

# Chief of Naval Operations Environmental Award Winners Recognized

## Accomplishments Exemplify Navy's Commitment to Environmental Stewardship

**WINNERS OF THE** annual Chief of Naval Operations (CNO) Environmental Awards program have been announced for fiscal year (FY) 2014. The awards recognize Navy ships, installations, and individuals for their exceptional environmental stewardship.

The competition categories for the FY14 competition included natural resources (large installation), cultural resources management (small installation and individual/team), environmental quality (industrial installation and overseas installation), sustainability (non-industrial installation and individual/team), environmental restoration (installation), and afloat (includes various competitive sub-categories).

Nominations were judged by subject matter experts on accomplishments from October 1, 2012 through September 20, 2014. Chief of Naval Operations Admiral Jonathan Greenert recognized 27 award winners during a video teleconference ceremony held June 23, 2015 at the Pentagon in Washington, D.C.

Accomplishments of the winners are highlighted below.

### Natural Resources

This award recognizes efforts to promote the conservation of natural resources, including the identification, protection, and restoration of biological resources and habitats; the sound long-term management and use of the land and its resources; and the promotion of a conservation ethic.

### Large Installation

#### *Joint Base Pearl Harbor-Hickam, Hawaii*

Serving as one of the world's largest military installations, Joint Base Pearl Harbor-Hickam (JBPHH) encompasses over 28,000 acres of land and nearly 70,000 marine miles in the surrounding area of the Hawaiian island of O'ahu. JBPHH oversees an extensive natural resources program covering various topographies and habitats from mountainous regions to oceans. Given their large area of responsibility and wide span, JBPHH contains more endangered species than any other Navy installation. The coconut rhinoceros



The coconut rhinoceros beetle, first discovered on JBPHH in December 2013, is a destructive invasive pest that is native to Southeast Asia. The beetle has caused the loss of more than 50 percent of all coconut palm trees on the island of Guam.

## For More Insights

FOR MORE INSIGHTS into JBPHH's efforts to eradicate the coconut rhinoceros beetle, read our article "JBPHH Joins the Team to Fight Coconut Rhinoceros Beetle: Invasive Insect Poses Real Threat to Hawaii's Palm Trees" in the winter 2015 issue of *Currents*. You can find an electronic copy of this article and browse the *Currents* archives at the Department of the Navy's Energy, Environment and Climate Change web site at <http://greenfleet.dodlive.mil/currents-magazine>.



beetle (native to Southeast Asia) began infesting the premises of JBPHH in large numbers and feeding on palm trees from 2012 to 2014. Base personnel implemented an invasive species management plan that was shared and adopted by nearby Army and Marine Corps properties to eradicate the beetle. They installed approximately 400 traps around the base and removed infected palm trees and mulch. Infected green waste was incinerated through the use of air curtain burners that generated less smoke and ash emissions. This method resulted in a potential \$500,000 savings for the Navy compared to regular incineration techniques.

At the JBPHH Lualualei Annex, the natural resources team took steps to preserve the critical habitat necessary for the survival of 22 threatened and endangered plant species. This included maintaining fenced boundaries and invasive plant monitoring and management. A non-native



Mangrove is considered beneficial in every part of the world except Hawaii, where it is not native. It can choke shorelines and mudflats, rendering them unusable for native Hawaiian waterbirds and shorebirds. At left is the Kumumau Canal before mangrove removal, and at right is the canal after mangrove removal. This had the dual benefit of increasing drainage of water away from the airfield during heavy rains (thereby reducing standing water on the airfield which attracts birds) and providing habitat in the canal itself.

mangrove was also removed within the Pearl Harbor complex due to mangroves' ability to choke shorelines and mudflats, which can threaten surrounding wildlife. The Lualualei Annex team also partnered with the U.S. Fish and Wildlife Service (USFWS) to assess the impact of nearby airfield construction and operations on native waterbirds.

## Environmental Quality

These awards recognize efforts to ensure mission accomplishment and protection of human health in the areas of environmental planning, waste management, and environmental law and regulation compliance.

## Industrial Installation

### *Fleet Readiness Center Southwest, California*

The Fleet Readiness Center Southwest's (FRCSW) mission is to carry out responsive maintenance, repair, and overhaul support to U.S. and allied warfighters. To support this mission, FRCSW conducts industrial processes, such as electroplating, chemical cleaning, stripping, painting, and jet engine testing. The latter generates hazardous waste and emis-



FRCSW participates in multiple community events including the San Diego Earthworks' Earth Fair, the Coronado Flower Show and Restoration Advisory Board meetings.

sions. The FRCSW environmental program office continuously monitors the production of hazardous waste and strives to find opportunities to mitigate the environmental impacts caused by activities at FRCSW. The team at FRCSW has successfully implemented tactics to reduce energy costs by nearly \$447,000 per year, reduce water use by 1.2 million gallons and reduce compressed air use resulting in a savings of \$1 million. FRCSW also encourages public outreach and education about their efforts at events including the San Diego Earthworks' Earth Fair and the Coronado Flower Show.



FRCSW's energy/water team performs energy audits to determine where conservation measures can be implemented. This hangar (circa 1940s) is an example of a lighting retrofit project that resulted from those energy audits. The command has saved hundreds of thousands of dollars a year on lighting retrofits alone.

### *Naval Base Kitsap, Washington*

Formed in 2004, Naval Base Kitsap encompasses nearly 11,200 acres (60 percent of which is forested), and due to the nature of its mission, produces hazardous waste, water discharges, and air emissions. Despite those facts, Naval Base Kitsap has been able to maintain International Organization for Standardization 14001 conformance as part of the Navy Region Northwest Environmental Management System (EMS). The installation is committed to replacing aging technologies with more state-of-the-art, fully compliant systems, including the replacement of many underground storage tanks (UST) and a wastewater treatment system. In an effort to reduce energy consumption, new light emitting diode exterior lighting was installed, reducing energy consumption by 53 percent.

Due to the large size of the installation, several species listed as threatened or endangered under the Endangered Species Act (ESA) call Naval Base Kitsap home.



A 6,000-gallon single-walled underground storage tank undergoing removal. This 30-year-old tank is one of eleven slated for removal from Naval Base Kitsap.

