

**Summary**  
**of**  
**Desert Tortoise Recovery Actions**  
**Northern Mojave Recovery Unit**

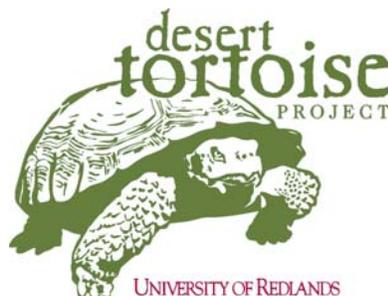
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Recovery Task Summary – Redlands Institute Desert Tortoise Project

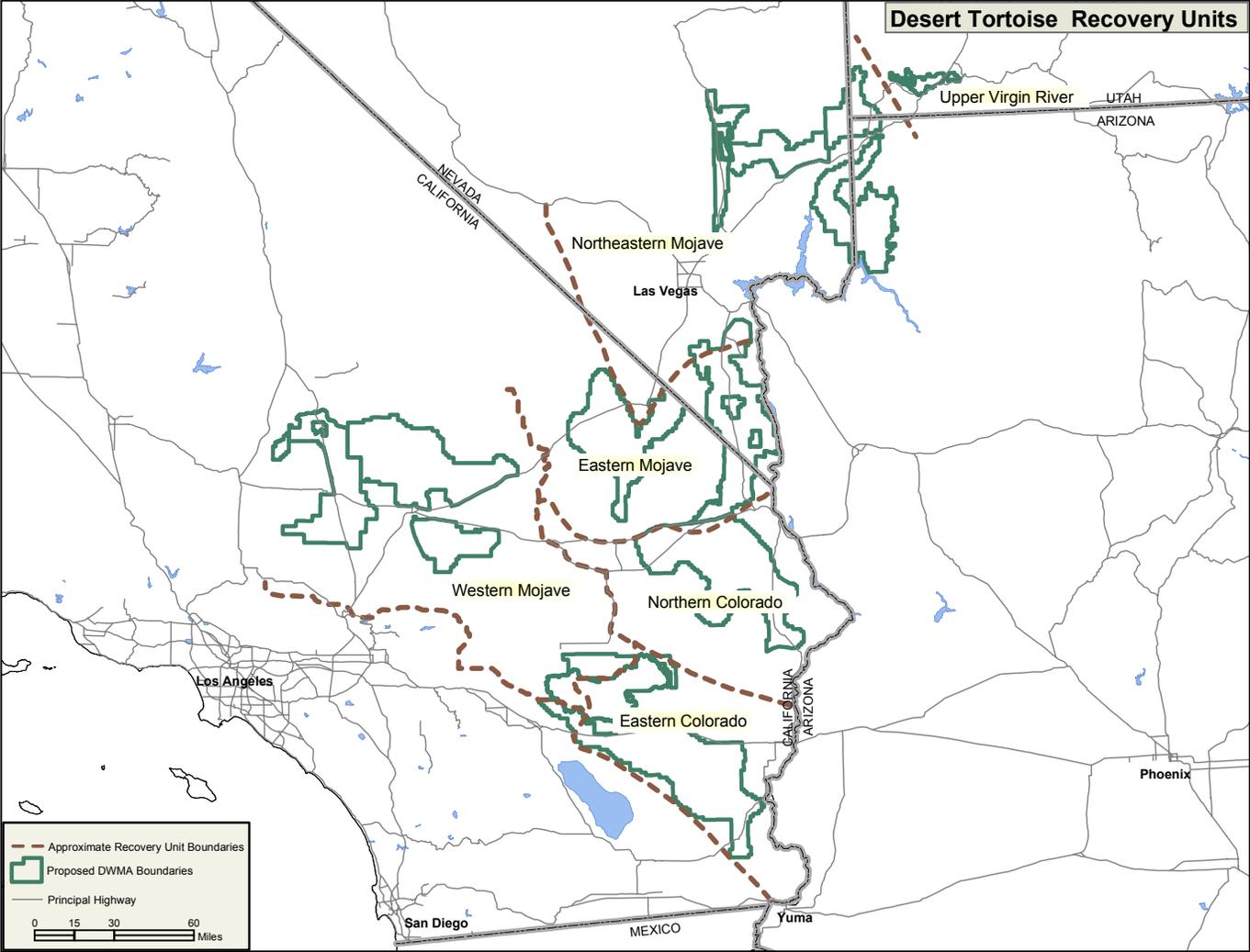


Figure 1. Desert Tortoise Recovery Units in the Mojave Desert

Recovery Task Summary – Redlands Institute Desert Tortoise Project

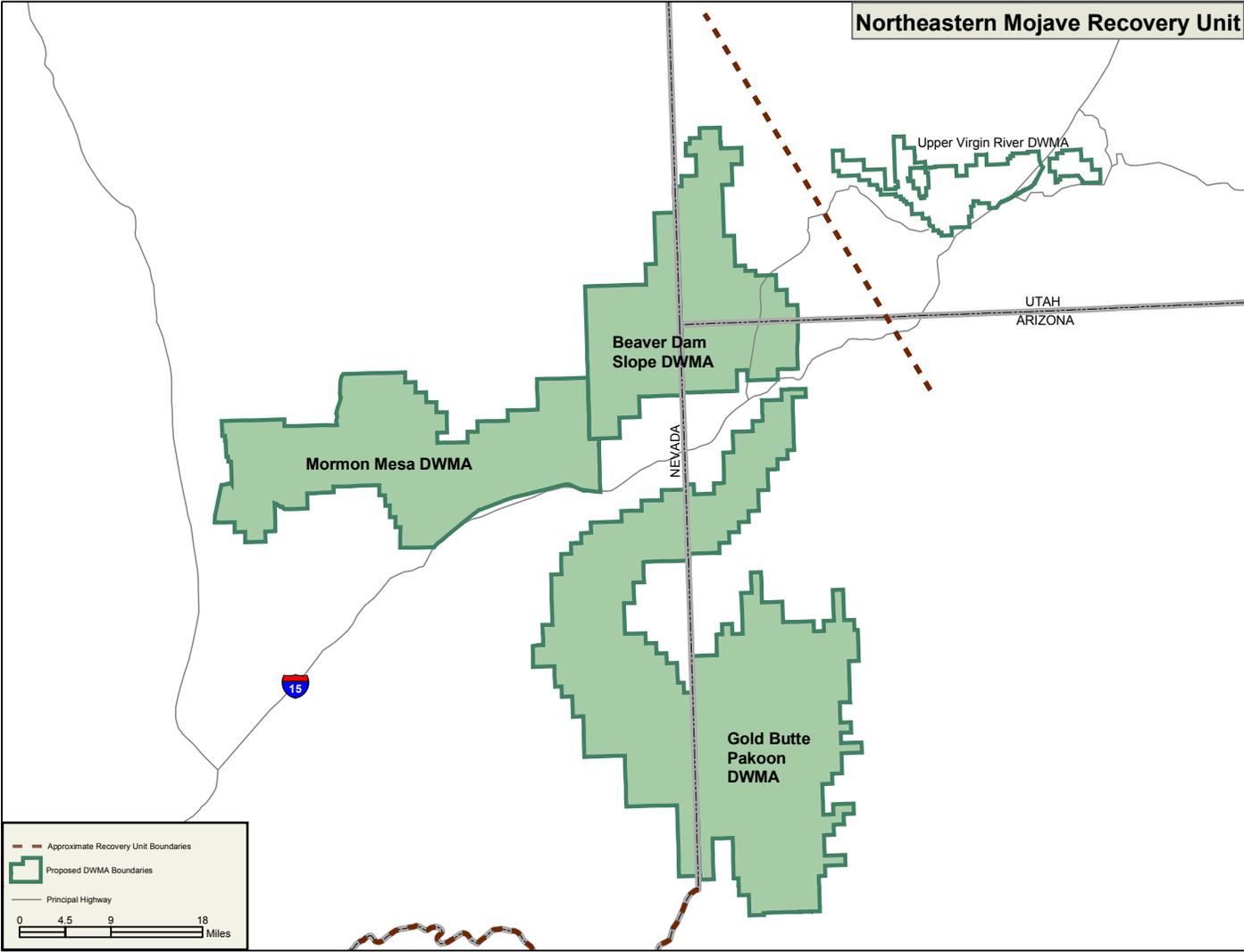


Figure 2. North-Eastern Mojave Recovery Unit

## Introduction

The following report provides a summary of completed and ongoing recovery, monitoring, and research actions for the desert tortoise, *Gopherus agassizii* in the Northern Mojave Recovery Unit. Information is summarized by each of the recovery actions identified in the Desert Tortoise Recovery Plan (USFWS, 1994). Information was obtained from surveys conducted in July 2002 of the land and resource agencies and entities responsible for desert tortoise recovery and management. The information provided within this document was taken directly from the survey responses. Where no answer was provided the corresponding cell was left blank. No attempt has been made to independently verify the accuracy and completeness of the information provided on the surveys. Contact information has been provided for the individuals who completed the questionnaire to aid in the evaluation of the information contained herein.

The information in this report will be used by the Desert Manager Group (DMG) and the Desert Tortoise Management Oversight Group (MOG) to plan and manage an effective and coordinated recovery program for the desert tortoise. The report will be updated annually. Copies of these reports can be obtained from the DMG website at [www.dmg.gov/documents](http://www.dmg.gov/documents).

Comments on the report are welcome and should be sent to:

