ATTACHMENT 3

3) Grazing utilization levels, range condition and trend, and vegetative parameters important to desert tortoise habitat quality shall be monitored. If monitoring indicates a deterioration in desert tortoise habitat quality or range condition attributable to livestock grazing, appropriate actions shall be taken to reverse the deterioration.

4) Attraction of common ravens and other potential desert tortoise predators to range improvements shall be reduced to the maximum extent possible.

Terms and Conditions

The following terms and conditions are established to implement the reasonable and prudent measures described above.

The chance of take of desert tortoises resulting from the proposed grazing program is greater in areas of relatively high density as compared to low density desert tortoise populations. The habitat categories (I, II, and III) are indicators of desert tortoise habitat quality and population densities (Spang 1988). Allotments can be segregated into three groupings based on habitat quality and population density (as indicated by habitat categories), and the amount of desert tortoise habitat affected:

> Group 1: Allotments which contain no desert tortoise habitat or contain only category III habitat, including the Pahrump, Horsethief Springs, Cady Mountain, Rattlesnake, Round Mountain, Round Valley, and Whitewater Canyon allotments. The Valley Well allotment is included in this group, because although it is located in category II habitat, it is small (480 acres) and appears to be poor or unsuitable habitat for desert tortoises. The Gold Valley allotment is also included here because, although it contains about 1,000 acres of category I habitat, the allotment is located in a high valley above 4,000 feet elevation in which desert tortoises are rare or absent.
>
> Group 2: Allotments with relatively small proportions or acreages of category I and/or II habitat, including Clark Mountain, Crescent Peak, and Granite Mountain.
>
> Group 3: Allotments with large amounts of category I and/or II habitat, including Chemehuevi Valley, Colton Hills, Cronese Lakes, Harper Lake, Jean Lake, Kessler Springs, Lanfair Valley, Lazy Daisy, Ord Mountain, Piute Valley, Valley View, and Valley Wells.

The following terms and conditions are tiered according to these groupings to reflect an increasing chance of take from group 1

tortoise habitat and discourage use of category I habitat in the southern portion of the allotment.

36. In the Lazy Daisy allotment the Bureau shall develop well P5W in the Old Woman Mountains to draw cattle away from category II habitat.

37. Cattle use of category II habitat on the west end of the Ord Mountain allotment shall be discouraged through management of water sources, including development of new waters in category III habitat or outside of desert tortoise habitat.

38. In the Piute Valley allotment, the Bureau shall remove cattle and turn off water to cattle troughs (unless needed for wildlife) in category I habitat east of the power line road.

39. In the Valley View allotment, cattle waters shall be managed to discourage use of category I habitat.

40. In the Valley Wells allotment, cattle waters shall be managed to encourage summer use by cattle of the higher elevation portions of the allotment, outside of Shadow Valley. Water management may include construction of pipelines P5 and P6P (Bureau 1991) to establish water sites outside of category I habitat. However, no new or replacement watering sites shall be constructed along these pipelines in category I habitat.

Disposition of Dead, Injured, or Sick Desert Tortoises

Upon locating dead, injured, or sick desert tortoises, initial notification must be made to the Service's Law Enforcement Office in Torrance, California at (310) 297 0062 within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. The notification shall be sent to the Service's Torrance office with a copy to the Ventura Field Office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. If possible, the remains of intact desert tortoises shall be placed with educational or research institutions holding the appropriate State and Federal permits. If such institutions are not available or the shell has been damaged, the information noted above shall be obtained and the carcass left in place. Marking the carcass in a manner that would not be toxic to other wildlife to ensure that it would not be re-recorded in the future, should be considered.

Arrangements regarding proper disposition of potential museum specimens shall be made with the institution prior to implementation of the action. Injured animals should be

be based on formal assessments of range condition of the entire allotment pursuant to the condition criteria and monitoring requirements established in the Desert Plan, as amended, and the Bureau Manual. If temporary, non-renewable use is authorized, it shall not exceed 25 percent of the active preference for specific allotments in any one year.

27. Utilization shall be light (no more than 40 percent) on all key species.

28. New key areas shall be established in areas accessible to cattle and within 0.75 miles of water in category I or II habitat in all group 1 and 2 allotments. Galleta grass shall be a key forage species in all key areas in which it occurs.

