

California Native Plant Society

And

Center for Biological Diversity

August 2, 2004

Mr. Jim Bartel, Field Supervisor
Carlsbad Fish and Wildlife Office
U.S. Fish and Wildlife Service
6010 Hidden Valley Road.
Carlsbad, CA 92009

RE: Comments on Proposed Designation of Critical Habitat for *Allium munzii* (Munz's onion)

Dear Mr. Bartel:

The California Native Plant Society (CNPS) is a non-profit organization of more than 10,000 laypersons and professional botanists organized into 32 chapters throughout California. The mission of the California Native Plant Society is to increase understanding and appreciation of California's native plants and to conserve them and their natural habitats, through education, science, advocacy, horticulture and land stewardship. Our members and chapters work closely with the U.S. Fish and Wildlife Service (USFWS) and other State and Federal agencies to manage and conserve rare and common botanical resources in California. The Center for Biological Diversity (CBD) is a non-profit organization with over 9,000 members in CA and across the nation, dedicated to Protecting endangered species and wild places through science, policy, education, and environmental law.

The CNPS and CBD have reviewed the rule proposing to designate critical habitat for *Allium munzii* (Munz's onion). We fail to understand the reason, based on any available science, why you did not designate critical habitat within the boundaries of existing Habitat Conservation Plans. While we read your *political* reasons for not including the designation, no mention is made of any scientific reasons for not including the designation within the boundaries of the Habitat Conservation Plans, which are federally approved projects. As participants in the West Riverside Multiple Species Habitat Conservation Plan (MSHCP) process as well as other HCP processes, we view the failure to designate critical habitat within the boundaries as a disincentive to developing HCP's in the future. In fact, the amount of area that is critical for species conservation and recovery *is always* the basic issue that arises in the public process! By its designation, Critical Habitat further helps to assure that the HCP will meet its success criteria. Critical Habitat as you noted is defined by Section 3(5)(A) of the Act as (i) the specific areas within the geographic area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection. Therefore, it is incumbent upon you to designate those areas that you have identified as "Essential Habitat" as Critical Habitat regardless of whether those areas are within the boundaries of an existing Habitat Conservation Plan.



Dedicated to the preservation of California native flora

Other science-based concerns about the proposed critical habitat include fragmentation between Critical/Essential Habitat units, lack of connectivity and lack of recovery opportunity as discussed below:

Fragmentation/Connectivity:

An accepted tenet of conservation biology is to minimize fragmentation and maximize connectivity. With the fragmented design of the “reserves under the West Riverside MSHCP, the proposed rule has not applied either 1) the legal direction in the FESA mandating promotion of species recovery or 2) basic scientific understanding of requirements for effective species conservation to the intervening spaces between the habitat units. Connectivity among occurrences, minimization or avoidance of fragmentation, and maximization of reserve size are all fundamental principles of basic reserve design (e.g. Jensen, 1987; Meffe and Carroll, 1994, Schemske et al. 1994). One of the most widely used primers on habitat conservation planning presents several “principles of species composition and reserve design” (Noss et al., p. 92-105). All of the principles underscore the need for reserves to emphasize connectivity among populations of focal species, conservation of large blocks of connected and intact habitat, and minimization of habitat fragmentation. For example principle 4 states that,

“[h]abitat in contiguous blocks is better than fragmented habitat” (p. 99),

and principle 5 states that

“[i]nterconnected blocks of habitat are better than isolated blocks” (p. 102)

In further support for these principles, Baur and Erhardt (1995) found reduced fecundity among herbaceous plant species occurring in fragmented patches. Interactions between plants and pollinators were also modified by fragmentation, helping to explain the reduced fecundity, and potentially affecting genetic diversity as well.