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Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<b>Establish at least one desert wildlife management area of at least 1,000 square miles in each recovery unit</b>	AGFD provided comment on the Arizona Strip Resource Management Plan amendment which enlarged the Beaver Dam Slope ACEC.	The Beaver Dam Slope DWMA is located north of the Virgin River. In Arizona it is contiguous with Utah and Nevada tortoise habitats. Extensive coordination with adjacent Utah and Nevada BLM offices, the FWS, Arizona Game and Fish Department (AGFD), and local agencies and interested parties resulted in the Beaver Dam Slope ACEC on BLM land.	Beaver Dam Slope ACEC was established by the SGFORMP with a total of 48,519 acres. During the planning and development stages of this ACEC, extensive coordination with Arizona and Nevada BLM, US Fish and Wildlife Service, National Park Service State Wildlife Agencies and other local agencies and interested parties was completed. BLM in Arizona and Nevada established ACECs which are adjacent to the Beaver Dam Slope ACEC. With the combining of the ACECs in Utah, Nevada and Arizona, a unified management area for the desert tortoise was established in the Northeastern Mojave Recovery Unit.
<b>Secure habitat within desert wildlife management areas</b>	AGFD acquired no habitat within the area.	No habitat has been acquired.	No land acquisitions have taken place. Preliminary discussions have occurred with the State of Utah to explore options for acquiring several key sections of state lands under a legislative exchange.
<b>Connect functional habitat within recovery units wherever enough extant desert tortoise habitat exists</b>	AGFD acquired no habitat within the area.	This has occurred with the designation of adjacent ACECs on BLM land in Nevada, Utah, and Arizona.	With the establishment of the ACECs in Utah, Nevada and Arizona, connection of functional habitat in the extreme northern portion of the Northeastern Mojave Recovery Unit was made.

