PRESSURE CONTROL VALVE SETTING OR RELIEF VALVE SETTING

Maximum start-to-discharge pressure (psig)	Maximum permitted filling density (percent by weight)				
	Ethylene	Ethylene	Ethylene	Hydrogen	Methane
17				6.60.	
45	52.8.				
75		51.1	51.1		32.5.
Maximum pressure when offered for transportation.	10 psig	20 psig	20 psig		15 psig.
Design service temperature	Minus 260 °F	Minus 260 °F	Minus 155 °F	Minus 423 °F	Minus 260 °F.
Specification (see § 180.507(b)(3) of this subchapter).	113D60W, 113C60W.	113C120W	113D120W	113A175W, 113A60W.	113C120W.

* * * * *

Issued in Washington, DC, on October 16, 2019, under authority delegated in 49 CFR 1.97.

Drue Pearce,

Deputy Administrator, Pipeline and Hazardous Materials Safety Administration.

[FR Doc. 2019–22949 Filed 10–23–19; 8:45 am]

BILLING CODE 4910–60–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R4–ES–2018–0082; FXES11130900000–178–FF0932000]

RIN 1018–BC11

Endangered and Threatened Wildlife and Plants; Removal of the Interior Least Tern From the Federal List of Endangered and Threatened Wildlife

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to remove the inland population of the least tern (Interior least tern) (*Sterna* (now *Sternula*) *antillarum*), from the Federal List of Endangered and Threatened Wildlife. The Interior least tern is a bird that nests adjacent to major rivers of the Great Plains and Lower Mississippi Valley. This proposed action is based on a thorough review of the best available scientific and commercial data, which indicate that the Interior least tern has recovered and no longer meets the definition of an endangered or a threatened species under the Endangered Species Act of 1973, as amended (Act). Our review shows that threats identified for the species at the time of listing, *i.e.,* habitat loss, curtailment of range, predation, and inadequacy of regulatory mechanisms, have been eliminated or reduced, and the Interior least tern has increased in abundance and range. We also announce the availability of a draft post-delisting monitoring (PDM) plan for the Interior least tern. We seek information, data, and comments from the public regarding this proposed rule and the associated draft PDM plan.

DATES: We will accept comments received or postmarked on or before December 23, 2019. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for public hearings, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by December 9, 2019.

ADDRESSES: *Written comments:* You may submit comments on this proposed rule and the associated draft PDM plan by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal: *http://www.regulations.gov.* In the Search box, enter FWS–R4–ES–2018–0082, which is the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the Search panel on the left side of the screen, under the Document Type heading, click on the Proposed Rule box to locate this document. 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–R4–ES–2018–0082, U.S. Fish and Wildlife Service, MS: BPHC, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

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 *Public Comments,* below, for more information).

Document availability: The proposed rule, draft PDM plan, and supporting documents are available at *http://www.regulations.gov* under Docket No. FWS–R4–ES–2018–0082.

FOR FURTHER INFORMATION CONTACT: Stephen Ricks, Field Supervisor, U.S. Fish and Wildlife Service, Mississippi Ecological Services Field Office, 6578 Dogwood View Parkway, Jackson, MS 39213; telephone (601) 321–1122. Individuals who use a telecommunications device for the deaf (TDD), may call the Federal Relay Service at (800) 877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, we are required to conduct a review of all listed species at least once every 5 years (5-year review) to review their status and determine whether they should be classified differently or removed from listed status. In the Act, the term ''species'' includes ''any subspecies of fish or wildlife or plants, and any distinct population segment [DPS] of any species of vertebrate fish or wildlife which interbreeds when mature.'' Therefore, we use the term ''species'' to refer to the Interior population of the least tern in this proposed rule. In our 2013 5-year review for the Interior least tern, we recommended removing the Interior least tern from the List of Endangered and Threatened Wildlife (*i.e.,* ''delisting'' the species). However, to change the status of a listed species under the Act, we must complete the formal rulemaking process. Therefore, we are publishing this proposed rule in the **Federal Register** and seeking public comments on it. Within 1 year of the publication of this proposed rule, we will make a final determination on the proposal.

What this document does. This document proposes to delist the Interior least tern (*Sterna* (now *Sternula*) *antillarum*).

The basis for our action. Under the Act, we may delist a species if the best scientific and commercial data indicate

the species is neither an endangered species nor a threatened species for one or more of the following reasons:

(1) The species is extinct;

(2) The species has recovered and is no longer endangered or threatened; or

(3) The original data used at the time the species was classified were in error. Here, we have determined that the Interior least tern may be considered for delisting based on recovery. Our review of the status of and listing factors for the Interior least tern indicated (1) a range extension; (2) an increase in abundance and number of breeding sites; (3) resiliency to existing and potential threats; (4) the implementation of beneficial management practices; and (5) changes in existing regulatory mechanisms that are more protective of migratory birds such as the Interior least tern. Accordingly, the Interior least tern no longer meets the definition of an endangered or threatened species under the Act.

Peer review. We are requesting comments from independent specialists to ensure that we base our determination on scientifically sound data, assumptions, and analyses.

Information Requested

Public Comments

We want any final rule resulting from this proposal to be as accurate and effective as possible. Therefore, we invite tribal and governmental agencies, the scientific community, industry, and other interested parties to submit data, comments, and new information concerning this proposed rule. The comments that will be most useful and likely to influence our decision are those that are supported by data or peer-reviewed studies and those that include citations to, and analyses of, applicable laws and regulations. Please make your comments as specific as possible and explain the basis for them. In addition, please include sufficient information with your comments to allow us to authenticate any scientific or commercial data you reference or provide. In particular, we are seeking comments on:

(1) Biological data regarding the Interior least tern, including the locations of any additional populations, survey data, or other relevant information;

(2) Relevant data concerning any threats (or lack thereof) to the Interior least tern;

(3) Additional information regarding the range, distribution, life history, ecology, and habitat use of the Interior least tern;

(4) Current or planned activities within the geographic range of the Interior least tern that may negatively impact or benefit the Interior least tern; and

(5) The draft PDM plan and the methods and approach detailed in it, including, but not limited to: (a) The duration of the monitoring period; (b) the survey and monitoring approach; (c) the triggers identified to detect change; and (d) the length of time to extend PDM if change is detected.

Please note that submissions merely stating support for or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(1)(A) of the Act (16 U.S.C. 1531 *et seq.*) directs that determinations as to whether any species is an endangered or threatened species must be made ''solely on the basis of the best scientific and commercial data available.''

In developing a final determination on this proposed action, we will take into consideration all comments and any additional information we receive. Such information may lead to a final rule that differs from this proposal. All comments and recommendations, including names and addresses, will become part of the administrative record.

You may submit your comments and materials concerning the 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 provide personal identifying information in your comment, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so.

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.*

Public Hearing

Section 4(b)(5)(E) of the Act provides for a public hearing on this proposal, if requested. We must receive requests for a public hearing, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by the date shown in **DATES**. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the **Federal Register** at least 15 days before the hearing.

Peer Review

In accordance with our policy published in the **Federal Register** on July 1, 1994 (59 FR 34270), and the OMB's Final Information Quality Bulletin for Peer Review, dated December 16, 2004, we will solicit the expert opinions of at least three appropriate and independent specialists regarding the science in this proposed rule and the draft PDM plan. The purpose of such review is to ensure that we base our decisions on scientifically sound data, assumptions, and analyses. The peer reviewers have expertise in the Interior least tern's biology, habitat, and physical or biological factors that will inform our determination. We will send peer reviewers copies of this proposed rule and the draft PDM plan immediately following publication of this proposed rule in the **Federal Register**. We will invite them to comment, during the public comment period, on the specific assumptions and conclusions regarding this proposed delisting rule and the associated draft PDM plan. We will summarize the opinions of these reviewers in the final decision documents, and we will consider their input and any additional information we receive as part of our process of making a final decision on this proposal and draft PDM plan. Such communication may lead to a final decision that differs from this proposal.

