

Appendix A: Council Member Applicant and Proposal Information Summary Sheet

<u>Council Member:</u>	Point of Contact: Phone: Email:
Project Identification	
Project Title: The Apalachicola Project Phase 1: Restoring Apalachicola Bay and Region	
State(s): Florida	County/City/Region: Franklin county/ Apalachicola/ Apalachicola River
General Location: <i>Projects <u>must</u> be located within the Gulf Coast Region as defined in RESTORE Act. (attach map or photos, if applicable)</i> Eastern Florida Panhandle, Apalachicola Region	
Project Description	
<u>RESTORE Goals:</u> <i>Identify all RESTORE Act goals this project supports. Place a P for Primary Goal, and S for secondary goals.</i>	
☐ <u>S</u> Restore and Conserve Habitat ☐ <u>P</u> Restore Water Quality ☐ <u>S</u> Restore and Revitalize the Gulf Economy	☐ Replenish and Protect Living Coastal and Marine Resources ☐ <u>S</u> Enhance Community Resilience
<u>RESTORE Objectives:</u> <i>Identify all RESTORE Act objectives this project supports. Place a P for Primary Objective, and S for secondary objectives.</i>	
☐ <u>S</u> Restore, Enhance, and Protect Habitats ☐ <u>P</u> Restore, Improve, and Protect Water Resources ☐ Protect and Restore Living Coastal and Marine Resources ☐ <u>S</u> Restore and Enhance Natural Processes and Shorelines	☐ <u>S</u> Promote Community Resilience ☐ <u>S</u> Promote Natural Resource Stewardship and Environmental Education ☐ <u>S</u> Improve Science-Based Decision-Making Processes
<u>RESTORE Priorities:</u> <i>Identify all RESTORE Act priorities that this project supports.</i>	
☒ <u>X</u> Priority 1: Projects that are projected to make the greatest contribution ☒ <u>X</u> Priority 2: Large-scale projects and programs that are projected to substantially contribute to restoring ☒ <u>X</u> Priority 3: Projects contained in existing Gulf Coast State comprehensive plans for the restoration ☒ <u>X</u> Priority 4: Projects that restore long-term resiliency of the natural resources, ecosystems, fisheries ...	
<u>RESTORE Commitments:</u> <i>Identify all RESTORE Comprehensive Plan commitments that this project supports.</i>	
☒ <u>X</u> Commitment to Science-based Decision Making ☒ <u>X</u> Commitment to Regional Ecosystem-based Approach to Restoration ☒ <u>X</u> Commitment to Engagement, Inclusion, and Transparency ☒ <u>X</u> Commitment to Leverage Resources and Partnerships ☒ <u>X</u> Commitment to Delivering Results and Measuring Impacts	
<u>RESTORE Proposal Type and Phases:</u> <i>Please identify which type and phase best suits this proposal.</i>	
☒ <u>X</u> Project ☒ <u>X</u> Planning ☒ <u>X</u> Technical Assistance ☒ <u>X</u> Implementation ☐ Program	
Project Cost and Duration	
<u>Project Cost Estimate:</u> Total : \$15 M	<u>Project Timing Estimate:</u> Date Anticipated to Start: January 1, 2016 Time to Completion: <u>5</u> years Anticipated Project Lifespan: <u>5</u> years

THE APALACHICOLA PROJECT – PHASE I

Restoring Apalachicola Bay and Region

EXECUTIVE SUMMARY

This proposal seeks \$15M to support the highly effective partners of the Apalachicola Regional Stewardship Alliance (ARSA) in initiating Phase I of a longer term, landscape level project to restore the Apalachicola Region, including both the water quality and quantity of the Apalachicola Bay and its watershed as well as the nationally significant habitats provided by its wetlands and upland forests alike. The project will harness the proven leadership of ARSA (a well-established collaboration comprised of local, state, non-governmental organizations and federal partners) to coordinate implementation of three core strategies to address the highest priority restoration needs across both public and private forestlands.

This proposal is a central component of a broader, Gulf-wide effort to engage with partners to improve management of forested watersheds as a necessary step in restoring the waters of the Gulf and its aquatic and terrestrial habitats, promoting community resilience, and revitalizing its human communities and economy. Quite simply, healthy forests are essential for Gulf health. Accordingly, USDA is mobilizing its internal resources from the Natural Resource and Conservation Service and the US Forest Service (in cooperation with State Foresters) as well as coordinating with external partners (including those active in the America's Longleaf Restoration Initiative) to mount similar forest-focused, multi-phase projects in multiple locations across the Gulf. See, for example, the concurrently pending Mississippi Gulf Coast Forest Restoration and Conservation Initiative. Additional proposals for other forested landscapes are also under development for future consideration.

The Apalachicola Project has strong potential to successfully model a landscape level approach. Phase 1 of a longer-term effort will achieve extensive hydrologic restoration of the Tate's Hell State Forest bordering the Apalachicola Bay along with re-establishment of site appropriate forest cover, primarily longleaf pine. In addition, a range of ecological improvements (mostly prescribed fire, non-native invasive species control and restoration of isolated wetlands) will be implemented by ARSA's ecosystem restoration team on the immediately adjacent Apalachicola National Forest, multiple coastal state owned lands and a military installation. Approximately 423,000 to 685,000 acres will be treated by the team. Together with other restoration planned on private lands, these actions will significantly improve the natural hydrological flow across a broad area of the lower Apalachicola River drainage and have direct and measurable effects on water quality and quantity as well as enhancing ecosystem functions and habitat quality.

Because approximately half of the 2M acres of undeveloped land in the project area are privately owned, engagement of private forestland owners will also be emphasized. Cutting-edge tools involving micro-targeting data analysis and social marketing will be utilized to solicit active participation from some 5,000 landowners; with approximately 650 owners offered forest management education and 200 directly working with a forester on a management plan,

certification and other actions. Targeted landowners will also be offered technical and financial assistance from state and federal agencies. Finally, additional high priority hydrologic and habitat restoration needs to be addressed in future phases of this foundational project will be identified via development of a Hydrological Assessment and Restoration Plan and a sophisticated Decision Support System.

In addition to improved water quality and more resilient habitats, project benefits include enhanced community resilience related to better flood control, drought tolerance, decreased wildfire risk, and reduced storm damage; and a revitalized economy related to productive fisheries, natural resources-dependent tourism, increased management of forestland to support a viable forest products industry and related local jobs.

A Phase 1 (5 year) grant of \$15M is requested to be utilized by agencies and partners as follows:

Strategy 1 Hydrologic Restoration - \$7M to the Florida Forest Service and Apalachicola National Forest for a) implementing already approved hydrologic restoration of Tate's Hell State Forest and b) development of additional hydrologic assessments and a Decision Support Tool;

Strategy 2 Ecosystem Restoration - \$5M to enable ARSA's Ecosystem Restoration Team with current leadership from The Nature Conservancy to implement a range of ecological improvements including prescribed fire, isolated wetland restoration and invasive species control on the Apalachicola National Forest, two National Wildlife Refuges, multiple state-owned lands, a military installation, and private lands identified in Strategy 3;

Strategy 3 Private Forests - \$3M to the Florida Forest Service to a) mount a targeted social marketing and outreach effort with assistance from the American Forest Foundation to engage and advise private forest landowners in the active management of their lands, and b) to enable the Florida Forest Service as well as the Florida Fish & Wildlife Conservation Commission and the Natural Resource and Conservation Service to provide interested forest landowners with additional technical and financial assistance needed for increased forest establishment and stewardship.

Success of this project is likely because ARSA is a well-established, highly functioning collaboration with deep knowledge and expertise in local restoration needs and practices. In the almost 10 years since its organization, ARSA has demonstrated accomplishments in all aspects of cooperative land management, including the ability to promote collaborative efforts and secure funding. In addition, this proposal will leverage and expand current grant funded ARSA projects (e.g. two National Fish and Wildlife Foundation (NFWF) grants and two Florida Fish and Wildlife Conservation Commission (FWC) grants) as well as a pending NFWF/NRCS Regional Conservation Partnership Program project. USDA is offering this proposal under the auspices of the Resources and Ecosystems Sustainability, Tourism Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) Act and other applicable statutory authorities.

Healthy Forests Substantially Contribute to Gulf Health

INTRODUCTION AND BACKGROUND

The relatively undeveloped Apalachicola Region of the Florida Panhandle is a vast expanse of pine forests, wet savannahs, cypress-tupelo swamps, blackwater streams and alluvial rivers. The defining feature is the Apalachicola River, formed by the confluence of the Flint and Chattahoochee Rivers where the Florida, Georgia and Alabama state lines converge. The Apalachicola River has the largest forested floodplain in Florida, covering approximately 112,000 acres and is up to 5 miles wide. The Region's high water table and flat topography cause hydrologic and nutrient flows to fuse the mosaic of wetland and upland ecosystems into a closely unified landscape (Ewel 1990). Rainfall within the northern Florida river basins slowly seeps through the forests, basin wetlands and river swamps before being gradually released into the coastal rivers and estuarine habitats of Apalachicola Bay. Accordingly, the health of the Region's estuarine resources is inextricably tied to the health of the forested habitats from which its waters flow.

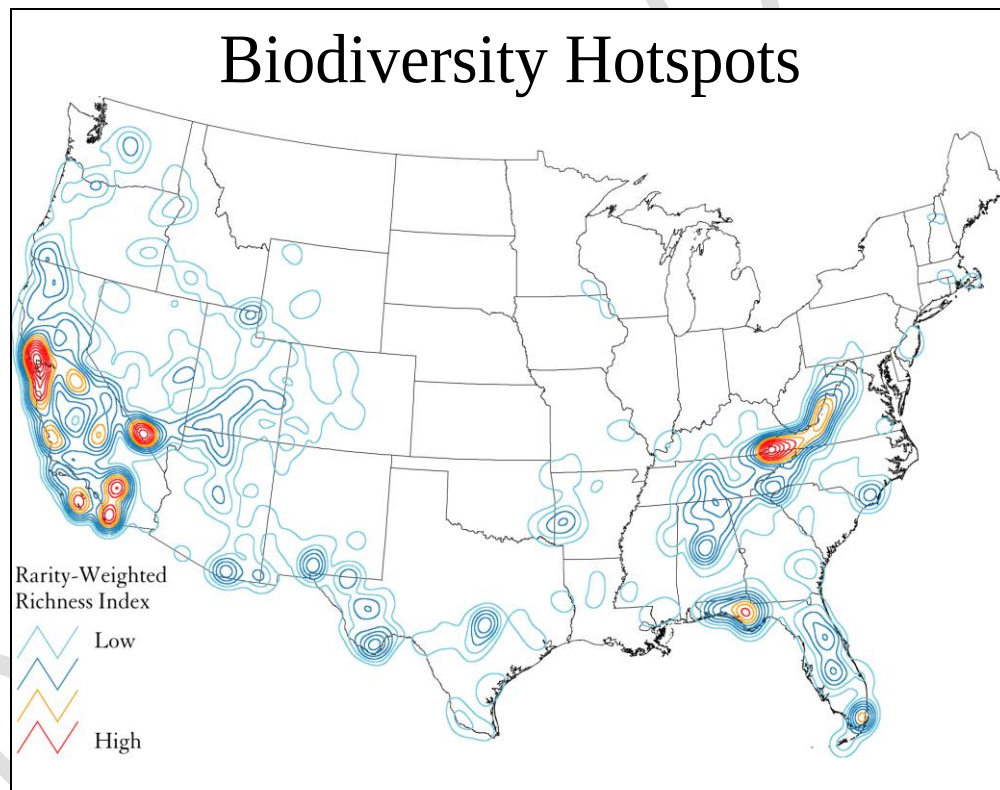


Figure 1. North America's five "hot spots" of species rarity and richness (Stein et al. 2000)

Collectively, the River, the adjacent floodplain, and wetland system as well as the receiving waters of the Bay and estuary are central to the Region's status as one of North America's five "hotspots" for species rarity and richness (Figure 1). To give just a few facts and figures, some 131 freshwater and estuarine fishes and 33 species of mussels have been found in the Apalachicola River and its main tributary, the Chipola River. The Apalachicola River harbors the

only remaining native population of the Gulf race striped bass in the southeast. It also provides spawning habitat for the federally endangered Gulf sturgeon and Alabama shad as well as providing habitat for the federally listed fat threeridge and purple bankclimber. The Chipola is home to 5 other federally listed mussels.

The bottomland forest of the Apalachicola floodplain is composed of approximately 60 species of trees. Water hickory, sweetgum, overcup oak, green ash, and sugarberry grow in the areas of higher elevation while the lower elevation areas are dominated by tupelo-cypress swamps. At least 127 of the rarest species of plants and vertebrates and 45 of the 62 terrestrial communities in Florida are found along the Apalachicola River (FNAI 2004).

Further south and down gradient, the Apalachicola River flows into one of the most biologically rich estuaries in the northern hemisphere. The estuary and bays (including East Bay, Apalachicola Bay, St. Vincent Sound and St. George Sound) are a biological, cultural and economic treasure that are dependent upon the freshwater inflows from the forested uplands and wetlands upstream (UF 2013, Florida DEP 2014). The magnitude of flow from the river and the natural productivity of the bay make it of great significance to the entire Gulf of Mexico. Some 90% of Florida's oysters, over 10% of the total U.S. harvest, are taken from the Apalachicola Bay, though recent changes in salinity related to reduced freshwater inflows are taking a toll (Livingston et al. 2000). It is a major nursery for penaeid shrimp, blue crabs and many fish species including striped bass, sturgeon, grouper, drum and flounder. It has one of the highest densities of bottom dwelling invertebrates of any comparable area in the U.S. The Apalachicola Bay is the largest National Estuarine Research Reserve within the federal system and has been designated a Florida Aquatic Preserve, an Outstanding Florida Water and an International Biosphere Preservation Area (Florida DEP 2014).

Also central to the Region's status as a biodiversity "hotspot" are its world-renowned forests of longleaf pine, the predominant upland forest type naturally occurring in the coastal plain. Situated at the center of the historic range of the imperiled longleaf pine ecosystem, the ARSA landscape provides critical habitat to a number of state and federally listed threatened and endangered species including red-cockaded woodpecker, frosted flatwoods salamander and gopher tortoise. The groundcover diversity per unit area within the longleaf pine ecosystem positions it within the most species rich plant communities outside of the tropics (Peet and Allard 1993). The abundant embedded wetlands of the longleaf pine ecosystem provide natural stormwater holding areas and important recharge and natural filtration functions for the Florida aquifer. Smaller ephemeral isolated wetlands also provide critical breeding habitat for many rare amphibians such as frosted flatwoods salamanders, Florida gopher frog and striped newt (Hipes et al. 2000). When properly maintained with a natural fire regime, longleaf forests are more resistant to certain pests (Thatcher and Barry 1982, Friedenberget al. 2007) and more resilient during droughts (McNulty et al. 1996) and storms alike (McNulty 2002, Hughes 2014). And they are economically valuable for their outstanding pole and saw timber values (Browning et al. 2009). The Apalachicola Region has been designated a Significant Geographic Area for longleaf restoration in the Range-Wide Conservation Plan for Longleaf Pine (2009) and

considerable public and private resources have supported initiation of longleaf restoration there in recent years under ARSA's leadership.

