

**SITE SURVEY SUMMARY SHEET  
FOR  
DERP-FUDS SITE NO. J09CA0064  
BIG LAGOON BOMBING TARGET  
HUMBOLDT COUNTY, CALIFORNIA**

**SITE NAME(S):** The property is currently part of the Dry Lagoon State Park, adjacent to the Big Lagoon County Park. The site was previously known as the Big Lagoon Bombing Target and Target No. 12.

**LOCATION:** The Big Lagoon Bombing Target property consists of 153 acres located in Humboldt County, California, approximately 30 miles north of Eureka and 325 miles northwest of Sacramento (Figure 1). The target area is situated at Latitude 41° 11' and Longitude 124° 07' and is visible from Highway 101. The target area is located on a 3 mile long sand spit which separates the lagoon and the ocean. A parking lot just south of both the lagoon and the spit includes a boat ramp which provides access to the lagoon. The parking lot is part of the Big Lagoon County Park and the spit is part of the Dry Lagoon Beach State Park. The park and beaches are open to the public twenty-four hours a day. There is a campground adjoining the lagoon to the south and there are numerous small homes and cabins adjacent to the campground and parking lot.

The inland property bordering the lagoon is covered with long grasses, shrubs and trees. The spit consists of a long stretch of wind blown sand down the middle, rocks and driftwood on the ocean side, and small plants on the lagoon side.

**SITE HISTORY:** According to a station history of NAAS, Arcata submitted on October 16, 1945, Fleet Air Alameda designated NAAS, Arcata (the Station) as a training Station for forward rocket firing. On April 25, 1944, five officers and eleven men reported aboard as Fleet Air Training Detachment 1 from Alameda. The mission of this detachment was the installation of rocket targets for the training of Fleet Air Squadrons (Fleet) in forward rocket firing (SB0248).

An undated list titled Gunnery Range and Target Areas Released since WW II by the Twelfth Naval District indicates that the Big Lagoon Range consisted of 153.03 acres acquired by leasehold condemnation on June 13, 1944 (SB0797). A Naval Speedletter dated May 21, 1945, requests that the Commandant advise of activities needed for fiscal year 1946. Included in the activities listed is a reference to a lease with Harriet Barto et al, for 153 acres for Big Lagoon the B-1 Target (CP0012). According to a September 24, 1945 memorandum, Big Lagoon Target No. 12, was included with the Humboldt Bay Bombing Target under Lease No. NOy(R)-38139 which was for 494.54 acres (SB0108).

The first Fleet target, located in Big Lagoon, was completed in June 1944, but the adverse weather prevented full utilization of the facilities. From September 1944 until June 1945, the rocket training program

was accelerated to a very high degree with the average size carrier-based squadron completing its training in the course of one week. As the rocket program became more and more paramount in naval aviation, it was necessary to establish a second target at the Station to meet the increasing number of squadrons arriving for training. A second target was located on the south spit of Humboldt Bay and was in operation in December 1944 (SB0248).

A drawing of the Big Lagoon Bombing Target indicates that the target was located on the lagoon side of the sand spit (Figure 2). As shown on the drawing, Range House No. 1 was located 4,000 feet south of the target on the ocean side of the spit, the Range Spotters Station was located 1,000 feet south of the target, the Deflection Spotters Station was located in the lagoon to the southeast of the target. The drawing also indicates that cottages were located within approximately 11,000 feet of the target (COE0473).

An April 1944, Property Acquisition Map indicates that the target's proposed boundary extended from the south end of the spit, up to the north end of the spit, and east over approximately one-half of the lagoon (Figure 3). The drawing also indicates that the Range Control Radio Shack consisted of a Dallas Hut with a flat roof for the tower. The Observers' Tower on the spit next to the target was six feet by six feet by eight feet. The target consisted of a 100 foot radius made of drift logs painted orange and white with a radar screen in the center. There were five raft markers, placed every 1,000 feet, and positioned in a straight line across the lagoon from the target toward Highway 101. Also in the lagoon, north of the raft markers, was a six foot by six foot Observers' Tower on a raft (SB0243).

Due to the heavy fog in the area the Station underwent a change in its mission and in January 1945, the Station was approved for the installation of an experimental Fog Dispersal Unit. During the initial period of this installation, the rocket training program continued at a high speed, with weather conditions exceptionally favorable. However, around the first of June 1945, the activities of the Landing Aids Detachment were centered in the immediate vicinity of the runways, even to the extent of tearing up runways and taxi strips for the laying of pipe lines. As a result, it was felt that the rocket training program could not be continued further under the existing hazardous conditions (SB0248).

