	No	8.5	510.0	0.0
29	10	10.2	No Treatment	57.3	47.5	16.5	5.0	21.2	17.5	19.5	25.0	Yes	Yes	10.2	433.5	10.2
28	2	16.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	8	8.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	9	4.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		105.5											Totals	63.2	3471.0	10.5

Half Mile Partition Current – Cluster 28.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	8	18.5	1969	Slash Pine	208.5	84.0	126.6	32.0	74.9	44.0	7.0	8.0	No	No	0.0	0.0	0.0
28	9	16.6	1981	Slash Pine	375.7	107.5	326.2	77.5	49.5	30.0	0.0	0.0	No	No	0.0	0.0	0.0
28	12	61.1	1920	Longleaf Pine	102.5	70.0	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	61.1	3519.4	0.0
29	58	14.9	1925	Longleaf Pine	75.9	60.0	13.8	2.5	42.1	32.5	20.0	25.0	Yes	Yes	14.9	856.8	14.9

29	2	20.0	1925	Longleaf Pine	100.4	72.0	34.9	12.0	45.4	36.0	20.0	24.0	Yes	No	20.0	1200.0	0.0	
29	10	10.2	1920	Longleaf Pine	57.3	47.5	16.5	5.0	21.2	17.5	19.5	25.0	Yes	Yes	10.2	433.5	10.2	
29	11	0.0	1925	Longleaf Pine	80.6	55.0	25.9	7.0	41.6	32.0	13.1	16.0	Yes	No	0.0	1.0	0.0	
28	2	99.7	1920	Baldcypress-water tupelo	NA	NA	0.0	0.0	0.0									
29	1	0.1	2008	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0	
29	8	10.8	1920	Brush Species	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0	
29	9	5.5	1980	Scrub Oak	NA	NA	0.0	0.0	0.0									
		275.9													Totals	106.2	6010.7	25.1

Half Mile Partition Future – Cluster 28.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
28	8	18.5	Thin	78.5	50.0	0.0	0.0	71.5	42.0	7.0	8.0	Yes	No	18.5	925.0	0.0	
28	9	16.6	Thin	119.4	50.0	69.9	20.0	49.5	30.0	0.0	0.0	No	No	0.0	0.0	0.0	
28	12	61.1	No Treatment	102.5	70.0	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	61.1	3519.4	0.0	
29	58	14.9	No Treatment	75.9	60.0	13.8	2.5	42.1	32.5	20.0	25.0	Yes	Yes	14.9	856.8	14.9	
29	2	20.0	No Treatment	100.4	72.0	34.9	12.0	45.4	36.0	20.0	24.0	Yes	No	20.0	1200.0	0.0	
29	10	10.2	No Treatment	57.3	47.5	16.5	5.0	21.2	17.5	19.5	25.0	Yes	Yes	10.2	433.5	10.2	
29	11	0.0	No Treatment	80.6	55.0	25.9	7.0	41.6	32.0	13.1	16.0	Yes	No	0.0	1.0	0.0	
28	2	99.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
29	1	0.1	No Treatment	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknow n	unknown	0.0	0.0	0.0	
29	8	10.8	No Treatment	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknow n	unknown	0.0	0.0	0.0	
29	9	5.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		275.9												Totals	124.7	6935.6	25.1

Cluster 28.05

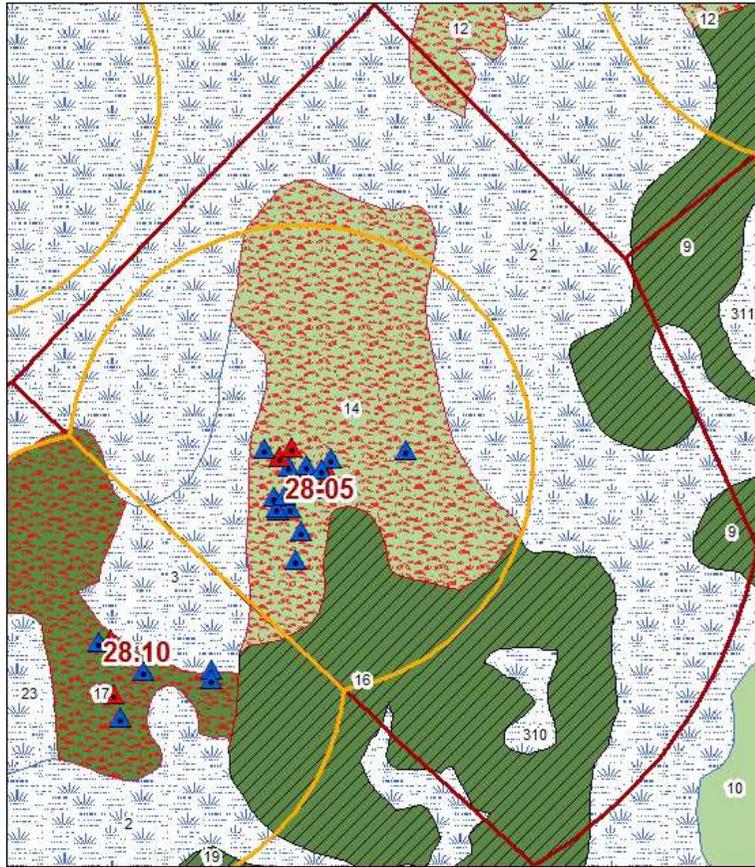
This cluster currently contains two stands (compartment 28, stands 14 and 17) totaling 57.2 acres that meet the MSS within the half mile partition. Pine stands located in the half mile partition are comprised of three intermediate aged slash stands, two mature longleaf stands, and three nonforaging stands. Compartment 28 stands 9 and 12 are separated from the cluster by more than 200 feet of nonforaging habitat and would be not be counted as foraging analysis acres.

Compartment 28 stands 9 and 16 would receive a thinning treatment reducing the total basal area in these stands to 50. The thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. Because treatment stands have mainly smaller trees (< 10 inch dbh) foraging acres and BA would not change in the partition.

Conclusion: Not Likely to Adversely Affect

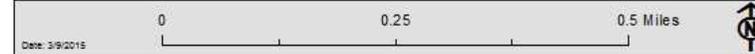
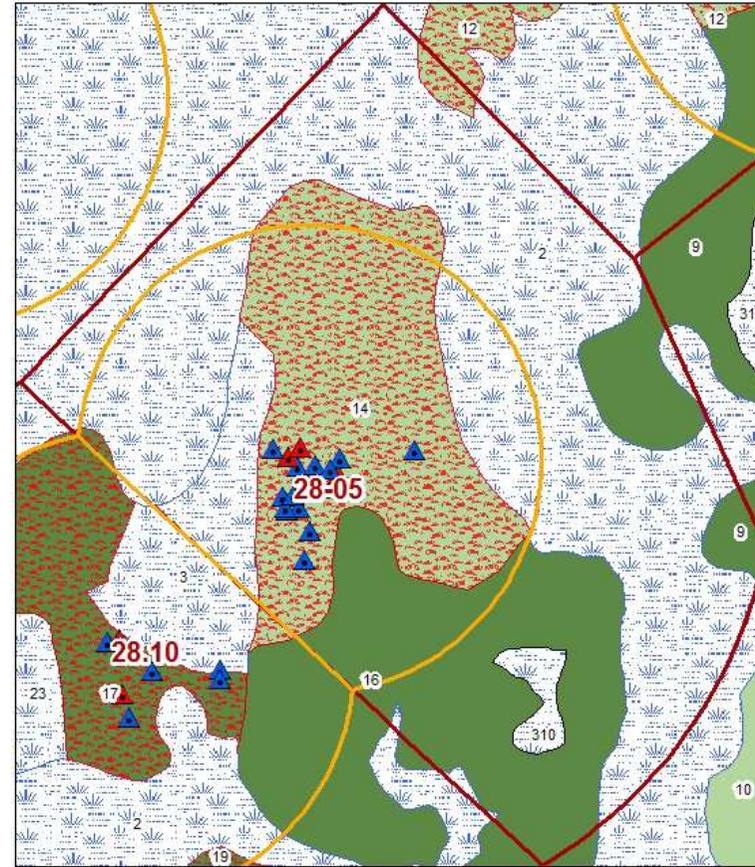
(NLAA) –Foraging acres would not change a result of implementing to proposed action.

Cluster 28.05 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
inactive	active	Wetland
RCW Partitions 0.25 mi	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.50 mi	BA 50	Longleaf Pine
	BA 10-40	Slash Pine
	BA 40	Scrub Oak
		Loblolly Pine

Cluster 28.05 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
inactive	active	Wetland
RCW Partitions 0.25 mi	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.50 mi	BA 50	Longleaf Pine
	BA 10-40	Slash Pine
	BA 40	Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 28.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres	
28	16	13.7	1981	Slash Pine	414.9	141.8	384.6	121.8	30.3	20	0	0	No	No	0.0	0.0	0.0	
28	14	52.3	1920	Longleaf Pine	87.8	64	35.1	12	33.9	28	18.8	24	Yes	No	52.3	2719.6	0.0	
28	17	0.4	1925	Slash Pine	102.9	70	25.2	8	62.6	44	15.1	18	Yes	No	0.4	24.8	0.0	
28	3	9.7	<Null>	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	31.5	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
															Totals	52.7	2744.4	0.0

Quarter Mile Cluster Partition Future – Cluster 28.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
28	16	13.7	Thin	118.1	50.0	87.8	30.0	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0	
28	14	52.3	No Treatment	87.8	64.0	35.1	12.0	33.9	28.0	18.8	24.0	Yes	No	52.7	2719.6	0.0	
28	17	0.4	No Treatment	102.9	70.0	25.2	8.0	62.6	44.0	15.1	18.0	Yes	No	0.4	24.8	0.0	
28	3	9.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	31.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
														Totals	52.7	2744.4	0.0

Half Mile Partition Current – Cluster 28.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	42	4.5	1920	Longleaf Pine	402.5	70.0	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	4.5	86.4	0.0
28	16	45.4	1981	Slash Pine	414.9	141.8	384.6	121.8	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	9	11.1	1981	Slash Pine	375.7	107.5	326.2	77.5	49.5	30.0	0.0	0.0	No	No	0.0	0.0	0.0
28	14	57.2	1920	Longleaf Pine	87.8	64.0	35.1	12.0	33.9	28.0	18.8	24.0	Yes	No	57.2	2974.4	0.0
28	17	0.5	1925	Slash Pine	102.9	70.0	25.2	8.0	62.6	44.0	15.1	18.0	Yes	No	0.5	31.0	0.0
28	310	3.1	1932	Pond Pine-hardwood	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	3	9.7	unkno wn	Brush Species	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
28	2	120.2	1920	Baldcypress-	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0

Cluster 28.06

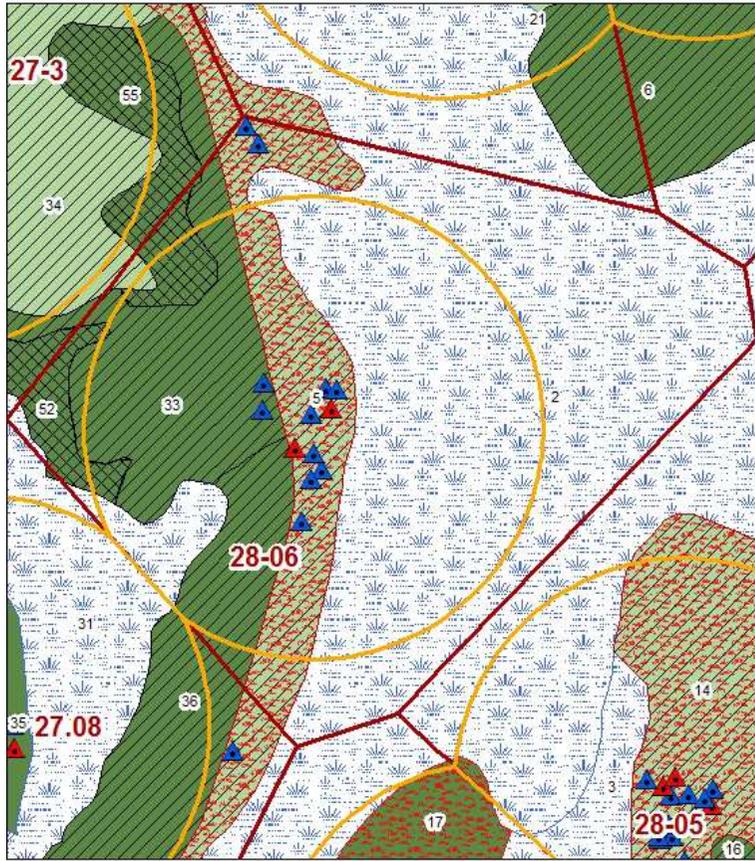
This cluster currently only has one stand (compartment 28 stand 5) totaling 27.8 acres that meets both the MSS and the recovery standard. Pine stands located in the half mile partition are comprised of four intermediate to mature aged slash stands, two mature longleaf stands, and two non-foraging stands. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stands 52 and 55 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In this treatment area, parts of the stands with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stand with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stand because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Compartment 27 stands 36 and 33 and compartment 28 stand 5 would receive a thinning treatment and compartment 27 stand 34 would receive a modified group selection cut reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 34 and 33 and compartment 28 stand 5 would meet MSS. Implementation of the proposed action would increase the MSS acres to 57.3 acres in the half mile partition.

This cluster has a net gain in acres meeting MSS due to proposed thinning treatments. However, this partition doesn't not reach the minimum 3000 ft² needed to meet MSS. Two savanna treatments (compartment 27 stands 52 and 55) reduce potential foraging habitat from above the BA threshold of 80 to below MSS BA threshold of 40. Because the opportunity to provide the minimum 3000 ft² would be missed, indirect effects for this cluster would be negative.

Due to hydric soil conditions and the abundance of cavity trees within the foraging partition a landing would need to be place within 200 ft of two inactive trees in order to remove timber without causing soil disturbance. These trees are currently inactive but could become active before project implementation. In this cluster logging activities would be conducted outside of the breeding season reducing possible negative impacts to nesting.

Conclusion: Likely to Adversely Affect (LAA) – Conclusion: Likely to Adversely Affect (LAA)
–This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase. However the opportunity would be missed to increase this foraging the 3000 ft² because of proposed savanna treatments reducing the BA under 40. Also due to the hydric soil conditions in the project area and the abundance of cavity trees a log landing would need to be placed within 200ft of a cavity tree. This cluster has 3 active trees in the cluster. However, the log landing is only expected to affect the individuals using the two trees closest to the landing. Because activities would be conducted outside of the breeding season only two individuals would be affected by the landing.

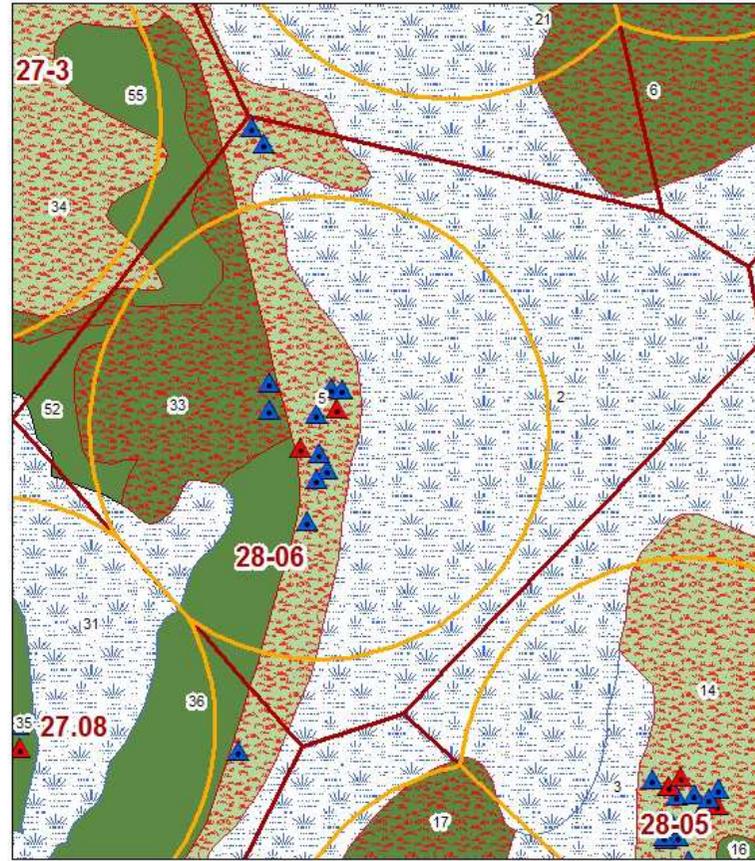
Cluster 28.06 Pre-treatment conditions with proposed harvests



Date: 1/30/2015

RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25 mi	BA 40	Slash Pine
RCW Partitions 0.50 mi		Scrub Oak
		Loblolly Pine

Cluster 28.06 Post-treatment conditions



Date: 1/30/2015

RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25 mi	BA 40	Slash Pine
RCW Partitions 0.50 mi		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 28.06

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	MSS Current	Recovery Current	MSS Acres	Total BA 10+in MSS	Recovery Acres	
27	34	0.3	1872	Longleaf Pine	160.4	104.7	64.1	18.8	73.8	57.6	22.5	28.2	No	No	0.0	0.0	0.0	
27	36	10.9	1987	Slash Pine	311	85.7	286.4	68.6	24.6	17.1	0	0	No	No	0.0	0.0	0.0	
27	52	0.9	1948	Slash Pine	163.4	102.5	80.8	22.5	56.8	45	25.8	35	No	No	0.0	0.0	0.0	
27	33	26.0	1948	Slash Pine	164.2	103.1	78.4	27.7	68.8	52.3	17.1	23.1	No	No	0.0	0.0	0.0	
27	55	3.0	1948	Slash Pine	127.3	80	72.3	25	43.1	35	11.8	20	No	No	0.0	0.0	0.0	
28	5	19.4	1932	Longleaf Pine	118.7	76	50	10	42.7	34	25.9	32	Yes	Yes	19.4	1280.4	19.4	
27	31	5.9	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	59.0	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
															Totals	19.4	1280.4	19.4

Quarter Mile Cluster Partition Future – Cluster 28.06

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
27	34	0.3	Modified Group Selection	50.4	50.0	0.0	0.0	27.9	21.8	22.5	28.2	Yes	Yes	0.3	15.0	0.3	
27	36	10.9	Thin	144.0	50.0	119.4	32.9	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0	
27	52	0.9	Savannah Restoration Thin to 10-40 BA	7.4	10.0	0.0	0.0	0.0	0.0	7.4	10.0	No	No	0.0	0.0	0.0	
27	33	26.0	Thin	52.5	50.0	0.0	0.0	35.4	26.9	17.1	23.1	Yes	No	26.0	1300.0	0.0	
27	55	3.0	Savannah Restoration Thin to 10-40 BA	5.9	10.0	0.0	0.0	0.0	0.0	5.9	10.0	No	No	0.0	0.0	0.0	
28	5	19.4	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	19.4	970.0	19.4	
27	31	5.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	59.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
														Totals	45.7	2285.0	19.7