Each major construction project, such as the Pier 6 fender pile replacement project (380 piles), has a monitoring program in place in order to ensure ESA-listed species are protected and operations are within permit limits. One such construction project was the replacement of a culvert on a Union River tributary, which was identified as a barrier to fish passage. After five months, the old culvert was replaced with a 20-foot diameter natural-bottom tunnel. This will allow such ESA-listed species as the steelhead trout and the coho salmon to migrate upstream and spawn.

### *Fleet Readiness Center Southeast, Florida*

Fleet Readiness Center Southeast (FRCSE) is one of eight Fleet Readiness Centers that provides maintenance and repair services for naval aircraft, engines, weapon systems and components. Several accomplishments of the team at FRCSE include:

- An energy reduction of 81 Million British Thermal Units (MBTU) per thousand square feet, which resulted in a 32 percent energy reduction from the 2003 baseline.
- A reduction in the hazardous waste stream by more than 80 percent (approximately 900,000 pounds) since 2008, lowering the cost of operations by more than \$720,000 annually.
- Use of a waste compactor in July 2014 for production waste, resulting in estimated annual savings of approximately \$17,000.
- Reclamation of 13 EA-6B Prowler aircraft, which resulted in the recovery of more than 900 aircraft parts, saving the Navy \$94.4 million.
- The creation of the Environmental Pacesetter of the Quarter Award, which recognizes an employee who personifies environmental stewardship.



FRCSE installed a paint solvent recycler for the aircraft paint facility to reclaim solvent used to clean paint lines. This reduced the amount of solvent material purchased by 7,126 pounds/year.

*Victor Pitts*

### **For More Information**

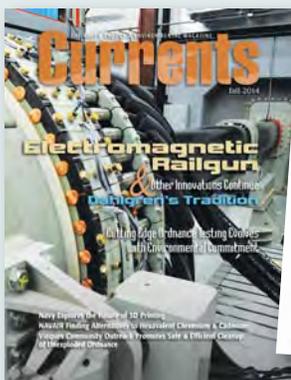
FOR MORE INFORMATION about Naval Base Kitsap's efforts to replace a culvert on a Union river tributary, read our article "Naval Base Kitsap Replaces Fish-Blocking Culvert: After Decades, Wild Salmon Returning to Their Spawning Grounds" in the fall 2014 issue of *Currents*.

### **Overseas Installation**

#### *U.S. Naval Hospital Yokosuka, Japan*

The U.S. Naval Hospital (USNH) Yokosuka encompasses one 48-bed military treatment facility and seven branch clinics located on mainland Japan, Korea, and Diego Garcia with over 1,200 staff providing care to over 42,000 active duty personnel and their families. The hospital's hazardous and medical waste operations manager oversaw a five percent reduction in total infectious waste costs between FY13 and FY14. This was possible through a complete overhaul of its medical waste management processes and the implementation of a new pharmaceutical hazardous waste disposal program. New staff training was implemented to teach personnel how to differentiate between potentially infectious waste, non-infectious waste and regular trash. The sustainability of these USNH Yokosuka programs can be attributed to three implementations:

1. Appropriate dedication of resources to institutionalize new polices, processes and systems that have been developed by dedicated subject matter experts
2. Development of procedures based on best practices and fundamental requirements approved by higher authority or regulations
3. Fostering and growth of new ideas to improve environmental stewardship across the entire command.





**USNH Yokosuka supporting the U.S. Army Veterinary Clinic via a Memorandum of Agreement requiring the collection of medical waste. Designated Army personnel transport properly contained medical waste from the veterinary clinic to the USNH Yokosuka collection site. Each permanently-sealed and disposal-ready white plastic containers house only red-bagged medical waste, per prefecture-specific regulations.**

#### *Naval Air Facility Atsugi, Japan*

Naval Air Facility (NAF) Atsugi must ensure they fully comply with environmental regulations from the Japan Environmental Governing Standards (JEGS). JEGS combine U.S. and Japanese environmental laws and agreements. Installation personnel successfully implemented the first-in-Navy lifecycle Preliminary Environmental Assessment Review (PEAR) process dictating over 30,000 environmental requirements for more than 50 construction and rehabilitation projects in 2014. The compliance tracker tool serves as a complement to PEAR and even received an Innovation Award from Naval Facilities Engineering Command (NAVFAC) Far East. This tool is a real-time measurement of compliance of the 50 applicable and individual environmental requirements.

NAF Atsugi negotiated a solid waste contract to provide cost incentives to waste service providers to separate

waste for recycling. Approximately 5,400 tons of material were recycled in FY13 and FY14. A potable water system produced solely by NAS Atsugi has resulted in a savings of \$5.8 million. The installation uses their own ground source supply and ensures standards meet or exceed U.S. Environmental Protection Agency (EPA) regulations. The shutdown of Navy Radio and Receiving Facility Totsuka and Naval Support Facility Kamiseya resulted in a massive clean-up. This clean-up removed 1,000 tons of solid waste and 1,500 of hazardous waste. In FY14, NAF Atsugi reduced a 15 year backlog of hazardous waste totaling 141,884 pounds. Their offsite Qualified Recycling Program (QRP) recycled 2,000 pounds worth of material from several transformers deemed free of polychlorinated biphenyls, thereby eliminating disposal fees.

#### *U.S. Naval Support Activity Bahrain, Bahrain*

The environmental team for Naval Support Activity (NSA) Bahrain provides oversight of the environment

program at Isa Air Base, the Ports of Jebel Ali and Fjairah in the United Arab Emirates (UAE), the waterfront development (NSA II), the UAE Coast Guard Base, and several homeported ships. The environmental program supports the mission and operations of the installations and the Commander, Fifth Fleet by maintaining compliance with all applicable environmental laws and regulations, protecting human health and the environment, and implementing pollution prevention initiatives to reduce the production of hazardous waste. During the last two years, Navy Region Europe Africa Southwest Asia has achieved approximately a 50 percent reduction in the quantity and cost of hazardous waste disposal. Through the implementation of a QRP, 1,900 tons of trash were diverted from the disposal stream and recycled for over \$100,000 in proceeds, which are used to sustain the QRP. The team, along with the environmental program itself, has been recognized for its robust, versatile and aggressive outreach and



**Each year, NSA Bahrain conducts at least three oil spill exercises to ensure that Navy personnel are trained and to ensure that the Navy's spill plan and that of the host nation are compatible. This joint exercise in Fujairah involved deployment of the Navy's and host nation assets.**

*Jayakumar Nair*

waste minimization programs by the UAE, the State of Qatar Armed Forces, and the National Crisis and Emergency Management Authority.

