

FY 2003 SECRETARY OF DEFENSE ENVIRONMENTAL AWARDS PROGRAM

ENVIRONMENTAL QUALITY—INDIVIDUAL

LTC RONALD SWAFFORD

HAWAII ARMY NATIONAL GUARD

FORT RUGER, HAWAII



BACKGROUND

Lieutenant Colonel Ronald Swafford establishes a solid foundation and positive tone for readiness and excellence in the Army National Guard's Aloha State presence. His position involves oversight for the planning, programming, implementation, administration, records maintenance, funds management and monitoring of all programs relating to the Hawaii Army National Guard's (HIARNG) compliance with federal, state and local regulations and statutes. Swafford runs highly integrated "phantom" environmental programs that enable soldiers to accomplish their missions without doing anything extra to protect or enhance the environment.

LTC Swafford is the Supervisory Environmental Protection Specialist of the Hawaii Army National Guard Facility Management Office's Environmental Branch (HIARNG-ENV), at the HIARNG Headquarters at Fort Ruger, near the world-renowned Diamond Head Crater in Honolulu on the island of Oahu. Swafford promotes the integration of the National Guard's statewide environmental planning into organizational protocols that more practically govern the HIARNG's compliance, conservation, prevention, restoration, military training and program management initiatives. Swafford developed a reputation for encouraging the protection of environmental resources and reducing both environmental impacts and associated costs through innovative ideas and effective management.

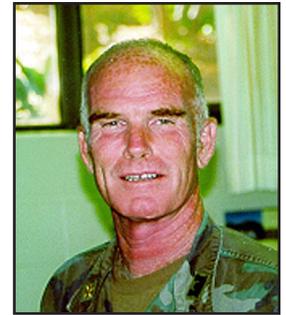
Swafford looks for every possible way to increase effectiveness and efficiency by providing an operations staff that seamlessly integrates sound

environmental practices, which is as important to the success of HIARNG's environmental initiatives as solid planning and community involvement. Operating with this broad perspective, he leads efforts that include:

- Developing quality installation-wide environmental programs and promoting organizational awareness and unit participation to achieve and maintain environmental compliance.
- Managing HIARNG environmental programs and compliance activities with primary emphasis on achieving program objectives and reducing overall project costs, sometimes by balancing the use of in-house staff with staff from various agencies and institutions to manage a comprehensive and cost-effective program.
- Educating officers and non-commissioned officers about environmental programs and compliance initiatives to communicate that environmental protection and stewardship are not detrimental to military readiness—and in fact can improve readiness through efficiency.

POSITION DESCRIPTION

The HIARNG-ENV holds the responsibility of ensuring compliance with environmental laws and regulations. HIARNG-ENV oversees the HIARNG's Ecosystem Management Program and monitors the impacts of Army and aviation units throughout the Hawaiian Islands. The wide range of program areas under Swafford's purview include mission and training compliance, endangered species protection and recovery, pest management, wetlands management,



▲ LTC Ron Swafford proves that readiness, mission-focus and environmental restoration and conservation are not mutually exclusive concepts.

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land rehabilitation, cultural resource assessment, integrated natural resources management plan reviews and updates, environmental awareness and training impact awareness. His office also coordinates environmental project reviews, grant acquisitions, and land and other partnership agreements.

ACCOMPLISHMENTS

Program Integration

Judging Criteria: Program Management, Transferability

Program Breadth: Full environmental compliance, cost controls, innovation in procedures

LTC Swafford supervises HIARNG's Environmental Branch, a group with duties including conservation, compliance and restoration. Staff within this three-pronged structure includes environmentalists, trainers, engineers, pest eradication specialists and recycling experts. LTC Swafford also enlists the help of a large number of interns, students and volunteers. With the assistance of this group, he plans, organizes, directs and evaluates the HIARNG's environmental priorities and oversees the budget process to ensure that financial resources and obligations are leveraged to achieve and maintain environmental compliance. In addition to his innovative planning and oversight of Hawaii's resource management for compliance, conservation, and training programs, he ensures that the state continues to excel in meeting environmental goals and awareness objectives.

