DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

FWS–R6–ES–2013–0068

RIN 1018–AY56

Endangered and Threatened Wildlife and Plants; Revision of Critical Habitat for Salt Creek Tiger Beetle

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service, propose to revise critical habitat for the Salt Creek tiger beetle (*Cicindela nevadica lincolniana*) under the Endangered Species Act. If we finalize this rule as proposed, it would extend the Act's protections to lands designated as revised critical habitat for this subspecies. This designation fulfills our obligations under a settlement agreement. The effect of this regulation is to conserve

the habitat of Salt Creek tiger beetles in eastern Nebraska under the Endangered Species Act.

DATES: We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES** section, below) must be received by 11:59 p.m. Eastern Time of the closing date. We must receive requests for public hearings, in writing, at the address shown in **ADDRESSES** by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically*: Go to the Federal eRulemaking Portal: *http://www.regulations.gov*. In the Search box, enter Docket No. **FWS–R6–ES–2013–0068**, which is the docket number for this rulemaking. You may submit a comment by clicking on "Comment Now!"

(2) *By hard copy*: Submit by U.S. mail or hand-delivery to: Public Comments Processing, Attn: **FWS–R6–ES–2013–0068**; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, MS 2042–PDM; Arlington, VA 22203.

We request that you send comments **only** by the methods described above. We will post all comments on *http://www.regulations.gov*. This generally means that we will

post any personal information you provide us (see the **Public Comments** section below for more information).

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at *http://www.fws.gov/nebraskaes*, or *http://www.regulations.gov* at Docket No. **FWS–R6–ES–2013–0068**, and at the Nebraska Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we may develop for this critical habitat designation will also be available at the Fish and Wildlife Service website and Field Office set out above, and may also be included in the preamble and/or at *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Michael D. George, Field Supervisor, U.S. Fish and Wildlife Service, Nebraska Ecological Services Field Office, 203 W 2nd St, Grand Island, NE 68801; telephone 308–382–6468. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule

This is a proposed rule to revise the designation of critical habitat for the endangered Salt Creek tiger beetle. This revision will fulfill the terms of a settlement agreement reached on June 7, 2011 (see Previous Federal Actions). Under the Endangered Species Act of 1973, as amended (Act; 16 U.S.C. 1531 *et seq*.), any species that is determined to be threatened or endangered requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

This rule will propose revised critical habitat for the endangered Salt Creek tiger beetle

In total, we are proposing 1,110 acres (ac) (449 hectares (ha)) for designation as critical habitat for the Salt Creek tiger beetle in Lancaster and Saunders Counties in Nebraska. This proposed revised critical habitat includes saline wetlands and streams associated with Little Salt Creek and encompasses all three habitat areas occupied by the subspecies at the time of listing. It also includes saline wetlands and streams associated with Rock Creek and Oak Creek (Capitol Beach) that are currently unoccupied, but supported the subspecies less than 20 years ago. Our designation also includes segments of Haines Branch Creek because this area has the potential to provide suitable habitat for the Salt Creek tiger beetle and its inclusion will reduce the risk of species extinction by providing redundancy in available habitat throughout multiple creeks. Due to the presence of suitable habitat, we believe that the Salt Creek tiger beetle occurred in this

area historically; however, they have not been documented in this location due to minimal survey effort relative to the annual surveys done at Little Salt, Rock, and Oak Creeks.

The basis for our action

Under the Act, any species that is determined to be a threatened or endangered species shall, to the maximum extent prudent and determinable, have habitat designated that is considered to be critical habitat. Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to 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.

We will seek peer review

We are seeking comments from independent specialists to ensure that our proposed revision of critical habitat is based on scientifically sound data and analyses. We will invite these peer reviewers to comment on our specific assumptions and conclusions in this proposed rule. Because we will consider all comments and

information received during the comment period, our final determinations may differ from this proposal (see subsequent section on Peer Review).

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other concerned government agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as "critical habitat" under section 4 of the Act (16 U.S.C. 1531 *et seq.*) including whether there are threats to the species from human activity, the degree of which can be expected to increase due to the designation, and whether that increase in threat outweighs the benefit of designation such that the designation of critical habitat may not be prudent.

(2) Specific information on:

(a) The amount and distribution of Salt Creek tiger beetle habitat;

(b) What areas that were occupied at the time of listing (or are currently occupied) and that contain features essential to the conservation of the species should be included in the designation and why;

(c) Special management considerations or protection that may be needed in critical habitat areas we are proposing, including managing for the potential effects of climate change;

(d) What areas not occupied at the time of listing are essential for the conservation of the species and why; and

(e) The amount of habitat needed to be occupied by Salt Creek tiger beetles in order to recover the species.

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

(4) Information on the projected and reasonably likely impacts of climate change on the Salt Creek tiger beetle and proposed critical habitat.

(5) Any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation; in particular, any impacts on small entities or families, and the benefits of including or excluding areas that exhibit these impacts.

(6) Whether any specific areas we are proposing for revised critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act.

(7) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments **only** by the methods described in **ADDRESSES**.

We will post your entire comment—including your personal identifying information—on *http://www.regulations.gov*. If you submit your comment by hard copy, you may request at the top of your document that we withhold personal information such as your street address, phone number, or e-mail address from public review; however, we cannot guarantee that we will be able to do so. All comments submitted via *http://www.regulations.gov* will be posted in their entirety.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on *http://www.regulations.gov*, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Nebraska Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Previous Federal Actions

The final rule to list the Salt Creek tiger beetle as endangered was published on October 6, 2005 (70 FR 58335). At that time, we stated that critical habitat was prudent and determinable; however, we did not designate critical habitat because we were in the process of identifying the physical and biological features essential to conservation of the species. We published a proposed rule to designate critical habitat on December 12, 2007 (72 FR 70716). On June 3, 2008, we published a notice in the **Federal Register** to reopen the comment period and announce a public hearing (73 FR 31665). On April 28, 2009, we published a revised proposed rule to designate critical habitat (74 FR 19167). A final rule designating approximately 1,933 ac (782 ha) of critical habitat was published on April 6, 2010 (75 FR 17466). The Center for Native Ecosystems, the Center for Biological Diversity, and the Xerces Society (plaintiffs) filed a complaint on February 23, 2011, regarding designation of critical habitat for the species. The plaintiffs asserted that we failed to designate sufficient critical habitat to conserve and recover the species. A settlement agreement between the plaintiffs and the U.S. Fish and Wildlife Service (Service) was reached on June 7, 2011, and we agreed to reevaluate our designation of critical habitat. This proposed rule addresses our proposed revisions to the critical habitat designation for the Salt Creek tiger beetle.

Background

It is our intent to discuss below only those topics directly relevant to the proposed revisions to the critical habitat designation for the Salt Creek tiger beetle. For more

detailed information regarding the species, refer to the final rule to list the species as endangered published on October 6, 2005 (70 FR 58335).

Taxonomy and Species Description

The Salt Creek tiger beetle (*Cicindela nevadica lincolniana*) is a subspecies in the class Insecta, order Coleoptera, and family Carabidae (Integrated Taxonomic Information System 2012, p. 1). At least 85 species of tiger beetles and more than 200 subspecies exist in the United States; 26 species and 6 subspecies are known from Nebraska (Carter 1989, p. 8). Tiger beetles are fast-moving, predaceous insects (Carter 1989, p. 9). The Salt Creek tiger beetle's average length is 0.4 inches (in) (10 millimeters (mm)), and its color is dark brown shading to green (Carter 1989, pp. 12 and 17).

Distribution, Abundance, and Trends

The Salt Creek tiger beetle is endemic to saline wetlands associated with the Salt Creek watershed and some of its tributaries in Lancaster and southern Saunders Counties in eastern Nebraska (Allgeier 2005, p. 18). Historical estimates of the extent of these saline wetlands vary. Fowler (2012, p. 41) estimates that approximately 65,000 ac (26,000 ha) of saline wetlands occurred historically within the Salt Creek watershed. LaGrange et al. (2003, p. 3) estimated that more than 20,000 ac (8,100 ha) occurred historically. Farrar and Gersib (1991, p. 20) cite a report from 1862 that estimated 16,000 ac (6,480 ha) of saline wetlands in four basins near the present-day town of

Lincoln. It is not clear which four basins they are describing, but these basins were likely only a portion of the entire eastern Nebraska saline wetland complex. Historically, the Salt Creek tiger beetle was probably widely distributed throughout the eastern saline wetlands of Nebraska, especially at the type locality of Capitol Beach (Allgeier 2005, p. 41) along Oak Creek. However, in the past 150 years, approximately 90 percent of these wetlands have been degraded or lost due to urbanization, agriculture, and drainage (LaGrange et al. 2003, p. 1; Allgeier 2005, p. 41).

