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Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Helianthus Paradoxus (Pecos Sunflower); Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FWS–R2–ES–2008–0002; 92210–1117–0000–B4]

RIN 1018–AV02

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

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for *Helianthus paradoxus* (Pecos Sunflower) under the Endangered Species Act of 1973, as amended (Act). In total, approximately 1,305 acres (ac) (528) hectares (ha)) in Chaves, Cibola, and Guadalupe counties, New Mexico, and in Pecos County, Texas, fall within the boundaries of the final critical habitat designation.

DATES: This final rule becomes effective on May 1, 2008.

ADDRESSES: This final rule and final economic analysis is available on the Internet at *http://www.regulations.gov* and *http://www.fws.gov/southwest/es/newmexico/.* Supporting documentation we used in preparing this final rule will be available for public inspection, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, 2105 Osuna Road, NE., Albuquerque, New Mexico 87113; telephone 505–346–2525; facsimile 505–346–2542.

FOR FURTHER INFORMATION CONTACT: Wally ''J'' Murphy, Field Supervisor, U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office (see **ADDRESSES** section). If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

It is our intent to discuss only those topics directly relevant to the development and designation of critical habitat in this final rule. For additional information on *Helianthus paradoxus,* refer to the proposed critical habitat rule published in the **Federal Register** on March 27, 2007 (72 FR 14328), the final listing rule published in the **Federal Register** on October 20, 1999 (64 FR 56582), or the Pecos Sunflower Recovery Plan available on the Internet at *http://www.regulations.gov* and *http://www.ecos.fws.gov/docs/recovery_plans/2005/050915.pdf.*

Previous Federal Actions

On March 27, 2007, we published a proposed rule to designate critical habitat for *Helianthus paradoxus* (72 FR 14328). We solicited data and comments from the public on the proposed rule. The comment period opened on March 27, 2007, and closed on May 29, 2007. On December 11, 2007, we published a notice announcing the availability of the draft economic analysis, draft environmental assessment, and the reopening of the public comment period (72 FR 70269). We also announced a revision to proposed critical habitat Unit 4 and a clarification of Unit 5. Section 4(b)(2) of the Act requires that we consider economic impacts, impacts to national security, and other relevant impacts prior to making a final decision on what areas to designate as critical habitat. We solicited data and comments from the public on these draft documents, as well as on all aspects of our proposal, so that we could consider these in this final determination. This comment period closed on January 10, 2008. For more information on previous Federal actions concerning *Helianthus paradoxus,* please refer to the proposed critical habitat rule published in the **Federal Register** on March 27, 2007 (72 FR 14328), and the final listing rule published in the **Federal Register** on October 20, 1999 (64 FR 56582).

Summary of Comments and Recommendations

We requested comments from the public on the proposed designation of critical habitat for *Helianthus paradoxus* during two comment periods. The first comment period associated with the publication of the proposed rule (72 FR 14328) opened on March 17, 2007, and closed on May 29, 2007. We did not receive any requests for a public hearing during this comment period. We also requested comments on the proposed critical habitat designation, associated draft economic analysis, and draft environmental assessment during a comment period that opened December 11, 2007, and closed on January 10, 2008 (72 FR 70269). We contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule and/or draft economic analysis and draft environmental assessment during these two comment periods.

During the first comment period, we received seven comments directly addressing the proposed critical habitat designation: one from a State agency, one from a Federal agency, and five from organizations or individuals. During the second comment period, we received seven comments addressing the proposed critical habitat designation, the draft economic analysis, or the draft environmental assessment. All substantive information provided during both public comment periods has been either incorporated directly into this final determination or addressed below.

Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from three knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. We received a response from one of the three peer reviewers from which we requested comments. The peer reviewer generally agreed that the physical and biological features identified in the proposed designation for *Helianthus paradoxus* were accurate. However, the peer reviewer suggested that the designation should be expanded to include additional areas and increase the size of existing units.

We reviewed all comments received from the public and the peer reviewer for substantive issues and new information regarding the designation of critical habitat for *Helianthus paradoxus,* and address them in the following summary.

Peer Reviewer Comments

1. *Comment:* The peer reviewer questioned why the proposed critical habitat designation did not include additional sites that were occupied by *Helianthus paradoxus* at the time of listing.

Our Response: In the notice of availability published on December 11, 2007 (72 FR 70269), we proposed to include two additional sites (Subunits 4a and 4b) within the designation. Nevertheless, we recognize that this critical habitat designation does not include all of the areas that are occupied by *H. paradoxus* throughout the species' range. Additional sites were not proposed as critical habitat because it is unclear whether they are stable or support sufficient numbers of plants to be considered stable and therefore do not meet our criteria for designation as critical habitat for *H. paradoxus* (Blue Earth Ecological Consultants, Inc.

2007b, p. 3; Poole 1992, p. 27; 2006, p. 3). These additional areas that were not proposed as critical habitat 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. Please see the ''Criteria Used to Identify Critical Habitat'' section below for more discussion of stable populations.

2. *Comment:* The peer reviewer stated that the map of Unit 5 at Diamond Y Spring Preserve in West Texas does not depict proposed critical habitat on the north side of Leon Creek, even though the area is occupied by *Helianthus paradoxus.*

Our Response: We reviewed the map and description of the boundaries for Unit 5 and found that the map in the proposed rule incorrectly displayed Unit 5. However, the textual description of the boundaries is accurate. We have corrected the map in this final rule. The maps published in the **Federal Register** are for illustration purposes and the amount of detail that can be published is limited. If additional clarification is necessary, contact the New Mexico Ecological Services Field Office (see **ADDRESSES** section).

3. *Comment:* The peer reviewer questioned whether Unit 5 contained a small group of plants downstream of The Nature Conservancy's Diamond Y Spring Preserve at a nearby highway right-of-way.

Our Response: In our notice of availability published on December, 11, 2007 (72 FR 70269), we clarified that the right-of-way site should not have been included in the unit description. Our notice revised proposed Unit 5 and did not include the right-of-way as critical habitat because this small area is not known to be able to support sufficient numbers of plants to be considered stable (Blue Earth Ecological Consultants, Inc. 2007b, p 3; Poole 2006, p. 3). Please see the ''Criteria Used to Identify Critical Habitat'' section below for more discussion of stable populations.

4. *Comment:* The peer reviewer questioned whether wetland filling and development has been documented as a threat within Unit 5.

Our Response: Our final economic analysis found that the land area at Diamond Y Spring Preserve proposed as critical habitat in Unit 5 does not face residential development pressure. However, the subsurface mineral rights are not owned by the landowners. Therefore, a future potential threat of wetland filling and development for drilling pads and access roads for oil and gas exists (see pages 3–10 of the final economic analysis). The information in the ''Final Critical Habitat Designation'' section below has been updated to reflect this information.

5. *Comment:* The peer reviewer questioned whether landowners were contacted prior to critical habitat being proposed for designation.

Our Response: We attempted to contact all of the private landowners on February 28, 2007, prior to the publication of the proposed rule. Furthermore, we sent the proposed rule and December 11, 2007, notice of availability to all interested parties, including landowners. Additionally, contractors contacted affected private parties during the development of the draft and final economic analyses.

Comments From the Public

6. *Comment:* The Service should exclude the La Joya Wildlife Management Area (Unit 2) from the final designation.

Our Response: We agree. After conducting an analysis under section 4(b)(2) of the Act, we concluded that the benefits of excluding Unit 2 from the final designation outweigh the benefits of inclusion (see ''Exclusions under Section 4(b)(2)'' section).

7. *Comment:* A management plan has been developed for Unit 2. This plan provides considerably more conservation for the species than the designation of critical habitat.

Our Response: We agree. Please see our response to Comment 6.

8. *Comment:* La Joya Wildlife Management Area lies in the path of the Westwide Energy Corridor, a proposal that would focus energy infrastructure such as pipelines, within a predefined corridor. Critical habitat would help prevent this proposed project from adversely impacting *Helianthus paradoxus.*

Our Response: Projects associated with the Westwide Energy Corridor proposal that are funded, permitted, or carried out by a Federal agency (i.e., projects with a Federal nexus) would require section 7 consultation under the adverse modification standard if they affected designated critical habitat (see ''Section 7 Consultation'' section for more discussion of this process). However, because this area is also occupied by *Helianthus paradoxus,* consultation would be required under section 7 of the Act under the jeopardy standard whether the area is designated as critical habitat or not. As discussed in our environmental assessment and in the ''Application of the Adverse Modification Standard'' section, the outcome of such consultations under the jeopardy and adverse modification standards are not likely to differ materially (Service 2008, p. 23, 24). Further, as discussed under our response to comment 6 above, we have excluded the La Joya Wildlife Management Area from this final designation.

9. *Comment:* One commenter expressed concern that there are areas containing *Helianthus paradoxus* that were not proposed as critical habitat. The Service should designate additional occupied sites that were not identified in the proposed rule.

Our Response: See response to Comment 1.

10. *Comment:* The Service must include suitable unoccupied habitat within the final designation to conserve *Helianthus paradoxus.*

Our Response: We disagree. We are not able to designate unoccupied areas as critical habitat for a species unless we make a determination that those areas are essential to the conservation of the species. We used a specific set of criteria, consistent with the biology of this species, to determine habitat essential for the conservation of *Helianthus paradoxus.* Please see the ''Criteria Used to Identify Critical Habitat'' section below for additional discussion of these criteria. Based on the areas that were identified using these criteria, we determined that additional, unoccupied areas were not essential for the conservation of the species.

11. *Comment:* If the Service excludes an area because of a management plan, the plan must fulfill the listing criteria of the Act. It cannot be voluntary, unenforceable, speculative, nor have funding uncertainties.

Our Response: Pursuant to section 4(b)(2) of the Act, we are required to take into consideration the economic, national security, and any other relevant impact of specifying any particular area as critical habitat. We may exclude any area from the critical habitat designation if we determine that the benefits of such exclusion outweigh the benefits (i.e., biological or conservation benefits) of including such area within critical habitat, providing that the failure to designate such area will not result in the extinction of the species. This analysis includes consideration of the impacts of the designation, the benefits to the species, as well as policy considerations such as national security, Tribal relationships, and impacts on conservation partnerships. We have utilized management plans in this rule as a part of this balancing analysis under section 4(b)(2) of the Act. Critical

habitat does not require proactive management, only that Federal actions do not adversely modify the habitat. In many cases, management plans provide for proactive management and conservation of listed species, thereby improving the habitat quality rather than just maintaining the status quo. This proactive management may be more beneficial to the conservation of the species than the critical habitat prohibitions would be. Although these plans may not always be fully certain of implementation and funding, taken in concert with the other impacts analyzed under section 4(b)(2), the benefits of exclusion may still outweigh the benefits of inclusion. Please see the ''Exclusions Under Section 4(b)(2)'' section for further discussion of management plans in 4(b)(2) analyses.

12. *Comment:* The Service should not exclude Bitter Lake National Wildlife Refuge from the designation.

Our Response: We agree. We have determined that certain areas managed by Bitter Lake National Wildlife Refuge (Refuge) meet the definition of occupied critical habitat for *Helianthus paradoxus*. The Refuge has developed and completed a Comprehensive Conservation Plan (CCP) that provides the framework for protection and management of all trust resources, including federally listed species and sensitive natural habitats. In our December 11, 2007, notice of availability (72 FR 70269), we stated our belief that the Refuge lands are being adequately protected and managed for the conservation of *H. paradoxus*. Nevertheless, we believe it is appropriate to designate lands within the Bitter Lake National Wildlife Refuge and the associated Refuge Farm as critical habitat in this final rule.

13. *Comment:* The maps for Bitter Lake National Wildlife Refuge and the Refuge Farm include areas that are not occupied by the species and are not suitable habitat.

Our Response: Upon further review of records from Bitter Lake National Wildlife Refuge, we have determined that the proposal included lands that are not occupied by the species, do not contain physical and biological features essential to the conservation of the species, and do not themselves meet the definition of critical habitat (Service 2008, p. 1). For example, the proposed maps included open water areas, dry native grassland, cultivated fields, and other non-essential features and habitat (Service 2008, p. 1). As such, we corrected the maps for Subunits 4a and 4b to include only those areas that contain suitable *Helianthus paradoxus* habitat and possess all of the primary constituent elements (PCEs). As explained in response to Comment 1, we subsequently removed an approximately 3,586 ac (1,451 ha) area of Federal land that was proposed as critical habitat in Subunit 4a and 4b from this final designation because these areas do not meet our criteria for designation of critical habitat for *H. paradoxus*.

14. *Comment:* The Service should include Bureau of Land Management (BLM) lands adjacent to Bitter Lake National Wildlife Refuge in the critical habitat designation for *Helianthus paradoxus*.

Our Response: We have determined that BLM lands adjacent to the Refuge do not contain the physical and biological features essential to the conservation of *Helianthus paradoxus* nor do they meet our criteria for designation as critical habitat for this species (see responses to comments 9 and ''Criteria Used to Identify Critical Habitat'' section below).

15. *Comment:* The Service should recognize that the designation of critical habitat for *Helianthus paradoxus* on Bitter Lake National Wildlife Refuge would provide benefits to the Roswell springsnail (*Pyrgulopsis roswellensis*), Koster's springsnail (*Juturnia kosteri*), Noel's amphipod (*Gammarus desperatus*), and the Pecos assiminea (*Assiminea pecos*).

Our Response: This discussion is provided in our environmental assessment (Service 2008), which included an analysis of the general benefits of an overlap with other listed species.

16. *Comment:* The Service continues to understate the impact of livestock grazing on *Helianthus paradoxus*. If private lands are designated as critical habitat, *H. paradoxus* would benefit from the higher protections provided under the adverse modification standard than the jeopardy standard.

Our Response: We disagree. The proposed rule states that one of the threats to *Helianthus paradoxus* is overgrazing by livestock during the species' flowering season (72 FR 14328). The proposed rule notes that 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). Nevertheless, we also note that properly managed livestock grazing can be compatible with *H. paradoxus* conservation.

Federal agencies already consult with us on activities in areas occupied by the species. Action on private lands that are not federally funded, authorized, or permitted, do not require section 7 consultations. Our environmental assessment found that a designation of critical habitat would have no effect on livestock grazing because there is no Federal nexus associated with any of the ongoing livestock grazing within any of the critical habitat units.

17. *Comment:* The designation should be larger to buffer the species from extended droughts caused by climate change. Critical habitat would provide an increased ability to the Service to respond to anthropogenic threats to maximize the species' chances of surviving climate change.

Our Response: The commenter did not cite any specific information that we could review on the vulnerability of *Helianthus paradoxus* to broad-scale environmental changes, such as climate change. One of our criteria for selecting areas to include in critical habitat was the size and stability of populations. We focused on large, stable occurrences because they are more likely to support intact ecosystem processes and native species. Therefore, we believe these areas have the highest likelihood of persisting through the environmental extremes and to withstand future introduced stressors such as climate change.

We are not aware of any reliable information that is currently available to us that was not considered in this designation process. This final determination constitutes our best assessment of areas needed for the conservation of the species. Much remains to be learned about this species; should credible, new information become available which contradicts this designation, we will reevaluate our analysis and, if appropriate, propose to modify this critical habitat designation, depending on available funding and staffing. We must make this designation on the basis of the information available at this time, and we may not delay our decision until more information about the species and its habitat are available (*Southwest Center for Biological Diversity* v. *Babbitt*, 215 F.3d 58 D.C. Cir. 2000).

18. *Comment:* A more expansive critical habitat designation would address the threat of hybridization with common sunflower (*Helianthus annuus*).

Our Response: Pecos sunflower will naturally hybridize with common sunflower (*Helianthus annuus*). As noted in the recovery plan, there is concern about the extent to which backcrosses from common sunflower could affect the genetic integrity of small Pecos sunflower populations.

Obvious hybrid plants have been found on the drier peripheries of the Pecos sunflower populations at Santa Rosa and La Joya, New Mexico. However, the dense stands of Pecos sunflower on wetter habitats appear to remain genetically pure based upon their appearance (Sivinski, personal observations, 1994–2004, cited in Service 2005, p. 10). We conclude that a more expansive designation would do nothing to alleviate the threat of hybridization.

19. *Comment:* The Service did not consider the threat of air pollution on *Helianthus paradoxus*. The National Park Service has described this threat for another, recently delisted sunflower, *Helianthus eggertii* (Olson undated).

Our Response: We appreciate the additional information; however, we believe we do not have specific and credible information to consider air pollution as a threat to *Helianthus paradoxus*. The National Park Service information concerns an area where acid deposition from air pollution is much more prevalent than it is in the range of *H. paradoxus*.

20. *Comment:* The designation of Unit 2 would result in unresolvable conflicts between the Rio Grande silvery minnow (*Hybognathus amarus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) because these species are also dependent on the same limited supply of water as *Helianthus paradoxus*.

Our Response: The commenter did not provide any indication of the types of conflicts that might occur. The final economic analysis does point to one recorded instance where delivery of water to La Joya's holding ponds was postponed so that water would be available for the Rio Grande silvery minnow downstream. However, no adverse impacts to *Helianthus paradoxus* were recorded as a result of that event. It is therefore unclear whether any potential changes to water management would be needed to protect the plant. The economic analysis therefore does not quantify future impacts on water withdrawals in this unit.

