



2022
**ANNUAL
REPORT**

WHERE CONSERVATION AND APPLIED RESEARCH MEET



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In 2022, the Texas A&M Natural Resources Institute (NRI) brought private land stewardship to the forefront of our applied research programs to determine landowner priorities and needs when it comes to management and conservation. We expanded our partner collaborations for endangered species and habitat resilience on military lands, and increased coordination and collaboration with departments, centers, and other universities through our NRI Research Assistant Professors.

We remained nimble in our efforts to build solutions for resilient landscapes, recognizing 2022 as a year of many *firsts*, and look forward to a new year of positive impacts.

ABOVE THE FOLD

Strategic Planning and Making Room for the Next Leaders

Looking ahead to 2023, NRI assembled a new strategic planning committee made up of emerging mid-level management leadership to revise and update our current strategic plan in the wake of program re-alignments. This new approach and effort allows the Institute to move ahead with the perspectives of the next wave of leaders in mind and to accurately represent our collective role and contribution to landscape-scale conservation.



LANDOWNER OUTREACH

Texas Landowner Survey

Texas has more than 142 million acres of working lands owned by 250,000+ private landowners, each with their own management objectives. These lands provide food and fiber, support rural economies and recreational opportunities along with many other products and services. In 2022, NRI released the latest 5-year iteration of the state-wide [Texas Landowner Survey](#), seeking to understand private landowner needs and concerns in operating and managing their land. The survey covers topics ranging from land management, land loss and fragmentation, and landowner challenges and preferences, all of which serve to improve efforts in private land conservation.

Texas Water Survey

NRI also developed and released a complimentary state-wide [Texas Water Survey](#), the first of its kind, to determine daily use and management of water resources across Texas. The survey covered a variety of topics including general water questions, water dependability, accessibility of information, cost of water, future water needs, water quality, water recreation, private wells, flooding and drought, and water users.

Texas Ecosystem Services: A statewide assessment

These diverse landscapes in Texas supported by landowners are comprised of many ecosystems that provide the commodities of nature. Promoting the long-term sustainability and stewardship of natural resources begins with a basic understanding of ecosystem services and their public benefits—and, ideally, the ability to assign monetary value illustrating the importance of contributions to society. Our last report of 2022 provides examples of broad ecosystem services, and estimates their relative economic value.





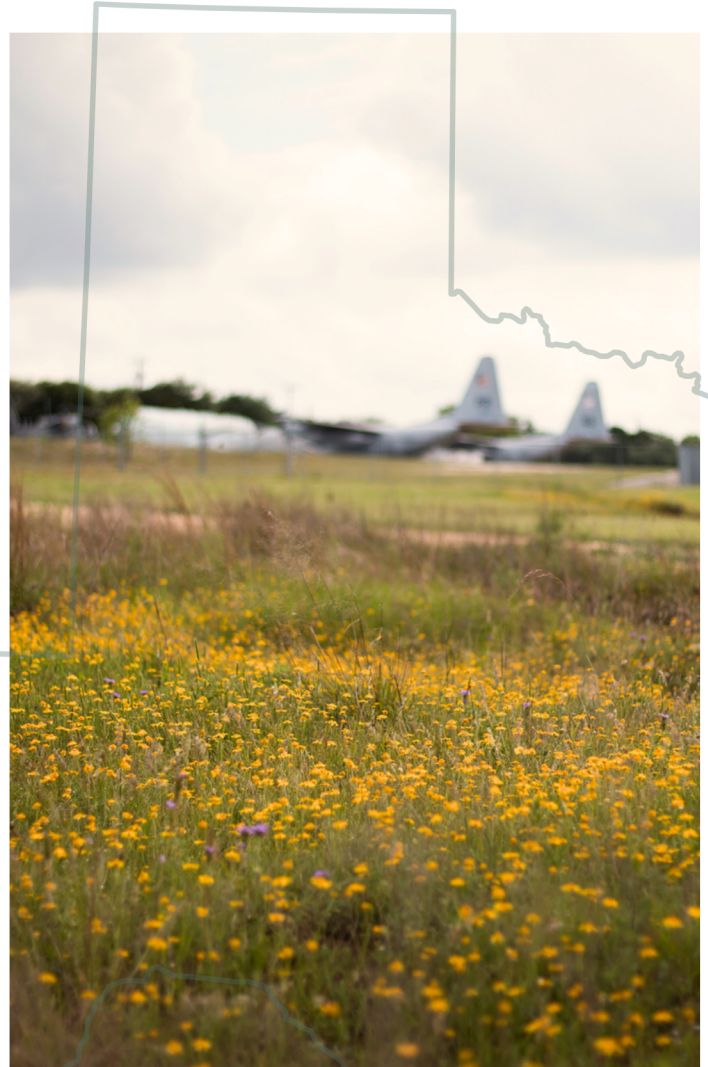
MILITARY LAND SUSTAINABILITY & CONSERVATION

The first ever
Sentinel Landscape
in Texas

The national recognition of the nation's newest Sentinel Landscape, Joint Base San Antonio-Camp Bullis (JBSA), opened significant new financial resources to protect military readiness, enhance agricultural productivity, and advance conservation in a multi-county region. JBSA provides field training opportunities for 266 mission partners and contributes over \$41B to the Texas economy annually.

Recognizing the importance of Camp Bullis, the ever-encroaching pace of growth emanating from San Antonio and the I-35 corridor is causing rapid loss of agricultural lands, increasing night-sky light pollution, and loss of spring flow and aquifer drawdowns. This area, now under immense conservation-focus, encompasses ranch lands, spring-fed rivers, the Edwards Aquifer Recharge and Contributing Zones, all within one of the fastest-growing regions in the country.

