

Naval Air Station Jacksonville

Adaptation Package #5: Adaptation for Land Management Around NOLF Whitehouse

This package includes three strategic projects that in combination improve land use practices around this mission-critical airfield. It encompasses policy recommendations that can be led by state, regional, and local authorities and agencies.



This study was prepared under contract with the Northeast Florida Regional Council with financial support from the Office of Local Defense Community Cooperation, Department of Defense.

The content herein reflects the views of the Northeast Florida Regional Council and does not necessarily reflect the views of the Office of Local Defense Community Cooperation or the Department of Defense.

How to Read this Document

Project Summary Packages provide details on recommendations, background, and context to facilitate and accelerate implementation. The summaries are presented by mission-critical priority assets in the study area. The recommendations may include physical projects, new partnerships, and modernized policies identified over the course of the project. Presented in three sections, **Background and Context, Recommendations, and Implementation Tools**, each summary package can be used to brief decision makers and to complete funding requests and/or grant applications.

The first section, **Background and Context**, situates the reader to the Military Installation Readiness Review (MIRR) project, the study area location, and the military installations. It includes the following subsections:

- **Mission of the Installation of the Package**, which reminds the reader of the installations' purpose and importance of readiness
- **Mission-Critical Priority Assets** for the installation as identified through stakeholder engagement and vulnerability assessment
- **Current Conditions** of the mission-critical asset of the package, which illustrate the issues in local context
- **MIRR Adaptation Strategy Framework**, which is aligned to the region's vision for a Resilient First Coast and is the foundation of this body of work

The second section, **Recommendations**, dives into the issues challenging the region and study area and presents recommendations in the form of investments through projects, policy modernization, and/or by forging new partnerships among diverse stakeholder groups. This section is informed by the vulnerability assessment findings, stakeholder insight on ongoing projects and priorities, and best practices research. Information on the following topics is included in this section:

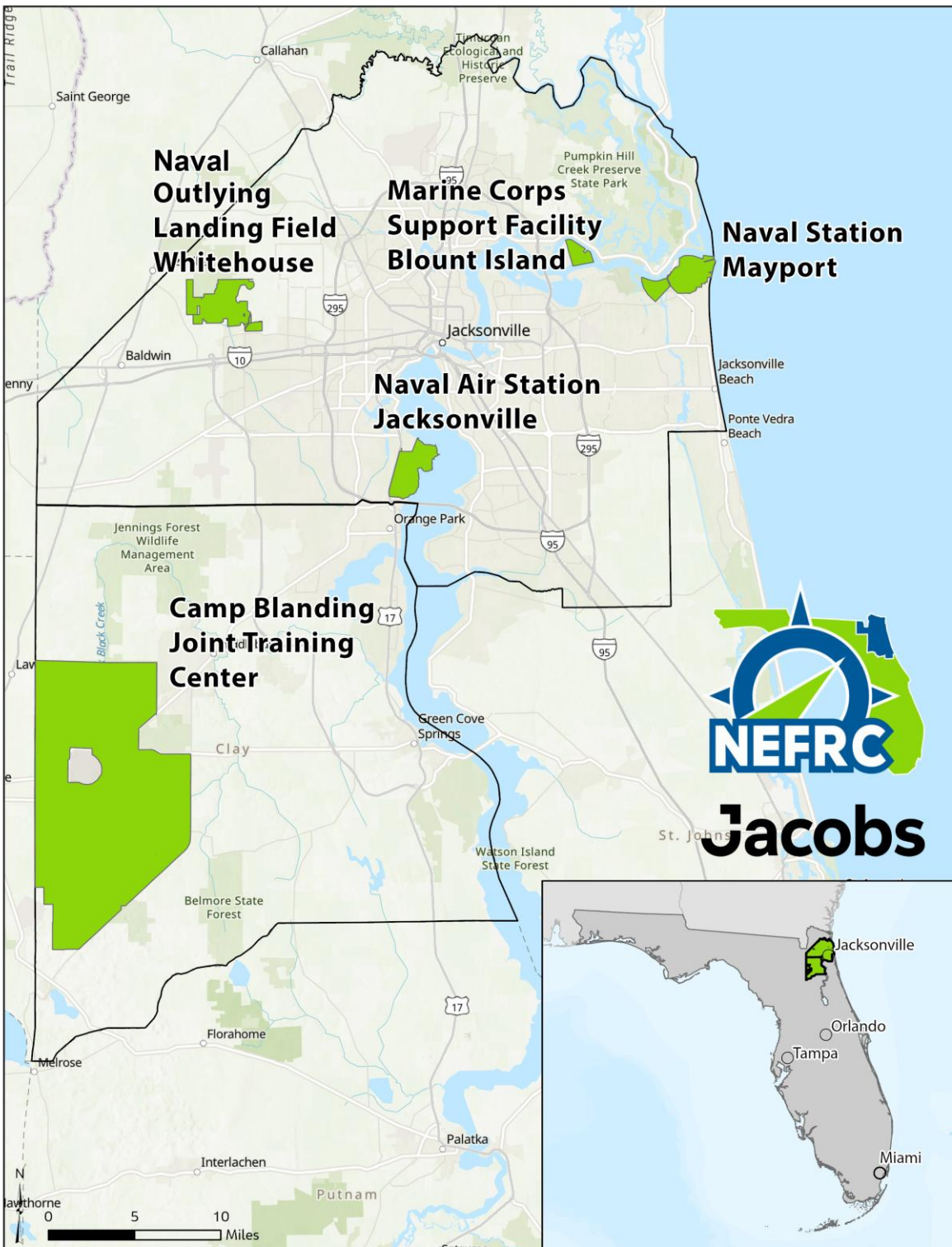
- **Shocks and Stresses** affecting the mission-critical asset
- **Project Objective**, which captures the adaptation goal for the following recommendations to support mission readiness through community resilience
- **Stakeholders and Current Efforts** highlighting successful foundational work upon which to build
- **Recommended Strategic Projects, Policies, and Partnerships**, including the owners and partners, vulnerability being addressed, co-benefits, foundational existing projects (as applicable), and timeline to comment implementation
- The **Metrics and Cost-Benefit Analysis** section, which illustrates how the recommendations were evaluated to determine appropriateness, viability, and achievement of project goals; this tool is available as new projects are identified by implementation partners

The final section, **Implementation Tools**, is provided as a resource to move from planning to action:

- **Financial Strategy Toolkit with Funding Opportunities**, which presents a matrix of opportunities and tools to finance and fund recommendations. Some recent grant opportunities are highlighted; however, given the changing conditions of federal sources and requirements, these should be viewed as initial suggestions for further review and applicability at the appropriate time.
- **References** are presented for user convenience.

Background and Context

Figure 1. Northeast Florida MIRR Study Area Map



In 2024, the Northeast Florida Regional Council (NEFRC) obtained a MIRR grant from the Department of Defense (DoD) Office of Local Defense Community Cooperation to identify and analyze the assets, hazards, and corresponding vulnerabilities and risks that affect the military installations in Duval and Clay counties. This study includes Camp Blanding Joint Training Facility, Marine Corps Support Facility Blount Island, Naval Station Mayport, and Naval Air Station (NAS) Jacksonville (Figure 1). The goal is to increase the resilience and readiness of these installations from the impacts of extreme weather events, infrastructure challenges, and other vulnerabilities, thereby promoting mission assurance. The adaptation projects are structured into comprehensive summary packages, with each focused on a specific mission-critical asset or system.

NAS Jacksonville

NAS Jacksonville covers more than 3,800 acres along the west bank of the St. Johns River in Jacksonville, Florida. It is located north of Interstate 295 (I-295) and the Buckman Bridge, east of the Ortega River and Roosevelt Boulevard, and south of downtown Jacksonville. The installation's large area provides space for military operations, training, and support activities and commands. The installation's area of responsibility also includes Naval Outlying Landing Field (NOLF) Whitehouse and the Pinecastle Range Complex (PRC), which consists of three constituent ranges in central Florida. The proximity of NAS Jacksonville to the NOLF and the PRC supports aviation training activities, while its proximity to Naval Station Mayport supports operational and training activities.

Mission

NAS Jacksonville's mission is to "provide the premier platform for generating and projecting naval power from the shore" (Commander, Navy Region Southeast, n.d.). As the largest installation in Navy Region Southeast, NAS Jacksonville is a key naval aviation hub that supports maritime patrol and reconnaissance, rotary-wing fleet support, naval aviation depot sustainment and fifth-generation capability, regional command and logistics, medical support, and aviation training, range, and airspace operations for aligned installations across the eastern United States (refer to Figure 1). These mission areas provide a basis for identifying the mission-essential functions affected by the loss of an asset or service, how quickly a disruption would affect military output, the level of service that must be maintained or restored, and whether a proposed mitigation reduces the resulting mission consequence.

The installation houses seven fixed-wing patrol (VP) squadrons consisting of P-8A Poseidon aircraft, multiple reserve-duty squadrons, and other entities, with more than 100 aircraft operating out of the installation. Patrol Squadron Thirty (VP-30) provides P-8A and MQ-4C Triton unmanned aircraft training. VP-30 is the Navy's largest aviation squadron and the only site that conducts maritime patrol fleet replacement training. Patrol and reconnaissance operations are supported by key tenants, including Patrol and Reconnaissance Wing 11. The installation also supports rotary-wing fleet operations and the broader aviation training, range, and airspace enterprise.

The Fleet Readiness Center Southeast (FRCSE) represents a major and growing national-level naval aviation sustainment mission at NAS Jacksonville. FRCSE employs approximately 5,000

civilian, military, and contract personnel and performs depot-level maintenance, repair, overhaul, modification, and technical support for aircraft, engines, and aeronautical components supporting Navy, Marine Corps, and joint aviation readiness. FRCSE is establishing significant F-35 aircraft and F135 engine maintenance capacity. Navy projections anticipate F135 production ramping through 2034 toward approximately 600 mini-modules and 120 power modules annually, representing roughly 600,000 maintenance labor hours per year at maximum production. Supporting investments include approximately 300,000 square feet of planned F135 maintenance capacity and expansion of engine-test capability. This growth increases the strategic importance of reliable electric power, transportation access, wastewater service, communications, workforce mobility, and other supporting infrastructure at NAS Jacksonville.

Logistical activities, led by NAVSUP Fleet Logistics Center Jacksonville and the Defense Logistics Agency, support Navy Region Southeast. Secondary missions include Naval Hospital Jacksonville, community and homeland defense, provision of emergency staging sites, and installation support for regional commands. Naval Hospital Jacksonville provides healthcare for military personnel and veterans throughout the region. Community and homeland defense activities are supported by U.S. Customs and Border Protection, which operates aircraft out of the installation. Both NAS Jacksonville's and NOLF Whitehouse's airfields are used as staging sites for the Federal Emergency Management Agency as part of disaster-response activities. Numerous tenants based out of the installation support regional activities, such as Naval Facilities Engineering Systems Command Southeast.

Installation Interconnections

The NAS Jacksonville linkage overlays, as shown on the webpage, illustrate the installation's role as one of Florida's most important naval aviation, command-support, and sustainment hubs. The maps show how NAS Jacksonville connects locally to Naval Station Mayport, regional Navy installations, training ranges, medical and logistics nodes, and nationally to Navy command, aviation, maintenance, communications, and supply enterprises. Together, the layers demonstrate that NAS Jacksonville is not an isolated air station, but a central operating platform that supports maritime patrol and reconnaissance, helicopter maritime strike forces, aviation maintenance, fleet logistics, medical readiness, communications, and installation support across the Southeast and beyond.

The broader strategic value of NAS Jacksonville is especially clear in its global linkages. Its maritime patrol and reconnaissance forces connect the installation to P-8A, MQ-4C, and allied training networks across U.S. and overseas operating locations; its rotary-wing squadrons support Atlantic Fleet ships and deployed naval operations; and Fleet Readiness Center Southeast provides aviation sustainment with reach across the Navy, Marine Corps, and joint force. When viewed as a combined overlay, the maps show NAS Jacksonville as a key node in national defense readiness, linking Florida's military infrastructure to fleet operations, international partnerships, homeland defense, and global maritime security.