Half Mile Partition Current – Cluster 28.06

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	MSS Current	Recovery Current	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	34	0.8	1920	Longleaf Pine	160.4	104.7	64.1	18.8	73.8	57.6	22.5	28.2	No	No	0.0	0.0	0.0
27	36	11.9	1987	Slash Pine	311.0	85.7	286.4	68.6	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0
27	52	5.2	1948	Slash Pine	163.4	102.5	80.8	22.5	56.8	45.0	25.8	35.0	No	No	0.0	0.0	0.0

27	33	29.5	1948	Slash Pine	164.2	103.1	78.4	27.7	68.8	52.3	17.1	23.1	No	No	0.0	0.0	0.0	
27	55	4.4	1948	Slash Pine	127.3	80.0	72.3	25.0	43.1	35.0	11.8	20.0	No	No	0.0	0.0	0.0	
28	5	27.0	1932	Longleaf Pine	118.7	76.0	50.0	10.0	42.7	34.0	25.9	32.0	Yes	Yes	27.0	1782.0	27.0	
27	31	6.7	1914	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	122.3	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		207.8													Totals	27.0	1782.0	27.0

Half Mile Partition Future– Cluster 28.06

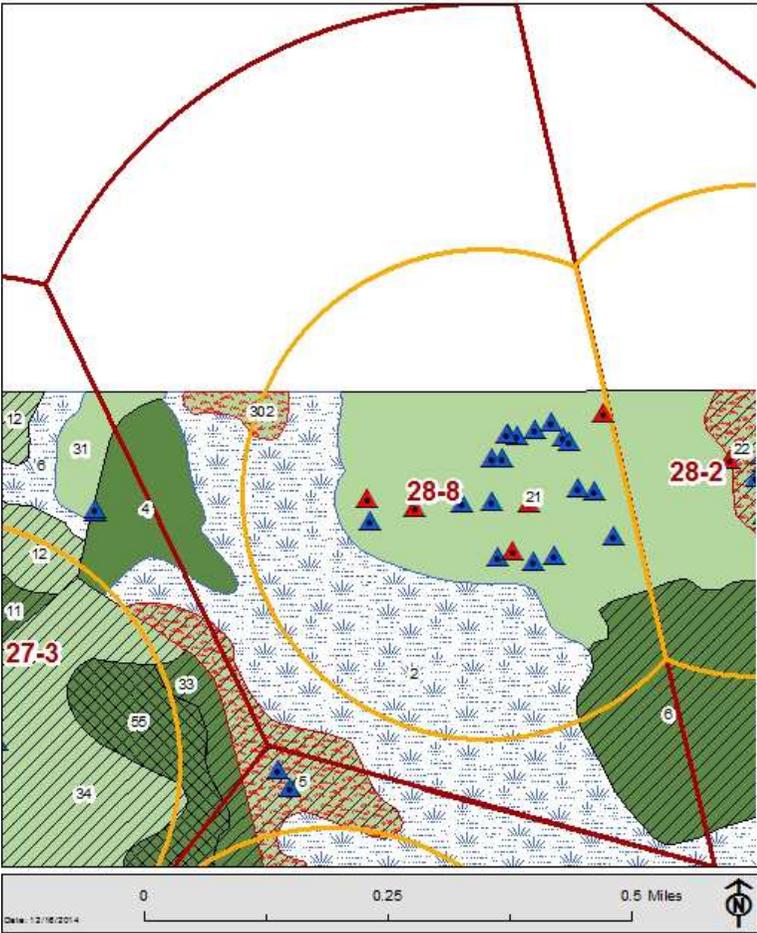
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
27	34	0.8	Modified Group Selection	50.4	50.0	0.0	0.0	27.9	21.8	22.5	28.2	Yes	Yes	0.8	40.0	0.8	
27	36	11.9	Thin	144.0	50.0	119.4	32.9	24.6	17.1	0.0	0.0	No	No	0.0	0.0	0.0	
27	52	5.2	Savannah Restoration Thin to 10-40 BA	7.4	10.0	0.0	0.0	0.0	0.0	7.4	10.0	No	No	0.0	0.0	0.0	
27	33	29.5	Thin	52.5	50.0	0.0	0.0	35.4	26.9	17.1	23.1	Yes	No	29.5	1475.0	0.0	
27	55	4.4	Savannah Restoration Thin to 10-40 BA	5.9	10.0	0.0	0.0	0.0	0.0	5.9	10.0	No	No	0.0	0.0	0.0	
28	5	27.0	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	27.0	1350.0	27.0	
27	31	6.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	2	122.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		207.8												Totals	57.3	2865.0	27.8

Cluster 28.08

This cluster currently contains two stands (compartment 28 stand 5 and 302) totaling 4.5 acres that meet the MSS within the half mile partition that. Compartment 28 stand 5 also meets the recovery standard. Pine stands located in the half mile partition are comprised of two intermediate aged slash stands, four mature longleaf stands, and one non-foraging stand. Compartment 28 stands 5 and 6 would receive a thinning treatment reducing the total basal area in these stands to 50. The thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 28 stands 8, 302, and 6 would meet the MSS. Implementation of the proposed action would increase MSS acres to 17.3 in the half mile partition.

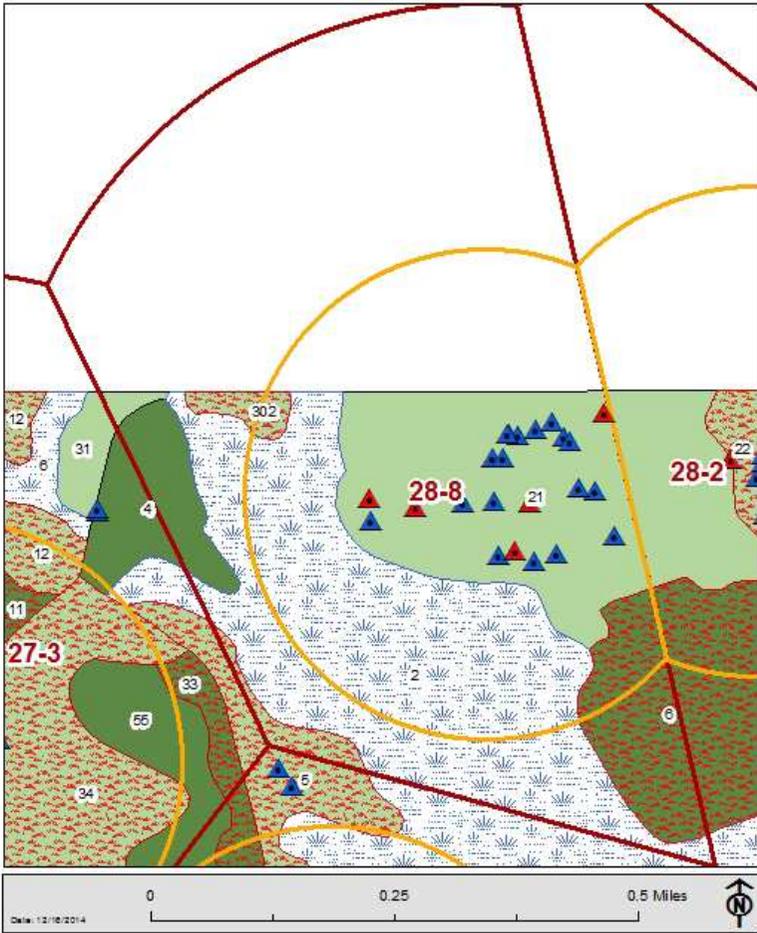
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase. However, a landing would need to be placed within 200 ft of an inactive cavity tree which could lead to disturbance if that tree becomes active.

Cluster 28.08 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Cluster 28.08 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 28.08

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	302	0.9	1933	Longleaf Pine	95.3	57.5	43	15	37.3	25	15	17.5	Yes	No	0.9	39.4	0.0
28	6	4.4	1959	Slash Pine	219.2	102.9	155.1	54.3	61.5	45.7	2.7	2.9	No	No	0.0	0.0	0.0
28	21	38.2	1933	Longleaf Pine	80	52.5	39.5	17.5	32.1	25	8.3	10	No	No	0.0	0.0	0.0
28	2	37.8	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
Totals															0.9	39.4	0.0

Quarter Mile Cluster Partition Future – Cluster 28.08

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	302	0.9	No Treatment	95.3	57.5	43.0	15.0	37.3	25.0	15.0	17.5	Yes	No	0.9	39.4	0.0
28	6	4.4	Thin	66.1	50.0	0.0	0.0	63.4	47.1	2.7	2.9	Yes	No	4.4	218.6	0.0
28	21	38.2	No Treatment	80.0	52.5	39.5	17.5	32.1	25.0	8.3	10.0	No	No	0.0	0.0	0.0
28	2	37.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
Totals														5.3	258.0	0.0

Half Mile Partition Current – Cluster 28.08

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	302	2.1	1933	Longleaf Pine	95.3	57.5	43.0	15.0	37.3	25.0	15.0	17.5	Yes	No	2.1	90.9	0.0
28	4	6.2	1959	Slash Pine	179.1	96.0	94.0	16.0	50.5	36.0	34.5	44.0	No	No	0.0	0.0	0.0
28	6	12.8	1959	Slash Pine	219.2	102.9	155.1	54.3	61.5	45.7	2.7	2.9	No	No	0.0	0.0	0.0
28	21	38.2	1933	Longleaf Pine	80.0	52.5	39.5	17.5	32.1	25.0	8.3	10.0	No	No	0.0	0.0	0.0
28	5	2.4	1932	Longleaf Pine	118.7	76.0	50.0	10.0	42.7	34.0	25.9	32.0	Yes	Yes	2.4	156.2	2.4
26	31	0.8	1970	Longleaf Pine	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unkno wn	unkno wn	unknown	0.0	0.0	0.0
28	2	64.4	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
Totals															4.5	247.2	2.4

Half Mile Partition Future – Cluster 28.08

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	302	2.1	No Treatment	95.3	57.5	43.0	15.0	37.3	25.0	15.0	17.5	Yes	No	2.1	90.9	0.0
28	4	6.2	No Treatment	179.1	96.0	94.0	16.0	50.5	36.0	34.5	44.0	No	No	0.0	0.0	0.0
28	6	12.8	Thin	66.1	50.0	0.0	0.0	63.4	47.1	2.7	2.9	Yes	No	12.8	639.2	0.0
28	21	38.2	No Treatment	80.0	52.5	39.5	17.5	32.1	25.0	8.3	10.0	No	No	0.0	0.0	0.0
28	5	2.4	Thin	48.5	50.0	0.0	0.0	22.6	18.0	25.9	32.0	Yes	Yes	2.4	118.4	2.4
26	31	0.8	No Treatment	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
28	2	64.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		126.9											Totals	17.3	848.5	2.4

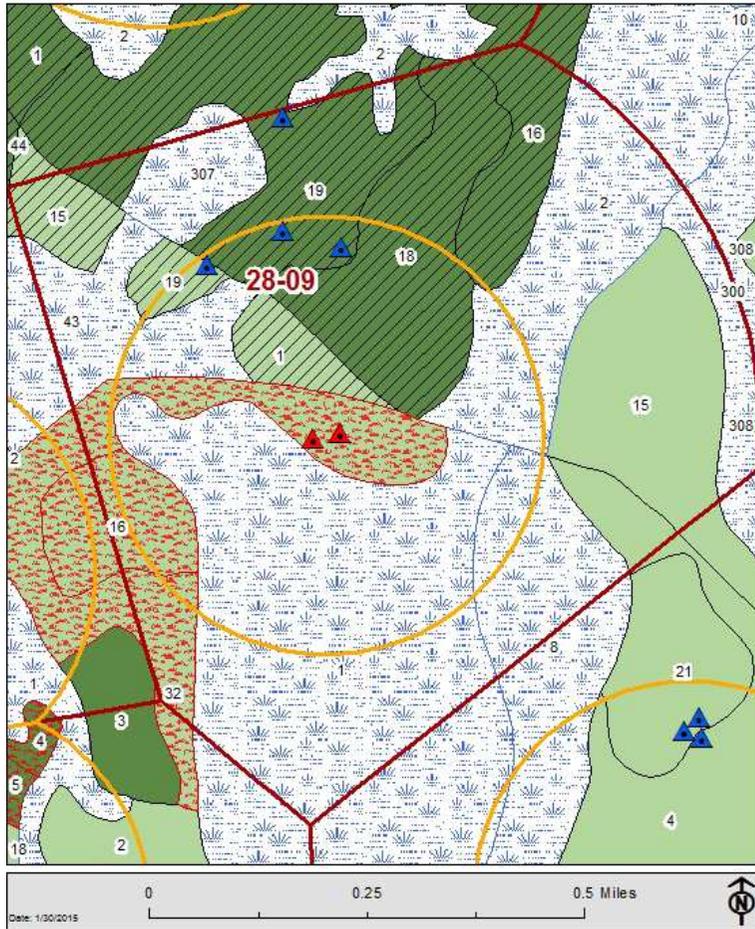
Cluster 28.09

This cluster currently has two stands (compartment 69 stands 16 and 32) totaling 29.2 acres that meet the MSS in the half mile partition. No stands meet the recovery standard. Pine stands located in the half mile partition are comprised of five intermediate to mature aged slash stands, seven mature longleaf stand, and six non-foraging stands. Compartment 28 stand 15 and compartment 67 stand 4 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the foraging habitat in the partition, they are not counted as foraging habitat for cluster 28.09. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stands 15 and 19 would receive first thinning treatments which remove selected rows for harvest. In these stands all size classes would be reduced because all entire rows are taken out. Compartment 27 stands 1 and 44 and compartment 28 stands 1, 16, 18, and 19 would receive thinning treatments reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stand 44, compartment 8 stands 18 and 19, and compartment 69 stands 16 and 32 would meet MSS. Implementation of the proposed action would increase the MSS acres to 85.4 acres in the half mile partition.

Due to the hydric soil conditions in the project area and the abundance of cavity trees in the project area, a log landing would need to be placed within 200ft of a cavity tree which could disturb the bird using that tree. This tree is currently inactive but could become active before project implementation. In this cluster logging activities would be conducted outside of the breeding season reducing possible negative impacts to nesting.

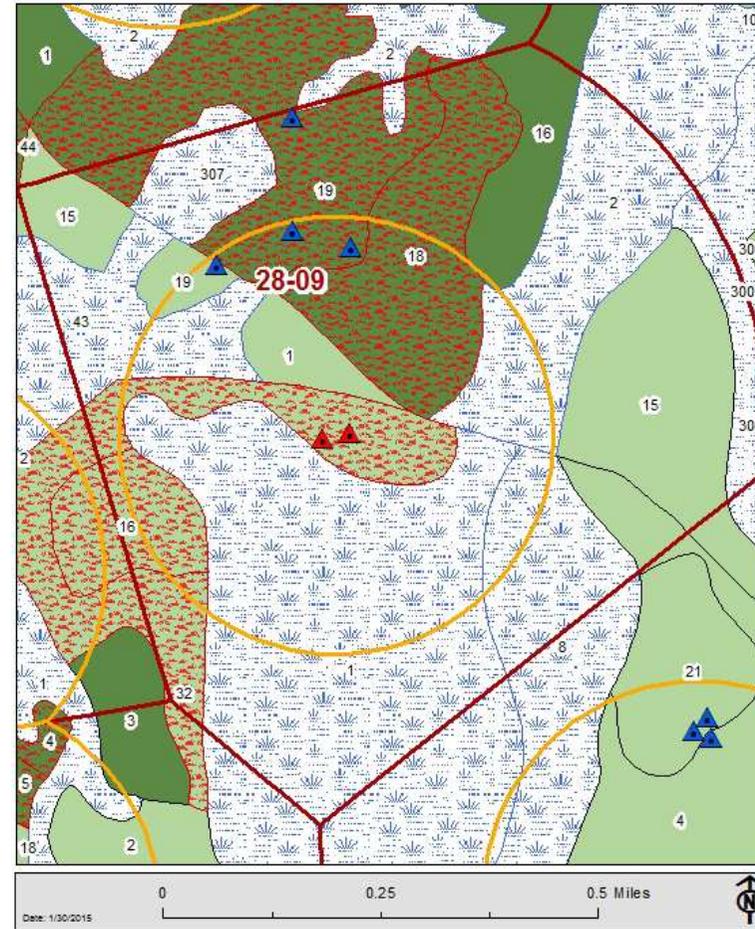
Conclusion: Likely to Adversely Affect (LAA) – Conclusion: Likely to Adversely Affect (LAA)
–This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase. However due to the hydric soil conditions in the project area and the abundance of cavity trees a log landing would need to be placed within 200ft of a cavity tree. This cluster has 1 active tree in the cluster. However, the log landing is only expected to affect the individual using the tree closest to the landing. Because activities would be conducted outside of the breeding season and the tree is separated from the other cavity trees only one individual would be affected by the landing.

