

Frequently Asked Questions about Critical Habitat and the Endangered Riverside fairy shrimp

Q. What is critical habitat?

Critical habitat is defined as specific areas that have been found to be essential to the conservation of a federally listed species, and which may require special management considerations or protection. Critical habitat is determined using the best available scientific and commercial information about the physical and biological needs of the species. These needs include:

- ◆ space for individual and population growth, and for normal behavior;
- ◆ food, water, light, air, minerals or other nutritional or physiological needs;
- ◆ cover or shelter;
- ◆ sites for breeding, reproduction, and rearing of offspring; and
- ◆ habitat that is protected from disturbance or is representative of the historical geographic and ecological distribution of a species.

In order to be designated as critical habitat, an area must be “essential to the conservation of the species.” The critical habitat designation must also identify, to the extent known, habitats that contain the primary constituent elements essential for the life cycle needs of the species.

Q. What are primary constituent elements essential to the conservation of the Riverside fairy shrimp?

The primary constituent elements for the Riverside fairy shrimp are those habitat components essential for the primary biological needs of foraging, sheltering, reproduction, and dispersal. The primary constituent elements include small-to-large vernal pools with moderate-to-deep depths that hold water for sufficient lengths of time necessary for Riverside fairy shrimp incubation and reproduction, the associated watershed(s) and other hydrologic features that support vernal pool basins and complexes; flat or gently sloping landscapes; and any soil type with a clay component known to support vernal pool habitat. All areas designated as critical habitat contain at least one or more of the primary constituent elements for the Riverside fairy shrimp.

Q. Does the designation of critical habitat create preserves?

No. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. It does not allow government or public access to private lands and will not result in closure of the area to all access or use.

Q. What were the findings of the economic analysis completed as part of the critical habitat designation process?

The Endangered Species Act, as amended, (ESA) requires the Service to prepare an economic analysis for any proposed critical habitat designation. Its purpose is to identify and analyze the potential economic impacts that may result from such a designation, above those stemming from the listing of the species under the ESA.



The economic analysis concluded that some development companies may be affected by any modifications to projects or incremental delays in the implementation of projects as a result of critical habitat designation. However these impacts were considered to be minor because most of these lands have been excluded from the final critical habitat designation. Overall, the economic analysis found that there will be no significant economic impacts resulting from the designation of critical habitat for the Riverside fairy shrimp.

A draft economic analysis was prepared by Industrial Economics Inc., an independent consulting firm in Cambridge, Massachusetts, and released for public review and comment on February 28, 2001. The firm based its analysis on public comments received on the proposed rule, information about current and future planned land uses, and input from the Service regarding the impacts of critical habitat on specific projects.

Q. In the proposed rule published on September 21, 2000, the Service proposed to designate nearly 12,060 acres as critical habitat. Why is the Service now designating critical habitat on only 6,870 acres?

To ensure that any final action would be as effective as possible, the Service asked for public comments and information at the time we published our proposal to designate critical habitat for the Riverside fairy shrimp. Based upon all comments and information received, we determined that certain lands were not necessary or appropriate for critical habitat designation. These determinations were made on the basis of information concerning special management considerations already in place on certain lands, whether the impacts of designating critical habitat outweighed the benefits of such designation, and improvements in mapping critical habitat boundaries.

Q. What is the Sikes Act? And what are Integrated Natural Resource Management Plans?

The Sikes Act Improvements Act of 1997 (Sikes Act) requires each military base that includes land and water suitable for the conservation and management of natural resources to complete, by November 2001, an Integrated Natural Resource Management Plan (INRMP). An INRMP integrates achievement of the military mission of the base with stewardship of the natural resources found there, including threatened and endangered species. It includes a description of the ecological resources on the base, a statement of goals and priorities, a detailed description of management actions to be taken to address the needs of the base's ecological resources, and a monitoring and adaptive management plan. Military bases that have completed INRMPs that meet the needs of species generally do not meet the definition of critical habitat, as they require no additional special management or protection.

Q. Why was Marine Air Corps Station (MCAS), Miramar excluded from the critical habitat designation?

MCAS, Miramar has completed a final INRMP that provides for the conservation, management, and protection of the Riverside fairy shrimp. They also have an existing vernal pool management plan in place. We have reviewed these plans and have determined that they address the conservation needs of the Riverside fairy shrimp. The INRMP provides special management strategies for the Riverside fairy shrimp including conservation and protection of habitat, periodic monitoring, and revisions of the INRMP as necessary. Therefore, lands on MCAS, Miramar have been excluded from the final designation of critical habitat for the Riverside fairy shrimp.