Identification of Priority Assets for NAS Jacksonville

Priorities for the installation were based on the direct assets and local services required to support the missions. This includes the roadways required to access the installation, the lands around NAS Jacksonville and NOLF Whitehouse that protect the installations and their operations from encroachment hazards, and the utilities (electric power, water, and wastewater) that support installation operations. These assets were evaluated for exposure to shocks and stresses (Figure 2).

Primary Mission Critical asset types for conducting training and operations, and logistical and maintenance support

- Location-Specific Positioning
 - Conservation lands
 - Shorelines
 - Assets Providing Direct Support
 - Electric Production and Supply Facilities
 - Roads and Bridges
 - Railway systems
 - Cecil Airfield
 - Airspace
 - Natural gas supply systems
 - Regional fire stations

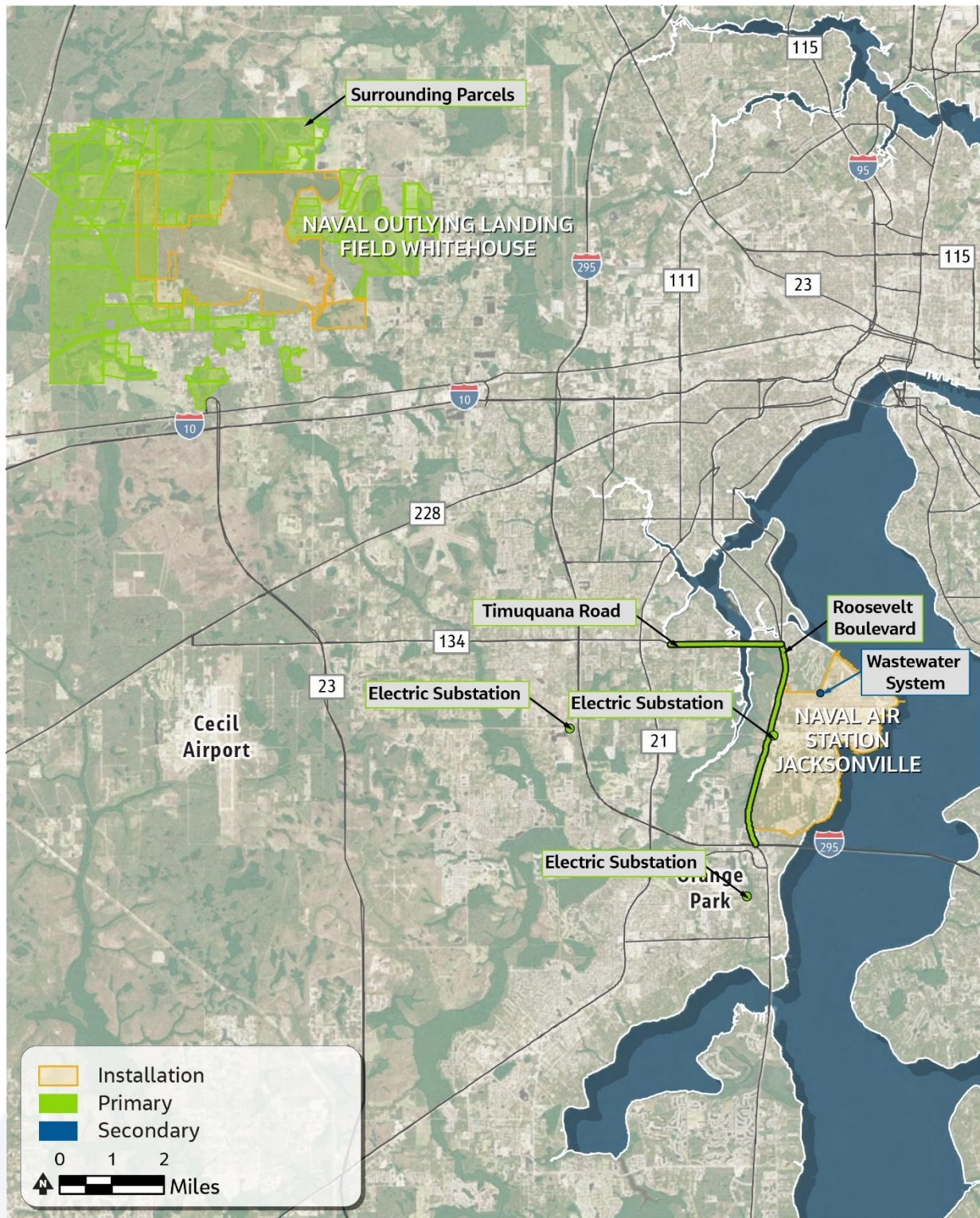
Secondary Mission Critical asset types for drone operations, Naval Hospital, support regional commands, community and homeland defense

- Assets Providing Direct Support
 - Water systems
 - Wastewater systems
 - Communications systems
 - Regional hospitals

Mission Supportive asset types for the livelihood and health of installation personnel, indirect support to primary and secondary missions

- Personnel Support
 - Affordable Housing
 - Childcare Facilities
- Assets Providing Indirect Support
 - Solid and Hazardous Waste Facilities
 - Stormwater systems

Figure 2. Primary and Secondary Mission Critical Assets for NAS Jacksonville



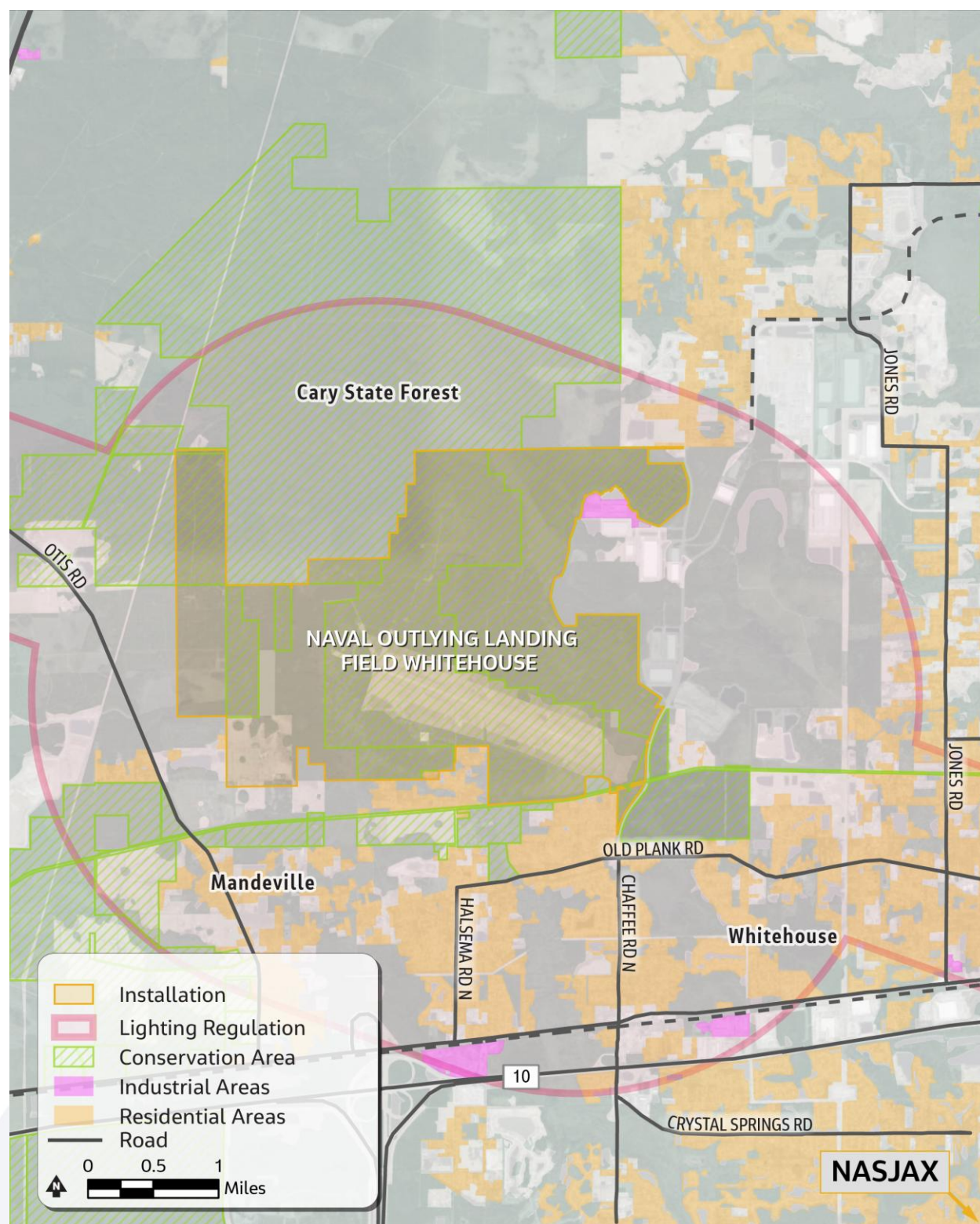
This package addresses the specific shocks and stresses of the mission-critical undeveloped lands surrounding NOLF Whitehouse.

Current Conditions That Affect Surrounding Undeveloped Lands

The undeveloped lands surrounding NOLF Whitehouse form a connected landscape of pine flatwoods, mixed hardwood forests, and forested wetlands that support biodiversity and maintain ecological continuity across western Duval and into Baker County while stabilizing hydrologic systems that feed the St. Marys and Nassau River basins (Figure 1). Historically, these areas were dominated by open pine flatwoods maintained by frequent low-intensity fire, with sparse understories and low, discontinuous fuel loads; however, timber harvesting and fire suppression from the late 19th through mid-20th century shifted the landscape toward denser stands, increased hardwood and shrub midstory, and higher fuel accumulation, requiring ongoing prescribed fire and vegetation management to reduce wildfire risk and restore habitat quality. Today, these lands absorb stormwater, support groundwater recharge, and filter runoff, while also functioning as critical buffers that mitigate aviation noise, improve air quality, reduce localized heat, and limit wildfire spread through active management. Although the area faces increasing development pressure from Jacksonville's expansion along US 90, I-10, and Chaffee Road, large portions remain undeveloped due to Navy compatibility buffers, timber ownership, conservation priorities, and wetland and floodplain constraints. Ownership spans the U.S. Navy, private timber landowners, and locally regulated lands under the City of Jacksonville, coordinated through compatibility programs and partnerships.

These conditions position the area as a strong candidate for REPI Sentinel Landscape designation, representing a high-value working landscape where military readiness, natural resource conservation, and economic use intersect. The lands provide essential flight safety and noise buffers, maintain watershed and aquifer health, and function as natural flood storage and wildfire mitigation zones, all while facing increasing risk of incompatible development. A Sentinel Landscape designation would enable targeted REPI investment, conservation easements, and coordinated land stewardship, sustaining working forests, avoiding costly infrastructure expansion, reducing long-term risks from flooding and wildfire, and delivering greater long-term economic value through avoided costs and preserved ecosystem services than conversion to development.

Figure 3. Current Conditions at NOLF Whitehouse



MIRR Adaptation Strategy Framework

The NEFRC envisions a resilient, prosperous, and inclusive region where communities work collaboratively across jurisdictional boundaries to strengthen economic vitality, safeguard natural and built systems, and enhance quality of life for current and future generations (Figure 4). In 2022, the Council launched **Resilient First Coast** to collaboratively address climate-related challenges across its seven member counties—Baker, Clay, Duval, Flagler, Nassau, Putnam, and St. Johns. This regional effort received strong support to develop a plan focused on addressing climate impacts and related threats to the region. Guided by this vision, the Regional Resilience Action Plan (RRAP) was published in 2025, providing a unifying framework that translates shared regional goals into coordinated action (NEFRC 2025).

The RRAP establishes a durable foundation for implementing this vision—enabling member governments and partners to prioritize investments, leverage funding opportunities, and advance solutions that build long-term resilience to environmental, economic, and social challenges across Northeast Florida. As such, the MIRR adaptation projects are built upon this framework to ensure alignment and promote successful implementation of the recommended strategies (Figure 5).