In addition to providing habitat to the myriad of plant and animal species described above, forests supply the cleanest water of any land use (Myers et al. 1985). Healthy forests absorb rainfall, refill groundwater aquifers, slow and filter storm water runoff, reduce floods, and maintain watershed stability and resilience (Riekerk 1989). The critical role of clean freshwater inflow in estuarine health is now widely recognized. However, during the past century the hydrology of the Apalachicola River Basin was altered dramatically with significant implications for the health and sustainability of the region's current estuaries and nearshore coastal ecosystems (Alber 2002, Light et al. 2006, Smith 2007). Restoring the Region to control the timing and delivery of freshwater inflows is critical to the long-term resilience of the Gulf of Mexico.

Healthy forests also provide a number of essential economic and social functions to the local communities. In the 12 county ARSA Region, forests and forest products producers provide more than 10,000 jobs with a payroll impact of more than \$350 million. The direct economic output of these markets is nearly \$1.2 billion (Hodges 2005). Well managed working forests also provide benefits to many endangered or declining native wildlife species described above. Furthermore, forests support military readiness in the Gulf region by providing important installation buffers and resilient areas for ground and air training.

ARSA: A Model of Collaborative Regional Restoration

The Apalachicola Regional Stewardship Alliance (ARSA) Local Implementation Team is a highly productive collaboration of public and private landowners and managers addressing conservation needs and opportunities across a broad area of the central Florida Panhandle, southwestern Alabama and southeastern Georgia (Figure 2). ARSA includes state, federal and private landowners and managers who are committed to the restoration and best management of the lands and waters within the Apalachicola Region. ARSA activities are governed by a 10-person steering committee comprised of formal agency/organization membership. The steering committee is chaired by the Local Implementation Team (LIT) Coordinator whose position is funded by member partners and public and private grants. All of the restoration and management activities described below will be directed by or done in close coordination with the ARSA steering committee.

ARSA was created in 2005 and partners signed a formal Memorandum of Understanding (MOU) in 2010¹. This MOU enables collaboration and sharing of personnel and resources across jurisdictional boundaries and thus enables the partners to take a team approach to efficiently accomplish a wide variety of public and private land management activities. This collaborative framework is critical as no one agency has the capacity to address all of the management

¹ A copy of the MOU is included in the Other Supporting Documents section.

concerns. A more complete description of ARSA's ecosystem restoration team, which this proposal would significantly expand, is provided below.

In summary, the framework established by the MOU lays the foundation for landscape level efforts such as those described in this proposal and facilitates public and private grant applications and awards by ARSA. Because ARSA is a well-established, highly functioning collaboration with deep knowledge and expertise in local restoration with a demonstrated record of accomplishments, the proposed project is very likely to succeed, if funded. ARSA also has the leadership capability to sustain landscape scale restoration efforts in future years.

Challenges and ARSA's Restoration Strategies

While the outstanding values of the Apalachicola Bay and its largely forested drainage are well-established in the ARSA Region, significant challenges also exist. Ditching and draining wetlands, conversion to new forest types, lack of sufficient fire, changes in understory structure and composition, the onslaught of non-native invasive species, and degradation of isolated wetlands have disrupted ecosystem function and decreased many ecosystem services, specifically water quality and both aquatic and terrestrial habitat.

To respond to these critical challenges ARSA and its partners have developed three core strategies: 1) hydrologic restoration, 2) additional ecosystem restoration and 3) enhanced management of private forest lands. Each core strategy is multifaceted, involving immediate on-the-ground implementation as well as anticipating future phases with assessment, planning and development of essential tools. While each strategy is led by a designated subset of the ARSA partners, the three strategies have been collaboratively designed to complement each other and have the synergistic effect of advancing ecosystem restoration at a landscape scale. In addition, ARSA will provide a forum for ongoing coordination during the implementation of all three strategies with the aim of maximizing results. The commitment of the private, state and federal entities in ARSA to combine resources and work collaboratively will create significant and lasting environmental and economic dividends for generations.

The Apalachicola Project (TAP) Area

As defined by ARSA, the geographic focus of The Apalachicola Project - Phase I (TAP) will be the Apalachicola River Basin and coastal public and private lands from Aucilla Wildlife Management Area westward to Tyndall Air Force Base (Figure 2). This initial focus area is situated in the lower central portion of the much larger ARSA Region, shown below, where future tiered restoration efforts are planned. The approximately 2M acres of undeveloped land within TAP area are nearly evenly divided between private forestlands and publicly managed areas. The private holdings range from large industrial timber corporations to small, family-owned woodlands. Anchoring the ARSA Region are 700,000 acres of public land on the Apalachicola National Forest and adjacent Tate's Hell State Forest (Figure 2). To ensure success at the landscape scale, strategies have been carefully crafted to address the unique needs and opportunities on both public and private forestlands.

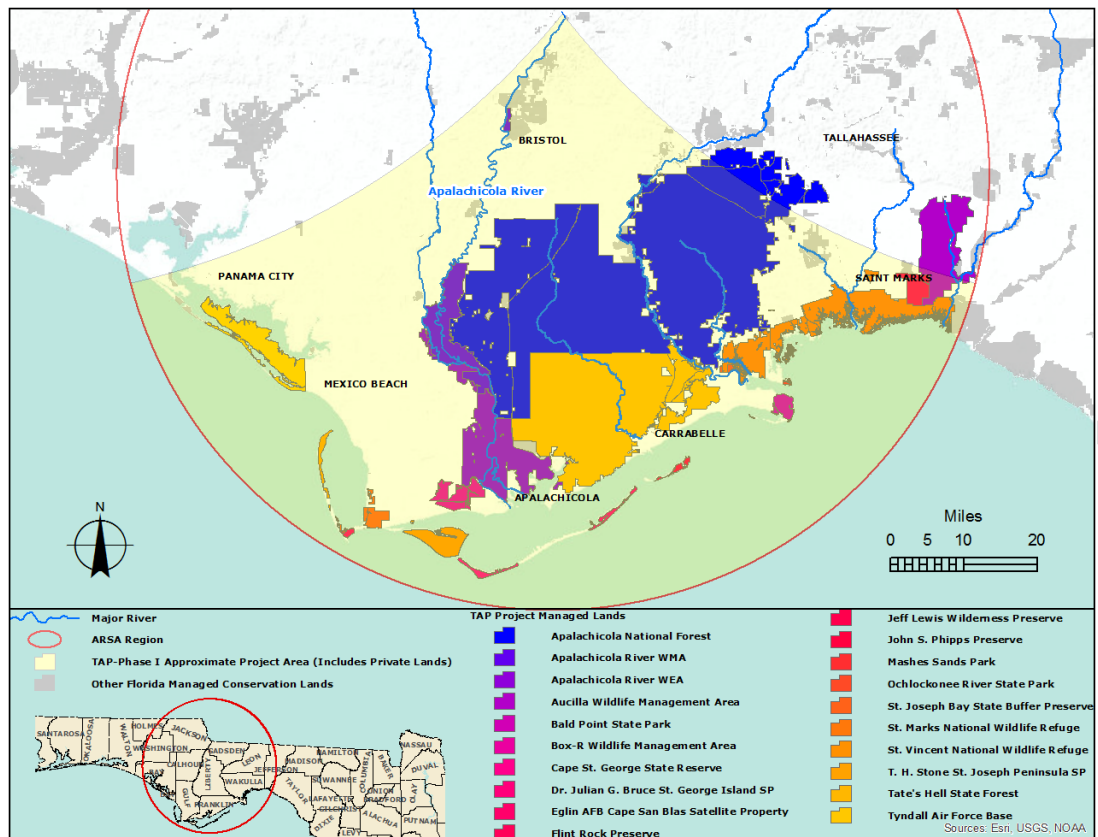


Figure 2. The Apalachicola Project (TAP) Phase I Area

Strategy 1: Hydrologic Restoration (lead partners - USFS, FFS, TNC, NFWFMD)

Recent estimates of the spatial distribution of water supply suggest that forests supply 66% of the water in the southern U.S. (Brown et al. 2008), while only 40% of the Region is forested (USDA Forest Service 2011). With approximately 2 million acres of forested land in the ARSA project, of which a significant percentage are wetlands, this landscape is a critical part of the overall water budget for both surface water and ground water in the area. The quantity, timing and quality of freshwater inflow are critical elements that structure physical, biogeochemical and hydrological conditions in near-shore coastal systems and thus the biological communities that inhabit them (Figure 3).

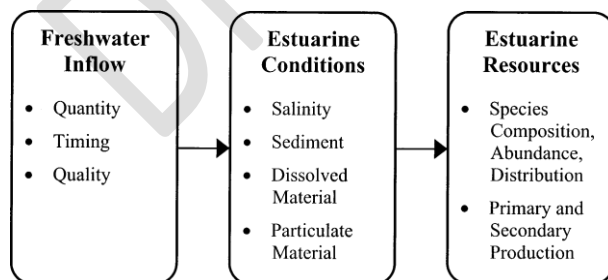


Figure 3. Schematic diagram of the effects of freshwater inflow on estuaries. (Alber 2002)

Many public and private lands in the Lower Apalachicola River Basin have experienced extensive ditching, drainage and bedding over the last century in an effort to alter the hydrology to make land more productive for silviculture and agriculture. The impacts to the project area's hydrology are clear; less obvious are the hydrological impacts from altered landcover and ecological processes. There is growing recognition of the functional interactions among vegetation, soils, and hydrologic processes at multiple scales and the linkages between upland, riparian, and aquatic components of the landscape (Vose et al. 2011). Taken together these hydrologic impacts have significantly altered the upland, wetland and estuary ecosystems in the Lower Apalachicola River Basin and have altered the magnitude, timing, and quality of surface water runoff discharged to Apalachicola Bay, East Bay, and surrounding waters. Restoration of natural flows will augment the delivery of fresh water to streams and rivers, and because of its proximity to the coast, to estuarine systems too.

Tate's Hell State Forest (THSF) has experienced a long history of intensive silvicultural activities that degraded the historic wetlands before state acquisition in 1994. Recently, a hydrologic restoration plan was developed for THSF by the Northwest Florida Water Management (NFWFMD) and the Florida Forest Service (NFWFMD 2009) which described and prioritized all hydrologic restoration needs. Initial plan implementation has begun, and all remaining hydrologic restoration work identified in high priority areas on THSF will be completed through this project. This will include: installing 54 low water crossings, installing 144 ditch blocks, constructing 3 bridges, installing/replacing 72 culverts, removing 20 culverts, installing 2 box culverts, and surface stabilization of 65 miles of roads. Additionally, approximately 2,100 acres of upland pine habitat (primarily longleaf) will be site prepped and planted on THSF in an effort to restore native habitat. Restoration of native longleaf pine forests will increase water yield, with research suggesting that water use of native longleaf savannas is approximately half that of planted loblolly and slash pine (Ford et al. 2008, Vose et al. 2011). Most of the target area is comprised of wetland habitats that drain into the New River and then into the salt marshes and estuary of St. George Sound just offshore from Carrabelle, Florida. Public outreach for the THSF restoration work will be through the THSF Liaison Committee, which meets twice per year.

A landscape scale hydrologic assessment will be developed for watersheds adjacent to those being restored on THSF to dramatically improve water quality within the lower Apalachicola River Basin in future phases of this project. In some cases hydrologic assessments are available that simply need to be updated and combined into a regional framework to identify and prioritize restoration opportunities throughout the area. For example, coastal areas of the Apalachicola River Wildlife and Environmental Area (ARWEA) were ditched and drained by a previous landowner in an attempt to convert to rice fields and crayfish production areas for local and export markets. A preliminary hydrological assessment was developed for ARWEA before the property was transferred to state ownership; however this plan needs to be updated since some restoration has already taken place. Adjacent watersheds on the Apalachicola National Forest (ANF) will also be included in the Hydrologic Assessment and Restoration Plan. This comprehensive hydrologic plan will be developed through a contract and will utilize existing hydrologic assessments (on the ARWEA, the Apalachicola River Water Management Area and THSF), existing GIS data (e.g., culvert locations), freely available LiDAR data and field

visits. The assessment will include water level and vegetation monitoring and analysis, determination of the completeness and effectiveness of previous hydrologic restoration activities and comparison of current and historic hydrologic and vegetation conditions. This will involve coordination across all partner agencies (USFS, FWC, FFS, TNC and NFWFMD) and will provide critical information to identify and prioritize future landscape-scale restoration projects focused on improving water quality and quantity across land ownership boundaries in the Lower Apalachicola River Basin.

In addition to prioritizing future projects, the hydrologic upland assessments and restoration plans developed during Phase I funding of the Apalachicola Project will also be used to support four planned Apalachicola National Forest projects. These projects, to be implemented in Phase II of funding, amount to over 70,000 acres of restoration including longleaf pine restoration, repairing areas with altered hydrology, restoring native groundcover, and reintroducing prescribed fire. All three future projects are aimed at improving the quality and quantity of water flowing into the Florida aquifer, restoring natural habitat, protecting endangered and threatened species, and supporting the local economies. These projects will also help enhance environmental markets by creating new potential recipient sites for endangered, threatened and candidate species such as the gopher tortoise and indigo snake (e.g. for mitigation measures related to development on private lands). Specific project details can be found in the Other Documents section of this proposal.

Regional Restoration Decision Support System

To guide hydrologic and habitat restoration efforts, a Regional Restoration Decision Support System (RRDSS) will be developed. Because of the complexity associated with water issues in coastal regions, a robust decision support system will help prioritize restoration needs including direct hydrologic improvements (e.g., installation of low water crossings), wetland restoration, timber thinning, prescribed fire, longleaf restoration and NNIS treatments, particularly where multiple benefits occur in the same geographical area.

The USFS National Forests in Florida has developed a functioning prototype forest management DSS. This system assesses current ecological conditions relative to desired future conditions at the landscape scale. Tiers of ecological health and condition are developed that allow land managers and public stakeholders to have a common framework to discuss restoration opportunities. With this common understanding, management activities such as prescribed burning can be prioritized to strategically target areas for maintenance or restoration. This approach incorporates many types of information and helps strategically target restoration activities in areas that are contextually important for prescribed fire, timber, threatened and endangered species, hydrology, and non-native invasive species.

This system can be scaled to accommodate the data from the combined hydrology that impacts the Lower Apalachicola River Basin or the entire ARSA area. Data which is currently under the management of separate agencies (FFS, FWC, NFWFMD and USFS) can be incorporated into the system to create a functional large-scale RRDSS. This, in turn, can help drive decisions in the

Region as they pertain to restoration whether it is upland forest land or specific to the actual hydrological features.

