

Connecting Conservation Across the South: An Investment Strategy for Southern Habitats

August 2026



NFWF

A large, detailed photograph of a Florida largemouth bass swimming in a swampy, underwater environment. The fish is positioned horizontally, facing right, with its head slightly angled towards the viewer. It has a silvery-grey body with dark vertical stripes along its side. The background is filled with dense, tangled roots and branches of cypress trees, creating a complex, natural habitat. The water is slightly murky, and the lighting is soft, highlighting the textures of the fish and the surrounding vegetation.

Florida largemouth bass

The 30-year Next Generation Business Plan (NextGen) reflects NFWF's enduring commitment to the community and stewardship of the landscape. It provides NFWF an adaptive blueprint for the strategies, investments and partnerships needed to achieve desired conservation outcomes. Implemented in 10-year increments, the plan evolves as new information and conditions emerge. It reflects collective expertise from federal, state, academic and other partners to complement existing conservation efforts.

Suggested citation: National Fish and Wildlife Foundation. August 2026. Connecting Conservation Across the South: An Investment Strategy for Southern Habitats. Ver. 1.0. Washington, D.C.

Table of Contents

1. Vision	1
2. Introduction	1
Extending Our Timeframe	1
Looking to the Community	2
Measuring More than Species Outcomes	2
Measuring Co-benefits	2
Expanding NFWF's Landscape-scale Approach	2
3. Southern Habitats	4
Fire-adapted Habitats	4
Longleaf Pine Measuring Outcomes Phase	5
Open Pine and Pine-oak Forests Testing Phase	5
Grasslands Testing Phase	6
Fire-adapted Habitat Indicators	7
Aquatic Habitats	8
Aquatics Measuring Outcomes Phase	8
Aquatic Indicators	9
Habitats in Scoping Phase	9
Coastal Habitats Scoping Phase	9
Bottomland Forests Scoping Phase	9
4. Implementation Components	11
Tracking Results	11
Funding Targets	12
Adaptive Management	13
5. Acknowledgments	15

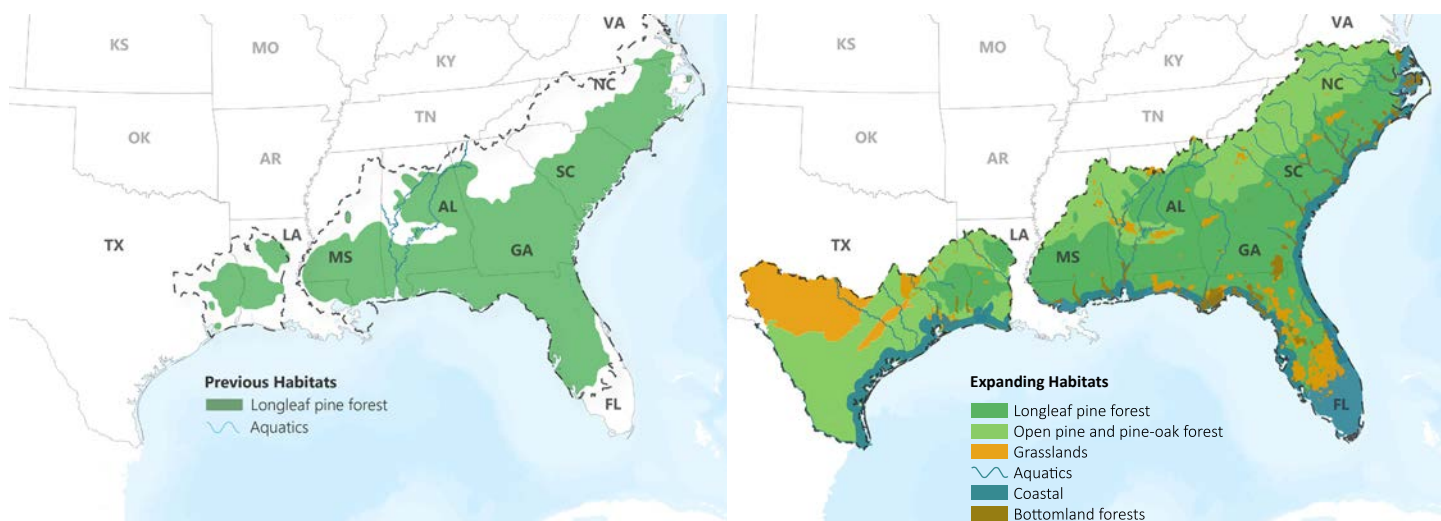


Figure 1: Maps compare the habitats of the previous Longleaf Forest and Rivers Business Plan (left) with the expanded habitats of the Southern Habitats BP (right). In both maps, the dashed line represents the Southern Habitats BP boundary.

1. Vision

A thriving Southern landscape of connected, resilient, and healthy forests, rivers, and communities where NFWF helps steward large-scale conservation by engaging landowners and advancing restoration to conserve wildlife and working lands.

2. Introduction

The southeastern United States contains large portions of the nation’s natural heritage. This plan builds on NFWF’s long history of work throughout the Southeast, including nearly 30 years of dedicated effort to restore longleaf pine forests and freshwater habitats (Figure 1). During this time, our conservation partners have worked alongside private landowners, corporate partners, philanthropic foundations, and the government to achieve many conservation goals. Through these collective efforts, we have learned enough to take conservation to a new level: the conservation of connected habitats so that they might flourish far into the future. Connecting Conservation Across the South: An Investment Strategy for Southern Habitats (Southern Habitats BP) aims to amplify the Foundation’s conservation efforts within the landscape by increasing the scope, scale and timeframe of investments. To conserve more habitats and species across this geography this Next Generation Business Plan was developed in collaboration with numerous stakeholders and sets forth a 30-year vision to be implemented in three 10-year cycles.

Three business plans have guided this work, the first two included a native black bass plan (2010-2017) followed by a plan focused on longleaf forest management (2014-2018). By developing and implementing these business plans, NFWF advanced its ability to measure outcomes. The third business plan (2018-2026) created a single, cohesive plan that brought together longstanding longleaf forest work with a watershed-based approach to aquatic

conservation. NFWF raised more funds and outpaced its habitat goals set in 2018, which led the Foundation to revise the third business plan in 2023. The Southern Habitats BP, like the 2023 revision, increases NFWF’s goals in the landscape. However, this new plan does much more. The Southern Habitats BP extends the timeframe of investments from ten years to 30 and engages the community as never before. It also measures progress in innovative ways to better account for the full benefits of our work and expands our work across the landscape.