RRAP Goals and Objectives

Figure 4. Regional Resilience Action Plan Vision (NEFRC 2025)



Figure 5. Regional Structure for Resilience as Framework for the MIRR

Create a Durable and Adaptive Built Environment

- Minimize magnitude and cost of damage to infrastructure
- Improve development practices and policies
- Decrease utility service disruptions and recovery time
- Improve transportation and mobility

Develop a Thriving Regional Economy

- Improve education and employment opportunities
- Increase housing stability
- Enhance tourism and historic preservation
- Increase smart growth and development

Ensure a Vibrant Quality of Life

- Improve public health and wellness
- Enhance supply of food, energy, and other critical resources
- Increase public participation and engagement
- Minimize disparity

Promote a Healthy Natural Environment

- Reduce heat stress
- Increase biodiversity and ecological services
- Maximize quality of soil, air, and water
- Minimize erosion, flooding, and storm impacts

Connecting this Built Environment Asset to the Regional Economy, Natural Environment, and a Vibrant Quality of Life

This framework provides the structure for how assets were organized and evaluated. This resilience project is centered on assets in the Built Environment pillar, so the acknowledgments below indicate how it is connected to the Regional Economy, Natural Environment, and Quality of Life.

Figure 6. Connection of This Asset to the Community





Recommendations



Documenting Shocks and Stresses with a Vulnerability Assessment

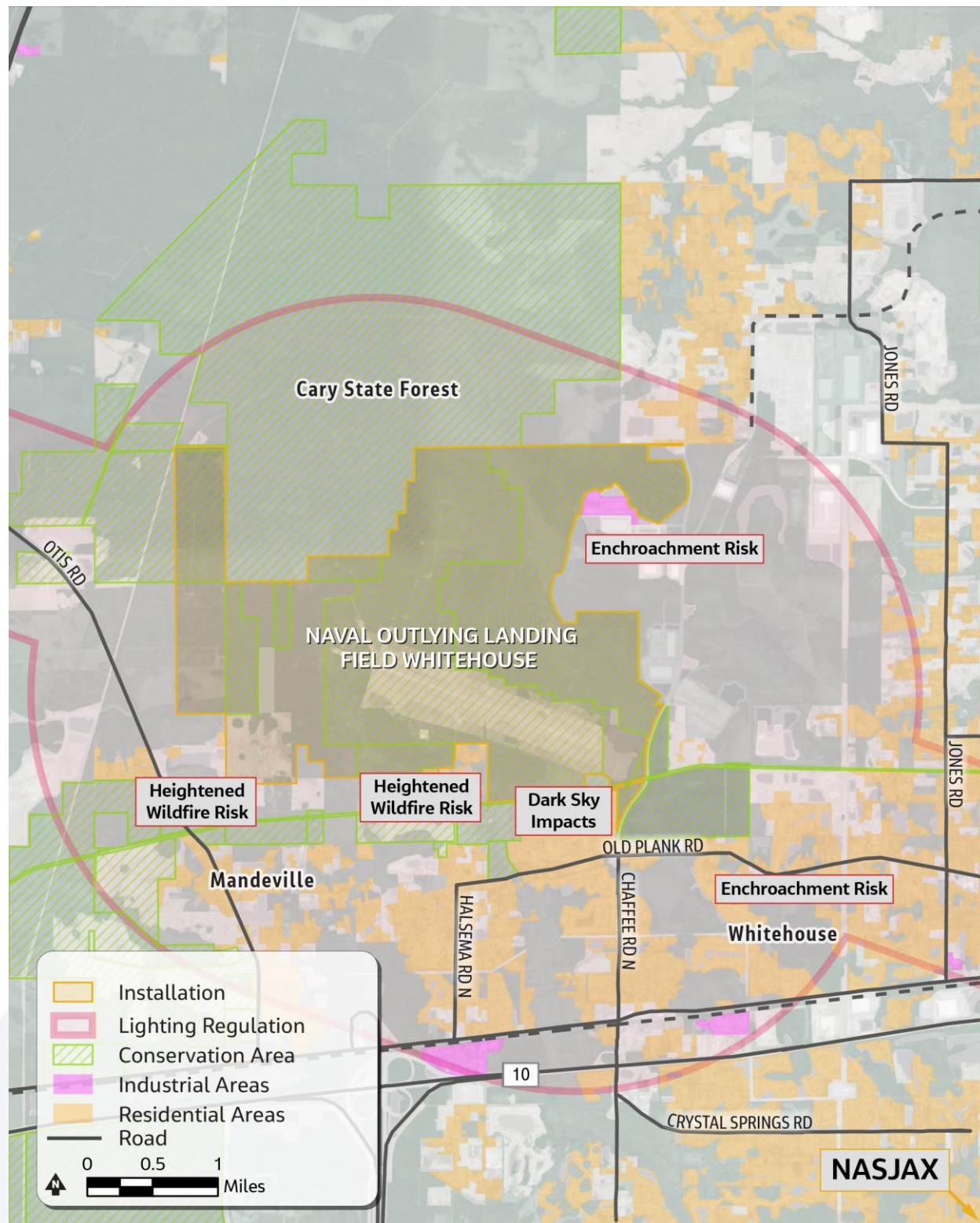
Shocks and stresses to the mission-critical assets supporting NAS Jacksonville include rainfall-induced flooding, coastal flooding from sea level rise (SLR), transportation congestion, lack of redundancy in transportation and utility system connection points, regulatory pressures, encroachment potential from development pressure, and light pollution in areas where dark skies are necessary.

- 1. Encroachment risks stem from development interest within the accidental potential zones of NAS Jacksonville and around NOLF Whitehouse.**
2. Rainfall-induced flooding and SLR can impact travel on Timuquana Road.
3. Transportation congestion (traffic) is a significant issue on Roosevelt Boulevard, the Buckman Bridge, and the I-295 Interchange, causing major traffic and delays getting on and off-base. Roosevelt Boulevard is the primary access road for the installation.
4. Installation electric and wastewater systems lack redundancy and are aging past their useable lifespan.
- 5. Despite existing regulations, light pollution threatens nighttime training operations at NOLF Whitehouse that require dark skies. Encroachment from development pressures and wildfire risk are high in the surrounding undeveloped lands.**

This project package addresses light pollution, encroachment, and wildfire risks at NOLF Whitehouse (item 5) to improve operational conditions.

Project Need: Manage Light Pollution, and Mitigate Encroachment and Wildfire Risks

Figure 7. Risk to Mission Map



Vulnerabilities Creating Risk to Mission for this Asset

NOLF Whitehouse is located northwest of NAS Jacksonville and serves as a critical training area requiring dark sky conditions for night flight operations. The City of Jacksonville supports this requirement through a Dark Sky Ordinance that establishes lighting standards for new development, helping to minimize light pollution and preserve nighttime visibility essential for training (Figure 7).

The land surrounding NOLF Whitehouse is mission-critical, as maintaining dark sky conditions is essential for effective pilot training. In addition, the surrounding undeveloped areas provide a natural buffer that reduces the risk of incompatible land uses and encroachment that could interfere with operations. These lands also deliver important environmental benefits, including flood mitigation, aquifer recharge, wildlife habitat, carbon sequestration, and improved air quality, while supporting opportunities for passive recreation.

Despite these benefits, the area surrounding NOLF Whitehouse faces increasing pressure from development and wildfire risk. Growth along the I-10 corridor to the south has steadily expanded northward, with workforce and affordable housing gradually encroaching toward the outlying field. This trend threatens to alter the rural character of the area with more intense development adjacent to the installation. Additionally, undeveloped properties outside of the Wildlife Management Area are vulnerable to wildfire, further increasing risks to both natural systems and mission operations. Given these factors, improving land use practices around this mission-critical airfield is an urgent priority for NAS Jacksonville (Table 1).

Table 1. NAS Jacksonville Electrical Substation Asset Summary

Asset Name	Owner	Location	Mission Criticality	Relevant Shocks & Stresses	Level of Urgency
NOLF Whitehouse	DoD	NOLF Whitehouse	Primary	Light Pollution, Encroachment, Wildfire	Immediate

Stakeholders and Current Efforts Identified

Stakeholders are actively involved in managing encroachment and wildfire risks surrounding NOLF Whitehouse. These efforts integrate land use policy, hazard mitigation planning, and land management practices to preserve mission-critical training conditions while protecting surrounding communities and natural resources. Collaboration across these entities ensures that development remains compatible with installation operations and that wildfire risks are proactively addressed through planning, regulation, and on-the-ground management. Key stakeholders include:

- NAS Jacksonville/NOLF Whitehouse
- Department of Defense (DoD)
- Florida Forest Service
- City of Jacksonville
- Cary Wildlife Management Area
- North Florida Land Trust

A coordinated set of regional and local initiatives is underway to manage wildfire risk and limit encroachment near NOLF Whitehouse. At the regional level, Duval County's Local Mitigation Strategy provides a framework for identifying wildfire hazards and guiding mitigation actions across the county, supporting resilience planning and interagency coordination. At the same time, the City of Jacksonville's Dark Sky Ordinance helps prevent incompatible development by requiring dark-sky-friendly lighting for new projects, preserving the low-light conditions necessary for aviation training and reinforcing compatible land use patterns around the installation.

Land management and planning efforts are further supporting wildfire resilience. Controlled burns within the Cary Wildlife Management Area are ongoing and serve to reduce hazardous fuel loads while maintaining ecosystem health, lowering the risk of severe wildfire in surrounding areas. In addition, the City of Jacksonville is developing a Community Wildfire Protection Plan, which will assess wildfire risks, identify vulnerable areas, and recommend targeted mitigation strategies.

Table 2 gives details on projects and efforts that are currently ongoing or have been identified as a need within the region as it relates to improving land use practices around NOLF Whitehouse for NAS Jacksonville.

Table 2. Current Projects and Efforts Related to NAS Jacksonville's NOLF Whitehouse

Existing Project	Entity	Location	Purpose	Timeline
Duval County Local Mitigation Strategy	Duval County	Duval County	Regional framework for wildfire mitigation	Complete
Dark Sky Ordinance	City of Jacksonville	NOLF Whitehouse	Requirements for dark-sky friendly lighting for new development	Complete
Controlled Burns	Cary Wildlife Management Area	Cary Wildlife Management Area	Manage fuel on state-owned lands	Ongoing
Community Wildfire Protection Plan	City of Jacksonville	City-wide	Assess wildfire risk and determine mitigation strategies	Plan in Development

Review of Current Strategic Partnerships and Policies

Efforts to improve land use compatibility around NAS Jacksonville's Outlying Landing Field (NOLF) Whitehouse are supported by a strong, formalized partnership among the U.S. Department of Defense, the City of Jacksonville, and the North Florida Land Trust. Established through a 2022 Encroachment Protection Agreement, this multi-party initiative has protected approximately 1,700 acres within Accident Potential Zones (APZs) 1 and 2 through the acquisition of development rights. Funded primarily through the Readiness and Environmental Protection Integration (REPI) program, with additional state support, this agreement represents a sustained and coordinated approach to reducing encroachment risk and preserving compatible land uses near the installation.

The program is widely regarded as effective, with the City of Jacksonville taking a leading coordination role despite contributing a minority share of funding. This reflects strong institutional commitment, further reinforced by the city's cabinet-level military affairs office—an uncommon feature nationally that enhances alignment between local planning and military readiness priorities. Additionally, NAS Jacksonville's representation on the city's planning commission provides a direct avenue for integrating installation concerns into local land use decision-making, helping to ensure that growth patterns remain compatible with aviation operations at NOLF Whitehouse.

Looking forward, the program's formal structure, stable funding, and institutional support position it well to address future encroachment pressures. However, potential changes in state legislation such as proposed bills that could preempt local land use authority introduce some uncertainty. Should these measures limit local control, the effectiveness of existing encroachment protection efforts could be diminished despite their current success.