Once applied initially to the Lower Apalachicola River Basin, the RRDSS will then be used to build an effective framework of regional (TAP) hydrologic priorities versus focusing on specific agency needs bounded by real property lines. Public outreach and tech transfer with RRDSS will include: peer-reviewed publications, a General Technical Report (USFS, freely available to public), a freely distributed ArcMap toolbar, web-based tutorials and web-based delivery of derived data products.

Developing a Comprehensive Hydrologic Assessment and Restoration Plan

The RRDSS will be used in conjunction with the landscape scale hydrologic assessment results to develop a Hydrologic Assessment and Restoration Plans that identifies and prioritizes future (i.e., beyond this 5 year project period) restoration opportunities throughout the Lower Apalachicola River Basin and ARSA Region. The primary emphasis will be where habitat and hydrologic restoration opportunities closely overlap. The RRDSS will be focused on public lands within the ARSA Region; however it could be used in conjunction with the Private Forests Initiative described below.

During this 5 year project period additional analysis and planning will be conducted to identify and prioritize restoration opportunities beyond the scope of this foundational project and USFS Stewardship contracting authorities will be used to develop an agreement with TNC to sell merchantable forest products. Receipts from the sale of these forest products would be used to significantly increase the scale and pace of various restoration activities on the ANF in TAP Phase II. Based on average annual precipitation as well as river flows and water yield studies (McLaughlin et al. 2013), this watershed improvement work could result in an additional water yield of approximately 34-44 million cubic meters of water per year into the Apalachicola River, which would increase the average flow by 1.75 to 2.25%. For scale, this volume of water is similar to the yearly municipal water supply of the City of Tallahassee and would clearly make substantial contributions to freshwater flows into Apalachicola Bay. This work would also dramatically improve the health of the longleaf pine ecosystem, increase climate change resilience, improve public access, reduce wildfire risk, and boost the local economy through job creation in the timber and fisheries industries. This foundational planning effort is a necessary and critical component to set the stage for all future work. Implementing these management plans, however, can be a roadblock for many restoration efforts. Fortunately, through the collaborative partnerships in TAP, ARSA is able to address these concerns and quickly and efficiently implement plans as outlined in Strategy 2 of this project.

Strategy 2 Ecosystem Restoration Initiative (lead partners - ARSA membership)

The need to apply increased effort toward the management and restoration of imperiled regions such as the longleaf pine ecosystem is not new (Noss 1989). The Ecosystem Restoration Initiative Strategy of TAP proposes to answer this need by providing “boots on ground” management and restoration support via an Ecosystem Restoration Team to private and public partners, educational outreach and training to private and public partners, technical and

monitoring expertise to TAP restoration projects, continued restoration program development, and coordination support to ARSA.

Importance of Prescribed Fire

Increased prescribed fire particularly stands out among the management and restoration needs of the Apalachicola Region due to the myriad potential positive impacts on ecosystem health, rare and threatened species recovery, water quality, commercial timber protection and safety and well-being of the Region's towns and municipalities.

Prior to European settlement, natural lightning ignitions led to frequent fire (every 2-3 years) in the longleaf pine dominated upland ecosystems (Huffman 2006) and on a decadal cycle in wetlands and basin swamps (Ewel 1990). Beginning in the middle of the 20th century, many of these natural forests were converted to pine plantations intensively managed for fiber production and from which fire was excluded. This legacy of heavily stocked, short rotation forests have impacts on hydrologic function because of significantly higher evapotranspiration (ET) compared to natural forests. Restoration of the natural fire regime will begin to restore native grass-dominated understories and reduce biomass of woody shrubs, also reducing ET (McLaughlin et al. 2013, Edwards and Troendle 2012). Fire provides a number of other ecosystem services functions as well: it provides appropriate germination conditions for many plant species; recycles necessary precious nutrients that are otherwise highly limited in the regions sandy, acidic soils (Gholz and Fisher, 1984); and by maintaining open community structure it provides critical habitat for many mammals, rare vertebrates and numerous rare plants such as the federally listed Harper's beauty and Godfrey's butterwort (Chafin 2000, Means et.al. 1994, Means 2008, Palis 1992, Ripley and Printiss 2005, Walker and Silletti 2005).

Fire-suppressed uplands and the subsequent accumulation of dangerous fuel loads also present wildfire risks to both timber resources and local communities. The increased fuel accumulation burns with unnaturally high intensity that often results in the loss of or reduced value of merchantable timber. More importantly, these same dense fuel loads present serious challenges to wildland fire fighters when responding to wildfires adjacent to the wildland urban interface. Areas that have received prescribed fire treatment every 2-3 years have lower fuel loads and generally burn with low intensity. Recent analysis shows a 23:1 cost savings for using prescribed fire to prevent or reduce the costs of fighting wildfire (Hinckley and Wallace 2012).

Non-Native Invasive Species

Non-native invasive species (NNIS) control is also an important management and restoration activity that has far reaching implications for the health of the Apalachicola Region's natural ecosystems, rare and threatened species recovery, commercial interests, and quality of life for the region's residents. Nearly half of all species federally listed as threatened or endangered are thought to be at risk primarily due to the effects of invasive species (Wilcove et al. 1998).

Dense monocultures formed by invasive plants like Chinese tallow tree, Chinese privet, cogongrass, and kudzu shade out and eliminate native plants and endangered species (Langeland 1998). The changes in native habitats can also have cascading effects on soils, insect

pollinators and birds as well as undermine essential functions of nature that humans rely on. For instance, natal grass may be destabilizing sand dunes in Franklin County by replacing deep rooting, native, beach species like sea oats that nearby communities rely on for storm protection.

Water quality and quantity issues have also been linked to NNIS. During dry periods, the Rio Grande River no longer flows into the Gulf due partly to the proliferation of two invasive plants: giant reed and salt cedar along its banks. Both of these are currently invading native habitats in North Florida. Large populations of these invasives reduce stream and groundwater recharge through evapotranspiration and create physical barriers to surface flow. These types of impacts result from a handful of characteristics common to invasive species. Non-native plants, such as kudzu, are extremely competitive, using resources like soil water and nutrients at the expense of native plants and limiting recharge of fresh water to the aquifer (Langeland 1998). Species like cogongrass, one of the top ten worst weeds in the world, can alter the historic dynamics of ecosystems they occupy (Gordon 1998). Like other invasives that grow and reproduce extremely rapidly, this grass forms a dense monoculture across the landscape that out-competes native species and destroys native habitat. Cogongrass also burns at a higher temperature than native species, which can kill whole tree stands and, at least in the short term, increase erosion and sedimentation leading to soil runoff into waterways.

It is estimated that NNIS cost the U.S. economy \$120 billion annually in direct control expenses, lost agricultural productivity and lowered property values (Pimentel 2005). In Florida alone the annual costs as measured in sales losses and expenses are estimated at \$179M (Pest Exclusion Advisory Comm. 2001). In 2013 the National Association of State Foresters recommended the establishment of a state-level rapid response team that can quickly eradicate priority forest invasive species, and in north Florida this rapid response approach has been very effective. If infestations can be caught in year one, they are generally easily controlled with limited resources. Infestations that go untreated result in difficult, expensive and time consuming operations.

Utilizing a Regional Team for Ecosystem Management

The team approach to management and restoration has been time tested and is recognized by both public and private partners in Florida. Currently five teams provide management and restoration assistance across the state. This model has now been adapted by other southeastern states and is encouraged by regional plans (Darden et al. 2009) and initiatives (e.g. National Fish and Wildlife Foundation Longleaf Stewardship Fund and FWC State Wildlife Grant).

The Apalachicola Ecosystem Restoration Team was initiated in 2005 primarily in response to the need of more prescribed fire capacity within the ARSA landscape and to provide increased capacity for NNIS control. All aspects of providing prescribed fire and NNIS assistance, from scheduling to equipment maintenance to data collection, have been highly refined. Since 2005 the amount of prescribed fire and NNIS assistance has steadily increased with prescribed fire averaging 30,000-40,000 acres per year. In 2013 a new record was set with over 70,000 acres of

prescribed fire assists. The fire team's trained, professional fire staff and state-of-the-art equipment allow partners to burn units more safely and at a larger scale. In some cases, burns would not be conducted without these skilled, well-equipped teams and in other cases the team provides additional capacity that enables partners to conduct multiple burns on a given day. As evidenced by the support of the ARSA partnership it is expected that requests for assistance for prescribed fire and NNIS control will continue to grow: this Strategy aims to meet that challenge. Please see letters of support from specific ARSA partners in Other Supporting Documents section.

Through Phase I funding the team will be expanded. Initially it will consist of two 4 person crews (three crew members and a crew boss): at years 4-5 both crews will be increased to 5 crew members. Operationally, one crew will focus on NNIS treatment and the second will focus on prescribed fire assistance. All team members will meet at least minimum National Wildfire Coordinating Group (NWCG) prescribed fire and NNIS training standards. This cross training will allow for the crews to collaborate in order to increase efficiency and maximize opportunities (e.g. take advantage of favorable weather or contend with tight time windows).

During the five year timeframe of the Apalachicola Project, 21 coastal or near coastal properties managed by FWC, DEP, FFS, FWS, TNC, USAF, USFS and Wakulla County will receive prioritized prescribed fire and NNIS assistance (Table 1 and Figure 6 in Other Supporting Documents section). In total, 423,400-684,900 acres will be treated with prescribed fire. NNIS treatments are harder to quantify; however, it is conservatively estimated that hundreds of infestations will be surveyed and treated throughout Phase I. The prescribed fire assistance will predominantly be in the form of assistance with prescribed fire execution, but will also include prescribed fire planning and site preparation, post fire "mop-up" operations, and wildfire response assistance. Annual planning and prioritization of prescribed fire and NNIS treatments will be accomplished during regular ARSA membership meetings and through partner correspondence. Private timber owners will also be provided with prescribed fire assistance from the team; the private prescribed fire assistance will be identified in coordination with the Strategy 3 Private Forests Initiative portion of the Apalachicola Project. Both public and private NNIS planning and assistance will be provided by the team and contracted services. The amount of contracted NNIS assistance will increase as needed during years with favorable prescribed fire conditions.

Prescribed fire training and FIREWISE outreach

In order to increase awareness among private land owners on important, local land management issues, Strategy 2 will provide local fire awareness outreach workshops including the FIREWISE Communities approach. Workshops will be held in both general locations (e.g. Carrabelle public library) and at targeted areas with known Wildland Urban Interface concerns (e.g. "Plantation" community at western end of St. George Island, CR 30A adjacent to St. Joseph Bay State Buffer Preserve and Dog Island). Workshops will be coordinated with community representatives in order to maximize participation and program success. To maximize TAP efficiency, the FIREWISE Community outreach will be done in close coordination with Strategy 3 outreach efforts.

To better prepare volunteer firefighters and other emergency responders for wildland fire emergencies the Strategy 2 Initiative will provide NWCG wildland fire training opportunities. Higher level NWCG training opportunities will also be offered to public land managers as specific needs are identified at regular ARSA membership meetings. Both levels of training will be offered at least twice per year at different locations during years 2-5.

Habitat restoration in isolated wetlands

Thousands of isolated wetlands are embedded throughout the longleaf pine uplands of the Apalachicola Region. These ponds are often less than an acre in size and are seasonal, meaning they do not hold water year round. This seasonality discourages colonization by most fish species, which in turn makes these wetlands critical (in fact obligate) breeding sites for numerous species of amphibians (including the federally threatened frosted flatwoods salamander) and hundreds of species of invertebrates. These isolated wetlands are so productive that they have been called the “grocery stores” of the longleaf pine ecosystem. The ecotones or edges of these wetlands are also important habitat for a long list of rare species including the federally listed Harper’s beauty and Godfrey’s butterwort. Isolated wetlands dry down in spring and historically would have burned as frequently as the adjacent uplands. However, due to altered fire regimes – in particular the long-term use of dormant season fires when these wetlands would be holding water– these ponds now are largely grown over with shrub vegetation and have lost much of their natural character (Figure 4). Using both contracted labor and the Apalachicola Ecosystem Restoration Team the Strategy 2 Ecosystem Restoration Initiative will restore approximately 250 isolated wetlands over the 5 year Project period. Crews will cut and remove woody vegetation from ponds and spot-treat the stems with



Figure 4. Before and after photos of isolated wetland restoration

herbicide. This pond structure restoration (see figure 4) will result in reduced evapotranspiration, lengthened hydroperiod, and increased water storage and improved water storage capacity of the pond. This work will also facilitate management with prescribed fire, thus protecting the restoration investment.

Strategy 3 Private Forests Initiative lead partners - FFS, TNC, FWC, NRCS, American Forest Foundation

Gulf forests include many ownership types with small woodland owners comprising the largest number and owning the majority of acres. The proposed reforestation and forest enhancements will make a significant contribution to the ecological restoration of the Gulf Coast and its economic revitalization. Funding for this proposal will accelerate forest restoration, providing benefits to coastal communities and the ecosystem. This project will create increased continuity and acres of actively managed forests leading to expanded public benefits in the form of water quality protections, other ecosystem services such as wildlife habitat, cleaner air, better quality of life, and expanded economic activity.

Healthy working forests provide essential economic impacts to local communities. In the 12 county ARSA Region, forests and forest products producers provide more than 10,000 jobs with a payroll impact of more than \$350 million. The direct economic output of these markets is nearly \$1.2 billion.

Private forests initiative implementation and methodology

Outreach efforts will be directed to private forestland owners in priority areas with assistance from the American Forest Foundation (see AFF strategy in Other Supporting Documents section) and the Florida Land Steward Partnership, a cooperative team consisting of University of Florida Forestry and Wildlife Specialists, Natural Resource Conservation Service, Florida Forest Service, Florida Fish and Wildlife Conservation Commission, and the US Fish & Wildlife Service Partners Program. Outreach will consist of micro-targeting data analysis and social marketing strategies to reach and engage priority landowners in sustainable forest management. As landowners respond to marketing they will be provided with education and stewardship informational materials, consistent communications, peer led events, technical education programs and, on request, personal visits from natural resource professionals. Educational opportunities will inform more than 600 landowners and demonstrate techniques to improve forests and habitat condition on private lands. Of these, approximately 200 will accept a forester visit on their property to receive management advice and commit to a forest management plan. Workshops will focus on practice implementation as well as silvicultural and wildlife best management practices and will facilitate the creation of 600+ practice plans covering 50,000 acres. These activities will lead to an increase in the quantity of private forestlands being actively managed with a number of different objectives including invasive species control, timber stand improvement, site preparation, establishment of 10,000 acres of forests with native species, hydrological restoration and prescribed fire.

The on-the-ground work will be directed by the Florida Forest Service with assistance from the Florida Fish & Wildlife Conservation Commission, NRCS, and the Strategy 2 restoration team. Landowners, private consulting foresters, and forestry services vendors will funnel requests for assistance through local County Foresters, NRCS, or other appropriate agency staff. County Foresters and FWC Biologists will visit sites, discuss options, prepare written work plans with map(s), and assist landowner in submitting application. The County Forester will prepare or approve a practice installation plan detailing the necessary steps to complete the landowner's

desired forest habitat enhancement practice(s) and describe financial assistance available to assist in completing the practice. Financial assistance programs will include NRCS Environmental Quality Incentives Program (EQIP) program, FFS Southern Pine Beetle program, USFWS Partners program, FWC's Landowner Incentive Program, and any necessary funding from Strategy 3 to encourage successful practice implementation.