Cluster 28.09 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
inactive	BA 50	Wetland
active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Cluster 28.09 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
inactive	BA 50	Wetland
active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 28.09

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+ in MSS	Recovery Acres
67	8	4.7	1918	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	1	6.7	1988	Longleaf Pine	387.1	120.0	378.1	110.0	8.8	5.0	0.1	5.0	No	No	0.0	0.0	0.0
27	19	1.8	1988	Longleaf Pine	388.8	125.0	380.5	120.0	8.3	5.0	0.0	0.0	No	No	0.0	0.0	0.0
27	43	7.3	NA	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	18	20.1	1962	Slash Pine	258.0	117.5	167.7	55.0	87.9	60.0	2.3	2.5	No	No	0.0	0.0	0.0
28	19	5.9	1920	Slash Pine	131.8	96.0	43.5	14.0	70.9	58.0	17.4	24.0	No	No	0.0	0.0	0.0
28	16	0.1	1981	Slash Pine	414.9	141.8	384.6	121.8	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	2	8.7	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	50.2	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	32	14.1	1926	Longleaf Pine	113.9	69.0	45.9	12.0	54.0	41.0	14.0	16.0	Yes	No	14.1	803.7	0.0
69	16	5.7	1926	Longleaf Pine	116.3	72.5	49.6	15.0	50.3	37.5	16.4	20.0	Yes	No	5.7	327.8	0.0
		125.3													19.8	1131.5	0.0

Quarter Mile Cluster Partition Future – Cluster 28.09

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
67	8	4.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	1	6.7	Thin	148.1	50.0	132.6	41.1	15.5	8.8	0.0	0.1	No	No	0.0	0.0	0.0
27	19	1.8	First Thin	149.7	50.0	143.1	46.0	6.6	4.0	0.0	0.0	No	No	0.0	0	0.0
27	43	7.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	18	20.1	Thin	71.9	50.0	0.0	0.0	69.6	47.5	2.3	2.5	Yes	No	20.1	1005.0	0.0
28	19	5.9	Thin	49.2	50.0	0.0	0.0	31.8	26.0	17.4	24.0	Yes	No	5.9	295.0	0.0
28	16	0.1	Thin	118.1	50.0	87.8	30.0	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	2	8.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	50.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	32	14.1	No Treatment	113.9	69.0	45.9	12.0	54.0	41.0	14.0	16.0	Yes	No	14.1	803.7	0.0
69	16	5.7	No Treatment	116.3	72.5	49.6	15.0	50.3	37.5	16.4	20.0	Yes	No	5.7	327.8	0.0
		125.3												45.8	2431.5	0.0

Half Mile Partition Current – Current 28.09

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MS Acres	Total BA 10+in MSS	Recovery Acres	
28	19	23.6	1920	Slash Pine	131.8	96.0	43.5	14.0	70.9	58.0	17.4	24.0	No	No	0.0	0.0	0.0	
28	16	13.0	1981	Slash Pine	414.9	141.8	384.6	121.8	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0	
28	2	32.5	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	308	0.2																
28	307	9.4	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
28	18	32.6	1962	Slash Pine	258.0	117.5	167.7	55.0	87.9	60.0	2.3	2.5	No	No	0.0	0.0	0.0	
27	15	6.1	1988	Longleaf Pine	542.8	170.0	526.2	160.0	16.5	10.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	1	6.7	1988	Longleaf Pine	387.1	120.0	378.1	110.0	8.8	5.0	0.1	5.0	No	No	0.0	0.0	0.0	
27	44	0.0	1962	Slash Pine	253.7	140.0	136.7	46.7	108.9	83.3	8.0	10.0	No	No	0.0	0.0	0.0	
69	32	21.4	1926	Longleaf Pine	113.9	69.0	45.9	12.0	54.0	41.0	14.0	16.0	Yes	No	21.4	1219.8	0.0	
69	1	81.5	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
27	19	4.1	1988	Longleaf Pine	388.8	125.0	380.5	120.0	8.3	5.0	0.0	0.0	No	No	0.0	0.0	0.0	
67	8	17.5	1918	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
67	4	5.0	1920	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0	
27	43	17.8	NA	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
69	16	7.8	1926	Longleaf Pine	116.3	72.5	49.6	15.0	50.3	37.5	16.4	20.0	Yes	No	7.8	448.5	0.0	
69	3	0.0	1964	Slash Pine	165.8	100.0	52.6	15.0	98.6	67.5	14.6	17.5	No	No	0.0	0.0	0.0	
28	45	29.8	1924	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
28	300	8.1	NA	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		317.1													29.2	1668.3	0.0	

Half Mile Partition Future – Current 28.09

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	19	23.6	Thin	49.2	50.0	0.0	0.0	31.8	26.0	17.4	24.0	Yes	No	23.6	1180.0	0.0
28	16	13.0	Thin	118.1	50.0	87.8	30.0	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	2	32.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0

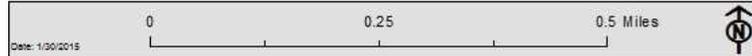
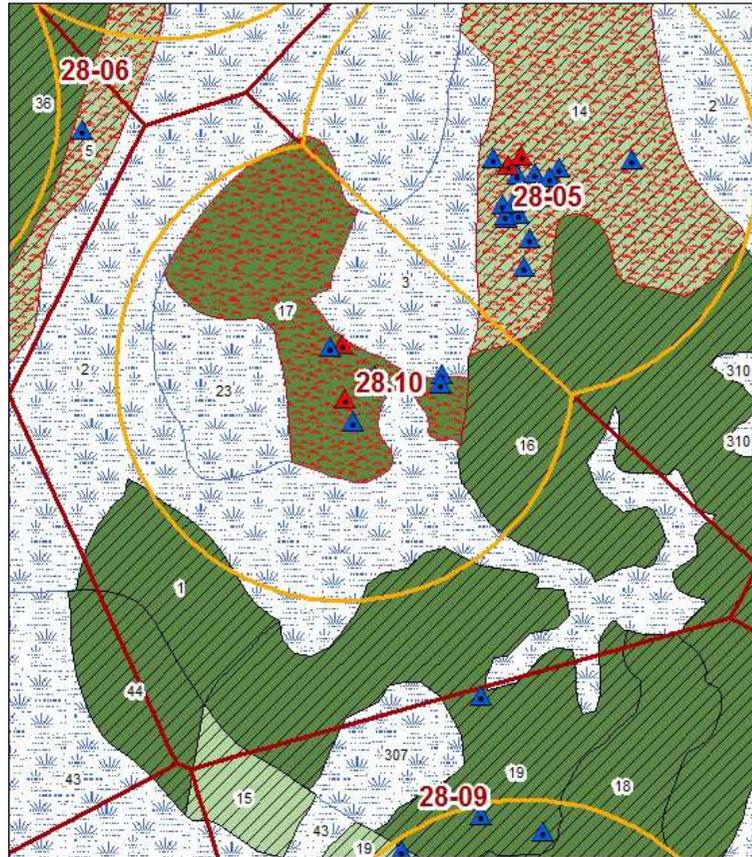
28	308	0.2															
28	307	9.4	No Treatment	NA	0.0	0.0	0.0										
28	18	32.6	Thin	71.9	50.0	0.0	0.0	69.6	47.5	2.3	2.5	Yes	No	32.6	1630.0	0.0	
27	15	6.1	First Thin	147.3	50.0	134.1	42.0	13.2	8.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	1	6.7	Thin	148.1	50.0	132.6	41.1	15.5	8.8	0.0	0.1	No	No	0.0	0.0	0.0	
27	44	0.0	Thin	60.3	50.0	0.0	0.0	52.3	40.0	8.0	10.0	Yes	No	0.0	0.0	0.0	
69	32	21.4	No Treatment	113.9	69.0	45.9	12.0	54.0	41.0	14.0	16.0	Yes	No	21.4	1219.8	0.0	
69	1	81.5	No Treatment	NA	0.0	0.0	0.0										
27	19	4.1	First Thin	149.7	50.0	143.1	46.0	6.6	4.0	0.0	0.0	No	No	0.0	0	0.0	
67	8	17.5	No Treatment	NA	0.0	0.0	0.0										
67	4	5.0	No Treatment	unknown	0.0	0.0	0.0										
27	43	17.8	No Treatment	NA	0.0	0.0	0.0										
69	16	7.8	No Treatment	116.3	72.5	49.6	15.0	50.3	37.5	16.4	20.0	Yes	No	7.8	448.5	0.0	
69	3	0.0	No Treatment	165.8	100.0	52.6	15.0	98.6	67.5	14.6	17.5	No	No	0.0	0.0	0.0	
28	15	29.8	No Treatment	unknown	0.0	0.0	0.0										
28	300	8.1	No Treatment	NA	0.0	0.0	0.0										
		317.1												85.4	4478.3	0.0	

Cluster 28.10

This cluster currently contains one stand (compartment 28 stand17) totaling 31.7 acres that meets the MSS within the half mile partition that. Pine stands located in the half mile partition are comprised of six intermediate aged slash stands, two mature longleaf stands, and four non-foraging stand. Compartment 28 stands 44, 1, 9, 19, 18, and 16 would receive a thinning treatment reducing the total basal area in these stands to 50. The thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 28 stands 44, 19, 18, 14, and 17 would meet the MSS increasing total MSS acres to 65.9 acres.

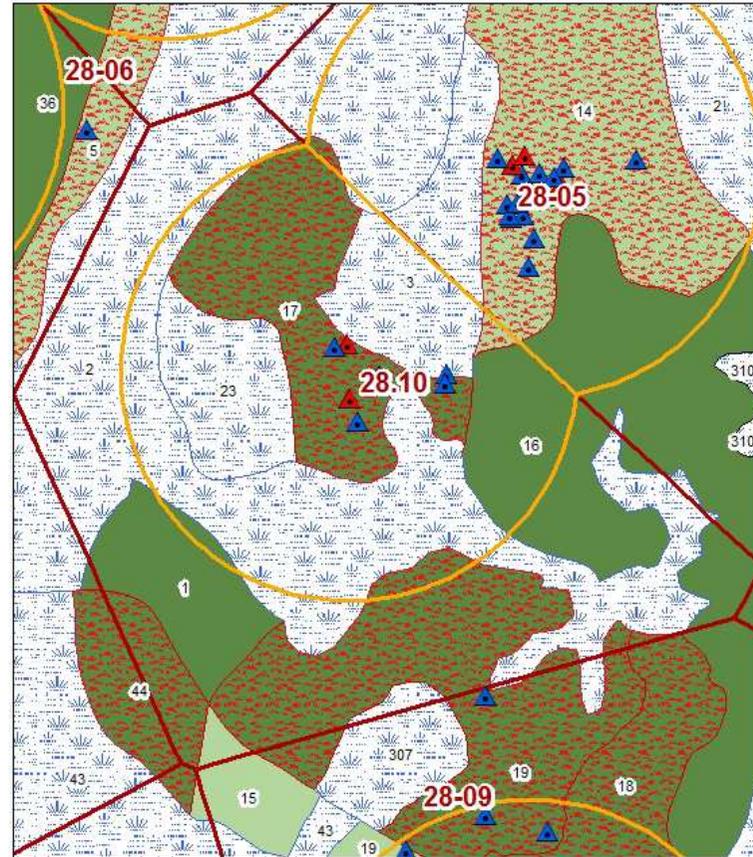
Conclusion: Not Likely to Adversely Affect (NLAA) – MSS would increase as a result of implementing the proposed action.

Cluster 28.1 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Cluster 28.1 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Longleaf Pine
RCW Partitions 0.25mi	BA 40	Slash Pine
RCW Partitions 0.50mi		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 28.1

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	23	14.5	NULL	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	1	0.9	1962	Slash Pine	223.8	128.0	96.5	20.0	100.5	76.0	26.9	32.0	No	No	0.0	0.0	0.0
28	19	1.9	1920	Slash Pine	131.8	96.0	43.5	14.0	70.9	58.0	17.4	24.0	No	No	0.0	0.0	0.0
28	16	11.2	1981	Slash Pine	414.9	141.8	384.6	121.8	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	14	0.7	1920	Longleaf Pine	87.8	64	35.1	12	33.9	28	18.8	24	Yes	No	0.7	36.4	0.0
28	17	30.8	1925	Slash Pine	102.9	70	25.2	8	62.6	44	15.1	18	Yes	No	30.8	1909.6	0.0
28	3	12.6	NULL	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	34.9	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		107.5													31.5	1946.0	0.0

Quarter Mile Cluster Partition Future – Cluster 28.1

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	23	14.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	1	0.9	Thin	50.7	50.0	0.0	0.0	23.8	18.0	26.9	32.0	Yes	Yes	0.9	45.0	0.9
28	19	1.9	Thin	49.2	50.0	0.0	0.0	31.8	26.0	17.4	24.0	Yes	No	1.9	95.0	0.0
28	16	11.2	Thin	118.1	50.0	87.8	30.0	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	14	0.7	Thin	50.3	50.0	0.0	0.0	31.5	26.0	18.8	24.0	Yes	Yes	0.7	35.0	0.7
28	17	30.8	No Treatment	102.9	70.0	25.2	8.0	62.6	44.0	15.1	18.0	Yes	No	30.8	1909.6	0.0
28	3	12.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	34.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		107.5												34.3	2084.6	1.6

Half Mile Partition Current – Cluster 28.1

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	23	14.5	NULL	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	44	5.4	1962	Slash Pine	253.7	140.0	136.7	46.7	108.9	83.3	8.0	10.0	No	No	0.0	0.0	0.0
27	15	1.2	1988	Longleaf Pine	542.8	170.0	526.2	160.0	16.5	10.0	0.0	0.0	No	No	0.0	0.0	0.0
28	1	15.0	1962	Slash Pine	223.8	128.0	96.5	20.0	100.5	76.0	26.9	32.0	No	No	0.0	0.0	0.0

28	307	1.3	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	18	0.2	1962	Slash Pine	258.0	117.5	167.7	55.0	87.9	60.0	2.3	2.5	No	No	0.0	0.0	0.0
28	19	27.4	1920	Slash Pine	131.8	96.0	43.5	14.0	70.9	58.0	17.4	24.0	No	No	0.0	0.0	0.0
28	16	25.1	1981	Slash Pine	414.9	141.8	384.6	121.8	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	14	0.7	1920	Longleaf Pine	87.8	64.0	35.1	12.0	33.9	28.0	18.8	24.0	Yes	No	0.7	36.4	0.0
28	17	31.0	1925	Slash Pine	102.9	70.0	25.2	8.0	62.6	44.0	15.1	18.0	Yes	No	31.0	1922.0	0.0
28	3	12.6	NULL	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	81.6	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		216.0													31.7	1958.4	0.0

Half Mile Partition Future – Cluster 28.1

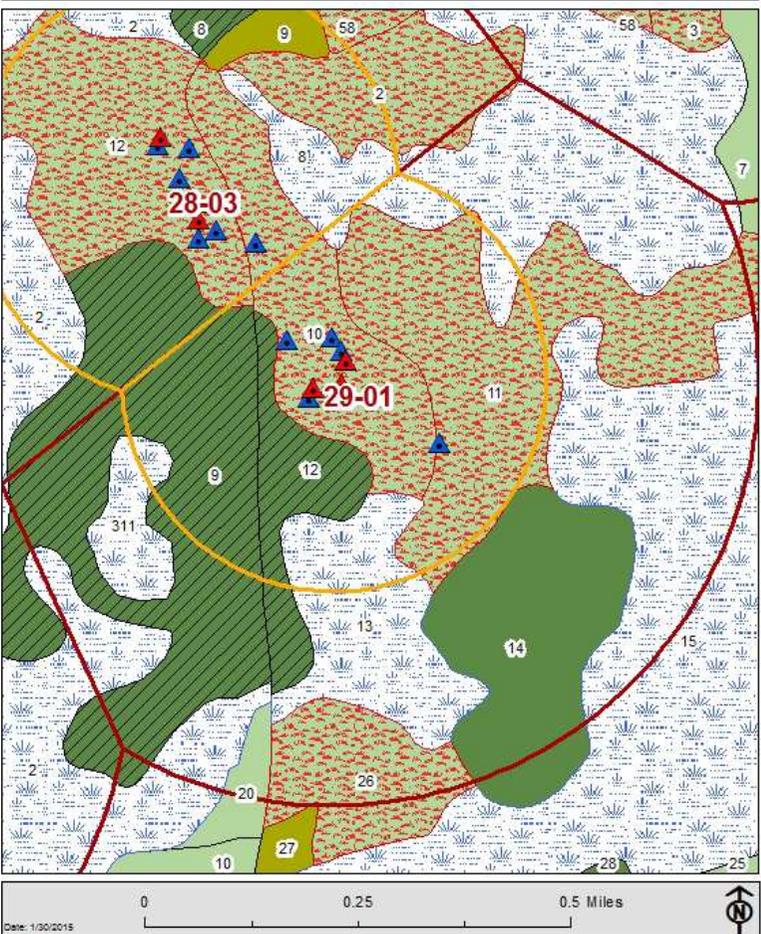
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	23	14.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	44	5.4	Thin	60.3	50.0	0.0	0.0	52.3	40.0	8.0	10.0	Yes	No	5.4	270.0	0.0
27	15	1.2	First Thin	147.3	50.0	134.1	42.0	13.2	8.0	0.0	0.0	No	No	0.0	0.0	0.0
28	1	15.0	Thin	50.7	50.0	0.0	0.0	23.8	18.0	26.9	32.0	Yes	Yes	1.2	60.0	1.2
28	307	1.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	18	0.2	Thin	71.9	50.0	0.0	0.0	69.6	47.5	2.3	2.5	Yes	No	0.2	10.0	0.0
28	19	27.4	Thin	49.2	50.0	0.0	0.0	31.8	26.0	17.4	24.0	Yes	No	27.4	1370.0	0.0
28	16	25.1	Thin	118.1	50.0	87.8	30.0	30.3	20.0	0.0	0.0	No	No	0.0	0.0	0.0
28	14	0.7	Thin	50.3	50.0	0.0	0.0	31.5	26.0	18.8	24.0	Yes	Yes	0.7	35.0	0.7
28	17	31.0	No Treatment	102.9	70.0	25.2	8.0	62.6	44.0	15.1	18.0	Yes	No	31.0	1922.0	0.0
28	3	12.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	2	81.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		216.0												64.7	3607.0	0.7

Cluster 29.01

This cluster currently contains five stands (compartment 28 stand 12 and compartment 29 stands 2, 10, 11, and 26) totaling 92 acres that meets the MSS within the half mile partition that. Compartment 29 stands 2 and 10 also meet the recovery standard. Pine stands located in the half mile partition are comprised of three intermediate aged slash stands, six mature longleaf stands, and six non-foraging stand. Compartment 28 stands 9 would receive a thinning treatment reducing the total basal area in these stands to 50. The thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. However, in its current state this stand does not contain enough trees greater than 10 inches to meet the MSS. After treatment foraging acres meeting the MSS and recovery standard would remain the same in this foraging partition.

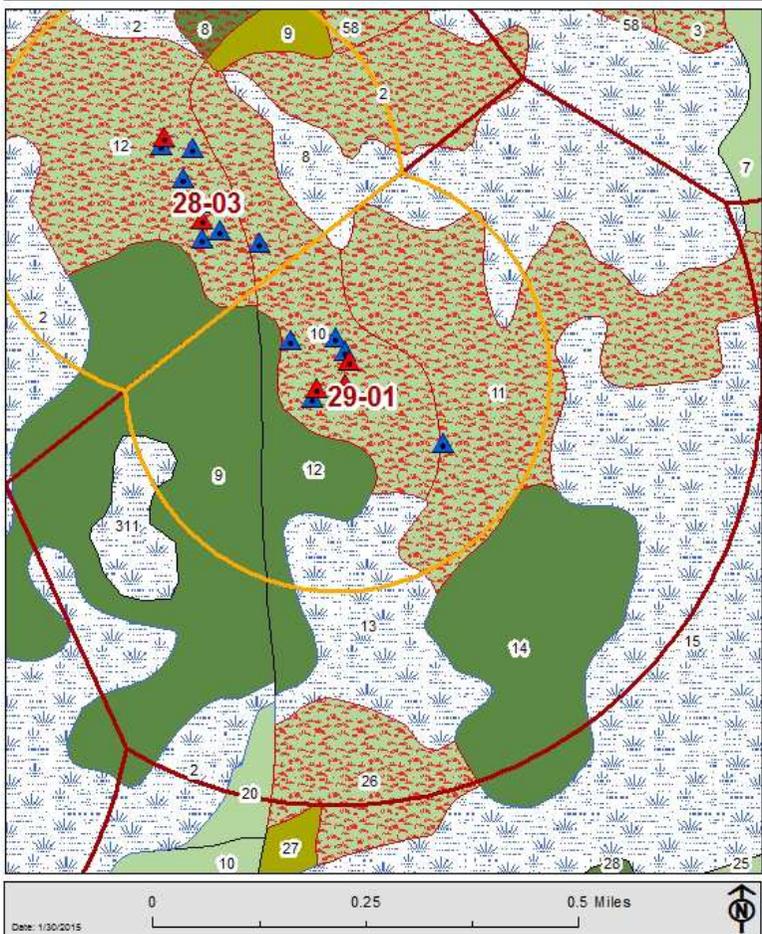
Conclusion: Not Likely to Adversely Affect (NLAA) – No current foraging habitat meeting MSS or the recovery standard would be altered.

