

Texas A&M University  
Natural Resources Institute

# Strategic Plan

2024



## WHERE CONSERVATION AND APPLIED RESEARCH MEET

The Texas A&M Natural Resources Institute (NRI) supports private land stewardship, military land sustainability, and at-risk species conservation by providing research and policy insight to land and wildlife managers. The Institute consists of experts and researchers based across the nation, situated to support the most critical natural resource challenges today. This strategic plan reflects the overarching goals and priorities of the research, outreach and policy-related programs led by the Institute and its partners, articulated by the people, funding, culture and service of a Land Grant university.



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# MISSION & VISION

The Texas A&M Natural Resources Institute (NRI) supports the Land Grant mission as part of Texas A&M AgriLife Research and Texas A&M AgriLife Extension Service. Our initiatives are founded on the basic need to enrich Texas and the nation with comprehensive agricultural and life sciences knowledge and services that connect people, agriculture, natural resources, and the economy.

We are committed to serving public and private land managers through collaboration with our diverse network of partners to achieve science-based solutions to solve complex natural resource challenges.

## Our Mission

Develop science-based solutions to complex natural resource challenges through collaboration, discovery, stewardship, engagement, and policy innovation.

## Our Vision

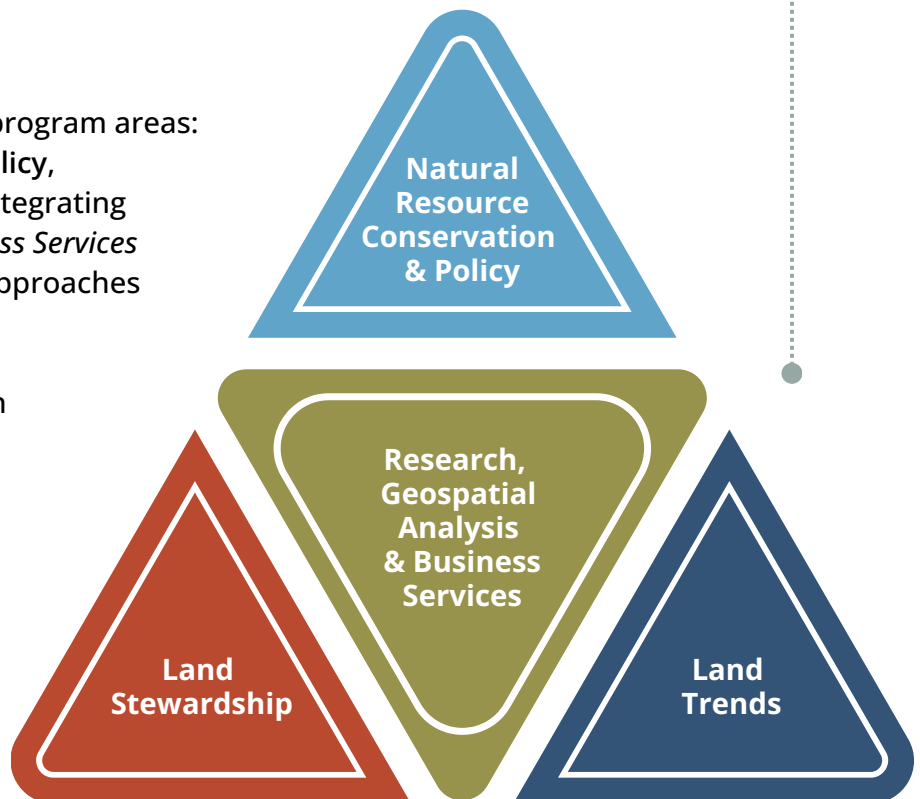
A future where the benefits of land stewardship and natural resource conservation are realized across the nation, ensuring the value of natural and working landscapes are protected.

## NRI Programs

The Institute is organized under three program areas: **Natural Resource Conservation and Policy**, **Land Stewardship**, and **Land Trends**. Integrating *Research, Geospatial Analysis and Business Services* facilitates timely and forward leaning approaches to program execution.

