



2019 SECRETARY OF THE ARMY

ENVIRONMENTAL AWARDS



Fort Stewart/Hunter Army Airfield Sustainability - Team

BACKGROUND & INTRODUCTION

Fort Stewart/Hunter Army Airfield (FS/ HAAF) is the largest Army installation east of the Mississippi River and serves as home to the 3rd Infantry Division. FS/HAAF's mission is to provide a safe, secure and responsive community that enhances the installation's power projection platform in support of National security objectives.

The Sustainability Management System (SMS) Team, consisting of four Process Action Teams facilitated by SMS Program Manager, Mr. Ronald King, has the requisite responsibility and authority to lead and make informed decisions concerning the system for FS/HAAF. The Environmental Division Prevention and Compliance Branch Chief, Ms. Tressa Rutland, ensures federal and state policies,

laws and regulations are incorporated into functional objectives and practices. These measures are presented to the SMS Management Representative/Environmental Division Chief, Mr. Thomas Fry, who ensures the SMS is mission enhancing, conforms to the International Organization for Standardization (ISO) 14001 standards and the scope of all support measures are installation-wide. In coordination with the Directorate of Public Works (DPW) Director, Mr. Robert Baumgardt, SMS Significant Aspects are briefed to the installation's top-management during the quarterly Environmental Quality Control Committee meeting and the annual SMS Management Review.



PROGRAM
MANAGEMENT



ORIENTATION
TO MISSION



IMPACT &
OUTCOMES



TECHNICAL
MERIT



STAKEHOLDER
INTERACTION



TRANSFERABILITY



ACCOMPLISHMENTS

 The world is ever-changing, which means Army installations must be able to adapt to continually support new training requirements. As such, sustainability has become one of the keys to successful transformation of the 3rd Infantry Division, necessary to support readiness requirements and enhance quality of life.

When the installation became conformant with the ISO 14001, this launched the installation's extensive efforts to improve environmental conditions through sustainability. HAAF's SMS Program is committed to enhancing the installation's power projection platform in support of national security objectives, while overseeing all environmental activities for the installation, and providing education and awareness to Soldiers and Civilians on how their daily operations affect the environment. FS/HAAF incorporates planning and coordination of local, state, and federal entities to help its command make better decisions regarding environmental policies and programs, ultimately resolving environmental problems and reducing risk.

 The DPW Environmental SMS Program partners with others to target sites on the installation's training platform which may have problematic environmental conditions, and works closely with the command to ensure sound sustainable management and environmental quality are integrated into the installation's strategic planning process. FS/HAAF's SMS incorporates a cross-functional approach which is broken into four Process Action Teams (PATs):  Infrastructure and Environment; Regional Development; Training Lands; and Procurement, Materials, and Resources. Composed of representatives from the installation's various directorates, the PATs track processes/activities with potentially problematic environmental conditions and help disseminate sustainability requirements across the installation. From FY17-FY18, the SMS PATs tracked 135 actions and 26 partnerships.

The following summarize FS/HAAF's major sustainability accomplishments during the award period:

1. FS/HAAF's significant environmental aspects are water conservation, energy conservation, and land use (with emphasis on threatened and endangered species management and solid waste reduction). As a result of this concentrated attention, FS/HAAF has either met or exceeded Executive Order (EO) 13693 standards and has not lost any training days since 2000. 
2. Achieved a 56 percent reduction of potable water consumption intensity (from an FY07 baseline) in FY17 and a 61 percent reduction in FY18. FS/HAAF exceeded the 36 percent reduction goal well before the FY25 deadline set by EO 13693 and is therefore in compliance with EO 13834. 
3. Maintained a successful Hazardous Materials Mart (HAZMART)/Pharmacy, which assists units with the management of packaged petroleum products. Through this customer oriented program, FS/HAAF has seen tremendous success in eliminating waste due to overstocking and expired products. Additionally, the HAZMART/Pharmacy is a convenient, time-saving program that allows customers more time for training and mission readiness. 
4. Further increased its Red-Cockaded Woodpecker (RCW) population, achieving a 47 percent increase since reaching recovery status in FY12 - all while increasing maneuverability through deprotection of all RCW clusters. From FY17-18, FS/HAAF installed 324 artificial cavities and conducted midstory mowing operations on 1,209 acres. FS/HAAF also supported regional recovery by translocating 41 RCWs to increase populations at other forests. 



