

2016 SECRETARY OF DEFENSE ENVIRONMENTAL AWARD NOMINEE

NATURAL RESOURCES CONSERVATION – TEAM

**U.S. NAVAL AIR STATION OCEANA AND U.S. NAVAL SUPPORT ACTIVITY HAMPTON ROADS NORTHWEST
ANNEX NATURAL RESOURCES TEAM**

BACKGROUND

There are three installation level Navy natural resources (NR) personnel [one NR Manager (NRM), one Biological Science Technician (BST); and one Conservation Law-enforcement Officer (CLEO)/BST] that provide services to approximately 15,000 acres of Navy owned/leased property that span across five states and an additional 140,500 acres of easements and nearshore environment. These three individuals are assigned to Naval Air Station Oceana (NASO) and have additional duties to manage the NR programs at Naval Support Activity Hampton Roads Northwest Annex (NSAHR NWA). This staff manages and implements three Navy Integrated NR Management Plans (INRMPs) in their primary duty area. This staff is regularly requested to provide additional support to other installations that are not part of their primary duty area. It is impossible for these three individuals to solely manage this area; as such, to manage and implement a successful ecosystem based NR program the installation NRM enlists the support of a wide variety of individuals: other navy civilians, navy active duty military, retired military, general community, volunteers, contractors, colleges/universities, other federal, state and local governmental agencies, non-governmental organizations, and local Scout groups.

Overall Natural Resources Conservation Management:

In 2015, six agencies [US Navy, US Fish & Wildlife Service (USFWS) Regions 4 and 5, Virginia Department of Game and Inland Fisheries (VDGIF), North Carolina Wildlife Resources Commission (NCWRC), NOAA, and National Marine Fisheries Service (NMFS)] came together to ensure all three INRMPs were compliant with the SIKES Act. During the annual review of the INRMPs with agency partners, two of the representatives from state wildlife agencies indicated that the way the Navy handled the Five Year Review for operation and effect and its annual INRMP implementation and partnership effectiveness reviews was “a leading example of how to efficiently and effectively complete these reviews.”

The installations utilized Non-Navy staff, an alternative staffing approach, to support the natural resources program through the use of: cooperative agreements with partners such as the National Aquarium (dune restoration), the University of William & Mary’s Center for Conservation Biology (Bald Eagle research), Christopher Newport University student projects (Garter snake research), Old Dominion University student projects (tick borne illness research); FrogWatch (amphibian research, citizen science); VDGIF (Canebrake rattlesnake research); USDA (BASH and Nuisance Wildlife Control); contractor support (various wildlife surveys and assessments); and volunteer support (hunting, dune restoration, and education trail programs).

Awards: In 2014, the installation NRM was awarded for her efforts in FYs 2012-2013 with regards to Natural Resources Conservation receiving: a Secretary of the Navy Environmental Award; and a Chief of Naval Operations Environmental Award. In 2014, the NRM also received honorable mention in association with the Secretary of Defense’s Environmental Award for Natural Resources Conservation efforts in FYs 2012-2013.

Mission Enhancement:

During the 2014 and 2015 INRMP metrics annual reviews the CO’s identified that the NR Team (NRT) had “benefited the military mission.” The NRT worked together to prepare for, **obtain and implement all**

necessary consultations and State and Federal permits to ensure the military training mission could occur safely and with minimal obstructions/downtime. The top three military mission enhancement actions the NRT provided were related to BASH, beach replenishment, and vegetation height obstructions.

Master Jet Base NASO and NALFF, its auxiliary landing field, are operational 24 hours a day/seven days a week, with operations conducted during day and night hours in order to familiarize pilots with realistic ship/shore landing conditions. Between the two installations over 195,000 flights are conducted annually. NASO is also boarded by private development adjacent to nearly every installation boundary. NASO and NALFF are both located along migration routes for various species of birds, butterflies, and bats. The number of aircraft operations, coupled with populated urban areas, and migrating wildlife lead to safety concerns. The integrated nature of and coordination efforts of the NRT helped to ensure safety of pilots, the community, and the wildlife within the watersheds via strategic conservation planning efforts and BASH avoidance measures.