Previous Federal Actions

On May 28, 1985, we published a final rule in the **Federal Register** (50 FR 21784) listing the Interior least tern as endangered, due to the low numbers and scattered distribution of the tern and to threats to the bird's breeding habitat. The listed population included only those least terns that breed and nest within the boundary of the continental United States on interior rivers and other water bodies. On October 19, 1990, we released a recovery plan for the Interior population of the least tern (Service 1990). In 1991, we announced in the **Federal Register** (56 FR 56882; November 6, 1991) a 5-year review of all endangered and threatened species listed before January 1, 1991, under the Act, including the Interior least tern. No change in the bird's listing classification was found appropriate as a result of that 5-year review.

We completed another 5-year review for the Interior least tern on October 24, 2013, and posted it on the Service's website. This 5-year review summarized all new information accumulated on the Interior least tern since 1991, and recommended delisting due to recovery.

This 5-year review is a supplemental document to the proposed rule and is provided at *https://www.regulations.gov* under Docket No. FWS–R4–ES–2018–0082 or *https://www.fws.gov/mississippiES/.*

For additional details on previous Federal actions, including recovery actions, see discussion under Recovery, below.

Species Information

A thorough review of the taxonomy, life history, ecology, and overall viability of the Interior least tern was presented in the 5-year review (Service 2013). Below, we present a summary of the biological and distributional information discussed in the 5-year review and new information published or obtained since.

Taxonomy and Genetics

Least terns within the Interior Basin of North America were described as *Sterna antillarum athalassos,* a subspecies of the eastern least tern (*S. antillarum antillarum*) (Burleigh and Lowery 1942, pp. 173–177). In 2006, the American Ornithologist's Union recognized least terns under a previously published genus (*Sternula*) based on mitochondrial DNA phylogeny (Bridge *et al.* 2005, p. 461). Interior least tern was one of three subspecies of New World (North and South America) least terns previously recognized by the American Ornithologists' Union (1957, p. 239), including the eastern least tern and the California least tern (*S. antillarum browni*). However, due to taxonomic uncertainty surrounding least tern subspecies, at the time of listing (50 FR 21784; May 28, 1985), we treated the Interior least tern as a population of eastern least tern.

Since that time, genetic analyses of North American populations of least tern found no evidence of differentiation warranting subspecies recognition (*e.g.,* Whittier 2001, p. 10; Draheim *et al.* 2010, pp. 813–815; Draheim *et al.* 2012, p. 146). Data indicate that genetic exchange between eastern least terns and Interior least terns is occurring at a rate greater than three migrants per generation between populations (Whittier *et al.* 2006, p. 179). After reviewing the best available scientific information regarding the taxonomy of the Interior least tern, we continue to conclude that it is a population of the eastern least tern (*Sternula antillarum*).

Species Description

Least terns are the smallest members of the family Laridae, measuring 21 to 23 centimeters (cm) (8 to 9 inches (in)) long with a 56-cm (22-in) wingspan (Thompson *et al.* 1997, pp. 1–2). Sexes look alike, characterized in the breeding plumage by a black crown, white forehead, grayish back and dorsal wing surfaces, snowy white undersurfaces, orange legs, and a black tipped yellow bill. Immature birds have darker plumage, a dark bill, and dark eye stripes on their white heads. Least terns are distinguished from all other North American terns by their small size. Interior least terns can only be separated from eastern and California least terns by the geographic area used for nesting.

Life Span

Interior least terns are potentially long-lived, with records of recapture more than 20 years following banding (Thompson *et al.* 1997, p. 15); however, the average life span is probably less.

Nesting Habitat and Behavior

Least terns begin breeding and nesting in their second or third year and breed annually throughout their lives (Thompson *et al.* 1997, p. 15). Prior to nesting, young birds exhibit some level of prospecting behavior (exploratory dispersal) across the landscape (*e.g.,* Boyd and Thompson 1985, p. 405; Lott 2012, p. 12; Shigeta *in litt.* 2014, entire).

Interior least terns generally nest on the ground, in open areas, and near appropriate feeding habitat (Lott and Wiley 2012, pp. 9–11). Nests are simple scrapes in the sand, and nesting sites are characterized by coarser and larger substrate materials, more debris, and shorter and less vegetation compared to surrounding areas (Smith and Renken 1993, p. 501; Stucker 2012, p. 49). Typical least tern clutch size is reported as two to three eggs (Thompson *et al.* 1997, p. 15); however, clutch size may vary by location and year (*e.g.,* Szell and Woodrey 2003, p. 37; Jones 2012, p. 3).

Natural nesting habitat features are maintained and influenced by magnitude and timing of riverine flood events (Sidle *et al.* 1992, p. 134; Renken and Smith 1995, pp. 194–195; Pavelka *in litt.* 2012). The Interior least tern prefers vegetation-free sand or gravel islands for nesting, although sand banks, point bars, salt flats or plains, and beaches may also be used. Interior least terns prefer areas remote from trees or other vegetation that may hide or support predators (Lott and Wiley 2012, pp. 9–11). Least terns also nest on anthropogenic sites (originating from human activity) (Jackson and Jackson 1985, p. 57; Lott 2006, p. 10) near water bodies that contain appropriate and abundant prey fishes. Anthropogenic sites used by the tern include industrial sites (Ciuzio *et al.* 2005, p. 102; Mills 2012, p. 2), dredge spoil (Ciuzio *et al.* 2005, p. 102), sand pits (Smith 2008, p. 2), constructed habitats (Stucker 2012, pp. 59–66), and rooftops (Boland 2008, entire; Watterson 2009, entire).

Lott and Wiley (2012, pp. 9–11) described five physical and biological conditions that are necessary for Interior least tern nest initiation and successful reproduction:

(1) Nest sites that are not inundated (flooded) during egg laying and incubation;

(2) Nesting sites that are not inundated until chicks can fly;

(3) Nesting sites with less than 30 percent ground vegetation;

(4) Nesting sites that are more than 76 meters (m) (250 feet (ft)) from large trees; and

(5) Availability of prey fishes to support chick growth until fledging.

Interior least terns are colonial nesters. Colony size may vary from a few breeding birds to more than 1,200 (Jones 2012, p. 3). Populations in some river drainages may be limited by annual availability of nesting habitat (*e.g.,* Missouri River; Stucker 2012, p. 104), while potential nesting habitat is generally abundant and underutilized in other drainages (*e.g.,* Mississippi River; U.S. Army Corps of Engineers (USACE) 2008, pp. 10–13). Nesting site conditions (*e.g.,* habitat suitability, flood cycles, prey fish abundance, predation pressure) can vary significantly from year to year in all drainages, resulting in wide fluctuations in bird numbers (Jones 2012, p. 14) and/or nesting success (Smith and Renken 1993, p. 41; Lott and Wiley 2012, p. 15). However, Interior least terns may re-nest, or relocate and re-nest, if nests or chicks are destroyed early in the season (Massey and Fancher 1989, pp. 353–354; Thompson *et al.* 1997, p 15). Interior least tern chicks leave their nests within a few days of hatching (semiprecocial), but remain near the nests and are fed by their parents until fledging (Thompson *et al.* 1997, pp. 14–15).