## Sustainability

These awards recognize efforts to prevent or eliminate pollution at the source, including practices that increase efficiency and sustainability in the use of raw materials, energy, water, or other resources. Sustainable practices ensure that Department of Defense (DoD) protects valuable resources that are critical to mission success.

### Non-Industrial Installation

#### *Naval Medical Center San Diego, California*

Naval Medical Center San Diego's (NMCS) sustainable practices ensure that the installation protects valuable resources that are critical to mission success. Through systematic training of NMCS's staff, they successfully instituted a comprehensive recycling and food composting program through the City of San Diego. Composting was implemented to divert unnecessary waste from being landfilled and to prevent or eliminate pollution at the source. On average, 177.5 tons of food waste and 590 tons of recycled materials per year are diverted, in addition to 36,000 gallons of cooking oil that is transported and rendered, so it may eventually be used for biofuel. This effort was accomplished through the collaboration of the NMCS environmental staff, NAVFAC Southwest Sustainable Solid Waste program office, NAVFAC Southwest Recycling, and the NMCS nutrition management department staff. Additional accomplishments include the following:

- The composting program diverts approximately 15 tons of food waste a month from the landfill.
- NMCS diversion rate for the facility is approximately 75 percent (excluding construction and demolition debris) which exceeds the 50 percent diversion rate stated in Executive Order 13514.
- Composting along with recycling has reduced the installation waste disposal costs by 25 percent.
- The City of San Diego uses composted materials as fertilizer.

#### *Naval Base San Diego, California*

Naval Base San Diego (NBSD) and the Space and Naval Warfare Systems Command (SPAWAR) conducted a



NMCS food waste being dumped at Miramar Greenery. This waste will be treated for 70 days and then used as a soil nutrient.

particle tracking experiment to analyze the use of fluorescent magnetic particles to link sources to sediments at Navy sites. During this study, SPAWAR placed 35 magnetic collectors in the area around NBSD Pier 8 and Paleta Creek and mapped a tracer plume at various distances ranging from 30 to 400 meters away. SPAWAR then released 750 kilograms of particle tracer from a vessel as it moved between the dock and about 60 meters out into the water. The magnets were recovered and showed where the tracer sank and was deposited in the bottom sediments. Sediment samples were then



NBSD has partnered with the City of National City, the City of San Diego, the Main Street Association, the San Diego 8th District Council, the Barrio Logan Association and surrounding communities to conduct a volunteer cleanup of the bay and shore. NBSD continually contributes to the betterment of San Diego, National City, Chula Vista, and surrounding communities.

*Kristina Walton*

collected and sent for laboratory analysis to compare to previous collections. This study helped determine where potential releases may spread and identify where clean-up efforts should be concentrated.

In addition, NBSD installed two new filtration systems for stormwater runoff to divert and capture potential pollutants from entering the San Diego Bay. NBSD also oversaw the removal of over 45,000 pounds of debris from the surrounding waterways over the last twelve months and organizes a Base Pride Clean-Up event. The volunteers at this year's clean-up collected over 90 pounds of trash across the installation.

### *Naval Support Activity Monterey, California*

Through staff interaction, adoption of cutting edge technology, forward-looking engineering, and solid leadership, NSA Monterey is setting the standard for sustainability within the Navy and the DoD. Located in Monterey, California, NSA Monterey is host to over 4,035 military, civilian and international personnel and 15 tenant commands, each with unique and critical mission requirements. The installation has built a committed EMS Executive Steering Committee (ESC) that brings together senior leadership from across the installation and tenant commands as partners in environmental decision making and communication. This group strives to exceed the sustainability principles set forth in Department of the Navy and other guidance. The EMS ESC was able to accomplish the following:

- A 34 percent reduction in energy consumption
- A 41 percent increase in scrap metal diversion
- A 77 percent solid waste diversion rate
- A 40 percent decrease in potable water use (as compared to the FY08 baseline)

### **Individual or Team**

#### *Mr. Len Sinfield and Mr. Thomas Niday, Naval Base Coronado, California*

Under the purview of Naval Base Coronado (NBC), the Naval Auxiliary Landing Field, San Clemente Island (SCI) is located approximately 67 miles offshore. Potable water is transported via barge to SCI where it is chlorinated, stored, and then distributed. Due in part to long storage time, as is necessary for emergency and fire protection, the SCI potable water system was out of compliance with EPA's Disinfection Byproducts Rule for Total Trihalomethane (TTHM). NBC implemented several short- and mid-term compliance measures, but these measures were unsustainable in the long term. Alternatives identified were space, time, and cost prohibitive (ranging from \$2 to \$31 million).

After lengthy research, Mr. Len Sinfield and Mr. Thomas Niday (from NAVFAC Southwest) found an affordable and effective solution through spray aeration. Although spray aeration was considered experimental by the EPA, NBC was able to get approval to conduct a pilot scale test. After success of the initial pilot test, regulators accepted NBC's



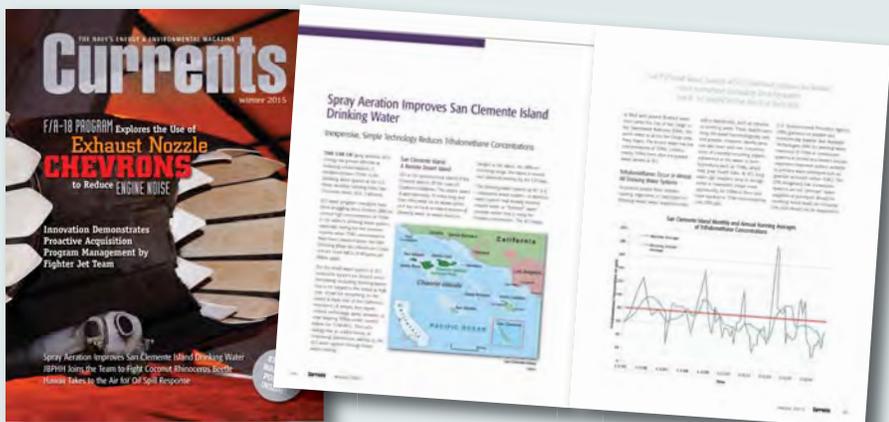
In an attempt to reduce the amount of fossil fuel used on NSA Monterey, 14 electric carts have been acquired. During FY13-14 these carts were driven over 15,000 miles on the main base.