His environmental program was the first to use personnel from governmental agencies and volunteer organizations extensively, rather than contracting

companies to write reports, conduct research and represent the HIARNG as professional consultants. A cooperative agreement with the University of Hawaii (UofH) at Manoa enables the HIARNG to contract services from the UofH Pacific Cooperative Studies Unit for in-house employees and interns. LTC Swafford also enlists

the assistance of other agencies—such as the U.S. Army Environmental Center, the U.S. Army Center for Health Promotion and Preventive Medicine and the U.S. Department of Agriculture—as partners in protecting and restoring the environment. The in-house staffing concept was so innovative and unusual that the HIARNG-ENV led other Army National Guard installations in the practice for more than five years. However, the money savings are so substantial—savings in the millions of dollars, which the accounting staff from the Secretary of Defense validated twice—many similar Army National Guard offices around the country are adopting Swafford's best management practices. LTC Swafford's technique of leveraging efforts from across his and other government agencies have allowed his program to stabilize at a budget of \$2 million per year, substantially down from the \$8 million to \$10 million in unfunded

Awards and Services

- The Secretary of Defense Environmental Security Award, Natural Resources Conservation, 1999
- Recognition from various agencies and organizations:
 - U.S. Fish and Wildlife Service (2002)
 - Environmental Protection Agency Region 9 (2000)
 - State of Hawaii Office of Environmental Quality Control (1999-2002)
- National Guard Bureau-Army Environmental Division Environmental Advisory Board Training Chairman
- HIARNG Combined Federal Campaign Coordinator, State Incentive Award Chairman
- Founding member, Hawaii Pollution Prevention Partnership (HP3)

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HIARNG estimated that the in-house staffing strategy creates an eight to one savings ratio, based on the costs incurred prior to 1996, for contractors to do projects, integrated plans or reports. The HIARNG determined this by comparing natural resource management personnel costs, estimated at approximately \$600,000 in fiscal year 2002, with estimated contract costs totaling \$4.8 million, according to the Secretary of Defense Independent Certified Public Accountant (CPA) report entitled “Statement of Process Improvements and Related Benefits Generated by the Hawaii Army National Guard Environmental Section’s Natural Resource Management Projects at Diamond Head, Oahu, Hawaii.”



▲ Fort Ruger’s location near Diamond Head Crater on the Hawaiian island of Oahu—one of America’s most treasured environments—makes Swafford’s mission all the more vitally important.

assets, the program runs more efficiently with the capability for tailoring to the specific military users and natural resources on Army National Guard lands statewide. Since the establishment of the in-house staff in 1998, HIARNG-ENV completes projects and other tasks, which contractors found difficult to accomplish because they lacked an intimate knowledge of HIARNG’s unusual challenges and responsibilities. In addition to many other activities, the in-house staff developed awareness materials for use by soldiers during training exercises, prepared successful grant proposals and conducted community outreach while realizing those same cost and time savings.

LTC Swafford and his team completed and administered more than 25 management plans, many of which have incorporated graphics and easily-understood language with the help of Web-based software. The management plans account for each HIARNG site’s unique needs and requirements while the system continues to improve with his early adoption of the Geographic

LTC Swafford’s technique of leveraging efforts from across his and other government agencies have allowed his program to stabilize at a budget of \$2 million per year, substantially down from the \$8 million to \$10 million in unfunded requirements experienced yearly before his program took hold.

The following excerpt from the Secretary of Defense Independent CPA report, issued in December 2002, sums up Swafford’s approach to cost management vs. performance:

“HIARNG-ENV’s use of in-house staff has been very cost-effective and the quality and quantity of work they produce is much higher than when work was contracted out separately. It also receives valuable and indispensable help from volunteers and student interns. Volunteers come from schools, private groups, state organizations and environmental protection organizations. Work done now to eradicate alien species like fountain grass and to protect forests and wetlands saves HIARNG and the state of Hawaii from much greater costs in the future.”

