2017 Secretary of Defense Environmental Awards



The Pentagon, as shown here in 1962, is a National Historic Landmark.

The Pentagon, Department of Defense National Historic Landmark and Cultural Resource

During the summer of 1941, the War Department was expanding exponentially as the U.S. Armed Forces responded to the threat of World War II. At that time, the War Department offices were spread across the Washington, D.C. area in at least 17 different properties; even the New War Department Building (later the Truman State Department Building), completed in June 1941, did not satisfy the spatial needs of the growing military. The Army's Chief of Construction, Brigadier General Brehon B. Somervell, conceived the idea for a massive office building to house the entire Department in Virginia. In July 1941, Somervell enlisted the aid of his Chief of Design, engineer Lieutenant Colonel Hugh J. Casey, and civilian architects from the Quartermaster Corps' Construction Division to design a new building for an oddly configured pentagonal-shaped site abutting Arlington National Cemetery and Memorial Bridge. Architects George Edwin Bergstrom and David J. Witmer began site investigations and building plans immediately.

While Somervell and Bergstrom preferred the original cemetery-adjacent site, several congressmen and planning officials opposed it, including Gilmore D. Clarke, the Chairman of the District of Columbia Commission on Fine Arts, and Frederic A. Delano, the Chairman of the National Capital Park and Planning Commission. The planners opposed the site because of its impacts to the character of the cemetery, potential transportation problems, and disruption of viewsheds from Arlington National Cemetery to the Lincoln Memorial. President Roosevelt sought to protect the national monumental core, and he agreed the first site did not harmonize with the existing plans and settings. Roosevelt approved a different site (south of the originally planned location) at the former Hoover Airport, near Queen City (a small African American community that was eventually displaced). Site construction began in August 1941, and the War Department broke ground on their new headquarters across the Potomac River on September 11, 1941. Design of the building was transferred to the new site but maintained the original pentagon shape. Work on the building, with its gray Indiana limestone exterior, 17.5 miles of corridors, and 6.5 million square feet of space, was completed extraordinarily quickly in January 1943, after just 16 months of construction.

The Pentagon is a remarkable example of a complex and highly efficient design consisting of stacked concentric pentagonal rings. The Pentagon's architectural style is Stripped Classicism and it is one of the last monumental Federal buildings in Washington, D.C. designed in accordance with the McMillan Commission Plan. The building's iconic form, location, and role in military and civilian culture have established the Pentagon as a national and international monument, the paramount symbol of American national defense and military power.

The Pentagon was listed in the National Register of Historic Places in 1989 and designated a National Historic Landmark in 1992. The significance of the building stems from its association with events that have made important contributions to the geopolitical role of the United States as a world power after World War II, and for its association with the lives of persons nationally significant in American history. The Pentagon is also considered significant in American architecture and history for its design, construction, and critical role in U.S. government, defense, and history.

The Pentagon was forever altered on September 11, 2001. The loss of life and damage to the landmark building itself are recognized and honored in various ways from plaques to quilts throughout the Pentagon Reservation. The ensuing Phoenix Project reconstruction paid careful attention to the original craftsmanship of the building and replicated the exterior limestone architecture. Reconstruction was completed within one year of the terrorist attack, on September 11, 2002. The outdoor Pentagon Memorial, which is dedicated to the memory of those lost, opened to the public on September 11, 2008.

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- Vogel, Steve, "How the Pentagon Got Its Shape," Washington Post, May 27, 2007. Available at
- http://www.washingtonpost.com/wp-dyn/content/article/2007/05/23/AR2007052301296.html.
- Excerpts from the 1992 Pentagon National Historic Landmark nomination to the National Register of Historic Places.

Foreword



The Department of Defense is committed to implementing environmental practices to facilitate and improve the capabilities of our forces while safeguarding the long-term sustainability of our Nation's priceless resources. By acting as a responsible environmental steward, the Department can more effectively manage and sustain training, testing, and operational lands to achieve mission readiness. The Department of Defense benefits immensely from the thoughtful leadership, innovation, and hard work of our personnel in protecting human health and preserving our Nation's natural and cultural resources while executing our national defense mission.

Since 1962, the Secretary of Defense has recognized this type of leadership by presenting the Environmental Awards to outstanding installations, teams, and individuals. These awards recognize

environmental accomplishments, best practices, and cooperative partnerships that promote quality of life and increase installation efficiencies to enable mission success. The 2017 Secretary of Defense Environmental Awards recognize exemplary accomplishments from October 1, 2014, to September 30, 2016, in the categories of natural resources conservation, environmental quality, sustainability, environmental restoration, cultural resources management, and environmental excellence in weapon system acquisition.

I am thrilled that one of my earliest actions at the Department of Defense is to honor our 2017 winners for their extraordinary dedication prioritizing mission success through environmental conservation and the protection of human health. The winners' achievements highlight the Department's commitment to fulfilling mission needs through advanced environmental efficiencies and technologies.

Congratulations to the winners of the 2017 Secretary of Defense Environmental Awards. Thank you for your continued efforts to promote environmental excellence within the Department of Defense.

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Ellen M. Lord Under Secretary of Defense for Acquisition, Technology, and Logistics

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About the Awards

Natural Resources Conservation

The Department promotes the conservation of natural resources, including the identification, protection, and restoration of biological resources and habitats; the sound long-term management and use of the land and its resources; support of the military readiness mission; and the promotion of a conservation ethic. Protecting endangered plant and animal species on our installations and other Department of Defense (DoD) lands ensures the preservation of these valuable environmental assets for current and future generations and assures the availability of these resources to sustain military readiness.

Environmental Quality

The Department seeks to protect human health in the areas of environmental planning, waste management, and compliance with environmental laws and regulations (e.g., Clean Air Act, Clean Water Act, Safe Drinking Water Act, or equivalent overseas governing standards). Meeting or exceeding all environmental requirements not only enhances the protection of our environmental assets, but also sustains our ability to effectively train and maintain readiness.

Sustainability

The Department seeks to extend the longevity of its resources by preventing or eliminating pollution at the source. To achieve this, DoD practices efficiency and sustainability in the use of raw materials, energy, water, or other resources. The Department also implements energy efficiency and renewable energy practices, greenhouse gas reduction efforts, procurement of sustainable goods and services, and efforts to plan for climate resilience. Sustainable practices ensure that DoD protects the valuable resources that are critical to mission success.

Environmental Restoration

The Department protects human health and the environment by restoring property at active and closed DoD installations in a timely, cost-efficient, and responsive manner under the Defense Environmental Restoration Program. Restoring sites or locations impacted by past defense practices protects military personnel and the public from potential environmental health and safety hazards.

Cultural Resources Management

The Department promotes effective cultural resources stewardship through proactive management of its extensive and rich heritage assets, including archaeological sites, the historic built environment, and cultural landscapes. Through dynamic cultural resources management programs, DoD identifies areas likely to contain cultural resources and works to protect them for future generations in partnership with American Indian and Alaska Native tribes, Native Hawaiian Organizations, and other historic preservation stakeholders.

Environmental Excellence in Weapon System Acquisition

The Department makes a concerted effort to incorporate environmental, safety, and occupational health requirements into the weapon systems acquisition program's system engineering, contracting, and decision-making processes. Adhering to these requirements enhances DoD's acquisition process by ensuring that weapon system programs keep the safety of personnel and protection of the environment as a top priority.



