## **Environmental Awards**

Natural Resources Conservation, Team Category Award Achievement Period 1 October 2019 – 30 September 2021



## **INTRODUCTION**



Meet the Team: The Naval Air Station Pensacola (NASP) Natural Resources Team is made up of a Natural Resources Manager, Michael Hardy, and Area Forester, Anna Lizana. Michael is the senior member of the team and has worked in NASP's Natural Resources section for 21 years. Michael started his career as the Area Forester and progressed to his current position. Michael holds a degree in Forestry and his impressive list of credentials includes being a Certified Forester, a Certified Prescribed Burn Manager in Alabama and Florida, and a DoD Certified Pesticide Applicator. He holds

affiliations with the Society of American Foresters and is a member of the Alabama Prescribed Fire Council. Anna has a B.S. in Natural Resources Ecology and Management. She is currently pursuing a Masters of Natural Resources degree and a Graduate Certificate in Restoration Ecology during her off duty time. Mrs. Lizana has been with the team for approximately 2 years and despite the pandemic has still been able to qualify as an Alabama Certified Prescribed Burn Manager. The Team is committed to providing innovative and cost effective approaches to wildlife conservation, habitat restoration and enhancement, and sustainable forest management to support the military mission. The Team aims to protect and maintain natural resources though the continuation and enhancement of ecologically appropriate and beneficial land use and management practices; protect and enhance forest resources by practicing ecologically sound forest management; protect, maintain, and restore native communities of plant and animal life; provide facilities and develop policies that allow for recreational and educational uses of natural resources; and protect and conserve the ecological value and diversity of natural resources by fostering knowledge of, and participation in, adaptive ecosystem management. The Team has been able to accomplish an extraordinary amount of Natural Resources conservation work by utilizing partnerships, interns, and innovative and cost effective approaches despite consisting of only two individuals.

**Installation Mission:** The Command Mission of NASP is to deliver the very best "Readiness From the Shore" by fully supporting the operational and training missions of assigned tenants, enhancing the readiness of the U.S. Navy, its sister armed services, and other customers. The initial training of all Naval Aviators begins here: *The Cradle of Naval Aviation*. NASP has a myriad of tenant activities, including the headquarters and staff of the Naval Education and Training Command; Naval Air Technical Training Center; Marine Aviation Training Support Groups-21 and 23; Navy Medicine Operations Training Center; Naval Recruiting Orientation Unit; and the world-renowned Blue Angels Flight Demonstration Squadron. The Information Warfare

Land Use Summary		
Forest Management	2,449	
acres		
Wetlands	650	
acres Semi-improved	911	
acres Outdoor Recreation acres	350	

Training Command delivers full-spectrum cyber information warfare and intelligence training to achieve decision superiority, and Naval Hospital Pensacola provides high-quality, safe, cost-effective, patient-focused care and deployment support at NASP Corry Station. The Naval Education and Training Professional Development and Technology Center supports customers worldwide at Saufley Field, and recreation and multi-use opportunities abound at Bronson Field. Attractions for visitors to the Southeast include the National Naval Aviation Museum, Barrancas National Cemetery, the National Park Service Fort Barrancas and Advanced Redoubt historical sites, the Pensacola Lighthouse, and National Naval Aviation Museum all onboard NASP. NASP is the second largest training operation in the Navy with nearly 60,000 students graduating from training programs annually. NASP trains students from every branch of the military, other agencies, and foreign allies. NASP employs over 23,000 personnel (>17,000 military and >5,000 civilian). The economic impact of NASP on the local economy exceeds \$6 billion. NASP attracts in excess of 1,000,000 visitors each year under normal circumstances.

## **BACKGROUND**

**Brief History:** Spanish explorers discovered Pensacola in 1559. The Spanish originally settled a small portion of what is now NASP in 1698. The settlement included a wood Fort, support facilities, and a village atop a bluff overlooking Pensacola Pass. Pensacola was also occupied by British, French, and American military forces and settlers, as well as Confederate troops during the Civil War. Florida gained statehood in 1821 and in 1825, a Naval Yard was authorized and constructed in Pensacola to serve the Gulf Coast. The Pensacola Navy Yard became the site of an aviation training facility in 1911, the nation's first Naval Air Station in 1914, and *The Cradle of Naval Aviation*.