EXTENDING OUR TIMEFRAME

The Southern Habitats BP covers a 30-year timeframe—three times longer than traditional NFWF business plans. The increased time horizon offers multiple advantages:

- It marks NFWF’s intention of being long-term stewards of the landscape, assuring our partners of our commitment
 - It allows NFWF and our partners to see and measure the gains achieved by our investments within an ecological context. For example, trees planted must mature for a considerable time before they can have the intended results of reducing stream temperatures for aquatic organisms or provide appropriate habitat for some bird species
 - It allows NFWF to advance our use of science and monitoring so that we can develop goals and implementation plans
- It allows NFWF and our partners to take risks, test innovative ideas and implement lessons learned

LOOKING TO THE COMMUNITY

Understanding NFWF's role in the broader landscape was a hallmark of our approach in developing the Southern Habitats BP. It is a landscape dominated by private, working lands, where we look to engage with willing landowners, in partnership with state and federal partners, funders, and the local conservation community. NFWF began by framing its conservation goals and strategies across a broad set of habitats within the landscape, aligned with what the conservation community sees as the overall need. For some habitats, the conservation need has been formally expressed by the community. For example, America's Longleaf Restoration Initiative (ALRI)—a partnership of nonprofit, state, and federal entities—aims to restore and maintain 8 million acres of longleaf habitat. NFWF framed its longleaf forest restoration goals as contributions to those larger ALRI efforts. Other input was derived from key partners driving huge wildlife conservation wins across the region, including from partners such as the state wildlife and state forestry agencies through their state wildlife and state forestry action plans, the Department of War through their base training and preparedness programs, and many others. For other habitats where partner needs are less developed, NFWF has estimated the overall need and sketched a role for NFWF and its partners.

In addition to framing NFWF's plan in relation to the overall conservation need, the Foundation has formalized stakeholder engagement throughout the planning process. We actively engaged more than 100 stakeholders to provide input for the plan using the following approaches:

- Formed an Advisory Group composed of thought leaders from private entities, federal and state partners, grantees, academic institutions and NGO partners
- Held a 1.5-day stakeholder workshop that provided a forum for open dialogue on goals and needs
- Developed focus groups to dive into questions around forests, aquatics and indicator species
- Conducted informational webinars
- Held individual and small group conversations with landowners and other experts

This valuable input has helped NFWF gain a more comprehensive approach to conservation within the landscape, and we will continue to engage regularly as we implement the plan.

MEASURING MORE THAN SPECIES OUTCOMES

In this Business Plan, NFWF uses a range of indicators to measure outcomes at the landscape scale. It starts with species, where NFWF puts the focus on indicator species. These are species that tell us that when they are doing well, dozens of other species are also doing well. A good example of this is the red-cockaded woodpecker. The homes they build in old pines are also used by over three dozen other species. Beyond species, NFWF measures other biotic and abiotic measures to tell us how the habitat is doing. This may include changes in water quality, increased



Greenbreast darter

vegetation density, or other measures that demonstrate healthy, productive habitats. As habitats improve, a wide range of species are expected to respond positively. By moving beyond single-species outcomes and clearly measuring how habitats respond to conservation actions, we can better understand how a whole suite of species that rely on a given habitat are likely to respond.

MEASURING CO-BENEFITS

NFWF's conservation investments strengthen local and regional economies, improve ecosystem services and deliver tangible benefits to communities. In addition to delivering core conservation outcomes, NFWF will estimate a suite of co-benefits to capture the broader value of its investments. These include:

- Jobs supported through grant-funded work, estimated using an economic modeling tool that accounts for direct, indirect and induced employment effects
- Soil health benefits of projects, modeled using scientific literature and open-source datasets
- Water benefits, estimated using a tool that calculates avoided runoff, improved groundwater recharge, increased inundation and other volumetric indicators using scientific best practices
- Returns on investment in nature-based solutions
- Community engagement and support

EXPANDING NFWF'S LANDSCAPE-SCALE APPROACH

This Business Plan expands from our previous focus on two habitats within the Southeast landscape, longleaf pine and freshwater aquatic habitats, by adding four more: grasslands, open pine and pine-oak forests, bottomland forests and coastal habitats. Each of the habitats in the plan have been identified as a priority based on NFWF's assessment of where we can meaningfully address the needs of the landscape. When selecting habitats, NFWF considered its ability to support strategies, develop landscape-scale goals, measure outcomes, and align with regional communities' conservation objectives.

To organize our approach, we have categorized the six habitats based on NFWF's phase of readiness for measuring progress towards goals (Figure 2). NFWF has always learned through grantmaking and we intend to invest in on-the-ground conservation in all three phases.

The three categories of readiness are described below:

- **Measuring Outcomes:** Habitats where NFWF has a history of goal setting and access to spatial data to estimate the impact of investment on habitat and species outcomes at scale

- **Testing:** Habitats where NFWF has interest, potential partners, and some knowledge, capacity and funding potential to test and assess conservation strategies, but not enough to set quantitative goals
- **Scoping:** Habitats where interest is present, but NFWF lacks sufficient knowledge, capacity and funding potential to select the appropriate conservation strategies and identify potential indicators

NFWF is most experienced at working in longleaf pine and aquatic habitats. Both habitats fall within the Measuring Outcomes phase, which means that all the check marks in Figure 2 are complete. We have identified conservation strategies, indicator species and quantitative goals. This allows us to set 30-year goals and measure our impact across the landscape. For both of these habitats, this plan sets expansive goals. NFWF will greatly increase longleaf acreage and expand our aquatics work from three subbasins¹ in the previous business plan, to 45 over the life of this new plan.

Ideally, the remaining four habitats will eventually move to the Measuring Outcomes phase. Two of these are in the Testing phase: open pine and pine oak forests and grasslands. Both habitats have identified conservation strategies and species that might prove to be good indicators, but testing is required. There are several reasons this could be the case. For example, NFWF may need more

information about how the species responds to our strategies before we can set goals. Partners engaged in the development of this plan also noted on-going efforts by the conservation community to develop strategies and goals for these habitats. Once complete, these efforts may help inform NFWF's long-term goals, similar to the approach used for longleaf. Within the first 10 years of the plan, we will test and gather the information necessary to develop long-term goals for habitats in the Testing phase.

The two remaining habitats fall within the Scoping phase: coastal habitats and bottomland hardwoods. These habitats are in the earliest stage of setting priorities, goals and measuring progress. NFWF will determine whether these habitats advance to Testing within the first five years of the plan. The Foundation has invested heavily in coastal habitats over the past decade and formulated a national Coastal Resilience Strategy; however, the Strategy does not include indicator species or 30-year goals. The first steps for both habitats will be to identify strategies and candidate species. For coastal habitats we will also be working to integrate priorities from the Coastal Resilience Strategy into the plan.

¹"Subbasins" in this plan refer to HUC8 watersheds—Hydrologic Unit Code defined by the U.S. Geological Survey's Watershed Boundary Dataset. HUC8 subbasins within the business plan boundary range from 160 to 4,600 square miles.