SCI is the cornerstone of the tactical training ranges supporting the Southern California Operations Area—the largest concentration of naval forces in the world.

## For More Information

FOR MORE INFORMATION about the use of spray aeration technology to reduce concentrations of trihalomethanes in the SCI drinking water system, read our article “Spray Aeration Improves San Clemente Island Drinking Water: Inexpensive, Simple Technology Reduces Trihalomethane Concentrations” in the winter 2015 issue of *Currents*.



The project consolidated the fuel terminal's expanse by over half from 200 to 75 acres. This lessened the impact on surrounding coastal habitat and wildlife including native canary palm trees.

Tainted soil was decontaminated on site and used as backfill to seal off old USTs. This resulted in a \$10 million cost avoidance by eliminating the need to import new soil. The project also replaced a 100-year old operational pier with an innovative new design that meets operational readiness requirements and environmental regulations. The updated pier's construction includes safeguards for marine life during construction, and structural modifications per California's seismic regulations, as well as sea level rise predictions. Over 1.8 million gallons

of speculation fuel were sold as a result of fuel oil reclamation efforts, eliminating an estimated \$50 million in waste disposal fees.

proposal to expand the spray aeration system to all the tank systems at SCI. Spray aeration, combined with implementation of several other efforts, has proven effective as SCI is now in compliance with the EPA TTHM requirements. At a material and installation cost of less than \$80,000, this fairly low-cost solution to a large problem would not have occurred without the years of technical experience and dedication to the Navy showed by Mr. Sinfield and Mr. Niday.

### *Fleet Logistics Center San Diego, California (Fuels Department)*

Naval Supply Systems Command (NAVSUP) Fleet Logistics Center (FLC) San Diego supports 86 home-ported ships, submarines, transient vessels and 11 over-the-horizon naval bases and air stations in California and Nevada. During the replacing of their Bulk Fuel Facility (referred to as military construction (MILCON) project no. P-401), the FLC San Diego team was able to divert over 70 percent (nearly 40,000 tons) of the associated construction waste from landfills by onsite reuse. The remaining construction waste was processed by another recycling center off site. The team was awarded the Leadership in Environmental and Engineering Design (LEED) Silver award for the project, which represented the first “green” Navy fuel terminal. Energy consumption declined by 33.2 percent.



The old Bulk Fuel Facility's footprint. Despite the challenges of multiple MILCON projects requiring extensive demolition and construction, unit cohesiveness was achieved with regular partnering sessions between all stakeholders, allowing NAVSUP FLC San Diego to meet operational and mission demands for all of its customers.



File cabinets and many other types of metal furniture are cut and processed for sale in the metals commodities markets breathing new life into NRSW wastes. Although furniture reuse is practiced extensively, some metal furniture and other components are beyond recovery and are processed as metal scrap. The SSW team developed processes and standards for metal recovery.

*Navy Region Southwest, California (Sustainable Solid Waste Program)*

Navy Region Southwest (NRSW) contains ten installations across six states (primarily California) consisting of 5,750 square kilometers of land with nearly 10,000 personnel supporting approximately 480 tenant commands. Activities of the Environmental Sustainability (ES) program at NRSW have included LEED building construction, electrical energy and water conservation, and renewable energy generation among others. In particular, the ES program has successfully encouraged the transition from a standard integrated solid waste management program to a sustainable solid resource and management program. The new sustainable solid waste (SSW) program has a wide range of programs including:

- Integrated solid waste management (combined refuse and recycling)
- Construction and demolition debris management

- Military industrial waste
- Disaster debris management
- Office property reuse
- Food waste composting program

NRSW is recognized as a leader within DoD for the management of solid waste. Its SSW program has been honored as the 2014 Recycler of the Year by the City of San Diego (for the ninth year in a row) and the California Governor’s Environmental and Economic Leadership Award in the Waste Reduction Category for 2013 (the state’s most significant environmental award).

**Environmental Restoration**

This award recognizes efforts to protect human health and the environment by cleaning up identified sites in a timely, cost-efficient, and responsive manner. Restoring these sites impacted by historic defense practices protects military personnel and the public from potential environmental health and safety hazards.



Installation of the waste isolation barrier at NAS Alameda Site 1 used a crane-mounted vibrating hammer to drive a series of interlocking sheet piles into the soil surrounding burn area waste. This technology creates “isolation cells” that will contain waste and prevent it from entering the San Francisco Bay during seismic activity.

## Installation

### *Former Naval Air Station Alameda, California*

Naval Air Station (NAS) Alameda was identified for closure under the base realignment and closure (BRAC) program in 1993 and fully ceased operation in April 1997. In 1999, NAS Alameda was added to the EPA's National Priorities List. The environmental program at NAS Alameda achieved several significant environmental remediation successes. A portion of the site was incorporated into the East Bay Trail System, which allows for public access to nearby wetlands. Also, in an effort to protect the endangered California Least Tern, a wildlife refuge was created to be managed by the USFWS and maintained by the Department of Veteran Affairs (VA). NAS Alameda was also able to transfer 624 acres of the installation to the VA in 2014. The VA will develop on this land a much needed clinic and national cemetery

to honor our veterans. Finally, an additional 1,704 acres were transferred to the City of Alameda in what was the achievement of a landmark programmatic goal for the BRAC program management office mission.