Camp Ripley, Minnesota Army National Guard Natural Resources Conservation, Large Installation

Camp Ripley is the largest training center for the Minnesota Army National Guard (MNARNG). Its 53,000 acres are home to abundant natural resources and provide critical training to support readiness not only for MNARNG, but also for the entire northern Midwest region. Camp Ripley is home to 665 plant, 203 bird, and 51 mammal species; incredible habitat diversity; and 18 miles of Mississippi River frontage. In addition, the installation is home to 88 species that require special conservation measures to halt significant population declines. The installation's Natural Resources Conservation (NRC) program supports the training mission and has a long record of excellence, distinguished by commitment to the Army's triple bottom line: mission, environment, and community. With a comprehensive approach to wildlife, land management, forestry, encroachment protection, and community outreach and partnerships, Camp Ripley balances an NRC program that supports the operational needs of over 365,000 annual man-days of training and employment of 850 full-time employees.

- Camp Ripley successfully implemented the Army Compatible Use Buffer (ACUB) program through cooperative agreements and partnerships. The ACUB program allows commands to partner with eligible entities to restrict access to buffer areas adjacent to the installation to protect training and operations. For example, in Fiscal Year (FY) 2015, Camp Ripley partnered with the Minnesota Board of Water and Soil Resources (BWSR) to complete 39 ACUB land transactions totaling 3,457 acres at no cost to MNARNG. Though the ACUB program is primarily funded by DoD, BWSR staff were able to secure \$1,200,000 in state funding in FY 2015 to support ACUB acquisitions.
- The installation built upon its expertise with the ACUB program to launch the Camp Ripley Sentinel Landscape program. This Sentinel Landscape program will engage other Federal and state agencies in joint conservation and habitat preservation goals on a regional level to simultaneously protect the mission and the land. Through the Sentinel Landscape program, MNARNG can more effectively compete for Federal funding outside of DoD to yield a higher return on investment for installation conservation projects.
- The NRC program coordinated with the Minnesota Department of Natural Resources, Audubon Minnesota, and Central Lakes College to use a solarpowered satellite backpack transmitter to track "Ripley," a Golden eagle, on her migration of 1,800 miles north to the Arctic Circle and back to the installation. Tagging and tracking this species, which is protected under the Bald and Golden Eagle Protection Act, helps the installation to better understand the bird's habitat, breeding and migration habits, thereby improving species management and sustaining the military mission. Local schools integrated this and other radio tracking efforts into their curricula to encourage conservation awareness and education.
 - Responding to the Northern long-eared bat listing as a federally threatened species, NRC program staff launched studies in FY 2015 to learn about the bat's maternity roosts and habitat requirements. The goal of the studies was to combat widespread bat population declines that can greatly restrict mission readiness. Using radio telemetry transmitters, NRC staff were able to identify colonies on post and determine 73 unique roost locations so the installation could protect those sites and avoid costly delays and workarounds.



Working with the National Eagle Center, Camp Ripley Natural Resources Conservation staff began participating in the Golden Eagle Project to better understand the bird's habitat and prey needs, and its breeding and migration habits. Once a Golden eagle was observed feeding regularly at one of the installation's bait stations, a capture and release project was implemented in 2015.



Radio telemetry collars have allowed Natural Resources Conservation staff to track wolves on Camp Ripley. Staff partnered with local schools to help purchase radio collars with classes "adopting" particular wolves. Local teachers have used grant funding to participate in the project and track their animals' movements. The telemetry data has shown that buffer areas are particularly beneficial to the wolves that reside on and adjacent to Camp Ripley.



Marine Corps Logistics Base Barstow, California Environmental Quality, Industrial Installation

Marine Corps Logistics Base (MCLB) Barstow is located in the high desert of western San Bernardino County, California. The base includes a diverse collection of large training areas and range areas encompassing 5,567 acres within the DoD Southwest Range Complex, and supports approximately 95 military personnel and their families and 1,840 civilian employees. MCLB Barstow is separated into three functional areas. Nebo Main is a large training area, also known as the cantonment area, that houses the MCLB Barstow headquarters and tenant logistical capabilities. Yermo Annex is an industrial repair and storage complex that is home to DoD's largest rail facility. The Annex primarily hosts tenant activities and supports Marine Corps and Army rotations to the National Training Center at Ft. Irwin and the Marine Corps Air Ground Combat Center at Twentynine Palms. There is also a range on the southern edge of Nebo Main that includes a live-fire known distance range complex and open training area. Key functions of the base are to receive, store, and distribute supplies and equipment, and to repair and rebuild DoD equipment in direct support of the U.S. military mission worldwide. MCLB Barstow supports the Marine Corps mission with comprehensive compliance, pollution prevention, conservation, planning, training, and management activities.

- MCLB Barstow reduced potable water use from 171 million gallons in FY 2014 to 107.5 million gallons in FY 2016, a reduction of 37% over two years. Through innovative changes to in-house and contract work and partnerships, the base reduced the cost of water program compliance by 50%, from \$1.2 million to \$0.6 million.
- The base improved its Environmental Compliance Evaluation (ECE) program to achieve a 50% reduction in negative findings during the 2015 Headquarters Marine Corps Benchmark inspection compared to the previous audit in 2011.
- MCLB Barstow implemented a three-tiered structure to support compliance and conformance on the installation. This allowed the installation to meet both mission and compliance requirements, reduce waste streams, and provide sound stewardship of the base's natural and cultural resources.
- The installation's solid waste diversion rate was 73.69% in FY 2015 and 80.52% in FY 2016, well ahead of the Federal mandate of 50%, leading California's "75 Percent Initiative" 2020 goal set by the Governor and Legislature of California.
- MCLB Barstow developed and implemented an integrated Environmental/Energy Management System Manual and an Environmental Management System that fully conforms to Marine Corps Directives in FYs 2015 and 2016.
- The base passed annual inspections by the Mojave Desert Air Quality Management District (MDAQMD) in both 2015 and 2016 with zero findings, and the Deputy Director of the MDAQMD Compliance Group personally congratulated Barstow on its strong and fully compliant program following the most recent inspection in August 2016.
- MCLB Barstow effected a reduction in hazardous waste disposal of 68% from FY 2015 to FY 2016. A coordinated effort between MCLB Barstow and Marine Depot Maintenance Command to use recyclable blast media for industrial processes will allow for ongoing savings of more than 1 million pounds of waste and \$1 million per year.



Ms. Arely Lessard demonstrates a recycling game during an Earth Day celebration.



Five tons of scrap metals collected for recycling pick-up.



U.S. Army Garrison Bavaria, Germany Environmental Quality, Overseas Installation

Headquartered in Grafenwoehr, Germany, U.S. Army Garrison (USAG) Bavaria is the largest overseas garrison within Installation Management Command Europe (IMCOM-E). The garrison supports four geographically dispersed military communities: Tower Barracks (TB) at Grafenwoehr, Rose Barracks (RB) at Vilseck, Hohenfels, and Garmisch. The garrison jointly operates Grafenwoehr Training Area and Hohenfels Training Area with the 7th Army Training Command. Approximately 180,000 troops from more than 35 countries train at Hohenfels and Grafenwoehr each year.

