

**Final Rule to list the Pagosa skyrocket (*Ipomopsis polyantha*) as an Endangered Species and Parachute beardtongue (*Penstemon debilis*) and DeBeque phacelia (*Phacelia submutica*) as Threatened Species**

**And**

**Proposed Designation of Critical Habitat for the Three Species**

**Questions and Answers**

**What is the U.S. Fish and Wildlife Service's (Service) determination regarding the status of the Pagosa skyrocket (*Ipomopsis polyantha*), Parachute beardtongue (*Penstemon debilis*), and DeBeque phacelia (*Phacelia submutica*)?**

After evaluating all the available scientific and commercial information regarding Pagosa skyrocket, Parachute beardtongue, and DeBeque phacelia, including an analysis of the threats to the species and their habitat, the Service has determined that protection under the Endangered Species Act (ESA) is warranted for these three western Colorado plant species. The Pagosa skyrocket will be protected under the ESA as an endangered species, and Parachute beardtongue and DeBeque phacelia will be protected as threatened species.

**What is Pagosa skyrocket, why is it endangered, and where does it live?**

Pagosa skyrocket is a rare biennial plant known from only two populations near Pagosa Springs, Colorado. Highly restricted soil requirements and geographic range make it particularly susceptible to extinction due to commercial, municipal, and residential development and the associated road and utility infrastructure. Other threats include heavy livestock use, fragmentation of habitat, and prolonged drought. About 87 percent of the species' occupied habitat is on private land with no protections.

**What is Parachute beardtongue, why is it threatened, and where does it live?**

Parachute beardtongue is a rare plant known from four viable populations that grows only on oil shale outcrops on the Roan Plateau escarpment in Garfield County, Colorado. The total estimated number of plants is about 4,133 individuals. Oxy USA Inc. (OXY) owns land that contains 69 percent of the total plants on 48 percent of the occupied habitat. The OXY property is designated as a Colorado State Natural Area, managed under a voluntary conservation agreement to protect the plants and its habitat. BLM manages about 19 percent of the total plants on 39 percent of the occupied habitat. The remaining 12 percent of the plants and 13 percent of the habitat are on oil company land without conservation agreements. Threats to the species and its habitat include natural gas development, oil shale mine reclamation, road maintenance, inadequacy of existing regulatory mechanisms, and stochastic events. The species' entire range is within the southern part of the Piceance Basin, which contains one of the largest natural gas reserves in North America.

**What is DeBeque phacelia, why is it threatened and where does it live?**

DeBeque phacelia is a rare ephemeral annual plant that grows on barren patches of shrink-swell clay of the Wasatch Formation. Eight populations that include 22 occurrences on 626 acres of habitat are known in the southern Piceance Basin of Mesa and Garfield Counties, western Colorado. The Bureau of Land Management (BLM) manages 80 percent of the occupied habitat, 12 percent is in private ownership, and the remaining habitat is managed by the U.S. Forest Service and the Colorado Division of Wildlife.

The species is threatened by habitat modifications from natural gas exploration and production with associated expansion of pipelines, roads, and utilities; development within the Westwide Energy Corridor; increased access to the habitat by off-road vehicles; soil and seed disturbance by livestock and other disturbances. The existing regulatory mechanisms are not adequate to protect this species from these threats.

### **Why did the Service make the decision to protect these species under ESA?**

Given the limited ranges and small population sizes of these species, and the severity of the threats facing the species, the Service has concluded that protection under the ESA is required.

Native plants are important for their ecological, economic, and aesthetic values. Plants play an important role in development of crops that resist disease, insects, and drought. At least 25 percent of prescription drugs contain ingredients derived from plant compounds, including medicine to treat cancer, heart disease, juvenile leukemia, and malaria, and to assist in organ transplants. Plants are also used to develop natural pesticides.

### **What is the U.S. Fish and Wildlife Service's determination regarding critical habitat for Pagosa skyrocket, Parachute beardtongue, and DeBeque phacelia?**

For Pagosa skyrocket, the Service is proposing to designate 9,894 acres of critical habitat in four units with 21 percent of the ownership Federal and the remaining largely on private lands. Two of these units are almost entirely on private lands and are currently occupied by the plant. Two of these units are entirely on U.S. Forest Service lands, are not currently occupied, and are included for future introductions.

For Parachute beardtongue, the Service is proposing to designate 19,155 acres of critical habitat in four units with 73 percent of the ownership being Federal and the remainder largely on private lands. Two of these units are occupied and two of these units are currently unoccupied, and are included for future introductions. We are also considering the two areas designated as Colorado State Natural Areas for exclusions from critical habitat because of the conservation practices in place on these private properties. We are requesting public comment on this proposed exclusion.