**Environment:** Natural resources onboard and surrounding NASP consist of wetlands, forests, sand hills, rivers, streams, and sensitive ocean coastal zones that create an environment abundant with animal, plant, and marine life. NASP serves as a unique interface for air, water, and land resources. The protection of these environmental treasures is vital to the sustainability of NASP, its military mission, and continued community support by achieving the public trust. NASP is also home to significant historical and cultural resources managed by both the Navy and the National Park Service, including Fort Barrancas and Barrancas National Cemetery.

**Overall Natural Resource Management:** The NASP Integrated Natural Resources Management Plan (INRMP) was completed in FY 2001 and signed into action in compliance with the Sikes Act Improvement Act of 1997. The overall goal of the NASP INRMP is "to implement an ecosystem-based conservation program that provides for conservation and rehabilitation of natural resources in a manner

consistent with the military mission." Five stated goals, 17 objectives, and 16 projects constitute the INRMP. The INRMP combines the management of natural resources of 3 formerly independent commands into one organization and one document. The NASP Natural Resources Team also provides forestry and agricultural management assistance for NAS Whiting Field. Annual INRMP reviews and "Metrics" with the stakeholders have been conducted annually since 2002 with the exception of 2004 when it was canceled due to Hurricane Ivan. INRMP revisions were completed in 2018 and the Natural Resources Data Call has been completed every year since 2002. *The team was able to meet or exceed all tracked metrics during the 2020 and 2021 Data Calls*, with the only exception noted being that the Team is understaffed. Projects such as Biological Monitoring, Habitat Restoration, Beach Restoration and Shoreline Stabilization, Invasive and Exotic Species Control, Urban Forestry, and Forest Product Sales were all implemented to enhance land



SCA Intern constructs drift fence for herpetofauna survey.

resources of the base. These projects, partnering with INRMP stakeholders and others, united the ecosystem, mission, and people.

Cooperative Agreements: A cooperative agreement between the Navy, U.S. Fish and Wildlife Service (USFWS), the Florida Fish and Wildlife Conservation Commission (FWC), National Marine Fisheries Service (NMFS), INRMP "stakeholders," was signed in 1979 and continues to be effective for fish and wildlife projects. For outdoor recreation, a cooperative agreement between the Navy, the National Park Service, and the Florida Department of Environmental Protection was signed in 1987. Other agreements include a Mutual Aid Agreement between the Navy and the Florida Forest Service revised in 2009; The Longleaf Alliance-Navy-Auburn University cooperative established in 1998; The Student Conservation Association-Navy Agreement revised and current; the U.S. Forest Service Prescribed Fire-Navy Agreement of 2004 revised and current; and the NAS Pensacola-Nature Conservancy Gulf Coastal Plain Ecosystem Partnership (GCPEP) Agreement of 2004 – an agreement involving a regional landowner consortium protecting over 1.1 million acres of area natural lands. The GCPEP partnership is key to the Navy's encroachment partnering program, which protects Navy mission sites. Anna and Michael both serve on the GCPEP Steering Committee. *These partnerships are the keystone to the team's management strategy that allows them to achieve outstanding results and accomplish an enormous amount of work despite minimal staffing*.

Organization: Natural resources management for NASP is performed by two government positions in the Pensacola Public Works Department of Naval Facilities Engineering Systems Command Southeast Jacksonville (NAVFAC SE Jax). A Natural Resources Manager, Michael Hardy, and an Area Forester, Anna Lizana, manage the program. Mr. Hardy was re-certified by the Society of American Foresters as a *Certified Forester* during the achievement period. Work is accomplished for NASP, Saufley Field, Corry Station, and Bronson Field, as well as for NAS Whiting Field for forestry and



Natural Resources Manager, Area Forester, and SCA Intern inspect a gopher tortoise burrow.