The U.S. Army is a signatory to the Supplement to the North Atlantic Treaty Organization (NATO) Status of Forces Agreement (1998) which requires the Army to follow specific German laws and European directives for environmental protection. These requirements supplement U.S. Federal law, and U.S. Army and DoD regulations. The USAG Bavaria environmental program enables soldiers to train in compliance with applicable environmental laws, while minimizing impacts to the military mission. Of note, more than 800 legally protected flora and fauna species flourish within the garrison's boundary.

- Environmental program staff developed and implemented an innovative technique to decontaminate and clean up Royal Demolition Explosive (RDX) residues in a limestone rock quarry within constructed wetlands via molasses-stimulated biological degradation. Compared to other proposed methods, this concept reduced construction costs from \$7,375,000 to \$2,330,000.
- USAG Bavaria helped military trainers evaluate training scenarios to avoid environmental impacts. This process saves project coordination time, avoids duplication of work order review efforts, and prevents loss of design funds. USAG Bavaria's environmental review process was such a success that the Army adopted it across IMCOM-E.
- In coordination with host nation (HN) authorities and other environmental non-government organizations, USAG Bavaria implemented a € 1.2 million European Union (EU) LIFE+ project to save the only reproducing population of the Greater horseshoe bat in Germany. The EU funds LIFE+ projects to support environmental, nature conservation, and climate action projects. This initiative to save the Greater horseshoe bat was the first EU LIFE+ project on an active military training area. The bat colony has survived in this area only because open military training lands in Hohenfels Training Area provide excellent foraging grounds.
- The installation partnered with HN authorities to conduct and implement a joint study about contamination cleanup at the Class III Yard and a low-cost remediation solution that reduced annual costs from \$500,000 to \$40,000.
- The installation shared its environmental program with national and international parties (e.g. Bavarian Environmental Office, German Army, Armies of Lithuania, Latvia and Estonia, Israeli Ministry of Defense, French Ministry of Defense, University of Prague, Australian National University). Personnel also received invitations to present at the NATO NetZero Workshop (Wiesbaden, Germany), the LifeDefenseNature2mil Conference (Nîmes, France) and the Estonia Environmental Security Event (Tallin, Estonia).



Romanian tanks during Combined Resolve II participate in training exercises at U.S. Army Garrison Bavaria, Germany.



Greater horseshoe bat and Mouse-eared bat caught by a photo trap at the entrance of a hibernating quarter at Hohenfels Training Area.



Eglin Air Force Base, Florida Sustainability, Non-Industrial Installation

Eglin Air Force Base (AFB) is positioned along Florida's Emerald Coast and extends into the heart of the Florida panhandle. Eglin is the largest forested military reservation in the U.S. and the largest Air Force installation in the world, encompassing 464,000 acres of land and 120,000 square miles of water ranges. This extensive area supports essential defense missions and diverse ecosystems that provide sanctuary to 106 rare, threatened, and endangered plant and animal species. Eglin's Environmental Management Division implements a holistic management approach to reduce risks, maintain compliance, and improve processes and programs to preserve and enhance a remarkable assemblage of biodiversity while supporting defense missions. The installation is responsible for the development, acquisition, testing, deployment, and sustainment of all air-delivered conventional weapons for the Air Force. Eglin AFB contains over 250,000 acres of open space available for it's 11,000 military personnel, 9,500 civilian employees, 57,000 family members and retirees, and the general public to use and enjoy.

- Eglin AFB recycled or reused approximately 78 percent of the municipal solid waste it created, exceeding the DoD goal by nearly 30 percent. Eglin's exemplary waste management, reuse, recycling, and mulching program has saved the installation \$3.5 million in waste disposal costs.
- The Environmental Management System Team adopted several Florida Department of Environmental Protection (FDEP) practices and procedures to decrease the number of reportable spills resulting from poor marina operations. The installation received a FDEP Clean Marina certification for these practices, which implement educational efforts to ensure marina users understand the most environmentally friendly method of marina operations. Since implementation, marina oil spills have been reduced to zero, and Eglin is one of only 10 other marinas in Florida to receive the *Clean and Resilient* designation.
- To help surpass the U.S. Fish and Wildlife Service's goal of increasing the Red-cockaded woodpecker population above 450 potential breeding groups in FY 2016, the Eglin Forestry Team created 3,000 acres of new longleaf pine habitat by planting a DoD record, 1.5 million longleaf pine seedlings in areas that were formerly degraded forest habitat.
- Eglin AFB produced two artificial reefs from approximately 2,000 tons of concrete pieces that were originally targets on the Eglin range that outlived their usefulness. The *Concrete to Reefs* initiative is a partnership between Eglin AFB, the Air Force Research Laboratory, and Okaloosa County. This effort saved Eglin more than \$60,000 in concrete disposal costs, and the reefs provide new habitat for a variety of aquatic species.
- To reduce Eglin AFB's potable water use, installation staff performed a leak detection audit on 120 miles of water distribution lines on base. This audit identified and enabled the installation to fix small leaks at hydrants and valves, saving approximately 10 million gallons of potable water per year. Eglin also removed irrigation from potable water mains on base, saving an additional 20 million gallons of potable water per year.



Eglin Air Force Base placed a major emphasis on the Air Force solid waste diversion goal and implemented various reuse and recycling initiatives. These efforts allowed Eglin to exceed DoD's Fiscal Year 2015 non-hazardous solid waste diversion goal by reaching a 78 percent diversion rate. This exceeded DoD's goal by nearly 30 percent during the award period.



Eglin personnel worked to become one of only 10 other Florida marinas designated as "Clean and Resilient." Marina oil spills have been reduced to zero since the Environmental Management System Team adopted Florida Department of Environmental Protection practices and procedures.



Mr. Jeffery D. Schone, Luke Air Force Base, Arizona Sustainability, Individual/Team

Luke Air Force Base (AFB), located northwest of Phoenix, AZ, is home to the 56th Fighter Wing, which is a unit of the Air Force Education Training Command and is the largest fighter wing in the world. The main base is nearly 2,500 acres in size, with an additional 2,000 acres of easements. The installation includes two runways and 400 buildings, encompassing over four million square feet of space.

Mr. Jeffery Schone is an Environmental Engineer for the 56th Civil Engineering Squadron at Luke AFB. He began his career with DoD in 1997 as an intern participating in the Palace Acquire program at Joint Base Charleston. Mr. Schone manages one of the few remaining Air Force operated wastewater plants and helps to ensure compliance with stringent Active Management Area water conservation requirements. He manages separate comprehensive multi-sector and small municipal storm sewer system permits for stormwater management. He also monitors compliance with stringent Clean Air Act Title V air quality permitting and management across the Luke AFB non-attainment area. He oversees the integrated support of Luke AFB's hazardous material management, asbestos and lead toxic substances management, and administers the Luke AFB solid waste, recycling, and hazardous waste management programs. Mr. Schone continues to provide exemplary sustainability leadership, supporting DoD mission-readiness into the future.