The dune system at NASO DNA provides significant training opportunities for the military, provides infrastructure protection of training facilities, and important migration and breeding habitat for a multitude of native species. In an effort to restore and maintain the integrity of the sand dunes bordering the beaches at Dam Neck, 300 community donated Christmas trees were placed along the dune line to catch and retain the sand, which otherwise erodes due to wind and tides. Over 60 thousand native plants (inclusive of pollinator friendly species) were planted by volunteers, by hand, along restored/created dunes to stabilize the dunes helping to prevent beach and sand erosion, promoting significant beach reclamation and rebuilding. The volunteers also posted dune management area signage along approximately one mile of beach. This volunteer based effort was accomplished through a Cooperative Ecosystems Studies Unit Cooperative Agreement between the Navy and the National Aquarium in Baltimore. Additionally, NASO DNA partnered with the City of Virginia Beach and the Commonwealth of Virginia in advocating the Shoreline Protection System, a project that controls beach erosion by the replacement of sand, providing natural wildlife habitats and beautification to the affected areas. The beach and dune restoration projects ensured this rare training environment remained available for military training while ensuring native wildlife habitat conservation, and recreation opportunities.



Sailor carries flats of native dune vegetation to plant on the dunes at NASO Dam Neck Annex. Over 200 volunteers, active duty and civilian, planted approximately 60,000 plants to enhance and create habitat, while also protecting important military training infrastructure.

Both NASO and NSAHR NWA commands must manage vegetation heights on the installations to ensure safe and effective mission operations. The NRT coordinated with appropriate installation and tenant command representatives to identify how to move forward with implementing mission vegetation height obstruction requirements while complying with NR laws. The NRT obtained end of year funding to conduct NLEB surveys for both commands to support this effort for anticipated consultation requirements. In addition the NRT collaborated with NASO Air Operations and Planning Departments to produce data and interactive maps that facilitate vegetation clearing planning in support of Airfield Obstruction Management Plans while assisting the NRM in planning for future forest, wildlife, and agricultural programs. The NRT plans to move forward with a similar planning tool (interactive map) for NSAHR NWA and its Clearzone Management Plan.

Land Use Management:

The NRT has been commended for their efforts at meeting NR program and military mission and training requirements. During the annual INRMP metrics reviews with the installation Commanding Officers (COs) both COs recognized the NRTs efforts to communicate effectively with Installation, Tenant, Safety, and Security representatives. The NRT worked with all appropriate personnel to ensure recreational hunting areas were closed to hunting when a mission or installation requirement required the use of the hunting area. The NRT helped ensure the installation was in compliance with the ESA and promoted sound conservation measures via coordination with various personnel to ensure beach operating areas were clear for use by the military and recreationist by conducted daily sea turtle patrols during nesting/hatching seasons.



NASO Biological Science Technician assists VA Aquarium Stranding Response team members and VA Army National Guard (VAANG) with the relocation and protection of a Federally protected Loggerhead Sea Turtle nest. While conducting morning beach patrols in August 2015, the NASO Natural Resource Manager located and reported VAANG's 1st confirmed sea turtle nest.

The 1st comprehensive Vegetation Classification Mapping efforts were completed for all 3 INRMP's properties. The mapping efforts utilized a combination of imagery/remote sensing and infield verification/ground-truthing efforts to meet the national vegetation classification standards. These layers are now being utilized to focus conservation management, provide threatened and endangered species suitable habitat data to USFWS to aid in determining species status under the Endangered Species Act, and identify vegetation community types that meet specific military mission/training requirements.

The NRT initiated an effort to look at land management practices and vegetation change over time thru the use of GIS. This effort will meld with planned future climate change assessments for the installations and local watersheds. The NRT GIS coordinator has been collecting and georeferencing historic maps and imagery from other NRT members and other imagery suppliers. The GIS coordinator has made this imagery available to the greater Navy community through the NAVFAC ML GRX EV Historic Maps and Imagery service.

Forest Management:

The NRT completed the 1st Commercial Forest Inventories in over 10 years for each INRMP's properties. The NRT awarded the 1st comprehensive Urban Forest Inventories (non-commercial) for each INRMP's properties. USFWS, VA Dept. of Forestry, and City of Chesapeake representatives have commend the Navy for its recent efforts to inventory and assess these forest resources.

