DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AV02

Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Pecos Sunflower (Helianthus paradoxus)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the Pecos sunflower (*Helianthus paradoxus*) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 1579.3 acres (ac) (639.1 hectares (ha)) fall within the boundaries of the proposed critical habitat designation. Proposed critical habitat is located in Chaves, Cibola, Guadalupe, Socorro, and Valencia Counties, New Mexico, and in Pecos County, Texas.

DATES: We will accept comments from all interested parties until May 29, 2007. We must receive requests for public hearings, in writing, at the address shown in the **ADDRESSES** section by May 11, 2007.

ADDRESSES: If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods:

1. Submit written comments and information by mail or hand-delivery to Wally ''J'' Murphy, Field Supervisor, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, 2105 Osuna Rd NE, Albuquerque, NM 87113.

2. Send comments by electronic mail (e-mail) to: *R2FWE_AL@fws.gov.*

Please see the Public Comments Solicited section below for file format and other information about electronic filing.

3. Fax your comments to 505/346–2542.

4. Go to the Federal eRulemaking Portal: *http://www.regulations.gov.* Follow the instructions for submitting comments.

Comments and materials received, as well as supporting documentation used in the preparation of this proposed rule, will be available for public inspection, by appointment, during normal business hours at the New Mexico Ecological Services Field Office, 2105 Osuna Rd NE, Albuquerque, NM 87113 (telephone 505/346–2525).

FOR FURTHER INFORMATION CONTACT: Wally ''J'' Murphy, Field Supervisor, New Mexico Ecological Services Field Office, 2105 Osuna Rd NE, Albuquerque, NM 87113; telephone 505/346–2525; facsimile 505/346–2542. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Public Comments Solicited

We intend that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule are hereby solicited. Comments particularly are sought concerning:

(1) The reasons any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act (16 U.S.C. 1531 et seq.), including whether the benefit of designation would outweigh any threats to the species caused by designation;

(2) Specific information on the amount and distribution of *Helianthus paradoxus* habitat, what areas should be included in the designation that were occupied at the time of listing that contain features essential for the conservation of the species and why, and what areas that were not occupied at the listing are essential to the conservation of the species and why;

(3) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat;

(4) Any foreseeable economic, national security, or other potential impacts resulting from the proposed designation and, in particular, any impacts on small entities;

(5) Whether our approach to designating critical habitat could be improved or modified in any way to provide for greater public participation and understanding, or to assist us in accommodating public concerns and comments; and

(6) The existence of any conservation or management plans being implemented by public or private land management agencies or owners that we should consider for exclusion from the designation pursuant to section 4(b)(2) of the Act. Please include information on any benefits (educational, regulatory, etc.) of including or excluding lands from this proposed designation.

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods (see **ADDRESSES**). Please include ''Attn: *Helianthus paradoxus*'' in your e-mail subject header and your name and return address in the body of your message. If you do not receive a confirmation from the system that we have received your message, contact us directly by calling our New Mexico Ecological Services Field Office at 505/346–2525. Please note that the e-mail address *R2FWE_AL@fws.gov* will be closed out at the termination of the public comment period.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Role of Critical Habitat in Actual Practice of Administering and Implementing the Act

Attention to and protection of habitat is paramount to successful conservation actions. The role that designation of critical habitat plays in protecting habitat of listed species, however, is often misunderstood. As discussed in more detail below in the discussion of exclusions under the Act's section 4(b)(2), there are significant limitations on the regulatory effect of designation under the Act's section 7(a)(2). In brief, (1) designation provides additional protection to habitat only where there is a Federal nexus; (2) the protection is relevant only when, in the absence of designation, destruction or adverse modification of the critical habitat would take place (in other words, other statutory or regulatory protections, policies, or other factors relevant to agency decision-making would not prevent the destruction or adverse modification); and (3) designation of critical habitat triggers the prohibition of destruction or adverse modification of that habitat, but it does not require specific actions to restore or improve habitat.

Currently, only 485 species, or 37 percent of the 1,310 listed species in the United States under the jurisdiction of the Service, have designated critical habitat. We address the habitat needs of all 1,310 listed species through conservation mechanisms such as listing, section 7 consultations, the section 4 recovery planning process, the section 9 protective prohibitions of unauthorized take, section 6 funding to the States, the section 10 incidental take permit process, and cooperative,

nonregulatory efforts with private landowners. The Service believes that these measures may make the difference between extinction and survival for many species.

In considering exclusions of areas proposed for designation, we evaluated the benefits of designation in light of *Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir 2004) (hereinafter *Gifford Pinchot*). In that case, the Ninth Circuit invalidated the Service's regulation defining ''destruction or adverse modification of critical habitat.'' In response, on December 9, 2004, the Director issued guidance to be considered in making section 7 adverse modification determinations. This proposed critical habitat designation does not use the invalidated regulation in our consideration of the benefits of including areas. The Service will carefully manage future consultations that analyze impacts to designated critical habitat, particularly those that appear to be resulting in an adverse modification determination. Such consultations will be reviewed by the Regional Office prior to finalizing to ensure that an adequate analysis has been conducted that is informed by the Director's guidance.

To the extent that designation of critical habitat provides protection, that protection can come at significant social and economic cost. In addition, the mere administrative process of designation of critical habitat is expensive, time-consuming, and controversial. The current statutory framework of critical habitat, combined with past judicial interpretations of the statute, make critical habitat the subject of excessive litigation. As a result, critical habitat designations are driven by litigation and courts rather than biology, and made at a time and under a timeframe that limits our ability to obtain and evaluate the scientific and other information required to make the designation most meaningful.

In light of these circumstances, the Service believes that additional agency discretion would allow our focus to return to those actions that provide the greatest benefit to the species most in need of protection.

Procedural and Resource Difficulties in Designating Critical Habitat

We have been inundated with lawsuits for our failure to designate critical habitat, and we face a growing number of lawsuits challenging critical habitat determinations once they are made. These lawsuits have subjected the Service to an ever-increasing series of court orders and court-approved settlement agreements, compliance with which now consumes nearly the entire listing program budget. This leaves the Service with little ability to prioritize its activities to direct scarce listing resources to the listing program actions with the most biologically urgent species conservation needs.

The consequence of the critical habitat litigation activity is that limited listing funds are used to defend active lawsuits, to respond to Notices of Intent (NOIs) to sue relative to critical habitat, and to comply with the growing number of adverse court orders. As a result, listing petition responses, the Service's own proposals to list critically imperiled species, and final listing determinations on existing proposals are all significantly delayed.

The accelerated schedules of court-ordered designations have left the Service with limited ability to provide for public participation or to ensure a defect-free rulemaking process before making decisions on listing and critical habitat proposals, due to the risks associated with noncompliance with judicially imposed deadlines. This in turn fosters a second round of litigation in which those who fear adverse impacts from critical habitat designations challenge those designations. The cycle of litigation appears endless and is expensive, thus diverting resources from conservation actions that may provide relatively more benefit to imperiled species.

The costs resulting from the designation include legal costs, the cost of preparation and publication of the designation, the cost of analysis of the economic effects and of requesting and responding to public comment, and in some cases the costs of compliance with the National Environmental Policy Act (NEPA; 42 U.S.C. 4371 et seq.). These costs, which are not required for many other conservation actions, directly reduce the funds available for direct and tangible conservation actions.

Background

It is our intent to discuss only those topics directly relevant to designation of critical habitat in this proposal. For more information on *Helianthus paradoxus*, refer to the final listing rule published in the **Federal Register** on October 20, 1999 (64 FR 56582) and the Pecos Sunflower Recovery Plan posted at *http://www.ecos.fws.gov/docs/recovery_plans/2005/050915.pdf.*

Helianthus paradoxus is a member of the Asteraceae family, described by Dr. Charles Heiser in 1958 as *Helianthus paradoxus* (Heiser 1958, pp. 272–274). Genetic and morphological analyses have confirmed *Helianthus paradoxus* as a valid taxon (Rieseberg et al. 1990, pp. 1508–1509; Lexer et al. 2003, p. 1999; Welch and Riesberg 2002, p. 477). A number of vernacular names for this plant, including Pecos sunflower, puzzle sunflower, and paradox sunflower, have appeared in printed literature, and all refer to *Helianthus paradoxus.* The Service has adopted 'Pecos sunflower' as the standard common name for this species.

H. paradoxus is a plant that grows on permanently wet, alkaline soils at spring seeps, wet meadows, stream courses, and pond margins. It is currently known from 12 populations in 5 widely spaced geographical areas in west-central and eastern New Mexico and adjacent Trans-Pecos Texas. These populations are all dependent upon wetlands that result from an elevated water table. The number of *H. paradoxus* per site varies from fewer than 100 to over one million. Because *H. paradoxus* is an annual, the number of plants per site can fluctuate greatly from year to year with changes in precipitation and depth to groundwater or in response to other physical and biological changes. Stands of *H. paradoxus* can change location within the habitat as well (Sivinski 1992, p. 125). If a wetland habitat dries out permanently, even a large population of *H. paradoxus* will disappear (Service 1999, p. 56582).

Little is known about the historic distribution of *H. paradoxus.* The plant is associated with spring seeps and desert cienegas, and there is evidence these habitats were historically reduced or eliminated by aquifer depletion, or severely impacted by agricultural activities and encroachment by nonnative plants (Poole 1992, p. 2; Sivinski 1995, p. 11). *H. paradoxus* was known only from a single population near Fort Stockton, Pecos County, Texas, when it was proposed as a candidate species under the Act on December 15, 1980 (45 FR 82480). This is a large population of several hundred thousand to one million plants at The Nature Conservancy's Diamond Y Spring Preserve and a smaller group of plants downstream at a nearby highway right-of-way. Between 1980 and 1994, field surveys for this plant found additional populations in New Mexico and Texas (Service 1999, p. 56582). During this period, *H. paradoxus* was discovered in a second Texas site at The Nature Conservancy's Sandia Spring Preserve in the Balmorhea area of Reeves County, Texas. In addition, *H. paradoxus* was found at 11 spring seeps and cienegas in the Roswell/Dexter region of the Pecos River valley in Chaves County, New Mexico. Three of these wetlands support many thousands

of *H. paradoxus,* but the remainder are smaller, isolated occurrences. Springs and cienegas within and near the town of Santa Rosa in Guadalupe County, New Mexico, were found to have eight wetlands with *H. paradoxus*, one of which consisted of a few hundred thousand plants. Also discovered were two widely separated areas of spring seeps and cienegas in the Rio San Jose valley of western New Mexico, each supporting a medium-sized population of *H. paradoxus.* One occurs on the lower Rio San Jose in Valencia County and the other is in Cibola County in the vicinity of Grants. After the species was listed, two more populations were added to the total number of known populations: (1) A very large population near La Joya, in Socorro County, at the confluence of the Rio Grande and the Rio Puerco; and (2) a population on State lands in Chaves County in a marshy sink (Service 2005, p. 4).

Previous Federal Actions

H. paradoxus was listed as a threatened species on October 20, 1999 (64 FR 56582). At the time this plant was federally listed, the Service determined that the designation of critical habitat was not prudent because we believed publication of critical habitat maps would increase the degree of threats to the species by vandalism and commercial collection. On September 27, 2005, the Forest Guardians filed suit against the Service for failure to designate critical habitat for this species (*Forest Guardians* v. *Hall* 2005). On March 20, 2006, a settlement was reached that requires the Service to re-evaluate our original prudency determination. The settlement stipulated that, if prudent, a proposed rule would be submitted to the **Federal Register** for publication on or before March 16, 2007, and a final rule by March 16, 2008. This proposed rule complies with the settlement agreement and with section 4(b)(2) of the Act.

For more information on previous Federal actions concerning *H. paradoxus*, refer to the final listing rule published in the **Federal Register** on October 20, 1999 (64 FR 56582), and the Pecos Sunflower Recovery Plan, dated July 2005, prepared by the Fish and Wildlife Service.

Critical Habitat

Critical habitat is defined in section 3 of the Act as—(i) the specific areas within the geographical 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; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring any endangered species or threatened species to the point at which the measures provided under the 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.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 of the Act requires consultation on Federal actions that are likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow government or public access to private lands. Section 7 of the Act is a purely protective measure and does not require implementation of restoration, recovery, or enhancement measures.

To be included in a critical habitat designation, the habitat within the area known at the time of listing to be occupied by the species must first have features that are essential to the conservation of the species. Critical habitat designations identify, to the extent known using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements (PCEs), as defined at 50 CFR 424.12(b)).

Habitat known at the time of listing to be occupied may be included in critical habitat only if the essential features thereon may require special management or protection. Thus, we do not include areas where existing management is sufficient to conserve the species. (As discussed below, such areas may also be excluded from critical habitat under section 4(b)(2) of the Act.) Accordingly, when the best available scientific data do not demonstrate that the conservation needs of the species require additional areas, we will not designate critical habitat in areas outside the geographical area known at the time of listing to be occupied by the species. However, an area currently occupied by the species but was not known at the time of listing to be occupied will likely, but not always, be essential to the conservation of the species and, therefore, typically may be included in the critical habitat designation.

The Service's Policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), and Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that decisions made by the Service represent the best scientific data available. They require Service biologists to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information is generally the listing package for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, or other unpublished materials and expert opinion or personal knowledge. All information is used in accordance with the provisions of Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658) and the associated Information Quality Guidelines issued by the Service.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery.

Areas that support populations, but are outside the critical habitat designation, will continue to be subject to conservation actions implemented under section 7(a)(1) of the Act and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available information at the time of the action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

Methods

As required by section 4(b) of the Act, we used the best scientific and commercial data available in determining areas that contain the features that are essential to the conservation of *H. paradoxus*, areas that are essential to the conservation of *H. paradoxus*, or both. In designating critical habitat for this species, we reviewed the Final Pecos Sunflower Recovery Plan and listing packages for the species, articles in peer-reviewed journals, conservation plans developed by land managers, scientific status surveys and studies, biological assessments, and other unpublished materials, including expert opinion. We are proposing to designate habitat that we have determined contains the physical and biological features essential to the conservation of the species arranged in the quantity and spatial characteristics necessary for conservation (see ''Criteria Used To Identify Critical Habitat'' section below).

We have also reviewed available information that pertains to the habitat requirements of this species. We reviewed information from knowledgeable biologists, including Hirsch 2006, Poole 2006, Sivinski 2007, and Ulibarri 2006, and reviewed recommendations contained in State resource reports. We also reviewed the available literature pertaining to habitat requirements, historical localities, and current localities of the species in peer-reviewed articles such as Van Auken and Bush 1998. We used data in reports submitted during consultations under section 7 of the Act and in regional Geographic Information System (GIS) data layer coverages. Of particular importance, we reviewed databases, published literature, and field notes to determine the historical and current distribution of the species. Agency and researcher field notes and published literature contained additional information on surveys and species' detections, such as in performance reports under section 6 of the Act prepared by botanists in New Mexico and Texas (Poole 1992, pp. 1–6; Sivinski 1992, pp. 124–126; Sivinski 1995, pp. 1–11).

Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we consider those physical and biological features (primary constituent elements (PCEs)) that are essential to the conservation of the species, and within areas occupied by the species at the time of listing, that may require special management considerations and protection. These include, but are not limited to: (1) Space for individual and population growth and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, and rearing (or development) of offspring; and (5) habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

The specific PCEs required for *H. paradoxus* are derived from the physical and biological features that are essential to the conservation of the species, as described below and in the Background section of this proposal. We determined the PCEs for *H. paradoxus* from studies of habitat requirements (see ''Background'' and ''Methods'' sections above).

Space for Individual and Population Growth, Including Sites for Germination, Pollination, Reproduction, and Seed Bank

H. paradoxus is an annual species that must re-establish populations of adult plants each year from seed produced during previous years' reproductive efforts. Habitats with suitable alkaline soils and perennially wet hydrologic conditions for all of the life functions of *H. paradoxus* are typically small areas around springs and ponds. Therefore, populations tend to grow in crowded patches of dozens or even thousands of individuals. Solitary individuals may be found around the periphery of the wetland, but dense, well-defined stands within suitable habitats are more typical. Aggregations of individuals may occur in different adjacent areas than the patches of dead stalks from the population of the previous year (Sivinski 1992, p. 125). This suggests seed dispersal or the presence of a persistent soil seed bank (Van Auken 2001). Patch densities and locations are determined by a combination of factors, including variations in seasonal soil moisture, salinity, oxygen, disturbance, and competing vegetation (Bush 2002, pp. 1–2; Van Auken and Bush 1995, p. 15; Bush and Van Auken 1997, p. 417).

Dense stands of *H. paradoxus* produce smaller, spindly plants, while more open stands have larger plants (Service 2005, p. 6). Likewise, experiments to remove competing vegetation, such as alkali sacaton (*Sporobolus airoides*) and saltgrass (*Distichlis spicata*), also produced larger *H. paradoxus* plants with more flowers per plant (Bush and Van Auken 1997, p. 417).

Pollination vectors for *H. paradoxus* have not been studied. However, most plants in the aster family with ray-like flowers, such as *H. paradoxus,* attract a variety of insect pollinators (Service 2005, p. 7). Seed production is greatly enhanced in *H. paradoxus* by cross-pollination between individual plants. An experiment that excluded pollinators from flower heads produced only 5 percent viable seed compared to 84 percent viable seed produced by flower heads that were open to insect pollination (Van Auken and Bush 1997, p. 44). *H. paradoxus* blooms in the months of September and October. Flowering peaks the second week of September in the northern-most New Mexico populations. The peak flowering time for the southern-most population in West Texas is later in October. Seeds fill and mature during October and November and then require a 2- to 3-month after-ripening period before germination (Van Auken 2001, p. 157). A few seeds remain dormant for longer periods and appear to be insurance for species survival by remaining viable in the soil seed bank (Van Auken 2001). The duration of seed viability has not yet been studied.

Areas That Provide the Basic Requirements for Growth (Such as Water, Light, and Minerals)

H. paradoxus habitat attributes usually are present in desert wetland areas that contain permanently saturated soils in the root zone (Service 2005, p. 6). These are most commonly desert springs and seeps that form wet meadows called ''cienegas.'' Nevertheless, *H. paradoxus* also can occur around the margins of lakes and creeks (Service 2005, p. 6). When *H.*

paradoxus grows around lakes or ponds, these areas are usually associated with natural cienega habitats. The soils of these desert wetlands and riparian areas are typically saline or alkaline because the waters are high in dissolved solids and elevated evaporation rates leave deposits of salts, including carbonates, at the soil's surface. Studies by Van Auken and Bush (1995, pp. 14) showed that *H. paradoxus* grows in saline soils, but seeds germinate and establish best when precipitation and high water tables reduce salinity near the soil surface. Based on greenhouse and limited field studies, *H. paradoxus* requires salinity levels ranging from 10 to 40 parts per thousand for optimal growth in competition with other salt marsh plant species (Van Auken and Bush 2006, p. 29). *H. paradoxus* can occur on the cienegas that contain alkaline, fine sand soils that may be dry at the surface during summer months, but are sub-irrigated in the root zone. Where saturated soils are shaded by taller vegetation, *H. paradoxus* may also not be present every year or in numbers greater than a few hundred plants. Like all sunflowers, this species requires open areas that are not shaded by taller vegetation for optimal growth. Solitary trees or shrubs are sometimes located within stands of *H. paradoxus.* Clusters of tall tress and shrubs will inhibit *H. paradoxus*'s growth by shading germinating seeds and seedlings (Service 2005, p. 6).

Primary Constituent Elements for Helianthus Paradoxus

Pursuant to the Act and its implementing regulations, we are required to identify the physical and biological features (PCEs) within the geographical area known to be occupied at the time of listing of *H. paradoxus,* that may require special management considerations or protections.

