



# Chief of Naval Operations Environmental Awards

FISCAL YEAR 2010 WINNERS



Tuesday, June 7, 2011 – 1000 to 1100





## Admiral Gary Roughead

*Chief of Naval Operations*

Admiral Roughead is a 1973 graduate of the United States Naval Academy.

Among his six operational commands, Admiral Roughead was the first officer to command both classes of Aegis ships, having commanded USS Barry (DDG 52) and USS Port Royal (CG 73).

As a flag officer, Admiral Roughead commanded Cruiser Destroyer Group 2, the George Washington Battle Group; and U.S. 2nd Fleet/NATO Striking Fleet Atlantic and Naval Forces North Fleet East.

Ashore, he served as Commandant, United States Naval Academy, the Department of the Navy's Chief of Legislative Affairs, and as Deputy Commander, U.S. Pacific Command.

Admiral Roughead is one of only two officers to have commanded the fleets in the Pacific and Atlantic, commanding the U.S. Pacific Fleet and Joint Task Force 519, as well as U.S. Fleet Forces Command, where he was responsible for ensuring Navy forces were trained, ready, equipped and prepared to operate around the world, where and when needed.

Admiral Roughead's awards include the Defense Distinguished Service Medal, Navy Distinguished Service Medal, Defense Superior Service Medal, Legion of Merit, Meritorious Service Medal, Navy Commendation Medal, Navy Achievement Medal, and various unit and service awards.

Admiral Roughead became the 29th Chief of Naval Operations Sep. 29, 2007.



About the Awards .....	1
Winners .....	2
Natural Resources Conservation, Large Installation	
<i>Naval Air Station Lemoore   California</i> .....	2
<i>Naval Base Coronado   California</i> .....	3
<i>Naval Base Ventura County   California</i> .....	4
Cultural Resources Management, Installation	
<i>Naval Air Station Fallon   Nevada</i> .....	5
<i>Naval Base Guam   Guam</i> .....	6
Environmental Quality, Industrial Installation	
<i>Fleet Readiness Center East   North Carolina</i> .....	7
<i>Naval Submarine Base Kings Bay   Georgia</i> .....	8
<i>Naval Weapons Station Seal Beach including Detachments Corona and Fallbrook   California</i> .....	9
Environmental Quality, Overseas Installation	
<i>Commander, Fleet, Activities, Yokosuka   Japan</i> .....	10
<i>Navy Region Center Singapore   Singapore</i> .....	11
<i>U.S. Naval Support Activity Bahrain   Bahrain</i> .....	12
Environmental Quality, Small Ship	
<i>USS Momsen (DDG 92)</i> .....	13
<i>USS Sterett (DDG 104)</i> .....	14
<i>USS Thach (FFG 43)</i> .....	15
Sustainability, Individual or Team	
<i>Fleet and Industrial Supply Center Pearl Harbor – Environmental Sustainability Team   Hawaii</i> .....	16
<i>Fleet Readiness Center Southeast   Florida</i> .....	17
<i>PMA-231 Environment, Safety, and Occupational Health Team   Maryland</i> .....	18
Sustainability, Non-Industrial Installation	
<i>Naval Base San Diego   California</i> .....	19
<i>Naval Station Great Lakes   Illinois</i> .....	20
<i>Naval Station Pearl Harbor   Hawaii</i> .....	21
Environmental Restoration, Installation	
<i>Hunters Point Naval Shipyard   California</i> .....	22
<i>Joint Expeditionary Base Little Creek-Fort Story   Virginia</i> .....	23
<i>Naval Station Norfolk and Naval Support Activity Norfolk   Virginia</i> .....	24
Environmental Excellence in Weapon System Acquisition, Small Program, Individual or Team	
<i>Battle Force Tactical Trainer In-Service Engineering Agent Design Team   Virginia</i> .....	25
Environmental Planning, Team	
<i>East Coast Range Complex Environmental Planning Team   Virginia</i> .....	26
<i>Southern California Range Complex Environmental Planning Team   California</i> .....	27
<i>Undersea Warfare Training Range Environmental Planning Team   Virginia</i> .....	28



*The Chief of Naval Operations Environmental Awards program rewards outstanding performance in promoting environmental stewardship. Awards are presented for work in Natural Resources Conservation, Cultural Resources Management, Environmental Quality, Sustainability, Environmental Restoration, Environmental Excellence in Weapon System Acquisition, and Environmental Planning. Ships, installations, individuals, and teams may compete. By presenting these awards, the Navy recognizes organizations and people who have made significant contributions in those areas.*

Award Categories:

## **NATURAL RESOURCES CONSERVATION – LARGE INSTALLATION**

The purpose of this award is to recognize efforts to promote the conservation of natural resources, including the identification, protection, and restoration of biological resources and habitats; the sound management and use of the land and its resources; and the promotion of the conservation ethic.

## **CULTURAL RESOURCES MANAGEMENT – INSTALLATION**

The purpose of this award is to recognize efforts to promote the management of cultural resources, including the identification, protection and restoration of historic

buildings and structures, archaeological sites, curation, and the promotion of the cultural resources conservation ethic.

## **ENVIRONMENTAL QUALITY – INDUSTRIAL INSTALLATION, OVERSEAS INSTALLATION, SMALL SHIP**

The purpose of this award is to recognize efforts to ensure mission accomplishment and protection of human health through implementation of environmental management systems and pollution prevention that promotes sustainability in the areas of environmental planning, waste management, and safe drinking water.

## **SUSTAINABILITY – INDIVIDUAL OR TEAM, NON-INDUSTRIAL INSTALLATION**

The purpose of this award is to 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.

## **ENVIRONMENTAL RESTORATION – INSTALLATION**

The purpose of this award is to recognize efforts to protect human health and the environment by cleaning up identified DoD sites in a timely, cost-efficient, and responsive manner.

## **ENVIRONMENTAL EXCELLENCE IN WEAPON SYSTEM ACQUISITION, SMALL PROGRAM – INDIVIDUAL OR TEAM**

The purpose of this award is to recognize efforts to incorporate environmental, safety and occupational health requirements into the weapon system acquisition program's decision-making process.

## **ENVIRONMENTAL PLANNING – TEAM**

The purpose of this award is to recognize outstanding environmental planning for the Navy.



## Naval Air Station Lemoore | California

*Natural Resources Conservation – Large Installation*

The natural resources team at Naval Air Station (NAS) Lemoore consists of John Crane and Timothy Schweizer, natural resources specialists for the environmental management division of the public works department. The team is responsible for a wide array of tasks including managing natural resource projects, real estate leasing, pest management, cultural resources coordination, implementation of the agricultural outlease program, National Environmental Policy Act (NEPA) compliance, implementation of the Bird Aircraft Strike Hazard (BASH) Program, and serving as environmental resource planning technical advisors to the commanding officer. During the reporting period, the natural resources team maintained all of its regulatory compliance responsibilities, developed and implemented a number of environmental projects, and provided professional expertise towards alleviating a situation that befell the installation during a time of extreme drought complicated by complex political and regulatory considerations.

