

Accelerating Longleaf Pine Restoration in Northeast Florida

A Collaborative Forest Landscape Restoration Proposal

USDA Forest Service
National Forests in Florida

April 30, 2010



"The Ecological Condition Model used in this proposal provides scientific support and increases the public's level of trust in the Forest Service as public land stewards, and lays a foundation for cooperative work between the Forest Service and conservation advocacy groups."

Brett Paben
Senior Staff Attorney
WildLaw



1. Proposed Treatments

Introduction

This proposal will successfully restore the longleaf pine (LLP) ecosystem on the Osceola National Forest (ONF) for these reasons: 1) there is a high degree of community support for proposed activities; 2) the forest maintains strong partnerships with collaborators and stakeholders; 3) existing contracts (Indefinite Delivery and Indefinite Quantity) and agreements are in place to ensure the expedient obligation and utilization of funds to include fiscal years 2010 and 2011; 4) the National Forests in Florida is a leader in the use of prescribed fire, having led the nation in prescribed fire acres; 5) the National Forests in Florida has led the Southern Region in the development of a comprehensive landscape scale restoration strategy using the best available science and has expanded this strategy for a 10 year period for this proposal; 6) All project NEPA is complete for the first two years of implementation and out year project NEPA is in progress; and 7) this proposal will restore LLP within one of the 16 landscapes identified under the *Range-Wide Conservation Plan for Longleaf Pine* identified by America's Longleaf (available at: <http://www.americaslongleaf.org/>).

The Greater Okefenokee Association of Landowners (GOAL) landscape, consisting of nearly 2 million acres of federal, state and private forest lands in five counties within Northeast Florida and Southeast Georgia including the ONF and the Okefenokee National Wildlife Refuge, was formed to address wildland fire-related issues that have plagued the area. This proposal addresses 567,800 acres in the southern portion of this landscape.

The LLP ecosystem in this landscape has been significantly altered due to long periods of fire exclusion and hydrological alteration. As a result, 31 million dollars have been spent in wildfire suppression over the past twelve years on the ONF alone. Approximately 50% of the ecosystem on the ONF is in poor to very poor ecological condition compared to desired future conditions as determined by the ONF's Ecological Condition Model (ECM) and described in the Landscape Strategy (Available at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRLandscapeStrategy.docx>).

The ECM and other strategic planning tools (Management Prioritization Model, and Landscape Scale Assessment) were developed for the ONF to guide and significantly increase restoration efforts on 112,000 acres of LLP forest to achieve desired future conditions as described in the Forest Land and Resource Management Plan. Even with these strategic planning tools in place, current funding levels are insufficient to achieve desired future conditions at desirable spatial and temporal scales. Appropriated funds combined with Collaborative Forest Landscape Restoration (CFLR) funding will be used to double, and in some cases quadruple, existing management efforts. In addition, this increased level of funding will be used to conduct new restoration treatments that, in total, will restore the LLP ecosystem on the ONF during the next 10 years.

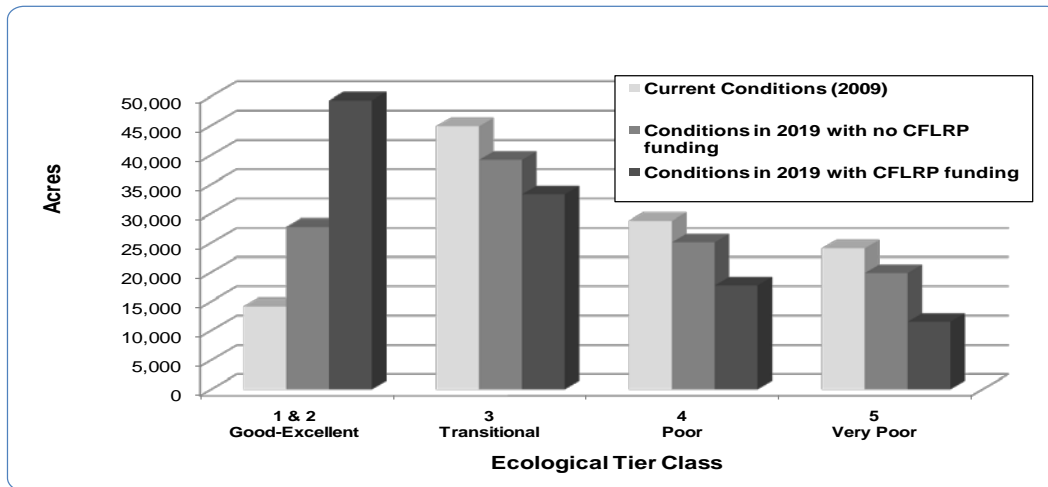
Figure 1 below illustrates the impact proposed CFLR funding would have on achieving the desired future conditions on the ONF. This proposal would triple the acreage of good to excellent condition (ECM Tier 1 and 2) from approximately 14,000 to 49,000 acres, while decreasing areas needing heavy restoration (ECM Tier 5) from 24,000 acres to 11,500 acres.

Since 1998, four wildfires (Oakhead, Friendly, Impassable 1 and Florida Bugaboo) have burned 431,074 acres with a total suppression cost of \$31,250,686. Rehabilitation costs for these fires exceeded 3.6 million dollars. The Bugaboo fire was the largest wildfire east of the Mississippi River and led to the partial evacuation of Lake City, Florida's 13,000 residents. Smoke from the fire closed Interstates 10 and 75 for several days and severely impacted air quality in the city of Atlanta over 250 miles away. Had the fire not entered a portion of the ONF recently prescribed burned, thereby allowing fire fighters the opportunity to extinguish the head of the fire, the results would have been even more severe to include the possible loss of life and property. This is substantiated by a quote from Mike Quesinberry, Blue Team Incident Commander for the Bugaboo fire, who stated:

"When the Blue Team assumed command of the Bugaboo fire, the existing uncontained 14 mile head of the fire shifted toward Lake City... the prescribed fire and timber thinnings recently conducted in this area had a dramatic impact on fire behavior. The rates of spread and intensity of the fire decreased in these areas, allowing for the suppression of the fire avoiding the full evacuation of Lake City".

The implementation of this proposal is expected to save the U.S. Forest Service as much as 17 million dollars given the ONF fire suppression history, essentially paying for this proposal.

Figure 1. Comparison of ecological condition of ONF longleaf pine forest under current conditions, in 2019 without CFLR funding, and in 2019 with CFLR funding. Condition categories (tier classes) are defined relative to desired future conditions, with lower tier classes indicating further separation from DFC.



Proposed Treatments

The 567,800 acre CFLR project area encompasses 234,995 acres on the Osceola National Forest (ONF), 37,736 acres of the John M. Bethea State Forest, 75,000 acres of industrial timberland, 140,000 acres of the Okefenokee National Wildlife Refuge, and 80,000 acres of private timberlands. This proposal is designed to accelerate ongoing longleaf pine (LLP) restoration efforts on the ONF and ultimately on other lands within the project area (Available at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRMap.pdf>).

Increasing Prescribed Fire Acreage - On average, the ONF has been able to prescription burn approximately 25,000 acres of the forest annually. This equates to a fire return interval of 4-5 years (too long to achieve ecological restoration). The widely accepted fire return interval associated with healthy LLP forests is a return interval of 2 to 3 years. To achieve this, the ONF will double the annual prescribed fire acreage to 50,000 acres. This is feasible and can be accomplished by increasing both the use of aerial ignition and increasing available personal for ground ignition. Expanding the number of qualified burners on the ONF will be accomplished by using CFLR dollars to fund temporary work details of U.S. Forest Service employees from western states during the winter months and to fund The Nature Conservancy's Prescribed Fire Strike Teams located within the region. The ONF will also take advantage of the recent hazardous fuel reduction efforts funded by America Reinvestment and Recovery Act (ARRA) dollars by reintroducing prescribed fire into these fire suppressed areas that were once too hazardous to prescribed burn.