An additional benefit to in-house staffing is that Swafford’s environmental team can better guide and more closely monitor the work. With this immediate oversight and first-hand knowledge of HIARNG’s unique challenges and

Information Systems (GIS) Enterprise software. HIARNG is one of five National Guard headquarters piloting the GIS Enterprise software, which provides an all-encompassing picture of each facility—ranging from people and training status to inventories and endangered species lists, all with plenty of images to improve comprehension. This system not only allows greater understanding of environmental issues impacting lands under the HIARNG’s purview, it also means that each site can accommodate both the generic, state-wide plan—such as an overarching spill response protocol—while also making available the detailed, site-specific response templates.

The chart below illustrates the relationships LTC Swafford cultivated with several of HIARNG-ENV’s partners. Through networking, relationship building and a talent for finding the straightest line between two points, LTC Swafford identified organizations and individuals who have the expertise

required to fill a particular need. By leveraging these relationships, he efficiently and cost-effectively retains the expertise the HIARNG-ENV needs to achieve a particular goal, such as devising a noise reduction plan or instituting a pest management plan. For example, he was able to identify and retain a predator control specialist to cover multiple sites under HIARNG-ENV’s control for the same cost as contracting the job for just one site.

Incidentally, Swafford’s principles actively reach beyond the scope of the HIARNG. Many of his employees—disciples to the Swafford way—have gone on to other agencies, taking the training, tutoring and mentoring gained at HIARNG with them. Organizations including the U.S. Fish and Wildlife Agency, the U.S. Forest Service and other public, private and military agencies are now beneficiaries of Swafford’s unique practices of networking and identifying efficiencies where none were thought possible. In return, the network Swafford depends

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HIARNG Leverages Partners for Critical Services and Expertise

Partner	Role	Program Contribution
U.S. Army Environmental Center	Validate EPR projects & training	Ensure that HIARNG has the right federal agency/agent to support complicated issues
U.S. Army Center for Health Promotion and Preventive Medicine	Expert guidance & training	Noise survey & management plan
U.S. Geological Survey	Expert guidance & training	Stormwater survey & management plan
U.S. Department of Agriculture	Field work with design/plans	Predator control (i.e., fencing & trapping)
Environmental Protection Agency	Advisor	Pacific Rim Resource Center liaison
U.S. Fish and Wildlife Service	Expert guidance & training	Endangered species survey, out-planting & management plan
Hawaii Pollution Prevention Partnership	Round table participant	Brainstorming major pollution problems & resolving issues
Maui, Hawaii, and Oahu Invasive Species Councils	Round table information & participant	Support with equipment & personnel

on for expertise continues to grow as former personnel branch out into other organizations.

Water Pollution Control

Judging Criteria: Program Management, Technical Merit, Orientation to Military Readiness

Program Breadth: Environmental compliance, water supply and waste water abatement, spill prevention, preparedness and planning for emergency response, environmental education and training, innovations in procedures, monitoring impacts, and mitigation measures

Swafford concentrated on point and non-point pollution sources. This focus resulted in increased waste minimization efforts and pollution prevention actions, which reduced or eliminated adverse impacts and liability of the HIARNG.

To achieve its source reduction goal, the team purchased equipment that allows and encourages containment of pollutants and recycling of water, including 12 oil/water separators with a recyclable water system and secondary containments for fuel tankers at two Combined Support Maintenance Shops, four Organizational Maintenance Shops and two Army Aviation Support Facilities. LTC Swafford took an innovative approach to training by utilizing equipment at HIARNG's Unit Training Equipment Site (UTES) facility to educate weekend soldiers during everyday operations.