- Mr. Schone implemented advanced bioremediation (using microorganisms to clean pollution) for all petroleum, oil, and lubricant systems as well as grease trap systems, reducing maintenance and costs by 82 percent and manpower by 97 percent, saving \$125,000 annually. The successful results and benefits of this process were published nationally in the Industrial Wastewater Digest. The Arizona Department of Environmental Quality (DEQ) named Mr. Schone one of Arizona DEQ's "Innovative Leaders" for the 2015 Pollution Prevention Week.
- He improved the installation's construction and demolition diversion rates by recycling 2,690 tons of construction and demolition debris. Luke AFB's 98 percent diversion rate far exceeds the DoD goal of 50 percent. Mr. Schone's contributions to the diversion rate also include 100 percent reuse of asphalt and crushed concrete for an extensive runway repair project and for refurbishing 19 parking areas. This concentrated diversion effort saved the installation \$1.2 million in landfill and utility costs.
- When Luke AFB established the first F-35 aircraft maintenance unit, no process was in place for proper waste determination or product inventories, resulting in an increased shelf life expiration rate of 400 percent at a cost of over \$25,000 for disposition. Mr. Schone redefined purchasing processes for 149 F-35 aircraft hazardous materials that the installation ordered in excess and 92 hazardous materials that the installation wouldn't be able to use due to their short shelf life. The reduced or eliminated hazardous material bench stock resulted in a 68 percent decrease in shelf life monitoring and disposal for a savings of \$147,000 for the first of six F-35 aircraft maintenance units.
 - Mr. Schone streamlined compliance recordkeeping for two highly regulated aerospace paint booths for the Luke AFB Clean Air Act Title V renewal permit. This change allowed Luke AFB to achieve an 80 percent reduction in physical records and \$27,000 in monthly savings for paint booth filter testing while operating a violation-free air program for 380 permitted sources.



Mr. Schone manages multiple environmental sustainability programs and led the integration of sustainable planning and construction in support of the stand-up of the new F-35 aircraft mission.



Mr. Schone negotiated an 80 percent reduction in Clean Air Act Title V recordkeeping paperwork for two highly regulated aerospace paint booths.



Travis Air Force Base, California Environmental Restoration, Installation

Travis Air Force Base (AFB) is a 6,696-acre military installation located in Solano County, California, midway between San Francisco and Sacramento. The base is composed of three primary mobility organizations as well as 50 partner organizations. The 60th Air Mobility Wing is the host wing and it works seamlessly with the 349th Air Mobility Wing, the Air Force's largest associate reserve wing. The third mobility organization is the 621st Contingency Response Wing, America's only contingency response wing ready to deploy within 12 hours to support contingencies or humanitarian operations around the globe. The 60th Air Mobility Wing rapidly projects American power anytime and anywhere in support of national objectives.

The Travis AFB Environmental Restoration Program (ERP) manages one Military Munitions Response Program (MMRP) site and 63 ERP sites. These areas include 21 Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) sites, 16 petroleum only contamination (POCO) sites, three inactive sites at the Potrero Hills Annex, and 23 closed sites.

- Travis AFB achieved Response Complete status for 11 oil/ water separator (OWS) sites, which removed two airfield obstructions and set the stage for closing 25 percent of the Travis AFB ERP sites in 2017. The installation also used clean stockpiled soil from technology demonstration projects to restore OWS sites, saving approximately \$20,000.
- The installation built the first ever subgrade sulfate reactor as a POCO technology demonstration that uses sulfatereduction biological treatment to accelerate the cleanup of fuel-soaked subsurface soil and dissolved petroleum contaminants. Scrap drywall that was destined for a local landfill provided a source of sulfate for the reactor's construction. This regulator-approved project offers the potential to significantly reduce the cost and time to complete future POCO remedial actions.
- Travis AFB applied sustainable remediation principles to speed up groundwater cleanup and reduce the environmental footprint of the base's cleanup efforts. The Travis ERP became the first DoD program, and the first private or Federal program in EPA Region 9, to self-certify conformance with the 2014 American Society for Testing and Materials Standard Guide for Greener Cleanups. EPA Region 9 uses Travis AFB successes in its training materials to explain how facilities within or outside of DoD can use similar approaches to clean up contamination effectively.
- Travis AFB used solar panel arrays to sustainably generate power for extraction pumps and recirculate treated water at three ERP sites and one POCO site. By removing electrical demand from the base power grid, the base reduced annual energy consumption by 675,480 kilowatt-hours at an annual cost savings of \$37,000, and avoided annual generation of 1,773,000 pounds of greenhouse gases.
- The installation worked in partnership with three regulatory agencies to successfully implement 19 groundwater remedies selected in a July 2014 base-wide Record of Decision. The Travis ERP received public accolades from EPA management to confirm its exemplary reputation during the recent Air Force Western Regional Environmental Restoration Summit in San Francisco.



A field technician describes the procedures for injecting vegetable oil into tight clay soil. This helps Restoration Advisory Board members understand the overall Travis Environmental Restoration Program groundwater cleanup strategy to convey to their constituents.



Travis Air Force Base built the first ever subgrade biogeochemical sulfate reactor that relies on sulfate reduction to biologically treat petroleum contamination in soil and groundwater.



Commander, Fleet Activities, Yokosuka, Japan Cultural Resources Management, Small Installation

Commander, Fleet Activities (COMFLEACT), Yokosuka includes some of DoD's most diverse and impressive historic assets. COMFLEACT Yokosuka is a forward-deployed naval base located just inside Tokyo Bay on the Pacific Ocean side of Honshu, one of the five major islands of Japan. The naval complex is approximately 43 miles south of Tokyo, and 18 miles south of Yokohama. COMFLEACT Yokosuka hosts 83 tenants with a population of over 24,000 military and civilian personnel. Cultural resources at COMFLEACT Yokosuka include 35 archaeological sites registered by the Kanagawa Prefecture; 260 historic buildings and architectural structures; 22 monuments memorializing historical events, religions, people, and animals; complex World War II (WWII) tunnel networks used for air raid protection and ordnance storage; and dry docks constructed in the late 1800s of stone blocks with stepped sides. The installation's primary mission is to maintain and operate base facilities for the logistic, recreational, and administrative support in service of the U.S. Naval Forces Japan, U.S. Seventh Fleet, and other operating forces assigned within the Western Pacific.

- COMFLEACT Yokosuka's Cultural Resources Management (CRM) program played an integral role in the Japan Heritage program, established by Japan's Agency for Cultural Affairs (ACA), to recognize and preserve the narratives that bind Japan's regional cultural properties. The CRM program was instrumental in the Japan Heritage designation of Yokosuka City by the ACA on April 25, 2016.
- In 2015, the COMFLEACT Yokosuka Environmental Division coordinated with the Yokosuka Board of Education (BOE) and Naval Facilities Engineering Command Pacific to complete a Historic Context and Inventory Report for Pre-WWII buildings, structures, and seawalls. This collaboration saved DoD \$20,000 in final project costs because the BOE assisted in conducting the field survey and CRM program staff provided translation between the contractors and BOE throughout the collaboration.
- The updated Historic Context and Inventory Report also implemented a new preservation rating system that was added to the 2015 Integrated Cultural Resources Management Plan (ICRMP) using color coded maps for historic architectural districts. This rating system was also introduced to other naval bases and is now used for most U.S. military bases in Japan.
- In 2015, COMFLEACT Yokosuka updated the Yokosuka ICRMP, including the Historic Context and Inventory Report. This revision updated compliance to the most current standards, included expanded metrics, and addressed planned construction project information.
- COMFLEACT Yokosuka developed cultural resources profile sheets for each facility and site to aid quick reference to the 101 known archaeological sites and 260 historic buildings and structures. These management techniques help to more easily identify cultural assets in the real property inventory, allowing for more productive use of resources to support mission needs.
- Installation personnel coordinated with the Yokosuka BOE to deploy alternative survey methods to recover data on historic sites blocked by landslides. The CRM program staff used a laser rangefinder to complete an archaeological survey of the building foundation of an Imperial Japanese Navy Marine Quarters that was previously undocumented.



