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AESO/SE
2-21-95-F-114R3

December 17, 2002

Mr. Ron Pearce
Director, Range Management
Marine Corps Air Station - Yuma
Box 99100
Yuma, Arizona 85369-9100

Dear Mr. Pearce:

This letter is in response to your October 22, 2002, request for reinitiation of consultation and conference for existing and proposed activities by the Marine Corps Air Station - Yuma (MCAS) in the Arizona Portion of the Yuma Training Range Complex, pursuant to section 7 of the Endangered Species Act (16 U.S.C. 1531-1544), as amended. The original biological and conference opinion was dated April 17, 1996, and addressed potential effects of proposed and ongoing activities by MCAS on the Barry M. Goldwater Range (BMGR), Yuma and Maricopa counties, Arizona, that may affect the endangered Sonoran pronghorn (*Antilocapra americana sonoriensis*) and the proposed threatened flat-tailed horned lizard (*Phrynosoma mcalli*). This is the third reinitiation of that opinion. Due to comments from the Environmental Protection Agency (EPA) concerning potential contaminants issues at MCAS's munitions training range (formerly the explosive ordnance disposal facility), you have requested reinitiation specifically in regard to possible effects of contaminants at the munitions training range on the flat-tailed horned lizard.

This biological and conference opinion is based on information provided with your request for reinitiation, information provided during the previous consultations on this action, new information on the status of the flat-tailed horned lizard, our files, and other sources of information as detailed in the consultation history. A complete administrative record of this consultation is on file in this office.

CONSULTATION HISTORY

The consultation history from the beginning of informal consultation in 1993 through November 16, 2001, is detailed in our November 16, 2001, reinitiated biological and conference opinion.

That opinion, and the previous reinitiation dated March 18, 1998, addressed revisions to the proposed action and changes in the status and environmental baseline of the Sonoran pronghorn, but did not address the flat-tailed horned lizard, covered in the April 17, 1996, opinion. The 2001 opinion also addressed potential effects to Peirson's milkvetch, listed as threatened since the 1996 opinion. Previous consultations also addressed your requests for concurrence that the proposed action may affect, but will not adversely affect, the lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) and the cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*). However, this is the first reinitiation that specifically addresses effects to the flat-tailed horned lizard. We summarize consultation history specific to the flat-tailed horned lizard and pertinent to the current request for reinitiation, since issuance of the April 17, 1996, biological and conference opinion:

January 1997: MCAS issued a final environmental impact statement (EIS) for the Yuma Training Range Complex (YTRC) (MCAS - Yuma 1997). A record of decision, adopting the proposed actions, was signed September 24, 1998. The actions proposed were those consulted upon in the 1996 opinion and its reinitiation in March 1998.

June 1997: A conservation agreement was signed by 10 State and Federal agencies in California and Arizona committing the signatory agencies to implementation of the May 1997 Flat-tailed Horned Lizard Rangeland Management Strategy (Foreman 1997).

June 6, 2001: MCAS issued the "Ecological Pathway Analysis, Munitions Treatment Range" (CDM Federal Programs Corporation 2001) and supporting documents. The analysis identified an interim action needed to protect the flat-tailed horned lizard (lizard barrier fencing of the munitions treatment range), and indicated an ecological risk assessment was needed.

September 2001: MCAS issued the final YTRC Training Range Complex supplemental environmental impact statement. A record of decision was signed later in 2001 adopting the proposed actions.

October 22, 2002: You requested reinitiation of consultation. We received the request on November 5, 2002, and concluded it contained all information needed to reinitiate conferencing.

BIOLOGICAL OPINION

The following opinion is tiered off the 1996 and 2001 opinions. Amendments to those opinions are found below.