We are required to designate critical habitat to the maximum extent prudent and determinable for each species that is listed as threatened or endangered within the United States. As part of this process, within the specific areas occupied by the species, we are to determine those physical and biological features essential to the conservation of the species and define critical habitat based on those features. We recognize that, in some cases, critical habitat for one species may overlap with critical habitat for another species which could result in conflicts in management or conservation actions. These conflicts would need to be addressed on a case-by-case basis with the Federal action agencies involved in any given consultation under section 7 of the Act to ensure that the actions would not result in the adverse modification of critical habitat for each species concerned.

21. *Comment:* The jeopardy standard does not protect habitat that is not occupied by *Helianthus paradoxus*.

Our Response: We have determined that unoccupied areas are not essential to the conservation of this species; therefore, we are precluded from designating such areas as critical habitat. When Federal actions do not directly or indirectly affect *Helianthus paradoxus*, the actions do not require section 7(a)(2) consultation and thus, are not protected by the jeopardy standard. However, when a Federal agency funds, authorizes, or carries out an action that may affect *H. paradoxus*, the Act requires that the agency consult with us under section 7 of the Act. Our view is that any Federal action that affects *H. paradoxus* should be considered a situation that ''may affect'' the species and should undergo section 7 consultation under the jeopardy standard. As in the past, the Federal action agency will continue to make the determination as to whether their project ''may affect'' the species or designated critical habitat.

22. *Comment:* The destruction of a single population of *Helianthus paradoxus* would violate the Act's prohibition on adverse modification.

Our Response: Activities that may result in the destruction or adverse modification of critical habitat include those that alter the physical and biological features to an extent that the value of critical habitat for the conservation of *Helianthus paradoxus* is appreciably reduced (i.e., with the implementation of the proposed project, will the critical habitat remain functional). We note that such activities may also jeopardize the continued existence of the species. Actions that would be expected to both jeopardize the continued existence of *H. paradoxus* and destroy or adversely modify its critical habitat would include those that significantly and detrimentally alter the species' habitat over an area large enough that the likelihood of *H. paradoxus'* persistence and recovery range-wide is significantly reduced. Thus, the likelihood of an adverse modification or jeopardy determination would depend on the baseline condition of the species as a whole.

Comments Related to the Draft Economic Analysis

23. *Comment:* According to the draft economic analysis, most of the projected costs associated with critical habitat for *Helianthus paradoxus* are from non-native species control. Non-native species control is voluntary on state and private lands and has been ongoing on the Refuge. Therefore, critical habitat designation does not cause these funds to be expended and should not be a basis for excluding areas from the final designation.

Our Response: The final economic analysis has been updated to include an assessment of incremental costs (i.e., those costs directly associated with the designation of critical habitat). While the costs of non-native species management are presented as part of the coextensive economic impacts associated with the conservation of *Helianthus paradoxus*, they are considered to be baseline impacts (i.e., not directly associated with this rulemaking) in the final economic analysis (Appendix B). As such they are not considered to be costs of including those areas as critical habitat.

24. *Comment:* Benefits that should have been considered in the economic analysis include the benefit of National Wildlife Refuges to neighboring communities, the economic benefits to The Nature Conservancy, and the value of ecosystem services. Specifically, the Service should consider economic benefits such as additional protection of National Wildlife Refuge lands that currently attract visitors and provide benefits to local communities.

Our Response: Where data are available, the final economic analysis attempts to recognize and measure the net economic impact of the proposed designation. However, monetization of this category of benefits would require detailed information that quantifies, for example, the recreational value added by critical habitat designation and its impact on visitation to the National Wildlife Refuge. This information is currently not available and thus is not included in the economic analysis. Such ''baseline'' benefits occur regardless of the designation of critical habitat and would not be considered in the evaluation under section 4(b)(2) of the Act.

25. *Comment:* In the economic analysis for the four invertebrates found at Bitter Lake National Wildlife Refuge, New Mexico, and on Diamond Y Spring Preserve in West Texas, it was noted that the designation of critical habitat might increase recognition and potential funding for restoration or conservation

projects. This economic benefit should be integrated into the final economic analysis for *Helianthus paradoxus*.

Our Response: We acknowledge that the general statement appeared in our economic analysis for the four invertebrates on the Refuge. However, we did not have any specific information at that time, nor are we aware of any information that is currently available to us that would permit us to quantify this assumed benefit. Please see our response to comment 23 for additional information regarding treatment of benefits in the final economic analysis.

26. *Comment:* It is unacceptable to place dollar values on Pueblo of Acoma lands in the economic analysis, as those lands will not be sold.

Our Response: The final economic analysis states that the Pueblo of Acoma lands in Unit 1a have recently been acquired by the Pueblo, and that it may wish to develop the land at some point, though no definitive plans were provided. The final economic analysis quantifies potential impacts to the Pueblo of Acoma related to the development of a management plan, monitoring costs, and management of livestock to avoid impacts to *Helianthus paradoxus*. The analysis does not quantify potential impacts on property value for Pueblo lands nor is it meant to quantify the actual property value of the area.

Comments From the State

27. *Comment:* The water source for Unit 2 is currently used by the New Mexico Department of Game and Fish (NMDGF) to inundate portions of the La Joya Wildlife Management Area. However, the water source is not secure (i.e., protected by a water right) and is subject to changing water management practices of the Middle Rio Grande Conservancy District (MRGCD).

Our Response: The designation of critical habitat would also not secure the water source. Critical habitat does not establish a preserve or provide water rights to designated areas. Designation of critical habitat requires that Federal agencies consult on actions they fund, authorize, permit, or carry out in order to ensure that the actions do not adversely modify the critical habitat. These consultations may limit the effects of changing water management, but are not guaranteed to preserve water in the area. In addition, unless there is a Federal nexus, any activities related to water management operations would not result in a consultation with us.

The water right at La Joya Wildlife Management Area is owned by MRGCD; however, NMDGF (i.e., the State of New Mexico) has a written agreement from 1960 with the MRGCD that allows them to replenish the water in six ponds from the return flow during the non-irrigation season (approximately October to February) to provide resting places for migratory waterfowl (NMDGF 2007). During this period, the MRGCD will allow the diversion of water from the return flow to an extent that such water is available (NMDGF 2007). This water is used to inundate wetland areas within La Joya Wildlife Management Area at a time of the year when other water demands are at their lowest. To date, there have been no conflicts associated with competing demands for this water. There are no known projects anticipated to impact water withdrawals in the future (Service 2008). Therefore, we find no reason that this relationship would not continue into the future.

Summary of Changes From the Proposed Rule

In preparing the final critical habitat designation for *Helianthus paradoxus*, we reviewed and considered comments from the public and peer reviewers on the March 27, 2007, proposed designation of critical habitat (72 FR 14328) and the December 11, 2007, notice announcing the availability of the draft economic analysis and draft environmental assessment, as well as the proposal of two additional subunits and the clarification of one unit as critical habitat (72 FR 70269). As a result of comments received, we made the following changes to our proposed designation:

(1) The final designation includes a correction to Subunits 4a and 4b and a clarification with respect to Unit 5. These three areas: (a) Are within the historical range of the species and were occupied at the time of listing; (b) provide the physical and biological features essential for the long-term persistence of *Helianthus paradoxus* populations; and (c) are currently occupied.

(2) We have excluded 854 ac (346 ha) of lands within the La Joya Wildlife Management Area (Unit 2) proposed as critical habitat for *Helianthus paradoxus* from the final designation (see the ''Exclusions under Section 4(b)(2) of the Act'' section of this final rule for further details).

(3) We have excluded land on the Pueblo of Laguna (Subunit 1c) proposed as critical habitat for *Helianthus paradoxus* from the final designation (see the ''Exclusions under Section 4(b)(2) of the Act'' section of this final rule for further details).

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

(a) Essential to the conservation of the species and

(b) Which may require special management consideration or protections; 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 the use of all methods and procedures that are necessary to bring any endangered 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 Federal agencies carrying out, funding, or authorizing the destruction or adverse modification of critical habitat. Section 7(a)(2) of the Act requires consultation on Federal actions that may affect 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 the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by private landowners. Where a landowner requests federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) would apply, but even in the event of a destruction or adverse modification finding, the landowner's obligation is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

For inclusion in a critical habitat designation, the habitat within the

geographical area occupied by the species at the time of listing must contain the physical and biological features essential to the conservation of the species, and be included only if those features may require special management considerations or protection. 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 (i.e., areas on which are found the PCEs laid out in the appropriate quantity and spatial arrangement for the conservation of the species). Under the Act, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed only when we determine that those areas are essential for the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines issued by the Service, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on 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 should be designated as critical habitat, our primary source of information is generally the information developed during the listing process 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.

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 we may eventually determine to be necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not promote the recovery of the species.

Areas that support populations, but are outside the critical habitat designation, will continue to be subject to conservation actions. They are also subject 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 require consultation under section 7 of the Act and 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 information available at the time of these planning efforts calls for a different outcome.

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 occupied by the species at the time of listing to designate as critical habitat, we consider those physical and biological features essential to the conservation of the species that may require special management considerations or protection. We consider the physical or biological features to be the PCEs laid out in the appropriate quantity and spatial arrangement for the conservation of the species. The PCEs 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.

We derived the specific PCEs required for *Helianthus paradoxus* from the biological needs of the species as described below. Additional information can also be found in the final listing rule published in the **Federal Register** on October 20, 1999 (64 FR 56582).

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

Helianthus 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 *Helianthus 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 *Helianthus 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). *Helianthus 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)

Helianthus 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, p. 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). *Helianthus paradoxus* can occur on 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 trees and shrubs will inhibit *H. paradoxus'* 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 within the geographical area occupied by *Helianthus paradoxus* at the time of listing that are essential to the conservation of the species and which may require special management considerations or protections. The physical and biological features are those primary constituent elements (PCEs) laid out in a specific spatial arrangement and quantity to be essential to the conservation of the species. All areas designated as critical habitat for *H. paradoxus* are currently occupied, within the species' historical geographic range, and contain sufficient PCEs to support at least one life history function.

Based on our current knowledge of the life history, biology, and ecology of the species and the habitat requirements for sustaining the essential life history functions of the species, we have determined that *Helianthus paradoxus'* 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.

This final designation is designed for the conservation of the PCEs necessary to support the life history functions of the species and the areas containing those PCEs in the appropriate quantity and spatial arrangement essential for the conservation of the species. Because all of the species' life history functions require all of the PCEs, all critical habitat units contain all of the PCEs.

Special Management Considerations or Protections

When designating critical habitat, we assess whether the areas occupied by the species at the time of listing contain the physical and biological features essential to the conservation of the species, and whether these features may require special management consideration or protections. As stated in the final listing rule (64 FR 56582), threats to *Helianthus paradoxus* and its physical and biological features 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*' flowering season, impacts from recreational activities, mowing, and highway maintenance.

The loss or alteration of wetland habitat continues to be the main threat to *Helianthus 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, *Helianthus paradoxus* has been observed 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 feet (ft) (120 meters (m)) in Pecos County and 500 ft (150 m) in Reeves County. Groundwater pumping has lessened in more 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). We are not aware of any protections afforded by Texas water law for the remaining springs that support *H. paradoxus* populations on The Nature Conservancy properties, which limits options for addressing this threat.

Livestock will eat *Helianthus 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 can be compatible 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).

Although water contamination is a significant threat for the Roswell springsnail, Koster's springsnail, Noel's amphipod, and the Pecos assiminea found on Bitter Lake National Wildlife Refuge (70 FR 46304), we have no information on whether contamination of water would affect *Helianthus paradoxus*. We did not find that reduced water quality was a threat to the species when it was listed in 1999 (64 FR 56582). Moreover, we are not aware of any research or information that documents the species' response to elevated nutrients or contaminants. For these reasons, we do not believe that water contamination is a significant threat to *H. paradoxus* at this time.

We have determined that each area included in this designation meets the definition of critical habitat for the reasons described in our unit descriptions below.

Criteria Used To Identify Critical Habitat

We are designating critical habitat in areas that were occupied by the species at the time of listing and contain PCEs in the quantity and spatial arrangement to support life history functions essential for the conservation of the species. Each such area contains all PCEs and support multiple life processes. We are also designating critical habitat in two areas that were not occupied by the species at the time of listing. We have determined that these areas, which are currently occupied, are essential to the conservation of the species.

For many species that are listed under the Act, habitat loss is a primary factor in their decline. For these species it is very important to conserve every piece of available habitat, and, in some cases, it is essential to conserve areas that may become suitable habitat in the future. This is not the case for *Helianthus paradoxus*, because this species currently exists throughout its range in a spatial arrangement that would provide for its long-term conservation, if the populations were secure from threats. For this reason, not all areas which are known to be occupied by *H. paradoxus* are required in order to conserve the species. To include all areas that are occupied by the Pecos sunflower, and unoccupied areas that could be occupied by the species, would encompass more areas than are reasonably needed to conserve the species. Thus, we developed a set of restrictive criteria to focus on those areas most likely to contribute to the long-term conservation of the species. We have chosen to focus on larger populations supported by water sources that are thought to be relatively stable. By focusing on size and stability, we believe we have chosen the populations that are most likely to become secure from threats in the long term and provide for the long-term conservation of this species.

Occupancy

We consider an area to be currently occupied if *Helianthus paradoxus* was found to be present by species experts within the last two years (Hirsch 2006, p. 1; Poole 2006, p. 1; Ulibarri 2006, p. 1; Sivinski 2007, p. 1). Two years is an appropriate time period because surveys may not occur in all areas in all years, and because plants reestablish in an area from seeds left in the ground from the previous year's production. The sunflower would be likely to persist in an area over multiple years unless major habitat modification occurred resulting in destruction of the seed bank.

Stability

In designating critical habitat, we considered the stability of the known populations, including size and status over time. According to population-level analysis conducted for *Helianthus 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 designation is based are from consistently observed populations during the last several years. Most of the sites included in this designation 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 designating currently occupied habitat that provides for important life-history functions, such as seed dispersal and genetic exchange, which 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 designating large populations, the species will persist, the potential for successful pollination is high, and genetic exchange is facilitated. Using this criteria results in some occupied areas not being included; however, we believe we have included the most important areas and in a spatial arrangement and quantity that allows for long-term conservation of the species.

Essential Areas

For areas not occupied by the species 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. *Helianthus paradoxus* critical habitat units in New Mexico and west Texas (shown in Table 1) 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, *due to the spatial distance between them*, we have determined that each of these populations, including two not occupied by the species at the time of listing (Unit 2 and Subunit 3b), are essential to the conservation of the species because they provide for the maintenance of the genetic diversity of *H. paradoxus*. The areas we have determined meet the definition of critical habitat for this species include populations containing all of the known remaining genetic diversity within the species. These areas include representation of each major subbasin in the known historical range of the species (Service 2005, p. 4).

In summary, this critical habitat designation includes populations of *Helianthus paradoxus* and habitats that possess the physical and biological features essential to the conservation of the species. We believe the populations included in this designation, if secured, would provide for the conservation of *H. paradoxus* by: (1) Maintaining the physical and biological features essential to the conservation of the species in areas where large populations

of *H. paradoxus* are known to occur; (2) maintaining the current distribution, thus preserving genetic variation throughout the range of *H. paradoxus* and minimizing the potential effects of local extinction; (3) minimizing fragmentation within populations by establishing contiguous occurrences and maintaining existing connectivity; (4) including sufficient pollinators; and (5) protecting the seed bank to ensure long-term persistence of the species.

Mapping

The designated *Helianthus paradoxus* critical habitat areas are grouped both spatially and by watershed into four larger units: West-Central New Mexico, Santa Rosa, Roswell/Dexter, and West Texas. The boundaries of the critical habitat designation for each subunit were mapped using a 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 *Helianthus paradoxus*. They do, however, represent a small area (6 ft (2 m) 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 critical habitat. To the best of our knowledge, no other areas were included within the mapped boundaries of 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 *Helianthus paradoxus* habitat. We utilized U.S. Geological Survey 7.5 minute quadrangle maps to create maps that depict the habitat containing the physical and biological features essential to the conservation of the species. 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 is 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 critical habitat boundaries, we made every effort to avoid including (within the boundaries of the map contained within this final rule) developed areas such as buildings, paved areas, and other structures that lack PCEs for *Helianthus 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 designating critical habitat in areas that we have determined were occupied at the time of listing, and that contain the PCEs laid out in the appropriate quantity and spatial arrangement to support life history functions essential for the conservation of the species. We are also designating critical habitat in areas that were not occupied at the time of listing, but are now occupied. We have determined that these areas are essential to the conservation of the species.

Final Critical Habitat Designation

The critical habitat areas described below constitute our current best assessment of areas determined to meet the definition of critical habitat for *H. paradoxus*. Table 1 outlines these areas and the threats requiring special management.