### *Naval Submarine Base New London, Connecticut*

Naval Submarine Base (NAVSUBASE) New London's mission is to provide the facilities and the services for combat-ready submarines and training professional submariners. The installation consists of 687 acres, with over 70 tenant commands and activities. Approximately, 6,500 active duty Sailors and approximately 2,000 civilians are employed here and 12,000 family members call NAVSUBASE New London home. Historic activities that may have had a detrimental effect on the base's environmental conditions include waste disposal practices, battery maintenance and overhaul, petroleum product leaks from USTs, and

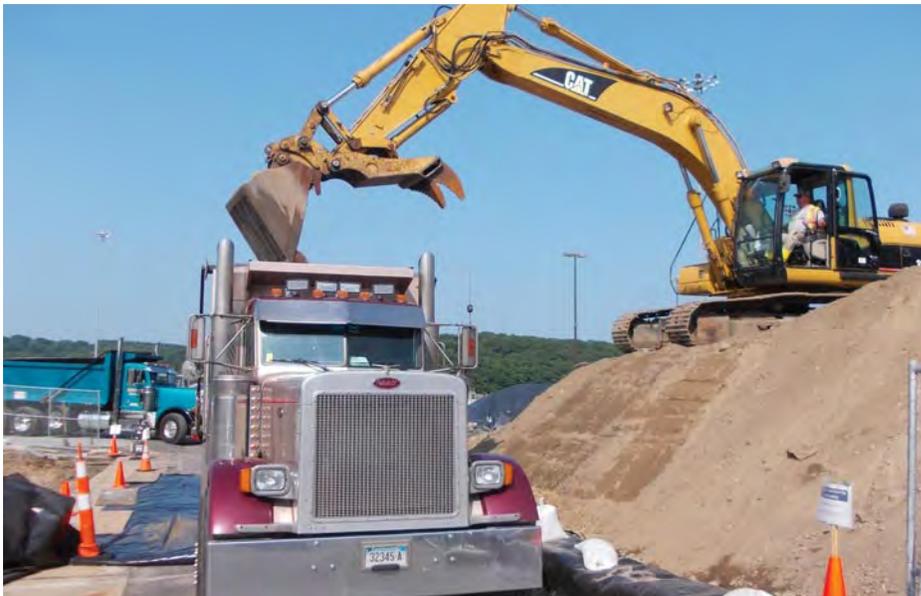
disposal of ash and dredged material. The NAVSUBASE New London environmental restoration team oversaw the removal of approximately 375 cubic yards of contaminated sediment from Pier 1, the disposal of at least 2,000 tons of lead-contaminated soils, and a wetland restoration project. The project involved the removal of 3,000 tons of non-hazardous contaminated sediment as well as the construction of eight topographical reliefs to support approximately 36,400 square feet of native trees and shrub woody areas. Remedial actions are expected to be completed in 2015.

### *Portsmouth Naval Shipyard, Maine*

Portsmouth Naval Shipyard (PNSY) serves as a nuclear-powered submarine maintenance installation. Expediting cleanup actions under the PNSY environmental restoration program promotes environmental stewardship at the shipyard while supporting the military mission.

Specific accomplishments included completing three Records of Decision in FY13 while accelerating review schedules by four months, as well as providing remedial strategies that meet the mission requirements, sustainability goals, and human health and environment protectiveness objectives.

PNSY completed a No Further Action Decision Document in FY14 for a former galvanizing plant tank vault site. The installation also dredged approximately 7,500 tons of contaminated sediment at four off-shore monitoring



Soil remediation on board NAVSUBASE New London. Contaminated soil mixed with Portland cement is loaded into trucks to be disposed of at an approved landfill. The linear and confined physical limitations of the lower base required extensive planning, staging, and site management to keep access to the piers open during excavation, loading, and backfilling.



Early phases of the former galvanizing plant removal action involved the removal of the existing building concrete slab floor via a jack hammer-equipped skid steer. A rubber-tracked excavator was utilized in the excavation of the 450 tons of non-hazardous fill contained within the vault. The removal action resulted in a No Further Action Decision which allowed for adaptive reuse of the historic building for a new Deep Submergence Testing Facility.

stations to coincide with approved in-water work windows for threatened and endangered fish species protection. The program enhanced the remedial action for the excavation of approximately 18,200 tons of contaminated soil by implementing an innovative stabilization method to render soil as non-hazardous waste. All sustainability goals were met through the reduction of disposal costs, transportation distance, and associated air emissions and safety risks.

### Cultural Resources Management

These awards recognize efforts to promote cultural resources stewardship by highlighting outstanding examples of cultural resources

management. Awards are designed to showcase extensive cultural resources including archaeological sites, the historic built environment, and cultural landscapes. Desired initiatives include partnering with external stakeholders such as Native Americans, state



Helicopter Maritime Strike Squadron FIVE-ONE (HSM-51) conducts an exercise around Mount Fuji. HSM-51 is one of 40 tenant commands at NAF Atsugi supporting the Navy's mission in the Seventh Fleet area of responsibility.

MC1 Barry Riley

historic preservation officers, and local communities, as well as those working with internal stakeholders, such as master planning, public works, and range management. Through cultural resources management programs, Navy and DoD identify areas likely to contain historical assets and work to protect these resources for future generations in partnership with Native American tribes and historic preservation authorities.

### Small Installation

#### *Naval Air Facility Atsugi, Japan*

NAF Atsugi supports up to five different aircraft types from Carrier Air Wing FIVE—the Navy's only forward-deployed carrier wing. NAF Atsugi lies in a highly urbanized area in Japan within 25 miles from the foot of Mount Fuji and within 20 miles of Tokyo. During the award period, NAF Atsugi's environmental division team created the first EMS in the Far East that incorporated lifecycle environmental impacts on the environment. These improvements to the EMS ensured that all cultural resources were identified and protected prior to the start of work or completion of any contract documents.

The team also developed a compliance tracker tool to assess and document compliance status with all cultural resources requirements—requirements with which NAF Atsugi has remained in full compliance. In addition, the team initiated external stakeholder partnering meetings with experts from the Kanagawa Prefecture and adjacent cities’ boards of education and historical/cultural resources. These meetings resulted in an informal working agreement that detailed how consultation and coordination with the host nation regulatory agency will be conducted.