On July 1, 1945, the Fleet Air Training Detachment withdrew from the Station altogether; stripping its targets and removing all "CASU", squadron, and Fleet personnel and equipment (SB0248). A February 1946 letter from the Commander Fleet Alameda states that Target No. 12, was no longer needed (SB0793). An undated list of Gunnery Range and Target Area Released since WWII by the 12 Naval District indicates that the leasehold, acquired by condemnation on June 13, 1944, was terminated on April 14, 1946 (SB0797).

**SITE VISIT:** On June 7, 1999, Gene Barber and Cheryl Mahoney of TechLaw visited the site. The main objectives of the site visit were to verify the reported evidence of DoD activity in the area and to document the current status of the site. The former target area can be reached by taking the Big Lagoon Park exit from Highway 101. The highway passes near the western edge of the lagoon, and the two are separated by a small strip of land. The two lane road to the site passes by an elementary school and numerous small houses and cottages. The parking lot, south of the lagoon, is part of Big Lagoon County Park and includes a boat ramp which provides access to the lagoon. It is possible to walk north onto the spit and south along the beach. On the day of the site visit, the beach was populated by approximately ten people. The weather

was sunny yet cold due to the strong winds. The wind along the beach appeared to sweep across the spit removing debris along the top. There were areas along the spit where it appeared that the ocean tides had broken over the sand and flowed into the lagoon.

TechLaw searched both the ocean and lagoon sides of the spit from the parking lot to just beyond the estimated location of the target without locating any signs of ordnance, the former target, or the observation buildings. Between the high tides, the strong undercurrent, and the wind, it seems possible that much of the ordnance would have been swept out to sea or buried in the sand; however, these same elements could also cause any remaining ordnance to resurface.

According to Natural Resources Specialist and local historian Don Tuttle, visitors to the area began removing ordnance shortly after WWII. He is unaware of any ordnance having been found within the past several years. Mr. Tuttle described the rockets found as being approximately 12 to 14 inches long and 4 inches in diameter without fins. He also stated that a man conducted an unsuccessful one year search of the lagoon for a WWII plane that had reportedly crashed there.

**CURRENT USE OF THE SITE:** During the 1920s and 1930s, cabins were built at the south end of the lagoon and the area was a popular destination for weekend and summer travelers. Many of the old cabins still exist alongside newer houses, several of which appear to be inhabited year round. Access to the area is gained through the Big Lagoon County Park which owns the parking area south of the lagoon, while the sand spit is part of the Dry Lagoon State Park. The area remains a popular destination for camping, boating, fishing, swimming, and beach combing.

Property on the southeastern side of the lagoon is part of the Big Lagoon Rancheria. While descendants of the Yurok and Tolowa tribes have lived in the Big Lagoon area since the 1930s the tribe only obtained title to the nine-acre Big Lagoon Rancheria under the Homeless Indians Act in the late 1960s (NS0007). This part of Big Lagoon was not included in the target area.

**CATEGORY OF HAZARD:** OE

**PROJECT DESCRIPTION:** There is one potential project at this site.

a. OE. Training in forward rocket firing was conducted at this site and practice bombs have been found in the former target area since WWII. The target area should be screened for potential ordnance.

**AVAILABLE STUDIES AND REPORTS:** Historical documents obtained from the Pacific Sierra National Archives in San Bruno. A list of these documents is attached.

**POC:** Mr. William Mullery, U.S. Army Corps of Engineers, Sacramento District, (916) 555-6944.

**PROJECT SUMMARY SHEET  
FOR  
DERP-FUDS OE PROJECT NO. J09CA006401  
BIG LAGOON BOMBING TARGET  
HUMBOLDT COUNTY, CALIFORNIA**

**PROJECT DESCRIPTION:** The Big Lagoon Bombing Target was used for training in forward rocket firing. The target location and proposed boundary are shown on a Navy map of the target area. The property is now part of Dry Lagoon Beach State Park and is open to the public.

**PROJECT ELIGIBILITY:** The site was used by DoD as a target for forward rocket firing practice during World War II. A site map indicates that the target area was constructed and used by the Navy. The site was leased by DoD until 1946 when the property was no longer needed.