I. DESCRIPTION OF PROPOSED ACTION

The action upon which we consulted in 2001 has not changed, with the exception of the following paragraph, which replaces the description of the EOD Operating Area in the

Description of the Proposed Action section. Refer to our April 17, 1996, opinion, the biological assessment for the proposed action (Dames and Moore 1995), the draft EIS for the YTRC (MCAS - Yuma 1995), and the final EIS for the YTRC for further information.

The munitions training range (formerly the EOD Operating Area), located approximately 1.5 miles south-southwest of AUX-2, is a fenced and gated facility of about 250 acres in size, designated for disposal of ordnance. Approximately 4 acres are actually disturbed by munitions activities. The site is accessed via a road from AUX-2 and consists of several detonation pits (still in use), white phosphorus burn pits (not in use), former open burn areas (not in use), emergency safety bunkers (in use), and a munitions wash area (not completely constructed). Approximately 6.5 mi² surrounding the operating area are designated as restricted to entry for safety purposes.

STATUS OF THE SPECIES

The following replaces the Status of the Species section in the 1996 opinion:

The flat-tailed horned lizard is a small, cryptically colored, phrynosomatid lizard restricted to flats and valleys in the western Sonoran Desert, including the Coachella, Borrego, and Imperial valleys in California; the Yuma Desert in extreme southwestern Yuma County, Arizona; and adjacent portions of Baja California Norte and Sonora, Mexico (Funk 1981, Johnson and Spicer 1985, Rodriguez 2001). On November 29, 1993, we published a rule in the Federal Register proposing the flat-tailed horned lizard as a threatened species (U.S. Fish and Wildlife Service 1993). The proposed rule was withdrawn in a Federal Register notice dated July 15, 1997. However, on July 31, 2001, the 9th Circuit Court of Appeals remanded the withdrawal for further consideration. In a Federal Register notice dated December 26, 2001, we reinstated the proposed rule. A final listing decision is due one year after the reinstatement notice.

In Arizona, the range of this species is approximately bounded by the Gila River on the north, urban and agricultural development along the Colorado River on the west, and to the east by bajadas and relatively coarse, alluvial, granitic soils immediately west of the Gila and Butler mountains (Rorabaugh *et al.* 1987, Hodges 1995). In this area, most records for the species are from areas of fine, often windblown, silica sand dominated by sparse stands of white bursage (*Ambrosia dumosa*), creosote (*Larrea tridentata*), and galleta grass (*Hilaria rigida*) (Rorabaugh *et al.* 1987, Hodges 1995). The species shows a preference for and may be more abundant on sandy substrates as compared to desert pavement or hardpan surfaces (Muth and Fisher 1992, Rorabaugh *et al.* 1987), and in Arizona is most often found in areas of silica sand, rather than granitic sands and gravels (Hodges 1995).

The diet of the flat-tailed horned lizard consists primarily of ants (Parker and Pianka 1975; Turner and Medica 1982; Young and Young 2000). The species is active primarily from mid-February to mid-November (Muth and Fisher 1992, Mayhew 1965) and juveniles may be active throughout the winter on warm days (Muth and Fisher 1992). Mean home range of telemetered

flat-tailed horned lizards in Imperial County, California was 4.7 acres (Muth and Fisher 1992). In the Yuma Desert, mean annual home ranges for flat-tailed horned lizards ranged from 1.7-25.5 acres for males and 2.4-12.6 acres for females (Young and Young 2000). Daily movements decline as density of lizards increase and as forage resources decline (Young and Young 2000). Females produce one or two clutches of eggs that hatch in July and August-September (Turner and Medica 1982, Muth and Fisher 1992, Howard 1974). Flat-tailed horned lizards construct burrows in which they hibernate in winter and escape high temperatures in summer (Muth and Fisher 1992, Rorabaugh 1994, Young and Young 2000). Mean cloacal temperature of active flat-tailed horned lizards in California was 37.7° C (Mayhew 1965). Maximum and minimum voluntary body temperatures are 41.0° and 29.3° C, respectively (Brattstrom 1965). Individuals become stressed when cloacal temperatures reach 45° C or more (Mayhew 1965).