Reducing Hazardous Fuel Loads - A combination of factors to include smoke management issues associated with Interstate 10 and other highways bisecting the forest, recent droughts that have hampered prescribed fire efforts, and a shortage of qualified personnel to implement prescribed burns; have led to the accumulation of hazardous fuels over much of the ONF. Approximately 4,300 acres have already been treated using ARRA funding to reduce hazardous fuels and an additional 3,700 acres will be completed by the close of FY10. CFLR funding will be used to extend mulching/mastication contracts to reduce hazardous fuels from an additional 10,000 acres thereby facilitating the reintroduction of prescribed fire into these fire suppressed areas.

Thinning Small Diameter Trees - Over half of the LLP stands on ONF are overstocked with small diameter pines and require silvicultural treatments to reduce hazardous fuels, restore LLP dominance, improve habitat

for endangered and other wildlife species, improve conditions for the normally diverse groundcover, and reduce the risk of insect and disease outbreaks. "Silvicultural Treatments" in Figure 2 will be accomplished by thinning mature LLP stands, mixed longleaf/slash stands (selective slash removal), and converting slash pine plantations to LLP. There will be no new permanent roads constructed for this project. CFLR dollars will be used to increase timber sale preparation (cruising and marking contracts) to expand the current sales program from treating 1,921 acres in FY10 to treating 5,000 acres in FY14 and in subsequent years. A combination of standard commercial timber sales and Stewardship Contracts will be utilized to accomplish the increase in sale area acreage. The ONF has already implemented two large and successful Integrated Resource Timber Contracts and will be developing new Stewardship Contracts to generate additional funding for restoration efforts. As the timber program expands, a new Stewardship Agreement will be developed in FY15 and a portion of the revenue generated from the increased timber harvest will be used to help adjacent partners implement restoration efforts using Wyden Amendment authority.

Harvesting Woody Biomass - In 2007, the ONF along with the U.S. Forest Service Southern Research Station conducted a Woody Biomass Administrative Study to compare two different methods of harvesting and baling woody biomass in the form of midstory shrub and tree species. The study provided much needed information regarding the feasibility and costs associated with harvesting this underutilized but very abundant source of biomass. The lack of a nearby market has hindered woody biomass utilization in north central Florida. This Administrative Study ultimately received the Regional Forester's award for Technology Transfer in 2008.

In 2009, the ADAGE Company, a joint venture between Duke Energy and ARVEA, was permitted to construct a 50 megawatt plant to generate electricity using woody biomass that is forecasted to be operational in 2013. The plant, to be built in Hamilton County, Florida will be within the effective hauling distance from the ONF. Annual feedstock requirements for this facility will be over 600,000 green tons per year. Most of this potential feedstock would come from private forest ownerships; however, ADAGE is interested in obtaining biomass from the ONF. This presents a tremendous opportunity to utilize woody biomass as a byproduct from the restoration activities on the ONF and surrounding lands as described in this proposal. The utilization of woody biomass will reduce the cost of ongoing mechanical fuel treatments (See Section 5 for further details).

Groundcover Restoration - Healthy LLP Ecosystems harbor some of the richest biological diversity in the country, most of which occurs on the forest floor in the form of grasses and herbaceous vegetation. Many wildlife and plant species, however, begin to decline as sunlight is shaded by an overly dense forest canopy or midstory. Saw palmetto, a naturally occurring shrub in LLP flatwoods, usually occurs in sparse clumps. However, when LLP forests are fire suppressed, saw palmetto densities increase dramatically and replace the diverse understory. When the density of saw palmetto exceeds 33% cover, imperiled grassland birds such as Bachman's sparrow, Henslow's sparrow and bobwhite are no longer present. A common and effective method of reducing saw palmetto coverage and increasing grass and herbaceous species is to use a single pass roller chopper followed closely by the application prescribed fire. Timber stands with high basal areas of small diameter pines will be thinned, chopped, and burned on a 2-3 year rotation, stimulating the grass and herbaceous ground cover. During the 10 year period of this proposal, 21,000 acres will be treated by roller chopping to restore native groundcover.

Decommissioning Trails and Roads/ Hydrological Restoration - There are approximately 850 miles of non-designated routes on the ONF. Many of these non-designated routes are an artifact of historic management and are located on wet sites. The primary environmental impact of these roads is interrupted sheet flow from ditching or where roads have become incised from repeated surface blading. Since implementing a designated travel management system in 2007 the ONF has been monitoring the status of non-designated routes. On dry sites the results of monitoring indicate that most non-designated routes are naturally revegetating. However, on wet sites more active restoration is required. This proposal will actively restore approximately 309 miles over a ten year time frame by blocking road access, planting containerized trees and shrubs, light disking to increase ground cover and/or recontouring ditches and berms to restore normal hydrologic sheet flow. Additional information regarding the ONF transportation system may be found in the 2009 Osceola National Forest Landscape Scale Assessment (Available at ftp2.fs.fed.us/incoming/r8/Florida/CFLR/ONF_LSA.pdf).

Numerous historic plowed firelines were created on the ONF for both prescribed fire and fire suppression that are interrupting hydrologic sheet flow and have altered the natural hydrology on the forest. The normal program of work on the ONF has been to treat or rehabilitate 2 miles of firelines annually. CFLR funds will be used to quadruple this effort to 8 miles of annual treatment with a total of 90 miles being treated over the 10 year period.

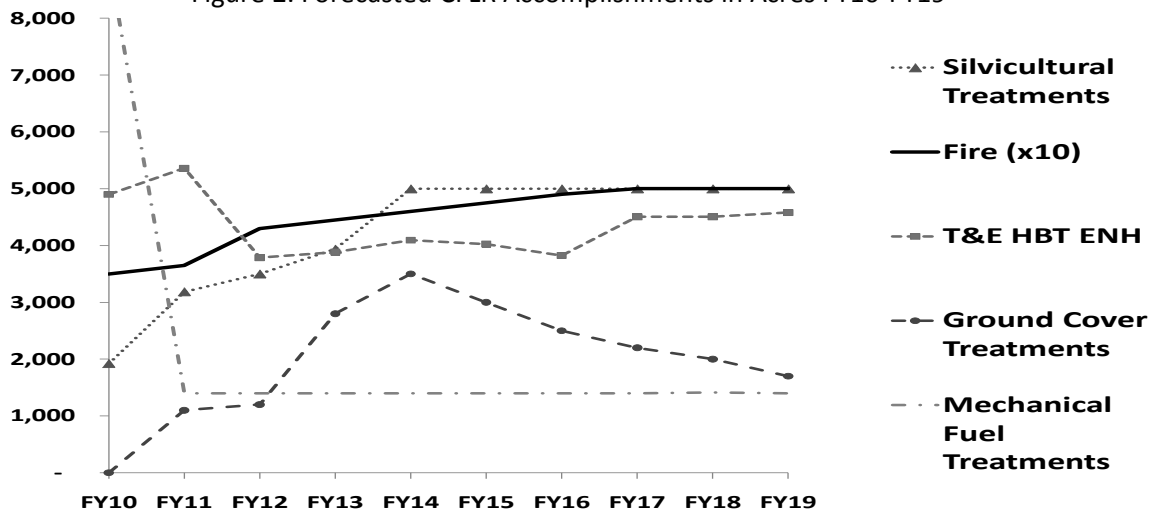
National Environmental Policy Act Compliance – The ONF has two Environmental Assessments (EAs) that address fire management activities to include prescribed burning, fireline maintenance and restoration, and roller chopping. Fire activities in the western portion of the forest are addressed in the Suwannee Analysis Area Prescribed Burn EA signed on June 26, 2008. Fire activities in the eastern portion of the forest would be addressed in the St Mary’s Analysis Area Prescribed Burn EA with an estimated decision date of July 2010. These two EAs would cover the entire 10 years of fire management activities.

Timber management activities including silvicultural treatments, site preparation, planting, mowing to reduce high fuel loads, and timber stand improvement activities are addressed in the “Priority Area Three Environmental Assessment” with a decision date of January 19, 2010. This EA will address activities occurring from FY10 - FY12. Beginning in FY12, timber management activities would be addressed by an EA currently under development with an estimated decision date of July 2011. This EA would cover at least two years of treatments through FY14. Miscellaneous activities such as road decommissioning and flatwoods salamander habitat enhancement would be addressed under separate NEPA documents as needed.