Q. Why didn't the Service exclude all of the training lands on Marine Corps Base (MCB), Camp Pendleton from the critical habitat designation?

We originally proposed to designate 5,670 acres of land on Camp Pendleton as critical habitat for the Riverside fairy



shrimp. Based upon comments provided to us by the Marine Corps, we have determined that it is appropriate to exclude approximately 4,900 acres of land on Camp Pendleton. Excluding these areas from the critical habitat designation has the significant benefit of allowing the Marine Corps to continue their mission-critical training activities while an INRMP is being completed. Approximately 770 acres of non-training land, including a portion of land leased by the Marine Corps to the California Department of Parks and Recreation, have been designated critical habitat. We will continue to work closely with Camp Pendleton to complete their INRMP by the statutory deadline. We expect that, when completed and adopted, this INRMP will provide protection to Riverside fairy shrimp habitat on the base equal to or greater than a critical habitat designation.

Q. What about lands already being conserved through approved Habitat Conservation Plans? Why are these areas being excluded?

Subsection 4(b)(2) of the Act allows us to exclude from critical habitat designation areas where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. We believe that the benefits of excluding Habitat Conservation Plans (HCPs) from critical habitat designations will outweigh the benefits of including them. In most cases, the Service is not designating critical habitat in areas that have currently approved and permitted HCPs and executed implementation agreements, because these lands receive special management and protection under the terms of the agreements. HCPs typically provide for greater conservation benefits to a covered species than section 7 consultations because HCPs assure the long term protection and management of a covered species and its habitat through the standards found in the "No Surprises" and "Five-Point" policies for HCPs.

The additional benefits of excluding HCPs include relieving landowners, communities and counties of any additional minor regulatory review that might be imposed by critical habitat. Excluding HCPs also provides us with an opportunity to streamline the regulatory process and confirm assurances for HCP participants.

Q. What is the "No Surprises" Regulation and the "Five-Point Policy"?

Approved in February 1998, the "No Surprises" policy provides assurances by the Service through the HCP process to non-Federal landowners. Essentially, private landowners are assured that if "unforeseen circumstances" arise, the Service will not require the commitment of additional land, water or financial compensation or additional restrictions on the use of land, water, or other natural resources beyond the level otherwise agreed to in the HCP without the consent of the permittee. We will honor these assurances as long as a permittee is implementing the terms and conditions of the HCP and other associated documents in good faith. In effect, this regulation states that the Service will honor its commitment as long as the HCP permittees honor theirs.

Following the approval of the "No Surprises" policy, we announced our plans to revise the HCP Handbook to reflect the new policy and to further enhance the overall effectiveness of the HCP process. The "Five Point" policy was the result of our efforts to improve and expand upon the general use and procedural clarity of section 10 of the Act.

The five concepts of the policy include:

- ▶ **Permit duration:** When determining how long an HCP will be in effect, we will consider the duration of the proposed activity and the positive or negative effects on the listed species. We will also take into consideration the time necessary to implement and achieve the conservation program and the adaptive management strategies.
- ▶ **Public Participation:** Public involvement provides opportunities for education and input in the



development of HCP's, leading to less controversy for the permittee and more partnerships in the conservation of natural resources.

- ▶ **Adaptive Management:** Allows the Service and applicants more flexibility in obtaining and implementing an incidental take permit.
- ▶ **Monitoring Provisions:** Monitoring is a mandatory element of all HCP's and is part of the permittee's implementation obligation. Applicants work closely with the Service to determine the level of monitoring appropriate for the HCP.
- ▶ **Biological Goals:** The development of the biological goals helps the project applicant and Service define a clear concept of what the conservation plan is going to accomplish.

The HCP process was designed to provide flexibility in resolving conflicts between economic development and species conservation. We continue to learn, along with our partners, as we implement the program, resulting in better HCP's and species conservation.

Q. Why have lands covered under the Orange County Central/Coastal Natural Community Conservation Plan (NCCP)/HCP been proposed as critical habitat for the Riverside fairy shrimp?