Naval Air Station Lemoore's accomplishments:

- Implemented a Wildlife Hazard Assessment study of the airfield and the adjacent agricultural leases and obtained a U. S. Fish and Wildlife Service Migratory Bird Depredation Permit to take legal measures to prevent bird aircraft strikes.
- Acquired permits from the U.S. Geological Survey (USGS) Bird Banding Lab and the California Department of Fish and Game to initiate an in-house raptor banding program as part of a raptor management program at the installation.
- Provided logistical support to the USGS while conducting research in the western San Joaquin study unit as part of the Groundwater Ambient Monitoring and Assessment program. The study focuses on monitoring the groundwater for a wide variety of constituents potentially harmful to human health.

- Coordinated efforts by federal, state, municipal agencies, and various non-governmental organizations to prevent encroachment within the sphere of influence of NAS Lemoore by identifying strategies suitable for agricultural and conservation easement collaboration and planning.



*Prescribed burns and modification of ground cover at NAS Lemoore are an essential component for kangaroo rat survival.*



*A research crew from USGS acquires water samples from one of the agricultural wells at NAS Lemoore.*



The Naval Base Coronado (NBC) natural resources program has had remarkable success supporting the military readiness mission while sustaining natural resources. NBC boasts an island fox management and natural resource compliance and outreach program that sets the standard for other federal agencies and private institutions. Both installation personnel and surrounding communities benefit from NBC's support of ecosystem balance and biodiversity and the ability of the land to withstand both natural and man-made disturbances, which is critical to military and civil preparedness and overall security. NBC has one of the highest concentrations of Naval Special Warfare training and range areas, and the Southern California Range Complex is a heavily used Navy range complex in the eastern Pacific region. With the second highest concentration of federally listed species on a Department of the Navy installation and the fourth highest concentration on an installation DoD wide, NBC has supported the military readiness mission while sustaining natural resources. The NBC conservation model provides a vivid example of how training and natural resources can successfully coexist.

Naval Base Coronado's accomplishments:

- Managed 22 federally listed species and their habitats in a manner compatible with military operations. Success of the program has been manifested by sustained increases in population or nesting numbers of three species/taxa, the San Clemente shrike, the California least tern, and the western snowy plover, with minimal impact on training requirements.
- Achieved success with six federally listed plants slated for down-listing. San Clemente shrike population numbers and trajectories are supportive of down- or de-listing, and the island night lizard is pending delisting.
- Funded the *San Clemente Island (SCI) Native Habitat Restoration Program* to ensure long-term viability of island species/taxa through the restoration of native plant communities and to increase understanding that functioning ecosystems ensure the long-term success of SCI operations.

- Worked closely with the NBC Community Plans and Liaison Officer on multiple encroachment buffering projects to ensure future compatibility of the military mission with local communities.



*The San Clemente Island fox was recently listed by the U.S. Fish and Wildlife Service on four of the eight Channel Islands, but it was not listed on San Clemente Island due to proactive management by the Navy.*



*Several groups collaborated to install three new burrowing owl artificial burrows on Naval Air Station North Island (NASNI), part of NBC. The work encouraged more burrowing owls, a federally sensitive and declining species in southern California, to nest on NASNI.*



## Naval Base Ventura County | California

*Natural Resources Conservation – Large Installation*

The environmental division at Naval Base Ventura County (NBVC) manages a successful natural resources program that balances stewardship of its extensive natural resources with the base's critical missions as a major aviation shore command and a Naval Construction Force mobilization base.

NBVC's environmental management system is critical for maintaining its success. Some of the major achievements of the program during FY 2009 and FY 2010 included the removal of feral cats on San Nicolas Island to restore seabird nesting colonies and the initiation of a program to re-establish eelgrass in Mugu Lagoon. The three facilities comprising NBVC are home to seven federally listed species (salt marsh bird's beak, western snowy plover, California least tern, light-footed clapper rail, Least Bell's Vireo, island night lizard, and black abalone) and two state listed species (island fox and Belding's Savannah Sparrow). Thus, the natural resources program has focused the majority of its management activities on the effective oversight of these threatened and endangered species, as well as marine mammals and other protected species and their associated habitats.

Naval Base Ventura County's accomplishments:

- Restored habitat in areas once covered by invasive plants through a marsh restoration program.
- Implemented a southwest pond turtles monitoring program to mark and release turtles.
- Captured and relocated falcons, hawks, and owls as part of the Bird Aircraft Strike Hazard (BASH) program.
- Monitored marine mammals, including 81,000 adult elephant seals, California sea lions, and harbor seals.
- Completed oyster restoration research pilot program in FY 2009.



*Northern elephant seals use San Nicolas Island to breed, raise pups, and molt.*



*Federally endangered salt marsh bird's beak grow in salt marshes of southern California coastal estuaries. Each year, the natural resources conservation team maps the distribution to determine population status and to avoid impacts from mission and recreational activities.*



Naval Air Station (NAS) Fallon employs one full-time archaeologist who is responsible for the management of all cultural resources including archaeological sites, historic sites, transportation routes, rural landscapes, historic buildings, and structures on the installation. About 18% of NAS Fallon has been surveyed for archaeological resources and approximately 420 sites have been recorded to date. The installation also manages nearly 200 buildings and structures that date from World War II through the Cold War, as well as several early 20th century ranches.

Management of historic buildings and structures was a top priority in FY 2010. A comprehensive historic building inventory was conducted, the results of which will be invaluable in the ongoing management of historic buildings and structures. A similar project inventoried several historic ranches, which have suffered from neglect and the elements for several years. These inventories are only the first step in

Naval Air Station Fallon's accomplishments:

- Developed an expedited consultation process in conjunction with the Nevada State Historic Preservation Office. This process enabled timely implementation of projects worth about \$3.9 million. Projects included solar hot water heating in several buildings, solar daylighting in a Cold War-era hangar, exterior improvements to the base chapel, demolition of three buildings, and emergency repairs to a World War II-era aircraft beacon.
- Evaluated historic ranches under the Navy's management through an architectural study that suggested that the properties are a unique resource and may be part of a historic rural landscape eligible for inclusion in the National Register of Historic Places.
- Updated and repaired the NAS Fallon Cultural Resource Information System that allows data retrieval and manipulation in a fraction of the time it had previously. A crucial planning and management tool, this system has been semi-functional since 2008.



*The Devore Homesite adobe, constructed in the 1930s, is one of several historic ranch properties managed by NAS Fallon.*



*NAS Fallon's Semi-automated Ground Environment and Backup Interceptor Control (SAGE BUIC) system facility is an easily recognized landmark on the landscape. It is also a tangible reminder of the base's Cold War history. The property was determined to be eligible for the National Register of Historic Places in 1998.*



## Naval Base Guam | Guam Cultural Resources Management – Installation

The cultural resources management program on Naval Base Guam (NBG) oversees more than 2,000 cultural resource projects. Due to a recent significant growth in operations, including the upcoming military buildup, NBG planned, programmed, and budgeted projects to meet the increased demand without compromising the integrity of its cultural resources while maintaining compliance with environmental laws and regulations.