agriculture under a NAVFAC staffing plan for efficient and economic sharing of professional staff and resources dating back to the 1980's. Commanding Officers, Public Works Officers, and department staff at each installation are highly active in support of the Natural Resources Program. The Natural Resources Branch, NAVFAC SE Jax, provides administrative, technical, and financial support along with NAVFAC HQ, Washington, DC. Environmental requirement funding and oversight are provided by Commander, Navy Region Southeast (CNRSE) and Commander, Navy Installations Command (CNIC). Additional and innovative staffing during 2019-2021 included an AmeriCorps Student Conservation Association (SCA) Intern who provided additional conservation support. The SCA intern supported the Natural Resources Program with additional professional staff while gaining their own valuable experience. Michael and Anna act as mentors to SCA interns, sharing their combined knowledge with them to make the experience rewarding for both the Navy and the intern. Their support goes beyond normal day-to-day work, including support in finding affordable housing and familiarization with the local area and customs. Michael's primary focus as the Natural Resource Manager is the base and associated area natural resource programs and compliance. However, because of his expertise and certifications, he is essential in the management of the Forestry Program and specifically in the prescribed burn programs of both NAS Pensacola and NAS Whiting Field. Anna's focus is on the Forestry Program; however, she is a major contributor to the National Environmental Policy Act (NEPA) reviews and to the completion of wetland permits and State ERP permits for the base.

## SUMMARY OF ACCOMPLISHMENTS

Hurricane-Damaged Natural Resources Restoration: Hurricane Sally caused substantial damage to natural resources throughout the Pensacola region in September 2020. The Team was engaged from the first day after the storm to assess the installation and worked tirelessly to clean up the installation and restore natural resources. The Team has been in constant coordination with the Public Works Department to address natural resources regulation and permitting concerns for all hurricane repair and cleanup projects. The Team's involvement in NEPA coordination has increased significantly due to Hurricane Sally. The Team completed over 99 NEPA actions in FY21 alone. An emergency timber salvage was conducted to recover hurricane-damaged timber and improve forest health, producing \$19,167 in income. The Team spent several weeks in the field to evaluate hurricane-damaged timber and pushed this timber sale through at a record pace to remove damaged timber before it became non-merchantable. This project not only benefited the Navy Forestry, producing much needed funds during budget shortfalls, but also removed downed and damaged trees that only serve as fuel in the increasingly dangerous wildfire season.

Mission Enhancement: Land and natural resources management led directly to mission continuance at the base. The Natural Resources Team responded to an increasing wildlife hazard, Bird Aircraft Strike Hazard (BASH), near the airfield when two bald eagle pairs nested near the approach of RW/01 during two consecutive years. The Team coordinated with USFWS to obtain nest removal permits and with USDA to complete nest monitoring. Through further coordination with NASP Air Operations to limit the use of the runway in question for several months, the eaglets



Juvenile bald eagle sits in nest.

were allowed to fledge, protecting our national symbol while supporting the base's primary mission. The permitted nest removal took place once the eaglets left the nest. Because this took place during the pandemic, the usual contractor for tree removal was not available. Through the relationship with their partners, the Team was able to have the nest and tree removed by a partner at no cost to the Navy.

The Team organized a four-day chainsaw safety training for Public Works Department staff to improve hurricane readiness. This involved securing training spaces, securing a field instruction site, scheduling



Chainsaw Safety Training at NAS Pensacola.

with instructors and students, and obtaining personal protective equipment and chainsaw supplies for students. This course provided training for 22 employees to allow for quicker mitigation of unsafe conditions after hurricanes and additional staff to perform tree maintenance work if contractors are unavailable. Through this course, students earned valuable safety training that can be used on or off the job. Again, this training was done by GCPEP, a partner, at no cost, saving much needed training funds.

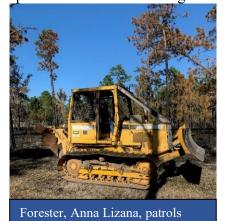
In response to a noncompliance found during an airfield inspection, the Team partnered with NAS Whiting Field Air Operations and their Natural Resources Manager to evaluate timber to be removed to maintain clear zones for the NAS Whiting flight operations. This required several weeks in the field and many hours in the office to calculate timber volumes in order to produce timber payment values. The Whiting Installation Environmental Program Director commended the NASP Team for the quick turnaround. Through this project, \$109,951 was provided to the Navy Forestry Account, and flight safety and communications were improved.

