



# Department of Defense Legacy Resource Management Program

Project 13-086

## **National Public Lands Day 2013**

Tracey P. Adams, Teresa Crane and Mallory Shramek  
National Environmental Education Foundation  
Washington, D.C.

February 19, 2014



**DEPARTMENT OF DEFENSE  
LEGACY RESOURCE MANAGEMENT PROGRAM (13-086)**

**National Public Lands Day 2013**

On September 28, 2013, 175,000 volunteers participated at 2,237 National Public Lands Day (NPLD) sites to improve parks and other public lands in all 50 states, the District of Columbia, Puerto Rico and Guam. NPLD volunteers contributed an estimated \$18 million in public land improvements by removing 500 tons of trash; collecting 23,000 pounds of invasive vegetation; building and maintaining 1,500 miles of trails; and planting 100,000 trees, shrubs and other native plants. Many NPLD events included an environmental education component to teach volunteers about land stewardship. In 2013, NPLD focused on promoting the health benefits of outdoor recreation. Sites were encouraged to integrate recreational activities for adults and youth into their events, such as hiking, birding, biking and fishing.

The Department of Defense provides funds to the National Environmental Education Foundation (NEEF) for National Public Lands Day projects on military lands open to the public for recreation. Since 1999, National Public Lands Day has received \$2,232,863.76 through the Legacy Resource Management Program (Legacy). In 2013, a total of \$160,468.09 was distributed to installations for materials and supplies. The Legacy funds were used to enhance Department of Defense (DoD) lands through various cultural and natural resource improvement projects. Participating in NPLD provides the natural and cultural resource managers the means and labor to complete small installation-specific projects that may not otherwise get done due to budget or staffing limitations. These projects improve habitat and biodiversity for common and rare species alike, often reducing the need for intense management of these species.

The National Environmental Education Foundation received 30 applications for Legacy awards of up to \$6,500 each for 2013 NPLD projects. In September, NEEF notified 30 sites that they were selected to receive a Legacy Resource Management Program Award. NEEF awarded Legacy funds to sites by sending payment directly to the installation or reimbursing vendors for all items purchased that pertained to the awarded project. The branches awarded Legacy Resource Management Program funding consisted of 10 Air Force, eight Army, seven Army/Air National Guard and five Navy sites.

Over 1,100 volunteers took part in various natural and cultural resource improvement activities that were offered at the 30 Legacy sites. Many Legacy sites organized work projects to improve habitat for pollinator species including bees, birds, bats and insects. Other natural resource activities performed by volunteers included removing invasive plants, restoring rivers, enhancing dunes, constructing trails and planting native trees and wildflowers. The cultural resource activities included preserving burial sites, repairing historic structures and installing educational signage.

# Legacy Sites 2013

<b><u>United States Air Force</u></b>	<b><u>Amount Awarded</u></b>
Beale Air Force Base   California	\$6,250.00
Bellows Air Force Station   Hawaii	\$6,496.00
Hurlburt Field   Florida	\$6,500.00
Joint Base Charleston-Weapons   South Carolina	\$3,000.00
Joint Base San Antonio-Camp Bullis   Texas	\$6,500.00
Joint Base San Antonio-Lackland   Texas	\$3,250.00
Joint Base San Antonio-Randolph   Texas	\$3,250.00
McConnell Air Force Base   Kansas	\$6,471.15
Shaw Air Force Base   South Carolina	\$6,500.00
Tyndall Air Force Base   Florida	\$6,500.00
<b><u>United States Army</u></b>	
Fort A.P. Hill   Virginia	\$3,850.00
Fort Bragg   North Carolina	\$1,850.00
Fort Leavenworth   Kansas	\$4,400.00
Fort Riley   Kansas	\$1,500.00
Joint Base Lewis McChord   Washington	\$6,500.00
Joint Base San Antonio-Fort Sam Houston   Texas	\$6,500.00
Makua Military Reservation (Kahanahaiki)   Hawaii	\$6,368.38
Redstone Arsenal   Alabama	\$6,487.50
<b><u>United States Army/Air National Guard</u></b>	
Biak Training Center   Oregon	\$5,870.32
Camp Dawson Army Training Site   West Virginia	\$3,559.65
Camp McCain Training Center   Mississippi	\$5,573.65
Diamond Head State Park   Hawaii	\$6,500.00
Fort Custer Training Center   Michigan	\$6,500.00
Fort Indiantown Gap   Pennsylvania	\$6,500.00
Fort Jackson/McCrary Training Center   South Carolina	\$4,294.72