Naval Base Guam's accomplishments:

- Successfully repatriated two Japanese WWII casualties to the Government of Japan, while another five Japanese WWII casualties are in the process of repatriation. Two pre-contact Chamorro (indigenous people of the Mariana Islands) burials have been recovered and are in the process of analysis and preparation for respectful reburial in consultation
- Implemented a Programmatic Agreement that facilitated a rapid turnaround time for review of projects located in low probability areas for cultural resources and fill lands on NBG. It also expedited mitigation consultation for projects located in medium and high probability areas.
- Preserved the Maanot Water Reservoir located on NBG Munitions Site. Recognizing its significance as the oldest reservoir on Guam and the adverse effect to a potential historic property, a Phase 1 project to demolish and replace the old Maanot Reservoir was descope. This preserved a historic structure and resulted in cost savings for the Navy.



*The Japanese POW stairs at NBG. Dating back to WWII, Japanese troops from the island of Rota were brought over to Guam and used as a labor force for various projects, including this one. The cultural resources program continues to maintain this and other historic properties.*



*These human remains were discovered on Navy property and were successfully repatriated to the Government of Japan. The cultural resources program at NBG oversees and manages archaeological recovery.*



Fleet Readiness Center (FRC) East's Industrial Environmental Program Division includes air, hazardous waste, solid waste/recycling, and water focus areas. With a commitment to continual improvement, these programs ensure compliance with applicable environmental regulations and seek opportunities to reduce environmental impact while improving fleet readiness.

Fleet Readiness Center East's accomplishments:

- Maintained a transportation incentive program (TIP) that serves 818 employees (about 20% of the workforce) with 94 van pools. During the award period, TIP conserved over one million gallons of gasoline, avoided approximately 16 million pounds of greenhouse gases, and reduced FRC East's environmental footprint by offsetting carbon dioxide (CO<sub>2</sub>) production in the facility's manufacturing processes.
- Constructed its first Leadership in Energy and Environmental Design (LEED) certified project. The project, a \$17 million Engineering Product Support Facility, is the first building constructed in the former Hancock residential area off North Carolina Highway 101. This location has been targeted as a key area for new FRC East facilities, with an emphasis on sustainable building practices and environmentally responsible land use. The project has set a high standard for future projects by going above the minimum requirement of LEED Silver and targeting LEED Gold designation.



*The photovoltaic panels added to the new Engineering Product Support Facility helped to move the project from LEED Silver to LEED Gold certification. The panels provide a clean, renewable energy source for 23% of the facility's energy use.*



*Outdoor air quality is a top priority to FRC East. The scrubbers shown are examples of air pollution control equipment used to regulate the emission of pollutants into the atmosphere.*



## Naval Submarine Base Kings Bay | Georgia

### *Environmental Quality – Industrial Installation*

Naval Submarine Base (NSB) Kings Bay is a large industrial installation located in a pristine coastal environment in southeast Georgia.

Naval Submarine Base Kings Bay's accomplishments:

- Implemented longleaf pine ecosystem restoration on roughly 150 acres of land, including planting approximately 17,000 longleaf pine seedlings. This ecosystem restoration supported region-wide conservation priorities for longleaf pine and bobwhite quail initiatives, and restored habitat for the gopher tortoise and federally threatened eastern indigo snake.
- Continued monitoring rare, threatened, and endangered species in cooperation with the University of Georgia and the U.S. Fish and Wildlife Service, including a 2009 base-wide eastern indigo snake survey. In 2010, NSB focused on surveying birds considered at risk species and species of special concern.
- Funded a mission critical shoreline erosion control project that restored approximately 1,000 feet of shoreline in the restricted area waterfront. This project eliminated point source sedimentation into high-use manatee waters and provided a substrate for marine growth that manatees are known to feed on.
- Stocked 1,100 grass carp in a lake for biological control of aquatic weeds. This project eliminated the need for aquatic herbicides and therefore eliminated the need for herbicide containers and rinsate entering the waste stream.
- Achieved a 45% reduction in hazardous waste, a 25% reduction in disposal cost, and a 7.5 million pound reduction in solid waste entering the landfill.
- Installed a vapor recovery system at the gas station, took corrective action on a failed fuel line for an emergency generator, and completed construction of a new water treatment facility.



*The USS Maryland departing Cumberland Sound. NSB Kings Bay is the homeport for Ohio class ballistic missile submarines on the east coast.*



*Gopher tortoises are a keystone species. Other species depend on gopher tortoise burrows for habitat and refuge. The eastern gopher tortoise population is being considered for federal listing as an endangered species. The western gopher tortoise population is currently listed.*

# Naval Weapons Station Seal Beach including Detachments Corona and Fallbrook | California

*Environmental Quality – Industrial Installation*



Naval Weapons Station Seal Beach, California and its Detachments—located in Corona and Fallbrook, California—provide weapons storage, loading of ready-for-use ordnance, maintenance, weapons systems assessment, and support to ships of the United States Pacific Fleet, U.S. Coast Guard vessels, and Marine Corps units stationed afloat and ashore. Natural resources stewardship includes protection of numerous endangered and sensitive habitats. Naval Weapons Station Seal Beach has integrated its environmental management system program throughout all installation functions during the award period.

Naval Weapons Station Seal Beach including Detachments Corona and Fallbrook's accomplishments:

- Reduced electrical energy consumption by 13.2% during the award period for a total 26% decrease over baseline, well beyond the 15% target set by Executive Order 13423. Estimated cost savings were \$350,000.
- Exceeded water reduction targets and supported California conservation initiatives by lowering usage 41% annually through the conversion to “smart” irrigations systems that monitor soil moisture and weather forecasts and by rethinking landscape methods. Estimated cost savings were over \$155,000.
- Employed Lean Six Sigma (LSS) methodology to evaluate installation fleet vehicle usage in order to develop a fuel use reduction plan. Engaged practice owners to change their GSA vehicle requests to select greener alternatives that are projected to reduce fleet vehicle fossil fuel consumption by 47%.
- Streamlined and improved the effectiveness of the Environmental Requirements Review process through a LSS study. Results included a 70% increase in green products used by the multi-trade contractor and work toward raising Leadership in Energy and Environmental Design (LEED) ratings for new projects.
- Partnered with community organizations and resource partners on a number of volunteer activities, including three National Public Lands Day events, habitat clean-ups, and monthly tours.



*Naval Weapons Station Seal Beach Public Works Officer LCDR Chad Lorenzana inspects the latest photovoltaic system installed on the base.*



*Naval Weapons Station Seal Beach preserves sensitive ecosystems and protects critical wetlands habitat for migratory, endangered, and threatened bird species at the Seal Beach National Wildlife Refuge. An observation platform overlooks the refuge and provides visitors a close-up experience with nature.*



## Commander, Fleet Activities, Yokosuka | Japan

*Environmental Quality – Overseas Installation*

As a leader in environmental protection in Japan, Commander, Fleet Activities, Yokosuka (CFAY) partners with U.S. and Japanese officials to meet or exceed stringent U.S. and Japanese government environmental protection standards. With strong support from military and civilian personnel, base residents, and personnel living and working in the cities of Yokosuka, Zushi, and Yokohama, CFAY has successfully developed and maintained invaluable partnerships crucial to the success of its environmental program.