Food and Foraging Habitat

Interior least terns are primarily piscivores (fish-eaters), and feed opportunistically on small fish species or the young of larger fish species. Prey species include native species such as shad (*Dorosoma* spp.), carps and minnows (Cyprinidae), freshwater drum (*Aplodinotus grunniens*), largemouth bass (*Micropterus salmoides*), white bass (*Morone chrysops*), sunfishes (*Lepomis* spp.), and top minnows (*Fundulus* spp.), as well as invasive species such as silver and bighead carp (*Hypophthalmichthys* spp.) (USACE

2008, pp. 16, 26). On the Missouri River, prey species include emerald shiner (*Notropis atherinoides*), sand shiner (*Notropis stramineus*), spotfin shiner (*Cyprinella spiloptera*), and bigmouth buffalo (*Ictiobus cyprinellus*) (Stucker 2012, p. 6). Least terns will also occasionally feed on aquatic or marine invertebrates (Thompson *et al.* 1997, pp. 6–7). Riverine foraging habitats and fish abundance may be influenced by stochastic (random) hydrological conditions and events (*i.e.,* flow, and flood timing and magnitude), and channel engineering (Schramm 2004, pp. 307, 321–323).

In the Missouri River drainage, Interior least terns forage for fish in shallow water habitats and within 12 kilometers (km) (7 miles (mi)) from colony sites (Stucker 2012, p. 24). In the Lower Mississippi River, foraging terns have been observed feeding in a variety of habitats within 3 km (2 mi) of colony sites (Jones 2012, pp. 5–6).

Migration and Winter Habitat

Interior least tern fall migrations generally follow major river basins to their confluence with the Mississippi River and then south to the Gulf of Mexico; however, late summer observations of least terns more than 150 km (93 mi) from major river drainages indicate that some birds migrate over land (Thompson *et al.* 1997, p. 16). Interior least terns gather in flocks in August prior to migration. Once they reach the Gulf Coast, they cannot be distinguished from other least tern populations en route to, or within, their winter habitats (*i.e.,* Gulf of Mexico, Caribbean islands, Central and South America); therefore, the limited information on migration and winter habitat is inclusive of other populations (*i.e.,* Caribbean, Gulf Coast, East Coast). Least terns appear to migrate in small, loose groups along or near shore, feeding in shallows and resting onshore (Thompson *et al.* 1997, pp. 4–6). Very little is known of least tern winter habitats, other than that the birds are primarily observed along marine coasts, in bays and estuaries, and at the mouths of rivers (Thompson *et al.* 1997, p. 6).

Breeding/Natal Site Fidelity and Dispersal

Breeding-site fidelity for least terns varies in different populations and breeding areas. Return rates of banded adults to the sites where they were banded was 36 to 86 percent in California colonies; 42 percent on the Mississippi River; 28 percent on the central Platte River, Nebraska; and 81 percent at Quivira National Wildlife Refuge in Kansas and on the Cimarron River in Oklahoma (Thompson *et al.* 1997, p. 16). Fidelity to natal site is also variable and difficult to estimate because re-sightings or recaptures of terns banded as chicks have been limited. Estimates of natal site fidelity have varied from 5 percent on the Mississippi River, to 82 percent in Kansas and Oklahoma (Thompson *et al.* 1997, p. 16).

Site fidelity in least terns may be affected by physical habitat variables or the extent and type of predation (Atwood and Massey 1988, p. 394). As noted above, least terns are strong fliers and can relocate if conditions on natal or previous-year nesting grounds become unfavorable. A study of eastern least terns found an average 22 percent turnover rate in nesting colony sites, primarily due to changes in habitat condition or disturbance (Burger 1984, p. 66).

Lott *et al.* (2013, pp. 3617–3618) found that 50 to 90 percent of reported recaptures occurred less than 26 km (16 mi) from the original banding sites, while more than 90 percent dispersed less than 96 km (59 mi), indicating a high degree of adult site fidelity and natal site philopatry (remaining near their point of origin). However, long distance dispersal (up to 1,000 km; 621 mi) has been documented (*e.g.,* Renken and Smith 1995, pp. 196–198; Boyd and Sexson 2004, p. 88; Lott *et al.* 2013, pp. 3617–3618), and may not be uncommon (Boyd and Thompson 1985, p. 405). Least tern nesting has also been documented in Brazil (Rodrigues *et al.* 2010, entire) and Hawaii (Conant *et al.* 1991, entire; Pyle *et al.* 2001, entire). During 2014, an Interior least tern banded in the Missouri River drainage was captured in Japan, along with another unbanded tern (Shigeta *in litt.* 2014).

Predation

Interior least tern eggs, chicks, and adults are prey for a variety of mammal and bird predators. Reported predators include birds (*e.g.,* crows, herons, owls, and hawks), mammals (*e.g.,* fox, coyote, racoon, and skunk), and catfish, as well as domesticated and feral dogs and cats (Thompson *et al.* 1997, pp. 10–11). The cryptic coloration of eggs and chicks, the secretive behavior of chicks, and the mobbing behavior (attack flights on potential predators) of adults, all serve to protect eggs and chicks from predators (Thompson *et al.* 1997, p. 11).

Location and size of nesting colonies also has a significant influence on degree of predation. Interior least tern reproductive success is higher on island colonies as compared to connected sandbar colonies, and when water levels maintain isolation of islands and nesting bars from mammalian predators (Smith and Renken 1993, p. 42; Szell and Woodrey 2003, p. 41). Additionally, significantly higher rates of predation were documented in larger colonies compared to smaller colonies (Burger 1984, p. 65).

Historical Distribution and Abundance

The Service defined the historical breeding range of the Interior least tern to include the Colorado (in Texas), Red, Rio Grande, Arkansas, Missouri, Ohio, and Mississippi Rivers systems from Montana south to Texas, and from New Mexico east to Indiana (50 FR 21784; May 28, 1985). However, in order to avoid confusion with eastern least tern, the Service excluded the Mississippi River south of Baton Rouge, Louisiana, the Texas Coast, and a 50-mile zone inland from the coast of Texas from the protected range of Interior least tern (50 FR 21784, May 28, 1985, see p. 50 FR 21789).

The historical distribution and abundance of the Interior least tern within this range is poorly documented. Hardy (1957, entire) provided the first information on least tern distribution on large interior rivers, documenting records of occurrence and nesting in the Mississippi, Ohio, Missouri, Arkansas, and Red river drainages. Downing (1980, entire) published results from a rapid aerial/ground survey of a subset of these rivers, identifying additional nesting populations within the range noted above, and estimated the Interior least tern population at approximately 1,250 adult birds. Ducey (1981, pp. 10–50) doubled the number of known nesting sites, including areas between the scattered observations reported in Hardy (1957). Ducey also extended the northern distribution of the Interior least tern to include the Missouri River below Garrison Dam in North Dakota and Fort Peck Dam in Montana. These three publications (Hardy 1957; Downing 1980; Ducey 1981) provide the primary historical sources of information about the Interior least tern's geographic range, and were used to reach the estimate of 1,400 to 1,800 adults rangewide in the listing rule (50 FR 21784; May 28, 1985).

Current Distribution and Abundance

The current east to west distribution of summer nesting Interior least terns encompasses more than 18 degrees of longitude, or 1,440 km (900 mi), from the Ohio River, Indiana and Kentucky, west to the Upper Missouri River, Montana. The north to south distribution encompasses over 21 degrees of latitude (more than 2,300 km

(1,450 mi)) from Montana to southern Texas. Interior least terns currently nest along more than 4,600 km (2,858 mi) of river channels across the Great Plains and the Lower Mississippi Valley (Lott *et al.* 2013, p. 3623), with nesting colonies found in 18 States, including: Montana, North Dakota, South Dakota, Nebraska, Colorado, Iowa, Kansas, Missouri, Illinois, Indiana, Kentucky, New Mexico, Oklahoma, Arkansas, Tennessee, Texas, Louisiana, and Mississippi. As noted above, this does not include least tern colonies nesting along the coasts of Texas, Louisiana, and Mississippi.