**United States Navy**

Joint Base Pearl Harbor-Hickam   Hawaii	\$6,482.72
Joint Regions Marianas Naval Base   Guam	\$4,856.00
Naval Air Station Fallon   Nevada	\$6,048.00
Naval Support Activity Hampton Roads   Virginia	\$5,610.00
Naval Weapons Station Seal Beach   California	\$6,500.00



## United States Air Force

### Beale Air Force Base | California Natural Resource Project: Riparian Habitat Enhancement

#### Pollinator Project

**Project Date:** October 11-12, 2013

**Project Summary:** The goal of this project was to improve riparian habitat along a nature trail. Volunteers contributed 200 hours and removed a few tons of invasive vegetation to improve the trail and creek habitat. Volunteers also repaired benches and a footbridge, installed another footbridge, replaced nature trail signs and painted signposts. Several bat boxes and native bee nesting posts were put up so visitors can view these elusive species.

These enhancements allow visitors and family living on base to gain an appreciation for Beale's natural resources and feel more connected to the environment.

**Contact:** Bridgette Kirk, Natural Resources Staff Biologist | (530) 634-4391

### Bellows Air Force Station | Hawaii Cultural and Natural Resource Project: Sand Dune Restoration

#### Pollinator Project

**Project Date:** September 28, 2013 and November 24, 2013



**Project Summary:** Over two workdays, volunteers participated in sand dune-out plantings and contributed 374 volunteer hours to enhance 400 square meters of sand dunes. These plantings captured new sand to stabilize the dune ecosystem. Volunteers spread mulch, removed invasive plants and planted 12 Ironwood trees and 1,000 native Hawaiian plants. An irrigation system was also installed to water the plantings during the first two months.

The planting events began and ended with a native Hawaiian blessing and ceremonial chant performed by a local Hawaiian Kahu (Minister). Volunteers were briefed on Hawaiian customs to ensure they acted respectfully to protect the land. Volunteers were also trained on coastal native plant identification and propagation and learned proper methods to

identify and remove invasive plants. The University of Hawaii Environmental Internship Program will continue to support the dune restoration projects at Bellows to ensure continued success.

**Contact:** Craig Gorsuch, Environmental Program Manager | (808) 259-4213

## Hurlburt Field | Florida

### Natural Resource Project: Nature Trail Realignment and Habitat Restoration

#### Pollinator Project

**Project Date:** September 28, 2013 and November 16, 2013

**Project Summary:** Because of planned family housing construction, 170 volunteers worked to provide uninterrupted access to the Grace Brown Nature Trail that would have otherwise been impacted by the construction. Over two workdays, volunteers rerouted and mulched approximately 350 feet of trail, relocated and installed signs, planted 80 trees and installed five nesting boxes. With no water and limited access, crews used mules to transport water from fire hydrants to water the trees by hand. Skilled volunteers from the Civil Engineer squadron constructed a viewing platform and mounted observation binoculars to establish a new barrier island interpretative station. The new signage and habitat enhancements will result in an enjoyable and educational experience for new housing residents who will begin using the area next summer.