Although the Orange County Central/Coastal HCP is approved and operating, we have included lands within this HCP as critical habitat because this particular plan provides only conditional coverage for the Riverside fairy shrimp. Riverside fairy shrimp in vernal pool habitats that are highly degraded and/or artificially created are covered by the HCP, but fairy shrimp in natural, undisturbed vernal pools are not covered under the HCP. Because the natural vernal pools complexes within the HCP are essential to the conservation of the species, we have included these lands in the critical habitat designation.

Q. What about lands where regional HCPs are being developed or will be developed in the future?

The designation of critical habitat should not impede ongoing habitat conservation planning efforts in southern California. We expect that the long-term conservation of the Riverside fairy shrimp will be addressed as new HCPs are developed. In the event that future HCPs covering the Riverside fairy shrimp are developed within the boundaries of designated critical habitat, we will work closely with applicants to identify appropriate management for those lands.

Q. What happens if my private property is designated critical habitat for the Riverside fairy shrimp?

The designation of critical habitat on privately owned land does not mean the government would like to acquire or control the land. Activities on private lands that do not require Federal permits or funding are not affected by a critical habitat designation. Critical habitat does not require landowners to carry out any special management actions or restrict the use of their land. However, other provisions of the Act prohibit any individual from engaging in unauthorized activities that will harm listed wildlife.

If a landowner needs a Federal permit or receives Federal funds for a specific activity, the Federal agency would consult with the Service to determine how the action may affect the Riverside fairy shrimp and designated critical habitat.

Section 7 of the Act requires Federal agencies to consult with the Service on any activities they authorize, fund, or carry out which "may affect" a listed species, or "adversely modify" its designated critical habitat. Through this



consultation process, the Service can ensure that permitted actions do not change (adversely modify) critical habitat in such a way that it no longer can meet the physical and biological needs of the species. Under non-critical habitat consultations, we conduct analyses to determine if actions are likely to jeopardize a listed species. Because of similarities in analysis standards we believe that projects which will not jeopardize a listed species will also not result in the adverse modification of critical habitat. The requirement to consult with the Service applies to all lands that have been identified as critical habitat where Federal agencies, permits or funding are involved.

Q. What happens if a project is reviewed as part of a reinitiation of consultation and the Service determines it will adversely modify critical habitat?

Federal regulations require agencies to reinitiate consultation with the Service on previously reviewed actions if critical habitat is designated after the initial consultation and if those actions may affect critical habitat. This applies only if those agencies have retained some type of involvement or control over the action, or if such involvement is authorized by law.

It is highly unlikely that an activity that was reviewed and permitted by the Service under section 7 of the Act prior to the designation of critical habitat will be changed because critical habitat is now designated for the area. When reviewing projects under section 7, we must determine if the proposed action will “jeopardize the continued existence” of a species by asking the question “*will the project appreciably reduce the likelihood of the species’ survival and recovery?*” A project that will “destroy or adversely modify” critical habitat is one that will appreciably reduce the value of critical habitat for the survival and recovery of the species. Regardless of whether critical habitat has been designated, we must still consider the effect a project may have on the continued existence and recovery of a listed species.

Q. How will the recent Supreme Court decision regarding Army Corps of Engineers jurisdiction over “waters of the U.S.” affect future section 7 consultations?

At the time we proposed critical habitat for the Riverside fairy shrimp, vernal pool complexes which support Riverside fairy shrimp (and other vernal pool species) received significant protection under the Clean Water Act. Under section 404 of the Clean Water Act any proposed development of vernal pools in this region was given the highest level of scrutiny in the permitting process. The designation of critical habitat for the Riverside fairy shrimp was thought to provide little or no significant additional protection above and beyond that provided by section 404 of the Clean Water Act and the listing of fairy shrimp.

On January 9, 2001, the United States Supreme Court issued a ruling in Solid Waste Agency of Northern Cook County (SWANCC) vs. U.S. Army Corps of Engineers. The Court ruled that the U.S. Army Corps of Engineers (Corps) exceeded its statutory authority under section 404 of the Clean Water Act by asserting authority over “*an abandoned sand and gravel pit...which provides habitat for migratory birds.*” The implications of the ruling are that Corps’ jurisdiction over isolated wetlands, such as vernal pools, could potentially be limited. As of yet, the Corps has not issued any formal guidance concerning the specific implications of the ruling, including whether they will maintain regulatory jurisdiction over isolated vernal pools in southern California.

