



2016 Secretary of Defense Environmental Awards Environmental Restoration, Installation Award

Each year since 1962, the Department of Defense (DoD) has honored individuals, teams, and installations for their outstanding achievements and innovative work protecting the environment while sustaining mission readiness. The 2016 Secretary of Defense Environmental Awards recognize accomplishments from October 1, 2013 to September 30, 2015. A diverse panel of judges with relevant expertise representing Federal and state agencies, academia, and the private sector evaluated all nominees to select one winner for each of the nine categories that cover six subject areas: natural resources conservation; environmental quality; sustainability; environmental restoration; cultural resources management; and environmental excellence in weapon system acquisition.

About the Environmental Restoration, Installation Award

The Environmental Restoration, Installation award recognizes installations that have made a significant contribution to environmental restoration. This award acknowledges efforts to protect human health and the environment by cleaning up identified DoD sites in a timely, cost-efficient, and responsive manner. Restoring these sites impacted by historic defense practices protects military personnel and the public from potential environmental health and safety hazards. The 2016 winner of the Environmental Restoration, Installation award is *Beale Air Force Base, California*.

About Beale Air Force Base

Beale Air Force Base (AFB) is a 22,944-acre military installation located in Yuba County, California. The 9th Reconnaissance Wing's mission is to train, deploy, and employ our Airmen and assets to deliver globally integrated intelligence, surveillance, and reconnaissance. Equipped with the Nation's fleet of U-2 Dragon Lady and RQ-4 Global Hawk reconnaissance aircraft and associated support equipment, the Wing maintains readiness for expeditionary combat support forces to deploy in response to theater contingencies. Over 17,000 acres of Beale AFB are undeveloped and consist of riparian areas and wetlands. Over 6,400 personnel are employed at Beale AFB and the installation contributes approximately \$604 million to California's economy annually. The Beale AFB Installation Restoration Program (ERP) and a Military Munitions Response Program (MMRP). Under the ERP, military personnel are implementing remedial actions at 38 open ERP sites out of 49 total ERP sites. The MMRP manages 63 munitions response areas that include 122 individual response sites.



Ms. Carolyn Rech (CDFW) and Mr. Darren Rector (AFCEC/CZOW) conducted a Swainson's Hawk Survey on Munitions Response Site GR592. A Swainson's Hawk nest was noted prior to the site excavation. The CDFW agreed weekly surveys and reporting could be conducted by Mr. Rector, eliminating additional project costs.

Major Accomplishments in FY 2014-2015

- Achieved site closeout for 70 Military Munitions Response Program (MMRP) sites and identified four sites that are already reporting site closeout. Also reduced the number of active MMRP sites by 81 percent, and returned 8,537 acres to the installation for unrestricted use.
- Achieved site closeout for nine contaminated ERP sites and 19 underground storage tank sites. The installation has reached response complete on three ERP sites, with site closeout to follow in 2016. Results include decreasing active ERP sites by 23 percent.
- Partnered with the U.S. Fish and Wildlife Service (FWS) on a revised remedial action approach involving the careful removal of lead “hot spots” near sensitive species habitat on a former skeet range. By using this approach, installation environmental staff reduced the excavation area by 45 percent, avoided wetland mitigation, and saved the Air Force approximately \$3 million.
- Worked directly with the Yuba County Water Agency to develop a complex response to the unprecedented drought in California. The response resulted in minimized contamination to groundwater plumes, identified contingency actions to address potential plume migration off-base, and ensured measures are in place ahead of plume migration.
- Implemented innovative, sustainable source area remedies, including five enhanced in situ bioremediation treatment areas, four in situ chemical oxidation treatment areas, a system that uses phytopumping, and a permeable reactive barrier. By implementing these alternative remedies, environmental staff have treated 135 source acres to depths of 95 feet below the ground surface.
- Created a collaborative partnership with state regulators, allowing for the decoupling of soil and groundwater across Beale AFB and the development of the first approved installation decision document in 2014. This resulted in achieving site closeout for five decoupled sites.



A collaborative partnership between Beale AFB and the FWS allowed the removal of a lead waste pile near vernal pools containing sensitive species. Leveraging hand digging, the Air Force saved over \$275k in wetland mitigation fees.



Beale AFB conducts Restoration Advisory Board tours twice a year, focused on an installation mission and restoration site visit. Participation includes concerned community members, Board members, Beale AFB residents, and civic leaders.