Ranking criteria will be formulated with input from ARSA partners and will include such considerations as proximity to coastal waters, riparian zones, conservation lands, practice importance to habitat and water quality, etc. Contracts will be awarded to the highest ranking applicants. Progress on installation will be monitored by the county forester or biologist. The capacity to implement this program and conduct the outreach necessary to insure success exists in the Florida Forest Service, NRCS, and its partners. Grant match will be obtained from dollars spent by private forest landowners and partners in implementing practices as well as county forester and biologist time spent providing technical assistance and program administration. Landowners will implement practices with guidance from FFS County Foresters and assistance from private consulting foresters, biologists, and other vendors as needed. Upon completion, the FFS County Forester will inspect completed work, approve or make recommendations on how to meet program standards and upon approval, certify work completed to program standards.

MONITORING AND ADAPTIVE MANAGEMENT

Strategy 1 hydrologic restoration monitoring will be performed at a subset of representative projects to quantify the success of restoration efforts. Monitoring will include permitting and construction, water levels (long term averages) and hydroperiod, pre- and post- construction vegetation surveys, and incidental wildlife occurrence observations. Planning support for the hydrologic monitoring will be provided by TNC, and a portion of the FTE for this position will be covered through this project. For the reforestation work, monitoring will be performed by state forest staff and will include supervision of vendors contracted for both site preparation and tree planting activities. Post planting monitoring will include survival check sampling after the first growing season, follow up observations, and re-sampling plots after 10 years.

Strategy 2 ecosystem restoration initiative monitoring will include NNIS site inspections 60 days post treatment and pre- and post-treatment vegetation analysis (including photo points) of 20% of isolated wetlands receiving shrub removal treatment. Prescribed fire treatment information, FIREWISE outreach and prescribed fire training outcomes will be discussed in the "Data/Information Sharing" section.

Strategy 3 private forests initiative monitoring will include approval of practice plans and completed projects by the County Forester or Biologist to ensure practices meet program specifications. Field checks will be made on a periodic basis to provide additional guidance for maintenance of the installed practices. The American Forest Foundation will conduct interviews with landowners targeted in the marketing campaign to determine factors that led to acceptance or rejection of our forest management assistance.

MEASURES OF SUCCESS

Strategy 1 Hydrologic Restoration measures of success will primarily relate to the effective implementation of hydrologic improvements on THSF. One objective measure will be if measured wetland hydroperiods are appropriate for the target community and if the wetland vegetation is indicative of appropriate hydroperiod conditions. Another measure will be evidence of the re-establishment of historical surface water drainage patterns. For the upland acres that are site prepped and planted on THSF measures of success will include: achieving desired survival rates for trees planted ($\geq 75\%$), desired species increasing in frequency or abundance and that the type and total coverage of tree, shrub and herbaceous species is appropriate for the target community. In addition to the measures of success for THSF, three additional objective metrics will be the development of a landscape scale hydrologic assessment, a Regional Restoration Decision Support System and a Comprehensive Hydrologic Assessment and Restoration Plan for planning restoration activities in the Lower Apalachicola River basin beyond Phase I of this project.

Strategy 2 Ecosystem Restoration Initiative measures of success will include the number of acres of prescribed fire assistance provided and the number and acreage of NNIS surveys and treatments. See Table 1 in Other Supporting Documents section for fire and NNIS targets organized by partner ownership. Measures of success will also include the number of isolated wetlands that receive restorative treatment to reduce shrub and hardwood encroachment. The number of FIREWISE community outreach events (including number of participants and follow ups) will also be tracked as well as the number of NWCG wildland fire trainings and the number of students. Other measures of success will include private lands land management support in coordination with Strategy 3, progress towards timber management Stewardship Agreement on the ANF and design of pre- and post-treatment hydrologic monitoring plan for Strategy 1 hydrologic restoration.

Strategy 3 Private Forests Initiative measures of success are based on FFS experience implementing similar programs. We anticipate treating more than 50,000 acres of private lands with a variety of forest enhancements including: planting 5,000,000 native trees, applying prescribed fire, mechanical underbrush reduction, timber stand improvement, native understory vegetation establishment, riparian buffer and stream bank restoration, and treatment of noxious invasive weed species. This project will create increased continuity and acres of actively managed forests leading to expanded public benefits in the form of water quality protections and other ecosystem services and expanded economic activity.

Accomplishments tracked will include acres of native forests established, numbers of seedlings planted, acres of forest enhanced by practice type, and number of private landowners with management plans and/or technical assistance contacts. FFS annual accomplishment reports and a Reforestation Survey will be used to track changes over time.

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LOCATION INFORMATION

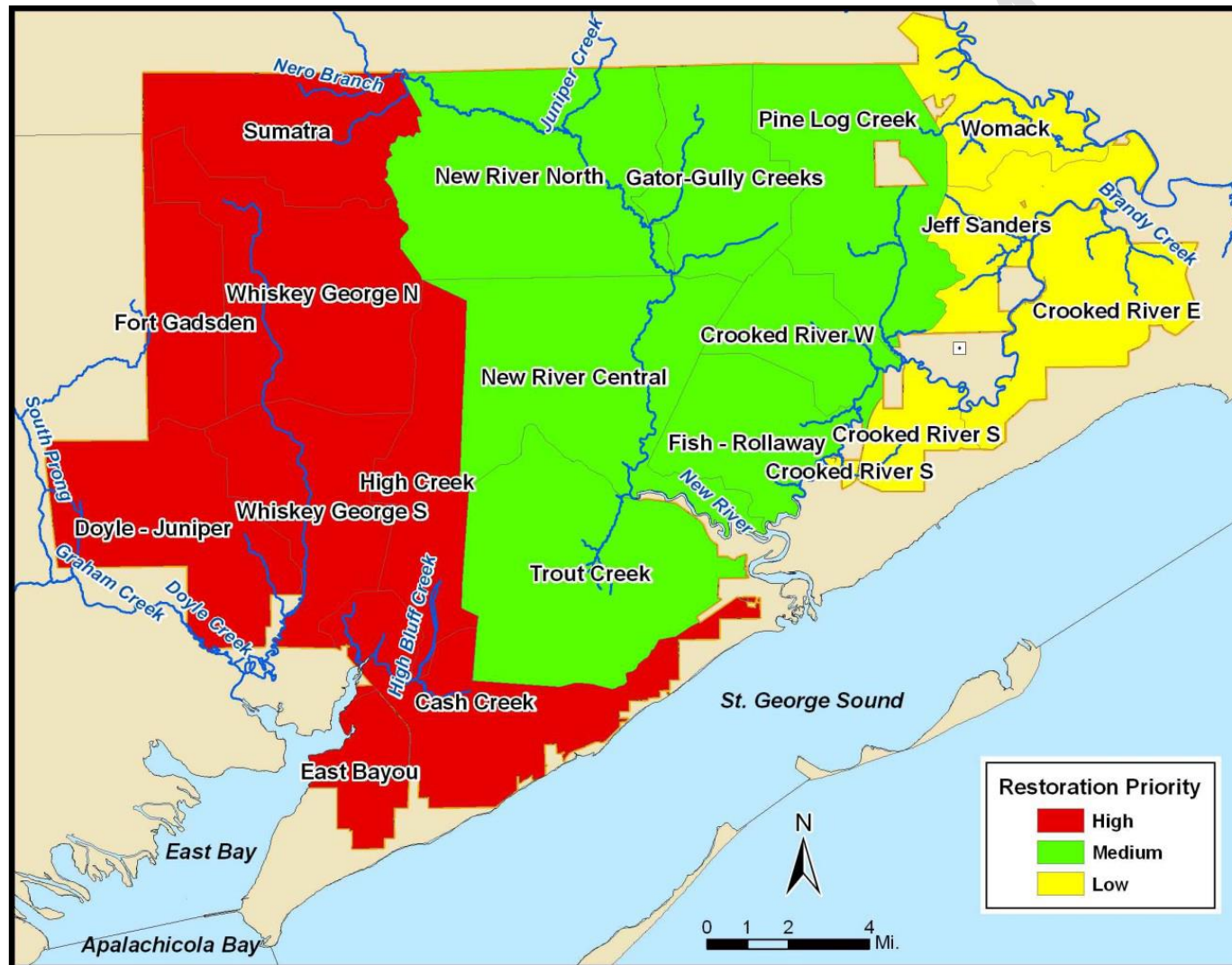


Figure 5. High priority areas on THSF for hydrologic restoration.

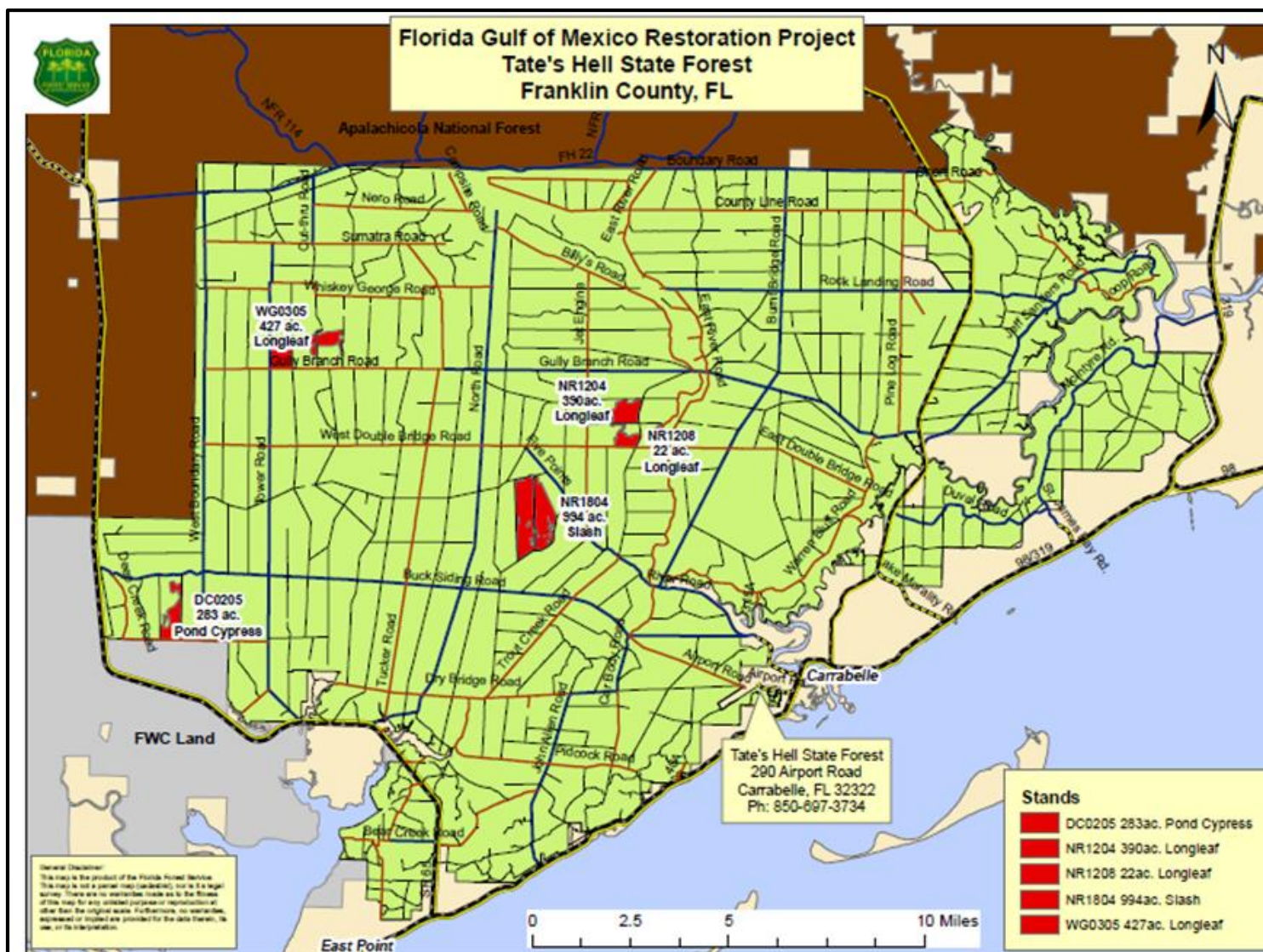


Figure 6. High priority areas on THSF for habitat restoration.

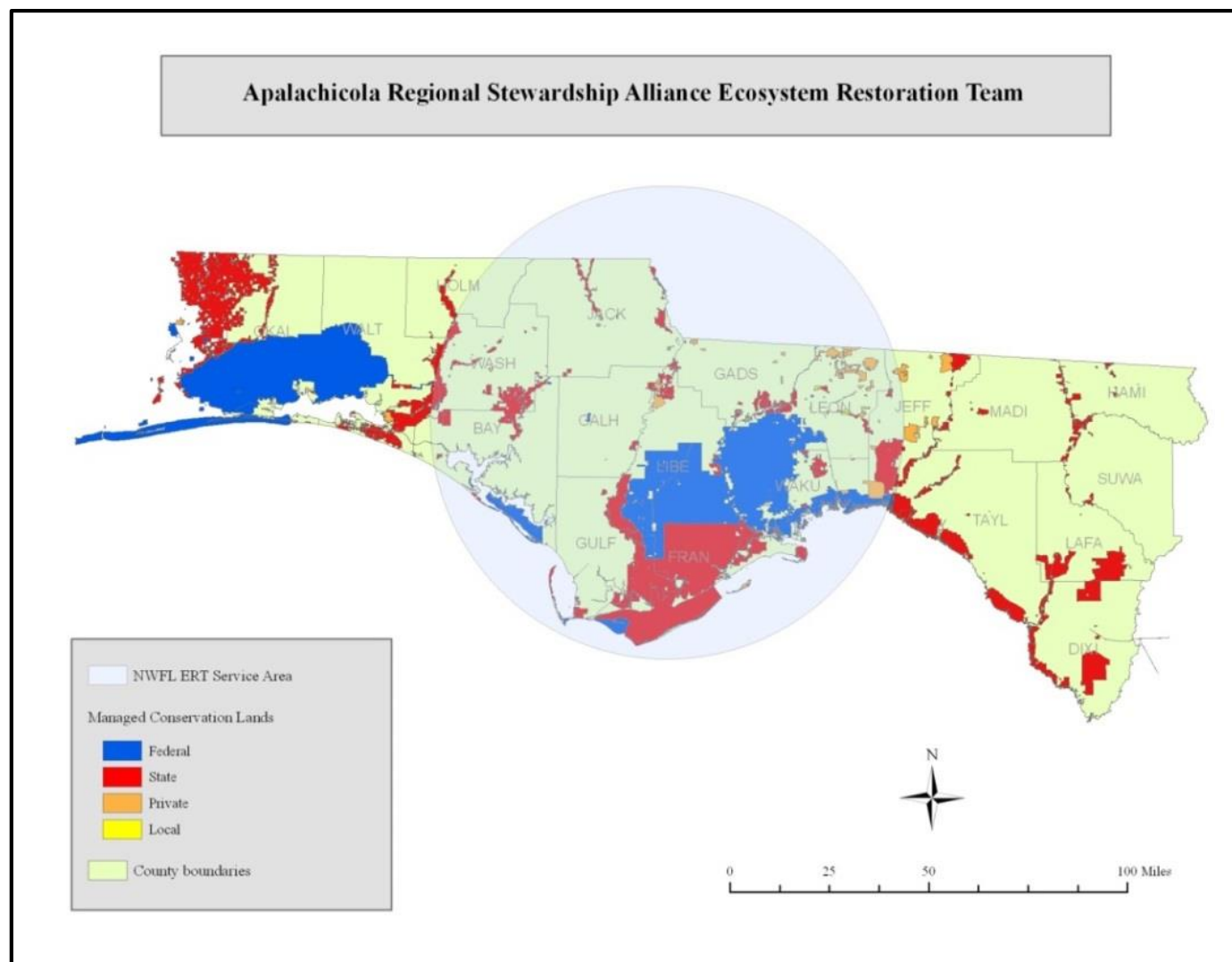


Figure 7. Apalachicola Regional Stewardship Alliance Partnership and restoration team service area