<u>The Following Additional Allotment-Specific Terms and Conditions Shall be Implemented in Group 3 Allotments</u>:

29. Through management of cattle waters and other actions in the Colton Hills allotment, movement of cattle from Fenner Valley to the slopes of the Providence Mountains and Clipper Valley shall be encouraged from March 1 through June 15.

30. Authorization of grazing in the Cronese Lake allotment is based on temporary, non-renewable use only. Thus, this allotment shall be exempt from term and condition 26. However, the stocking rate shall not exceed 500 AUMs.

31. Construction of water development BP2W in the Cronese Lake allotment (Bureau 1991) may proceed because it would reduce impacts in high density, category II desert tortoise habitat.

32. A two-pasture rotational grazing system shall be implemented in the Harper Lake allotment which will improve the condition of desert tortoise habitat in the north pasture. Concurrence between the Bureau and the Service on the details of the rotational grazing plan, including construction of a new water site in the north pasture, shall be required before implementation.

33. In the Jean Lake allotment, grazing shall be limited to seasonal use from November 1 to February 28.

34. Water availability shall be manipulated in the Kessler Springs allotment to discourage use of category II habitat. The Bureau shall explore options with the Service for rotational grazing which would improve the quality of desert tortoise habitat.

35. Through manipulation of water sources in the Lanfair Valley allotment, the Bureau shall encourage cattle use of non-desert

report for other cattle grazing allotments elsewhere in the California Desert District. In addition, any Analysis, Evaluation, and Interpretation Reports completed for the allotments addressed in this biological opinion shall be forwarded to the Service.

21. In allotments in fair or poor range condition, utilization of key species shall not exceed 30%. These allotments currently include: Chemehuevi Valley, Cronese Lakes, Clark Mountain, Horsetheif Springs, Piute Valley, and Valley Wells.

22. In allotments with cattle distribution problems, utilization of key species shall not exceed 40%. These allotments currently include Pahrump and Harper Lake.

<u>The Following Additional Terms and Conditions Shall be Implemented in Category I and II Habitat in Group 2 and 3 Allotments</u>:

23. Authorization for ephemeral forage shall occur only when ephemeral production is at least 350 pounds per acre.

24. No new or replacement cattle waters (including hauling water to new sites, but not including water pipelines which may traverse, but do not provide water sources in category I or II habitat) shall be constructed within 0.5 miles of category I or II habitat, unless an overall benefit to the desert tortoise would accrue. Concurrence between the Service and the Bureau shall be required in the determination of whether or not a benefit would accrue. An example of a water development in category I or II habitat which could benefit the desert tortoise is the construction of a new or replacement water in an area of low desert tortoise density that attracts cattle from a higher density area, thus reducing interactions between cattle and desert tortoises. Another example could be construction of a new water development in category I habitat which would allow rotational grazing and result in long-term improvement and recovery of perennial shrubs. New or replacement waters which result in long-term deterioration of desert tortoise habitat shall not be constructed in category I or II habitats .

25. Only those new range improvements which will not create conflicts with desert tortoise populations shall be allowed.

26. No temporary, non-renewable use shall be authorized except in allotments in good range condition or better. Data on which range condition assessments are based shall be no more than two years old. For two years from the date of this opinion, these data may consist of on-site evaluations by interdisciplinary teams which include Bureau biologists and range conservationists. After two years from the date of this opinion, evaluations shall

f. Only persons authorized by the Service under the auspices of this biological opinion shall be permitted to handle desert tortoises. The Service authorizes Tom Egan, Willow Yumiko, Jeff Lovich, and Larry Foreman of the Bureau to handle desert tortoises. If other individuals are to be authorized, the Service shall be supplied with their names(s) and credentials at least 15 days prior to the onset of any construction activities for review and approval. All handling of desert tortoises shall be in accordance with protocol adopted by the Service (Arizona Game and Fish Department et al. 1991).

g. Each desert tortoise found within a trench or above ground within three hours of nightfall or when ambient air temperatures exceed 90 degrees Fahrenheit shall be placed in a clean disposable cardboard box and held overnight in a cool location. The box shall be covered and kept in possession of a qualified biologist for release of each desert tortoise the next morning in the manner described in term and condition 18e. Cardboard boxes used to hold desert tortoises shall be new, used once, and discarded. All materials which come into contact with desert tortoises shall be used only once and then properly discarded to minimize contact with the causative factor(s) for URTD or other diseases.

h. All construction and maintenance workers shall strictly limit their activities and vehicles to areas which have been flagged by the qualified biologist to eliminate adverse impacts to desert tortoises and their habitat. All workers shall be instructed that their activities are restricted to flagged and cleared areas.