**POLICY CONSIDERATIONS:** The target area was used by DoD.

**PROPOSED PROJECT:** It is recommended that signs be posted in the area and that the proper officials be notified of potential hazards. This site should be further evaluated for unexploded ordnance and should be referred to CEHND for recommendations on further action.

**RAC FORM:** Attached

**POC:** Mr. Bill Mullery, U.S. Army Corps of Engineers, Sacramento District, (916) 557-6944

ST. GEORGE REEF LIGHT STATION

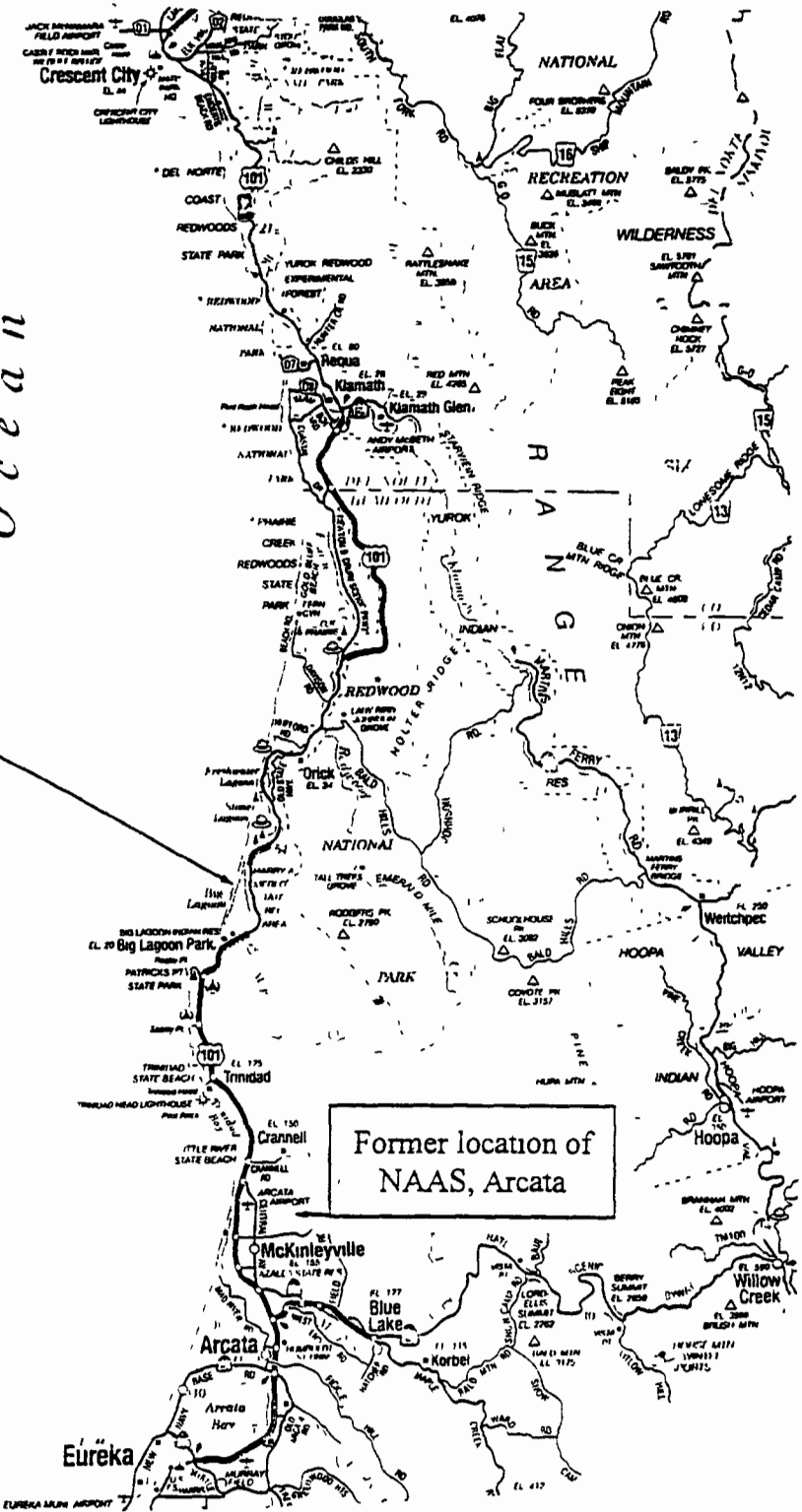
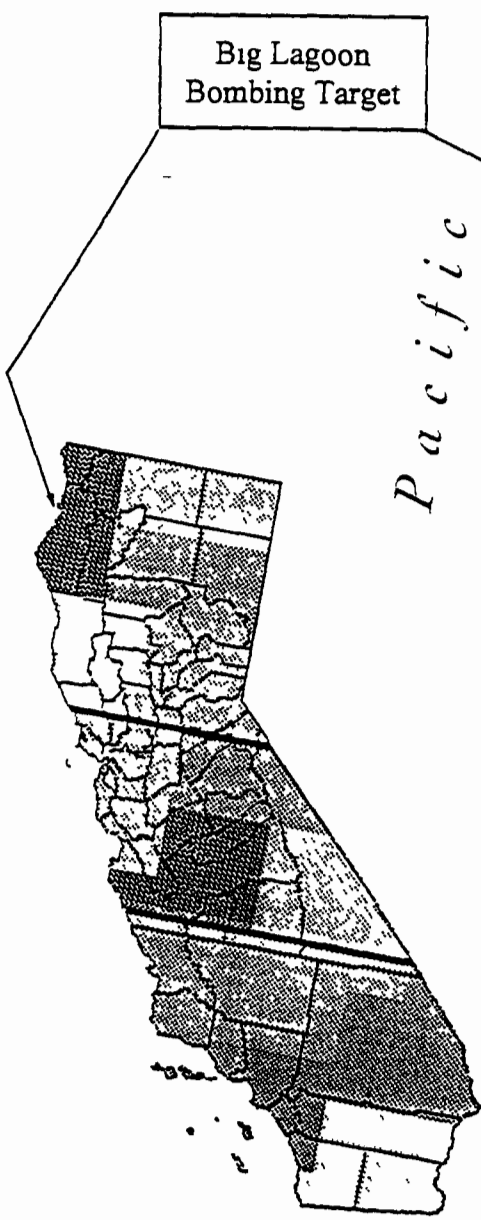