Predators of the flat-tailed horned lizard include a number of birds, most notably the loggerhead shrike, as well as sidewinder, leopard lizard, round-tailed ground squirrel, coyote, and fox (Young 1999, Duncan *et al.* 1994, Muth and Fisher 1992, Funk 1981). Large scorpions likely prey on juvenile flat-tailed horned lizards (Turner and Rorabaugh 1998). Eighty-two percent of flat-tailed horned lizards approached by researchers at Ocotillo Wells State Recreational Vehicle Area crouched low and remained motionless. Flat-tailed horned lizards were more likely to run when approached by a vehicle than by someone on foot (Wone and Beauchamp 1995).

The flat-tailed horned lizard is threatened by widespread habitat loss, including fragmentation and degradation due to human activities such as agricultural and urban development, off-highway vehicle use, energy developments, sand and gravel mining, construction of roads and canals, and military activities (U.S. Fish and Wildlife Service 1993). Based on a 1997 analysis, roughly 48.6 percent of the historical habitat of the flat-tailed horned lizard in the United States has been converted to other uses, particularly urban development and agriculture, and by filling of the Salton Sea (Hodges 1997). Remaining habitats are threatened by continued habitat conversion, off-road vehicles, pesticide applications, and invasion of nonnative plants. Insecticide applications in flat-tailed horned lizard habitat to control an agricultural pest may have reduced ant populations, the primary prey of the flat-tailed horned lizard (U.S. Fish and Wildlife Service 1993, Bolster and Nicol 1989) or caused other changes in the habitat of the lizard (Foreman 1997). Invasion of nonnative plants, such as split grass (*Schismus barbatus*) and Sahara mustard (*Brassica tournefortii*) may alter the prey base of the flat-tailed horned lizard. Stem densities of these species can also become dense enough to perhaps impede the movement of flat-tailed horned lizards. Furthermore, nonnative plants can carry fire that eliminates native shrubs (Foreman 1997).

In the Yuma Desert west and north of the Goldwater Range, numerous proposed or ongoing activities threaten the habitat of the flat-tailed horned lizard. Federal actions that have affected the species over the last two decades include construction of a desalinization sludge disposal facility, a State Prison at County 23rd and Avenue B, paving of County 23rd and Avenue B, development of a Yuma County Administrative Center, and rights-of way for roads and utilities. A landfill has been proposed along County 23rd east of its intersection with Avenue D. Yuma

Metropolitan Planning Organization has proposed a highway (the "Area Service Highway") from San Luis to Interstate 8 that would traverse County 23rd and then cross the northwestern portion of the Goldwater Range and connect to I8 at Araby Road. A new border crossing is proposed in flat-tailed horned lizard habitat near San Luis. Border Patrol operations and illegal activities along the border in the Yuma area have increased dramatically over the last decade, and much of the habitat along the border has been severely affected by off-road-vehicle activity. Many new roads and routes have been created in recent years (Rorabaugh *et al.* 2002). On State and private lands in the northern Yuma Desert, habitat continues to be developed for agriculture. The habitat north of the Goldwater Range in the Foothills area is rapidly being lost to housing developments. Habitats on the Goldwater Range are the least disturbed of the Arizona portion of the lizard's range. The public is prohibited from entering that portion of the Goldwater Range that supports flat-tailed horned lizards. As of 1997, approximately 31.1 percent of the historical habitat in Arizona had been converted to other land uses, with agriculture (17.5 percent) and urban development (11.1 percent) accounting for most of the habitat conversions (Hodges 1997).

A conservation agreement and strategy was finalized for the flat-tailed horned lizard in 1997. The purpose of the agreement and strategy was to maintain viable populations of flat-tailed horned lizards in five management areas (MAs), including the Yuma Desert MA in Yuma County, Arizona; and the East Mesa, West Mesa, Yuha Desert, and Borrego Badlands MAs in Imperial and eastern San Diego counties, California. These MAs range in size from 42,400 to 136,100 acres and total 485,200 acres. The strategy's format was that of a Fish and Wildlife Service recovery plan (Foreman 1997).

