



CNO Recognizes

ENVIRONMENTAL EXCELLENCE

Across the Fleet

2011 Award Winners Highlight the Range of
the Navy's Environmental Commitment



Winners of the annual Chief of Naval Operations (CNO) Environmental Awards program have been announced for Fiscal Year (FY) 2011. The awards recognize Navy ships, installations, and individuals for their exceptional environmental stewardship.

The competition categories for the FY 2011 competition included natural resources conservation (small installation and individual/team), cultural resources management (installation), environmental quality (non-industrial installation, individual/team, and large ship), sustainability (industrial installation), environmental restoration (installation and individual/team), and environmental excellence in weapon system acquisition, large program (individual/team).

Nominations were judged by subject matter experts on accomplishments from 1 October 2009 through 30 September 2011. Vice Chief of Naval Operations Admiral Mark Ferguson recognized the 30 CNO award winners for their exceptional environmental stewardship during the FY 2011 CNO Environmental Awards ceremony held 5 June 2012 at the U.S. Navy Memorial and Naval Heritage Center in Washington, D.C. Accomplishments of the FY 2011 CNO environmental award winners are highlighted below.

NATURAL RESOURCES CONSERVATION

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

SMALL INSTALLATION

Pacific Missile Range Facility, Hawaii

Pacific Missile Range Facility (PMRF) has an Integrated Natural Resources Management Plan (INRMP) that has helped forge successful relationships through community outreach and cooperative conservation with organizations



For the first time in over a decade, the threatened green sea turtle (*Chelonia mydas*) successfully nested at PMRF twice in the summer of 2010 and once in the summer of 2011. These hatchlings were collected and released in a “reverse landing” back into the Pacific Ocean.

Dennis Rowley

and programs such as federal and state agencies, local conservation organizations, the public as well as native Hawaiians. Resulting accomplishments include raising public support for the Laysan Albatross Surrogate Parenting Program; coordination of monitoring, documenting, and protecting of listed terrestrial and marine species; and participation in several nongovernmental organization and National Oceanic and Atmospheric Administration (NOAA) programs.

Finally, PMRF has closed certain areas to meet Force Protection requirements and protect designated critical habitat for numerous protected species. Doing so has eliminated shoreline harvesting, fishing, and recreational driving. The patrolled beachfront and littoral zone are predicted to return to pre-human conditions.



On 15 September 2011, PMRF sailors teamed with students and faculty from the Ke Kula Niihau O Kekaha Hawaiian Language charter school on a beach sweep and discovered a message-in-a-bottle released by sixth grade students from a school in Japan in 2006. Besides collecting over 400 pounds of ocean debris, the Kauai and Japanese schools have initiated an international exchange project.

MC1 Jay Pugh

Fleet Logistics Center Puget Sound, Washington (Fuel Department)

During the awards period, the Naval Supply Systems Command (NAVSUP) Fleet Logistics Center (FLC) Puget Sound completed several environmental projects outlined in the Fuel Department’s INRMP. Some examples include removing the last impediments to fish migration as part of the final phase of the Beaver Creek Restoration Project—creating additional breeding habitat for salmon, as well as Sea-run Cutthroat trout for the first time since 1939;



Beaver Creek Restoration Project is nearing completion of Phase Four in a continued effort to restore the creek to natural, pre-World War II, salmon-bearing stream conditions. (Shown here: construction of a replacement culvert.)

completing a study that indicated that the Fuel Department shoreline has become one of the most productive habitats for forage fish in all of Puget Sound; and completing a survey which indicated that the eelgrass population is growing at much deeper depths near the Fuel Department than anywhere else in the Sound.

Environmental projects that were initiated during the awards period include a detailed oil spill contingency plan, and a deer species survey that, after its completion in September 2012, will be one of several samples used to compare the current wildlife population with historical figures. The overall effort will be utilized to develop a wildlife management plan.



FLC Puget Sound Fuel Department is a 234-acre site in eastern Kitsap County, Washington. It contains approximately two miles of Puget Sound shoreline and a 26-acre lagoon.

Naval Support Activity Panama City, Florida

Naval Support Activity (NSA) Panama City, located along the western shore of St. Andrew Bay on the Gulf of Mexico in Florida's panhandle, has found an innovative way to address years of erosion along the installation by utilizing a living shoreline. This project installed 175 oyster reefs using recycled oyster shells; and planted 22,000 donated marsh grasses. Over 2,800 volunteer hours in a nine-month period helped this project come to fruition. Other conservation programs that support the sustainable multi-purpose use of the environment include the implementation of a successful prescribed fire program inside a wildland-urban interface, and the sustainment of 13 threatened and endangered species where intense commercial and residential development around the installation has fragmented habitat. NSA Panama City also protects and enhances wetlands by enforcing a new 50-foot buffer policy to maintain biological communities while beneficial landscape techniques conserve resources.



The Gulf of Mexico's unique conditions and location make NSA Panama City ideal for fleet training and littoral warfare missions. The installation is also a consolidated site for Navy diving and salvage research, development, testing, and training.

