

because of the occurrence of occupied habitat in adjacent areas with similar geologic features. Because the types of voids that occur in these calcareous formations continuously reform, thereby providing suitable habitat for very long time spans, this area is essential to provide for population expansion and refuge from human and catastrophic environmental threats. This unit currently has minimal human presence in the area, and there are no known current plans for development. Inclusion of this area with Units 1 through 13 provides a diverse geographic distribution that will increase the likelihood the species will survive stochastic or catastrophic impacts and is therefore considered essential to the conservation of both species.

### Effects of Critical Habitat Designation

#### Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to destroy or adversely modify critical habitat. Destruction or adverse modification occurs when a Federal action directly or indirectly alters critical habitat to the extent it appreciably diminishes the value of the critical habitat for the conservation of the species. Individuals, organizations, States, local governments, and other non-Federal entities are affected by the designation of critical habitat when their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

Section 7(a)(1) of the Act requires Federal agencies, including the Service, to use their authorities to carry out programs for the conservation of any species that is proposed or listed as endangered or threatened. Section 7(a)(4) of the Act requires Federal agencies (action agency) to confer with us on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the

responsible Federal agency (action agency) must enter into consultation with us. Through this consultation, the Federal agency would ensure that the permitted actions do not destroy or adversely modify critical habitat.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate formal consultation on previously reviewed actions in instances where critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation with us on actions for which formal consultation has been completed if those actions may affect designated critical habitat or adversely modify or destroy proposed critical habitat.

If we issue a biological opinion concluding that a project is likely to result in the destruction or adverse modification of critical habitat, we also provide "reasonable and prudent alternatives" to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that the Director believes would avoid the likelihood of the destruction or adverse modification of critical habitat. Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project.

Activities on Federal lands that may affect the Kauai cave wolf spider or Kauai cave amphipod or their critical habitat will require section 7 consultation. Activities on private or State lands that may affect the species or their critical habitat and that require a permit from a Federal agency, such as a permit from the U.S. Army Corps of Engineers (ACOE) under section 404 of the Clean Water Act, or some other Federal action, including funding (e.g., from the Federal Highway Administration, Federal Aviation Administration, Federal Emergency Management Agency (FEMA), or Natural Resources Conservation Service (NRCS)) will also continue to be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally

funded or permitted do not require section 7 consultation.

Section 4(b)(8) of the Act requires us to evaluate briefly in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify such habitat or that may be affected by such designation. Activities that may result in the destruction or adverse modification of critical habitat include those that alter the primary constituent elements to an extent that the value of critical habitat for the conservation of the Kauai cave wolf spider and Kauai cave amphipod is appreciably reduced. We note that such activities also may jeopardize the continued existence of the species. Activities that may directly or indirectly adversely affect critical habitat for these cave animals include, but are not limited to:

(1) Removing, thinning, or destroying perennial surface vegetation occurring directly above or adjacent to the cave or within the cave (roots) or mesocaverns (as defined in the primary constituent elements discussion), whether by burning, or by mechanical, chemical, or other means (e.g., wood cutting, grading, overgrazing, construction, road building, mining, herbicide application, etc.);

(2) Activities within or outside of the cave or other mesocavern (i.e., all cave-bearing rock) that promotes prolonged soil-disturbance, resulting in the filling of caves, voids, and mesocaverns, with sediments or other materials, or alters airflow, and/or light penetration such that habitat microclimates are exposed to conditions of desiccation. These activities include, but are not limited to: Utilizing caves for the disposal of wastes or unwanted soil or rock, elevated and prolonged soil disturbance above or adjacent to cave-bearing rock, closing existing cave openings, breaching existing caves (i.e., creating new openings), modifying the natural geomorphology of a cave interior, passage, or opening;

(3) Appreciably decreasing habitat value or quality through indirect effects (e.g., introduction or promotion of potential predators, parasitoids, diseases, or disease vectors (e.g., nonnative arthropods), vertebrate or invertebrate food competitors, or invasive plant species), habitat fragmentation, overgrazing, water diversion or impoundment, groundwater pumping, inappropriately planned ground water disposal (e.g., diversion into potential habitat or prevention of natural water recharge into soils and rock above and adjacent to caves), or other activities that could