Cultural Resources Program Manager Ryouko Araki leads a tour of the historic Yokosuka Dry Dock 1 for U.S. Force Japan Environmental Subcommittee members. Dry Dock 1 was completed in 1871, serving as the oldest stone dry dock in Japan.



LT William Lindahl, Steven Marksberry, Charles Sayon, and Brad Stevenson participate in a site visit to discuss the relocation of historic anchors and anchors from the Imperial Japanese Navy era.



Cultural Resources Management Team, Alabama Army National Guard Cultural Resources Management, Individual/Team

The Alabama Army National Guard (ALARNG) installation encompasses 23,911 acres across 84 Readiness Centers in Alabama, including the 22,647-acre Fort McClellan Army National Guard Training Center (FM-ARNGTC), the largest of the ALARNG holdings. Cultural resources across these properties are associated with 19 Federally-recognized Native American Tribes, Civil War battles, Andrew Jackson's military exploits, World War I and World War II, and the Civil Rights movement, among others. The ALARNG Cultural Resources Management (CRM) team is dedicated to identifying and protecting archaeologically and culturally sensitive sites on their property across the State of Alabama. Consideration of cultural resources is a key element in all ALARNG project planning processes, creating true integration of CRM with the military mission and enhancing organizational awareness of cultural resources stewardship responsibilities.

- The CRM and Geographic Information Systems (GIS) programs have collaborated closely to design and implement an integrated management program and tool that interfaces CRM activity areas and cultural property sites with other installation planning efforts across ALARNG locations. This GIS-enabled management approach streamlines project reviews and creates transparency across all ALARNG directorates. The CRM team members are enhancing the tool to also incorporate Range Operations for more complete integration and mission transparency.
- The CRM team added Light Detection and Ranging (LiDAR) technology to the CRM-GIS management tool. Using LiDAR has allowed the team to develop hillshade data in the program's web map viewer for multiple locations. Hillshade imagery is a uniquely powerful tool in generating landscape assessments, which allows the CRM team to more accurately determine the footprints of historic sites and spatially represent related features in context. Using hillshade data, the CRM team is able to more efficiently and accurately identify patterns of land modification, pinpoint the potential for additional resources, and plan future survey areas. With this capability, the team is now constructing a predictive model for cultural sites.
- The CRM team initiated a regional tribal consultation approach, partnering with Mississippi, Alabama, Tennessee, Georgia, Louisiana and Florida to rotate hosting of annual consultation meetings. Each participating state Guard contributes to a share of the funding to host. For the ALARNG, this partnership translates into approximately \$210,000 in cost savings each year over hosting independent annual meetings.
- ALARNG is working toward 100% completion of cultural resources surveys across the state. The CRM team evaluated all structures (50-years old and older), and is now addressing the final un-surveyed 500 acres, out of 22,000 acres, at FM-ARNGTC.
- The CRM team led efforts to identify relevant locations for Civil Rights movement events and historical experiences of African American residents in the area that is now ALARNG. This project deepened the ALARNG's partnership with the State Historic Preservation Officer and the surrounding communities.



Wes Tuttle, Natural Resources Conservation Service (NRCS), demonstrates the use of ground penetrating radar equipment at the New Mount Sellers Cemetery on Pelham Range of the Fort McClellan Army National Guard Training Center. The Alabama Army National Guard (ALARNG) partners with the NRCS for training opportunities and Native American Consultation. The New Mount Sellers Cemetery is an African American cemetery that predates the military occupation of Pelham Range. The ALARNG actively works with members of the African American community to continue to document past land use.



The ALARNG conducts annual consultation with 19 Federally-recognized Native American Tribes with ancestral ties to the lands that the ALARNG continues to manage and the artifacts that they maintain. Through partnerships with the Alabama Historical Commission and the Natural Resources Conservation Service, the ALARNG helps facilitate site visits of ancestral lands for members of the Thlopthlocco Tribal Town. These types of partnerships complement the consultation process, allowing for multiple agencies to consult with Tribes with shared areas of interest.



Chromium-Free Wash Primer Replacement Team, U.S. Army Research Laboratory, Aberdeen Proving Ground, Maryland Environmental Excellence in Weapon System Acquisition, Small Program

The U.S. Army Research Laboratory (ARL) is the Army's corporate laboratory tasked with discovering, innovating, and transitioning science and technology to ensure dominant strategic land power. The ARL Chromium-Free Wash Primer Replacement Team executes this mission by promoting alternatives to the use of hazardous hexavalent chromium (Cr(VI)). The Army relies on carcinogenic Cr(VI) compounds like DOD-P-15328 wash primer to protect its weapon systems from corrosion. The DOD-P-15328 wash primer constitutes one of the largest sources of Cr(VI) in Army operations because it is the primary surface treatment required for mixed metal applications. Workers and Soldiers may be exposed to Cr(VI) compounds during spray application of wash primer and during routine maintenance throughout the life cycle of systems treated with wash primer. As a secondary environmental concern, DOD-P-15328 wash primer contains high amounts of volatile organic compounds (VOCs), which contribute to poor air quality and increase human health risks. The team executed a project to develop, demonstrate, and implement low-VOC, Cr(VI)-free pretreatments as alternatives to wash primer.

- The Chromium-Free Wash Primer Replacement Team began with the identification of three Cr(VI)-free pretreatments for mixed metal substrates that meet TT-C-490F Type III Federal environmental standards. This paved the way to remove DOD-P-15328 wash primer from the Chemical Agent Resistant Coating system and eliminate its use on Army weapon systems.
- ARL staff selected the best performing wash primer alternative and tested the alternative, Henkel's Bonderite 7400, on support trailers at Letterkenny Army Depot. The Army deployed the support trailers and they remain in service.
- ARL personnel provided three qualified alternatives to the U.S. Army Public Health Center (APHC): Henkel's Bonderite 7400 (manganese and fluoride-based). Chemetall's Oxsilan 9810/2 (zirconium silane-based), and PPG's 11-TGL-07-Z (zirconiumbased). The APHC published toxicology assessments in January 2016 and verified that these alternatives did not pose other serious environmental risks that would prevent implementing the alternatives. The APHC verified the team's assertions and concluded that the recommended alternatives are preferable to the DOD-P-15328 wash primer.
- The Chromium-Free Wash Primer Replacement Team's efforts contributed to a reduction of 24,000 Cr(VI) compounds and 2.3 million pounds of VOCs per year. More specifically, these efforts will reduce 58 percent of all Cr(VI) usage at Letterkenny Army Depot (610 pounds) annually.
- As a result of the team's success in developing low-VOC and Cr(VI)-free pretreatments as alternatives to wash primer, ARL issued a memorandum announcing the cancellation of DOD-P-15328. ARL intends to cancel the specification no later than September 30, 2017, giving users one year to transition their wash primer usage to qualified Cr(VI)-free alternatives.
- The team is transitioning alternatives to additional government and contractor users that have expressed interest in Cr(VI)-free pretreatments. Interested users include Anniston, Red River, and Sierra Army Depots, the U.S. Marine Corps, and multiple original equipment manufacturers.