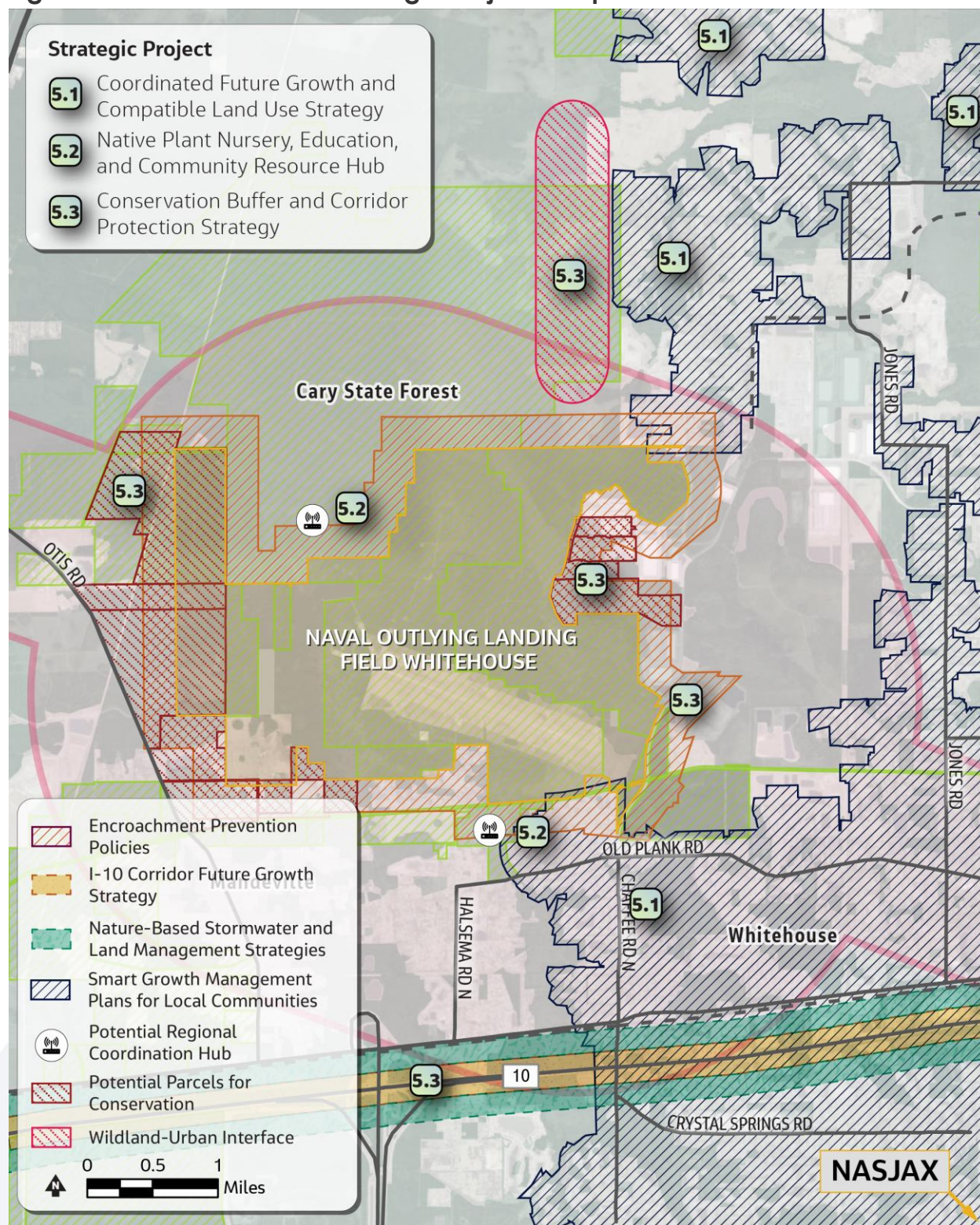
Overall, the existing partnership framework is mature, well-coordinated, and delivering measurable results. As such, additional formalization is unlikely to yield significant marginal benefits. Instead, continued implementation of the current program, coupled with active monitoring of state policy developments, will be critical to sustaining long-term land use compatibility around NOLF Whitehouse.

Table 3. NAS Jacksonville NOLF Whitehouse Land Management Policy Recommendations

Strategy	Issue(s)	Relevant Parties	Description	Current Policies	Policy Change
NW-1: Consider Updating and Expanding Duval County Zoning	Encroachment Dark Sky/Light Pollution Incompatible Use	City of Jacksonville NAS Jax NOLF Whitehouse	Comprehensively update Duval County zoning near NOLF Whitehouse in coordination with NASJAX.	Current county zoning policies restrict density and uses in coordination with U.S. Navy OPNAV Instruction 11010.36.B relative to county by-right development standards from 2007.	Strengthen zoning restrictions to reflect current and anticipated encroachment risk from the I-10 corridor; add explicit use restrictions tied to the modern DoD encroachment definition (density caps, lighting standards, incompatible uses, required disclosure); and require automatic NASJAX review and comment for rezonings to higher-intensity uses before Planning Commission action.
NW-2: Continue Advancing Sentinel Landscape Designation and Building a Coordinated Priority Parcel Pipeline	Encroachment Conservation Dark Sky	Installations State of Florida City of Jacksonville NFLT Sentinel Landscape Program	Advance a Sentinel Landscape designation for the NOLF Whitehouse buffer and build a coordinated priority parcel pipeline.	Efforts to advance a Sentinel Landscape designation for the NOLF Whitehouse buffer are underway; the 2022 Encroachment Protection Agreement among Jacksonville, DoD, and NFLT and the City's dark-sky lighting requirements aim to limit encroachment.	Increase support for a formal Sentinel Landscape designation; use O2O Wildlife Corridor mapping to justify a REPI Sentinel Landscape designation; coordinate local, state, nonprofit, and federal resources so local/state funds can match REPI; prioritize parcels that protect dark-sky conditions, prevent incompatible residential growth, preserve operational flexibility, and maintain ecological corridor value; and report annually on progress.
NW-3: Establish a Transfer of Development Rights (TDR) Program for the NOLF Whitehouse Buffer Area	Encroachment Dark Sky Incompatible Use	City of Jacksonville NAS Jax NOLF Whitehouse	Explore a TDR program tied to the NOLF Whitehouse buffer area as a direct complement to REPI.	For parcels where fee-simple acquisition or easements are not feasible, TDR preserves land in low-intensity use without public purchase.	Establish sending zones (parcels within the Military Influence Zone, Lighting Regulation Zone, APZs, high-noise areas, airport height/hazard areas, and O2O/REPI-priority buffer lands where development would conflict with operations) and receiving zones (designated I-10 corridor growth nodes with existing or planned infrastructure and service capacity where added density would not increase encroachment risk).
NW-4: Strengthen NOLF Whitehouse-Specific Disclosure Requirements	Encroachment Dark Sky Disclosure	City of Jacksonville NAS Jax NOLF Whitehouse	Strengthen existing Duval County disclosure requirements for transactions and approvals within the broader NOLF Whitehouse buffer area.	Duval County has existing disclosure requirements (within Military and Civilian Influence Zones), but they do not fully capture NOLF Whitehouse-specific operational impacts, including nighttime aviation operations and dark-sky needs.	Require any sale, lease, rezoning, subdivision, or development approval within the buffer to include formal notice of proximity to NASJAX/NOLF Whitehouse aviation operations (including nighttime operations), dark-sky requirements and lighting restrictions, and noise, overflight, and safety considerations - establishing informed consent without restricting use.
NW-5: Develop a Smart Growth Strategy for the I-10 Corridor to Direct Growth Away from NOLF Whitehouse	Encroachment Growth/Sprawl Dark Sky	City of Jacksonville NAS Jax NOLF Whitehouse NEFRC	Proactively plan for I-10 corridor growth to route density away from the installation rather than reacting parcel by parcel.	Jacksonville's expansion along US 90, I-10, and Chaffee Road promotes development of lands that currently help preserve the low-light, low-intensity conditions NOLF Whitehouse operations require.	Promote growth nodes along I-10 with sufficient water/sewer capacity and incentivize compact development; establish conservation subdivision or clustering standards where development is permitted; apply enhanced lighting standards to prevent cumulative light pollution that could degrade FCLP operations; and coordinate housing, transportation, and utility planning to avoid long-term infrastructure dependencies in areas where operational flexibility and dark-sky conditions must be preserved.

Adaptable Built Infrastructure Projects

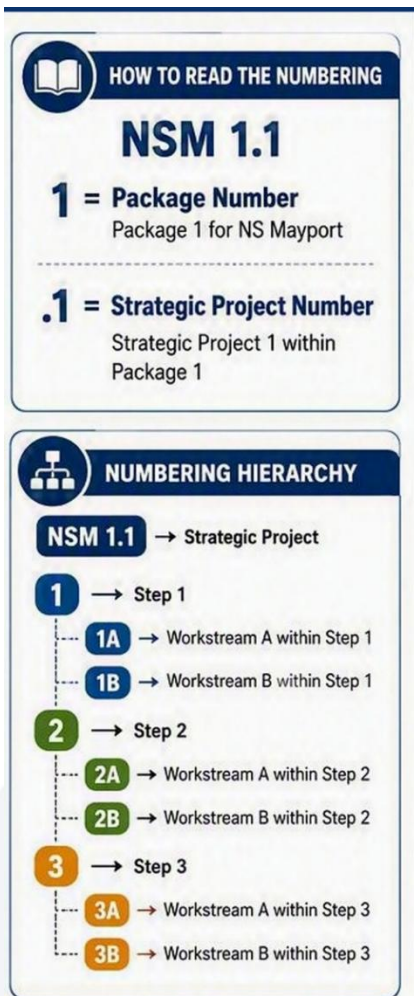
Figure 8. NOLF Whitehouse Strategic Projects Map



Strategies included in the adaptation plan have been organized by short, mid, and long-term timeframes for implementation. The strategy numbers in the maps correspond to the details provided in their respective sections, which outline a comprehensive approach to strengthening energy resilience and support long-term mission continuity. These strategies focus on enhancing existing system performance, reducing vulnerabilities, and advancing modern, flexible infrastructure solutions that can adapt to future demands and environmental conditions. Approximate, order-of-magnitude cost estimates will be provided in 2026 dollars to the extent possible, with up to 50% contingency unless otherwise noted.

Potential Project Leads and Partners are mentioned by organization in the following narratives. The intent is to identify the correct stakeholders that have agency, authority, and interest in the work that is being proposed. Being listed as a lead or partner provides the opportunity to collaborate, advise, and be involved in the adaptation efforts, but does not mandate participation. Funding and financing of projects are not indicated as the responsibility of the project lead or partners, and the monetary tools for obtaining such are in the Implementation section of this package.

Figure 9. Strategic Project Framework



The strategic projects are organized by installation, package, project, step, and actions. The 2-3 letter code indicates the installation. The first number indicates which package this project is in. The second number indicates the project number in the package.

Within each project, the timeline of activities is indicated through the steps (Step 1, Short-term, etc.), and the order of activities is narrated in the sub-steps (1A, 1B, etc.). Through this organization, each strategic project illustrates its project number, timeline, and actions in the narrative.

Strategic Project NSJ 5.1. Coordinated Future Growth and Compatible Land Use Strategy for NOLF Whitehouse and the I-10 Corridor

This project establishes a coordinated strategy to guide future growth, compatible land use, and long-term landscape conservation in the communities and undeveloped lands surrounding Naval Outlying Landing Field (NOLF) Whitehouse. Through a multijurisdictional approach, the project aligns military compatibility, ecological conservation, transportation-oriented growth, and community development by directing growth away from sensitive lands while strengthening the role of an I-10 corridor as a strategic economic and mobility spine.

The land surrounding NOLF Whitehouse serves as critical buffer areas that support military readiness, protect operational safety, and maintain regional environmental functions. At the same time, increasing development pressure along Interstate 10 and adjacent growth corridors presents both opportunity and risk creating potential for incompatible land uses, encroachment, and loss of rural and ecological character if not properly managed. This project guides proactive land use planning, conservation strategies, and housing development patterns that preserve working lands, protect natural resources, and support resilient and inclusive community growth, including affordable housing options for military personnel.