Based on our current knowledge of the life history, biology, and ecology of the species and the requirements of the habitat to sustain the essential life history functions of the species, we have determined that *H. paradoxus*'s PCEs are the desert wetland or riparian habitat components that provide:

(1) Silty clay or fine sand soils that contain high organic content, are saline or alkaline, are permanently saturated within the root zone (top 50 cm of the soil profile), and have salinity levels ranging from 10 to 40 parts per thousand; and

(2) Low proportion (less than 10 percent) of woody shrub or canopy cover directly around the plant.

Critical habitat does not include manmade structures, such as buildings, aqueducts, runways, airports, roads, and other paved areas, and the land on which such structures are located within the boundaries of a final critical habitat designation that exist on the effective date of a final rule.

This proposed designation is designed for the conservation of PCEs necessary to support the life history functions that are the basis for the proposal and the areas containing those PCEs. Because all of the species' life history functions require all of the PCEs, all proposed critical habitat units contain all PCEs.

Special Management Considerations or Protections

When designating critical habitat, we assess whether the areas determined to be occupied at the time of listing and that contain the primary constituent elements may require special management considerations or protections. Threats to *H. paradoxus* include drying of wetlands from groundwater depletion, alteration of wetlands (e.g., wetland fills, draining, impoundment, and development), competition from nonnative plant species, overgrazing by livestock during *H. paradoxus*'s flowering season, impacts from recreational activities, mowing, and highway maintenance.

We believe each area included in this proposal requires special management or protections as described in our unit descriptions below.

The loss or alteration of wetland habitat continues to be the main threat to *H. paradoxus.* The scattered distribution of cienegas makes them aquatic islands of unique habitat in an arid-land matrix (Hendrickson and Minckley 1984, p. 169). There is evidence these habitats have been historically, and are presently being, reduced or eliminated by aquifer depletion, and severely impacted by agricultural activities and encroachment by exotic plants (Poole 1992, pp. 1–2; Sivinski 1995, p. 11). The lowering of water tables through aquifer withdrawals for irrigation and municipal use, diversion of water from wetlands for agriculture and recreational uses, and wetland filling for conversion to dry land uses destroy or degrade desert wetlands.

In Grants, New Mexico, *H. paradoxus* has been observed to occur in close proximity to building sites that may have contained suitable wetland habitat prior to filling (Service 2005, p. 8). A cienega containing *H. paradoxus* near Dexter, New Mexico, was dried when a wellhead was placed on the spring and the water diverted for other uses (Service 2005, p. 8). Springs that have fed *H. paradoxus* habitats have been converted to swimming pools and fishing ponds in the towns of Roswell and Santa Rosa, New Mexico (Service 2005, p. 8). Groundwater withdrawals for agriculture in Pecos and Reeves Counties in Texas have had an especially severe impact on desert springs (Service 2005, p. 8). Of the 61 historical desert springs in these two counties, only 13 were still flowing in 1980 (Brune 1981 *in* Poole 1992, p. 5). Beginning around 1946, groundwater levels fell as much as 400 ft (120 m) in Pecos County and 500 ft (150 m) in Reeves County. Groundwater pumping has lessened in recent years due to the higher cost of removing water from deeper aquifers, but rising water tables and resumption of spring flows are not expected (Poole 1992, p. 5). Texas water law provides no protection for the remaining springs that support *H. paradoxus* populations on The Nature Conservancy properties, which limits options for addressing this threat.

Livestock will eat *H. paradoxus* when other green forage is scarce, and when the buds are developing and abundant (Service 1999, p. 56587). Cattle and horses tend to pull off the flower heads, which can reduce seed production (Bush and Van Auken 1997, p. 416). However, well-managed grazing during non-flowering months may have a beneficial effect on *H. paradoxus* populations by decreasing the density and biomass of potentially competing plant species in these habitats. This sunflower germinates earlier than most associated plants and grows vigorously on wet, bare, highly insolated soils (Service 2005, p. 9). Actions that remove shading grass cover, such as grazing, appear to enhance growth and reproduction of sunflower plants that are later protected from grazing while they are reproductively maturing. Therefore, properly managed livestock grazing is not incompatible with *H. paradoxus* conservation. Livestock grazing operations that are not managed to protect *H. paradoxus* occur in populations in the Grants and Roswell areas of New Mexico (Service 2005, p. 9).

The specific threats requiring special management or protections are described in the critical habitat unit descriptions below.

Criteria Used To Identify Critical Habitat

We are proposing to designate critical habitat in areas that were known at the time of listing to be occupied and that contain sufficient PCEs to support life history functions essential for the conservation of the species. Lands are proposed for designation based on

sufficient PCEs being present to support the life history processes of the species. All lands contain all PCEs and support multiple life processes. We are also proposing critical habitat in areas that were not known at the time of listing to be occupied. However, we have determined that these areas are currently occupied and are essential to the conservation of the species.

Occupancy

We consider an area to be currently occupied if *H. paradoxus* was found to be present by species experts within the last 2 years (Hirsch 2006, p. 1; Poole 2006, p. 1; Ulibarri 2006, p. 1; Sivinski 2007, p. 1).

Stability

In proposing to designate critical habitat, we considered the stability of the known populations, including size and status over time. According to population-level analysis conducted for *H. paradoxus*, approximately 1,600 or more individuals is a population target that gives a high probability of having a stable population over time (Poole 2004; Sanderson 2006, p. 918). We consider the status of a population to be stable when it appears that (1) the number of new individuals in a population is equal to or greater than the number of individuals dying, and (2) the population occupies a similar or larger area over multiple survey periods. The survey and field data on which this proposed designation is based represent consistently observed populations during the last several years. Most of the sites included in this proposal were visited by species experts four or more times between 1992 and 2007; however, at a minimum each site was visited twice.

By including stable populations, we are proposing to designate currently occupied habitat that provides for important life-history functions, such as seed dispersal and genetic exchange, and will contribute to the long-term conservation of the species. Locations that have populations that do not support at least 1,600 individuals are usually either dependent on an inconsistent water supply or rely on small, restricted, or modified habitats. We believe that, by proposing to designate large populations, the species will persist, the potential for successful pollination is high, and genetic exchange will be facilitated.

Essential

For areas not known to be occupied at the time of listing, the Service must demonstrate that these areas are essential to the conservation of the species in order to include them in a critical habitat designation. The *H. paradoxus* critical habitat units shown in Table 1 in New Mexico and west Texas are sufficiently distant (40 to 100 miles (mi) (64 to 161 kilometers (km)) from one another to rule out frequent gene exchange by pollen vectors or seed dispersal. Therefore, we have determined that each of these populations, including any not known to be occupied at the time of listing, is essential to the conservation of the species because they ensure maintenance of the genetic diversity of *H. paradoxus*. The areas we are proposing for critical habitat designation include populations containing all of the known remaining genetic diversity within the species that are not currently under a management regime that would result in the conservation of *H. paradoxus*. These areas include representation of each major subbasin in the known historical range of the species (Service 2005, p. 4).

In summary, this proposed critical habitat designation includes populations of *H. paradoxus* and habitats that possess the physical and biological features essential to the conservation of the species. We believe the proposal: (1) Maintains PCEs in areas where large populations of *H. paradoxus* are known to occur; (2) maintains the current distribution, thus preserving genetic variation throughout the range of *H. paradoxus* and minimizing the potential effects of local extinction; (3) minimizes fragmentation within populations by establishing contiguous occurrences and maintaining existing connectivity; (4) includes sufficient pollinators; and (5) protects the seed bank to ensure long-term persistence of the species.

Mapping

The proposed *H. paradoxus* critical habitat areas are grouped both spatially and by watershed into five larger units: West-Central New Mexico, La Joya, Santa Rosa, Roswell/Dexter, and West Texas. The boundaries of the proposed critical habitat designation for each subunit were mapped using global positioning system (GPS) along the outside boundary of the area of occupied habitat (Pittenger 2007). We attempted to encompass only areas that contain all of the PCEs in a year of average rainfall. The elevated water table that provides conditions favorable to *H. paradoxus* growth is influenced by both past and current precipitation. Groundwater level is often affected by precipitation in the entire watershed from many prior years as water slowly moves through the soil and geologic features into springs and wetlands. The groundwater provides a relatively reliable, stable water source permanently saturating soils adjacent to springs and wetlands. Winter storms and monsoons provide a more dynamic source of precipitation to *H. paradoxus* habitat. The suitable habitat expands and contracts horizontally and laterally from the groundwater-influenced areas depending on the amount of annual precipitation (Sivinski 1992, p. 125). Therefore, in very wet years, suitable *H. paradoxus* habitat may extend beyond the mapped boundaries for critical habitat and in very dry years may shrink to a smaller area than delineated.

In a few of the subunits we include, narrow dirt roads within the mapped boundaries when these roads were present within the occupied habitat. Due to soil compaction from vehicle tracks, these roads do not provide the PCEs for *H. paradoxus.* They do, however, represent a small area (2 m (6 ft) wide), and they are directly adjacent to occupied habitat, so we found it too difficult, due to mapping constraints, to exclude them from the maps of proposed critical habitat. To the best of our knowledge, no other areas were included within the mapped boundaries of proposed subunits that do not possess all of the PCEs.

We were not able to obtain physical access to some private lands in order to map the boundaries of *H. paradoxus* habitat. We utilized U.S. Geological Survey 7.5 minute quadrangle maps to create maps that depict the habitat containing the PCEs. One of the features of 7.5 minute quadrangle maps is their accurate depiction of permanent water sources (e.g., springs and wetlands) associated with these populations. The depiction of the subunits are based on: (1) Map features, (2) limited visual observations, and (3) a knowledge of how spring/wetland habitats influence similar *H. paradoxus* populations in other geographic areas within the species' range.

With the exception of the narrow dirt roads discussed above, when determining proposed critical habitat boundaries, we made every effort to avoid including (within the boundaries of the map contained within this proposed rule) developed areas such as buildings, paved areas, and other structures that lack PCEs for *H. paradoxus*. The scale of the maps prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed areas.

We are proposing to designate critical habitat in areas that we have determined were occupied at the time of listing, and

that contain sufficient PCEs to support life history functions essential for the conservation of the species. Lands are proposed for designation based on sufficient PCEs being present to support the life processes of the species. We are also proposing critical habitat in areas that were not known at the time of listing to be occupied. However, we have determined that these areas are currently occupied and are essential to the conservation of the species.

Proposed Critical Habitat Designation

We are proposing five (5) units as critical habitat for *H. paradoxus*. The critical habitat areas described below constitute our best assessment currently of areas known at the time of listing to be occupied, that contain the primary constituent elements and may require special management, and those additional areas that were not known to be occupied at the time of listing but were found to be essential to the conservation of *H. paradoxus*. Table 1 shows the areas that were known at time of listing to be occupied, those areas that are currently occupied, and the threats requiring special management or protections.

TABLE 1.—THREATS AND OCCUPANCY IN AREAS CONTAINING FEATURES ESSENTIAL TO THE CONSERVATION OF *H. Paradoxus*

Geographic area/unit	Threats requiring special management or protections	Known to be occupied at the time of listing	Currently occupied
Unit 1. West-Central New Mexico			
Subunit 1a. Rancho del Padre Spring Cienega	Water withdrawal, wetland filling and development, incompatible livestock management.	Yes	Yes.
Subunit 1b. Grants Salt Flat Wetland	Wetland filling and development, encroachment by nonnative vegetation,incompatible livestock management.	Yes	Yes.
Subunit 1c. Pueblo of Laguna	Water withdrawal, incompatible livestock management, encroachment by nonnative vegetation.	Yes	Yes.
Unit 2. La Joya			
La Joya State Wildlife Management Area	Encroachment by nonnative vegetation	No	Yes.
Unit 3. Santa Rosa			
Subunit 3a. Blue Hole Cienega / Blue Hole Fish Hatchery Ponds.	Encroachment by nonnative vegetation; on City land, wetland filling and recreation use, mowing to edges of ponds, dredging ponds and filling of wetlands.	Yes	Yes.
Subunit 3b. Westside Spring	Next to major road, water withdrawal, wetland filling and development, encroachment by nonnative vegetation.	No	Yes.
Unit 4. Roswell/Dexter			
Subunit 4a. Bitter Lake National Wildlife Refuge/ City of Roswell Land.	Threats on Refuge lands have been addressed by CCP; on City land, water withdrawal, wetland filling and development, incompatible livestock management.	Yes	Yes.
Subunit 4b. Bitter Lake National Wildlife Refuge Farm.	Threats have been addressed by CCP	Yes	Yes.
Subunit 4c. Oasis Dairy	Water withdrawal, wetland filling and development, incompatible livestock management.	Yes	Yes.
Subunit 4d. Lea Lake at Bottomless Lakes State Park.	Campgrounds and human trampling, encroachment by nonnative vegetation.	Yes	Yes.
Subunit 4e. Dexter Cienega	Water withdrawal wetland filling and development, incompatible livestock management.	Yes	Yes.
Unit 5. West Texas			
Diamond Y Spring	Water withdrawal, wetland filling and development, incompatible livestock management.	Yes	Yes.

The approximate area encompassed within each proposed critical habitat unit is shown in Table 2.

TABLE 2.—CRITICAL HABITAT UNITS PROPOSED FOR *H. Paradoxus*

[Area estimates reflect all land within proposed critical habitat unit boundaries.]

Geographic area/unit	Land ownership	Acres (Hectares) for non-inclusion and proposed exclusion	Proposed critical habitat acres (hectares)
Unit 1. West-Central New Mexico			
Subunit 1a. Rancho del Padre Spring Cienega	Private and Tribal		25.5 (10.3)
Subunit 1b. Grants Salt Flat Wetland	Private		62.5 (25.3)
Subunit 1c. Pueblo of Laguna	Tribal	undefined	undefined
Unit 2. La Joya			
La Joya State Wildlife Management Area	State of New Mexico		854.3 (345.7)
Unit 3. Santa Rosa			
Subunit 3a. Blue Hole Cienega/Blue Hole Fish Hatchery Ponds.	State of New Mexico and City of Roswell		133.9 (54.2)
Subunit 3b. Westside Spring	Private		6.4 (2.6)
Unit 4. Roswell/Dexter			
Subunit 4a. Bitter Lake National Wildlife Refuge/City of Roswell Land.	U.S. Fish and Wildlife Service and City of Roswell.	3,480 (1408.3)	92.2 (37.3)
Subunit 4b. Bitter Lake National Wildlife Refuge Farm.	U.S. Fish and Wildlife Service	686.2 (277.7)	0 (0)
Subunit 4c. Oasis Dairy	Private		103.9 (42.0)
Subunit 4d. Lea Lake at Bottomless Lakes State Park.	State of New Mexico		19.5 (7.9)
Subunit 4e. Dexter Cienega	Private		41.4 (16.8)
Unit 5. West Texas			
Diamond Y Spring	Private		239.7 (97.0)
Total Acres (Hectares)		4,166.2 (3094.3)	1,579.3 (639.1)

Below, we present brief descriptions of all subunits, and reasons why they do or do not meet the definition of critical habitat for *H. paradoxus* (see ''Criteria Used to Identify Critical Habitat'' section above).

Unit 1: West-Central New Mexico

Subunit 1a is located at Rancho del Padre Spring Cienega. This subunit is 25.5 ac (10.3 ha) in Cibola County, New Mexico. The subunit consists of an area of Rancho del Padre Spring Cienega from the spring on the south side of I–40 then northeast approximately 0.5 mi (0.8 km) to the Rio San Jose.

This population consists of large patches of several thousand plants on areas owned by two private landowners (22.6 ac (9.1 ha)) and the Pueblo of Acoma (2.9 ac (1.2 ha). This site was known to be occupied at the time of listing and has been visited or observed from a public right-of-way by species experts during four or more seasons. These experts have found the site occupied by *H. paradoxus* on every visit (Sivinski 2007a, p. 3). This unit is currently occupied, contains all of the PCEs, and is threatened by water withdrawal, wetland filling and development, and livestock grazing during *H. paradoxus*'s growing and flowering season. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

In January 2007, we found that the Pueblo of Acoma owned the land that contained part of this population. Although we are not aware of any management plans that address *H. paradoxus* in this area, if the Pueblo or other landowners request, we will provide technical assistance on management of the species and the development of a management plan. We will consult with the Pueblo and other landowners during the proposal period to evaluate whether these lands should be considered for exclusion in the final designation. As such, we may consider excluding this area, including lands owned by the Pueblo of Acoma, from the final critical habitat designation pursuant to section 4(b)(2) of the Act (see ''Application of Section 4(b)(2) of the Act'' section below for additional information).

Subunit 1b is located at Grants Salt Flat Wetland. This subunit is 62.5 ac (25.3 ha) in Cibola County, New Mexico. The subunit consists of an area of wet alkaline playa between railroad tracks and I–40 and west of Hwy 122 (Road from Interstate to downtown Grants). Playas are nearly level areas at the bottom of undrained desert basins that are sometimes covered in water.

This population consists of large patches of several thousand plants mostly on private property. This site was known to be occupied at the time of listing and has been visited or observed from a public right-of-way by species experts during four or more seasons. These experts have found the site occupied by *H. paradoxus* on every visit (Sivinski 2007). This unit is currently occupied, contains all of the PCEs, and is threatened by wetland filling and development, encroachment by nonnative vegetation, and livestock management not compatible with *H. paradoxus* physiology. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

Subunit 1c is located at the Pueblo of Laguna. This subunit's acreage is undefined in Valencia County, New Mexico. The subunit consists of an area along the Rio San Jose, South Garcia, New Mexico.

At this site, *H. paradoxus* plants are located in patches at springs along the Rio San Jose. Each patch consists of several hundred to several thousand plants, and a few scattered plants grow along the river (Sivinski 1995, p. 4). The entire site belongs to the Pueblo of Laguna. This site was known to be occupied at the time of listing, is currently occupied, contains all of the PCEs, and is threatened by water withdrawal, encroachment by nonnative vegetation, and livestock grazing during the *H. paradoxus*'s growing and flowering season. The Pueblo is developing a management plan for *H. paradoxus*. On the basis of this plan and our partnership with the Pueblo of Laguna, we anticipate excluding this area from the final critical habitat designation pursuant to section 4(b)(2) of the Act (see ''Application of Section 4(b)(2) of the Act'' section below for additional information).

Unit 2: La Joya

Unit 2 is located in the La Joya State Wildlife Management Area. This unit is 854.3 ac (345.7 ha) in Socorro County, New Mexico. This population is located about 7 mi (11 km) south of Bernardo within Socorro County near the confluence of the Rio Grande and the Rio Puerco. The La Joya population is bounded to the west by I–25 and to the east by the Unit 7 Drain. The north boundary is adjacent to River Mile 126 of the Rio Grande and the south boundary is adjacent to River Mile 123.

One of the largest populations of *H. paradoxus* occurs on the Rio Grande at La Joya. This Rio Grande population consists of 100,000 to 1,000,000 plants and occurs on the La Joya State Waterfowl Management Area (Service 2005, p. 4). It is within the La Joya Unit of the Ladd S. Gordon Waterfowl Complex. This property is owned by the New Mexico State Game Commission. It is managed by the New Mexico Department of Game and Fish for migratory waterfowl habitat, which is compatible with preservation of wetlands for *H. paradoxus*.

This area was not known to be occupied at the time of listing. It was discovered in 2004. This site has been found to be occupied every year since then by one of the largest populations of *H. paradoxus* in the range of the species (Hirsch 2006, p. 1). This unit is currently occupied by a stable population (Blue Earth Ecological Consultants, Inc. 2007c, p. 3), contains all of the PCEs, and is threatened by encroachment of nonnative vegetation.

We have determined this site to be essential to the conservation of the species because it is currently occupied by a stable, very large population of H. paradoxus, and is sufficiently distant (over 40 mi (64 km)) from other populations to serve as an additional locality that contributes to the conservation of genetic variation. This population may prevent extirpation of the species resulting from encroachment of nonnative species, degradation of habitat, or a catastrophic event because it is the sole representative located in an area distinct from any other population in the range of the species. As such, it may contain genetic variation not found anywhere else in the range of the species. Because the water source for this population is very stable, this population can be expected to persist in very large numbers every year.