Figure 2 below displays the forecasted accomplishments in acres over the life of this proposal. The accomplishments for additional activities measured in miles are explained below. Note the ONF received ARRA funding for 8,000 acres of mechanical fuels reduction in FY10.

Monitoring and Measuring Success – A number of monitoring programs using the best available science are currently in place on the ONF. The ONF is using advanced GIS modeling (Ecological Condition Model and Management Prioritization Models) populated with remote sensing and forest inventory data to annually assess the effects of management actions and quantify forest health at the landscape scale. Annual cooperator and interdisciplinary planning meetings are held to review these models and plan future years work. Project level monitoring will be conducted by Tall Timbers Research Station and Land Conservancy across 15-20% of the total CFLR activities to detect changes in vegetation and wildlife. The Southeast Regional Partnership for Planning and Sustainability, funded through the Department of Defense is annually monitoring the Federally endangered Red-cockaded woodpecker (RCW) population on the ONF and supplying juvenile RCWs to recipient sites in support of Regional translocation efforts. Their monitoring data will be relevant towards understanding the impacts of the CFLR activities on the ONF.

Figure 2. Forecasted CFLR Accomplishments in Acres FY10-FY19



2. Ecological Context

Current Vegetation and Other Characteristics

Longleaf pine (LLP) historically dominated much of the coastal plain from eastern Texas to southern Virginia, as well as portions of the piedmont and the extreme southern Blue Ridge. It is the foundation of an ecosystem that is dependent on frequent ground fire, is among the most species-rich in North America, and that once covered approximately 40 percent of the region. The LLP ecosystem has declined by more than 98% due to its conversion to non-forest land uses, dense commercial plantations of slash pine and loblolly pine, and widespread fire exclusion. It has been reduced to relatively few isolated occurrences comprising approximately 5 million acres, and much of what remains is in poor condition and is degrading due to insufficient management - leading to conservation initiatives such as The Longleaf Alliance and America's Longleaf.

The most extensive LLP-dominated natural community in the U.S. Coastal Plain and Florida is pine flatwoods. This community is characterized by low, flat topography on poorly drained sandy soils. Healthy pine flatwoods are characterized by open uneven-aged LLP stands with a highly diverse grassy groundcover supporting abundant wildlife.

The vegetation of the Greater Okefenokee Association of Landowners (GOAL) landscape and focus of this proposal is a mosaic of pine flatwoods dominated by LLP and/or slash pine, large forested swamps, and grassy marshes. The pine flatwoods of the landscape, which have been greatly altered over the past century, will be the primary focus of restoration treatments because they stand the most to be gained by restoration, require the most active management, support the greatest number of sensitive species, and are the primary forest type managed for forest products.

The Osceola National Forest (ONF) is at the south end of a broad swath of pine flatwoods and forested wetlands that border the Okefenokee Swamp on the south and west. The ONF encompasses approximately 112,000 acres of pine flatwoods. Over the past two years, the ONF and collaborators have developed an Ecological Condition Model (ECM) for the ONF flatwoods, with primary inputs including fire severity and history, basal area (square feet of wood per acre), and stand age. For more detailed discussion of the ECM, see the Landscape Strategy at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRLandscapeStrategy.docx>.

Tier Class	Ecological Condition	Relative Amount of Restoration Need	Maintenance and Restoration Treatment Needs	Acres in Tier	Percent in Tier
1 and 2	Good-Excellent	Low -maintenance condition	Rx fire, periodic silvicultural treatments	14,148	13%
3	Transitional	Moderate	Increased Rx fire, silvicultural treatments, roller chopping, longleaf pine planting	44,870	40%
4	Poor	High	Same as Tier 3, but with mechanical fuel treatments, biomass harvest, some groundcover planting	28,761	26%
5	Very Poor	Very High	Same as for Tier 4, but with hydrological restoration	24,046	22%

Need to Restore Longleaf Pine Dominance - As a conservative estimate, 2/3 of the flatwoods on the ONF should be dominated by longleaf pine and 1/3 should be dominated by slash pine. Yet, based on stand

inventory data, only about 1/3 of the flatwoods are currently dominated by longleaf pine and 2/3 are mixed longleaf pine/ slash pine or slash pine stands. This is due to historic fire suppression and differences in species tolerances to fire, with longleaf being more adapted to frequent fire. Approximately 11,000 acres of off-site slash pine will be converted to longleaf pine with this CFLR proposal.

Need to Restore Groundcover – Due to historic fire suppression and altered fire regimes, saw palmetto and woody shrubs have become dominant in many pine flatwoods of the U.S. southeastern coastal plain, including those on the ONF. This has led to the degradation of large, remaining portions of the pine flatwoods. Areas of the ONF that haven't been recently burned or have not burned with at least one moderately severe fire within the last ten years are now dominated by saw palmetto and/or woody shrubs. This has suppressed or eliminated the original groundcover normally dominated by bunch grasses and forbs. Approximately 21,000 acres of groundcover restoration will be accomplished by light roller drum chopping of overly abundant saw palmetto with this proposal, see page 22 of the Landscape Strategy (Available at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRLandscapeStrategy.docx>). These activities will benefit 38 of 39 sensitive plant species from the R8 Regional Forester's list that are known or considered likely to occur on the ONF, as well as 36 species of amphibians, 49 species of reptiles and 51 species of land birds.

Overview of Pine Flatwoods Ecology - Pine flatwoods, their pyrogenic groundcover, and associated wildlife evolved with regularly occurring lightning fires on a 2–3 year interval. In fact, the reproductive strategies of many flatwoods species (including LLP) depend on such frequent fires. In ECM Tiers 1 and 2, frequent prescribed fire that mimics the natural fire return interval and severity prevents a shift in the understory from native grasses and forbs to saw palmetto and woody shrubs, and prevents the less fire tolerant slash pine from invading and dominating LLP sites. On the ONF only 14,148 acres are currently in Tier 1 and 2 and require only the application of prescribed fire to maintain desired future conditions. In the absence of frequent fire the percent cover of saw palmetto and woody shrub species dramatically increases, resulting in decline of herbaceous cover and diversity and shift to lower quality ECM Tiers 3-5.

Frequent fire alone will not achieve restoration objectives for ECM Tiers 3-5 due to the presence of well-established, unnaturally dense, saw palmetto and shrubs and the fact that these species rapidly rebound to preburn abundance and percent cover. A combination of mechanical treatments and growing and dormant season prescribed fires will be required to restore these areas to desired future conditions.

The ONF will use a combination of the ECM and prioritization models to identify and target areas for restoration that are in close proximity to high quality areas and threatened and endangered (T&E) species habitat. This approach will result in a more efficient and effective method of restoring pine flatwoods.

Restored vegetation and other characteristics - The goal of restoration is to maximize the acreage converted to Tiers 1 and 2 by 2019 (see Figure 1). Tier 1 is equivalent to the desired future condition, and is described as follows: Overstory is dominated by longleaf pine or mixed longleaf and slash pine that has an appropriate distribution of stand ages, tree sizes, and tree densities, with the oldest age class of greater than 110 years of age, and average pine basal area (BA) of 40-60 ft²/acre. Except on relatively small drier sandhill ridges and some wetland ecotones, there is no hardwood midstory. Species-rich groundcover is distributed continuously across the landscape and is dominated by native grasses and forbs, and saw palmetto cover is less than ~30%. Tier 2's upper age class is 90-109 years and all other criteria are the same as Tier 1.

Ecological Adaptation to Climate Change - Predictions for Florida include increased fluctuation in annual rainfall, and increases in drought extent and heat index. This proposal positions the forest to withstand predicted fluctuations associated with climate change and improves current forest health by reducing fuel loads, restoring LLP, and restoring native grasses. LLP is the superior southern pine species due to its tolerance to extreme weather (wildfires and hurricanes), its dependence on frequent fire, its increased resilience to insect and disease, and its ability to sequester carbon at a higher rate than other southern pine species. Proactive LLP restoration is especially critical to the ONF in the face of climate change.