TABLE 1.—THREATS AND OCCUPANCY IN AREAS CONTAINING PHYSICAL AND BIOLOGICAL FEATURES ESSENTIAL TO THE CONSERVATION OF HELIANTHUS PARADOXUS

Geographic area/unit	Threats requiring special management or protections	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	Water withdrawal, wetland filling and development, encroachment by nonnative vegetation.	No	Yes.

TABLE 1.—THREATS AND OCCUPANCY IN AREAS CONTAINING PHYSICAL AND BIOLOGICAL FEATURES ESSENTIAL TO THE CONSERVATION OF HELIANTHUS PARADOXUS—Continued

Geographic area/unit	Threats requiring special management or protections	Occupied at the time of listing	Currently occupied
Unit 4. Roswell/Dexter			
Subunit 4a. Bitter Lake National Wildlife Refuge/ City of Roswell Land.	Water withdrawal, encroachment by nonnative vegetation; on City land, wetland filling and development, incompatible livestock management.	Yes	Yes.
Subunit 4b. Bitter Lake National Wildlife Refuge Farm	Water withdrawal and encroachment by nonnative vegetation.	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 critical habitat unit is shown in Table 2.

TABLE 2.—LANDS DESIGNATED AS CRITICAL HABITAT FOR HELIANTHUS PARADOXUS AND LAND OWNERSHIP

[Area is displayed in acres (hectares)]

Geographic area/unit	Land ownership	Lands meeting the definition of critical habitat	Lands excluded from critical habitat	Critical habitat
Subunit 1a. Rancho del Padre Spring Cienega.	Private and Tribal	26 (10)	0 (0)	26 (10)
Subunit 1b. Grants Salt Flat Wetland	Private	63 (25)	0 (0)	63 (25)
Subunit 1c. Pueblo of Laguna	Tribal	(1)	(1)	0 (0)
Unit 2. La Joya—La Joya State Wildlife Management Area.	State of New Mexico	854 (346)	854 (346)	0 (0)
Subunit 3a. Blue Hole Cienega/Blue Hole Fish Hatchery Ponds.	State of New Mexico and City of Roswell	134 (54)	0 (0)	134 (54)
Subunit 3b. Westside Spring	Private	6 (3)	0 (0)	6 (3)
Subunit 4a. Bitter Lake National Wildlife Refuge/City of Roswell Land.	U.S. Fish and Wildlife Service and City of Roswell.	576 (233)	0 (0)	576 (233)
Subunit 4b. Bitter Lake National Wildlife Refuge Farm.	U.S. Fish and Wildlife Service	96 (39)	0 (0)	96 (39)
Subunit 4c. Oasis Dairy	Private	104 (42)	0 (0)	104 (42)
Subunit 4d. Lea Lake at Bottomless Lakes State Park.	State of New Mexico	20 (8)	0 (0)	20 (8)
Subunit 4e. Dexter Cienega	Private	41 (17)	0 (0)	41 (17)
Unit 5. West Texas—Diamond Y Spring	Private	240 (97)	0 (0)	240 (97)
Total Acres (Hectares)				1,305 (528)

[1] Undefined.

Below, we present a brief description of all subunits that meet the definition of critical habitat for *Helianthus 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 26 ac (10 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 (23 ac (9 ha)) and the Pueblo of Acoma (3 ac (1 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 in the appropriate spatial arrangement and quantity, 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.

Subunit 1b is located at Grants Salt Flat Wetland. This subunit is 63 ac (25 ha) of private land in Cibola County, New Mexico. The subunit consists of an area of wet alkaline playa (i.e., a seasonal, shallow desert lake) 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 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 *Helianthus paradoxus* on every visit (Sivinski 2007). This unit is currently occupied, contains all of the PCEs in the appropriate spatial arrangement and quantity, 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, *Helianthus 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 occupied at the time of listing, is currently occupied, contains all of the PCEs in the appropriate spatial arrangement and quantity, and is threatened by water withdrawal, encroachment by nonnative vegetation, and livestock grazing during *H. paradoxus*' growing and flowering season. The Pueblo has developed a management plan for *H. paradoxus*. On the basis of this plan and our partnership with the Pueblo of Laguna, we are 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 Wildlife Management Area

Unit 2 is located in the La Joya Wildlife Management Area. This unit is 854 ac (346 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 *Helianthus paradoxus* occurs adjacent to 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 Wildlife 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 NMDGF for migratory waterfowl habitat, which is compatible with preservation of wetlands for *H. paradoxus.*

We believe this area was not occupied at the time of listing. It was discovered in 2004. This site has been found to be occupied every year since then and represents one of the largest populations of *Helianthus 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 in the appropriate spatial arrangement and quantity, 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 *Helianthus 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 stable, this population can be expected to persist in very large numbers every year.

As described below, we are excluding Unit 2, the La Joya Wildlife Management Area, from the critical habitat designation for *Helianthus paradoxus* (see ''Exclusions Under Section 4(b)(2)'' section).

Unit 3: Santa Rosa

Subunit 3a is located at Blue Hole Cienega/Blue Hole Fish Hatchery Ponds. This subunit is 134 ac (54 ha) in Guadalupe County, New Mexico. The Blue Hole Fish Hatchery Ponds population of *Helianthus 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 population is immediately north of Blue Hole Road and the Blue Hole Cienega is immediately south.

This subunit was 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 *Helianthus 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 in the appropriate spatial arrangement and quantity, and is threatened by encroachment of 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 *Helianthus 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 in the appropriate spatial arrangement and quantity, 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. City of Santa Rosa park maintenance staff have voluntarily stopped mowing and cutting *Helianthus paradoxus* 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. At this time, we are not aware of any management plans that address *Helianthus paradoxus* in this area.

Subunit 3b is located at Westside Spring. This subunit is 6 ac (3 ha) of private land in Santa Rosa, Guadalupe County, New Mexico. The subunit consists of an area along an unnamed spring on the west side of the Pecos River, located to the west of River Road and 1 mi (1.6 km) east of Highway 54.

We believe this area was not 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 in the appropriate spatial arrangement and quantity, and is threatened by 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 *Helianthus 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 *Helianthus 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 stable and not anticipated to be subject to any known future water withdrawals, this population can be expected to persist in large numbers every year.

Unit 4: Roswell/Dexter

Subunit 4a includes 576 ac (233 ha) of Bitter Lake National Wildlife Refuge and City of Roswell land located in Chaves County, New Mexico. This subunit is located approximately 5 mi (8 km) northeast of the city of Roswell.

One of the largest *Helianthus 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 the Lost River.

This area was 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 *Helianthus 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, contains all of the PCEs essential to the conservation of the species, and is threatened by water withdrawal and encroachment of nonnative vegetation. Additional threats occurring on the City of Roswell lands include wetland filling and development, and incompatible livestock management. Therefore, special management or protections may be required to minimize these threats.

Subunit 4b includes 96 ac (39 ha) of land within the Bitter Lake National Wildlife Refuge Farm (Refuge Farm). This subunit is located in Chaves County, New Mexico, approximately 5 mi (8 km) east of Roswell on the west side of the Pecos River.

Subunit 4b 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 *Helianthus paradoxus*. The wet soils in this population are not cultivated.

This area 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 *Helianthus 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 in the appropriate spatial arrangement and quantity essential to the conservation of the species.

Subunit 4c is located at the Oasis Dairy. This subunit is 104 ac (42 ha) of private land in Chaves County, New Mexico. The subunit is located on the east side of Roswell, west side of Pecos River Valley, approximately 4 mi (7 km) southeast of the Hwy 380 bridge, and beside an unnamed spring approximately 0.6 mi (1 km) west of the Pecos River and 6 mi (9 km) south of Highway 380.

This site contains a very large, dense patch of several thousand *Helianthus 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 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 in the appropriate spatial arrangement and quantity, and is threatened by livestock grazing during *H. paradoxus*' 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 20 ac (8 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. The lands adjacent to Lea Lake are used as a picnic area and campground for the State Park. This site was 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 *Helianthus 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 in the appropriate spatial arrangement and quantity, 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 ac (17 ha) of private land 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 3 mi (5 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 in the appropriate spatial arrangement and quantity, and is threatened by water withdrawal, wetland filling and development, and livestock grazing during *Helianthus paradoxus*' 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

Unit 5 includes 240 ac (97 ha) of private land located on Diamond Y Spring in Pecos County, Texas. The unit is located approximately 12 mi (20 km) north-northwest of Fort Stockton, Texas.

Unit 5 consists of several hundred thousand to one million plants found on The Nature Conservancy's Diamond Y Spring Preserve and a contiguous parcel of private land. This site was 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 *Helianthus 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 essential to the conservation of the species.

The land within The Nature Conservancy's Diamond Y Spring Preserve was purchased to protect Diamond Y Spring Preserve and other rare or endangered aquatic species in the Diamond Y Spring system. This habitat is managed for the conservation of such species (Service 2005, p. 12). Diamond Y Spring Preserve has recently expanded from 1,500 ac (607 ha) to 4,000 ac (1,618 ha). However, *Helianthus paradoxus* on the Preserve is threatened by water withdrawal occurring outside the Preserve. On the adjacent private land, *H. paradoxus* is also threatened by water withdrawal, wetland filling and development, and livestock grazing during the growing and flowering season. As a result, 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.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that actions they fund, authorize, or carry out are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify designated critical habitat. Decisions by the Fifth and Ninth Circuit Court of Appeals have invalidated our definition of ''destruction or adverse modification'' (50 CFR 402.02) (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)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under 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 PCEs to be functionally established) to serve its intended conservation role for the species.

Under section 7(a)(2) of the Act, 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, we document compliance with the requirements of section 7(a)(2) through our 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 are likely to adversely affect listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. We define ''Reasonable and prudent alternatives'' 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,
- Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,
- Are economically and technologically feasible, and
- Would, in the Director's opinion, avoid jeopardizing the continued existence of the listed species or destroying or adversely modifying 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 need to 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.

Federal activities that may affect *Helianthus paradoxus* or its designated critical habitat will require consultation under section 7(a)(2) of 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 (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10(a)(1)(B) of the Act) or involving some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency) are examples of agency actions that may 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(a)(2) consultations.

Application of the Adverse Modification Standard

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 PCEs to be functionally established) to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical and

biological features to an extent that appreciably reduces the conservation value of critical habitat for *Helianthus paradoxus*. 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, when carried out, funded, or authorized by a Federal agency, may affect critical habitat and, therefore, should result in consultation for *Helianthus 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 *Helianthus 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, construction of water impoundments), livestock management not compatible with *H. paradoxus* 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 *Helianthus paradoxus* plants. This may occur through plowing, grading, wetland filling and development, road building, burning, mechanical weed control, herbicide application, recreational use, 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).

All of the units designated as critical habitat, as well as Subunit 1c and Unit 2 that have been excluded under section 4(b)(2) of the Act, contain the physical and biological features essential to the conservation of *Helianthus paradoxus*. The five units are within the geographic range of the species, all except two were known to be occupied by the species at the time of listing (based on observations made within the last 14 seasons (Ulibarri 2006; Kargas 2007; Sivinski 2007)), and all units are currently occupied. Federal agencies already consult with us on activities in areas occupied by the species, and if the species may be affected by the proposed action, the consultation is to ensure that their actions do not jeopardize the continued existence of *H. paradoxus*.

We recognize that jeopardy and adverse modification are not equivalent standards. However, for *Helianthus paradoxus*, there is not likely to be any difference in project modifications made under the jeopardy standard and the adverse modification standard. In other words, the material outcomes of consultations completed under the two standards are not likely to differ. Whether consulting under either standard, in order to reach a conclusion of jeopardy or adverse modification, the proposed action would have to make the habitat unsuitable to support plants. *Helianthus paradoxus* is an annual species that re-establishes populations of adult plants each year from seed produced during the previous year or years' reproductive efforts. Roots and seeds are present in the soil year round, even when the plants are not flowering. Because the plant grows in patches and sprouts from seeds left in the ground the year before, harming or killing existing plants would not likely result in jeopardy to the species. The outcome of formal consultation that does not determine jeopardy or adverse modification results in only discretionary conservation recommendations. Critical habitat designation may interject additional considerations for protection of habitat function, suitability, or capability over the long term into section 7 consultations. This could result in additional discretionary conservation recommendations.

Alternatively, in order to conclude that a proposed action jeopardizes the continued existence of *Helianthus paradoxus*, an action would have to make the habitat unsuitable within critical habitat units or core areas. Temporary effects to this fairly hardy plant would not have lasting effects at the population level, and likely would not jeopardize the continued existence of the species, as long as the habitat remained suitable. For example, an area that is completely mowed would result in adverse effects to the *H. paradoxus*, but likely would not jeopardize the species because the plant should re-establish from seeds in the soil.

If a consultation were to reach the conclusion that the action jeopardized the continued existence of *Helianthus paradoxus*, the reasonable and prudent alternative, which would be required if the project was to proceed, would have to reduce impacts to plants and the biological and physical features of habitat. The reasonable and prudent alternative under a conclusion that the action would result in adverse modification of critical habitat would not likely add any additional requirements because the alternative for jeopardy already considers effects to the biological and physical features of habitat. Consequently, the outcome of section 7 consultations in such cases may not be substantially different with designation of critical habitat compared to existing consultation conducted under the jeopardy standard.

Exclusions

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

Section 4(b)(2) of the Act states that the Secretary must designate and revise critical habitat 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 statute on its face, as well as the legislative history are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give any factor. In the following sections, we address a number of general issues that are relevant to the exclusions we considered.

Benefits of Designating Critical Habitat

The process of designating critical habitat as described in the Act requires that the Service identify those lands on which are found the physical or biological features essential to the conservation of the species that may require special management considerations or protection, and those areas outside the geographical area occupied by the species at the time of listing that are essential to the conservation of the species. In identifying those lands, the Service must consider the recovery needs of the species, such that, on the basis of the best scientific and commercial data available at the time of designation, the habitat that is identified, if managed, could provide for the survival and recovery of the species.

The identification of those areas that are essential for the conservation of the species and can, if managed, provide for the recovery of a species is beneficial. The process of proposing and finalizing a critical habitat rule provides the

Service with the opportunity to determine the physical and biological features essential for conservation of the species within the geographical area occupied by the species at the time of listing, as well as to determine other areas essential to the conservation of the species. The designation process includes peer review and public comment on the identified physical and biological features and areas. This process is valuable to land owners and managers in developing conservation management plans for identified areas, as well as any other occupied habitat or suitable habitat that may not have been included in the Service's determination of essential habitat.

The consultation provisions under section 7(a)(2) of the Act constitute the regulatory benefits of critical habitat. As discussed above, Federal agencies must consult with the Service on actions that may affect critical habitat and must avoid destroying or adversely modifying critical habitat. Federal agencies must also consult with us on actions that may affect a listed species and refrain from undertaking actions that are likely to jeopardize the continued existence of such species. The analysis of effects to critical habitat is a separate and different analysis from that of the effects to the species. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. For some species, and in some locations, the outcome of these analyses will be similar, because effects to habitat will often also result in effects to the species. However, the regulatory standard is different, as the jeopardy analysis looks on the action's impact to survival and recovery of the species and the adverse modification analysis looks at the effects to the designated habitat's contribution to conservation of the species. This will, in many instances, lead to different results, and different regulatory requirements. Thus, critical habitat designations may provide greater regulatory benefits to the recovery of a species than would listing alone.

There are two limitations to the regulatory effect of critical habitat. First, a section 7(a)(2) consultation is only required where there is a Federal nexus (an action authorized, funded, or carried out by any Federal agency)—if there is no Federal nexus, the critical habitat designation of private lands itself does not restrict any actions that destroy or adversely modify critical habitat. Second, the designation only limits destruction or adverse modification. By its nature, the prohibition on adverse modification is designed to ensure that the conservation role and function of those areas that contain the physical and biological features essential to the conservation of the species or of unoccupied areas that are essential for the conservation of the species are not appreciably reduced. Critical habitat designation alone, however, does not require private property owners to undertake specific steps toward recovery of the species.

Once an agency determines that consultation under section 7(a)(2) of the Act is necessary, the process may conclude informally when the Service concurs in writing that the proposed Federal action is not likely to adversely affect critical habitat. However, if the Service determines through informal consultation that adverse impacts are likely to occur, then formal consultation is initiated. Formal consultation concludes with a biological opinion issued by the Service on whether the proposed Federal action is likely to result in destruction or adverse modification of critical habitat.

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 the physical and biological features essential to the conservation of the species, but it would not suggest the implementation of any reasonable and prudent alternative. We suggest reasonable and prudent alternatives to the proposed Federal action only when our biological opinion results in an adverse modification conclusion.

As stated above, the designation of critical habitat does not require that any management or recovery actions take place on the lands included in the designation. Even in cases where consultation has been initiated under section 7(a)(2) of the Act, the end result of consultation is to avoid jeopardy to the species and/or adverse modification of its critical habitat, but not necessarily to manage critical habitat or institute recovery actions on critical habitat. Conversely, voluntary conservation efforts implemented through management plans institute proactive actions over the lands they encompass and are put in place to remove or reduce known threats to a species or its habitat; therefore, implementing recovery actions. We believe that in many instances the regulatory benefit of critical habitat is low when compared to the conservation benefit that can be achieved through conservation efforts or management plans. The conservation achieved through implementing Habitat Conservation Plans (HCPs) under section 10 of the Act 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 they are not committed to provide conservation or long-term benefits to areas not affected by the proposed project. Thus, implementation of any HCP or management plan that incorporates enhancement or recovery as the management standard may often provide as much or more benefit than a consultation for critical habitat designation.