Current Stakeholder Projects

- Duval County Local Mitigation Strategy
- Dark Sky Ordinance
- Controlled Burns
- Community Wildfire Protection Plan

Potential Project Leads and Partners

- NEFRC/ RFC Collaborative Partners
- City of Jacksonville
- Baker County
- Florida Wildlife Corridor Foundation
- North Florida Land Trust (NFLT)
- Naval Air Station Jacksonville / NOLF Whitehouse
- Florida Department of Environmental Protection (FDEP) Division of State Lands
- Florida Forever Program
- Florida Natural Areas Inventory (FNAI)
- St. Johns River Water Management District (SJRWMD)
- Jacksonville Transportation Authority (JTA)
- Cary Wildlife Management Area
- Private landowners, timber companies, developers, and housing partners

Estimated Cost

To be determined by owner

Step 1: Partnership Development and Regional Coordination Framework (Short-term)

1A. NOLF Whitehouse Community Partnership

- NEFRC / RFC Collaborative Partners can facilitate creation of a NOLF Whitehouse Community Partnership to coordinate future growth, military compatibility, infrastructure investment, and housing strategies. This forum can bring together local governments, military representatives, housing authorities, transportation agencies, conservation organizations, and private stakeholders to support coordinated decision-making along the I-10 corridor. Participation in the Partnership allows for influence, collaboration, and shared resources.

1B. Working Lands, Housing, and Development Partnership Expansion

The NOLF Whitehouse Community Partnership can expand partnerships with private landowners, timber companies, developers, and housing organizations to balance conservation with growth. This includes collaboration to promote conservation easements and sustainable land management, support strategically located development nodes along I-10, and advance public-private partnerships to deliver affordable and workforce housing for military personnel and their families.

1C. Strengthen Dark Sky Ordinance Through Whitehouse Lighting Code Updates

- With direction from NASJAX, the City of Jacksonville can update the existing Whitehouse Lighting Zoning Code to align with Navy guidance and Air Installations Compatible Use Zones (AICUZ) principles for NOLF Whitehouse. This effort will incorporate NAS Jacksonville–recommended lighting standards to reduce glare hazards and visual interference near airfield operations and flight paths, establish lighting controls within Accident Potential Zones and approach and departure corridors, and require fully shielded, downward-directed luminaires to minimize skyglow and preserve pilot night vision adaptation.
- With direction from NASJAX, the update will also establish illumination limits, including lumen caps and foot-candle thresholds, restrict high-intensity or horizontally projected lighting, and prohibit flashing or strobe lighting that could be confused with navigational or airfield systems. Additional measures will include defining lighting curfews and adaptive controls such as dimming and motion sensors, refining overlay zoning boundaries to align with AICUZ compatibility areas, and integrating lighting compliance into site plan review and development permitting processes.

Step 2: Coordinated Future Growth Policy, Conservation Strategy, and Implementation (Short-term)

2A. Encroachment Prevention and Compatible Land Use Policies

- The NOLF Whitehouse Community Partnership can review Chapter 656 (Zoning Code), Part 10 of the City of Jacksonville Code of Ordinances that governs regulations related to Airports and Lands Adjacent Thereto, for coordinated future growth policies, zoning overlays, and buffering strategies that direct development away from NOLF Whitehouse operational areas, limit incompatible uses such as noise- and light-sensitive development, maintain safety clear zones, protect mission readiness, and incorporate AICUZ-compatible lighting standards to

minimize glare hazards and nighttime operational conflicts. Upon review, if expansion or amendment is desired by NASJAX, this project provides the opportunity for taking that step.

2B. I-10 Corridor Coordinated Future Growth Strategy and Design Guidelines

- The NOLF Whitehouse Community Partnership can develop a coordinated future growth framework for the I-10 corridor that promotes clustered, mixed-use development at key interchanges, supports transit and freight-compatible land uses, and incorporates conservation subdivisions, transfer of development rights, and strategic buffering to maintain compatibility with military operations. The framework will also include efficient infrastructure investment aligned with growth nodes and establish corridor-wide lighting design standards consistent with AICUZ guidance, ensuring dark-sky-friendly development and coordinated illumination controls.

2C. Affordable and Workforce Housing Strategy for Military Personnel

- The NOLF Whitehouse Community Partnership can identify and prioritize opportunities for affordable housing development that supports military personnel stationed at NAS Jacksonville and NOLF Whitehouse. This includes identifying suitable sites near I-10 with strong regional access and minimal operational conflicts, encouraging mixed-income housing developments, leveraging state and federal housing programs. Coordinate housing and growth strategy with REPI-compatible land-use planning so that additional residential density is directed toward locations that do not compromise Whitehouse operational utility, while aligning supply with projected military and workforce demand.

2D. Nature-based Stormwater and Land Management Strategies

- The project can integrate nature-based solutions that protect wetlands and drainage systems along the I-10 corridor, reduce flood risk and improve water quality, maintain natural buffers that reinforce military compatibility, and incorporate low-impact, wildlife-friendly lighting practices that minimize ecological disruption.

2E. Habitat Connectivity and Landscape Protection

- The NOLF Whitehouse Community Partnership can support protection of key habitat corridors and open space networks in western Duval and Baker counties, ensuring connectivity between conservation lands while maintaining compatible land uses around NOLF Whitehouse.

2F. Advanced Working Lands and Conservation Strategies

- The NOLF Whitehouse Community Partnership can advance working lands and conservation strategies that align economic viability with long-term landscape protection, including expanding conservation easements and acquisitions, maintaining timber and agricultural lands as productive landscapes, promoting sustainable forestry practices, supporting diversified landowner revenue streams, and using data from FNAI and SJRWMD to prioritize high-value lands for conservation and compatibility.

2G. Coordinated Future Growth Management Plans for Local Communities

- NEFRC / RFC Collaborative Partners, in coordination with the City of Jacksonville, Baker County, and local governments, can develop coordinated future growth management plans that identify priority growth areas along I-10, define AICUZ compatibility zones and

conservation priorities, align infrastructure and housing investments with coordinated growth principles, incorporate tools such as clustered development and conservation design, integrate light pollution mitigation and AICUZ lighting standards into land development regulations and capital planning, and ensure that future development supports both military readiness and regional housing needs.

Strategic Project NSJ 5.2. Northeast Florida Center for Natural Lands: Native Plant Nursery, Education, and Community Resource Hub

This project is also listed in Camp Blanding JTC Encroachment and Wildfire Mitigation Through Land Management.

This project establishes the Northeast Florida Center for Natural Lands (the “Center”), a regional native plant nursery, education and workforce development center, and community resource hub serving Camp Blanding JTC, NOLF Whitehouse, and the broader O2O Corridor across the Central Ridge and Black Creek watershed systems. The Center can support ecological restoration, wildfire resilience, and community engagement through an integrated approach that combines plant production, applied land management, education, workforce training, and recruitment for land management and wildfire professionals.

The lands surrounding Camp Blanding and across the O2O Corridor function as critical natural infrastructure, supporting groundwater recharge, water quality protection, wildfire mitigation, and habitat connectivity. These undeveloped lands also serve as mission-critical buffers that protect military operations while delivering essential benefits to surrounding communities. However, many residents, landowners, and potential workforce recruits are not fully aware of the role these lands play or the career pathways associated with their management. This project can address that gap by creating a highly visible, accessible resource that connects land stewardship, public education, workforce recruitment, and defense community resilience.

The Center can serve as a living demonstration of partnership, celebrating and operationalizing the collaboration between military installations, conservation organizations, wildfire professionals, scientists, and local communities. It can also function as a front door for recruitment, introducing students, residents, and landowners to careers in wildfire management, forestry, conservation, and environmental science. By bringing these sectors together in one location, the project can translate technical practices into practical knowledge while building the future workforce needed to sustain these systems. This integrated approach directly supports OLDCC objectives by reinforcing compatible land use, community resilience, and long-term defense readiness.

Current Stakeholder Projects

- N/A

Potential Project Leads and Partners

- NEFRC/RFC Collaborative Partners
- Camp Blanding JTC
- Naval Outlying Field (NOLF) Whitehouse / NAS Jacksonville (NASJAX)

- St. Johns River Water Management District (SJRWMD)
- North Florida Land Trust (NFLT)
- Florida Forest Service
- Florida Fish and Wildlife Conservation Commission
- Tall Timbers Research Station
- Pinecastle Range Complex Wildfire Firefighters
- Local governments, school districts, and academic institutions
- Private landowners and community organizations
- Opportunities to engage Tribal partners, including the Seminole Tribe of Florida

Estimated Cost

\$270,000

Step 1: Partnership Development and Center Establishment (Short-term)

1A. Facility Development and Regional Coordination

- The NOLF Whitehouse Community Partnership can establish a centrally accessible facility that serves as a native plant nursery, education center, and regional coordination hub, strategically located to support Camp Blanding, NOLF Whitehouse, and surrounding communities within the O2O Corridor and Black Creek watershed.

1B. Multi-agency Partnership and Program Development

- NEFRC / RFC Collaborative Partners can formalize partnerships across military, conservation, wildfire, academic, and Tribal sectors to develop integrated programming. This effort can highlight and celebrate the collaboration between these groups, creating a unified platform that demonstrates how coordinated land management supports both ecological systems and mission readiness.

1C. Workforce Development and Recruitment Partnerships

- The Center can establish workforce development pathways and serve as a regional recruitment hub in collaboration with wildfire professionals, conservation organizations, and military partners. Programs can connect participants directly to career opportunities with entities such as the Pinecastle Range Complex Wildfire Firefighters, Florida Forest Service, conservation organizations, and land management agencies.

Step 2: Nursery Operations, Education Programming, and Community Implementation (Short-term)

2A. Native Plant Nursery and Restoration Supply

The Center can propagate and sell native grasses, understory plants, shrubs, and tree species typical of pine flatwoods, longleaf pine, and mixed forest systems. This provides a trusted, local source of plant material for restoration, landscaping, and stormwater management while reinforcing the ecological value of native systems.

2B. Integrated Education, Demonstration, and Outreach Program

- The Center can provide a comprehensive, hands-on education program designed to connect land stewardship, wildfire management, and water resource protection while helping the public understand why undeveloped lands are essential to regional resilience.
- Education and training can be delivered through coordinated partnerships, including the following:
 - NFLT, FDEP Division of State Lands, and local practitioners
 - › Native plant installation and habitat restoration
 - SJRWMD
 - › Vegetation's role in water quality, stormwater filtration, and aquifer recharge
 - Tall Timbers Research Station, Pinecastle Range Complex wildfire firefighters, and Florida Forest Service
 - › Prescribed fire, defensible space, fuel reduction, and longleaf pine restoration
 - University and extension partners
 - › Sustainable forestry, wildlife habitat, and land stewardship
- The Center can also incorporate traditional ecological knowledge through engagement with Tribal partners, including opportunities to collaborate with the Seminole Tribe of Florida, connecting modern practices with long-standing stewardship traditions.
- Through demonstration areas and participation, the Center can clearly communicate that undeveloped lands are active, functioning systems that protect water, reduce wildfire risk, and sustain both communities and military operations.
- The program can also serve as a recruitment pipeline, introducing participants to careers in wildfire management, forestry, conservation, and environmental science through direct interaction with professionals and training programs.

2C. Public Education Program on Land Conservation and Water Resource Management

- The Center can establish a focused education program explaining how lands surrounding Camp Blanding protect water quality, groundwater recharge, and flood mitigation within the Kingsley Lake and Black Creek watersheds.
- Through workshops, schools, signage, and digital outreach, the program can build public understanding of how conservation lands, working landscapes, and military buffers function as natural infrastructure systems supporting regional resilience.

2D. Integrated Wildfire and Land Stewardship Demonstration

- In partnership with Tall Timbers, the Pinecastle Range Complex Wildfire Firefighters, and the Florida Forest Service, the Center can host live demonstrations of prescribed fire, fuel management, and defensible space.

- These activities can serve both as education and recruitment exposure, allowing participants to engage directly with wildfire professionals and understand the role of fire in sustaining resilient landscapes.

Key Outcomes

- Increased availability of native plant materials for restoration and community use
- Expanded workforce development and direct recruitment pathways into wildfire and land management careers
- Improved public understanding of why undeveloped lands are critical to water, wildfire resilience, and military compatibility
- Strengthened partnerships across military, conservation, wildfire, and community sectors
- Integration of scientific, operational, and traditional ecological knowledge
- Reinforcement of REPI-aligned goals for compatible land use and long-term stewardship

Summary

This project creates a highly visible, community-facing hub that celebrates and strengthens the partnership between military installations, conservation organizations, and wildfire professionals. By combining native plant production, applied education, and workforce recruitment, the Center can demonstrate how undeveloped lands function as essential infrastructure while building the knowledge, capacity, and workforce needed to sustain these systems into the future.