### *Pacific Missile Range Facility, Hawaii*

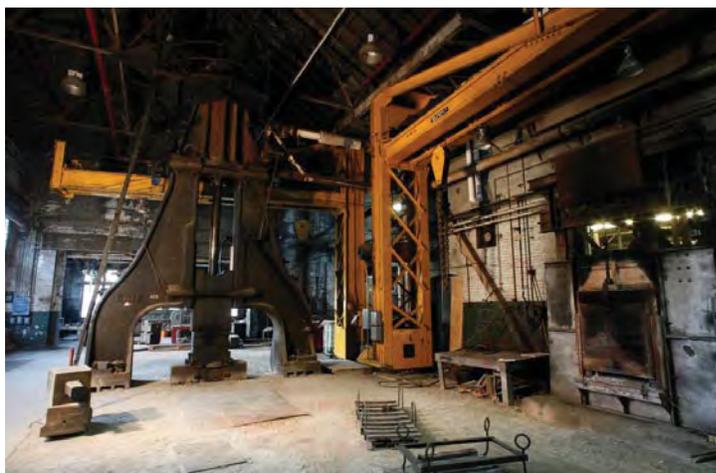
Capable of supporting surface, subsurface, air and space operations simultaneously, the Pacific Missile Range Facility (PMRF) is the world’s top multi-dimensional integrated training and test range. It also encompasses some of the most sacred cultural sites on the island of Kauai. PMRF has supported successful outreach projects to the surrounding communities and streamlined the cultural resources consultation and National Historic Preservation Act’s (NHPA) section 106 review process. The team’s major accomplishments include:

- Design and installation of education signage throughout the base with the goal of highlighting the Navy’s commitment to cultural resource stewardship and public education.
- Recovery of a Japanese navigational buoy, which had traveled across the ocean following the 2011 tsunami disaster.

- A NHPA survey of over 300 acres of the southern portion of the installation.
- Physical site protection measures implemented on sand dunes to slow the erosion of cultural deposits through the use of geo-webbing technology.
- Continued outreach programs to civic clubs, school groups and native Hawaiian organizations for cultural experiences, which also allows the staff at PMRF to ensure the installation is aligned with the community.

### *Portsmouth Naval Shipyard, Maine*

Established in 1800, PNSY is the oldest continuously operating naval shipyard in the nation; its historic district is listed on the National Register of Historic Places. During FY13 and FY14, over 200 consultation packages facilitating NHPA section 106 compliant work supported over \$127,600,000 of projects on historic facilities. Nine studies were successfully executed (totaling \$1.3 million) during the award period. One of the installation’s projects involved the search for a suitable replacement option for corrugated wire glass windows. These windows are no longer manufactured, but remain a character-defining feature of many of the older buildings’ historic character. An aluminum polycarbonate curtain wall system has been selected as the best alternative that replicates the previous windows’ familiar pattern, and are also more energy efficient. Due to the age of the infrastructure on the installation, the island setting, and the dynamic mission, PNSY will continue to present unique cultural resources management challenges.



The interior of PNSY’s Building 76 is an excellent example of the historic industrial character exemplified at the shipyard. Originally constructed in 1902 as a forge, Building 76 still operates in that capacity today. The massive forge hammers are character-defining features and will be retained when the building is renovated.

*Kerry Vautrot*

### **Individual or Team**

*Mrs. Heather Robbins, Naval Facilities Engineering Command, Mid-Atlantic, Norfolk, Virginia*

The current Navy’s Regional Historic Preservation Officer for the Hampton Roads region is also the Cultural Resources Team Lead at NAVFAC Mid-Atlantic, and the installation level Cultural Resources Manager at six Navy installations. Mrs. Robbins provides cultural resources management support as well as contract management to the Navy installations in the Navy Region Mid Atlantic’s area of responsibility from Maine to North Carolina. She has provided leadership on how to minimize or avoid adverse effects to historic properties and on identification procedures of cultural resources requirements such as



Heather Robbins is responsible for cultural resources compliance through review of designs for proposed rehabilitations of historic buildings. Building G29 (the Pennsylvania House) is one such building. The building was constructed as part of the 1907 Jamestown Exposition held in Norfolk, Virginia and is a smaller scale replica of Independence Hall.

archaeological or architectural investigations in support of construction projects. A brief overview of Mrs. Robbins' accomplishments include:

- The successful execution of 18 cultural resources contracts in FY14 with 100 percent execution of funds received.
- The management of 32 contract actions in FY13 and FY14 that delivered products such as archaeological surveys, viewshed analyses, public education exhibits and brochures.
- The foundation of strong consultation relationships with three federally-recognized tribes in Oklahoma, Kansas and Wisconsin.
- The development and issuance of training at Hampton Roads installations that served to increase awareness of cultural resources,



Lono arrives by canoe at Hickam Beach during the Makahiki. The Makahiki is an ancient annual festival dedicated to Lono, the deified guardian of agriculture, rain, health, and peace. For more than 2,000 years, early Hawaiian people celebrated their beliefs associated with Lono during Makahiki festivals throughout the Hawaiian Islands.

promote cultural resources stewardship, and also give individuals a day-to-day understanding of cultural resources compliance.

*Mr. Jeffrey Pantaleo, Joint Base Pearl Harbor-Hickam, Hawaii*

Managing a diverse range of cultural resources (including some native Hawaiian sites that date back to 1200 A.D.), Mr. Pantaleo is the Cultural Resources Program Manager for both Navy Region Hawaii and JBPHH. Mr. Pantaleo has focused his efforts on developing outreach and education programs, which has resulted in a balanced approach that both supports mission objects and continued cultural resources stewardship. He has successfully obtained over \$250,000 in project orders through the execution of seven contracts. One of his most significant roles is that of the Navy's main point of contact for Native Hawaiian Organizations (NHO). He has taught DoD personnel in Hawaii how to engage in meaningful consultation with NHOs. Working directly with the NHOs, Mr. Pantaleo consults and helps organize the annual Makahiki

festival, which honors the Hawaiian deity Lono. This festival provided an opportunity for military families to appreciate and learn more about the history and culture of Hawaii. At the former Hickam Air Force Base at Halealoha Haleamau Burial Platform, Mr. Pantaleo managed the National Public Lands Day activities and was also able to organize the permanent re-burial of six native Hawaiian remains through careful consultation with the NHOs.

*Mr. Michael Smolek, NAS Patuxent River, Maryland*

The cultural resources management program at NAS Patuxent River, Maryland has been built on a solid foundation that includes comprehensive resource inventories, partnership development, stakeholder involvement, community outreach, and strong scientific research. This strong foundation can be generally accredited to Mr. Smolek. He is the regional archaeologist for Naval District Washington and the cultural resources manager at NAS Patuxent River. The Patuxent River Complex has 19 properties totaling 15,000 acres spread

over five Maryland counties, and hosts the Naval Air Warfare Center's Aircraft Division. Through his personal knowledge of aviation, Mr. Smolek is able to keep a mission-first focus on all historic preservation compliance and stewardship actions.