Jonnie Smallman



Florida Department of Environmental Protection Ecosystem Restoration Specialists, Zack Schang and Penelope Bishop demonstrate proper grass planting techniques for volunteers from NSA Panama City and students from local high schools during the 2011 Living Shoreline Restoration project event. Two-and-a-half acres of estuarine habitat were created with 2,840 volunteer labor hours at 28 events during a nine-month period.

Jonnie Smallman

INDIVIDUAL/TEAM

Naval Base Guam, Marianas (Public Works Department, Environmental Division)

Responsible for the management of natural resources on lands covering approximately 14 percent of the island, the natural resources team at Naval Base Guam (NBG) is responsible for maintaining a variety of significant habitats including limestone forests, ravine forests, wetlands, and coral reefs, as well as several threatened and endangered species, and two ecological reserve areas. NBG has devel-



NBG protects and improves shoreline habitats for a variety of species through ecological studies, beach cleanups, and other conservation projects.

Kevin Brindock

oped an INRMP that identifies the overall goal of protecting and improving the natural ecosystem's structure and function on Guam. The natural resources team achieves this goal by identifying and inventorying resources, protecting threatened and endangered species, habitat management and enhancement, invasive species management, soil and water conservation, and education and outreach programs. These efforts have resulted in Navy lands containing some of the best habitat for native, threatened, and endangered species on Guam. The natural resources team has achieved similar accomplishments with marine resources management, with Navy submerged lands identified as containing some of the healthiest reefs around the island.



The marine environment around Guam contains habitat for threatened and endangered sea turtles. Both green and hawksbill turtles use the waters and beaches on NBG for foraging and nesting.

Kevin Brindock

Naval Support Activity Panama City, Florida (Environmental Staff)

The environmental staff at NSA Panama City utilizes limited resources and the cooperation of command and tenant staff to implement and manage numerous proactive

projects. NSA Panama City continues to enhance the biological integrity and diversity of the installation's land through a targeted prescribed fire program, invasive/exotic species elimination, and wetland protection programs. A robust Environmental Management System (EMS) and careful planning ensures that all proposed mission projects and associated work processes are completed on time and with no adverse effects to the environment.



Ken Rudisil, staff horticulturist from the University of Florida Bay County Extension Office, assists Executive Officers Lieutenant Commander Douglas Johnson, NSA Panama City, and Commander Robert Hoar, Naval Surface Warfare Center Panama City Division plant trees on Arbor Day 2011. 2011 marked the 16th year that NSA Panama City has been certified as a Tree City through the national Arbor Day Foundation.

MC2 David Didier



NSA Panama City created a Living Shoreline to combat the effects of years of erosion along the shoreline of St. Andrew Bay, one of the few remaining pristine bays in northwest Florida. A Living Shoreline protects and enhances juvenile habitats for fish and birds.

Jonnie Smallman



Pacific Missile Range Facility, Hawaii (Integrated Natural Resources Management Plan Implementation Team)

Successful implementation of PMRF's 2010 INRMP requires the efforts and support from Naval Facilities Engineering Command (NAVFAC) Pacific and NAVFAC Hawaii biologists, and the coordination of a variety of individuals and elements both on and off base. PMRF Sailors, civilians, and contractors work collaboratively to execute several programs and projects, including elimination of feral goat damage at the Makaha Ridge radar and telemetry site; study and subsequent changes to PMRF lighting to reduce harm to protected species; monitoring and protecting nest and basking sites for green sea turtles and Hawaiian monk seals; maintaining and performing requirements for the unique "surrogate parenting" program for Laysan Albatross eggs from PMRF to the North Shore of Kauai; maintaining the integrity of recovering natural resources of secured coastal areas to pre-human condition; and managing the elimination of a target invasive plant species—the Long Thorn Kiawe.



An off-duty PMRF security guard holds the first green sea turtle hatchling found in over a decade at Barking Sands beach. The threatened green sea turtle successfully nested at PMRF twice in the summer of 2010 and once in the summer of 2011.

John Burger



In an effort to minimize fallout of protected nocturnal migratory seabirds, lamps at Barking Sands beach are being changed to test the efficacy of Light Emitting Diode (LED) lights. These changes are expected to aid fledgling migration and save energy.

John Burger

CULTURAL RESOURCES MANAGEMENT

This award recognizes efforts to promote the conservation and management of cultural resources, including the identification, protection, and restoration of historic buildings and structures, archaeological sites, and sacred objects and sites.

INSTALLATION

Commander, Fleet Activities Yokosuka, Japan

Commander, Fleet Activities Yokosuka (CFAY) has successfully developed and maintained invaluable relations crucial to the success of the cultural resources program through dedicated support from military and civilian personnel, and partnerships with the Yokosuka City Museum, the Yokosuka Board of Education, the Zushi Board of Education, and the cities of Yokosuka, Zushi, and Yokohama.

Through several efforts, CFAY has developed and maintained a robust cultural resources preservation program. During the awards period, CFAY preserved historically significant fossil shells, railroad bridges, and brickwork; and continued several ongoing efforts, including maintaining curation and preservation agreements with the Yokosuka City Museum. Other cultural awareness initiatives undertaken at the base include recruiting volunteers to support resource protection efforts; coordinating base historical/cultural tours; organizing new environmentally-focused programs and events; and educating personnel via newspaper articles and television advertisements.