The most complete recent inventory, conducted in 1992 and 1993, identified 3,244 ac (1,314 ha) of "Category 1" wetlands remaining in Lancaster and Saunders Counties (Gilbert and Stutheit 1994, p. 10). The authors define Category 1 wetlands as high-value saline wetlands or saline wetlands with the potential to be restored to high value (Gilbert and Stutheit 1994, p. 6). High-value wetlands were defined as meeting one or more of the following criteria: (1) the presence of Salt Creek tiger beetles; (2) the presence of one or more rare or restricted halophytes (salt-tolerant plants); (3) historical significance as identified by the Nebraska State Historical Society; (4) the presence of plants characteristic of saline wetlands and not highly degraded, or the potential for saline wetland characteristics after enhancement or restoration; and (5) high potential for restoration of the historical salt source. Other categories of wetlands described in the inventory, including Categories 2, 3, and 4, were thought to provide limited or no saline wetland functions. At that time, it was thought that these wetland types had little or no potential for reestablishing the salt source and hydrology needed to restore and maintain saline conditions (Gilbert and Stutheit 1994, p. 7). Since 1994, however, techniques

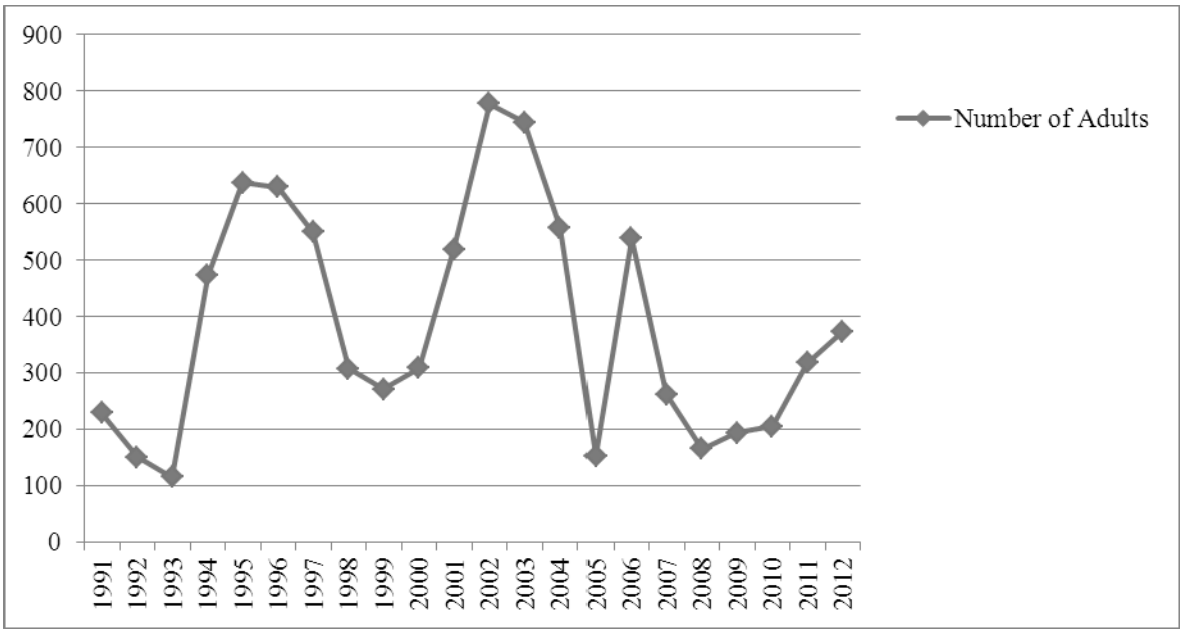
involving removal of excess sediment and restoration of saline water through installation of wells has made restoration of Categories 1, 2 and 3 feasible. Removal of sediment has exposed saline seeps and restored Salt Creek tiger beetle habitat along Little Salt Creek to the extent that the species now uses some of the restored areas (Harms 2013, pers. comm.). Category 2, 3, and 4 wetlands can also protect Category 1 saline wetlands from negative impacts associated with sediment transport and freshwater dilution of salinity. Without adjacent Category 2–4 wetlands, Category 1 saline wetlands can degrade and cease providing saline wetland functions (USFWS 2005, p. 11; LaGrange 2005, pers comm.; Stutheit 2005, pers comm.). The Service completed a detailed assessment of wetlands prior to listing the Salt Creek tiger beetle in 2005 and concluded that, following years of degradation in the Salt Creek watershed, approximately 35 ac (14 ha) of barren salt flats and saline stream edges contain the entire habitat currently occupied by the Salt Creek tiger beetle, which is not sufficient to sustain the species.

Visual surveys of Salt Creek tiger beetles, using consistent methods, timing, and intensity, have been conducted by University of Nebraska at Lincoln since 1991 (Spomer 2012a, pers comm.). Over the past 22 years, the total number of Salt Creek tiger beetle adults counted during visual surveys has ranged from 115 (in 1993) to 777 (in 2002) individuals (Figure 1). The most recent count was 374 adults in 2012. A 2-year mark-recapture study indicated that visual surveys may underestimate the species' population by approximately 40–50 percent, and recommended that a 2X correction factor be applied (Allgeier et al. 2003, p. 6; Allgeier et al. 2004, p. 3; Allgeier 2005, p. 40). However, these mark-recapture efforts were conducted on a small population that may

have experienced immigration or emigration during the sampling period; therefore, all assumptions may not have been met (Spomer 2012b, pers. comm.) and use of these results to make a population estimate may not be appropriate. Additionally, mark-recapture requires handling beetles and may interfere with egg-laying (Allgeier 2004, p. 3). Therefore, visual studies are preferred since they are more economical and less intrusive (Allgeier et al. 2003, p. 6; Allgeier et al. 2004, p. 3; Allgeier 2005, p. 53); however, visual studies do not provide the same precision as do mark-recapture studies.

Insects typically show greater population variability than many other animal species (Thomas 1990, p. 326), and their annual population numbers are generally cyclic. A very small population size indicates a vulnerability to extinction (Thomas 1990, pp. 325–326; Shaffer 1981, p. 131; Lande 1993, pp. 911–912; Primack 1998, p. 179) because when numbers decline, the population can become locally extirpated. The long-term data shows a fluctuating, but very small population size for Salt Creek tiger beetles.

Figure 1. Adult Salt Creek tiger beetles counted during visual surveys 1991-2012 (Brosius 2010, p. 12; Spomer 2012b, entire).



In addition to the number of individuals, the number of populations is critical when considering distribution, abundance, and trends. Salt Creek tiger beetles have been located at 14 sites since surveys began in 1991 (Brosius 2010, p. 12). We consider these 14 sites to represent 6 different populations based upon documented dispersal distances and presence of discrete suitable habitat for the species (70 FR 58336, October 6, 2005). Three of these populations have been extirpated since surveys began in 1991: The Capitol Beach population along Oak Creek, the Upper Little Salt Creek–South population on Little Salt Creek, and the Jack Sinn Wildlife Management Area (WMA) population on Rock Creek. For these populations, surveys showed that the number of individuals declined and then completely disappeared, leaving us to conclude that the population had become locally extirpated. The three remaining populations, Upper Little Salt Creek–North, Arbor Lake, and Little Salt Creek–Roper, all occur in the Little Salt Creek

watershed, along a stream reach of approximately 7 miles (mi) (11 kilometers (km)) (Fowler 2012, p. 41).

Habitat

The Salt Creek tiger beetle has very specific habitat requirements. It occurs in remnant saline wetlands on exposed mudflats and along the banks of streams and seeps that contain salt deposits (Carter 1989, p. 17; Spomer and Higley 1993, p. 394; LaGrange et al. 2003, p. 4). Soil moisture and soil salinity are critically important in habitat selection (Allgeier et al. 2004, p. 6) for foraging, where the female lays eggs, and for larval habitat. The species uses soil moisture and soil salinity to partition habitat between other collocated species of tiger beetles (Allgeier 2005, p. 64). Moist, saline, open flats are needed for thermoregulation, reproduction, and foraging.

Nebraska's eastern saline wetlands are maintained through groundwater discharge from the Dakota Aquifer System occurring in the flood plains of Salt Creek as it flows in a general pattern from southwest to northeast of Lincoln, Nebraska, in Lancaster and southern Saunders Counties (Harvey et al. 2007, p. 738). From the perspective of the larger Nebraska Eastern Saline Wetlands ecosystem, little is known about the connections between the surface water and the underlying groundwater and dissolved salts, or about the extent of the flow systems that feed the wetlands. From a local perspective, especially when making decisions about land management actions, it can be difficult to make informed management decisions about wetland protection or the impact of future

development (Harvey et al. 2007, p. 738). However, the eastern saline wetlands are dependent upon a regional-scale groundwater flow system and may not be replenished indefinitely (Harvey et al. 2007, p. 750). Subsurface geology, geomorphic features (including manmade features), and topographic characteristics all affect the hydrology of the wetlands, resulting in variability between each wetland (Kelly 2011, pp. 97–99).

Life History

The Salt Creek tiger beetle typically has a 2-year life cycle of egg, larval, and adult stages (Ratcliffe and Spomer 2002, unpaginated; Allgeier 2005, pp. 3–4). Adult females lay eggs in moist, saline mudflats along the banks of seeps and in saline wetland habitats when soil moisture and saline levels are appropriate. Upon hatching, each larva excavates a burrow where it lives for the next 2 years; the burrow is enlarged by the larva as it grows. Larvae are sedentary predators, catching prey that passes nearby. Larvae are more directly affected by a limited food supply than adults because they are not as mobile as adults and almost never leave their burrows. Following pupation, adults emerge from the burrows in the late spring to early summer of their second year and mate. Adults are typically active in May, June, and July before dying (Allgeier 2005, p. 63).

