

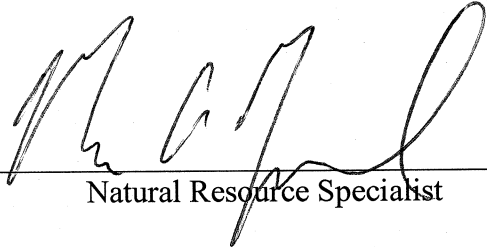
**FINDING OF NO SIGNIFICANT IMPACT
(FONSI)**

LC-10-038

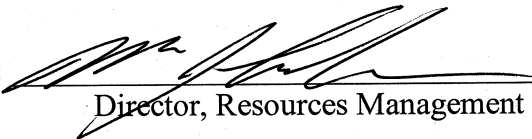
**Swimmer Defense System Testing
At Davis Dam
Clark County, NV
Mojave County, AZ**

Based on a thorough review of the analysis of the environmental impacts presented in the Final Environmental Assessment prepared by the Department of Homeland Security Reclamation concludes that implementation of Alternative 3 (Preferred Alternative) will not significantly affect the quality of the human or physical environment within or adjacent to the project area.

This Finding of No Significant Impact has, therefore, been prepared and is submitted to document environmental review and evaluation of the Preferred Alternative in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended.

Prepared:  Date: 10/16/10
Natural Resource Specialist

Recommended:  Date: 10/16/10
Manager, Environmental Compliance Group

Approved:  Date: 10-20-10
Director, Resources Management Office

BACKGROUND

The United States (U.S.) Department of Homeland Security (DHS) is proposing to conduct testing of a Swimmer Defense System (SDS) at Davis Dam, located along the border of Nevada and Arizona during 2010 and 2011 as part of the Underwater Surveillance: Dams and Tunnels Program. Specifically, the DHS Science and Technology Directorate Infrastructure and Geophysical Division proposes to demonstrate the capability of a Naval Undersea Warfare Center Division Newport owned and operated SDS to detect swimmer/diver threats in a dam environment. DHS is partnering with the U.S. Department of the Interior Bureau of Reclamation (Reclamation) to test SDS at critical facilities within the U.S. The in-water SDS equipment that would be tested includes two high frequency detection sonars, an underwater loudhailer (eLOUD), and a subsurface non-lethal diver deterrent (NLDD). The proposed testing would be conducted within the forebay area of Davis Dam and in the nearby waters of its reservoir, Lake Mohave. The Environmental Assessment (EA) analyzes testing scheduled to take place beginning in late summer or fall of 2010 that would be completed in the winter/spring of 2011. Future SDS system deployment efforts at Davis Dam would not be covered under this EA and would necessitate issuance of additional environmental documentation.

Reclamation was a cooperating agency on the EA prepared by DHS for this action. The EA addressing this action may be obtained from: Mr. Daniel Dayton at (202) 254-5607; daniel.dayton@dhs.gov or by contacting Reclamation at 702-293-8130 and requesting to review a copy.

ALTERNATIVES CONSIDERED

Three alternatives were considered for SDS testing: the No Action Alternative and two Action Alternatives which consist of two different testing time periods. Under Alternative 1, the No Action Alternative, the Proposed Action would not occur. Under Alternative 2, Phase I SDS testing would be performed at Davis Dam in late summer/fall 2010, with Phase II SDS testing performed in winter 2011 after the analysis of test data obtained during Phase I. Under Alternative 3, the Preferred Alternative, Phase I SDS testing would be performed at Davis Dam in late summer/fall 2010, with delayed Phase II SDS testing occurring in spring 2011 before air temperatures pose safety concerns for test participants. DHS will implement Alternative 3. All testing will occur for a maximum of 12 hours per day during a 10-day period. Each phase will result in an estimated total of 120 hours of operation. All testing will occur during daylight hours, and only on weekdays.

THE RECOMMENDED ALTERNATIVE

Under Alternative 3, following a three-day pre-survey, Phase I SDS testing would be performed at Davis Dam in late summer/fall 2010, with delayed Phase II SDS testing occurring in spring 2011. All testing would occur for a maximum of 12 hours per day during a 10-day period. Additional details on the preferred alternative can be found in the EA for Swimmer Defense System Testing at Davis Dam in Reclamations Resource Management Office Environmental Library.

ENVIRONMENTAL IMPACTS

The EA analyzed the physical, biological and socioeconomic environments in the Lake Mohave environment. Indian Trust Assets (ITA) and Environmental Justice were not explicitly addressed in the EA. Reclamation will address these two topics in this Environmental Impacts section of the FONSI. Environmental impact analyses were not conducted for terrestrial resources since all of the Proposed Action will occur in the lake environment. Based on the analyses contained in the EA, Reclamation finds that the conduct of SDS testing at Davis Dam will not significantly impact the human or natural environment; therefore, an Environmental Impact Statement is not required for the Proposed Action. The following section provides a short discussion regarding environmental impacts for the analyzed resources.

