



ENVIRONMENTAL SCREENING FORM

Project Name: Manage Common Ravens to Protect Desert Tortoise

Location California Desert Conservation Area

Lead Agency: Fish and Wildlife Service Date 21 April 2005

PROJECT DESCRIPTION

Project Background:

Desert tortoise populations have declined over most of their range in California, with some populations showing precipitous drops (Berry 1990, Fish and Wildlife Service 1994, Corn 1994). Conflicting human activities have been reduced in many areas to enhance habitat quality and reduce mortality in order to first stabilize and secondly increase tortoise populations. Despite these efforts, populations cannot stabilize or increase unless there is a steady stream of young tortoises recruited into the breeding population at levels sufficient to replace or surpass the natural mortality of adults (Fish and Wildlife 1994, Congdon *et al.* 1993). Populations of common raven are elevated many-fold above historic levels due in large part to human subsidies of food, water, and nesting sites (Knight *et al.* 1993, Boarman and Berry 1995). At these elevated population levels, raven predation on desert tortoise hatchlings and juveniles can take a substantial proportion of the young in some areas and adversely impact recruitment. Thus, there is a need to reduce raven predation on hatchling and juvenile tortoises so that survivorship is sufficient to replenish natural and human induced losses of adults.

Purpose and need:

The purpose of the proposed raven management actions is **to reduce raven predation on hatchling and juvenile desert tortoise**. It is believed that by reducing raven predation on hatchling and juvenile tortoises their survivorship will increase. This increased juvenile survivorship will lead to increased recruitment of tortoises into the reproductive population and ultimately promote population stabilization and recovery.

Proposed Action:

The proposed actions will continue on-going efforts to reduce raven subsidization of food and water, reduce the occurrence of human provided nesting opportunities, and directly remove **only those ravens that are known to prey on tortoises**. Research and monitoring will provide information necessary to modify and adapt the actions to meet changing conditions and increase effectiveness.

Non-lethal tools reduce human factors that have contributed to raven populations increasing to abnormally high levels. Methods used could include any or all of the following depending upon the circumstances: reduce or eliminate human food subsidies, reduce the availability of carcasses of road-killed animals along highways in tortoise habitat, reduce available water removing raven nests outside the nesting season in and within 2 miles of tortoise management areas, and reduce nesting substrate in tortoise habitat.

Methods used remove ravens known to predate on tortoise could include any or all of the following depending upon field circumstances: shooting, live capture and euthanasia, and use of toxicants. Young ravens and eggs found in nests of removed adults would be euthanized humanely if they can be captured safely.

Alternative Actions:

No Action. This alternative would maintain the status quo, and not involve additional action. This can be thought of as the current “program” alternative. It consists entirely of efforts that are being made now: reducing trash availability at landfills and illegal dumps, limited fencing along highways to reduce road-kills, limited educational outreach to local desert communities.

Non-lethal Methods only. This alternative would allow for implementation of only non-lethal methods to prevent or deter ravens from tortoise management areas. Any or all of the non-lethal efforts listed under the proposed action could be used.

Remove Additional Ravens. This alternative would implement the proposed action and would include the removal of **any ravens found within a tortoise management area** whether or not it they are known to have preyed upon tortoise. Any or all of the lethal efforts listed under the proposed action could be used.

Target Raven Concentrations. This alternative would implement the proposed action with the addition of targeting **ravens at known concentration centers** (e.g. landfills) whether these concentration points are in tortoise management areas or not and without knowing if the specific ravens had preyed upon tortoise.

If the proposed alternative were implemented, would it	Yes	No	Data Needed to Determine
A. Have material adverse effects on public health or safety?		X	
B. Have adverse effects on such unique characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands; floodplains; or ecologically significant or critical areas, including those listed on the National Register of Natural Landmarks?		X	
C. Have highly controversial environmental effects?			x
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?		x	
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?			X
F. Be directly related to other actions with individually insignificant, but cumulatively significant, environmental effects?		X	
G. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places?		X	
H. Have adverse effects on species listed or proposed to be listed on the List of Endangered or threatened Species, or have adverse effects on designated Critical Habitat for these species?		X	
I. Require compliance with Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?		X	
J. Threaten to violate a federal, state, local or tribal law or requirement imposed for the protection of the environment.	Project would require a depredation permit from the USFWS Migratory Bird Treaty Office		
K. Involve unresolved conflicts concerning alternative uses of available resources (NEPA sec. 102(2)(E))?		X	
L. Have a disproportionate, significant adverse effect on low-income or minority populations (EO 12898)?		X	
M. Restrict access to and ceremonial use of Indian sacred sites by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO130007)?		X	
N. Contribute to the introduction, continued existence, or spread of Federally listed noxious weeds (Federal Noxious Weed Control Act)?		X	
O. Contribute to the introduction, continued existed, or spread of non-native invasive species or actions that may promote the introduction, growth or expansion of the range of non-native invasive species (EO 13112)?		X	
P. Require a permit from a federal, state, or local agency to proceed, unless the agency from which the permit is required agrees that a CE is appropriate?	Project would require a depredation permit from the USFWS Migratory Bird Treaty Office		
Q. Have the potential for significant impact as indicated by a federal, state, or local agency or Indian tribe?		X	
R. Have the potential to be controversial because of disagreement over possible environmental effects?	X		

If the proposed alternative were implemented, would it have measurable impacts on the following categories?	Yes	No	Data Needed to Determine
A. Geological resources – soils, bedrock, streambeds, etc.		X	
B. Air quality, traffic, nuisance dust, or from noise		X	
C. Water source, water quality or quantity		X	
D. Wash, drainage, wetlands, or aquifer		X	
E. Land use, including occupancy, income, values, ownership, type of use, adjacent property owners (either public or private)		X	
F. Rare or unusual vegetation, i.e., Joshua trees, fan palms, cacti		X	
G. Species of special concern (plant or animal; state or federal listed or proposed for listing), i.e., desert tortoise, foxtail cactus, rock pennyroyal, speckled rattlesnake, etc.	X		
H. Biosphere reserves, World Heritage sites		X	
I. Unique or important wildlife or wildlife habitat		X	
J. Recreation resources, including supply, demand, visitation, activities, etc.		X	
K. Visitor services		X	
L. Alter parking or traffic flows, either temporarily or permanently		X	
M. Visitor experience, aesthetic resources, such as visual, smell, sound		X	
N. Socio-economics, including employment, occupation, income changes, tax base, infrastructure, etc.		X	
O. Facility maintenance requirements		X	
P. Energy resources, utility costs		X	
Q. Other important environmental resources		X	
R. Wilderness		X	
S. Specifically for BLM managed lands, impact or take place in ACECs	X		
T. Specifically for the NPS, have the potential to violate the NPS Organic Act by impairing park resources or values		X	

Concurrence: In signing below, you concur that the information and analysis above is complete and accurate and shall be used as the basis for preparation of the Raven Management Environmental Assessment.

Agency	Representative/Date	Agency	Representative/Date
NPS-Joshua Tree NP		NPS-Mojave NP	
USFWS		DOA-Wildlife Services	
BLM- California Desert District		California Department of Fish and Game	
DOD-MAGTFTC		DOD, MCLB Barstow	
DOD- NTC, Ft. Irwin		DOD-Edwards AFB	
DOD, NAWS, China Lake			