Rangewide surveys in 2005 estimated an approximate minimum adult population size of 17,500, with nesting occurring in more than 480 colonies spread across 18 States, which is likely an underestimate given imperfect detection of adults and survey coverage of potential habitat (Lott 2006, pp. 10–21, 50). Lott (2006, pp. 13–15) also provided counts for 21 populations or population segments that were unknown at the time of listing, which collectively support more than 2,000 terns.

Population Trends

The Interior least tern has demonstrated a positive population trend, increasing by almost an order of magnitude (or 10 times what it was prior) since it was listed in 1985. After it was listed, researchers increased survey effort and the geographical extent of the area surveyed, producing sufficient Interior least tern count data to analyze population trends for several river reaches that support persistent breeding colonies. Kirsch and Sidle (1999, p. 473) reported a rangewide population increase to over 8,800 adults in 1995, and found that 29 of 31 Interior least tern locations with multi-year monitoring data were either increasing or stable. Lott (2006, p. 50) reported an increase to over 17,500 adult birds in 2005, forming 489 colonies in 68 distinct geographic sites.

Lott (2006, p. 92) conceptualized the Interior least tern functioning as a large metapopulation (a regional group of connected populations of a species), which might also include least terns on the Gulf Coast. Using available information on dispersal of least terns, Lott *et al.* (2013, pp. 3616–3617) defined 16 discrete breeding populations of Interior least tern, with 4 major geographical breeding populations (population complexes) accounting for more than 95 percent of all adult birds and nesting sites throughout the range. Portions of these four population complexes have experienced multi-year monitoring to different degrees. While some local (colony, subpopulation) declines have been documented, the Interior least tern has experienced a dramatic increase in range and numbers since listing and development of the recovery plan (*e.g.,* Kirsch and Sidle 1999, p. 473; Lott 2006, pp. 10–49). There has been no reported extirpation of any population or subpopulation since the species was listed in 1985.

Recovery

Section 4(f) of the Act directs us to develop and implement recovery plans for the conservation and survival of endangered and threatened species unless we determine that such a plan will not promote the conservation of the species. Recovery plans are not regulatory documents and are instead intended to: (1) Establish goals for long-term conservation of a listed species; (2) define criteria that are designed to indicate when the threats facing a species have been removed or reduced to such an extent that the species may no longer need the protections of the Act; and (3) provide guidance to our Federal, State, and other governmental and nongovernmental partners on methods to minimize threats to listed species. There are many paths to accomplishing recovery of a species, and recovery may be achieved without all criteria being fully met. For example, one or more criteria may have been exceeded while other criteria may not have been accomplished, yet the Service may judge that, overall, the threats have been minimized sufficiently, and the species is robust enough, to reclassify the species from endangered to threatened (*i.e.,* to ''downlist'' the species) or perhaps to delist the species. In other cases, recovery opportunities may have been recognized that were not known at the time the recovery plan was finalized. These opportunities may be used instead of methods identified in the recovery plan.

Likewise, information on the species may be learned that was not known at the time the recovery plan was finalized. The new information may change the extent that criteria need to be met for recognizing recovery of the species. In short, recovery of a species is a dynamic process requiring adaptive management that may, or may not, fully follow the guidance provided in a recovery plan.

The Service approved the Interior Least Tern Recovery Plan on September 19, 1990 (Service 1990, entire). The objective of the recovery plan is to meet the standard of recovery that leads to delisting the Interior least tern. Recovery plans provide a road map for the public with site-specific management actions for private, Tribal, federal, and state cooperation in conserving listed species and their ecosystems. A recovery plan provides guidance on how best to help listed species achieve recovery. Recovery criteria are the values by which it is determined that a recovery plan objective has been reached. Recovery criteria identified in the recovery plan were designed to assure the protection of essential habitat by removal of threats at that time and habitat enhancement, establish agreed-upon management plans, and attain a rangewide population of 7,000 birds at the levels listed below (for five major river drainages throughout the Interior least tern's range):

(1) Adult birds in the Missouri River system will increase to 2,100, and remain stable for 10 years.

(2) Current numbers of adult birds (2,200–2,500) on the Lower Mississippi River will remain stable for 10 years.

(3) Adult birds in the Arkansas River system will increase to 1,600, and remain stable for 10 years.

(4) Adult birds in the Red River system will increase to 300, and remain stable for 10 years.

(5) Current numbers of adult birds (500) in the Rio Grande River system will remain stable for 10 years.

Primary recovery tasks conducted to achieve the recovery objective and drainage population targets included:

(1) Determining the distribution and population trends of the Interior least tern;

(2) Determining habitat requirements and status;

(3) Protecting, enhancing, and increasing Interior least tern populations; and

(4) Preserving and enhancing the tern's habitats.

These are summarized within the 5-year review and briefly reviewed below.

Rangewide Population Criterion To Delist

The Interior least tern rangewide numerical recovery criterion (7,000 birds) has been met and has been exceeded since 1994 (see Service 2013). Using rangewide seasonal count data from 1984 (722 terns) through 1995 (8,859 terns), Kirsch and Sidle (1999, pp. 473–477) demonstrated achievement of the numerical recovery criterion and a positive population growth trend. They noted that most of the Interior least tern increase had occurred on the Lower Mississippi River, observed that population increases were not supported by fledgling success estimates available at that time, and hypothesized

that Interior least tern increases were possibly due to immigration surges from a more abundant least tern population inhabiting the Gulf Coast (Kirsch and Sidle 1999, p. 478).

Lott (2006, entire) organized, compiled, and reported a synchronized rangewide count for Interior least tern in 2005, finding tern numbers had doubled since 1995 (17,591 birds rangewide; 62 percent occurring along the Lower Mississippi River), equaling or exceeding least tern population estimates along the U.S. Gulf Coast (Lott 2006, p. 50). Since 2006, the majority of Interior least terns continue to be reported from the Lower Mississippi River (Service 2013, p. 11). As did Kirsch and Sidle (1999, p. 478), Lott (2006, p. 52) also hypothesized a wider least tern metapopulation, which included Gulf Coast and interior subpopulations, and the possibility of a shift of birds from the Gulf Coast to inland habitats due to the presence of better nesting conditions, particularly on the Lower Mississippi River. However, there are few data directly supporting the Kirsch and Sidle (1999, pp. 473–477) or the Lott (2006, p. 52) immigration hypotheses as a factor in the 20-year increase in Interior least tern counts. There has not been a complete or organized rangewide count since 2005; however, some geographic segments continue to be annually monitored, including portions of the Missouri (USACE *in litt.* 2017, entire), Platte (Keldsen and Baasch 2016, entire), Red (Stinson *in litt.* 2017, entire), Arkansas (Cope *in litt.* 2017, entire; Nupp 2016, entire), and Wabash rivers (Mills 2018, entire). These partial counts indicate that we continue to exceed the recovery goal of 7,000 birds (Service 2013, pp. 11–12).