Unit 3: Santa Rosa

Subunit 3a is located at Blue Hole Cienega/Blue Hole Fish Hatchery Ponds. This subunit is 127.6 ac (51.6 ha) in Guadalupe County, New Mexico. The Blue Hole Fish Hatchery Ponds population of *H. paradoxus* is part of the same population as and nearly contiguous with the Blue Hole Cienega in Santa Rosa, New Mexico. The Blue Hole Fish Hatchery Ponds is immediately north of Blue Hole Road and the Blue Hole Cienega is immediately south.

This subunit was known to be occupied at the time of listing and has been visited by species experts during four or more seasons. These experts found the subunit to be occupied by *H. paradoxus* on every visit (Sivinski 2007a, p. 2). This subunit is currently occupied (Blue Earth Ecological Consultants, Inc. 2006, p.1), contains all of the PCEs, and is threatened by encroachment by nonnative vegetation, wetland filling, and park maintenance activities. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

The part of this population at Blue Hole Cienega consists of 100,000 to 1,000,000 plants and is the largest population of *H. paradoxus* in the upper Pecos River basin. A non-traditional section 6 grant was awarded to the State of New Mexico in 2004 for acquisition of the Blue Hole Cienega, which was finalized in July 2005. At this site, shallow ground water seeps to the surface to create cienega communities. This subunit is currently occupied, contains all of the PCEs, and is threatened by encroachment by nonnative vegetation. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

The part of this population at the Blue Hole Fish Hatchery Ponds is owned and administered by the City of Santa Rosa and consists of approximately 1,000 plants. This site is maintained as a recreational area. Park maintenance staff have voluntarily stopped mowing and cutting the sunflower during the months of August and September. An information kiosk on endangered wetland plants is being planned for the bike/foot path along the creek at Blue Hole Park.

This subunit was confirmed to be occupied in 2006 (Blue Earth Ecological Consultants, Inc. 2006, p. 4), contains all of the PCEs, and is threatened by encroachment from nonnative vegetation, wetland filling, and park maintenance activities. Therefore, special management or protections may be required to minimize these threats. The City of Santa Rosa is willing to participate in the development of a conservation plan. We will work with the City in this effort to develop and implement a plan to conserve this population.

Subunit 3b is located at Westside Spring. This subunit is 6.4 ac (2.6 ha) in Santa Rosa, Guadalupe County, New Mexico. The subunit consists of an area along an unnamed spring on west side of Pecos River, located to the west of River Road and 1 mi (1.6 km) east of Highway 54.

This area was not known to be occupied at the time of listing. It was discovered in 2005, and contained thousands of plants. This site was found to be occupied again in 2006 by a species expert observing from a public right-of-way (Sivinski 2007). This subunit is currently occupied by a stable population, contains all of the PCEs, and is threatened by proximity to a major road, water withdrawal, wetland filling and development, and encroachment of nonnative vegetation. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

We have determined this site to be essential to the conservation of the species because it is currently occupied by a stable, large population of *H. paradoxus*, and is one of only two stable, large populations in Unit 3. This

subunit is sufficiently distant (over 40 mi (64 km)) from other populations to serve as an additional locality that contributes to the conservation of genetic variation. This population may prevent extirpation of the species resulting from encroachment of nonnative species, degradation of habitat, or a catastrophic event that could occur to the other subunit in Unit 3. It may also contain genetic variation specific to this Unit. Because the water source for this population is very stable, this population can be expected to persist in large numbers every year.

Unit 4: Roswell/Dexter

Subunit 4a is located at Bitter Lake National Wildlife Refuge/ City of Roswell Land. The subunit is 3,572.2 ac (1,445.6 ha) in Chaves County, New Mexico. This subunit is located approximately 5 mi (8 km) northeast of Roswell.

One of the largest *H. paradoxus* populations occurs on the Bitter Lake National Wildlife Refuge in New Mexico on Federal lands managed by the Service. Several hundred thousand to a few million plants occur nearly continuously along the shores and small islands of all the artificial lakes in the southern unit of the refuge. Also a few small patches of plants occur on the west side of Bitter Lake Playa and adjacent springs on Lost River.

This area was known to be occupied at the time of listing and has been visited by species experts during four or more seasons. These experts found the site occupied by *H. paradoxus* on every visit (Ulibarri 2006a, p. 1; Sivinski 2007a, p. 2; Blue Earth Ecological Consultants, Inc. 2007a, p. 3). This area is currently occupied and contains all of the PCEs. However, this area is covered by a final Comprehensive Conservation Plan (CCP) that manages *H. paradoxus* in a manner that provides a conservation benefit to the species; therefore, we believe this area does not require special management or protections. As this area does not meet the definition of critical habitat, the portion of this subunit within Bitter Lake National Wildlife Refuge has not been included in this critical habitat proposal. Please see ''Application of Section 3(5)(a) of the Act'' below for additional discussion.

Approximately 92.2 ac (37.3 ha) of land adjacent to the southwest boundary of Bitter Lake National Wildlife Refuge is owned by the City of Roswell. There are a few thousand *H. paradoxus* on this land. It is located on a large alkaline cienega adjoining the Bitter Lake National Wildlife Refuge population. This site was known to be occupied at the time of listing and has been visited by species experts during at least two seasons. These experts have found it occupied by *H. paradoxus* on both visits (Sivinski 2007a, p. 2). This unit is currently occupied (Blue Earth Ecological Consultants, Inc. 2007c, p. 3), contains all of the PCEs, and is threatened by water withdrawal, wetland filling and development, and livestock grazing during *H. paradoxus*'s growing and flowering season. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this portion of the subunit.

Subunit 4b is located at Bitter Lake National Wildlife Refuge (Refuge) Farm. This subunit is 686.2 ac (277.7 ha) in Chaves County, New Mexico. The subunit is located approximately 5 mi (8 km) east of Roswell on the west side of the Pecos River.

This area consists of a few large patches with several thousand plants on alkaline seeps behind the dikes on the western edge of the Refuge Farm south of Highway 380. This land is owned and managed by the Service as a grain farm and feeding area for migratory birds. The eastern portion of the Refuge Farm is a marshy spring-seep area that contains a large population of *H. paradoxus*. The wet soils in this population are not cultivated.

This site was known to be occupied at the time of listing and has been visited by species experts during four or more seasons. The experts found the site occupied by *H. paradoxus* on every visit (Ulibarri 2006b, p. 1; Sivinski 2007a, p. 2; Blue Earth Ecological Consultants, Inc. 2007a, p. 3). This subunit is currently occupied and contains all of the PCEs. However, this area is covered by a final CCP that manages *H. paradoxus* in a manner that provides a conservation benefit to the species; therefore, we believe this area does not require special management or protections. As this area does not meet the definition of critical habitat, it has not been included in the critical habitat proposal. Please see ''Application of Section 3(5)(a) of the Act'' below for additional discussion.

Subunit 4c is located at the Oasis Dairy. This subunit is 103.9 ac (42.0 ha) Chaves County, New Mexico. The subunit is located on the east side of Roswell, west side of Pecos River Valley, approximately 4.5 mi (7.2 km) southeast of the Hwy 380 bridge, and beside an unnamed spring approximately 0.6 mi (1 km) west of the Pecos River and 5.5 mi (8.9 km) south of Highway 380.

This site contains a very large, dense patch of several thousand *H. paradoxus* in a low alkaline sink area approximately 0.5 mi (0.8 km) west of the Pecos River on private land. It also contains a large patch with many thousands of *H. paradoxus* in a low area below a spring, also on private land. This site was known to be occupied at the time of listing and has been visited by species experts during at least three seasons. These experts found the site occupied by *H. paradoxus* on every visit (Sivinski 2007a, p. 3). This subunit is currently occupied, contains all of the PCEs, and is threatened by livestock grazing during *H. paradoxus*'s growing and flowering season, water withdrawal, and wetland filling and development. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

Subunit 4d is located at Lea Lake at Bottomless Lakes State Park. This subunit is 19.5 ac (7.9 ha) in Chaves County, New Mexico. It includes the wet margins of Lea Lake.

This site contains a few thousand plants on the riparian margins of Lea Lake. This land belongs to the State of New Mexico and is managed by the New Mexico Parks and Recreation Division. Lea Lake is used as a picnic area and campground for the State Park. This site was known to be occupied at the time of listing and has been visited by species experts during four or more seasons. These experts found the site occupied by *H. paradoxus* on every visit (Sivinski 2007a, p. 3). This subunit is currently occupied (Sivinski 2007a, p. 3; Blue Earth Ecological Consultants, Inc. 2007a, p. 3), contains all of the PCEs, and is threatened by encroachment of nonnative vegetation, and recreational and park maintenance activities. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

Subunit 4e is located at Dexter Cienega. This subunit is 41.4 ac (16.8 ha) in Chaves County, New Mexico. The subunit is located in a small valley west of the Pecos River, east of the Hagerman Irrigation Canal, and 2.9 mi (4.7 km) north of Dexter.

This site consists of several thousand plants on private land along a wide, boggy drainage bottom. This site was known to be occupied at the time of listing based upon observations from a public right-of-way by species experts during at least three seasons (Sivinski 2007a, p. 2). This subunit is currently occupied, contains all of the PCEs, and

is threatened by water withdrawal, wetland filling and development, and livestock grazing during *H. paradoxus*'s growing and flowering season. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any management plans that address *H. paradoxus* in this area.

Unit 5: West Texas

This unit is located at Diamond Y Spring. It is 239.7 ac (97.0 ha) in Pecos County, Texas. This unit is located approximately 12 mi (20 km) north-northwest of Fort Stockton, Texas.

The Nature Conservancy owns a very large area of habitat for *H. paradoxus* that contains 100,000 to 1,000,000 plants within its Diamond Y Spring Preserve near Fort Stockton, Pecos County, Texas. This is the type locality, or location from which the species was first described. It consists of a large population with several hundred thousand to one million plants at The Nature Conservancy's Diamond Y Spring Preserve, and a small group of plants downstream at a nearby highway right-of-way, and another small group of plants on adjacent private land. This site was known to be occupied at the time of listing and has been visited by species experts during four or more seasons. These experts found the site occupied by *H. paradoxus* on every visit (Poole 2006, p. 2). This unit is currently occupied (Blue Earth Ecological Consultants, Inc. 2007b, p. 3) and contains all of the PCEs. On The Nature Conservancy land, *H. paradoxus* is threatened by water withdrawal. The Nature Conservancy land was purchased to protect this plant and other rare or endangered aquatic species in the Diamond Y Spring system. This habitat is managed for conservation of these species (Service 2005, p. 12). Diamond Y Spring Preserve recently expanded from 1,500 to 4,000 acres. On the private land, *H. paradoxus* has the same threat as above, plus wetland filling and development, and livestock grazing during *H. paradoxus*'s growing and flowering season. Therefore, special management or protections may be required to minimize these threats. At this time, we are not aware of any completed management plans that address *H. paradoxus* in this area.

Table 3 below provides approximate area of lands containing features essential to the conservation of the species, lands not included in proposed critical habitat, lands considered for exclusion from the final critical habitat rule, and reasons why we are not including those lands in proposed critical habitat or considering those lands for exclusion from the final critical habitat rule.

TABLE 3.—NON-INCLUSIONS AND PROPOSED EXCLUSIONS BY SUBUNIT

Subunit/geographical area	Reason for non-inclusion or proposed exclusion	Acres (hectares)	Proposed exclusion acres (hectares)
Subunit 1c. Pueblo of Laguna	Section 4(b)(2) of the Act	Undefined	Undefined
Subunit 4a. Bitter Lake National Wildlife Refuge.	Section 3(5)(a) of the Act	3,480.0 (1,408.3)	3,480.0 (1,408.3)
Subunit 4b. Bitter Lake National Wildlife Refuge Farm.	Section 3(5) (a) of the Act	686.2 (277.7)	686.2 (277.7)

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7 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. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as ''a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.'' However, recent decisions by the 5th and 9th Circuit Court of Appeals have invalidated this definition (see *Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service,* 378 F. 3d 1059 (9th Cir 2004) and *Sierra Club* v. *U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442F (5th Cir 2001)). Pursuant to current national policy and the statutory provisions of the Act, destruction or adverse modification is determined on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the primary constituent elements to be functionally established) to serve the intended conservation role for the species.

Section 7(a) of the Act requires Federal agencies, including the Service, to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is proposed or designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402.

Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. This is a procedural requirement only. However, once a proposed species becomes listed, or proposed critical habitat is designated as final, the full prohibitions of section 7(a)(2) apply to any Federal action. The primary utility of the conference procedures is to maximize the opportunity for a Federal agency to adequately consider proposed species and critical habitat and avoid potential delays in implementing their proposed action because of the section 7(a)(2) compliance process, should those species be listed or the critical habitat designated.

Under conference procedures, the Service may provide advisory conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The Service may conduct either informal or formal conferences. Informal conferences are typically used if the proposed action is not likely to have any adverse effects to the proposed species or proposed critical habitat. Formal conferences are typically used when the Federal agency or the Service believes the proposed action is likely to cause adverse effects to proposed species or critical habitat, inclusive of those that may cause jeopardy or adverse modification.

The results of an informal conference are typically transmitted in a conference report, while the results of a formal conference are typically transmitted in a conference opinion. Conference opinions on proposed critical habitat are

typically prepared according to 50 CFR 402.14, as if the proposed critical habitat were designated. We may adopt the conference opinion as the biological opinion when the critical habitat is designated, if no substantial new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)). As noted above, any conservation recommendations in a conference report or opinion are strictly advisory.

If a species is listed or critical habitat is designated, section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to 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. As a result of this consultation, compliance with the requirements of section 7(a)(2) will be documented through the Service's issuance of: (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or (2) a biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to result in jeopardy to a listed species or 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 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 jeopardy to the listed species or 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. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where a new species is listed or critical habitat is subsequently designated that may be affected 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 subsequently listed species or designated critical habitat or adversely modify or destroy proposed critical habitat.

Federal activities that may affect *H. paradoxus* or its designated critical habitat will require section 7 consultation under the Act. Activities on State, Tribal, local or private lands requiring a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act or a permit under section 10(a)(1)(B) of the Act from the Service) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) will also be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local or private lands that are not federally funded, authorized, or permitted, do not require section 7 consultations.

Application of the Jeopardy and Adverse Modification Standards for Actions Involving Effects to Helianthus paradoxus and Its Critical Habitat

Jeopardy Standard

The Service has applied an analytical framework for *H. paradoxus* jeopardy analyses that relies heavily on the importance of core area populations to the survival and recovery of *H. paradoxus*. The section 7(a)(2) analysis is focused not only on these populations but also on the habitat conditions necessary to support them.

The jeopardy analysis usually expresses the survival and recovery needs of *H. paradoxus* in a qualitative fashion without making distinctions between what is necessary for survival and what is necessary for recovery. Generally, if a proposed Federal action is incompatible with the viability of the affected core area population(s), inclusive of associated habitat conditions, a jeopardy finding is warranted because of the relationship of each core area population to the survival and recovery of the species as a whole.

Adverse Modification Standard

For the reasons described in the Director's December 9, 2004 memorandum, the key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would remain functional (or retain the current ability for the primary constituent elements to be functionally established) to serve the intended conservation role for the species. Generally, the conservation role of *H. paradoxus* critical habitat units is to support viable core area populations.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation. Activities that may destroy or adversely modify critical habitat may also jeopardize the continued existence of the species.

Activities that may destroy or adversely modify critical habitat are those that alter the PCEs to an extent that the conservation value of critical habitat for the species is appreciably reduced. Activities that, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and therefore should result in consultation for *H. paradoxus* include, but are not limited to:

(1) Projects that physically alter permanently saturated saline or alkaline soils (e.g., salt deposits or crusts present) or result in the loss and degradation of *H. paradoxus* habitat. Such activities could include, but are not limited to, drying of wetlands from groundwater depletion, alteration of wetlands (e.g., wetland fills, draining, impoundment wetland filling and development), livestock management not compatible with *H. paradoxus's* physiology, clearing, introducing or encouraging the spread of nonnative plants, and recreational use (such as the use of off-road vehicles);

(2) Removing, thinning, or destroying *H. paradoxus* plants. This may occur through plowing, grading, wetland filling and development, road building, burning, mechanical weed control, herbicide application, and activities associated with firefighting (e.g., staging areas, surface disturbance); and

(3) Activities that appreciably diminish habitat value or quality through indirect effects (e.g., encroachment of nonnative plants or animals, or fragmentation).

We consider all of the units proposed as critical habitat, as well as those that have been proposed for exclusion or not included due to special management, to contain features essential to the conservation of *H. paradoxus.* All units

are within the geographic range of the species, all except two were known at the time of listing to be occupied by the species (based on observations made within the last 14 seasons (Ulibarri 2006; Kargas 2007; Sivinski 2007)), and are likely to be used by *H. paradoxus.* Federal agencies already consult with us on activities in areas currently occupied by *H. paradoxus*, or if the species may be affected by the action, to ensure that their actions do not jeopardize the continued existence of *H. paradoxus.*

Application of Section 3(5)(A) of the Act

Section 3(5)(A) of the Act defines critical habitat as the specific areas within the geographic area occupied by the species on which are found those physical and biological features (i) essential to the conservation of the species, and (ii) which may require special management considerations or protection. Therefore, areas known at the time of listing to be occupied by the species that do not contain the features essential to the conservation of the species are not, by definition, critical habitat. Similarly, areas known at the time of listing to be occupied by the species that require no special management or protection also are not, by definition, critical habitat.

There are multiple ways to provide management for species habitat. Statutory and regulatory frameworks that exist at a local level can provide such protection and management, as can lack of pressure for change, such as areas too remote for anthropogenic disturbance. Finally, State, local, or private management plans, as well as management under Federal agencies' jurisdictions, can provide protection and management to avoid the need for designation of critical habitat. When we consider a plan to determine its adequacy in protecting habitat, we consider whether the plan, as a whole, will provide the same level of protection that designation of critical habitat would provide. The plan need not lead to exactly the same result as a designation in every individual application, as long as the protection it provides is equivalent overall. In making this determination, we examine whether the plan provides management, protection, or enhancement of the PCEs that is at least equivalent to that provided by a critical habitat designation, and whether there is a reasonable expectation that the management, protection, or enhancement actions will continue into the foreseeable future. Each review is particular to the species and the plan, and some plans may be adequate for some species and inadequate for others.

Within the areas known to be occupied by *H. paradoxus* at the time of listing and containing sufficient PCEs to support *H. paradoxus's* life processes, we have identified the Bitter Lake National Wildlife Refuge (portion of subunit 4a) and the associated Refuge Farm (subunit 4b) as areas that do not require special management or protections. Our preliminary analysis of section 3(5)(a) of the Act and special management on these Refuge lands follows.

Bitter Lake National Wildlife Refuge: Lands within the Service's Bitter Lake National Wildlife Refuge and the Refuge Farm are considered to be occupied and contain the necessary features that are essential for the conservation of *H. paradoxus.* Below, we provide general background information on the Refuge and CCP, followed by an analysis pursuant to section 3(5)(a) of the Act of the current management provisions on the Refuge.

The Bitter Lake National Wildlife Refuge was established on October 8, 1937, by Executive Order 7724 ''as a refuge and breeding ground for migratory birds and other wildlife.'' The Refuge Recreation Act (16 U.S.C. 460k et seq.) identifies the refuge as being suitable for incidental fish and wildlife-oriented recreational development, the protection of natural resources, and the conservation of endangered species or threatened species. The Wilderness Act of 1964 (16 U.S.C. 1131*1136) directs the Service to ''maintain wilderness as a naturally functioning ecosystem'' on portions of the Refuge. While the Refuge was originally established to save wetlands vital to the perpetuation of migratory birds, the isolated gypsum springs, seeps, and associated wetlands protected by the Refuge have been recognized as providing the last known habitats in the world for several unique species. Management emphasis of the Refuge is placed on the protection and enhancement of habitat for endangered species and Federal candidate species, maintenance and improvement of wintering crane and waterfowl habitat, and monitoring and maintenance of natural ecosystem values.