Fish, Wildlife, or Threatened & Endangered Species Improvements - The Federally endangered red-cockaded woodpecker (RCW) requires open forest with old-growth pines. The ONF has taken advantage of existing

suitable acres and has used artificial nest cavities to expand the population 12% per year over the past three years, up to 134 active breeding pairs. This growth rate cannot be maintained without the forest restoration activities outlined in this CFLR proposal. Such activities could improve 43,465 acres, producing additional RCW breeding pairs. The proposed prescribed burning, fuel reduction, LLP restoration, and groundcover restoration will also benefit numerous other species including Northern bobwhite quail, Eastern wild turkey, Bachman's sparrow, Eastern meadowlark, and white-tailed deer.

The Federally Threatened frosted flatwoods salamander (FFS) requires breeding ponds with open grassy ecotones and surrounding open grassy pinelands. This species inhabited the ONF until the late 1990s, but may have been extirpated due to the encroachment of shrubs and trees within the grassy ecotones surrounding breeding ponds. In 2009, the USFWS designated 550 acres as Critical Habitat on the ONF and the ONF designated approximately 6,300 acres south of Interstate 10 as the flatwoods salamander Conservation Area. CFLR funding will provide a significant opportunity to improve habitat for the FFS. All acres within critical habitat of FFS and most of the acres within the FFS Conservation Area will be treated under this proposal.

Maintenance and Improvement of Water Quality and Watershed Function- Over the duration of this proposal, approximately 400 miles of non-system roads, trails, and old firebreaks will be closed and obliterated. Where these disturbances function as channels and alter the natural laminar and subsurficial flow of water, hydrological restoration will be fostered by blocking vehicular access, pulling roadside berms back into roads, light disking to increase ground cover, recontouring erosion features and ditches to restore normal hydrologic sheet flow, planting containerized trees and shrubs, and/or seeding/planting of native groundcover species. The maintenance/ restoration of system roads will be performed under receipts generated from stewardship contracts, and in some cases, through Knutson-Vanderberg funds generated from traditional timber sales.

Prevent, remediate, or control invasive, exotic species – The ONF utilizes the U.S. Forest Service Southern Region's non-native invasive species (NNIS) strategy for identification, control, containment, education, prevention and removal. In comparison to many conservation lands in Florida, the occurrences of NNIS on ONF are of relatively low intensity. This proposal however will allow for much needed treatment of currently known NNIS occurrences. Species of major concern include Japanese climbing fern, torpedo grass, skunk vine, mimosa, camphor tree and Chinaberry.

Insects and Diseases - The proposed CFLR activities will improve the long term health and sustainability of the ONF pine forest. An increase in thinning both longleaf and slash pine stands will increase the resilience of individual trees and reduce the threat of insect pests such as Southern Pine Beetle. Slash pine management prescriptions would be incorporated in site specific project plans. Pondspice, a Florida endangered shrub, is vulnerable to attack by laurel wilt disease, and prescribed burning in the wetland margins will improve its vigor.

Road and Trail Maintenance, Decommission, and Rehabilitation -There are approximately 850 miles of non-designated routes on the forest. Approximately 400 miles of non-system roads, trails, and old firebreaks would be closed and obliterated over the duration of this proposal. Many of the non-designated routes resulting from historic management occur in wet flatwoods that are submerged in normal years. The primary environmental impact of these roads is interrupted sheet flow from ditching or where roads have become incised from repeated blading. Since implementing a designated travel management system in 2007 the ONF has been monitoring the status of non-designated routes. The results of this monitoring indicate that most non-designated routes on dry sites are rehabilitating naturally by eliminating unauthorized use. Additional description of the transportation system may be found in the 2009 ONF Landscape Scale Assessment (Available at ftp2.fs.fed.us/incoming/r8/Florida/CFLR/ONF_LSA.pdf).

3. Collaboration

Collaborative Interests and Accomplishments - The Osceola National Forest (ONF) is collaborating with multiple groups and organizations to better achieve Forest Plan Goals and Objectives. Collaborators include:

WildLaw - Working with WildLaw, a non-profit environmental law firm, the ONF has developed a working relationship that promotes early project collaboration to improve project effectiveness and avoid costly appeals and litigation. With support from WildLaw, the National Forests in Florida has significantly improved the quality of project proposals. The ONF has not had an appeal of timber or burning related projects in over four years.

Tall Timbers Research Station and Land Conservancy (TTRSLC) - The TTRSLC would enter into a Challenge Cost-Share Agreement to complete effectiveness monitoring of longleaf pine (LLP) restoration activities. See Landscape Strategy at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRLandscapeStrategy.docx>.

Greater Okefenokee Association of Landowners (GOAL) - A diverse group of forest landowners including US Fish and Wildlife Service, Florida and Georgia state officials, forest industry, non-industrial owners, and representatives from six rural communities committed to addressing fire-related issues. Current efforts include a shared aerial ignition contract, shared responsibility for wildfire suppression regardless of ownership boundaries, and adoption of the Incident Command System. Under this proposal, the GOAL and USFS would continue to work together to enhance and protect the longleaf pine ecosystem within this landscape.

Florida Division of Forestry (FL DOF), John M. Bethea State Forest (JMBSF) – The ONF routinely works the FL DOF under the Incident Command System and jointly staff a Unified Command during large wildfire suppression events, wildfire prevention programs, and joint fire training classes. The FL DOF has also introduced a longleaf ecosystem restoration incentives program and a forest stewardship program for private landowners. There would be potential for out-year revenues to be used to assist FL DOF, specifically the JMBSF, in the implementation of a stewardship agreement. The JMBSF serves as an important corridor connecting the ONF and the Okefenokee National Wildlife Refuge. The JBMSF prepared a comprehensive restoration plan in January 2009 which may be partially funded through use of the Wyden Amendment.

The Nature Conservancy (TNC) - Has provided critical review of the ONF's Ecological Condition Model (ECM) facilitating its development. The ONF is assisting TNC with the development of a similar model on their lands. TNC's Northeast Florida Strike team will be used to assist in conducting prescribed fire in the project area under an existing agreement. Under this proposal, TNC could also participate in monitoring the effects of habitat restoration for the Federally Threatened frosted flatwoods salamander on the ONF.

US Fish and Wildlife Service (USFWS) - Has provided critical review of the ECM. They work cooperatively with the ONF to implement restoration activities which will benefit federally listed species. The Okefenokee Wildlife Refuge staff participates in management of natural resources across ownerships including prescribed burning, joint law enforcement activities, and threatened and endangered species recovery efforts.

National Park Service (NPS) - Provides critical heritage survey information through Challenge Cost-Share agreements with the local Universities. Under this proposal, the existing agreements will continue to facilitate completion of project level planning through the ONF's appropriated funding.

ADAGE - A joint venture between AREVA and Duke Energy, two highly respected and well-capitalized energy companies, whose interests lie in development of woody biomass as alternative energy sources. ADAGE would harvest a portion of the woody biomass from the ONF once their facility becomes operational in 2013.

The National Wild Turkey Federation (NWTf) - Has worked with the National Forest in Florida to help implement landscape level conservation through the use of Stewardship Contracting. Under this proposal, the ONF would continue to work with the NWTf and the Florida Fish and Wildlife Conservation Commission (FFWCC) under a Challenge Cost-Share Agreement developed in 2006 to implement healthy forest restoration and wildlife habitat improvement at the landscape scale.

Florida Forestry Association (FFA) - The FFA will communicate the potential increase in forest product values offered through stewardship contracts by the ONF and use of biomass to industry and landowners.

The Langdale Company - The ONF together with The Langdale Company and the Southern Research Station completed a woody biomass administrative study on the ONF to document the costs and effectiveness of various woody biomass harvesting methods. As a result of this study, the ONF is poised to provide biomass while meeting ecological restoration objectives on the forest when market conditions allow. The Langdale Company would continue to be an active participant in wildfire suppression efforts within the GOAL area.