As the first Navy base in Japan to fully implement an environmental management system (EMS) in accordance to ISO 14001 standards, CFAY has set and met EMS goals, objectives, and targets by developing an effective and robust cross-functional team. CFAY ensures the completion of EMS awareness training of all personnel in the CFAY area of responsibility and continues to lead the way in EMS execution.

Commander, Fleet Activities, Yokosuka's accomplishments:

- Reduced the amount of hazardous waste disposed of by over 500,000 pounds annually in FY 2009 and 2010, representing a 36% decrease since FY 2008.
- Doubled the amount of material recycled since FY 2008, and increased its solid waste diversion rate from 24% in FY 2008 to 69% in FY 2010.
- Reduced petroleum, oils, and lubricant spills by 85% since FY 2009.
- Took a strategic approach to evaluating and optimizing environmental management processes, saving millions of dollars in funding while increasing the effectiveness of environmental planning and oversight.
- Successfully integrated the community into environmental management through various outreach events and awareness programs, including cultural and historical resource tours, environmental/safety fairs, base beautification events, and natural resource sustainment events.



*CFAY gives tours to promote environmental awareness and educate the community on how the Navy protects the environment. In FY 2010, CFAY started providing tours of the newly constructed environmentally friendly cogeneration plant for the general public.*



*In FY 2009, CFAY began sponsoring young fish release and eelgrass planting events. Over 100 local American and Japanese girl scouts participated this year to learn about the ecosystem in Green Bay, help prepare eelgrass strands for planting, and release young marbled flounder and tiger blowfish.*



U.S. Navy Region Center, Singapore's (NRCS) mission is to lead and manage the overall coordination of military services in Singapore. The NRCS environmental program has an important role in maintaining compliance with U.S. environmental requirements and applicable local laws and regulations, as well as enhancing the quality of life of the facility population. In FY 2009, NRCS became the first command in the Navy to achieve environmental management system (EMS) conformity with zero deficiencies. NRCS was able to fully evaluate all processes and developed 21 standard operating procedures under the program. With all the checks and balances implemented, the system is constantly finding ways to reduce operational impacts.

Navy Region Center Singapore's accomplishments:

- Implemented effective environmental compliance programs which received no notice of violations from local regulators.
- Achieved EMS self-certification. Recycled and reused materials at every opportunity.
- Offloaded over 344,000 pounds of shipboard generated industrial waste and implemented an effective solid waste qualified recycling program.
- Conducted numerous training sessions and drills which greatly enhanced the command's response capability.



*Informational booth set up at NRCS on Earth Day 2010. School children learned about waste reduction and pollution prevention efforts at NRCS.*



*In FY 2009 and 2010, NRCS assisted in the collection and disposal of over 344,000 pounds of shipboard generated industrial waste.*



## U.S. Naval Support Activity Bahrain | Bahrain

### Environmental Quality – Overseas Installation

As the only permanent frontline shore base in the Southwest Asia area of operations, Naval Support Activity (NSA) Bahrain is the epicenter of all support operations in the turbulent Middle East. Despite the continual increase in operational tempo, coupled with DoD budget and manpower constraints, NSA Bahrain's environmental program continues its regional support in this dynamic area of responsibility.

The mission of the environmental program at NSA Bahrain is to provide timely and quality service that enables and sustains fleet, fighter, and family readiness through consistent standardized shore services within the Commander, Fifth Fleet Area of Responsibility.

The environmental team has consistently achieved environmental excellence utilizing scarce resources and has dedicated their organization to improving environmental quality at NSA Bahrain and surrounding communities. Most notably, they export their expertise and lessons learned to support the Horn of Africa and Camp Lemonier Djibouti.

U.S. Naval Support Activity Bahrain's accomplishments:

- Responded to more than 1,400 service calls supporting 148 U.S. Navy and coalition ships.
- Processed more than 4,000 55-gallon drums of shipboard-used hazardous materials offloaded in Bahrain and United Arab Emirates (UAE).
- Continued recycling programs in Bahrain and the UAE, diverting an annual average of 1,000 tons of recyclables from the landfill, and reducing disposal costs by more than \$3 million over the past two fiscal years.



*NSA Bahrain participated in a tree planting at the Port of Khor Fakkan in the United Arab Emirates.*



*Environmental department employees collecting plastic bottles from one of the many recycling bins located throughout NSA Bahrain. Each year, NSA Bahrain's recycling program has managed to divert an average of 1,000 tons of recyclables from the landfill.*



USS Momsen (DDG 92), based at Pacific Northwest homeport of Naval Station Everett, Washington, is a proactive custodian of the environment, and strives to set the example for environmental stewardship throughout the Navy.

USS Momsen's accomplishments:

- Restored the ship's oil/water separator to full operation, without cost to the government. The oil/water separator is the primary method of ensuring that liquid discharges are scrubbed of pollutants and is pivotal to effective environmental protection program.
- Reduced fuel consumption and operated the plant in the most efficient configurations. Command leadership pioneered the use of "drift operations" during slow pace underway assignments, securing the main engines and allowing the currents to push Momsen as required, thereby reducing fuel consumption by as much as 10% per day. The use of "single generator operations" allows Momsen to save 500 gallons of fuel every hour. Additionally, engineers closely monitor air conditioning and sea water service system loads, maintaining only minimum equipment in operation—a substantial improvement over baseline usage.
- Undertook an ongoing evaluation of Momsen-specific fuel burn rates, known as the "Lafavor List," by the oil lab and bridge watch teams to closely track and evaluate fuel consumption given specific plant line-ups. With this list, Momsen intends to create hull-specific guidance on plan operation given tactical and operational requirements to ensure that the carbon footprint is as small as feasible.



*GSM1 Bernard Ankrah ensures that caustic exhaust gases are correctly directed and merged with ambient air, which is vital to crew health. Momsen's proactive approach towards corrective and preventative maintenance is a cornerstone of a stellar environmental protection program.*



*Sailors participate in an island preservation community relations project while on a visit to the Maldives.*



## USS Sterett (DDG 104)

*Environmental Quality – Small Ship*

USS Sterett (DDG 104) is one of the Navy's newest Arleigh Burke class destroyers. Commissioned in August 2008 and homeported in San Diego, California, Sterett maintains the highest environmental protection performance, delivering success in the face of an increasingly complex landscape of environmental protection challenges.