The Refuge sits at a juncture between the Roswell Artesian Groundwater Basin and the Pecos River. These two systems and their interactions account for the diversity of water resources on the Refuge, including sinkholes, springs, wetlands, oxbow lakes, and riverine habitats. The federally reserved water right for Bitter Lake National Wildlife Refuge has been signed by the State of New Mexico, but awaits final approval by the Federal government, a procedural process. The Refuge is currently in negotiations with the New Mexico Office of the State Engineer, a State agency responsible for administering New Mexico's water resources, to quantify these reserved rights. This water right allows for an in-stream flow in Bitter Creek and allows the Refuge to manage impounded springs for the benefit of many species, including *H. paradoxus.* This water right protects against the threat of a future water user purchasing a Pecos River Basin water right and moving the use to a location that would be detrimental to the Refuge's ability to manage for the conservation of *H. paradoxus.* While the water right does not specifically protect water for the purposes of *H. paradoxus* conservation, it combines with management under the Refuge's CCP (discussed below) to remove the threat of water withdrawal on Refuge lands.

The National Wildlife Refuge System Improvement Act of 1997 (Pub. L. 105–57) (Refuge Improvement Act) establishes a conservation mission for refuges, gives policy direction to the Secretary of the Interior and refuge managers, and contains other provisions such as the requirement to integrate scientific principles into the management of the Refuges. According to section 7(e)(1)(E) of the Refuge Improvement Act, all lands of the Refuge System are to be managed in accordance with an approved CCP that will guide management decisions and set forth strategies for achieving refuge purposes. In general, the purpose of the CCP is to provide long-range guidance for the management of National Wildlife Refuges. The Refuge Improvement Act requires all refuges to have a CCP and provides the following legislative mandates to guide the development of the CCP: (1) Wildlife has first priority in the management of refuges; (2) wildlife-dependent recreation, including hunting, fishing, wildlife observation, wildlife photography, environmental education, and environmental interpretation, are the priority public uses of the refuge system, and shall be allowed when compatible with the refuge purpose; and (3) other uses have lower priority in the refuge system and are only allowed if not in conflict with any of the priority uses and determined appropriate and compatible with the refuge purpose.

The CCP must also be revised if the Secretary determines that conditions that affect the refuge or planning unit have changed significantly. In other words, a CCP must be followed once it is approved, and regularly updated in response to environmental changes or new scientific information.

The Bitter Lake National Wildlife Refuge has a final CCP that was approved in September 1998. The CCP serves as a management tool to be used by the Refuge staff and its partners in the preservation and restoration of the ecosystem's natural resources. The plan is intended to guide management decisions for 15 years after the plan is made final, and sets forth strategies for achieving Refuge goals and objectives within that timeframe. In 2013, the plan will not expire, but will undergo review, and any needed revisions will be incorporated at that time. Key goals of the CCP related to *H. paradoxus* include the following: (1) To restore, enhance, and protect the natural diversity on the Refuge including threatened and endangered species by (a) appropriate management of habitat and wildlife resources on refuge lands and (b) strengthening existing and establishing new cooperative efforts with public and private stakeholders and partners; and (2) To restore and maintain selected portions of a hydrological system that more closely mimics the natural processes along the reach of the Pecos River adjacent to the Refuge by (a) restoration of the river channel, as well as restoration of threatened, endangered, and special concern species, and (b) control of exotic species and managment of trust responsibilities for maintenance of plant and animal communities and to satisfy traditional recreational demands (Service 1998, pp. 5, 46–52). Specific objectives related to these goals include: (1) The restoration of populations of aquatic species designated as endangered, threatened, or of special concern to a sustainable level (*H. paradoxus* is specifically mentioned in this goal); and (2) following existing recovery plan objectives to monitor and study threatened or endangered species, their habitat requirements, exotic species encroachment, and human-induced impacts to prevent further decline and loss (Service 1998, pp. 49–52).

In summary, we believe that the Refuge lands are being adequately protected and managed for the conservation of *H. paradoxus* and that special management consideration or protections are not required. Therefore, we have determined that the Refuge lands do not meet the definition of critical habitat under section 3(5)(a) of the Act, and we are not proposing to designate critical habitat for *H. paradoxus* within Bitter Lake National Wildlife Refuge or the Refuge farm.

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that critical habitat shall be designated, and revised, on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact, of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the Congressional record is clear that the Secretary is afforded broad discretion regarding which factor(s) to use and how much weight to give to any factor.

Under section 4(b)(2), in considering whether to exclude a particular area from the designation, we must identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and determine whether the benefits of exclusion outweigh the benefits of inclusion. If an exclusion is contemplated, then we must determine whether excluding the area would result in the extinction of the species. In the following sections, we address a number of general issues that are relevant to the exclusions we are considering. In addition, the Service is conducting an economic analysis of the impacts of the proposed critical habitat designation and related factors, which will be available for public review and comment. Based on public comment on that document, the proposed designation itself, and the information in the final economic analysis, additional areas beyond those identified in this assessment may be excluded from final critical habitat by the Secretary under the provisions of section 4(b)(2) of the Act. This is provided for in the Act and in our implementing regulations at 50 CFR 424.19.

Benefits of Designating Critical Habitat

Educational Benefits

A benefit of including lands in critical habitat is that the designation of critical habitat serves to educate landowners, State and local governments, and the public regarding the potential conservation value of an area. This helps focus and promote conservation efforts by other parties by clearly delineating areas of high conservation value for *H. paradoxus*. In general, the educational benefit of a critical habitat designation always exists, although in some cases it may be redundant with other educational effects. For example, Habitat Conservation Plans (HCPs) have significant public input and may largely duplicate the educational benefit of a critical habitat designation. This benefit is closely related to a second, more indirect benefit: that the designation of critical habitat would inform State agencies and local governments about areas that could be conserved under State laws or local ordinances.

Conservation Partnerships on Non-Federal Lands

Most federally listed species in the United States will not recover without the cooperation of non-Federal landowners. More than 60 percent of the United States is privately owned (National Wilderness Institute 1995), and at least 80 percent of endangered or threatened species occur either partially or solely on private lands (Crouse et al. 2002). Stein et al. (1995) found that only about 12 percent of listed species were found almost exclusively on Federal lands (90 to 100 percent of their known occurrences restricted to Federal lands) and that 50 percent of federally listed species are not known to occur on Federal lands at all.

Given the distribution of listed species with respect to land ownership, conservation of listed species in many parts of the United States is dependent upon working partnerships with a wide variety of entities and the voluntary cooperation of many non-Federal landowners (Wilcove and Chen 1998; Crouse et al. 2002; James 2002). Building partnerships and promoting voluntary cooperation of landowners is essential to understanding the status of species on non-Federal lands and is necessary to implement recovery actions such as reintroducing listed species, habitat restoration, and habitat protection.

Many non-Federal landowners derive satisfaction in contributing to endangered species' recovery. The Service promotes these private-sector efforts through the Department of the Interior's Cooperative Conservation philosophy. This philosophy is evident in Service programs such as HCPs, Safe Harbor Agreements, Candidate Conservation Agreements, Candidate Conservation Agreements with Assurances, and conservation challenge cost-share. Many private landowners, however, are wary of the possible consequences of encouraging endangered species to their property, and there is mounting evidence that some regulatory actions by the Federal government, while well-intentioned and required by law, can (under certain

circumstances) have unintended negative consequences for the conservation of species on private lands (Wilcove et al. 1996; Bean 2002; Conner and Mathews 2002; James 2002; Koch 2002; Brook et al. 2003). Many landowners fear a decline in their property value due to real or perceived restrictions on land-use options where threatened or endangered species are found. Consequently, harboring endangered species is viewed by many landowners as a liability, resulting in anti-conservation incentives because maintaining habitats that harbor endangered species represents a risk to future economic opportunities (Main et al. 1999; Brook et al. 2003).

The Department of the Interior's Cooperative Conservation philosophy is the foundation for developing the tools of conservation. These tools include conservation grants, funding for Partners for Fish and Wildlife Program, the Coastal Program, and cooperative-conservation challenge cost-share grants. Our Private Stewardship Grant program and Landowner Incentive Program provide assistance to private landowners in their voluntary efforts to protect threatened, imperiled, and endangered species, including the development and implementation of Habitat Conservation Plans (HCPs). Conservation agreements with non-Federal landowners (HCPs, contractual conservation agreements, easements, and stakeholder-negotiated State regulations) enhance species conservation by extending species protections beyond those available through section 7 consultations. In the past decade, we have encouraged non-Federal landowners to enter into conservation agreements, based on a view that we can achieve greater species conservation on non-Federal land through such partnerships than we can through coercive methods. We invite discussion with all landowners within the proposed critical habitat that have an interest in developing conservation strategies that we would evaluate to determine if they provide a greater benefit to *H. paradoxus* than could be achieved through the final designation of critical habitat.

The purpose of designating critical habitat is to contribute to the conservation of threatened and endangered species and the ecosystems upon which they depend. The outcome of the designation, triggering regulatory requirements for actions funded, authorized, or carried out by Federal agencies under section 7 of the Act, can sometimes be counterproductive to its intended purpose on non-Federal lands. According to some researchers, the designation of critical habitat on private lands significantly reduces the likelihood that landowners will support and carry out conservation actions (Main et al. 1999; Bean 2002; Brook et al. 2003). The magnitude of this negative outcome is greatly amplified in situations where active management measures (such as reintroduction, fire management, control of invasive species) are necessary for species conservation (Bean 2002). The Service believes that the judicious use of excluding specific areas of non-federally owned lands from critical habitat designations can contribute to species recovery and provide a superior level of conservation than critical habitat alone.

General Principles of Section 7 Consultations Used in the 4(b)(2) Balancing Process

The most direct, and potentially largest, regulatory benefit of critical habitat is that federally authorized, funded, or carried out activities require consultation under section 7 of the Act to ensure that they are not likely to destroy or adversely modify critical habitat. There are two limitations to this regulatory effect. First, it only applies where there is a Federal nexus—if there is no Federal nexus, designation itself does not restrict actions that destroy or adversely modify critical habitat. Second, it only limits destruction or adverse modification. By its nature, the prohibition on adverse modification is designed to ensure those areas that contain the physical and biological features essential to the conservation of the species or unoccupied areas that are essential to the conservation of the species are not eroded. Critical habitat designation alone, however, does not require specific steps toward recovery.

Once consultation under section 7 of the Act is triggered, the process may conclude informally when the Service concurs in writing that the proposed Federal action is not likely to adversely affect the listed species or its critical habitat. However, if the Service determines through informal consultation that adverse impacts are likely to occur, then formal consultation would be initiated. Formal consultation concludes with a biological opinion issued by the Service on whether the proposed Federal action is likely to jeopardize the continued existence of a listed species or result in destruction or adverse modification of critical habitat, with separate analyses being made under both the jeopardy and the adverse modification standards. For critical habitat, a biological opinion that concludes in a determination of no destruction or adverse modification may contain discretionary conservation recommendations to minimize adverse effects to primary constituent elements, but it would not contain any mandatory reasonable and prudent measures or terms and conditions. Mandatory measures and terms and conditions to implement such measures are only specified when the proposed action would result in the incidental take of a listed animal. Reasonable and prudent alternatives to the proposed Federal action would only be suggested when the biological opinion results in a jeopardy or adverse modification conclusion.

We also note that for 30 years prior to the Ninth Circuit Court's decision in *Gifford Pinchot*, the Service combined the jeopardy standard with the standard for destruction or adverse modification of critical habitat when evaluating Federal actions that affect currently-occupied critical habitat. The Court ruled that the two standards are distinct and that adverse modification evaluations require consideration of impacts on the recovery of species. Thus, under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species. However, we believe the conservation achieved through implementing habitat conservation plans (HCPs) or other habitat management plans is typically greater than would be achieved through multiple site-by-site, project-by-project, section 7 consultations involving consideration of critical habitat. Management plans commit resources to implement long-term management and protection to particular habitat for at least one and possibly other listed or sensitive species. Section 7 consultations only commit Federal agencies to prevent adverse modification to critical habitat caused by the particular project, and agencies do not have to commit to provide conservation or long-term benefits to areas not affected by the proposed project. Thus, any HCP or management plan that considers enhancement or recovery as the management standard will often provide as much or more benefit than a consultation for critical habitat designation conducted under the standards required by the Ninth Circuit in the *Gifford Pinchot* decision.

The information provided in this section applies to all the discussions below that discuss the benefits of inclusion and exclusion of critical habitat in that it provides the framework for the consultation process.

Benefits of Excluding Lands With Approved Management Plans From Critical Habitat

The benefits of excluding lands with approved management plans from critical habitat designation include relieving landowners, communities, and counties of any additional regulatory burden that might be imposed by a critical habitat designation. Most conservation plans take many years to develop and, upon completion, are consistent with the recovery objectives for listed species that are covered within the plan area. Many conservation plans also provide conservation benefits to unlisted sensitive species. Imposing an additional regulatory review as a result of the designation of critical habitat may undermine these conservation efforts and partnerships designed to proactively protect species to ensure that listing under the Act will not be necessary. Designation of critical habitat within the boundaries of management plans that provide conservation measures for a species could be viewed as a disincentive to those entities currently developing these plans or contemplating them in the future, because one of the incentives for undertaking conservation is greater ease of permitting where listed species are affected. Addition of a new regulatory requirement would remove a significant incentive for undertaking the time and expense of management planning. In fact, designating critical habitat in areas covered by a pending conservation plan could result in the loss of some species' benefits if participants abandon the planning process, in part because of the strength of the perceived additional regulatory compliance that such designation would entail. The time and cost of regulatory compliance for a critical habitat designation do not have to be quantified for them to be perceived as additional Federal regulatory burden sufficient to discourage continued participation in plans targeting listed species' conservation.

A related benefit of excluding lands within management plans from critical habitat designation is the unhindered, continued ability to seek new partnerships with future plan participants including States, counties, local jurisdictions, conservation organizations, and private landowners, which together can implement conservation actions that we would be unable to accomplish otherwise. If lands within approved management plan areas are designated as critical habitat, it would likely have a negative effect on our ability to establish new partnerships to develop these plans, particularly plans that address landscape-level conservation of species and habitats. By preemptively excluding these lands, we preserve our current partnerships and encourage additional conservation actions in the future.

Relationship of Critical Habitat to Tribal Lands

In accordance with the Secretarial Order 3206, ''American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act'' (June 5, 1997); the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we believe that fish, wildlife, and other natural resources on tribal lands are better managed under tribal authorities, policies, and programs than through Federal regulation wherever possible and practicable. Based on this philosophy, we believe that, in many cases, designation of tribal lands as critical habitat provides very little additional benefit to threatened and endangered species. Conversely, such designation is often viewed by tribes as an unwanted intrusion into tribal self governance, thus compromising the government-to-government relationship essential to achieving our mutual goals of managing for healthy ecosystems upon which the viability of threatened and endangered species populations depend.

In our critical habitat designations, we use the provision outlined in section 4(b)(2) of the Act to evaluate those specific areas that contain the features essential to the conservation of the species to determine which areas to propose and subsequently finalize (i.e., designate) as critical habitat. On the basis of our preliminary evaluation, discussed in detail below, we are proposing to exclude certain lands from the final designation of critical habitat for *H. paradoxus*. In the development of our final designation, we will incorporate or address any new information received during the public comment periods, and from our evaluation of the potential economic and or other relevant impacts of this proposal. As such, we may revise this proposal to address new information and/or exclude additional areas that may warrant exclusion pursuant to section 4(b)(2) of the Act.

Pueblo of Acoma

The Pueblo of Acoma has lands containing features essential to the conservation of *H. paradoxus*. In making our decision on the final critical habitat designation with regard to these lands, we will be considering several factors, including our relationship with the Pueblo and whether a management plan has been developed for the conservation of *H. paradoxus* on their lands. Currently, we are not aware of a management plan for *H. paradoxus*. As noted above, if the Pueblo requests, we will provide technical assistance on management of the species and the development of a management plan. We also note that lands of the Pueblo of Acoma could be considered for exclusion in the final determination or designation under section 4(b)(2) of the Act and that any exclusions made in the final determination or designation will be the result of an analysis of any new information received.

Pueblo of Laguna

The Pueblo of Laguna has lands containing features essential to the conservation of *H. paradoxus*. In making our final decision with regard to Pueblo lands, we will consider several factors, including our relationship with the Pueblo and whether a management plan has been developed for the conservation of *H. paradoxus* on their lands. On August 2, 2004, in a letter to the New Mexico Ecological Services Field Office from Pueblo of Laguna Governor Johnson, we learned that the Pueblo has developed a draft management plan for *H. paradoxus* and has been managing Pueblo land consistent with the protection and recovery of the sunflower. We received the Pecos Sunflower (*Helianthus paradoxus*) Draft Management Plan, Pueblo of Laguna, 2007, for review on February 8, 2007, and we are working with the Pueblo on finalizing the management plan for their lands. On the basis of our partnership with the Pueblo, and in anticipation of completion of a management plan, the populations of *H. paradoxus* associated with spring habitats along the Rio San Jose belonging to the Pueblo of Laguna may be excluded from final critical habitat designation pursuant to section 4(b)(2) of the Act (see ''Relationship of Critical Habitat to Tribal Lands'' section below for additional information).

Economic Analysis

An analysis of the economic impacts of proposing critical habitat for *H. paradoxus* is being prepared. We will announce the availability of the draft economic analysis as soon as it is completed, at which time we will seek public review and comment. At that time, copies of the draft economic

analysis will be available for downloading from the Internet at *http://www.fws.gov/southwest/es/newmexico/* or by contacting the New Mexico Ecological Services Field Office directly (see **ADDRESSES**).

Peer Review

In accordance with our joint policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), we will seek the expert opinions of at least three appropriate and independent specialists regarding this proposed rule. The purpose of such review is to ensure that our critical habitat designation is based on scientifically sound data, assumptions, and analyses. We will send copies of this proposed rule to these peer reviewers immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment during the public comment period on the specific assumptions and conclusions regarding the proposed designation of critical habitat.

We will consider all comments and information received during the comment period on this proposed rule during preparation of a final determination. Accordingly, the final decision may differ from this proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. Requests for public hearings must be made in writing at least 15 days prior to the close of the public comment period (see **DATES**). We will 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 prior to the first hearing.

Clarity of the Rule

Executive Order 12866 (Regulatory Planning and Review) requires each agency to write regulations and notices that are easy to understand. We invite your comments on how to make this proposed rule easier to understand, including answers to questions such as the following: (1) Are the requirements in the proposed rule clearly stated? (2) Does the proposed rule contain technical jargon that interferes with the clarity? (3) Does the format of the proposed rule (grouping and order of the sections, use of headings, paragraphing, and so forth) aid or reduce its clarity? (4) Is the description of the notice in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the proposed rule? (5) What else could we do to make this proposed rule easier to understand?

Send a copy of any comments on how we could make this proposed rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C Street, NW., Washington, DC 20240. You may e-mail your comments to this address: *Exsec@ios.doi.gov*.

Required Determinations

Regulatory Planning and Review

In accordance with Executive Order 12866, this document is a significant rule in that it may raise novel legal and policy issues, but it is not anticipated to have an annual effect on the economy of $100 million or more or affect the economy in a material way. Due to the tight timeline for publication in the **Federal Register**, the Office of Management and Budget (OMB) has not formally reviewed this rule. We are preparing a draft economic analysis of this proposed action, which will be available for public comment, to determine the economic consequences of designating the specific area as critical habitat. This economic analysis also will be used to determine compliance with Executive Order 12866, Regulatory Flexibility Act, Small Business Regulatory Enforcement Fairness Act, Executive Order 12630, Executive Order 13211, and Executive Order 12875.