Each year, Mr. Smolek assesses and manages several hundred facilities and test projects, as he is the installation's only cultural resources professional. He has aggressively pursued the collection, cataloguing, and storage of historic records and documents, which has helped historians gain better access to items of cultural resource significance. Mr. Smolek also recognizes the importance of scientific research that may benefit cultural resource management. For example, he currently supports a project involving the search for buried paleosol soils that may hold evidence of human occupation in the area during the Pleistocene Epoch.

## Environmental Planning

This award recognizes outstanding environmental planning efforts that benefit the Navy, the environment, and the public at large.

### Team

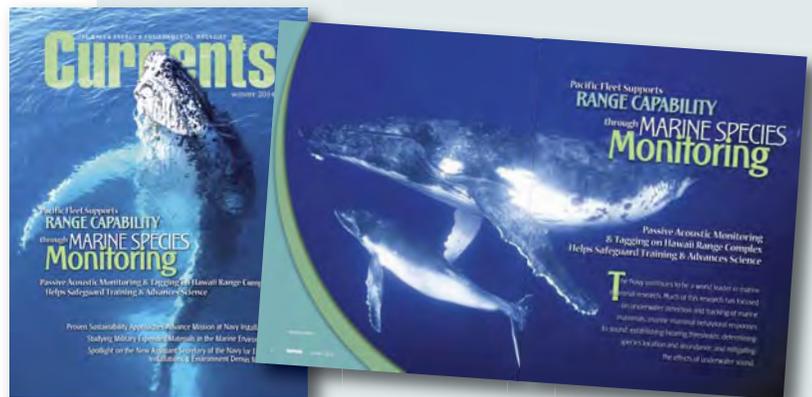
#### *Hawaii-Southern California Training and Testing Environmental Impact Statement Team, Pearl Harbor, Hawaii*

The Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) team is composed of Navy and contractor personnel with backgrounds in Navy fleet operations, environmental planning, marine biology, and environmental law, among many other disciplines. The primary goal of the team was to initiate the National Environmental Policy Act (NEPA) process through meeting all regulatory requirements and obtaining all relevant regulatory permits and authorizations to ensure that naval forces are able to continue conducting critical training and testing in Southern California, Hawaii, and the transit corridor in between. The sheer geographic scope (over 2.1 million square miles) of this EIS/OEIS was quite unusual and demanded effective coordination with local, state (Hawaii and California) and federal agencies.

The team was able to make use of a new Navy acoustic model along with a new stressor-based approach which allowed for the analysis of a more accurate simulation of

## For More Insights

**FOR MORE INSIGHTS** into the Navy's significant commitment to understanding the behavior and abundance of marine mammals within and in near proximity to its at-sea training and testing activities, read our cover story, "Pacific Fleet Supports Range Capability Through Marine Species Monitoring: Passive Acoustic Monitoring & Tagging on Hawaii Range Complex Helps Safeguard Training & Advances Science," in the winter 2014 issue of *Currents*.



marine mammal behavior. The team refined the Navy's approach on further minimizing the potential effects of sonar and explosives on marine mammals and sea turtles. Along with face-to-face public meetings and strong media outreach, a comprehensive website was also developed by the HSTT EIS/OEIS team through coordination with the Atlantic Fleet Training and Testing team and the



Researchers from the Cascadia Research Collective approach a short-finned pilot whale in an effort to place a satellite tag on it as part of U.S. Pacific Fleet's marine mammal monitoring program. The range's passive acoustic monitoring system enables scientists to locate marine mammals and estimate their exposure to sonar, while satellite tags and photographs provide movement, habitat use and population information.



The final Environmental Impact Statement for the U.S. Navy F-35C West Coast Home Basing. The scope of Final EIS required expertise in a wide range of subject matters, including airfield operations, noise analysis, environmental planning and compliance, natural resources, and program management.

Lt. j.g. Johnny Michael

Chief of Naval Operations Energy and Environmental Readiness Division—giving the public access to supporting documents and an opportunity to comment during the NEPA process.

*U.S. Navy F-35C West Coast Home Basing Environmental Planning Team, Norfolk, Virginia*

With the FA-18 Hornet aircraft nearing the end of its service life, Congress has approved the replacement of the aircraft with the F-35C aircraft. The environmental planning team of the U.S. Navy F-35C West Coast Home Basing, led by the U.S. Fleet Forces Command (USFF), was brought together to study the impacts of bringing the new aircraft into service and the potential environmental impacts of facilities to support home basing 100 F-35C aircraft in the Pacific Fleet. Coordination among Navy stakeholder commands was necessary to identify operational requirements, shore infrastructure necessities, and potential environmental impacts in numerous resource areas. Due to congressional and local public interest in this transition, the team conducted media training and developed a public outreach/engagement strategy to ensure consistent responses to inquiries from the public, the media, and elected officials. The team achieved all of its

objectives to date and prepared a NEPA document which met all operational timelines. The arrival of the F-35C is expected in 2017.

*Supplemental Environmental Impact Statement for the Introduction of P-8A Aircraft into U.S. Navy, Norfolk, Virginia*

The new P-8A aircraft was approved by Congress as the replacement for the Navy’s aging P-3 maritime patrol and surveillance aircraft. Since the release of the 2008 final EIS for this transition, the Navy has determined that two home basing locations, rather than three, for the P-8A squadrons would still meet current strategic operational objectives, but also provide potential cost savings.

The purpose of this Supplement EIS (SEIS) was to enhance the basing alternatives and analysis in the original 2008 EIS with additional information based on current conditions.

Coordination between USFF and additional Navy stakeholder commands was needed to successfully complete all requirements of the SEIS through the identification of all operational requirements and shore infrastructure needs, the analysis of all potential environmental impacts in 11 resource areas, and continuous outreach to



Lt. Brett Eckert, assigned to the Pro’s Nest of Patrol Squadron (VP) 30, observes Royal Air Force squadron leaders Andy Bull and Mark Faulds as they participate in a flight simulator exercise for the P-8A Poseidon.