Numerical Population Targets

In addition to the numerical population targets identified in the recovery plan for five major river drainages throughout the tern's range (see above), sub-drainage targets were also identified for the Missouri and Arkansas River drainages (Service 1990, pp. 28–29). Drainage and sub-drainage numerical targets were based upon the opinions of technical experts and State and Federal resource agencies of the potential for population increase at the time (Service 1990, p. 28). The drainage system population size targets have been exceeded in three of the five targeted drainages (Lower Mississippi (more than 25 years), Red (more than 15 years), and Arkansas rivers (more than 10 years)) (see Service 2013, pp. 22–26). As to the Rio Grande drainage, it is now recognized that the subpopulations found within the drainage represent recent exploitation of anthropogenic habitats and are not historical habitats; thus, these areas were inappropriately designated as ''essential'' segments of the tern's ecosystem in the recovery plan (Service 2013, pp. 26–27). Therefore, numerical targets originally set for the Rio Grande drainage are no longer considered necessary for this species' recovery.

As to the Missouri River drainage, the Interior least tern population size has remained relatively stable (approximately 1,600 birds) over the 29 years since recovery criteria were identified (Service 2013, p. 11), and neither the drainage population target (2,100) nor many of the targets identified for Missouri River drainage segments have been consistently met (Service 2013, pp. 14–21). However, since the tern was listed, the Missouri River system has received a significant commitment of conservation attention and resources (USACE 2019a), particularly in comparison to other drainages that have experienced increases in tern populations. Based on the lack of increase, in light of the substantial commitment of resources, we conclude that that the Missouri River drainage is likely at the carrying capacity of the available habitat (Service 2013, pp. 14–21), and the recovery goal of 2,100 birds is not achievable. Monitoring data show that periodic downward trends observed in a few Missouri drainage subpopulations have been reversed by habitat improvement following major floods (Pavelka 2012, p. 2), or offset by upward trends in other subpopulations (Pavelka 2012, pp. 7–8; Lott and Sheppard 2017a, pp. 49–53) indicating that the Missouri River drainage Interior least tern population is sustainable and recovered.

In short, some drainage population targets identified in the 1990 recovery plan have not been fully met, as the Rio Grande was inappropriately considered ''essential'' (see above) and the Missouri River drainage appears to be at carrying capacity and incapable of reaching the 2,100 target identified in the recovery plan. However, the inability to meet these drainage and sub-drainage targets have been offset by large increases in the Interior least tern populations within the Arkansas, Red, and Lower Mississippi rivers, and by the discovery of numerous subpopulation segments throughout the Interior Basin that were either unrecognized or not occupied at the time of listing and recovery plan development, increasing the number of known breeding colonies from a few dozen at listing to more than 480 (Lott 2006, p. 10; also see Service 2013, pp. 31–33).

Habitat Criteria

Recovery plan delisting criteria required the protection, enhancement, and restoration of essential Interior least tern breeding habitats (Service 1990, pp. 28–29). Beyond the identification of specific river reaches as ''essential,'' habitat parameters were not defined, nor were specific objective and measurable criteria for their protection identified. The recovery plan outlined several tasks to protect and enhance Interior least tern habitats, including managing water flows, modifying construction activities, and protecting all areas identified as ''essential'' across the species' range through acquisition, easements, or agreements (Service 1990, pp. 29–50).

Recovery tasks identified for managing water flows are primarily relevant to portions of the Missouri, Red, and Arkansas River drainages, which cumulatively encompass about 20 percent of the Interior least tern breeding population. The majority of the remainder of species' range occurs along unimpounded sections of the Mississippi river not subject to flow management. Over the past two decades, protective flow management actions have been identified and incorporated by USACE Northwest Division into their Missouri River Bank Stabilization and Navigation Project and operations of the Kansas River Reservoir System, including seasonal reservoir flow management to reduce nesting mortalities, and for sandbar augmentation and modification, vegetation management, predation control, human restriction measures, and water-level management for reservoir nesting areas (USACE 2017, pp. 139–143). In the Southern Plains, USACE Southwest Division civil works projects in the Arkansas, Canadian, and Red River systems within Arkansas, Oklahoma, and Texas use reservoir storage and operation to reduce flooding, minimize land bridging, predation, and human disturbance during Interior least tern nesting season, and to enhance nesting habitats at other times of the year (USACE 2002, pp. 3–4; 2016 pp. 18–20). These water management practices have been adopted by the respective USACE Divisions and Districts as Best Management Practices and with commitments to continue into the future regardless of the future status of the Interior least tern under the Act (USACE 2016, pp. 2, 24; 2018, pp. 4–13–4–17).

Recovery tasks for modifying construction activities within river channels have been successfully

implemented across Interior least tern habitats that are managed under USACE programs in jurisdictional waters (categories of waters defined under the Clean Water Act (33 U.S.C. 1251 *et seq.*) that include navigable waters, interstate waters, tributaries, impoundments, etc.). Construction practices critical to maintaining and protecting nesting habitats have been incorporated into USACE river management programs as standard operating procedures (SOPs) or Best Management Practices (BMPs), including construction timing and work zone buffers to avoid disturbance of nesting colonies, dike modifications to protect and maintain habitat values, and dredge material disposal methods beneficial to maintaining nesting sand bars and islands (*e.g.,* USACE 2013, pp.69–72; USACE 2016, p. 21). Other SOPs and BMPs incorporated into USACE programs promote ecosystem productivity important to tern foraging, including articulated concrete mat design, use of hardpoints in lieu of revetment, and strategic placement of woody debris within channels (*e.g.,* USACE 2013, p. 71). These existing management strategies and programs (USACE 2013, 2016, 2017) are protective of waters and habitats managed by USACE that support about 80 percent of the Interior least tern's range. All USACE programs currently provide for adaptive management into the future, independent of the federal listing status of the Interior least tern (USACE 2013, p. 71; 2016, pp. 2, 24; 2018, pp. 4–13–4–17).

New information developed over the past three decades relative to the ecology of Interior least tern and its habitats indicate that recovery tasks to protect ''essential'' habitats across the species' range through acquisition or easements are neither cost-effective nor necessary. Riverine habitat for Interior least terns is not static, and clearly experiences dramatic local or regional annual (at times, daily) variation in location, quantity, and quality. Describing and quantifying habitat quality is difficult, given the wide variety of conditions the bird is known to exploit (*e.g.,* rivers, reservoirs, rooftops).

The Interior least tern adjusts to habitat variation and change over its range through metapopulation dynamics (Hanski and Gilpin 1991, entire; Lott *et al.* 2013, p. 3620; Lott and Shepard 2017, entire). A metapopulation consists of a network of populations with similar dynamics that are buffered against extinction by abandoning areas as habitats degrade, and dispersing and exploiting suitable habitats as they become available. Therefore, the importance of specific habitat segments to the species is likely to change with time. Within large metapopulations of mobile species, small subpopulations (or colonies within subpopulations) may occur in habitats where recruitment is inconsistent or may not exceed mortality (*i.e.,* population sinks), but which are maintained by immigration from colonies where recruitment exceeds mortality (*i.e.,* population sources). While exploitation of anthropogenic habitats by Interior least terns may indicate a lack of suitable habitat in an area, it may also indicate an overall population or subpopulation expansion. Sink colonies also play important roles in large metapopulations by providing opportunities for range expansion, and/or redundancy from episodic stochastic impacts to preferred natural habitats. While some colony sites may be periodic or consistent population sinks, there is no evidence that they are detracting from the Interior least tern's rangewide survival (*e.g.,* Lott and Sheppard 2017a, p. 51), particularly in consideration of the substantial increase in the known number and size of tern colonies over the past two decades, and the expansion of the species' distribution outside of its historical range (*i.e.,* Illinois, New Mexico, Central Texas, Colorado; see Service 2013, pp. 31–33).