Cluster 29.01 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	▨	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
▭ RCW Partitions 0.25 mi	▨ BA 50	Longleaf Pine
▭ RCW Partitions 0.50 mi	▨ BA 10-40	Slash Pine
	▨ BA 40	Scrub Oak
		Loblolly Pine

Cluster 29.01 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	▨	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
▭ RCW Partitions 0.25 mi	▨ BA 50	Longleaf Pine
▭ RCW Partitions 0.50 mi	▨ BA 10-40	Slash Pine
	▨ BA 40	Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 29.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	9	20.8	1981	Slash Pine	375.7	107.5	326.2	77.5	49.5	30	0	0	No	No	0.0	0.0	0.0
28	12	0.2	1920	Longleaf Pine	102.5	70	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	0.2	11.5	0.0
29	10	21.7	1920	Longleaf Pine	57.3	47.5	16.5	5	21.2	17.5	19.5	25	Yes	Yes	21.7	922.3	21.7
29	11	36.0	1925	Longleaf Pine	80.6	55	25.9	7	41.6	32	13.1	16	Yes	No	36.0	1728.0	0.0
28	311	1.2	1932	Pond Pine-hardwood	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	8	5.7	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	12	11.3	1980	Slash Pine	unkno wn	unkno wn	unkn own	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
29	13	8.7	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		105.5												Totals	57.9	2661.8	21.7

Quarter Mile Cluster Partition Future – Cluster 29.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	9	20.8	Thin	119.4	50.0	69.9	20.0	49.5	30.0	0.0	0.0	No	No	0.0	0.0	0.0
28	12	0.2	No Treatment	102.5	70.0	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	0.2	11.5	0.0
29	10	21.7	No Treatment	57.3	47.5	16.5	5.0	21.2	17.5	19.5	25.0	Yes	Yes	21.7	922.3	21.7
29	11	36.0	No Treatment	80.6	55.0	25.9	7.0	41.6	32.0	13.1	16.0	Yes	No	36.0	1728.0	0.0
28	311	1.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	8	5.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	12	11.3	No Treatment	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
29	13	8.7	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		105.5												57.9	2661.8	21.7

Half Mile Partition Current – Cluster 29.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	9	50.3	1981	Slash Pine	375.7	107.5	326.2	77.5	49.5	30.0	0.0	0.0	No	No	0.0	0.0	0.0
28	12	0.2	1920	Longleaf Pine	102.5	70.0	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	0.2	11.5	0.0
29	14	34.1	1970	Slash Pine	153.2	64.0	105.6	32.0	42.8	26.0	4.8	6.0	No	No	0.0	0.0	0.0
29	26	13.6	1938	Longleaf Pine	72.2	60.0	12.7	2.5	37.6	30.0	21.8	27.5	Yes	Yes	13.6	781.9	13.6

29	2	0.9	1925	Longleaf Pine	100.4	72.0	34.9	12.0	45.4	36.0	20.0	24.0	Yes	No	0.9	54.0	0.0
29	10	21.7	1920	Longleaf Pine	57.3	47.5	16.5	5.0	21.2	17.5	19.5	25.0	Yes	Yes	21.7	922.3	21.7
29	11	56.5	1925	Longleaf Pine	80.6	55.0	25.9	7.0	41.6	32.0	13.1	16.0	Yes	No	56.5	2712.2	0.0
28	311	8.5	1932	Pond Pine-hardwood	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	20	2.4	1925	Longleaf Pine	unkno wn	unkno wn	unkno wn	unk now n	unkn own	unkn own	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0
28	2	12.1	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	27	0.0	1981	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	15	39.0	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	8	36.3	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	12	14.7	1980	Slash Pine	unkno wn	unkno wn	unkno wn	unk now n	unkn own	unkn own	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0
29	14	34.1	1970	Slash Pine	153.2	64.0	105.6	32.0	42.8	26.0	4.8	6.0	No	No	0.0	0.0	0.0
29	13	26.3	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		350.7												Totals	92.0	4427.8	35.3

Half Mile Partition Future – Cluster 29.01

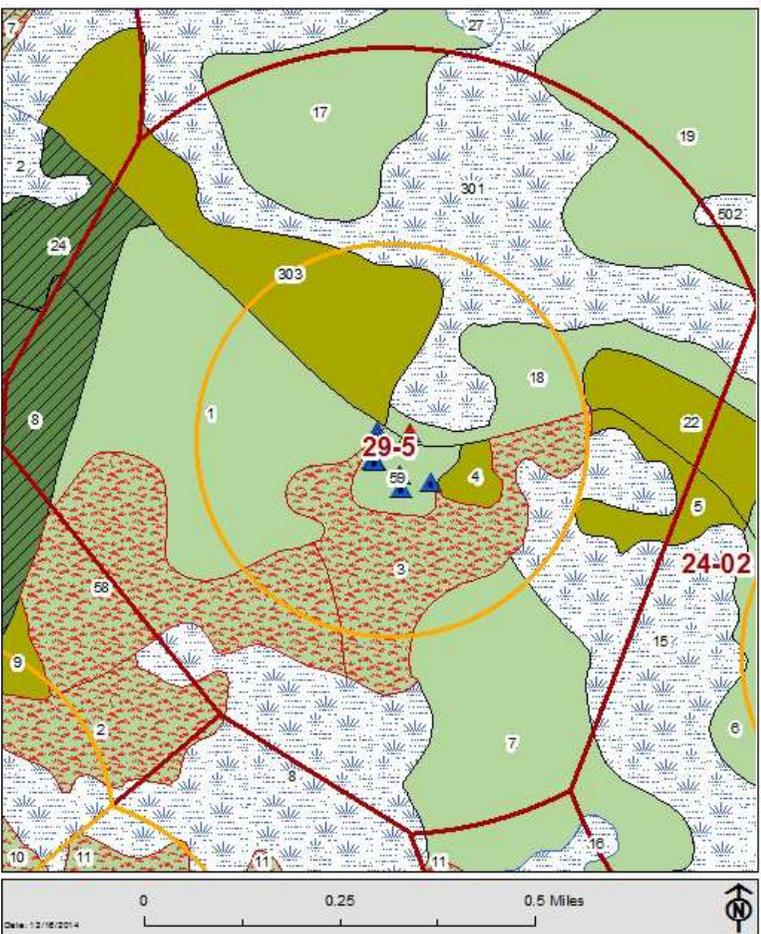
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	9	50.3	Thin	119.4	50.0	69.9	20.0	49.5	30.0	0.0	0.0	No	No	0.0	0.0	0.0
28	12	0.2	No Treatment	102.5	70.0	35.3	12.5	47.9	33.8	19.2	23.8	Yes	No	0.2	11.5	0.0
29	14	34.1	No Treatment	153.2	64.0	105.6	32.0	42.8	26.0	4.8	6.0	No	No	0.0	0.0	0.0
29	26	13.6	No Treatment	72.2	60.0	12.7	2.5	37.6	30.0	21.8	27.5	Yes	Yes	13.6	781.9	13.6
29	2	0.9	No Treatment	100.4	72.0	34.9	12.0	45.4	36.0	20.0	24.0	Yes	No	0.9	54.0	0.0
29	10	21.7	No Treatment	57.3	47.5	16.5	5.0	21.2	17.5	19.5	25.0	Yes	Yes	21.7	922.3	21.7
29	11	56.5	No Treatment	80.6	55.0	25.9	7.0	41.6	32.0	13.1	16.0	Yes	No	56.5	2712.2	0.0
28	311	8.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
28	20	2.4	No Treatment	unkno wn	unkn own	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unknown	0.0	0.0	0.0
28	2	12.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	27	0.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	15	39.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	8	36.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	12	14.7	No Treatment	unkno wn	unkn own	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unknown	0.0	0.0	0.0
29	14	34.1	No Treatment	153.2	64.0	105.6	32.0	42.8	26.0	4.8	6.0	No	No	0.0	0.0	0.0
29	13	26.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		350.7												92.0	4427.8	35.3

Cluster 29.05

This cluster currently contains five stands (compartment 29 stands 2, 3, and 58) totaling 61.3 acres that meets the MSS within the half mile partition that. Compartment 29 stands 2 and 58 also meet the recovery standard. Pine stands located in the half mile partition are comprised of two intermediate aged slash stands, nine mature longleaf stands, and seven non-foraging stands. Compartment 28 stands 8 would receive a thinning treatment reducing the total basal area in these stands to 50. The thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. Compartment 28 stand 24 would receive a clearcut (4.9 acres within the foraging partition) so that a barrow pit could be created. The barrow pit is needed to provide material to improve the roads so that timber can be removed from the project area. This stand currently does not meet the MSS or recovery standard. After treatment compartment 29 stands 2, 3, and 58 and compartment 28 stand 8 would meet the MSS increasing the total acres meeting MSS in the half mile partition to 74 acres.

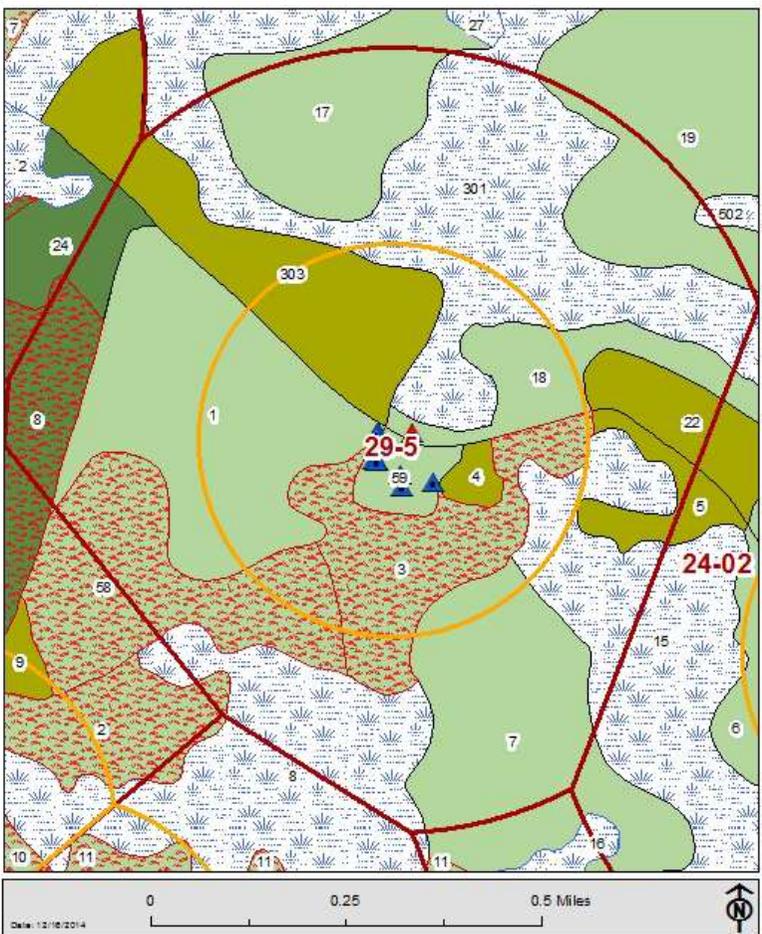
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 29.05 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 29.05 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 29.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
29	58	4.7	1925	Longleaf Pine	75.9	60	13.8	2.5	42.1	32.5	20	25	Yes	Yes	4.7	269.4	4.7
29	3	28.4	1925	Longleaf Pine	95.9	68.3	25.5	6.7	51.9	40	18.5	21.7	Yes	Yes	28.4	1751.6	28.4
24	301	14.8	1926	Sweetbay-swamp tupelo-red maple	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
24	18	11.9	1915	Longleaf Pine	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unkn own	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0
24	303	20.4	1926	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	15	5.0	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	1	27.1	2008	Longleaf Pine	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unkn own	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0
29	59	6.6	1925	Longleaf Pine	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unkn own	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0
29	7	3.8	2009	Longleaf Pine	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unkn own	unkn own	unkn own	unknow n	unknown	0.0	0.0	0.0
29	4	3.0	1980	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		125.7												Totals	33.1	2021.1	33.1

Quarter Mile Cluster Partition Future – Cluster 29.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
29	58	4.7	No Treatment	75.9	60.0	13.8	2.5	42.1	32.5	20.0	25.0	Yes	Yes	4.7	269.4	4.7
29	3	28.4	No Treatment	95.9	68.3	25.5	6.7	51.9	40.0	18.5	21.7	Yes	Yes	28.4	1751.6	28.4
24	301	14.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
24	18	11.9	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
24	303	20.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	15	5.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	1	27.1	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
29	59	6.6	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
29	7	3.8	No Treatment	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
29	4	3.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		125.7												33.1	2021.1	33.1

Half Mile Partition Current – Cluster 29.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
28	8	12.7	1969	Slash Pine	208.5	84.0	126.6	32.0	74.9	44.0	7.0	8.0	No	No	0.0	0.0	0.0
28	24	4.9	1969	Slash Pine	264.9	80.0	231.0	60.0	33.9	20.0	0.0	0.0	No	No	0.0	0.0	0.0
29	58	28.1	1925	Longleaf Pine	75.9	60.0	13.8	2.5	42.1	32.5	20.0	25.0	Yes	Yes	28.1	1614.8	28.1
29	2	0.9	1925	Longleaf Pine	100.4	72.0	34.9	12.0	45.4	36.0	20.0	24.0	Yes	No	0.9	56.1	0.0
29	3	32.3	1925	Longleaf Pine	95.9	68.3	25.5	6.7	51.9	40.0	18.5	21.7	Yes	Yes	32.3	1992.6	32.3
24	301	77.6	1926	Sweetbay-swamp tupelo-red maple	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
24	17	28.6	1958	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
24	502	0.3	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
24	49	47.4	1986	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
24	18	18.2	1915	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
24	22	9.4	1926	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
24	303	33.3	1926	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	15	25.2	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	1	61.2	2008	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
29	59	6.6	1925	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
29	8	24.6	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	5	6.5	1980	Scrub Oak	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
29	7	39.0	2009	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
29	4	3.0	1980	Scrub Oak	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
		429.9													61.3	3663.4	60.4

Half Mile Partition Future– Cluster 29.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
28	8	12.7	Thin	78.5	50.0	0.0	0.0	71.5	42.0	7.0	8.0	Yes	No	12.7	636.4	0.0
28	24	4.9	Clearcut Site For Borrow Pit Excavation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0
29	58	28.1	No Treatment	75.9	60.0	13.8	2.5	42.1	32.5	20.0	25.0	Yes	Yes	28.1	1614.8	28.1
29	2	0.9	No Treatment	100.4	72.0	34.9	12.0	45.4	36.0	20.0	24.0	Yes	No	0.9	56.1	0.0
29	3	32.3	No Treatment	95.9	68.3	25.5	6.7	51.9	40.0	18.5	21.7	Yes	Yes	32.3	1992.6	32.3

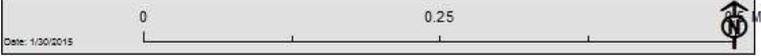
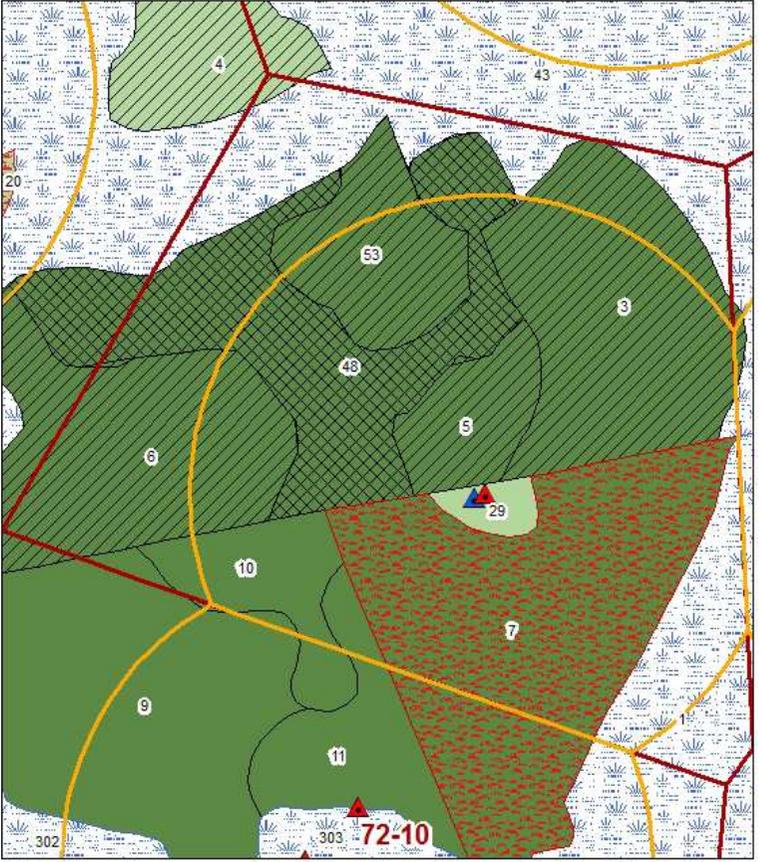
24	301	77.6	No Treatment	NA	0.0	0.0	0.0										
24	17	28.6	No Treatment	unknown	0.0	0.0	0.0										
24	502	0.3	No Treatment	unknown	0.0	0.0	0.0										
24	49	17.4	No Treatment	unknown	0.0	0.0	0.0										
24	18	18.2	No Treatment	unknown	0.0	0.0	0.0										
24	22	9.4	No Treatment	NA	0.0	0.0	0.0										
24	303	33.3	No Treatment	NA	0.0	0.0	0.0										
29	15	25.2	No Treatment	NA	0.0	0.0	0.0										
29	1	61.2	No Treatment	unknown	0.0	0.0	0.0										
29	59	6.6	No Treatment	unknown	0.0	0.0	0.0										
29	8	24.6	No Treatment	NA	0.0	0.0	0.0										
29	5	6.5	No Treatment	NA	0.0	0.0	0.0										
29	7	39.0	No Treatment	unknown	0.0	0.0	0.0										
29	4	3.0	No Treatment	unknown	0.0	0.0	0.0										
		429.9													74.0	4299.8	60.4

Cluster 69.03

This cluster currently only has one (compartment 69 stand 7) totaling 31.1 acres that meets both the MSS and the recovery standard. Compartment 69 stand 29 does not meet the MSS but does meet the recovery standard. Pine stands located in the half mile partition are comprised of eight intermediate to mature aged slash stands, one mature longleaf stand, and three non-foraging stands. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stands 48 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In these treatment areas, parts of the stand with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stand with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stand because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Compartment 27 stands 3, 5, 6, and 53 would receive a thinning treatment and compartment 27 stand 34 would receive a modified group selection cut reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 3, 5, 6, and 53 and compartment 69 stand 7 would meet MSS. Implementation of the proposed action would increase the MSS acres to 95.6 acres in the half mile partition.