The Chromium-Free Wash Primer Replacement Team (from left to right: Thomas Considine, Fred Lafferman, Jack Kelley, Alicia Farrell, Thomas Braswell; not pictured: Thomas Stagg).



The Chromium-Free Wash Primer Replacement Team applies hexavalent chromium-free alternatives to DOD-P-15328 wash primer to metal coupons in preparation for performance testing.

Honorable Mentions

Natural Resources Conservation, Large Installation

Naval Weapons Station Earle, New Jersey Marine Corps Air Station Beaufort, South Carolina Eglin Air Force Base, Florida

Environmental Quality, Industrial Installation

None

Environmental Quality, Overseas Installation

U.S. Naval Station, Rota, Spain

Marine Corps Base Camp Smedley D. Butler, Japan

Yokota Air Base, Japan

Sustainability, Non-Industrial Installation

Hawaii Army National Guard

Naval Support Activity Mechanicsburg, Pennsylvania

Defense Logistics Agency Installation Support at Fort Belvoir, Virginia

Sustainability, Individual/Team

Sustainability Team, Pennsylvania Army National Guard

Sustainability Team, Naval Base Ventura County, California

Office of Space Launch Sustainability Team, National Reconnaissance Office, Virginia

Environmental Restoration, Installation

Fort Bragg, North Carolina

St. Juliens Creek Annex, Virginia

Marine Corps Installation West - Marine Corps Base Camp Pendleton, California

Defense Supply Center Richmond, Virginia

Cultural Resources Management, Small Installation

Camp Pendleton, Virginia Army National Guard

Yokota Air Base, Japan

Cultural Resources Management, Individual/Team

Cultural Resources Management Team, Naval Air Weapons Station China Lake, California

Cultural Resources Management Team, Marine Corps Air Ground Combat Center Twentynine Palms, California

Mr. Thomas Edward Penders, 45th Space Wing, Florida

Environmental Excellence in Weapon System Acquisition, Small Program

None

Judges

Volunteers from private industries, state and federal agencies, academia, and non-governmental organizations served as judges for the 2017 Secretary of Defense Environmental Awards.

Susan P. Adams Director, Safety, Fire, and Environmental Programs, Architect of the Capitol

Katherine B. Andrus Manager, Environmental Policy & Operations, Federal Aviation Administration

Barton V. Barnhart Deputy Assistant Secretary for Program Planning and Budget, Office of Environmental Management, U.S. Department of Energy

Serena Bellew Historic Preservation Specialist, U.S. General Services Administration

Stanley Bond Chief Archaeologist, National Park Service

Kathleen Callister Manager, Environmental Resources Division, Bureau of Reclamation, Upper Colorado Region

Joel Cascio Co-Director, George Washington University Environmental and Energy Management Institute

RADM Christopher Cole (USN, Ret) Federal Facilities Remediation & Restoration Unit Leader, Navy Safe Harbor Foundation

Bernard F. Denno, Jr. Safety Engineer/Deputy Director, Architect of the Capitol

Colby Duren Director of Policy & Staff Attorney, Indigenous Food and Agriculture Initiative, University of Arkansas School of Law

Bill Flanagan Director, Ecoassessment Center of Excellence, GE Global Research

Kevin Funk Lead, Sustainable Acquisition, U.S. General Services Administration

Sally Gestautas Global Substances Program Manager, Raytheon Company Michael Goldstein Global Remediation Manager, Ingersoll Rand Company

Lewis E. Gorman, III, Ph.D. Biologist, Endangered Species Recovery Program, U.S. Fish & Wildlife Service

Philip W. Grone Principal, Findlay & Western Strategies, LLC

Kathryn Gunkel President, Wildwood Environmental Engineering Consultants, Inc.

Christina Guthrie Lead Environmental Protection Specialist, U.S. Environmental Protection Agency

Carolyn Hanson Deputy Executive Director, Environmental Council of the States

Erik Hein Executive Director, National Conference of State Historic Preservation Officers

Harry R. Hendler Project Manager, U.S. Army Corps of Engineers

Philip Hoffman Protected Species National Program Coordinator, NMFS Office of Protected Resources, National Oceanic and Atmospheric Administration

Beth M. Hylton Sustainable Design Manager, U.S. Department of State

Kit Kennedy Director, Energy & Transportation, Natural Resources Defense Council

Katharine Kerr Historic Preservation Specialist, Advisory Council on Historic Preservation

Michael Lesnick Senior Partner, Meridian Institute

David Levine President & CEO, American Sustainable Business Council

Judges

Anne Y. Malewicz Federal Facilities Section Chief, Massachusetts Department of Environmental Protection

Mike McNeill Acting Director, Environmental Management Division, NASA Headquarters

Kathleen Merrigan, Ph.D. Executive Director of Sustainability, George Washington University

Gina Noel Environmental Compliance Specialist, U.S. General Services Administration

Douglas Pulak Deputy Federal Preservation Officer, Office of Construction & Facilities Management, U.S. Department of Veterans Affairs

Tad Radzinski Certification Officer, GreenCircle Certified, LLC

James K. Reap Professor, College of Environment and Design, University of Georgia

Charles Reyes Senior Program Manager, Association of State and Territorial Solid Waste Management Officials

Patricia C. Reyes Director, Interstate Technology Regulatory Council

Yann Risz Managing Director, Aligned Incentives

Patricia Samford, Ph.D. Director, Maryland Archaeological Conservation Lab, Jefferson Patterson Park and Museum

Mark Schaeffer Vice President/Chief Systems Engineer, ManTech International

Rita Schenck, Ph.D., LCACP Executive Director, Institute for Environmental Research & Education

Timothy J. Sheehan, CIH, CSP, PE Materials Regulatory and Risk Manager, Global Substances Program, Raytheon Company **John Sprinkle, Ph.D.** Bureau Historian, National Park Service

Bruce Stein, Ph.D. Associate Vice President, National Wildlife Federation

Scott Strickland Project Archaeologist, St. Mary's College of Maryland

Peggy Tadej Director of Military Partnership, Northern Virginia Regional Council

Mervyn L. Tano President, The International Institute for Indigenous Resource Management

Noeleen Tillman Executive Director, Institute for Sustainable Seaports

Richard Wagner, Ph.D. Director and Professor, MAHP Program, Goucher College

Kevin Welsh Acting Manager, Policy and Operations Division, Office of Environment and Energy, Federal Aviation Administration

Linda S. Wennerberg, Ph.D. Environmental Management Division, NASA Headquarters

Tracie M. White Federal Facilities Remediation & Restoration Unit Leader, Hazardous Materials & Waste Management Division, Colorado Department of Public Health & Environment

David Widawsky Director, Chemistry, Economics, and Sustainable Strategies Division, Office of Chemical Safety and Pollution Prevention, U.S. Environmental Protection Agency

Calvin F. Williams Assistant Administrator for Strategic Infrastructure, NASA

Ken Zarker

Manager, P2 & Regulatory Assistance Section, Department of Ecology, Washington State University