Strategic Project NSJ 5.3. Conservation Buffer and Corridor Protection Strategy for NOLF Whitehouse

This project establishes a targeted strategy to secure, formalize, and actively manage undeveloped lands immediately surrounding NOLF Whitehouse to maintain mission compatibility, reduce wildfire exposure, and preserve regional ecological connectivity. By focusing on conservation easements, land protection, and corridor integration, the project ensures that land outside the installation boundary function not only as protective buffers but also as actively managed, mission-supporting landscapes. The lands adjacent to NOLF Whitehouse form a connected system that supports habitat continuity, groundwater recharge, and wildfire risk reduction.

However, increasing development pressure within the greater Jacksonville region threatens to fragment these areas and introduce incompatible land uses. This project addresses these risks by coupling long-term land protection with a comprehensive management framework designed to sustain buffer functionality over time.

A central component of this effort is alignment with and expansion of the City of Jacksonville's Community Wildfire Protection Plan (CWPP), ensuring that buffer management contributes directly to regional wildfire preparedness, coordinated response, and community resilience while supporting Department of Defense readiness objectives.

Current Stakeholder Projects

- Duval County Local Mitigation Strategy
- Dark Sky Ordinance
- Controlled Burns
- Community Wildfire Protection Plan

Potential Project Leads and Partners

- NEFRC / RFC Collaborative Partners
- National Weather Service – Jacksonville Office
- Naval Outlying Field (NOLF) Whitehouse / NAS Jacksonville (NASJAX)
- North Florida Land Trust (NFLT)
- Florida Department of Environmental Protection (FDEP) Division of State Lands
- Florida Forever Program
- Florida Fish and Wildlife Conservation Commission
- St. Johns River Water Management District (SJRWMD)
- City of Jacksonville
- Florida Forest Service

Estimated Cost

\$41,000,000

Step 1: Conservation Buffer Protection and Land Security (Short-term)

1A. Permanent Land Protection Adjacent to Installation

- NEFRC / RFC Collaborative Partners can convene the project leads and partners to implement a coordinated land protection strategy to secure parcels immediately outside the NOLF Whitehouse boundary through a combination of conservation easements, fee-simple acquisition, and other land protection tools. This effort ensures the long-term preservation of buffer integrity, reduces wildfire risk, and protects mission compatibility.
- Conservation easements will serve as the primary tool for maintaining working lands while restricting incompatible development, particularly across timberlands, rural transitional areas, and environmentally sensitive uplands. These voluntary agreements allow landowners to retain ownership and productive use while maintaining landscape continuity and limiting encroachment risk.
- In areas where development pressure is more immediate or where parcel configuration is critical to maintaining buffer integrity, targeted fee-simple acquisition can be pursued to secure high-priority lands, establish permanent management areas, and enable direct implementation of wildfire mitigation activities such as prescribed burning and fuel treatments.

1B. Identification and Prioritization of Critical Buffer Parcels

- NAS JAX and NFLT can lead a regional effort to identify, map, and prioritize parcels for protection surrounding NOLF Whitehouse, ensuring that conservation investments are strategically targeted. This effort will integrate data from regional and state partners, including SJRWMD, FNAI, the Florida Forest Service, and installation representatives, to develop a comprehensive prioritization framework. Parcels will be evaluated based on a combination of wildfire risk factors, development pressure, encroachment vulnerability, operational compatibility, and ecological importance. By incorporating both environmental and mission-related considerations, this approach ensures that protected lands provide maximum benefit in reducing risk, maintaining readiness, and sustaining regional connectivity.

Step 2: Integrated Buffer Management and Wildfire Resilience (Mid-term)

2A. Wildfire Risk Reduction through Fuel Management

- Following buffer formalization, partners can implement coordinated, landscape-scale fuel management across protected lands and adjacent areas to reduce wildfire intensity and protect mission-critical operations. This includes the strategic use of prescribed fire to maintain fire-adapted ecosystems, complemented by mechanical thinning in areas where burning is constrained or immediate risk reduction is needed. These treatments can be coordinated across property boundaries to ensure continuity of fuel reduction efforts and maximize effectiveness. By proactively managing vegetation and fuel loads, the buffer becomes a critical tool for minimizing wildfire threats, reducing suppression costs, and preventing training disruptions at NOLF Whitehouse.

2B. Formalization of Wildland-Urban Interface (WUI) Resilience Zones

- Partners can establish and maintain formalized WUI resilience zones within and along the edges of the conservation buffer, particularly where development interfaces with natural lands. These zones are designed to function as managed transition areas that reduce wildfire spread while supporting ecological integrity.
- Through the incorporation of fuel breaks, defensible space, and fire-adapted vegetation, these areas can significantly lower ignition risk and fire intensity near developed areas. Coordination with local governments will ensure that these resilience zones align with land use policies and guide compatible development patterns. This approach directly addresses encroachment while enhancing both community safety and installation protection.

2C. Longleaf Pine Restoration and Regenerative Land Management

- Buffer lands can be actively managed to restore longleaf pine ecosystems and other native, fire-adapted habitats, creating a more resilient and self-regulating landscape. By reestablishing natural, low-intensity fire regimes, these restoration efforts help reduce hazardous fuel accumulation over time while improving biodiversity and ecological function. Regenerative land management practices further enhance soil health, hydrology, and long-term system stability. This approach transforms the buffer into a sustainable landscape that inherently supports wildfire risk reduction while contributing to broader conservation objectives.

2D. Strengthen Regional Wildfire Planning

- NOLF Whitehouse buffer landscape should be incorporated into regional wildfire planning and mitigation efforts. By aligning installation priorities with municipal and regional strategies, the project strengthens coordination for wildfire prevention, preparedness, and response across jurisdictions. This integration supports more effective resource sharing, improves communication during wildfire events, and ensures that mitigation efforts are implemented consistently across the broader landscape. Expanding wildfire planning in this way reinforces both community resilience and military readiness.

2E. Establishment of the Northeast Florida Center for Natural Lands

- Partners can establish a Northeast Florida Center for Natural Lands to support long-term stewardship, workforce development, implementation of buffer management strategies, and a regional hub for native plant production, prescribed fire demonstrations, and landowner education. By providing technical assistance and building local capacity, the center helps translate the importance of the landscape and management practices into practical applications for private landowners and public agencies. This supports local buy-in and ensures sustained, coordinated management of conservation lands and strengthens the long-term success of the buffer strategy.

Step 3: Technology Integration and Adaptive Management

3A. Smart Environmental Monitoring and Risk Detection Systems

- Advanced technologies can be deployed across the buffer landscape to support proactive and adaptive management. Integrated systems using IoT sensors, satellite imagery, and drone monitoring can track vegetation conditions, fuel loads, and environmental changes in real time. These tools allow for early wildfire detection and provide data to support predictive modeling of fire behavior. By leveraging GIS and data analytics, partners can prioritize treatments, optimize resource allocation, and continuously refine management strategies based on evolving conditions.

3B. Integrated Data and Coordination Platform

- A centralized data and coordination platform can be established to support collaboration among partners and improve overall management efficiency. This platform would integrate information on land protection status, wildfire risk, fuel treatments, and prescribed fire activities, enabling real-time coordination across agencies and landowners. By aligning with CWPP systems and regional planning frameworks, the platform ensures transparency, supports informed decision-making, and enhances the effectiveness of cross-boundary management efforts.

Key Outcomes

- By combining conservation buffer protection with sustained, integrated land management, this project ensures that lands surrounding NOLF Whitehouse function as a wildfire-resilient landscape that protects both military operations and surrounding communities, a connected ecological system that supports regional conservation priorities, and a coordinated, partnership-driven model that reduces encroachment while enhancing long-term mission readiness.

Alignment and Support of the Regional Resilience

Figure 10. Alignment with the RRAP

SCALE	ACTION	DESCRIPTION
	2	Encourage preparedness for wildfires
	4	Promote supply of native plants for landscaping, restoration, and reforestation
	5	Promote the conservation and restoration of ecologically significant natural ecosystems
	13	Facilitate partnerships to advance resilience work
	14	Encourage smart growth and building practices
	15	Promote resilient and affordable housing
	18	Promote resilient agriculture
	21	Create an industry of resilience professionals
	22	Promote deployment of green infrastructure and nature-based solutions
	29	Evaluate major changes in heat patterns and monitor contributing factors
	31	Research population trends to understand growth patterns



Facilitate



Guide



Analyze

Action Plan

This project advances RRAP Actions 2, 4, 5, 13, 14, 15, 18, 21, 22, 29, and 31, matching the breadth of the companion Camp Blanding land management package and extending it into housing. The undeveloped lands surrounding NOLF Whitehouse function simultaneously as flight safety and noise buffer, dark sky preserve, wildfire fuel-management landscape, aquifer recharge area, and habitat corridor linking western Duval into Baker County. Strategic Project

NSJ 2.1 establishes coordinated growth policy for the I-10 corridor through zoning overlays, conservation subdivisions, transfer of development rights, clustered development at interchanges, and strategic buffering. These measures implement Action 14 (Encourage Smart Growth and Building Practices), specifically, Subaction 14.1 on evaluating incentives for resilient development, Subaction 14.2 on guiding density toward areas furthest removed from hazards, and Subaction 14.3, under which the Collaborative drafts sample language for local governments to incorporate into comprehensive plans, building codes, and ordinances. The update of the Whitehouse Lighting Zoning Code to align with AICUZ principles establishing lumen caps, shielded downward-directed luminaires, lighting curfews, and integration into site plan review gives Subaction 14.3 a specific and replicable regional application.

Strategic Project NH 2.3 advances the RRAP's Healthy Natural Environment goal alongside Action 2 (Encourage Preparedness for Wildfires). Landscape-scale fuel management through prescribed fire and mechanical thinning across protected buffer lands implements Subaction 2.1 on effective and scientific wildfire reduction practices, which notes that many municipalities lack the capacity to manage public lands to reduce fuel loads and commits the Collaborative to leading efforts to secure funding for regional wildfire mitigation. Formalization of Wildland-Urban Interface resilience zones with fuel breaks, defensible space, and fire-adapted vegetation implements Subaction 2.2 on fire-wise landscaping and structure protection. Expansion of the City of Jacksonville's Community Wildfire Protection Plan to incorporate the NOLF Whitehouse buffer landscape implements Subaction 2.3 on increasing regional collaboration to improve fire response and preparedness, which directs the Collaborative to investigate interagency agreements and facilitate coordination where gaps exist. Conservation easements, fee-simple acquisition, and habitat corridor protection across western Duval and Baker counties advance Subaction 5.1 on wetland conservation, Subaction 5.2 on encouraging biodiversity through native ecosystem protection and prescribed burns, and Subaction 5.3, under which the Collaborative advocates for the protection and acquisition of properties needed to connect parks and preservation areas throughout the region. Longleaf pine restoration, sustainable forestry, maintenance of working timberlands, and diversified landowner revenue streams implement Subaction 18.1 on resilient land use and best management practices for agriculture, and the continuous tree cover these lands sustain supports Subaction 29.2 on tracking and preserving regional tree canopy as a determinant of heat resilience.

Two components of this package reach actions no other MIRR project addresses. Strategic Project NSJ 2.1, Step 2C, identifying suitable sites near I-10 for mixed-income housing, leveraging state and federal housing programs and REPI-compatible partnerships, and coordinating with local housing authorities to align supply with projected military and workforce demand implements Action 15 (Promote Resilient and Affordable Housing), including Subaction 15.2 on maintaining resources on affordable housing funding and programs and Subaction 15.3 on compiling case studies and best practices for innovative housing options, which the RRAP illustrates with Nassau County's codification of tiny home development.