Adult Salt Creek tiger beetles have a mean dispersal distance of 137 feet (ft) (42 meters (m)), a maximum dispersal of 1,506 ft (459 m), and most are recovered within 82 ft (25 m) of the marking location, based upon a study of 60 individuals (Allgeier 2005, p. 50) in which 24 individuals were relocated following capture and 36 were not. The Salt

Creek tiger beetle appears to have narrower habitat requirements for egg-laying, foraging, and thermoregulation than other tiger beetles found in Nebraska's eastern saline wetlands (Brosius 2010, p. 5).

Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the 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 considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to 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 requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal 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) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special

management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species, but that was not occupied at the time of listing, may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific 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, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our 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 we are 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, other unpublished materials, experts' opinions, or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are 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 be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded

by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. 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 (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Prudency Determination

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the designation of critical habitat is not prudent when one or both of the following situations exist:

(1) The species is threatened by taking or other human activity, and identification of critical habitat can be expected to increase the degree of threat to the species, or

(2) Such designation of critical habitat would not be beneficial to the species.

There is currently no imminent threat of take attributed to collection or vandalism under Factor B for the Salt Creek tiger beetle, and identification and mapping of critical habitat is not expected to initiate any such threat. In the absence of finding that the designation of critical habitat would increase threats to a species, if there are any benefits to a critical habitat designation, then a prudent finding is warranted. Here, the potential benefits of designation include:

(1) Triggering consultation under section 7 of the Act, in new areas for actions in which there may be a Federal nexus where it would not otherwise occur because, for example, it is or has become unoccupied or the occupancy is in question;

(2) Focusing conservation activities on the most essential features and areas;

(3) Providing educational benefits to State or county governments or private entities; and

(4) Preventing people from causing inadvertent harm to the species.

Therefore, because we have determined that the designation of critical habitat will not likely increase the degree of threat to the species and may provide some measure of benefit, we find that designation of critical habitat is prudent for the Salt Creek tiger beetle.

Critical Habitat Determinability

Having determined that designation is prudent, under section 4(a)(3) of the Act we must find whether critical habitat for the Salt Creek tiger beetle is determinable. Our

regulations at 50 CFR 424.12(a)(2) state that critical habitat is not determinable when one or both of the following situations exist:

(1) Information sufficient to perform required analyses of the impacts of the designation is lacking, or

(2) The biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

When critical habitat is not determinable, the Act allows the Service an additional year to publish a critical habitat designation (16 U.S.C. 1533(b)(6)(C)(ii)).

We reviewed the available information pertaining to the biological needs of the species and habitat characteristics where it is located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for the Salt Creek tiger beetle.

Physical or Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features that are essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or 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 derive the specific physical or biological features essential for the Salt Creek tiger beetle from studies of this species' habitat, ecology, and life history as described below. Additional information can be found in the final listing rule published in the **Federal Register** on October 6, 2005 (70 FR 58335). We have determined that the following physical or biological features are essential for the Salt Creek tiger beetle.

Space for Individual and Population Growth and for Normal Behavior

Individual Spatial Needs—The Salt Creek tiger beetle requires areas associated with saline seeps along stream banks and salt flats with the appropriate soil moisture and salinity levels and that are largely barren and nonvegetated. During the species' nearly 2-year larval stage, its spatial requirements are small, but very specific in terms of soil texture, moisture, and chemical composition (Allgeier et al. 2004, pp. 5–6; Allgeier 2005, p. 64; Brosius 2010, p. 20; Harms 2012a, pers comm.). At this stage, the species is a sedentary predator that positions itself at the top of its burrow to catch prey that passes

nearby. Tiger beetle larvae do not move more than an inch or so from where eggs are originally deposited by the female (Brosius 2010, p. 64).

The adult stage of the Salt Creek tiger beetle lasts a few weeks in May, June, and July (Carter 1989, pp. 8 and 17). Adults have greater spatial requirements in order to accommodate foraging needs and egg-laying. We do not have information regarding historical dispersal distances for the species. However, adults are strong fliers (Carter 1989, p. 9); therefore, it is likely they could disperse some distance if sufficient suitable habitat was available. A recent study documented adults dispersing up to 1,506 ft (459 m), with a mean dispersal distance of 137 ft (42 m), and most individuals dispersed less than 82 ft (25 m) (Allgeier 2005, p. 50). Longer dispersal movements almost certainly occur (Allgeier 2005, p. 51).

A female will lay up to 50 eggs during her brief adult season, each in a separate burrow (Rabadinanth 2010, p. 14). We do not have species-specific information regarding the typical distance between burrows in the wild. However, tiger beetles using burrows in close proximity to one another may succumb to intraspecific and interspecific competition (Brosius 2010, p. 27). Efforts to breed the species in captivity attempted to keep burrows in terrariums at least 1 in (25 mm) apart; at this distance, incidences of burrow collapse due to proximity to another burrow were documented (Allgeier 2005, pp. 121–122).

Population Spatial Needs—We do not have species-specific information regarding a minimum viable population size for the Salt Creek tiger beetle or the amount of habitat needed to sustain a viable population. However, we have preliminarily determined that 500–1,000 adults is a reasonable estimate of a minimum viable population for the species based on recovery plans for two other species of tiger beetles in the same genus (*Cicindela*). These plans consider a minimum viable population size to be at least 500–1,000 adults (Hill and Knisley 1993, p. 23; Hill and Knisley 1994, p. 31). The authors base this estimate on available literature and on preliminary observations of population stability at several sites, but acknowledge that there is little information available regarding the amount of habitat necessary to support a population of this size.

The Salt Creek tiger beetle is historically known from six populations (70 FR 58336, October 6, 2005); four from Little Salt Creek, one from Rock Creek, and one from Oak Creek (i.e., Capitol Beach). We consider this the minimum number of populations needed to maintain species viability. Half of these populations are now extirpated. Little Salt Creek contains saline wetland and stream habitats currently occupied by the remaining populations of the species. Rock and Oak Creeks also contain saline wetland and stream habitats although the species has disappeared from those areas. One of the populations at Little Salt Creek (Upper Little Salt Creek South population) was extirpated leaving the remaining three populations. The two additional populations on Rock and Oak Creeks existed prior to the mid-1990s (70 FR 58336, October 6, 2005). Visual surveys of adults at the three remaining populations on Little Salt Creek over the past 10 years have ranged from 153 to 745 individuals (Harms 2009, p. 3). The Service

determined that 38 ac (15 ha) of scattered barren salt flats and saline stream edges remain in the Little Salt Creek watershed, with approximately 35 ac (14 ha) currently occupied by the Salt Creek tiger beetle (70 FR 58342, October 6, 2005; George and Harms 2013, pers. comm.).

In the absence of specific data on how much space is required to maintain viable populations of Salt Creek tiger beetles, we derived an estimate of the amount of habitat needed to support six viable populations as follows. The minimum population of Salt Creek tiger beetles counted over the past 10 years was 153 adult beetles in 2005, from 3 populations. We consider a minimum of 500 adult beetles necessary to maintain a single viable population. The small population of 153 beetles occupied approximately 35 ac (14 ha) of habitat. We estimate that 3.3 times as much habitat would be required to support a minimum of 500 beetles; therefore approximately 116 ac (47 ha) are required to support a single viable population, and approximately 696 ac (282 ha) would be required to support 6 viable populations. This estimate is very conservative from the standpoint that 500 individuals was used as a minimum viable population size. If the upper number in the range of 500–1,000 adults to support a single viable population is used, similar calculations would conclude that approximately 1,368 ac (554 ha) are required to support 6 viable populations of the species. Therefore, based upon the best available information, it is reasonable to assume that 696–1,368 ac (282–554 ha) are needed to maintain species viability. Therefore, we designed our proposed revised critical habitat units to provide sufficient habitat to ensure the species' recovery.

Summary—Based upon the best available information, we conclude that recovery of the Salt Creek tiger beetle would require at least 6 populations, with each population containing at least 500–1,000 adults of the species. We estimate that at least 696–1,368 ac (282–554 ha) would be required to maintain these populations. Given the nature of insect populations, which are cyclic and subject to local extirpations, the species must be sufficiently abundant and in a geographic configuration that allows them to repopulate areas following local extirpations when suitable habitat conditions return. Salt Creek tiger beetles require nonvegetated areas associated with stream banks, mid-channel islands, and salt flats to meet life-history requirements as core habitat, as well as adjacent habitat to facilitate dispersal and protect core habitat. We identify these spatial characteristics as a necessary physical feature for this species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Food—The Salt Creek tiger beetle is a predatory insect. Larvae are sedentary predators that capture small prey passing over or near their burrows on the soil surface. Adults are very quick and agile, and use this ability to actively hunt a wide variety of flying and terrestrial invertebrates (Allgeier 2005, pp. 1–2, 5). Insect prey may be supported by the limited open habitat in close proximity to the burrows or by the adjacent vegetated habitat. Typical prey items include insects belonging to the orders Coleoptera (beetles), Orthoptera (grasshoppers and crickets), Hemiptera (true bugs), Hymenoptera (ants, bees, and wasps), Odonata (dragonflies), Diptera (flies), and Lepidoptera (moths and butterflies) (Allgeier 2005, p. 5). Ants appear to be the most commonly observed

prey of adult tiger beetles (Allgeier 2005, p. 5). Larvae are more easily affected by a limited food supply than adults because they almost never leave their burrows and must wait for prey (Ratcliffe and Spomer 2002, unpaginated).