Further, Executive Order 12866 directs Federal agencies promulgating regulations to evaluate regulatory alternatives (OMB, Circular A–4, September 17, 2003). Pursuant to Circular A–4, once it has been determined that the Federal regulatory action is appropriate, then the agency will need to consider alternative regulatory approaches. Since the determination of critical habitat is a statutory requirement under the Act (16 U.S.C. 1531 et seq.), we must then evaluate alternative regulatory approaches, where feasible, when promulgating a designation of critical habitat.

In developing our designations of critical habitat, we consider economic impacts, impacts to national security, and other relevant impacts pursuant to section 4(b)(2) of the Act. Based on the discretion allowable under this provision, we may exclude any particular area from the designation of critical habitat providing that the benefits of such exclusion outweigh the benefits of specifying the area as critical habitat and that such exclusion would not result in the extinction of the species. As such, we believe that the evaluation of the inclusion or exclusion of particular areas, or combination thereof, in a designation constitutes our regulatory alternative analysis.

When it is completed, the draft economic analysis will be made available through an announcement in the **Federal Register** and in local newspapers. At that time, we will seek public review and comment on the draft economic analysis. The draft economic analysis will also be available on our Web site at *http://www.fws.gov/southwest/es/newmexico/* or by contacting the New Mexico Ecological Services Field Office directly (see **ADDRESSES**).

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (5 U.S.C. 601 et seq., as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the Regulatory Flexibility Act (RFA) to require Federal agencies to provide a statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

At this time, the Service lacks the available economic information necessary to provide an adequate factual basis for the required RFA finding. Therefore, the RFA finding is deferred until completion of the draft economic analysis prepared under section 4(b)(2) of the Act and E.O. 12866. This draft economic analysis will provide the required factual basis for the RFA finding. Upon completion of the draft economic analysis, the Service will publish a notice of availability of the draft economic analysis of the proposed designation and reopen the public comment period for the proposed designations. The Service will include with the notice of availability, as appropriate, an initial regulatory flexibility analysis or a certification that the rule will not have a significant economic impact on a substantial number of small entities accompanied by the factual basis for that determination. The Service has

concluded that deferring the RFA finding until completion of the draft economic analysis is necessary to meet the purposes and requirements of the RFA. Deferring the RFA finding in this manner will ensure that the Service makes a sufficiently informed determination based on adequate economic information and provides the necessary opportunity for public comment.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501), the Service makes the following findings:

(a) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector and includes both ''Federal intergovernmental mandates'' and ''Federal private sector mandates.'' These terms are defined in 2 U.S.C. 658(5)–(7). ''Federal intergovernmental mandate'' includes a regulation that ''would impose an enforceable duty upon State, local, or tribal governments'' with two exceptions. It excludes ''a condition of Federal assistance.'' It also excludes ''a duty arising from participation in a voluntary Federal program,'' unless the regulation ''relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,'' if the provision would ''increase the stringency of conditions of assistance'' or ''place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding,'' and the State, local, or Tribal governments ''lack authority'' to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; AFDC work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. ''Federal private sector mandate'' includes a regulation that ''would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.''

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above on to State governments.

(b) We recognize that some areas within the proposed critical habitat designation are within the City of Santa Rosa. As we conduct our draft economic analysis, we will complete a comprehensive assessment of the effect of designating critical habitat on these small governmental jurisdictions.

Executive Order 13211

On May 18, 2001, the President issued an Executive Order (E.O. 13211; Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Although this proposed rule to designate critical habitat for *H. paradoxus* is a significant regulatory action under Executive Order 12866 in that it may raise novel legal and policy issues, it is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required. However, we will further evaluate this issue as we conduct our economic analysis and review and revise this assessment as warranted.

Takings

In accordance with Executive Order 12630 (''Government Actions and Interference with Constitutionally Protected Private Property Rights''), we have analyzed the potential takings implications of designating critical habitat for *H. paradoxus* in a takings implications assessment. The takings implications assessment concludes that this designation of critical habitat for *H. paradoxus* does not pose significant takings implications. However, we will further evaluate this issue as we conduct our economic analysis and review and revise this assessment as warranted.

Federalism

In accordance with Executive Order 13132 (Federalism), the rule does not have significant Federalism effects. A Federalism assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies in New Mexico and Texas. The designation of critical habitat in areas currently occupied by *H. paradoxus* imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas that contain the features essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary to the conservation of the species are specifically identified. While making this definition and identification does not alter where and what federally sponsored activities may occur, it may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

Civil Justice Reform

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We propose designating critical habitat in accordance with the provisions of the Endangered Species Act. This proposed rule uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of *H. paradoxus*.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act. This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et. seq.)

It is our position that, outside the Jurisdiction of the Tenth Federal Circuit, we do not need to prepare environmental analyses as defined by NEPA in connection with designating critical habitat under the Endangered Species Act of 1973, as amended. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This assertion was upheld by the Ninth Circuit (*Douglas County* v. *Babbitt,* 48 F.3d 1495 (9th Cir. Ore. 1995), cert. denied 516 U.S. 1042 (1996)). However, when the range of the species includes States within the Tenth Circuit, such as that of *H. paradoxus*, under the Tenth Circuit ruling in *Catron County Board of Commissioners* v. *U.S. Fish and Wildlife Service,* 75 F.3d 1429 (10th Cir. 1996), we will undertake a NEPA analysis for critical habitat designation and notify the public of the availability of the draft environmental assessment for this proposal when it is completed.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951), Executive Order 13175, and the Department of Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997, ''American Indian Tribal Rights, Federal—Tribal Trust Responsibilities, and the Endangered Species Act,'' we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes. If requested by the Pueblo of Acoma, we will provide technical assistance on management of the species and the development of a management plan. We will also continue to work with the Pueblo of Laguna on the development of a final management plan for their lands. We note that lands of the Pueblos of Acoma and Laguna may be considered for exclusion in the final designation or determination pursuant to section 4(b)(2) of the Act and that any exclusions made in the final designation or determination will be the result of an analysis of any new information received.

References Cited

A complete list of all references cited in this rulemaking is available upon request from the Field Supervisor, New Mexico Ecological Services Field Office (see **ADDRESSES**).

Author(s)

The primary authors of this package are staff of the New Mexico Ecological Services Field Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17—[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.12(h), revise the entry for ''*Helianthus paradoxus*'' under ''FLOWERING PLANTS'' in the List of Threatened and Endangered Plants to read as follows:

§ 17.12 Endangered and threatened plants.

* * * * *

(h) * * *

Species		Historic range	Family	Status	When listed	Critical habitat	Special rules
Scientific name	Common name						
FLOWERING PLANTS							
*	*	*	*	*	*		*
Helianthus paradoxus	Pecos (=puzzle, =paradox) sunflower.	U.S.A. (NM, TX)	Asteraceae	T	667	17.96(a)	NA
*	*	*	*	*	*		*

3. In § 17.96(a), add an entry for ''*Helianthus paradoxus* (Pecos sunflower)'' in alphabetical order under Family Asteraceae to read as follows:

§ 17.96 Critical habitat—plants.

(a) *Flowering plants.*

* * * * *

Family Asteraceae: *Helianthus paradoxus* (Pecos sunflower)

(1) Critical habitat units are depicted for Chaves, Cibola, Guadalupe, Socorro, and Valencia Counties, New Mexico, and for Pecos County, Texas, on the maps below.

(2) Within critical habitat units, the primary constituent elements of critical habitat for the *Helianthus paradoxus* are the desert wetland or riparian habitat components that provide:

(i) Silty clay or fine sand soils that contain high organic content, are saline or alkaline, are permanently saturated within the root zone (top 50 cm (19.7 in) of the soil profile), and have salinity levels ranging from 10 to 40 parts per thousand; and

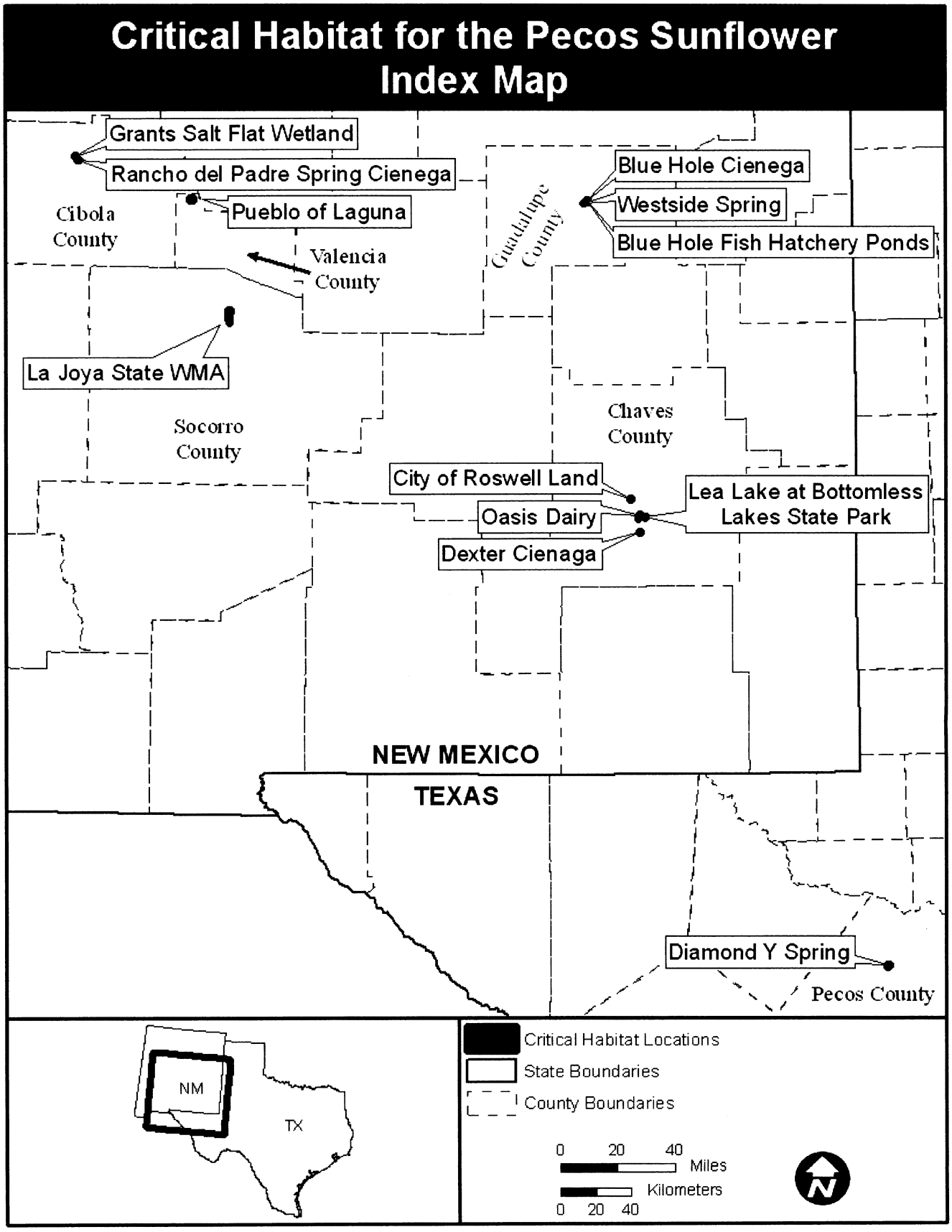
(ii) A low proportion (less than 10 percent) of woody shrub or canopy cover directly around the plant.

(3) Critical habitat does not include manmade structures, such as buildings, aqueducts, airports, and roads, and the land on which such structures are located, existing on the effective date of this rule and not containing one or more of the primary constituent elements.

(4) *Critical habitat map units.* Data layers defining map units were created on a base of USGS 1:24,0000 maps, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) coordinates.

(5) *Note:* Index map of Pecos sunflower critical habitat units (map 1) follows:

BILLING CODE 4310–55–P



BILLING CODE 4310–55–C

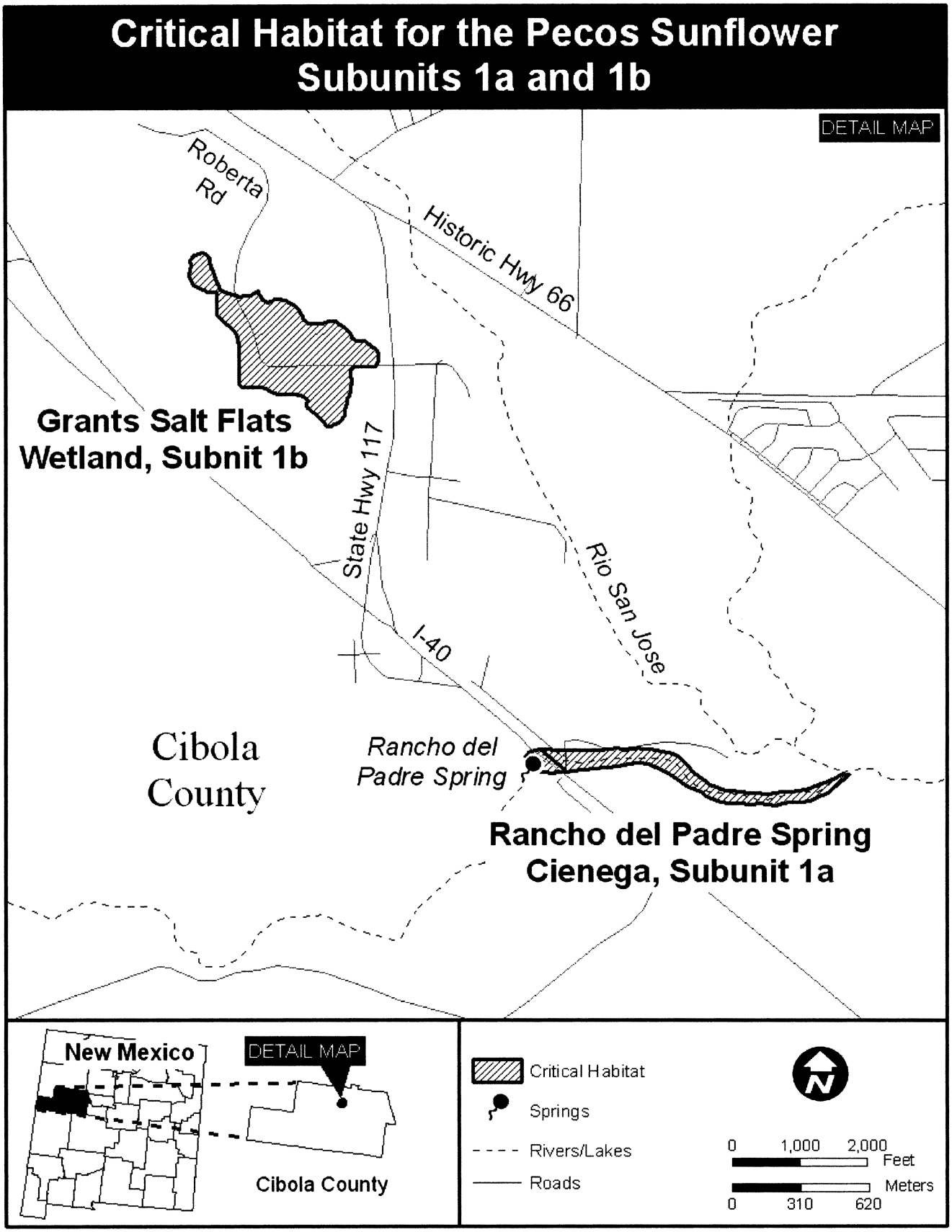
(6) Unit 1: West-Central New Mexico, Cibola and Valencia Counties, New Mexico.

(i) Subunit 1a for *Helianthus paradoxus*, Rancho del Padre Spring Cienega, Cibola County, New Mexico. From USGS 1:24,000 quadrangle Grants SE, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 243145, 3889604; 243025, 3889705; 243053, 3889708; 243097, 3889700; 243141, 3889702; 243201, 3889703; 243246, 3889703; 243286, 3889703; 243342, 3889708; 243377, 3889712; 243402, 3889704; 243441, 3889707; 243441, 3889707; 243472, 3889710; 243490, 3889709; 243518, 3889707; 243577, 3889698; 243626, 3889686; 243657, 3889669; 243683, 3889642; 243706, 3889616; 243729, 3889590; 243765, 3889564; 243794, 3889545; 243826, 3889535; 243863, 3889518; 243888, 3889519; 243932, 3889513; 243966, 3889506; 243991, 3889508; 244056, 3889504; 244120, 3889510; 244157, 3889513; 244196, 3889517; 244242, 3889530; 244282, 3889546; 244325, 3889560; 244359, 3889575; 244388, 3889592; 244423, 3889592; 244410, 3889576; 244393, 3889566; 244362, 3889539; 244322, 3889506; 244278, 3889486; 244244, 3889470; 244209, 3889467; 244155, 3889466; 244126, 3889461; 244088, 3889450; 244057, 3889453; 244019, 3889457; 243982, 3889456; 243923, 3889459; 243879, 3889459; 243824, 3889470; 243779, 3889490; 243752, 3889510; 243726, 3889522; 243689, 3889537; 243653, 3889566; 243604, 3889594; 243573, 3889612; 243515, 3889637; 243471, 3889643; 243427, 3889641; 243376, 3889630; 243325, 3889625; 243265, 3889619; 243224, 3889611; 243169, 3889606; thence returning to 243145, 3889604.

(ii) Subunit 1b for *Helianthus paradoxus*, Grants Salt Flat Wetlands, Cibola County, New Mexico. From USGS 1:24,000 quadrangle Grants, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 241567, 3891788; 241548, 3891788; 241521, 3891788; 241509, 3891801; 241493, 3891806; 241482, 3891812; 241460, 3891822; 241448, 3891840; 241440, 3891865; 241445, 3891886; 241449, 3891910; 241445, 3891930; 241456, 3891947; 241463, 3891957; 241484, 3891960; 241499, 3891965; 241517, 3891962; 241531, 3891941; 241534, 3891918; 241543, 3891893; 241551, 3891866; 241560, 3891846; 241568, 3891825; 241582, 3891801; 241602, 3891789; 241636, 3891777; 241670, 3891770; 241691, 3891774; 241714, 3891774; 241733, 3891785; 241751, 3891795; 241751, 3891785; 241762, 3891765; 241775, 3891750; 241798, 3891741; 241812, 3891747; 241825, 3891755; 241850, 3891755; 241876, 3891751; 241901, 3891738; 241917, 3891731; 241934, 3891717; 241942, 3891694; 241952, 3891679; 241959, 3891662; 241979, 3891648; 242003, 3891648; 242025, 3891648; 242045, 3891648; 242071, 3891659; 242100, 3891656; 242122, 3891641; 242135, 3891629; 242168, 3891604; 242175, 3891585; 242186, 3891578; 242196, 3891570; 242215, 3891570; 242234, 3891570; 242252, 3891554; 242288, 3891527; 242295, 3891507; 242295, 3891482; 242288, 3891465; 242283, 3891452; 242239, 3891452; 242191, 3891452; 242178, 3891441; 242171, 3891432; 242169, 3891409; 242172, 3891391; 242172, 3891378; 242171, 3891358; 242169, 3891344; 242165, 3891323; 242155, 3891303; 242154, 3891285; 242142, 3891252; 242141, 3891232; 242128, 3891205; 242114, 3891194; 242097, 3891188; 242080, 3891180; 242062, 3891179; 242052, 3891190; 242040, 3891204; 242023, 3891225; 241999, 3891240; 241984, 3891255; 241975, 3891262; 241971, 3891278; 241972, 3891293; 241964, 3891308; 241944, 3891322; 241911, 3891325; 241879, 3891325; 241836, 3891326; 241811, 3891335; 241785, 3891350; 241768, 3891359; 241755, 3891360; 241728, 3891356; 241706, 3891357; 241680, 3891357; 241666, 3891373; 241662, 3891403; 241664, 3891455; 241666, 3891502; 241666, 3891544; 241657, 3891574; 241650, 3891611; 241612, 3891644; 241567, 3891688; thence returning to 241567, 3891788.