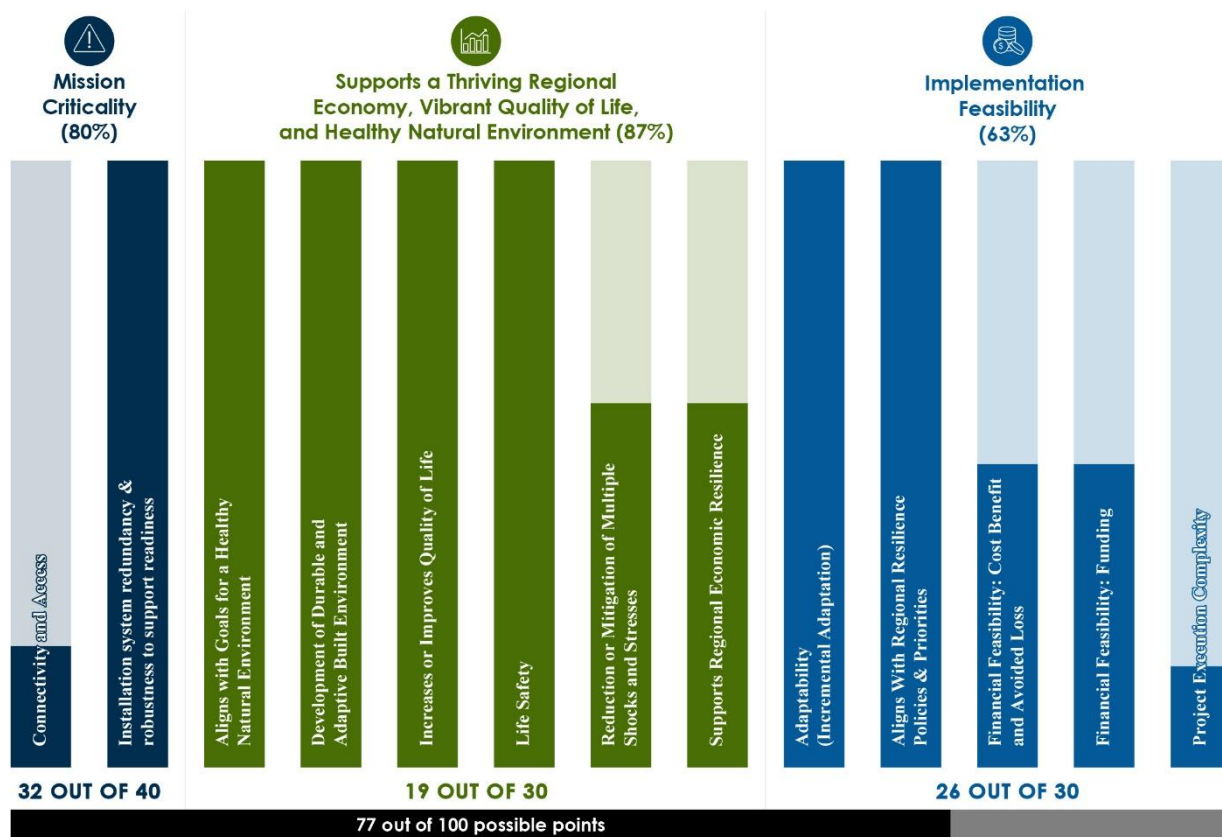
The Northeast Florida Center for Natural Lands, cross-listed here from the Camp Blanding land management package, implements Action 4 (Promote Supply of Native Plants for Landscaping, Restoration, and Reforestation), through Subaction 4.2 on evaluating the feasibility of a regional native plant nursery, and Action 21 (Create an Industry of Resilience Professionals), through Subaction 21.1 on workforce development programs and Subaction 21.2 on developing competitive educational programs with local colleges. The 2022 Encroachment Protection Agreement among DoD, the City of Jacksonville, and the North Florida Land Trust, which has

protected approximately 1,700 acres within Accident Potential Zones 1 and 2, is a mature expression of Subactions 13.1, 13.2, and 13.3. Nature-based stormwater strategies protecting wetlands and drainage along the I-10 corridor support Subaction 22.2, and the regional data platform consolidating land ownership, zoning, conservation status, and growth projections supports Action 31 on researching population trends to understand growth patterns.

Metrics Score

The NOLF Whitehouse Surrounding Parcels project was evaluated against a robust series of metrics to determine the appropriateness, viability, and achievement of goals. The metric categories are given a percentage weight to indicate the comparative importance for the MIRR, with Mission Criticality being the highest. High and mid-range scores across all metric categories indicate that implementing the strategies and policy recommendations within this project will promote mission assurance for the installation.

Figure 11. Metrics Scorecard Results



Cost-Benefit Analysis

Benefit-cost analysis (BCA) determines the cost-effectiveness of adaptation projects. This effectiveness is calculated using the equation

$$\frac{B}{C} = \text{Value}$$

Where B is the benefit, or avoided costs, of the project and C is the cost to implement the project. A benefit-cost value greater than 1 indicates that a project is cost-effective (i.e., the benefits of the project outweigh the costs incurred in implementing it), whereas a BC value less than 1 indicates the project may not be cost effective (i.e., the costs exceed the benefits).

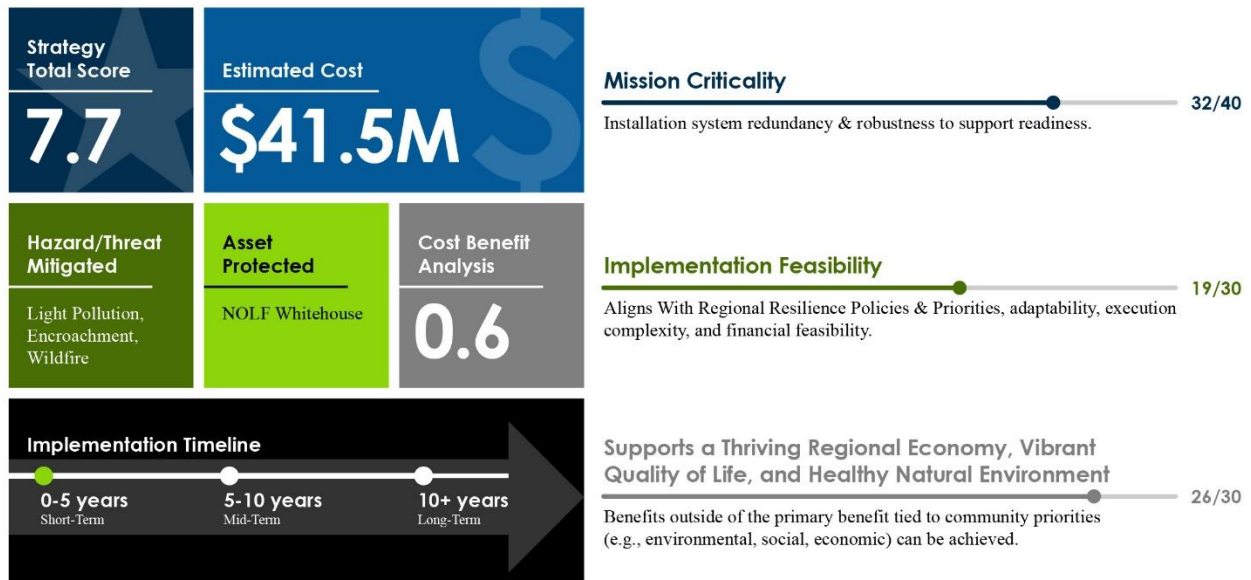
Adaptation project costs were costed to include project construction and design costs, where feasible. Project benefits were costed to include direct (construction or repair costs) and indirect (social, economic, and environmental) costs whenever feasible.

Data sources for benefit values include the Federal Emergency Management Agency, the National Institute of Standards and Technology, the National Interagency Fire Center, and others.

In many cases, associated financial savings data (such as improved installation operations, improved quality of life for installation personnel, or asset-specific O&M costs) was unknown; in these cases, the benefit is described. Hence, BCA values may not reflect the total possible benefit of the proposed adaptation project.

Total Project Package Snapshot

Figure 12. Total Project Package Snapshot





Implementation Tools



Financial Strategy Toolkit

More information on financial strategy building can be found in Technical Memo 10: Implementation Strategy and Investment Pathways.

Many of the tools required to fund, finance, and coordinate resilience implementation are already available under current Florida law or institutional precedent. The challenge, then, is aligning, adapting, and scaling existing tools to support coordinated regional resilience investment strategies. Thus, this section provides an initial inventory of funding, financing, and institutional tools that can be used to support the implementation of the MIRR project portfolio and the broader resilience system envisioned above.

Sustain and Extend the Stacked Conservation Funding Model

The REPI, state, and local model around NAS Jacksonville and Camp Blanding is the region's clearest example of coordinated resilience investment. At Camp Blanding, the installation has prioritized the parcels within its buffer, and the North Florida Land Trust is acquiring development rights from willing sellers. Because these acquisitions depend on willing sellers, the model advances opportunistically, one parcel at a time. That makes it important to front-load protection where priority buffer parcels, willing-seller opportunity, and near-term conversion pressure overlap. Keeping the model funded and sustaining a steady pipeline of priority parcels is therefore a near-term priority. Steps include:

- Continuing REPI cost-share agreements and Sikes Act compatible-use buffer acquisitions with the North Florida Land Trust and the installations as the federal anchor of the stack, and sustaining the buffer-parcel prioritization the installation has already completed.
- Layering in FDACS's Rural and Family Lands Protection Program, a state easement program that protects working lands and can buffer installations and conservation corridors.
- Coordinating county participation and other state programs to complete the match and extend protection to the next tier of mission-adjacent parcels near Camp Blanding and NOLF Whitehouse.

Term-based federal conservation programs for priority working may be another near-term option for lands where permanent acquisition or easement purchase is not feasible at this time. Term-based programs like EQIP can support conservation practices on agricultural and forestry lands. These tools would not replace acquisitions, but could help maintain compatible working-land uses while longer-term protection funding is assembled.

Note: The Florida Legislature did not fund the Florida Forever land acquisition program in FY2025–26, so near-term strategies should not assume Florida Forever dollars are available and should plan around REPI, Rural and Family Lands, and federal easement programs.

Develop Regional Prioritization Tools for Conservation Investment

Even with a working funding model, conservation investment across the region can still be reactive and parcel-by-parcel. Shared tools that rank parcels by mission compatibility and risk

reduction let the region channel limited capital toward the highest-value acquisitions. Near-term actions include:

- Using MIRR vulnerability and compatibility analysis to identify parcels that reduce long-term exposure or protect mission-adjacent lands.
- Developing a regional conservation prioritization map or scoring tool that supports grant applications, easement programs, and partnerships, building on the land use analysis in Technical Memo #9.
- Coordinating with the North Florida Land Trust and county governments so acquisition strategies align with regional infrastructure priorities and funding opportunities.

The prioritization tool should also identify the most likely protection option for priority lands, distinguishing parcels suited for near-term fee or easement acquisition from areas where land use policy, term-based programs, compatible-development incentives, or longer-term conservation finance may be more appropriate.

Expand Use of Conservation Finance Mechanisms

Traditional conservation programs are often underfunded relative to need, and finance tools can stretch public investment further. Near-term steps include screening federal easement and partnership programs such as USDA's Agricultural Conservation Easement Program and the Regional Conservation Partnership Program for a regional or watershed-scale application, and conducting feasibility work on tools such as green bonds, mitigation banking, or revolving land funds in higher-growth areas with ecological or strategic value. Building partner capacity to structure these transactions now prepares the region for the larger conservation-finance strategies discussed later in this memo.

For priority parcels where permanent acquisition is not immediately feasible, partners could also explore opportunities for interim protection options, such as term-based programs or working lands land use codes to maintain compatible land uses while longer-term funding is assembled.

Use Interlocal Agreements to Coordinate Land Use and Conservation

Jurisdictional boundaries rarely match the hazard or mission boundaries that define these landscapes, and the buffer work now underway at Camp Blanding shows why coordination matters. Since acquisitions depend on willing sellers, the effort relies on the region's ability to spot parcels as they come to market. However, currently only the installation and the North Florida Land Trust are tracking willing sellers and buffer priorities. Widening that circle into a standing coalition, backed by interlocal agreements is an opportunity to strengthen this work. Near-term recommendations include:

- Convene a standing buffer coordination group for Camp Blanding that meets every six months to share willing-seller information, review recent and pending land use and real estate changes near the buffer (listings, rezonings, development applications, and parcel splits), and align acquisition timing with available REPI and state cost-share. A similar group could be stood up for NOLF Whitehouse and NAS Jacksonville as well.

