

INTRODUCTION:

Naval Air Station Whiting Field (NASWF) is located eight miles north of Milton, Florida in Northwest Florida. The mission of NASWF is to provide and support initial fixed wing and rotary wing student pilot training to the United States Navy, Marine Corps, Coast Guard and allies of the United States.

NAS Whiting Field employs 3209 military, civilian and contract personnel. The direct economic impact of NASWF on the local economy is \$501 million dollars with an indirect impact of \$1.2 billion dollars. NAS Whiting Field personnel enjoy being part of the culture, history and natural resources within Santa Rosa County and along Florida's Coast. The total acreage of NASWF is 5,058 acres in size with an additional 8,358 acres divided among the 13 Navy Outlying Landing Fields (NOLFs) and other properties that support the Navy's mission. Whiting Field is the busiest aviation complex in the world. It accounts for nearly one million annual flight operations that includes primary flight training and advanced helicopter training for more than 1,200 Navy, Marine Corps and Coast Guard students.

BACKGROUND:

Organization/Staffing:

As of FY 2019, NASWF PWD Environmental Division staffing consisted of one (1) Environmental Director with Environmental Division oversight three (3) Physical Scientists (Clean Water Act, Safe Drinking Water Act, Clean Air Act, Hazardous and Solid Waste and National Environmental Policy Act), one (1) Environmental Protection Specialist (Hazardous, Solid Waste, Emergency Planning and Community Right-To-Know Act, Aboveground Storage Tanks and EMS), one (1) Materials Handler and one (1) Natural Resource Manager (Forestry Operations, Integrated Natural Resources, Integrated Cultural Resources and Pest Management). In addition, NASWF PWD is an active participant in the Student Conservation Association (SCA) intern program.

NASWF Environmental Division prides itself on having all environmental media managers crosstrained to perform each other's job duties. This best practice has enabled us to provide greater oversight and improved our ability to provide the appropriate corrective actions. NASWF also prides itself on continuing a record of not having received a Notice of Violation or major compliance finding in its history

Listing of Relevant Committees, Boards, and Memberships: Arbor Day Foundation-Tree City USA (27 Years) Blackwater River Clean Up Clean Marina Program Earth Day Celebrations-Bagdad Elementary School Department of Defense/Florida Department of Environmental Protection Partnering Team Gulf Coast Plains Ecosystem Partnership Florida Department of Environmental Protection (FDEP) Installation Restoration (IR) Partnering Team Keep Santa Rosa Beautiful NASWF/Division of Forestry Smoke Management Stormwater Environmental Action Team (SWEAT) Student Conservation Association (SCA) Internships Smithsonian Institute (Feather Identification Laboratory) United States Department of Agriculture (USDA)-Bird Aircraft Strike Hazards (BASH) University of Florida (UF), Extension Facility-4H Volunteer Firefighters

Significant Environmental Plans and Agreements: Bacteriological Sampling Plan (September 2019) Environmental R Plan (September 2019) EPCRA Section 311/312/313 Summary Compliance Report (July 2019) Hazardous Waste Determination Report (September 2019)

SUMMARY OF ACCOMPLISHMENTS:

Safe Drinking Water Act:

NAS Whiting Field has been awarded the FDEP Plant Operations Excellence Awards for the past seven years from 2012 to 2018. NAS Whiting Field PWD and our BOSC team members take enormous pride in our work and strive to achieve the best potable water system and supply in the Navy.

The Navy is committed to maintaining safe drinking water on its installations. Our water distribution system is regularly tested for lead and in compliance with the Safe Drinking Water Act. Lead exposure is a particular concern for children. Lead in drinking water may come from plumbing inside buildings including fittings, solder, water fountains/coolers, or water faucets. Based on EPA technical guidance [EPA's Training, Testing, Telling for Reducing Lead in Drinking Water in Schools, ("3Ts")], it is recommended, but not mandated, that we test the lead content of drinking water in priority areas (LIPA) such as child development centers (CDCs). The Navy has adopted the recommendation as policy. NAS Whiting Field participated in sampling drinking water for LIPA for reducing lead in drinking water at schools and childcare facilities.

In July 2018, NAS Whiting Field Environmental Division Water Program Manager conducted sampling and analysis for lead of all consumptive use and hand washing fixtures at the onsite CDC. The results indicated that all drinking water intended for consumption, to include drinking water

and water intended for cooking or washing, was below the EPA-recommended screening level of 20 parts per billion (ppb).