Surface Water—The Salt Creek tiger beetle prefers very moist soils for egg-laying and during its larval stage, with mean soil moisture of 47.6 percent (Allgeier 2005, p. 72). This high moisture percentage likely aids in the species' ability to tolerate heat (Allgeier 2005, p. 75) and keeps the soil malleable during burrow construction and maintenance (Harms 2012b, pers comm.). Adults of the species spend significantly more time on damp surfaces and in shallow water than other tiger beetles (Ratcliffe and Spomer 2002, unpaginated; Brosius 2010, p. 70). This close association with seeps and adjacent shallow pools may allow adults to forage at times when high temperatures limit foraging by other saline-adapted tiger beetles. However, this association may also explain some of the species' vulnerability to extinction—beyond the loss of saline wetlands in general, the limited seeps and pools in the remaining habitat may represent a further limitation regarding habitat (Brosius 2010, p. 74). Channelization along Salt Creek has increased its velocity, which in turn has resulted in deep cuts in the lower reaches of its tributaries. This change has caused these tributary streams to function like drainage ditches, lowering adjacent water table levels and drying many of the wetlands that once provided suitable habitat for the species (Farrar and Gersib 1991, p. 29; Murphy 1992, p. 12). Additionally, saline seeps located along Little Salt Creek have become over-covered following bank sloughing that was facilitated by channel entrenchment. Seeps are currently the only locations that provide suitable larval habitat.

Groundwater—Nebraska's eastern saline wetlands are fed by groundwater discharge from the Dakota Aquifer, which is part of the Great Plains Aquifer (Harvey et al. 2007, p. 741). Urban expansion associated with the City of Lincoln is placing increasing demands on the aquifer (Gosselin et al. 2001, p. 99). The official soil series description for the "Salmo" soil series notes that the water table is near the surface in the spring and at depths of 2–4 ft (0.6–1.2 m) in the fall (USDA 2009). Harvey et al. (2007, p. 740) monitored groundwater levels and groundwater salinity at Rock Creek and Little Salt Creek from 2000 through 2002. They found that groundwater did not reach the soil surface and was present in the upper few yards (meters) of the soil column only during the spring when groundwater levels were at their highest due to winter snowmelt and spring rainstorms. They also noted that the depth of groundwater was related to the proximity of the stream, such that groundwater was at a lower depth near a stream than far away from it. They also noted that the area was under slight drought conditions during the study period. The increased depth to groundwater in this region is likely due to a combination of factors including drought, channelization along Salt Creek, and water depletions for urban and agricultural uses. If groundwater levels continue to decline, saline features of the wetlands could gradually change to freshwater, or wetlands could dry. Either of these scenarios could result in extirpation of the Salt Creek tiger beetle from affected wetlands and could ultimately lead to extinction of the species.

Saline Soils—Soils in the eastern saline wetlands of Nebraska typically contain chloride or sulfate salts and have a pH from 7–8.5 (Allgeier 2005, p. 17). Salt Creek tiger

beetles prefer soils that are slightly saline, with an optimal electroconductivity of 2,504 milliSiemens per meter (mS/m) (Allgeier 2005, p. 75). However, salinities as low as 1,656 mS/m have been measured at survey sites (Rabadinanth 2010, p. 19). Soil salinity may serve as a means of partitioning habitat between the 12 species of tiger beetles in the genus *Cicindela* that use the saline wetlands of Nebraska (Allgeier et al. 2004, pp. 5–6; Allgeier 2005, p. 65; Brosius 2010, p. 13).

The "Salmo" soil series is found at all known occurrences for the species (Allgeier 2005, p. 42). This soil type is formed on saline flood plains, and its characteristics typically include: (1) a texture of silt loam or silty-clay loam, (2) 0–2 percent slope, (3) somewhat poorly drained or poorly drained soils, and (4) 0–3 feet to the water table (Gersib and Steinauer 1991, p. 41; Gilbert and Stutheit 1994, p. 4; USDA 2009, pp. 1–3). The "Saltillo" soil series is found in adjacent Saunders County and has soil characteristics very similar to the "Salmo" soil series (USDA 2006, pp. 1–4). Consequently we believe that this soil type may also be able to provide suitable salinity levels and capacity to hold sufficient soil moisture for the species.

Light—Salt Creek tiger beetles have only been observed laying eggs at night (Allgeier et al. 2004, p. 5). Light pollution from urban areas likely disrupts nocturnal behavior by attracting beetles towards the light and out of their normal habitats (Allgeier et al. 2003, p. 8). In both field and laboratory studies, attraction to light from different types of lamps varied, in decreasing order, from blacklight, mercury vapor, fluorescent, incandescent, and sodium vapor, with blacklight being the most favored by the species

(Allgeier 2005, pp. 89–95). The disruption in behavior caused by lights could affect egg-laying activity of females, if it attracts females into unsuitable habitat.

Summary—Based upon the best available information, we conclude that the Salt Creek tiger beetle requires abundant available insect prey (supported by both the immediate core habitat and adjacent habitat), moist saline soils, and minimal light pollution. We identify these characteristics as necessary physical or biological features for the species.

Cover or Shelter

Burrows—Salt Creek tiger beetle larvae are closely associated with their burrows, which provide cover and shelter for approximately 2 years. Larvae are sedentary predators and position themselves at the top of their burrows. When prey passes nearby, a larva lunges out of its burrow, clutches the prey in its mandibles, and pulls the prey down into the burrow to feed. Once a larva obtains enough food, it plugs its burrow and digs a pupation chamber, emerging as an adult in early summer of its second year (Ratcliffe and Spomer 2002, unpaginated; Allgeier 2005, p. 2). The species is a visual predator, requiring open habitat to locate prey (Ratcliffe and Spomer 2002, unpaginated). Consequently, a clear line of sight is important. Habitat that becomes covered with vegetation no longer provides suitable larval habitat (Allgeier 2005, p. 78). Burrow habitat can also be impacted from disturbances such as trampling (Spomer and Higley 1993, p. 397), which causes soil compaction and damages the fragile crust of salt that is

evident on the soil surface. After the adult emerges from the pupa, it remains in the burrow chamber while its outer skeleton hardens (Ratcliffe and Spomer 2002, unpaginated). For the remainder of its brief adult stage, burrows are no longer used.

Summary—Based upon the best available information, we conclude that the Salt Creek tiger beetle requires a suitable burrow in moist, saline, sparsely vegetated soils for its larval stage. We identify this characteristic as a necessary physical feature for the species.

Sites for Breeding, Reproduction, or Development of Offspring

Annual visual surveys have been conducted since 1991, when six populations were known. Each of the three populations of Salt Creek tiger beetle currently known is associated with Category 1 wetlands along Little Salt Creek including moist saline soils and seeps which can be located at saline wetlands and streams. Three additional populations occurred in the mid-1990s on Little Salt Creek, Oak Creek, and Rock Creek, but these have been extirpated since 1998. No records of the species are known for other tributaries of Salt Creek. However, the species may have been abundant historically, based on numerous museum specimens collected from Capitol Beach (Carter 1989, p. 17; Allgeier et al. 2003, p. 1). The Capitol Beach population was severely impacted following construction of the Interstate-80 corridor and other urban development (Farrar and Gersib 1991, pp. 24–25), and finally disappeared in 1998. Little or no suitable habitat remains along Oak Creek because it has been channelized and has become

somewhat entrenched. However, numerous saline seeps and a large salt flat are located southwest of Oak Creek in its former floodplain. Little Salt Creek and Rock Creek still contain numerous saline wetlands and are the focus of efforts to protect remaining saline wetlands (Farrar and Gersib 1991, p. 40). Saline seeps are known to occur at the Haines Branch Creek. Few regular surveys for the Salt Creek tiger beetle have been done in these areas; however, suitable habitat occurs there, and more habitat could be potentially restored to aid in the recovery of the Salt Creek tiger beetle (USFWS 2005, p. 18). Given the presence of suitable habitat for a species with very narrow habitat preferences with historical records nearby, we can infer that the species was likely present there in the past.

The Salt Creek tiger beetle has very specific habitat requirements for foraging, egg-laying, and larval development. Requirements regarding water, soil salinity, and exposed habitat are described in the previous sections.

Summary—Based upon the best available information, we conclude that the Salt Creek tiger beetle requires a core habitat of moist saline soils with minimal vegetative cover for foraging, egg-laying, and larval development. Adjacent, more vegetative habitat is used for shade to cool adults (Harms 2013, pers comm.), protecting core habitat, and supporting a diverse source of prey for adults and larval Salt Creek tiger beetles. Approximately 90 percent of all remaining wetlands suitable for Salt Creek tiger beetles occur in the Little Salt Creek, Rock Creek watersheds, but saline seeps and wetlands also occur at Oak and Haines Branch Creeks. We identify barren salt flats and

saline seeps along streams and within suitable wetlands as a necessary physical feature for the species.