Based upon this understanding of Interior least tern population dynamics and habitat use, the recovery task of protecting all areas identified in 1990 as ''essential'' across the species' range through acquisition or easements is not necessary for the conservation of the species. This conclusion is supported by the increase in the species' range and abundance over the past 29 years without protections achieved through such acquisition or easements. Although some Interior least tern nesting colonies occur on protected public lands such as wildlife refuges, they represent only a small portion (less than 2 percent) of the range-wide population. Additionally, as noted above, existing management agreements, strategies, and programs within jurisdictional waters are protective of the habitats that support about 80 percent of the Interior least tern population (USACE 2013, 2016, 2017).

While the majority (80 percent) of Interior least tern nesting colonies are known from jurisdictional waters with a strong Federal connection with navigation systems or reservoirs, the remaining nesting colonies occur along rivers with a more limited Federal nexus, or on mining and industrial sites adjacent to or near rivers and reservoirs. On about 10 percent of these, Federal, State, and/or private conservation partnerships have developed and implemented conservation agreements and management programs beneficial to Interior least tern as well as other at risk or endangered species. These programs generally post or restrict access, control predators, and conduct monitoring during nesting season, as well as conduct vegetation control and public education as opportunities present.

In the Platte River drainage, the Tern and Plover Conservation Partnership was initiated in 1999, at the University of Nebraska, School of Natural Resources. This partnership consists of a group of State, industrial, Federal and other cooperators having an interest in tern and plover conservation and management on and along the Platte, Loup, and Elkhorn Rivers, with emphasis on nesting areas associated with sand and gravel mines, lake shore housing developments and dredging operations (University of Nebraska-Lincoln, 2019)). Long-term management of Interior least tern habitats in the Platte River drainage is also assured by an Adaptive Management Plan developed and implemented by a partnership of State and industrial water users in Nebraska, Colorado, and Wyoming under the Platte River Recovery Implementation Program (Platte River Recovery Implementation Program, 2019). This program, initiated in 1997, also targets management needs of endangered pallid sturgeon and whooping crane, and the threatened piping plover. Since both programs target other listed species with similar habitat requirements, and the Interior least tern is State listed as endangered, these conservation programs and efforts are expected to continue regardless of a change in the Federal status of this species.

Interior least tern management in the Wabash River drainage began with the 1986 discovery of a single nesting pair on Gibson Generating Station property, Gibson County, Indiana (Hayes and Pike 2011, entire; Mills 2018, pp. 2–5). This colonization led to site monitoring, predator control and other protective measures, as well as vegetation control, water management, and habitat management and creation, resulting in increasing numbers of terns and expansion of nesting colonies to multiple sites on public and private properties in the vicinity (Hayes and Pike 2011, entire). In 1999, management was formalized by development of a Habitat Conservation Plan, which was renewed and revised in 2004 and 2011, by Duke Energy Corporation (Hayes and Pike 2011, entire). The Indiana

Nongame and Endangered Wildlife Program continues to coordinate conservation and monitoring efforts on industrial and river sites along the Wabash River by Duke Energy, Service, and other Indiana Department of Natural Resources personnel (Mills 2018, p. 14). Since the Interior least tern is protected by the State of Indiana, management and monitoring is expected to continue regardless of a change in the Federal status of species.

To various degrees, a number of additional small, localized, and often temporary breeding colonies of Interior least tern and their habitats have been managed, protected, and monitored at industrial, municipal, and reservoir sites under the conservation (sections 6, 7(a)(1), and 10) or consultation (section 7(a)(2)) requirements of the Act. Managed sites have included coal mines (*e.g.,* Tanner and Hart 1998, entire), rooftops (*e.g.,* Boylan 2008, entire), and small reservoirs (*e.g.,* Nelson, 2010 entire). Such efforts may or may not continue should the tern be delisted; however, it is also likely that the terns will continue to exploit small areas of suitable habitats as they are available and encountered in its range. While such populations contribute some small benefit to the rangewide redundancy and representation of the tern (see discussion of metapopulaion, above), they cumulatively represent less than 2 percent of the summer nesting population and their success or failure within individual sites has little impact on the rangewide conservation status of the Interior least tern.

In summary, the expansion of the numbers and distribution of the Interior least tern, and its adaptation to, and exploitation of anthropogenic habitats over the past several decades indicate that the species is no longer conservation reliant and is recovered. Potential threats identified at the time of listing have been removed or ameliorated by conservation actions of multiple conservation partners, most principally the USACE, for more than 20 years. These actions have assisted in recovery of the species as reflected in the large number of individuals range-wide, stable to increasing drainage populations since listing, and a high number of self-sustaining colonies in 18 states. Furthermore, our partners in USACE Divisions and districts within the range of the Interior least tern have cooperatively modified their programs to provide for the long-term management of nesting and foraging habitats for about 80 percent of the rangewide population of the species (USACE (2013, 2016, 2017). Another 10 percent of the population is managed by State and private partnerships, which are expected to continue based upon State status and regulations. Regarding the remaining 10 percent of the population that nest in habitats with minimal or no management, while these areas contribute to redundancy and representation for the species, their success or failure within these sites is not essential to the continued existence of the Interior least tern. Therefore, we believe the recovery of the Interior least tern has been fully achieved.

Summary of Factors Affecting the Species

Section 4 of the Act and its implementing regulations (50 CFR part 424) set forth the procedures for listing species, reclassifying species, or removing species from listed status. We may determine that a species is an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence.

A recovered species is one that no longer meets the Act's definition of endangered species or threatened species. Determining whether the status of a species has improved to the point that it can be delisted or downlisted requires consideration of the same five factors identified above. When the Interior least tern was listed as endangered in 1985, the identified threats (factors) influencing its status were the modification and loss of habitat and curtailment of range (Factor A), predation and disturbance of local colonies (Factor C), and the inadequacy of State or Federal mechanisms to protect its habitat at that time (Factor D). We may delist a species according to 50 CFR 424.11(d) if the best available scientific and commercial data indicate that the species is neither endangered nor threatened for the following reasons: (1) The species is extinct; (2) the species has recovered and is no longer endangered or threatened; and/or (3) the original scientific data used at the time the species was classified were in error. The following analysis, based on an assessment of the Interior least tern, evaluates these previously identified threats, any other threats currently facing the species, and any other threats that are reasonably likely to affect the Interior least tern in the foreseeable future following the delisting and the removal of the Act's protections.

Habitat Loss and Curtailment of Range

The primary threats identified for the Interior least tern in the May 28, 1985, listing rule (50 FR 21784) were associated with the destruction and modification of habitat due to channel engineering practices on large rivers of the Interior Basin (*i.e.,* damming, channelization, and channel stabilization) (Service 1985, pp. 21789–21790; Service 1990, pp. 22–23). Reservoirs had inundated hundreds of miles of historical or potential tern riverine habitat in many Mississippi River Basin drainages, and reduced sediment input into channels below dams had caused channel degradation, constriction, and loss of potential nesting habitats. Channelization, channel training structures (dikes), and bank stabilization in the Missouri, Mississippi, and Ohio rivers prevented natural geomorphic response to loss of sediments, resulting in deepened and narrowed channels, and loss or terrestrialization (vegetation encroachment) of potential nesting sandbars and islands. Reservoir releases for hydropower, navigation, and flood control also were found to adversely affect Interior least tern populations surviving below these same dams (Service 1990, p. 22). These trends of habitat degradation were also expected to continue throughout most of the tern's fragmented range (Smith and Stuckey 1988, entire).