We host extensive collaborations within and across each program area—a key element to solving challenges through discovery, stewardship, engagement, and innovation.

The Texas A&M Natural Resources Institute programmatic framework.



# NRI PROGRAMS

## 1 Natural Resource Conservation & Policy

NRI's *Natural Resource Conservation & Policy Program* focuses on the nexus between landscape scale conservation, collaborative partnerships, and military land sustainability. Through collaboration with various stakeholders, including the Department of Defense (DoD) and the U.S. Fish and Wildlife Service (USFWS), we address a wide range of natural resource challenges. Central to our efforts is support for DoD's Readiness and Environmental Protection Integration (REPI) program, which aims to promote land-use compatibility and landscape scale conservation near our nation's military installations. We also support DoD's Environmental Planning and Conservation program, which aims to manage and steward installation natural resources by providing support while successfully executing the national defense mission.

### Key Focus Areas

- **Strategic Conservation and Policy:** We develop innovative conservation solutions, emphasizing landscape-scale collaboration to support military readiness and address regional conservation challenges. Our expertise spans policy development, regulatory compliance, and species conservation.
- **Regional Planning and Partnership:** We lead collaborative regional partnerships like the Southeast Regional Partnership for Planning and Sustainability (SERPPAS), Sentinel Landscapes, and America's Longleaf Restoration Initiative, linking partners and resources, ultimately advancing the military's mission and ecosystem sustainability.
- **Ecosystem Resilience:** Our researchers support USFWS and other federal/state agencies in assessing and conserving species of concern through applied research to enhance species viability, habitat conservation, and climate resiliency.
- **Military Land Stewardship Education and Sustainment:** We conduct research, education and training, and implement conservation management strategies on military installations nationwide, ensuring operational readiness.



## 2 Land Stewardship

NRI's *Land Stewardship Program* promotes comprehensive stewardship of natural resources by integrating sound science with collaboration and engagement. Our scientists and educators specialize in diverse ecosystems, working with stakeholders to address emerging challenges. We bring science into decision making processes and conservation partnerships with private landowners.

### Key Focus Areas

- **Wildlife Research:** We prioritize relationships with private landowners as we recognize their critical role in conservation and in finding sustainable, long-term solutions to keep farms, ranches and forestlands in tact. By understanding emerging natural resource challenges and pressing wildlife issues in land management, we can lead informed, scientific research efforts.
- **Engagement and Outreach:** We translate science to connect diverse audiences with our research findings. Through internal collaboration and external partnerships, we bring science to the forefront of decision-making.
- **Collaborative Networks:** We host nation-wide programs like the Gulf Coast Cooperative Ecosystem Studies Units Network (GC-CESU) and Renewable Resources Extension Act (RREA), strengthening federal partnerships with university researchers.

## 3 Land Trends

NRI's *Land Trends Program* utilizes geospatial tools to address landscape-scale conservation issues to serve decision-makers. We monitor changes in rural working lands from state and national datasets to inform topics like endangered species conservation and military readiness. The program also promotes research findings through web-based products and reports used by policymakers and conservation organizations to visualize changes in working lands and areas of conservation priority.

### Key Focus Areas

- **Geospatial Atlas:** For the last two decades, we have monitored changes on privately-owned rural working lands in Texas, curating datasets on land conditions, endangered species, and military assets. This effort resulted in a comprehensive, state-wide geospatial atlas facilitating data-driven decision-making.
- **Conservation Mapping:** Our geospatial staff provides vital datasets and web-based tools to aid policymakers, conservation organizations, and agencies in visualizing changes to working lands. These products inform decisions that support the growing population of Texas, landscape-scale conservation, and effective policies.