CFAY has gone to great lengths to retain the structural framework of historical buildings that are in need of replacement to meet the Navy's changing needs. Three industrial, administrative, and community support buildings were rehabilitated using the original historical structures' frames and foundations. Historical relics were found in the basement of this building, which was constructed in 1929.

Ryouko Araki



CFAY manages an Adopt-A-Monument program designed to stimulate greater familiarity with and awareness of the many monuments located throughout CFAY's Area of Responsibility. Participants in the program maintained and cleaned 21 culturally significant monuments throughout Yokosuka Naval Base among other tasks.

Ryouko Araki

Joint Base Pearl Harbor-Hickam, Hawaii

Joint Base Pearl Harbor-Hickam (JBPHH), created in 2009 by combining Naval Station Pearl Harbor and Hickam Air Force Base, is home to the Navy's Pacific Fleet, the Pacific Air Forces' 15th Wing, and more than 20 other Department of Defense (DoD) and government units and partner entities. The base covers 28,000 acres and contains approximately 3,000 historic resources (buildings, structures, artifacts, and archeological sites). In addition to its association with the Japanese attack of 7 December 1941, the base also contains a wealth of important cultural resources ranging from ancient Hawaiian fishponds to Cold War era intelligence facilities.

Significant milestones include establishing the Navy's first historic preservation division at the installation in 2010; developing a programmatic agreement to support the Pearl Harbor Naval Shipyard Modernization Plan (a 25-year long-range plan, completed in 2011); and sharing cultural activities with the local community, including the ongoing maintenance of a Native Hawaiian burial vault.



Carrying on a centuries-old tradition, the annual Makahiki (festival) reaffirms JBPHH's role in respecting the Native Hawaiian heritage.



Founded in 1997 to serve as a permanent resting place for ancient Hawaiian remains, the Fort Kamehameha Burial Vault is a testament to the collaborative efforts of JBPHH staff and local Native Hawaiian groups. Several times a year, a wide variety of residents from the base and surrounding community gather to help maintain this important cultural site.

Naval Base Guam, Marianas

NBG's cultural resources management program oversees more than 2,000 historical properties in coordination with government and private agencies. Despite recent significant growth in operations including the upcoming military





The NBG cultural resources program oversees and manages archaeological recovery. Work was initiated during FY11 to investigate the chemical composition and dating of this cave art painting.

Lon Bulgrin

buildup on the island, NBG planned and budgeted projects will meet the increased demand without compromising the integrity of its cultural resources or jeopardizing compliance with environmental laws and regulations. During FY11, the program efficiently executed over 300 project consultations. Accomplishments included developing and signing the programmatic agreement for historic preservation oversight of the Defense Policy Review Initiative program; completing the Historical American Engineering Record for the Maanot Reservoir (possibly the oldest reservoir on Guam, to keep historic record of the site and as mitigation in the event of demolition); and finalizing consultations under the National Historic Preservation Act to construct a 15.7-mile pipeline that is crucial to the upcoming military buildup.



This outdoor movie theater, one of the historic sites maintained by NBG, was constructed by Japanese Prisoners Of War during WWII.

Zerlene Cruz

ENVIRONMENTAL QUALITY

This award recognizes efforts to ensure mission accomplishment and protection of human health through implementation of EMSs that promote sound environmental practices.

NON-INDUSTRIAL INSTALLATION

Commander, Fleet Activities Sasebo, Japan

Commander, Fleet Activities Sasebo (CFAS) is a small naval installation located on the western coast of Kyushu Island in Nagasaki Prefecture, Japan. The installation serves as a logistic support center for forward deployed units and visiting operational forces of the U.S. Pacific Fleet and its tenant activities. CFAS is homeport to nine U.S. Navy ships and consists of ten non-contiguous areas totaling 1,238 acres.



CFAS treats and disposes of ship-borne waste fluids with contracted treatment barges. Through recycling efforts during FY10 and FY11, the base recycled 755,000 gallons of waste oil, contaminated fuel, and the extracts of oily wastewater which saved the Navy \$3.19 million in disposal costs.

CFAS has implemented many programs designed to minimize environmental impacts and reduce operational costs, including capturing and treating ship's wastewater; recycling petroleum, oil, and lubricants; filtering oily wastewater for treatment; converting cooking oil to biodiesel fuel; recycling used oil for energy recovery; and processing 34 waste streams through its Qualified Recycling Program. CFAS has also reduced hazardous waste disposal costs while increasing solid waste diversion rates by initiating new processes. Energy conservation efforts include: installation of photovoltaic panels; replacing air conditioning systems with new energy-efficient models; joining boiler systems; and upgrading street lights with efficient low-wattage bulbs. These initiatives have dramatically reduced installation utilities cost in excess of \$287,000 each year.



CFAS has launched a program to recycle mattresses, plastic, wood pallets, textile, and scrap clothing. These materials are used as ingredients for the production of Refuse Paper and Plastic Fuel (RPF). In FY11, CFAS recycled 1,420 tons of RPF and realized savings of \$171,000 in disposal costs.