Readiness and integration of environmental practices are the same under this colonel's direction. LTC Swafford integrates environmentally sound practices into training and

the mission to prevent detracton from readiness. For example, he uses a 10 feet by 10 feet modular secondary containment units in his spill control training and as part of his operational protocol. The smaller secondary containment units are far more manageable than traditionally large containment devices; therefore, personnel setup every tank pump unit on secondary containment; that way, if a spill occurs, it is already contained. Combining such practices with common sense instruction for field operations—such as always setting up pump units on high ground away from water in areas that are easily accessed for refueling operations—Swafford integrates operational and environmental training. According to LTC Swafford, environmentally sound practices become second nature to Guardsmen who follow his protocols, and the same practices work no matter where the Guardsmen are in the world.

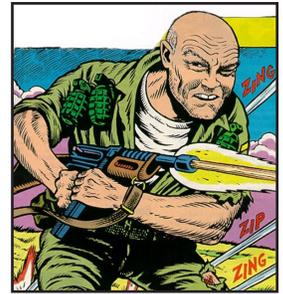
HIARNG has had no spills since 1998. This is especially impressive when 26 states, two countries and three territories used LTC Swafford's HIARNG Field Spill Prevention and Countermeasure Plan at the Joint Readiness Training Center while supporting Hawaii's 29th Infantry Brigade during that time. He ensures that personnel trained become as hardwired for sound environmental practices as operational protocols.

Noise Pollution Control

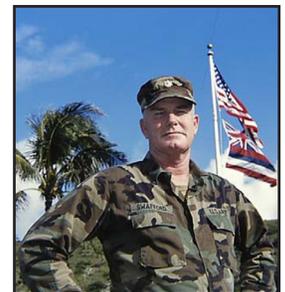
Judging Criteria: Technical Merit

Program Breadth: Noise pollution abatement

HIARNG-ENV collaborated with the U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM) to



▲ LTC Swafford is an “environmental warrior” to those who work with him or undergo training at HIARNG facilities.



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survey aviation, headquarters and maintenance sites for noise violations and time management of equipment movement. The survey resulted in an Ambient Noise plan, program and model. Implementation of the program resulted in fewer complaints from the communities and an excellent recording procedure for the public affairs office, which reports on noise control performance to the governor's office annually. The evolution of this decade program, now addresses modern challenges such as small arms training and adopting streamlined features such as computer-based tracking. LTC Swafford's teams must coordinate complex neighborhood restrictions on usage of military vehicles—in terms of both location and hours of operation—while maintaining a viable training schedule. HIARNG-ENV also anticipates when loud noise would negatively affect the nesting of species that call Hawaii home. Lastly, safety incorporates environmental noise control with personal noise training, again with the goal of making a seamless connection between environmental and operations protocol.

Waste Management and Resource Recovery

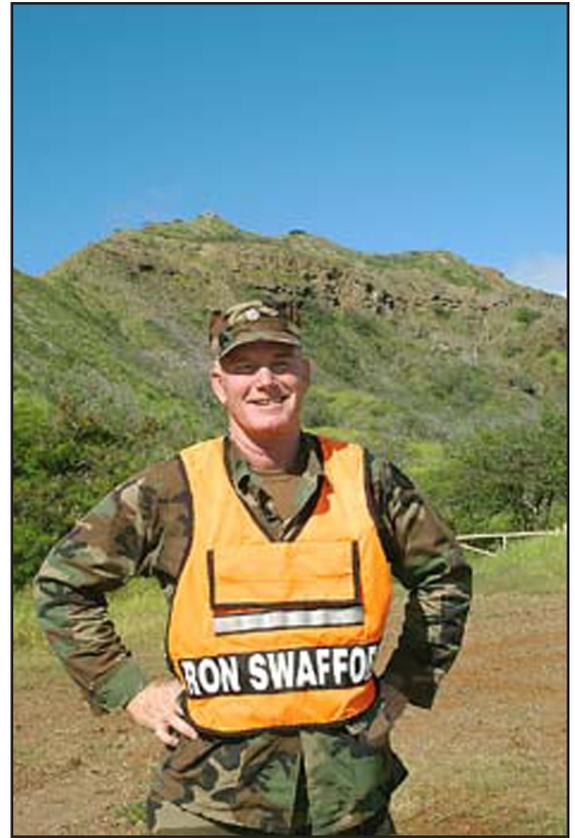
Judging Criteria: Program Management, Technical Merit, Orientation to Military Readiness