Forest Management: Through the Team's efforts, \$129,118 was provided to the Navy Forestry Account from salvage timber sales and timber clearing mitigation. Navy Forestry Account funds contributed to the site preparation of 93 acres for reforestation of longleaf pine. The Team worked with contractors and Whiting Field's Natural Resource Department to prepare 93 acres for reforestation of longleaf pine at Whiting Field. Longleaf Pine Forests are a unique ecosystem to the Southeastern United States and have been reduced to 5% of its historical extent because of unsustainable longleaf forestry practices. This effort



supports the goals of the US DoD Readiness and Environmental Protection Integration Program to help reduce military-community-environmental conflicts that could adversely affect the ability to test, train, and operate.

Prescribed burning, an essential natural resource management and climate change activity, was completed on 681 acres to improve forest health, prevent wildfires, and improve habitat for protected species. Prescribed burning was accomplished by using the Student Conservation Association, GCPEP,



firebreaks.

and US Forest Service Cooperatives to supplement the Team. The Team constructed all firebreaks, produced burn plans, obtained burn authorization, and coordinated with multiple agencies and Air Operations. As the Certified Burn Manager, the Team assumed all responsibilities for these high-risk burns. Climate change contributed to increased risk during this time, evidenced by multiple wildfires in Florida. The Team was able to expertly plan, coordinate, and manage these complex events without incident. The Team pursued a 5-year agreement with the USFWS and a contract with TIMCO for prescribed burning support to achieve additional burn acres in FY22 during this achievement period. Additionally, the Team provided resources and personnel for their partner's prescribed burns at Tarkiln Bayou State Park.

Fish and Wildlife Management: The Team actively participates in the Gopher Tortoise Candidate Conservation Agreement (GTCCA). The GTCCA includes 15 federal, state, and private partners who work together to manage the gopher tortoise across the landscape in an effort to recover its population and re-establish its historical distribution. The Team conducted a herpetology survey, a dolphin density survey, and migratory bird survey through contractors. The Team also partnered with the NMFS, FWC, US Coast Guard, and Port Operations to



Gopher Tortoise

deploy two acoustic receivers to monitor Gulf sturgeon activity in Pensacola Bay. These types of projects are critical to the survival of threatened and endangered species.

Land Use Management: Beach restoration projects have continued at NASP. Shoreline stabilization projects were completed at two recreational beaches at NASP and Bronson Field. Since Hurricane Sally caused significant beach erosion to several areas of the base, *additional beach areas have been identified for future restoration efforts* and the Team worked with Public Works Department Staff to develop a plan of action for restoration efforts.

**Habitat Restoration:** The Team assisted Whiting Field to accomplish a large scale prescribed burn at NOLF Holley Field. Forest areas were enhanced by using prescribed fire to restore forest health and improve habitat for protected species such as the reticulated flatwoods salamander. The Navy partnered with the Longleaf Alliance, Florida Forest Service, National Park Service,



Forester, Anna Lizana, conducts prescribed burn.

Florida Park Service, Eglin AFB, and Navy and local fire departments to accomplish this prescribed burning.



Pitcher plants grow following prescribed burn.

This burn could not be accomplished without assistance from the NASP Team, as the Team consisted of the only Florida Certified Burn Manager in the NAVFAC Southeast Region during the achievement period. The Team also procured funds, developed project scopes, served as the Navy technical representative, and completed longleaf pine and gopher tortoise habitat restoration for 217 acres through three separate contracts. In planning for future habitat restoration, the Team initiated an ecosystem assessment and habitat mapping study utilizing contract support. This project will identify vulnerabilities of each ecosystem to stressors associated with climate change and allow the Team to adapt management strategies for future consideration.

Invasive Species Control and Pest Management: An influx of storm-related invasive species were controlled during the award period. The Team partnered with GCPEP through the USFWS to treat 350 acres of invasive species at NASP, Bronson, and Whiting Field. The Team also treated 187 acres of invasive species in forested areas through two separate contracts. This treatment targeted Chinese tallow trees, Chinese privet, and Cogon grass. The team utilized facility funding for a \$16,000 per year contract to manage nuisance wildlife on the base, controlling the beaver and coyote populations that can easily get out of control.

