

Meeting the Navy Mission & Protecting the Environment in 2012

Highlights of Environmental Accomplishments

EACH YEAR IN April, Earth Day reminds us of the importance of protecting the environment for current and future generations. While Earth Day is a great opportunity to participate in base and community recycling drives, neighborhood cleanups, environmental fairs, and other “green” activities, the Navy’s focus on environmental stewardship is a year-round endeavor that helps enable our primary mission of national defense.

some of these major efforts and accomplishments.

Environmental Planning for At-Sea Training & Testing

The Navy continued working in 2012 to complete Phase II environmental planning and permitting. Phase II consolidates areas from 13 environmental impact statements (EIS) from Phase I into five comprehensive EISs. This reduces the paperwork burden

to fully consider the potential impacts of proposed training and testing activities on the environment, including marine mammals. For this purpose, the Navy used a mathematical modeling tool known as the Navy Acoustics Effects Model (NAEMO) that takes into account such factors as the quantity and types of activities planned, underwater geography, typical ocean conditions, and the species and quantity of marine mammals expected to be in a given

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The year 2012 was very productive for the Navy’s environmental professionals, with significant progress made in areas such as site restoration, clean water and air policy, compatibility and range sustainment, and environmental planning. The Navy continued building relationships with local communities, closing out munitions response sites, and incorporating energy and environmental considerations into the acquisitions process. This article highlights

for the Navy and the National Marine Fisheries Service (NMFS) and allows interested stakeholders to get a more holistic understanding of the proposed activities. For training and testing to continue uninterrupted, Phase II permits from NMFS must be completed before Phase I permits begin expiring in January of 2014.

To move toward obtaining these permits, the Navy worked with NMFS

training or testing area. Once modeling was completed for each training and testing area, experts applied scientific post-modeling analysis to refine estimates of the number of marine mammals that may be affected.

In May of 2012, the Navy released the draft Atlantic Fleet Training and Testing (AFTT) and the Hawaii-Southern California (HSTT)

EIS/Overseas EIS (OEIS) documents—the first documents released under Phase II—for public comment. The Navy has since revised the original draft EIS estimates of potential marine mammal effects to reflect evolving training and testing requirements and/or new science.

In total, these changes across AFTT and HSTT resulted in decreased estimates of potential marine mammal injuries and mortalities. Estimates of non-injurious behavioral effects (e.g., turning head, changing swim direction) increased for AFTT but decreased for HSTT. These revisions were reflected in the NMFS AFTT and HSTT proposed rules, which were published in the Federal Register on 25 January 2013. NMFS will accept public comments on these rules through 11 March. NMFS will consider public comments in the final rules, which will likely be published later in 2013. After the final AFTT and HSTT EISs are released, the Navy plans to issue records of decision for both areas.

Energy & Environmental Considerations in the Acquisition Process

In 2012, the Navy reviewed acquisition programs across their lifecycles and during all phases of the Joint Capabilities Integration Development System (JCIDS) and Navy Gate Review processes to effectively integrate environmental and operational energy considerations. The Navy Acquisition Environmental Readiness Integrated Product Team (ACQ-ER IPT) and the Navy Operational Energy in Acquisition Team (EN-ACQT) facilitated discussion, development, and review of appropriate language to integrate environmental and operational energy considerations into a full range of planning and force development activities. The teams' review will be finalized in the development of two, individual OPNAV N45 environmental and operational energy in acquisition guidebooks during 2013.

OPNAV N45 worked directly with Program Offices and representative SYSCOMs to review energy metrics including the JCIDS' Energy Key Performance Parameter, program trade space analyses, and Fully Burdened Cost of Energy. This ensured the acquisition program adhered to



The Navy's "Current Buster" deployed off of the USCG Cutter Sycamore during Arctic Shield-Oil Spill Response Exercise two miles off of Point Barrow, Alaska in the Arctic Ocean.

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Secretary of the Navy (SECNAV) and Chief of Naval Operations goals of energy efficient acquisition and that acceptable operational energy considerations were developed.

In response to a 7 February 2012 action memo from Vice Admiral Burke (then serving as Deputy Chief of Naval Operations for Fleet Readiness and Logistics (OPNAV N4)), OPNAV N45 hosted the inaugural Navy Requirement

Environmental Planning & Readiness Sustainment Symposium

ON SEPTEMBER 18–19, 2012, the Chief of Naval Operations Energy and Environmental Readiness Division (OPNAV N45) held a training symposium on natural resources; environmental planning; compatibility and readiness sustainment; and marine mammal protection. More than 300 Navy and Department of Defense (DoD) representatives attended the symposium in Norfolk, Virginia. The Honorable Roger Natsuhara, Principle Deputy Assistant Secretary of the Navy for Energy, Installations, and Environment was a keynote speaker during the event. Additional speakers included Rear Admiral Slates, Director of OPNAV N45; Peter Boice, Deputy Director of Natural Resources for the Office of the Secretary of Defense; Judy Conlow, Senior Counsel, Navy Office of General Counsel, and other senior policymakers and technical personnel from the Fleets, NAVFAC, the systems commands (SYSCOM), the regions, Chief of Naval Installations Command (CNIC), and several bases.