Southeast Regional Partnership for Planning and Sustainability (SERPPAS) – A partnership between state environmental and natural resource officials from across the southeast with the Department of Defense (DoD) and other federal and State agencies to promote improved collaboration in making resource-use decisions. Under this proposal, SERPPAS would continue funding RCW monitoring and translocation on the ONF.

The Longleaf Alliance (LLA) – a partnership between private landowners, forest industries, state and federal agencies, conservation groups, researchers, and others interested in managing and restoring LLP forests. Under this proposal, the LLA partnership will continue to enhance the condition of longleaf pine on private lands within and adjacent to the GOAL landscape.

America's Longleaf Initiative (ALI) - An umbrella for the collaborative efforts by stakeholders convened by the LLA and SERPPAS that identified sixteen focal landscapes in the Southeast for LLP restoration, including the ONF. ALI would help disseminate information attained from the results of our CFLR implementation.

PANDION - Will continue to manage the Fire in Florida's Ecosystem (FIFE) program which is a curriculum and educator training program that gives teachers the information and tools to teach the importance of fire in Florida. FIFE teacher training workshops would be provided to public school teachers, nature center or park staff, home school parents, Scout and 4-H leaders, camp counselors in communities near the ONF.

Natural Resources Conservation Service (NRCS) – Since 2002 private landowners within the GOAL landscape have participated with the NRCS in voluntary conservation programs such as Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentives Program (WHIP) on approximately 2,555 acres. Lands managed under these programs would have improved LLP ecosystem conditions and provide important connectivity adjacent to the ONF.

Georgia Forestry Commission (GFC) – Has provided funding to private landowners within the GOAL landscape to enhance fuel reduction efforts. Under this proposal GFC will continue to assist private landowners.

Collaborative Group Function and Stakeholder Representation - Having worked with the ONF for 5-10 years, there is a general consensus among collaborators and the forest on how to implement the Forest Plan. The collaborators contributed towards the development of both the ECM and this proposal by helping to identify opportunities to utilize CFLR funds to maximize the effectiveness of restoration treatments on the ONF.

Collaboration in Multiparty Monitoring – The University of Florida and the U.S. Forest Service's Centers for Urban and Interface Forestry are assessing the effects of prescribed fire and mechanical fuel treatment independent of this CFLR proposal. Consequently, this will provide necessary monitoring information at no cost to the CFLR proposal. An annual monitoring meeting between all stakeholders, will be conducted to share and exchange information and to update the ECM and management prioritization models based on the results of the implemented CFLR activities.

The Department of Defense has contracted with the SERPPAS on the ONF to monitor and translocate up to ten pair of RCW annually. They monitor at least 100 active RCW breeding pairs on the ONF and their data has proven vital in the ONF's out-year planning and strategies for RCW expansion to include the placement of future CFLR funded activities. Their annual In-Kind contribution to the ONF is \$102,960 and is expected to last through the ten-year CFLR time frame.

4. Wildfire

Current Wildfire Behavior - Under current conditions in the Greater Okefenokee Association of Landowners (GOAL) landscape, the potential for uncharacteristic wildfire behavior (fast moving stand-replacing fires that threaten local communities) will remain high, as will the potential for high suppression costs, to include the use of air tankers, aerial attack helicopters, and Type 1 Incident Management Teams. Over time, large wildfires on the landscape and on the Osceola National Forest (ONF) have increased in size, severity and cost. U.S. Forest Service (USFS) records show that large wildfires over 10,000 acres occurred on the ONF in 1932, 1941, 1943, 1956, 1989, 1998, 1999, 2004, and 2007. Figure 3 summarizes the larger wildfires that have occurred in the proposal area since 1998.

Figure 3. Summary of costs and acres burned for wildfires >10,000 acres on Osceola National Forest and GOAL Landscape from 1998 - present					
Wildfire	Year	Costs		Acres Burned	
		FS Suppression	FS Rehab	FS	Non FS
Oakhead	1998	\$250,000	unknown	20,370	n/a
Friendly	1999	\$12,000,000	unknown	31,292	37,768
Impassable 1	2004	\$3,451,000	\$2,978,764	16,191	18,469
Florida Bugaboo	2007	\$11,900,000	\$670,922	74,044	232,940
Subtotals		\$27,601,000	\$3,649,686	141,897	289,177
Grand Totals		\$31,250,686		431,074	

The Bugaboo Fire was the largest fire in the recorded history of Florida and Georgia, with USFS suppression and rehab costs exceeding \$12,000,000. The complex burned for three months and at times blanketed the city of Jacksonville, Florida and most of northeast Florida and southeast Georgia for many days with a pall of thick smoke. Smoke extended northward to Atlanta, Georgia (~250 miles) and was carried as far south as central Florida, and as far west as Meridian, Mississippi (nearly 400 miles). Refer to figure 4 below.

Suppression and recovery costs associated with these wildfires continue to pose a significant financial burden to federal, state and private landowners. USFS and Florida Division of Forestry suppression costs for the Bugaboo Fire alone exceeded 11.9 million dollars. Implementation of this proposal will help restore these pyrogenic natural communities, with special emphasis on longleaf pine (LLP) sites, and significantly reduce the threat of uncharacteristically severe wildfires and their associated suppression costs.

Reestablishing Natural Fire Regimes – This proposal will substantially reduce the uncharacteristically heavy fuel loads, reducing fire severity and associated smoke management issues on the ONF. The use of CFLR funding will allow for increased capacity of already-established programs (e.g., prescribed fire, mechanical fuel treatment, timber thinning) and new treatments such as roller chopping. From 2010 to 2019, prescribed fire acres will increase from 25,000 acres to 50,000 acres and silvicultural treatments (primarily timber thinnings) from 1,921 acres to 5,000 acres.

The need for mechanical fuel treatments will actually decrease over the life of this project due to the above mentioned activities from 8,000 acres to 1,000 acres. Restoration of native pyrogenic ground cover will be accomplished by reducing saw palmetto cover (often >70%) to <30% on 16,500 acres. The resulting re-establishment of fine flashy fuels will facilitate a return to the historical fire return interval.

Anticipated Fire Behavior under Restored Conditions - Proposed ecological restoration treatments will significantly reduce fuel loading and corresponding fire intensity for both wild and prescribed fires. Wildfire behavior under restored conditions will typically be low severity grass fires that are easier to extinguish or manage with considerably less risk to adjacent communities. Substantially less smoke will be produced from

wildfires, enabling an increased flexibility to burn adjacent to Interstate 10 and other major highways bisecting the ONF.

Wildfire Management in the Restored Landscape - Wildfires will be managed more efficiently and with less cost in a restored landscape. Fire behavior will decline from intense to moderate and low. Initial attack with local resources will result in containment within the first burning period. The lower fire severity combined with considerably less smoke production will enable wildfire managers to use more discretion when considering suppression tactics with fewer smoke management concerns on adjacent highways and communities. This will mean less direct attack using fire plows and corresponding ecological damage. It is noteworthy that firefighters observed that the 2007 Bugaboo Fire lost speed and intensity when it ran into the edge of areas that had recently been prescription burned and/or had pine stands thinned prior to the wildfire.

Wildfire Protection Plan - The 2006 Community Wildfire Protection Plan for Taylor, Florida has been incorporated into the proposal by building on the goals of the plan through increased focus on prescribed burning and timber thinning around the community. The plan was designed to help protect this rural community, which is surrounded by federal, state and private timberlands. The community has been designated a Firewise Community. Projects such as community education and hazardous fuel reduction projects are completed regularly and involve the coordinated effort of both the residents of Taylor and their wildland and structural fire community partners.

Long-term Wildfire Cost Reductions - Since 1998, the USFS has spent in excess of \$31,000,000 on large scale wildfire suppression and rehab on ONF – an average of \$2,600,000 per year. It is therefore reasonable to assume that wildfire suppression costs will be dramatically reduced, as well as the incidence of large-scale uncharacteristically severe wildfires on the ONF.