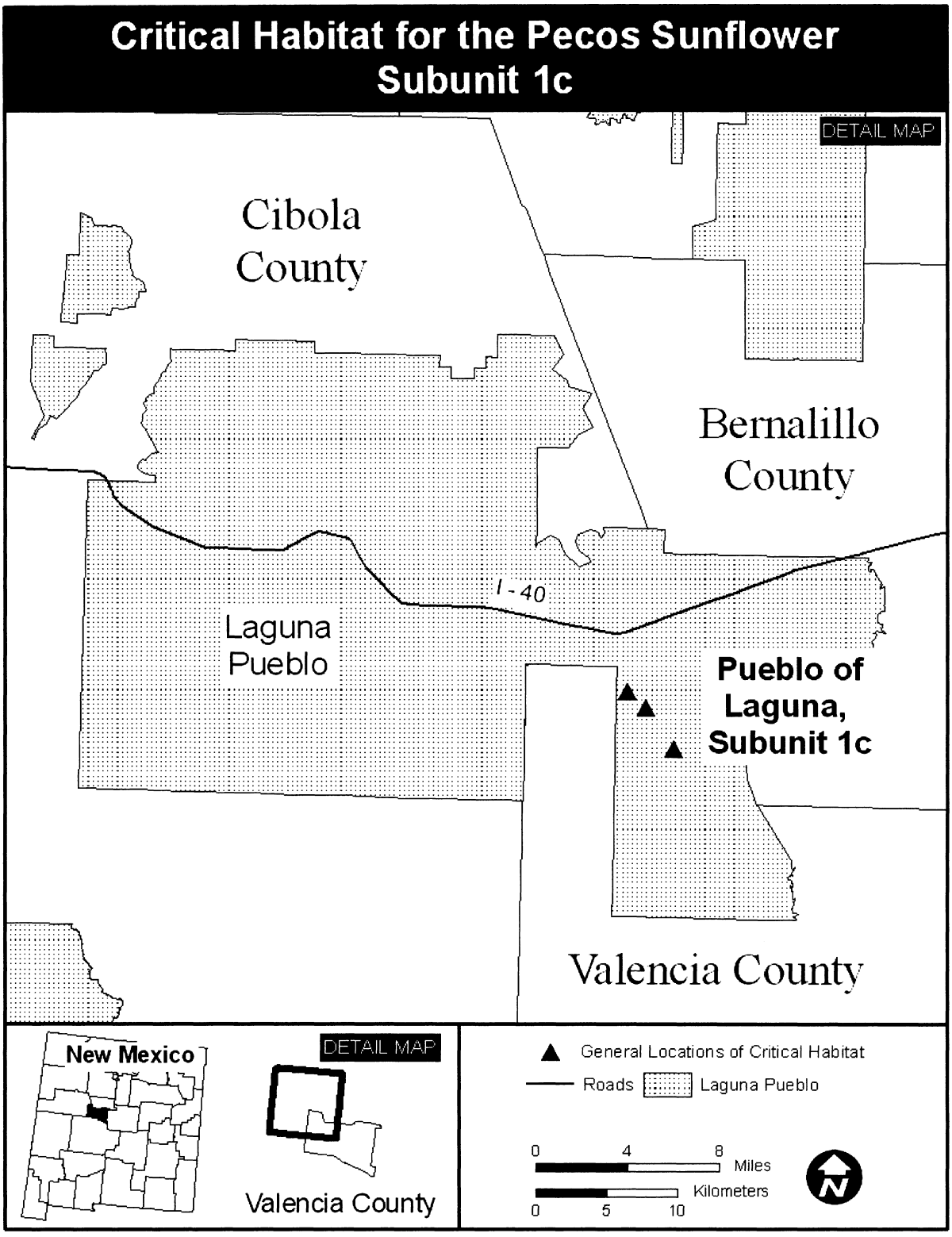
(iii) *Note:* Map of Subunits 1a and 1b for *Helianthus paradoxus* (Map 2) follows:

BILLING CODE 4310–55–C


Critical Habitat for the Pecos Sunflower
Subunits 1a and 1b
DETAIL MAP
Roberta Rd
Historic Hwy 66
Grants Salt Flats
Wetland, Subnit 1b
State Hwy 117
Rio San Jose
I-40
Cibola County
Rancho del Padre Spring
Rancho del Padre Spring
Cienega, Subunit 1a
New Mexico
DETAIL MAP
Cibola County
Critical Habitat
Springs
Rivers/Lakes
Roads
N
0 1,000 2,000
Feet
0 310 620
Meters

(iv) Subunit 1c for *Helianthus paradoxus*, Pueblo of Laguna, Valencia County, New Mexico. From USGS 1:24,000 quadrangles Correo and South Garcia, springs along the Rio San Jose south of Interstate 40, and the areas immediately surrounding these springs.

(v) Note: Map of Subunit 1b (West-Central New Mexico—Pueblo of Laguna Subunit) of *Helianthus paradoxus* critical habitat (Map 3) follows:



BILLING CODE 4310–55–C

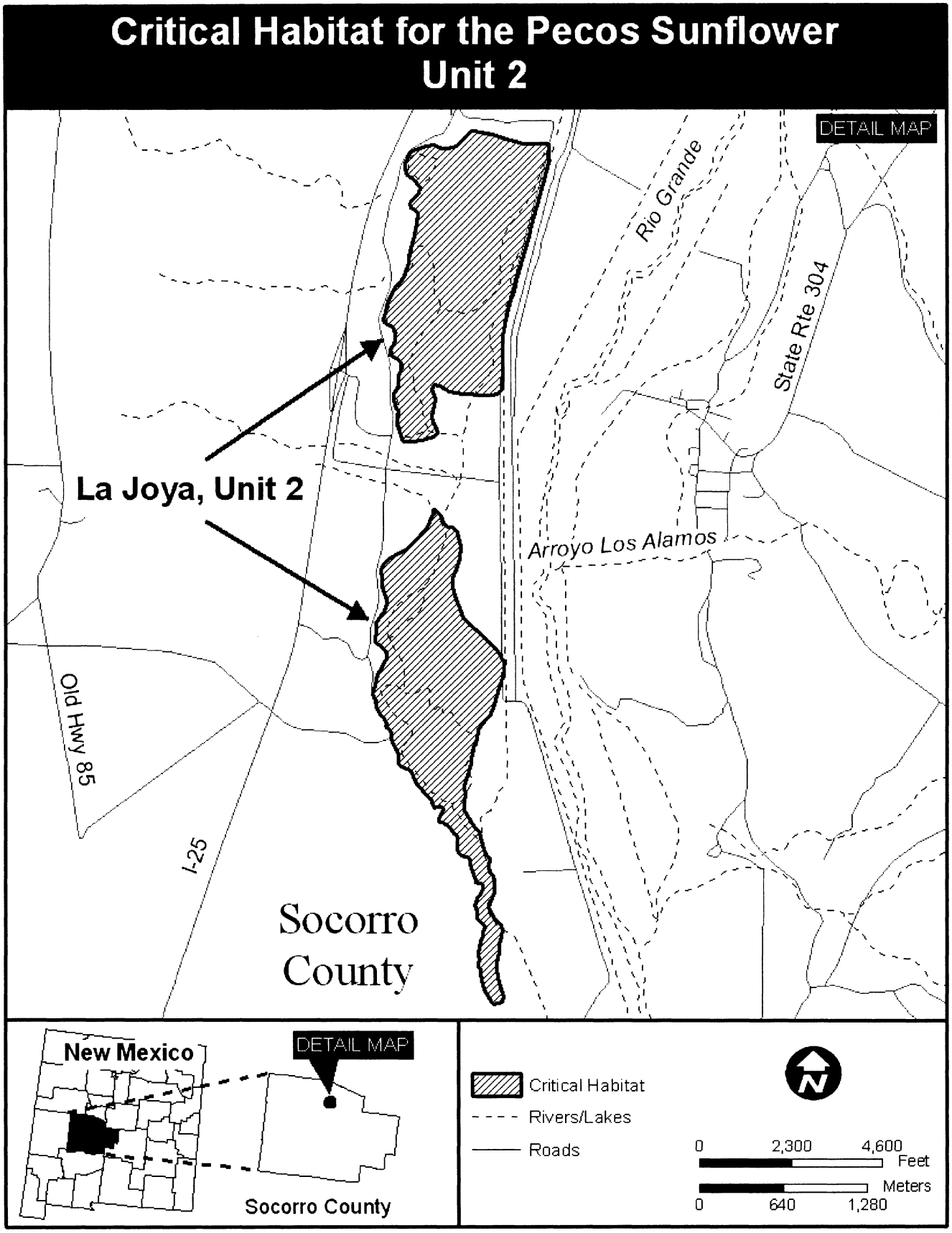
(7) Unit 2: La Joya, Socorro County, New Mexico.

(i) Unit 2 for *Helianthus paradoxus*, La Joya State Wildlife Management Area, Socorro County, New Mexico. From USGS 1:24,000 quadrangle La Joya, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 327938, 3803771; 328008, 3803841; 328017, 3803889; 327974, 3803950; 327921, 3803981; 327906, 3804024; 327900, 3804069; 327929, 3804128; 327953, 3804169; 328019, 3804191; 328076, 3804209; 328129, 3804211; 328192, 3804189; 328237, 3804185; 328306, 3804204; 328353, 3804256; 328416, 3804317; 328493, 3804315; 328575, 3804293; 328654, 3804268; 328744, 3804240; 328809, 3804227; 328891, 3804221; 328978, 3804221; 329007, 3804221; 329002, 3804151; 329007, 3804081; 328943, 3803853; 328884, 3803635; 328854, 3803517; 328795, 3803310; 328756, 3803178; 328739, 3803098; 328730, 3803069; 328716, 3803028; 328698, 3802962; 328686, 3802913; 328669, 3802848; 328662, 3802791; 328654, 3802744; 328651, 3802687; 328649, 3802547; 328649, 3802336; 328619, 3802307; 328559, 3802294; 328514, 3802292; 328352, 3802301; 328237, 3802318; 328166, 3802369; 328126, 3802370; 328104, 3802335; 328123, 3802292; 328137, 3802262; 328123, 3802215; 328115, 3802167; 328112, 3802126; 328115, 3802093; 328142, 3802036; 328156, 3802004; 328126, 3801971; 328025, 3801950; 327961, 3801941; 327897, 3801940; 327881, 3801959; 327845, 3802076; 327843, 3802138; 327847, 3802172; 327830, 3802196; 327824, 3802226; 327817, 3802269; 327815, 3802305; 327847, 3802363; 327849, 3802406; 327847, 3802448; 327864, 3802483; 327875, 3802517; 327871, 3802547; 327854, 3802572; 327813, 3802589; 327785, 3802607; 327788, 3802637; 327815, 3802687; 327828, 3802722; 327822, 3802771; 327805, 3802818; 327773, 3802833; 327740, 3802854; 327738, 3802884; 327751, 3802923; 327762, 3802967; 327766, 3803012; 327796, 3803064; 327820, 3803117; 327858, 3803158; 327895, 3803209; 327914, 3803265; 327928, 3803309; 327929, 3803359; 327958, 3803460; 327978, 3803524; 327995, 3803612; 328003, 3803685; 327976, 3803721; 327948, 3803730; thence returning to 327938, 3803771.

327683, 3800456; 327686, 3800538; 327717, 3800591; 327740, 3800627; 327757, 3800689; 327762, 3800723; 327743, 3800777; 327726, 3800820; 327722, 3800890; 327715, 3800947; 327735, 3800983; 327791, 3801036; 327872, 3801083; 327917, 3801107; 327973, 3801164; 328021, 3801220; 328071, 3801278; 328114, 3801381; 328117, 3801417; 328133, 3801417; 328183, 3801359; 328186, 3801340; 328201, 3801308; 328230, 3801280; 328255, 3801276; 328283, 3801262; 328307, 3801232; 328329, 3801131; 328320, 3801039; 328302, 3800977; 328267, 3800885; 328272, 3800815; 328285, 3800744; 328311, 3800674; 328351, 3800590; 328403, 3800529; 328483, 3800459; 328531, 3800401; 328606, 3800340; 328658, 3800252; 328663, 3800195; 328654, 3800120; 328619, 3800010; 328597, 3799947; 328579, 3799881; 328553, 3799819; 328504, 3799779; 328465, 3799718; 328456, 3799643; 328417, 3799555; 328408, 3799459; 328381, 3799358; 328359, 3799278; 328368, 3799217; 328359, 3799151; 328355, 3799094; 328430, 3798975; 328474, 3798923; 328509, 3798788; 328527, 3798757; 328553, 3798727; 328544, 3798661; 328553, 3798625; 328579, 3798590; 328592, 3798559; 328588, 3798502; 328588, 3798463; 328557, 3798401; 328544, 3798349; 328579, 3798274; 328645, 3798212; 328649, 3798169; 328641, 3798120; 328623, 3798063; 328623, 3798001; 328610, 3797918; 328610, 3797865; 328623, 3797761; 328658, 3797664; 328654, 3797616; 328582, 3797604; 328520, 3797699; 328497, 3797746; 328491, 3797783; 328485, 3797841; 328477, 3797877; 328462, 3797893; 328464, 3797913; 328469, 3797944; 328466, 3797990; 328470, 3798038; 328483, 3798093; 328496, 3798128; 328503, 3798162; 328513, 3798192; 328509, 3798209; 328496, 3798209; 328474, 3798249; 328456, 3798271; 328452, 3798324; 328440, 3798362; 328447, 3798381; 328456, 3798420; 328483, 3798456; 328500, 3798486; 328501, 3798520; 328493, 3798536; 328464, 3798536; 328445, 3798539; 328443, 3798562; 328431, 3798594; 328419, 3798630; 328413, 3798658; 328405, 3798677; 328402, 3798701; 328399, 3798716; 328392, 3798725; 328370, 3798733; 328360, 3798733; 328342, 3798748; 328322, 3798765; 328309, 3798775; 328308, 3798793; 328308, 3798821; 328302, 3798837; 328301, 3798861; 328306, 3798879; 328303, 3798898; 328293, 3798911; 328279, 3798917; 328262, 3798938; 328240, 3798967; 328215, 3798987; 328186, 3799000; 328164, 3799007; 328158, 3799014; 328161, 3799027; 328174, 3799051; 328188, 3799082; 328195, 3799097; 328194, 3799114; 328182, 3799123; 328168, 3799127; 328149, 3799122; 328140, 3799117; 328127, 3799112; 328122, 3799116; 328117, 3799139; 328096, 3799178; 328038, 3799245; 328002, 3799293; 327989, 3799302; 327972, 3799331; 327962, 3799355; 327956, 3799383; 327945, 3799400; 327931, 3799414; 327916, 3799417; 327906, 3799418; 327898, 3799427; 327883, 3799430; 327867, 3799434; 327854, 3799454; 327851, 3799475; 327852, 3799498; 327850, 3799528; 327839, 3799553; 327833, 3799563; 327810, 3799598; 327803, 3799622; 327797, 3799653; 327794, 3799688; 327790, 3799711; 327783, 3799722; 327768, 3799731; 327761, 3799737; 327755, 3799745; 327759, 3799761; 327752, 3799774; 327730, 3799811; 327712, 3799844; 327694, 3799873; 327685, 3799893; 327678, 3799936; 327664, 3799973; 327658, 3800004; 327663, 3800029; 327674, 3800049; 327685, 3800106; 327693, 3800146; 327717, 3800188; 327737, 3800226; 327758, 3800262; 327761, 3800294; 327748, 3800325; 327697, 3800375; 327674, 3800398; 327671, 3800427; thence returning to 327683, 3800456.

(ii) Note: Map of Unit 2 for *Helianthus paradoxus* (Map 4) follows:

BILLING CODE 4310–55–P



BILLING CODE 4310–55–C

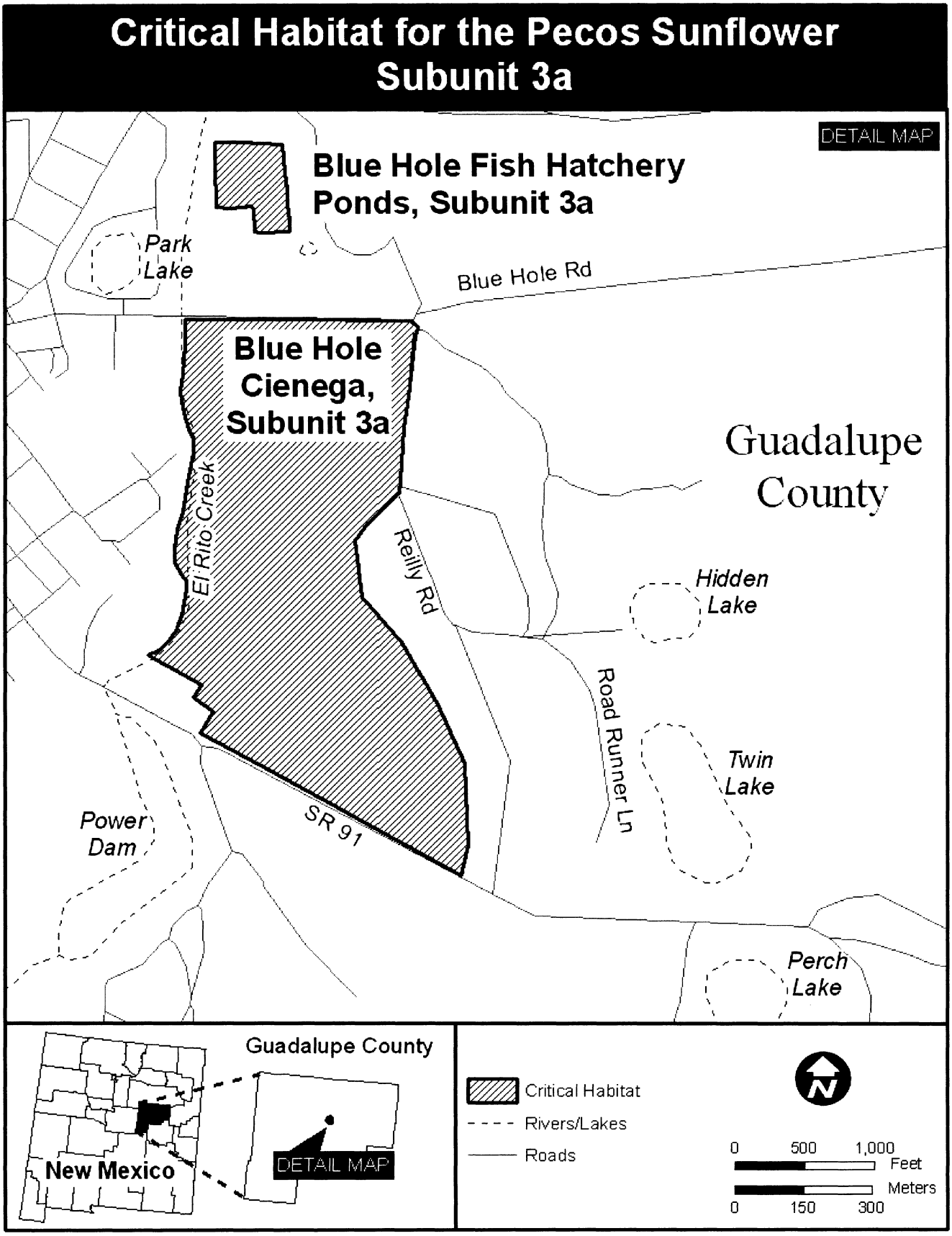
(8) Unit 3: Santa Rosa, Guadalupe County, New Mexico.