Another benefit of including lands in critical habitat is that 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 *Helianthus paradoxus*. In general, critical habitat designation always has educational benefits; however, in some cases, they may be redundant with other educational effects. For example, HCPs have significant public input and may largely duplicate the educational benefits of a critical habitat designation. Including lands in critical habitat also would inform State agencies and local governments about areas that could be conserved under State laws or local ordinances.

Recovery Benefits

The process of designating critical habitat as described in the Act requires that the Service identify those lands on which are found the physical or biological features essential to the conservation of the species which may require special management consideration or protections. In identifying those lands, the Service must consider the recovery needs of the species, such that the habitat that is identified, if managed, could provide for the survival and recovery of the species. Furthermore, once critical habitat has been designated, Federal agencies must consult with the Service under section 7(a)(2) of the Act to ensure that their actions will not adversely modify designated critical habitat or jeopardize the continued existence of the species. As noted in the Ninth Circuit's *Gifford*

Pinchot decision, the Court ruled that the jeopardy and adverse modification standards are distinct, and that adverse modification evaluations require consideration of impacts to the recovery of species. Thus, through the section 7(a)(2) consultation process, critical habitat designations provide recovery benefits to species by ensuring that Federal actions will not destroy or adversely modify designated critical habitat.

It is beneficial to identify those lands that are necessary for the conservation of the species and that, if managed appropriately, would further recovery measures for the species. The process of proposing and finalizing a critical habitat rule provides the Service with the opportunity to determine lands essential for conservation as well as identify the physical and biological features essential for conservation on those lands. The designation process includes peer review and public comment on the identified features and lands. This process is valuable to landowners and managers in developing habitat management plans for identified lands, as well as any other occupied habitat or suitable habitat that may not have been included in the Service's determination of essential habitat.

However, the designation of critical habitat does not require that any management or recovery actions take place on the lands included in the designation. Even in cases where consultation has been initiated under section 7(a)(2) of the Act, the end result of consultation is to avoid jeopardy to the species and adverse modification of its critical habitat, but not specifically to manage remaining lands or institute recovery actions on remaining lands. Conversely, management plans institute proactive actions over the lands they encompass intentionally to remove or reduce known threats to a species or its habitat and, therefore, implement recovery actions. We believe that the conservation of a species and its habitat that could be achieved through the designation of critical habitat, in some cases, is less than the conservation that could be achieved through the implementation of a management plan that includes species-specific provisions and considers enhancement or recovery of listed species as the management standard over the same lands. Consequently, implementation of an 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.

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, p. 2), and at least 80 percent of endangered or threatened species occur either partially or solely on private lands (Crouse et al. 2002, p. 720). Stein et al. (1995, p. 400) 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, p. 1407; Crouse et al. 2002, p. 720; James 2002, p. 271). 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. Conservation agreements with non-Federal landowners (HCPs, safe harbor agreements, other conservation agreements, easements, and State and local 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 regulatory methods (61 FR 63854; December 2, 1996).

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, pp. 5–6; Bean 2002, pp. 2–3; Conner and Mathews 2002, pp. 1–2; James 2002, pp. 270–271; Koch 2002, pp. 2–3; Brook et al. 2003, pp. 1639–1643). 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. This perception results in anti-conservation incentives because maintaining habitats that harbor endangered species represents a risk to future economic opportunities (Main et al. 1999, pp. 1264–1265; Brook et al. 2003, pp. 1644–1648).

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, p. 1263; Bean 2002, p. 2; Brook et al. 2003, pp. 1644–1648). The magnitude of this negative outcome is greatly amplified in situations where active management measures (such as reintroduction, fire management, and control of invasive species) are necessary for species conservation (Bean 2002, pp. 3–4). The Service believes that the judicious exclusion of 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.

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(a)(2) of the Act, can sometimes be counterproductive to its intended purpose on non-Federal lands. Thus, the benefits of excluding areas that are covered by partnerships or voluntary conservation efforts can often be high.

Benefits of Excluding Lands With HCPs or Other Management Plans From Critical Habitat

The benefits of excluding lands with HCPs or other 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 HCPs

and other 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. Our experience in implementing the Act has found that designation of critical habitat within the boundaries of management plans that provide conservation measures for a species is 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 HCP or 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 covered by approved HCPs or other management plans from critical habitat designation is the unhindered, continued ability it gives us 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.

Furthermore, HCP applications require consultation, which would review the effects of all HCP-covered activities that might adversely impact the species under a jeopardy standard, including possibly significant habitat modification (see definition of ''harm'' at 50 CFR 17.3), even without the critical habitat designation. In addition, all other Federal actions that may affect the listed species would still require consultation under section 7(a)(2) of the Act, and we would review these actions for possibly significant habitat modification in accordance with the definition of harm referenced above.

The information provided in the previous section applies to all the following discussions of benefits of inclusion or exclusion of critical habitat.

Exclusions Under Section 4(b)(2) of the Act

When performing the required analysis under section 4(b)(2) of the Act, the existence of a management plan (HCPs as well as other types) that considers enhancement or recovery of listed species as its management standard is relevant to our weighing of the benefits of inclusion of a particular area in the critical habitat designation. We considered the following criteria in evaluating the management and protection provided by such plans:

(1) The plan is complete and provides for the conservation and protection of the physical and biological features essential to the conservation of the species;

(2) There is a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future, based on past practices, written guidance, or regulations; and

(3) The plan provides conservation strategies and measures consistent with currently accepted principles of conservation biology.

Discussions of Subunit 1c, the Pueblo of Laguna, and Unit 2, the La Joya Wildlife Management Area, under the provisions in section 4(b)(2) of the Act are provided below.

La Joya Wildlife Management Area

During the first comment period, which closed on May 29, 2007 (72 FR 14328), the NMDGF requested technical assistance on the development of a habitat management plan for *Helianthus paradoxus*. During the second comment period, which closed on January 10, 2008, we received the final Pecos sunflower (*Helianthus paradoxus*) Habitat Management Plan on the La Joya Wildlife Management Area from the NMDGF. The NMDGF finalized the habitat management plan in order to preclude the designation of critical habitat on their lands (NMDGF 2008, p. 1).

The purpose of the management plan is to support conservation of the species on the La Joya Wildlife Management Area by: (1) Annually controlling invasive species; (2) protecting the natural spring in Unit 5 from motorized vehicles and heavy equipment; (3) monitoring core populations by digitizing these areas annually; (4) conserving *H. paradoxus* by adjusting invasive species treatment area boundaries; and (5) restoring native habitat through revegetation.

The habitat management plan was developed in accordance with the recovery plan for *Helianthus paradoxus* (NMDGF 2008, p. 1). The recovery plan identifies that the recovery objective for *H. paradoxus* is to protect and manage significant populations. The recovery plan identified the La Joya population as a core conservation area that would ensure the survival of the species (Service 2006, p. 17). Long-term protection can be provided by purchasing populations and implementing appropriate management plans for *H. paradoxus* (Service 2006, p. 15–16). The recovery plan outlines that these management plans should reduce the identified threats to *H. paradoxus* (e.g., controlling invasive plants, identifying and restricting incompatible land uses, and ensuring spring flows). We find that the management plan developed by NMDGF is consistent with the tenets identified in the recovery plan for *H. paradoxus*. Therefore, we conclude that the plan is complete and provides for the conservation and protection of the physical and biological features essential to the conservation of the species.

Benefits of Inclusion

The benefits of including lands in critical habitat can be regulatory, educational, or to aid in recovery of species as generally discussed in the ''Benefits of Designating Critical Habitat'' section. Few additional benefits would be derived from including the La Joya Wildlife Management Area in a critical habitat designation for *Helianthus paradoxus* beyond what will be achieved through the implementation of NMDGF's management plan. The principal benefit of designating critical habitat in that area would be that activities that affect *H. paradoxus* would require consultation under section 7 of the Act. Consultation would ensure that a proposed action does not result in the

destruction or adverse modification of critical habitat.

Based upon our analysis conducted within the environmental assessment and discussion in the ''Application of the Adverse Modification Standard'' section, we conclude that few regulatory benefits to *Helianthus paradoxus* would be gained from a designation of critical habitat on these lands because the outcomes of consultations conducted under the jeopardy and adverse modification standards for this species would not be materially different (Service 2008, pp. 23, 34). The most likely Federal nexus would occur due to invasive species removal associated with management activities, funded in part, through the Service's Federal Assistance Division. A consultation related to invasive species removal would likely result in a conservation recommendation to avoid core stands of *H. paradoxus* when applying herbicides or that backpack sprayers be utilized to target herbicide application. However, these conservation recommendations are already being implemented by NMDGF during invasive species removal. Therefore, designation of critical habitat would provide little conservation benefit as it related to the control of invasive species and the management of *H. paradoxus*.

To date, there have been no consultations that addressed *Helianthus paradoxus* or its habitat along the Rio Grande. Nevertheless, the economic analysis found that, over the next 20 years, there may be two future intra-Service formal consultations associated with projects to remove non-native species, but that no informal consultations were likely. These consultations would occur regardless of whether critical habitat is designated, because the species occupies the area. Section 7 consultation under the jeopardy standards will still be required for activities affecting *H. paradoxus*. Beyond these, we do not expect any additional consultations. For these reasons, we find the consultation process for critical habitat is unlikely to result in additional protections for the species. Consequently, there is little regulatory benefit of a critical habitat designation in this area.

The educational benefits of critical habitat in this case are relatively low for the La Joya Wildlife Management Area, because the recovery plan has already identified and discussed its importance to the conservation of *Helianthus paradoxus* (Service 2005). The NMDGF is well aware of where *H. paradoxus* occurs, due to the recovery plan (Service 2005) and their recent efforts to implement conservation actions for the species (NMDGF 2008, p. 5). Therefore, we believe that the educational benefits that inclusion of these lands would provide for *H. paradoxus* are relatively low. Further, the educational benefits of critical habitat designation have already been achieved through the overall designation process and the notice and public comment period, and will occur whether or not this unit is designated.

Under the *Gifford Pinchot* decision, critical habitat designations may provide greater benefits to the recovery of a species than was previously believed. However, the protection provided is still a limitation on the adverse effects that may occur to designated critical habitat, as opposed to a requirement to affirmatively provide a conservation benefit on those lands. As outlined above and in the environmental assessment, we have had no consultations for actions that may affect *Helianthus paradoxus* on this land or other areas along the Rio Grande. However, the NMDGF has committed to definite conservation actions on lands covered under the management plan. Therefore, we believe the benefits to the recovery of *H. paradoxus*, based on inclusion of these lands in critical habitat, are low.

For these reasons, we find that because of the management plan with the NMDGF, the benefits of including the La Joya Wildlife Management Area as critical habitat are low. Since the Act's protection of plants on private lands is minimal, the Service believes that it will achieve more conservation from this management plan than it would from a critical habitat designation.

Benefits of Exclusion

Implementation of the management plan will provide benefits to *Helianthus paradoxus* as discussed earlier. The NMDGF has committed to, and has already begun to, manage *H. paradoxus* and its habitat through controlling invasive species, protection of natural springs habitat, monitoring *H. paradoxus*, and native species restoration activities. We expect the management plan will provide a significant conservation benefit to *H. paradoxus* populations.

The development of a voluntary management plan for the lands within Unit 2 was a collaborative effort between the Service and the NMDGF that promoted a positive relationship that continues today. The Service believes that exclusion of Unit 2 will allow us to continue working with NMDGF in a spirit of cooperation and partnership. The management plan identifies that the NMDGF has a common interest in promoting healthy ecosystems and in protecting populations and habitat of *Helianthus paradoxus*. While the area is managed by the State of New Mexico, it was purchased using Federal funds. In the final economic analysis we found that approximately 75 percent of the annual budget for the area is reimbursed to the State through Federal Pittman-Roberts funds (Service 2008, p. 3–12). Thus, there is a reasonable expectation that the conservation management strategies and actions will continue to be implemented for *H. paradoxus* in the foreseeable future.

In our final economic analysis, we found that, while many of the ongoing activities at La Joya benefit *Helianthus paradoxus*, including non-native species removal activities, management of the area for *H. paradoxus* will increase the cost of nonnative species removal from approximately $200 per acre for aerial spraying to $1,000 to $1,500 for manual/mechanical ''chop and pull'' treatments (Service 2008, p. 3–13). The NMDGF plans on treating approximately 1,500 acres for non-natives in the next few years at La Joya. As a result, an increased cost of $800 to $1,200 per acre, or $0.6 million to $1.1 million across the area for non-native species removal efforts are expected over the next 20 years (undiscounted), or $0.6 to $0.9 million, discounted at seven percent. Because La Joya will implement non-native species removal in this way whether they are designated as critical habitat or not, these impacts are considered baseline costs. Thus, exclusion of these lands from critical habitat would not relieve the NMDGF of the higher cost of managing non-native species in a way that limits impacts to *H. paradoxus*. Nevertheless, because we have already come to agreement about how to manage *H. paradoxus*, the additional effort involved in consultations or other regulatory actions with respect to this site would be unnecessary. As discussed in the ''Benefits of Excluding Lands With HCPs or Other Management Plans From Critical Habitat'' section, imposing an additional regulatory review as a result of the designation of critical habitat may undermine conservation efforts and partnerships. Addition of such a regulatory requirement would remove a significant incentive for undertaking the time and expense of management planning. Thus, the designation of critical habitat may be counterproductive because it will strain the working relationship we share with NMDGF and may hinder future cooperative conservation projects.

Benefits of Exclusion Outweigh the Benefits of Inclusion

The NMDGF committed to the management plan in recognition that the plan may be used to exclude La Joya Wildlife Management Area. We believe the proactive management of *Helianthus paradoxus* provided under the plan provides significant benefits to this species. In contrast, the benefits of inclusion are, as noted above, likely to be minor because of the lack of any consultations in the Rio Grande since the listing of the species. Still, even in situations where consultation might occur, it would be unlikely to result in proactive management of the species and its habitat.

As detailed above, even if the La Joya Wildlife Management Area is excluded from the designation, this area will provide a conservation benefit to *Helianthus paradoxus* by following the tenets of developing and implementing management plans, as described in the Recovery Plan (Service 2005, p. 20). As such, we find that the management plan provides conservation strategies and measures consistent with currently accepted principles of conservation biology.

In conclusion, we have evaluated the potential regulatory, educational, and recovery benefits that would result from the inclusion of Unit 2. In receiving the final *Helianthus paradoxus* Habitat Management Plan from NMDGF during the second comment period, we have weighed these benefits of including Unit 2 in the critical habitat designation against the more tangible conservation benefits provided by the management plan, which would occur from excluding Unit 2 from the designation. Based on *the above analysis,* in the development of our final determination of critical habitat for *H. paradoxus*, we are excluding Unit 2 under section 4(b)(2) of the Act. Further, we believe that this exclusion is a logical outgrowth from the proposed designation due to public comments and information received on that proposal.

Exclusion Will Not Result in Extinction of the Species

We have determined that the exclusion of Unit 2 that totals 854 ac (346 ha) from the final designation of critical habitat will not result in the extinction of *Helianthus paradoxus*. Overall, this area represents less than 15 percent of the proposed designation. In addition, because the 854 ac (346 ha) we are excluding from critical habitat are occupied by *H. paradoxus*, consultations under section 7 of the Act that involve these lands will occur even in the absence of their designation as critical habitat. Application of the jeopardy standard of section 7 of the Act also provides assurances that the species will not go extinct in the absence of this designation.

In summary, the benefits of including the La Joya Wildlife Management Area in the critical habitat designation are few. The benefits of excluding this area from being designated as critical habitat for *Helianthus paradoxus* are greater, and include affirmative actions for controlling invasive species, protection of natural springs habitat, monitoring *H. paradoxus*, and restoration activities. We find that the benefits of excluding this area from critical habitat designation outweigh the benefits of including this area.

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 physical and biological features essential to the conservation of the species to determine which areas to propose and subsequently finalize (i.e., designate) as critical habitat.

Pueblo of Laguna

The Pueblo of Laguna has lands containing physical and biological features essential to the conservation of *Helianthus paradoxus*. In making our final decision with regard to Pueblo lands, we considered several factors, including our relationship with the Pueblo and the management plan that was 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 was developing a management plan for *H. paradoxus* and has been managing Pueblo land consistent with the protection and recovery of the sunflower. We received a draft management plan from the Pueblo in February 2007. The draft management plan was the basis for continued discussions with the Pueblo. Subsequently, we received the Pecos Sunflower (*Helianthus paradoxus*) Management Plan (Resolution # 01–08), Pueblo of Laguna, 2008, during the public comment period on the proposed critical habitat for *H. paradoxus*, which closed on January 10, 2008. The Management Plan and corresponding Resolution (No. 01–08) was adopted and approved by the Pueblo of Laguna Staff Officers in January 2008 (Laguna 2008). The resolution that was passed for the management plan demonstrates the Pueblo's sovereign status while providing for special management protections and conservation of *H. paradoxus*. The Pueblo's management plan includes the following tasks and protective measures: (1) Surveys and monitoring of *H. paradoxus*; (2) riparian restoration; (3) controlling competition of non-native species; (4) limiting access into stands of *H. paradoxus* through a recently adopted trespass ordinance; and (5) appropriate management of livestock. We find that the Pueblo of Laguna management plan provides significant conservation benefit to *H. paradoxus*. Therefore, we find that the plan is complete, provides for the conservation and protection of the physical and biological features essential to the conservation of the species, and is consistent with currently accepted tenets of conservation biology.