The partnership will work to address regional challenges and opportunities, including reducing light pollution that impairs nighttime training capabilities at Camp Bullis and mitigating flooding and wildfire risks to the military installation and nearby communities. The Institute's emerging small acreage landowner focus will be a key aspect of this partnership.





PARTNERSHIPS & NEW FACULTY

In addition to the continued efforts developed between NRI and departments—like our partnership with USFWS and the NRI Graduate Fellows Program working to train graduate students interested in natural resource policy—our linkage to the Texas A&M Department of Rangeland, Wildlife and Fisheries Management (RWF) enabled NRI to support the broader natural resource-focused teaching commitment as part of the Land Grant.

This past year, we added four new Research Assistant Professors—Drs. Stephen Webb, Danielle Walkup, Charles Randklev and Jeff Goodwin—and others in the institute supporting and standing up courses for the next generation of natural resource professionals.

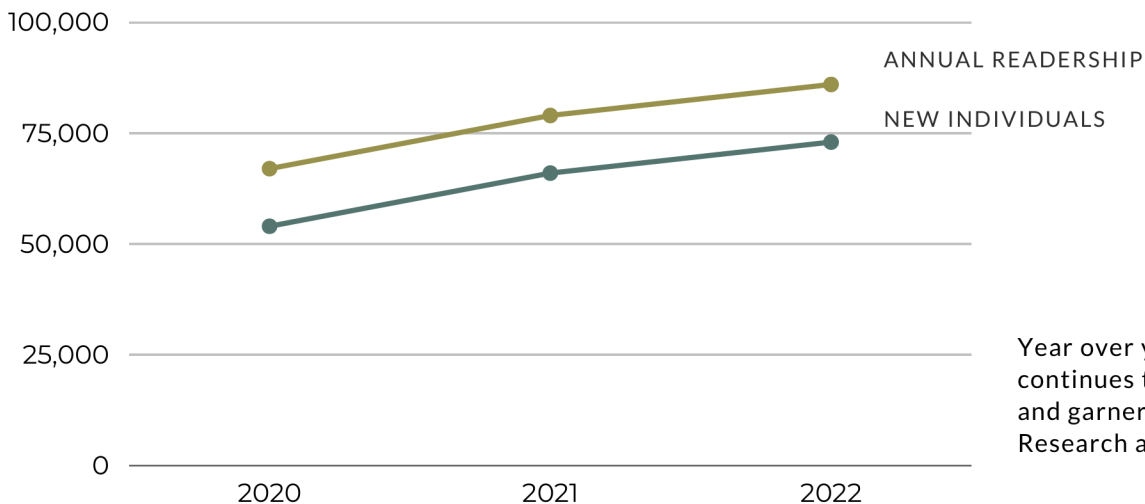
As part of our strategic plan, NRI has largely directed our attention and efforts to new avenues, linkages, and efficiencies with the departments in the college. We are identifying opportunities where faculty and NRI scientists can work together, our land trends and geospatial analysis team is engaging with faculty and extension specialists, and our natural resource policy team is collaborating with departmental faculty to teach students and professionals how to assess complex scenarios with considerations for social, regulatory, and economic factors.



Communicating Science

RESEARCH & EXTENSION PUBLICATIONS

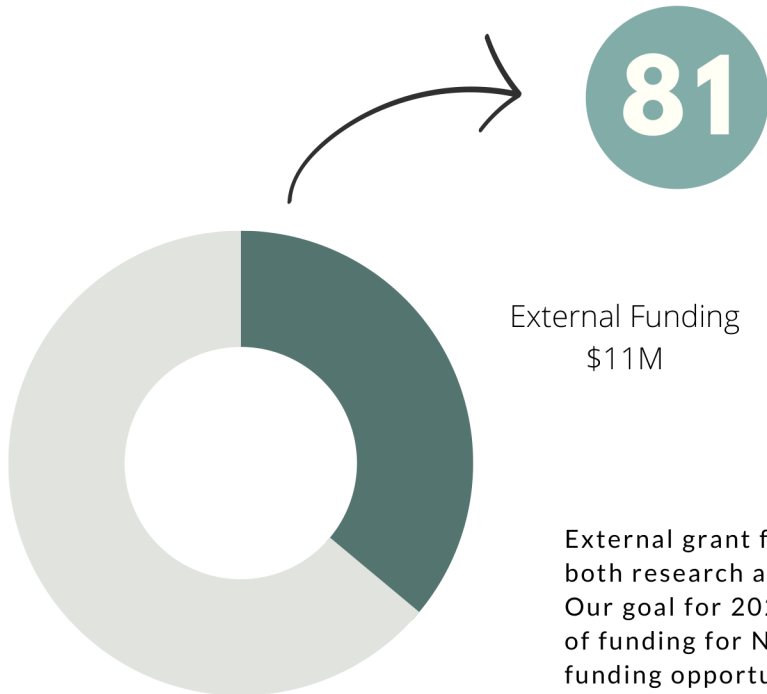
The Institute continues to perform at a high return on investment in three key areas: external grant funding, research and extension products & publications, and graduate student training support.



Year over year, the institute continues to reach more individuals and garner higher readership for Research and Extension materials.

Year in Review

EXTERNAL GRANT FUNDING



81 PEER REVIEWED JOURNAL PUBLICATIONS 19-22

Pending Contracts \$19.5M

External Funding \$11M

External grant funding surpassed \$19.5M for both research and extension this past year. Our goal for 2023 is to maintain that level of funding for NRI's scientists and to expand funding opportunities for departmental and center faculty with increased collaboration