Q. Is critical habitat designated for all listed species?

No. Critical habitat has been designated for 135 of the 1,244 species currently listed as threatened and endangered under the Act. The Act requires us to identify critical habitat at the time a species is listed. However, in some cases, designating critical habitat may be considered “not prudent” if it would cause harm to the species, such as increasing



the possibility of vandalism or collection. We may find that such a designation is “not determinable” if we don’t have enough information when a species is listed to define areas as critical habitat. Recently, there have been a number of lawsuits based on our failure to designate critical habitat and, as a result, by October 1, 2000, we must re-evaluate our previous decisions for 13 species in California for which we determined critical habitat was not prudent.

Q. Why is the Service designating critical habitat for the Riverside fairy shrimp?

On June 30, 1999, the Southwest Center for Biological Diversity filed a lawsuit in Federal District Court for the Northern District of California against the United States Department of the Interior et al. for failure to designate critical habitat for the Riverside fairy shrimp. A settlement agreement was entered into whereby the Service would publish a proposed and subsequently designate critical habitat for the endangered Riverside fairy shrimp. Today’s announcement is in response to an order issued on February 15, 2000, by the Federal District Court for the Northern District of California, to make a final determination of critical habitat for the Riverside fairy shrimp by May 1, 2001.

Q. Why didn’t the Service designate critical habitat at the time the Riverside fairy shrimp was listed as endangered?

At the time the Riverside fairy shrimp was listed as endangered, the Service concluded that designation of critical habitat was not prudent because such designation would not benefit the species and would make it more vulnerable to increased incidences of habitat vandalism or destruction. Following the listing of the Riverside fairy shrimp as endangered, maps and electronic files detailing locations of vernal pools, vernal pool complexes, and Riverside fairy shrimp occurrences were distributed to Federal, State, and local jurisdictions, and private landowners and developers. The release of these data resulted in the widespread distribution of Riverside fairy shrimp occurrence locations to the public.

Since the release of these data, there has not been a documented increase in the threats to the species through vandalism, collection, habitat destruction, or other means. In fact, there has been an increase in public interest in the conservation of the species through survey efforts by species experts, scientific research, regional and local planning, and public outreach. Based on the lack of an increase in vandalism threats, we reconsidered the original prudency determination and concluded that designating critical habitat will not increase incidences of habitat vandalism above current levels for this subspecies.

Q. How does a listed species benefit from the designation of critical habitat?

Regardless of any critical habitat designations, Federally listed endangered or threatened wildlife species are protected from take or harm. Listed plants are protected against malicious damage or destruction on Federal land or in violation of state law, whereas listed animals are protected against adverse impacts from actions on public or private lands. Within critical habitat boundaries, listed plants and animals receive the same protection as species outside the boundaries.

This designation ensures that critical habitat will not be adversely modified where there is a federal nexus, whether or not the species happens to be present. Also, the designation focuses attention on areas that might benefit from the long term survival and preservation of a species through conservation planning and land ownership exchanges.

Q. What is the status of the Vernal Pools Unit of the San Diego National Wildlife Refuge?



To protect and manage key habitats for listed species, help recover vernal pool species, and contribute to the MSCP, we approved the Vernal Pools Stewardship Project in April 1997. This project allowed the Service to move forward with planning efforts to establish the Vernal Pools Unit of the San Diego National Wildlife Refuge. The purpose of this refuge unit is to provide for the long-term conservation of vernal pool habitats and their associated flora and fauna in the San Diego region.

As part of the stewardship project, the Department of Defense is committed to continuing conservation of vernal pool resources at MCAS Miramar under existing authorities and through the development of a cooperative agreement with the Service and California Department of Fish and Game under the Sikes Act, which provides for cooperation by the Interior Department and the Defense Department with state agencies in planning, development and maintenance of fish and wildlife resources on military reservations throughout the United States.

The Stewardship Project is located within the City and County of San Diego, primarily on Otay Mesa, sites near the Otay and Sweetwater Reservoirs, in central San Diego County on Del Mar Mesa, Lopez Ridge, MCAS Miramar and adjacent lands, and Montgomery Field Airport.