The Pueblo of Laguna intends to share monitoring and survey information with us (Laguna 2008, p. 10). The Pueblo of Laguna has also acquired funding from a grant through the New Mexico Environment Department to proactively manage areas that currently contain *Helianthus paradoxus*. Moreover, in 2006, we funded a Tribal Wildlife Grant for the Pueblo of Laguna (2006, p. 42). This grant provided funding to improve aquatic habitat on their lands by protecting, conserving, and improving valuable riparian systems and natural

spring sources on the Pueblo. The Pueblo of Laguna identified that they will continue to seek additional funds through the Service's Partners for Fish and Wildlife Program, Tribal Wildlife Grants, and Tribal Landowner Incentive Programs (Laguna 2008, p. 12). We believe that the resolution passed by the Pueblo of Laguna and the development of the Pueblo of Laguna management plan demonstrate that the management plan will be implemented. For these reasons, there is a reasonable expectation that the conservation management strategies and actions will be implemented for *H. paradoxus* for the foreseeable future.

The management plan for *Helianthus paradoxus* also demonstrates the voluntary cooperative working relationship we share. This relationship will continue to enable us to implement a natural resource program of mutual interest for the benefit of *H. paradoxus*. Under this management plan, *H. paradoxus* will benefit from monitoring, restoration, enhancement, and survey efforts. The Service has also determined that exclusion would not result in the extinction of the species. As discussed below, we have considered the benefits to *H. paradoxus* from this management plan. We have also taken into account the potential adverse impact to this species from designation of critical habitat on their lands.

Benefits of Inclusion

Few additional benefits would be derived from including the Pueblo of Laguna in a critical habitat designation for *Helianthus paradoxus* beyond what will be achieved through the implementation of their management plan. The principal benefit of any designated critical habitat is that activities in and affecting such habitat require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid destruction or adverse modification of critical habitat. Based upon our analysis conducted within the environmental assessment and discussed in the ''Application of the Adverse Modification Standard'' section, we conclude that few regulatory benefits to *H. paradoxus* would be gained from a designation of critical habitat on the Pueblo's lands because the outcomes of consultations conducted under the jeopardy and adverse modification standards for this species would not be materially different (Service 2008, pp. 23, 34). The economic analysis estimated that, over the next 20 years, one formal consultation associated with livestock grazing activities may occur, but that no informal consultations were likely. This consultation would occur regardless of whether critical habitat is designated, because the species occupies the area. Section 7 consultations under the jeopardy standard will still be required for activities affecting *H. paradoxus*. Beyond this formal consultation, we do not expect any additional consultations. For these reasons, we find the consultation process for critical habitat is unlikely to result in additional protections for the species.

Although we believe the likelihood of additional consultations is small, consultation requirements under section 7 of the Act would be triggered as a result of the funding or permitting processes administered by the Federal agency involved. The benefit of critical habitat designation would ensure that any actions funded or permitted by a Federal agency would not likely destroy or adversely modify any critical habitat. Without critical habitat, projects would still trigger consultation requirements under the Act because *Helianthus paradoxus* is currently present on the Pueblo. Given that no consultations have occurred with the Bureau of Indian Affairs (BIA) or the Pueblo since *H. paradoxus* was listed as endangered in 1999 and the overall low likelihood of Federal projects being proposed in this area, the Service believes there is almost no regulatory benefit of a critical habitat designation in this area. Consequently, the designation of critical habitat in these areas would provide minimal, if any, regulatory benefit to the species.

Another possible benefit is that the designation of critical habitat can help to educate the public regarding potential conservation value of an area, and may focus efforts by clearly delineating areas of high conservation value for the species. Any information about *Helianthus paradoxus* and its habitat that reaches a wide audience, including other parties engaged in conservation activities, would be considered valuable. As noted, we recently funded the Pueblo of Laguna to work with the Service to address riparian systems and natural spring sources, which would benefit *H. paradoxus*. The Tribal Wildlife Grant also included an objective to promote environmental education and public awareness by creating a quarterly newsletter and coordinating educational programs at schools, villages, and events (Service 2006, p. 41). Additionally, we anticipate that the Tribal Wildlife Grant and the management plan for *H. paradoxus* will provide for the timely exchange of management and monitoring information. The Pueblo is already working with the Service to address the habitat needs of the species. Further, this area was included in the proposed designation, which itself has reached a wide audience, and has thus provided information to the broader public about the conservation value of this area. Thus, the educational benefits that might follow critical habitat designation, such as providing information to the BIA, U.S. Army Corps of Engineers, or the Pueblo on the area that is important for the long-term survival and conservation of the species, have already been provided by proposing this area as critical habitat. Therefore, the educational benefits important for the long-term survival and conservation of *H. paradoxus* are being realized. Educational benefits will continue on these lands if they are excluded from the designation, because the Tribal Wildlife Grant and the management plan already recognize the importance of this area to riparian systems and natural spring sources and *H. paradoxus*.

For these reasons, we believe that designation of critical habitat would have few additional benefits beyond those that will result from continued consultation under the jeopardy standard.

Benefits of Exclusion

The benefits of excluding the Pueblo of Laguna from designated critical habitat are more significant. We conclude that not designating critical habitat on the Pueblo would have substantial benefits including: (1) The advancement of our Federal Trust obligations and our deference to the Pueblo to develop and implement tribal conservation and natural resource management plans for their lands and resources, which includes *Helianthus paradoxus;* (2) the maintenance of effective working relationships to promote the conservation of *H. paradoxus* and its habitat; (3) the allowance for timely exchange of management and monitoring information; (4) the continued provision of conservation benefits to riparian systems and natural spring sources and *H. paradoxus* and its habitat that might not otherwise occur; and (5) the reduction or elimination of administrative and/or project modification costs as analyzed in the economic analysis.

As noted above, we worked with the Pueblo of Laguna to provide technical assistance on the conservation or management of the species on their lands. We have also provided funding through our Tribal Wildlife Grant program for them to manage their natural resources. As such, we

established an effective working relationship with the Pueblo of Laguna. As part of our relationship, we provided technical assistance to the Pueblo to develop voluntary measures to conserve *Helianthus paradoxus* and its habitat on their lands. These voluntary measures are contained within the management plan that we have in our administrative record for this decision (see discussion above). These proactive actions were conducted in accordance with 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 the Pueblo of Laguna should be the governmental entity to manage and promote the conservation of *H. paradoxus* on their lands. We recognize and endorse their fundamental right to provide for tribal resource management activities, including those relating to riparian systems and natural spring sources and *H. paradoxus.* Much of our discussions centered on providing technical assistance to the Pueblo to develop, continue, or expand natural resource programs such that the designation of critical habitat for *H. paradoxus* would likely be unnecessary on Pueblo lands.

The designation of critical habitat would be expected to adversely impact our working relationship with the Pueblo of Laguna. Critical habitat would be viewed as an intrusion on their sovereign abilities to manage natural resources in accordance with their own policies, customs, and laws. To this end, we found that the Pueblo would prefer to work with us on a Government-to-Government basis. For these reasons, we believe that our working relationship with the Pueblo of Laguna would be better maintained if the Pueblo of Laguna lands are excluded from the designation of critical for *H. paradoxus.* We view this as a substantial benefit.

Benefits of Exclusion Outweigh the Benefits of Inclusion

In summary, the benefits of including the Pueblo of Laguna in the critical habitat designation are few. The benefits of excluding this area from being designated as critical habitat for *Helianthus paradoxus* are more significant, and include encouraging the continued development and implementation of management measures such as monitoring, riparian restoration, controlling competition of non-native species, limiting access into stands of *H. paradoxus,* and appropriate management of livestock. The exclusion of this area from the designation will allow the Pueblo to manage its natural resources to benefit *H. paradoxus,* without the perception of Federal Government intrusion. This philosophy is also consistent with our published policies on Native American natural resource management. We find that the benefits of excluding this area from critical habitat designation outweigh the benefits of including this area.

Exclusion Will Not Result in Extinction of the Species

As noted above, the Service may exclude areas from the critical habitat designation only if it is determined, ''based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will not result in the extinction of the species concerned.'' Here, we have determined that exclusion of the Pueblo of Laguna from the critical habitat designation will not result in the extinction of *Helianthus paradoxus.* First, activities on the Pueblo that may affect *H. paradoxus* will still require consultation under section 7 of the Act. 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 listed species. Therefore, even without critical habitat designation on these lands, activities that occur on these lands cannot jeopardize the continued existence of *H. paradoxus.* Second, the Pueblo has committed to protecting and managing according to their management plan and natural resource management objectives. In short, the Pueblo of Laguna has committed to greater conservation measures on this area than would result from the designation of critical habitat. With these measures, we have concluded that this exclusion from critical habitat will not result in the extinction of *H. paradoxus,* because the management plan generally follows the tenets of developing and implementing similar plans, as identified in the Recovery Plan. Accordingly, we have determined that the Pueblo of Laguna should be excluded under subsection 4(b)(2) of the Act because the benefits of exclusion outweigh the benefits of inclusion and will not cause the extinction of the species.

The Service believes that by not designating critical habitat on the Pueblo of Laguna where the management plan and other conservation activities will be implemented, we fulfill the Service's responsibilities to the Tribes (e.g., Secretarial Order 3206, the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'', Executive Order 13175, and the relevant provision of the 512 DM 2), we properly honor Tribal sovereignty, and we ultimately provide conservation benefits to *Helianthus paradoxus.* For all of these reasons, we are excluding from this critical habitat designation the Pueblo of Laguna.

Pueblo of Acoma

The Pueblo of Acoma has lands containing physical and biological features essential to the conservation of *Helianthus paradoxus.* In making our decision on the final critical habitat designation with regard to these lands, we considered 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* for this area.

We met with the Pueblo of Acoma on July 2, 2007, and offered technical assistance if they chose to develop a management plan for the species. We repeatedly contacted the Pueblo during summer and fall 2007, but they did not express interest in developing a management plan. The Pueblo of Acoma submitted a letter on January 9, 2008, during the comment period, indicating that they opposed the designation of critical habitat on their lands. However, the Pueblo of Acoma did not pursue the development of a management plan that addresses *Helianthus paradoxus* in this area. Still, they indicated that they may request technical assistance on the development of a Tribal Management Plan at some point in the future. Although we have funded big game management activities in the past on the Pueblo of Acoma (Service 2006, p. 41), we have nothing in our administrative record that demonstrates a cooperative working relationship for *H. paradoxus* on their lands. As a result, Pueblo of Acoma lands have not been excluded from the final designation and are designated as critical habitat.

Economic Analysis

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific information available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. Section 4(b)(2) of the Act allows the Secretary to exclude areas from critical habitat for economic reasons if

the Secretary determines that the benefits of such exclusion exceed the benefits of designating the area as critical habitat. However, this exclusion cannot occur if it will result in the extinction of the species concerned.

Following the publication of the proposed critical habitat designation, we conducted an economic analysis to estimate the potential economic effects of the designation. The draft analysis (dated October 29, 2007) was made available for public review on December 11, 2007 (72 FR 70269). We accepted comments on the draft analysis until January 10, 2008. Following the close of the comment period, a final analysis of the potential economic effects of the designation was developed taking into consideration the public comments and any new information.

The economic analysis considers the potential economic effects of all actions relating to the conservation of *Helianthus paradoxus,* including costs associated with sections 4, 7, and 10 of the Act, as well as those attributable to designating critical habitat. It further considers the economic effects of protective measures taken as a result of other Federal, State, and local laws that aid habitat conservation for *H. paradoxus* in areas containing the features essential to the conservation of the species. The analysis considers both economic efficiency and distributional effects. In the case of habitat conservation, efficiency effects generally reflect the ''opportunity costs'' associated with the commitment of resources to comply with habitat protection measures (such as lost economic opportunities associated with restrictions on land use). The economic analysis also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat conservation and the potential effects of conservation activities on small entities and the energy industry. This information can be used by the decision-makers to assess whether the effects of the designation might unduly burden a particular group or economic sector (see ''Required Determinations'' section below). Finally, the economic analysis looks retrospectively at costs that have been incurred since the date this species was listed as threatened (October 20, 1999; 64 FR 56582), and considers those costs that may occur in the 20 years following designation of critical habitat (i.e., coextensive costs, 2007–2026).

The economic analysis focuses on the direct and indirect costs of the rule. However, economic impacts to land use activities can exist in the absence of critical habitat. These impacts may result from, for example, section 7 consultations under the jeopardy standard, local zoning laws, State and natural resource laws, and enforceable management plans and best management practices applied by other State and Federal agencies. Economic impacts that result from these types of protections are not included in the analysis as they are considered to be part of the regulatory and policy baseline.

The economic analysis estimates potential economic impacts resulting from the implementation of *Helianthus paradoxus* conservation efforts in four categories: (a) Treatment of non-native species; (b) wetland filling and development; (c) livestock management; and (d) road maintenance. The final economic analysis of the proposed designation updates the draft economic analysis by removing impacts that were not considered probable or likely to occur and by adding an estimate of the costs associated solely with the designation of critical habitat for *H. paradoxus* (i.e., incremental costs). The final economic analysis estimates that the potential economic effects of actions relating to the conservation of *H. paradoxus*, including costs associated with sections 4, 7, and 10 of the Act, and including those attributable to the designation of critical habitat (i.e., coextensive costs) will be $3.9 to $4.4 million in undiscounted dollars ($193,000 to $221,000 annualized) over the next 20 years. The present value of these impacts, applying a 3 percent discount rate, is $3.3 million to $3.6 million ($219,000 to $245,000 annualized); or $2.5 million to $2.9 million ($238,000 to $271,000 annualized), using a discount rate of 7 percent. These cost estimates are the same as those estimated in the draft economic analysis. The final economic analysis also estimates costs attributable solely to the designation of critical habitat for *H. paradoxus* (incremental costs) to be $709,000 in undiscounted dollars over the next 20 years. The present value of these impacts, applying a 3 percent discount rate, is $605,000; or $517,000, using a discount rate of 7 percent.

We evaluated the potential economic impact of this designation as identified in the economic analysis. Based on this evaluation, we believe that there are no disproportionate economic impacts that warrant exclusion under section 4(b)(2) of the Act at this time. The final economic analysis is available on the Internet at *http://www.regulations.gov* and *http://www.fws.gov/southwest/es/newmexico/* or upon request from the New Mexico Ecological Services Field Office (see **ADDRESSES** section).

Required Determinations

In our March 27, 2007, proposed rule (72 FR 14328), we indicated that we would defer our determination of compliance with several statutes and Executive Orders until the information concerning potential economic impacts of the designation and potential effects on landowners and stakeholders was available in the draft economic analysis. In this final rule, we affirm the information contained in the proposed rule concerning Executive Order (E.O.) 13132, E.O. 12988, the Paperwork Reduction Act, and the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951).

Regulatory Planning and Review

The Office of Management and Budget (OMB) has determined that this rule is not significant and has not reviewed this rule under Executive Order 12866 (E.O. 12866). OMB bases its determination upon the following four criteria:

(a) Whether the rule will have an annual effect of $100 million or more on the economy or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government.

(b) Whether the rule will create inconsistencies with other Federal agencies' actions.

(c) Whether the rule will materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients.

(d) Whether the rule raises novel legal or policy issues.

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

Under the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 et seq., as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) (5 U.S.C. 802(2)), whenever an agency must 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 effect of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. SBREFA amended RFA to require Federal agencies to provide a

certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the critical habitat designation for *Helianthus paradoxus* will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration (SBA), small entities include small organizations, such as independent nonprofit organizations, and small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents, as well as small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business, special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term ''significant economic impact'' is meant to apply to a typical small business firm's business operations.

To determine if the rule could significantly affect a substantial number of small entities, we considered the number of small entities affected within particular types of economic activities (e.g., residential and commercial development and agriculture). We apply the ''substantial number'' test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define ''substantial number'' or ''significant economic impact.'' Consequently, to assess whether a ''substantial number'' of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities conducted, funded, or permitted by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they fund, permit, or implement that may affect *Helianthus paradoxus* (see Section 7 Consultation section). Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional economic impact on small entities due to the requirement to reinitiate consultation for ongoing Federal activities (see Application of the ''Adverse Modification'' Standard section).

