

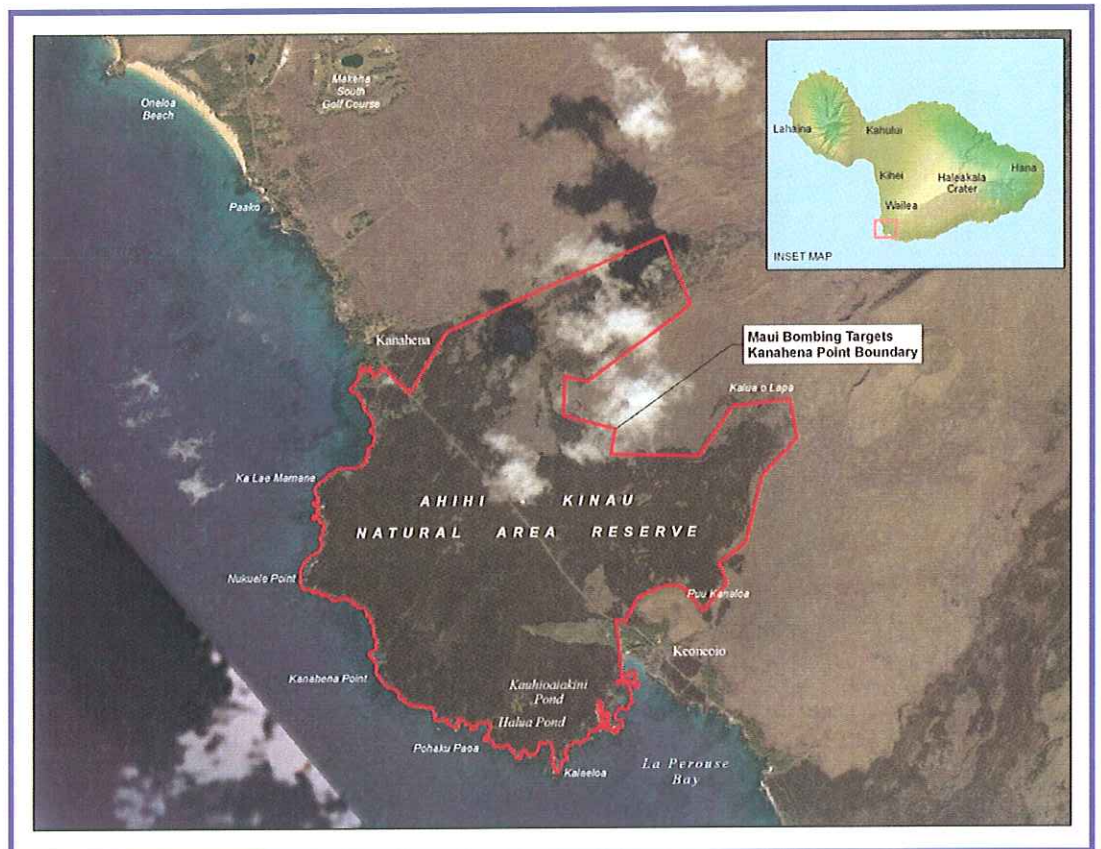


Formerly Used Defense Site (FUDS) Site Investigation at Maui Bombing Targets – Kanahena Point, Maui, Hawaii

The Department of Defense established the Formerly Used Defense Site (FUDS) program under the Defense Environmental Restoration Program (DERP) to address munitions and explosives of concern (MEC) and munitions constituents (MC) located on closed or transferred military training areas. Munitions present on these areas that did not properly function and remain on the former target area are considered a safety hazard that present a serious danger to human health. MC refers to munitions contaminants associated with munitions items that may have been released into the environment.

Maui Bombing Targets – Kanahena Point, hereafter referred to as Kanahena, was one of four bombing targets on the island of Maui, which were part of the Hawaiian Area Targets. It is a 989-acre FUDS located on the southern side of the island of Maui, Hawaii, District of Makena. Situated at the base of Haleakala in the ahupua'a of Kanahena, Kualapaka, and Kalihi, approximately six miles south of Wailea, Kanahena is located within the Ahihi – Kinau Natural Area Reserve (NAR) (refer to figure below). Most of the site is covered with a'a and pahoehoe lava flows of various periods from Haleakala Crater.

The Territory of Hawaii granted use of Kanahena to the United States of America by permit, lease, license, or verbal authorization on or about June 1945. During 1945, the Fourteenth Naval District reportedly conducted practice bombing exercises on the site using miniature and water-filled practice bombs. A visual survey conducted in support of the 1996 Inventory Project Report (INPR) identified a six-inch naval projectile, mechanical time fuze, .50-caliber projectile, and impact craters which indicated the use of high explosive (HE) munitions at the site. Munitions surmised to be used at the site include .50-caliber projectiles, miniature practice bombs including AN-Mk5, AN-Mk23, and AN-Mk43, and six-inch high explosive (HE) projectiles. Use of the target terminated at the end of World War II and the site was abandoned. There were no clean-up projects by the military associated with this site.



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Previous Investigations

The 2004 Archive Search Report (ASR) Supplement provided information concerning the munitions possibly used at Kanahena. The ASR stated that there was suspected use of small arms including .50-caliber machine gun rounds, practice bombs, Shell, HE, MK IIA2.

The 2008 Site Inspection (SI) identified munitions debris (MD) in the form of .50-caliber bullets and casings, projectile parts and fragments, fuze parts, lead shrapnel, and mortar fins. The SI report was recommended that Kanahena proceed to a Remedial Investigation/Feasibility Study (RI/FS) for MEC based on the presence of MEC and MD found during this SI.

Remedial Investigation

An RI/FS will be conducted at Kanahena to determine what types of cleanup actions are needed to reduce risks from MEC comprised of unexploded ordnance, discarded military munitions, or MC (Munitions Constituents, materials and chemical components originating from munitions) remaining from past training activities.

With stakeholders input, transects and grids will be placed throughout the Kanahena project site. Intrusive investigations to determine the nature and extent of MEC contamination will also be coordinated. Transects and grids will be investigated across the site using an analog-and-dig approach. Intrusive MEC sampling along transects and within grids will determine the potential presence of MEC items, and where to conduct MC sampling. MC sample locations will be placed in/around known source areas and receptors, based on document review, and the findings of the intrusive investigations. Environmental samples will be collected to determine the presence of MC and to establish background concentrations. Samples will be collected from surface and subsurface soils, where practical. Survey of the associated NAR submerged lands will be performed utilizing side scan sonar technology. An archaeologist and biologist will be on site during transect and grid layouts, as well as field surveys in order to identify sensitive cultural and natural resources.

After completion of the RI/FS, it will be determined if clean-up of this investigated area will be required. Follow-on projects will be planned as required.

Path Forward

The anticipated tasks to complete the RI at the Maui Bombing Targets - Kanahena Point are as follows:

- RI Field Activities:
 - Visual survey aided by hand-held magnetometers on land
 - MEC sampling
 - Survey of Natural Area Reserve submerged lands
- RI Reporting and Approval

Should the RI field work identify potentially explosive hazards, a FS will be prepared to evaluate clean-up strategies and a Remedial Action would execute the preferred remedy.

If you have any further questions, please contact:

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