19. Cattle carcasses found within 300 feet of any road shall be removed and disposed of in an appropriate manner.

20. An annual report summarizing the grazing program shall be prepared and delivered to the Service by April 15 of each year. The report shall briefly summarize in letter form all utilization, AUMs, and trend data collected in the previous calendar year; discuss remedial actions taken to correct overutilization, elevated AUMs, or other problems; list all range improvement projects constructed, replaced, or maintained; and quantify destruction of desert tortoise habitat and take of desert tortoises resulting from these and other activities authorized by this biological opinion. The report shall also make recommendations for modifying or refining the terms and conditions stipulated herein to enhance desert tortoise protection or to reduce needless hardship on the Bureau and allotment lessees. This report may be combined with the annual

Bureau (1991). Construction of new or replacement facilities shall be carried out only from October 15 to March 15, unless specifically authorized due to safety or emergency considerations. Surface disturbance, particularly road construction and off-road vehicle activity shall be held to a minimum. After completion of the project, the disturbed soil shall be blended and contoured into the surrounding soil surface.

b. Pre-construction desert tortoise surveys of project sites shall be conducted by a qualified biologist ("qualified biologist" refers to a knowledgeable desert tortoise biologist, approved by the Bureau). These surveys shall conform to procedures described in Service (1992).

c. Range improvement construction, operation, and maintenance shall be modified as necessary to avoid direct impacts to desert tortoises and their burrows. Any hazards to desert tortoises that may be created, such as auger holes and trenches, shall be monitored by a biological monitor at least twice daily for desert tortoises which might become entrapped. These hazards shall be eliminated prior to the work crew leaving the site.

d. Prior to land-disturbing activities, an individual shall be designated as a field contact representative (FCR) who shall have the authority to ensure compliance with protective stipulations for the desert tortoise and be responsible for coordination with the Service. Such designated representative shall have the authority and responsibility to halt activities that are in violation of Service stipulations.

e. If desert tortoises are found above ground within areas to be disturbed by construction and maintenance of range improvement projects, and in the opinion of a qualified biologist are endangered by construction activities, they shall be relocated by an authorized desert tortoise biologist (see term and condition 18.f. for definition) a short distance away from the construction zone in the direction of undisturbed habitat. Relocated desert tortoises shall be placed in the shade of a large, marked shrub. If construction activities are short in duration, the authorized biologist may elect to hold the desert tortoise overnight pursuant to part g. below, and release the animal the next day at or near the point of capture after construction or maintenance activities have been completed.

from March 1 through June 1 depending on the availability of perennial forage. Outside of this period and in category III habitat, authorization may be for up to three months depending on the number of head of cattle and forage available.

13. All allotments shall be managed according to the AMPs for these areas. AMPs shall be finalized within 2 years of the date of signature of this biological opinion for all allotments not currently covered by one. Until such plans can be completed, allotments lacking an AMP shall be managed under existing guidelines, including the Desert Plan, with modifications based on criteria contained in the Bureau's rangewide desert tortoise plan (Bureau 1988, 1992).

14. Authorization for ephemeral forage in category III desert tortoise habitat shall occur only when 200 pounds or more of ephemeral forage per acre is available. Any replacement cattle authorized to use ephemeral forage shall be removed from such allotments whenever the thresholds for curtailing ephemeral grazing are reached.

15. The Bureau shall manage allotments for an increase of native perennial and annual plants, and promote continued improvement in trend and forage condition in areas where natural site potentials permit.

16. The Bureau shall continue to participate in research and studies designed to improve knowledge of desert tortoise nutrition, standard health profiles, epidemiology of diseases, and effects of cattle grazing. The Bureau shall incorporate information gathered from these studies into range and livestock management practices.

17. All private and public personnel who implement actions authorized by this biological opinion shall be briefed on the status of the desert tortoise and protection measures designed to reduce potential impacts to this species. Personnel shall be advised that handling, harming, or harassing desert tortoises without specific authorization is a violation of the Act. Personnel shall also be advised of the penalties of up to a $25,000 and six months in prison for taking a listed species without a permit. Handouts summarizing this information shall be provided to all personnel implementing all actions proposed in Bureau (1991) which may result in a take of desert tortoises.