PHASES OF READINESS <i>Process to assess NFWF's phases of readiness for measuring progress towards goals</i>	ESTIMATED TIMELINE	IMPLEMENTATION	CONSERVATION STRATEGIES	INDICATOR SPECIES	MEASUREMENT AT SCALE	SOUTHERN HABITATS BP HABITATS
MEASURING OUTCOMES <i>Measure progress towards long-term species and habitat goals</i>	 Up to 30 years or remainder of business plan	 Fund projects across landscape	 Identified	 Quantitative goals	 Measure impact at landscape scale	 LONGLEAF AQUATICS
TESTING <i>Invest in data collection and monitoring to set goals</i>	 Up to 10 years in Testing phase	 Fund projects, testing and monitoring	 Identified	 Candidate species but no goals	 Test species response to habitat change	 OPEN PINE AND PINE OAK GRASSLANDS
SCOPING <i>Identify most impactful conservation strategies across landscape</i>	 0.5 – 3 years in Scoping phase	 Fund projects, planning and strategy	 Develop strategies	 Identify candidate species	 Identify monitoring needs	 COASTAL HABITATS BOTTOMLAND FORESTS

Figure 2: Phases of readiness outlines how NFWF assesses readiness for measuring progress towards goals. Check marks indicate characteristics associated with each readiness phase. Habitats in the Measuring Outcomes phase meet all criteria, while Testing and Scoping phases require additional development. The final column shows the Southern Habitats BP habitat types by their readiness phase.



Forest and river in Alabama

3. Southern Habitats

The Southern Habitats BP focuses on six habitats that we have categorized in terms of readiness to measure progress towards goals (Figure 2). In this section of the plan, we describe these habitats in greater detail. We have organized this section into three groups:

- **Fire-adapted Habitats:** These include forests and grasslands that have evolved with fire. The habitats in this group are in differing phases of readiness. However, they share restoration strategies and many of the same species that rely on more than one fire-adapted habitat.
- **Aquatic Habitats:** These habitats are intertwined with the terrestrial landscape, but many of the strategies are unique. NFWF’s plan to expand the number of aquatic subbasins as priorities and its new monitoring framework will enable us to increase the scale of our work over the life of the plan.
- **Habitats in Scoping Phase:** Two habitats in the Scoping phase, coastal habitats and bottomland forests, are developmental in nature and are where we are working to determine how we move them to the Testing phase.

While we had to separate out the various southern habitats to better delineate goals, NFWF recognizes and will strive toward integration between aquatic and terrestrial programs. What is good for terrestrial habitats is often good for aquatic habitats, and vice versa.

FIRE-ADAPTED HABITATS

Southeastern forests and grasslands face numerous threats, including conversion to urban development and other land uses, fragmentation, invasive species, pests and pathogens. Fire suppression is a critical threat to these fire-adapted habitats and has contributed to their decline and degradation. Combined, these threats have reduced longleaf and other open pine and pine-oak forest and grassland habitats to a fraction of their historical ranges and have contributed to a patchwork of isolated remnants. As a result, species that rely on these habitats, such as red-cockaded woodpecker, Bachman’s sparrow

and northern bobwhite, are declining. Remaining forests and grasslands need active management to restore conditions that enable wildlife to thrive.

NFWF has a long history of investing in fire-adapted habitats such as longleaf pine, and we can use what we have learned to measure outcomes at scale. Expanding NFWF’s investments to include fire-adapted forest and grassland habitats beyond longleaf increases opportunities to promote habitat connectivity and to apply a landscape-scale approach to habitat and species conservation. Given that 85 percent of southeastern lands are in private ownership, working with willing landowners is central to this plan.

This plan integrates lessons learned from NFWF’s decades of experience scaling up investments through collaboration with the ALRI. In so doing, NFWF will support the recovery of species that rely on these habitats. In the Measuring Outcomes phase, longleaf has on-the-ground capacity, well-invested strategies and 30-year goals. Unlike longleaf pine restoration efforts, shortleaf pine, white oak and grassland partnerships are in varying stages of planning, prioritization and implementation. This plan includes 10-year, short-term milestones with time-bound measurable goals to move open pine and pine-oak forests and grasslands from Testing phase to the Measuring Outcomes phase of readiness.

LONGLEAF PINE | MEASURING OUTCOMES PHASE

The longleaf pine habitat consists of several subhabitats, ranging from flatwoods and savannas to sandhills, rolling hills and montane. These

KEY STRATEGIES FOR FIRE-ADAPTED HABITATS



Forest and grassland establishment



Prescribed burning



Landowner engagement



Species-specific interventions

subhabitats support unique wildlife species that rely on forest canopy and its associated understory. Ephemeral wetlands, including limesinks, pocosins and Carolina bays, are embedded within the historical range of longleaf forests and contribute to the complexity and biodiversity of this ecosystem.



Eastern fence lizard on a longleaf pine

Within ALRI's 8 million-acre restoration goal, at least 3 million acres are maintained in a mature, open canopy condition, which supports a broad array of wildlife needs. Continued investment in the robust network of implementation partners who support habitat restoration, management and conservation activities is needed to accelerate momentum toward the remaining 2.8 million acres of the goal. Additional investments are needed in species-specific interventions, advancing science, addressing seed and seedling supply issues and expanding market-oriented incentives for private landowners to achieve habitat and species goals.

LONGLEAF PINE 30-YEAR GOALS:

- Establish an additional 1 million acres of new longleaf pine habitat
- Support implementation of one third of the total prescribed fire needed annually to enhance and maintain existing longleaf pine habitat

OPEN PINE AND PINE-OAK FORESTS | TESTING PHASE

Fire-adapted open pine and pine-oak forests, such as shortleaf pine and pine-oak forests, provide important habitat for numerous wildlife species, including species often associated with the longleaf pine ecosystem.

Within the business plan boundary, pockets of shortleaf pine and other pine-oak forest habitats remain, such as the shortleaf-oak woodlands in Georgia and North Carolina, longleaf-shortleaf woodlands in Georgia, and shortleaf oak woodlands and mesic shortleaf woodlands in western Louisiana and east Texas. Investments in planning and prioritization are needed to address information gaps, inform geographic prioritization and establish baseline information toward setting habitat and species goals.

Investments are also needed in coordination capacity, regionally appropriate tree seedlings and groundcover seed and resources for monitoring and adaptive management. We will build upon and be informed by existing collaboratives such as the Shortleaf Pine Initiative and the White Oak Initiative, and will work to integrate lessons learned and best practices from the ALRI and other large-scale conservation efforts as well as cross habitat/initiative collaboration to leverage existing capacity and expertise at a landscape scale.

OPEN PINE AND PINE-OAK FOREST 10-YEAR GOALS:

- Restore, maintain and conserve 400,000 acres of open pine-oak forest habitat
- Support range-wide coordination and development of implementation teams within 2-3 priority geographies
- Improve regionally appropriate seed and seedling supplies



Brown-headed nuthatch

GRASSLANDS | TESTING PHASE

Southeastern grasslands are recognized as a global biodiversity hotspot because of their exceptional species richness and high levels of endemism—native species found nowhere else. Grassland habitats and the associated species in this region are adapted to frequent fires. The Atlantic and Gulf Coastal Plains grassland and savanna habitat alone supports more than 6,000 native plant taxa, of which 1,748 are endemic.

