

## Tribal Land Turns Back Clock Through Environmental Restoration

(By Cindy Vincent)

Sutcliffe, Nev.--Once an integral part to Naval bombing and strafing activities conducted at Pyramid Lake in the 1940s, ordnance that was sitting on the bottom of Pyramid Lake locked a piece of Naval history and the Pyramid Lake Paiute Reservation.

In August 2004, this piece of history was recovered and brought to the surface for the first time by Navy Explosive Ordnance Disposal Mobile Unit (EODMU) 11, with support from Naval Air Station (NAS) Fallon, the Pyramid Lake Paiute Tribe, the U.S. Army Corps of Engineers, tribal contractor David Evans and Associates (DEA), and Army Corps' contractor EM-Assist.



Heather Drury/EM-Assist, Inc.

Tribal staff works with the Navy and EM-Assist to recover ordnance from Pyramid Lake.

“This is the ultimate cooperative effort: funded by the Native American Land Environmental Mitigation Program (NALEMP), managed by the tribe, mentored by the Corps, and executed by the Navy with assistance from DEA and EM-Assist,” said Jerry Vincent, Formerly Used Defense Sites Program Manager, U.S. Army

Corps of Engineers, Sacramento District.

A massive joint effort that initially began in 2002, the ordnance removal project, known as “Operation Sutcliffe Rocket Lift” was made possible through funding provided by the Native American Land Environmental Mitigation Program (NALEMP). The NALEMP was established by the Department of Defense to specifically address the effects of past military operations on Native American lands and Alaska Native Claims Settlement Act-conveyed properties.

In 2002, the Army Corps of Engineers and the Pyramid Lake Paiute Tribe established a Cooperative Agreement, which created a guideline for the ordnance removal project through the Strategic Project Implementation Plan.

“This project has made it possible for the tribe to undertake a lake mapping project with a wide range of uses for the fisheries, water quality control and economic development,” said Anna Keyzers, Pyramid Lake Paiute Tribe Environmental Department. “This information has far reaching capabilities for the tribe.”

The initial fieldwork began with the tribe awarding a contract to DEA for the mapping and sediment sampling of Pyramid Lake. In the fall of 2003, the bathymetric and detailed cultural debris investigation was conducted, which identified and mapped over 200 significant anomalies, potentially ordnance ammunition, at the bottom of Pyramid Lake.



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Navy divers prepare for a dive operation on one of two barges located at Pyramid Lake.

DEA initiated a Remotely Operated Vehicle (ROV) exploratory service in the spring of 2004. The vehicle was equipped with scanning sonar and was able to detect small targets within a 20-meter radius, and located high-velocity aircraft rockets, ammunition crates, 55-gallon drums and various other debris.

In August 2004, two years worth of planning and investigation finally paid off when the first phase of ordnance removal was initiated off the Sutcliffe shoreline. EOD divers, DEA, Paiute tribal members, and representatives from the Army Corps and EM-Assist, recovered 207 rockets and 500 pounds of small arms ammunition during the 12-day removal effort.

The recovered ordnance was stored at the Pyramid Lake Fisheries Department in crates until the recovery operation was complete. The total amount was sent to NAS Fallon in secure packing materials and stored in the base weapons facility.

"We didn't expect to find so much out there. Previous ROV searches indicated far less than we recovered. What we did find was extremely degraded from being under water for 60 years," said Senior Chief Hull Technician (EOD), Daniel Gross, EODMU 11, Detachment Fallon.

On August 27, 2004, all 207 rockets and 500 pounds of small arms ammunition were taken to an air-to-ground bombing range, sorted into two piles, laced with explosives, and detonated to properly dispose of all of the hazardous shallow-water ordnance recovered from Pyramid Lake.

Immediately after the Phase I removal operations, nearly nine months of planning went into preparing the next phase by developing logarithms for new high altitude decompression dive tables and acquiring the equipment necessary to carry out Phase II. In April 2005, "Operation Sutcliffe Rocket Lift" Phase II was initiated and marked a historical step in not only the history of Pyramid Lake but also in the history of Naval diving operations.



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Navy Divers secure the MK 16 Mod 1 diving rig before initiating a dive operation.

Two important details separated this operation from all others: equipment and altitude. EOD diving personnel dove for the first time in Naval history at an uncommon altitude of 3,880 feet with very unique diving gear, known as a MK 16 Mod 1 closed-circuit breathing apparatus, that provides and reuses both oxygen and helium while filtering out any carbon dioxide. In order for divers to use this equipment at such a high altitude, Naval Systems Command (NAVSEA OOC) developed new untested dive tables and received Chief of Naval Operations approval.

"The MK16 Mod 1 gives the diver the advantage of the mobility of a free swimmer and requires minimal support," Hull Technician Senior Chief, Master Diver, Boy Kayona said.

Unlike the first phase, which only covered shallow-water areas (up to 130 feet), the second phase entailed deeper excursions to cover a 500 feet by 1-mile path up to 222 feet in depth. Like the first phase, Whidbey Island divers and EOD specialists from NAS Fallon worked alongside DEA, EM-Assist and Pyramid Lake support to locate anomalies for removal and proper disposal. For approximately six weeks, EOD and Navy divers

conducted up to eight dives per day, with two groups conducting two dives in the morning and two in the afternoon.

Another ROV search was launched the final week of operations to re-locate previously identified anomalies; after which divers retrieved identified ordnance and munitions. Navy EOD personnel inspected recovered pieces of ordnance to identify types of hazards and determine proper shipping and disposal methods.

Again, the recovered ordnance was stored at the Pyramid Lake Fisheries Department in crates and the total amount was sent in secure packing materials. On June 4, 2005, all 243 rockets, 182 crates, weighing approximately 27,000 pounds, of small arms ammunition were sorted into three piles, laced with explosives, and detonated to properly dispose of the forgotten Discarded Military Munitions from the bottom of Pyramid Lake once and for all.

"The Pyramid Lake Paiute Tribe applauds the clean-up effort and positive working relationship with the Department of Defense for the removal of ordnance and munitions from historic Defense operations," Pyramid Lake Paiute Tribal Chairman, Norm Harry, said.



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Navy EOD personnel prepares for the final detonation by tightly packing the recovered ordnance.