Conservation Education: The team strives to improve their knowledge and stay on the cutting edge of natural resource management. They participated in 10 educational conferences, training, and meetings. Anna completed the State of Alabama Certified Prescribed Burn Manager program. Michael maintained his Certified Prescribed Burn Manager certifications for both Florida and Alabama. He also renewed his status as a Society of American Foresters "Certified Forester". Finally, he maintained DoD Pesticide Applicator Certification. Anna has maintained a 4.0 grade point average in her off-duty studies for her Masters of Natural Resources degree and Restoration Ecology Graduate Certificate. All of this while managing the best Natural Resources Program in the Navy.

**Pollinator Project:** The Team followed DoD guidance on pollinator program establishment and currently have 3 volunteer beekeepers maintaining 5 colonies of honeybees. This provides a no cost proactive approach to remove swarms in a timely manner from urban areas of the base when necessary.

**Environmental Enhancement:** Partnering was continued for mission buffers with The Nature Conservancy, the State of Florida's Pitcher Plant Prairie, Garcon Point Preserve, and Jones Creek Swamp Preserve.

Community Outreach and Education: The Pensacola Bay Living Shoreline Project is a multiphase, multi-stakeholder project to restore and protect approximately three miles of shoreline near Pensacola Florida. This 20.9 million dollar project is funded by the RESTORE Act of 2012, BP Oil Spill 2010, National Fish and Wildlife Foundation, and the Defense Community Infrastructure Program. Project partners are the Florida Department of Environmental Protection, Escambia County, and Naval Air Station Pensacola. The project is being executed by Escambia County for configuration along NASP's

shorelines and is set to begin construction in the fall of 2022. This project will greatly enhance the bay's ecosystem to be enjoyed by the community and the military, enhancing the quality of life for all. It will

also serve the dual purpose of reducing the effects of future storms on the base's shoreline. The Team has been actively contributing to meetings and planning throughout the project.

**Urban Forestry:** *The Team received the Tree City* **USA award for the 25th and 26th consecutive years.** This involves tracking urban forestry expenditures and activities throughout the year, producing an annual proclamation, and conducting an annual tree planting ceremony.



Awards and Notables: Michael Hardy (Natural Resources Manager) and Anna Lizana (Area Forester) were selected as *Public Works Department GS* (*Tier 2*) *Employee of the Quarter for 3rd Quarter 2020 and GS* (*Tier 1*) *Employee of the Quarter for 3rd Quarter 2021, respectively.* This is significant as Michael Hardy has received the EOQ several times in the past and Anna Lizana received the award in her first year as a GS employee. In addition to his regular duties, Michael served as the Interim Installation Environmental Program Director during the first Quarter of this award period. Anna was presented a NAVFAC Atlantic command coin by RDML VanderLey in November 2020 for her role as part of the Disaster Recovery Team (DAT) after Hurricane Sally. He stated that she "immediately returned to work, deferring efforts at her own home to later. She has been instrumental in the Urban Forestry program at NASP, working tirelessly with many Commands and customers on urban tree issues following the hurricane." This recognition sheds a positive light on the Natural Resources Team at NASP and demonstrates the incredible drive and dedication that this Team has for conserving, preserving, and managing NASP's vast and rich Natural Resources.

Environmental Enhancement and Natural Resources Compliance Program: The NASP Team continues to perform a model natural resources conservation program. INRMP work ensured the long-term sustainability of the land, forests, water, and plant and animal life. Compliance with integrity in such a way has allowed NAS Pensacola the freedom to train in a healthy ecosystem with the complete trust of the public and agencies. Cooperatives with the INRMP stakeholders, project work, volunteerism, and community involvement are day-to-day tools. Environmental Conservation and Natural Resources Stewardship funding were instrumental to the restoration effort. The natural resource sections of other

Environm	<u>ental Funds</u>	
FY 20	\$ 179 K	
FY 21	\$ 121 K	
NR Stewardship Fund (Reimbursable)		
FY 20	\$ 34 K	

\$ 36 K

FY 21

PWDs will benefit from following the model set by Michael and Anna on how to do more with less. They have leveraged their relationships, partnerships, and cooperative agreements to produce a truly remarkable amount of work that has produced exceptional results. Today, NASP is a great example of the balance between man and nature, providing a great place to train Navy leaders.