(i) Subunit 3a for *Helianthus paradoxus,* Blue Hole Cienega / Blue Hole Fish Hatchery Ponds, Guadalupe County, New Mexico. From USGS 1:24,000 quadrangle Santa Rosa, lands bounded by the following UTM NAD83 coordinates (meters E, meters N):

529408, 3865628; 529431, 3865639; 529449, 3865654; 529468, 3865681; 529481, 3865715; 529491, 3865773; 529491, 3865792; 529478, 3865810; 529467, 3865832; 529465, 3865863; 529472, 3865903; 529484, 3865943; 529494, 3866006; 529507, 3866073; 529505, 3866104; 529497, 3866123; 529484, 3866171; 529479, 3866207; 529483, 3866245; 529489, 3866310; 529489, 3866366; 529640, 3866364; 529771, 3866366; 529910, 3866363; 529980, 3866361; 529991, 3866355; 529996, 3866347; 529991, 3866329; 529988, 3866289; 529980, 3866217; 529967, 3866125; 529959, 3866012; 529957, 3865985; 529887, 3865918; 529859, 3865879; 529876, 3865756; 529962, 3865656; 530041, 3865519; 530099, 3865390; 530105, 3865209; 530091, 3865144; 529784, 3865313; 529705, 3865355; 529593, 3865417; 529522, 3865456; 529550, 3865504; 529505, 3865533; 529524, 3865564; thence returning to 529408, 3865628.

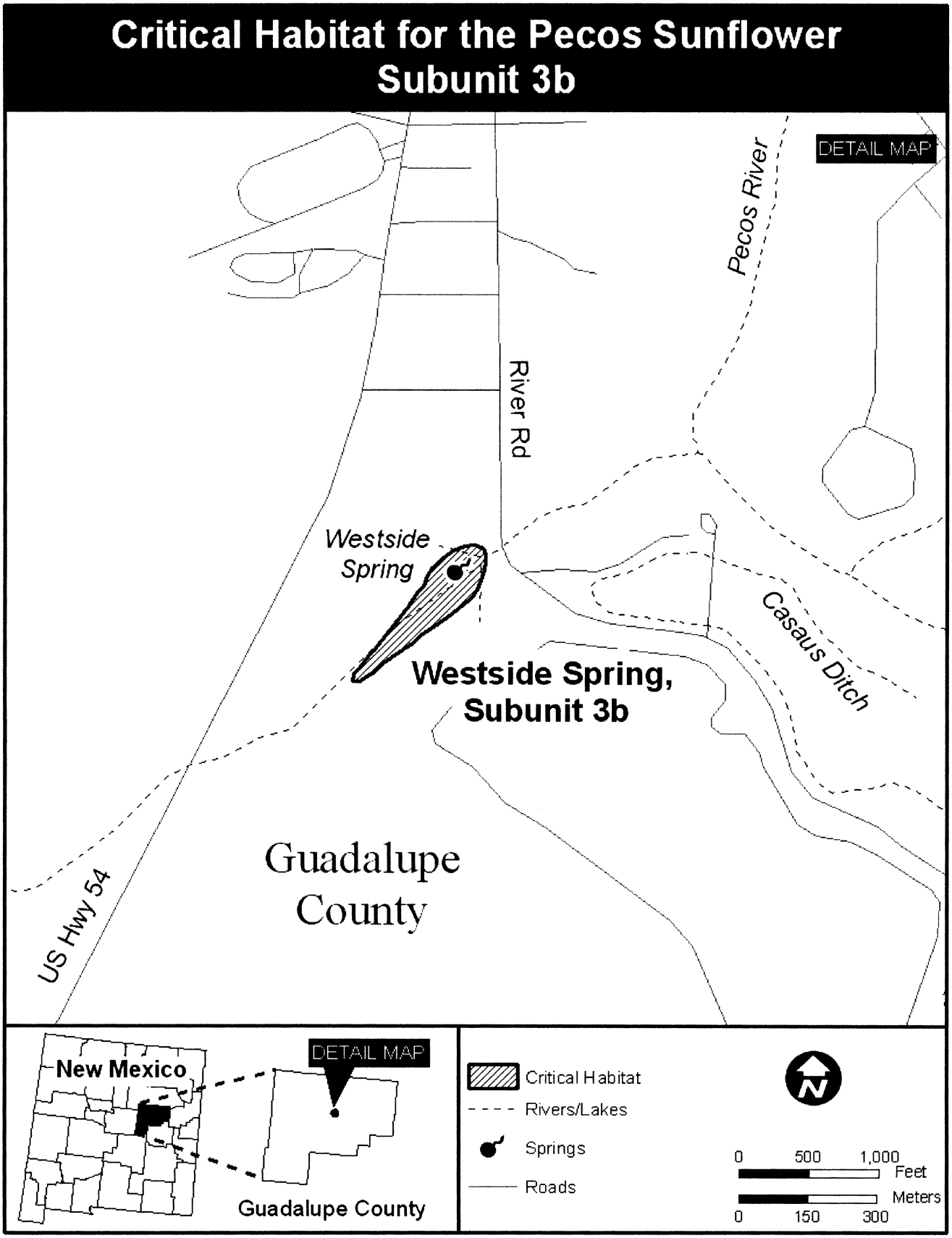
529555, 3866753; 529618, 3866754; 529654, 3866751; 529702, 3866748; 529706, 3866687; 529712, 3866651; 529713, 3866618; 529717, 3866581; 529717, 3866559; 529652, 3866555; 529640, 3866558; 529638, 3866609; 529634, 3866613; 529590, 3866609; 529556, 3866611; 529556, 3866639; 529555, 3866683; thence returning to 529555, 3866753.

(ii) Note: Map of Subunit 3a for *Helianthus paradoxus* (Map 5) follows:


Critical Habitat for the Pecos Sunflower
Subunit 3a
DETAIL MAP
Blue Hole Fish Hatchery
Ponds, Subunit 3a
Park
Lake
Blue Hole Rd
Blue Hole
Cienega,
Subunit 3a
Guadalupe
County
El Rito Creek
Reilly Rd
Hidden
Lake
Road Runner Ln
Twin
Lake
Power
Dam
SR 91
Perch
Lake
Guadalupe County
New Mexico
DETAIL MAP
Critical Habitat
Rivers/Lakes
Roads
N
0 500 1,000
Feet
Meters
0 150 300

(iii) Subunit 3b for *Helianthus paradoxus,* Westside Spring, Guadalupe County, New Mexico. From USGS 1:24,000 quadrangle Santa Rosa, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 527977, 3864746; 527990, 3864762; 527999, 3864783; 528009, 3864801; 528033, 3864823; 528054, 3864837; 528079, 3864848; 528103, 3864852; 528121, 3864843; 528125, 3864832; 528125, 3864813; 528123, 3864796; 528118, 3864780; 528108, 3864756; 528095, 3864734; 528072, 3864717; 528047, 3864697; 528018, 3864676; 527987, 3864654; 527961, 3864633; 527932, 3864613; 527906, 3864594; 527886, 3864575; 527866, 3864561; 527850, 3864551; 527836, 3864552; 527838, 3864566; 527852, 3864585; 527869, 3864606; 527886, 3864626; 527903, 3864648; 527921, 3864672; 527938, 3864694; 527957, 3864716; 527961, 3864722; 527975, 3864743; thence returning to 527977, 3864746.

(iv) Note: Map of Subunit 3b for *Helianthus paradoxus* (Map 6) follows:

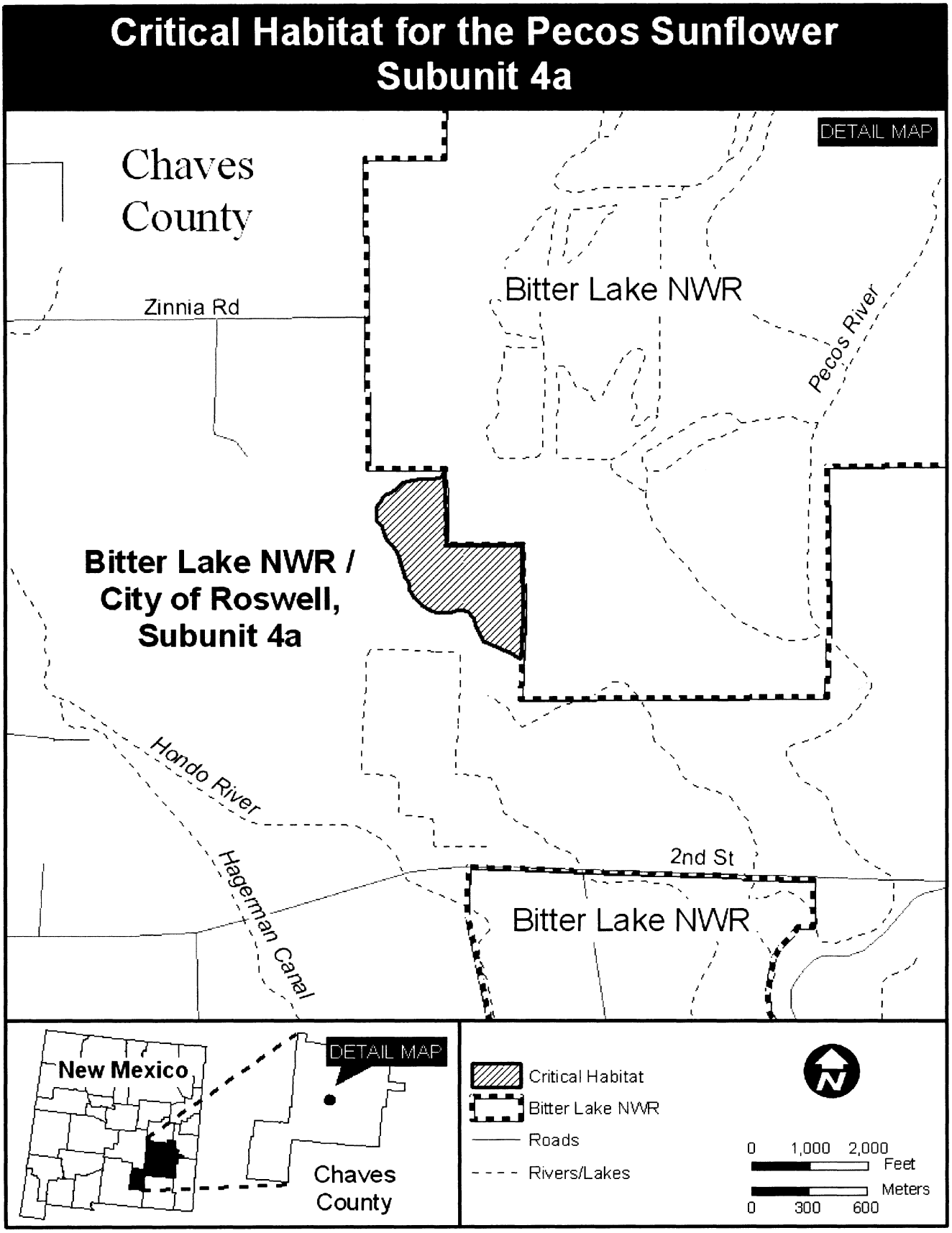

Critical Habitat for the Pecos Sunflower
Subunit 3b
DETAIL MAP
Pecos River
River Rd
Westside
Spring
Westside Spring,
Subunit 3b
Casaus Ditch
Guadalupe
County
US Hwy 54
New Mexico
DETAIL MAP
Guadalupe County
Critical Habitat
Rivers/Lakes
Springs
Roads
N
0 500 1,000
Feet
Meters
0 150 300

(9) Unit 4: Roswell/Dexter, Chaves County, New Mexico.

(i) Subunit 4a for *Helianthus paradoxus,* Bitter Lake National Wildlife Refuge/City of Roswell Land, Chaves County, New Mexico. From USGS 1:24,000 quadrangle Bitter Lake, lands bounded by the following UTM NAD83 coordinates (meters E, meters N):

553930, 3697605; 553934, 3697207; 554338, 3697211; 554336, 3696806; 554330, 3696733; 554330, 3696665; 554327, 3696605; 554268, 3696635; 554205, 3696666; 554127, 3696699; 554092, 3696768; 554089, 3696787; 554084, 3696811; 554048, 3696856; 554021, 3696861; 553990, 3696861; 553957, 3696849; 553925, 3696849; 553881, 3696851; 553847, 3696860; 553809, 3696885; 553793, 3696903; 553765, 3696930; 553751, 3696954; 553740, 3696972; 553738, 3696995; 553733, 3697019; 553718, 3697038; 553716, 3697053; 553710, 3697067; 553702, 3697088; 553691, 3697115; 553689, 3697128; 553684, 3697150; 553673, 3697170; 553652, 3697201; 553624, 3697231; 553617, 3697248; 553614, 3697266; 553601, 3697291; 553600, 3697304; 553580, 3697324; 553571, 3697335; 553567, 3697359; 553567, 3697381; 553569, 3697402; 553577, 3697416; 553587, 3697427; 553601, 3697453; 553627, 3697474; 553647, 3697485; 553663, 3697495; 553689, 3697518; 553709, 3697535; 553731, 3697546; 553765, 3697552; 553808, 3697556; 553866, 3697558; 553895, 3697563; 553916, 3697574; 553923, 3697590; thence returning to 553930, 3697605.

(ii) Note: Map of Subunit 4a for *Helianthus paradoxus* (Map 7) follows:



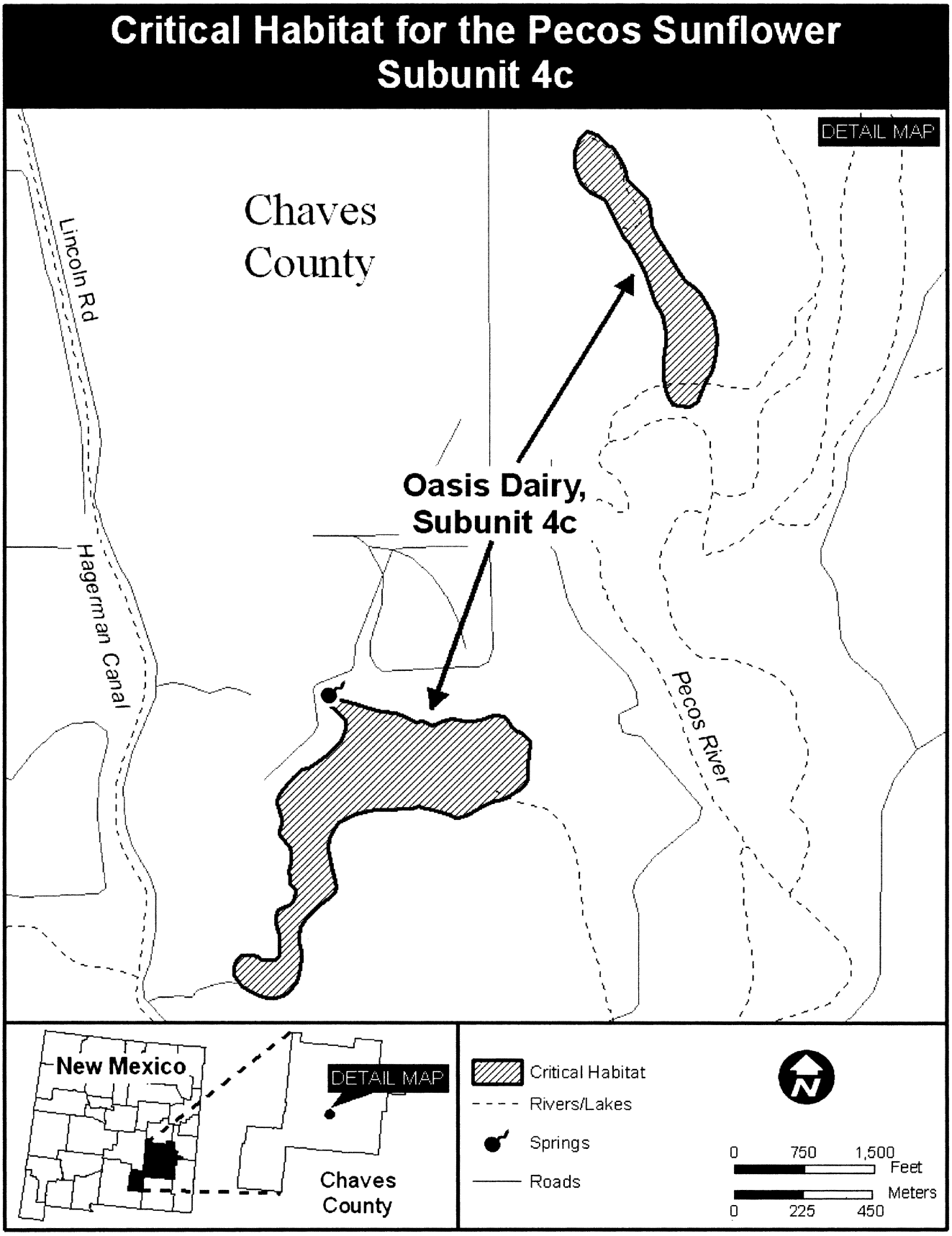
BILLING CODE 4310–55–C

(iii) Subunit 4c for *Helianthus paradoxus,* Oasis Dairy Subunit, Chaves County, New Mexico. From USGS 1:24,000 quadrangles Bottomless Lakes and South Spring, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 559225, 3688383; 559265, 3688370; 559292, 3688339; 559312, 3688333; 559335, 3688294; 559348, 3688262; 559355, 3688228; 559377, 3688207; 559420, 3688160; 559431, 3688128; 559436, 3688078; 559458, 3688030; 559492, 3687977; 559523, 3687927; 559548, 3687893; 559579, 3687870; 559595, 3687851; 559617, 3687819; 559638, 3687777; 559649, 3687709; 559647, 3687656; 559636, 3687605; 559608, 3687555; 559584, 3687497; 559559, 3687483; 559533, 3687486; 559506, 3687488; 559486, 3687523; 559475, 3687573; 559474, 3687634; 559481, 3687686; 559480, 3687729; 559469, 3687782; 559446, 3687826; 559433, 3687871; 559412, 3687924; 559385, 3687977; 559365, 3688014; 559345, 3688040; 559325, 3688077; 559305, 3688122; 559282, 3688159; 559238, 3688182; 559204, 3688219; 559184, 3688267; 559184, 3688314; 559199, 3688359; thence returning to 559225, 3688383.

558767, 3686447; 558771, 3686449; 558790, 3686451; 558823, 3686444; 558852, 3686446; 558879, 3686451; 558899, 3686458; 558917, 3686464; 558932, 3686466; 558952, 3686459; 558963, 3686453; 558977, 3686433; 558986, 3686422; 558997, 3686411; 559012, 3686407; 559030, 3686392; 559038, 3686377; 559038, 3686361; 559035, 3686343; 559031, 3686291; 559031, 3686253; 559026, 3686238; 559014, 3686223; 558985, 3686205; 558960, 3686191; 558934, 3686182; 558915, 3686177; 558884, 3686164; 558866, 3686152; 558839, 3686137; 558817, 3686127; 558804, 3686124; 558795, 3686123; 558772, 3686135; 558745, 3686144; 558722, 3686150; 558700, 3686157; 558678, 3686161; 558650, 3686157; 558621, 3686154; 558589, 3686153; 558561, 3686152; 558534, 3686153; 558498, 3686144; 558467, 3686137; 558439, 3686122; 558415, 3686108; 558398, 3686086; 558385, 3686058; 558380, 3686024; 558387, 3685985; 558396, 3685944; 558404, 3685914; 558408, 3685894; 558404, 3685879; 558387, 3685862; 558363, 3685843; 558338, 3685818; 558318, 3685805; 558305, 3685787; 558290, 3685762; 558284, 3685734; 558286, 3685712; 558292, 3685684; 558294, 3685662; 558288, 3685634; 558286, 3685609; 558276, 3685584; 558262, 3685566; 558253, 3685552; 558232, 3685540; 558208, 3685531; 558183, 3685532; 558148, 3685542; 558126, 3685553; 558099, 3685568; 558086, 3685583; 558073, 3685608; 558071, 3685633; 558079, 3685654; 558095, 3685671; 558115, 3685672; 558132, 3685672; 558150, 3685666; 558163, 3685655; 558192, 3685654; 558209, 3685658; 558221, 3685671; 558221, 3685689; 558221, 3685714; 558220, 3685738; 558211, 3685759; 558209, 3685781; 558207, 3685799; 558218, 3685819; 558232, 3685829; 558250, 3685836; 558262, 3685843; 558270, 3685859; 558275, 3685880; 558273, 3685888; 558255, 3685909; 558253, 3685931; 558252, 3685946; 558256, 3685956; 558259, 3685975; 558260, 3685989; 558258, 3686009; 558256, 3686024; 558250, 3686035; 558240, 3686046; 558233, 3686056; 558223, 3686065; 558221, 3686071; 558220, 3686078; 558224, 3686092; 558227, 3686102; 558227, 3686119; 558219, 3686147; 558215, 3686174; 558216, 3686193; 558228, 3686212; 558243, 3686232; 558267, 3686257; 558281, 3686271; 558297, 3686283; 558315, 3686290; 558338, 3686302; 558355, 3686314; 558368, 3686325; 558393, 3686346; 558406, 3686362; 558423, 3686381; 558432, 3686397; 558438, 3686423; 558437, 3686445; 558425, 3686461; 558410, 3686475; 558392, 3686490; 558373, 3686507; 558364, 3686529; 558413, 3686519; 558466, 3686502; 558514, 3686488; 558558, 3686475; 558601, 3686470; 558635, 3686457; 558667, 3686443; 558689, 3686445; 558720, 3686431; thence returning to 558767, 3686447.