Reducing Environmental Impacts

The NAS Whiting Field Air Quality Manager in conjunction with Naval Facilities Engineering Command (NAVFAC) Southeast Regional Environmental subject matter experts saw a need for a more complete way of tracking and compiling air emissions data to ensure continued compliance with state and federal air regulations. The Air Quality Program has instituted two new databases for program management referred to as the following: Air Emissions Inventory Database and Refrigeration Equipment Inventory. Fuel throughput at all NAS Whiting Field fueling facilities are recorded by this database as well as generator runtimes, painting operations, and controlled burns to monitor and calculate base wide air emissions. This new Air Compliance database ensures that all aspects of NAS Whiting Field are monitored to maintain compliance with state Air Resource Management rules and Federal Clean Air Act regulations.

NAS Whiting Field Environmental staff advocated for inclusion into the Annual Allocation and Requirements Review (A2R2) Program to enhance the capabilities for Environmental staff to respond and mitigate spills that occur on NAS Whiting Field property. A2R2 is a Headquarters level program for select installations that are able to utilize the resources available for spill response programs. NAS Whiting Field was approved for the program and subsequently received significant spill response equipment to include a Vacuum Truck. This has greatly enhanced the Environmental staff to provide a rapid and effective response to ensure minimal impact to the environment.

Environmental Quality and Protection of Human Health:

Per-and polyfluoroalkyl substances (PFAS) are not identified as a hazardous substance, but the Navy and USEPA consider it as a contaminant and pollutant. Therefore, the Navy is taking a proactive measure by conducting PFAS Preliminary Assessments (PAs) at NAS Whiting Field and its Alabama and Florida NOLFs during FY 2019 and FY 2020 to determine the extent of potential releases to the environment. Information gathered from the PAs will be used to conduct site investigations for follow-on actions.

Conserving Resources and Alternate Energy:

In September 2019, NASWF was a finalist in the armed forces category for the 2019 Excellence in Park and Recreation Management by the American Academy for Park and Recreation Administration in partnership with the National Recreation and Park Association. This was largely due to its exceptional conservation buffering program which protects the installation from encroachment and provides benefits to the Florida Division of State Lands.

Over 2,000 acres totaling \$5.8 million have been safeguarded for environmental stewardship and conservation from a joint partnership with NAS Whiting Field's Readiness and Environmental Protection Integration (REPI) Program, Florida Forever Project, Florida Forest Service, Florida Fish and Wildlife Commission and US Department of Agriculture . The Department of Defense's

REPI Program is the funding mechanism for the US Navy, which is a tool used to limit encroachment while conserving natural lands. The collaboration strengthens the military mission and sustains threatened and endangered species habitat and its critical corridors. The Trust for Public Land bought 1,272 acres within the Wolfe Creek Forest and added to the Blackwater River State Forest. The property creates recreational opportunities, helps restore and rebuild longleaf pines and prevents land use conflicts with NAS Whiting Field's fixed wing and helicopter training missions. The Wolf Creek site encompasses a historic hardwood forest range along Big Coldwater Creek. The two miles of forest preserves Blackwater River State Forest and protects Whiting Field from infringement that may limit flight operations and vital military training.

Presidential Executive Order (EO) 13693 mandated that federal facilities reduce water consumption intensity by 36 percent by Fiscal Year 2025 relative to its 2007 baseline. Although EO 13693 was revoked on May 17, 2018 and replaced with a less stringent EO 13834, NAS Whiting Field reduced its water consumption by 8,636K GAL through FY18 as a significant water conservation measure. This reduction amounts to nearly 10 percent for the period, which was well ahead of the pace initially mandated by the EO 13693, and above and beyond for the most recent implemented EO 13834.

Enhancing Ecosystems:

NAS Whiting Field administers prescribed burning for habitat health and enhancement, wild fire prevention and control of invasive species. Nearly 1,000 acres have been burned in an effort to help with the revitalization of rare and endangered species, habitat recovery and training.

NAS Whiting Field conducts annual inventory investigations on NAS Whiting Field and the 12 outlying landing fields for the Gopher Tortoise and their burrow habitats. The field surveys indicate that Gopher Tortoise populations are constant and even expanding in many areas. Gopher Tortoises are a keystone species and their burrows provide refuge for up to 360 other species. Gopher Tortoises are state-designated as "threatened" and a candidate for the federal endangered species list. The assessments provide crucial data for NAS Whiting Field and its NOLFs. The information is used to develop land usage; to protect from burrow habitat loss; and to manage these critical resources. NAS Whiting Field Environmental Division organized a Hydro-Ax project totaling 175 acres to improve the Gopher Tortoise habitat located at NAS Whiting Field.