Program Breadth: Solid waste management, environmental education and training, innovations in procedures Swafford led a focused effort to rewrite and update the Guard's Solid Waste Management Plan and the Hazardous Waste Management Plan. HIARNG manifested success with a 50 percent reduction of solid waste to the landfill

and no notices of violations over the past two fiscal years. In addition, the purchase of 21 biodegradable parts washers and 20 weapon cleaners ensured that soldiers would spend less time on maintenance and more time preparing for mission-essential tasks. Soldiers at all levels use filter crushers, aerosol can reclamations, paper shredders and cardboard balers; the result of which is the avoidance of more than 100 tons of waste that otherwise would go to landfills. In addition, every shop has oil filter crushers and antifreeze reclamation machines with re-use tanks.

Per the plan, shop areas have designated holding areas for recyclable materials, which greatly benefits efficiency and readiness because the shop areas are free of debris. In addition, the sorting practice of properly containing recyclables is just part of the shop areas' standard operating procedures—environmental practices are not a separate step, but a help by getting trash such as cardboard and oil filters out from underfoot.

LTC Swafford takes recycling on the road when units train off-site. In the past, these training activities required two large roll-off containers to contain



▲ HIARNG-ENV personnel follow LTC Swafford's lead to seamlessly integrate training and operational requirements with preservation of environmental features and native species.

“If you ain't driving training...you ain't working!”

—LTC Ron Swafford

the resulting trash. Realizing that most of the space in the roll-off was from cardboard, he now takes a transportable tire baler to compact the recyclable cardboard. The reduction in bulk refuse means that HIARNG only requires one roll-off container for remote training sites. This best management practice also eliminates a separate step to sort recyclable cardboard when units return to their home-station.

Recycling also provides operational training opportunities according to command. Swafford noted that shops hosting vehicle rebuild programs produced a large amount of scrap steel. Rather than contracting a refuse hauler to remove all the scrap, LTC Swafford turned the situation into an opportunity to train Guardsmen who drive large tractor-trailers. By having to secure the large, irregular loads of scrap steel, the Guardsmen get valuable exercise experience by safely loading, securing and transporting cargo that makes any other cargo look extremely simple to handle. At the same time, the HIARNG saves money that outside contract haulers would charge to remove the unwieldy refuse. Units conduct training without a separate step for environmental practices; therefore, soldiers train as they fight—fight the way they trained.

Environmental Research and Education

Judging Criteria: Community Interaction

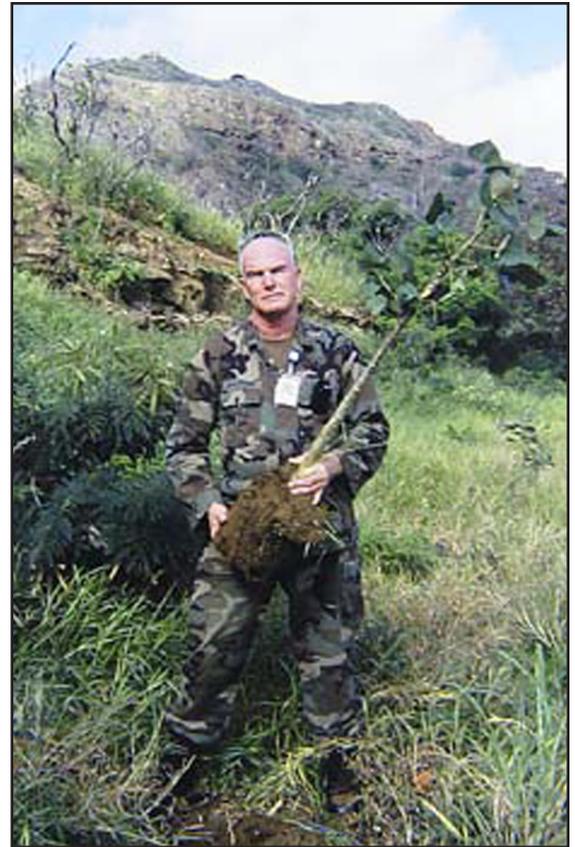
Program breadth: Pest management

LTC Swafford takes pride in his organization's stewardship of the environment on all the islands where personnel live and units conduct training. One of the major initiatives was a series of environmental service