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<b>Number (or miles) of roads closed or rehabilitated</b>	NA	<p>A transportation plan was developed. Some existing roads were blocked. Other roads were signed. The number of roads dealt with cannot be determined precisely, but it is believed the majority of roads were covered in the ACEC. Some tortoise fencing has been erected.</p> <p>A major new planning effort has just begun on the Arizona Strip. Transportation (road) management will be an important component of this new plan. Currently the plan is in the scoping process. Completion should be within three years.</p>	<p>An environmental assessment and transportation plan are being developed for the Beaver Dam Slope ACEC. Approximately one mile of road in this ACEC is recommended for closure. No off road use will be allowed in the ACEC with vehicles restricted to designated roads. There will be additional restrictions on some roads. No new roads are anticipated.</p>
<b>All competitive and organized events on designated roads</b>	NA	We have few such events. However, this is done and was part of the B.O	Motorized vehicles and bicycles are restricted to designated roads. All competitive/organized events have been so restricted.
<b>Prohibit habitat destructive military maneuvers</b>	(NA to the Beaver Dam Slope)	This does not occur in our area. We only have military aircraft overflights.	No such activities allowed (SGFORMP, FW-19)

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<p><b>Prohibit clearing for agriculture, landfills, and any other surface disturbance that diminishes the capacity of the land to support desert tortoises, other wildlife, and native vegetation</b></p>	<p>NA</p>	<p>On BLM land, through the RMP amendment and B.O. process, this has essentially been done. However, because of the growth of the Scenic, Beaver Dam, and Littlefield communities, a small amount of BLM administered public land can be used for R&amp;PP grants, such as new schools. There is an acreage cap on the total amount to be allowed which was set by the B.O. This cap is set very conservatively.</p>	<p>The Beaver Dam Slope has the following provisions governing surface disturbing activities: closed to fuel wood, vegetative and mineral material sales, right-of-way avoidance area for new rights-of-way except in designated utility and transportation corridors, oil and gas category 3 (No surface occupancy), use restrictions on recreational activities (SGFORMP, FW-19). BLM has issued several rights-of-way to utility companies for power lines and pipelines. These were issued solely in the utility corridor. Installation of power lines and pipelines were completed using utility protocols for protection of desert tortoises. Compensation was paid where permanent loss of desert tortoise habitat occurred (SGFORMP, FW-19).</p>
<p><b>Acres of grazing allotments (sheep and cattle) closed or bought out for conservation</b></p>	<p>NA</p>	<p>None, however on BLM administered lands (in the Beaver Dam ACEC), which were designated as critical habitat for desert tortoise, summer livestock grazing after March 15 and before October 15, has been eliminated.</p>	<p>Grazing on the critical desert tortoise habitat (34,095 acres) has been adjusted to allow for winter grazing only for the protection of desert tortoise and their habitat. All grazing during the Spring active season has been terminated. All appeals and litigation in Federal Court have been resolved.</p>
<p><b>Number of wild horses and burros removed</b></p>	<p>AGFD removed no wild horses or burros</p>	<p>NA</p>	<p>NA</p>
<p><b>Prohibit vegetation harvest, except by permit; collection of biological specimens, except by permit</b></p>	<p>NA</p>	<p>This is done. BLM relies on the AGFD and FWS collection permitting process for biological specimens. BLM permits research activities, not collection of specimens.</p>	<p>Vegetative harvest is prohibited in the Beaver Dam Slope ACEC.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<b>Number of illegal dumps cleaned up (and tons of trash removed, if this information is available)</b>	NA	Number not available, but some work has been done	NA
<b>Prohibit deposition of captive or displaced desert tortoises or other animals, except under authorized translocation research projects</b>	AGFD prohibits the release of wildlife without a special permit.	NA. Authority rests with AGFD.	No deposition of animals is allowed on the Beaver Dam Slope.
<b>Prohibit uncontrolled dogs out of vehicles</b>	NA	Done. Covered by B.O. amendment. County has primary authority. (BLM has no authority but would like to prohibit uncontrolled dogs in vehicles, as well.)	NA
<b>Restrict establishment of new roads in desert wildlife management areas</b>	NA	Establishment of new roads is tightly restricted. No off-road vehicle use is allowed. Our law enforcement staff has been expanded to help enforce this. We currently have 4 BLM and 2 NPS law enforcement rangers assigned to the Arizona Strip Field Office.	An environmental assessment and transportation plan are being developed for the Beaver Dam Slope ACEC. Approximately one mile of road in this ACEC is recommended for closure. No off road travel will be allowed in the ACEC with vehicles restricted to designated roads. There will be additional restrictions on some roads. No new roads are anticipated.
<b>Location and miles of desert tortoise fencing installed (include number of culverts designed or suitable for desert tortoises)</b>	None	Data not available.	There has been a total of 2 miles of protective fencing installed on the Beaver Dam Slope ACEC.

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<b>Number of acres or list of revegetation projects</b>	NA	NA	None to date.

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<b>Sign and fence desert wildlife management areas as needed</b>	NA	This has mostly been done.	Signing and additional fencing/barriers will be completed upon approval of the Transportation Plan. Initial signing to prevent cross-country travel was posted in Fall 2000.
<b>Establish environmental education programs and facilities.</b>	AGFD established no environmental education programs or facilities in the area.	Some has been done, but potential for more remains. Most current efforts (brown bag luncheon lectures, brochures, etc.) are based in the St. George area, and not specifically in the Beaver Dam area.	Several lectures (Brown Bag Lunches) have been made to the Public concerning the Beaver Dam ACEC and management of desert tortoise in Washington County. Brochures on special status animals and vegetation in desert environments have been developed and are disseminated from the Interagency Office Information Center.