David Giorda

the Navy leadership and to the media. The P-8A SEIS Environmental Planning Team was able to meet the aggressive 17-month schedule with the final federal register publication of their NEPA document in June 2014. The revised basing strategy resulting from the SEIS will save an estimated \$100 million in one-time infrastructure and training simulator costs. Aircraft delivery is expected to begin in FY16 at NAS Whidbey Island.

## Afloat

The Afloat awards recognize outstanding contributions to fleet readiness, increased morale, and efficient, economical use of resources to promote environmental protection at sea.

## Littoral or Amphibious Warfare

### LCS Crew 102

Stationed in San Diego, California, LCS Crew 102 is assigned to both USS Freedom (LCS 1) and USS Fort Worth (LCS 3). Each crew of 54 officers and Sailors is proud to execute mission tasking to meet warfare demands while maintaining a culture of environmental responsibility and sustainability. LCS Crew 102 had zero incidences of spill or inadvertent discharge of hazardous substances to the environment, inclusive of four refueling-at-sea evolutions, in-port defueling, and onload/offload of hazardous materials. Engineers operating the oil-water separator (OWS) system demonstrated a comprehensive technical understanding of the system and reduced generation of oily waste and corrected casualties. Through efficient engine use practices, LCS Crew 102 maintained station for 12 days of underway operations in April 2014 on a platform that averages refueling once every three to four days. Underway operations conducted during whale migration season and other periods resulted in zero occurrences of negative marine mammal interactions. LCS Crew 102's commitment to environmental excellence also is evident in community service projects where they have adopted and conducted cleanups of the Tidelands Park in Coronado, California.



Sailors assigned to Surface Warfare Detachment Four of the littoral combat ship USS Fort Worth Crew 102, prepare to board a naval training vessel as part of maritime interception operation training. *Katarzyna Kobiljak*

## Surface Combatant Category

### USS Dewey (DDG 105)

An Arleigh Burke-class guided-missile destroyer, USS Dewey is homeported in San Diego, California. Its crew of 300 officers and enlisted Sailors conducts sustained at-sea combat operations as part of Destroyer Squadron One and Carl Vinson Carrier Strike Group (CSG 1). In August 2014, the USS Dewey began a 10-month deployment that transitioned through both the 5th and 7th Fleet areas of responsibility. By modifying standard operating procedures to meet new challenges, and training watchstanders on local laws and regulations, USS Dewey had zero spills while offloading oily waste from holding tanks in port. In FY14, Dewey unloaded three million gallons of diesel fuel with zero spills or mishaps. As a credit to aggressive management of fuel and outstanding maintenance practices, USS Dewey reduced its fuel consumption by 105,000 gallons compared to the DDG class average, which saved over 2.3 million pounds of carbon dioxide from being released into the atmosphere. During three CSG 1 anti-submarine warfare exercises, USS Dewey completed reporting for over 180 hours of active sonar time via the web-based Sonar Positional Reporting System, which allowed the Naval Mine and Anti-Submarine Warfare Command to produce a thorough report on



Sailors aboard the guided-missile destroyer USS Dewey heave a line during a replenishment-at-sea with the Military Sealift Command fleet replenishment oiler USNS Joshua Humphreys (T-AO 188).

*James Vazquez*

how marine mammal encounters affect ships in a tactical environment.

### Large Deck Combatant Category

#### *USS Essex (LHD 2)*

With 1,075 shipboard personnel, USS Essex started the year with the completion of a major maintenance overhaul in its homeport of San Diego, California, without any environmentally adverse incidents. USS Essex received a “green” grade with many assessments being above standards for the type commander (TYCOM) material inspection. Once in service, the ship transferred four million gallons of fuel during seven replenishments, and metered and transferred 500,000 gallons of sewage to barges or trucks during Seattle Seafair, all without incident. Through operations under the Hazardous Material Minimization Center, the crew saved approximately \$1.6 million through the reuse of excess hazardous materials and reducing the overall volume of hazardous materials



The Wasp-class amphibious assault ship USS Essex transits the Pacific Ocean.

*Huey Younger, Jr.*

ordered. Essex also efficiently processed 2.3 million pounds of solid waste during underway days in 2012-2014, and was even able to reduce the amount of space needed to store plastic waste by 30 to 1 through the use of shredders and four plastic waste processor units. Finally, the crew's own strong culture of environmental stewardship is demonstrated by the development of a unique in-port recycling program that resulted in a potential cost savings of \$50,000, as well as their regular management of the San Diego Main Street cleanup effort for NBSD.

### Submarine Category

#### *USS Tennessee (SSBN 734)*

Homeported in Kings Bay, Georgia, the USS Tennessee has recently returned to service after a three year engineering refueling overhaul conducted in Portsmouth, Virginia. With a crew of 160 personnel, USS Tennessee conducted six strategic deterrent patrols and several subsequent upkeep periods. The ship was assessed as "Above Standards" during the supply management inspection by the TYCOM also received an "Above Standards" in hazardous materials management. Tennessee also received an "Above Standards" rating in May 2014 during the most recent Naval Safety Center survey. The crew has received over 1,500 man hours of environmental awareness training, which has resulted in individuals who strive daily to support sound environmental stewardship practices. These ideals have brought about a systematic plastics waste program and a "first in / first out" program, where all expiring material are utilized first. This reduces the volume of unnecessarily off-loaded materials at port. Finally the crew of USS Tennessee was proud to note the lack of reportable pollutant spills or violations of the Protective Measures Assessment Protocols.

All winners were recognized in a video teleconference ceremony by the CNO Admiral Jonathan Greenert for their efforts. Vice Admiral Philip H. Cullom, deputy chief of



The Ohio-class ballistic missile submarine USS Tennessee departs NAVSUBASE Kings Bay.  
*Ashley Hedrick*

naval operations for fleet readiness and logistics and Rear Admiral Kevin R. Slates, director, chief of naval operations energy and environmental readiness division attended to congratulate the honorees as well. 📍

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Ashley Tolbert  
Chief of Naval Operations Energy and Environmental Readiness Division  
703-695-5116  
DSN: 225-5116  
ashley.tolbert.ctr@navy.mil

Madeline Joyce  
Chief of Naval Operations Energy and Environmental Readiness Division  
703-695-5073  
DSN: 695-5073  
madeline.joyce.ctr@navy.mil