The Reticulated Flatwoods Salamander is a Federally Endangered Species under the federal Endangered Species Act. The Navy has provided funding for routine field surveys and habitat assessments to determine if the Reticulated Flatwoods Salamander persists at NAS Whiting Field's NOLF Holley. The multi-seasonal surveys were completed at five specific locations during daytime and nighttime hours utilizing silt fencing as a technique to coral the species. The data from the surveys is used to determine the effectiveness of the habitat improvement efforts directly related to Reticulated Flatwoods Salamander populations.

In December of 2018, we celebrated our 27th consecutive year as a member of the national program, "Tree City USA." Team Whiting efforts in meeting and exceeding this program's guiding principles were instrumental in the care, administration and support of our community-wide forest projects. NAS Whiting Field has the longest active history of military

installation participation in the Tree City program in the state of Florida stretching back 28 years. Our volunteers dedicated 200 hours in advocating the significance of forestry management through informational briefs and proactive training throughout the community, highlighting proper tree care, preservation education, soil erosion and habit protection. NAS Whiting Field volunteers served a lead role in the Longleaf Alliance and Gulf Coastal Plain Ecosystem Partnership programs. These sister programs emphasized the safeguard and restoration of the largest contiguous footprint of longleaf pine trees throughout the State of Florida. Our workforce committed nearly 3,000 hours in support of these long-term partnerships, which included controlled burns, classroom training and shared resources in environmental sustainment between landowners, forest industries, state and federal agencies, conservation groups and research institutes. To date, our efforts have helped protect and sustain over 220,000 wildlife acres through the proper use of prescribed burns, invasive species control, rare species recovery and habitat improvement techniques.

Training and Outreach:

One of the most significant process improvement mechanisms and contributor to our EMS Conformance for our installation is the continual communication and feedback we sustain with our training and outreach programs below. We have been able to develop ownership and pride from our residents and tenant commands by exercising the "see something do something" motto when making taking observations on the Base. This has contributed to helping identify illicit discharges and their sources, and water hydrants that need backflow preventers. Some of our training and outreach activities are summarized below.

Each week, NAS Whiting Field PWD Environmental Division staff provides Environmental Management System training for all new Primary Flight Training students as part of flight school orientation. The training provides a brief overview of each environmental media program at the installation offering military officers an educational opportunity in environmental awareness. The training highlights each person's responsibilities in contributing towards environmental management. Nearly 4,400 student trainees have received this instruction since the program's inception which averages approximately 700 new students each year.

NAS Whiting Field Environmental Division created the SWEAT program to address stormwater and other environmental programs information, policies, training and education with all installation tenants. The SWEAT meets quarterly to provide key installation personnel with presentations on environmental concerns that could affect base tenants. All members of the team receive information, awareness and education on best management practices and environmental compliance requirements.

NAS Whiting Field Environmental Division's support of Earth Day resulted in educational briefs and distribution of materials to 711 kids and more than 3,500 installation personnel. NASWF activities included a presentation at a local elementary school that served special needs children diagnosed with Autism Spectrum Disorder (ASD), and staff emphasized the specific event as an Autism Awareness/Earth Day celebration. The event was held April 2019, because April is designated as Autism Awareness Month. The presentation included three stations where special needs children could visit and get some "hands-on" information on some interesting environmental displays and presentations. Our community youth and military family were educated on the importance of natural resource management, water resource protection, recycling and energy saving concepts through the use of poster boards, fact sheets and classroom demonstrations. Team Whiting's efforts highlighted the principles of personal responsibility and emphasized that everyone has a role in protecting our environment.

In 2019, we celebrated our 34-year partnership with the Division of Forestry and the Blackwater River Liaison Panel. These outreach partnerships provided an educational framework between industry, forestry and local citizens. The team collaborated to educate on the dangers of wild land fire, the importance of controlled burns, smoke management practices and benefits of habitat restoration initiatives. Our program efforts resulted in more than 1,300 hours of hands-on instruction to execute prescribed burns on over 440 acres, which greatly reduced wildfire risks and promoted an educational outlet for the Student Conservation Association curriculum. A complimentary initiative that also had a great impact on the environment and our community was our Volunteer Firefighters. Over the year, Team Whiting volunteered over 2,500 hours in helping with environmental protection, which included participation in fire control, wildfire response and participation in educational fire safety programs throughout the community. Our workforce effort affected an environmental footprint that encompasses more than 700,000 residents located across Florida and Alabama.