Officer (RO) Training Course that covered various topics including energy and environmental considerations in requirements. The intent of the course was to meet gaps in current training with the goal of better preparing Navy ROs to meet challenges of managing their programs. OPNAV N45 continues to present at the monthly RO Training Courses.

Compatible Development & Protecting the Navy Mission

The Navy continued working closely with communities to reach agreements about land use development near naval installations. Notably, in April and October of 2012, the Navy signed memorandums of agreement (MOA) with wind developers to prevent any potential impacts of wind farms on radar systems at Naval Air Station (NAS) Corpus Christi and NAS Kingsville. The MOAs include limits on turbine height and stipulations to temporarily shut off turbines if they interfere with Navy radar.

NAS Kingsville and Corpus Christi train nearly 300 naval pilots yearly, which amounts to about half of all naval pilots. Pilots rely on radar systems for safe landings and aerial navigation. Wind turbines may interfere with Navy radar, making it difficult for flight controllers to safely



The Navy is working to finalize its Phase II environmental planning and permitting to ensure vital training and testing can continue. The Navy must be able to train as it fights and realistically test new equipment, but maintains a firm commitment to protecting the environment.

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guide pilots. Realistic training conditions are critical for pilots in the field. The Navy recognizes the importance of renewable energy but it must ensure that it does not interfere with its training mission. Navy pilots rely on radar systems for safe navigation and wind turbines may clutter radars, making it difficult to detect dangers.

Moving Forward with Installation Restoration & Munitions Response

The Navy's Environmental Restoration Program (ER, N) is comprised of the Installation Restoration Program (IRP) and Munitions Response Program (MRP). The IRP manages sites with legacy hazardous materials and the MRP cleans up unexploded ordnance and military munitions on closed

range sites. In Fiscal Year 2012 (FY12), there were a total of 4,356 ER,N sites; this number includes 86 sites that have been added since FY11.

The ER,N program has specific goals for closing out sites. These goals state the following:

1. By the end of FY18, 90 percent of all sites will be Response Complete (RC).
2. By the end of FY21, 95 percent of all sites will receive RC.

In FY12, 260 sites at 58 installations achieved RC, which puts the Navy at 71 percent of both goals. The Navy also has goals for IRP and MRP. The IRP goal states that by the end of FY14, 100 percent of IRP sites are to achieve Remedy in Place (RIP)/RC. In FY12, 91 percent of sites met this goal. By

Energy Goals

ONE OF SECNAV Ray Mabus's energy goals is to incorporate energy into the acquisitions process. To help meet this goal, the EN-ACQT was established in 2011 to consider energy-related factors during all phases of system development and acquisition.

the end of FY20, 100 percent of MRP sites are to achieve RIP/RC. In FY12, 39 percent of sites achieved this goal.

In 2012, the Navy completed the divestiture, or sale, of Naval Weapons Industrial Reserve Plant (NWIRP) Dallas. NWIRP Dallas was transferred to a non-federal entity at the culmination of years of environmental assessments at the industrial facility. This is the largest Navy divestiture (other than Base Realignment and Closure), resulting in a \$27 million cost avoidance for the ER,N program.

Implementing Environmental Management Systems

To protect the environment and reduce pollution, Navy installations integrate environmental considerations into day-to-day activities across all levels and functions of the Navy enterprise by implementing Environmental Management Systems (EMS). The Navy performs audits of its installations, on a three-year cycle, to validate conformance with the International Organization for Standardization (ISO) Environmental

Management Specifications 14001 and to assess environmental compliance. Installations develop and implement Plans of Actions and Milestones (POA&M) to rapidly resolve audit findings and identify their root causes. Audit teams track the POA&M to completion.

In FY12, the Naval Facilities Engineering Command's (NAVFAC) Facilities Engineering Command auditors completed audits of 23 installations using procedures developed by NAVFAC's EMS Media Field Team (MFT). The MFT also implemented standardized training through the Environmental Compliance Assessment, Training, and Tracking System (ECATTS). In addition, the MFT designed and implemented a Navy-wide computer system, EMSWeb, to establish a single repository for EMS documentation and audit data while preventing loss of information and allowing transparent communication of information.

Preventing Oil Spills

The Navy is part of the National Response Team (NRT) established

under the Oil Pollution Act of 1990. As part of the NRT, Navy assets are used to respond to any major oil spill. The Navy routinely trains with other federal agencies to ensure the nation's preparedness to respond to oil spills. In 2012, the Navy spent \$22M in developing plans, training, and buying equipment to respond to oil spills.

