



DESERT TORTOISE COUNCIL

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Senator Lisa Murkowski, Chair
Committee on Energy and Natural Resources
304 Dirksen Senate Office Building
Washington DC 20510

RE: Opposition to Senator Mike Lee's "Desert Tortoise Habitat Conservation Plan Expansion Act" (S. 3297)

Dear Madam Chair:

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

Herein we are taking this opportunity to formally oppose Senator Mike Lee's *Desert Tortoise Habitat Conservation Plan Expansion Act (S. 3297)* (herein "Act") and urge you to do the same for the reasons given below. Given the location of the proposed project in critical habitats occupied by Agassiz's desert tortoise (*Gopherus agassizii*), potential loss of lands obligated by federal, state, and county agreements to conserve the tortoise, and binding decisions to conserve and recover the species on lands now proposed for highway development, we firmly oppose this proposed legislation.

The Washington County Habitat Conservation Plan (HCP) has functioned effectively since 1995 to protect tortoises while authorizing residential, commercial, and other development. Enactment of S. 3297 would establish a dangerous and damaging national precedent. Since 1995, as reflected in the HCP, there has been a successful cooperative agreement among state (Utah Division of Wildlife Resources), federal [U.S. Fish and Wildlife Service (USFWS) and Bureau of

Land Management (BLM)], and county (Washington County, Utah) jurisdictions that is now threatened by this proposed Act. Through formal authorization provided for by the Federal Endangered Species Act (FESA), thousands of acres of development have occurred in exchange for thousands of acres of conserved lands. To construct a major highway through these federally-protected conservation lands would seriously undermine recovery of the desert tortoise in the Red Cliffs National Conservation Area, imbalance the habitat-loss-to-habitat-protection ratio thus far achieved by the HCP, and exceed the federal take authorization previously granted under the FESA.

S. 3297 would facilitate construction of the Northern Corridor/Washington Parkway (herein “highway” or “Northern Corridor”) in violation of the existing HCP established under the FESA, in violation of the final BLM Red Cliffs National Conservation Area (NCA) Plan, and to the detriment of the intended function of the Red Cliffs Desert Reserve (“Reserve”). There have been over two decades of cooperation to establish and implement the HCP and garner public support and consensus on the management of public lands by the BLM. This longstanding cooperation would be undone by passing this Act. During the past several years, the public has once again actively opposed the construction of the Northern Corridor through the NCA. Consistent with the relevant laws and policies, BLM and USFWS officials have properly denied the county’s request to construct the highway. This new legislation attempts to undermine the science-based, public supported function of the FESA via its HCP component and to reverse the outcomes from extensive environmental review and public involvement processes.

There are many compelling biological reasons to oppose S. 3297, including the following:

Passage of S. 3297 would facilitate construction of the Northern Corridor through a dedicated Reserve that would adversely affect desert tortoise in the following ways: Direct mortality during and following construction; introduce construction activities into a dedicated Reserve area; create habitat fragmentation; result in habitat loss; impair the efficacy of an already minimally-sized reserve and tortoise population; degrade habitats that would not otherwise be disturbed; result in the spread of exotic and invasive plant species; increase the risk of fire, which has already decimated tortoise populations in the Reserve; increase predation of tortoises by common ravens and coyotes; possibly promote disease and impair tortoise health by introducing chemicals associated with vehicles; and, increase access to reserve areas that could result in poaching and vandalism of tortoises.

Recent (2004 to 2014) Tortoise Population Trends

The Mojave Population of the Agassiz’s desert tortoise was listed as Threatened by the USFWS in 1990 (USFWS 1990) followed by the designation of critical habitat (USFWS 1994a) and completion of a recovery plan in 1994 (USFWS 1994b), which was revised in 2011 (USFWS 2011). In 2000, the USFWS began systematically surveying tortoise populations in critical habitat and recovery unit areas to determine population trends. Based on their findings (USFWS 2015), which are briefly summarized below, the Council is convinced that the Mojave Population of the Agassiz’s desert tortoise, which includes tortoises that would be affected by passage of this Act, should be federally listed as Endangered rather than Threatened.

Summarizing the results of these surveys (USFWS 2015), 17 populations of Mojave desert tortoise are described below that occur in Critical Habitat Units (CHUs) and Tortoise Conservation Areas (TCAs), including 14 that are on lands managed by the BLM.