Commander, Fleet Activities Yokosuka, Japan

Commander, Fleet Activities Yokosuka (CFAY) maintains strong relationships with on- and off- base organizations and consistently coordinates efforts to establish quick and thorough alternatives to environmental degradation and destruction. With dedicated support from military and civilian personnel, base residents, and their Japanese neighbors, team members have successfully developed and maintained invaluable partnerships crucial to the success of its environmental program.

Team members take pride in leading environmental education and community initiatives, including cultural and historical resource tours, environmental/safety fairs, monument cleanup/base beautification events, eelgrass planting and flounder releasing events, and the implementation of an Adopt-A-Monument program. CFAY's environmental web site, newspaper articles, newsletters, and television/movie theater advertisements help support this effort.



CFAY offered 30 Japanese and English spill prevention and response courses in FY10 and FY11 in alignment with CFAY's EMS goals.

Hideomi Kakimoto



CFAY's Adopt-A-Monument program allows Commands and organizations to adopt specific monuments to maintain throughout the year.

Naval Base San Diego, California

Naval Base San Diego (NBSD) has significantly reduced its impact of operations on the environment with the introduction of new ideas and equipment to reduce waste, capture pollutants, and otherwise mitigate environmental impacts.



Used electronics were turned in at NBSD, including televisions, refrigerators, microwave ovens, fax machines, copiers, coffee makers, and other materials. All items were sent to recycling.

Environmental initiatives and programs at NBSD include community outreach, transforming NBSD into a pedestrian-friendly base with walking paths, bike lanes, and bike racks; promoting a base-wide "Plant a Tree" program; continuing successful electronic recycling events; collecting trash and diverting waste from landfills; achieving a return on investment in water; and eliminating fertilizer and pesticide use (and their associated runoff) through the use of xeriscaping.

INDIVIDUAL/TEAM

Awni Almasri, U.S. Naval Support Activity Bahrain, Bahrain

Mr. Almasri is a well-respected representative of U.S. Forces in the Bahrain region. He promotes U.S. Navy and host nation relations at numerous environmental conferences within the Arabian Gulf. His management abilities are responsible for the successful integration of pollution prevention programs across diverse civilian and military activities at NSA Bahrain, reducing costs and increasing the environmental compliance of the facility.



An average of over 1.5 tons of plastic bottles were collected from NSA Bahrain for recycling. Plastic bottles are ground into granules at Crown Industries prior to being sent to other counties for recycling.

Sunilkumar Pillai/Layla Turabi

The U.S. Navy's annual Oil Spill Response Preparedness Table Top Exercise and Workshop, which he started in 2003, continues to evolve into a premier event where spill response and mitigation issues with regional impact are discussed and exercised in realistic scenarios.



As part of the NSA Bahrain celebrations of Earth Day, Mr. Almasri set up an environmental booth providing guidance on environmental protection and energy conservation. Participants of the week-long celebrations include DoD Dependent Schools kids, and host nation and coalition forces.

Layla Turabi

Naval Supply Systems Command Fleet Logistics Center Pearl Harbor Environmental Quality Team, Hawaii

The Environmental Quality Team at Naval Supply Systems Command Fleet Logistics Center Pearl Harbor (NAVSUP FLC Pearl Harbor) has addressed a number of significant environmental issues by partnering with Navy experts, regulatory agencies, and community resources. The team ensured that the command met all applicable regulations and requirements necessary to protect the fragile environment in Hawaii. This was done through monitoring of operations, conducting assist visits to help shop supervisors maintain compliance, and educating the workforce.

Accomplishments include reducing energy and water consumption, increasing recycling, replacing incandescent



NAVSUP FLC Pearl Harbor Fuel Department personnel deploy a Weir skimmer during an oil spill response exercise at a Pearl Harbor wharf. This drill was conducted to ensure that the team is ready to quickly and safely respond to oil spills.

light sources with high-efficiency fluorescent lamps, eliminating toxic and hazardous waste from the workplace, and properly disposing of electronic products. Educating and encouraging participation by all NAVSUP FLC Pearl Harbor personnel helped promote environmental stewardship through increased awareness of the fragile Hawaiian ecology.



Team member Ben Fegurgur (right), conducts a quality assurance test at the Fuel Oil Reclamation Facility. These tests assure that the water can be properly discharged into the installation sewer system. In the past, the wastewater was discharged to the industrial waste treatment plant at a higher cost.

Navy Region Center Singapore Environmental Sustainment Team, Singapore

Navy Region Center Singapore's (NRCS) Environmental Sustainment Team has an important role in maintaining compliance with U. S. environmental guidance and applicable local laws and regulations, as well as enhancing the quality of life of the facility population.

In FY09, the team became the first in the Navy to achieve EMS conformity with zero deficiencies (major or minor). This effort continues today. Under the program, the team fully evaluated all aspects of processes and developed/established 17 management procedures. With all the checks and balances implemented, the system continues to find ways to reduce operational impacts. Significant accomplishments include achieving EMS self-certification, offloading over 444,000 pounds of shipboard-generated industrial waste, implementing an effective solid waste qualified recycling program, and conducting numerous training sessions and drills to greatly enhance response capability. These programs continue to contribute significantly to the command's strategic plan and improve command readiness.



