



U.S. AIR FORCE



Environmental Program



Overview

The U.S. Air Force is a leader and devoted guardian of the environment. As trustee to over **8 million** acres of natural habitat, the Air Force takes considerable measures to defend and enhance America's rich natural resources and cultural heritage. Over the last 20 years, the Air Force has followed a compliance-based approach to environmental management resulting in an unparalleled record of responsiveness to regulation, community interests, and ecological needs. The Air Force has also invested approximately **\$12 billion** in the cleanup of contaminated sites to protect human health, recover valuable natural assets, and preserve the integrity of America's diverse landscape.

Yet to meet current and future mission requirements, the Air Force Environmental Program must focus on ensuring environmental resources, such as air, land, and water, are available to meet flying and training needs. This new viewpoint allows the Air Force to *sustain, restore, and modernize* its environmental resources, or "natural infrastructure," in full compliance and support of military readiness challenges. **Compliance and beyond** is the new mantra as the Air Force transforms and begins to "operationalize" the environment.

Program Areas

Air Quality Management

Uses innovative processes and technologies to maintain air quality standards that are vital to protecting human health and the environment, as well as retaining access to airspace for Air Force operations.

Land and Natural Resources Management

Uses sound ecological practices to protect and preserve the health, diversity and productivity of the "natural infrastructure" upon which the Air Force operates. Marrying mission objectives with effective environmental stewardship ensures military readiness and safeguards our natural resources for generations to come.

Water Quality Management

Maintains adequate water supply, water quality, and the safety of Air Force water systems worldwide. The Air Force provides more than **38 billion gallons** of water for mission-critical operations through efficient operation and maintenance of water systems. Access to safe drinking water and other water resources is imperative to the well-being of our Air Force people and the flying mission.

Benefits

- Protects human health and the environment
- Maintains the mission
- Reduces negative environmental impacts
- Encourages partnerships

Major Initiatives

New Management Philosophy - The Air Force continues to move forward with an initiative focused on “operationalizing” traditional environmental management. Through a new philosophy, called **Natural Infrastructure Management (NIM)**, the Air Force seeks to expand environmental responsibility to all organizations that control aspects of its natural infrastructure (e.g., airspace, land and water training areas, etc.). NIM will optimize the Air Force’s natural asset portfolio to maintain operational capability while continuing to meet our legal obligations.

Performance-Based Management (PBM) – PBM is a management approach to integrating the entire range of restoration activities from preliminary site assessment to closeout and beyond. Elements of PBM include innovative site investigation, Remedial Process Optimization (RPO), and performance-based contracting. PBM applies best management practices to achieve cost-effective cleanup results that protect human health and restore the environment for continued use. Air Force Major Commands project **\$112M life-cycle** cost savings as a result of PBM initiatives.



Enterprise Environmental, Safety, and Occupational Health - Management Information System (EESOH-MIS) - The EESOH-MIS is an information management tool that facilitates Air Force business processes to deliver environmental, safety, and occupational health (ESOH) support to the war fighter. The goal of this initiative is to incorporate all ESOH systems into one integrated system by merging the functional activities from the ESOH communities into a common standardized architecture and data/software code sharing (e.g., standard data fields, avoidance of redundant code development, etc.).

Successes

Great Strides

The Air Force Restoration Program has achieved remarkable success in cleaning up over **4,500** contaminated sites, completing two-thirds of its restoration obligations. Through innovative methods, such as EPA’s systematic investigation tool (Triad), the Air Force saved over **\$100 million** in cleanup expenses. For example, at King Salmon AFB, Alaska, six soil vapor extraction systems and one “pump and treat” system were shut down, saving **\$25 million** in projected life-cycle operating costs.

Lean and Green

Through proactive pollution prevention (P2) initiatives, such as the purchase of environmentally preferable products and the diversion of solid waste from landfills to recycling, the Air Force is able to leverage economic resources and directly reduce environmental burdens and risks. In 2005, the Air Force avoided over **\$60 million** in solid waste disposal costs by effectively diverting **87%** of the construction and demolition debris and **46%** of non-hazardous solid waste from landfills and incinerators. The Air Force is also expanding usage of alternative fuels (like ethanol) in its military fleet vehicles to reduce dependency and costs, and continues to seek new opportunities to buy green power and apply eco-friendly products and services to its day-to-day operations.

Land Reuse

F.E. Warren AFB, Wyoming, plans construction of two 1-megawatt wind turbines to provide supplemental power for its installation. However, the selected location for these wind turbines is within an old firing range. The base restoration team redirected investigation resources to concentrate on clearing the 42-acre project site. The team cleared 100% of the area within three weeks in order for construction of the wind turbines to begin. Use of these wind turbines is estimated to generate approximately **\$230,000** annual savings and provide clean energy to the entire installation.