Past Winners

Natural Resources Conservation

- 2016 Camp Dawson Army Training Site, West Virginia Army National Guard
- 2016 Fort McCoy Natural Resources Branch, Wisconsin
- 2015 Camp Blanding Joint Training Center, Florida Army National Guard, Florida
- 2014 Marine Corps Base Hawaii
- Eglin Air Force Base, Natural Resources Team, Florida 2014
- 2013 Naval Base Coronado, California
- 2012 U.S. Army Garrison - Hawaii, Oahu Army Natural Resource Program Team
- 2012 Marine Corps Base Hawaii
- 2011 Eglin Air Force Base, Florida
- Fort Custer Training Center, Michigan Army National Guard 2010
- 2010 Mr. Stephen M. Seiber, Eglin Air Force Base, Florida
- 2009 Camp Ripley Maneuver and Training Center, Minnesota
- 2008 Naval Weapons Station, Seal Beach, California
- 2008 Fort Indiantown Gap Training Center, Pennsylvania Army National Guard
- 2007 Arnold Air Force Base, Tennessee
- 2006 Minnesota Army National Guard Natural Resources Conservation Team, Camp Ripley
- 2006 Marine Corps Base Hawaii
- 2005 Fort Drum, New York
- 2004 Columbus Air Force Base, Mississippi
- 2003 U.S. Army Intelligence Center and Fort Huachuca, Arizona
- 2002 U.S. Army Transportation Center, Fort Eustis & Fort Story, Virginia
- Naval Weapons Station Charleston, South Carolina 2001
- 2000 U.S. Army Training Center & Fort Jackson, South Carolina
- 2000 Hawaii Army National Guard
- 1999 Camp Ripley, Army National Guard, Minnesota
- U.S. Army Garrison, Fort Belvoir, Virginia 1999
- Fort Stewart/Hunter Army Airfield, Georgia 1998
- Naval Submarine Base Kings Bay, Georgia 1998
- 1997 Marine Corps Base Camp Pendleton, California
- 1997 Naval Surface Warfare Center, Indian Head, Maryland
- 1996 Tyndall Air Force Base, Florida
- 1996 Marine Corps Base Hawaii
- Naval Air Warfare Center, Patuxent River, Maryland 1995
- 1994 Eglin Air Force Base, Florida
- Twin Cities Army Ammunition Plant, Minnesota 1993
- 1992 Marine Corps Base Camp Lejeune, North Carolina
- 1991 Fort Belvoir, Virginia
- 1990 Fort Sill, Oklahoma
- 1989 F.E. Warren Air Force Base, Wyoming
- Goldwater Air Force Range, Arizona 1988
- 1987 New Boston Air Force Station, New York
- 1986 Beale Air Force Base, California
- 1985 Robins Air Force Base, Georgia
- 1984 Fort Huachuca, Arizona
- 1983 Indian Island Annex, Keyport, Naval Engineering Station, Washington

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- 1982 Fort McCoy, Wisconsin
- 1981 Tobyhanna Army Depot, Pennsylvania
- 1980 Fort Huachuca, Arizona
- 1979 Naval Air Station Chase Field, Texas
- 1978 Fort Sill, Oklahoma
- 1977 Griffiss Air Force Base, New York
- 1976 Marine Corps Base Camp Lejeune, North Carolina
- 1975 Barksdale Air Force Base, Louisiana
- 1974 Fort Campbell, Kentucky
- 1973
- Marine Corps Base Camp Lejeune, North Carolina
- 1972 Marine Corps Base Camp Pendleton, California
- 1971 Tyndall Air Force Base, Florida
- 1970 Camp Pickett, Virginia
- 1969 Marine Corps Base Camp Lejeune, North Carolina
- 1968 Red River Army Depot, Texas
- 1967 Fort Rucker, Alabama
- 1966 Naval Weapons Station Yorktown, Virginia
- 1965 Tyndall Air Force Base, Florida
- 1964 Eglin Air Force Base, Florida
- 1963 Fort Knox, Kentucky

Environmental Quality

- 2016 Marine Corps Air Ground Combat Center Twentynine Palms, California
- 2016 Eglin Air Force Base Environmental Quality Team, Florida
- 2015 Robins Air Force Base, Georgia
- Marine Corps Base Camp Smedley D. Butler, Japan 2015
- 2014 Fort Hood, Texas
- 2014 Environmental Quality Team, Minnesota Army National Guard
- 2013 78th Civil Engineer Group, Robins Air Force Base, Georgia
 - 2013 Marine Corps Base Camp Smedley D. Butler, Japan
- 2012 Fort Hood, Texas
- 2012 Fort Hood Recycle Team, Texas, and Naval Supply Fleet Logistics Center, Pearl Harbor, Hawaii (tie)
- 2011 U.S. Army Garrison Grafenwoehr, Germany
- 2011 Defense Supply Center, Richmond, Virginia
- 2010 Marine Corps Base Hawaii
- 2010 Mr. Awni M. Almasri, Naval Facilities Engineering Command Europe Africa Southwest Asia
- 2009 Environmental Management Division, Hill Air Force Base. Utah
- 2009 United States Army Garrison Bamberg, Germany
- 2008 Naval Air Engineering Station Lakehurst, New Jersey
- 2008 Hill Air Force Base, Utah
- 2007 Tinker Air Force Base, Oklahoma
- Marine Corps Base Camp Smedley D. Butler, Japan 2007
- Team Dyess, Dyess Air Force Base, Texas 2006
- 2006 Fort Campbell, Kentucky
- 2005 Naval Air Depot Cherry Point, North Carolina
- 2005 Misawa Air Base, Japan

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- 2004 U.S. Naval Support Activity Bahrain
- 2003 Tinker Air Force Base, Oklahoma
- Marine Corps Base Camp Smedley D. Butler, Okinawa, Japan 2003
- 2002 Air Armament Center, Eglin Air Force Base, Florida

Naval Aviation Depot North Island, California

Naval Air Station Patuxent River, Maryland

Naval Surface Warfare Center, Indian Head, Maryland

2001 Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility, Hawaii

Indian Head Division, Naval Surface Warfare Center, Maryland

- 2001 Marine Corps Base Camp Butler, Okinawa, Japan
- Patrick Air Force Base, Florida 2000 Marine Corps Base Hawaii

Luke Air Force Base, Arizona

Luke Air Force Base, Arizona

Eglin Air Force Base, Florida

USAF Hurlburt Field, Florida

Fort Campbell, Kentucky

Hill Air Force Base, Utah

Tooele Army Depot, Utah

Fort Lewis, Washington

Fort McClellan, Alabama

Hill Air Force Base, Utah

Fort Sill, Oklahoma

Fort Sill, Oklahoma

Pine Bluff Arsenal, Arkansas

Luke Air Force Base, Arizona

Eglin Air Force Base, Florida

Robins Air Force Base, Georgia

Tinker Air Force Base, Oklahoma

McChord Air Force Base, Washington

Vandenberg Air Force Base, California

McClellan Air Force Base, California

Marine Corps Air Station Kaneohe Bay, Hawaii

Marine Corps Base Camp Lejeune, North Carolina

Marine Corps Base Camp Pendleton, California

Marine Corps Air Station Kaneohe Bay, Hawaii

Naval Air Training Center Patuxent River, Maryland

Fort Sill, Oklahoma

Past Winners

Sustainability (formerly Pollution Prevention)