An overview of the importance of the area was discussed and a brief how-to on tree planting was also provided. Small-group discussions about plant identification, cultural resources and birding occurred throughout the work days. Additionally, volunteers learned about the area's cultural history and how to protect it as went by a 1.5-mile trail that crosses two protected archaeological sites

**Contact:** Kristal Walsh, Natural Resources Manager | (850) 884-7916

## Joint Base Charleston/Weapons | South Carolina

### Natural Resource Project: Sustainable Trail Improvements

**Project Date:** September 28, 2013

**Project Summary:** Volunteers spent over 200 hours lopping limbs, chopping roots and painting trail blazes along over a mile of the Marrington Multi Use Trail. The local mountain bike community was engaged and was a key partner in the success of the restoration.

This 19 mile trail runs past old plantations and other historic sites from the 1700s, but the path had eroded and contains exposed roots. This was a nuisance and safety concern to bikers and runners. This project will help ensure that the trail is in good shape for many years

**Contact:** Don Watts, Natural Resource Technician | (843) 764-7345

## Joint Base San Antonio-Camp Bullis | Texas Natural Resource Project: Invasive Species Removal and Pollinator Habitat Regeneration

### Pollinator Project

**Project Date:** September 26-28, 2013

**Project Summary:** The project at Camp Bullis removed a half acre of invasive bamboo. Cut bamboo was used as a carbon supply for water harvesting contour bioswales. The rainwater will dramatically increase the rates of groundwater recharge and reduce flooding downstream to Salado Creek basin. This project provided hands on environmental education and taught members of the local community easy ways to regenerate the landscape and increase their local groundwater recharge. The Alamo Area Master Naturalists, Green Spaces Alliance, San Antonio River Authority, Air Force and employees of two local environmental firms contributed 60 hours of volunteer work. Over 200 pounds of trash was removed from the area and 100 pounds of native seed were planted.

**Contact:** Bryan Hummel, Natural Resources Specialist | (210) 295-7761

## Joint Base San Antonio-Lackland | Texas Natural Resource Project: Pollinator Garden Project

### Pollinator Project

**Project Date:** September 28, 2013

**Project Summary:** A combined 100 volunteer hours were spent creating rain gardens with over 200 plants at Lackland Elementary School to capture rainwater runoff from the school downspouts. The gardens will provide a living laboratory for the elementary students to study native plants, pollinators and the life cycle of the monarch butterfly, which is already a unit of learning for second graders at the school. Volunteers included the parent teacher organization, school administrators, the Lackland Robotics Club and students. Volunteers learned that depressed rain gardens will help irrigate the landscape every time it rains and prevent runoff, erosion and flooding damage.

**Contact:** Bryan Hummel, Natural Resources Specialist | (210) 295-7761

## Joint Base San Antonio-Randolph | Texas Natural Resource Project: Pollinator Garden Project

### Pollinator Project

**Project Date:** Several Work Days in September and November 2013



**Project Summary:** Joint Base San Antonio-Randolph partnered with the Joint Base Elementary Schools to install several pollinator rain gardens at the schools. These gardens will provide a living laboratory for classrooms to study native plants, pollinators and the life cycle of native butterflies. Ten raised beds were also built for the science classrooms. In total, 375 plants were planted after 15 pounds of invasive vegetation was removed. The raised gardens are watered by 12 rain barrels that capture runoff from the school buildings. Forty trees were planted to provide shade for the playground.

Volunteers worked eight days over two months. Over 400 hours were contributed by elementary students, parent teacher organizations, the Randolph Garden Club, several environmental organizations and the fire department.

**Contact:** Bryan Hummel, Natural Resources Specialist | (210) 295-7761

## **McConnell Air Force Base | Kansas** **Natural Resource Project: Pollinator Gardens Development**

### **Pollinator Project**

**Project Date:** September 17, 19-22, 28; October 5-6, 2013

**Project Summary:** For his 2013 Eagle Scout project, Adam Hubert expanded the installation's 2012 NPLD Bee Tree project by organizing volunteers to create three pollinator gardens of Kansas wildflowers within a half mile area of their Honey Bee Tree at the Krueger Recreational Area. Over the course of seven days, 1,154 volunteer hours were spent picking up 350 pounds of trash, removing 12 different invasive species and sowing over 100 plants in the garden.