Key planning actions included establishing the MAs and, within MAs, limiting cumulative new disturbance to one percent of each MA, limiting vehicle use to designated routes only, reducing route densities; acquiring inholdings; law enforcement and public education; rehabilitating degraded habitats; and prohibiting competitive recreational events, long term camping, and use of pesticides. The planning actions also included research needed to promote conservation of the lizard and its habitat, inventory and monitoring of horned lizard populations and habitats, and maintenance of habitat corridors between MAs. A technical team (the Interagency Coordinating Committee [ICC]) and a management team (the Management Oversight Group [MOG]), modeled after similar groups for the desert tortoise, coordinate and track implementation of the strategy (Rorabaugh *et al.* 2000). The strategy is currently in revision.

Further information on the range, biology, and ecology of the flat-tailed horned lizard can be found in Wright (2002), Wright and Grant (2002), Young and Young (2000), Rorabaugh *et al.* (2002, 2000, 1994, 1987), Beauchamp *et al.* (1998), Hodges (1997, 1995), Wone and Beauchamp (1995), Muth and Fisher (1992), Turner and Medica (1982), Turner *et al.* (1980), Norris (1949), and Mayhew and Wright (1971).

ENVIRONMENTAL BASELINE

The following is added to the Environmental Baseline section for the flat-tailed horned lizard in the 1996 opinion.

Contaminants sampling of the munitions training range was conducted in the mid 1990s (Merz *et al.* 1995) and in 2001 (CDM Federal Programs Corporation 2001). In the former analysis, soil samples were tested for general chemistry, diesel fuel, 3 types of explosives, 3 volatiles, 5 semivolatiles, and 19 metals. Levels detected were compared to ADEQ residential soil remediation levels (SRLs). These levels are pre-determined risk-based standards developed by the Arizona Department of Health Services pursuant to A.R.S. §§ 49-152(A)(1)(a). Soils that exceed these levels pose a risk to ecological receptors and must be remediated pursuant to ADEQ guidelines. Levels of contaminants that affect reptiles, particularly in regard to sublethal effects, are not well studied. No studies have been conducted in regard to effects of contaminants on the flat-tailed horned lizard. However, the SRLs may provide some general guidance as to whether contaminant levels may affect organisms, including the flat-tailed horned lizard or its prey (harvester ants).

Levels of contaminants in the munitions training range were lower than the residential SRLs, with the exception of bis(2-ethylhexyl)phthalate in the open burn trenches (which was greater than the SRL by about a factor of 5). MCAS attributed this finding to laboratory error (October 22, 2002, letter to us). In the ecological pathways analysis, CDM Federal Programs Corporation (2001) concluded that risks to the flat-tailed horned lizard from potential contaminants are limited to the vicinity of the detonation pits. However, they found that lack of vegetation and ants may limit use of the site by the lizard. They recommended constructing a lizard barrier fence around the munitions training range to limit exposure.

EPA, in their November 21, 2001, letter, described numerous issues and problems with the results of the ecological pathways analysis. To summarize, and focusing on those issues most important to the conclusion in this opinion: 1) contaminants sampling was not comprehensive in regard to types of potential contaminants, and sample sizes were small, 2) contaminants could be spread via surface water flow, wind, or detonation plumes, 3) without identification of compounds of potential concern and their distribution, there is no way to evaluate the toxicity of site contaminants to the flat-tailed horned lizard or other “ecological receptors”, and 4) effects to the flat-tailed horned lizard in regard to noise and fire in the munitions training range should be described.

EFFECTS OF THE PROPOSED ACTION

The following is added to the Effects of the Proposed Action section for the flat-tailed horned lizard in the 1996 opinion.