FS/HAAF installs artificial cavities in longleaf pine trees to assist in the management and continued growth of its red-cockaded woodpecker population.

- 5. From FY17-FY18, FS/HAAF achieved an average diversion of 52 percent for Municipal Solid Waste (MSW) and an average of 77 percent for Construction and Demolition (C&D), thereby exceeding the 50 percent MSW and 60 percent C&D standards and goals mandated by EO 13693 and 13834. These achievements provided total cost avoidance of \$1,940,117.
- 6. In June 2017, FS/HAAF connected its Purple Pipe system to the irrigation lines in one of Fort Stewart's housing areas. To date, this connection has saved 884,700 gallons of potable water. During the award period, the Purple Pipe system as a whole saved FS/HAAF 80,957,400 gallons of potable water.

Livable Communities, Master Planning, & Green Building

FS/HAAF has established a tradition of successful sustainability practices. Environmental stewardship is important to all of FS/HAAF's daily operations and is

a vital part of ensuring FS/HAAF's readiness and sustainability. The installation emphasizes an SMS where everyone has a role and responsibility toward sustaining the mission, as embodied by the installation's SMS Policy, ROCK (Resources, Optimize, Compliance, and Keep Improving). Transformation of water conservation, energy conservation and land use, using the SMS process, is a strategy for change, in which synergistic effects are gained when a Garrison functions more organically as a whole, rather than as stove-piped organizations with competing interests.

R	RESOURCES	Pollution Prevention P2	Natural Resources
O	OPTIMIZE	MISSION WELL-BEING — ENVIRONMENT	
C	COMPLIANCE	Scales of Justice, Gavel, Book	
K	KEEP IMPROVING	Person climbing stairs, Bar chart	
OF THE MARNE		<i>Sustainable Fort Stewart/ Hunter Army Airfield</i>	

The SMS Policy is modeled after the 3rd Infantry Division's motto "Rock of the Marne."

FS/HAAF's SMS Program is committed to supporting the Army's customers – Units, Soldiers, Family Members, Department of Army Civilians, and Retirees. This is done by actively engaging installation staff while providing sound stewardship of installation resources and the environment. Coordination is continuously ongoing with DPW Master Planning Division and the Directorate of Plans, Training, Mobilization and Security (DPTMS) to assist in determining optimal siting alternatives for Garrison and Range Control projects at early proposal stages. During these early planning initiatives, the Environmental Division begins preparing National Environmental Policy Act (NEPA) documentation to meet internally set suspense dates prior to a proposed action's contract award, often times enabling early execution. The office consolidates environmental



responses from subject matter experts after their completion of internal project review and coordinates those responses with project proponents and customers to ensure they are aware of the proposed action's environmental requirements. By proactively commenting on every project, proponents and designers are continuously reminded of the need to protect and sustain our environment and incorporate required local, state and federal requirements into design, construction and implementation of those projects.

The SMS Program recognizes that good community relations are very important to its ability to support mission readiness. The development of partnerships with regulatory and environmental stakeholders, as well as environmental outreach and awareness programs has helped to build a level of trust in FS/HAAF as a whole. Furthermore, to address community concerns, the installation plans accordingly to ensure a harmonious, active community planning and working relationship. As a deeply integrated installation program, the SMS Program makes an exceptional effort in developing strong partnerships with the local surrounding communities, municipalities, schools, and all civil and environmental organizations. For example, the installation partnered with Georgia Environmental Protection Division, U.S. Geologic Survey, and Department of Energy to investigate alternate water sources to the stressed Upper Floridan Aquifer (UFA). In doing so, FS/HAAF was one of the first to construct a successful Lower Floridan Aquifer well in the region. The well helps the installation meet its water demands while alleviating some of the stress from the UFA.

FS/HAAF also partnered with the City of Hinesville to implement the "Purple Pipe" project which distributes reuse water from a Hinesville wastewater treatment plant to Fort Stewart to use as an alternate water source for irrigation and industrial purposes, further reducing Fort Stewart's demand on the UFA. During the award period, the Purple Pipe project saved FS/HAAF 80,957,400 gallons of potable water.