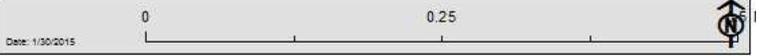
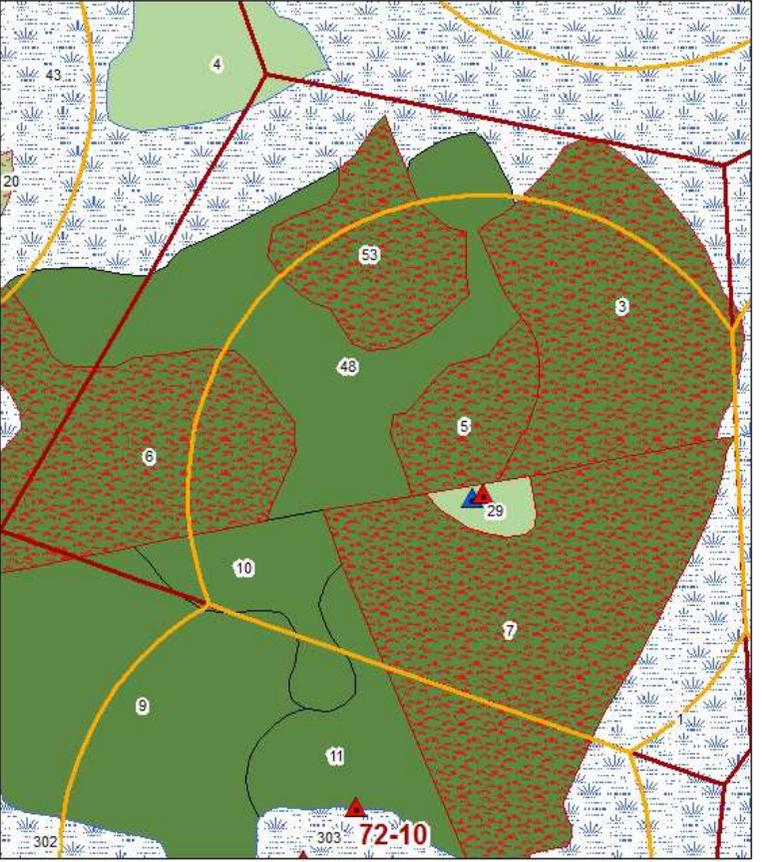
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 69.03 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Forest Type
RCW Partitions 0.25mi	BA 40	Longleaf Pine
RCW Partitions 0.50mi		Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 69.03 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	BA 10-40	Forest Type
RCW Partitions 0.25mi	BA 40	Longleaf Pine
RCW Partitions 0.50mi		Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 69.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
27	3	21.2	1970	Slash Pine	201	123.3	97.9	40	91.9	70	11.1	13.3	No	No	0.0	0.0	0.0	
27	5	7.2	1941	Slash Pine	171.8	160	0	0	123.9	100	47.9	60	No	No	0.0	0.0	0.0	
27	6	6.4	1957	Slash Pine	110.7	84	34.6	10	50.3	41	25.8	33	No	No	0.0	0.0	0.0	
27	48	16.1	1941	Undrained Flatwoods	122.9	126.7	12.1	3.3	55.2	46.7	55.6	76.7	No	No	0.0	0.0	0.0	
27	53	8.0	1941	Slash Pine	125.1	96	31.7	8	76	68	17.4	20	No	No	0.0	0.0	0.0	
72	10	5.8	1940	Slash Pine	143.8	85	68.4	20	54.3	40	21.1	25	No	No	0.0	0.0	0.0	
69	29	2.0	1926	Longleaf Pine	86	93.3	0	0	38.7	26.7	47.3	66.7	No	Yes	0.0	0.0	2.0	
69	7	31.1	1957	Slash Pine	52.5	60	0	0	17	14.4	35.5	45.6	Yes	Yes	31.1	1863.5	31.1	
27	43	0.2	<Null>	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
72	9	0.3	1958	Slash Pine	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unknown	0.0	0.0	0.0	
72	11	1.4	1960	Slash Pine	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unknown	0.0	0.0	0.0	
69	1	8.1	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		107.7													Totals	31.1	1863.5	33.0

Quarter Mile Cluster Partition Future – Cluster 69.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
27	3	21.2	Thin	59.3	50.0	0.0	0.0	48.2	36.7	11.1	13.3	Yes	No	21.2	1059.7	0.0	
27	5	7.2	Thin	39.9	50.0	0.0	0.0	0.0	0.0	39.9	50.0	Yes	Yes	7.2	358.2	7.2	
27	6	6.4	Thin	46.7	50.0	0.0	0.0	20.9	17.0	25.8	33.0	Yes	Yes	6.4	319.9	6.4	
27	48	16.1	Savannah Restoration Thin to 10-40 BA	7.2	10.0	0.0	0.0	0.0	0.0	7.2	10.0	No	No	0.0	0.0	0.0	
27	53	8.0	Thin	50.9	50.0	0.0	0.0	33.5	30.0	17.4	20.0	Yes	No	8.0	399.8	0.0	
72	10	5.8	No Treatment	143.8	85.0	68.4	20.0	54.3	40.0	21.1	25.0	No	No	0.0	0.0	0.0	
69	29	2.0	No Treatment	86.0	93.3	0.0	0.0	38.7	26.7	47.3	66.7	No	Yes	0.0	0.0	2.0	
69	7	31.1	No Treatment	52.5	60.0	0.0	0.0	17.0	14.4	35.5	45.6	Yes	Yes	31.1	1863.5	31.1	
27	43	0.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
72	9	0.3	No Treatment	unkn own	unkn own	unkn own	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
72	11	1.4	No Treatment	unkn own	unkn own	unkn own	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
69	1	8.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
		107.7												73.8	4001.0	46.6	

Half Mile Partition Current – Cluster 69.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MS S Acres	Total BA 10+i n MSS	Recovery Acres
27	3	26.4	1970	Slash Pine	201.0	123.3	97.9	40.0	91.9	70.0	11.1	13.3	No	No	0.0	0.0	0.0
27	4	0.3	1987	Longleaf Pine	401.1	100.0	401.1	100.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0
27	5	7.2	1941	Slash Pine	171.8	160.0	0.0	0.0	123.9	100.0	47.9	60.0	No	No	0.0	0.0	0.0
27	6	19.2	1957	Slash Pine	110.7	84.0	34.6	10.0	50.3	41.0	25.8	33.0	No	No	0.0	0.0	0.0
27	48	25.7	1941	Undrained Flatwoods	122.9	126.7	12.1	3.3	55.2	46.7	55.6	76.7	No	No	0.0	0.0	0.0
27	53	11.7	1941	Slash Pine	125.1	96.0	31.7	8.0	76.0	68.0	17.4	20.0	No	No	0.0	0.0	0.0
72	10	6.9	1940	Slash Pine	143.8	85.0	68.4	20.0	54.3	40.0	21.1	25.0	No	No	0.0	0.0	0.0
69	29	2.0	1926	Longleaf Pine	86.0	93.3	0.0	0.0	38.7	26.7	47.3	66.7	No	Yes	0.0	0.0	2.0
69	7	31.1	1957	Slash Pine	52.5	60.0	0.0	0.0	17.0	14.4	35.5	45.6	Yes	Yes	31.1	1863.4	31.1
27	43	14.1	NA	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	9	1.0	1958	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
72	11	1.4	1960	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	0.0	0.0	0.0
69	1	11.8	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		158.7												Totals	31.1	1863.4	33.0

Half Mile Partition Future – Cluster 69.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	3	26.4	Thin	59.3	50.0	0.0	0.0	48.2	36.7	11.1	13.3	Yes	No	26.4	1320.0	0.0
27	4	0.3	Thin	200.6	50.0	200.6	50.0	0.0	0.0	0.0	0.0	No	No	0.0	0.0	0.0
27	5	7.2	Thin	39.9	50.0	0.0	0.0	0.0	0.0	39.9	50.0	Yes	Yes	7.2	358.2	7.2
27	6	19.2	Thin	46.7	50.0	0.0	0.0	20.9	17.0	25.8	33.0	Yes	Yes	19.2	962.1	19.2
27	48	25.7	Savannah Restoration Thin to 10-40 BA	7.2	10.0	0.0	0.0	0.0	0.0	7.2	10.0	No	No	0.0	0.0	0.0
27	53	11.7	Thin	50.9	50.0	0.0	0.0	33.5	30.0	17.4	20.0	Yes	No	11.7	585.0	0.0
72	10	6.9	No Treatment	143.8	85.0	68.4	20.0	54.3	40.0	21.1	25.0	No	No	0.0	0.0	0.0
69	29	2.0	No Treatment	86.0	93.3	0.0	0.0	38.7	26.7	47.3	66.7	No	Yes	0.0	0.0	2.0
69	7	31.1	No Treatment	52.5	60.0	0.0	0.0	17.0	14.4	35.5	45.6	Yes	Yes	31.1	1863.4	31.1
27	43	14.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	9	1.0	No Treatment	unkno	unkno	unkn	unkn	unkno	unkno	unkno	unkno	unkno	unkno	0.0	0.0	0.0

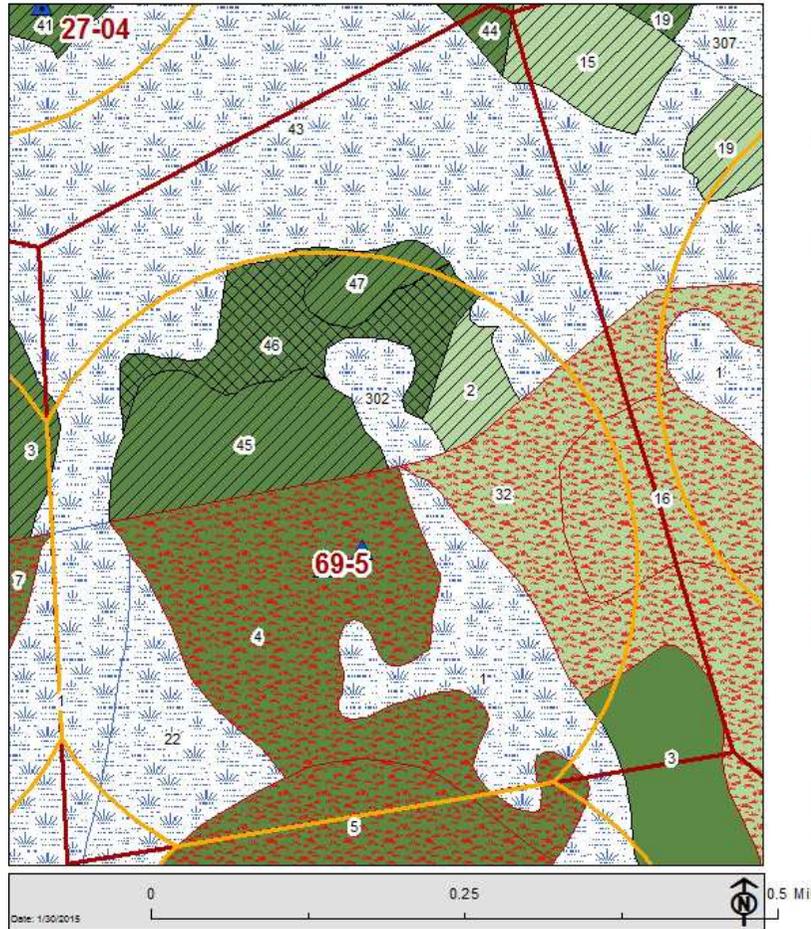
				wn	wn	own	own	wn	wn	wn	wn	wn				
72	11	1.4	No Treatment	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
69	1	11.8	No Treatment	NA	NA	0.0	0.0	0.0								
		158.7												95.6	5088.7	59.4

Cluster 69.05

This cluster currently has four stands (compartment 69 stands 4, 5, 16, and 32) totaling 53.2 acres that meet the MSS in the half mile partition. Compartment 69 stand 22 does not meet the MSS but does meet the recovery standard and compartment 69 stand 5 meets both the recovery standard and MSS. Pine stands located in the half mile partition are comprised of eight intermediate to mature aged slash stands, one mature longleaf stand, and three non-foraging stands. Compartment 27 stands 44 and 15 are separated by over 200 feet of non-foraging habitat and will not be counted as potential foraging habitat in the analysis. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stands 46 would receive a savanna treatment reducing the total BA to between 10 to 40 BA. In these treatment areas, parts of the stand with intact herbaceous savanna groundcover absent of woody brush species would be reduced to a basal area of 10 while parts of the stand with woody brush vegetation and palmetto would be reduced to 40 BA. The 40 BA is needed in these sections of the stand because not enough fine fuels are present to carry fire if the canopy was reduced to 10 BA. It is likely that after implementation RCWs would still use this stand for foraging, however, since the total BA would be under 40, below the MSS, it would not be counted as MSS foraging habitat. Compartment 27 stand 15 would receive first thinning treatments which remove selected rows for harvest. In these stands all size classes would be reduced because all entire rows are taken out. Compartment 27 stands 3, 2, 44, 45, and 47 would receive thinning treatments reducing these stands to 50 BA. Regular thinning treatments and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 3, 45, and 47 and compartment 69 stand 4, 5, 16, and 32 would meet MSS. Implementation of the proposed action would increase the MSS acres to 67.8 acres in the half mile partition.

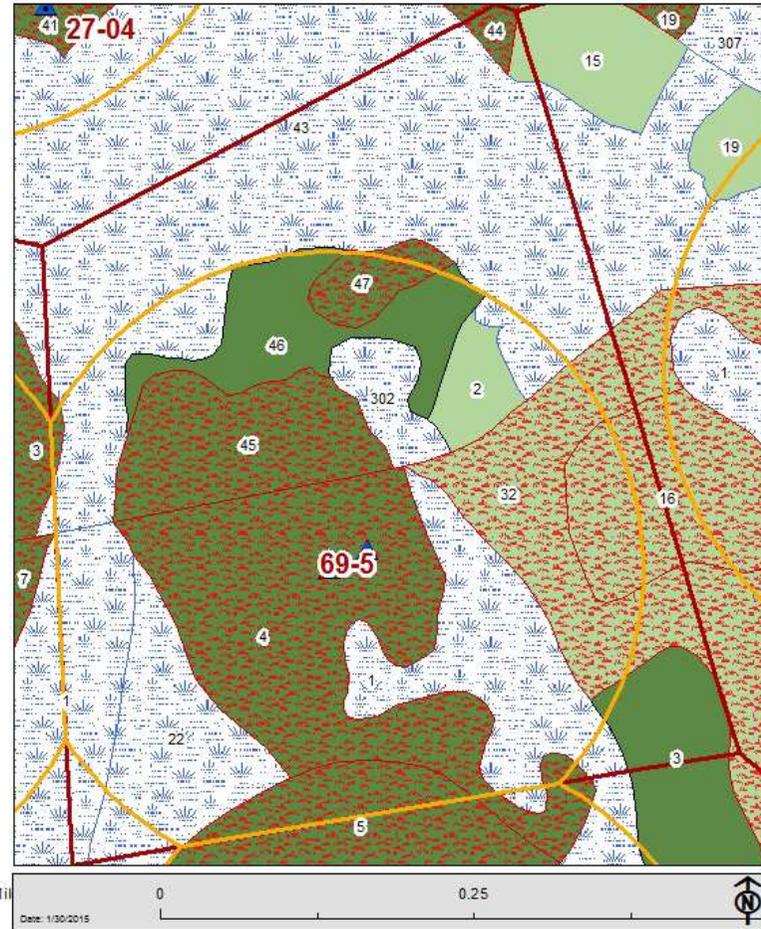
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 69.05 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	active	Wetland
RCW Partitions 0.25mi	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.50mi	BA 50	Longleaf Pine
	BA 10-40	Slash Pine
	BA 40	Scrub Oak
		Loblolly Pine

Cluster 69.05 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	active	Wetland
RCW Partitions 0.25mi	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.50mi	BA 50	Longleaf Pine
	BA 10-40	Slash Pine
	BA 40	Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 69.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	3	0.2	1970	Slash Pine	201	123.3	97.9	40	91.9	70	11.1	13.3	No	No	0.0	0.0	0.0
27	2	3.0	1988	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
27	45	11.5	1941	Slash Pine	149	110	45.9	20	89.9	70	13.2	20	No	No	0.0	0.0	0.0
27	46	9.2	1941	Slash Pine	354.4	100	343.9	90	10.5	10	0	0	No	No	0.0	0.0	0.0
27	47	2.3	1941	Slash Pine	252.5	180	83.1	40	125.5	80	43.9	60	No	No	0.0	0.0	0.0
69	22	9.6	<Null>	Undrained Flatwoods	106.7	85	38.2	7.5	32	25	36.5	52.5	No	Yes	0.0	0.0	9.6
69	32	11.2	1926	Longleaf Pine	113.9	69	45.9	12	54	41	14	16	Yes	No	11.2	640.5	0.0
69	16	4.1	1926	Longleaf Pine	116.3	72.5	49.6	15	50.3	37.5	16.4	20	Yes	No	4.1	236.7	0.0
69	4	27.9	1941	Slash Pine	100.7	58.6	50.4	14.3	34.6	25.7	15.6	18.6	Yes	No	27.9	1237.6	0.0
69	3	0.2	1964	Slash Pine	165.8	100	52.6	15	98.6	67.5	14.6	17.5	No	No	0.0	0.0	0.0
69	5	4.5	1965	Slash Pine	75.2	65	3.8	1.7	51	40	20.5	23.3	Yes	Yes	4.5	285.7	4.5
27	302	3.5	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	43	8.4	<Null>	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	19.4	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		115.0												Totals	47.8	2400.5	14.2