- 2016 Marine Corps Support Facility Blount Island, Florida
- 2015 Marine Corps Air Ground Combat Center Twentynine Palms, California
- 2015 Minnesota Army National Guard Sustainability Team, Minnesota
- 2014 Naval Weapons Station Seal Beach, California
- 2013 673d Air Base Wing, Joint Base Elmendorf-Richardson, Alaska
- 2013 Ms. Dorenda Coleman, Arizona Army National Guard
- 2012 Scranton Army Ammunition Plant, Pennsylvania
- 2011 Joint Base Lewis-McChord, Washington
- 2011 The Exchange Corporate Sustainability Program, Army and Air Force Exchange Service, Texas
- 2010 Fleet Readiness Center Southwest, California
- 2009 Naval Air Station Whidbey Island, Washington
- 2009 14th Civil Engineer Squadron Pollution Prevention Team, Columbus Air Force Base, Mississippi
- 2008 Robins Air Force Base, Georgia
- 2007 Marine Corps Base, Hawaii
- 2007 Pollution Prevention Afloat Team Naval Sea Systems Command, Washington, DC
- 2006 Tinker Air Force Base, Oklahoma
- 2005 Commander, Navy Region Mid-Atlantic, Norfolk, Virginia
- 2004 Robins Air Force Base, Georgia
- 2003 Naval Air Station Whidbey Island, Washington
- 2002 Warner Robins Air Logistics Center, Robins Air Force Base, Georgia
- 2001 U.S. Army Transportation Center and Fort Eustis, Virginia
- 2000 Radford Army Ammunition Plant, Virginia
- 2000 HQ III Corps and Fort Hood, Texas
- 1999 Robins Air Force Base, Georgia
- 1999 Marine Corps Base Hawaii
- 1998 Robins Air Force Base, Georgia
- 1998 Fort Carson and Pinon Canyon Maneuver Site, Colorado
- 1997 Corpus Christi Army Depot, Texas
- 1997 Fort Lewis, Washington
- 1996 Robins Air Force Base, Georgia
- 1996 Dyess Air Force Base, Texas
- 1995 Kelly Air Force Base, Texas
- 1995 Naval Construction Battalion Center, Port Hueneme, California
- 1994 Tinker Air Force Base, Oklahoma
- 1993 Navy Aviation Depot, Florida

Environmental Restoration

- 2016 Beale Air Force Base, California
- 2016 Vieques Environmental Restoration Program Team, Puerto Rico
- 2015 Marine Corps Base Camp Lejeune, North Carolina
- 2014 Marine Corps Installation East, Marine Corps Base Camp Lejeune, North Carolina
- 2014 Naval Air Station Cecil Field Base Realignment and Closure Cleanup Team, Florida
- 2013 U.S. Army Garrison Aberdeen Proving Ground, Directorate of Public Works, Maryland
- 2012 Former Mare Island Naval Shipyard, California
- 2012 75th Civil Engineering Group, Hill Air Force Base, Utah
- 2011 Cape Canaveral Air Force Station, Florida
- 2010 Hill Air Force Base, Utah
- 2010 Ms. Regina Dixon Butler, Patrick Air Force Base, Florida
- 2009 Defense Depot, Memphis, Tennessee
- 2008 Seymour Johnson Air Force Base, North Carolina
- 2008 Marine Corps Air Station Cherry Point Partnering Team, North Carolina
- 2007 Dover Air Force Base, Delaware
- 2006 Fort Lewis, Washington
- 2006 Pyramid Lake Torpedo and Bombing Range Remediation Project, U.S. Army Corps of Engineers, Sacramento District
- 2005 Naval Facilities Engineering Command Pacific, Hawaii, and Keesler Air Force Base, Mississippi (tie)
- 2004 Tinker Air Force Base, Oklahoma
- 2003 Hill Air Force Base, Utah
- 2002 F.E. Warren Air Force Base, Wyoming

- 2001 Offutt Air Force Base, Nebraska
- 2000 Elmendorf Air Force Base, Alaska
- 1999 Naval Air Engineering Station Lakehurst, New Jersey
- 1998 Riverbank Army Ammunition Plant, California
- 1997 Naval Air Station North Island, San Diego, California
- 1996 Naval Air Station Cecil Field, Florida
- 1995 Naval Air Station Whidbey Island, Washington

Cultural Resources Management

- 2016 White Sands Missile Range, New Mexico
- 2015 U.S. Army Garrison Picatinny Arsenal, New Jersey
- 2015 Dr. Paul R. Green, U.S. Air Force Civil Engineer Center, Virginia
- 2014 Fort Wainwright, Alaska
- 2013 Marine Corps Air Station Beaufort, South Carolina
- 2013 Ms. June Noelani Cleghorn, Marine Corps Base Hawaii
- 2012 30th Space Wing, Vandenberg Air Force Base, California
- 2011 88th Air Base Wing Civil Engineering Directorate, Environmental Branch, Wright-Patterson Air Force Base, Ohio
- 2011 Cultural Resources Management Team, Eglin Air Force Base, Florida
- 2010 Camp Guernsey, Wyoming Army National Guard
- 2009 Vandenberg Air Force Base, California
- 2009 Fort Drum Cultural Resources Team, Fort Drum, New York
- 2008 Redstone Arsenal, Alabama
- 2007 Mr. Gary M. O'Donnell, Hickam Air Force Base, Hawaii
- 2007 Fort Drum, New York
- 2006 Naval Air Weapons Station China Lake, California
- 2005 Marine Corps Recruit Depot Parris Island, South Carolina, and 15th Airlift Wing, Hickam Air Force Base, Hawaii (tie)
- 2004 Marine Air Ground Task Force Training Command, Twentynine Palms, California
- 2003 Texas Army National Guard Cultural Resources Management Office, Texas
- 2002 Commander Navy Region Mid-Atlantic, Hampton Roads, Virginia
- 2001 U.S. Army Air Defense Artillery Center and Fort Bliss, Texas
- 2000 Fort Riley, Kansas
- 1999 Vandenberg Air Force Base, California
- 1998 Fort Hood, Texas

2008

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1996 Fort Carson and Pinon Canyon Maneuver Site, Colorado

Environmental Excellence in Weapon System Acquisition

- 2016 KC-46 Program Environment, Safety, and Occupational Health Team, Wright-Patterson Air Force Base, Ohio
- 2015 Halon Extinguisher Replacement Program for Aviation Weapon Systems Integrated Product Team, Redstone Arsenal, Alabama
- 2014 Air Force Life Cycle Management Center F-35 Environmental, Safety and Occupational Health Support Team, Wright-Patterson Air Force Base, Ohio
- 2013 Counterfeit Refrigerant Impact Team, Tank Automotive Research, Development and Engineering Center, Michigan
- 2012 Stryker Brigade Combat Team Warren, Michigan

Fairchild Air Base, Washington

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- 2011 Sustainable Painting Operations for the Total Army, Aberdeen Proving Ground, Maryland
- 2010 Aeronautical Systems Center Environmental and Occupational Health Team, Wright-Patterson Air Force Base, Ohio

Special Recognition Environmental Management Systems Implementation

Defense Logistics Agency Environmental Management Systems Team

C-17 Pollution Prevention Integrated Product Team, Wright-Patterson Air Force Base, Ohio



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