During detonation of ordnance, flat-tailed horned lizards could be killed or injured as a result of fire or flying debris, if they are in the vicinity of the blast. The immediate vicinity of the detonation pits is denuded of vegetation, and CDM Federal Programs Corporation (2001) noted an absence of ant nests. The flat-tailed horned lizard has a large home range for a lizard of its size (Young and Young 2000). Lizards wander during daily excursions and could easily stray into the vicinity of detonation pits from more suitable habitats. These lizards would be subject to direct injury or mortality. Flat-tailed horned lizards could also experience hearing loss if they are near detonations. Brattstrom and Bondello (1980) tested the responses of the Mojave fringe-toed lizard (*Uma scoparia*) to dune buggy sounds. Dune buggy noise at 95 decibels (dBA) for a cumulative exposure time of 500 seconds was sufficient to cause severe hearing loss in test animals for several days. The Mojave fringe-toed lizard has external ear openings, whereas the flat-tailed horned lizard does not, suggesting the flat-tailed horned lizard may be less sensitive to noise. Decibel levels at detonation pits are unknown; however, we suspect that detonations would result in short, but very intense noise levels, capable of damaging the hearing of nearby lizards. Loss of hearing could affect behavior, including ability to detect danger, such as approaching vehicles or predators.

Disposal of ordnance may result in contaminated soils in the munitions training range. Flat-tailed horned lizard exposure to and effects from contaminants could occur via incidental ingestion of contaminated soil, direct contact with soils, and ingestion of contaminated prey (CDM Federal Programs Corporation 2001). Contaminant levels in the munitions training range are generally lower than ADEQ's residential SRLs. Exactly what that means in terms of toxicity to flat-tailed horned lizards is unknown, but because they generally do not exceed the SRLs, and the only exceedence was apparently a result of laboratory error, we have no reason to believe that the contaminants tested occur at high enough levels to affect lizards. Table 1 provides additional evidence that contaminants levels may not be high enough to adversely affect flat-tailed horned lizards. In the Table we compare concentrations of metals tested at the munitions training range with those at background levels in Arizona, residential and non-residential SRLs, and effects thresholds for aquatic wildlife (we do not have data for some categories). Contaminants levels are consistently at or below background levels, and none of the SRLs are exceeded. Levels of zinc are high enough to cause severe effects to aquatic wildlife, but these are effects which would occur when an organism is submersed in solutions of zinc. The flat-tailed horned lizard would be traversing substrates and occasionally burying in substrates containing these levels of zinc. Also, the detonation pits are likely to only comprise a small portion of any lizard's home range, thus exposure would be limited temporally. Nevertheless, our knowledge of how contaminants at the munitions training range may affect the flat-tailed horned lizard is incomplete; and we cannot rule out the possibility that animals in the vicinity of the detonation pits may be adversely affected.

We would expect that contaminants dispersed by wind or detonation would occur at even lower concentrations than in the detonation pits. The exceedingly well-drained soils in the Yuma Desert do not provide opportunities for pooling of water or flow of surface waters. Rainfall, even very heavy precipitation, simply soaks into the sand and does not provide a medium for

horizontal movement of contaminants.

To summarize, flat-tailed horned lizards present at or near the detonation pits could be killed or injured by detonation of ordnance, and surviving lizards may have hearing loss which could affect behavior. We have no evidence that contaminants levels are high enough in the munitions training range to affect flat-tailed horned lizards. On the other hand, our knowledge of what levels of contaminants may adversely affect the lizard is rudimentary; no studies have been completed to quantify effects from contaminants on this species. Also, EPA believed that contaminants sampling may have been inadequate to properly assess risk to the flat-tailed horned lizard. The munitions training range covers about 250 acres of the Yuma Desert MA. Of that, about 4 acres have been disturbed by munitions disposal activities.