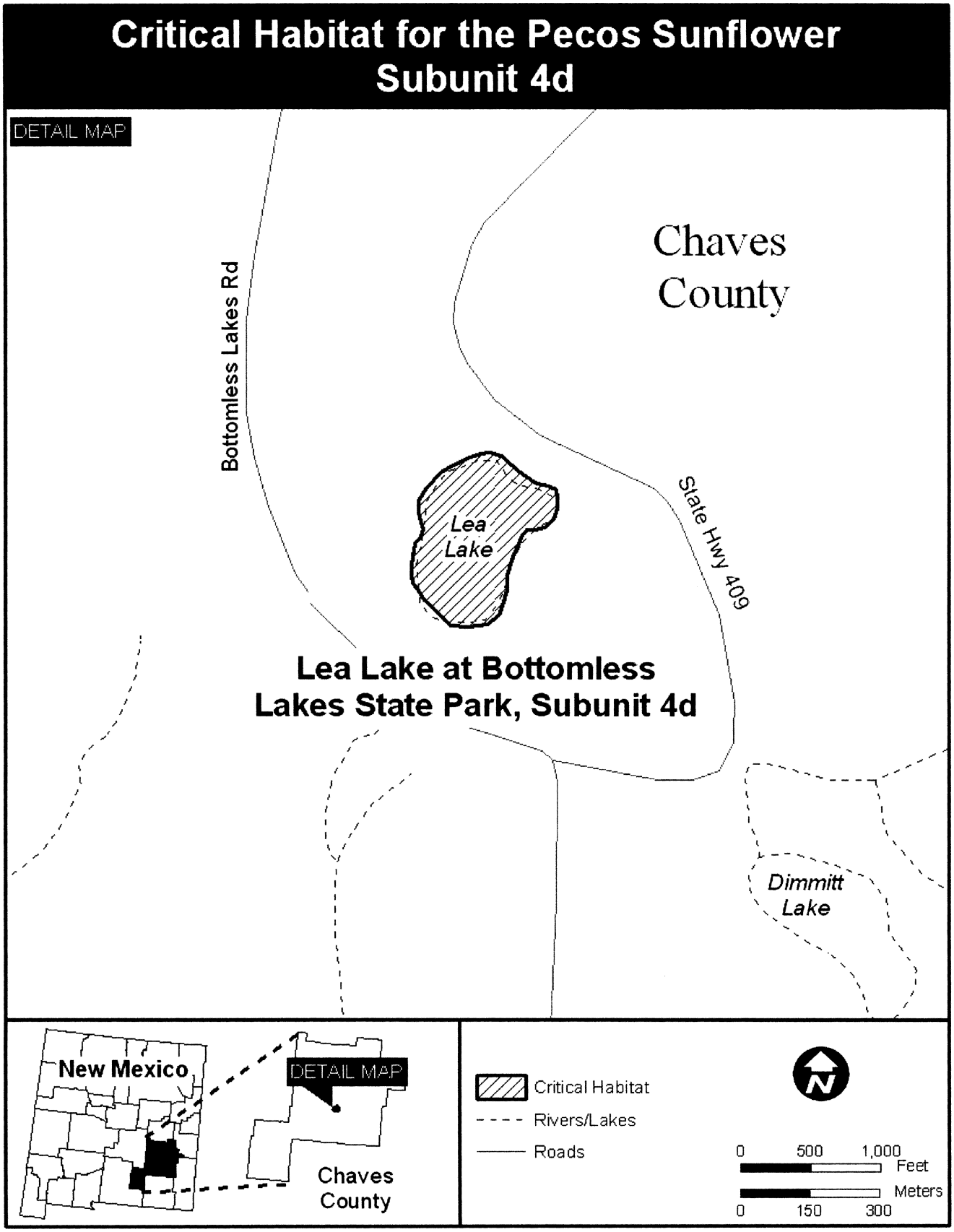
(iv) Note: Map of Subunit 4c for *Helianthus paradoxus* (Map 8) follows:

BILLING CODE 4310–55–P


Critical Habitat for the Pecos Sunflower
Subunit 4c
DETAIL MAP
Chaves
County
Lincoln Rd
Hagerman Canal
Pecos River
Oasis Dairy,
Subunit 4c
New Mexico
DETAIL MAP
Chaves
County
Critical Habitat
Rivers/Lakes
Springs
Roads
N
0 750 1,500
Feet
Meters
0 225 450

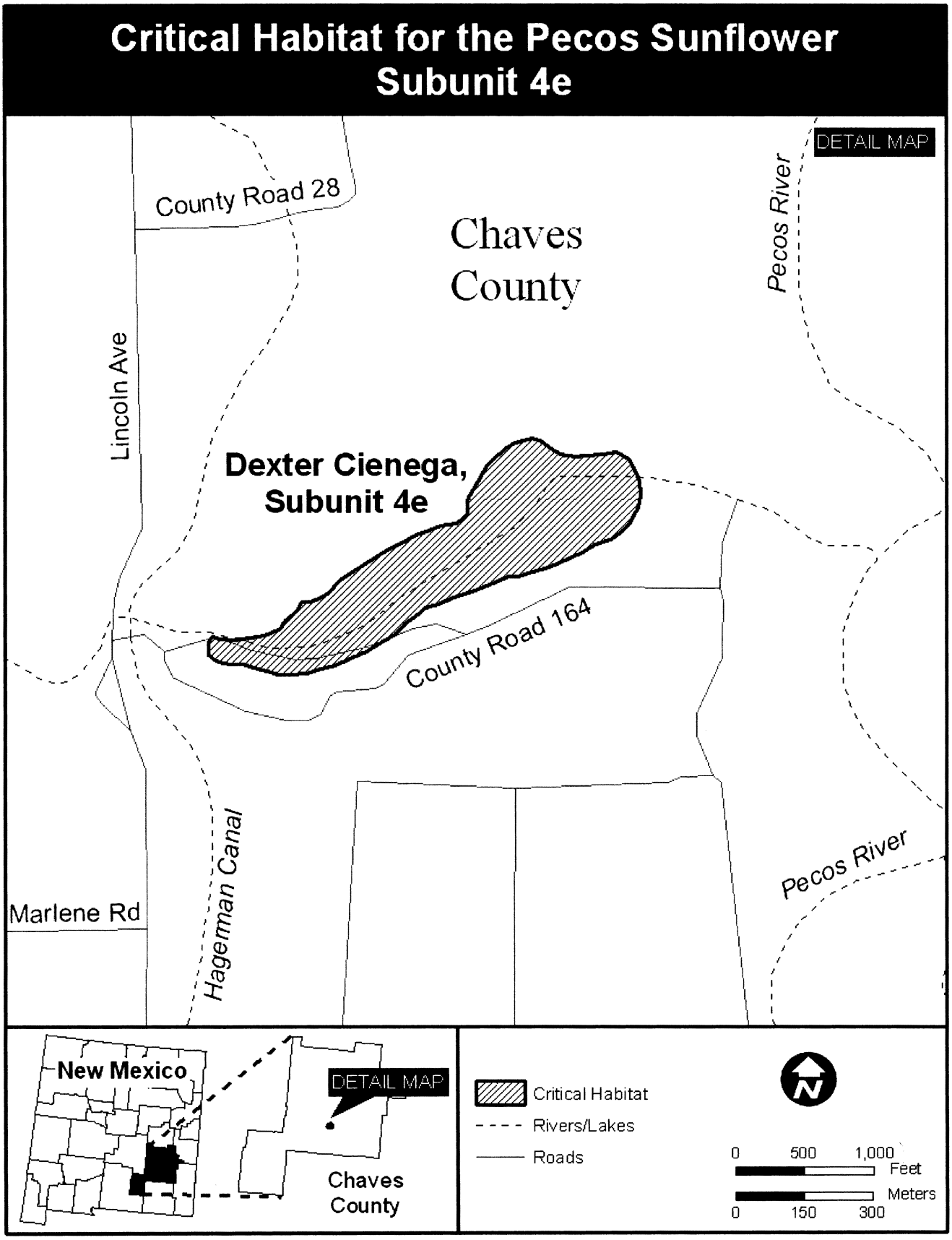
(v) Subunit 4d for *Helianthus paradoxus,* Lea Lake at Bottomless Lakes State Park, Chaves County, New Mexico. From USGS 1:24,000 quadrangle Bottomless Lakes, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 562371, 3687020; 562381, 3687019; 562402, 3687011; 562419, 3686993; 562437, 3686976; 562464, 3686956; 562476, 3686950; 562499, 3686947; 562515, 3686938; 562519, 3686919; 562520, 3686895; 562511, 3686875; 562495, 3686857; 562483, 3686851; 562471, 3686849; 562453, 3686850; 562442, 3686836; 562432, 3686814; 562420, 3686784; 562409, 3686747; 562410, 3686718; 562402, 3686690; 562391, 3686663; 562366, 3686642; 562325, 3686637; 562286, 3686639; 562276, 3686652; 562230, 3686695; 562216, 3686715; 562203, 3686732; 562200, 3686752; 562201, 3686770; 562203, 3686791; 562208, 3686818; 562221, 3686835; 562225, 3686852; 562222, 3686868; 562216, 3686888; 562217, 3686914; 562230, 3686939; 562250, 3686958; 562270, 3686978; 562293, 3686992; 562323, 3687006; 562351, 3687016; thence returning to 562371, 3687020.

(vi) Note: Map of Subunit 4d for *Helianthus paradoxus* (Map 9) follows:


Critical Habitat for the Pecos Sunflower
Subunit 4d
DETAIL MAP
Chaves
County
Bottomless Lakes Rd
State Hwy 409
Lea
Lake
Lea Lake at Bottomless
Lakes State Park, Subunit 4d
Dimmitt
Lake
New Mexico
DETAIL MAP
Chaves
County
Critical Habitat
Rivers/Lakes
Roads
N
0 500 1,000
Feet
Meters
0 150 300

(vii) Subunit 4e for *Helianthus paradoxus,* Dexter Cienega, Chaves County, New Mexico. From USGS 1:24,000 quadrangle Dexter East, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 559316, 3678509; 559316, 3678510; 559329, 3678521; 559339, 3678530; 559355, 3678547; 559372, 3678557; 559402, 3678565; 559412, 3678566; 559432, 3678560; 559452, 3678542; 559471, 3678532; 559508, 3678527; 559525, 3678528; 559567, 3678532; 559595, 3678535; 559622, 3678521; 559635, 3678495; 559645, 3678472; 559648, 3678443; 559642, 3678414; 559630, 3678392; 559622, 3678376; 559606, 3678361; 559582, 3678344; 559549, 3678334; 559519, 3678314; 559493, 3678303; 559464, 3678290; 559439, 3678280; 559410, 3678271; 559381, 3678263; 559358, 3678260; 559329, 3678249; 559293, 3678233; 559265, 3678223; 559234, 3678215; 559205, 3678201; 559177, 3678193; 559160, 3678178; 559132, 3678157; 559111, 3678136; 559083, 3678118; 559048, 3678097; 559012, 3678082; 558980, 3678067; 558948, 3678058; 558915, 3678047; 558884, 3678045; 558855, 3678046; 558830, 3678054; 558801, 3678062; 558776, 3678067; 558754, 3678070; 558732, 3678071; 558714, 3678078; 558703, 3678089; 558702, 3678101; 558703, 3678116; 558711, 3678128; 558728, 3678126; 558757, 3678122; 558776, 3678124; 558812, 3678130; 558833, 3678134; 558843, 3678141; 558856, 3678145; 558869, 3678166; 558895, 3678186; 558906, 3678205; 558926, 3678207; 558948, 3678215; 558966, 3678227; 558976, 3678240; 558995, 3678256; 559017, 3678272; 559038, 3678284; 559074, 3678307; 559099, 3678323; 559124, 3678334; 559157, 3678352; 559185, 3678364; 559210, 3678373; 559242, 3678378; 559260, 3678389; 559269, 3678401; 559268, 3678424; 559272, 3678437; 559285, 3678457; 559299, 3678486; thence returning to 559316, 3678509.

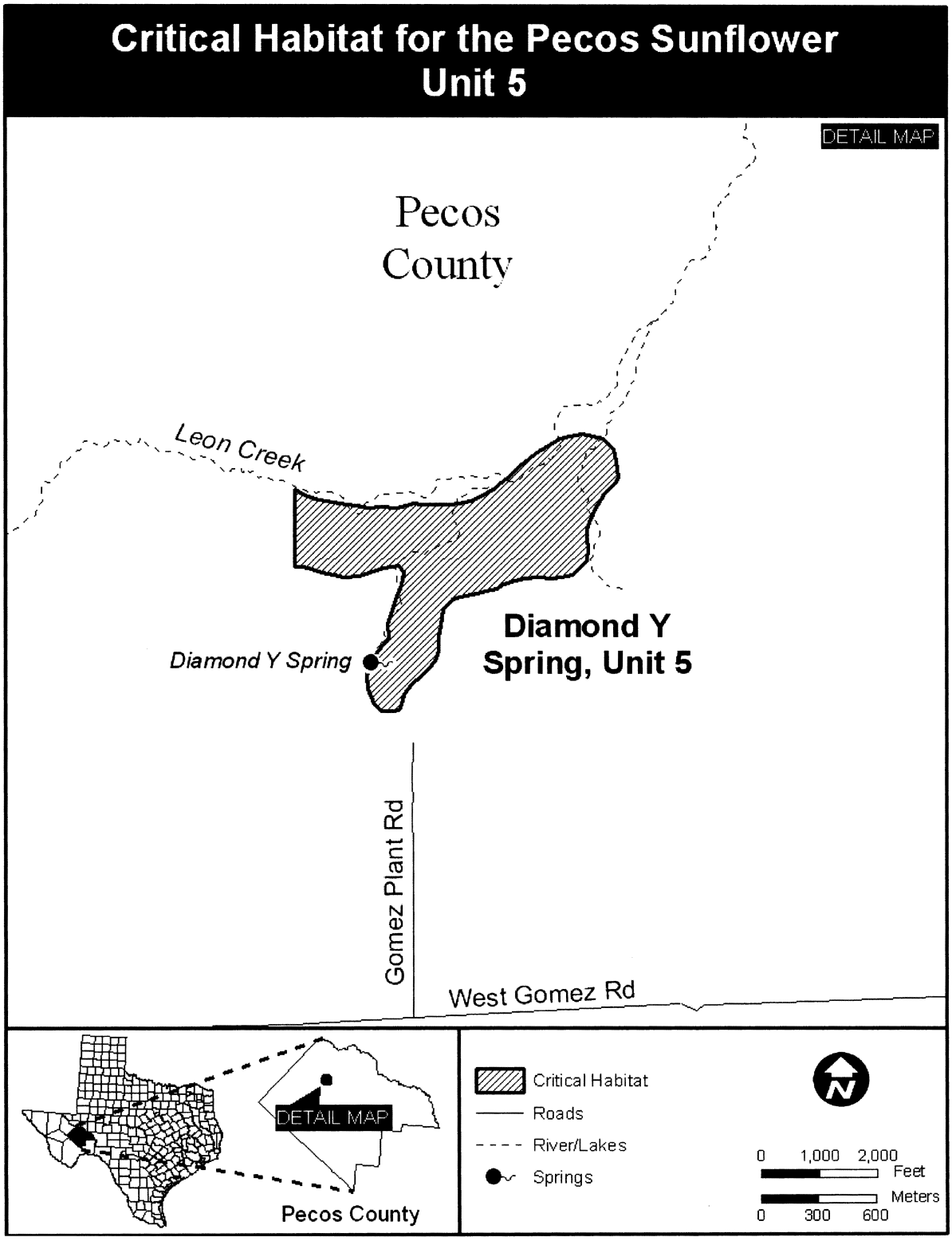
(viii) Note: Map of Subunit 4e for *Helianthus paradoxus* (Map 10) follows:


Critical Habitat for the Pecos Sunflower
Subunit 4e
DETAIL MAP
County Road 28
Chaves
County
Pecos River
Lincoln Ave
Dexter Cienega,
Subunit 4e
County Road 164
Hageman Canal
Marlene Rd
Pecos River
New Mexico
DETAIL MAP
Chaves
County
Critical Habitat
Rivers/Lakes
Roads
N
0 500 1,000
Feet
Meters
0 150 300

(10) Unit 5: West Texas—Diamond Y Springs, Pecos County, Texas.

(i) Unit 5 for *Helianthus paradoxus*, West Texas—Diamond Y Spring, Pecos County, Texas. From USGS 1:24,000 quadrangles Diamond Y Spring and Fort Stockton West, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 699410, 3432430; 699368, 3432356; 699338, 3432300; 699323, 3432253; 699323, 3432205; 699328, 3432141; 699320, 3432086; 699291, 3432054; 699243, 3432009; 699185, 3431996; 699137, 3431991; 699068, 3431999; 698992, 3431993; 698941, 3431977; 698883, 3431961; 698849, 3431935; 698793, 3431924; 698719, 3431906; 698679, 3431901; 698616, 3431884; 698565, 3431825; 698552, 3431741; 698542, 3431685; 698539, 3431606; 698523, 3431558; 698486, 3431510; 698425, 3431455; 698391, 3431420; 698362, 3431378; 698348, 3431325; 698333, 3431296; 698295, 3431288; 698240, 3431291; 698200, 3431330; 698168, 3431405; 698163, 3431479; 698190, 3431561; 698237, 3431624; 698280, 3431680; 698274, 3431751; 698303, 3431839; 698325, 3431900; 698346, 3431952; 698356, 3432021; 698333, 3432058; 698253, 3432048; 698126, 3432003; 698044, 3431995; 697994, 3432011; 697933, 3432019; 697877, 3432040; 697831, 3432050; 697785, 3432055; 697785, 3432459; 697841, 3432429; 697913, 3432408; 697990, 3432391; 698060, 3432384; 698110, 3432373; 698173, 3432366; 698237, 3432370; 698321, 3432366; 698371, 3432377; 698417, 3432387; 698459, 3432384; 698519, 3432380; 698565, 3432380; 698607, 3432380; 698653, 3432387; 698710, 3432401; 698759, 3432426; 698830, 3432461; 698872, 3432497; 698918, 3432532; 698978, 3432592; 699059, 3432656; 699119, 3432691; 699183, 3432726; 699262, 3432748; 699299, 3432756; 699405, 3432732; 699463, 3432674; 699473, 3432613; 699484, 3432525; 699468, 3432494; thence returning to 699410, 3432430.

(ii) Note: Map of Unit 5 for *Helianthus paradoxus* (Map 11) follows:



* * * * *

Dated: March 15, 2007.

Todd Willens,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 07–1396 Filed 3–26–07; 8:45 am]

BILLING CODE 4310–55–C