

# FORMERLY USED DEFENSE SITES (FUDS) PROJECT FACT SHEET

JUNE 1997

HNC REVISION 1: 25 SEPTEMBER 1997

HNC REVISION 2: 22 JANUARY 1998

TAG REVIEW DATE: 4 FEBRUARY 1998

1. **SITE NAME:** Borrego Maneuver Area

**SITE NUMBER:** J09CA701100

**LOCATION:**

City: Borrego Springs

County: San Diego County

State: California

**PROJECT NUMBER:** J09CA701101

**CATEGORY:** OE

**INPR RAC:** 2

**ASR RAC:** 2

**TAG RAC:** 2

2. **POC'S:**

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**ASR TECHNICAL REVIEWER:**

Name: Thomas M. Meekma

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**3. SITE DESCRIPTION:** The former Borrego Maneuver Area consisted of 400 square miles (256,000 acres) located in eastern portion of San Diego County and western portion of Imperial County, California with the northern boundary at the Riverside County line, the eastern boundary at U.S. Highway 99 (now Highway 86), the southern boundary at State Highway 78, and the western boundary along a line north-south through Borrego P.O. Excluded from this area were three areas: an Indian Reservation on a portion of Township 9 South, Range 9 East lying between Highway 99 and the Santa Rosa Mountains; Benson's Dry Lake lying north of Ocotillo (Naval landing field); and the area adjacent to the western boundary on which houses, fences and other improvements have been erected. Other FUDS projects, including Bensen Dry Lake and Camp Ensign, lie within Borrego Maneuver Area. Also, the ASR states that Clarks Dry Lake and the Borrego Military Wash, which contained bombing, strafing, rocket targets and rake stations, although within the Borrego Maneuver Area, have been identified and are being investigated as separate FUDS sites, currently in the PA phase of investigation. Today, the land consists of a combination of barren desert, mountains, and badlands owned predominately by the State of California for use as Anza-Borrego Desert State Park, with numerous additional parcels under state, federal and private ownership.

The climate is characterized by hot summers and mild winters. From June through August, the average daily temperature is 88.93° F, while the average is 57.3° F for the months December through February. Average yearly rainfall is 6.83 inches. Rainfall from summer storms can be locally heavy and cause damaging flash floods. Occasionally, a tropical Pacific cyclone, known in Mexico as a chubasco, will strike the area and dump large amounts of rain in a short period of time. On average, summer rains attributable to tropical Pacific storms reach Southern California once every two years. The site is in the Borrego Valley with elevations ranging from 262 feet below sea level to 6,560 feet above sea level. Borrego Maneuver Area is on a fairly level, broad, and arid plain between Borrego Mountain and the Santa Rosa Mountains with some mountainous areas. Vegetation is sparse, consisting of several species suited to the arid climate. The only surface body of water constantly present is the Coyote Canyon stream.

**4. SITE HISTORY:** The former Borrego Maneuver Area was acquired by the Department of the Army through a Use Permit with the State of California dated 10 March 1942. Referenced improvements to the Maneuver Area included primarily roads. Navy sites, specifically Naval Clarks Dry Lake and the Borrego (Military) Wash target areas, were predominately used as bombing, gunnery, rocketry targets and emergency landing strips. Expected and/or observed military improvements at the bombing targets include remains of rake stations, remains of mobile target tracks, and remains of targets. Reported uses of the area by the Army included force-on-force maneuvers and anti-aircraft training for troops stationed at Camp Callan, San Diego, California. The Marine site (Camp Ensign) was reportedly used as a tent camp for trainees from the San Diego area. Marine activity in the maneuver area consisted solely of desert driving training.

On 13 July 1944, the Commanding General, Headquarters, Army Ground Forces declared the Borrego Maneuver Area as surplus to the requirements of the Army Ground Forces. Termination

of the land use permit is believed to have occurred in October 1944, after Army use areas were determined to be appropriately prepared for transfer. The 400 square miles which constituted the Maneuver Area were predominately relinquished back to the State of California, which owns the property today as part of the Anza-Borrego Desert State Park.