Primary Constituent Elements for Salt Creek Tiger Beetle

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the Salt Creek tiger beetle in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to the Salt Creek tiger beetle are:

- Saline barrens and seeps found within saline wetland habitat in Little Salt, Rock, Oak and Haines Branch Creeks. For our evaluation, we determined that two habitat types within suitable wetlands are required by the Salt Creek tiger beetle:
    - Exposed mudflats associated with saline wetlands or the exposed banks and islands of streams and seeps that contain adequate soil moisture and soil salinity are essential core habitats. These habitats support egg-laying and foraging requirements. The "Salmo" soil series is the only soil type that currently

supports occupied habitat; however, “Saltillo” is the other soil series that has adequate soil moisture and salinity and can also provide suitable habitat.

- Vegetated wetlands adjacent to core habitats that provide shade for species thermoregulation, support a source of prey for adults and larval forms of Salt Creek tiger beetles, and protect core habitats.

With this proposed designation of critical habitat, we intend to identify the physical or biological features essential to the conservation of the species, through the identification of the features’ primary constituent elements sufficient to support the life-history processes of the species.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. A detailed discussion of threats to the Salt Creek tiger beetle and its habitat can be found in the October 6, 2005, final rule to list the species (70 FR 58335).

The primary threats impacting the physical and biological features essential to the conservation of the Salt Creek tiger beetle are described in detail in the final rule to list the species published on October 6, 2005 (70 FR 58335). These threats may require

special management considerations or protection within the proposed critical habitat and include, but are not limited to, urban development (e.g., commercial and residential development, road construction, associated light pollution, and stream channelization) and agricultural development (e.g., over-grazing and cultivation). These threats are exacerbated by having only three populations on one stream (Little Salt Creek) with extremely low numbers and a highly restricted range making this species particularly susceptible to extinction in the foreseeable future.

The features essential to the conservation of the Salt Creek tiger beetle (exposed, moist, saline areas associated with stream banks, mid-channel islands, and mudflats) may require special management considerations or protection to reduce threats. For example, a loss of moist, open habitat necessary for larval foraging, thermoregulation, and other life-history activities resulted in the extinction of another endemic tiger beetle—the Sacramento Valley tiger beetle (*Cicindela hirticollis abrupta*) (Knisley and Fenster 2005, p. 457). This was the first tiger beetle known to be extirpated. Actions that could ameliorate threats include, but are not limited to:

(1) Increased protection of existing habitat through actions such as land acquisition and limiting access;

(2) Restoration of potential habitat within saline wetlands and streams through exposure of saline seeps, removal of sediment layers to expose saline soils and seeps, and use of wells to pump saline water over saline soils by Federal, State, and local interested parties;

(3) Establishment of multiple populations in the Rock, Oak, and Haines Branch Creeks through captive rearing and translocation of laboratory-reared larvae originating from wild populations;

(4) Protection of habitat adjacent to existing and new populations to provide dispersal corridors, support prey populations, and protect wetland functions; and

(5) Avoidance of activities such as groundwater depletions, new channelization projects, increased surface water runoff, and residential or road development that could alter soil moisture levels, salinity, open habitat, or low light levels required by the species.

Criteria Used to Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. We review available information pertaining to the habitat requirements of the Salt Creek tiger beetle. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we consider whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of the species. We are proposing to designate critical habitat within the geographical area occupied by the species at the time of listing in 2005 (Little Salt Creek) under the first prong of the Act's definition of critical habitat. We also are proposing to designate specific areas outside the geographical area occupied by the species at the time of listing that were documented to be occupied as recently as the mid-1990s or are presumed to have been occupied in the

past given the availability of suitable saline habitat, but which are presently unoccupied (Rock, Oak, and Haines Branch Creeks), under the second prong of the Act's definition of critical habitat because such areas are essential for the conservation of the species as they will spread the risk of species extinction over multiple stream systems. Important sources of supporting data include the final rule for listing the species (70 FR 58335, October 6, 2005), the recovery outline (USFWS 2009), available literature, and information provided by the University of Nebraska at Lincoln and the Nebraska Game and Parks Commission (citations noted herein).

We are proposing to include all currently occupied habitat in our designation of critical habitat because any further loss of occupied habitat would increase the Salt Creek tiger beetle's susceptibility to extinction. As previously noted, the species currently occupies approximately 35 ac (14 ha) of saline wetland and streams in three small populations along approximately 7 mi (11 km) of Little Salt Creek. The three existing populations are referred to as Upper Little Salt Creek–North, Little Salt Creek–Arbor Lake, and Little Salt Creek–Roper.

We are also proposing to include unoccupied saline wetlands, specifically saline salt flats along Little Salt Creek that are interspersed among these three populations. These barren salt flats are essential to the conservation of the species because they provide larval habitat, protect existing populations, provide dispersal corridors between populations, support prey populations, and provide potential habitat for new populations.

Lastly, we are proposing to include unoccupied barren salt flats and saline streams along Rock, Oak, and Haines Branch Creeks that were either occupied by the species until 1998 (i.e., Rock and Oak Creeks) or have suitable habitat for the Salt Creek tiger beetle, but were surveyed infrequently (Haines Branch). We have determined that these areas (Little Salt, Rock, Oak, and Haines Branch Creeks) are essential to the conservation of the species because they provide necessary redundancy in the event of an environmental catastrophe associated with Little Salt Creek—the only watershed that currently supports the species. All of these areas are tributaries to Salt Creek.

We recommend that at least one viable population of Salt Creek tiger beetles be established in each of the three unoccupied units of critical habitat, recognizing the uncertainty as to which areas will successfully support reintroduced populations. Although so little appropriate habitat remains in one of these units (Haines Branch) that it is below the number of acres that we estimated would be necessary to support a population of 500 adults, this area may be able to support a smaller population, which collectively would reduce the risk of extinction.

These populations, in addition to the 3 existing populations at Little Salt Creek, would result in 6 populations, with at least 500 adults in each population, but with 3 populations in Little Salt Creek. This is the number of populations documented in the mid-1990s, and the minimum number needed for species recovery; however, at that time, none of these populations were large enough to maintain species viability, and three of the populations were later extirpated. As the populations expand to viable numbers, we

anticipate that they will be within the maximum documented dispersal range of the species and may eventually constitute one metapopulation that has spatially separated populations with some interaction between those populations.

We delineated the critical habitat unit boundaries for the Salt Creek tiger beetle using the following steps:

(1) We used Geographic Information System (GIS) coverages initially generated by Gilbert and Stutheit (1994, entire) to categorize saline wetlands in the Salt Creek watershed of Lancaster and Saunders Counties, Nebraska.

(2) We delineated critical habitat within the areas of Little Salt, Rock, Oak, and Haines Branch Creeks that (a) are documented to support the species currently or to have supported it in the recent past (until 1998), or (b) that provide potential suitable habitat for the species that could sustain a viable population.

(3) We delineated all of the barren salt flats in the four creeks with adjacent suitable saline wetlands.

(4) In order to include surrounding vegetative areas that provide essential resources and support functions to the species, we delineated areas on segments of the four creeks that extended 137 feet (the average known dispersal distance for the species) on either side of the stream course. We used 137 feet because it is the average distance that the Salt Creek tiger beetle can move to meet life history requisites which can be satisfied within the stream segment and adjacent saline barrens and seeps in the floodplain area. We concluded that this distance would provide the species with sufficient prey resources.

Some other areas within the likely historical range of the Salt Creek tiger beetle were considered in this revised designation, but ultimately were not included. We do not propose to designate suitable saline wetlands along Middle Creek as critical habitat because the habitat there has been eliminated due to commercial and residential developments, road construction, and stream channelization, and is probably not restorable. Similarly, we do not propose to designate areas on tributaries to Salt Creek near the Cities of Roca and Hickman, Nebraska, because agricultural development has somewhat limited the ability of these areas to be restored for the benefit of the Salt Creek tiger beetle. We also do not propose to designate areas of Salt Creek downstream of Lincoln, Nebraska, because channel entrenchment has resulted in the loss of saline seep and saline wetland habitats there. We also did not include remaining areas of suitable saline wetlands in Upper Salt Creek because they are of insufficient size to support a viable population of Salt Creek tiger beetles.

This proposed revision to the critical habitat designation for Salt Creek tiger beetle would decrease the current designation of 1,933 acres by 823 acres, but it would increase the number of unoccupied units from one to three. This change would extend critical habitat to two additional stream corridors not previously included in critical habitat that could support populations of the species in the future, thereby reducing the risk of extinction. We have also revised the primary constituent elements on which this proposed revision was based to make them clearer and easier for the public to understand. However, these revised proposed primary constituent elements are based on

the same biological concepts about the needs of the Salt Creek tiger beetle that were used in the current critical habitat designation.