USS Sterett's accomplishments:

- Implemented and maintained major emission control measures to ensure that Sterett minimizes the total amount of airborne pollutants, leading to zero accidental releases or ventings of Halon during FY 2010.
- Implemented an aggressive operation and maintenance plan for gas turbine main engines and gas turbine generators to ensure the most efficient operation and minimal fuel usage. All relevant watchstanders are well versed in the most efficient ship speeds and configurations to maximize efficiency and minimize fuel use.
- Safely conducted 11 underway refueling operations receiving over 1.6 million gallons of fuel. Sterett recorded zero fuel spills during this reporting period.
- Rigorously managed hazardous materials, ensuring that 2,750 items were offloaded and onloaded during a yard period with zero discrepancies. Sterett also established its first hazardous waste minimization center during this reporting period, including creating all the necessary instructions and procedures for hazardous materials.
- Utilized R-134A refrigerant at all five air conditioning plants, eliminating the production and release of harmful chlorofluorocarbons into the atmosphere. Outstanding maintenance practices contributed to Sterett's record of zero refrigerant leaks in FY 2009 and 2010.
- Followed protective measures assessment protocol (PMAP) which is used to help protect marine mammals during training exercises.



*A whale tail is spotted from the bridge of USS Sterett. Marine mammal sightings are logged and identified, and operations are modified as necessary to avoid hurting the animals. PMAP is run prior to any exercise that could affect marine life.*



*CSSN Lopezcastillo empties a trash bag full of biodegradables into the pulper unit onboard. Sterett makes every effort to minimize waste onboard through recycling and management. Shredded biodegradables are only released when outside 12 nautical miles from land.*



USS Thach (FFG 43), based at Naval Base San Diego, California, ensures each crew member understands their personal environmental safety responsibilities from air, water, oil pollution, solid and hazardous material and waste, and their duty to protect the oceans they sail upon.

USS Thach's accomplishments:

- Minimized air pollutants through strict adherence to laws and regulations to ensure the ship's gas turbine and service diesel generators operate as efficiently as possible.
- Performed 620 hours and invested \$80,000 in repairs to make the water pollution control systems fully operational.
- Continued to implement an assertive policy for managing solid waste. Every Sailor is accountable for proper disposal of trash, and must segregate their trash while at sea.
- Managed hazardous material utilizing the ship's hazardous material inventory and control systems windows. Thach ensures only the needed hazardous materials are kept onboard, and all materials are used through exhaustion.
- Raised environmental awareness through onboard indoctrination of new crew members and through continued training by supervisors. Every Sailor is responsible for adhering to the highest standards of operational impact on the environment.



*780 Sailors aboard USS Thach conducted a refueling during the most recent Northern Arabian Gulf deployment. The refueling was a success with no fuel spilled.*



*Thach crew members participate in a community cleanup project during a port visit to Mazatlan, Mexico.*

The Fleet and Industrial Supply Center Pearl Harbor (FISC Pearl) Environmental Sustainability Team addressed a number of significant environmental issues by partnering with Navy experts, regulatory agencies, and community resources. The team, whose members are from FISC Pearl and Naval Facilities Engineering Command Hawaii, took bold and innovative measures to ensure that FISC Pearl will continue to serve as a key and critical logistics provider and defense fuel support point for DoD.

Fleet and Industrial Supply Center Pearl Harbor Environmental Sustainability Team's accomplishments:

- Reduced energy usage through a combination of facility upgrades and personnel training on conservation methods that resulted in FISC Pearl reducing its consumption by 32% at the end of FY 2010, far below the DoD target level.
- Initiated a program to assess vehicle usage and replace command vehicles with alternatively fueled vehicles where feasible.
- Initiated an internal project review process to ensure that facilities repair and construction projects include appropriate elements of high performance and sustainable buildings. This included project requirements to recycle construction debris and to use stormwater pollution prevention best management practices.
- Reclaimed 779,216 gallons of not-ready-for-issue fuel in FY 2009 and FY 2010 at the Fuel Oil Reclamation Facility. This allowed the sale of this commodity vice disposal as oily waste for a savings of \$11.7 million.
- Conducted an Earth Day Fair with displays describing the FISC Pearl environmental protection program, storm water pollution prevention, oil spill response, Hawaii's endangered species, and energy conservation. Other events to recognize the 40th anniversary of Earth Day were a storm drain stenciling project to increase awareness of water pollution prevention and taping a video for the Environmental Protection Agency's Earth Day website.



*Captain John Polowczyk, Commanding Officer, FISC Pearl, is briefed by LT Jason Jackson, FISC Pearl Environmental Sustainability Team member, on the hydrogen hybrid vehicle's drive train.*



*LT Jason Jackson paints a message at one of the 159 storm drains in the FISC Pearl area during Earth Day 2010. The message reads "Dump No Waste – Goes to Pearl Harbor" and serves as a reminder to everyone that Hawaii's fragile water resources need to be protected from pollution.*



Fleet Readiness Center Southeast (FRCSE) is committed to protecting the environment while providing timely and cost effective maintenance solutions to the Fleet.

Fleet Readiness Center Southeast's accomplishments:

- Improved air quality and reduced ground-level ozone (smog) by eliminating more than 2.5 tons of the hazardous air pollutant Toluene from the industrial facility's manufacturing processes through implementing the use of less toxic solvents and green alternatives.
- Reduced the amount of hazardous waste from FRCSE industrial wastewater treatment plants by reducing point source generation of waste, implementing more cost effective operating procedures for water treatment, and leveraging capability of the Naval Facilities Public Works Department. This operational change eliminated more than 600,000 pounds of hazardous waste, provided a disposal cost avoidance of nearly \$480,000 and provided additional energy and maintenance cost savings associated with these operational changes.
- Reclaimed 13 EA-6B Prowler aircraft, recovering about 300 parts from each stricken aircraft and providing a cost avoidance of about \$9 million to the Navy and taxpayers.
- Reduced annual hazardous material (HM) procurement cost by nearly \$40,000 and reduced HM waste by more than 38% (5,400 pounds) by implementing best management practices for HM shelf life management.
- Purchased machine coolant sump filter/recycle unit for maintenance of more than 80 industrial machines to reduce coolant purchase by 60%, reduce waste by 225,000 pounds/year and provide \$1.4 million in disposal cost avoidance.
- Modified contract with General Electric (GE) in June 2009 to begin recycling rhenium, a rare earth metal used in the manufacture of turbine blades. To date, FRCSE has recycled more than 30 tons of demilitarized, turbine blades back to GE for rhenium extraction, and remanufacture of turbine blades and nozzles.

- Recycled nearly 241 tons of material that did not go to landfill at a cost avoidance of \$462,000. In addition, FRCSE saved nearly \$2.73 million through reuse of JP-5 fuel.



*FRCSE improved air quality and reduced smog by eliminating more than 2.5 tons of the hazardous air pollutant Toluene from the industrial facility's manufacturing processes.*



*FRCSE recycled more than 3,600 pounds of bottles and cans, 1,800 pounds of newspaper and more than 18,000 pounds of computer and office mix paper in 2010.*



## PMA-231 Environment, Safety, and Occupational Health Team | Maryland

*Sustainability – Individual or Team*

The Naval Air Systems Command (NAVAIR) Program Manager Air (PMA) - 231 Environment, Safety, and Occupational Health (ESOH) team has worked diligently and effectively to maintain fleet readiness while dramatically reducing the environmental footprint of the E-2 platform through effective ESOH integration into the development, manufacture, use, maintenance, and disposal of its aircraft systems. The ESOH team works closely with a multi-disciplined sustainability team consisting of chemical, material, safety, and environmental engineers, and production personnel to provide solutions to process activities with significant environmental benefit.