Volunteers learned about the North American Honey Bees and the importance of the flowering plants that sustain them.

**Contact:** James Vause, Outdoor Recreation Director | (316) 759-4435



## **Shaw Air Force Base | South Carolina** **Natural Resource Project: Land Restoration**

### **Pollinator Project**

**Project Date:** September 27-28, 2013

**Project Summary:** At the Poinsett Electronic Combat Range (PECR), volunteers planted wildflowers, native grass seed and other shrubs to improve wildlife habitat. PECR is an active bombing range with limited access due to safety and security. Yet it has a successful recovery program for an endangered species, the Red-Cockaded Woodpecker which prefers an open understory of old growth Long Leaf Pine forest. The Base has 27 active woodpecker clusters. Approximately 50 acres of Long Leaf Pine understory was treated with fertilizer and lime and then seeded. Active duty military, retirees, civil service and private citizens spent 80 hours across two days to improve the understory.

**Contact:** David Davis, Wildlife Biologist/Cultural Resources Manager | (803) 895-1682

## **Tyndall Air Force Base | Florida** **Natural Resource Project: Ponds and Trail Improvements**

**Project Date:** October 5-26, 2013

**Project Summary:** Tyndall Air Force Base volunteers made trail access and safety improvements. More than 100 volunteers cleared overgrown vegetation along three pond shorelines, added handrails to fishing piers, built a pavilion at Horseshoe Lake and added a new fishing pier to Seminole Pond over the span of 12 workdays. A

suspension bridge was damaged down during a storm, so volunteers created a detour trail by clearing vegetation and installing a new 100 foot boardwalk over a wetland. Two and a half miles of trail were built or maintained by civil engineering and communications groups, the 823rd Red Horse Squadron, and students at a local academy under the Tyndall Adopt-A-Trail program which encourages team building and morale among units. In-kind contributions amounted to almost \$15,000.

**Contact:** Wendy Jones, Wildlife Biologist | (850) 527-2009

## United States Army



### Fort A.P. Hill | Virginia Cultural and Natural Resource Project: NPLD at Travis Historic District and Liberty Church

#### Pollinator Project

**Project Date:** September 28, 2013

**Project Summary:** Fort A.P. Hill hosted an NPLD event at a historically significant Civil War site. Eighteen volunteers removed 50 pounds of trash, cleared a quarter of an acre of invasive vegetation, planted 38 flowers and shrubs, rebuilt a replica Civil War hut and split-rail fence around it, and planted two dogwood and two redbud trees. They also erected a sign marking the sesquicentennial of an 1862-1863 winter encampment. Volunteers, including Boy and Girl Scouts, received training on the role of the Archaeological Resources Protection Act on federal lands.

**Contact:** John Mullin, Cultural Resource Manager | (804) 663-8761

### Fort Bragg | North Carolina Natural Resource Project: Debris Removal and Butterfly Planting

#### Pollinator Project

**Project Date:** September 26, 2013

**Project Summary:** Fort Bragg hosted an event to plant Purple Muhly Grass and various perennials to attract butterflies. Additionally the project beautified the library building and walkway. Prior to the event, the area was sorely neglected and lacking plants or curb appeal. Volunteers invested a combined 45 hours to add 116 plantings, new benches and a smoking receptacle. Volunteers also removed 20 pounds of trash and a pickup load of invasive vegetation.

Project leader Minday Love-Stanley said, "Anytime that we can do a project to improve the grounds on the Installation that allow people to enjoy their outdoor experience is fulfilling."