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<p><b>Monitor desert tortoise populations within recovery units</b></p>	<p>AGFD contracted desert tortoise monitoring plots, largely funded by BLM, as follows: Beaver Dam Slope exclosure, 1996, 2001; Littlefield, 1998, 2002. AGFD partially funded (through Section 6) distance sampling on the Beaver Dam Slope in 2001 and 2002.</p>	<p>BLM has funded tortoise monitoring studies in this recovery unit in 1996, 1998, 2001, and 2002, typically by contracting through AGFD. Some distance sampling was also done by AGFD on the Beaver Dam Slope in 2001 and 2002.</p> <p>The Beaver Dam Slope desert tortoise population (including Utah and Nevada) has been studied since the 1930's, beginning with Woodbury and Hardy's field research. There is also the Beaver Dam Exclosure Plot established in 1980 by Hohman and Ohmart to research the effects of excluding cattle grazing and the related control plot 6.4 km to the south called the Littlefield Plot where grazing occurs. Other studies have also been conducted; i.e., Duck and Schipper, 1989; Sheppard, 1982; Goodlett et al, 1996; etc.</p>	<p>See Utah DWR.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Beaver Dam Slope		
Agency	AZGFD	AZBLM	UTBLM
Recovery Action			
<p><b>Initiate research necessary to monitor and guide recovery efforts</b></p>	<p>AGFD has conducted no research in the Mojave Desert. Several research projects conducted or funded by AGFD in the Sonoran Desert (e.g., life history, disease) may provide comparative insight for Mojave Desert tortoise recovery efforts.</p>	<p>This is being done as noted in the paragraph above and will continue.</p>	<p>Provided 3 test sites to conduct Translocation Studies (1997-1999).</p>
<p><b>Activities associated with predator control</b></p>	<p>AGFD conducted no predator control in the area.</p>	<p>None is currently authorized. BLM closely coordinates predator management when needed with AGFD and USDA's Wildlife Services. Limited predator control work was done in the Beaver Dam Slope ACEC prior to the development of the recovery plan. No government conducted control efforts are believed to have been conducted since.</p> <p>Coyote calling and varmint hunting are popular public activities in the local area, associated with predator control. Public hunting is administered by the state wildlife agencies, specifically by AGFD in the Arizona portion of the recovery unit.</p>	<p>Limited predator control was completed in the Beaver Dam Slope ACEC prior to the development of the Recovery Plan. No predator control has been completed since. Current procedures will rely solely on APHIS Coordination.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Establish at least one desert wildlife management area of at least 1,000 square miles in each recovery unit</b></p>	<p>Although the Recovery Plan recommends the establishment of at least one DWMA of 1,000 square miles in each recovery unit, it is not possible to achieve this on public lands in Nevada. The minimally acceptable situation is to establish several smaller DWMA's that are connected by corridors of functional tortoise habitat. In 1998, the LVFO BLM Resource Management Plan (RMP) established four Areas of Critical Environmental Concern (ACEC) for protection of critical desert tortoise habitat encompassing a total of 743,209 acres (1,161.27 mi<sup>2</sup>). The Gold Butte ACEC comprises of 186,909 acres (292 mi<sup>2</sup>).</p>	<p>The Gold Butte/Pakoon DWMA is located south of the Virgin River. To recap, it has two portions split by the Virgin Mountains. In Arizona it is also contiguous to tortoise habitat in Nevada. Extensive coordination with adjacent Nevada BLM offices, FWS, NPS's Lake Mead National Recreation Area, Arizona Game and Fish Department (AGFD), and local agencies and interested parties resulted in the Gold Butte/Pakoon ACEC on BLM land.</p>	<p>AGFD provided comment on the Arizona Strip Resource Management Plan amendment which created the Virgin Slope and Pakoon ACECs.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Secure habitat within desert wildlife management areas</b></p>	<p>The objectives of the Recovery Plan were incorporated into our Resource Management Plan (RMP) as management direction and all actions proposed for lands managed under the Las Vegas Field Office are required to comply with our RMP. Table 2-2 in our Resource Management Plan identifies the management direction for ACECs designated for desert tortoise values and is included as an attachment to this document.</p> <p>The Bureau has continued to provide support to The Nature Conservancy for the development of site conservation plans for each of the DWMA's.</p>	<p>On January 11, 2000, President Clinton designated the 1.1 million acre Grand Canyon – Parashant National Monument. It lies south of the Virgin Mountains. Approximately 40% of this Monument is desert tortoise habitat. The purposes of the Monument and BLM's "Interim Management Policy for the Newly Created National Monuments" closely complement the Desert Tortoise Recovery Plan. For example, new rights-of-way, off-road vehicle use, woodcutting, new mining, and other mineral development are now banned. Thus, in one sense creation of this National Monument did a great deal to secure habitat for the desert tortoise. All of the DWMA south of the Virgin Mountains, plus additional designated critical habitat are inside the Monument.</p>	<p>AGFD acquired no habitat within the area.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Secure habitat within desert wildlife management areas</b></p>	<p>The BLM LVFO provided funding to hire a land law examiner that completed a review of the legal descriptions of all ACECs in an effort to consolidate information necessary to initiate the withdrawal of lands within ACECs from mineral entry, subject to valid and existing rights.</p>	<p>Approximately 450,000 acres of Arizona desert tortoise habitat are covered by the Monument designation. In addition, in June of 2002 BLM acquired 240 acres of private property at Pakoon Springs. These acres are located just outside the DWMA, and the livestock grazing in the Pakoon Springs Allotment tied to the privately owned water at Pakoon Springs was also acquired by BLM. While grazing has not been permanently eliminated from this allotment, there is no current livestock use. An estimated 10% of the 18,000 acre Pakoon Springs Allotment lies within the DWMA.</p>	