- Expand the coalition beyond the installations and the North Florida Land Trust to the counties that hold buffer and corridor land. For Camp Blanding, this effort will require both Clay County and Bradford County.
- Evaluate targeted TDR feasibility where growth pressure is moving toward mission-adjacent landscapes. For Camp Blanding and NOLF Whitehouse, this would mean identifying whether development potential could be transferred from buffer areas to locations more appropriate for regional growth. TDR would complement, not replace, other fee and easement acquisition programs by giving owners of important, but lower-priority buffer lands a near-term conservation option.
- Develop interlocal agreements that let the City of Jacksonville, Clay County, Bradford County, and the North Florida Land Trust coordinate land acquisition, cost-sharing, and development review in mission-adjacent areas.
- Maintain a shared, regularly updated priority-parcel and willing-seller tracking list, tied to a corridor map that identifies the critical buffer parcels whose protection most reduces encroachment and preserves mission compatibility. The list should distinguish willing sellers, landowners who may require additional outreach or incentive, and properties that are unlikely to be conserved in the near term.

Land Use Planning & Conservation Longer-term Implementation

Land use planning and conservation are most effective when policy and acquisitions move together. Fee and easement purchases serve an important role; however, funding limits and private property rights / the voluntary nature of conservation programs require these not be relied on alone to drive a long-term land compatibility strategy. Rather, conservation investments should be complemented and reinforced by the local land use policies, development standards, disclosure tools, growth-management strategies, wildfire planning, and compatible-development incentives outlined in Technical Memo 9.

This project category should consequently be managed as both a project and policy pipeline. The project pipeline should identify priority lands around Camp Blanding, NOLF Whitehouse, NAS Jacksonville, and other mission-adjacent landscapes where fee acquisition, easements, nonprofit capacity, and willing landowners can be aligned to the extent possible. In parallel, the policy pipeline should identify where the outlined tools (overlays, dark-sky protections, TDR, clustering, conservation subdivision tools, disclosure requirements, compatible-growth incentives, etc.) are needed to prevent encroachment or other incompatible uses.

Wildfire and fuels management projects may be more competitive when tied to adopted plans, implementation leads, landowner commitments, and maintenance plans.

The long-term value for this project category will come through connecting funding, land use policy, landowner engagement, and wildfire planning such that protected lands continue to function as mission-supporting buffers rather than areas of unmanaged risk to mission and communities.

Funding Opportunities

Table 4. Land Use and Conservation Funding Options

Agency/Org	Program	Description	Available Funding	General Eligibility	Example Eligible Projects	Timeline
NFWF	America's Ecosystem Restoration Initiative	Supports locally led projects for fish/wildlife habitat restoration, ecosystem and community resilience, access to nature, habitat corridors and connectivity, and partnership-driven conservation. [Verify current RFP: NFWF's America the Beautiful Challenge and related federal conservation funding are under review in 2025-26.] (nfwf.org)		Nonprofits, local/state/tribal governments, academic institutions	- Conserving and restoring rivers, coasts, wetlands, and watersheds - Conserving and restoring forests, grasslands and other terrestrial ecosystems - Connecting and reconnecting wildlife corridors, landscapes, watersheds, and seascapes - Improving community and ecosystem resilience to flooding, drought, and other threats - Expanding community access to the outdoors	Annual RFP, typically opens early spring
USFS	Community Wildfire Defense Grant Program (CWDG)	Helps communities and Tribes plan for and reduce wildfire risk and implement the National Cohesive Wildland Fire Management Strategy.	\$1 billion five-year competitive grant program funded by the Bipartisan Infrastructure Law	Prioritizes communities that: - Are in an area identified as having high or very high wildfire hazard potential, - Are low income or, - Have been impacted by a severe disaster within the previous 10 years which increased wildfire risk and/or hazard.	Funds can be used to: - Develop and revise Community Wildfire Protection Plans - Implement projects described in a Community Wildfire Protection Plan that are less than ten years old.	Rounds 1-3 have been awarded. The 4th and final round NOFO was delayed by the federal shutdown and is anticipated ~March 2026.
USFS	State Fire Assistance (SFA) Program	Supports and assists State Foresters and local communities in building capacity for wildfire prevention, mitigation, control, and suppression on non-Federal lands.	The program is funded at \$17.6 million annually and funding is available for four years. 1:1 non-federal cost share required.	Local and tribal governments are eligible recipients.	Projects that support states and local communities are eligible under this program.	Grants, financial, and technical assistance applications typically open in the 4th quarter. This program has been proposed for elimination in the proposed Federal Fiscal Year 2027 budget.
USFS	Forest Stewardship Program	The Forest Stewardship Program (FSP) provides assistance to owners of forest land where good stewardship, including agroforestry practices, will enhance and sustain multiple forest resources and contribute to healthy and resilient landscapes.	Varies; primarily technical assistance	Private landowners	Forest management planning, wildlife habitat enhancement, erosion control	Rolling basis; administered by state forestry agencies
USDA	Conservation Stewardship Program (CSP)	CSP can assist with designing plans to improve grazing conditions, increase crop resiliency, or develop wildlife habitat. CSP can help identify natural resource problems in operation areas and provide technical and financial assistance to solve those problems or attain higher stewardship levels in an environmentally beneficial and cost-effective manner.	NRCS technical assistance at no cost; ~\$4,000 minimum annual payment. Estimated FY2025 CSP spending ~\$839M. Authorized through FY2031 (One Big Beautiful Bill Act, 2025).	CSP contracts are for five years, with the opportunity to compete for a contract renewal if you successfully fulfill the initial contract and agree to achieve additional conservation objectives.	Cover crops, forest stand improvement, water management systems, erosion control practices	Contact your local NRCS office to get started. Applications for NRCS conservation programs are accepted on a continuous basis.

Agency/Org	Program	Description	Available Funding	General Eligibility	Example Eligible Projects	Timeline
USDA	Regional Conservation Partnership Program (RCPP)	Long-range assistance for innovative solutions to conservation challenges and partnerships on a regional or watershed scale.	~\$300M/year as a standalone program (2018 Farm Bill); IRA provided additional funds through FY2025. Authorized through FY2031 (OBBBA 2025).	Eligible organizations interested in partnering with NRCS on conservation projects can develop applications for the RCPP competition. The lead partner for an RCPP project is the entity that submits an application, and if selected for an award is ultimately responsible for collaborating with NRCS to successfully complete an RCPP project.	Examples include natural climate solutions, on-farm and off-farm water conservation and efficiency infrastructure improvements, soil health, and forest management.	Project proposals for RCPP are being accepted through August 24, 2026, on the RCPP portal.
FWS	Cooperative Endangered Species Conservation Fund (CESCF)	Funds participation in a wide array of voluntary conservation projects for species listed as endangered or threatened under the Endangered Species Act, as well as candidate species and at-risk species.	The Service awarded approximately \$62.34 million in federal funding in fiscal year 2024 under four grant programs that are available through CESCF	Funding for states and territories only. Local governments such as counties or groups such as conservation organizations may work in partnership with a State or Territorial agency as a subgrantee.	Grant programs under CESCF include Traditional Conservation Grants, Habitat Conservation Plan (HCP) Land Acquisition Grants, Conservation Planning Assistance Grants, and Recovery Land Acquisition Grants.	FY25 HCP/Recovery Land Acquisition grant applications closed Jan 8, 2025. No funding notices open at this time.
FWS	Partners for Fish and Wildlife	Provides free technical and financial assistance to landowners, managers, tribes, corporations, schools and nonprofits interested in improving wildlife habitat on their land.	Up to \$25,000 in financial assistance; no match required	All private landowners interested in restoring wildlife habitat on their land are eligible to participate.	Project work may include livestock exclusion fencing/alternate water supply construction, streambank stabilization, restoration of in-stream aquatic habitats, longleaf or shortleaf pine planting, prescribed burning, native grass and forb planting, wetland restoration/enhancement or riparian reforestation.	Continuous; projects accepted year-round
FL DEP	Wetlands Restoration and Protection Grants	Supports planning, design, and construction of wetland restoration and preservation projects, particularly those benefiting water quality or habitat.	Varies based on legislative appropriations; can range from \$250,000 to several million.	Local governments, water management districts, conservation organizations	Marsh rehydration, invasive species control, shoreline wetland restoration	Annual application cycle; generally opens in spring
FL DEP	Florida Forever Grant Program	Provides funding to local governments and nonprofit environmental organizations for acquiring conservation lands, urban open spaces, parks, and greenways to further outdoor recreation and natural resource protection needs identified in local comprehensive plans.	State-appropriated. [Status note: the FL Legislature did NOT fund Florida Forever in the FY2026-27 state budget (House withheld funding; Senate had proposed \$35M). Program remains authorized but unfunded for the cycle — verify appropriations.] (theinvadingsea.com; baynews9.com)	Local governments and eligible nonprofit environmental organizations.	Acquisition of land for community parks, greenways, and conservation areas.	The Florida Forever program was defunded in the state's 2026-2027 budget.
FL DEP	Land and Water Conservation Fund (LWCF) Program	Provides grants for the acquisition or development of land for public outdoor recreation, aiming to create and maintain high-quality recreation areas and facilities.	Maximum of \$1.5 million per project.	Local governments.	Development of public parks, trails, and recreational facilities.	Annual application cycle; the FY25-26 application window was November 15 - December 15, 2025.
Florida Fish and Wildlife Conservation Commission (FWC)	Florida State Wildlife Grants Program	Matching grants program, which provides financial support for projects that address conservation needs identified in the State Wildlife Action Plan.		State and local governments, educational institutions, and nonprofit organizations.	Habitat restoration, species monitoring, and conservation planning.	

Agency/Org	Program	Description	Available Funding	General Eligibility	Example Eligible Projects	Timeline
USDA NRCS	Agricultural Conservation Easement Program (ACEP)	Provides financial and technical assistance to protect agricultural lands and wetlands through conservation easements — Agricultural Land Easements (ALE) that keep working farms/ranches in production, and Wetland Reserve Easements (WRE) that restore and protect wetlands.	Funding increased to ~\$450M/year (from \$250M); est. ~\$375M obligated in FY2025. Authorized through FY2031 (OBBBA 2025).	ALE: state/local governments, tribes, and NGOs (land trusts) partnering with landowners. WRE: private and tribal agricultural landowners.	Perpetual agricultural land easements protecting working farms/ranches from conversion; wetland reserve easements restoring hydrology and habitat.	Applications accepted year-round; Contact your local NRCS office to get started.
FDACS	Rural and Family Lands Protection Program (RFLPP)	State program that purchases permanent agricultural conservation easements on working farms, ranches, and timberland while owners continue to operate; protects rural and agricultural land from development and can buffer military installations and conservation corridors.	\$425 million appropriated for FY2026-27. >225,000 acres preserved since 2001; the ranked acquisition list includes 428 projects (est. demand >\$2B). (theinvadingsea.com; fdacs.gov)	Private owners of bona fide working agricultural lands.	Perpetual conservation easements on ranches, farms, and timberland; buffer lands near military installations and within conservation corridors.	Annual application window. The previous application window was open from December 15, 2025 through January 23, 2026.
FloridaCommerce	Community Planning Technical Assistance (CPTA) Grants	Competitive grants to local governments and regional planning councils to create comprehensive plans, land development regulations, and community/economic development strategies, meet Community Planning Act requirements, and protect environmentally sensitive areas.	Up to \$75,000 per award (cost-reimbursement). FloridaCommerce awarded >\$1.5M through CPTA in Nov 2025. (floridajobs.org)	Counties, municipalities, and regional planning councils; priority for Rural Areas of Opportunity and rural communities.	Comprehensive plan updates/amendments, land development regulations, resilience and land-use planning, sector plans.	SFY2026-27 cycle was open from April 2 through May 1, 2026.
FL DEP	Florida Recreation Development Assistance Program (FRDAP)	Competitive reimbursement grants to local governments for the acquisition or development of land for public outdoor recreation.	Maximum grant request \$200,000. (floridadep.gov)	Municipal and county governments and other legally constituted local entities with recreation authority.	Development of parks, trails, boat ramps, sports and playground facilities, and other public outdoor recreation.	The 2026-2027 FRDAP Application Cycle opened September 1, 2025.

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