Quarter Mile Cluster Partition Future – Cluster 69.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	3	0.2	Thin	59.3	50.0	0.0	0.0	48.2	36.7	11.1	13.3	Yes	No	0.2	11.4	0.0
27	2	3.0	Thin	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
27	45	11.5	Thin	51.7	50.0	0.0	0.0	38.5	30.0	13.2	20.0	Yes	No	11.5	574.2	0.0
27	46	9.2	Savannah Restoration Thin to 10-40 BA	10.5	10.0	0.0	0.0	10.5	10.0	0.0	0.0	No	No	0.0	0.0	0.0
27	47	2.3	Thin	36.6	50.0	0.0	0.0	0.0	0.0	36.6	50.0	Yes	Yes	2.3	114.0	2.3
69	22	9.6	No Treatment	106.7	85.0	38.2	7.5	32.0	25.0	36.5	52.5	No	Yes	0.0	0.0	9.6
69	32	11.2	No Treatment	113.9	69.0	45.9	12.0	54.0	41.0	14.0	16.0	Yes	No	11.2	640.5	0.0
69	16	4.1	No Treatment	116.3	72.5	49.6	15.0	50.3	37.5	16.4	20.0	Yes	No	4.1	236.7	0.0
69	4	27.9	No Treatment	100.7	58.6	50.4	14.3	34.6	25.7	15.6	18.6	Yes	No	27.9	1237.6	0.0
69	3	0.2	No Treatment	165.8	100.0	52.6	15.0	98.6	67.5	14.6	17.5	No	No	0.0	0.0	0.0

69	5	4.5	No Treatment	75.2	65.0	3.8	1.7	51.0	40.0	20.5	23.3	Yes	Yes	4.5	285.7	4.5
27	302	3.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	43	8.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	19.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		115.0												61.8	3100.2	16.4

Half Mile Partition Current – Cluster 69.05

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	44	0.8	1962	Slash Pine	253.7	140.0	136.7	46.7	108.9	83.3	8.0	10.0	No	No	0.0	0.0	0.0
27	3	0.3	1970	Slash Pine	201.0	123.3	97.9	40.0	91.9	70.0	11.1	13.3	No	No	0.0	0.0	0.0
27	15	0.4	1988	Longleaf Pine	542.8	170.0	526.2	160.0	16.5	10.0	0.0	0.0	No	No	0.0	0.0	0.0
27	2	3.0	1988	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unk now n	unkn own	unkno wn	unknown	0.0	0.0	0.0
27	45	11.5	1941	Slash Pine	149.0	110.0	45.9	20.0	89.9	70.0	13.2	20.0	No	No	0.0	0.0	0.0
27	46	9.3	1941	Slash Pine	354.4	100.0	343.9	90.0	10.5	10.0	0.0	0.0	No	No	0.0	0.0	0.0
27	47	2.8	1941	Slash Pine	252.5	180.0	83.1	40.0	125.5	80.0	43.9	60.0	No	No	0.0	0.0	0.0
69	22	10.9	unkno wn	Undrained Flatwoods	106.7	85.0	38.2	7.5	32.0	25.0	36.5	52.5	No	Yes	0.0	0.0	10.9
69	32	14.5	1926	Longleaf Pine	113.9	69.0	45.9	12.0	54.0	41.0	14.0	16.0	Yes	No	14.5	826.5	0.0
69	16	6.1	1926	Longleaf Pine	116.3	72.5	49.6	15.0	50.3	37.5	16.4	20.0	Yes	No	6.1	350.8	0.0
69	4	28.0	1941	Slash Pine	100.7	58.6	50.4	14.3	34.6	25.7	15.6	18.6	Yes	No	28.0	1242.1	0.0
69	3	4.7	1964	Slash Pine	165.8	100.0	52.6	15.0	98.6	67.5	14.6	17.5	No	No	0.0	0.0	0.0
69	5	4.5	1965	Slash Pine	75.2	65.0	3.8	1.7	51.0	40.0	20.5	23.3	Yes	Yes	4.5	285.8	4.5
27	302	3.5	1920	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
27	43	45.2	NA	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	21.1	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		166.7												Totals	53.2	2705.2	15.4

Half Mile Partition Future– Cluster 69.05

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	44	0.8	Thin	60.3	50.0	0.0	0.0	52.3	40.0	8.0	10.0	Yes	No	0.8	40.0	0.0
27	3	0.3	Thin	59.3	50.0	0.0	0.0	48.2	36.7	11.1	13.3	Yes	No	0.3	15.0	0.0
27	15	0.4	First Thin	147.1	50.0	134.1	42.0	13.2	8.0	0.0	0.0	No	No	0.0	0.0	0.0

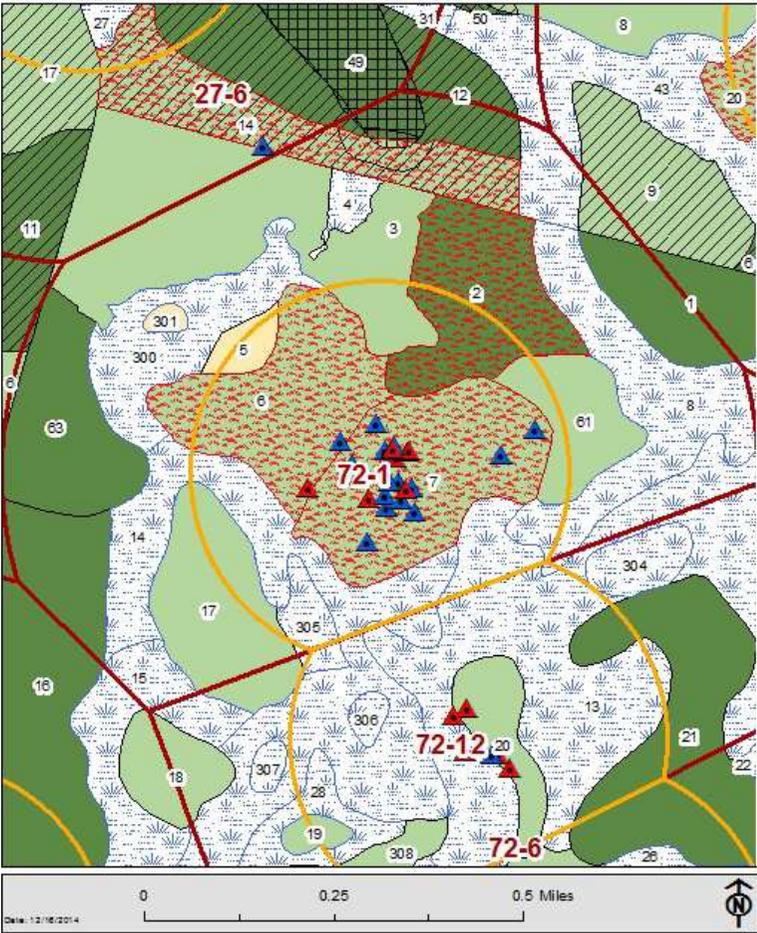
				3													
27	2	3.0	Thin	unkn own	unkno wn	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unkn own	unkno wn	unknown	0.0	0.0	0.0	
27	45	11.5	Thin	51.7	50.0	0.0	0.0	38.5	30.0	13.2	20.0	Yes	No	11.5	574.2	0.0	
27	46	9.3	Savannah Restoration Thin to 10-40 BA	10.5	10.0	0.0	0.0	10.5	10.0	0.0	0.0	No	No	0.0	0.0	0.0	
27	47	2.8	Thin	36.6	50.0	0.0	0.0	0.0	0.0	36.6	50.0	Yes	Yes	2.8	141.7	2.8	
69	22	10.9	No Treatment	106. 7	85.0	38.2	7.5	32.0	25.0	36.5	52.5	No	Yes	0.0	0.0	10.9	
69	32	14.5	No Treatment	113. 9	69.0	45.9	12.0	54.0	41.0	14.0	16.0	Yes	No	14.5	826.5	0.0	
69	16	6.1	No Treatment	116. 3	72.5	49.6	15.0	50.3	37.5	16.4	20.0	Yes	No	6.1	350.8	0.0	
69	4	28.0	No Treatment	100. 7	58.6	50.4	14.3	34.6	25.7	15.6	18.6	Yes	No	28.0	1242.1	0.0	
69	3	4.7	No Treatment	165. 8	100.0	52.6	15.0	98.6	67.5	14.6	17.5	No	No	0.0	0.0	0.0	
69	5	4.5	No Treatment	75.2	65.0	3.8	1.7	51.0	40.0	20.5	23.3	Yes	Yes	4.5	285.8	4.5	
27	302	3.5	No Treatment	NA	NA	0.0	0.0	0.0									
27	43	45.2	No Treatment	NA	NA	0.0	0.0	0.0									
69	1	21.1	No Treatment	NA	NA	0.0	0.0	0.0									
		166.7												67.8	3436.0	18.2	

Cluster 72.01

This cluster currently only has four stands (compartment 72 stands 2, 6, 7, and 17) totaling 103.2 acres that meet both the MSS and recovery standard. Pine stands located in the half mile partition are comprised of eight intermediate to mature aged slash stands, ten mature longleaf stands, two loblolly stands, and ten non-foraging stands. Compartment 72 stands 5 and 17 are separated by more than 200ft of non-foraging habitat. Because these stands are separated from the rest of the foraging habitat in the partition, they are not counted as foraging habitat for cluster 72.01. The pine stands that currently do not meet MSS have basal areas over 80, above the MSS maximum. Compartment 27 stand 49 would receive savanna thinning treatment reducing the total BA in the stands to 40. Compartment 27 stands 9, 11, and 12 would receive a thinning treatment and compartment 27 stand 14 would receive a modified group selection treatment reducing these stands to 50 BA. Regular thinning treatments, modified group selection treatments, and savanna thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 27 stands 11, 12, 14, and 49 and compartment 72 stands 2, 6, 7, and 17 would meet MSS. Implementation of the proposed action would increase the MSS acres to 111.7 acres in the half mile partition.

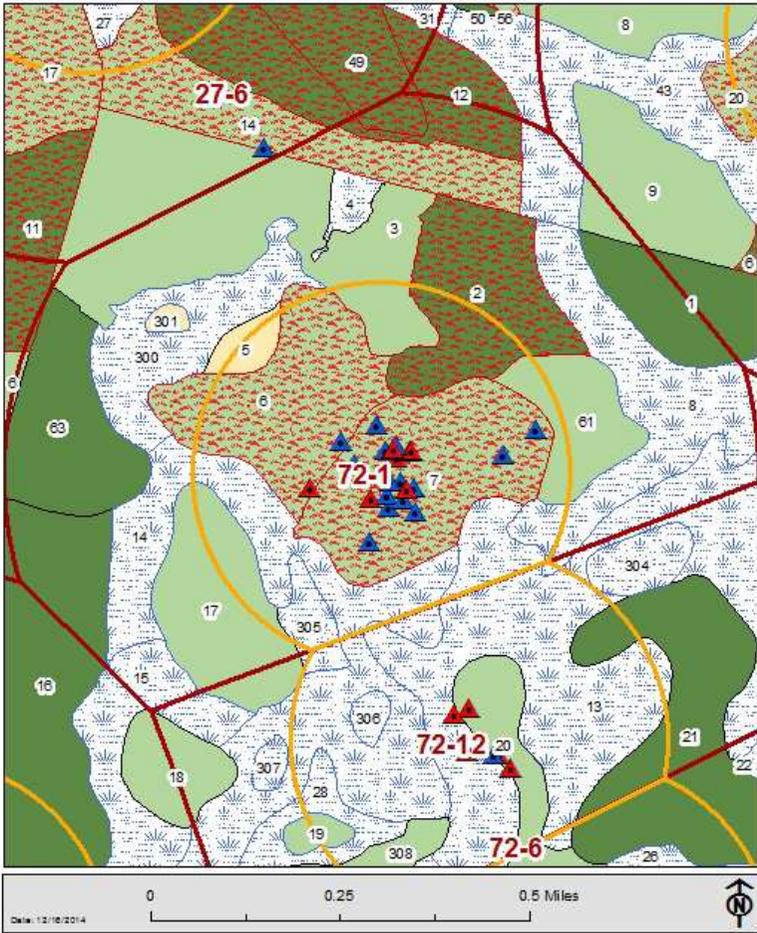
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 72.01 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
RCW Partitions 0.50mi		Loblolly Pine

Cluster 72.01 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
RCW Partitions 0.50mi		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 72.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
72	6	26.1	1893	Longleaf Pine	58.3	60	0	0	25.4	20	32.9	40	Yes	Yes	26.1	1563.3	26.1
72	2	9.4	1941	Slash Pine	65.2	60	0	0	35.2	25	30	35	Yes	Yes	9.4	565.0	9.4
72	61	4.2	1893	Longleaf Pine	105.6	88	14.4	4	63.6	48	27.6	36	No	No	0.0	0.0	0.0
72	7	36.1	1893	Longleaf Pine	73.8	71	12	4	21.7	17	40.1	50	Yes	Yes	36.1	2421.2	36.1
72	13	12.4	<Null>	Undrained Flatwoods	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	305	3.9	<Null>	Undrained Flatwoods	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	17	5.3	1910	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	3	5.5	2014	Longleaf Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	300	0.0	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	8	2.5	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	5	2.0	1918	Loblolly Pine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	14	18.2	1930	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		125.7												Totals	71.6	4549.5	71.6

Quarter Mile Cluster Partition Future – Cluster 72.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
72	6	26.1	No Treatment	58.3	60.0	0.0	0.0	25.4	20.0	32.9	40.0	Yes	Yes	26.1	1563.3	26.1
72	2	9.4	No Treatment	65.2	60.0	0.0	0.0	35.2	25.0	30.0	35.0	Yes	Yes	9.4	565.0	9.4
72	61	4.2	No Treatment	105.6	88.0	14.4	4.0	63.6	48.0	27.6	36.0	No	No	0.0	0.0	0.0
72	7	36.1	No Treatment	73.8	71.0	12.0	4.0	21.7	17.0	40.1	50.0	Yes	Yes	36.1	2421.2	36.1
72	13	12.4	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	305	3.9	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	17	5.3	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	3	5.5	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	300	0.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	8	2.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	5	2.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	14	18.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		125.7												71.6	4549.5	71.6

Half Mile Partition Current – Cluster 72.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
27	9	2.3	1987	Longleaf Pine	595.1	160.0	572.3	146.7	22.8	13.3	0.0	0.0	No	No	0.0	0.0	0.0
27	49	2.3	1941	Slash Pine	199.7	116.0	120.8	48.0	59.3	44.0	19.5	24.0	No	No	0.0	0.0	0.0
27	14	11.2	1926	Longleaf Pine	76.4	68.9	18.7	6.1	35.2	29.4	22.5	33.3	Yes	Yes	11.2	702.0	11.2
27	12	5.9	1941	Slash Pine	175.9	120.0	59.0	20.0	102.6	80.0	14.4	20.0	No	No	0.0	0.0	0.0
25	6	0.4	1930	Longleaf Pine	165.8	128.0	44.8	16.0	93.1	76.0	27.8	36.0	No	No	0.0	0.0	0.0
25	11	0.2	1971	Slash Pine	207.1	140.0	50.3	20.0	134.8	95.0	22.0	25.0	No	No	0.0	0.0	0.0
72	6	30.0	1893	Longleaf Pine	58.3	60.0	0.0	0.0	25.4	20.0	32.9	40.0	Yes	Yes	30.0	1798.9	30.0
72	2	25.9	1941	Slash Pine	65.2	60.0	0.0	0.0	35.2	25.0	30.0	35.0	Yes	Yes	25.9	1553.6	25.9
72	61	13.5	1893	Longleaf Pine	105.6	88.0	14.4	4.0	63.6	48.0	27.6	36.0	No	No	0.0	0.0	0.0
72	7	36.1	1893	Longleaf Pine	73.8	71.0	12.0	4.0	21.7	17.0	40.1	50.0	Yes	Yes	36.1	2421.2	36.1
27	43	5.8	NA	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	13	35.7	unknow n	Undrained Flatwoods	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	1	10.2	1960	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	305	4.8	unknow n	Undrained Flatwoods	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	301	1.1	1918	Loblolly Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	306	0.9	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	17	23.6	1910	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	16	12.1	1965	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	4	2.9	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	63	22.0	1986	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	3	37.6	2014	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	300	20.0	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	8	29.8	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	5	3.5	1918	Loblolly Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	14	38.3	1930	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	21	0.8	1958	Slash Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	15	7.5	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	20	0.5	1871	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0

72	18	1.4	1910	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	307	0.5	1920	Brush Species	NA	NA	NA	0.0	0.0	0.0							
72	304	6.0	1940	Brush Species	NA	NA	NA	0.0	0.0	0.0							
		392.9												Totals	103.2	6475.7	103.2

Half Mile Partition Future– Cluster 72.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
27	9	2.3	Thin	159.3	50.0	136.5	36.7	22.8	13.3	0.0	0.0	No	No	0.0	0.0	0.0
27	49	2.3	Savannah Restoration Thin to 40	54.5	40.0	0.0	0.0	35.0	26.0	19.5	24.0	Yes	Yes	2.3	117.0	2.3
27	14	11.2	Modified Group Selection	42.5	50.0	0.0	0.0	20.0	16.7	22.5	33.3	Yes	Yes	11.2	559.8	11.2
27	12	5.9	Thin	52.9	50.0	0.0	0.0	38.5	30.0	14.4	20.0	Yes	No	5.9	296.6	0.0
25	6	0.4	No Treatment	165.8	128.0	44.8	16.0	93.1	76.0	27.8	36.0	No	No	0.0	0.0	0.0
25	11	0.2	Thin	57.5	50.0	0.0	0.0	35.5	25.0	22.0	25.0	Yes	Yes	0.2	11.8	0.2
72	6	30.0	No Treatment	58.3	60.0	0.0	0.0	25.4	20.0	32.9	40.0	Yes	Yes	30.0	1798.9	30.0
72	2	25.9	No Treatment	65.2	60.0	0.0	0.0	35.2	25.0	30.0	35.0	Yes	Yes	25.9	1553.6	25.9
72	61	13.5	No Treatment	105.6	88.0	14.4	4.0	63.6	48.0	27.6	36.0	No	No	0.0	0.0	0.0
72	7	36.1	No Treatment	73.8	71.0	12.0	4.0	21.7	17.0	40.1	50.0	Yes	Yes	36.1	2421.2	36.1
27	43	5.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	13	35.7	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	1	10.2	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	305	4.8	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	301	1.1	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	306	0.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	47	23.6	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	16	12.1	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	4	2.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	63	22.0	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	3	37.6	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0
72	300	20.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	8	29.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	5	3.5	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0

72	14	38.3	No Treatment	NA	NA	NA	NA	0.0	0.0	0.0							
72	21	0.8	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0	
72	45	7.5	No Treatment	NA	NA	NA	0.0	0.0	0.0								
72	20	0.5	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0	
72	18	1.4	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkn own	unkno wn	unknown	unknown	0.0	0.0	0.0	
72	307	0.5	No Treatment	NA	NA	NA	0.0	0.0	0.0								
72	304	6.0	No Treatment	NA	NA	NA	0.0	0.0	0.0								
		392.9												111.7	6758.9	105.8	

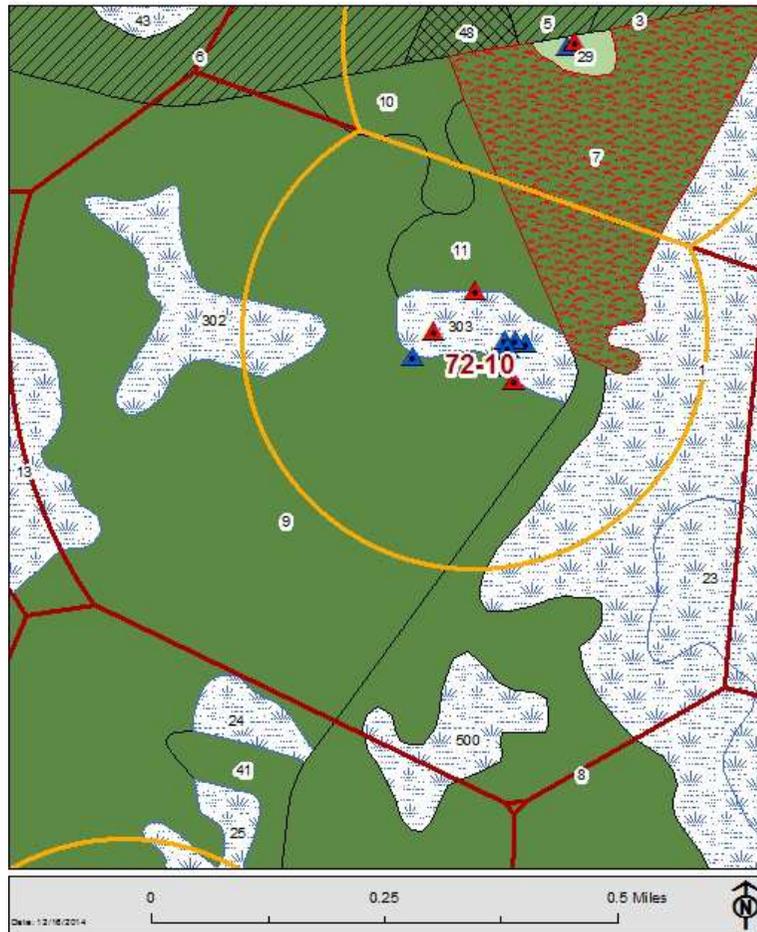
Cluster 72.1

This cluster currently has only one stand compartment 69 stand 7 totaling 11.3 acres that meets the MSS. This partition contains six slash pine stands and six non-foraging habitat stands.