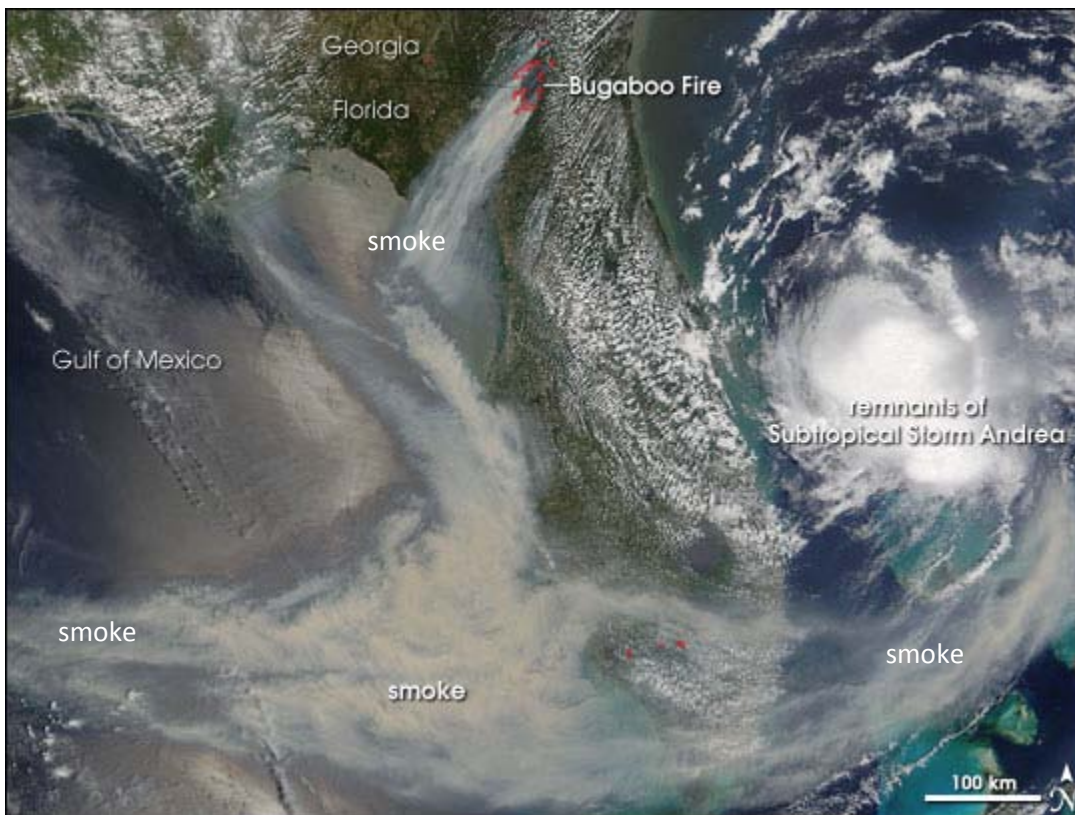


Figure 4. Bugaboo fire as seen from space. Imagery adapted from NASA's Earth Observatory.

5. Utilization

It is anticipated that through traditional timber sales and/or stewardship contracts the Osceola National Forest (ONF) would produce over 211,000 hundred cubic feet (CCF) of timber products over the next ten years from 8,000 CCF in FY10 to 25,000 CCF annually from FY14 to FY19.

The ONF's average volume ranges from 5 to 15 CCF per acre. The ONF has produced and offered 49,242 CCF of pulpwood and 21,915 CCF of yellow pine sawtimber since 1999 to seven different purchasers. In 2004 and 2007 the ONF sold multiple salvage sales due to wildfires totaling over 60,000 CCF. Slash pine and longleaf pine are the major tree species harvested during commercial thinnings. Size classes range from 5 inch dbh to 9.6 inch dbh for pulpwood and 9.6 inch dbh to 18 inch maximum dbh for small sawtimber. Trees larger than 18 inches at dbh are generally retained for red-cockaded woodpecker foraging and nesting habitat.

Three categories exist for biomass utilization: 1) the shrubby understory and midstory vegetation, tops, and stems less than 4.9 dbh from mature slash pine and longleaf pine (LLP) thinning; 2) stems less than 4.9 dbh from slash pine plantations to be restored to LLP; and 3) sub-merchantable stems from pre-commercial thinning in young slash pine and LLP stands. With an annual timber harvest target increasing to 5,000 acres per year, the combination of these three categories would produce, on average, 10,000 green tons annually for biomass utilization that would only complement, and not compete with the local pulpwood and sawtimber markets.

ADAGE, a joint venture between Duke Energy and ARVEA, has been permitted to construct a bio-power plant in Hamilton County, Florida in 2013. The proximity of this facility to the ONF (within 30 miles) would enable the utilization of biomass feedstock. ADAGE will require over 600,000 green tons per year for biomass feedstock. Although most of this feedstock would come from private forest ownership, ADAGE is interested in pursuing biomass utilization opportunities on the ONF.

In 2007, a cooperative administrative study involving The Langdale Company, Supertrak Inc., Université Laval, National Wild Turkey Federation and the U.S. Forest Service Southern Research Center in Auburn, Alabama was completed on the ONF to assess the feasibility of harvesting non-merchantable vegetation as woody biomass. The study concluded that the cost to harvest an average of three tons of understory biomass per acre ranged from \$132 per acre to \$160 per acre. That said, the value of the biomass could be as high as \$25 per ton delivered, reducing the operating cost to as low as \$57 per acre. The use of Stewardship authorities could offset the costs to remove the biomass. The value of the sawtimber and pulpwood sized trees removed would provide the revenue for a service contract to remove and haul the biomass. Utilization of woody biomass will reduce the cost of mechanical mulching, mowing, or chopping by half. An additional benefit of biomass utilization would be to reduce smoke management issues. Traditional mechanical fuel treatments leave large amounts of vegetation on the ground which, when burned, smolder producing large amounts of smoke impacting highways and other wildland-urban interface areas.

6. Investments

Federal Investments within the Landscape –The Osceola National Forest (ONF) plans to silviculturally treat 42,545 acres, prescription burn over 450,000 acres, increase and/or enhance 31,000 acres of threatened and endangered species habitat, restore ground cover on 21,000 acres, mechanically reduce hazardous fuels on 21,015 acres, and restore/rehab/de-commission approximately 400 miles of old fire lines, roads, and trails. Normal appropriations combined with forest product value and Knutson-Vanderberg receipts from timber sales total 19 million dollars. When combined with the requested 17 million dollars in CFLR funding, the total investment over a ten-year time frame will be 36 million dollars.

Mechanical fuels reduction activities were accomplished on 2,141 acres near Lake City, Florida in FY10 with funding from the Stevens Amendment totaling \$53,525. Given the wildfire history in this area, there is a strong potential for continued funding under this program.

Project effectiveness monitoring on the ONF will entail a partnership with the Tall Timbers Research Station and Land Conservancy (TTRSLC) under a Challenge Cost-Share Agreement. TTRSLC will match \$62,000 with the ONF's \$74,400 per year for at least 10 years. Vegetation, game, non-game, and threatened and endangered (T&E) avian species response to treatments will be monitored to provide feedback for the existing adaptive management program.

The Department of Defense, through the Southeast Regional Partnership for Planning and Sustainability (SERPPAS), is supporting regional red-cockaded woodpecker (RCW) recovery efforts by annually funding RCW monitoring and the translocation of RCWs from the ONF. SERPPAS monitors 100 active RCW breeding pairs (80% of the ONFs' population) and provides up to twenty RCWs to contribute to regional translocation efforts. Their annual contribution of \$102,960 significantly reduces the ONF's monitoring costs and is expected to last through the ten-year CFLR time frame.