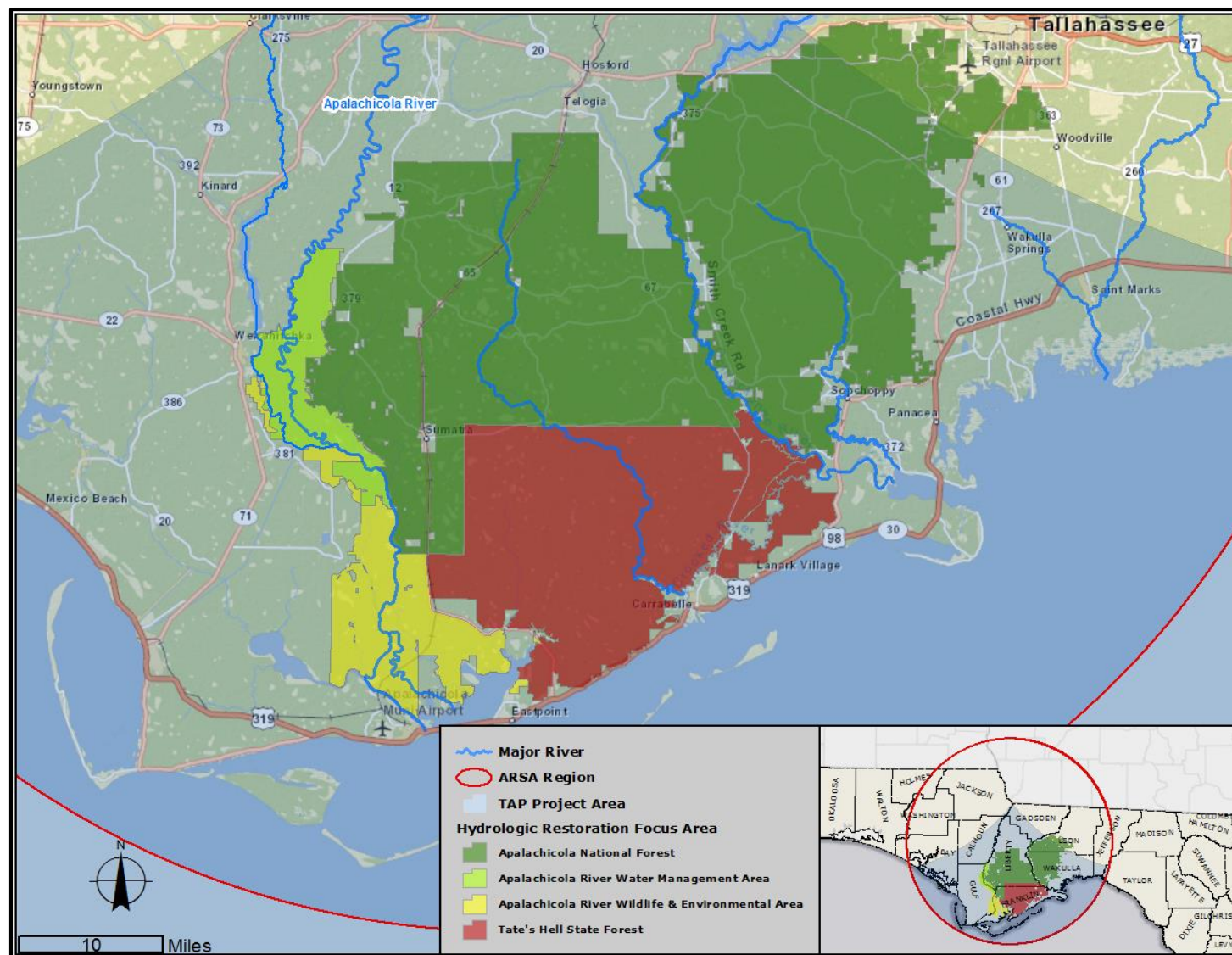


Figure 8. Proposed hydrologic restoration focus area (Strategy 1)

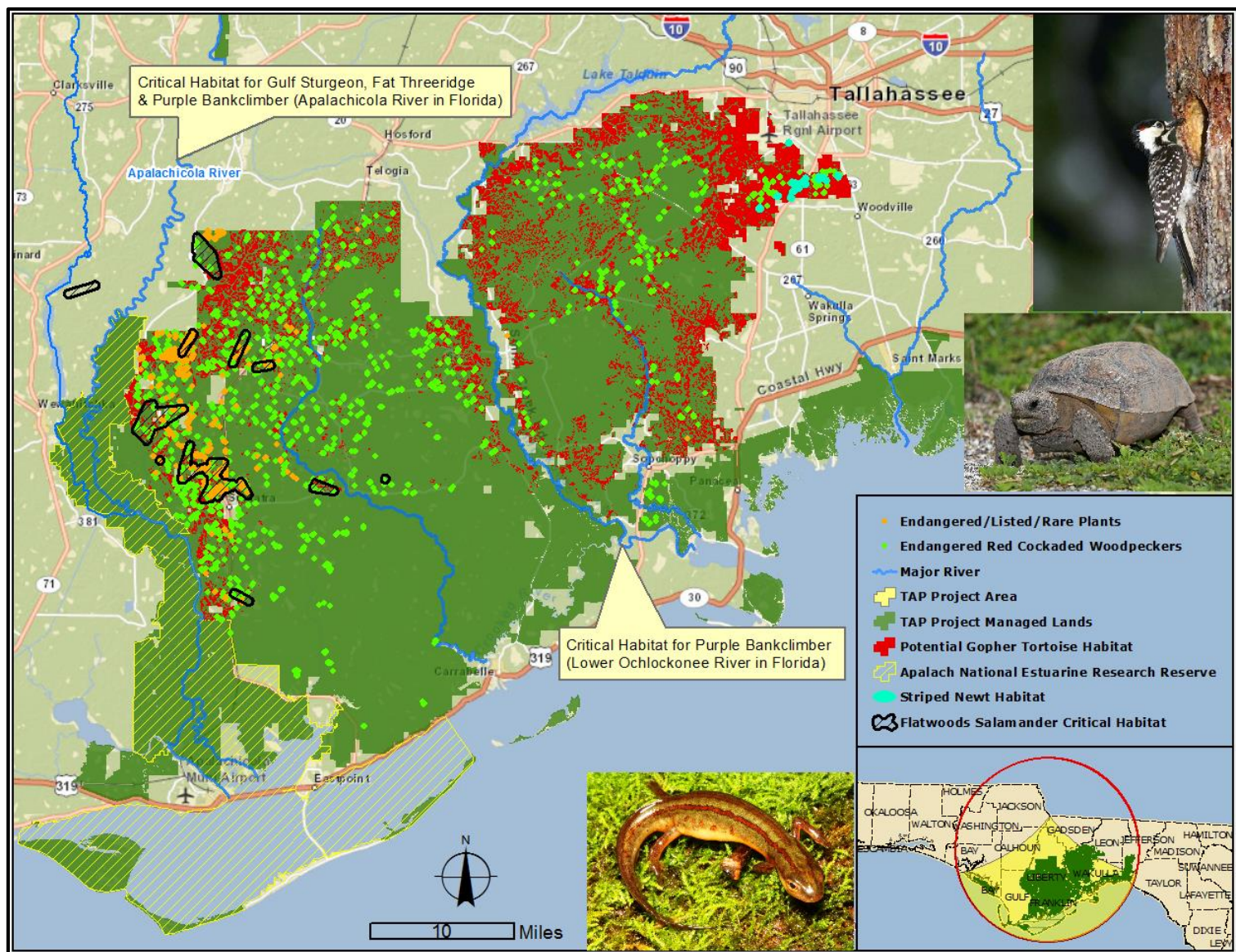


Figure 9. Ecological importance of TAP area managed lands



Figure 10. Pine forests lead right up to the Gulf coast in the panhandle of Florida (Photo: Marvin Cook, Caribbean Heritage Concepts. Used with permission)

BUDGET NARRATIVE

Strategy 1 Hydrologic Restoration

\$7,000,000 for 5 years (\$1,500,000/year)

- \$4,000,000 - THSF hydrologic improvements
 - Approximately \$3.5M to hire local contractors
- \$500,000 for 2 years (\$250,000/year) THSF Landscape Restoration
 - Approximately \$200,000 to hire local contractors
- \$600,000 for Landscape Scale Hydrologic Assessment
 - 3 year contract with local contractors
- \$1,000,000 for 5 years (\$200,000/year) Regional Restoration Decision Support System
 - Includes funding for 1 FTE and 1 partial FTE
- \$900,000 for 3 years (\$300,000/year) Developing a Comprehensive Hydrologic Assessment and Restoration Plan (including NEPA analysis).
 - Approximately \$300,000 to hire local contractors (timber inventory, cultural resource surveys, etc.)

Strategy 2 Ecosystem Restoration Initiative

\$5,000,000 for 5 years (\$1,000,000/year)

- \$2,524,617 salaries, wages and benefits- for 12 FTEs including Project Director, Field Operations Manager, Local Implementation Team Coordinator, Wetland Restoration Specialist, Contractor Field Technician, 2 Crew Bosses and five crew members. 10% of a Freshwater Scientist position is also included.
- \$711,000 contractual- increased capacity related to NNIS and isolated wetland restoration
- \$198,000 equipment upgrades – 2 Type 6 Engines and 4 all-terrain vehicles spread throughout five year period
- \$563,600 supplies – such as vehicle fuel, drip torch mix, personal protective equipment, chain saws and herbicide for all five years.
- \$22,740 travel – including lodging, mileage, rental, etc. during travel
- \$50,000 other – such as prescribed fire training and FIREWISE outreach materials, staff professional development training, postage, printing, etc.
- \$929,171 indirect – TNC allowable rate

Potential match will take numerous forms including in-kind use of ARSA partner staff and equipment, significant volunteer hours, and other private/non-federal complimentary grants forecasted throughout the duration of TAP Phase I.

Strategy 3 Private Forests Initiative

\$3,000,000 for 5 years (\$600,000/year) funding for:

- Establish forests on 10,000 acres of private forestlands

- Increase nursery demand to produce an additional 2 million native tree seedlings annually.
- Create 600+ practice plans covering 50,000 acres.
- More than six hundred landowners will complete improvements to existing forests on approximately 50,000 acres.
- Create 200 multiple-resource management plans covering 35,000 acres.
- Increase private landowner technical assistance and education/outreach to private landowners through federal, state agencies, and non-government organizations collaborating at state and local levels.
- Increase quantity of managed forest acres by assisting landowners in implementing management plan practices including invasive species control, timber stand improvement, site preparation, reforestation, prescribed fire, etc.

Match will be provided from private landowners, the American Forest Foundation, Florida Forest Service, and Florida Fish & Wildlife Conservation Commission. Match from state agencies will include a strong existing infrastructure of experienced staff, equipment, offices, and utilities. Match from private landowners' includes their financial investment in forest land, time and expense incurred for maintenance and management, as well as ecosystem services values.

**All budgets can be reduced or increased depending on available funding

Appendix B
ENVIRONMENTAL COMPLIANCE CHECKLIST

<u>Environmental Compliance Type</u>	Yes	No	Applied For	N/A
Federal				X
National Marine Sanctuaries Act (NMSA)				X
Coastal Zone Management Act (CZMA)				X
Fish and Wildlife Coordination Act				X
Farmland Protection Policy Act (FPPA)				X
NEPA – Categorical Exclusion	X			
NEPA – Environmental Assessment	X			
NEPA – Environmental Impact Statement				X
Clean Water Act – 404 – Individual Permit (USACOE)				X
Clean Water Act – 404 – General Permit(USACOE)				X
Clean Water Act – 404 – Letters of Permission(USACOE)				X
Clean Water Act – 401 – WQ certification				X
Clean Water Act – 402 – NPDES				X
Rivers and Harbors Act – Section 10 (USACOE)				X
Endangered Species Act – Section 7 – Informal and Formal Consultation (NMFS, USFWS)	X			
Endangered Species Act – Section 7 - Biological Assessment (BOEM,USACOE)	X			
Endangered Species Act – Section 7 – Biological Opinion (NMFS, USFWS)				X
Endangered Species Act – Section 7 – Permit for Take (NMFS, USFWS)				X
Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat (EFH) – Consultation (NMFS)				X
Marine Mammal Protection Act – Incidental Take Permit (106) (NMFS, USFWS)				X
Migratory Bird Treaty Act (USFWS)				X
Bald and Golden Eagle Protection Act – Consultation and Planning (USFWS)				X
Marine Protection, Research and Sanctuaries Act – Section 103 permit (NMFS)				X
BOEM Outer Continental Shelf Lands Act – Section 8 OCS Lands Sand permit				X
NHPA Section 106 – Consultation and Planning ACHP, SHPO(s), and/or THPO(s)				X
NHPA Section 106 – Memorandum of Agreement/Programmatic Agreement				X
Tribal Consultation (Government to Government)				X
Coastal Barriers Resource Act – CBRS (Consultation)				X
State				
As Applicable per State				X

ENVIRONMENTAL COMPLIANCE CHECKLIST (continued)

All three strategies discussed above for this project have the necessary environmental compliance measures already in place so that work can begin as soon as funding is made available. The hydrologic restoration work on THSF has been approved by the Florida Forest Service. The hydrologic restoration plan and the Regional Restoration Decision Support System do not require environmental compliance steps; however these elements will be critical for planning additional TAP work beyond Phase I. All work on the Apalachicola National Forest (NNIS treatments, prescribed fire and isolated wetland restoration) complies with the National Forests in Florida Land and Resource Management Plan (available at <http://goo.gl/RPFAZ>) and has been authorized for implementation. The NEPA process (including Environmental Assessments, and the effects assessment and consultations required by ESA Section 7 and NHPA Section 106) for these projects is complete so those activities can commence as soon as funding is available.

