



2024 Secretary of Defense Environmental Awards Environmental Restoration, Individual/Team Award

Each year since 1962, the Secretary of Defense has honored installations, teams, and individuals for outstanding achievements in Department of Defense (DoD) environmental programs. These accomplishments include outstanding conservation activities, innovative environmental practices, and partnerships that improve quality of life and promote efficiencies without compromising DoD's mission success. The 2024 Secretary of Defense Environmental Awards cycle encompasses an achievement period from October 1, 2021, through September 30, 2023 (Fiscal Years [FY] 2022-2023). A diverse panel of 47 judges with relevant expertise representing Federal and state agencies, academia, and the private sector evaluated all nominees to select 1 winner for each of the 9 categories. These nine categories cover six subject areas including natural resources conservation, environmental quality, sustainability, environmental restoration, cultural resources management, and environmental excellence in weapon systems acquisition.

About the Environmental Restoration, Individual/Team Award

The Environmental Restoration, Individual/Team award recognizes efforts to protect human health and the environment by cleaning up hazardous substances, pollutants or contaminants, and munitions in a timely, cost-efficient, and responsive manner. Restoring sites impacted by past DoD activities protects military personnel, their families, and the public from potential human health, environmental, and safety hazards. The 2024 winner of the Environmental Restoration, Individual/Team award is the *Environmental Restoration Team, Vieques Naval Installation, Puerto Rico*.

About Environmental Restoration Team, Vieques Naval Installation, Puerto Rico

Established during World War II, Vieques Naval Installation was the premier training range of U.S. forces and North Atlantic Treaty Organization allies. Between 2001 and 2003, DoD decommissioned the 23,000-acre former installation located on Vieques Island, which is off the southeast coast of the mainland of Puerto Rico. In 2005, the U.S. Environmental Protection Agency placed large portions of Vieques and its surrounding waters on the National Priorities List for cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act. Since then, DoD has eliminated over 130,000 potentially explosive munitions, removed nearly 9 million munitions and munitions-related material from the former training ranges, and recycled over 17 million pounds of this material. The environmental restoration of Vieques remains the highest priority and the costliest project in the Navy's Munitions Response Program.



The former Vieques Naval Installation is 23,000 acres, with another 12,000 acres of surrounding waters.

Major Accomplishments in FY 2022-2023

- Teaming with U.S. Fleet Forces Command, Naval Facilities Engineering Systems Command pioneered integration of active-duty Navy explosive ordnance disposal (EOD) dive units into the Vieques offshore munitions cleanup. In 2023, the munitions cleanup program saved nearly \$200,000 and doubled cleanup productivity, and the Navy's EOD dive units heightened their operational readiness associated with locating and handling underwater live ordnance.
- Recognizing the social and economic value of 29 beaches within the former Navy training areas, the Navy and stakeholder agencies developed a novel approach to expedite characterization and coordinate and focus remedial action.

Focusing on the area where beachgoer contact with the seafloor is highest, the team identified the zone between the shoreline and a water depth of about 15 feet for characterizing munitions and munitions constituents. Implementation at the first beach is anticipated to save over \$75 million, preserve high-value ecological resources, accelerate public use, and provide a model for the remaining beaches.

- In accordance with the National Defense Authorization Act and in collaboration with DoD explosive safety elements and stakeholders, including regulatory agencies and the Vieques community, the Navy used a closed detonation chamber to destroy 144 unexploded ordnances that it recovered during cleanup operations. In addition, the Navy purchased a high-pressure water jet to process 1,500 recovered inert munitions for recycling.



Water jet cutting system dismantling an inert practice bomb recovered during the munitions cleanup in Vieques. Processing inert munitions in this manner is a cost-effective way to enable the metal casings to be recycled for beneficial reuse.

- Working with Naval Information Warfare Center Pacific, Harvard University, and San Diego State University, in 2021 the Navy deployed two mobile artificial reefs, called "arks." The Navy used the artificial reefs to evaluate potential use in mitigating damage to threatened and endangered coral from Navy cleanup activities. Subsequent monitoring data demonstrated higher coral survival rates and improved coral proliferation conditions on the arks compared with the control area.



Scientific divers, John Martin and Lora Pride, attach growth plates containing coral fragments to each of two "arks."

- The Navy and regulatory agencies designed an innovative sub-bottom profiler survey to identify areas where underwater munitions may be buried. The Vieques survey was significantly faster, safer, and at least an order of magnitude less costly than a traditional approach.