Table 1. Summary of 10-year trend data for 5 Recovery Units and 17 CHUs/TCAs for Agassiz's desert tortoise (= Mojave desert tortoise). The table includes the area of each Recovery Unit and CHU/TCA, percent of total habitat for each Recovery Unit and CHU/TCA, density (number of breeding adults/km² and standard errors = SE), and the percent change in population density between 2004 and 2014. Populations below the viable level of 3.9 breeding individuals/km² (10 breeding individuals per mi²) (assumes a 1:1 sex ratio) and showing a decline from 2004 to 2014 are in red. The one directly affected by the proposed Act (Upper Virgin River Recovery Unit, Red Cliffs Desert Critical Habitat Unit) is *italicized*.

Recovery Unit: Designated Critical Habitat Unit/Tortoise Conservation Area	Surveyed area (km ²)	% of total habitat area in Recovery Unit & CHU/TCA	2014 density/km ² (SE)	% 10-year change (2004–2014)
Western Mojave, CA	6,294	24.51	2.8 (1.0)	-50.7 decline
Fremont-Kramer	2,347	9.14	2.6 (1.0)	-50.6 decline
Ord-Rodman	852	3.32	3.6 (1.4)	-56.5 decline
Superior-Cronese	3,094	12.05	2.4 (0.9)	-61.5 decline
Colorado Desert, CA	11,663	45.42	4.0 (1.4)	-36.25 decline
Chocolate Mtn AGR, CA	713	2.78	7.2 (2.8)	-29.77 decline
Chuckwalla, CA	2,818	10.97	3.3 (1.3)	-37.43 decline
Chemehuevi, CA	3,763	14.65	2.8 (1.1)	-64.70 decline
Fenner, CA	1,782	6.94	4.8 (1.9)	-52.86 decline
Joshua Tree, CA	1,152	4.49	3.7 (1.5)	+178.62 increase
Pinto Mtn, CA	508	1.98	2.4 (1.0)	-60.30 decline
Piute Valley, NV	927	3.61	5.3 (2.1)	+162.36 increase
Northeastern Mojave	4,160	16.2	4.5 (1.9)	+325.62 increase
Beaver Dam Slope, NV, UT, AZ	750	2.92	6.2 (2.4)	+370.33 increase
Coyote Spring, NV	960	3.74	4.0 (1.6)	+265.06 increase
Gold Butte, NV & AZ	1,607	6.26	2.7 (1.0)	+384.37 increase
Mormon Mesa, NV	844	3.29	6.4 (2.5)	+217.80 increase
Eastern Mojave, NV & CA	3,446	13.42	1.9 (0.7)	-67.26 decline
El Dorado Valley, NV	999	3.89	1.5 (0.6)	-61.14 decline
Ivanpah, CA	2,447	9.53	2.3 (0.9)	-56.05 decline
<i>Upper Virgin River</i>	<i>115</i>	<i>0.45</i>	<i>15.3 (6.0)</i>	<i>-26.57 decline</i>
<i>Red Cliffs Desert</i>	<i>115</i>	<i>0.45</i>	<i>15.3 (6.0)</i>	<i>-26.57 decline</i>
Range-wide Area of CHUs - TCAs/Range-wide Change in Population Status	25,678	100.00		-32.18 decline

Importantly, between 1998 and 2003 there was a 41% reduction in tortoise numbers within the Red Cliffs Desert Reserve (McLuckie *et al.* 2012). You can see from the results of USFWS surveys in Table 1 that (a) 10 of 17 populations of the Mojave desert tortoise declined from 2004 to 2014; (b) 11 of 17 populations of the Mojave desert tortoise are no longer viable; (c) these 11 populations represent 89.7 percent of the range-wide habitat in CHUs/TCAs, which encompass the best remaining tortoise habitats and populations; and (d) there has already been a decline of 26.57% in the tortoise population within the CHU encompassing the Reserve that would be adversely affected by Senator Lee's proposal.

Given these data, the Council believes that the Mojave desert tortoise meets the definition of an Endangered species. In the FESA, Congress defined an “Endangered species” as “any species which is in danger of extinction throughout all or a significant portion of its range...” Because most of the populations of the Mojave desert tortoise were non-viable in 2014; most continue to decline; and the threats to the Mojave desert tortoise are numerous and have not been substantially reduced throughout the species’ range, the Council believes the Mojave desert tortoise should be designated as an Endangered species by the USFWS. Enactment of S. 3297 would serve to accelerate this serious downward tortoise population trend in southwestern Utah.