Since the time of our previous critical habitat designation, we have begun the process of recovery planning, and have preliminarily determined that at least 6 populations of 500–1,000 beetles within suitable habitat across multiple stream corridors would be necessary to recover the species. Therefore, we have proposed to designate an amount of critical habitat that would allow for that recovery to occur. We considered other possible critical habitat configurations for this proposal, including larger and smaller designations and different numbers of units. However, we concluded that this proposed designation of 1,110 acres in four units was the most biologically appropriate as it is based on habitat features that are used by Salt Creek tiger beetles, consistent with the statutory definition of critical habitat, and would best provide for the recovery of the species.

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack the physical and biological features necessary for the Salt Creek tiger beetle. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these developed lands would not trigger

section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

We are proposing designation of critical habitat lands that: (a) were determined to be occupied at the time of listing and contain sufficient elements of physical or biological features to support life-history processes essential for the conservation of the species and (b) are outside of the geographical area occupied at the time of listing that we have determined are essential for conservation of the Salt Creek tiger beetle.

Four units are proposed for designation based on sufficient elements of physical or biological features being present to support Salt Creek tiger beetle life-history processes. Designating units of critical habitat on Little Salt, Rock, Oak, and Haines Branch Creeks provides redundancy in the event that adverse effects on one of these watersheds impact Salt Creek tiger beetles or their habitat.

The critical habitat designation is defined by the map, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make the coordinates or plot points or both on which the map is based available to the public on *http://www.regulations.gov* at Docket No. **FWS–R6–ES–2013–0068**, on our Internet site

at *http://www.fws.gov/nebraskaes/*, and at the Nebraska Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT** above).

Proposed Critical Habitat Designation

We are proposing four units as critical habitat for the Salt Creek tiger beetle. The critical habitat units we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the species. The four units we propose as critical habitat are: (1) Little Salt Creek—under the first prong of the Act's definition of critical habitat and (2) Rock Creek, Oak Creek, and Haines Branch—under the second prong of the Act's definition of critical habitat. Table 1 shows the occupancy status of these units.

TABLE 1. Occupancy of Salt Creek tiger beetle by proposed critical habitat units.

Unit	Occupied at Time of Listing?	Currently Occupied?
Little Salt Creek Unit	Yes	Yes
Rock Creek Unit	No	No
Oak Creek Unit	No	No
Haines Branch Unit	No	No

The approximate area and ownership of each proposed critical habitat unit is shown in Table 2.

TABLE 2. Proposed critical habitat units for Salt Creek tiger beetle (Area estimates reflect all land within critical habitat unit boundaries.).

Critical Habitat Unit	Land Ownership by Type	Estimated Quantity of Critical Habitat	Percent of Critical Habitat Unit

Little Salt Creek Unit	City of Lincoln	40 ac (16 ha)	14.1
	Lower Platte South Natural Resources District	19 ac (8 ha)	6.7
	Nebraska Game & Parks Commission	41 ac (17 ha)	14.4
	The Nature Conservancy	29 ac (12 ha)	10.2
	Pheasants Forever	11 ac (4 ha)	3.9
	Private*	144 ac (58 ha)	50.7
	Subtotal	**284 ac (115 ha)**	
Rock Creek Unit	Nebraska Game & Parks Commission	152 ac (62 ha)	28.9
	Private*	374 ac (152 ha)	71.1
	Subtotal	**526 ac (213 ha)**	
Oak Creek Unit	Nebraska Department Roads	178 ac (72 ha)	85.6
	City of Lincoln	30 ac (12 ha)	10.67
	Subtotal	**208 ac (84 ha)**	
Haines Branch Unit	Private	**92 ac (37 ha)**	100
Total	City of Lincoln	70 ac (28 ha)	6.3
	Lower Platte South Natural Resources District	19 ac (8 ha)	1.7
	Nebraska Game & Parks Commission	193 ac (78 ha)	17.4
	Nebraska Department Roads	178 ac (72 ha)	16.0
	The Nature Conservancy	29 ac (12 ha)	2.6
	Pheasants Forever	11 ac (4 ha)	1.0
	Private*	610 ac (247 ha)	55.0
	Total	**1,110 ac (449 ha)**	

* Several private tracts are protected by easements

We present a brief description of each unit and reasons why it meets the definition of critical habitat for Salt Creek tiger beetle below.

Unit 1: Little Salt Creek Unit

This unit consists of 284 ac (115 ha) of barren salt flats and three stream segments on Little Salt Creek in Lancaster County from near its junction with Salt Creek to approximately 7 mi (11 km) upstream. It includes the three existing populations of Salt

Creek tiger beetles (Upper Little Salt Creek–North, Arbor Lake, and Little Salt Creek–Roper) present at the time of listing, and an additional site with an extirpated population (Upper Little Salt Creek–South). This Unit contains the physical or biological features essential to the Salt Creek tiger beetle.

Approximately 50 percent of the unit is either owned by entities that will protect or restore saline wetland habitat (see Table 2) or is part of an easement that protects the saline wetland habitat in perpetuity. This portion of the unit is largely protected from future urban development (e.g., commercial and residential development, road construction, and stream channelization) and future agricultural development (e.g., overgrazing and cultivation) by the landowners' or easement holders' participation in the *Implementation Plan for the Conservation of Nebraska's Eastern Saline Wetlands* and their membership in the Saline Wetlands Conservation Partnership (SWCP). At least two tracts (owned by the city of Lincoln) have been restored (Arbor Lake and Frank Shoemaker Marsh) (Malmstrom 2011 and 2012, entire) and other areas are in the process of being restored or are managed to conserve saline wetlands. However, without continued management, historical impacts from development will continue to adversely affect much of the habitat. The remaining 50 percent of the Little Salt Creek Unit that is not currently being managed for protection and restoration of saline wetland habitat remains vulnerable to both historical and ongoing impacts from development. The lower reaches of Little Salt Creek are in or near the City of Lincoln and, consequently, are most vulnerable to impacts related to urban development; upper stream reaches are more impacted by agricultural development.

Unit 2: Rock Creek Unit

The unit consists of 526 ac (213 ha) of barren salt flats and a stream segment of Rock Creek from approximately 2 mi (3 km) above its confluence with Salt Creek to approximately 12 mi (19 km) upstream. Most of this stream reach is in Lancaster County, but the northernmost portion is in southern Saunders County. This unit was not occupied at the time of listing; however, one population was present there until 1998. This Unit contains the physical or biological features essential to the Salt Creek tiger beetle. It is essential to the conservation of the species because any population established on Rock Creek would provide redundancy, in the event of a natural or manmade disaster on Little Salt Creek.

Approximately 29 percent of the unit is either owned by an entity that will protect or restore saline wetland habitat (see Table 2) or is part of an easement that protects the saline wetland habitat in perpetuity. This portion of the unit is largely protected from future urban development (e.g., commercial and residential development, road construction, and stream channelization), but not future agricultural development (e.g., overgrazing and cultivation). Approximately 152 ac (61 ha) of barren salt flats and the stream segment are part of the Jack Sinn WMA (owned by Nebraska Game and Parks Commission) located in southern Saunders and northern Lancaster Counties. This tract has undergone several projects to restore saline wetlands. However, without protection and restoration, historical impacts from development will continue to adversely affect

much of the habitat. The 71 percent of the Rock Creek Unit that is not currently being managed for protection and restoration of saline wetland habitat remains vulnerable to both historical and ongoing impacts from development. This unit is further removed from Lincoln; therefore, it faces fewer threats from urban development (e.g., commercial and residential development, road construction, and stream channelization) and more threats from agricultural development (e.g., overgrazing and cultivation) than the Little Salt Creek Unit.

Unit 3: Oak Creek Unit

The unit consists of 208 ac (84 ha) of barren salt flats and a saline seep complex located within a historic floodplain of Oak Creek. The unit is located along Interstate 80 in the northwest part of Lincoln, near the Municipal airport in Lancaster County. This unit was not occupied at the time of listing; however, one population (Capitol Beach) was present until 1998. This Unit contains the physical or biological features essential to the Salt Creek tiger beetle and is essential to the conservation of the species because any population established on Oak Creek or Capitol Beach would provide redundancy, in the event of a natural or manmade disaster on Little Salt Creek.

Approximately 86 percent of the unit is owned by the City of Lincoln and 14 percent the Nebraska Department of Roads (see Table 2). This unit is largely protected from future urban development (e.g., commercial and residential development, road construction, and stream channelization) and future agricultural development (e.g.,

overgrazing and cultivation). Barren salt flats including the saline seep complex along Interstate 80 are part of this Unit. This tract was once a part of a large saline wetland complex and is the type locality for the Salt Creek tiger beetle. However, a substantial amount of development has resulted in the loss of the once large saline wetland known from the area. This unit is near the City of Lincoln; however, it faces fewer threats from urban development (e.g., commercial and residential development, road construction, and stream channelization) than the Little Salt Creek Unit given the limitations on development that can be done along the Interstate and within the boundaries of the Lincoln Municipal Airport.