Grasslands are an ecologically important part of the longleaf range. Fire-maintained grasslands may have historically occupied as much as 60 million acres. Major grasslands included the Florida dry prairie (approximately 2 million acres), the Black Belt Prairie of Mississippi and Alabama (approximately 3.5 million acres) and the Kentucky prairie system (>2.5 million acres).

Today, southeastern grasslands are drastically diminished, with over 90 percent lost, including more than 99 percent of prairie types and 97–98 percent of longleaf pine savanna. Major causes of this decline include agriculture, urbanization, habitat fragmentation, fire suppression, hydrologic changes and invasive species. Remaining grassland patches are endangered and need active management.

To advance grassland conservation in the South, NFWF will work across public and private lands, guided by existing collaborations, such as the Southeastern Grasslands Institute, to focus on restoration. Next steps to advance grasslands to the Measuring Outcomes phase include developing a spatial prioritization, inventory and strategy summary to recover historical grassland habitat using previously identified test sites. In addition, NFWF will engage with a working lands mindset in the southeast region. These steps will enable NFWF to establish intermediate and longer-term conservation goals for species and subhabitats.

GRASSLANDS 10-YEAR GOALS:

- Restore, maintain and conserve 85,000 acres of grassland habitat
- Support range-wide coordination and development of implementation teams within 2-3 priority geographies
- Improve regionally appropriate seed mixes



Great egret



Red-cockaded woodpecker
Achieve delisting



Eastern indigo snake
Achieve delisting



Gopher tortoise
*Eastern population - maintain
Western population - achieve delisting*



Bachman's sparrow
Reverse population decline



Northern bobwhite
Achieve sustainable populations

Figure 3: Thirty-year goals for five indicator species associated with fire-adapted habitats. The goals include delisting from the U.S. Endangered Species Act and measurable improvements in population levels.

FIRE-ADAPTED HABITAT INDICATORS

NFWF has selected a suite of species that are indicators of healthy fire-adapted habitats, including red-cockaded woodpecker, gopher tortoise, eastern indigo snake, Bachman's sparrow and northern bobwhite. Although these species are often associated with longleaf pine, they also use other forest and grassland habitats within the region (Table 1). Red-cockaded woodpecker, gopher tortoise and eastern indigo snake are listed as threatened under the U.S. Endangered Species Act (ESA), and the business plan goals are to help achieve delisting criteria as outlined in their respective U.S. Fish and Wildlife Service (USFWS) recovery plans. Bachman's sparrow and northern bobwhite have experienced steep population declines, and the business plan goal is to slow, and then reverse decline and support sustainable populations (Figure 3).

Table 1: Indicator species' use of fire-adapted habitat types, demonstrating their dependence on multiple habitat types across their range.

	Longleaf	Open Pine and Pine-Oak	Grasslands
Red-cockaded woodpecker	✓	✓	
Eastern indigo snake	✓	✓	
Gopher tortoise	✓	✓	✓
Bachman's sparrow	✓	✓	✓
Northern bobwhite	✓	✓	✓

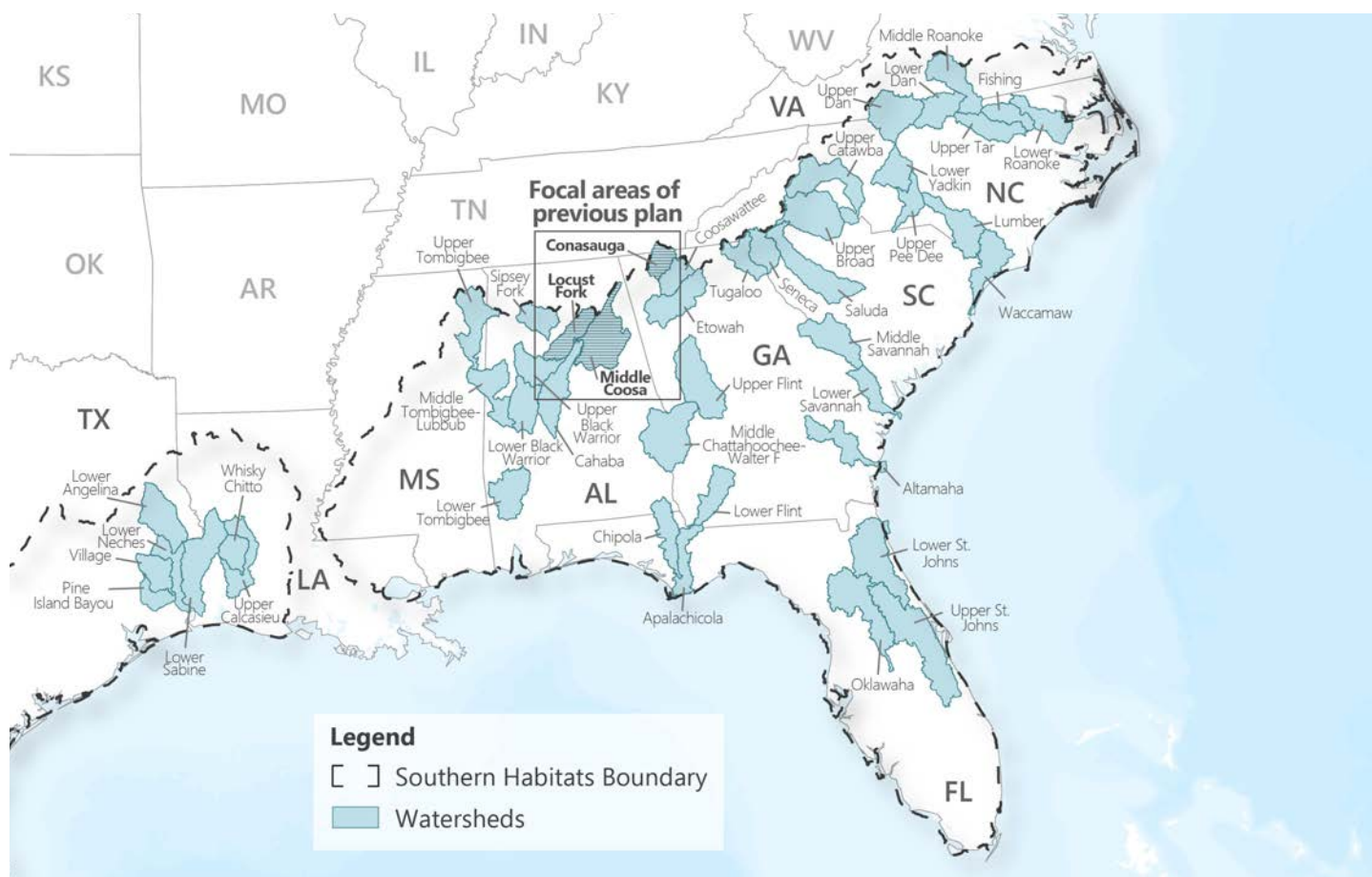


Figure 4: Scoping of forty-five subbasins, identified for their importance for biodiversity and endemism, connectivity, and the conservation priorities of partners. This priority list will change with more information and partner consultation. A next step is to identify the fifteen subbasins that will be the focus of NFWF investments in the first decade of the plan. The map also shows the three focal subbasins included in the previous plan.