**Contact:** Mindy Love Stanley, Environmental Training and Outreach Manager | (910) 432-8476



## Fort Leavenworth | Kansas Natural Resource Project: Trail Project

**Project Date:** November 18, 2013

**Project Summary:** Volunteers spent 80 hours improving 10 miles of trail and installing two bridges. The event also included educational stations to inform 50 volunteers about the trail, biking, running and herpetology. Volunteers came from the community and represented groups including the Kansas Trail Council, local businesses, the Kansas Herpetological Society and Fort Leavenworth's Department of Public Works.

Natural resources specialist Matthew Nowak said that the project "provided an opportunity for several young officers to demonstrate their organizational and leadership skills as well as their engineering abilities while managing the project. As a result, an old historic woodland road system that has been eroded in many places is being re-made into a sustainable trail system."

**Contact:** Matthew Nowak, Natural Resources Specialist | (913) 684-8979

## Fort Riley | Kansas Natural Resource Project: Nature Trail Improvements

**Project Date:** September 28, 2013



**Project Summary:** Three work days were held to improve the Kaw River Trail by creating an all-weather surface for visitors to enjoy. Ten volunteers improved unstable sections of the trail. They installed two split rail fences and signs warning visitors of the loose ground. Trucks dumped gravel on an embankment to the trail site and volunteers worked to use a skid steer and gator to spread the gravel. Walking stones were placed along two low-lying areas prone to flooding.

**Contact:** Mike Houck, Wildlife Biologist | (785) 239-2537

## Joint Base Lewis McChord | Washington Natural Resource Project: Community Garden Restoration

### Pollinator Project

**Project Date:** September 28, 2013

**Project Summary:** Gardeners, soldiers and airmen invested 40 hours of their time to improve a community garden on McChord Field. Ten volunteers weeded and added soil to 30 raised garden beds, removed 20 pounds of trash and built a shed. Now that the garden is restored, it is used by many retirees, government civilians, families and single service members. Additionally the garden provides therapeutic benefits for post-traumatic stress disorder.

**Contact:** Miriam Easley, Sustainability Outreach Coordinator | (253) 966-1734

## Joint Base San Antonio-Fort Sam Houston | Texas Natural Resource Project: Rain Gardens for Pollinators

### Pollinator Project

**Project Date:** September 28, 2013

**Project Summary:** Over three days, volunteers spent 60 hours removing invasive bamboo. The cut pieces were then arranged as part of bioswales to slow erosion and to recharge the groundwater supply. About 200 pounds of trash were removed, two pounds of seed were collected and 100 pounds of native seed were planted for pollinators. Groups that participated were The Alamo Area Master Naturalists, Green Spaces Alliance, The San Antonio River Authority, The Air Force, and the employees of two environmental firms.

**Contact:** Bryan Hummel, Natural Resources Specialist | (210) 295-7761

## Makua Military Reservation | Hawaii Natural Resource Project: Invasive Weed Control

### Pollinator Project

**Project Date:** November 9, 2013

**Project Summary:** The installation is on the island of Oahu, home to 44 endangered species and some of the island's last remaining native forest habitat. Eight volunteers hiked to the restoration site, guidebook in hand, and learned about the area's natural and cultural resources. A quarter of an acre of invasive strawberry guava, Koster's curse and Lantana camara were removed. This will allow native plants to take root, including the hosts for endemic Hawaiian insects such as the umii akoko and the kamehameha butterfly.

Environmental Outreach Specialist Celeste Ventresca said, "Members of the community had the chance to see endangered Achatinella tree snails, which are prominent in Hawaiian folklore and are only found on the island of O'ahu. Giving volunteers the chance to volunteer in their own backyards gives the community a greater sense of connection to their home and the environment around them."

**Contact:** Celeste Ventresca, Environmental Outreach Specialist | (808) 656-7741

## Redstone Arsenal | Alabama Cultural and Natural Resource Project:

### Pollinator Project

**Project Date:** September 30, 2013

**Project Summary:** Redstone Arsenal partnered with Path to Nature, an outdoor education center, to improve the grounds next to the environmental classroom. The event began with an educational presentation explaining the tasks available and the benefits to wildlife and the community the work will bring. Volunteers were allowed to choose which task suited their abilities and interests. They planted 30 pollinator friendly plants, performed five miles of trail maintenance, removed 50 pounds of trash, repaired mud walls on the Mud Hut and fixed a split rail fence.