Cost Savings – Implementation of this proposal will result in significant cost savings for a number of reasons. 1) The ONF has spent approximately 31 million dollars in wildfire suppression costs over the past twelve years. With the management activities proposed on the landscape, it is anticipated that suppression costs would be greatly reduced. If restoration efforts reduce suppression costs by only half, this proposal would pay for itself. 2) Shifting approximately 35,000 acres from a habitat restoration to maintenance mode will significantly reduce future management costs. Restoration is inherently more treatment-intensive and costly than habitat maintenance. Increased management efficiency and lower costs will be accomplished by creating larger, contiguous blocks of high quality LLP habitat and strategically connecting them through proposed treatments, allowing for an increased economy of scale. 3) Future management costs after completion of this CFLR project will be primarily focused on habitat maintenance vs. restoration, with larger high quality areas being primarily maintained over the long-term with prescribed fire using staffing commensurate with FY10 levels. 4) All CFLR activities will increase forest health and will therefore reduce the impacts associated with insect and disease.

Non-Federal Investments within the Landscape - The ONF has a strong partnership with the National Wild Turkey Federation (NWTf) and was the first Forest in the Nation to fund a cooperative position with the NWTf (in cooperation with the Florida Fish and Wildlife Conservation Commission) to facilitate Stewardship opportunities in Florida. Another Challenge Cost-Share Agreement is in place with the NWTf to explore biomass utilization opportunities and other healthy forest restoration activities to enhance game, non-game, and T&E species habitat on the ONF. In total, over the life of the CFLR project, it is estimated that the NWTf will have invested a minimum of \$50,000 on the ONF.

TTRSLC will enter into a Challenge Cost-Share agreement matching \$620,000 of the monitoring costs to the ONF's \$744,000 associated with the monitoring of CFLR activities for the first ten years of the project. See the Landscape Strategy for more details on the monitoring activities (Available at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRLandscapeStrategy.docx>).

Non-Federal Investments Outside the Landscape - As mentioned in the utilization section above, the 220 million dollar ADAGE biomass plant to be constructed in Hamilton County in 2013, will provide a market for woody biomass effecting all forest landowners within the Greater Okefenokee Association of Landowners (GOAL) landscape.

Florida Division of Forestry (FL DOF) has invested \$36,315 in FY10 for private landowners in Baker and Columbia Counties, Florida, as part of their Longleaf Ecosystem Restoration Private Landowner Incentives Program. In addition 22,971 acres of private land are now enrolled in the FL DOF Forest Stewardship Program. FL DOF's John M. Bethea State Forest (JMBSF) will restore LLP within the boundary of the Bugaboo fire. JMBSF will invest \$45,000 in FY10 and \$270,000 in FY11 for LLP restoration.

Within Baker and Columbia Counties, the Natural Resource Conservation Service has currently enrolled 916 acres in the Environmental Quality Incentives Program and 1,639 acres in the Wildlife Habitat Incentive Program with a total investment of \$121,000.

Georgia Forestry Commission (GFC) has provided \$2.7 million to landowners in counties adjacent to the Okefenokee National Wildlife Refuge for implementation of approved wildfire mitigation practices, including prescribed burning and grants for the development of Community Wildfire Protection Plans and Firewise practices.

Increased Restoration Capacity and Cost Reduction - The establishment of a biomass market within the Greater Okefenokee Association of Landowners area will facilitate the restoration of additional acres by providing new opportunities to remove previously non-merchantable vegetation in support of restoration and wildfire management objectives.

Several factors will contribute to reduced restoration unit costs. Fire excluded areas within the wildland-urban interface (WUI) would require an expensive initial mechanical treatment, up to \$250 per acre, to facilitate the reintroduction of prescribe fire at \$28 per acre on a 2-3 year return interval into the future. Ground cover restoration activities at \$90 per acre will convert 21,000 acres from a Fuel Model 7 (Southern rough) to a Fuel Model 2 (open canopy, grassy understory) that can then be maintained by prescribed fire at \$28 per acre. Wildfires occurring in these newly restored project areas (approximately 35,000 acres of pine forests in Ecological Condition Model Tier 1&2) will be smaller, less intense, and require less direct attack, less fireline rehab and maintenance, and facilitate more efficient containment and control. Again, all of the CFLR activities combined will significantly increase the forest health of the ONF, thus reducing the costly impacts of insects and disease. Additionally rehabilitation, decommissioning and closure of 400 miles of roads, trails and firelines will eliminate the annual maintenance costs of those roads, trails and firelines.

Employment and Training Opportunities- The implementation of this proposal will create new job opportunities associated with an increase in timber harvest, mechanical fuel treatments, ground cover restoration, creation of a new woody biomass market, and an array of service contracts in support of longleaf ecosystem restoration. Over the next ten years, the cumulative impacts of these activities will affect 600,000 acres and 400 miles of roads, trails, and firelines. At least 150 local men and women would be employed primarily by small businesses to support this level of effort. For example employment would include up to four 12-person logging crews to accomplish timber harvesting activities alone.

Expansion of the prescribed burning program will provide increased opportunities for employment and training with cooperative entities such as The Nature Conservancy, U.S. Fish and Wildlife Service, FL DOF, GFC, Suwannee River Water Management District and St. Johns River Water Management District. The Interagency Prescribed Fire Training Center in Tallahassee, Florida, will also be involved in coordinating training opportunities for fire crews from other regions.

The ONF will continue to provide on-going training opportunities for local youth groups including Project Learning Tree, Boy Scouts of America, Girl Scouts of America, Lake City schools, Richardson Community Center.

7. Funding Estimate

Funding estimates for this CFLR proposal are provided in the tables below. The Osceola National Forest (ONF) plans to enter into a Challenge Cost-Share Agreement with Tall Timbers Research Station and Land Conservancy (TTRSLC) for up to three 5-year periods of time. This agreement is represented in the boxes below with an initial, up-front obligation of funding for monitoring in FY10 as the ONF plans to use \$372,000 CFLR dollars (\$74,400/year for 5 years) to compliment TTRSLC's \$310,000 In-Kind contribution. The ONF plans to evaluate and renew the Agreement at the beginning of FY16. This will entail another investment of CFLR dollars that will carry the agreement through FY20. Other than FY10 and FY16, only the monitoring by ONF personnel is accounted for in the "FY20XX Funding for Monitoring" row in the tables below.

The ONF developed a detailed spreadsheet describing the activities and costs associated with both the ONF's normal appropriations and CFLR funding for all 10 years of this proposal. This spreadsheet is available at [ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLR Funding Plan FY10_FY19_FINAL.xlsx](ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLR_Funding_Plan_FY10_FY19_FINAL.xlsx) and supports the values summarized in the tables below.

The estimated forest product value (line 5. in the tables below) fluctuates based on the implementation of an ongoing stewardship contract and the subsequent development of a stewardship contract/agreement as funding permits.