Establishing such partnerships through the SMS Program has been a win-win for FS/HAAF, local communities and the environment.



The washrack shown here is one of two on Fort Stewart that utilize reclaimed water through the purple pipe system.

One sustainability related area in which the installation saw both environmental and mission enhancement was where tank trails intersect stream crossings. During storm events these streams swell and wash out the tank trail - impeding training and creating adverse environmental conditions to the streams by transferring large amounts of silt and sediment to Waters of the State. The transferred silts and sediments are removed from the streams and a watershed analysis is conducted to engineer proper drainage requirements for a 100-year storm event (i.e. topography issues, storm water basins and culvert sizes). Properly sized culverts are then installed and the tank trail is hardened. The installation systematically corrects these issues: in the last 10 years over 28 miles of stream crossings have been hardened and in FY18 FS/HAAF funded over one and a half miles of additional stream crossings. Most importantly, the newly hardened tank trails/stream crossings ensure uninterrupted access to critical live fire facilities (ranges and gun lines) regardless of weather conditions, while ensuring environmental compliance and sustainability.

In an effort to further ensure the sustainability for both the training and conservation missions, FS/HAAF



partnered with Georgia Power on a 250-acre Photovoltaic Power Generating System on Fort Stewart. This system came online in December of 2016 and is capable of producing approximately 30 megawatts of solar energy. As one of three installations east of the Mississippi to have such a system, FS/HAAF's solar generation facility brings the Army closer to its commitment to deploy one gigawatt of renewable energy by 2025.

Compliance with Executive Order 13693

To ensure continued environmental compliance, the SMS Program maintains a formal training needs assessment, ensuring those working on the installation with environmentally-sensitive tasks are knowledgeable about environmental compliance and sustainability concerns, as well as best management practices. To further ensure that awareness and vigilance are maintained, online SMS training is available for all Soldiers, Civilians, contract staff and tenants on the installation.

 FS/HAAF's SMS Program also maintains an Internal Assessment Plan (IAP) for environmental programs, ensuring an annual internal Environmental Performance Assessment System and SMS internal assessment are conducted. The IAP also identifies the daily, weekly, monthly and quarterly audit activities to be carried out, as planned for each compliance program.

By emphasizing proactive management to minimize training restrictions; thin timber; reduce wildfire risk thru prescribed burns, improve visibility and maneuverability, the installation is able to achieve both environmental compliance and mission sustainability. This strategy has produced numerous outcomes that support the SMS Program's win-win mindset. For instance, the installation reached its recovery goal for its RCW population, which in turn allowed for the removal of restrictions on training and offset impacts from new construction.

Another example is FS/HAAF's highly successful Army Compatible Use Buffer (ACUB) program.

Though the size of the Army may be shrinking, the constant need for new facilities to support modernized weapons systems and changing missions still remains. Through the purchase of development rights using conservation easements, the ACUB program aids in preventing encroachment from incompatible development adjacent to installation boundaries. The program also provides conservation value and ecological services to FS/HAAF, while buffering neighbors from the noise, smoke and dust created by military training and management activities (i.e. prescribed burning). During the award period, FS/HAAF's ACUB program protected more than 4,223 acres. This accomplishment increased the total number of acres protected under the installation's ACUB Program to over 80, 000 acres.   

Material Management

The sustainability mindset fostered by the SMS Program has also led to great success in regards to material management on the installation. One example is the HAZMART/Pharmacy Program, which involves a partnership with FS/HAAF's DPW Environmental Division and Logistics Readiness Center. The HAZMART/Pharmacy is a service and delivery program designed to assist 3rd ID and tenant unit motorpools, as well as on-site contract activities, with the management of packaged petroleum products. Personnel in this program ensure that customers have sufficient shelf-stock to conduct maintenance operations, while at the same time managing the shelf-life of each product, to guarantee that the product is used prior to its expiration date. By assisting with the management of hazardous materials, to include 72-hour order to delivery turnaround, the HAZMART/ Pharmacy allows its customers more time for training and mission readiness. This program has seen tremendous success in eliminating waste due to overstocking and expired products.    