In the final economic analysis of the proposed critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listing of *Helianthus paradoxus* and proposed designation of its critical habitat. This analysis estimated prospective economic impacts due to the implementation of *H. paradoxus* conservation efforts in four categories: (a) Treatment of non-native species; (b) wetland filling and development; (c) livestock management; and (d) road maintenance. We determined from our analysis that the economic impacts of the designation on small entities are expected to be borne primarily by modifications to wetland filling and development activities. We assumed that if owners of parcels containing designated critical habitat face land-use restrictions that preclude development on some or all of the parcel, the value of the properties will be reduced, essentially eliminating the option that those areas be developed. The economic analysis assumes that, in a high-end scenario, the entirety of forecast impacts would be borne by one small developer. The one small developer estimated to be affected represents approximately 20 percent of total small developers in the region. The total potential impact resulting from land-use restrictions on development activities is forecast to be, at most, $290,000, or approximately $20,000 annually. Assuming the annual revenues of an average small developer in Cibola County are $400,000, the total potential impact resulting from the proposed designation would amount to approximately 5.0 percent of typical annual sales of one entity. Therefore, based on the above reasoning and currently available information, we certify that this rule will not have a significant economic impact on a substantial number of small entities. A regulatory flexibility analysis is not required.

Small Business Regulatory Enforcement Fairness Act (5 U.S.C 801 et seq.)

Under SBREFA, this rule is not a major rule. Our detailed assessment of the economic effects of this designation is described in the economic analysis. Based on the effects identified in the economic analysis, we believe that this rule will not have an annual effect on the economy of $100 million or more, will not cause a major increase in costs or prices for consumers, and will not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final economic analysis for a discussion of the effects of this determination (see **ADDRESSES** for information on obtaining a copy of the final economic analysis).

Executive Order 13211—Energy Supply, Distribution, or Use

On May 18, 2001, the President issued E.O. 13211 on regulations that significantly affect energy supply, distribution, or use. E.O. 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this E.O. that outlines nine outcomes that may constitute ''a significant adverse effect'' when compared without the regulatory action under consideration. The economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with *H. paradoxus* conservation activities within critical habitat are not expected. As such, the designation of critical habitat 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.

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; Aid to Families with Dependent Children 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. Non-Federal entities that receive Federal funding, assistance, permits, or otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat. However, 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 onto State governments.

(b) We do not believe that this rule will significantly or uniquely affect small governments because it will not produce a Federal mandate of $100 million or greater in any year; that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The designation of critical habitat imposes no obligations on State or local governments. By definition, Federal agencies are not considered small entities, although the activities they fund or permit may be proposed or carried out by small entities. As such, a Small Government Agency Plan is not required.

Executive Order 12630—Takings

In accordance with E.O. 12630 (''Government Actions and Interference with Constitutionally Protected Private Property Rights''), we have analyzed the potential takings implications of critical habitat for *Helianthus paradoxus.* Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. The takings implications assessment concludes that this final designation of critical habitat for *H. paradoxus* does not pose significant takings implications for lands within or affected by the designation.

Federalism

In accordance with E.O. 13132 (Federalism), this final 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 final critical habitat designation with appropriate State resource agencies in New Mexico. The designation of critical habitat in areas currently occupied by *Helianthus paradoxus* is not likely to impose any 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 because the areas that contain the physical and biological features essential to the conservation of the species are more clearly defined, and the PCEs of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Civil Justice Reform

In accordance with E.O. 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. This final rule uses standard property descriptions and identifies the physical and biological features essential to the conservation of the species within the designated areas to assist the public in understanding the habitat needs of *Helianthus paradoxus.*

Paperwork Reduction Act of 1995

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). 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 Act. 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 *Helianthus 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 conduct an environmental assessment under NEPA for the proposed critical habitat designation. We completed an environmental assessment and finding of no significant impact on the designation of critical habitat for *H. paradoxus.*

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 the 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. Therefore, we solicited information from the Pueblo of Acoma and Pueblo of Laguna.

As noted above, we contacted the Pueblo of Acoma and Pueblo of Laguna and offered to provide technical assistance on management of the species and the development of management plans. On July 2, 2007, we met with the Pueblo of Acoma to discuss potential effects to them or their resources that may result from critical habitat designation. They did not pursue the development of a management plan. As a result, Pueblo of Acoma lands have not been excluded from the final designation and are designated as critical habitat.

As detailed above, we provided technical assistance to the Pueblo to develop a management plan for *Helianthus paradoxus.* We received the Pecos Sunflower (*Helianthus paradoxus*) Management Plan (Resolution # 01–08), Pueblo of Laguna, 2008, during the open comment period, which closed on January 10, 2008. The Management Plan and corresponding Resolution (No. 01–08) was adopted and approved by the Pueblo of Laguna Staff Officers in January 2008 (Laguna 2008). The resolution that was passed by the Pueblo concerning its management plan exercises the sovereign status of the Pueblo and provides for special management protections and conservation of *H. paradoxus.* We find that the Pueblo of Laguna management plan provides significant conservation benefit to *H. paradoxus* and have excluded this area from the final designation of critical habitat.

References Cited

A complete list of all references cited in this rulemaking is available on the Internet at *http://www.regulations.gov* and *http://www.fws.gov/southwest/es/newmexico/.*

Author(s)

The primary authors of this rulemaking 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.

Regulation Promulgation

■ Accordingly, we 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 Endangered and Threatened 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, and Guadalupe 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 *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

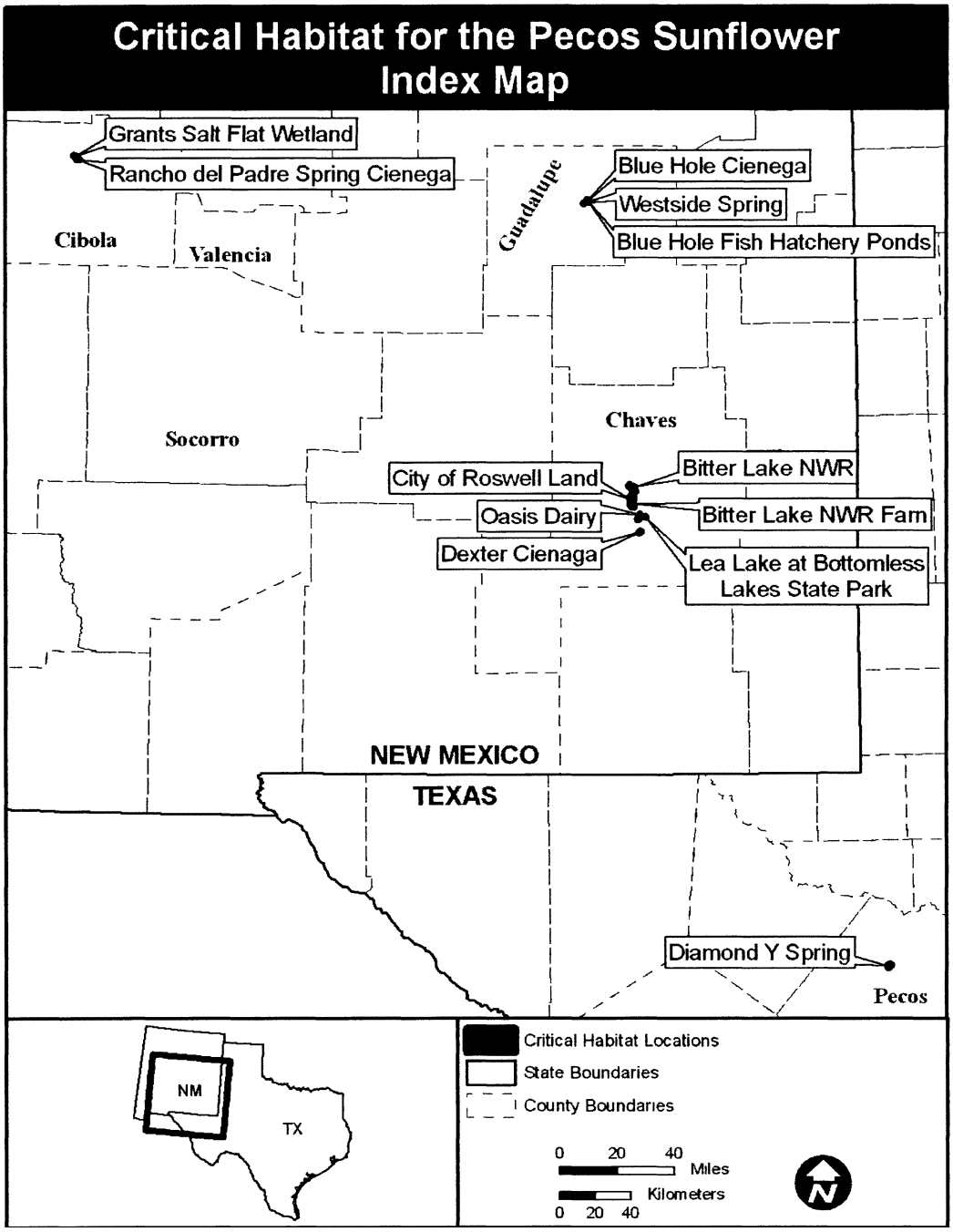
(ii) A low proportion (less than 10 percent) of woody shrub or canopy cover directly around the plant.

(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 for *Helianthus paradoxus* (Pecos sunflower) critical habitat units follows:

BILLING CODE 4310–55–P



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(6) Unit 1: West-Central New Mexico, Cibola County, 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* (Pecos sunflower) critical habitat follows:

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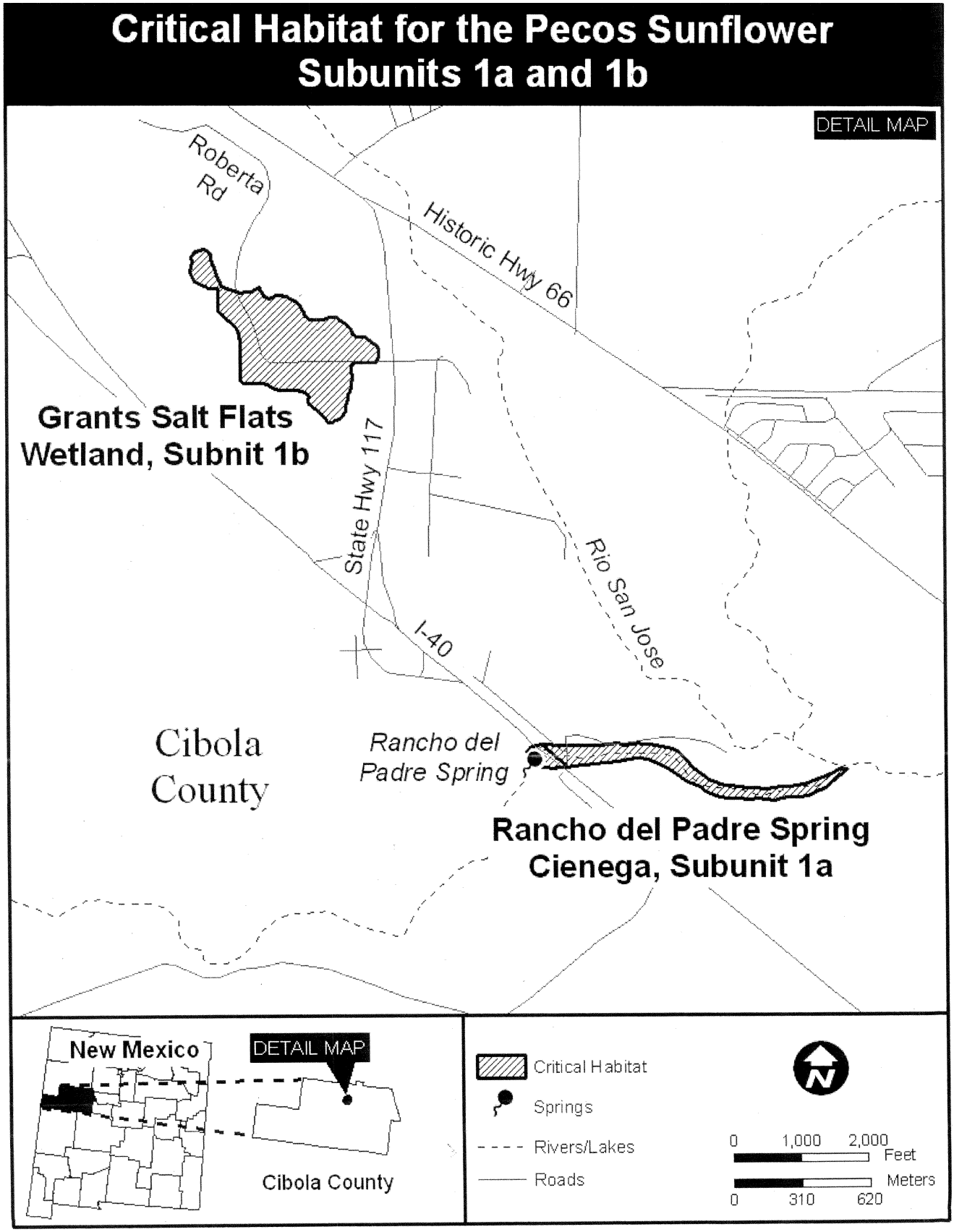
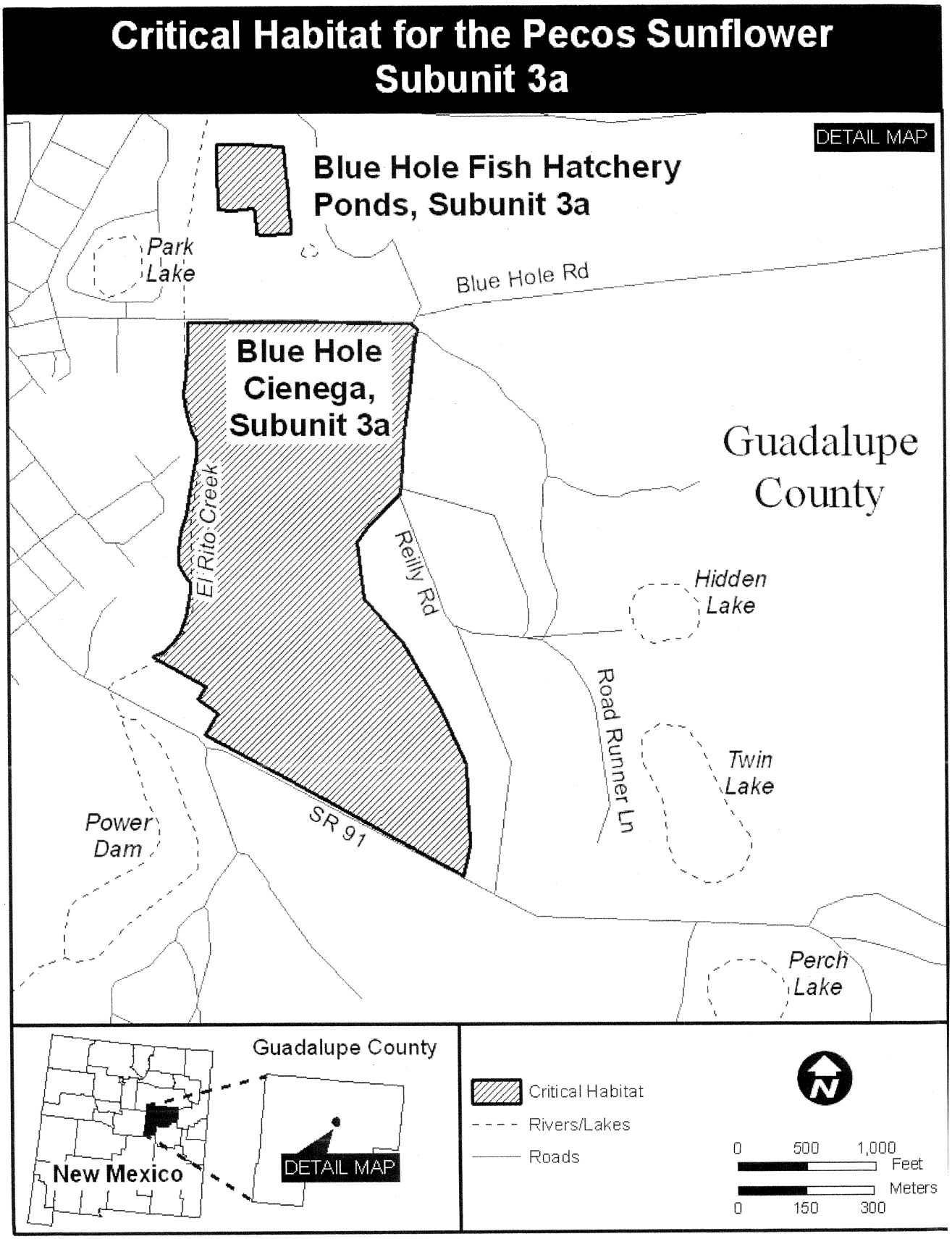

Critical Habitat for the Pecos Sunflower
Subunits 1a and 1b
DETAIL MAP
Roberta Rd
Historic Hwy 66
Grants Salt Flats Wetland, Subnit 1b
State Hwy 117
Rio San Jose
I-40
Cibola County
Rancho del Padre Spring
Rancho del Padre Spring Cienega, Subunit 1a
New Mexico
DETAIL MAP
Cibola County
Critical Habitat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