Ocean

Big Lagoon  
Bombing Target

Pacific

Former location of  
NAAS, Arcata



Not to Scale

Figure 1

LEGEND  
MAP DEPICTING  
SITE LOCATION

SOURCE: California State Automobile Association

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM  
FORMERLY USED DEFENSE SITES  
FINDINGS AND DETERMINATION OF ELIGIBILITY

BIG LAGOON BOMBING TARGET  
HUMBOLDT COUNTY, CALIFORNIA  
DERP-FUDS SITE NO. J09CA0064

FINDINGS OF FACT

1. The DoD acquired a leasehold interest in the property at Big Lagoon through condemnation proceedings on June 13, 1944. The property consisted of approximately 153 acres in Humboldt County, California.
2. In 1944, Fleet Air Alameda designated NAAS, Arcata as a training station for forward rocket firing and in April 1944, Alameda sent Fleet Air Training Detachment 1 (Fleet) to install rocket targets and set up a training program. The first target, located in Big Lagoon, was completed in June 1944, but the adverse weather prevented full utilization of the facilities. From September 1944 until June 1945, the rocket training program was accelerated to a very high degree with the average size carrier-based squadron completing its training in the course of one week. Due to the heavy fog in the area the NAAS, Arcata underwent a change in its mission and the station was approved for the installation of an experimental Fog Dispersal Unit. During the initial period of this installation, the rocket training program continued at a high speed, with weather conditions exceptionally favorable. However, around the first of June 1945, the activities of the Landing Aids Detachment were centered in the immediate vicinity of the runways, even to the extent of tearing up runways and taxi strips for the laying of pipe lines. As a result, it was felt that the rocket training program could not be continued further under the existing hazardous conditions.
3. On July 1, 1945, the Fleet withdrew from the station altogether, stripping its targets and removing all "CASU", squadron, and Fleet personnel and equipment. The condemnation leasehold was terminated on April 14, 1946.

DETERMINATION

Based on the foregoing findings of fact, the site has been determined to be formerly used by DoD. It is therefore eligible for the Defense Environmental Restoration Program - Formerly Used Defense Sites established under 10 USC 2701 et seq.

27 Sep 99  
DATE

Peter T. Madsen, Col  
PETER T. MADSEN  
COLONEL (P), U.S. ARMY  
COMMANDING