For DeBeque phacelia, the Service is proposing to designate 24,987 acres of critical habitat in nine units with 87 percent of area on Federal lands. All of these nine units are currently occupied.

In total, the Service is proposing to designate 54,036 acres as critical habitat for these three species.

### **Why did the Service propose to designate these areas as critical habitat?**

When listing species, the Service is required to also designate critical habitat unless the benefits of exclusion outweigh the benefits of specifying an area. We proposed these areas because we believe them to be necessary to recover the species.

### **What is critical habitat?**

Critical habitat is a term used in the ESA that refers to specific geographic areas that contain habitat features essential for the conservation of a threatened or endangered species. These areas may require special management considerations or protection for the species.

### **What is the purpose of critical habitat?**

Critical habitat is a tool to identify areas that are important to the survival and recovery of a listed species. It is also a tool used to notify federal agencies of areas that must be given special consideration when they are planning, implementing, or funding activities.

### **How does critical habitat affect landowners?**

Federal agencies are required to consult with the Service on actions they carry out, authorize, fund, or permit, that may affect critical habitat. A critical habitat designation has no effect when a Federal agency is not involved. For example, a landowner undertaking a project on private land that involves no Federal funding or permit has no additional responsibilities if his or her property falls within critical habitat boundaries.

### **Do listed species in critical habitat areas receive more protection?**

A critical habitat designation does not set up a preserve or refuge. It only affects activities with Federal involvement, such as Federal funding or a Federal permit. Listed species and their habitats are protected by the ESA whether or not they are in areas designated as critical habitat. Designation of critical habitat can help focus conservation activities for a listed species by identifying areas that contain the physical and biological features that are essential for the conservation of that species. Critical habitat also alerts the public as well as land management agencies to the importance of these areas.

### **Do federal agencies have to consult with the Service outside critical habitat areas?**

Even when there is not critical habitat designation, Federal agencies must consult with the Service, if an action that they fund, or authorize, or permit may affect listed species.

### **Will a critical habitat designation for Pagosa skyrocket, Parachute penstemon, or DeBeque phacelia affect use of my personal property? Will this result in any taking of my property?**

The designation of critical habitat on privately-owned land does not mean the government wants 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 the land.

If a landowner needs a Federal permit or receives Federal funding for a specific activity, the agency responsible for issuing the permit or providing the funds would consult with the Service to determine how the action may affect these species or their designated critical habitat. We will work with the Federal agency and private landowner to modify the project to minimize the impacts.

### **What activities could adversely affect critical habitat?**

For the Pagosa skyrocket (*Ipomopsis polyantha*) these activities include, but are not limited to:

- Actions that would lead to the destruction or alteration of the plants or their habitat; or actions that would result in continual or excessive disturbance or prohibit overland soil erosion on Mancos shale soils.
- Actions that would result in the loss of pollinators or their habitat, such that reproduction could be diminished
- Actions that would result in excessive plant competition at Pagosa skyrocket sites

For the Parachute beardtongue (*Penstemon debilis*) these activities include, but are not limited to:

- Actions that would lead to the destruction or alteration of the plants or their habitat.
- Actions that would alter the highly mobile nature of the soil at sites.
- Actions that would result in the loss of pollinators or their habitat, such that reproduction could be diminished.

For the DeBeque phacelia (*Phacelia submutica*) these activities include, but are not limited to:

- Actions that would lead to the destruction or alteration of the plants, their seed bank, or their habitat, or actions that would destroy the fragile clay soils where the DeBeque phacelia is found.
- Actions that would result in excessive plant competition at DeBeque phacelia sites.

### **How does the Service determine which areas to designate as critical habitat?**

All areas proposed as critical habitat for Pagosa skyrocket, Parachute penstemon, or DeBeque phacelia have the necessary physical and biological features essential to the conservation of the species. When determining critical habitat, biologists consider physical and biological habitat features needed for life and successful reproduction of the species. Habitat areas essential for these plants provide suitable habitat (soils, elevation, climate), pollinator habitat, and suitable levels of disturbance.

Because of the rarity of all three species, we have designated critical habitat in all areas occupied by the species. In addition, we have proposed two unoccupied areas each for Pagosa skyrocket and Parachute penstemon for future introductions in an effort to expand the number of populations and individuals. These unoccupied areas are all on Federal lands.

**Are all areas within the proposed critical habitat boundaries considered critical habitat?**

No. Within areas designated as critical habitat, only those places within that specified area that contain essential elements for conservation of the mouse are considered critical habitat. For example, already existing developments (housing developments, shopping centers, etc.), plowed fields, and roads would not be included as critical habitat within that area.

The scale of mapping that we used to approximate our delineation of critical habitat does not allow us to exclude all developed areas such as roads and rural development.