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

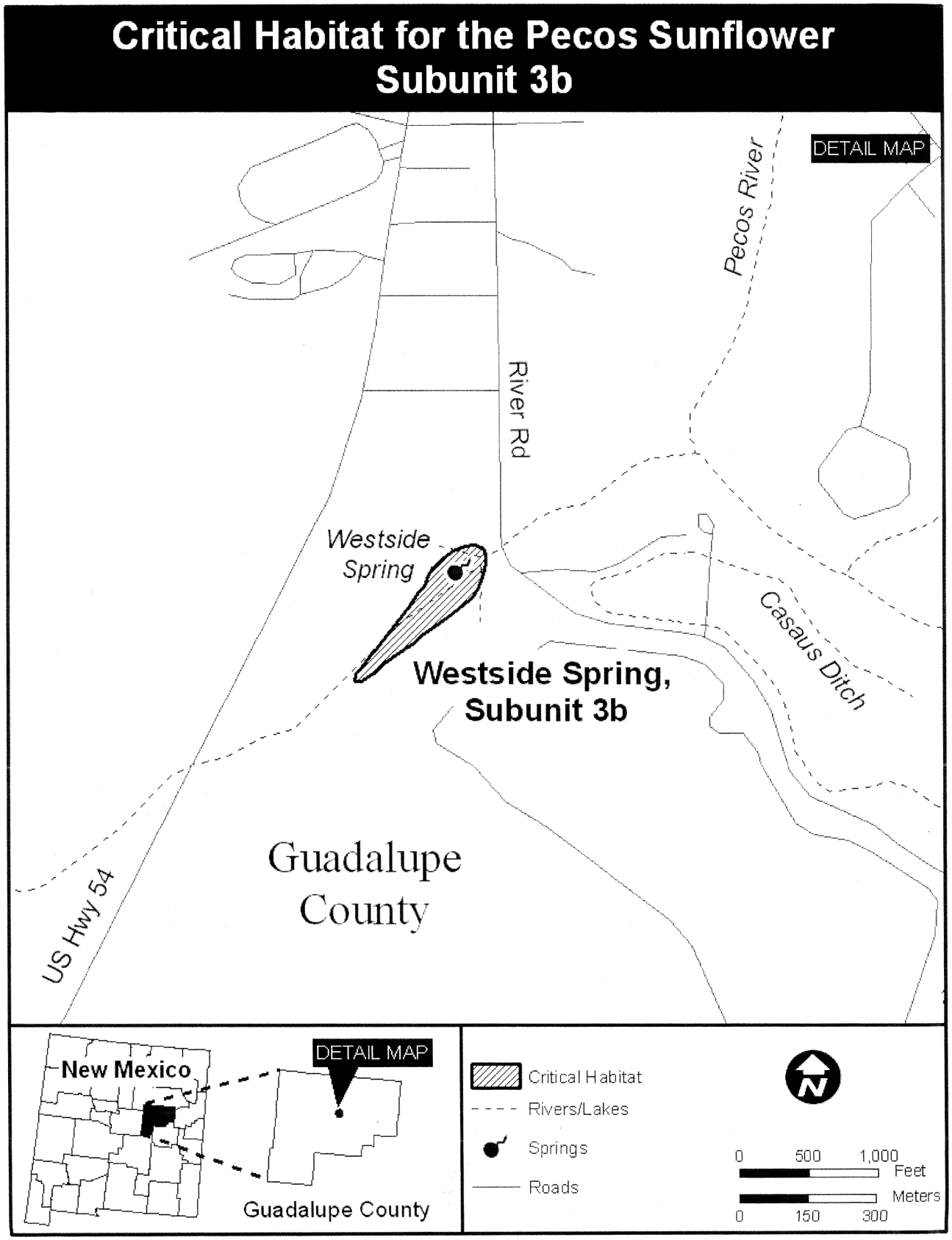
(i) Subunit 3a for *Helianthus paradoxus*, Blue Hole Cienega/Blue Hole Fish Hatchery Ponds, Guadalupe County, New Mexico. From USGS 1:24,000 quadrangle Santa Rosa, lands bounded by the following UTM NAD83 coordinates (meters E, meters N): 529408, 3865628; 529431, 3865639; 529449, 3865654; 529468, 3865681; 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* (Pecos sunflower) critical habitat 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* (Pecos sunflower) critical habitat follows:



BILLING CODE 4310–55–C

(8) 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): 553433, 3705266; 553438, 3705244; 553427, 3705221; 553405, 3705160; 553392, 3705130; 553391, 3705126; 553381, 3705133; 553368, 3705185; 553355, 3705203; 553368, 3705223; 553376, 3705270; 553375, 3705274; 553381, 3705283; 553418, 3705283; thence returning to 553433, 3705266

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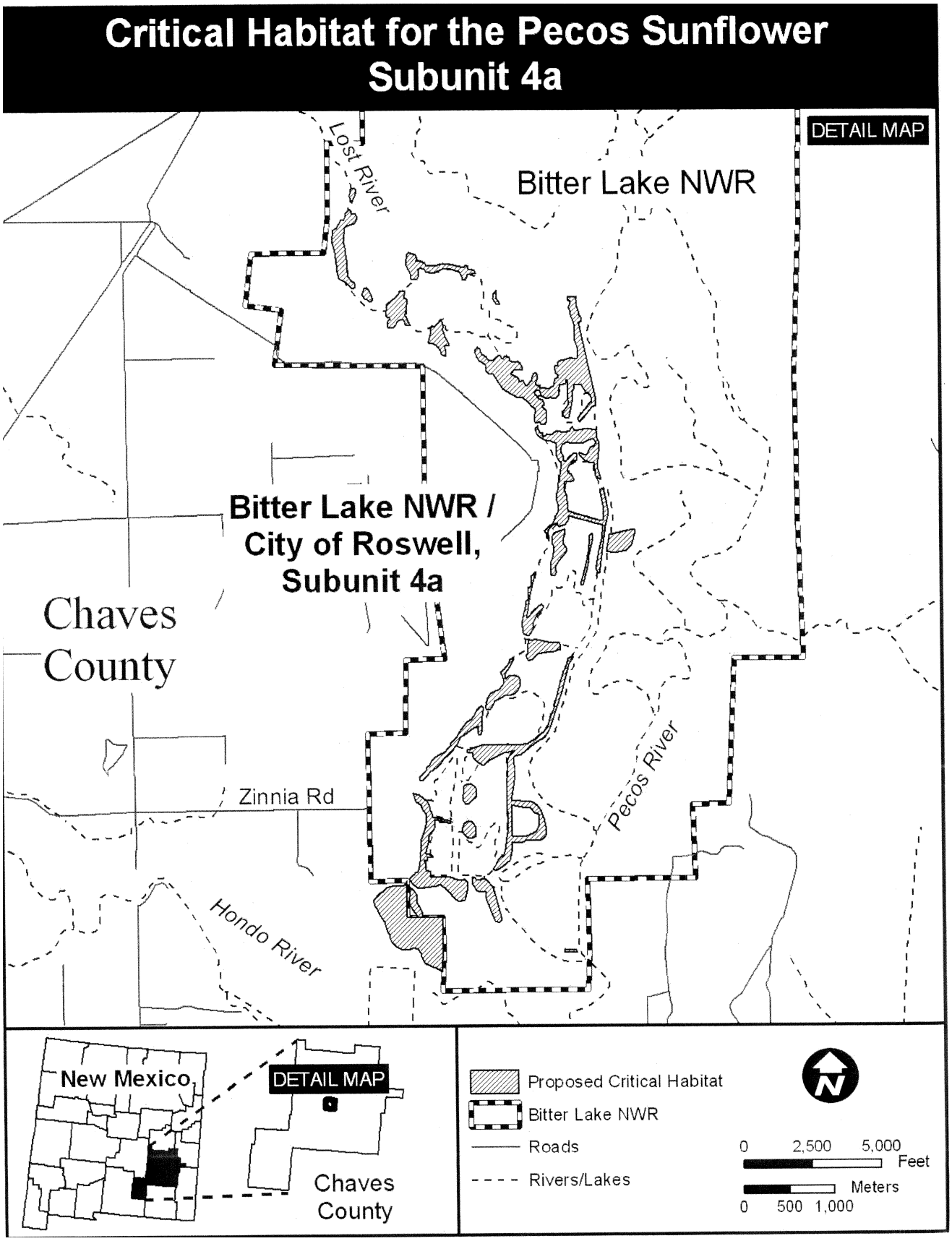
(ii) Note: Map of Subunit 4a for *Helianthus paradoxus* (Pecos sunflower) critical habitat follows:

BILLING CODE 4310–55–P

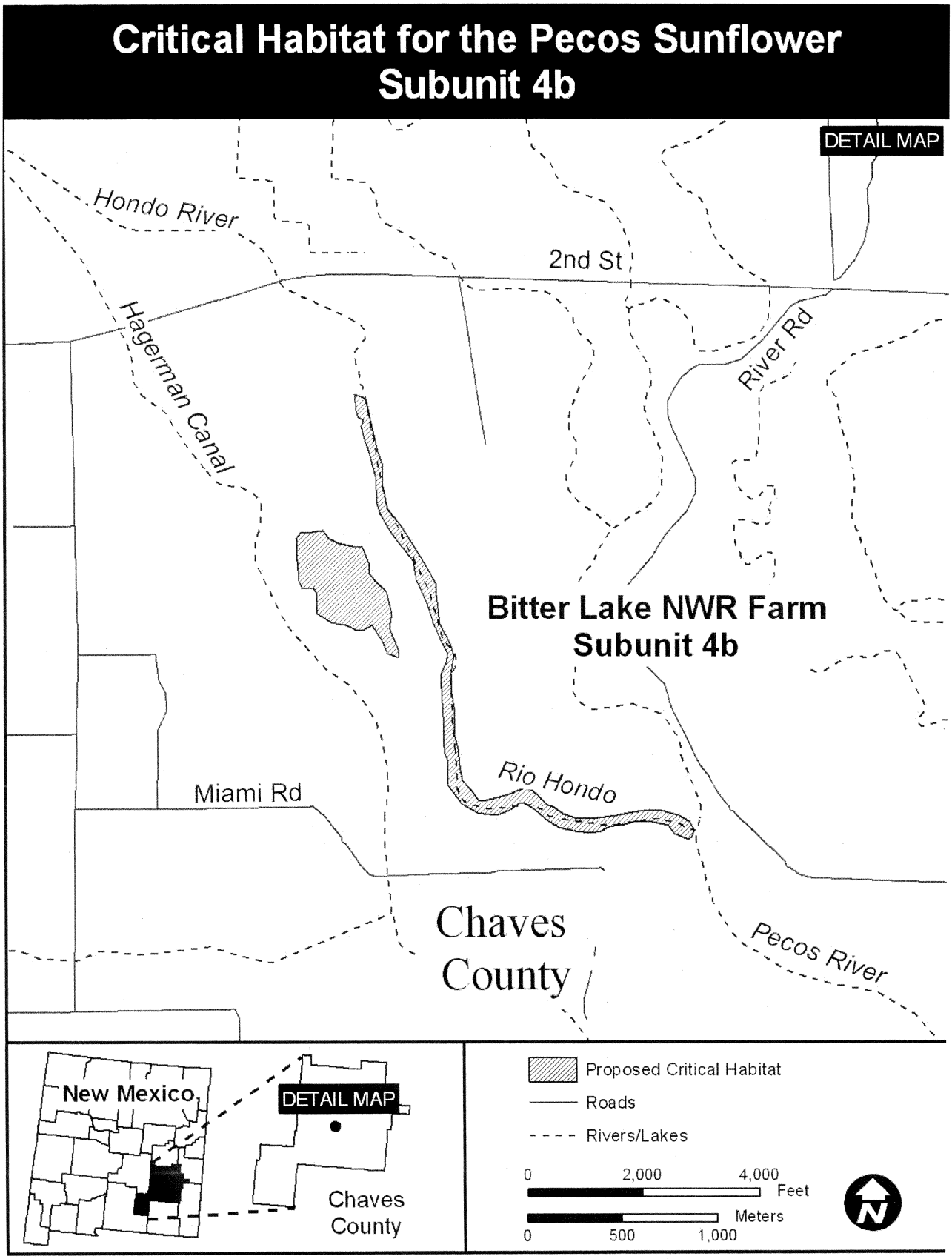

Critical Habitat for the Pecos Sunflower
Subunit 4a
DETAIL MAP
Lost River
Bitter Lake NWR
Bitter Lake NWR /
City of Roswell,
Subunit 4a
Chaves
County
Zinnia Rd
Pecos River
Hondo River
New Mexico
DETAIL MAP
Chaves
County
Proposed Critical Habitat
Bitter Lake NWR
Roads
Rivers/Lakes
N
0 2,500 5,000
Feet
Meters
0 500 1,000

(iii) Subunit 4b for *Helianthus paradoxus,* Bitter Lake National Wildlife Refuge Farm, 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):

554219, 3693892; 554261, 3693848; 554290, 3693737; 554276, 3693659; 554328, 3693532; 554323, 3693504; 554263, 3693526; 554239, 3693587; 554188, 3693676; 554137, 3693648; 554104, 3693647; 554076, 3693664; 554043, 3693675; 553974, 3693685; 553899, 3693735; 553894, 3693846; 553880, 3693868; 553819, 3693867; 553805, 3693906; 553795, 3694011; 553790, 3694128; 553813, 3694156; 553873, 3694161; 553929, 3694167; 553962, 3694129; 554013, 3694101; 554088, 3694085; 554134, 3694080; 554172, 3693991; 554172, 3693941; thence returning to 554219, 3693892

554157, 3694858; 554177, 3694762; 554220, 3694579; 554243, 3694507; 554244, 3694402; 554268, 3694280; 554333, 3694198; 554423, 3694059; 554517, 3693894; 554521, 3693849; 554520, 3693841; 554523, 3693831; 554526, 3693799; 554536, 3693678; 554593, 3693578; 554612, 3693512; 554598, 3693423; 554599, 3693312; 554618, 3693223; 554614, 3693102; 554633, 3693030; 554641, 3692940; 554656, 3692862; 554698, 3692810; 554741, 3692755; 554779, 3692758; 554831, 3692771; 554894, 3692789; 554945, 3692809; 554981, 3692819; 555025, 3692810; 555052, 3692782; 555097, 3692737; 555141, 3692720; 555186, 3692687; 555247, 3692665; 555335, 3692663; 555405, 3692671; 555472, 3692679; 555550, 3692695; 555641, 3692707; 555702, 3692705; 555794, 3692681; 555854, 3692646; 555873, 3692601; 555862, 3692568; 555841, 3692555; 555772, 3692585; 555736, 3692630; 555656, 3692647; 555576, 3692652; 555510, 3692634; 555430, 3692621; 555384, 3692596; 555336, 3692588; 555254, 3692595; 555165, 3692617; 555093, 3692657; 555034, 3692714; 554983, 3692742; 554951, 3692741; 554897, 3692706; 554832, 3692680; 554735, 3692690; 554653, 3692737; 554578, 3692832; 554578, 3692882; 554582, 3692965; 554565, 3692998; 554559, 3693035; 554553, 3693196; 554548, 3693345; 554547, 3693423; 554570, 3693478; 554579, 3693523; 554542, 3693600; 554504, 3693683; 554471, 3693788; 554419, 3693910; 554400, 3694009; 554348, 3694075; 554287, 3694158; 554231, 3694252; 554217, 3694308; 554206, 3694451; 554173, 3694574; 554164, 3694602; 554154, 3694634; 554131, 3694713; 554142, 3694747; 554118, 3694756; 554107, 3694795; 554098, 3694876; thence returning to 554157, 3694858

(iv) Note: Map of subunit 4b for *Helianthus paradoxus* (Pecos sunflower) critical habitat follows:



