FINDING OF NO SIGNIFICANT IMPACT

Implementation of a Desert Tortoise Recovery Plan Task: Reduce Common Raven Predation on the Desert Tortoise

The U.S. Fish and Wildlife Service (Service) proposes to reduce predation by the common raven on the federally threatened desert tortoise in the California Desert. We would integrate Federal, State, and local management plans, and develop and implement a major public outreach and education program. The management techniques include cultural and mechanical methods (e.g., reduce human subsidies of food, water, nest sites, roosting sites for the common raven, and aggressive nest removal) with the potential of limited raven removal in designated areas. Four of the alternatives include the physical removal of limited numbers of common ravens. In implementing these four alternatives, the percent of the common raven population removed in the California desert would range from about 0.5 to 18.7 annually. Even with this effort, common raven populations would remain well above historic levels for these areas, and would be viable and self-sustaining.

Alternatives Analyzed in Detail

The Service prepared an Environmental Assessment (EA) (copy enclosed) which discussed 16 alternatives. We analyzed six alternatives:

- Alternative A describes the current level of management - limited non-lethal management actions implemented at a few locations and no lethal control of common ravens.
- Alternative B focuses on reducing human subsidies of food, water, and nest sites to the common raven in the California desert. It provides immediate protection to hatchling and juvenile desert tortoises by identifying and removing ravens (maximum of 0.5 percent of the population) that have preyed or attempted to prey on the desert tortoise.
- Alternative C includes reduction of human subsidies to common ravens and removal of ravens (maximum of 5.3 percent) in specific areas (e.g., Desert Tortoise Management Areas (DTMAs), critical habitat, and specially designated management areas).
- Alternative D would incorporate raven removal in the areas identified in Alternative C and raven concentration areas, such as landfills with removal of maximum of 18.7 percent of the population.
- Alternative E would use non-lethal methods to reduce human subsidies of food, water, nest sites, and roost sites for the common raven thereby eventually reducing the size of the common raven population.
- Alternative F would implement Alternatives B, C, and D through phased implementation, as needed.

Selection of Alternative to Implement

The analyses in the EA demonstrate that Alternative F, phased implementation of Alternatives B to D, provides the greatest ability to achieve the Service's goal in a timely manner while safeguarding human health and safety, reduces impacts to recreation to a minimal level, provides

the greatest benefit to non-target wildlife species, and has minimal socio-economic impacts.

Phased implementation with monitoring and adaptive management is necessary to determine the lowest level of removal that is effective in reducing raven predation on the desert tortoise to meet our goals in combination with implementing cultural and mechanical methods to reduce human subsidies to common ravens. We would remove common ravens by implementing up to three phases, as needed. The first phase (Alternative B) would remove up to 0.5 percent of the adult common ravens desert-wide for which we have evidence that they are preying or attempting to prey on desert tortoises. If effectiveness monitoring indicates that our actions are not successful, we would implement the second phase. The second phase (Alternative C) would be to remove up to 5.3 percent of the adult common ravens in the California desert and would include removal of ravens seen in the DTMAs in combination with reducing human subsidies to ravens. If effectiveness monitoring indicates that our actions are not successful, we would implement the third phase. The third phase (Alternative D) would be to remove up to 18.7 percent of the ravens in the California Desert and would include removal of ravens in the DTMAs and landfills in combination with reducing human subsidies to ravens. We would remove only the minimum number of ravens; we would continue to remove common ravens until there is no evidence of predation on the desert tortoise based on effectiveness monitoring results.

Monitoring and Adaptive Management

The Service, in coordination with the cooperating agencies, would periodically review the monitoring data and compare the results to the goal in the final EA document and decision. The methodology for determining whether to maintain the level of common raven removal or increase or decrease our level of removal would be through analysis of three years of effectiveness monitoring data. If the data indicate less than a 75 percent reduction in raven predation on the desert tortoise for each year, we would implement the next phase or alternative. If the data indicate a 90 percent or more reduction for each year, we would implement the previous phase thereby reducing the number of ravens removed. If the results are between these thresholds, we would continue implementing the current alternative.