Table 1. Priority pollutants in soil/sediment (ppm dry weight) Arizona background levels, human health guidelines, wildlife toxicity thresholds, and munitions training range soils.

Element	Arizona Background ¹		Human Health Guidelines ²		Aquatic Wildlife Thresholds ³		Munitions Training Range	
	Mean	Maximum	Residential	Non-resident	Lowest effect	Severe effect	Lowest	Highest
Aluminum	55,213	100,000	77,000	1,000,000	NA ⁵	NA	2,460	5,570
Antimony	<1.0	<1.0	31	680	NA	NA	ND ⁶	2.7
Arsenic	9.8	97	10	10	6.0	33	1.5	3.7
Barium	565	1,500	5,300	110,000	NA	NA	42	379
Beryllium	0.52	5	1.4	11.0	NA	NA	0.27	0.11
Cadmium	NA	NA	38	850	0.6	10	0.47	4.1
Chromium	61.3	300	2,100	4,500	26.	110	3.6	19
Copper	30.	200	2,800	63,000	16.	110	3.2	9.5
Lead	23.4	100	400	2,000	31.	250	1.6	20.3
Magnesium	no data	no data	NA	NA	NA	NA	1,370	3,100
Manganese	no data	no data	3,200	NA	NA	NA	61.6	141
Nickel	27.5	150	1,500	34,000	16	75	2.9	23
Potassium	no data	no data	NA	NA	NA	NA	512	1,120

Selenium	0.30	1.6	380	8,500	NA	NA	ND	0.42
Silver	NA	NA	380	8,500	NA	NA	ND	0.34
Sodium	no data	no data	NA	NA	NA	NA	ND	731
Strontium	no data	no data	46,000	NA	NA	NA	18	86
Thallium	no data	no data	NA	NA	NA	NA	ND	0.58
Vanadium	71.3	300	540	12,000	NA	NA	6.3	22.4
Zinc	62.1	150	23,000	510,000	120	820	8.2	804

¹Earth Technology. 1991. Evaluation of Background Metals Concentrations in Arizona Soils. Prepared for ADEQ.

²Residential and non-residential standards data from Arizona Department of Environmental Quality. Title 18. Environmental Quality, Chapter 7. Remedial Action. Article 2. Soil Remediation Standards.

³Persaud, D., R. Jaagumagi, and A. Hayton. 1993. Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario. Water Resources Branch, Ontario Ministry of the Environment and Energy. Environment and Energy, Ontario, Canada, 24 pp. See also Ingersoll et al. 2000

⁴Metals in sediment samples collected from three sites above the gabion (70, 150, and 250').

⁵ NA = Not Available.

⁶ ND = Not Detectable.

CDM Federal Programs Corporation (2001) suggested that contaminants risk for flat-tailed horned lizards is likely limited to the vicinity of the detonation pits. Thus, no more than about 4 acres are likely to be contaminated. Flat-tailed horned lizard densities in the Yuma Desert typically are no more than 2 per acre (Young and Young 2000). Thus, no more than about 8 flat-tailed horned lizards are likely to occur regularly in the vicinity of the detonation pits. Other flat-tailed horned lizards may move through or visit the area, but would not be regularly found near portions of the munitions training range. Four acres represents 0.003% of the habitat in the Yuma Desert MA (Foreman 1997) and about 0.0028% of the extant habitat in Arizona (Hodges 1997). The recommendation of CDM Federal Programs Corporation (2001) to construct a lizard barrier fence around the 250 acre munitions training range is not justified, given the localized nature of the effects.

Cumulative Effects

The following replaces the Cumulative Effects section in the 1996 opinion.

Cumulative effects are those impacts of future non-Federal (state, local government, and private) actions that are reasonably certain to occur in the project area. Future Federal actions will be subject to the consultation and conferencing requirements established in section 7 of the Act and, therefore, are not considered cumulative to the proposed project.

