

## **Barry M. Goldwater Range-East**

### Department of Defense (DoD) Site

#### **Boundaries:**

The [Barry M. Goldwater Range](#)-East (BMGR) is located in southwest Arizona, and consists of over 2.7 million acres in Maricopa, Pima and Yuma counties, from Yuma to Gila Bend, Arizona and is bordered by Mexico to the south. BMGR is divided into the eastern portion managed by the Luke Air Force Base and the western portion managed by the Yuma Marine Corps Air Station. Only BMGR-East managed by Luke AFB is discussed in this narrative.

#### **Site Status Update:**

Currently, a [Military Munitions Response Program](#) (MMRP) site investigation of several closed, transferred or transferring ranges is being conducted by Luke Air Force Base environmental personnel including the Sentinel Plain, Ground 5 Lead-In Range, Firing In-Butts and I-8 staircase buffer zone. The Comprehensive Site Evaluation Phase I and II for the former ranges began in 2008 and is currently ongoing.

#### **Community Involvement Activities:**

No community involvement activities are planned at this time. The Air Force has a fact sheet that can be found on the [Luke AFB Web site](#).

#### **Site History:**

**1941-1962:** The BMGR, formerly called the Luke Air Force Range, was developed in 1941 to provide training for air crews in aerial and air-to-ground combat and for the evaluation of new weapons and tactics necessary to develop skills for national defense. The range was expanded in 1962 and is still being used for training today.

**1986-2001:** The Military Lands Withdrawal Act of 1986 (P.L. 99-606), was used to withdraw the land for the BMGR and expired in 2001. The Defense Authorization Bill for fiscal year 2000 approved language extending the withdrawal for another 25 years.

**2004-2005:** An investigation began at several munitions targets in the “Area A” buffer zone on the far eastern side of the range.

**2006-2008:** Several targets and roads at the “Area A” buffer zone on the eastern side of the range were investigated for munitions. The former range was used in the 1950s for bombing practice at constructed targets in a canyon valley west of the Sand Tanks Mountains. Munitions include sub-



**Air-to-Ground Attack Practice  
Mission on Range in 1957**

caliber air rockets (that look like pipe bombs), BDU-33 25-pound bombs, 100-pound practice bombs, 500-pound practice bombs and other munitions. The area is now part of the [Sonoran Desert National Monument](#) managed by the U.S. [Bureau of Land Management](#) (BLM). BLM requested the investigation of 67 miles of roadways using a composite towed array. The Phase II reacquisition and digging of over 9,000 anomalies took place in 2008. The majority of items were non-munitions related such as barb wire, cans, and iron rich rocks. Most of the munitions were confined to the area around the targets.



**BMGR-East Area A-Composite Towed Array**



**Sub-caliber air rocket (SCAR)**

**2007:** In February, a Preliminary Assessment-Comprehensive Site Evaluation Phase I was completed for the closed or transferred ranges.

**2008:** A kick-off meeting for the Comprehensive Site Evaluation Phase II for several closed and transferred ranges was held on July 22, 2008. The investigation included walking transects looking for munitions debris, and munitions and explosives of concern. It also included sampling at the Sentinel Plain, Ground 5 Lead-In, I-8 Staircase buffer zone, Firing In-butts and Ajo airport.

The reacquisition at Area “A” BLM roads took place in 2008. Digging of over 9,000 anomalies did not yield munitions or explosives of concern. The majority of items were non-munitions related such as barbed wire, cans, and iron rich rocks. Most of the munitions were confined to the area around the targets.

**2009:** The start of the Comprehensive Site Evaluation Phase II included walking fixed straight-path transect lines (paths along which one records and counts occurrences of munitions) around denser vegetation, recording and mapping field observations for munitions.

**2010:** The Draft-Final Comprehensive Site Evaluation Phase II was submitted to ADEQ for review. The Sentinel Plain, and Ground 5 Lead-In were recommended for further munitions response action by the Air Force.

## **Contaminants:**

There are no known contaminants pending sampling activities. Contaminants associated with munitions include lead, copper, chromium, mercury, titanium, zinc and explosives.

## Public Health Impact:

There is no known risk to human health from these sites. Munitions from training activities may pose an explosive safety hazard. Discovery of munitions should be reported to the local law enforcement authorities and left untouched.

## Site Hydrogeology:

The BMGR is situated in the Basin and Range Lowlands hydrogeologic province characterized by isolated mountain ranges of crystalline rocks separated by [alluvial](#) valleys and basins. The mountains serve as [aquifer](#) boundaries. The basins are tectonically depressed troughs that have been filled to depths of several thousand feet with unconsolidated alluvium eroded from the mountains. Faulting is common at the margins of the basins as well as in other portions of the basins.

Most of the ground water storage is found within the inter-mountain basins. Surface runoff from rainfall carries water to closed alluvial basins or into generally dry washes. Potential aquifers in the BMGR basins are found in coarse gravel and sand wedge zones. Depth to groundwater at the BMGR ranges from 24 feet to 663 feet.

## Contacts:

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\*In Arizona, but outside the Phoenix area, call toll-free at (800) 234-5677.

## Information Repository:

Interested parties can review Site information at the Arizona Department of Environmental Quality (ADEQ) Main Office located at 1110 W. Washington Street in Phoenix. Please contact (602) 771-4380 or (800) 234-5677 to schedule an appointment with 24-hour notice to review these documents. Once all documents requested have been collected, you will be contacted for a review Monday through Friday from 8:30 a.m. to 4:30 p.m. at the ADEQ Records Management Center, 1110 W. Washington Street in Phoenix, AZ.