BILLING CODE 4310–55–C

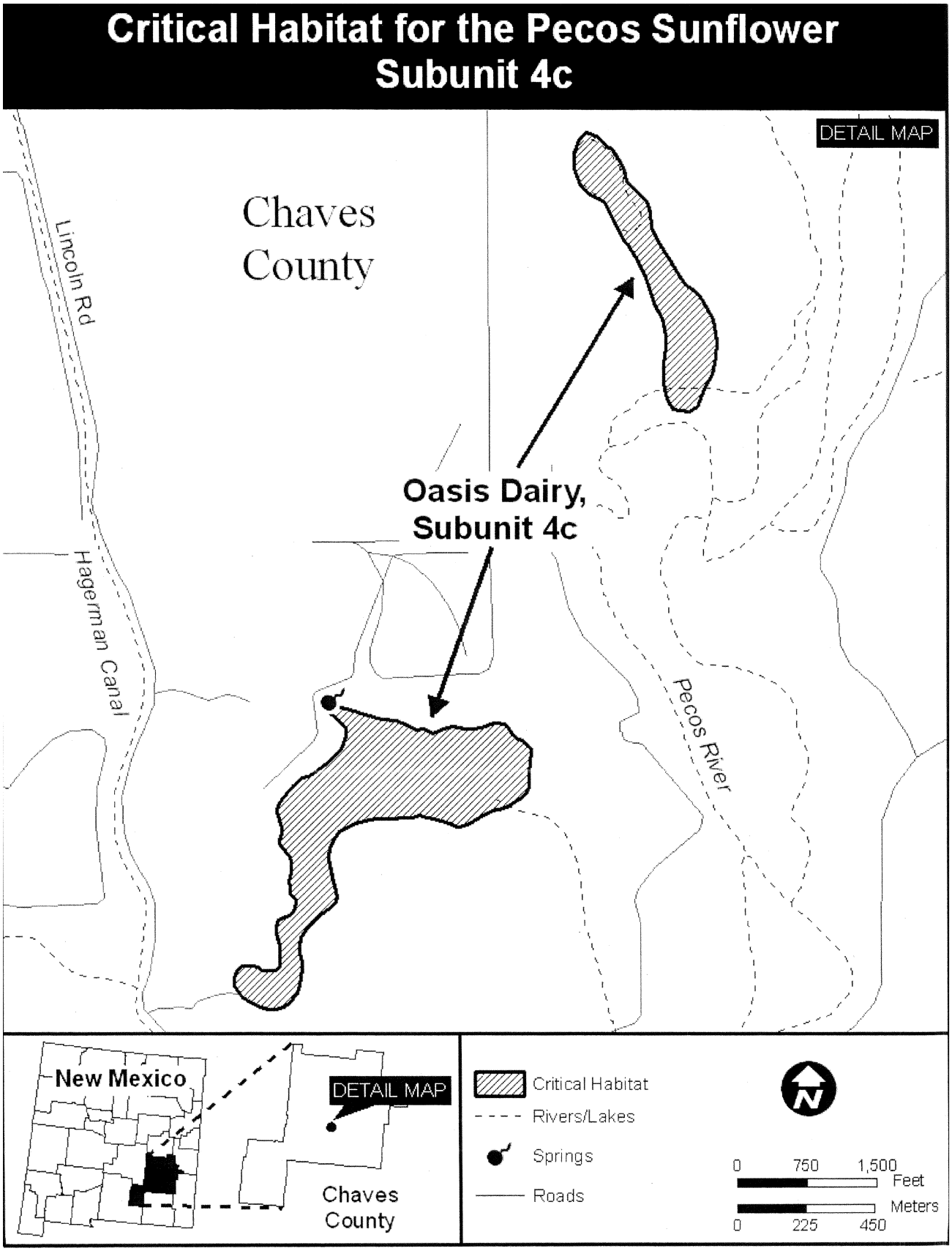
(v) Subunit 4c for *Helianthus paradoxus*, Oasis Dairy Subunit, Chaves County, New Mexico. From USGS 1:24,000 quadrangles Bottomless Lakes and South Spring, lands bounded by the following UTM NAD83 coordinates (meters E, meters N):

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.

(vi) Note: Map of Subunit 4c for *Helianthus paradoxus* (Pecos sunflower) critical habitat follows:

BILLING CODE 4310–55–P

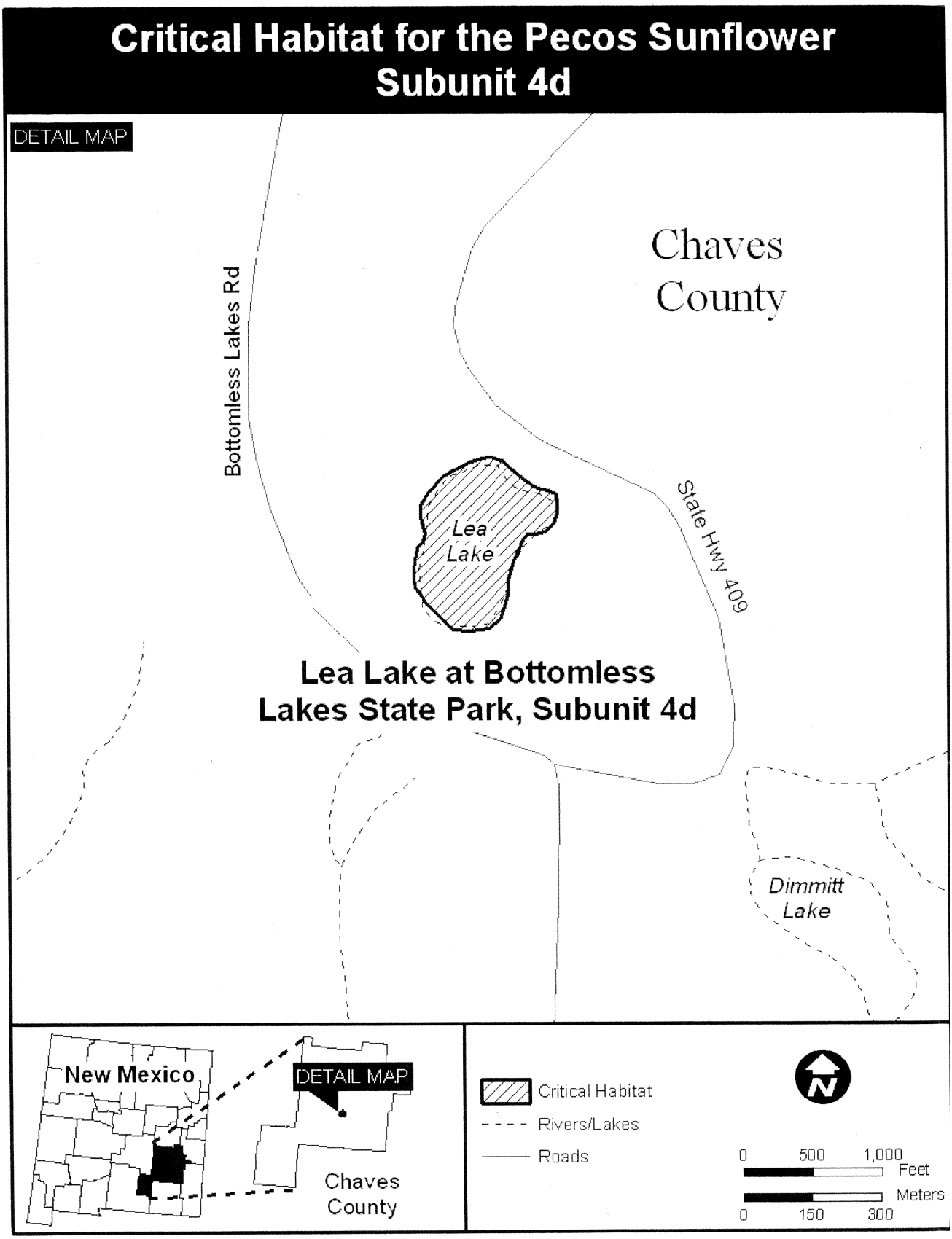


BILLING CODE 4310–55–C

(vii) 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.

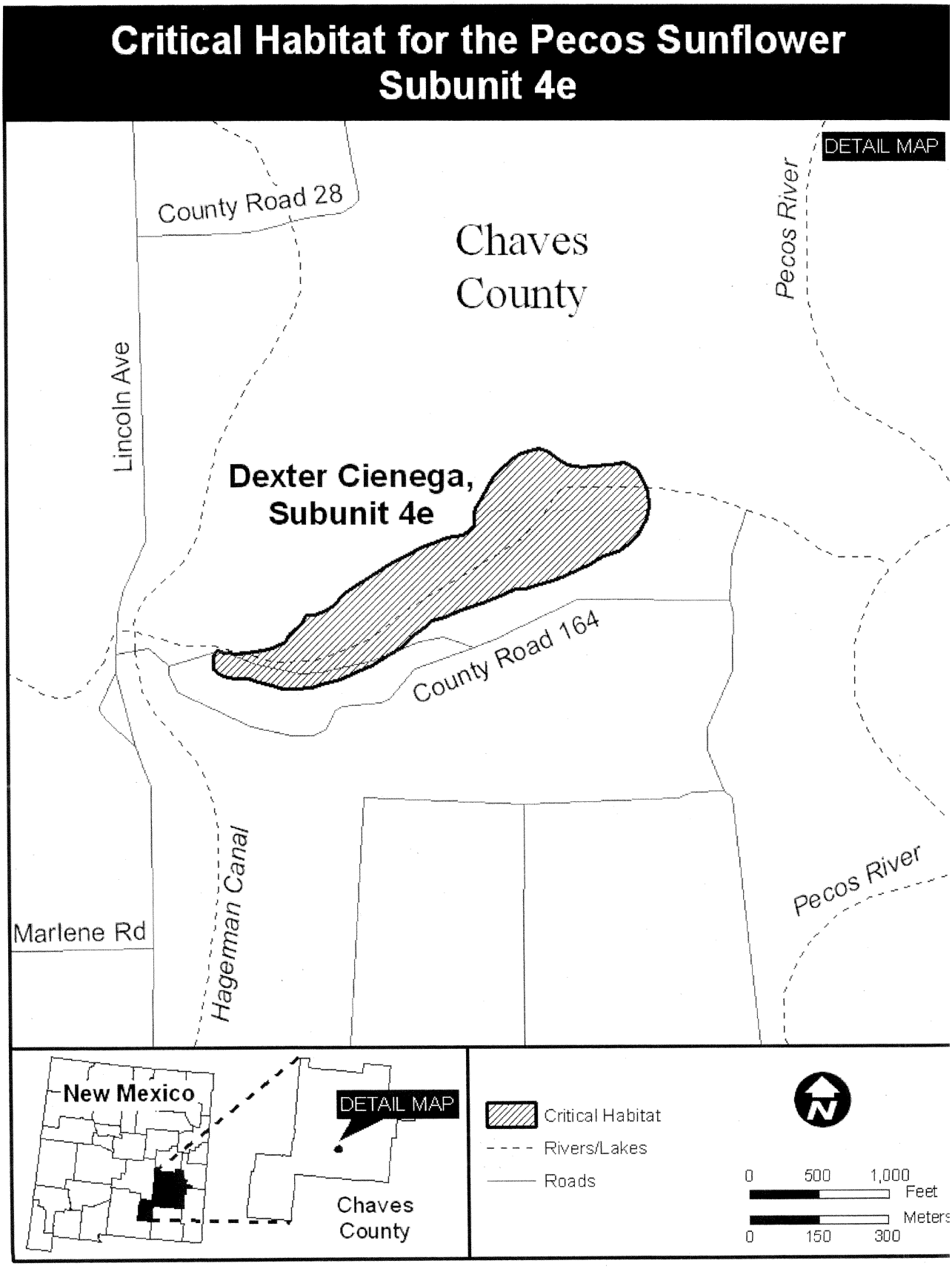
(viii) Note: Map of Subunit 4d for *Helianthus paradoxus* (Pecos sunflower) critical habitat follows:


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

(ix) 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.

(x) Note: Map of Subunit 4e for *Helianthus paradoxus* (Pecos sunflower) critical habitat follows:

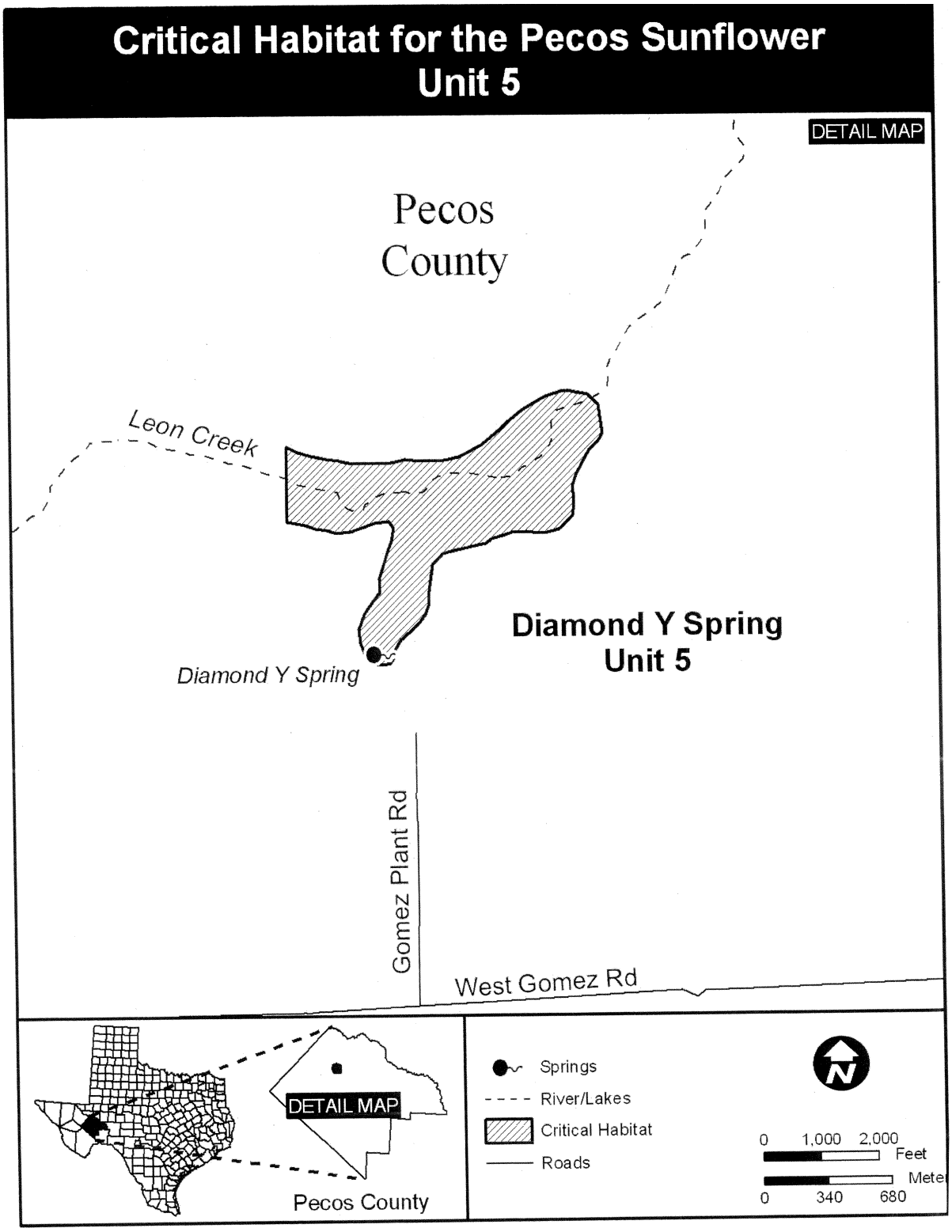

Critical Habitat for the Pecos Sunflower
Subunit 4e
DETAIL MAP
County Road 28
Chaves
County
Pecos River
Lincoln Ave
Dexter Cienega,
Subunit 4e
County Road 164
Hagerman Canal
Pecos River
Marlene Rd
New Mexico
DETAIL MAP
Chaves
County
Critical Habitat
Rivers/Lakes
Roads
0 500 1,000
Feet
Meters
0 150 300

(9) 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):

698884, 3432181; 698826, 3432165; 698791, 3432139; 698736, 3432128; 698662, 3432110; 698622, 3432104; 698558, 3432087; 698508, 3432029; 698495, 3431944; 698484, 3431889; 698482, 3431809; 698466, 3431762; 698429, 3431714; 698368, 3431658; 698333, 3431624; 698304, 3431582; 698291, 3431529; 698275, 3431500; 698238, 3431492; 698183, 3431494; 698143, 3431534; 698111, 3431608; 698106, 3431682; 698132, 3431764; 698180, 3431828; 698222, 3431883; 698217, 3431955; 698246, 3432042; 698267, 3432103; 698288, 3432156; 698299, 3432225; 698275, 3432262; 698196, 3432251; 698069, 3432206; 697987, 3432198; 697936, 3432214; 697876, 3432223; 697820, 3432243; 697774, 3432254; 697727, 3432259; 697728, 3432663; 697784, 3432632; 697855, 3432612; 697932, 3432595; 698003, 3432587; 698052, 3432577; 698116, 3432570; 698179, 3432573; 698264, 3432570; 698313, 3432580; 698359, 3432591; 698402, 3432587; 698462, 3432584; 698507, 3432584; 698550, 3432584; 698596, 3432591; 698652, 3432605; 698702, 3432630; 698772, 3432665; 698814, 3432700; 698860, 3432736; 698920, 3432796; 699002, 3432859; 699062, 3432895; 699125, 3432930; 699204, 3432951; 699241, 3432959; 699347, 3432935; 699405, 3432877; 699416, 3432816; 699427, 3432729; 699411, 3432697; 699352, 3432634; 699310, 3432560; 699281, 3432504; 699265, 3432456; 699265, 3432409; 699270, 3432345; 699263, 3432289; 699233, 3432258; 699186, 3432213; 699128, 3432200; 699080, 3432194; 699011, 3432202; 698934, 3432197; thence returning to 698884, 3432181

(ii) Note: Map of Unit 5 for *Helianthus paradoxus* (Pecos sunflower) critical habitat follows:



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Dated: March 17, 2008.

David M. Verhey,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. E8–5811 Filed 3–31–08; 8:45 am]

BILLING CODE 4310–55–C