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Connect functional habitat within recovery units wherever enough extant desert tortoise habitat exists</b></p>	<p>NO</p>	<p>This has occurred with the designation of adjacent ACECs on BLM land in Nevada and Arizona. The Beaver Dam Slope ACEC lies on the north side of the Virgin River.</p>	<p>AGFD acquired no habitat within the area.</p>
<p><b>Number (or miles) of roads closed or rehabilitated</b></p>	<p>No Activity</p>	<p>A transportation plan was developed. Some existing roads were blocked. Other roads were signed. The number of roads dealt with cannot be determined precisely, but it is believed the majority of roads were covered in the ACEC. Some tortoise fencing is believed to have been erected.</p> <p>A major new planning effort has just begun on the Arizona Strip. Transportation (road) management will be an important component of this new plan. Currently the plan is in the scoping process. Completion should be within three years.</p>	<p>NA</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>All competitive and organized events on designated roads</b></p>	<p>In accordance with the Resource Management Plan, all competitive events involving mechanized and motorized vehicles are limited to designated roads and trails within ACECs. Due to the high level of OHV events, the Piute-Eldorado ACEC was prioritized for road designations. All roads within this area have been designated, signed, and are in the process of being restored.</p> <p>We are working with the USFWS to secure funding to support a roads designation position that will assist our field office with the designation of roads in the remaining ACECs.</p>	<p>We have few such events. However, this is done and was part of the B.O. Competitive events are also banned from the Monument.</p>	<p>NA</p>
<p><b>Prohibit habitat destructive military maneuvers</b></p>	<p>The Resource Management Plan Management Direction SS-3-f. prohibits the authorization of military maneuvers within ACECs. All activities proposed for lands managed by the LVFO are reviewed through the NEPA process and are required to be in conformance with the RMP.</p>	<p>This does not occur in our area. We only have military aircraft overflights.</p>	<p>(NA to the Gold Butte/Pakoon)</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Prohibit clearing for agriculture, landfills, and any other surface disturbance that diminishes the capacity of the land to support desert tortoises, other wildlife, and native vegetation</b></p>	<p>The RMP management direction RW-1-e, RW-1-f state that ACECs are right-of-way avoidance areas and site-type right-of-way exclusion areas. Management direction SS-3-d limits utility corridors to 3,000 feet or less in width, SS-3-e prohibits the authorization of new landfills. All activities proposed for lands managed by the LVFO are reviewed through the NEPA process and are required to be in conformance with the RMP.</p> <p>As a result of the increased demand for energy, the LVFO has received and processed several rights-of-way actions in support of energy-related facilities. In order to reduce the cumulative impact of these actions on desert tortoises and other special status species, we have developed restoration requirements based on the environmental sensitivity of the project areas.</p>	<p>On BLM land, through the RMP amendment and B.O. process, this has essentially been done. The Monument also precludes these type activities. However, because of the growth of the Scenic, Beaver Dam, and Littlefield communities, a small amount of BLM administered public land can be used for R&amp;PP grants, such as new schools. There is an acreage cap on the total amount to be allowed which was set by the B.O. This cap is set very conservatively.</p>	<p>NA</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Prohibit clearing for agriculture, landfills, and any other surface disturbance that diminishes the capacity of the land to support desert tortoises, other wildlife, and native vegetation</b></p>	<p>The greater the sensitivity of the resources within the project area, the more stringent the requirements are for restoration. ACECs and tortoise critical habitat are the second highest ranking for restoration standards and require seed collection and propagation, perennial shrub transplanting, and long term monitoring with success criteria set at 60% of the dominance diversity after 6 years. The BLM LVFO has implemented the use of independent third-party contractors funded by proponents, to ensure compliance with stipulations of biological opinions on large rights-of-way projects. This effort was initiated to combat current personnel shortages that hinder our abilities to provide onsite project oversight. Stipulations enforced include limiting disturbance to the minimal necessary for project implementation.</p>		

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Acres of grazing allotments (sheep and cattle) closed or bought out for conservation</b></p>	<p>NO</p>	<p>On paper, BLM grazing decisions issued in 1999 eliminated livestock grazing in the DWMA and also eliminated summer livestock grazing after March 15 and before October 15 in adjacent designated critical habitat. However, several of these decisions are currently on appeal.</p> <p>The 123,397 acre Tassi Allotment is completely within the DWMA. It includes land in Nevada and NPS land within the Lake Mead National Recreation Area. In the past the Arizona Strip BLM administered the livestock grazing for the entire allotment. On paper, the BLM grazing decision followed the B.O. and eliminated livestock grazing. Only one BLM grazing decision is now currently on appeal and it concerns the Mosby-Nay Grazing Allotment. The Tassi decision became final in early 2001. Also, the Tassi was flown by the BLM and NPS on September 6, 2002, and 43 trespass cattle were counted, so while an unknown number of cattle remain, in September 43 head would be considered the minimum.</p>	<p>NA</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<b>Acres of grazing allotments (sheep and cattle) closed or bought out for conservation</b>		<p>This local area presently is a hotbed of anti-federal rhetoric, but the BLM and NPS are continuing to work together to eliminate all cattle in this allotment as soon as possible.</p> <p>Also, as noted earlier, approximately 18,000 acres in the DWMA in the Pakoon Springs Allotment are no longer grazed because BLM recently acquired the base water for that allotment.</p>	
<b>Number of wild horses and burros removed</b>		<p>In 2002, BLM removed 61 burros from the DWMA in the Tassi Allotment, including some from lands in Nevada. In 2003, BLM plans to remove 10 more. Currently, BLM roundups have significantly reduced, but not totally eliminated, the burro population. Total elimination may not be possible given that a burro population is managed for in Nevada.</p>	<p>AGFD removed no wild horses or burros.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Prohibit vegetation harvest, except by permit; collection of biological specimens, except by permit</b></p>	<p>No Activity</p>	<p>Because the Gold Butte-Pakoon DWMA lands in Arizona are completely within the Grand Canyon-Parashant National Monument, collection of any objects, including vegetation, paleontological resources, or rock specimens, should not be permitted, except where intended (and permitted) for legitimate scientific uses. BLM relies upon the AGFD and FWS collection permitting process for biological specimens. BLM permits research activities, not collection of specimens.</p>	<p>NA</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<b>Number of illegal dumps cleaned up (and tons of trash removed, if this information is available)</b>	2 dump sites were cleaned up in the Goldbutte ACEC	Number not available, but some work has been done.	NA
<b>Prohibit deposition of captive or displaced desert tortoises or other animals, except under authorized translocation research projects</b>	NO	NA. Authority rests with AGFD.	AGFD prohibits the release of wildlife without a special permit.
<b>Prohibit uncontrolled dogs out of vehicles</b>	NO	Done. Covered by B.O. amendment. County has primary authority. (BLM has no authority but would like to prohibit uncontrolled dogs in vehicles, as well.)	NA