PMA-231 Environment, Safety, and Occupational Health Team's accomplishments:

- Tested non-chromate primer on the entire E-2 aircraft exterior. E-2 is the first carrier-based aircraft to do so. If in-service performance testing is successful, non-chromate primer will be implemented on the entire E-2/C-2 fleet, avoiding lifetime use of over 20,000 pounds of chromate primer.
- Sought alternatives for two hazardous material containing adhesives used on the E-2 platform. FM-58, a film adhesive, and FM-47, a liquid adhesive, contain formaldehyde and toluene, respectively. Non-hazardous alternatives were implemented for both adhesives, eliminating use of 3,000 square feet of formaldehyde-based and 200 gallons of toluene-based adhesives, annually.
- Implemented replacement of Halon—a known ozone depleting substance (ODS)—alternative ahead of schedule, preventing the retrofit of three aircraft and saving 100 pounds of Halon. Overall, 73 of 75 E-2D AHE aircraft will be equipped with non-ODS fire suppressant, avoiding the use of over 20,000 pounds of Halon over the lifetime of the program.
- Implemented smart building management systems, thermostat regulation, and an aggressive light replacement program at the St. Augustine Manufacturing Center, E-2D's final assembly site.

These efforts reduced the E-2D's assembly site energy consumption by 6.4 million kWh, or 33%, compared to the 2006 baseline.



*The first E-2C to have the entire exterior of the aircraft primed with Defi's 02-GN-84 non-chrome primer.*



*Aviation Structural Mechanic 3rd Class Jeck Maigue sands down an aircraft to help aid in the prevention of corrosion and prepare it for painting.*



Naval Base San Diego (NBSD) has significantly reduced its impact of operations on the environment. The introduction of new ideas and equipment which reduce waste, capture pollutants, and otherwise mitigate environmental impacts at NBSD has led to regulatory compliance in all areas of NBSD activities.

Naval Base San Diego's accomplishments:

- Diverted 20,669 tons of solid construction and demolition waste from the municipal landfill achieving an 85% diversion rate.
- Initiated 227,000 square feet of xeriscape projects, vastly improving base appearance and saving approximately 7.5 million gallons of water and \$88,000 annually in water and maintenance.
- Held several electronic waste turn-in events that resulted in the recycling/re-use of electronic items and appliances and a savings in disposal costs.
- Hosted a one-day hazardous material and hazardous waste turn-in event open to both afloat and shore commands. This event recycled over 6 tons of hazardous materials and waste.
- Hosted the first Navy Region Southwest Environmental Green Summit featuring both Navy and private enterprise representatives. The summit provided a venue to share information on a wide array of conservation, green projects, and Navy-private enterprise partnerships.



*Aging waterfront structures and a substandard basketball court were transformed into a first-class multi-use outdoor work-out facility including a synthetic 400-meter running track, full-size modern basketball court, workout stations and picnic areas, providing a convenient workout area on the waterfront.*



*The Photovoltaic Carport on the "wet side" of NBSD.*



## Naval Station Great Lakes | Illinois Sustainability – Non-Industrial Installation

Commitment and a strong culture of teamwork at Naval Station Great Lakes have yielded success across a wide spectrum of environmental sustainability initiatives on base. The installation is a leader in managing a fleet of green vehicles, using alternative fuels, providing environmentally-friendly laundry services, employing sustainable construction practices, and leading energy efficiency initiatives. An effective environmental management system focused the command's energy, environmental, and mission operator teams on significant environmental aspects and critical objectives. The installation has forged partnerships with external agencies, industry, academia, environmental groups, and the local community to sustain effective environmental stewardship programs, build support for the Navy mission, and facilitate technology transfer. These efforts resulted in substantial pollution reductions, conserved energy and natural resources, and have driven a pursuit of clean energy initiatives to meet future fleet facility needs.



*Mark Schultz, environmental director for NAVFAC Midwest, explains to students at North Chicago Community High School about electric vehicles and other environmentally friendly means of transportation used by the Navy during an Environmental Science Olympics community outreach event.*

Naval Station Great Lakes' accomplishments:

- Reduced regulated air emissions by 85% and eliminated hazardous air pollutants through boiler and dry cleaning process improvements and fuel substitutions.
- Reduced energy intensity by 29%, well ahead of the federal goal through improved energy management programs and facility upgrades using utility energy service contracts.
- Increased recycling by 1,107 tons and increased solid waste diversion by 57%.
- Earned the first Gold certification under the new U.S. Green Building Council Leadership in Energy and Environmental Design for New Construction (LEED NC) v.2.2 standard for the Atlantic Fleet Drill Hall construction project.
- Increased its alternative-fueled vehicle fleet to 61% of total inventory and increased alternative fuel use by 20% through an innovative automated fuel key system that regulates use of alternative fuels in flex-fuel vehicles.



*Tunnel washers installed in the Naval Station Great Lakes Navy Exchange laundry facility in FY 2009 use 90% less water and detergent and 40% less energy than previous machines.*



Naval Station Pearl Harbor (NAVSTA Pearl) is located in the Hawaiian Islands on the island of Oahu. With Hawaii's complete dependence on imported oil for energy generation, energy conservation, and alternative energy initiatives have taken on added importance.

Naval Station Pearl Harbor's accomplishments:

- Awarded a \$15 million project for the installation of 2.5MW of solar photovoltaic generation panels on the roofs of five buildings. The new system will provide an annual avoidance of approximately 5,667 barrels of oil and 3,118 tons of CO<sub>2</sub> emissions, which is the equivalent of taking 550 passenger cars off the road.
- Reduced the Navy's waste oil disposal costs, created an additional source of fuel and saved almost \$11.7 million over two years through the off-specification diesel and jet fuel, and used oil reclamation program. In FY 2009, more than 195,000 gallons of fuel were reclaimed. In FY 2010, this number grew to more than 500,000 gallons.
- Avoided more than \$1.7 million of disposal and procurement costs in FY 2009 and more than \$2.9 million of disposal and procurement costs in FY 2010 through the Consolidated Hazardous Materials Reutilization and Inventory Management Program (CHRIMP).
- Audited over 4.9 million square feet of facilities for energy and water conservation opportunities in FY 2010, exceeding the mandated goals required under the Energy Independence and Security Act of 2007. Audit results identified over 87 energy and water conservation measures with potential annual savings of \$1.6 million.
- Purchased new Arizona Memorial ferry boats with several clean fuel technology innovations. Diesel engines meet the Environmental Protection Agency's Tier 2 standards for total hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter emissions. The boats are also optimized for operation with biodiesel fuel.