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2010 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2010 Funding Type	Dollars/Value Planned
FY 2010 Funding for Implementation	\$2,391,650
FY 2010 Funding for Monitoring (CCS w/ Tall Timbers for 5 years plus force acct)	\$397,000
1. USFS Appropriated Funds	\$1,092,150
2. USFS Permanent & Trust Funds	\$190,000
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value (NWTF & Tall Timbers)	\$82,000
5. Estimated Forest Product Value	\$0
6. Other (specify) – DOD SERRPAS & Recovery Act Projects	\$1,419,500
FY 2010 Total (total of 1-6 above for matching CFLR request)	\$2,788,650
FY 2010 CFLR request (must be equal to or less than above total)	\$1,171,000
Funding off NFS lands associated with proposal in FY 2010 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2010 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding (GFC, FL DOF, JMBSF and NRCS)	\$2,900,000
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2011 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2011 Funding Type	Dollars/Value Planned
FY 2011 Funding for Implementation	\$1,914,135
FY 2011 Funding for Monitoring	\$49,500
1. USFS Appropriated Funds	\$1,267,925
2. USFS Permanent & Trust Funds	\$277,000
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value – Hutto IRTC	\$228,750
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2011 Total (total of 1-6 above for matching CFLR request)	\$1,963,635
FY 2011 CFLR request (must be equal to or less than above total)	\$1,465,800
Funding off NFS lands associated with proposal in FY 2011 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2011 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – (John Bethea State Forest Hydro Recovery Plan)	\$270,000
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2012 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2012 Funding Type	Dollars/Value Planned
FY 2012 Funding for Implementation	\$1,705,680
FY 2012 Funding for Monitoring	\$58,500
1. USFS Appropriated Funds	\$1,213,013
2. USFS Permanent & Trust Funds	\$284,957
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	\$76,250
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2012 Total (total of 1-6 above for matching CFLR request)	\$1,764,180
FY 2012 CFLR request (must be equal to or less than above total)	\$1,497,970
Funding off NFS lands associated with proposal in FY 2012 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2012 Funding Type	
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2013 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2013 Funding Type	Dollars/Value Planned
FY 2013 Funding for Implementation	\$1,646,010
FY 2013 Funding for Monitoring	\$62,000
1. USFS Appropriated Funds	\$1,242,305
2. USFS Permanent & Trust Funds	\$275,745
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	\$0
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2013 Total (total of 1-6 above for matching CFLR request)	\$1,708,010
FY 2013 CFLR request (must be equal to or less than above total)	\$1,518,050
Funding off NFS lands associated with proposal in FY 2013 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2013 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2014 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2014 Funding Type	Dollars/Value Planned
FY 2014 Funding for Implementation	\$1,815,535
FY 2014 Funding for Monitoring	\$64,500
1. USFS Appropriated Funds	\$1,233,047
2. USFS Permanent & Trust Funds	\$457,028
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	\$0
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2014 Total (total of 1-6 above for matching CFLR request)	\$1,880,035
FY 2014 CFLR request (must be equal to or less than above total)	\$1,690,075
Funding off NFS lands associated with proposal in FY 2014 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2014 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2015 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2015 Funding Type	Dollars/Value Planned
FY 2015 Funding for Implementation	\$1,900,635
FY 2015 Funding for Monitoring	\$73,500
1. USFS Appropriated Funds	\$1,281,925
2. USFS Permanent & Trust Funds	\$502,250
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	Initiate Stewardship Agreement
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2015 Total (total of 1-6 above for matching CFLR request)	\$1,974,135
FY 2015 CFLR request (must be equal to or less than above total)	\$1,784,175
Funding off NFS lands associated with proposal in FY 2015 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2015 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2016 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2016 Funding Type	Dollars/Value Planned
FY 2016 Funding for Implementation	\$1,614,561
FY 2016 Funding for Monitoring (Re-up with Tall Timbers for next 5 years)	\$445,500
1. USFS Appropriated Funds	\$1,305,161
2. USFS Permanent & Trust Funds	\$464,940
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	\$100,000
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2016 Total (total of 1-6 above for matching CFLR request)	\$2,060,061
FY 2016 CFLR request (must be equal to or less than above total)	\$1,870,101
Funding off NFS lands associated with proposal in FY 2016 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2016 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2017 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2017 Funding Type	Dollars/Value Planned
FY 2017 Funding for Implementation	\$2,177,260
FY 2017 Funding for Monitoring	\$73,500
1. USFS Appropriated Funds	\$1,261,800
2. USFS Permanent & Trust Funds	\$599,000
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	\$200,000
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2017 Total (total of 1-6 above for matching CFLR request)	\$2,250,760
FY 2017 CFLR request (must be equal to or less than above total)	\$2,051,937
Funding off NFS lands associated with proposal in FY 2017 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2017 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2018 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2018 Funding Type	Dollars/Value Planned
FY 2018 Funding for Implementation	\$2,201,010
FY 2018 Funding for Monitoring	\$73,500
1. USFS Appropriated Funds	\$1,285,550
2. USFS Permanent & Trust Funds	\$549,000
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	\$250,000
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2018 Total (total of 1-6 above for matching CFLR request)	\$2,274,510
FY 2018 CFLR request (must be equal to or less than above total)	\$2,041,037
Funding off NFS lands associated with proposal in FY 2018(does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2018 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

Funds to be used on NFS lands for ecological restoration treatments and monitoring that would be available in FY 2019 to match funding from the Collaborative Forested Landscape Restoration Fund	
Fiscal Year 2019 Funding Type	Dollars/Value Planned
FY 2019 Funding for Implementation	\$2,285,580
FY 2019 Funding for Monitoring	\$73,500
1. USFS Appropriated Funds	\$1,370,120
2. USFS Permanent & Trust Funds	\$499,000
3. Partnership Funds (NWTF Agreement #08-CS-11080500-001)	\$5,000
4. Partnership In-Kind Services Value	\$82,000
5. Estimated Forest Product Value	\$300,000
6. Other (specify) – DOD SERRPAS	\$102,960
FY 2019 Total (total of 1-6 above for matching CFLR request)	\$2,359,080
FY 2019 CFLR request (must be equal to or less than above total)	\$2,091,537
Funding off NFS lands associated with proposal in FY 2019 (does not count toward funding match from the Collaborative Forested Landscape Restoration Fund)	
Fiscal Year 2019 Funding Type	Dollars Planned
USDI BLM Funds	
USDI (other) Funds	
Other Public Funding – John Bethea State Forest Hydro Recovery Plan	
Private Funding	

8. Funding Plan

The National Forest System (NFS) lands in the southeastern United States offer unique opportunities for restoring the native forests and ecological systems that were once commonly found throughout the region. In many developed areas, the NFS lands are some of the few remaining large, forested landscapes in the South. Restoring and sustaining these lands and doing so in close coordination with our partners and neighboring landowners were a key part in the establishment of the Southern Region national forests and continue to be an emphasis in our management goals for today.

The Collaborative Forest Landscape Restoration Program (CFLRP) will supplement the Southern Region's work priorities very well. The Southern Region has developed a Strategic Framework to guide the important work we do. This Strategic Framework has identified restoration as one of the main areas of emphasis for developing programs of work. The goal for this region-wide focus is "ecological systems are returned to their natural resilience and sustained," which also supports intent of the CFLRP.

The Southern Region's program of restoration work includes a broad set of management practices designed to control the establishment, growth, composition, health, and quality of forests to meet the diverse needs and values of society on a sustainable basis. In developing our regional funding plans, the integration of multiple programs is the primary driver for budget development. Annual funding requests are made by each national forest based on their integrated capacity to accomplish needed work to support land management goals and objectives. The goals and objectives are guided by Land Management Plans, the Region's Strategic Framework, and other restoration strategies. Our regional program managers (fire, fuels, wildlife, forest health protection, vegetation, and watershed management) then work together to develop a seamless regional budget package that takes full advantage of the strengths of each individual program.

Vegetation treatment activities for restoration are designed to protect and restore ecosystems, address energy and other social needs, and protect human communities. The funding identified through the process above is used to plan, implement, and monitor the work activities to be accomplished in each fiscal year. The Southern Region will continue to utilize this process to inform allocation decisions in support of CFLRP requirements and to assure that CFLRP funding allocated in FY2010 and FY2011 will be used on this proposal in the year transferred. The Region has also committed to assuring that funding will be available to support the long-term multiparty monitoring requirement for this proposal. The Southern Region has a proven track record for delivering a very efficient program of work with high integrity for producing results.

9. **USDI Funding** – The proposal does not include this element.
10. **Other Funding** - The proposal does not include this element.
11. **Maps** – A color map of the CFLR landscape, land ownership patterns and proposed treatments from 2010-2019 is available at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRMap.pdf>.
12. **Landscape Strategy** – The Ecological Condition Model (ECM) and related Management Prioritization Models are described more fully in our Landscape Strategy. These spatial decision support tools form the analytical basis for developing the 10 year CFLR restoration strategy. The Landscape Strategy also discusses the proposed 15 year monitoring plan and how the monitoring data will help to evaluate the effectiveness of proposed restoration activities and to update the ECM and Management Prioritization Models at annual interdisciplinary collaborative planning meetings. This document is available at <ftp2.fs.fed.us/incoming/r8/Florida/CFLR/CFLRLandscapeStrategy.docx>.