Awards: Team prepared 3 Tree City USA awards packages per year, in association with the 3 INRMP Urban Forest Management programs. From 2014-2014, 6 Tree City USA awards were issued by the National Arbor Day Foundation. The awards received in 2015 were for Forest Management actions that occurred on the installation in 2014. The awards in 2015 resulted in: NASO receiving its 21st consecutive award; NASO DNA receiving its 15th consecutive award; and NSAHR NWA receiving its 13th consecutive award.

Fish and Wildlife:

The NRT in partnership with the VAANG – Camp Pendleton (CP), VDGIF, USFWS, and Virginia Aquarium & Marine Science Center (VAMSC) conducted ESA and Marine Mammal Protection Act protected species annual nesting sea turtle and stranded marine animal patrols of both NASO DNA and VAANG-CP beaches. 2015 patrol efforts documented the 1st confirmed sea turtle nest for VAANG-CP. NRT patrol efforts ensured timely response by permitted partners (VAMSC) to collect biological data and implement nest protection procedures.



Navy Natural Resource Team received equipment and support, Christmas Eve 2014, from a Marine Corps detachment located at NASO Dam Neck Annex to relocate a stranded Minke Whale, so that Navy partners from the Virginia Aquarium and Marine Science Center could conduct a necropsy.

NASO, in partnership with the City of Virginia Beach, aided the City of Virginia Beach's sentinel chicken project. This project determines the presence of infectious diseases within the surrounding area (i.e., West Nile virus, encephalitis, etc.). The chickens are housed on the NRTs field office property and are an active educational feature of the NRTs educational trail system during summer months.

The NRT in partnership with Virginia Aquarium and Marine Science center coordinated access for survey teams to conduct annual dolphin counts along the

beaches of NASO Dam Neck Annex in support of state and national research and monitoring efforts.

The NRTs proactive efforts to surveying for NLEBs resulted in obtaining information previously unknown about this species in SE VA/NE NC. Though these areas contain summer habitat suitable for these species they had previously not been recorded in the area within the last 2 decades. In Aug 2013 the species was 1st confirmed present in SE VA/NE NC on NSAHR NWA, and the species was then recorded for the 1st time in 2015 at NALFF (it was not recorded on the installation during 2014 survey efforts). The NRTs efforts to conduct these surveys documented that the bats travel longer distances from capture sites and initial roosting sites than originally thought, and it also documented limitations to the recommended protocols for trapping these species in the area's hot humid swampy environment (tracking transmitter glue melts and the devices fall off).

Invasive Species Control and Pest Management:

In 2014/2015, the Navy awarded a multi-year contract to control 5 non-native invasive plants (Kudzu, Phragmites, Alligator weed, Asian Spiderwort, and Bamboo). The Navy partnered with adjacent landowners and their additional partners [VA Army National Guard (VAANG), Hampton Roads Sanitation District, USFWS, City of VA Beach, and Local Neighborhood Civic League] to develop a targeted species action list and accomplish these efforts via an ecosystem wide invasive species partnership. Each organization is working in tandem with one another to control these species.

The NRT has been working with installation Public Affairs Officers, Environmental Services and Facilities Management Departments in a multi-faceted effort to control and remove Feral Animal populations on the installations. In addition to feral animal physical removal efforts in 2015 the installation launched an effort to

educate the installation community via social media and face to face communication of the: Navy Policies regarding these species; threats these species pose to the local native wildlife and other natural resources; and human health and safety concerns of these species.

Conservation Education & Community Outreach:

The NRT provided opportunities for representatives from USFWS Regions 4 & 5, local USFWS National Wildlife Refuges, VDGIF, NCWRC,VAANG, and US Navy to observe Bat Survey and Monitoring techniques in action associated with the 2015 Endangered Species Act Federally Listed Threatened Species, Northern long-eared bat/Northern myotis (*Myotis septentrionalis*). This bat was identified for the 1st time, in 2015, thru these efforts at NALF Fentress. NASO hosted 3 USFWS representatives, 1 VDGIF representative, and 7 Navy representatives during these events.