Physical Environment

Analysis of the physical Environment included air and water quality.

Water Quality- Potential impacts to air quality could result from vessel engine and air compressor exhaust emissions. During test operations, up to four small surface support vessels would be used for diving purposes, transporting equipment and personnel, and to clear the site of interfering traffic. An air compressor would be used for the NLDD air supply pack and for charging SCUBA cylinders for dive operations. The emissions, however, would be minimal given the short duration of the SDS testing. As discussed in Section 3.1.3 of the EA, Mohave County is currently considered attainment zones for all criteria pollutants. Clark County is classified as an NAA of the eight-hour standard for ozone, Subpart 1 (40 CFR § 81.329). For Clark County, nitrogen oxides (NO_x) and volatile organic compound (VOC) emissions resulting from the Proposed Action fall below de minimis levels and therefore, a Conformity Determination under the Clean Air Act is not required (Appendix A of the EA).

Air Quality- Potential impacts to water quality could result from routine vessel operations. Although fuel and oil spills are not expected, these substances can degrade water quality and injure freshwater organisms. However, shipboard or testing operations do not include intentional release of fuel or oil. In the event of an accidental release of fuel oil or any other hazardous substance during testing operations, the Lower Colorado River Spill Notification Process would be followed.

Biological Environment

Analysis of the Biological Environment included invertebrates, fish, birds, and reptiles. There are two fish species listed under the Endangered Species Act that are found in Lake Mohave.

These two species are the razorback sucker (*Xyrauchen texanus*) and bonytail chub (*Gila elegans*).

There will be no significant impacts to invertebrates (i.e., the benthic community), reptiles (turtles), or birds associated with the Proposed Action. The acoustic emissions from the diver detection sonars and current profilers during SDS testing are above the hearing range of invertebrates, reptiles, and birds, and therefore will result in no potential impact. The eLOUD and NLDD will only involve intermittent exposures, after which time any disturbed fauna are likely to return to their normal activities. Any energy emitted from the eLOUD and NLDD into Lake Mohave will dissipate before it reaches the shoreline, where most turtles occur. Further, due to the short duration and intensity of the acoustic emissions during testing, as well as the limited time diving birds spend underwater, there will be no significant impact to birds. Significant impacts to invertebrates and reptiles from vessel movements is also not anticipated due to the small number of invertebrates exposed to vessel movements and the occurrence of turtles primarily in shallower waters along the shoreline.

No significant impacts to fish species from acoustic emissions or vessel movement will occur from the Proposed Action. The acoustic emissions from the diver detection sonars and current profilers are above the hearing range of fish. Acoustic emissions from the eLOUD or NLDD may cause some adult fish species to have short-term behavioral responses (i.e., startle response) or experience a temporary threshold shift in hearing. However, it is unlikely that physical impacts to fish will occur from acoustic emissions based on the intermittent exposure, acoustic frequencies, and source levels of these systems. As such, acoustic emissions are not expected to prevent fish from returning to normal activities, and no significant impacts are expected. Significant impacts to fish from vessel movements are also not anticipated due to the low probability of collision with mobile juvenile or adult fish.

Fish protected by the Endangered Species Act (ESA) have the potential to occur within the proposed test site. An Informal ESA Section 7 Consultation was initiated to seek U.S. Fish and Wildlife Service (USFWS) concurrence with a “not likely to adversely affect” conclusion for two ESA-listed fish species (razorback sucker and bonytail chub) potentially occurring within the proposed test site. The Preferred Action will occur within the dam forebay and in deeper waters of Lake Mohave away from bonytail chub and razorback sucker spawning habitat. USFWS concurred with the conclusions of the analysis that the Proposed Action may affect but is not likely to adversely affect the ESA-listed species and their critical habitat.

Socioeconomic Environment

Surface activity associated with tourism, recreational fishing, and recreational boating will temporarily be restricted during testing within an established safety zone; however, any exclusion will be short-term and within a small area and will not significantly impact recreational activities. Testing will generally occur outside of peak recreational fishing times, further reducing the potential for impacts. Any significant potential impacts to human divers/swimmers will be minimized by a protective measures plan in place during testing. Protective measures include, but are not limited to:

1. Boat crews will remain vigilant for all non-participant divers/swimmers.
2. Sound pressure levels will be monitored during testing to ensure non-participant swimmers/divers are not exposed to levels potentially causing impacts.
3. A Notice to Mariners will be issued to provide notice to public users of the areas surrounding the test site.

Indian Trust Assets

ITA were not analyzed in this EA because there are no ITA that would be impacted from this action.

Environmental Justice

Environmental Justice was not analyzed in this EA. Reclamation performed an analysis of Environmental Justice in the preparation of this FONSI and determined that there are no residences in the immediate vicinity of Davis Dam that would be impacted from this action. Lake Mohave would have a temporary closure on the extreme southern end, but this closure does not target any one individual group of ethnicity or economic stature and permanent impacts will not result from this temporary closure.