# NRI'S APPROACH & COMPETITIVE ADVANTAGES

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## Applied Research

NRI proactively identifies and addresses natural resource management issues through research so we can provide responsive, practical, scientific solutions to real-world problems. Our scientists conduct field research to address current issues for a variety of flora and fauna across a wide range of habitats. Our research team has specific expertise in herpetology, malacology, ornithology and mammalogy, with extensive experience in rangeland and aquatic ecosystems. We translate scientific research into on-demand, on-the-ground solutions based on our strong extension service experience, which hinges on stakeholder rapport and understanding. We facilitate the confluence of natural resource science, stakeholders, tangible partnerships, and lasting policy innovations, which collectively serve to realize the Land Grant mission.

## Geospatial Analysis

Our Geospatial and Data Analysis experts serve as a cornerstone in project execution, leveraging cutting-edge technology and analytical expertise to drive informed decision-making and precise implementation. They offer robust frameworks and tools to augment research and program development, elevating customer experiences and scientific innovation, positioning NRI for continued success in a data-driven world.

## Business Services

Our Business administrators support project execution, ensuring smooth operations and program integration. Their expertise in financial management, human resources, grant expedition and logistical support enhances project execution and efficiency. Their focus on client satisfaction cultivates strong relationships, fosters trust, and drives repeat business.



# GOALS & STRATEGIES

1

**Engage federal and state agencies in natural resource conservation initiatives.**

## Strategies

- a. Expand DoD engagement to include additional programs and decision-making elements within the Office of the Secretary of Defense (OSD) and the military services.
- b. Expand collaborations with all federal agencies involved in natural resources conservation research, policy, and management.
- c. Be the go-to resource for research-based insights and recommendations that inform federal agency policies and decision-making processes.

2

**Lead landscape-scale partnerships solving complex and pressing natural resource challenges.**

## Strategies

- a. Expand collaboration and partnerships beyond federal agencies to state and regional organizations, academic institutions, and industry.
- b. Develop interdisciplinary research projects addressing complex and pressing natural resource challenges.
- c. Organize conferences, workshops, and educational events to facilitate discussion and action among diverse stakeholders, promoting landscape conservation.



**3**

### **Conduct applied natural resource research and policy innovations that solve pressing problems for landscape and community resilience.**

#### **Strategies**

- a.** Implement research projects addressing pressing natural resources and community resilience challenges of local, state, and national importance.
- b.** Advance NRI's unique role in generating innovative conservation solutions addressing Endangered Species Act (ESA) objectives and other wildlife conservation challenges.
- c.** Expand expertise with federal agencies to develop a comprehensive set of processes, policies, and tools that provide multi-species benefits.
- d.** Disseminate research findings through publications, conferences, and outreach efforts to improve land management practices.

**4**

### **Create datasets and analyses to inform natural resources decision-making in landscape-scale conservation.**

#### **Strategies**

- a.** Conduct comprehensive geospatial analyses of land trends affecting rural working landscapes and rural communities in Texas.
- b.** Provide data-driven policy and land management recommendations to state and local leadership to inform land management decisions in Texas.
- c.** Collaborate with governmental and non-governmental entities to identify and implement sustainable land use practices.





**5**

**Provide education, engagement, and outreach to enhance and broadly disseminate efforts from other strategic goals.**

### **Strategies**

- a.** Collaborate with researchers to integrate research-based content into innovative extension programming.
- b.** Engage and connect local communities and other partners through outreach initiatives to promote awareness and adoption of sustainable land stewardship practices.
- c.** Create certificate and professional training programs that will better prepare the next generation of natural resource professionals.

**6**

**Implement flexible and client-focused project delivery and staffing support.**

### **Strategies**

- a.** Implement streamlined operational processes to enhance project management.
- b.** Develop tools to facilitate project management efficiencies.
- c.** Build internal capacity to support emerging research and management opportunities.
- d.** Identify contracting and sub-contracting strategies that allow for maximum flexibility and broad capacity support.
- e.** Maintain institute skills and training to best serve our sponsors.