## 5. PROJECT DESCRIPTION:

### AREA A-1:

Size, Acres: 2,085.00  
Former Use: Mechanized Artillery Range Impact Area  
Present Use: Desert State Park  
Probable End Use: Desert State Park  
Ordnance Presence: **Confirmed:** MKII 40mm HE Projectile  
**Potential:** M71 90mm HE Projectile

### AREA A-2

Size, Acres: 23,852.00  
Former Use: Mechanized Artillery Range Buffer Zone  
Present Use: Desert State Park  
Probable End Use: Desert State Park  
Ordnance Presence: **Potential**  
Type: MKII 40mm HE Projectile  
M71 90mm HE Projectile

### AREA B

Size, Acres: 4,450.00  
Former Use: Borrego Mountain Automatic Weapons  
Firing Range/Rocket Experimental Test Area  
Present Use: Desert State Park  
Probable End Use: Desert State Park  
Ordnance Presence: **None**  
Type: Not Applicable

### AREA C

Size, Acres: 4,450.00  
Former Use: Santa Rosa Automatic Weapons Firing Range  
Present Use: Desert State Park  
Probable End Use: Desert State Park  
Ordnance Presence: **None**  
Type: Not Applicable

## AREA D

Size, Acres: 206,731  
Former Use: All Other Lands  
Present Use: Desert State Park/Federal/Private  
Probable End Use: Desert State Park/Federal/Private  
Ordnance Presence: **None**  
Type: Not Applicable

## AREA E-1:

Size, Acres: 3,112.00 (Clarks Dry Lake 1,093.00, Borrego Wash 2,019.00)  
Former Use: Naval Impact Area  
Present Use: Desert State Park  
Probable End Use: Desert State Park  
Ordnance Presence: **Confirmed**

**Borrego Wash:** High Explosive Projectiles(MKII 40mm HE Projectile), Target Practice and Armor Piercing(20mm M95 and M99) Projectiles, Photoflash Bombs(100 lb.), Practice Bombs(MK 15MOD3 100 lb, MK 23 3 lb., and M38A2 100 lb.), High Explosive Rockets(5”), Practice Rockets(2.25”), Small Arms Ammunition(.50 cal.)

**Clarks Dry Lake:** Practice Bombs (M38A2 100 lb. and MK 23 3 lb.), Small Arms Ammunition(.50 cal)

**Potential:** M71 90mm HE Projectile at Borrego Wash and dynamite at Clarks Dry Lake

## AREA E-2:

Size, Acres: 9,785.00 (Clarks Dry Lake 4,487.00, Borrego Wash 5,298.00)  
Former Use: Naval Buffer Zones  
Present Use: Desert State Park  
Probable End Use: Desert State Park  
Ordnance Presence: **Potential**

**Borrego Wash:** High Explosive Projectiles, Target Practice and Armor Piercing Projectiles, Photoflash Bombs, Practice Bombs, High Explosive Rockets, Practice

Rockets, Small Arms Ammunition  
**Clarks Dry Lake:** Practice Bombs,  
Small Arms Ammunition

6. **CURRENT STATUS:** The Archives Search Report (ASR) for Borrego Maneuver Area was completed by the U.S. Army Corps of Engineers, Rock Island District, in June 1997.

7. **STRATEGY:**

**AREA A-1:** RAC 3;EE/CA

**AREA A-2:** RAC 3;EE/CA

**AREA B:** RAC 5;NOFA

**AREA C:** RAC 5;NOFA

**AREA D:** RAC 5;NOFA

**AREA E-1:** RAC 2;EE/CA

**AREA E-2:** RAC 2;EE/CA

8. **ISSUES AND CONCERNS:** The Huntsville Center Technical Advisory Group (TAG) concurred with the ASR recommended strategy of EE/CA for Areas A-1, A-2, E-1, and E-2, provided that Areas E-1 and E-2, comprising Clarks Dry Lake in the northwestern sector of Borrego Maneuver Area and Borrego Military Wash in the southeastern sector, are not separate FUDS projects. The TAG also concurred with NOFA for Areas B, C, and D. Areas A-2 and E-2 are designated as buffer zones for Areas A-1 and E-1, respectively. Interview and site visit results did not indicate any instances of OE or OE related debris being found in Areas A-2 and E-2.