**Contact:** Shannon Allen, Ecologist/NEPA Specialist | (256) 876-3977

## United States Army/Air National Guard



### Biak Training Center | Oregon Natural Resource Project:

**Project Date:** September 20, 2013

**Project Summary:** Seventy-five volunteers from the Youth Challenge Program, the Heart of Oregon Corps and local Scout Troops recovered and replanted a burned area and removed 2,700 pounds of trash from all affected sites, covering a total of 6,500 acres. Infrastructure such as cattle guards and gates were cleaned and painted, invasive species and ground fuels were removed and dangerous limbs from trees were cut down.

These volunteer efforts helped to sustain this training area for future use by the military and for recreational use by the public. Young volunteers were educated on the importance of public lands and how it benefits the military, the public and future generations.

**Contact:** David J. Duncan, ITAM/Environmental Manager | (541) 923-8943

### Camp Dawson Army Training Site | West Virginia Natural Resource Project: Interpretive Trail Enhancements

**Project Date:** October 5, 2013

**Project Summary:** Eighteen volunteers and four Camp Dawson staff members continued with the development of an interpretive trail in Dawson's Volkstone Training Area, a project worked on in previous years for the DoD Legacy Award. Participants constructed three recycled plastic picnic tables for use on the common access deck and cleared and treated the existing boardwalk with preservative. The trail, located in a bottomland hardwood forest, will showcase the unique aspects of riparian habitats to future visitors.

This trail will be utilized for a natural educational experience by community schools, Boy Scouts, Girl Scouts and other local groups. Camp Dawson provides an interpreter, which allows for community outreach and education as select bottomland tree and wetland species are tagged with their common and scientific name.



**Contact:** Rick Chaney, ATS Environmental Manager | (304) 791-4135

## **Camp McCain Training Center | Mississippi Cultural and Natural Resource Project: Cemetary Enhancements**

### **Pollinator Project**

**Project Date:** November 15, 2013

**Project Summary:** Volunteers were involved in a cemetery clean up and marker dedication to help restore two historical cemeteries. Participants improved fencing, removed 50 pounds of trash and enhanced habitat for honeybees and other native pollinators.

The Camp McCain Training Center Environmental Officer gave a briefing that explained the mission of Camp McCain and the history of the cemeteries. The local newspaper published an article about Camp McCain's NPLD project, which generated interest in the community for future projects.

**Contact:** Mark Williams, Natural Resources Specialist | (662) 294-0305

## **Diamond Head State Park | Hawaii Natural Resource Project: Native Plant Garden Maintenance**

### **Pollinator Project**

**Project Date:** September 28, 2013 and December 7th

**Project Summary:** Eighty cadets from the Youth Challenge Academy (YCA) program distributed over 70 yards of mulch, pulled weeds, and planted over 2,100 native plants to maintain a native plant garden within the Diamond Head Crater. This effort took place at two different planting locations that the public can walk through and enjoy. After the plantings, the YCA conducted a park-wide trash cleanup and removed over 160 pounds of trash.

The cadets at the YCA were at-risk teenagers who got the chance to learn about native Hawaiian plants and the history behind the island, specifically Diamond Head Crater. Most importantly, this event gave these young teenagers a sense of pride in the work that they accomplished. Many have said they would like to come back after graduation to check on the gardens.

**Contact:** Kristine Macdonald, Outreach Coordinator | (808) 672-1264

## **Fort Custer Training Center | Michigan Natural Resource Resource Project: Habitat Enhancement**

### **Pollinator Project**

**Project Date:** September 21-22, 2013

**Project Summary:** Over two days, volunteers spread native seed mixes in recently disturbed areas to promote native flora populations and native pollinators. Volunteers also planted 120 trees to help prevent soil erosion and reduce energy consumption in buildings by providing wind and sun shelter.