**Does the ESA require an economic analysis as part of designating critical habitat?**

Yes. The Service must take into account the economic and other relevant impacts of specifying any particular areas as critical habitat. The Service may exclude any area from critical habitat if it determines that the benefits of such exclusion outweigh the benefits of specifying the area as part of critical habitat unless it determines, based on the best scientific and commercial data available, that the failure to designate the area as critical habitat will result in the extinction of the species.

The Service is conducting an economic analysis which will be available for public review and comment when complete.

**Is an economic analysis required when a species is added to the list of threatened and endangered species?**

No. Under the ESA, a decision to list a species is made solely on the basis of biological data and analysis.

**What is the impact of a critical habitat designation on economic development?**

The vast majority of activities that require consultation with the U.S. Fish and Wildlife Service (which would be only those involving a Federal agency) proceed with little or no modification. If a proposed project were to affect critical habitat, consultation under Section 7 of the Endangered Species Act would be required. During this process, coordination between the agencies involved would examine modifications to the project that would reduce impacts to the plant populations and designated critical habitat areas.

**Will the public have an opportunity to comment on the proposed designation of critical habitat?**

Yes. To make the information upon which we base the final decision to designate critical habitat as complete as possible, the Service is soliciting comments from the general public, Federal and State agencies, private landowners, natural conservation organizations, wildlife conservation agencies, Tribal organizations, congressional groups, counties, and municipalities.

The public will have until September 26, 2011 to submit scientific information regarding the proposal to the Federal eRulemaking Portal at <http://www.regulations.gov> or via U.S. mail or hand delivery to: Public Comments Processing, Attn: FWS-R6-ES-2011-0040; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042-PDM; Arlington, VA 22203.

All information and comments will be considered in the development of a final rule for critical habitat. On the basis of public comment, the Service may find that areas proposed are not essential to the conservation of these species; or that areas may be appropriate for exclusion or not appropriate for exclusion; or that areas not proposed should be designated as critical habitat.

The Service may schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings in the Federal Register and local newspapers at least 15 days before the first hearing.

### **When will the Service make a decision regarding which areas will be excluded from critical habitat?**

Our intent is to publish a final decision a year from the date of publication of the proposed rule. The final determination will be made after reviewing all available information. Upon review, the Service may find that areas proposed are not essential to the conservation of these plants, areas may be appropriate for exclusion or not appropriate for exclusion, or that areas not proposed should be designated as critical habitat.

Areas may be excluded from a critical habitat designation if the benefits of exclusion outweigh the benefits of inclusion as long as the exclusion would not result in the extinction of the species. When considering the benefits of exclusion, the Service will consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; and/or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide.

When evaluating a management plan, the Service will consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical and biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

### **What is being done to conserve these three rare plant species?**

Pagosa skyrocket – A monitoring plan for better tracking the status of the species is in development. Conservation planning identifying priority actions has occurred through the Colorado Rare Plant Conservation Initiative. Private land conservation efforts are being prioritized. Some fencing has been installed on private lands to conserve the species.

Parachute beardtongue – The Mount Callahan and Mount Callahan Saddle Natural Areas have been designated and managed jointly by OXY USA and the Colorado Natural Areas Program. Best management practices have been developed and implemented for these areas to conserve the species. Because of these ongoing efforts, we are considering these areas as exclusions from critical habitat. Monitoring, to assess the trend of the species, occurs for the species at several locations.

DeBeque phacelia – Inventory efforts have been ongoing for many years, especially during years with good species emergence to better map the species' distribution. On Federal lands, areas are surveyed prior to projects being authorized. The Pyramid Rock Areas of Critical Environmental Concern that was developed to protect another listed plant species also serves to protect DeBeque phacelia at one location.

### **What can landowners do to conserve these species?**

The Service works with private landowners, tribes, and other federal and state agencies, including other programs within the Service to forge voluntary conservation agreements benefiting sensitive, candidate, and listed plant species. The Service also provides technical assistance on designing and implementing conservation actions to address threats identified in these species assessments.

The Service, in conjunction with federal partners provides financial and technical assistance to landowners seeking to conserve candidate species on their land through the Service's Partners for Fish and Wildlife Program. Additional financial assistance is available through various Service grants and agreements, as well as through Farm Bill.

### **Where can I get more information on these species?**

A copy of the final rule, proposed critical habitat, and other information about Pagosa skyrocket, Parachute beardtongue, and DeBeque phacelia are available on the internet at <http://www.fws.gov/mountain-prairie/species/plants/3COplants>, or by contacting the Western Colorado Ecological Services Field Office, U.S. Fish and Wildlife Service, 764 Horizon Drive, Building B, Grand Junction, CO 81506-3946, phone 970-243-2778.