

# FORMERLY USED DEFENSE SITES | Withlacoochee Chemical Warfare Service Field Trials and Air-to-Ground Bombing and Gunnery Range

DECISION DOCUMENT AND PUBLIC AWARENESS

Items Found in 1950 Clearance



April 2020

## DEFENSE ENVIRONMENTAL RESTORATION PROGRAM FOR FORMERLY USED DEFENSE SITES

Across the country, the Department of Defense acquired properties, often during times of war, to use for military training, testing and demonstrations. When no longer needed, many of these properties were cleaned up according to the best practices available at the time and then transferred to other owners such as private individuals or other government entities. These Formerly Used Defense Sites can range from privately owned farms to National Parks. They also include residential, industrial and educational properties. We are committed to protecting people and the environment and improving public safety by cleaning up these properties. The Defense Environmental Restoration Program for Formerly Used Defense Sites was established to evaluate and, if necessary, to remediate Formerly Used Defense Sites. The U.S. Army Corps of Engineers (Corps) manages the program on behalf of the Department of Defense.

Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund, in 1980 and the Superfund Amendments and Reauthorization Act in 1986. These laws give the Corps the authority for certain cleanup activities and dictate the process we must follow. We conduct investigations to determine the potential risk to people and the environment from the military's use of the property. Public involvement and community participation are important components of the process. The Corps partners with stakeholders throughout the process, including congressional representatives, state and local governments, regulatory and environmental agencies, and affected property owners.

## BACKGROUND

Between October 1943 and the fall of 1946, the military used approximately 18,240 acres in Sumter and Hernando Counties to create the Withlacoochee Chemical Warfare Service Field Trials and Air-to-Ground Bombing and Gunnery Range. The site, approximately 18 miles northeast of Zephyrhills, is now part of the Richloam Wildlife Management Area of the Withlacoochee State Forest. The Florida Division of Forestry manages the site for timber, and the public uses it for recreation. It also includes the Florida Bass Conservation Center offices and the Richloam State Fish Hatchery.

As the name implies, the site had two distinct purposes: as an aerial gunnery range for practice munitions and as a research and testing area for chemical agents and munitions. The Army Air Forces constructed targets for strafing, dive and skip bombing, and rockets. In other areas of the site, the Chemical Warfare Service conducted carefully controlled experiments to determine the effectiveness of chemical agents under tropical and subtropical conditions.

## ENVIRONMENTAL INVESTIGATIONS

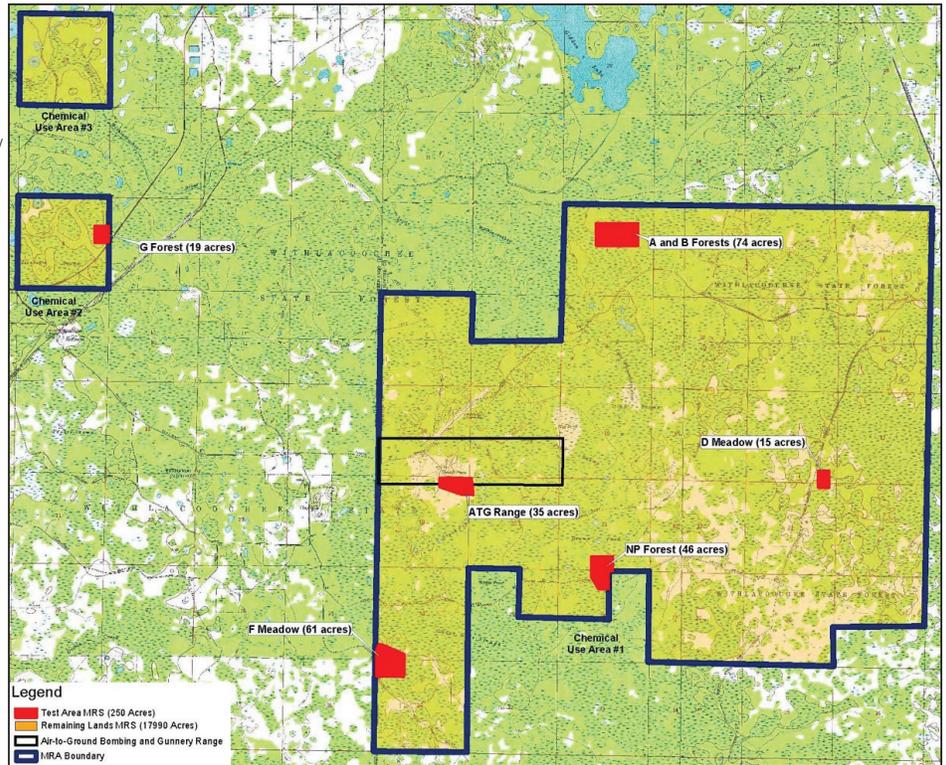
In 1950 the Corps investigated the site, removed munitions and recommended surface use only in some areas. Subsequently, the Corps has conducted a number of additional studies, and in 2016, the Corps completed a Remedial Investigation/Feasibility Study. The purpose of the study was to determine if anything remained in the area from the Army's activities, and if so, in what amounts and locations. This is known as characterizing the nature and extent of potential military-related materials.



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During the investigation, teams thoroughly searched the areas where the military trained using state-of-the-art tools. Two munitions were recovered; one was destroyed at the site, and one, which contained mustard agent, was packaged and transported out of state by a specially trained unit and taken to a research laboratory. Pieces of munitions, known as munitions debris, were found in 117 locations. The team also collected 166 soil samples to test for the explosives and metals that comprise munitions (known as munitions constituents) as well as chemical agents and their breakdown products. Teams also monitored the air for chemical agents and industrial chemicals while crews were searching. No chemical agents or related compounds were detected in the air or soil samples. Generally, no metals or explosives were detected above the levels the Florida Department of Environmental Protection has set for industrial/commercial settings. While arsenic in one sample was detected slightly above the industrial level, most of the levels were much lower. Arsenic occurs naturally in the environment and this detection may be attributable to past cattle ranching activities rather than military munitions. A risk assessment was conducted, and it concluded there is no significant risk to people or the environment from munitions constituents.

The team analyzed the data collected during the investigation and drafted a Remedial Investigation/Feasibility Study report which includes an analysis of options for addressing the results. The Corps divided the Withlacoochee site into two areas known as Munitions Response Sites: Remaining Areas (17,991 acres) and Test Areas (249 acres). No munitions or munitions debris was found in Remaining Areas, so no further action is necessary, and the selected alternative is No Action. The Test Areas were searched thoroughly, and two munitions were identified. While the potential of encountering munitions associated with the military's training is low, the Corps' Selected Alternative for the Test Areas is public awareness. This means the Corps will make every effort to inform the public about the military's use of the site and what to do should someone encounter a suspected munition.



## SAFETY FIRST: Remember the 3Rs

While the potential of finding munitions is low, always use caution in areas where the military has trained. Remember and follow the 3Rs of Explosive Safety: Recognize, Retreat, Report.

**RECOGNIZE** - The object you found could be dangerous.

**RETREAT** - Leave the area without touching or moving the object.

**REPORT** - Call 911 immediately.



## For More Information

Documents are available at:  
EC Rowell Public Library  
85 E Central Avenue, Webster, FL 33597  
Telephone: 352.568.1600

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