This event not only showed volunteers the positive result from teamwork and cooperation, but educated them on current issues in natural resource management such as invasive species management, soil erosion and sedimentation control, energy consumption and struggling pollinator populations.

**Contact:** Jonathan Edgerly, Natural Resource Analyst | (269) 731-6571

## Fort Indiantown Gap | Pennsylvania Natural Resource Project: Native Species and Pollinator Conservation

### Pollinator Project

**Project Date:** September 14-October 12, 2013

**Project Summary:** Fort Indiantown Gap (FIG) is the only live-fire, maneuver military training facility in Pennsylvania. To help beautify the installation and improve the integrity of the habitat, Fort Indiantown Gap organized four different events that were attended by 36 volunteers that contributed 184 volunteer hours.

These four projects included removing trash and debris, removing invasive brush, collecting native seed and improving outdoor recreation opportunities. Before each event, a safety brief was held to introduce FIG and the project. These projects improved a habitat that is part of the Chesapeake Bay Watershed. The native seed collected will support conservation of the regal fritillary butterfly. Fort Indiantown Gap is one of the only two eastern locations with habitats that support this species of butterfly.

**Contact:** Rita Meneses, Cultural Resource Manager | (717) 861-9415



## Fort Jackson/McCrary Training Center | South Carolina Natural Resource Project: Interpretive and Fitness Nature Trail Maintenance

**Project Date:** November 15, 2013

**Project Summary:** Over forty volunteers from the sixth grade Lugoff/Elgin Science Club created a new kiosk at a trail entrance located on the cantonment area of the McCrary Training Center. After a brief talk about the importance of NPLD and how their volunteer actions will aid future visitors, participants went on a nature walk which included reading interpretive signs along the way. The nature walk ended at Colonels Creek with a discussion about how to monitor the health of streams. Afterwards, volunteers were given a chance to perform several tests on the creek using water sampling kits that were provided. After discussing the results of the tests, the group headed to our outdoor classroom for a lunch provided by the McCrary environmental department.

**Contact:** Layne Anderson, Natural Resource Manager | (803) 299-2237

## United States Navy



### Joint Base Pearl Harbor-Hickam | Hawaii Cultural and Natural Resource Project:

**Project Date:** September 28, 2013; November 16 and 21, 2013

**Project Summary:** Joint Base Pearl Harbor-Hickam held three (3) NPLD events honoring the 20th Anniversary of National Public Lands Day. The natural resource projects involved removing debris from Nimitz Beach and planting native vegetation as well as removing invasive mesquite trees and pickleweed to restore the Ahua Reef Watershed. Additionally, volunteers enhanced a cultural resource, the Halealoha Haleamau Burial Platform. Volunteers trimmed Naupaka hedges, removed invasive weeds and enhanced the burial platform with smooth `ili`ili river rock.

Groups that participated included local Girl Scout troops, a NEEF corporate partner, a middle school environmental club and Wai`anae Mountains Watershed Partnership, a nonprofit based in the region. These volunteers along with representatives from the installation contributed 500 hours of service work. In that time, they added 70 plants, picked up 400 pounds of debris and removed 2,000 pounds of invasive vegetation. All of the events included an educational discussion led by subject matter experts specific to each activity.

**Contact:** Patricia Colemon, Environmental Protection Specialist | (808) 473-0369

### Joint Regions Marianas Naval Base | Guam Natural Resource Project: Invasive Plant Removal and Native Plant Habitat Enhancement

#### Pollinator Project

**Project Date:** September 29 to October 4, 2013

**Project Summary:** The project was completed as six volunteer days. Two days were spent removing invasive vegetation from a sea turtle nesting beach. Because the project heavily involved a local middle and elementary school, four days were spent educating students about sea turtles. Presentations featured facts about life cycle, threats to sea turtles including invasive plants on nesting beaches, endangered species status and what everyone can do to help save the sea turtles. Prior to the presentations, students created posters that were showcased throughout each school's science classes.