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Restrict establishment of new roads in desert wildlife management areas</b></p>	<p>Through the Clark County Multi-species Habitat Conservation Plan (MSHCP) law enforcement rangers have been hired to patrol our ACECs. Among other things, their efforts onsite can ensure travel within these areas remains restricted to designated roads.</p> <p>The Bureau, in cooperation with the Public Information and Education subgroup of the MSHCP, has developed a brochure depicting the locations of approved routes of travel within the Piute-Eldorado ACEC and provides information on the use-limitations enforced in these areas.</p> <p>The Bureau has issued a number of trespass violations and required reimbursement for damaged vegetation for off road activities. Money collected from these violations is used toward restoring these areas.</p>	<p>Establishment of new roads is tightly restricted. No off-road vehicle use is allowed. DWMA lands within the National Monument are doubly protected. Our law enforcement staff has been expanded to help enforce this. We currently have 4 BLM and 2 NPS law enforcement rangers assigned to the Arizona Strip Field Office. The planning process will be addressing the road issue, as well.</p>	<p>NA</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<b>Location and miles of desert tortoise fencing installed (include number of culverts designed or suitable for desert tortoises)</b>	No Activity	Some. Exact data unavailable.	AGFD installed no fencing.
<b>Number of acres or list of revegetation projects</b>	8 trespass sites in the Whitney Pockets area have been restored	Data not available.	NA
<b>Sign and fence desert wildlife management areas as needed</b>	NO	This has mostly been done.	NA
<b>Establish environmental education programs and facilities.</b>	The Bureau developed the Eastern Mojave Desert Initiative Plan to expand the Desert Tortoise Conservation Center Management Area to accommodate future research and educational needs.	Some has been done, but potential for more remains. Most current efforts (brown bag luncheon lectures, brochures, etc.) are based in the St. George area, and not specifically in the Beaver Dam area.	AGFD established no environmental education programs or facilities in the area.