In FY10 and FY11, NRCS assisted in the collection and disposal of over 444,000 pounds of shipboard-generated industrial waste. By eliminating the need to retrograde these materials to Japan or the Continental U.S., the programs enhanced personnel safety and minimized spills.



The first ever backflow prevention assembly tester training was held at NRCS in June 2011. Fifteen personnel completed the class, passed all the exams, and were certified in the State of California.

LARGE SHIP

USS Carl Vinson (CVN 70)

Nicknamed the "Green Machine," Carl Vinson (CVN 70) is dedicated to generating policy, practices, and partnerships to measure and improve overall environmental impact afloat and ashore related to trash processes, recycling methods, transportation-related carbon emissions, and fuel consumption. Environmental accomplishments by Carl Vinson's crew include diversion of 760,000 pounds of waste cardboard and aluminum while underway in 2011; donation of about 3,000 pounds of aluminum cans to two separate charities; participation in six San Diego area beach cleanup events by the "Green Machine" and family members; and utilization of bulk recycling bins at Carl



Vinson's homeport of Naval Base Coronado pier. From July to September 2011, the crew recycled over 12,000 pounds of aluminum, plastic, and glass, thereby saving the ship \$6,600 in waste processing costs.



USS Carl Vinson crew members helped with a beach cleanup along San Francisco Bay.

MC3 Timothy A. Hazel

USS Enterprise (CVN 65)

USS Enterprise (CVN 65), the world's first nuclear-powered aircraft carrier, provides prompt, sustained combat operations from the sea while ensuring environmental stewardship through an exceptional environmental management program. Homeported in Norfolk, Enterprise has a total crew complement of 4,400 Sailors and Marines, which includes 3,100 ship's company and 1,300 air wing and staff personnel.

Enterprise is committed to supporting the Navy's environmental program goals through the elimination and control of pollutants. Environmental policy is integrated into applicable ship instructions, and included in indoctrination and safety-related training presentations. Program accomplishments include partnering with personnel from NAVFAC to plan and organize a pier environmental compliance training DVD; completely refurbishing the ship's solid waste incinerator to ensure the ship was able to properly dispose of thousands of tons of hazardous trash and classified material; and maintaining a nationally certified asbestos laboratory with three analysts to ensure safe and proper asbestos lagging removal, storage, and disposal in three successful emergent underway repairs.



The aircraft carrier USS Enterprise (CVN 65) departs Naval Station Norfolk for the ship's 22nd and final deployment.

MC Seaman Harry Andrew Gordon



The aircraft carrier USS Enterprise (CVN 65) is underway with the Enterprise Carrier Strike Group in the Atlantic Ocean.

MC Seaman Harry Andrew Gordon

USS Ronald Reagan (CVN 76)

USS Ronald Reagan's (CVN 76) crew has demonstrated naval environmental stewardship both while underway and in port despite the ship's high operational tempo. In an effort to improve oil spill compliance and response, the ship coordinated with local and regional environmental contacts to create tailored ship contingency spill plans for U. S. and foreign ports. Ronald Reagan also increased training attendance and qualifications in the oil pollution abatement course; increased the number of personnel qualified to operate and maintain oil process, and the transfer and disposal of equipment; and increased the number of personnel qualified as Spill Response Clean-Up Supervisors.



The aircraft carrier USS Ronald Reagan transits San Diego Bay.
MC Seaman Derek Stroop

Other environmental accomplishments include conducting 11 over-the-side spill drills in 2011; working with various commands on decontamination policies and efforts while in support of humanitarian assistance and disaster relief operations following the Japanese tsunami; conducting a combined total of 11,199 radiological surveys on mission essential items, areas, and personnel; and minimizing environmental impact through more than 50 training exercises using the Protective Measures Assessment Protocol to identify natural resources and protective control for endangered species and marine mammals.



SH-60S Sea Hawk helicopters fly above the aircraft carrier USS Ronald Reagan as it returns to homeport after conducting routine training exercises.
MC2 Michael Russell

SUSTAINABILITY

This award recognizes efforts to prevent or eliminate pollution at the source through efficient and sustainable use of energy, water, and raw materials.

INDUSTRIAL INSTALLATION

Naval Weapons Station Seal Beach, California (including Detachments Fallbrook and Norco)

Naval Weapons Station (NWS) Seal Beach and its Detachments Fallbrook and Norco, California, covers an area of approximately 14,000 acres, including numerous endangered and sensitive habitats. NWS Seal Beach employs its EMS as the primary framework to achieve Executive Order (EO) goals and overall sustainability. The cross-functional team's accomplishments included a 63 percent solid waste diversion rate, overall energy reduction of over



A total of almost 400 kilowatts of rooftop renewable energy photovoltaic systems went online at NWS Seal Beach in FY11. These systems have created an annual savings of over \$90,000.