AQUATIC HABITATS

AQUATICS | MEASURING OUTCOMES PHASE

The watersheds of the Southeast are among the most biodiverse in the world, with unmatched endemism. Yet these systems face cumulative stressors from pollution (chemicals, sediment, excess nutrients), flow alteration, fragmentation (that limits the movement of species) and riparian degradation.

KEY STRATEGIES FOR AQUATIC HABITATS



**Agriculture/
forestry BMPs**



**Enhance aquatic
connectivity**



**Riparian
restoration**



**Advance
conservation
science**

Intact habitats support the highly specialized needs of endemic species. The intact habitats also provide the clean water, recreation and dynamic rivers and streams that make the South special.

Building on our success and learning in the Conasauga, Locust Fork and Middle Coosa watersheds of Georgia and

Alabama, NFWF and its partners have identified 45 subbasins (HUC8) across four ecoregions and 10 states (Figure 4). The 45 subbasins selected comprise 19 percent of all southeast subbasins and contain 81 percent of its aquatic endemic species and 74 percent of the Regional Species of Greatest Conservation Need. Of the 45 subbasins, NFWF seeks to increase grantmaking in 15 watersheds per decade.

The 30-year habitat goal protects aquatic species by targeting the ecological functions that enable their survival. Accomplishing the habitat goal is fundamental to the success of any species restoration targets.

AQUATICS 30-YEAR GOALS:

- Improve biological integrity (index measures) across priority watersheds
- Reduce pollution and sediment loads
- Restore riparian areas and instream habitat
- Connect aquatic habitat to promote species' lifecycles

AQUATIC INDICATORS

To achieve 30-year species goals, habitat improvements must translate into measurable outcomes for fish, mussels and other aquatic species in Southern watersheds. The selected species represent a wide range of aquatic diversity and align with conservation priorities of federal, state and other partners. Many are protected under the ESA or are designated Species of Greatest Conservation Need. Advancing aquatic science, population data and species counts can provide some quick wins for conservation. NFWF can leverage partner capacity, coordinate monitoring efforts and contribute directly to recovery and delisting outcomes.

The species goals build on the foundation of intact habitats by providing the specialized needs of target species (Figure 5). Common to all, our approach restores habitat and supports self-sustaining populations.

NFWF’s Aquatic Health Score will measure progress at scale. To do this, we developed a monitoring framework derived from an Index of Biological Integrity (IBI) methodology and adapted to meet the needs of our priority watersheds network. Like IBI, the Aquatic Health Score integrates species assemblage data (e.g., fishes, mussels and macroinvertebrates) into a single score reflecting overall

	Brook trout and hellbender <i>Restore habitat and support self-sustaining populations</i>
	Resident native fishes <i>Improve habitat conditions; support recovery/delisting of ESA-listed species</i>
	Migratory native fishes <i>Restore habitat and stream connectivity to improve occupancy</i>
	Freshwater mussels <i>Improve habitat conditions; support recovery/delisting of ESA-listed species</i>
	Aquatic turtles and waterdogs <i>Improve habitat conditions; support recovery/delisting of ESA-listed species</i>

Figure 5: Thirty-year goals for aquatic indicator species or species groups. Goals focus on habitat improvement and increasing populations; improved population data may support species delisting under the U.S. Endangered Species Act (ESA).

aquatic community conditions, but also includes abiotic data about underlying habitat quality (e.g., water temperature). The score is a reference of qualitative changes resulting from conservation actions. The Aquatic Health Score unifies species and habitat measurement, and overcomes a major hurdle to successful conservation: the lack of funding and capacity to support conventional monitoring. At a landscape scale, NFWF is advancing the use of innovative monitoring technologies such as environmental DNA (eDNA) to detect rare and imperiled species more efficiently and expand the reach of field monitoring across the South.

HABITATS IN SCOPING PHASE

COASTAL HABITATS | SCOPING PHASE

NFWF has a long history of funding conservation in coastal habitats through multiple programs but has not set goals in the South. Salt marsh is one of the first subhabitats this plan will target. Salt marshes are tidal wetlands that fringe much of the southeastern U.S. coastline. Dominated by salt-tolerant grasses, these wetlands flood and drain daily with the tide, creating the foundation of southeastern estuaries. Salt marshes’ dense root systems stabilize sediments and, when healthy, increase in elevation over time. As marsh plants grow and decompose, they fuel a detritus-based food web that supports shrimp, blue crabs, oysters and many juvenile fish species, which in turn support a thriving ecosystem utilized by migratory shorebirds, wading birds, marsh mammals and reptiles.

COASTAL HABITATS NEXT STEPS
 We are developing a work plan informed by existing collaborations, such as the South Atlantic Salt Marsh Initiative, that focuses on identifying indicator species and strategies with measurable conservation goals. Additional next steps in this Scoping phase include aligning priorities with NFWF’s Coastal Resilience Strategy and overlapping species-specific business plans.

BOTTOMLAND FORESTS | SCOPING PHASE

Bottomland forests (often called bottomland hardwoods) and associated wetlands refer primarily to forest and shrub swamps and other freshwater wetlands.² Bottomland forests and wetlands provide critical services that include floodwater storage, water-quality improvement, carbon sequestration and habitat for a high diversity of fish, wildlife and migratory birds.

BOTTOMLAND FORESTS NEXT STEPS
 As we continue to build long-term goals in these forest habitats, we have created a work plan with milestones to develop robust, measurable conservation goals that are aligned with the broader conservation community.

²With the exception of ephemeral, isolated wetlands embedded within pine savannas and flatwoods which are addressed in the longleaf pine and other open-pine and pine oak forest sections of this plan.

Brook trout



4. Implementation Components

TRACKING RESULTS

NFWF will measure conservation impact by tracking conservation actions and associated outcomes in the southeast landscape. The impact of conservation strategies will be tracked using grantee-reported metrics³, habitat and species modeling and selected field monitoring. Tables 2 and 3 show the accomplishments to successfully implement strategies for habitats in the Measuring Outcomes phase. Testing phase habitats (open pine and pine-oak forests and grasslands) have similar metrics to Longleaf pine, though their targets are for ten years while longer-term goals are developed. During the testing phase, our targets are to restore, maintain, and conserve

400,000 acres of open pine and pine-oak habitat and to do the same on 85,000 acres of grasslands. These targets should provide enough habitat to test and develop the long-term goals to move these

habitats to the Measuring Outcome level. Scoping phase habitats (coastal habitats and bottomland forests) do not yet have short-term goals, though implementation metrics will be tracked by NFWF.