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Monitor desert tortoise populations within recovery units</b></p>	<p>The FWS and BLM have entered into a MOU to support the service training provided by the FWS on public lands to ensure valid and consistent results among contractors hired to implement the distance sampling.</p>	<p>Monitoring on the Strip has focused on the Beaver Dam Slope. BLM has funded tortoise monitoring studies on the Arizona Strip in 1996, 1998, 2001, and 2002, typically by contracting through AGFD. Some distance sampling was also done by AGFD on the Beaver Dam Slope in 2001 and 2002.</p> <p>The Beaver Dam Slope desert tortoise population (including Utah and Nevada) has been studied since the 1930's, beginning with Woodbury and Hardy's field research. There is also the Beaver Dam Exclosure Plot established in 1980 by Hohman and Ohmart to research the effects of excluding cattle grazing and the related control plot 6.4 km to the south called the Littlefield Plot where grazing occurs. Other studies have also been conducted; i.e., Duck and Schipper, 1989; Sheppard, 1982; Goodlett et al, 1996; etc.</p>	<p>AGFD contracted the Virgin Slope monitoring plot, largely funded by BLM, in 1997. This plot is scheduled to be resurveyed in 2003.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoan		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Initiate research necessary to monitor and guide recovery efforts</b></p>	<p>The BLM continues to maintain and manage the Desert Tortoise Conservation Center as a research facility to support research dedicated to improve our understanding of the nutritional requirements, the effects of disease, and the impact of high densities on the health, survival and reproduction of desert tortoises.</p> <p>Through off-site mitigation fees collected from sand and gravel community pit sales, the BLM has provided \$1,126,750.00 in funding for nutritional research on desert tortoises since 1995.</p> <p>The Bureau developed the Eastern Mojave Desert Initiate Plan to expand the Desert Tortoise Conservation Center Management Area to accommodate future research and educational needs.</p>	<p>This is being done as noted in the paragraph above and will continue. In addition, USGS (primarily Todd Esque, et. al.) has research plots in the DWMA looking at the issues of fire, insects, invasive plants, etc.</p>	<p>AGFD has conducted no research in the Mojave Desert. Several research projects conducted or funded by AGFD in the Sonoran Desert (e.g., life history, disease) may provide comparative insight for Mojave Desert tortoise recovery efforts.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Gold-Butte Pakoon		
Agency	NVBLM	AZBLM	AZGFD
Recovery Action			
<p><b>Activities associated with predator control</b></p>	<p>Through the project planning and design stages of the NEPA process, the BLM LVFO encourages the consolidation of transmission lines into designated utility corridors to reduce the dispersion of perching/nesting sites for ravens throughout public lands.</p> <p>The BLM LVFO has implemented the use of independent third-party contractors funded by proponents, to ensure compliance with stipulations of biological opinions on large rights-of-way projects to combat current personnel shortages that hinder our abilities to provide onsite project oversight. Stipulations enforced include litter control to reduce the attractiveness of sites to ravens.</p>	<p>None is currently authorized. BLM closely coordinates predator management when needed with AGFD and USDA's Wildlife Services. Coyote calling and varmint hunting are popular public activities in the local area, associated with predator control. Public hunting is administered by the state wildlife agencies, specifically by AGFD in the Arizona portion of the DWMA.</p>	<p>AGFD conducted no predator control in the area.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Mormon Mesa
Agency	Nevada BLM
Recovery Action	
<p><b>Establish at least one desert wildlife management area of at least 1,000 square miles in each recovery unit</b></p>	<p>Although the Recovery Plan recommends the establishment of at least one DWMA of 1,000 square miles in each recovery unit, it is not possible to achieve this on public lands in Nevada. The minimally acceptable situation is to establish several smaller DWMA's that are connected by corridors of functional tortoise habitat. In 1998, the LVFO BLM Resource Management Plan (RMP) established four Areas of Critical Environmental Concern (ACEC) for protection of critical desert tortoise habitat encompassing a total of 743,209 acres (1,161.27 mi<sup>2</sup>). The Mormon Mesa ACEC comprises of 151,360 acres (237 mi<sup>2</sup>).</p>
<p><b>Secure habitat within desert wildlife management areas</b></p>	<p>The objectives of the Recovery Plan were incorporated into our Resource Management Plan (RMP) as management direction and all actions proposed for lands managed under the Las Vegas Field Office are required to comply with our RMP. Table 2-2 in our Resource Management Plan identifies the management direction for ACECs designated for desert tortoise values and is included as an attachment to this document.</p> <p>The Bureau has continued to provide support to The Nature Conservancy for the development of site conservation plans for each of the DWMA's.</p> <p>The BLM LVFO provided funding to hire a land law examiner that completed a review of the legal descriptions of all ACECs in an effort to consolidate information necessary to initiate the withdrawal of lands within ACECs from mineral entry, subject to valid and existing rights.</p>
<p><b>Connect functional habitat within recovery units wherever enough extant desert tortoise habitat exists</b></p>	<p>NO</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Mormon Mesa
Agency	Nevada BLM
Recovery Action	
<b>Number (or miles) of roads closed or rehabilitated</b>	No Action
<b>All competitive and organized events on designated roads</b>	<p>In accordance with the Resource Management Plan, all competitive events involving mechanized and motorized vehicles are limited to designated roads and trails within ACECs. Due to the high level of OHV events, the Piute-Eldorado ACEC was prioritized for road designations. All roads within this area have been designated, signed, and are in the process of being restored.</p> <p>We are working with the USFWS to secure funding to support a roads designation position that will assist our field office with the designation of roads in the remaining ACECs.</p>
<b>Prohibit habitat destructive military maneuvers</b>	The Resource Management Plan Management Direction SS-3-f. prohibits the authorization of military maneuvers within ACECs. All activities proposed for lands managed by the LVFO are reviewed through the NEPA process and are required to be in conformance with the RMP.
<b>Prohibit clearing for agriculture, landfills, and any other surface disturbance that diminishes the capacity of the land to support desert tortoises, other wildlife, and native vegetation</b>	<p>The RMP management direction RW-1-e, RW-1-f state that ACECs are right-of-way avoidance areas and site-type right-of-way exclusion areas. Management direction SS-3-d limits utility corridors to 3,000 feet or less in width, SS-3-e prohibits the authorization of new landfills. All activities proposed for lands managed by the LVFO are reviewed through the NEPA process and are required to be in conformance with the RMP.</p> <p>As a result of the increased demand for energy, the LVFO has received and processed several rights-of-way actions in support of energy-related facilities. In order to reduce the cumulative impact of these actions on desert tortoises and other special status species, we have developed restoration requirements based on the environmental sensitivity of the project areas. The greater the sensitivity of the resources within the project area, the more stringent the requirements are for restoration. ACECs and tortoise critical habitat are the second highest ranking for restoration standards and require seed collection and propagation, perennial shrub transplanting, and long term monitoring with success criteria set at 60% of the dominance diversity after 6 years. The BLM LVFO has implemented the use of independent third-party contractors funded by proponents, to ensure compliance with stipulations of biological opinions on large rights-of-way projects. This effort was initiated to combat current personnel shortages that hinder our abilities to provide onsite project oversight. Stipulations enforced include limiting disturbance to the minimal necessary for project implementation.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Mormon Mesa
Agency	Nevada BLM
Recovery Action	
<b>Acres of grazing allotments (sheep and cattle) closed or bought out for conservation</b>	NO
<b>Number of wild horses and burros removed</b>	No Action
<b>Prohibit vegetation harvest, except by permit; collection of biological specimens, except by permit</b>	<p>The RMP management direction SS-3-n prohibits the commercial collection of flora. Commercial collection of fauna is only allowed upon completion of a scientifically credible study that demonstrates commercial collection of fauna does not adversely impact affected species or their habitat. This management direction does not however, limit hunting or trapping and casual collection as these activities are permitted by the State of Nevada.</p> <p>Management direction FW-3-b allows harvesting of green or dead and down Mesquite by permit only and only when this activity is consistent with sustaining plant communities and their dependent wildlife in a healthy and vigorous state.</p>
<b>Number of illegal dumps cleaned up (and tons of trash removed, if this information is available)</b>	No Action
<b>Prohibit deposition of captive or displaced desert tortoises or other animals, except under authorized translocation research projects</b>	NO
<b>Prohibit uncontrolled dogs out of vehicles</b>	NO

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Mormon Mesa
Agency	Nevada BLM
Recovery Action	
<b>Restrict establishment of new roads in desert wildlife management areas</b>	<p>Through the Clark County Multi-species Habitat Conservation Plan (MSHCP) law enforcement rangers have been hired to patrol our ACECs. Among other things, their efforts onsite can ensure travel within these areas remains restricted to designated roads.</p> <p>The Bureau has issued a number of trespass violations and required reimbursement for damaged vegetation for off road activities. Money collected from these violations is used toward restoring these areas.</p>
<b>Location and miles of desert tortoise fencing installed (include number of culverts designed or suitable for desert tortoises)</b>	NO
<b>Number of acres or list of revegetation projects</b>	No Action
<b>Sign and fence desert wildlife management areas as needed</b>	NO
<b>Establish environmental education programs and facilities.</b>	The Bureau developed the Eastern Mojave Desert Initiative Plan to expand the Desert Tortoise Conservation Center Management Area to accommodate future research and educational needs.
<b>Monitor desert tortoise populations within recovery units</b>	The FWS and BLM have entered into a MOU to support the service training provided by the FWS on public lands to ensure valid and consistent results among contractors hired to implement the distance sampling.