Environmental Consequences

Implementation of the Service's decision would likely result in the following environmental, social, and economic effects. From implementation of Alternative D, common raven populations would decrease a maximum of about 18.7 percent in selected areas across the California desert from implementation of lethal removal. However, raven populations would still be well above (more than 500 percent) the historic levels for these areas, and be considered viable and self-sustaining. More hatchling and juvenile desert tortoises would have the opportunity to reach adulthood, increase the size of the population, and reproduce than in Alternatives A, B, C, or E. Wildlife populations of other prey species for common ravens would likely increase with the reduction in the numbers of predatory ravens. The maximum estimated socio-economic effect from phased implementation of Alternative F is $550,000 annually; ravens could be killed anytime during the year. To minimize any impact to human health and safety, there would be limited use of firearms and avicide bait. These methods would be implemented by trained professionals and follow all safety regulations. Better trash containment and reduction of

unauthorized dumps would reduce the possible spread of disease to humans and other wildlife species. Recreation impacts would be restricted on a site-specific basis for a short time, with an estimated total loss of up to 20 days per year throughout the California desert. Raven removal actions would not occur on weekends, whenever possible, to minimize potential impacts to recreation. The opportunities for wildlife viewing would increase because there would be reduced predation by common ravens on small mammals, birds, and other reptiles.

Measures to mitigate and/or minimize adverse effects have been incorporated into the proposal. For the common ravens, these include removing the smallest number of ravens necessary to accomplish our goal; using only professional wildlife specialists to remove common ravens, monitoring impacts of the program on the raven annually, and using the most humane methods practicable to euthanize ravens (see section 4.5 of the EA).

For other wildlife species, measures to mitigate and/or minimize impacts include: consulting with the California Department of Fish and Game to avoid or minimize potential risks to State listed species; conducting internal consultation under the Endangered Species Act to avoid or minimize take of federally listed and proposed species; training professional personnel that remove ravens to identify state and federally listed species and avoid them; and using the most appropriate methods for raven removal to avoid or minimize impacts to other wildlife species.

Measures to mitigate and/or minimize impacts on recreation and human health and safety include conducting activities to remove ravens after developing agreements with landowners; avoiding implementation during periods of high human use, such as weekends, when possible; using the most appropriate methods to minimize impacts especially near settlements. No lethal methods would be used in areas with legal or policy restrictions that preclude the proposed activities.

The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988 as these activities would occur in desert environments or near desert environments where there are no wetlands. Some activities may occur in floodplain area of desert washes but there would be no modification of topography or surface flow. No grading or construction is proposed in a floodplain or wetland.

The proposal is not expected to have any significant effects on the human environment. The impacts were analyzed with respect to context and intensity using significance criteria developed for each resource area. Impacts ranged from minor adverse to moderate beneficial. The references that were used to prepare the EA are located in section 5.0 of the EA.

Public Involvement

The proposal has been coordinated with local, State, and Federal agencies and Tribes. There was a substantial public outreach effort. For information, please refer to Appendix B in the EA. The response to comments received on the EA is located in Appendix F of the EA.

The proposal complies with all applicable laws and regulations. Please refer to Appendix D of the EA for a complete discussion of applicable laws, regulations, and Executive Orders.

Finding of No Significant Impact

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment from implementing the preferred alternative, Alternative F (phased implementation of Alternatives B to D). Based on my review and evaluation of the enclosed EA and other supporting documentation, I have determined that Alternative F does not constitute a major Federal action significantly affecting the quality of the human environment, under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended) and 40 CFR 1508.27. As such, preparation of an environmental impact statement is not required.

Decision

I have carefully reviewed the EA and input from the public involvement process. I believe the issues identified in the EA would be best addressed through Alternative F because it offers the greatest flexibility in achieving effectiveness while minimizing cumulative impacts on the quality of the human environment with respect to the issues presented for consideration in this process. The Service will implement the preferred alternative in compliance with standard operating procedures and the decision model described in Appendix C. The EA identifies several alternatives, analyzes their effects on the human environment, and supports this finding. It is available upon request from the Fish and Wildlife Service, Ventura Fish and Wildlife Office, 2493 Portola Road, Suite B, Ventura, CA 93003 (Telephone 805-644-1766).

3-14-08

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Deputy Regional Director, Region 8
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Date

Enclosure