In keeping with community partnering with respect to resource management principles, our staff enthusiastically volunteered to participate in the Northwest Florida Department of Environmental Protection partnering roundtable initiatives. This program promoted dialogue as well as the development of polices to address challenges and plausible solutions before they develop into serious environmental impacts. This cross-functional interchange significantly enhanced our ability to exact volunteer workforce efforts in ecosystem management, watershed and environmental protection. During the year, we also participated in "Keep Santa Rosa Beautiful." These projects promoted opportunities for public education in environmental programs and stimulated public involvement toward keeping the local community attractive. Our team dedicated nearly 400 volunteer hours to assist in litter reduction, ecofriendly education and upkeep through the Adopt-a-Highway and Blackwater/Coldwater River Cleanup programs. These volunteer initiatives allowed our volunteers to have a direct and immediate impact on the environment. Our workforce participated in the removal of hundreds of bags of trash adjacent along two miles of roadsides and one of the community's most prominent riverfronts. Our team continued to exemplify and represent only the highest of standards in environmental stewardship programs throughout the year. NAS Whiting Field's volunteers have proven to be outstanding ambassadors in improving our local community and has stood firm in the belief that we have a responsibility to protect and sustain our environmental resources.

Energy Sustainability

NAS Whiting Field was awarded the 2019 SECDEF Energy Gold Award. The Gold Award was the second highest award given in 2019. Only two bases in the entire Navy (out of 71 bases total) scored higher than NAS Whiting Field. The scoring system was based on program leadership and management, in addition to, efficiency, reliability and resiliency metrics.

NAS Whiting Field exemplified energy strategies, conservation and collaboration. NAS Whiting Field, in coordination with the Secretary of Navy's Renewable Energy Program Office, finalized an agreement with Gulf Power Company to construct a 305-acre intermittent solar farm located on NOLF Holley, which will provide fifty-two (52) gigawatts of electricity. This project will play a major role in meeting the Secretary of the Navy's strategy for a ONE GW metric in renewable energy. The Navy, in partnership with Gulf Power, recently completed the installation of over 400,000 solar panels covering 336 acres at NOLF Holley, a heavily encroached outlying airfield near Navarre. The site provides enough renewable energy to power 6,000 homes. In lieu of lease payments for the underutilized airfield, Gulf Power will construct an alternate electrical feeder to NAS Whiting Field that will greatly increase the resiliency of our electrical distribution system. This innovative lease arrangement is a prime example of leveraging underutilized assets to accomplish environmental and energy security goals.

Organizational Culture of Environmental Stewardship:

In October 2019, NAS Whiting Field was awarded First Place in Environmental Stewardship Flagship Volunteer Award for Medium Shore Installations from the Region Southeast Community Service Award Program.

In December 2018, Naval Air Station Whiting Field was recognized by FDEP for outstanding environmental stewardship in safeguarding Florida's natural resources. The award was aimed at our reduction in water consumption, energy sustainable partnerships and natural resources.

In April 2018, NAS Whiting Field was selected for a Chief of Naval Operations (CNO) Environmental Award for Environmental Quality, Non-Industrial Installation. The annual CNO Environmental Awards Program recognizes Navy ships, installations, and people for outstanding performance in promoting environmental stewardship. The program highlights accomplishments in Natural Resources Conservation, Cultural Resources Management, Environment Quality, Sustainability, Environmental Restoration, Environmental Excellence in Weapon System Acquisition, and Environmental Planning, according to the website for the Office of the Secretary of the Navy in Washington, DC.

In January 2018, Commander, Navy Installations Command (CNIC), selected NAS Whiting Field as the winner of the prestigious Installation Excellence Award (IEA). The Navy's IEA program recognizes installations based on their performance in accordance with the command's strategic goals and the Office of the Secretary of Defense criteria for the DoD-wide Commander-in-Chief Installation Excellence Awards.

In October 2017, NASWF received the first place award from the Navy, Region Southeast for excellence in outstanding community service efforts for shore activities (200-499) in the Environmental Stewardship category.