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	Mormon Mesa
Agency	Nevada BLM
Recovery Action	
<p><b>Initiate research necessary to monitor and guide recovery efforts</b></p>	<p>The BLM continues to maintain and manage the Desert Tortoise Conservation Center as a research facility to support research dedicated to improve our understanding of the nutritional requirements, the effects of disease, and the impact of high densities on the health, survival and reproduction of desert tortoises.</p> <p>Through off-site mitigation fees collected from sand and gravel community pit sales, the BLM has provided \$1,126,750.00 in funding for nutritional research on desert tortoises since 1995.</p> <p>The Bureau developed the Eastern Mojave Desert Initiate Plan to expand the Desert Tortoise Conservation Center Management Area to accommodate future research and educational needs.</p>
<p><b>Activities associated with predator control</b></p>	<p>Through the project planning and design stages of the NEPA process, the BLM LVFO encourages the consolidation of transmission lines into designated utility corridors to reduce the dispersion of perching/nesting sites for ravens throughout public lands.</p> <p>The BLM LVFO has implemented the use of independent third-party contractors funded by proponents, to ensure compliance with stipulations of biological opinions on large rights-of-way projects to combat current personnel shortages that hinder our abilities to provide onsite project oversight. Stipulations enforced include litter control to reduce the attractiveness of sites to ravens.</p>

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	No DWMA Specified
Agency	CalTrans
Recovery Action	
Establish at least one desert wildlife management area of at least 1,000 square miles in each recovery unit	NO
Secure habitat within desert wildlife management areas	We are purchasing 1,442.2 acres for mitigation which will be going to F&G. The project is north of Baker and the lands will be somewhere near the project , but we do not know where yet.
Connect functional habitat within recovery units wherever enough extant desert tortoise habitat exists	NO
Number (or miles) of roads closed or rehabilitated	NO
All competitive and organized events on designated roads	NO
Prohibit habitat destructive military maneuvers	NO

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	No DWMA Specified
Agency	CalTrans
Recovery Action	
Prohibit clearing for agriculture, landfills, and any other surface disturbance that diminishes the capacity of the land to support desert tortoises, other wildlife, and native vegetation	NO
Acres of grazing allotments (sheep and cattle) closed or bought out for conservation	NO
Number of wild horses and burros removed	NO
Number of illegal dumps cleaned up (and tons of trash removed, if this information is available)	NO
Prohibit deposition of captive or displaced desert tortoises or other animals, except under authorized translocation research projects	NO
Prohibit uncontrolled dogs out of vehicles	NO

Recovery Action Summary – Northern Mojave Recovery Unit

DWMA	No DWMA Specified
Agency	CalTrans
Recovery Action	
<b>Restrict establishment of new roads in desert wildlife management areas</b>	NO
<b>Location and miles of desert tortoise fencing installed (include number of culverts designed or suitable for desert tortoises)</b>	We are mitigating for a Truck Descending Lane project near Baker on I-15. We are putting in permanent tortoise fence where I-15 runs through the Ivanpah Unit. It will run 21.6 miles both northbound and southbound for a total of 43.2 miles of permanent tortoise fence. It starts at Postmile 141.7 (a few miles north of the town of Baker) to 163.3 (just north of Cima Road). It should be done sometime this year.
<b>Number of acres or list of revegetation projects</b>	NO
<b>Sign and fence desert wildlife management areas as needed</b>	NO
<b>Establish environmental education programs and facilities.</b>	NO
<b>Monitor desert tortoise populations within recovery units</b>	NO
<b>Initiate research necessary to monitor and guide recovery efforts</b>	NO
<b>Activities associated with predator control</b>	NO

# APPENDICES

# **APPENDIX A**

## **Contact Information**

## Contact Information

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# **APPENDIX B**

## **Glossary**

# Glossary

## Common Abbreviations

ACEC	Area of Critical Environmental Concern
APHIS	Animal and Plant Health Inspection Service
BLM	Bureau of Land Management
CALTRANS	California Department of Transportation
CDCA	California Desert Conservation Area
CFR	Code of Federal Regulations
DEVA	Death Valley National Park
DFG	Department of Fish and Game
DTNA	Desert Tortoise Natural Area
DTPC	Desert Tortoise Preserve Committee
DWMA	Desert Wildlife Management Area
Edwards AFB	Edwards Air Force Base
EIS	Environmental Impact Statement
ELISA	Enzyme-Linked Immunosorbent Assay
FONSI	Finding Of No Significant Impact
GFD	Game and Fish Department
GIS	Geographic Information System
GPS	Global Positioning System
HCP	Habitat Conservation Plan
INRMP	Integrated Natural Resource Management Plan
JOTR	Joshua Tree National Park
LAME	Lake Mead National Recreation Area
LDS	Line Distance Sampling
LVFO	Las Vegas Field Office
NA	Not Applicable
NBS	National Biological Survey....
NECO	Northern and Eastern Colorado Desert Planning Unit
NEPA	National Environmental Protection Agency
NTC Ft Irwin	National Training Center Fort Irwin
NPS	National Park Service
MCAGCC	Marine Corps Air Ground Combat Center
MCLB	Marine Corps Logistics Base
MOJA	Mojave National Preserve
MSHCP	Multi-species Habitat Conservation Plan
UDWR	Utah Department of Wildlife Resources
UNLV	University of Nevada Las Vegas
URTD	Upper Respiratory Tract Disease
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USMC	U.S. Marine Corps

OHV	Off-Highway Vehicle
ORV	Off-Road Vehicle
RMP	Resource Management Plan
SCA	Student Conservation Association