The private lands component will comply with all federal, state and tribal regulations and be addressed through existing policies and procedures such as the NRCS Field Office Technical Guide (<http://efotg.sc.egov.usda.gov/treemenuFS.aspx>).

Strategy 3 Private lands: Much of the private lands conservation practice implementation work done with NRCS EQIP program financial assistance will rely on Categorical Exclusion.

DATA/INFORMATION SHARING PLAN

The comprehensive hydrologic assessment and restoration plan will be made available to the public. Tech transfer with RRDSS will include: peer-reviewed publications, General Technical Report (USFS, freely available to public), freely distributed ArcMap toolbar, web-based tutorials and delivery of derived data products. Training sessions/ workshops on the RRDSS will also be conducted with ARSA members and with other interested parties.

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OTHER SUPPORTING DOCUMENTS AND MATERIALS

Opportunities for Leveraging Of Resources And Partnerships

TAP will fully leverage existing investments to and by ARSA members (e.g, National Fish and Wildlife Foundation grants, federal and state allocations for improving water quality and restoring habitat) along with new and innovative federal and state spending authorities and initiatives to accomplish landscape scale restoration of hydrology and natural communities within the ARSA Region.

Through the guidance of the Apalachicola Regional Stewardship Alliance, NFWF is proposing \$1.94 million direct funding of NRCS' RCPP Technical Assistance and Financial Assistance for longleaf pine habitat on private lands within the ARSA Region. This funding will incorporate private dollars available to NFWF and match from private landowners and ARSA Technical Assistance providers. An estimated 17,000 acres of existing longleaf stands will be managed with prescribed fire and 3700 acres of longleaf established; private landowner contributions to work on their property can add the same number of acres as well.

This project will leverage the significant investment already made by the NFWFMD and FFS to improve the hydrology on portions of THSF. To date this investment has been over \$1.57 million worth of hydrologic improvements including installing 49 low water crossings, modifying 51 culverts, removing 13.4 miles of roads, blocking 106 ditches and installing 3 bridges. This investment does not include FFS and NFWFMD personnel and equipment used to help accomplish this work. Existing hydrologic plans for THSF, ARWEA and Apalachicola River Water Management Area (ARWMA) will also be utilized to develop the comprehensive hydrologic restoration plan for the Lower Apalachicola River Basin. This restoration plan will build on work already done on THSF and ARWEA and will leverage existing data sources (LIDAR, GIS infrastructure databases) to the fullest extent possible. Similarly, the Regional Restoration Decision Support System will leverage free 4 band National Agricultural Imagery Program imagery, Landsat imagery and GIS tools developed by the USFS Rocky Mountain Research Station. The RRDSS will also be coordinated with the new Longleaf Pine Ecosystem Geodatabase developed by the Florida Natural Areas Inventory and FFS. It is expected that the RRDSS will initially leverage the existing geodatabase but will also provide invaluable updates to this database in TAP Region.

This project will also utilize the existing ARSA MOU and innovative federal (Wyden Act) and state (FFS Good Neighbor Authority) spending authorities to accomplish work across TAP Region. A Challenge Cost Share agreement is already in place between the USFS and TNC which can be used to accomplish work not only within USFS land but also on adjacent lands within connected watersheds (Wyden Authority). Similarly, a partnership agreement is in place with the Florida Natural Areas Inventory which will be utilized for assistance with development of Regional Restoration Decision Support System. USFS Stewardship contracting authorities will also be used to develop an agreement with TNC to sell merchantable forest products in TAP

Phase II. All receipts from the sale of these forest products would be used to significantly increase the scale and pace of various restoration activities on the ANF.

Additional outside funding will be leveraged as well. ARSA has received \$349,908 in funding from NFWF for longleaf restoration and an additional \$262,000 is pending. FWC funds for invasive species treatment in ARSA Region (approximately \$160,000 per year) will also be leveraged to treat and re-treat far more NNIS acres than would otherwise be possible. [get information on other recent ARSA NNIS grants]

The marketing of the private forests initiative program will enhance landowner interest and participation in forest and habitat management and applicants will be advised to seek assistance through a variety of forestry and wildlife assistance programs such as NRCS Environmental Quality Incentive Program, Tree Farm, FFS Southern Pine Beetle program, Farm Service Agency Conservation Reserve Program, etc. Marketing efforts will include partnerships with the American Forest Foundation, Florida Land Steward Partnership, and the Forest Stewardship Program. Outreach channels will include agency and university websites, Florida Land Steward Partnership, Forest Stewardship Program, direct mail to high priority landowners, forester visits, public workshops, newsletters, press releases, radio interviews, and newspaper articles. The American Forest Foundation will provide a match of \$427,063 in research, staff, and volunteer support.

Apalachicola Stewardship Alliance Memorandum of Understanding



ARSA_MOU_fullyexecutedOCT082010.pdf

First Amendment to ARSA MOU adding DOD as signatory



Tyndall_ARSA_addendum_fully executed_2013.pdf

MOU between NASF, NRCS, NACD, and USFS.

Online: <http://www.stateforesters.org/sites/default/files/publication-documents/MOU_NASF-NACD-NRCS-FS_FINALsigned_9-29-08.pdf>

Table 1. Ecosystem Restoration Team Prescribed Fire and NNIS Treatment List

Managed Area Name	Ownership	Acres of RX Fire Assistance/year	Fire Planning	WUI *	Wildfire/ Incident Assist†	NNIS Actions ‡
Apalachicola R. WEA	FWC	3,500-5,500	Y	N	Y	T, S
Apalachicola NF	USFS	35,000-65,000	N	Y	Y	T, S, P
Apalachicola R. WMA	NWFWMD	N.A	N.A	N.A.	N.A.	T, S
Aucilla WMA	FWC	5,000-10,000	N	N	Y	T, S
Bald Pt. SP	DEP-Rec. and Park	2,250	N	Y	Y	T, S
Box R WMA	FWC	2,500-4,000	N	Y	Y	T, S
Cape St. George SR	DEP-FL Coast. Off.	0	Y	Y	Y	T, S
Dr. JG Bruce St Georg Is. SP	DEP-Rec. & Park	0	N	N	Y	T, S
Eglin AFB-Cape San Blas	DOD	0	N	Y	Y	T, S
Flint Rock Pres.	TNC	3,500-5,000	Y	N	Y	T, S, P
Jeff Lewis Wild. Pres. at Dog Is.	TNC	0	N	Y	Y	T, S
J. S. Phipps Pres.	TNC	30	N	Y	Y	T, S
Mashes Sands Co. Park	Wakulla Cty.	100-200	N	Y	Y	T, S
Ochlockonee R. SP	DEP-Rec. & Park	350-450	N	N	Y	T, S
St George Is. Tracts	DEP-FL Coastal Off.	50	Y	Y	Y	T, S
St Joseph Bay St. Buffer Pres.	DEP-FL Coastal Off.	800-1,200	Y	Y	Y	T, S
St Marks NWR	USFWS	13,000-16,000	N	Y	Y	T, S
St Vincent NWR	USFWS	2,500-4,000	N	Y	Y	T, S
Tates Hell SF	FFS	10,000-14,000	N	Y	Y	S
TH Stone Mem. St Joseph Penn. SP	DEP-Rec. and Park	100-300	Y			
Tyndall AFB	DOD	6,000-9,000	Y	Y	Y	T, S
RX fire assistance/year total:		84,680-136,980				

*Managed area has significant area adjoining Wildland Urban Interface

†Team is available to assist with wildfire and other Incidents such as hurricane response

‡P=planning, S=survey and T=treatment

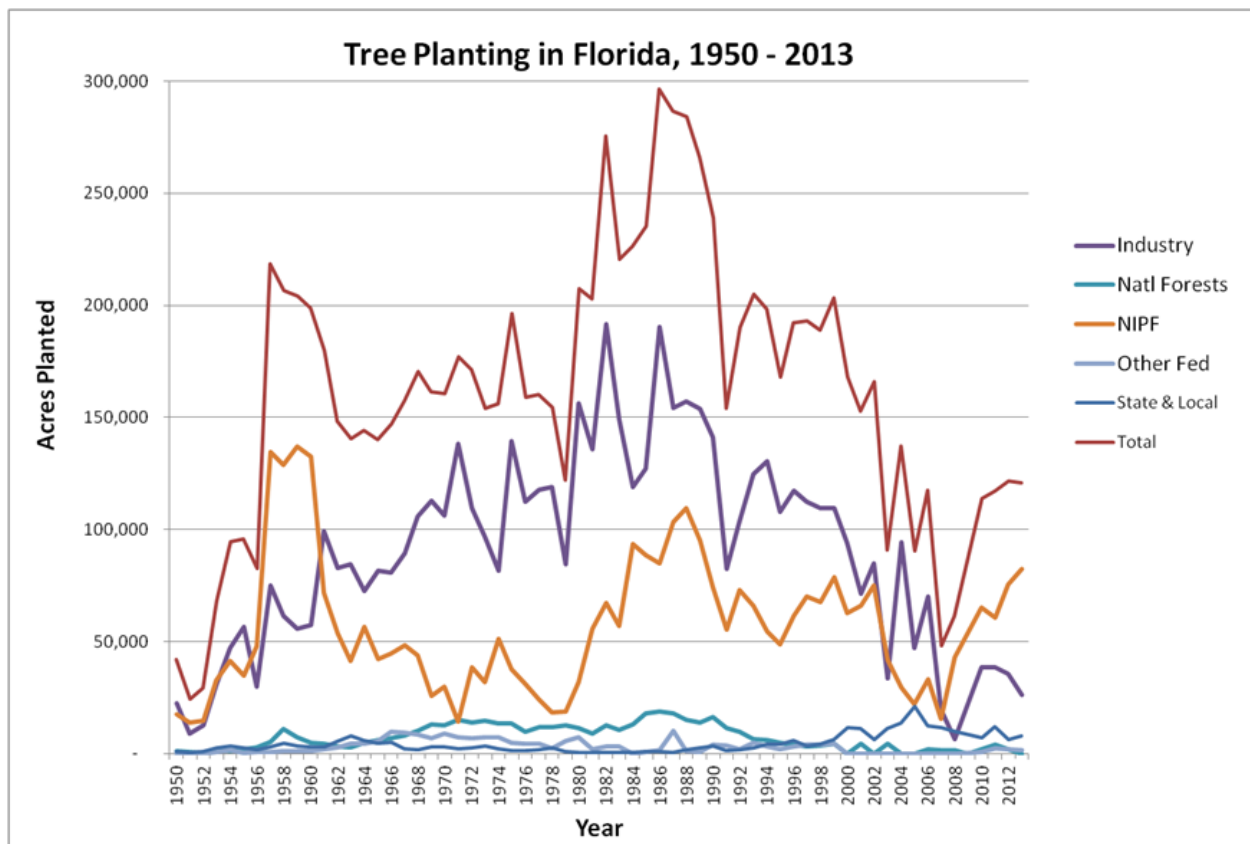


Figure 11. Decrease in Florida tree plantings since 1950

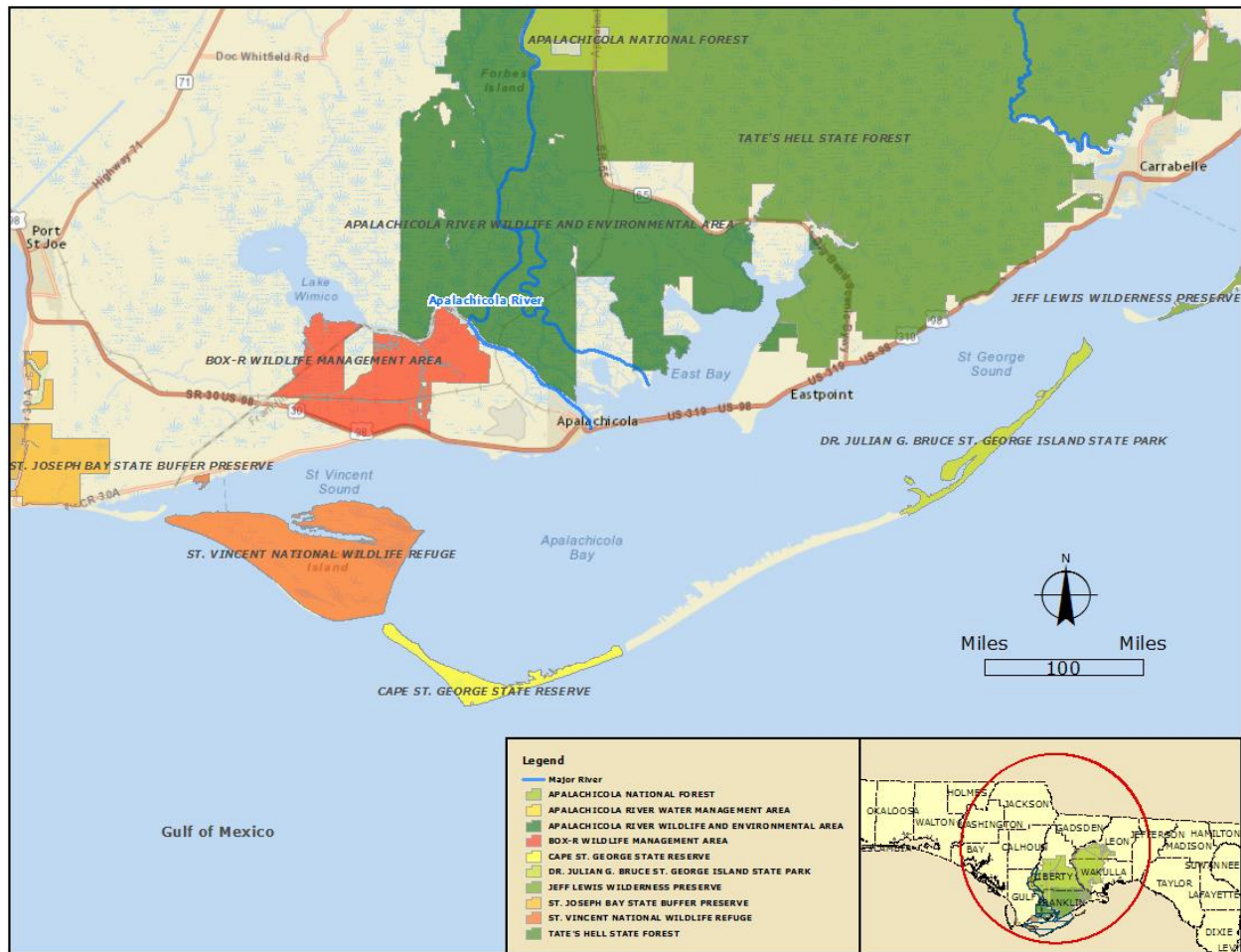


Figure 12. Apalachicola Regional Stewardship Alliance Longleaf Conservation Project Map

Description of Regional Restoration Decision Support System

This project will expand on the positive results of the prototype decision support system to create a Regional Restoration Decision Support System (RRDSS) for TAP region. A recent partnership with the USFS Rocky Mountain Research Station will change the entire dynamic of the existing system. A new procedure will be utilized that allows for improved raster analysis through delayed reading and function raster datasets (Hogland et al. 2013) thus making it much easier to scale up to larger areas using free nationwide datasets. In other words, with this technology, it is possible to process much more data over larger geographic areas quickly and easily without the need for terabytes of data storage space. Additionally, this can be done with publically available imagery sources that minimize the need for expensive LiDAR datasets.

