

1 as President of the United States of America; UNITED STATES OF AMERICA; U.S. 2 DEPARTMENT OF DEFENSE; PATRICK M. SHANAHAN, in his official capacity as 3 Acting Secretary of Defense; MARK T. 4 **ESPER**, in his official capacity as Secretary of the Army; **RICHARD V. SPENCER**, in his 5 official capacity as Secretary of the Navy; **HEATHER WILSON**, in her official capacity 6 as Secretary of the Air Force; U.S. **DEPARTMENT OF THE TREASURY;** 7 STEVEN T. MNUCHIN, in his official 8 capacity as Secretary of the Treasury; U.S. **DEPARTMENT OF THE INTERIOR;** 9 **DAVID BERNHARDT**, in his official capacity as Acting Secretary of the Interior; U.S. 10 DEPARTMENT OF HOMELAND SECURITY; KIRSTJEN M. NIELSEN, in 11 her official capacity as Secretary of Homeland 12 Security; 13 Defendants. 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

I, Kevin B. Clark, declare as follows:

- 1. I have personal knowledge of the facts set forth in this declaration. If called as a witness, I could and would testify competently to the matters set forth below.
- 2. I am the Director of BioServices for the San Diego Natural History Museum, a position I have held since 2014.
- 3. I have over twenty-five years of biological experience, including conducting surveys for a wide range of endangered species. I hold permits with the state and federal governments to nest search, monitor, and band rare and endangered passerines, shorebirds, and seabirds. I hold federal and state permits to survey and nest monitor endangered species such as the Southwestern Willow Flycatcher, Western Snowy Plover, Least Bell's Vireo, California Gnatcatcher, and California Least Tern. I am also permitted to mist-net, handle, and band migratory birds.
- 4. I have conducted biological surveys throughout the U.S., Mexico, and Costa Rica, from bird banding in bottomland hardwood forests of Louisiana to mammal, bird, and reptile studies in the Sierra Nevada of California. I co-authored a book on the extinction of the Imperial Woodpecker that took me throughout tropical and montane habitats of northwestern Mexico. I have a Bachelor of Science degree from the University of California, Berkeley, and a Master of Science Degree in Ecology from Arizona State University. My thesis research involved the effects of habitat fragmentation on birds, mammals, and reptiles. My research analyzed landscape influences on biological communities and trophic level relationships of extirpated and persisting species. This research found that smaller habitat fragments supported fewer species of animals, and even common species in pre-fragmented landscapes could be extirpated once fragmentation occurred. In 2011, this research was published in the Journal of the Arizona-Nevada Academy of Sciences.
- 5. From 2000-2006, I was a Fish and Wildlife Biologist with the U.S. Fish and Wildlife Service ("U.S. FWS" or "Service"), based in Carlsbad, California. In this capacity, I worked on the recovery of endangered species, including the California Gnatcatcher and California Least Tern, and was the regional recovery coordinator for the threatened Western Snowy Plover. I was the primary author of the 2003 designation of critical habitat for the

California Gnatcatcher, which included a proposed rulemaking reclassifying the species as a Distinct Population Segment under the Endangered Species Act (68 Fed. Reg. 20228). As part of this analysis, I thoroughly reviewed all the pertinent literature and survey information for the species, conducted field surveys for the bird and its habitat requirements, and analyzed and finalized maps describing the range of the species and its essential habitat locations. In my capacity as a Fish and Wildlife Biologist I also participated in consultations required under Section 7 of the Endangered Species Act, which are required whenever a federal project may impact threatened or endangered species.

- 6. Subsequent to my employment at the U.S. FWS, I founded my own company, Clark Biological Services, to conduct focused surveys and conservation-based research on endangered species in Southern California. I possess authorized take permits from both federal and state wildlife agencies to conduct surveys and monitoring of the California Gnatcatcher. I authored numerous reports on the results of California Gnatcatcher surveys and monitoring, generally for large landowners in southern California such as the Department of Defense. After I founded my own conservation firm, I joined the San Diego Natural History Museum as the Director of BioServices, and in this capacity I coordinate the contracting within the science departments with various clients requiring applied ecological research, typically for large agencies and institutions. I also currently serve on the recovery teams of the endangered Masked Bobwhite Quail (*Colinus virginianus ridgwayi*) and the Sonoran pronghorn (*Antilocapra americana sonoriensis*), both convened by the U.S. FWS.
- 7. I have analyzed the border-infrastructure projects outlined in the February 25, 2019, memorandum regarding "Request for Assistance Pursuant to 10 U.S.C. § 284" that the U.S. Department of Homeland Security ("DHS") directed to the U.S. Department of Defense ("DOD"), in which DHS requests DOD's assistance in constructing pedestrian fencing along approximately 218 miles of the U.S.- Mexico border. DHS has identified eleven separate projects for border areas located in California, Arizona and New Mexico ("Section 284 Projects").
- 8. One of the Section 284 Projects, El Centro Project 1, is located in Imperial County, California, and involves removing approximately 15 miles of vehicle barrier fencing and

