



U.S. AIR FORCE



Water Quality Management

Overview

The U.S. Air Force Water Quality Program maintains water supply, water quality, and safety of Air Force water systems worldwide. The Air Force provides more than **38 billion gallons** of water per year for mission-critical operations including human consumption, fire fighting, sanitation and many industrial processes. The program's primary focus is to protect human health by providing safe drinking water. Good water quality is achieved through efficient operation and maintenance of drinking water systems, and the protection of ground and surface water, wetlands and coastlines. Success in these activities means sustainable and efficient bases, critical to the Air Force flying and training mission, as well as safeguarding the environment.

Program Areas

Drinking Water Supply

Provides safe drinking water to over **1 million** Air Force personnel and their families worldwide, a population equivalent to the entire state of Montana. Air Force water supply systems must meet the minimum National Drinking Water standards and requirements for the protection of public health, providing drinkable water free of disease-causing organisms and toxic substances.

Storm Water Management

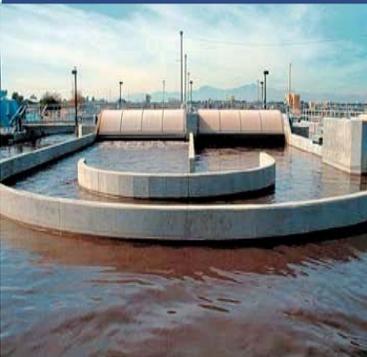
Uses best management practices to reduce, minimize, or eliminate sources of pollution exposed to storm water runoff. These efforts help the Air Force maintain and enhance the quality of our nation's rivers, lakes, and streams.

Wastewater Treatment

Evaluates and implements best management practices to eliminate sources of pollutants from domestic and industrial wastewater in order to protect and preserve water resources. To achieve national water quality standards, the Air Force recycles over **583 million gallons** of "grey water" annually, and maintains wastewater treatment systems that conform to the Clean Water Act permit requirements.

Water Resources Conservation

Employs effective storm water management and erosion control techniques to protect and enhance the quality of our groundwater and surface water assets, wetlands and coastlines.



Benefits

- Provides safe drinking water
- Protects sources and distribution systems
- Protects surface waters, wetlands and estuaries
- Manages storm water and wastewater
- Protects discharge capacities

Major Initiatives

Strategic Partnership - Air Force professionals are leading a strategic partnership with the University of Arizona to design a *Master Watershed Steward* training course. This comprehensive course was developed to educate Air Force water managers to better protect our water resources. Master watershed steward training benefits water program managers by providing a strong, technical background in regional water resources necessary to oversee base-specific water quality programs

Resource Conservation - The Air Force Academy, Colorado, developed a facility-specific Alternative Water Management Plan to address potential drinking water shortages due to drought conditions and to meet federal Executive Order 13123. The intent of the plan is to efficiently manage and conserve all water resources while sustaining mission effectiveness, military readiness, safety, and quality of life.

Water Vulnerability Assessments - In accordance with Air Force anti-terrorism programs, all vulnerabilities related to intentional water system threats are being evaluated to ensure findings are appropriately tracked and monitored to prevent degradation of public health or mission capability. Base water system related Emergency Response Plans will be updated to reflect findings.

Successes

Green Process for Re-Painting Aircraft

EPA's Region 8 Administrator presented the Award for Environmental Excellence to Hill AFB, Utah, staff for removing a hazardous chemical from aircraft pre-painting operations. The new technology, PreKote, provides Hill AFB and other Air Force bases with safer working environments and cost savings. Hill AFB achieved a savings of **\$6,000** per aircraft and the elimination of a half million gallons of wastewater per year. The use of this innovative technology in aircraft pre-painting operations is estimated to provide an annual savings of **\$1.3M** based on the Hill AFB depot servicing **225** F-16 aircraft each year.



Installation Permits

The Dallas Regional Environmental Office successfully negotiated with the Texas Commission on Environmental Quality to consider host bases as owners and operators of the base. Had this not occurred, each tenant on every DoD facility would have been required to submit their own Texas Pollution Discharge Elimination System permits and prepare the associated pollution prevention plans. This success resulted in estimated savings of **\$2 million** per year in avoided pollution prevention plans and annual compliance reports for tenants at all Texas bases.

Water Permit Fees

The Air Force successfully negotiated a water permit fee solution with the State of California. The state agreed that Air Force and DoD bases are not required to pay the state water monitoring surcharge fee since it would be equivalent to a tax rather than a service fee. The state also agreed to void Notices of Violation it had given to several Air Force bases in California for non-payment of water permit fees. This effort has resulted in cost savings amounting to approximately **\$50,000** per year for all California bases holding water permit fees.