Essentially, detailed, accurate, efficient and inexpensive methods of estimating basal area, trees, and aboveground biomass per acre across broad extents are accomplished faster and easier than was previously possible (Hogland et al. 2014). These functions have all been packaged into a scalable integrated toolset for the industry standard GIS software that can be downloaded for free. This system is referred to as the “RMRS Raster Utility” and consists of numerous user forms, multiple software commands, and a comprehensive, user-friendly toolbar. This toolset will provide the foundation for the proposed Regional Restoration Decision Support System (RRDSS).

The RRDSS will rely upon an objective-driven approach firmly rooted in principles of land management, conservation, biology, landscape ecology, geospatial analysis, remote sensing and information technology. Once contextual information such as hydrology “hotspots” is added, this system can be foundational in terms of building prioritization models for hydrology. These models will aid in restoration decisions throughout the Apalachicola Region.

USFS Example

For example, the USFS prototype DSS demonstrated that there are over 60,000 acres of overstocked pine plantations needing thinning on the Apalachicola National Forest alone. To put the importance of this landscape level restoration in perspective, even if the 60,000 acres already identified on the ANF were to be thinned to a basal area of approximately 50 square feet per acre this would nearly double the water yield from these areas, while also improving water quality due to restoration of grassy and herbaceous understories that will filter and trap sediment. This would significantly increase both the quantity and quality of water flowing through more than 1,000 miles of waterways within the Apalachicola National Forest. This work would also improve the health of the longleaf pine ecosystem, increase climate change resilience, improve public access, reduce wildfire risk, and boost the local economy through job creation in the timber industry.

Presently, there is strong support for this project internally as well as from federal and state partners and stakeholders. As mentioned, the intent of this technology beyond the obvious management utility is to be transferable to interested partners/stakeholders. This technology can be used to build hydrologic priorities on a regional scale and provided to the public through

web-based tutorials and data products. Utilizing planning tools such as this Regional Restoration Decision Support System is critical to the foundation of long-term successful restoration projects.

Draft 10/06/2014

American Forest Foundation Strategy for Engaging Private Forest Landowners

The woodland owner audience presents unique challenges. Recent national data indicates only 15% have ever consulted a resource professional, 5% have forest management plans, and only 1% are certified to standards of sustainability. The vast majority otherwise is your classic private forest landowner.

The American Forest Foundation, in conjunction with the State Foresters, the US Forest Service, Natural Resource Conservation Service (NRCS) and others, has developed a unique landowner engagement strategy utilizing modern marketing techniques. The Foundation reaches landowners with messaging that resonates with them based on publicly available consumer data, and with offers that meet them at their comfort level of engagement. The results have been startling. Our initial project in the Driftless region of Wisconsin has yielded response rates of 12.5% compared to traditional marketing results of 1-3%. Of those initial respondents, 30% have already taken additional steps demonstrating stewardship. Results from our other place based projects are showing similar trends in landowner engagement.

In cooperation with the project implementation team, the Foundation will use its micro-targeting data analysis and social marketing strategies to reach and engage landowners in sustainable forest management. As landowners respond to marketing they will be set on a pathway of education and stewardship through informational materials, consistent electronic communications, peer led events, technical education programs and personal visits from natural resource professionals. Foundation foresters will work with landowners and provide management advice, increasing the health and productivity of their forestland. They will also be able to provide written stewardship management plans, enabling landowner's access to technical assistance and cost-share. Finally, the Foundation's volunteer network of foresters can provide third party forest certification to credible and globally recognized standards of sustainability, ensuring access to more competitive forest product markets.

The Foundation will hire one full time equivalent staff to coordinate this effort and market to 5,000 landowners over five years. We anticipate at least 650 landowners to be educated on sustainable forest management. Of these we believe 200 will accept a forester visit on their property and provide management advice, commit to a forest management plan and forest certification. Total funds requested is \$170,825 a year, \$854,125 overall. The Foundation will provide a match through the investment of \$427,063 over the life of the project in research, staff and volunteer support. Partners will provide further matching funding for technical services provided to respondents.

The Foundation is committed to improving the forestry communities understanding of identifying and engaging family forest owners in sustainable forest management by demonstrating its landowner engagement strategy in partnerships such as this and can continue to promote that understanding by replicating across the Gulf States on future projects.

Additional Apalachicola National Forest Projects in the DEP Portal for Phase II Funding

The following projects have been submitted to the Florida DEP Portal and would follow the Phase I projects outlined in this proposal.

Restoring Natural Hydrologic Regimes in the Apalachicola River Basin

A preliminary analysis revealed that approximately 65,000 to 85,000 acres within the Apalachicola River Basin on the Apalachicola National Forest are currently overstocked with pines. The hydrologic assessment and RRDSS discussed in the Strategy 1 (Hydrologic Restoration) section above will be used to better identify high priority restoration sites on the Apalachicola NF. In Phase II we propose to thin pines on as much as 55,000 acres of flatwoods to approximately 50sq. ft. of basal area per acre and on 10,000-20,000 acres of wet prairies to approximately 10sq. ft. of basal area per acre. We estimate that this would approximately double the water yield from flatwoods habitats and more than double the water yield from wet prairie habitat, while also improving water quality due to restoration of grassy and herbaceous understories that will filter and trap sediment. This would increase both the quantity and quality of more than 1,000 miles of flowing surface waters within the Apalachicola River basin. Based on average precipitation, river flows and water yield studies, this watershed improvement work would result in an additional water yield of approximately 34-44 million cubic meters of water per year into the Apalachicola River, which would increase the average flow by 1.75 to 2.25%. For scale, this volume of water is similar to the yearly municipal water supply of the city of Tallahassee and would clearly make substantial contributions to freshwater flows into Apalachicola Bay. This work would also dramatically improve the health of the longleaf pine ecosystem, increase climate change resilience, reduce wildfire risk, and boost the local economy through job creation in the timber and fisheries industries. Project costs are estimated to be \$6 million over 15 years. NEPA for some areas is complete, but additional areas will be analyzed during Phase I.

Munson Sandhill Restoration and Aquifer Recharge

Approximately 2,500 acres of work is proposed within a 10,000 acre sandhill area on the Wakulla Ranger District (Leon and Wakulla Counties) with underlying karst geology. Specific activities include converting severely stunted off-site slash pine plantations to longleaf pine, reducing hardwood abundance, restoring native groundcover, improving habitat for rare and endangered species (gopher tortoise, indigo snake, red-cockaded woodpecker, striped newt), decommissioning old roads and trails, repairing areas with altered hydrology (e.g., stream crossings) and reestablishing the normal fire regime. In addition to restoring longleaf pine and helping achieve national longleaf pine metrics, this work will substantially increase the quality

and quantity of water flowing into the underground spring system. Existing partnerships with USFS Southern Research Station, Florida A&M University and Florida Geological Survey will provide hydrological monitoring support before and after management activities are implemented. Four large creek systems in this area leave the surface and flow underground via swallets directly into the aquifer. These underground water courses flow directly to Wakulla Springs, the Wakulla River and the Gulf of Mexico. In addition to the ecological benefits, this project would help sustain the local economy of Wakulla Springs which attracts over 200,000 visitors a year generating \$22 million for the local economy. Project costs are estimated to be \$3.5 million over 10 years. NEPA is complete on this project.

Restoration in the Lower Ochlockonee and Apalachee Bay-St. Marks River Subbasins

Restoration of 11,000 acres of severely degraded former pine plantations and wildfire-damaged stands in an 86,000 acre analysis area on the Wakulla Ranger District (Leon and Wakulla Counties). Work includes converting stunted off-site slash pine plantations to longleaf pine, correcting hydrological problems (e.g., improving stream crossings, minimizing bedding, road decommissioning), restoring native groundcover and reintroducing prescribed fire. In addition to improving the ecological condition across this portion of the forest, this work will improve rare and endangered species habitat, reduce the risk of catastrophic wildfires, improve resilience to climate change and increase surface and ground water supply and quality through groundcover restoration and removal of slash pine plantations. Project costs are estimated to be \$10.5 million over 15 years. Additional groundcover restoration work (\$200/ac. on up to 2800 more acres) could be conducted through existing partnerships with The Nature Conservancy if additional funding is provided. NEPA analysis is currently in progress for this project, decision expected in 2015.

Leon Sinks Restoration

Leon Sinks is part of the Woodville Karst Plain, a 450-square-mile area extending from Tallahassee to the Gulf of Mexico that includes numerous first order magnitude springs (including Wakulla Springs) and the Leon Sinks Cave System, the longest underwater cave in the United States and fourth longest in the world. Multiple swallets within and adjacent to Leon Sinks transport surface water directly to underground rivers leading to Wakulla Springs, the Wakulla River and the Gulf of Mexico. This area has been designated by the state of Florida as a precious natural water resource. However, because of altered fire regimes, the upland habitat surrounding Leon Sinks are in need of restoration. The area has tremendous potential for integrating ecological restoration, water conservation, outdoor recreation, and public outreach

through education. Restoration efforts would include hardwood understory removal and restoring the natural fire regime on approximately 400 acres. This activity will reduce evapotranspiration rates and thus contribute to increased water quantity and quality to the Florida aquifer. Extracted hardwoods would be used as material for biofuel, supporting local industry and alternative energy systems. Funding would be utilized for a preparation of biomass. Project costs are estimated to be \$250,000 depending on the value of biomass product (\$400 per acre for 400 acres, including NEPA, sale prep, biomass removal, and ground cover restoration). Funding would also be used to restore fire to this area by supplementing existing fire resources with fire crews from partners (\$30 per acre per fire). The remainder will be used for public outreach/education, and interpretive signs linking terrestrial restoration with water conservation. Site-specific planning has been initiated with public and agency partners.

Letters of Support

The Apalachicola Project letters of support

Anticipated letters of support from the following: Longleaf Partnership Council for America's Longleaf Restoration Initiative, USFS, FWS, NRCS, FWC, DEP, FFS, NFWFMD, Wakulla Co., AFF, U.S. Endowment for Forestry and Communities

Recent ARSA support letters on following pages

Draft 10/06/2014



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

February 12, 2014

David Printiss, Program Director
The Nature Conservancy
Northwest Florida Program
10394 NW Longleaf Drive
Bristol, FL 32321

Dear David:

Thank you for the tremendous and continuing support that your fire team is providing to the Florida Park Service's prescribed fire program. In the 2013 calendar year, the team provided 17 burning assists at five different DEP-managed units. These efforts supported the application of fire to over 4,361 zone acres. In addition to these actual burn days, the team was available on six days when we had to cancel burn operations, as well as providing much needed support in other fire-related activities including burn planning and fireline preparation.

Your team's support made a tremendous difference in not only accomplishing these 17 burns but your team provides a multiplier effect that let us spread our limited fire staff between more parks on any particular day. We typically need to burn at more than one park when the weather is suitable, and there is simply not enough staff to go around. Your team has made the difference in being able to handle multiple burns on numerous days. Your team is critical to the success of our fire mission, and we certainly hope that your team will continue to be available.

Your staff also provides support in many other aspects of fire, not in just getting acreages burned. The interactions that your team affords to our staff provide great lessons in interagency cooperation and different perspectives on meeting the same resource management goals. We believe that the team model that you are using is a very viable model and believe it could be expanded to cover many more areas in Florida. Thank you for your continued support. We look forward to continuing this successful partnership.

Sincerely,

Rosi Mulholland
Division Fire Coordinator
Florida State Parks

www.dep.state.fl.us



United States
Department of
Agriculture

Forest
Service

Apalachicola National Forest
Apalachicola Ranger District Wakulla Ranger District
P.O. Box 579 57 Taff Drive
Bristol, FL 32321 Crawfordville, FL 32327
850/643-2282 850/926-3561

February 11, 2014

David Printiss, Northwest Florida Program Manager
The Nature Conservancy
10394 NW Longleaf Drive
Bristol, FL 32321

Dear Mr. Printiss,

David, I would like to thank you again for your support during the 2013 prescribed fire season. The assistance The Nature Conservancy crew provided to the prescribed fire program on the Apalachicola National Forest (ANF) has been outstanding. Your crew assisted with 32 burns totaling 50,946 acres of prescribed fire on the ANF. On the majority of these prescribed fires your crews help was critical for meeting the staffing levels and having the ability to burn more than one unit per day. These burns would not have happened without your assistance. Your crews performed well, were dependable and professional, and could be counted on for their assigned tasks. I welcome and appreciate assistance from our cooperators (TNC) in accomplishing our burning objectives and goals for the year. It's comforting to know there are cooperators you can count on that are dedicated to ecosystem management as we are here on the ANF. I look forward to future cooperation on prescribed fires and other projects that will benefit both our agencies and the ecosystems we manage.

/s/ *Marcus A. Beard*

Marcus A. Beard
District Ranger
Apalachicola National Forest



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**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

MARJORY STONEMAN DOUGLAS BUILDING
3900 COMMONWEALTH BOULEVARD
TALLAHASSEE, FLORIDA 32399-3000

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

February 3, 2014

Brian Pelc
The Nature Conservancy
625 North Adams St.
Tallahassee, FL 32301

Dear Mr. Pelc:

Please accept this letter as my support for the proposed Nature Conservancy Apalachicola (TNC) Apalachicola Longleaf Conservation Initiative National Fish and Wildlife Foundation grant application. It is understood that these grants will in part fund a continuation of the natural community restoration at Torreya State Park. This project is a target goal as identified in the park's current Unit Plan.

The present Sweetwater tract of Torreya State Park contains over 4,300 acres of restorable Sandhill habitat previously windrowed and planted heavily in a Sand Pine plantation. Due to our TNC partnership, we have restored nearly 1,500 acres back to an original domain. This project represents the largest example of a natural community restoration in the Florida State Park system.

Further, the NFWF grant funding would assist in addressing the threats of incompatible; fire, forestry practices, altered fire regimes, invasive plants, erosion control and enhance restoration of native pine species.

It is my hope that the National Fish and Wildlife Foundation will focus serious consideration to the proposed TNC Apalachicola Longleaf Conservation Initiative grant proposal. If I can provide any additional information, please feel free to contact me.