Unit 4: Haines Branch Unit

The unit consists of 92 ac (37 ha) of barren salt flats and 2.8-mile long Haines Branch stream segment. Haines Branch is located on the west side of Lincoln, near Pioneers Park in Lancaster County. This unit was not occupied at the time of listing, but suitable habitat in the form of saline seeps and wetlands are available for the Salt Creek tiger beetle. This Unit contains the physical or biological features essential to the Salt Creek tiger beetle and is essential to the conservation of the species because any population established on Haines Branch Creek would provide redundancy, in the event of a natural or human-caused disaster on Little Salt Creek.

The entire Unit is owned by private entities (see Table 2). This Unit is not protected from future urban development (e.g., commercial and residential development,

road construction, and stream channelization) and future agricultural development (e.g., overgrazing and cultivation).

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory 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*, 245 F. 3d 434, 442 (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, we determine destruction or adverse modification on the basis of whether, with

implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

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. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require 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 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 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 may affect and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify

critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define "reasonable and prudent alternatives" (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action;

(2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction;

(3) Are economically and technologically feasible; and

(4) Would, in the Director's opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of 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 we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions

for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

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 continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for the Salt Creek tiger beetle. As discussed above, the role of critical habitat is to support life-history needs of the species and provide for the conservation of the species.

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

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the Salt Creek tiger beetle. These activities include, but are not limited to:

(1) Actions that would alter soil moisture or salinity—Such activities could include, but are not limited to, development within or adjacent to proposed critical habitat such as installation of tile drains in agricultural lands, construction of storm drains in urban areas, road construction, or further development of residential or commercial areas. These activities could decrease soil moisture levels (in the case of tile drains) or increase soil moisture and decrease salinity levels through increased runoff of fresh surface water (in the case of storm drains, road construction, and residential or commercial development). Any change to soil moisture or salinity levels could degrade or destroy habitat by altering habitat characteristics beyond the narrow range of soil moisture and salinity required by the species. A secondary effect of increased freshwater inputs that lessen soil salinity is the potential invasion of more freshwater-tolerant plants such as cattails (*Typha* spp.) and reed canary grass (*Phalaris arundinacea*) that eliminate the open habitat required by the species (Harvey et al. 2007, p. 749).

(2) Actions that would increase the depth to the water table—Such activities could include, but are not limited to, stream channelization or bank armoring in Little Salt Creek, Rock Creek, Haines Branch, and Oak Creek or adjacent portions of Salt Creek. These activities could result in a lowering of the water table within proposed critical habitat that would compromise groundwater discharge functions necessary to maintain saline wetlands. A further loss of saline wetland habitat could impact our ability to conserve the Salt Creek tiger beetle.

(3) Actions that would cause trampling of open saline areas associated with stream banks, mid-channel islands, and mudflats—Such activities could include, but are not

limited to, overgrazing by livestock within proposed critical habitat. Trampling could result in the destruction of larvae and larval burrows, leading to population declines.

(4) Actions that would increase nighttime levels of light—Such activities could include, but are not limited to, new construction of residential or commercial areas that includes nighttime lighting. Light pollution likely disrupts nocturnal behavior by attracting beetles away from their normal habitats (Allgeier et al. 2003, p. 8). Attraction to light from different types of lamps varies, in decreasing order, from blacklight, mercury vapor, fluorescent, incandescent, and sodium vapor, with blacklight being the most favored (Allgeier et al. 2004, p. 10). The disruption in behavior could affect nighttime egg-laying activity of females, if it attracts females into unsuitable habitat.

(5) Actions that would result in modification to the right of way located along Interstate 80 that could alter the hydrology supporting saline seeps and salt flats at Oak Creek (Capitol Beach). This could include earth disturbance and installation of drainage structures.

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates

implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

(1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;

(2) A statement of goals and priorities;

(3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108-136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: "The Secretary shall not designate as critical habitat any lands or other geographic areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation."

There are no Department of Defense lands with a completed INRMP within the proposed critical habitat designation. Therefore, we are not proposing any exemptions based on section 4(a)(3)(B)(i).

Exclusions

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

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to 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 to any factor.

Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of

excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we are preparing a new analysis of the economic impacts of the proposed revised critical habitat designation and related factors. Upon completion, copies of the draft economic analysis will be available for downloading from the Internet at *http://www.regulations.gov*, or by contacting the Nebraska Fish and Wildlife Office directly (see **FOR FURTHER INFORMATION CONTACT** section). During the development of a final designation, we will consider economic impacts, public comments, and other new information. Areas may be excluded from the final critical habitat designation under section 4(b)(2) of the Act and our implementing regulations at 50 CFR 424.19.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. In preparing this proposal, we have determined that the lands within the proposed

designation of critical habitat for the Salt Creek tiger beetle are not owned or managed by the Department of Defense; therefore, we anticipate no impact on national security. Consequently, the Secretary does not propose to exercise his discretion to exclude any areas from the final designation based on impacts on national security.

Exclusions Based on Other Relevant Factors

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors, including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to-government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation. In preparing this proposal, we have determined that there are currently no completed HCPs for the Salt Creek tiger beetle, and the proposed designation does not include any tribal lands or trust resources.

There are no management plans for the Salt Creek tiger beetle. However, there is an implementation plan for the conservation of Nebraska's remaining eastern saline wetlands (LaGrange et al. 2003, entire). Signatories to this plan include the Nebraska Game and Parks Commission, the City of Lincoln, the County of Lancaster, the Lower Platte South Natural Resources District, and The Nature Conservancy. This plan may

protect and restore Salt Creek tiger beetle habitat. The goal of the plan is no net loss of saline wetlands and their associated functions, with long-term improvements in wetland functions through restoration of the hydrological system, prescribed wetland management, and watershed protection (LaGrange et al. 2003, p. 6). This plan led to formation of the SWCP, which has purchased nearly 1,200 ac (486 ha) of eastern saline wetlands and associated uplands, and acquired conservation easements on more than 2,000 ac (810 ha) of additional lands (Malmstrom 2011 and 2012, entire). Overall, approximately 29 percent of proposed critical habitat is protected through these acquisitions. We believe that activities implemented under the plan or under the SWCP would be supported by designation of critical habitat because the Salt Creek tiger beetle is described by the plan and the SWCP as one of the values supported by these saline wetlands. Therefore, no areas are proposed for exclusion from this designation based on other relevant impacts.

Peer Review

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

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

Public Hearings

Section 4(b)(5) of the Act provides for one or more public hearings on this proposal, if requested. Requests must be received within 45 days after the date of publication of this proposed rule in the **Federal Register**. Such requests must be sent to the address shown in **ADDRESSES**. We will schedule public hearings on this proposal, if any are requested, and announce the dates, times, and places of those hearings, as well as how to obtain reasonable accommodations, in the **Federal Register** and local newspapers at least 15 days before the hearing.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. The OIRA has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

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 of 1996 (SBREFA; 5 U.S.C 801 *et seq*.), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the 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.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include such businesses as 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 forestry and logging operations with fewer than 500 employees and annual business less than $7 million. To determine whether small entities may be affected, we will consider 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.

Importantly, the incremental impacts of a rule must be *both* significant and substantial to prevent certification of the rule under the RFA and to require the preparation of an initial regulatory flexibility analysis. If a substantial number of small entities are affected by the proposed critical habitat designation, but the per-entity economic impact is not significant, the Service may certify. Likewise, if the per-entity

economic impact is likely to be significant, but the number of affected entities is not substantial, the Service may also certify.

Under the RFA, as amended, and following recent court decisions, Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself, and not the potential impacts to indirectly affected entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the Agency is not likely to adversely modify critical habitat. Therefore, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Under these circumstances, it is our position that only Federal action agencies will be directly regulated by this designation. Therefore, because Federal agencies are not small entities, the Service may certify that the proposed critical habitat rule will not have a significant economic impact on a substantial number of small entities.

We acknowledge, however, that in some cases, third-party proponents of the action subject to permitting or funding may participate in a section 7 consultation, and thus may be indirectly affected. We believe it is good policy to assess these impacts if we have sufficient data before us to complete the necessary analysis, whether or not this analysis is strictly required by the RFA. While this regulation does not directly regulate these entities, in our draft economic analysis we will conduct a brief evaluation of the

potential number of third parties participating in consultations on an annual basis in order to ensure a more complete examination of the incremental effects of this proposed rule in the context of the RFA.

In conclusion, we believe that, based on our interpretation of directly regulated entities under the RFA and relevant case law, this designation of critical habitat will only directly regulate Federal agencies which are not by definition small business entities. And as such, we certify that, if promulgated, this designation of critical habitat would not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required. However, though not necessarily required by the RFA, in our draft economic analysis for this proposal we will consider and evaluate the potential effects to third parties that may be involved with consultations with Federal action agencies related to this action.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. We do not expect the designation of this proposed critical habitat to significantly affect energy supplies, distribution, or use as there is no energy supply or distribution infrastructure near the proposed critical habitat. Therefore, this action is not a significant energy action, and no Statement of Energy

Effects is required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

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

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq*.), we make the following findings:

(1) 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 mandates" include 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 mandates" include a regulation that "would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program."

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

(2) We do not believe that this rule will significantly or uniquely affect small governments because most of the lands within the proposed critical habitat do not occur within the jurisdiction of small governments. This rule will not produce a Federal

mandate of $100 million or greater in any year. Therefore, 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. Consequently, a Small Government Agency Plan is not required. However, we will further evaluate this issue as we conduct our economic analysis, and review and revise this assessment as warranted.