The NRT in coordination with installation planning, real-estate, and preventative medicine provided opportunities for University Students and Professors to conduct research on the installation. Old Dominion University students and professors conducted various tick studies throughout Virginia looking at disease pathogen spread, population densities, and species diversity with sites being located at NASO and NASO DNA. Christopher Newport University student conducted research related to Garter snake population color variations in Virginia with NALFF and NSAHR NWA being two of the study locations. William & Mary College – Center for Conservation Biology collected data from the 1st recorded Eagle’s Nest on NASO to be added to a state wide database and utilized for various research and reporting requirements.



Navy contractor holds a Northern long-eared bat (NLEB) that had been banded and tagged with a tracking device at NSAHR Northwest Annex in 2014. The NLEB was listed under the Endangered Species Act as threatened in April 2015.

Members of the NRT: provided wildlife safety briefings to Installation Commands and Tenant Commands; published articles in the Navy’s Environmental Magazine the “Currents” educating people regarding sea turtles and expanding ranges; provided NR presentation’s to the greater military community during the National Military Fish & Wildlife Association (NMFWA) Annual Training Workshops; were elected as chairmen to NMFWA working groups (BASH and Conservation Law-enforcement); were DoD Partners in Flight and DoD Partners in Amphibian and Reptile Conservation steering committee members; and provided training support to the Military focused 2015 Migratory Bird Treaty Act Training Class (NAS Jacksonville).

The NRT conducted 6 (2 per INRMP) community focused Tree Planting Events in support of Arbor Day, Earth Day, and Migratory Bird Day Celebrations. The Child Development Center children and installation community at each installation participated in the event with NRT, VDOF, and Installation Command Representatives (CO/XO/CMC/OIC). Participants learned about each of these celebrations thru a, interactive demonstration of the importance of trees in the cycle of life and how to properly plant and care for a tree.

Awards: National Public Lands Day (NPLD) DoD Legacy Award was awarded in both 2014 (\$6,360.00) and 2015 (\$6,360.00) for the NASO DNA volunteer based dune restoration efforts by the National Environmental Education and Training Foundation (NEEF) via DoD Legacy Resource Management Program funding.



NASO Commanding Officer, Virginia Department of Forestry representative, and Smokey the Bear teach children how to plant a tree at one of two installation Arbor Day, Earth Day and Migratory Bird Day celebrations conducted in 2015.

Environmental Enhancement (improved quality of life for personnel and surrounding communities):

Award funding from the NEEF was used to create a dune system containing a diversity of native pollinator friendly plants on NASO property. Approximately, \$12,720 was awarded to fund an additional 15,900 plants during two NPLD events at NASO DNA. The NRT worked with over 200 volunteers and cooperators to plant over a mile of dunes. These events gave the community a sense of ownership and pride in this natural habitat.

Natural Resources Compliance Program:

During FY14 & FY15 multiple contracts and cooperative agreements were awarded several projects awarded in 2012 and 2013 also continued to be executed thru FY14 and FY15 resulting in FY14 or FY15 final deliverables/products. The team worked collaboratively with in-house support, contractors, cooperators, regulatory agencies, lessees, and volunteers to obligate and/or execute the funding of 171 projects totaling approximately \$3,951,732.00.

Fiscal Year (FY):	Awarded/Obligated (\$) During FY:	Spent (\$) In FY by Funds Obligated in FY2012 to FY:	Number of Associated Projects Worked in FY:
FY2014	\$783,286.47	\$892,834.50	81
FY2015	\$1,241,306.63	\$1,034,304.25	90
TOTAL:	\$2,024,593.10	\$1,927,138.75	171

In addition to the FY15 funding obligation and execution requirements, the NRT had to enter INRMP identified funding requirements for the years 2018 to 2022 into the Navy’s Program Objectives Memorandum (POM) database. The installation NRM initially submitted 75 total funding requirements packages. In preparation for submitting these requirements to the Headquarters and above levels of the organization, the installation NRM, EPDs, and regional NAVFAC ML Core NRSs worked collaboratively to ensure the 75 submissions were adequately justified and budgeted to be met with approvals at the upper echelons of the Navy’s Environmental Program. All 75 projects were submitted to and approved by NAVFAC EV Headquarters and Commander Navy Installation’s Command (CNIC) EV and submitted to the Chief of Naval Operations (CNO) EV reviewers for approvals.