replacing it with pedestrian fencing that will be 18 to 30 feet tall. El Centro Project 1 also includes construction of roads and installation of lighting. I have also reviewed the description of El Centro Project 1, as outlined in the "Determination Pursuant to Section 102 of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, as Amended," that DHS published in the federal register (84 Fed. Reg. 21800).

- 9. DHS has not provided detailed information regarding El Centro Project 1. It is presumed that the project will be similar to recently completed border wall projects in other portions of the California border, and will include a new bollard wall from 18 to 30 feet high, construction of a 20-foot wide all-weather road, and assorted temporary roads for access to the work sites. As with any construction project of this scale, it is assumed that extensive areas for equipment staging and materials storage will also be required in the vicinity of the project area at the border.
- 10. I have considerable experience in evaluating the impacts caused by similar border infrastructure projects. From 2011-2012, my company was hired to perform biological monitoring of the construction along the primary and secondary border fences from Bunker Hill (about a mile east of the Pacific Ocean) to the coast. My observations of the amount of area needed for staging equipment and materials, constructing roads for access to construction areas, and cut and fill activities during construction are directly relevant to the current proposal.
- 11. In this declaration, I provide several examples specific to the El Centro Project 1 site, and to the border region more generally, to illustrate how El Centro Project 1 will cause irreparable harm to wildlife.
- 12. Multiple peer-reviewed scientific studies have found that a variety of wildlife, ranging from mountain lions (*Puma concolor*) to bighorn sheep (*Ovis canadensis*) as well as ground dwelling non-migratory birds, are negatively affected by border fences disrupting their movement patterns. In disrupting movement, these barriers can reduce or restrict events such as juvenile and adult dispersal, as well as genetic interchange between populations.
- 13. The American Society of Mammalogists, a professional, scientific, and educational society consisting of nearly 3,000 members, passed a resolution in June 2017

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opposing the construction of border infrastructure due to its well-documented negative effects on a variety of mammal species, many of them declining or endangered. The resolution calls upon the Federal Government to ensure that all boundary infrastructure, both existing and proposed, include features and modifications to maintain landscape permeability for mammalian populations to permit demographic and genetic exchange necessary for well-distributed, viable populations and the long-term persistence of species and mammalian community structure. According to the resolution, the actions of DHS on the US-Mexico border must receive regular environmental review to identify, monitor, and mitigate significant threats to the persistence of mammalian populations under the National Environmental Policy Act ("NEPA") and the US Endangered Species Act. In addition, the Southwestern Association of Naturalists ("SWAN") passed a similar resolution in July 2017 opposing the construction of a border wall. SWAN is an international association of scientists, educators, and students founded in 1953 to promote the field study of plants and animals in the southwestern United States, Mexico, and Central America. Their resolution states, ". . . wall construction will irreparably harm many species and some of the Southwest's most significant lands . . . THEREFORE BE IT RESOLVED that the Southwestern Association of Naturalists (SWAN) calls upon the Governors of all the border states (those of the U.S. and of Mexico), the U.S. Secretary of the Interior, the Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT) of Mexico, the Director of the U.S. Fish and Wildlife Service, and the Secretary for Homeland Security to immediately stop all plans for construction of the proposed border wall based on the potential negative impacts of the wall to native plants and wildlife and to mitigate the current negative impacts of the existing fence."