Because all of the flat-tailed horned lizard habitat in the vicinity of the project area is managed by MCAS, almost all activities likely to occur in this area will be Federal actions subject to section 7 of the Act. An exception is increasing illegal border crossings by undocumented immigrants and smugglers. Numbers of illegal crossings and subsequent response by the U.S. Border Patrol have increased dramatically over the last 15 years. Increased presence of Border Patrol in the area of Yuma, and other large Arizona border towns (Operation Gatekeeper), as well as southeastern California, have pushed undocumented immigrant traffic into remote desert areas, such as Cabeza Prieta National Wildlife Refuge, Organ Pipe Cactus National Monument, BMGR, and the Yuma Desert. Illegal activities result in habitat damage in the form of route proliferation, off-road vehicle tracks, and discarded trash. These activities are likely to continue into the future and may continue to increase.

Outside of the Goldwater Range, continued development of non-Federal lands that support the flat-tailed horned lizard is anticipated to the west and north of the action area. Continued development of non-Federal lands for residential, industrial, and agricultural purposes is occurring at a rapid rate. If the lizard is subsequently listed, the effects of non-Federal actions, including residential and other development, may be addressed through the section 10(a)(1)(B) permit process.

CONCLUSION

After reviewing the current status of the flat-tailed horned lizard, the environmental baseline for the action area, the anticipated effects of the proposed action, and the cumulative effects, it is our

conference opinion that the proposed action is not likely to jeopardize the continued existence of the flat-tailed horned lizard. Our conclusion is based on the reasons supporting our conclusion stated in the 1996 opinion, plus the following:

Although up to 8 flat-tailed horned lizards and about 4 acres of habitat are expected to be affected by ordnance detonations and potentially contaminated soils at the munitions training range, acreage of habitat and numbers of lizards affected are very small compared to that available in the Yuma Desert MA or in Arizona.

INCIDENTAL TAKE STATEMENT

Our 1996 opinion anticipated the following forms of take of flat-tailed horned lizard (among others):

“Three flat-tailed horned lizards per year in the form of direct mortality or injury associated with non-vehicular aspects of troop maneuvers, establishment of camps, EOD disposal, ordnance delivery, use of the rifle range, cargo pallet delivery and recovery at the parachute drop zone, construction at AUX-2, and other non-vehicular activities described in this biological opinion in "DESCRIPTION OF THE PROPOSED ACTION".

“Ten flat-tailed horned lizards in the form of harm resulting from loss or degradation of habitat.”

We believe these levels accommodate potential take of flat-tailed horned lizards anticipated as a result of ordnance detonation, habitat loss, and contaminants, as described here in the Effects of the Proposed Action. Thus, no changes to the Incidental Take Statement are needed.

Other Findings/Sections in the 1996 Biological and Conference Opinion and Subsequent 1998 and 2001 Reinitiations

All other sections and findings not addressed above in our April 17, 1996, biological and conference opinion, and subsequent March 18, 1998, and November 16, 2001, reinitiations remain the same. This document is designated the third reinitiation of the biological and conference opinion.

REINITIATION NOTICE

This concludes reinitiation of formal consultation and conferencing on the Arizona portion of the YTRC, Yuma County, Arizona. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: 1) the amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may adversely affect listed species or critical habitat in a manner or to an extent not considered in this opinion;

3) the agency action is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this opinion; or 4) a new species is listed or critical habitat designated that may be affected by this action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation, if it is determined that the impact of such taking will cause an irreversible and adverse impact to the species.

If we may be of further assistance in this matter, please contact Jim Rorabaugh (x238) or Sherry Barrett (520) 670-4617 of my staff.

Sincerely,

/s/ Steven L. Spangle
Field Supervisor

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (ARD-ES)
Assistant Field Supervisor, Fish and Wildlife Service, Tucson, Tucson, AZ

Director, Arizona Game and Fish Department, Phoenix, AZ
Regional Supervisor, Arizona Game and Fish Department, Yuma, AZ

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