*Xeriscaping at the Navy Exchange facility at Pearl Harbor. Fresh water is a large sustainability concern for an island in the middle of the ocean, so this project incorporated the planting of hearty, drought-tolerant plants, efficient irrigation, ground cover and balanced soil to produce a landscape that requires 50% less water to maintain than traditional landscaping.*



*Installation of new energy efficient air conditioners at Building 1770, saving more than \$92,000 annually.*



## Hunters Point Naval Shipyard | California

### Environmental Restoration – Installation

Environmental restoration at Hunters Point Naval Shipyard, located in San Francisco, California, is managed by the BRAC Program Management Office West. The Navy operated the 936-acre shipyard from 1939 to 1974, and in 1989 it was designated a superfund site. Toxic substances left behind when the shipyard closed include solvents, fuel and grease, metals, pesticides, PCBs, and radioactive materials. The Navy uses the Environmental Protection Agency TRIAD concept to streamline data-gathering and decision-making during investigation and cleanup. Innovative cleanup technologies are tested and those deemed most effective are used to address the contamination. The Navy and regulatory agencies have used time-critical removal actions to remove waste from the Bay shoreline. Testing a wide variety of technologies was aided by partnerships with DoD's Strategic Environmental Research and Development Program. The Navy partners with existing community programs, such as Young Community Developers and City Build, to provide vocational training and the opportunity to take part in the shipyard cleanup.

Hunters Point Naval Shipyard's accomplishments:

- Achieved significant mission progress by implementing final cleanup actions at seven parcels, accounting for over 55% of the terrestrial property to be transferred.
- Cleaned solvent contamination during technology testing in one parcel, saving the Navy approximately \$1 million in early transfer costs.
- Partnered with community groups to train and ultimately provide employment for 20 community members with the Navy's environmental contractors.
- Operated a state-of-the-art radiological laboratory reducing average analytical time by over 65% at no additional cost compared to a commercial laboratory.
- Conducted a removal action to remove PCBs from the Bay shoreline, and restoring the shoreline and beach areas.

- Adopted the TRIAD concept to field work, saving \$1 million annually for groundwater monitoring and reducing most field work schedules by three to five months.



*Contaminated soil containing hydrocarbons and PCBs is excavated for disposal at Hunters Point Naval Shipyard. A section of the restored beach can be seen in the background.*



*Debris and contaminated sediment have been removed from the shoreline at Hunters Point Naval Shipyard. A liner anchored with rip rap boulders prevents erosion and potential future exposure to contaminants that may be present at depth.*



On October 1, 2009, Hampton Roads' first joint base, Joint Expeditionary Base Little Creek-Fort Story (JEBLCFS), was established, comprising former Naval Amphibious Base Little Creek and former Army Garrison Fort Story. The Navy Environmental Restoration Program (NERP) at JEBLCFS successfully balances the challenge of restoring environmental sites and protecting human health and the environment with the facility's limited space, continued growth and mission need for usable land. The Navy continually collaborates with representatives of the U.S. Environmental Protection Agency, Virginia Department of Environmental Quality, and other Department of Defense entities to evaluate the needs of the community, the NERP, and the mission to apply economical, environmentally sound, and sustainable methodologies to issues under examination. These efforts have resulted in over \$2 million cost savings and have made approximately 1,864 acres available for reuse.

Joint Expeditionary Base Little Creek-Fort Story's accomplishments:

- Achieved no further action status for 13 sites, established remedy in place for two sites, completed an action decision document for two sites, developed a feasibility study at one site, and concluded the Military Munitions Response Program for Joint Expeditionary Base Little Creek.
- Actively treated three sites via enhanced reductive dechlorination by applying a vegetable oil substrate to the subsurface to promote in situ degradation of groundwater contaminants by naturally occurring microbial populations.
- Collaborated with other agencies to incorporate scheduled base activities in planning remedy implementation, including aggressive development of a sampling plan, eliminating the need for NERP closure of the airport, preventing temporary decline in military readiness through cessation of dry dock operations, and saving approximately \$1.5 million.

- Reused available resources to repair two soil covers, saving more than \$1 million, and installed an irrigation system to maintain the vegetation on the soil cover, reducing soil erosion and eliminating the need for continued maintenance.



*Material at the Site 9 Driving Range Landfill was reused to complete repair activities to the soil cover of two sites, eliminating the facility's need to dispose of the material import outside soil. Reuse of available resources at JEBLCFS has saved the Navy more than \$1 million.*



*The Site 9 Driving Range Landfill during maintenance repair activities, which included the addition of supplemental soil, installation of an irrigation system, and sprigging grass in impacted areas.*



## Naval Station Norfolk and Naval Support Activity Norfolk | Virginia Environmental Restoration – Installation

Naval Station Norfolk (NSN) is the world's largest Naval Installation. It consists of more than 4,000 buildings, 20 piers, and an active airfield, covering 4,631 acres. It is the hub for Navy logistics support for the Caribbean and the European and Central Command theaters of operation. The Naval Support Activity Norfolk (NSAN) Headquarters Complex is located adjacent to NSN. This installation is home to over 6,000 personnel and has the largest concentration of fleet headquarters administrative and communication facilities outside of Washington, D.C. Due to the size of NSAN and its close proximity to NSN, all installation restoration (IR) sites located at the installation are managed as part of the NSN restoration program. NSN is one of 66 DoD installations located within the Chesapeake Bay watershed, the nation's largest estuary. Recreation and commercial fishing are vital industries within the Bay.

NSN and NSAN achieved an unparalleled partnership between the Navy, Environmental Protection Agency (EPA), and Virginia Department of Environmental Quality. Throughout the partnering process, site-specific project status updates led to expedited document reviews and approvals. This facilitated long term site management strategies that also provided for the beneficial re-use of multiple IR sites at Naval Station Norfolk.

Naval Station Norfolk and Naval Support Activity Norfolk's accomplishments:

- Achieved major milestones in both Navy Remedy in Place and EPA Installation Construction Completion.
- Provided over 22 acres of re-usable outdoor recreation space, 1,400 parking spaces on 14 acres, and approximately ¼ acre of re-usable warehouse space.
- Accomplished significant progress on a 172-site, 27-year and \$100 Million Program.



*A protective remedy asphalt cover was utilized at IR Site SWMU 14 to provide beneficial land reuse of 14 acres and to provide for an additional 1,400 parking spaces in the carrier pier vicinity. Thirteen biofiltration areas were also utilized to treat the first inch of stormwater runoff in direct support of the low impact development initiatives around the Chesapeake Bay watershed.*



*Excavation activities in the section of Bousch Creek adjacent to the Naval Station Norfolk flight line. Excavation was completed from the top of the bank with a long-reach excavator to avoid impacting established vegetation along the banks. The depth of excavation was measured using a man lift located on the top of bank to avoid having workers in the water.*

# Battle Force Tactical Trainer In-Service Engineering Agent Design Team | Virginia

*Environmental Excellence in Weapon System Acquisition – Small Program*



Ten obsolete Battle Force Tactical Trainer (BFTT) systems were reutilized at Combat Direction Systems Activity, Dam Neck (CDSA DN) in FY 2010. The BFTT systems were processed for reutilization, preventing several hundred pounds of metal from being discarded and saving an estimated 8,500 kilowatt-hours of energy—approximately enough to power an average U.S. residential household for nine months.