Matt Duke

18 percent, and reduction of water consumption by approximately 35 percent. The installation holds several community outreach and special events, the centerpiece of which is the annual Sustainability FairE (the "E" stands for Environment), which engages all base personnel to actively support sustainability. FairE participants include regulatory and resource agencies, non-governmental organizations, volunteer groups, green vendors, and the local elementary school.



On 29 September 2011, NWS Seal Beach participated in a collaborative event in support of the release of 15 endangered light-footed clapper rail birds into the Seal Beach refuge.

Edgar Espinoza

U.S. Naval Ship Repair Facility and Japan Regional Maintenance Center, Yokosuka and Detachment Sasebo, Japan

U.S. Naval Ship Repair Facility and Japan Regional Maintenance Center (SRF-JRMC), located at Yokosuka and Sasebo, recognizes the environmental challenges associated with performing ship repair and maintenance on the waterfront in the host country of Japan. To mitigate environmental impacts to Japan's natural resources while upholding the Navy's mission, SRF-JRMC executes a comprehensive environmental program.

Some of the program's accomplishments include the establishment of an International Organization for Standardization (ISO) 14001 Navy EMS. An external EMS inspection team found zero nonconformance findings during the program's first EMS audit.

Additionally, SRF-JRMC completed the required external environmental compliance assessment with NAVFAC Pacific in 2010 with significantly fewer findings than the previous assessment and a 90 percent decrease in environmental discrepancies compared to 2005. The team also achieved a 41 percent reduction in oily wastewater tank cleaning costs and a savings of over \$140,000 by using technology to improve the in-house wastewater treatment capability.



SRF Yokosuka, Japan.

Photographer's Mate 2nd Class John L. Beeman

Navy Fleet Readiness Center East, North Carolina

The success of virtually every environmental program is dependent upon managing hazardous materials properly. To that end, the Materials Engineering Group at the Fleet Readiness Center East (FRC East) has dedicated themselves to improving hazardous material use and finding environmentally preferred substitutes for products. Much of the hazardous materials packaging is managed through the recycling program. Currently, FRC East recycles metal, wood, cardboard, toner cartridges, plastic, and paper. In FY09 and FY10, over 3.8 million pounds of solid waste were recycled. The FRC East hazardous materials program enables FRC East to operate an EMS that is mature, effective, and continually improving. FRC East is the only Federal facility registered to the four major management standards: Quality (ISO 9001); Aircraft Quality (SAE AS9100); Environmental (ISO 14001); and Safety (OHSAS 18001).

ENVIRONMENTAL RESTORATION

This award recognizes efforts to protect human health and the environment by cleaning up identified DoD sites in a timely, cost-efficient, and responsive manner.



Most of the hazardous materials received at FRC East are shipped in outer cardboard boxes. These boxes are sold to an off-site recycler. During the award period, FRC East recycled over 600,000 pounds of cardboard.

David Hooks



The dispensing operation for FRC East's hazardous materials transfers chemicals from larger, more economical containers to the numerous sizes preferred by artisans. By customizing the sizes, FRC East is able to reduce the amount of product wasted.

David Hooks

INSTALLATION

Naval Air Weapons Station China Lake, California

Naval Air Weapons Station (NAWS) China Lake is the Navy's largest single landholding, representing 85 percent of the Navy's land for research, development, acquisition, test, and evaluation use and 34 percent of the Navy's land holdings worldwide, encompassing 1.1 million acres of land that varies from flat, dry lake beds to rugged pine-

covered mountains. The vast majority of the land is undisturbed and provides habitat for more than 340 species of wildlife and 650 plant types.

Because the weapons system development activities conducted at NAWS China Lake for the past five decades have been widely distributed throughout the installation, the environmental restoration requirements for these disparate sites present unique challenges. NAWS China Lake has 89 installation restoration (IR) program sites and five military munitions response program sites.

Some of China Lake's IR accomplishments include completion of a remedial action to install two landfill caps at a propellant/explosives burn area located in sensitive species habitat within the controlled area of an ordnance test facility; installation of solar-powered fuel skimmers at groundwater extraction wells; successful initiation of a monitored natural attenuation groundwater remediation remedy; and other regulatory and small business initiatives.



Although this burrow was found to be inactive during construction, many species, such as the burrowing owl (*Athene cunicularia*) might use such burrows in the future. This landfill cap was tied into an existing soil bank, and rocks were placed on the side to reduce erosion so as not to disturb the burrow.

James McDonald



Naval Base Ventura County, Point Mugu-Port Hueneme-San Nicolas, California

Naval Base Ventura County (NBVC) is composed of three operating facilities located on the Pacific Ocean: Point Mugu, Port Hueneme, and San Nicolas Island. During FY10 and FY11, the NBVC environmental restoration program was extremely successful in meeting its objectives. One of the program's notable accomplishments was the Port Hueneme dredging project, which used a confined aquatic disposal cell to isolate contaminated sediment, allowing future maintenance dredging to proceed without contaminated sediment issues.

Other accomplishments include: achieving site closure at six IR sites and one munitions response site at Point Mugu; achieving remedy-in-place for four other IR sites at Point Mugu; completing one removal action at Port Hueneme; removing 6,600 cubic yards of benzene contaminated soil; removing 3,400 cubic yards of contaminated sediment from the Calleguas Creek Watershed; and safely excavating and removing suspected chemical agent identification sets from Point Mugu military family housing without evacuating residents.