New information on the species' response to the threats identified at the time of listing indicate that anthropogenic changes in some river channels supporting the Interior least tern have also benefited the Interior least tern in ways that may have compensated for historical impacts to its habitat. For example, in the Lower Mississippi River (where tern numbers have increased by an order of magnitude, and which currently supports more than 60 percent of the Interior least tern nesting population), channel engineering, including the construction of channel training dikes, resulted in higher sandbars as well as earlier and shorter spring and summer high water events in this portion of the range (Schramm 2004, pp. 306, 322; USACE 2013, p. 60). Such changes have reduced egg and chick flood-related mortality events, extended the nesting season, and increased re-nesting opportunities, all of which may explain the Interior least tern population increase in the Lower Mississippi River over the past four decades.

Anthropogenic habitats are also now known to provide significant opportunities for Interior least tern nesting and recruitment. High flows in the Platte River have historically peaked after most nesting has been initiated within the river channel, flooding nests and hatchlings, and limiting re-nesting opportunities (Farnsworth *et al.* 2017, p. 3587). Models now suggest least tern nesting success would only have occurred during 32 percent of years, an inadequate success rate to have maintained the species within the Platte River. It is now hypothesized that off-channel mining habitats were, and continue to be critical to the success of the Interior least tern in the central and lower Platte River (Farnsworth *et al.* 2017, p. 3588). Similar observations have been proposed for some reaches of the Missouri River (*e.g.,* Jorgensen 2009, entire). In Texas and Colorado, foraging and nesting habitats created by dam construction have provided for Interior least tern colonization of arid regions historically unsuitable for the species (Service 2013, pp. 26–27).

Although river channel engineering, including reservoirs, channelization, channel training structures, and bank stabilization, continues to alter the Interior least tern's habitats, as outlined above these habitat modifications have also created addition habitat opportunities for this species. The Interior least tern's known range has increased significantly: The reported numbers of nesting Interior least terns have expanded by almost an order of magnitude from fewer than 2,000 in 1985, to approximately 18,000 in 2005 (Lott 2006, p. 10), and currently more than 480 Interior least tern colonies are known to occur in four major drainages with 16 primary subpopulations (Lott *et al.* 2013, pp. 3616–3617). Most of these subpopulations have been stable or increasing over the past two decades (Lott *et al.* 2013, p. 3620; Lott and Sheppard 2017a, pp. 51–52). Thus, the negative impacts of river channel engineering on the tern appear to have been initially overestimated.

Loss of some historical Interior least tern summer nesting habitat likely occurred on a local or regional scale prior to listing; however, we have found no evidence that nesting habitat loss is currently limiting the Interior least tern on a rangewide scale. The Interior least tern continues to nest in all habitat types and drainages identified in 1985, and there is no evidence of significant regional decline or extirpation from any drainage since listing (Service 2013, p. 10). As previously noted, the Interior least tern uses a variety of anthropogenic habitats such as navigation systems, reservoirs, sand mines, and so forth, allowing the Interior least tern to not only survive, but also to thrive in some drainages, and even expand its range into areas without historical records.

While future conditions within some portion of the Interior least tern's range may deteriorate due to natural or anthropogenic changes (for example, climate change may increase the likelihood of heavy rainfall events) or human demands (*e.g.,* water extraction or removal in the western plains), the wide range of the Interior least tern and its ability to relocate to areas with better conditions reduce the magnitude of any threat (see *Effects of Climate Change* (Factor E), below). The Interior least tern is also well adapted to adjust to variability and changes in local habitat availability, quality, and quantity through metapopulation dynamics (see *Habitat Criteria,* above, for detail on metapopulation dynamics), enhanced by the species' longevity, dispersal capability, and ability to re-nest (*e.g.,* Lott *et al.* 2013, p. 3620; Lott and Sheppard 2017b, entire).

Predation

Interior least tern eggs, chicks, and adult individuals are susceptible to a wide variety of avian and terrestrial predators. During the 25-year monitoring period on the Missouri River, the greatest cause of egg loss has been predation (3 percent) (Aron *in litt.* 2012). On the Mississippi River, predation was the second highest cause of Interior least tern egg, chick, and adult mortality (Smith and Renken 1993, pp. 41–42).

Interior least terns are adapted to avoid predation because: (1) Their eggs and chicks are cryptically colored to avoid detection; (2) chicks exhibit ''freeze'' behavior when threatened; and (3) adults cooperate in alarm calls and attack flights on potential predators to the colonies (Thompson *et al.* 1997, p. 11). Terns may also abandon and relocate colonies due to predation pressure (Atwood and Massey 1988, p. 394).

The level and effect of predation can be locally high and significant in some colonies and in some years; however, the Interior least tern's adaptation to high levels of predation is demonstrated by the exponential growth of rangewide breeding numbers since listing in 1985. Interior least tern are long-lived, and current population trends indicate that sporadic local breeding failure due to predation or other causes is natural, and unlikely to be significant to the long-term stability of the rangewide population.

Effects of Climate Change

The distributions of many terrestrial organisms, including birds, are shifting in latitude or elevation in response to climate warming (Chen *et al.* 2011, pp. 1024–1025). Although population declines, apparently in response to climate change effects, have been reported for long distance migrant bird species in both Europe and North America, the negative effects of climate change at one life or migratory stage may be compensated at another stage, *e.g.,* by increased survival or reproduction on winter or breeding grounds (Knudson *et al.* 2011, p. 9).

The ability of migratory birds to cope with rapid climate change effects depends upon the rate of their adaptive response to the changes (Knudson *et al.* 2011, p. 12). Phenotypic plasticity (*i.e.,* the ability to shift dates of migration, breeding, fledgling, etc.) may allow rapid adaptation to climate change effects in some species (Charmantier *et al.* 2008, entire). While there is little information available on Interior least tern phenology (life cycle events and how they are influenced by climate variation), their adaptations to habitats controlled by stochastic events, along with high mobility and use of anthropogenic habitats, indicate that they will be resilient to predicted effects of climate changes.

Most climate change models predict increased extreme weather events (*i.e.,* floods and droughts) throughout the Interior least tern's breeding range (Lubchenco and Karl 2012, pp. 33–36). In the absence of clear knowledge of Interior least tern wintering distributions, potential effects of climate change on the bird when it is away from its breeding range are unknown. The Interior least tern is well adapted to cope with extreme hydrologic changes, and its habitat and productivity are closely tied with stochastic weather events. For example, while extreme high flow events may result in annual recruitment loss, such events are also the primary factor in creating, scouring, and maintaining high-quality sandbars where Interior least terns nest (Sidle *et al.* 1992, p. 134). On the other hand, extreme drought events that connect nesting islands to the mainland and result in increased predation of some Interior least tern colonies may be offset by higher abundance of available nesting areas, increased dispersal of reproductive efforts, and higher local recruitment rates of some colonies during low flow periods. Rooftop nesting birds are susceptible to catastrophic recruitment failure due to high summer temperatures (see

Watterson 2009, pp. 23–24; Nupp and Petrick 2010, pp. 5–7), and colonies on natural habitats may also become negatively affected by increasing summer temperatures. However, Interior least terns are dispersed along a wide latitudinal and longitudinal gradient of climate conditions and are unlikely to experience rangewide catastrophic recruitment failure due to high summer temperatures. Therefore, while Interior least tern colonies may be locally or regionally affected by changes in frequency and duration of extreme discharge events and droughts, or high temperatures, the dispersal of the Interior least tern over a wide geographical area encompassing a variety of latitudinal and longitudinal gradients, its long life, and its ability to move long distances indicate the tern's resilience to future patterns of predicted effects of climate change (Lott *et al.* 2013, p. 3623).