As conservation actions are implemented, the expected outcomes for habitats and species will be modeled using

³NFWF uses both activity metrics and outcome metrics to measure and report on results of its conservation investments. NFWF defines an activity metric as a specific measurable conservation action or set of tasks that partners are expected to implement as a requirement of grants. An outcome metric is a measure of progress on short-, intermediate-, or long-term results that focuses on what happened as a result of a conservation action(s). Unless explicitly stated otherwise, all references to metrics in this document refer to activity metrics.

Table 2: Longleaf pine strategies, metrics, and targets. The numeric targets are organized in ten-year increments, which can be revised as the plan evolves, and 30-year outcomes. All figures represent estimated targets.

Longleaf Pine Strategy	Metrics	Total 2026-2036	Total 2037-2046	Total 2047-2056	Outcomes (all years)
1. Longleaf pine establishment	Acres of Longleaf trees planted	250,000	500,000	250,000	1,000,000
1a. Longleaf pine seedlings planted	# of longleaf pine planted	125,000,000	250,000,000	125,000,000	500,000,000
2. Longleaf pine – prescribed burning	Acres of prescribed burn implemented	6,000,000	6,500,000	8,000,000	20,500,000
3. Longleaf pine – enhancement and maintenance	Forest or Fuels Management Practice Acres Implemented , Acres of invasives removed	500,000	500,000	500,000	1,500,000
4. Longleaf – groundcover restoration	Acres of herbaceous, non-woody plants planted Acres of tree/shrubs planted	50,000	50,000	50,000	150,000
5. Longleaf – habitat conserved	Acres of longleaf land acquired Acres of longleaf land protected	10,000	10,000	10,000	30,000
6. Landowner engagement and technical assistance					
6a. Landowners informed (outreach, education)	# of landowners informed, reached, and trained	500,000	500,000	500,000	1,500,000
6b. Landowners reached (technical assistance)	# of landowners reached	100,000	100,000	100,000	300,000
6c. Landowners taking action	# of landowners adopting a conservation behavior	5,000	5,000	5,000	15,000
6d. Forest restoration/ management plans developed	# of plans developed	2,500	2,500	2,500	7,500
7. Species-specific interventions					
7a. Red-cockaded woodpecker translocations	Pairs of RCW translocated	200	200	200	600
7b. Gopher tortoise translocations / head-started individuals released	Individual gopher tortoises translocated	10,000	10,000	10,000	30,000

Table 3: Aquatic habitat strategies, metrics, and targets. The numeric targets are organized in ten-year increments, which can be revised as the plan evolves, and 30-year outcomes. All figures represent estimated targets.

Aquatics Strategy	Metrics	2026-2036 15 Watersheds	2037-2046 30 Watersheds	2047-2056 45 Watersheds	Outcomes (all years)
1. Ag and forestry BMPs	Acres of agricultural management practices implemented	50,000	50,000	50,000	150,000
2. Enhance aquatic connectivity and restore spawning	# barriers rectified (leading to miles opened)	225	225	225	675
3. Restoration	Miles of instream restoration activities implemented	105	105	105	315
3a. Riparian restoration	Acres of riparian restoration activities implemented	2,250	2,250	2,250	6,750
4. Species-specific recovery	# of sites restocked	150	150	150	450
5. Landowner engagement	# landowners engaged	7,500	7,500	7,500	22,500
6. Assessment and planning	# of watershed conservation plans developed	8	8	8	24

historical data, current data and peer-reviewed literature. The relationship between actions and outcomes will be outlined and tracked using logic models, which provide the theory of change for our investments. The outcomes will be verified by a tiered monitoring and measurement approach. Study designs will guide the monitoring approach to collect key habitat or species data.

The study designs will incorporate species-habitat models for two main purposes. First, they will allow NFWF to rigorously measure the full impact of all our investments in the business plan. Spatial maps depicting the distribution of species or their habitat are widely available and will be used to estimate the impact of investments outside of areas being intensively monitored. Second, species-habitat models will help identify the best project locations to maximize impact on fish and wildlife populations. These models, along with information on opportunities and threats, will allow NFWF and our partners to better identify priority locations for conservation investment. Monitoring the response of populations to investments is needed for both purposes.

The monitoring effort for each habitat and species will vary based on available scientific knowledge including the use of artificial intelligence (AI), open-source data and spatial models. A species that is well documented to respond to conservation actions will require less effort in monitoring (e.g., Bachman's sparrow). In contrast, habitats and species outcomes that are not well studied will require higher

monitoring effort until the relationship is validated (e.g., via NFWF's Aquatic Health Score). Monitoring effort will decrease if a relationship of actions to outcomes is established. In this case, NFWF will use models and spot monitoring to report outcomes. The measurement of results and outcomes within a logic model framework will inform adaptive plan management.

FUNDING TARGETS

In this section we define the funding targets. This includes both the NFWF funding and match from our partners, needed to implement the goals of this plan. We also include funding for science and monitoring needed to increase the ability to measure outcomes in each of the habitats. These funding targets are order-of-magnitude estimates in 2026 dollars. The estimates will be revised as we implement the plan and better understand the fiscal needs of the goals we have set. While ambitious, these numbers should inform fundraising goals for NFWF and our partners.

We will fund conservation to demonstrate success, advance the science and build enthusiasm across the region. All numbers will be revised as we implement projects and learn more about what is needed as these habitats progress through the three phases of readiness.

First, we present 30-year funding targets for those habitats that are in the Measuring Outcomes phase, longleaf pine and aquatics.

Table 4: Longleaf pine funding targets shown in 10-year increments and 30-year targets. Funding targets are based on projected unit costs and expressed in USD 2026. NFWF and its partners will contribute to the funding target estimates.

Longleaf	2026-2036	2037-2046	2047-2056	Total Estimate for 30 Years
Habitat and species	\$692,000,000	\$761,000,000	\$680,000,000	\$2,133,000,000
Advance conservation goals	\$26,000,000	\$25,000,000	\$24,000,000	\$75,000,000
TOTAL	\$718,000,000	\$786,000,000	\$704,000,000	\$2,208,000,000

Longleaf Pine: To achieve NFWF's goals of restoring 1 million acres of longleaf habitat, maintaining one-third of existing longleaf habitat and recovering the indicator species listed in this plan, we estimate a 30-year funding target of \$2.2 billion (Table 4). This includes costs for advancing conservation goals within longleaf habitat encompassing both NFWF and grantee match contributions.

Aquatics: There are 239 subbasins in this Southern landscape, and our work will focus on 45 of them. We estimate a \$1.5 billion funding target needed to improve biological integrity and enable targeted aquatic species recovery over 30 years at \$1.5 billion (Table 5).