Compartment 27 stand 6 is planned for a thinning treatment and after treatment would meet the MSS and recovery standard increasing the total acres meeting MSS to 12.6 acres.

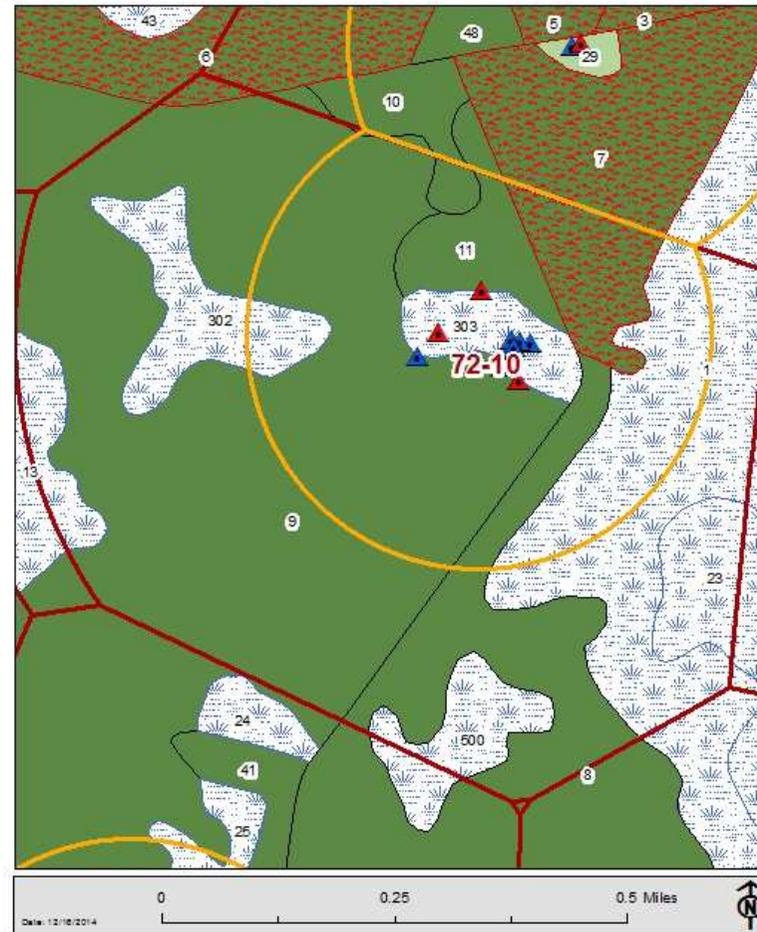
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 72.1 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 72.1 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	BA 50	Wetland
▲ active	Proposed Action - BA Reductions	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 72.1

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
72	10	1.7	1940	Slash Pine	143.8	85	68.4	20	54.3	40	21.1	25	No	No	0.0	0.0	0.0	
69	7	11.3	1957	Slash Pine	52.5	60	0	0	17	14.4	35.5	45.6	Yes	Yes	11.3	678.4	11.3	
72	9	51.7	1958	Slash Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0	
72	11	9.3	1960	Slash Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0	
72	303	8.6	1940	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
72	302	3.3	1940	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
69	1	19.4	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
69	8	6.0	1959	Slash Pine	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0	
		111.4													Totals	11.3	678.4	11.3

Quarter Mile Cluster Partition Future – Cluster 72.1

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5 to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
72	10	1.7	No Treatment	143.8	85.0	68.4	20.0	54.3	40.0	21.1	25.0	No	No	0.0	0.0	0.0
69	7	11.3	No Treatment	52.5	60.0	0.0	0.0	17.0	14.4	35.5	45.6	Yes	Yes	11.3	678.4	11.3
72	9	51.7	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	11	9.3	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	303	8.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	302	3.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	19.4	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	8	6.0	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
		111.4												11.3	678.4	11.3

Half Mile Partition Current – Cluster 72.1

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
27	6	1.3	1957	Slash Pine	110.7	84.0	34.6	10.0	50.3	41.0	25.8	33.0	No	No	0.0	0.0	0.0	
72	10	1.8	1940	Slash Pine	143.8	85.0	68.4	20.0	54.3	40.0	21.1	25.0	No	No	0.0	0.0	0.0	
69	7	11.3	1957	Slash Pine	52.5	60.0	0.0	0.0	17.0	14.4	35.5	45.6	Yes	Yes	11.3	678.4	11.3	
72	9	143.2	1958	Slash Pine	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
72	13	6.0	unkno wn	Undrained Flatwoods	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
72	11	9.3	1960	Slash Pine	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
72	303	8.6	1940	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	302	14.1	1940	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	46.9	1926	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	500	7.6	NA	unknown	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
69	8	28.3	1959	Slash Pine	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
69	23	8.7	unkno wn	Undrained Flatwoods	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
		287.1													11.3	678.4	11.3	

Half Mile Partition Future – Cluster 72.1

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery	
27	6	1.3	Thin	46.7	50.0	0.0	0.0	20.9	17.0	25.8	33.0	Yes	Yes	1.3	64.1	1.3	
72	10	1.8	No Treatment	143.8	85.0	68.4	20.0	54.3	40.0	21.1	25.0	No	No	0.0	0.0	0.0	
69	7	11.3	No Treatment	52.5	60.0	0.0	0.0	17.0	14.4	35.5	45.6	Yes	Yes	11.3	678.4	11.3	
72	9	143.2	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
72	13	6.0	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
72	11	9.3	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
72	303	8.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	302	14.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	1	46.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	500	7.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
69	8	28.3	No Treatment	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0

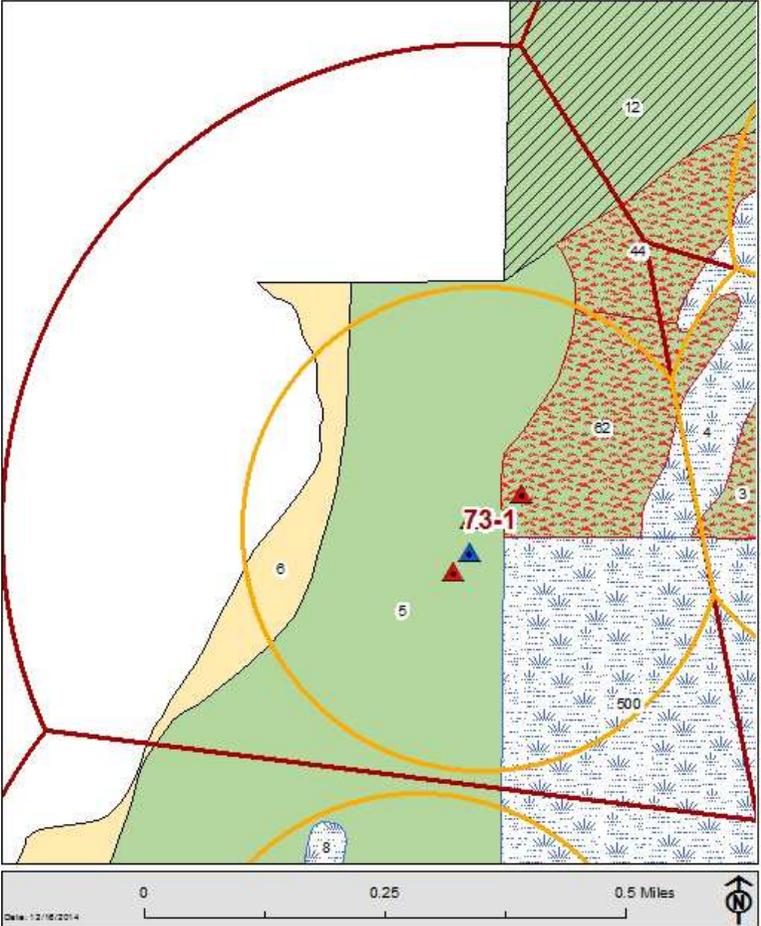
69	23	8.7	No Treatment	unkno wn	unknow n	unknown	0.0	0.0	0.0							
		287.1												12.6	742.5	12.6

Cluster 73.01

This cluster currently contains three stands (compartment 73 stands 62, 44, and 3) totaling 25.4 acres that meets the MSS within the half mile partition. Compartment 29 stands 3 and 44 and compartment 25 stand 12 meet the recovery standard. Pine stands located in the half mile partition are comprised of five mature longleaf stands, one loblolly stand, and two non-foraging stands. Compartment 25 stand 12 would receive a thinning treatment reducing the total basal area in these stands to 50. The thinning treatments would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 25 stand 12 would meet the MSS increasing the total acres meeting the MSS to 35.2 in the half mile partition.

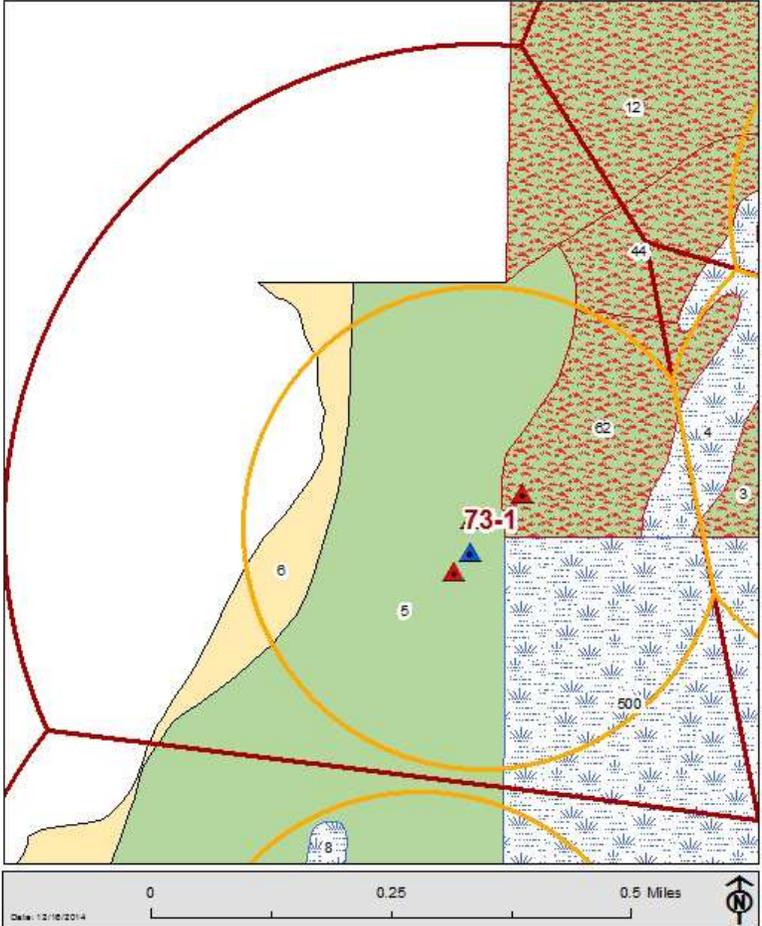
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 73.01 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
RCW Partitions 0.50mi		Loblolly Pine

Cluster 73.01 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Longleaf Pine
RCW Partitions 0.25mi	BA 10-40	Slash Pine
RCW Partitions 0.50mi	BA 40	Scrub Oak
RCW Partitions 0.50mi		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 73.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
73	62	19.1	1920	Longleaf Pine	95.5	60	52.6	15	15.7	10	27.2	35	Yes	No	19.1	858.0	0.0
73	3	0.1	1896	Longleaf Pine	93.2	70	39.2	10	21.5	18.3	32.4	41.7	Yes	Yes	0.1	4.6	0.1
73	44	0.0	1920	Longleaf Pine	57.1	65	12.8	5	2.7	2.5	41.5	57.5	Yes	Yes	0.0	1.5	0.0
73	5	61.3	1920	Longleaf Pine	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unkn own	unknown	unkno wn	unknown	unknown	0.0	0.0	0.0
73	6	8.0	1925	Loblolly Pine	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	500	26.2	unknown	unknown	unkno wn	unkno wn	unkno wn	unkno wn	unknow n	unkn own	unknown	unkno wn	unknown	unknown	0.0	0.0	0.0
73	4	2.6	1939	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		117.2													19.2	864.1	0.1

Quarter Mile Cluster Partition Future – Cluster 73.01

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA 10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
73	62	19.1	No Treatment	95.5	60.0	52.6	15.0	15.7	10.0	27.2	35.0	Yes	No	19.1	858.0	0.0
73	3	0.1	No Treatment	93.2	70.0	39.2	10.0	21.5	18.3	32.4	41.7	Yes	Yes	0.1	4.6	0.1
73	44	0.0	No Treatment	57.1	65.0	12.8	5.0	2.7	2.5	41.5	57.5	Yes	Yes	0.0	1.5	0.0
73	5	61.3	No Treatment	unkn own	unkn own	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
73	6	8.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	500	26.2	No Treatment	<Null >	<Null >	<Null>	<Null >	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	0.0	0.0	0.0
73	4	2.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		117.2												19.2	864.1	0.1

Half Mile Partition Current – Cluster 73.01

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
25	12	9.8	1927	Longleaf Pine	86.7	81.7	17.6	5.0	34.9	30.0	34.2	46.7	No	Yes	0.0	0.0	9.8
73	62	20.2	1920	Longleaf Pine	95.5	60.0	52.6	15.0	15.7	10.0	27.2	35.0	Yes	No	20.2	907.4	0.0
73	3	0.1	1896	Longleaf Pine	93.2	70.0	39.2	10.0	21.5	18.3	32.4	41.7	Yes	Yes	0.1	4.6	0.1
73	44	5.2	1920	Longleaf Pine	57.1	65.0	12.8	5.0	2.7	2.5	41.5	57.5	Yes	Yes	5.2	312.3	5.2
73	5	75.0	1920	Longleaf Pine	unkn own	unkn own	unkn own	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unknown	0.0	0.0	0.0

73	6	14.5	1925	Loblolly Pine	unkn own	unkn own	unkn own	unkno wn	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unknown	0.0	0.0	0.0
73	500	41.5	NA	unknown	NA	0.0	0.0	0.0									
73	4	2.6	1939	Pond Cypress	NA	0.0	0.0	0.0									
		168.9												Totals	25.4	1224.3	15.1

Half Mile Partition Future – Cluster 73.01

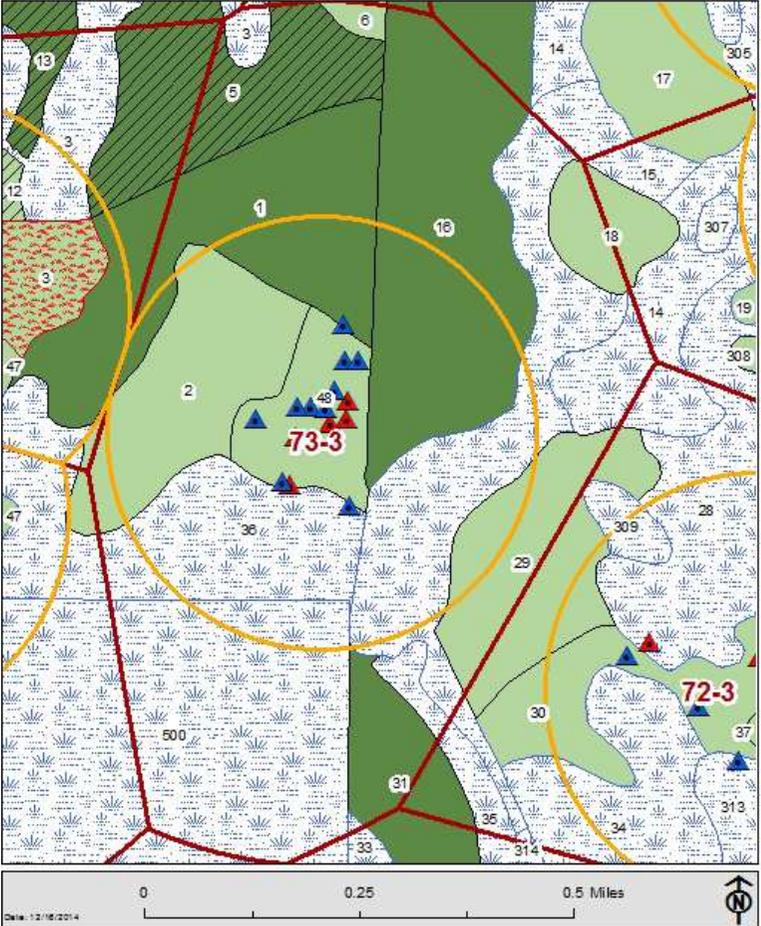
Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
25	12	9.8	Modified Group Selection	38.0	50.0	0.0	0.0	3.8	3.3	34.2	46.7	Yes	Yes	9.8	488.6	9.8
73	62	20.2	No Treatment	95.5	60.0	52.6	15.0	15.7	10.0	27.2	35.0	Yes	No	20.2	907.4	0.0
73	3	0.1	No Treatment	93.2	70.0	39.2	10.0	21.5	18.3	32.4	41.7	Yes	Yes	0.1	4.6	0.1
73	44	5.2	No Treatment	57.1	65.0	12.8	5.0	2.7	2.5	41.5	57.5	Yes	Yes	5.2	312.3	5.2
73	5	75.0	No Treatment	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
73	6	14.5	No Treatment	unkn own	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	unknown	0.0	0.0	0.0
73	500	41.5	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	4	2.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
		168.9												35.2	1712.9	15.1

Cluster 73.03

This cluster contains no stands that currently meet the MSS or recovery standards. One stand (compartment 25 stand 5) would receive a thin reducing the BA to 50. This thinning treatment would primarily thin from below leaving the largest trees for foraging habitat. After treatment compartment 25 stand 5 would meet the MSS increasing the total acres meeting the MSS to 15.3 in the half mile partition.