To further ensure proper management of hazardous materials, FS/HAAF's Environmental Division requires and conducts hazardous waste handlers' 



courses for those handling such materials. Additionally, quarterly Environmental Compliance Officer (ECO) courses are conducted to ensure that all military units and garrison organizations have an ECO that is knowledgeable of all environmental procedures and regulations. Furthermore, quarterly ECO roundtable meetings are held to discuss any new and emerging environmental compliance requirements.



FS/HAAF's Qualified Recycling Program provides Recycling Convenience Centers to make recycling easy for everyone living and working on the post.

Recycling Program

FS/HAAF has built a very successful Qualified Recycling Program (QRP). The QRP conducts recycling training sessions for newcomer (Military and Civilian) briefings, unit/organization classes, and environmental courses to assist units/agencies with setting up recycling programs, addressing shortcomings from inspection results, and improving the environmental quality of the community. During the award period, the QRP trained more than 11,701 people.

The QRP also partners with off-post organizations to support recycling awareness beyond the installation's boundaries. For example, FS/HAAF is a Keep America Beautiful Affiliate. Overseen by the QRP, FY18 marked the 15th consecutive year of FS/HAAF's Keep America Beautiful certification.

Through training, recycling assessments and community education and outreach, the QRP has seen

great success in reaching mandated diversion goals. During the award period, the installation achieved an average diversion of 52 percent for MSW and an average of 77 percent for C&D, thereby exceeding the 50 percent MSW and 60 percent C&D goals mandated by EO 13693 and 13834. These achievements provided total cost avoidance of \$1,940,117.

Education, Outreach, & Partnering

FS/HAAF's SMS Program has a robust and proactive outreach program. The Program recognizes that outreach involving installation personnel, residents and local communities are key factors in maintaining compliance and a good environmental posture. For this reason, the SMS Program is continually working to increase awareness of environmental protection efforts on the installation.

Community outreach is an invaluable way to maintain a positive relationship with the local communities and surrounding counties. Therefore, the SMS Program realized the opportunity and invaluable return in showcasing FS/HAAF's environmental programs. Activities, events, tours, presentations and classes were continually hosted on- and off-post in support of the installation and its sustainability initiatives. Over the past two years, various environmental programs presented at military forums, state conferences, served on technical boards, and participated in community meetings to assist local communities in the development and implementation of their respective programs.

To further promote sustainability and encourage involvement in garrison environmental efforts, the SMS Program honored environmental awareness days such as Earth Day, America Recycles Day, and Arbor Day. The SMS Program, as well as various other Environmental Division Programs, also participated in numerous Directorate of Family, Morale, Welfare, and Recreation events throughout the year to inspire awareness and appreciation for the Earth's natural environment. The Division sponsored/participated in approximately 160 events



and tours, and reached over 50,000 people within the last two years.



FS/HAAF's Qualified Recycling Program uses the recycling robot, Curby, to assist in teaching children about the importance of recycling and environmental sustainability.

The education of garrison personnel on sustainability goals and objectives is also a significant component of good environmental stewardship. Extensive training of Soldiers and Civilians on-post has increased awareness and ensured the highest standards of environmental quality. ECO and Recycling Compliance Officer training courses were taught on a quarterly and monthly basis, respectively, during the award period. The participants received training on issues and concerns likely to impact the environment and the Civilian and Military communities. This training has efficiently garnered significant savings, both in terms of financial costs and mitigating harmful impacts to the environment.

The continued success of the SMS Program can be attributed not only to compliance assessments, inspections, and classes but also to the regular submittal and publication of articles to local newspapers and professional journals. Conservation tips were published weekly through the installation newspaper and social media outlets. Additionally, numerous videos highlighting various aspects of sustainability appeared on the installation's environmental website and were shown during monthly training sessions.

Perhaps the most important message the SMS Program communicates is to “think locally and act globally,” because FS/HAAF's working and living environment extends beyond the homes and neighborhoods within its borders, to the country and the planet. Fostering such a mindset ensures that the entire FS/HAAF community embraces not only the well-being of the Soldiers, Families, and Civilian employees who work, train, and live here, but also the preservation of the installation's training lands for future generations.

Conclusion

By being proactive, planning for the future, and forging strong relationships throughout the installation, community and regulatory arena, FS/HAAF's SMS Program has helped to cement the installation's reputation as an environmental leader and good neighbor – giving the program strength and staying power that will outlive current employees.