Other Habitats: This plan expands NFWF grantmaking into new habitats where additional work is needed to establish long-term goals and funding targets. Therefore, we have established short-term (10-year) funding targets to move a habitat's phase of readiness from Scoping to Testing, and ultimately to Measuring Outcomes (Figure 2). We estimate a funding target of \$375 million over the next 10 years to advance open pine and pine-oak forest, grasslands, bottomland forests and coastal habitats (Table 6). This funding target includes \$45.5 million to develop the science needed to move all four habitats to the next phase

of readiness and support broader implementation over the next 10 years. This approach allows NFWF to seize implementation opportunities and refine effective grantmaking models over time.

Adding all habitat conservation needs together, we estimate a current 30-year funding target of ~\$4 billion for this plan. We hope that the broader community can use this plan to expand our collective progress and play a role in turning these funding targets into on-the-ground action.

These estimates challenge NFWF and its partners to stretch to meet as much of this funding target as possible to allow big conservation gains across the region. Over time, we will learn more about what works and what does not so we can adjust accordingly. For example, in aquatics, there are wide ranges of costs for actions in various locations and what is needed in one watershed is different from what might be needed in another. Adaptive learning is a key focus for our NextGen plans.

ADAPTIVE MANAGEMENT

A 30-year strategy requires a framework that emphasizes flexibility, foresight and enduring values. NFWF will stay firm on our overarching vision and 30-year goals, but will remain

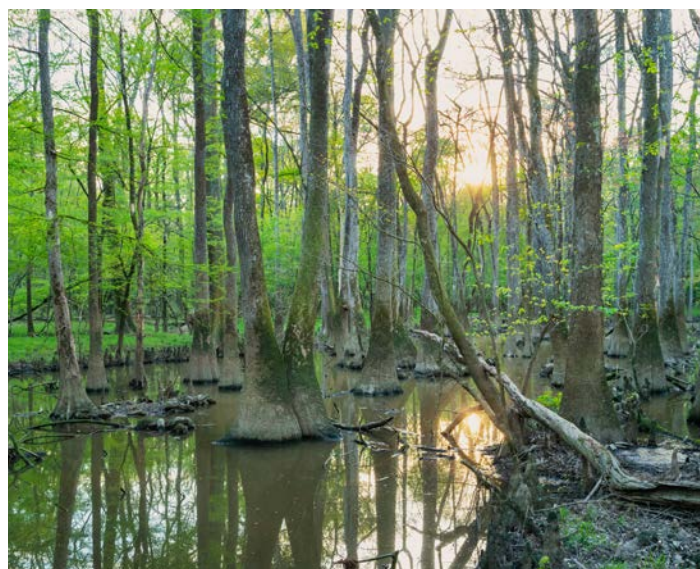
Table 5: Aquatic habitat funding targets shown in 10-year increments and 30-year targets. Estimates are based on expanding grantmaking into 45 watersheds over 30 years. Funding targets are based on projected unit costs and expressed in USD 2026. NFWF and its partners will contribute to the funding target estimates.

Aquatics Strategy	2026-2036 15 Watersheds	2037-2046 30 Watersheds	2047-2056 45 Watersheds	Total Estimate for 30 Years
1. Ag and forestry best management practices	\$2,500,000	\$3,750,000	\$5,600,000	\$11,850,000
2. Enhance aquatic connectivity and restore spawning	\$112,500,000	\$112,500,000	\$112,500,000	\$337,500,000
3. Restoration	\$157,500,000	\$236,250,000	\$354,400,000	\$748,150,000
3a. Riparian restoration	\$22,500,000	\$28,100,000	\$35,200,000	\$85,800,000
4. Species-specific recovery	\$30,000,000	\$45,000,000	\$67,500,000	\$142,500,000
5. Landowner engagement	\$37,500,000	\$41,300,000	\$45,400,000	\$124,200,000
6. Assessment and planning	\$1,600,000	\$2,400,000	\$3,600,000	\$7,600,000
7. Advance conservation goals	\$12,000,000	\$18,000,000	\$27,000,000	\$57,000,000
TOTAL	\$376,100,000	\$487,300,000	\$651,200,000	\$1,514,600,000

flexible and adaptive in implementing the conservation strategies described in the plan to achieve them. Priorities will be reflected in NFWF's regular Request for Proposals process, through programs such as the Longleaf Landscape Stewardship Fund and the Southeast Aquatics Fund. RFP criteria will be based on the goals set in this plan, but also look to build on other successful, existing initiatives with aligned results. Progress will be measured based on the success of implementing conservation actions that provide the highest conservation return on NFWF's investment, and we fully expect our milestones, geographies, and species to change over time as we implement strategies and learn from the outcomes achieved in the early years of the plan.

The key elements of our adaptive management approach include:

1. Digital scorecards providing frequent feedback, which can be integrated into the RFPs to correct course and adjust short-term goals as needed
2. Internal assessments every 2 to 3 years that examine a subset of projects to understand ways to improve performance
3. A refresh of major elements every 5 to 7 years in conjunction with a third-party evaluator that assesses key metrics at the project, program, and business plan phases and review of the logic models
4. Minor, off-cycle updates can be triggered by major policy changes or funding shifts, new partnerships, extreme events, new science, new or rapidly increasing threats, updated spatial prioritizations, or impactful ecological research
5. Biennial stakeholder engagement/webinar communicating intended changes and integrating feedback into implementation plans.



Bottomland forest

We also recognize the importance of this landscape plan in informing disaster recovery. NFWF will continue to play a role in helping communities get back on their feet, through nature based investments that benefit people and wildlife.

Progress on our habitat and species goals and priority areas for investment will be reported in NFWF's Digital Business Plans, dashboards, story maps, and other digital assets. We will provide public-facing applications containing information on our progress and priorities for our stakeholders and funding partners.

Table 6: Funding targets for other habitats. Implementation estimates are for the first 10 years of the plan. Moving phases include estimates of the time and costs expected to move from one habitat phase to another. Funding targets are based on projected unit costs and expressed in USD 2026. NFWF and its partners will contribute to the funding target estimates.

Habitat Types	IMPLEMENTATION		MOVING PHASES		Total
	Timeframe	Cost	Timeframe	Cost	
Open pine and pine-oak forests	10 years	\$150,000,000	Testing to Measuring Outcomes 10 years	\$25,000,000	\$175,000,000
Grasslands	10 years	\$60,000,000	Testing to Measuring Outcomes 6 years	\$15,000,000	\$75,000,000
Costal habitats	10 years	\$74,500,000	Scoping to Testing 5 years	\$500,000	\$75,000,000
Bottomland forests	10 years	\$45,000,000	Scoping to Testing 5 years	\$5,000,000	\$50,000,000
TOTAL		\$329,500,000		\$45,500,000	\$375,000,000



Eastern tiger salamander

5. Acknowledgments

NFWF gratefully acknowledges the time, strategic direction and extended support provided by the members of our Advisory Group.