In July of 2012, the U.S. Navy's Supervisor of Salvage and Diving (SUPSALV) participated in Arctic Shield, a joint exercise involving equipment and personnel from the U.S. Northern Command, SUPSALV, the U.S. Coast Guard (USCG), and multiple commercial companies. One of the purposes of Arctic Shield was to demonstrate USCG and SUPSALV readiness for deploying spill response capabilities in the arctic region of Alaska. For that purpose, exercise participants deployed equipment in the Arctic Ocean near Point Barrow, Alaska. Due to offshore drilling beginning in this region, it is increasingly vital that Oil Spill Response Organizations demonstrate their ability to respond in the event of a spill in the harsh conditions of the Arctic.

Environmental Management Systems audits to validate conformance with the ISO Environmental Management Specifications 14001 and to assess environmental compliance.

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Clean Water Act Services Steering Committee

The DoD Clean Water Act Services Steering Committee (CWA SSC) leads DoD in cost-effectively implementing CWA statutes and regulations, including those related to stormwater. The Navy manages stormwater on its installations to minimize pollution associated with runoff from impervious surfaces, like streets and parking lots. In 2012, OPNAV N45, NAVFAC, and CNIC worked closely with the committee, to develop and issue a policy on stormwater service charges, or

Clean Water Act Reasonable Service Charges

THE CWA AMENDMENT states that Federal installations must pay any “reasonable service charges” for stormwater pollution providing the charge was:

1. Based on some fair approximation of the proportionate contribution of the property or facility to stormwater pollution.
2. Used to pay or reimburse the costs associated with any stormwater management program (whether associated with a separate storm sewer system or a system that manages a combination of stormwater and sanitary waste). This second provision includes the full range of costs attributable to collecting stormwater, reducing pollutants in stormwater, and reducing the volume and rate of stormwater discharge.

“fees.” The policy was developed in response to a 2011 amendment to the Clean Water Act (CWA).

Navy’s policy requires a highly fact-specific analysis of stormwater charges, to be conducted on a case-by-case basis using seven criteria. To be payable by a Navy facility, a stormwater service charge:

1. Must relate to the control and abatement of water pollution
2. Must be reasonable
3. Must be nondiscriminatory
4. Must be based on some fair approximation of the proportionate contribution of the property or facility to stormwater pollution
5. Must be measured in terms of quantities of pollutants, or volume or rate of stormwater discharge or runoff from the property or facility
6. Must be used to pay or reimburse the costs associated with any stormwater management program (whether associated with a separate storm sewer system or a sewer system that manages a combination of stormwater and sanitary waste)
7. May include the full range of programmatic and structural costs attributable to collecting stormwater, reducing pollutants in stormwater, and reducing the volume and rate of stormwater discharge

The policy also provides examples of frequently asked questions and

answers to aid installations and regions in their analysis, and ensures consistency across the Navy. To learn more about the CWA SSC or for a copy of Navy’s stormwater fee policy, visit: https://www.denix.osd.mil/denix_secure/cwassc/index.cfm.

Marine Mammal Research

In an effort to gain insights into the program’s current research portfolio, the Navy’s Living Marine Resources (LMR) program manager convened an In-Progress Review (IPR) of researchers and its management team, the Living Marine Resources Advisory Committee (LMRAC), in Port Hueneme, California in October 2012. Researchers from across the globe discussed what they are doing to help the Navy develop, demonstrate, and assess new solutions to protect living marine resources while preserving core Navy readiness capabilities.

Opening remarks were provided by Mr. Don Schregardus, Deputy Assistant Secretary of the Navy for Environment. Representatives from OPNAV N45 as well as members of the management team from LMR’s sister research program, the Navy Environmental Sustainability Development to Integration (NESDI) program, joined LMR personnel to evaluate current LMR projects and plan future investments to keep the program properly focused. LMR researchers, the LMRAC, and staff joined together in honoring Dr. Frank Stone for his vision and leadership since the founding of the program more than 15 years ago through the transition of

the LMR program to NAVFAC management in 2012.

In addition to standing up a website for the program (at www.lmr.navy.mil) as well as documenting its business processes in a Standard Operating Procedure, the LMR program also completed its FY 2013–14 needs collection and evaluation process which yielded a total of 65 submittals from across the Navy. After a thorough review, evaluation, and consolidation of the submitted needs, the LMR Program Manager (on behalf of the LMRAC) forwarded six needs to OPNAV N45, the program's resource sponsor. Proposals to address those priority needs will be considered and projects initiated in FY13 and FY14 as available funds allow.