Our concern is that the Critical/Essential Habitat units do not have any connectivity between them. Corridors for connectivity are necessary to provide opportunities for dispersal of propagules and pollinators (Haddad 1999). Isolated populations will lose genetic variation, and therein the ability to adapt to inevitable environmental variation (Noss et al 1997). Coupled with that is the toll that inbreeding takes: reduction in survivorship, fecundity and longevity (Noss et al 1997). Townsend and Levey (2002) found that fragmentation effects are diminished if fragments are joined by a corridor connecting two or more fragments. Their study conducted on insect-pollinated plants showed a statistically significant increase in successful pollen transfer between fragments when those fragments were connected by corridors versus when they were not connected by corridors. This important information is relevant to *Allium munzii*, whose pollinators are unknown. As proposed, the Critical/Essential Habitat units are typically separated often by miles. While the CNPS recognizes that the West Riverside MSHCP has mechanisms to establish connectivity corridors, unfortunately, because the West Riverside is a “build as you go” plan, there is no guarantee that connectivity will remain, nor is it a requirement of the plan. Decreasing fragmentation by including corridors as part of the Critical Habitat is essential both to species conservation, and, as importantly, to its recovery. Recovery is the fundamental purpose of the FESA (see discussion below).

Another recent approach to identifying the size of plant conservation areas takes into consideration multiple variables including life strategy, disturbance probability, potential habitat, population size, recovery from disturbance, habitat suitability, predation, and competition (Burgman et al. 2001). These types of factors are all critical components when establishing critical habitat needs for species and should be addressed in the final Critical Habitat proposal. The CNPS proposed using this methodology to identify adequate plant conservation areas for the West Riverside MSHCP repeatedly, but this scientifically based methodology has yet to be considered. You now have another opportunity to do so.

Recovery:

According to Section 3 of the FESA,

“(5)(A) The term “critical habitat” for a threatened or endangered species means--

(i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and

(ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.”

“Conservation” is defined in FESA Section 3 as

“(3) The terms “conserve”, “conserving”, and “conservation” mean to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.”

It is clear that the purpose of critical habitat designation is to facilitate recovery of listed species, not merely to ensure the survival of individuals or occurrences within a fragmented and disturbed landscape of unsuitable or destroyed habitat. This is the goal of the CNPS, too - to assure adequate areas of protected landscapes to get rare species number high enough to remove them from the ESA list whenever possible, as well as proactive prevention of future species from needing ESA protection. As proposed the Critical/Essential Habitat simply maintains the fragmented 10-20% of the Munz's onion, with no opportunity for recovery. Even if the Essential Habitat is included in the critical habitat designation, it may not be adequate to ensure the long term survival of the species, much less its recovery. Critical habitat designations should provide species the opportunity for genetic exchange, migration in response to climate change or recruitment events, and other adaptations over time. Designation of unoccupied suitable habitat is

essential to giving species a change to recover and thus is one of the most important benefits offered by critical habitat.

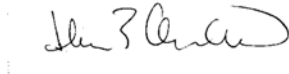
These views of the value of critical habitat are supported by case law. In a recent case the 5th U.S. circuit court of appeals required critical habitat to be designated because the requirements to designate critical habitat and to consult on federal actions that affect critical habitat are aimed not only at preventing extinction (i.e. jeopardy), but also at promoting recovery of the listed species (Sierra Club v. U.S. Fish & Wildlife Service, 2001 U.S. App. LEXIS 3936 (5th Cir. 2001)). Other cases have stressed the requirement for separate consultation regarding adverse modification and jeopardy (e.g. Greenpeace et al. vs. National Marine Fisheries Service et al., 55 F.Supp.2d 1248 July 13, 1999).

Additionally, while the proposed rule indicates that “the designation of critical habitat is of little additional value for most listed species” (page 18019), actual data show otherwise. Research by Cornell University, using FWS' own data, shows that species with designated critical habitat are less likely to be declining, and twice as likely to be recovering, than species without critical habitat. see: <http://www.biologicaldiversity.org/swcbd/programs/policy/ch/CHSEER9-2003.pdf>. Critical Habitat is therefore essential for protecting rare species, because it works.

We look forward to the opportunities to continue to work with the US Fish and Wildlife Service in the conservation of this species and the rest of California’s botanical resources.

Thank you for the opportunity to submit these comments.

Sincerely,



Ilene Anderson
Southern California Regional Botanist
California Native Plant Society

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Peter Galvin
Center for Biological Diversity

cc: CNPS State Office
David Chipping, CNPS Conservation Director
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San Diego County - CNPS

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