events for some 1,000 high school students from across the state that focused upon planting native plants and weeding noxious (alien) species. In 2002, in the Diamond Head area alone, Swafford and his staff directed a program in which the students planted nearly 8,000 plants. The plantings included 46 different species, with 12 tree species, 19 shrub species, 13 groundcover species and two sedge species.

The HIARNG-ENV Natural Resources Program (NRP) took on another restoration site in September 2001. With the help of funds from a National Public Lands Day grant, the NRP began a forestry project to plant native and Polynesian-introduced canopy trees (*Erythrina sandwicensis*, *Reynoldsia sandwicensis*) in Diamond Head Crater. Volunteers now help to provide the massive amounts of maintenance required to keep the site free of non-native weeds and encourage the growth of native plants. These volunteers are invaluable to NRP personnel in maintaining the diversity and health of these recovering ecosystems.

Once established, the various native species can choke out the non-native weeds, reducing alien plant problems.



▲ One of Swafford's initiatives is the removal of alien plant species from National Guard lands and the implementation of native species out-planting programs.

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In managing the NRP, Swafford temporarily allows the non-native trees to remain and provide shade for the developing plants. Staff will then introduce rare species, increasing the diversity. Plans include planting more trees for shade and for their value in educating visitors about native plants.

With the site’s proximity to the future Diamond Head State Park Visitor Center, this site would be ideal for opening interpretative trails, supplemented with more shrubs that are native as well as other species. Partnerships with park rangers promote public access to adjacent lands, with highly promoted volunteer programs targeting residents of the Hawaiian Islands and beyond, including involvement of local community groups. Swafford himself conducts more than 20 tours each year inside Diamond Head Crater that usually ends with volunteer weed pulling or mulch spreading. He also notes that HIARNG lands are frequently hosts for film crews and “living laboratories” for students, which he supports.

Environmental Compliance Assessment and Management Program

Judging Criteria: Program Management, Technical Merit, Transferability

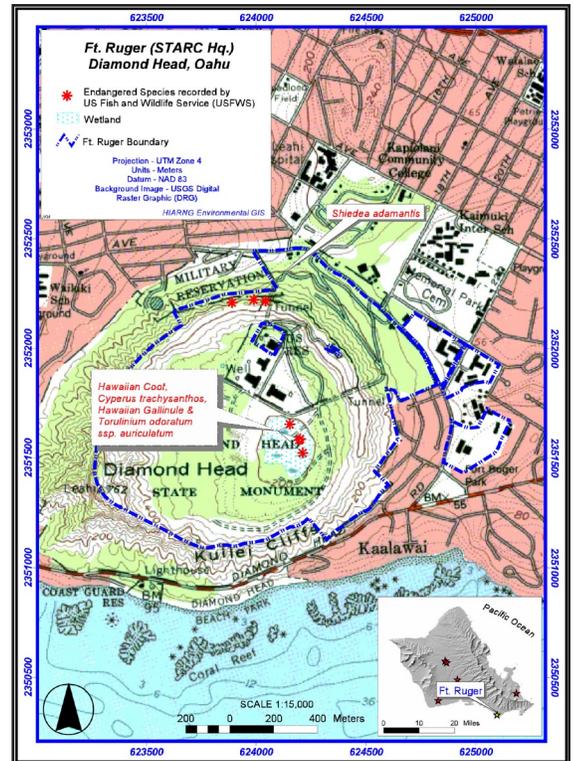
Program Breadth: Full environmental compliance, water supply and waste water management, hazardous materials and hazardous waste management, environmental education and training, cost controls, innovations in procedures