Q. Because of the critical habitat designation are there any restrictions on my private property land?

Designation of critical habitat on land within the geographic area occupied by the Riverside fairy shrimp is not likely to result in a regulatory burden above that already in place. Activities on your private property within the critical habitat boundary that have a Federal nexus and that may destroy or adversely modify critical habitat, will be subject to consultation by the Service. Activities that may destroy or adversely modify critical habitat include, but are not limited to:

- Any activity that results in discharge of dredged or fill material, excavation, or mechanized land clearing of ephemeral and/or vernal pool basins.
- Any activity that alters the watershed, water quality or quantity to an extent that water quality becomes unsuitable to support Riverside fairy shrimp, or any activity that significantly affects the natural hydrology of the vernal pool system.
- Activities that could lead to the introduction of exotic species into occupied or potentially occupied Riverside fairy shrimp habitat.

Q. How were the critical habitat unit maps created?

In an effort to map areas essential to the conservation of the species, we used data on known Riverside fairy shrimp locations and vernal pool habitat identified in the Recovery of Southern California Vernal Pools Plan. We then evaluated those areas based on the hydrology, watershed, and topographic features. Based on this evaluation, a 250 meter Universal Transverse Mercator (UTM) grid was overlaid on top of those vernal pool complexes and their associated watersheds. This allowed for the exclusion of many areas that do not contain the primary constituent elements for the Riverside fairy shrimp.

In defining critical habitat boundaries, we made an effort to avoid developed areas, such as towns, roads, and other structures that do not contain the primary constituent elements to support the species. However, the minimum mapping unit we used did not allow us to exclude all developed areas. Existing features and structures within the boundaries of the mapped units, such as buildings, roads, and other developed areas will probably not contain the primary constituent elements.



Q. What areas have been designated as critical habitat for the Riverside fairy shrimp?

The area designated as critical habitat includes 880 acres of Federal lands managed by the Department of Defense and the Immigration and Naturalization Service (INS) and 1,875 acres of State or local jurisdiction lands. Although 4,115 acres of private land has been designated as critical habitat, the majority is located on the Santa Rosa Plateau Ecological Reserve, which is owned and managed by The Nature Conservancy. Lands designated as critical habitat are divided into the following five critical habitat units:

- **Transverse Range Critical Habitat Unit** - This unit includes vernal pools at Cruzan Mesa, Los Angeles County, and the former Carlsberg Ranch, Ventura County. These vernal pools represent the northern limit of occupied habitat for the Riverside fairy shrimp and are the last remaining vernal pools in Los Angeles and Ventura counties known to support this species.
- **Los Angeles Basin-Orange Management Area** - This unit is the only suitable remnant area located within the historical coastal prairie landscape, which formerly extended from Playa del Rey south to the Palos Verdes Peninsula. In Orange County, this unit includes vernal pools at the Marine Corps Air Station El Toro, Chiquita Ridge, Tijeras Creek, Rancho Viejo, Saddleback Meadows, and along the southern Orange County foothills. These wetlands are the last remaining vernal pools in Orange County known to support this species.
- **Western Riverside County Critical Habitat Unit** - This unit includes the vernal pools on the Santa Rosa Plateau and in Murrieta. These areas represent the eastern limit of occupied habitat and likely contain unique genetic diversity important to the overall long term conservation of the species. Conservation of these pools will provide for the conservation and recovery of the Riverside fairy shrimp, as well as stabilize the current populations in Riverside County.
- **North San Diego County Critical Habitat Unit** - This unit includes approximately 770 acres of non-training areas within Marine Corps Base (MCB), Camp Pendleton and one vernal pool complex in the City of Carlsbad. Designation of critical habitat in this area will conserve important habitat for the Riverside fairy shrimp and will contribute to the recovery of southern California vernal pools.
- **South San Diego County Critical Habitat Unit** - This unit includes the ephemeral basin along the United States/Mexico Border. These lands are managed by the INS and represent the southern limit of occupied habitat for the Riverside fairy shrimp in the United States.

Q. When will the critical habitat designation take affect?

The final designation of critical habitat for the endangered Riverside fairy shrimp will take affect 30 days after the final rule is published in the *Federal Register*. A complete description of the Service's decision to designate critical habitat will be published in the *Federal Register* on May 30, 2001. Copies of the final rule, final economic analysis, and other information can be downloaded from the Carlsbad Fish and Wildlife Office's website at <http://carlsbad.fws.gov>. Requests for copies of the final rule and economic analysis should be submitted to Field Supervisor, U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, 2730 Loker Avenue West; Carlsbad, CA 92008, or by calling 760/431-9440.



Prepared by: U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife

Prepared on: May 24, 2001