14. El Centro Project 1 will harm multiple species of lizards, birds and mammals. Within the proposed project area, numerous species such as bighorn sheep, mountain lion, and bobcat (*Lynx rufus*) would be negatively affected. Immediately to the west of the project area, the Peninsular bighorn sheep has been recorded moving back and forth across the border, allowing for genetic interchange between populations based in the U.S. and Mexico. The Peninsular bighorn sheep is identified as "endangered" under both the Endangered Species Act and the California Endangered Species Act. Over 11,000 acres in the Jacumba Mountains, immediately

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north of the international border, are designated critical habitat for the sheep because, "the Jacumba Mountains represent the only area of habitat connecting the DPS [Distinct Population Segment] listed in the United States with other bighorn sheep populations that occupy the Peninsular Ranges in Mexico." (74 Fed. Reg. 17318). The California Department of Fish and Wildlife has tracked collared sheep in this area for many years, and documented intensive use of the slopes immediately above and to the west of the western terminus of the project area. These slopes are lamb-rearing habitat, and pregnant ewes would be adversely affected by construction activities and border patrol actions immediately below them. For instance, the intensive ground disturbances due to road construction and trenching in the project area, as well as the establishment of extensive lighting in the area would introduce continuous disruption in an area that is currently a remote, undisturbed habitat area for the sheep. Were bighorn sheep to abandon these slopes due to the increased disturbance level from the project, it is unclear if suitable highquality lamb rearing habitat remains in the area to support this unique population that represents the sole connection to sheep populations south of the border. The California Department of Fish and Wildlife states in their 2018 annual report on sheep monitoring in the area: "The Jacumba ewe group typically spends each winter and spring within the Jacumba Wilderness in the United States and each summer and fall within a canyon just north of Highway 2 in Mexico." (Colby, J. & Botta, R. 2018. CDFW 2017-18 Peninsular bighorn sheep annual report; Page 7). They further state: "The Jacumba ewe group is dependent on resources both within the US and Mexico. A fence along the US-Mexico border would prohibit movement to, and use of, prelambing and lamb-rearing habitat and summer water sources. Furthermore, lamb-rearing habitat in the east Jacumba Mountains is not within USFWS- designated critical sheep habitat and further development of energy projects within or adjacent to these areas, combined with disturbance by border security activities, will have significant adverse impacts on this ewe group." (Page 24)

15. In addition to the Peninsular Bighorn Sheep, numerous rare species occur in the project area and would be harmed or killed by the extensive trenching, construction of roads, and staging of materials necessary to construct the proposed border fence. These include:

guidance for conservation and management of sufficient habitat to maintain populations of flattailed horned lizards within each of five Management Areas in perpetuity. The flat-tailed horned lizard is typically found in sandy flats and dunes that often support sparse desert vegetation. This lizard is a specialized predator of ants, and has declined throughout its range due to habitat fragmentation and degradation from agricultural development, urbanization, and off-road vehicle use. For much of the year it stays concealed in underground burrows, emerging during warmer months to forage for prey.

- 17. The Rangewide Management Strategy focuses conservation efforts on five Management Areas, including the Yuha Desert Management Area, in which the El Centro Project 1 footprint occurs. The population within the Yuha Desert Management Area is naturally connected to populations to the south in Mexico, and provides a genetic linkage with Management Areas to the north. The El Centro Project 1 occurs across the entire southern boundary of this population, and if these lizards cannot cross this barrier, there would be a new genetic break in the species range.
- 18. The flat-tailed horned lizard occurs within the project footprint and surrounding area. The extensive trenching, construction of roads, and staging of materials proposed in this area will harm or kill lizards that are either active or in underground burrows within the project footprint. Additionally, the principal predators of these lizards include small birds of prey that use perches to hunt. By constructing a continuous fence, 18-30 feet high, as well as numerous light poles, over the entire southern boundary of the Yuha Desert Management Area, this project will greatly increase the predation rate of lizards adjacent to the wall, and in combination with permanent roads and infrastructure removing suitable habitat, will effectively sever the linkage that currently exists between populations on both sides of the border.
- 19. The project also proposes to install lighting along the 15-mile construction area. The frequency and intensity of lighting is not specified, but is likely to be extensive to accommodate border patrol-related activities. Currently, this portion of the California desert is composed of natural habitats and has limited artificial lighting. Artificial night lighting can have myriad negative effects on animals and plants. Artificial night lighting can reduce movement and

1	restrict the effectiveness of corridors for nocturnal mammals, including medium and large
2	predators, as well as the sensitive rodent species that likely occur within the project area. Night
3	lighting can also attract and disorient migrating birds, leading to their death, and has also been
4	correlated with declines in nocturnal reptiles in Southern California. The artificial night lighting
5	associated with the El Centro Project 1 will significantly degrade the natural habitats adjacent to
6	the project area for the entire 15-mile extent of the project, causing harm to a variety of sensitive
7	species inhabiting the area.
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9	I declare under penalty of perjury under the laws of the United States that the foregoing is
10	true and correct.
11	Executed on May 28, 2019, at San Diego, California.
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