18. For all construction, operation, and maintenance of range improvements involving land disturbance in desert tortoise habitat:

a. All construction and maintenance in category I, II, or III habitat shall be limited to that proposed in

possible. Environmental guidelines shall require that no known desert tortoise burrows be destroyed and that the chance of incidental take of desert tortoises be minimized. Within desert tortoise habitat, most water developments shall be turned off except when cattle are on the range.

5. Grazing shall be curtailed to protect perennial plants during severe or prolonged drought.

6. The Bureau shall ensure that all proposed range improvement projects shall be designed and flagged to minimize environmental impacts. Surface disturbance shall be minimized, and after construction is complete, disturbed soil shall be blended and contoured into the surrounding terrain. Construction of new roads shall be minimized. Debris or trash created during construction and maintenance of range improvements shall be removed immediately to limit attraction of predators.

7. Through coordination with Bureau biologists, layout of fences shall be carefully positioned to avoid potential impacts to desert tortoises and their burrows. Construction of fences near burrows shall be avoided.

8. Existing access and areas of disturbance shall be utilized when trenching for a section of new pipe or when performing maintenance on existing pipe.

9. If off-road use of any mechanical equipment is required to maintain or construct range improvement projects, the lessee shall notify the Bureau two working days prior to initiating the work. The Bureau shall ensure that the proposed off-road activity is consistent with terms and conditions 4 and 6 of this biological opinion. During routine maintenance, vehicles shall be restricted to existing roads and vehicle ways. Off-road vehicular use to remove cattle carcasses is authorized without notification to the Bureau (see term and condition 19).

10. Except for shipping and animal husbandry practices, herding of cattle shall be kept to a minimum. Cattle shall be evenly dispersed throughout their area of use.

11. Monitoring of perennial plant utilization, ephemeral forage production, and range condition and trend shall be implemented according to the methods and scheduling detailed in AMPs and in accordance with the Bureau Manual and the Desert Plan (as amended). Ephemeral production data shall be collected when necessary if requests are made for ephemeral grazing.

12. In category I and II desert tortoise habitat, perennial forage authorization above the preference level shall be made under temporary, non-renewable basis for one-month increments

through 3. A basic set of terms and conditions (#1-22) are defined herein for all allotments. Most of these (1-11, 13-17, 18b-h, and 19 and 20) are taken from the Service's biological opinion for four allotments on the eastern slopes of the Sierra Nevada Range (1-6-92-F-55), but contain minor changes to reflect different habitat conditions. The eastern Sierra allotments addressed by that opinion contained only category III habitat and therefore met the criteria for group 1. Other terms and conditions which apply to all allotments (12 and 18a) are taken from the Bureau's grazing proposal (Bureau 1991).

Additional terms and conditions are stipulated for groups 2 and 3. Of these, #23 and 25 are taken from Bureau (1991). Terms and conditions 24 and 26-40 were coordinated with Bureau wildlife biologists and range conservationists during informal consultation.

All terms and conditions in this biological opinion shall apply to occupied desert tortoise habitat. Whether or not habitat is occupied by desert tortoises shall be determined by belt-transects and/or other data, and concurrence between the Service and the Bureau shall be required in making these determinations. The following terms and conditions shall not apply to those allotments or portions of allotments which are found to be unoccupied by desert tortoises.

Terms and Conditions Common to All Allotments:

1. The proposed action shall be an interim grazing program of five years or less.

2. Within key areas, utilization shall be limited to between 30 and 50 percent of key species. In desert tortoise habitat, utilization of key perennial grasses shall not exceed 40% from February 15 to October 14. No averaging of utilization levels among key species or key areas shall occur. When utilization approaches authorized limits in any key area, steps shall be taken to redistribute or reduce cattle use of that key area. These steps shall include removal of cattle or, where feasible, turning off water at troughs to reduce adjacent grazing. If not identified, key areas within each allotment shall be established within two years of the date of issuance of this biological opinion.

3. Feeding of roughage, such as hay, hay cubes, or grains to supplement forage quantity, shall not be allowed in desert tortoise habitat.

4. Range improvement projects shall be constructed and maintained following standard environmental guidelines. Construction shall occur on previously disturbed sites, whenever