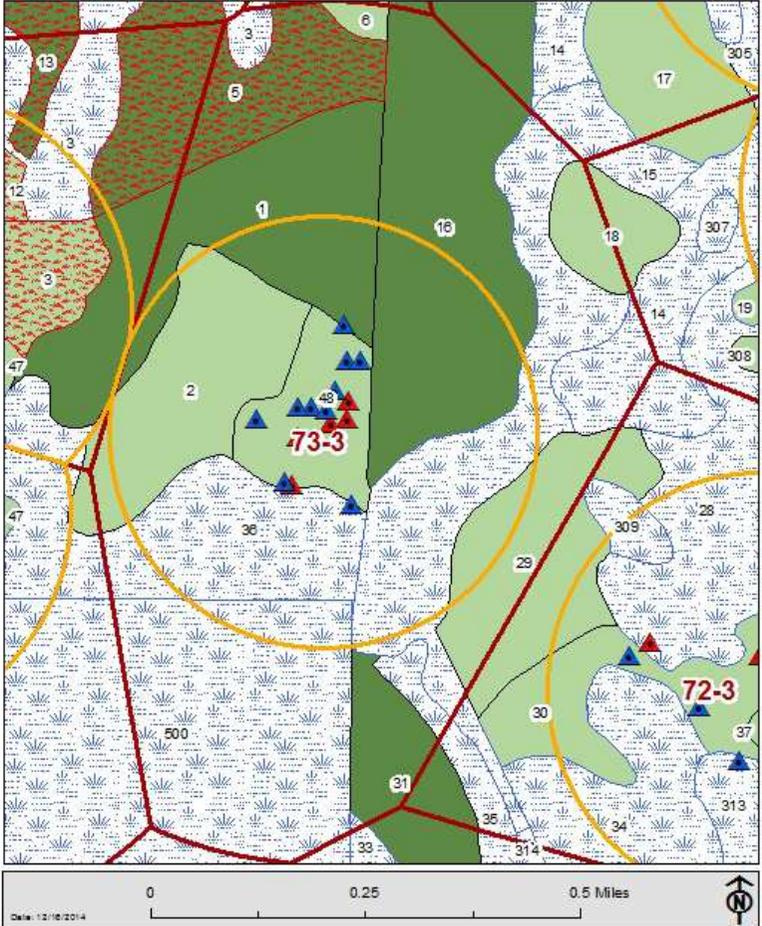
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 73.03 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 73.03 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 73.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
73	1	12.1	1972	Slash Pine	121.5	88.3	25.6	10	77.9	56.7	18	21.7	No	No	0.0	0.0	0.0
73	36	21.8	1910	Undrained Flatwoods	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
73	500	5.1	<Null>	<Null>	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
72	31	0.0	2005	Slash Pine	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
72	16	22.3	1965	Slash Pine	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
72	15	49.9	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	29	4.3	1878	Longleaf Pine	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
73	2	24.7	1896	Longleaf Pine	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
73	48	15.4	1920	Longleaf Pine	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkn own	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
		125.6												Totals	0.0	0.0	0.0

Quarter Mile Cluster Partition Future – Cluster 73.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
73	1	12.1	No Treatment	121.5	88.3	25.6	10.0	77.9	56.7	18.0	21.7	No	No	0.0	0.0	0.0
73	36	21.8	No Treatment	unkno wn	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
73	500	5.1	No Treatment	unkno wn	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
72	31	0.0	No Treatment	unkno wn	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
72	16	22.3	No Treatment	unkno wn	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
72	15	49.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	29	4.3	No Treatment	unkno wn	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
73	2	24.7	No Treatment	unkno wn	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
73	48	15.4	No Treatment	unkno wn	unkn own	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
		125.6												0.0	0.0	0.0

Half Mile Partition Current – Cluster 73.03

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
72	16	49.1	1965	Slash Pine	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
25	5	15.3	1971	Slash Pine	22	205.3	116.0	116.0	48.0	85.6	64.0	3.6	4.0	No	No	0.0	0.0
25	3	2.0	1925	Baldcypress-water tupelo	67	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0
25	6	1.6	1930	Longleaf Pine	21	165.8	128.0	44.8	16.0	93.1	76.0	27.8	36.0	No	No	0.0	0.0
72	14	8.9	1930	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	15	36.6	1920	Brush Species	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	18	8.1	1910	Longleaf Pine	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
72	29	15.6	1878	Longleaf Pine	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
72	309	0.0	1930	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	2	27.0	1896	Longleaf Pine	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
73	48	15.4	1920	Longleaf Pine	unkn own	unkn own	unkno wn	unknow n	unknow n	unkno wn	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
		179.6												Totals	0.0	0.0	0.0

Half Mile Partition Future – Cluster 73.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
72	16	49.1	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
25	5	15.3	Thin	65.1	50.0	0.0	0.0	61.5	46.0	3.6	4.0	Yes	No	15.3	765.0	0.0
25	3	2.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
25	6	1.6	No Treatment	165.8	128.0	44.8	16.0	93.1	76.0	27.8	36.0	No	No	0.0	0.0	0.0
72	14	8.9	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	15	36.6	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
72	18	8.1	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	29	15.6	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
72	309	0.0	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	2	27.0	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
73	48	15.4	No Treatment	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	unknown	0.0	0.0	0.0
		179.6												15.3	765.0	0.0

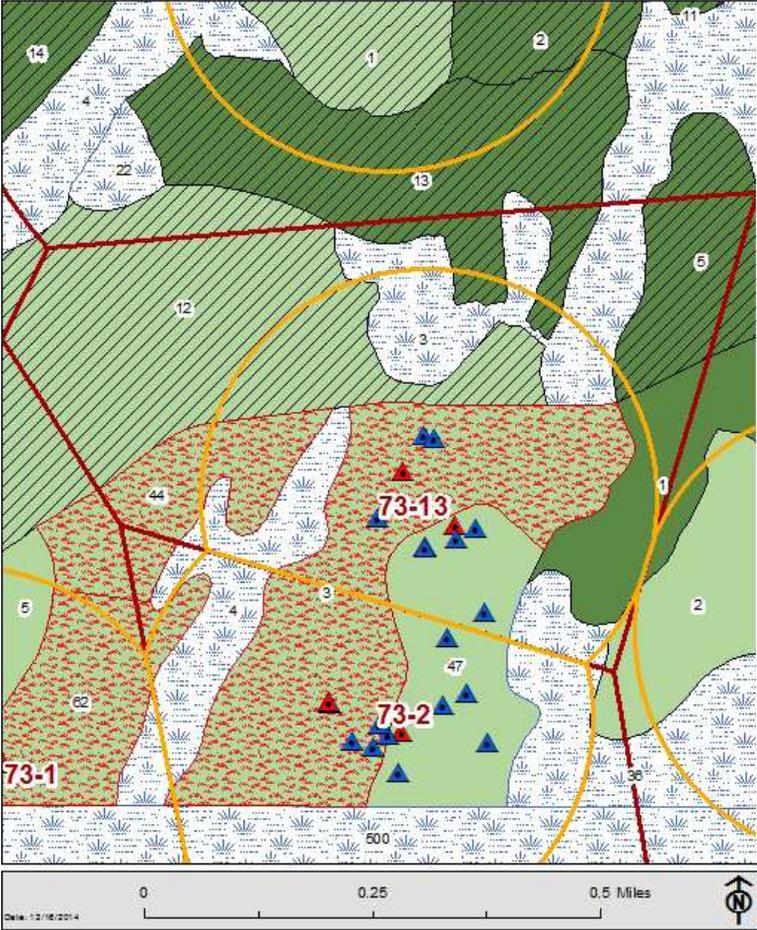
Cluster 73.13

This cluster currently contains two stands (compartment 73 stands 44 and 3) totaling 42.4 acres that meet the MSS and the recovery standard within the half mile partition. Compartment 25 stand 12 meets the recovery standard. Pine stands located in the half mile partition are comprised of five mature longleaf stands, three slash pine stands, and three non-foraging stands.

Compartment 25 stand 12 would receive a thinning treatment and compartment 25 stand 12 would receive a modified group selection treatment reducing the total basal area in these stands to 50. The thinning treatments and modified group selection treatments would primarily thin from below leaving the largest trees for foraging habitat. Compartment 25 stand 13 is would receive a first thinning treatment which removes selected rows for harvest. In this stand all size classes would be reduced because entire rows would be removed. After treatment compartment 25 stands 12, 13, and 5 would meet the MSS increasing the total acres meeting the MSS to 102.7 in the half mile partition.

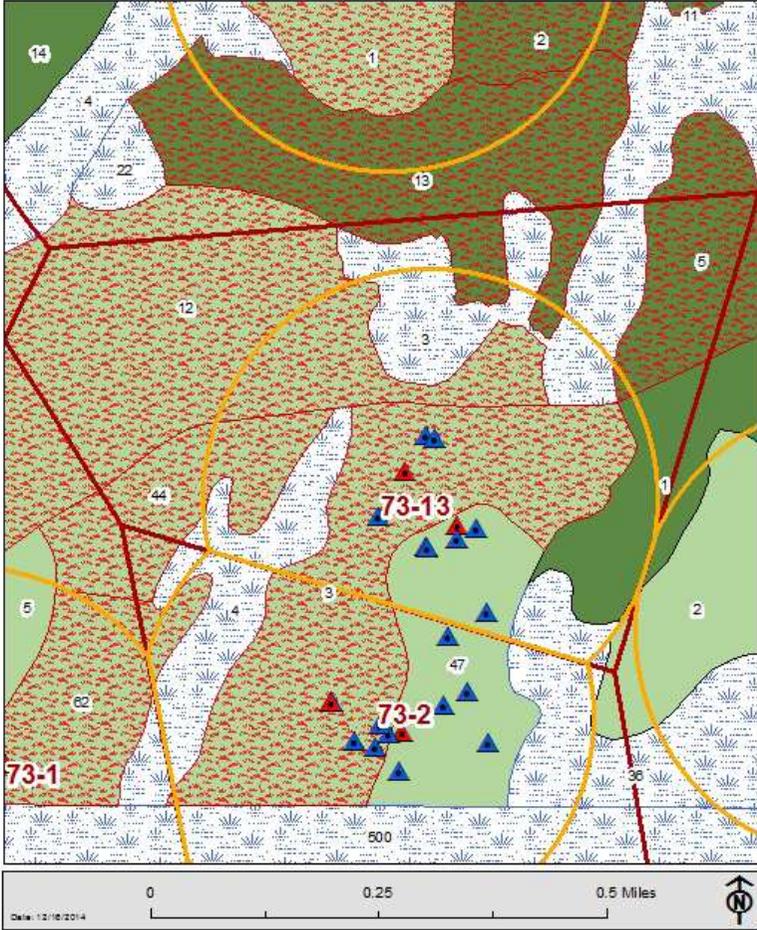
Conclusion: Not Likely to Adversely Affect (NLAA) – This cluster is currently deficient with respect to stands meeting the MSS, but if the proposed action is implemented acres meeting the MSS would increase.

Cluster 73.13 Pre-treatment conditions with proposed harvests



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Cluster 73.13 Post-treatment conditions



RCW Trees	Stands Meeting MSS	Vegetation
▲ inactive	Proposed Action - BA Reductions	Wetland
▲ active	BA 50	Forest Type
RCW Partitions 0.25mi	BA 10-40	Longleaf Pine
RCW Partitions 0.50mi	BA 40	Slash Pine
		Scrub Oak
		Loblolly Pine

Quarter Mile Cluster Partition Current – Cluster 73.13

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
25	5	0.3	1971	Slash Pine	205.3	116	116	48	85.6	64	3.6	4	No	No	0.0	0.0	0.0
25	12	16.8	1927	Longleaf Pine	86.7	81.7	17.6	5	34.9	30	34.2	46.7	No	Yes	0.0	0.0	16.8
25	13	1.8	1982	Slash Pine	316.4	132	234.8	72	81.6	60	0	0	No	No	0.0	0.0	0.0
73	47	10.8	1896	Longleaf Pine	74.5	35	49.9	15	20.6	15	3.9	5	No	No	0.0	0.0	0.0
73	1	9.5	1972	Slash Pine	121.5	88.3	25.6	10	77.9	56.7	18	21.7	No	No	0.0	0.0	0.0
73	3	29.6	1896	Longleaf Pine	93.2	70	39.2	10	21.5	18.3	32.4	41.7	Yes	Yes	29.6	1777.2	29.6
73	44	6.7	1920	Longleaf Pine	57.1	65	12.8	5	2.7	2.5	41.5	57.5	Yes	Yes	6.7	404.6	6.7
25	3	13.2	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	36	4.2	1910	Undrained Flatwoods	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
73	4	7.8	1939	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	2	0.1	1896	Longleaf Pine	unkno wn	unkn own	unkn own	unkno wn	unkno wn	unkno wn	unknow n	unkno wn	unknow n	unknown	0.0	0.0	0.0
		100.8												Totals	36.4	2181.8	53.2

Quarter Mile Cluster Partition Future – Cluster 73.03

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres	
25	5	0.3	Thin	65.1	50.0	0.0	0.0	61.5	46.0	3.6	4.0	Yes	No	0.3	14.1	0.0	
25	12	16.8	Modified Group Selection	38.0	50.0	0.0	0.0	3.8	3.3	34.2	46.7	Yes	Yes	16.8	842.4	16.8	
25	13	1.8	First Thin	70.1	50.0	4.8	2.0	65.3	48.0	0.0	0.0	Yes	No	1.8	87.0	0.0	
73	47	10.8	No Treatment	74.5	35.0	49.9	15.0	20.6	15.0	3.9	5.0	No	No	0.0	0.0	0.0	
73	1	9.5	No Treatment	121.5	88.3	25.6	10.0	77.9	56.7	18.0	21.7	No	No	0.0	0.0	0.0	
73	3	29.6	No Treatment	93.2	70.0	39.2	10.0	21.5	18.3	32.4	41.7	Yes	Yes	29.6	1777.2	29.6	
73	44	6.7	No Treatment	57.1	65.0	12.8	5.0	2.7	2.5	41.5	57.5	Yes	Yes	6.7	404.6	6.7	
25	3	13.2	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
73	36	4.2	No Treatment	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
73	4	7.8	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0	
73	2	0.1	No Treatment	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknow n	unknown	unknown	0.0	0.0	0.0
		100.8												55.3	3125.2	53.2	

Half Mile Partition Current – Cluster 73.13

Compartment	Stand	Acres	Year of Origin	Vegetation Type	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	MSS Acres	Total BA 10+in MSS	Recovery Acres
25	5	13.3	1971	Slash Pine	205.3	116.0	116.0	48.0	85.6	64.0	3.6	4.0	No	No	0.0	0.0	0.0
25	12	56.6	1927	Longleaf Pine	86.7	81.7	17.6	5.0	34.9	30.0	34.2	46.7	No	Yes	0.0	0.0	56.6
25	13	8.3	1982	Slash Pine	316.4	132.0	234.8	72.0	81.6	60.0	0.0	0.0	No	No	0.0	0.0	0.0
73	47	10.8	1896	Longleaf Pine	74.5	35.0	49.9	15.0	20.6	15.0	3.9	5.0	No	No	0.0	0.0	0.0
73	1	13.0	1972	Slash Pine	121.5	88.3	25.6	10.0	77.9	56.7	18.0	21.7	No	No	0.0	0.0	0.0
73	3	29.6	1896	Longleaf Pine	93.2	70.0	39.2	10.0	21.5	18.3	32.4	41.7	Yes	Yes	29.6	1777.2	29.6
73	44	12.8	1920	Longleaf Pine	57.1	65.0	12.8	5.0	2.7	2.5	41.5	57.5	Yes	Yes	12.8	769.2	12.8
25	3	25.3	1925	Baldcypress-water tupelo	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	36	4.4	1910	Undrained Flatwoods	unkn own	unkno wn	unknow n	unkno wn	unknow n	unkno wn	unkno wn	unknow n	unknow n	unknown	0.0	0.0	0.0
73	4	8.1	1939	Pond Cypress	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	2	0.6	1896	Longleaf Pine	unkn own	unkno wn	unknow n	unkno wn	unknow n	unkno wn	unkno wn	unknow n	unknow n	unknown	0.0	0.0	0.0
		182.8												Totals	42.4	1867.7	99.1

Half Mile Partition Future – Cluster 73.13

Compartment	Stand	Acres	Treatment	TPA	BA	TPA 5 to 10 in	BA 5to 10 in	TPA 10 to 14 in	BA10 to 14 in	TPA 14 in +	BA 14 in +	Meets MSS	Meets Recovery	Acres MSS	Total BA 10+in MSS	Acres Recovery
25	5	13.3	Thin	65.1	50.0	0.0	0.0	61.5	46.0	3.6	4.0	Yes	No	13.3	664.1	0.0
25	12	56.6	Modified Group Selection	38.0	50.0	0.0	0.0	3.8	3.3	34.2	46.7	Yes	Yes	56.6	2830.8	56.6
25	13	8.3	First Thin	70.1	50.0	4.8	2.0	65.3	48.0	0.0	0.0	Yes	No	8.3	399.2	0.0
73	47	10.8	No Treatment	74.5	35.0	49.9	15.0	20.6	15.0	3.9	5.0	No	No	0.0	0.0	0.0
73	1	13.0	No Treatment	121.5	88.3	25.6	10.0	77.9	56.7	18.0	21.7	No	No	0.0	0.0	0.0
73	3	29.6	No Treatment	93.2	70.0	39.2	10.0	21.5	18.3	32.4	41.7	Yes	Yes	29.6	1777.2	29.6
73	44	12.8	No Treatment	57.1	65.0	12.8	5.0	2.7	2.5	41.5	57.5	Yes	Yes	12.8	769.2	12.8
25	3	25.3	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	36	4.4	No Treatment	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
73	4	8.1	No Treatment	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0	0.0	0.0
73	2	0.6	No Treatment	unknow n	unknow n	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unkno wn	unknown	0.0	0.0	0.0
		182.8												120.7	6440.5	99.1