The HIARNG ranks third in the nation in meeting compliance for protocols governing hazardous waste, Petroleum-

Oil-Lubricant and wastewater. LTC Swafford initiated an ongoing review and follow-up procedures that validate the development of the Environmental Performance Assessment System checklist, which in turn validates actual inspections to regulatory agencies. National evaluations of the organization’s environmental compliance and stewardship place the HIARNG near complete compliance, with minimum discrepancies. As stated earlier, HIARNG is one of five pilot state Guards to initiate GIS Enterprise, which allows the staff and facility managers to access findings and supporting regulations through a computer portal.

The program’s budgetary plans focus on identifying each program requirement that qualifies for federal funds. The organization has a strong record of obtaining sufficient funding and maintaining aggressive obligation rates. HIARNG’s budgetary requirements focus through 2010 to ensure continued success with sustained compliance.

Swafford co-authored, designed and published an Environmental Awareness Training and Operations Manual that establishes protocols for units and unit members to reduce fire, disturbance of Hawaiian species and dispersal of “alien” species into the environment



▲ The adoption of Geographic Information Systems (GIS) technology at HIARNG-ENV means that Swafford and his team can use computer images and modeling to oversee and supervise environmental initiatives and other events on National Guard lands.

during training activities. Graphic training aids outlined in the manual serve as the basis for pocket size rare and endangered plant and animal identification cards. The main goal of the state environmental program is to communicate an ethic to all levels of the command and to encourage organization-wide stewardship. LTC Swafford also makes a concerted effort to publish information in local and national environmental publications about the initiatives and successes of partnerships between the HIARNG and state and federal agencies in managing endangered fauna and flora at Diamond Head Crater.

National Environmental Protection Act (NEPA) Analysis

Judging Criteria: Community Interaction

Program Breadth: Full environmental compliance, environmental planning and analysis, innovations in procedures, monitoring impacts and mitigation measures, usefulness in decision-making

Swafford uses the Record of Environmental Consideration and its associated checklist to document NEPA requirements. He and his staff

regularly attend neighborhood board meetings and participate in various community projects in order to build better relationships with the public to support the NEPA process. Swafford oversaw efforts to write and review three environmental assessments during the past two years utilizing inter-government resources, which saved the Guard between \$1–\$3 million.

Several aspects of LTC Swafford’s programs generated substantial savings for the Guard and taxpayers, including those highlighted in the chart below.

CONCLUSION

As the individual charged with stewardship of the environment on 7,200 acres of paradise, LTC Swafford feels a strong obligation to preserve and protect his beautiful state of Hawaii while ensuring that 3,000 soldiers have training lands and facilities to protect our great country. He achieves these goals in a sustainable, repeatable and positive manner by constantly seeking out efficiencies in relationships, activities and time to consistently apply the best management practices and maintain a premier Army program.

“The HIARNG Environmental Office has received National Guard Bureau recognition for its outstanding Natural Resources Conservation Team and Installation achievements, including receiving grant monies to fund alien species eradication and watershed protection projects. The program’s success is a result of innovative resource management, creative partnerships, and an integrated conservation plan dedicated to maintaining the diversity of resources while enhancing the military mission.”

—Secretary of Defense
Independent CPA Report on
Diamond Head, Oahu

Environmental Quality Program Highlights

Program	Activity	Technology/BMP	Savings/Cost Avoidance
Program Integration	Personnel	In-House Management Function	\$1 million–\$4 million
Water Quality	Pollution Prevention, Recycling & Reuse	(1) Recycle & Reuse water (2) No spills during refuels (3) No Requirement for USTs	(1) \$250,000 (2) Reduced cleanup costs to zero
Noise	Reduction	In-House Monitoring	\$25,000
Education/Personnel Operations Model	Natural Resources	Volunteers, seed propagation, in-house staff	\$4.3 million saved; \$2.6 million future costs avoided (Figures derived from an Office of the Secretary of Defense accounting report)