Effects of Roads on Desert Tortoise Populations

Although S. 3297 proposes to add a new Zone 6 to the existing HCP-established Red Cliffs Desert Reserve as mitigation for construction of the highway through the core Reserve Zone 3, this addition will not effectively offset the impacts of the new road through the federally-dedicated conservation area. The inherent problem with this part of the proposed Act is that the new highway through the existing Zone 3 conservation area will adversely fragment and impact currently protected tortoise habitats by ostensibly protecting new habitats in Zone 6 areas. Since the tortoises in Zone 6 are already protected under the FESA and existing HCP, and much of the area is within an existing BLM Area of Critical Environmental Concern (ACEC), adding Zone 6 to the Reserve will not substantially increase tangible tortoise protection or effectively mitigate for the loss and fragmentation of tortoise habitat in the core Reserve Zone 3.

McLuckie *et al.* (2012) found that the 41% tortoise “... population decline [in the Reserve] was attributed to drought conditions in the early 2000s, with other contributing factors influencing population numbers including habitat degradation due to *wildfires* and recreational use, disease, and *predation*” [*italicized emphasis added*]. Placement of this road through the Reserve would expose tortoise habitats to increased incidence of wildfire, as several studies have shown wildfires to be associated with vehicle travel on paved and unpaved roads. Predation would also likely increase as animals (particularly small mammals) killed on the new roadway would provide subsidies to common ravens and coyotes, both of which may be attracted into the area and opportunistically kill tortoises.

The Council believes that construction of this new highway would create new impacts and threats that cannot be mitigated by enlarging the existing Reserve. New impacts would predictably include increased predation on tortoises as predators are attracted to road-killed animals; increased weed species and a concomitant increase in the number of wildfires; unacceptable additional habitat fragmentation to a Reserve area that is already small; indirect impacts that degrade habitats out to 4,000 meters from the roadside (Hoff and Marlow 2002). The construction of this new highway through the dedicated Reserve will have the adverse effects given above to a population of tortoises that has already undergone a 41% decline in numbers.

Linear projects, including pipelines, transmission lines, and roadways, have the most serious direct impacts to tortoises and habitats because they affect the home ranges of many more tortoises than does development of a single square or rectangular parcel. A hundred acres of habitat lost along a right-of-way ten miles long will affect many more tortoises than would occur

on a 100-acre square parcel assuming equal quality habitats among the sites. For example, in a study assessing development impacts for 171 projects (LaRue and Dougherty 1996) between 1989 and 1995, 38 of 53 (72%) tortoise mortalities occurred during construction of a single project - the Mojave-Kern Pipeline - in 1989. Cumulatively, 48 of 53 (91%) tortoise deaths (including 38 on the Mojave-Kern Pipeline) occurred along only four *linear* projects. So, four linear projects, of the 171 projects analyzed, were responsible for 91% of the mortality, and the remaining 167 projects resulted in only five tortoise mortalities.

Adverse Effects on the Existing Habitat Conservation Plan

Although the Council was unable to determine how many acres of tortoise habitats have been developed and how many tortoises have been displaced from authorized development areas under the Washington County HCP, we know that tortoises have declined by 41% inside the Reserve area between 1998 and 2003 (McLuckie *et al.* 2012) in spite of best conservation efforts to recover them. We know that 14,624 acres of habitats had recently burned on the Reserve, including 25 percent of the tortoise critical habitat therein (McLuckie *et al.* 2012). These observations indicate there have been both a net loss of habitat and wild tortoises from HCP-authorized development areas *and* a net reduction in tortoise numbers inside the NCA.

Lost habitats and displaced tortoises from HCP-authorized development activities were considered allowable based on the understanding that protected and acquired habitats within the Reserve would be conserved. The Council finds that construction of a new highway through a conservation area whose function it is to offset tortoise losses attributed to authorized activities is counterintuitive and counterproductive; it violates the intent of the federal take permit and undermines the efficacy of conservation within the Reserve. A new highway through the Reserve was not a foreseen event in the federal take permit, so development of a new highway through the Reserve violates the premise of the HCP.

We appreciate this opportunity to provide input to our elected representatives and trust that our comments will clarify why the Desert Tortoise Council opposes S. 3297 and why we urge you to also oppose this Act.

Regards,



Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

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