Battle Force Tactical Trainer In-Service Engineering Agent Design Team's accomplishments:

- Significantly reduced the amount of toxic material introduced with system deployment through the BFTT In-Service Engineering Agent (ISEA) Design Team's reutilization effort, which decreased both personnel hazard and the carbon footprint by reducing the amount of power required to operate the system. The training systems are embedded in surface combatant ships to provide combat systems training for sailors worldwide.
- Incorporated Environmental Safety and Occupational Health (ESOH) objectives throughout the product lifecycle. Programmatic ESOH evaluation is a part of the Systems Engineering Plan, aiding in the ESOH requirements and analyses.
- Completed six formal technical reviews where several ESOH system risks were identified and addressed. Additionally, eight system certification events were conducted that included ESOH risk mitigation, and six instances of concurrence by the Weapon Systems Explosive Safety Review Board for BFTT System Deployment.



*Nominated team members (from L-R) Brian Schwark, Randy Tucker, Mark Schroeder, and Timothy Gilbert.*



*Recovered parts from USS Theodore Roosevelt (CVN 71) that continue to be reused, refurbished and/or recycled. To date, more than \$1 million has been saved in support of CDSA DN's Environmental Excellence in Weapon System Acquisition efforts.*



The U.S. Fleet Forces (USFF) East Coast Range Complex Environmental Planning Team is composed of Navy and contractor personnel with wide-ranging expertise in naval operations, natural resources, and environmental planning and compliance. In order to produce high quality Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) for each of the three east coast range complexes on a compressed schedule, the team had to accurately describe training requirements spanning 100,000 square nautical miles of ocean area, address all applicable environmental laws and regulations, collect and interpret best available science, create methodologies to predict environmental effects, and compile it all into scientifically accurate and readable studies. The team overcame significant challenges in achieving this goal and given the sheer operational and geographic scope of the combined effort. This effort ensured consistency among simultaneous major document preparation efforts, and coordinated with the U.S. Marine Corps, regulatory requirements, legal risks, time constraints, and evolving operational requirements while mindful of the environmental effects of military training activities.

East Coast Range Complex Environmental Planning Team's accomplishments:

- Employed innovative management approaches to deal with challenges, including designing matrix approaches, preparing EIS collaboratively, establishing and implementing quality assurance/quality control review principles, applying standardized risk communication training, and integrating Navy and Marine Corps environmental planning efforts.
- Successfully completed three East Coast Range Complex Final EIS and associated marine species regulatory permits, providing total environmental coverage for live training along the east coast with no loss of current capabilities.
- Continued integrating operations into the environmental planning process, developed groundbreaking responses to emerging natural resource issues during late stages of the environmental planning process, dealt with last minute regulatory actions, and supported new mine warfare capabilities on the east coast.



*Overhead view of a U.S. Navy scoping meeting for a JAX EIS public hearing as Navy officials explain marine mammal mitigation protection programs to interested community members.*



*Susan Lang (left), NAVFAC Atlantic Lead Environmental Planner for the Cherry Point EIS, and Jim Casey (right), USFF Live Training Analyst, explain the Navy's need to train to an interested member of the community at the VACAPES EIS public hearing in Virginia Beach, Virginia.*



The Southern California (SOCAL) Training Range Complex environmental planning and compliance project was exceptionally managed by Mr. Alex Stone (CPF NO1CE), who led a diverse, interdisciplinary governmental and contractor team in support of one of the most highly visible, operationally critical, environmentally complex and legally contentious environmental planning efforts in the Navy. This team's efforts supported Commander, U.S. Pacific Fleet's (COMPACFLT) goal to continue to train while adhering to protective measures that also ensure training integrity. The team effectively addressed environmental concerns for critically endangered species and other sensitive marine and terrestrial species along the coast of Southern California.

Southern California Range Complex Environmental Planning Team's accomplishments:

- Implemented a highly innovative and proactive approach to environmental planning and compliance that provided COMPACFLT the ability to use sonar in the accomplishment of its sea-based, sonar training missions while continuing to protect marine resources.
- Developed a long-term solution to allow Sailors, Marines, and Special Forces to conduct critical training, including land and sea activities, in one of the Navy's premier and irreplaceable training complexes. Therefore, the SOCAL project directly contributed to the Navy's mission to maintain, train and equip combat ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas.
- Finalized both marine (NMFS Biological Opinion) and terrestrial (USFWS Biological Opinion for San Clemente Island) threatened and endangered species compliance. The Terrestrial Biological Opinion was an immense, complex task that resulted in a favorable no-jeopardy outcome from the U.S. Fish and Wildlife Service for both proposed protections and continued biological success.



*USS Preble (DDG 88) fires a surface-to-air SM2 missile while conducting missile-firing exercises off the coast of Southern California.*



*Navy divers position an underwater listening device near a submerged diesel submarine. The submarine is being used as a target for the new MK 54 Mod 0 Lightweight Torpedo and was tested off the shores of San Clemente Island, California.*



## Undersea Warfare Training Range Environmental Planning Team | Virginia

*Environmental Planning – Team*

The Undersea Warfare Training Range (USWTR) environmental planning and compliance initiative was based on a highly innovative and proactive approach that will successfully give U.S. Fleet Forces (USFF) the ability to conduct littoral Anti-Submarine Warfare (ASW) training while continuing to protect marine resources. Specifically, the USWTR initiative ultimately developed a long-term solution to allow Sailors and Airmen the capability to maintain proficiency in littoral ASW skill sets. This has preserved the Navy's mission to maintain, train, and equip combat ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas.

This initiative was exceptionally managed by Mr. Jene Nissen (USFF N45) who led a diverse, interdisciplinary governmental and contractor team through the final development of the USWTR Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS). This team's efforts will support the USFF goals to continue to train with sonar while adhering to mitigation parameters to ensure training integrity, and effectively addressing environmental concerns over critically endangered and other sensitive marine species.

Undersea Warfare Training Range Environmental Planning Team's accomplishments:

- Completed USWTR EIS/OEIS. The thoroughness of the EIS/OEIS and supporting analyses provide for the range construction and operation with the proper balance to deliver necessary training while also considering and mitigating potential environmental impacts. ASW capability is one of Navy's top priorities, and USWTR will provide sailors the skill sets necessary to achieve that capability and operate more effectively in littoral environments.
- Enhanced future ASW training effectiveness through successful environmental planning of USWTR, which will provide USFF the opportunity to train in



*Joel Bell, NAVFAC Atlantic Marine Biologist, shares information regarding marine resources in USWTR to a member of the public. Bell explains how the U.S. Navy minimizes or eliminates any potential effects to marine life at a USWTR public hearing in Morehead City, N.C.*



*Jene Nissen, USFF Project Team Leader (second from left), listens intently as a community member provides valuable information during a USWTR public hearing in Morehead City, N.C. Public input is critical to the NEPA process and ensures Navy products are complete and accurate.*





**FY 2010 Chief of Naval Operations Environmental Awards**

<http://greenfleet.dodlive.mil/home>