Emily Aversa, Bezos Earth Fund

Jimmy Bullock, Resource Management Service

Mark Burget, Re:wild

Carol Denhof, The Longleaf Alliance

Anna George, formerly, Tennessee Aquarium

Rachel Jinright, International Paper

Josselyn Lucas, USDA Natural Resources Conservation Service (NRCS) Working Lands for Wildlife

Jesalyn McCurry, Southern Company

Gordon Myers, Association of Fish and Wildlife Agencies

Mike Oetker, USFWS

Kay Reed, U.S. Forest Service (USFS)

Kathryn Smith, Department of War (DOW)/Texas A&M Natural Resources Institute

Sacha Spector, Doris Duke Foundation

Jose Barrios, USFWS

Bill Bartush, West Gulf Joint Venture

Rebecca Bearden, Geological Survey of Alabama

Chris Bergh, TNC

Mark Berry, Southern Company

Nick Biemiller, American Forests

Leslie Bobby, Southern Regional Extension Forestry

Ryan Bollinger, The Longleaf Alliance

Walter “Tripp” Boltin, USFWS

Stephen Bontekoe, Limestone Valley Resource, Conservation, and Development Agency

Kiley Briggs, The Orianne Society

Ryan Brown, Virginia Department of Wildlife Resources

Bronson Bullock, University of Georgia

Tamara Campbell, NRCS Mississippi State Office

Joel Casto, Casto Environmental Services

Stephanie Chance, Tennessee Aquarium

Houston Chandler, The Orianne Society

LuAnn Craighton, TNC

Jason Crowley, Gaylord and Dorothy Donnelley Foundation

James Cummins, Mississippi River

Trust; Wildlife Mississippi

Joshua Daskin, NatureServe

Shannon Deaton, North Carolina Wildlife Resources Commission

Colette DeGarady, TNC

Jason Dockery, Alabama Forestry Commission

Chris Doffitt, Louisiana Department of Wildlife and Fisheries

John Doesky, USFWS

Jamelle Ellis, Theodore Roosevelt Conservation Partnership

Michele Elmore, USFWS

Ben Emanuel, American Rivers

Carter England, Shortleaf Pine Initiative

Chris Erwin, Alabama Forestry Foundation

Dwayne Estes, Southeastern Grasslands Institute

Troy Ettel, Turner Foundation

Todd Ewing, Southeast Aquatic Resources Partnership

Murielle Gamache-Morris, Thrivner

Jose Garrido, Amphibian and Reptile Conservancy

Dave Gonzales, USFWS

Davis Goode, TNC

Wendell Haag, USFS

Clint Harris, TNC

Jennie Haskell, The Longleaf

NFWF also gratefully acknowledges the time and content expertise provided by individuals and organizations who engaged in the development of this business plan. Although the plan does not necessarily represent each of their specific views, thanks go to:

Diane Alix, The Nature Conservancy (TNC)

Paul Angermeier, Virginia Tech

Janine Antalfy, American Bird Conservancy

JJ Apodaca, Amphibian and Reptile Conservancy

Carla Atkinson, University of Alabama

Charles Babb, Chesterfield Soil and Water Conservation District

Don Barker, NRCS North Carolina State Office

Heather Barklow, Southeastern Grasslands Institute



Alliance

Matt Hestad, Georgia Forestry Association
Rita Hite, American Forest Foundation
Kat Hoenke, Southeast Aquatic Resources Partnership
Lee Holt, USFWS
Chris Howell, Georgia Department of Forestry
Gwen Iacona, Florida Natural Areas Inventory
Dallas Ingram, Georgia Department of Natural Resources
Stephen Jackson, USFWS
Chris Jenkins, The Orianne Society
Claude Jenkins, Alabama Wildlife Federation
Brena Jones, North Carolina Wildlife Resources Commission
Jessie Jordan, The Longleaf Alliance
Tom Kay, Alachua Conservation Trust
Mark Kiser, Florida Forest Service
Bernie Kuhajda, Tennessee Aquarium
Ricky Lackey, National Wild Turkey Federation
Stacey Lance, Savannah River Ecology Laboratory, University of Georgia
Lisa Lord, The Longleaf Alliance

Patrick Ma, TNC
Alexis Martin, Center for Heirs Property
James Martin, University of Georgia
Deb Maurer, TNC
John McGuire, Tall Timbers
Courtney McInerney, Texas A&M Forest Service
Rodney McKay, Hodges LEAF Center
Ross Melinchuk, Southeastern Association of Fish and Wildlife Agencies
Jason Meyer, formerly, White Oak Initiative
Harold Mitchell, USFWS
Chip Morgan, Southeastern Grasslands Institute
Katie Moss, Forest Landowners Association
Barry New, North Carolina Forest Service
Jason Nolde, USFS
Reed Noss, Southeastern Grasslands Institute
Chris Oberholster, Southeastern Grasslands Institute
Jennifer Oelke Farley, DOW
Lydia O'Halloran, Clemson University
Katie Owens, TNC

Brandon Peoples, Clemson University
Ryan Phillips, Georgia Forestry Commission
Elizabeth Piennar, University of Georgia
Cody Pope, USFWS
JT Pynne, Emory University
Eddie Reese, NRCS South Carolina State Office
Kate Richardson, Tall Timbers
Catherine Rideout, USFWS
Gordon Rogers, Flint Riverkeeper
Erica Rohr, DOW
Viviana Ruiz Gutierrez, Cornell University (Lab of Ornithology)
Brandon Rutledge, The Jones Center at Ichauway
Will Saffell, Environmental Systems Analysis
Jenny Sanders, Texas A&M Forest Service
Hughes Simpson, Texas A&M Forest Service
Justin Smith, NRCS Georgia State Office
Rob Smith, USFS
Robert Smith, Wildlife Mississippi
Dori Stiefel, Thriver
Andrew Stillman, Cornell University (Lab of Ornithology)
Bonnie Stine, Florida Forest Service

Russ Thomas, North Carolina Wildlife Resources Commission
Addie Thornton, Texas A&M Natural Resources Institute
Jason Throneberry, TNC
Kimberly Tillman, Alachua Conservation Trust
Britt Townsend, TNC
John Tupy, USFWS
Matthew Vandersande, NRCS
Brian van Eerden, TNC
Louise Vaughn, USFWS
Carly Voight, Florida Natural Areas Inventory
Emily Wallace, Thriver
Dan Weber, TNC
Holly Welch, South Carolina Forestry Commission
Shane Wellendorf, Tall Timbers
Seth Wenger, University of Georgia
Kirstie White, Resource Management Service
Jesse Wimberley, North Carolina Sandhills Prescribed Burn Association
E.J. Williams, American Bird Conservancy
Theo Witsell, Southeastern Grasslands Institute
Tiffany Woods, National Wildlife Federation



NFWF

ABOUT NFWF

The National Fish and Wildlife Foundation (NFWF) works with partners to foster sustainable and impactful conservation solutions so that people and nature thrive together. Chartered by Congress in 1984, NFWF has grown to become the nation's largest conservation foundation. Since its founding, NFWF has funded more than 23,900 projects that have generated a total conservation impact of more than \$12 billion.

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FRONT COVER

Florida wetlands

BACK COVER

Eastern meadowlark

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