An article entitled "LMR Program Holds In-First

Progress Review" in the winter 2013 issue of *Currents* contained more insights into the LMR program. (To subscribe to the magazine or browse the *Currents* archives, visit the Department of the Navy's Energy, Environment and Climate Change web site at <http://greenfleet.dodlive.mil/currents-magazine>.)

Clean Air Act & Ozone Depleting Substances

Similar to the CWA SSC, the Clean Air Act (CAA) SSC ensures compliance of the CAA throughout DoD. In 2012, the CAA SSC updated the Engine and Fuel Standards Desk Reference guide, which was first published in May



Navy and Marine Corps installations across the world participated in beach cleanups, recycling drives, and other community events in celebration of Earth Day 2012.

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2010. The committee developed and issued a coordination process through its Highway/Nonroad Engines Subcommittee to ensure that, whenever a Service requests a national security exemption, the CAA SSC is informed and participates in the review. The committee coordinated with Deputy Assistant Secretary of the Navy (Environment) (DASN(E)) and Deputy Under Secretary of the Defense (Installations & Environment) (ADUSD(I&E)) for ADUSD(I&E) to sign out the DoD Air Emission Rights Policy in July of 2012. The CAA SSC also submitted comments on behalf of DoD and the Services for consideration by the U.S. Environmental

Protection Agency on eight proposed rule amendments, reconsiderations, and guidance documents.

In 2012, the Navy realigned the Ozone Depleting Substances (ODS) SSC as a subcommittee of the CAA SSC to increase efficiency, reduce administrative burdens, and improve coordination between the two committees. Both committees were chaired by OPNAV N45 and reported to DASN(E). Under the realignment, the ODS SSC will now interact more with the CAA SSC Global Climate Change Subcommittee, which should have benefits due to the ODS SSC's increased focus on the climate change issues of ODS alternatives.



The NESDI program is using a robust predictive model to develop quantitative categories for Essential Fish Habitats that support Fleet readiness. Among the species targeted in this effort is the Kelp Bass (*Paralabrax clathratus*).

Researching Navy Environmental Sustainability

The NESDI program ended FY12 with the release of its annual report, entitled “NESDI FY12 Year in Review Report: It Ends with Integration.” The report contains a financial review of program expenditures as well as insights into projects that were particularly successful in demonstrating the use of an innovative technology or collecting critical information to enhance the efficiency of environmental management programs. From finding a method to distinguish background from anthropogenic sources of perchlorate to determining the effects of military expendable materials in the marine environment, the report provides insights into some of the most successful NESDI projects.

In an effort to address the ongoing challenges of effectively managing stormwater at Navy facilities, the NESDI program convened IPRs of stormwater end users, researchers, and policymakers in San Diego, California in January 2012 and then again in Silverdale, Washington in November 2012. These and other IPRs ensure that existing NESDI projects and future investments are properly focused, efficiently executed, and successfully integrated. For more

information about the NESDI program, visit the program’s web site at www.nesdi.navy.mil.

Community Outreach—An Online and In-Person Presence

The Navy continues to share information about environmental successes with local communities and interested stakeholders at air shows, conferences, community events, and online. In 2012, more than 60 Navy and Marine Corps installations participated in and/or hosted more than 150 Earth Day events and activities worldwide. Events included environmental fairs, base and beach cleanups, recycling contests and electronic waste collections, art contests, dumpster dives, and tree plantings.

U.S. Fleet Forces Command (USFF) continued to expand its environmental outreach program in 2012, visiting 49 schools and speaking with nearly 30,000 students. This is a 150 percent increase in students reached compared to last year. In addition to schools, USFF participated in 26 public events, such as festivals and air shows, reaching out to more than 36,000 people.

The Navy continued to grow its online presence on social media

outlets like Facebook and Twitter. On Facebook, the Task Force Energy and Navy *Currents* pages expanded their repertoire of interactions to be more interactive with questions, quizzes, and links to video and graphics, such as the 2012 Earth Day infographic highlighting Navy Earth Day events worldwide.

Task Force Energy Twitter (@NavalEnergy) followers increased and Navy *Currents* Twitter (@NavyCurrents) followers both increased by 35 percent in 2012. Task Force Energy Facebook page likes increased 32 percent and Facebook Navy *Currents* page likes increased 46 percent. The NavyEnergyEnviro YouTube channel posted numerous videos on various topics ranging from Navy sonar to the MOA signing at NAS Kingsville. Total NavyEnergyEnviro viewership for 2012 was 4,658.

With 2013 well underway, the Navy continues to comply with environmental regulations and make significant progress in achieving environmental goals. Despite significant fiscal constraints, the Navy remains committed to minimizing environmental impacts, keeping Sailors, Navy families, nearby communities, and the natural environment safe as we carry out our primary national defense mission. [↓](#)

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