Sincerely,

Daniel R. Jones, Bureau Chief
District 1 Administration

www.dep.state.fl.us



DEPARTMENT OF THE AIR FORCE

325TH FIGHTER WING (ACC)
TYNDALL AIR FORCE BASE FLORIDA

Colonel David E. Graff
Commander, 325th Fighter Wing
501 Illinois Ave, Suite 1
Tyndall AFB FL 32403-5549

Ms. Suzanne Sessine
National Fish and Wildlife Foundation
1133 Fifteenth St, NW, Suite 1100
Washington, DC 20005

Dear Ms. Sessine

On behalf of the 325th Fighter Wing at Tyndall Air Force Base (AFB), I fully endorse the Nature Conservancy's Longleaf Stewardship Fund 2013 project initiative. Longleaf ecosystem restoration is a cornerstone of our Integrated Natural Resources Management Plan (INRMP) and our participation in this effort will support sustainment of our forestry efforts.

Partnerships and teamwork provide the synergy needed to advance our efforts in today's constrained environments. My staff has worked closely with Apalachicola Regional Stewardship Alliance to identify important opportunities that may assist Tyndall Air Force Base's military mission while simultaneously advancing longleaf conservation in the areas surrounding the base. With the support of ARSA, and Nature Conservancy Initiative, we can mitigate threats such as urban sprawl, ecosystem service losses and invasive exotic species on base and in the surrounding communities.

If you have questions, please contact our point of contact, Mr. Daniel Childs, Base Forester, at (850) 283-2822.

Sincerely

for M. Graff
DAVID E. GRAFF, Colonel, USAF

cc:
Brian Pelc, The Nature Conservancy

Draft 10/06/2014

United States Department of Agriculture



Natural Resources Conservation Service
Florida State Office
2614 NW 43rd Street
Gainesville, FL 32606

P.O. Box 141510
Gainesville, FL 32614

Phone: 352-338-9500
Fax: 352-338-9574
www.fl.nrcs.usda.gov

January 31, 2013

Mr. David Printiss
Program Director, The Nature Conservancy
Northwest Florida Program
10394 NW Longleaf Dr
Bristol, FL 32321

Dear Mr. Printiss:

On behalf of USDA-Natural Resources Conservation Service, I wish to express my support for your Apalachicola Longleaf Initiative (ALI). NRCS is continuing our long tradition of helping private land owners, managing our nation's natural resources and building capacity to withstand future challenges. Initiatives like ALI compliment the mission of NRCS and strengthen the role of conservation within this important geographical area.

I especially appreciate the effort by the Apalachicola Regional Stewardship Alliance (ARSA) to provide technical expertise to private landowners in the Apalachicola River watershed. This region of Florida has a strong history of private timber production, providing a strong economy to our state and way of life to North Florida residents. I am aware of the local knowledge among ARSA members and see a tremendous benefit that professional land managers can bring to the proposed workshops, field trips and one on one interactions with private landowners.

I am confident that the same technical expertise that will be available to private landowners has been applied in the design and implementation planning on all aspects of the ALI proposal. The agencies responsible for converting the acres of off-site pine to longleaf as outlined in the proposal have years of experience successfully managing and restoring longleaf habitat in North Florida. Furthermore the investment in these acres will be multiplied by the decades of smart management that ARSA members can provide.

Sincerely,

A handwritten signature in blue ink, appearing to read "Roney Gutierrez", is written over a horizontal line.

RONY GUTIERREZ
Acting State Conservationist

cc: Jeff Norville, Area Conservationist for Area 1, Marianna, FL
Jeff Woods, Assistant State Conservationist for Programs, Gainesville, FL
Mimi Williams, Acting SRC, Gainesville, FL

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FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
COMMISSIONER ADAM H. PUTNAM

February 18, 2013

To Whom It May Concern:

The Florida Forest Service (FFS) supports The Nature Conservancy's 2013 Longleaf Stewardship Fund grant request to the National Fish and Wildlife Foundation to increase and enhance longleaf pine acreage around the Apalachicola area in northwest Florida. This goal is a priority of the Florida Forest Service and other natural resource stakeholders as reflected in the *Florida Forest Action Plan* strategies for longleaf pine ecosystems. If funded, this project would complement ongoing FFS programs in the Florida Panhandle.

FFS current efforts include providing private landowners with longleaf pine management information and incentives for eligible applicants through Farm Bill programs including Environmental Quality Incentives Program, Wildlife Habitat Incentive Program, Conservation Reserve Program and the FFS administered Southern Pine Beetle and Longleaf Legacy Landowner Incentive Programs. Additionally, the FFS is a longstanding participant in the Apalachicola Regional Stewardship Alliance, a valuable long-standing collaborative for active resource management. The FFS is working diligently to expand longleaf acres in Florida and promote the use of longleaf ecosystem tools such as prescribed fire, invasive species management, and improved efficiencies in ground cover restoration. The Nature Conservancy's proposed project will accelerate that effort.

I look forward to this additional collaborative opportunity to enhance longleaf ecosystems in cooperation with The Nature Conservancy.

Sincerely,

Adam H. Putnam
Commissioner of Agriculture

A handwritten signature in black ink, appearing to read "James R. Karels".

James R. Karels, Director
Florida Forest Service

JRK/bss
cc: Brian Pelc



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MyFWC.com

February 8, 2013

Suzanna Sessine
David O'Neill
National Fish and Wildlife Foundation
1133 Fifteenth Street, NW Suite 1100
Washington, D.C. 20005

Dear Ms. Suzanna Sessine and Mr. David O'Neill:

I am writing on behalf of the Florida Fish and Wildlife Conservation Commission (FWC) in support of the Longleaf Stewardship Fund project being proposed by the Florida Chapter of The Nature Conservancy (TNC) on behalf of the Apalachicola River Stewardship Alliance (ARSA), the Apalachicola Longleaf Initiative (ALI).

ARSA is a partnership of land managers in the Apalachicola Region spanning 10 counties in the Florida panhandle from Holmes and Bay counties east to Leon and Wakulla counties and from the Florida-Georgia line south to the Gulf of Mexico. Members include federal and state agencies, non-governmental organizations, research centers as well as university researchers and private landowners. ARSA has been a driving force of many conservation efforts in this region; including increasing prescribed burn abilities of the partners, increasing exotic/invasive plant control, on both public and private lands, and now working to increase the ability of partners to conduct longleaf restoration on conservation lands throughout the "significant geographic area" which the members of ARSA administer.

FWC supports the project as it is proposed by TNC and has lead management authority on Box-R Wildlife Management Area (WMA), located in Franklin County, FL. Box-R WMA is included in the proposal as receiving \$37,000 for longleaf pine planting on 300 acres of degraded mesic and wet flatwoods on the area. Much of Box-R WMA was heavily disturbed by previous ownership and is now slash pine plantation. FWC's ability to achieve the goal of natural community restoration on the area would be enhanced by funding from National Fish and Wildlife Foundation (NFWF). FWC plans to provide a 1:1 match over the course of two years for this project through in-kind services, comprised of agency personnel time conducting site preparation and prescribed burns to enhance longleaf pine habitat.

Funding by the NFWF of this project will assist in the enhancement, protection and management of conservation lands managed by several different agencies; and will be the primary source of outreach and education to private land owners in the region. This outreach and education will help foster the philosophy of longleaf restoration on private lands as well as public lands. The reintroduction of prescribed fire and longleaf pine to these areas will increase the region's ability to "weather the

Suzanna Sessine
David O'Neill
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February 8, 2013

times" of climate change and will enhance the natural resources which are so vital to the region ecologically, culturally, and economically. It is a pleasure to be included in this project, thank you for your time and consideration of this proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. B. Brooks", with a stylized flourish at the end.

Michael B. Brooks, Leader
Wildlife and Habitat Management Section
Division of Habitat and Species Conservation



Jonathan P. Stevenson
Executive Director

Northwest Florida Water Management District

81 Water Management Drive, Havana, Florida 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee)

Phone: (850) 539-5999 • Fax: (850) 539-2777

February 12, 2013

Mr. David Printtiss
The Nature Conservancy
Northwest Florida Program
10394 NW Longleaf Drive
Bristol, FL 32321

Dear David,

I am writing to express the District's support for the Apalachicola Longleaf Initiative project proposal for NFWF funding. If funded, our agency will directly benefit from a number of the project components; most importantly the prescribed fire assistance provided through the Ecosystem Restoration Team (ERT), and the direct assistance with purchase of longleaf pine tubelings for our 2013-2014 longleaf restoration efforts.

As you may know, our agency's traditional source of funding for land management and restoration efforts (the state of Florida's Water Management Lands Trust Fund) has not been funded in recent years, so we have been limited in our ability to contract for prescribed burning or undertake in-house burns. Anticipated budget shortfalls in FY 2013-2014 may also threaten or delay our ability to plant longleaf on the acreage that is ready for this restoration activity.

As I have expressed previously, the ERT model is a perfect fit for the District's prescribed burning needs and we support all efforts to continue this valuable program. We look forward to continuing our relationship and to getting more acres burned with ERT assistance, and we are hopeful that funding can be provided for longleaf restoration and the other NFWF proposal components. Please feel free to contact me if you have any questions. Thanks!

Sincerely,

A handwritten signature in blue ink, appearing to read "Tyler Macmillan".

Tyler Macmillan
Chief, Bureau of Land Management Operations.

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Lt. Governor

Herschel T. Vinyard Jr.
Secretary

February 7, 2013

Brian Pelc
The Nature Conservancy
625 North Adams Street
Tallahassee, Florida 32301

Dear Mr. Pelc:

Please accept this letter as my statement of support for the proposed Nature Conservancy Apalachicola (TNC) Apalachicola Longleaf Conservation Initiative National Fish National Wildlife Foundation (NFWF) grant application. It is my understanding that these grant funds would in part, allow the Florida Park Service to continue with important Sandhill natural community restoration at Torreya State Park. This project is a priority goal for Torreya State Park, and has been identified as such in the approved 2012 Management Plan for this unit.

As a result of State of Florida conservation lands purchases in the 1990s, the Florida Park Service became responsible for management and restoration of over 10,000 acres of new conservation property in Liberty and Gadsden Counties. These lands were added to the existing Torreya State Park. Unfortunately, due to state budget constraints, line-item funding for wildland management and restoration has become severely curtailed. The present Sweetwater Tract of Torreya contains over 4300 acres of restorable Sandhill habitat. In spite of these challenges, and with the capable assistance of the TNC Apalachicola Bluff and Ravines Preserve, we have been able to restore and manage over 1200 acres the Sweetwater tract to date. This project represents the largest example of a natural community restoration in the Florida State Park system.

Further, the NFWF grant funding would assist in addressing the threats of incompatible fire, incompatible forestry practices, altered fire regimes, invasive plants, habitat destruction or conversion, altered community structure, and altered species composition in Sandhill and Upland Pine habitats by increasing the capacity for prescribed fire management by government agencies and on private lands; forest

Mr. Brian Pelc
February 7, 2013
Page 2

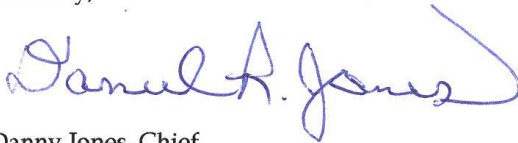
restoration including restoration of native pine species; and coordinating interagency invasive plant detection, management, and control.

Our partnership with TNC, facilitated via the Apalachicola Regional Steward Alliance (ARSA) MOU, Torreya and other local state parks have been able to meet or exceed their annual prescribed burning objectives. Our ARSA membership has also allowed us to network with other regional land management agencies during periodic meetings. Relevant discussions and on-site visits have been very useful in keeping abreast of the latest issues and techniques to properly address wildland fire, exotic plant control and related issues.

The Apalachicola Longleaf Conservation Initiative (ALCI) is housed within the Northwest Florida Program (NWFL) of The Nature Conservancy (TNC). NWFL has been working to support both restoration and prescribed fire in the Apalachicola River region since the late 1980s. In recent years, staff at the NWFL flagship preserve- the Apalachicola Bluffs and Ravines Preserve (ABRP)- have refined groundcover restoration to the point of having the capacity to restore as many as 200 acres of Sandhill natural community per year. Furthermore, the prescribed fire team portion of the ALCI has is now averaging over 20,000 acres of federal, state and private prescribed fire assists per year.

It is my hope that the National Fish and Wildlife Foundation will focus serious consideration to the proposed TNC Apalachicola Longleaf Conservation Initiative grant proposal. These funds would represent a very positive and constructive contribution to wildland habitat restoration and management in north Florida. If I can provide any additional information, please feel free contact to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Danny A. Jones". The signature is fluid and cursive, with a long horizontal stroke at the end.

Danny Jones, Chief
Bureau of Parks District 1 Administration

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February, 12, 2014

Mr. Brain Pelc
The Nature Conservancy
625 North Adams Street
Tallahassee, Florida 32301

Dear Mr. Pelc:

By this letter I am expressing my support for the proposed Nature Conservancy Apalachicola (TNC) Apalachicola Longleaf Conservation Initiative, National Fish and Wildlife Foundation grant application. As we've discussed, these funds would in part encourage and allow private landowners to establish longleaf pine on sites currently planned for slash or sandpine establishment. This would in turn add to the restoration of the Sandhill natural community in Liberty and Gadsden counties.

The primary reason private landowners do not plant Longleaf acreage in large numbers is its added initial expense. Many private landowners prefer the characteristics of the specie but acquiesce to market forces for reforestation activities. By doing so the status quo specie mix is maintained with Longleaf continuing to be a minor component.

The parcels we've reviewed for this project are adjacent to, or in close proximity to Torreya State Park and will compliment their restoration efforts. They will also serve as an example of the benefits of private-public partnerships pursuing similar goals.

In summary, I am in full support of The Nature Conservancy's efforts to increase the acreage planted in Longleaf and understand the need to include private landowners in that effort. Without the participation of private landowners the results of restoring and maintaining the Sandhill natural community will be limited.

Sincerely,



Brenda L. Thueson,
Trustee
The Holland M. Ware Charitable Foundation

Acronym Index

Acronym	Full Description
ANF	Apalachicola National Forest
ARSA	Apalachicola Regional Stewardship Alliance
ARWEA	Apalachicola River Wildlife and Environmental Area
ARWMA	Apalachicola River Water Management Area
DEP	Florida Department of Environmental Protection
DOD	Department of Defense
EQIP	Environmental Quality Incentives Program
FFS	Florida Forest Service
FTE	Full Time Equivalent
FWC	Florida Fish and Wildlife Conservation Commission
FWS	US Fish and Wildlife Service (US Department of Interior)
LIT	Local Implementation Team
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NNIS	Non-native Invasive Species
NRCS	Natural Resources Conservation Service
NWCG	National Wildfire Coordinating Group
NWFWMD	Northwest Florida Water Management District
RRDSS	Regional Restoration Decision Support System
TAP	The Apalachicola Project
THSF	Tate's Hell State Forest
TNC	The Nature Conservancy
USAF	US Air Force (Department of Defense)
USFS	US Forest Service (US Department of Agriculture)
WUI	Wildland Urban Interface