Slag and ash residue is removed from a NBVC Point Mugu lagoon. It took six weeks to remove the ash and slag residue, which totaled almost 2,000 cubic yards.

Steve Granade

Portsmouth Naval Shipyard, Maine

The Portsmouth Naval Shipyard (PNSY), established in 1800, is now a maintenance installation for nuclear-powered submarines. The PNSY IR program promotes



After soil sampling activities were completed at PNSY, each area was backfilled with gravel, lined with geotextile fabric, and top dressed with loam and seed. Final backfilling, landscaping, and fence replacement were completed during fall 2010 and spring 2011.

Frederick Matthew Thyng

environmental stewardship while supporting the military mission. The accelerated pace and expanded scope of cleanup efforts under the program has been possible only through cooperation and collaboration among the PNSY team and regulatory and community stakeholders. Specific environmental accomplishments include accelerated timeline for two records of decision; completing significant soil removal actions in a residential area and a historic building to support upcoming adaptive reuse; finalizing a land-use design to support the remedial action objectives of the Jamaica Island Landfill site; and enhancing public outreach for more effective stakeholder communications and involvement through the quarterly Restoration Advisory Board (RAB) meetings, Community Involvement Plan updates, and annual Site Management Plan updates.



PNSY's Building 184, a former galvanizing plant, is considered a historically significant building, which required a consultation with the Maine State Historic Preservation Office prior to the building's adaptive re-use. As part of this consultation, a historic architectural photographer documented the features of the brick-lined vault.

Frederick Matthew Thyng

INDIVIDUAL/TEAM

Mare Island Investigation Area H1 Restoration Team, Naval Facilities Engineering Command Base Realignment and Closure Program Management Office, California

The environmental restoration team for the former Mare Island Naval Shipyard (MINS) turned a former landfill (Investigation Area H1) into a recreation area and wildlife refuge. Despite time pressure from critical removal actions occurring concurrently at five other installation restoration sites, the team, with the aid of community members, regulators, and contractors, successfully executed the landfill cap placement and opened the area to the public in 2010.

The project realized disposal cost and cap cover construction savings of \$42 million; avoided more than 9,000 tons of carbon dioxide emissions; and generated \$20 million for small and disadvantaged businesses in a local commu-



Members of the MINS restoration team and RAB members, contractors, and community members at the San Pablo trail on the former landfill site.
Carolyn Hunter

nity that was severely impacted by base closure. Also notable were the use of green remediation techniques such as wetlands surface water replenishment from land fill cap runoff and onsite fuel storage, carpooling and use of local vendors; successful partnering with stakeholders to address such concerns as the protection of the salt marsh harvest mouse, a state and federally listed endangered species; improving 120 acres of existing wetlands; and creating 8.7 acres additional wetlands.



A 7,300-foot long slurry wall surrounding the Investigation Area H1 containment area prevents contamination from migrating into the surrounding groundwater.

Delia Sanchez



Silver Strand Training Complex Navy Installation Restoration Site II Team, Naval Base Coronado, California

The Silver Strand Training Complex (SSTC) South, Naval Base Coronado, is one of the Navy's premier training facilities for Naval Special Warfare (NSW) forces. The discovery of asbestos contamination at SSTC South forced training at certain locations to stop in 2009. The site was entered into the Navy's IR program and a Time-Critical Removal Action (TCRA) was implemented, in an effort to return the site for NSW training as soon as possible.



Pre-removal activity-based sampling mimicking Navy training exercises on concrete pads with asbestos-containing tiles.

Simon Wilson

The TCRA posed several challenges, including preventing asbestos releases during sampling and removal actions, minimizing costs, and meeting an aggressive schedule to resume training exercises within 15 months. Navy staff applied innovative practices to overcome these challenges, and SSTC South was able to resume training Navy personnel in record time. At the conclusion of activities, a Technical Memorandum was written with a human health risk assessment of Navy trainee and instructor scenarios, and an evaluation of Occupational Safety and Health Administration occupational exposure. These lessons learned can be applied at other asbestos sites throughout the Navy.



Sampling personnel mimic a game of Frisbee, a potential future recreational activity at SSTC.

Thomas Cook

Vieques Naval Installation, Puerto Rico (Project Management Team)

Initial assessments estimate that up to 9,000 acres of Vieques Naval Installation may be contaminated by munitions and explosives of concern (MEC) resulting from over 50 years of training operations. In 2005, Vieques was placed on the National Priorities List, initiating the development of a Project Management Team which was formed to address cleanup issues. During the award period, the team conducted two major removal actions, destroying over 500 munitions items, and excavating 1,000 subsurface MEC items from roads and beaches. The team also initiated the installation of a barrier system to restrict recreational boaters from anchoring and trespassing into the former bombing range. An extensive underwater biological assessment was conducted to ensure the barrier installation would not impact the endangered coral and marine mammal species found in the area.



In an effort to locate subsurface MEC, a geophysical instrument (in background) is used to identify the location of metallic anomalies that may be indicative of munitions. Technicians then dig out the anomalies to identify and remove (or detonate) the munitions.