Takings—Executive Order 12630

In accordance with Executive Order 12630 ("Government Actions and Interference with Constitutionally Protected Private Property rights"), this rule is not anticipated to have significant takings implications. As discussed above, the designation of critical habitat affects only Federal actions. 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. Due to current public knowledge of the species protections and the prohibition against take of the species both within and outside of the proposed areas, we do not anticipate that property values will be affected by the critical habitat designation. However, we have not yet completed the economic analysis for this proposed rule. Once the economic analysis is available, we will review and revise this preliminary assessment as warranted, and prepare a Takings Implication Assessment.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this proposed rule does not have significant Federalism effects. A Federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this proposed critical habitat designation with appropriate State resource agencies in Nebraska. The designation of critical habitat in areas currently occupied by the Salt Creek tiger beetle imposes no additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments because the areas that contain the physical or biological features essential to the conservation of the species are more clearly defined, and the elements of the features necessary to the conservation of the species are more clearly defined, and the elements of the features 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).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the

legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, the rule identifies the elements of physical or biological features essential to the conservation of the species. The designated areas of critical habitat are presented on a map, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

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

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act 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 (42 U.S.C. 4321 et seq.*)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) 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 position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County* v. *Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)). However, 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 are required to complete NEPA analysis when designating critical habitat under the Act within the boundaries of the Tenth Circuit. We prepared an environmental assessment for our 2010 final rule designating critical habitat for the Salt Creek tiger beetle, and made a finding of no significant impacts. Although the State of Nebraska is not part of the Tenth Circuit, and therefore, NEPA analysis is not required, we will undertake a NEPA analysis in this case since we conducted one previously for our 2010 final rule.

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 (Consultation and Coordination With Indian Tribal Governments), 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. We determined that there are no tribal lands that were occupied by the Salt Creek tiger beetle at the time of listing that contain the features essential for conservation of the species, and no tribal lands unoccupied by the Salt Creek tiger beetle that are essential for the conservation of the species. Therefore, we are not proposing to designate critical habitat for the Salt Creek tiger beetle on tribal lands.

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

(1) Be logically organized;

(2) Use the active voice to address readers directly;

(3) Use clear language rather than jargon;

(4) Be divided into short sections and sentences; and

(5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in the **ADDRESSES** section. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

References Cited

A complete list of references cited in this rulemaking is available on the Internet at *http://www.regulations.gov* and upon request from the Nebraska Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this package are the staff members of the Nebraska Ecological Services Field Office and the Mountain-Prairie Regional Office.

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

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

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

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

Authority: 16 U.S.C. 1361–1407; 1531–1544; 4201–4245; unless otherwise noted.

2. In § 17.95(i), revise the entry for "Salt Creek Tiger Beetle (*Cicindela nevadica lincolniana*)," to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(i) *Insects.*

* * * * *

Salt Creek Tiger Beetle (*Cicindela nevadica lincolniana*)

(1) Four critical habitat units are depicted for Lancaster and Saunders Counties, Nebraska, on the map below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of Salt Creek tiger beetle consist of the following components:

(i) Saline barrens and seeps found within saline wetland habitat in Little Salt, Rock, Oak and Haines Branch Creeks. For our evaluation, we determined that two habitat types within suitable wetlands are required by the Salt Creek tiger beetle:

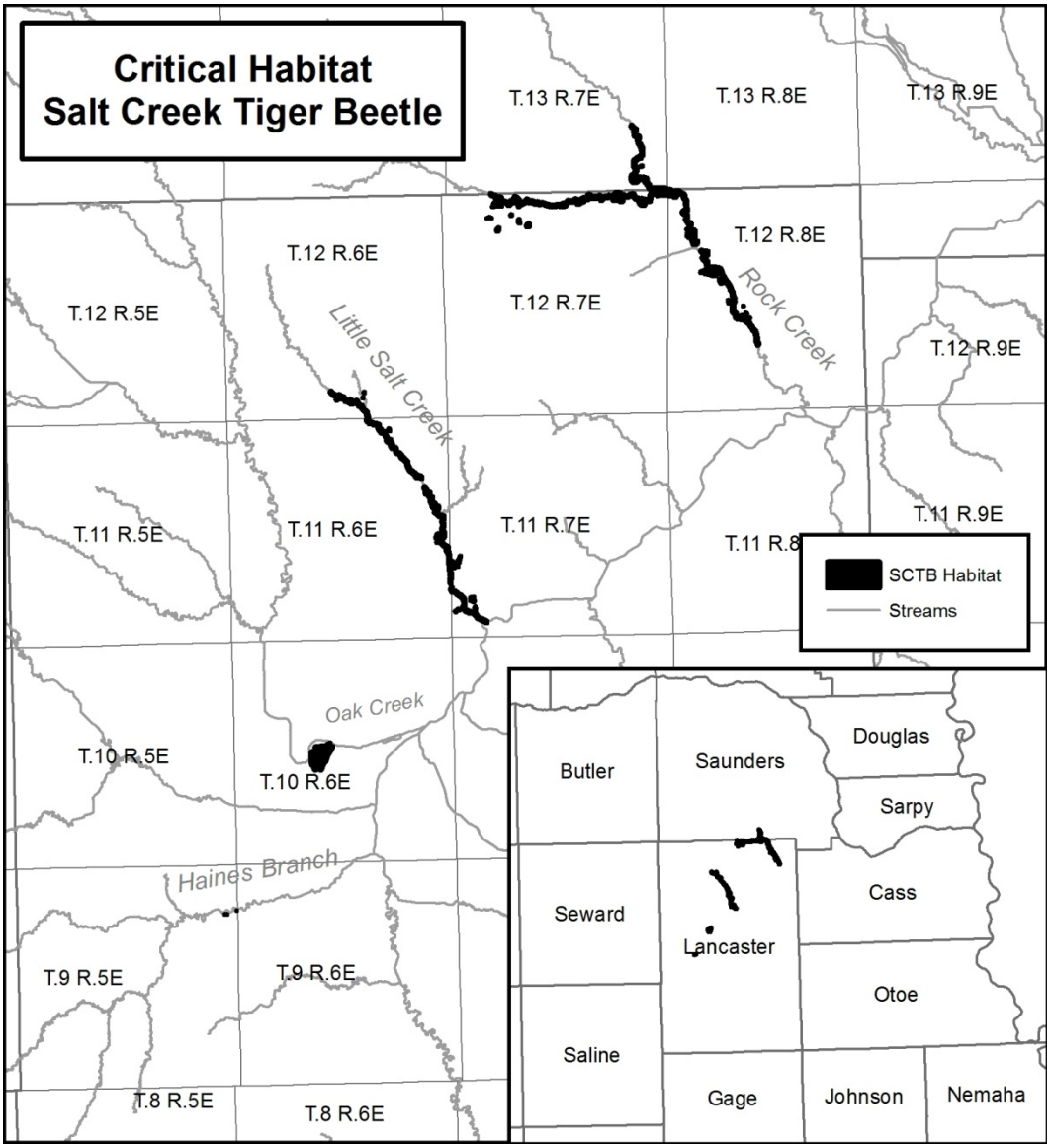
(ii) Exposed mudflats associated with saline wetlands or the exposed banks and islands of streams and seeps that contain adequate soil moisture and soil salinity are essential core habitats. These habitats support egg-laying and foraging requirements. The "Salmo" soil series is the only soil type that currently supports occupied habitat; however "Saltillo" is the other soil series that has adequate soil moisture and salinity and can also provide suitable habitat.

(iii)Vegetated wetlands adjacent to core habitats that provide shade for species thermoregulation, support a source of prey for adults and larval forms of Salt Creek tiger beetles, and protect core habitats.

(iv) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(v) Critical habitat map units. The map in this entry, as modified by any accompanying regulatory text, establishes the boundaries of the critical habitat designation. The coordinates or plot points or both on which the map is based are available to the public at the Service's internet site, *http://www.fws.gov/nebraskaes*, at *http://www.regulations.gov* at Docket No. FWS–R6–ES–2013–0068, and at the field office responsible for this designation. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(vi) Note: Map showing critical habitat units for the Salt Creek tiger beetle follows:


Critical Habitat
Salt Creek Tiger Beetle
T.13 R.7E
T.13 R.8E
T.13 R.9E
T.12 R.6E
T.12 R.7E
T.12 R.8E
T.12 R.5E
T.12 R.9E
Little Salt Creek
Rock Creek
T.11 R.5E
T.11 R.6E
T.11 R.7E
T.11 R.9E
SCTB Habitat
Streams
Oak Creek
T.10 R.5E
T.10 R.6E
Haines Branch
T.9 R.5E
T.9 R.6E
T.8 R.5E
T.8 R.6E
Butler
Saunders
Douglas
Sarpy
Seward
Lancaster
Cass
Otoe
Saline
Gage
Johnson
Nemaha

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Dated: May 20, 2013.

Rachel Jacobsen

Principal Deputy Assistant Secretary for Fish and Wildlife and Parks

Billing Code 4310-55-P

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