**Areas E-1 and E-2:** The ASR states that Areas E-1 and E-2 encompass the areas for Clark's Dry Lake and Borrego Military Wash, that these areas are in the preliminary stages of separate investigations (INPR), and they do not as yet possess a signed FDE. Concur with the ASR author's recommendation in paragraph 5b of the ASR Findings that **"Since these sites were inspected during this investigation, were found to contain an OE presence, and have been further analyzed/described later in this report, it would be prudent to include additional area acreage with report FDE acres and terminate any further investigative actions."** Furthermore, it appears that the firing point for the Impact Area and Range Buffer Zone of Areas A-1 and A-2, used by the Army, is included in the the Borrego Military Wash area, used by the Navy for bombing, gunning and rocketry. Based on the historical use of the land, and since findings, conclusions and recommendations for these lands have been included in this report, inclusion of Areas E-1 and E-2 in this project is required.

**Area Strategies:**

**Areas A-1 and E-1, Mechanized Artillery Range Impact Area**(2,085 acres) and **Naval Impact Areas**(3,112 acres) respectively; Historical documents and interviews indicate that two 40mm HE were found in **Area A-1**, one of which was destroyed and one remains at an undetermined

location; the survey team site inspection revealed no evidence of OE. The site survey team found most of the OE indicated for **Area E-1** during site inspection.

**Areas A-2** (23,852 acres) and **E-2** (9,785 acres), buffer zones for Areas A-1 and E-1, respectively: EE/CA was recommended for these areas based on proximity to Areas A-1 and E-1, range fans for weapons thought to have been fired and expenditure of OE beyond the target areas due to error. No record of OE was found in these areas and inspection of the site revealed no OE or OE debris present. There is some indication in the ASR that 90mm was used at the site: Area A-2 is based on the range fan for 90mm.

**Areas B** (4,450 acres), **C** (5,985 acres), and **D** (206,731 acres) consisted of Automatic Weapons Firing Ranges and Other Lands. No OE was found during site inspection and interviews/research provided no indication of OE in these areas. However, the site inspection team did find seven impacted 3.25 inch practice rockets in Area B, which was also a Rocket Experimental Test Area. The ASR states: “Although a practice rocket presence was discovered, these particular rockets were fired during a closely controlled CALTECH experimental rocket program. They are fired devoid of hazardous energetic materials other than propellant and occasional flare elements, which were found to have been consumed in all discovered rockets.” NOFA applies for these areas.

**Chemical Warfare Materiel:** No documentation was noted that indicates that chemical warfare activities occurred at the site.

**Natural Resources:** Federally- and State-threatened species are known to occur within the general area of the site and are listed in ASR Findings, pages 7 through 8, para 3f and Table 3-2. An on-site inspection by appropriate State and Federal personnel may be necessary to verify the presence, absence or location of listed species, or natural communities.

**Historical Resources:** The ASR Findings, para 3g, state that there are numerous historical/archeological/paleontological sites located in or near the site. Any intrusive measures taken within the area will require oversight by the State Historical Preservation Office and/or other like organizations.

**9. SCHEDULE SUMMARY:**

	Orig.	Sch.	Actual	Orig.	Sch.	Actual
<u>Phase</u>	<u>Start</u>	<u>Start</u>	<u>Start</u>	<u>Comp</u>	<u>Comp</u>	<u>Comp</u>
EE/CA						

**10. FUNDING/BUDGET SUMMARY: For Official Use Only**