Other environmental remediation initiatives include enhancing native soil and vegetation as cover for the 41-acre municipal landfill, resulting in a cost savings of over \$11 million and the preservation of a vegetative habitat; recycling 1.6 million pounds of munitions scrap; and installing solar panels and wind turbines to operate air monitoring and communications equipment. Finally, the team conducted a comprehensive bilingual community involvement program, including quarterly RAB meetings with simultaneous translation, site visits to observe the cleanup progress, and educational workshops.



Prior to the installation of the water barrier system at the Vieques Naval Installation, a magnetometer was used to identify potential buried munitions.

ENVIRONMENTAL EXCELLENCE IN WEAPON SYSTEM ACQUISITION, LARGE PROGRAM

This award recognizes efforts to incorporate environmental, safety, and occupational health (ESOH) requirements into the weapon system acquisition program's decision-making process.

INDIVIDUAL/TEAM

F/A-18E/F and EA-18G Program Office (PMA-265) Green Hornet Team, Maryland

PMA-265, which manages the variants and subsystems of the F/A-18A-D Hornet, F/A-18E/F Super Hornet, and EA-18G Growler aircraft, has cut its carbon footprint and improved safety through proactively seeking to mitigate any potential environmental problems in the initial design stage. As the premiere tactical aircraft of the U.S. Navy, the F/A-18E/F Super Hornet is the focal point of various energy and environmental initiatives. The F/A-18



The Blue Angels successfully demonstrated the use of the blended biofuel at NAS Patuxent River's Labor Day Weekend 2011 Air Show.

Mike Rudy

Green Hornet was the first aircraft to fly on a 50/50 blend of camelina-based biofuel and conventional petroleum-based JP-5 jet fuel. Its demonstration flight on Earth Day 2010 was followed by other successful flights, including the Blue Angels' demonstration performance at the Naval Air Station (NAS) Patuxent River 2011 Labor Day Air Show.

PMA-265 is also committed to pursuing viable technologies to reduce personnel and community exposure to jet engine noise (a long-standing occupational health risk associated with high-performance tactical aircraft), and air emissions. The PMA-265 Green Hornet Team also continues to successfully research and implement alternatives for reducing hazardous materials usage and pollution.



PMA-265, in partnership with Office of Naval Research and General Electric Aviation, is implementing a Rapid Technology Transfer project for mechanical chevrons, a viable solution to reduce jet engine noise for the F414/F404 engines. Testing has demonstrated an approximate 2.5 to three decibels (dB) reduction over much of the frequency range, and up to nine dB reduction in the three to six kilohertz frequency range.

PMA-290 Environment, Safety, and Occupational Health Team, Maryland

The Maritime Patrol and Reconnaissance Aircraft Program Office (PMA-290) ESOH team has employed innovative, highly effective strategies in its legacy aircraft acquisition programs. The team has effectively managed compliance by integrating ESOH considerations into the overall

systems engineering process, thereby minimizing risks and reducing costs.

Notable accomplishments of the PMA-290 ESOH team include reducing solid waste at the Boeing P-8A Poseidon production sites; participating in training that resulted in time and cost savings to the program (estimated three years and \$2.75 million); increasing energy efficiency—for example, the P-8A Poseidon engine (CFM56-7BE), will provide annual reductions of two percent carbon emission and four percent maintenance costs compared to the CFM56-5C engine; and establishing ESOH training with the Boeing team to ensure consistency among maintenance crews.



P-8A production aircraft will be configured with new CFM56-7BE engines, which is now standard on all next generation 737s. Boeing officials say that this process combined with drag reduction improvements will result in lower fuel consumption and maintenance cost savings.

Jim Anderson

Virginia Class Test and Evaluation Environmental Team, Washington, D.C.

The major responsibilities of the Virginia Class Test and Evaluation Environmental team consist of identification and mitigation of ESOH risks, and extensive coordination and documentation to ensure compliance with NEPA and EO 12114. The team has achieved major accomplishments during the awards cycle, including implementing an ESOH risk management process that included mechanisms for identification, documentation, and mitigation of associated risks; as well as implementing a strategic and thorough process for addressing NEPA/EO 12114 compliance requirements before the system is delivered; including identifying potential risks, analysis of potential impacts, coordination with the appropriate regulatory agencies and legal counsel, and production of the appropriate documentation.



The Test and Evaluation Environmental Team coordinated marine mammal observer (MMO) support for the Virginia Class Submarine Diver Recall during operations in Key West, Florida. MMO support is crucial to prevent impacts to the environment during test exercises.

Josh Frederickson



In October 2009, USS Texas (SSN 775) completed an historic exercise in the Arctic region. Texas became the first vessel of its class not only to operate in the Arctic, but also to surface through the ice during developmental testing. Texas is one of three Virginia-class submarines to be stationed in the Pacific.

Sonar Technician (Submarines) 1st Class Hamilton Felt

CONTACT

Katherine Turner
Chief of Naval Operations Energy and Environmental Readiness Division
703-695-5073
DSN: 225-5073
katherine.m.turner.ctr@navy.mil