**Contact:** Gretchen Grimm, Natural Resources Specialist | (671) 339-2158



## Naval Air Station Fallon | Nevada Natural Resource Project: Land Restoration

### Pollinator Project

**Project Date:** October 1-3, 2013

**Project Summary:** The Veterans Park Project's 42 volunteers successfully installed walking paths throughout the park, built a gazebo with a central memorial to Veterans, mulched planting beds, planted a windbreak of junipers and seeded wildflowers and added additional parking. The majority of materials for this project were no-cost re-used materials, including asphalt grindings recycled from the old runway, sand leftover from past road projects, wood chips recycled from excess wood pallets and manure from the Navy's horse stables. A local store provided 500 pounds each of shredded paper and cardboard, which were used for the sheet mulch layers in the plant beds. The aesthetically pleasing sheet mulch will enhance the soil over time as the materials breakdown, while encouraging earthworms and discouraging weeds.



**Contact:** Anna Keyzers, Natural Resources Specialist | (775) 426-2922

## Naval Support Activity Hampton Roads | Virginia Natural Resource Project: Riparian and Shoreline Restoration

### Pollinator Project

**Project Date:** November 15, 2013

**Project Summary:**

At the Naval Support Activity Hampton Roads project volunteers created a riparian buffer by planting native vegetation and restored the shoreline. The day began with an orientation covering the history of the site, as well as the importance of riparian forest buffers and shoreline stabilization. Volunteers were given detailed instructions on the proper techniques to plant shrubs and wetland grasses. Then, 20 volunteers planted 845 native grasses and shrubs including Smooth Cordgrass, Saltmeadow Cordgrass, Highbush Blueberry, Wax Myrtle, Marsh Hibiscus and High-tide Bush. The plantings enhanced about 500 linear feet or an estimated .263 acres.



The natural will significantly benefit the natural environment and local wildlife populations. The riparian buffer helped stabilize stream channels and shorelines. Vegetation reduces pollution by trapping and filtering sediments, nutrients and other chemicals, keeping them from running off into local waterways. Additionally, the plants supply food, cover and shade for fish and other wildlife in the area

**Contact:** Linda Hicks, Environmental Program Director | (757) 836-1862

# Naval Weapons Station Seal Beach | California

## Natural Resource Project: Habitat Restoration

### Pollinator Project

**Project Date:** November 23, 2013

**Project Summary:** Naval Weapons Station and Seal Beach National Wildlife Refuge hosted a volunteer event to restore several acres of upper salt marsh habitat and adjacent upland habitat. The property at Seal Beach is unique in that the Department of the Navy, through Naval Weapons Station Seal Beach, the Department of the Interior, through the U.S. Fish and Wildlife Service's Seal Beach National Wildlife Refuge, and the Friends of the Seal Beach National Wildlife Refuge are in a formal partnership aimed at promoting the conservation of natural resources on the public lands encompassed by Naval Weapons Station Seal Beach.

This year's project included removal of invasive plants, preparing the land for restoration and planting native plants. Volunteers contributed a total of 720 hours of service to plant over 1,000 native shrubs and flowers in the prepared area. The highest number of plants since the first of these annual events 10 years ago., These upland restoration areas provide habitat and shelter for state and federally-listed endangered bird species, including the federally-endangered light-footed clapper rail and California state-endangered Belding's Savannah Sparrow. These areas also provide an important buffer between wetland habitat and agricultural lands.

In addition to military personnel, volunteers included Boy Scout and Girl Scout troops and students from local elementary, middle, and high schools. Additional volunteers from the Sunburst Youth Academy, Boeing, Wells Fargo and the Disney Corporation rounded out the workforce.

**Contact:** Bob Schallmann, Conservation Program Manager | (562) 626-7290