Habitat Loss and Fragmentation Related to Effects of Climate Change

Hof *et al.* (2011, p. 2990) noted that habitat destruction and fragmentation may reduce the likelihood of species surviving the effects of climate change, in part because smaller habitat patches sustain smaller populations. Habitat fragmentation can also impede the dispersal ability of species (Hof *et al.* 2011, pp. 2989–2990). While the Interior least tern has possibly been affected by loss of significant reaches of riverine habitat such as the lower Missouri River and lower Red River, it has also increased its longitudinal range by exploiting anthropogenic habitats such as reservoirs in central Texas, Colorado, and the Rio Grande, and industrial sites in the Wabash. Additionally, known population size has also increased by an order of magnitude since the range became fragmented, and genetic studies have demonstrated connectivity via gene flow within Interior least tern populations and between other least tern populations (Whittier *et al.* 2006, p. 179).

Invasive salt cedar and willow growth, decreases in annual rainfall, and overuse and depletion of aquifers, coupled with increased human water demands, are occurring in the Southern and Northern Plains rivers, possibly to the future detriment of Interior least tern habitat and forage availability in those drainages. However, increases in impervious surfaces (*e.g.,* artificial structures or compacted soils associated with human developments) may offset the negative effects of climate change in some watersheds, while human demands such as urban or industrial utilization, and irrigation, could either offset or exacerbate climate change effects in others (Caldwell *et al.* 2012, p. 2854). Based on current data, the wide longitudinal and latitudinal distribution of the Interior least tern will likely offset any potential localized or regional reduction in habitat quantity or quality, at least in part, by new opportunities in other portions of its range.

Decline of Fish Prey

Starvation of California least tern chicks has been reported due to the detrimental effects of El Niño on fish abundance (Massey and Fancher 1989, p. 354; Massey *et al.* 1992, p. 980). Decreased fish prey availability has been locally linked to reduced Interior least tern egg weights, clutch size, and chick weights, and may have influenced chick survival and fledgling rates (Dugger 1997, pp. 94–95). Declines in fish prey have been noted on the Missouri River (Stucker 2012, p. 21) and in some years on the Mississippi River (Dugger 1997, pp. 113–114). Fish prey abundance has also been linked to cyclic river conditions (*e.g.,* river stage during nesting season; Dugger 1997, p. 26). However, Interior least terns are strong flyers and capable of exploiting a large variety of aquatic habitats and fish species, including exotic species that may invade rivers such as Asian carp. These characteristics, coupled with the bird's long life, its ability to re-nest, and its ability to relocate to more productive areas, enable it to cope with local periodic cycles of low fish prey abundance.

Other Factors

Thompson *et al.* (1997, pp. 15–17) and others have documented the mortality of least tern eggs, chicks, and adults due to a number of additional factors, including flooding of nesting areas during heavy summer rains and high water events, exposure to pesticides and other contaminants (of coastal least tern; Jackson and Jackson 1985, p. 58), burial of eggs by sand, hailstorms, heat, cold, sand spurs (a common grass in this habitat with prickly burrs that stick to passing animals), fire ants, fireworks, airboats, off-road vehicles (ORVs), and human recreationists. Cattle trampling of Interior least tern eggs and chicks has been documented in the Red River (Hervey 2001, pp. 7–8). Nupp (2012, pp. 7–8) documented mortality of eggs and chicks from heat exposure in rooftop colonies.

Sampling for contaminants in Interior least terns has been concentrated in the Missouri River drainage, where sub-lethal amounts of arsenic, mercury, chlorinated hydrocarbon, selenium, and polychlorinated biphenyl (PCBs) have been documented in individuals (Fannin and Esmoil 1993, pp. 153–157; Ruelle 1993, pp. 162–170; Allen *et al.* 1998, pp. 358–364); however, no incidences of death or decreased fitness of Interior least terns due to contaminants have been reported to date. ORV impacts have been documented in most drainages where Interior least terns nest (Red, Mississippi, Arkansas, Ohio, and Missouri river drainages). However, ORV access to nesting areas occurs only occasionally because it is usually limited to situations where low flow conditions allow such access. While other threats (*i.e.,* sand storms, hail storms, heat, cold, sand spurs, fire ants, fireworks, airboats, etc.) may increase in frequency and severity in some portions of the Interior least tern's range, most are site-specific and sporadic, or otherwise limited in scope.

Interior least tern mortality occurs locally throughout the range due to a variety of natural or manmade factors. However, the wide distribution of the species, its current high numbers, its long life span, and its ability to relocate and re-nest make the Interior least tern resilient to occasional or periodic local sources of mortality, as well as potential effects of climate change. The increase in range and population size since 1985 indicates that sources of mortality to localized colonies are compensated by these traits of resiliency, as well as by the potential of high recruitment rates in other Interior least tern colonies or populations.

Cumulative Effects

Our analysis has identified no rangewide threats or stressors with significant effects to all breeding colonies or subpopulations. Monitoring data show some breeding colonies or subpopulation segments may decline or relocate due to localized stressors (*e.g.,* predation, disturbance), regional stressors (*e.g.,* droughts, floods), or their cumulative effects. Variations in colony locations, size, or subpopulation densities, however, are a characteristic of metapopulation dynamics, and have not been shown to threaten the rangewide status of the Interior least tern over an extended area. Additionally, the increases documented in the abundance and distribution of the Interior least tern, since it was listed in 1985, do not support a conclusion that any of these stressors cumulatively pose a threat to the Interior least tern.

Future Conditions and Species Viability

Species viability, or its ability to survive long term, is related to its ability

to withstand catastrophic population and species-level events (redundancy), to adapt to changing environmental conditions (representation), and to withstand disturbances of varying magnitude and duration (resiliency). The viability of a species is also dependent on the likelihood of new stressors or continued threats now and in the future that act to reduce a species' redundancy, representation, and resiliency.

Redundancy of populations is needed to provide a margin of safety for a species to withstand catastrophic events. Current information and observed trends since the species was listed in 1985 indicate that redundancy of the Interior least tern is currently ensured by the existence of hundreds of breeding colonies in multiple drainages across a wide latitudinal and longitudinal range (see *Current Distribution and Abundance,* above), and within a variety of natural and anthropogenic habitats (see *Nesting Habitat and Behavior,* above).

Adequate representation ensures that the species' adaptive capabilities are conserved, specifically through its representation across all historical ecological settings, and through preservation of the genetic diversity of the species. The Interior least tern was historically known from, and continues to occur in, two main natural habitat types: Large river sandbars and salt plains. While the salt plains populations were and continue to be historically localized in small portions of the Southern Plains, the sandbar populations occurred across a large latitudinal and longitudinal gradient, encompassing multiple river and stream orders, and a wide variety of climatic conditions. Little evidence of genetic structure has been found within the Interior least tern population (Draheim *et al.* 2010, p. 813), indicating high genetic connectivity between drainage subpopulations. There also appears to be high genetic connectivity between California, Interior, and eastern least terns (Draheim *et al.* 2010, p. 816). For these reasons, the Interior least tern appears to have adequate genetic and ecological representation to allow for adaptability to environmental changes.

Resiliency allows a species to recover from periodic or occasional disturbance. Resilience of individual and mated terns is demonstrated by their ability to relocate and re-nest when habitat conditions deteriorate, or when disturbance by humans or predators becomes severe. Interior least tern metapopulation dynamics allow subpopulations and colonies to respond to changing habitat conditions, including their ability to exploit a variety of anthropogenic habitats that were not historically available (Lott *et al.* 2013, p. 3623). This resilience is augmented by the long life span and strong flight abilities of Interior least terns, and by the prospecting behavior (exploratory dispersal) of young birds across the landscape (Boyd and Thompson 1985, p. 405; Lott 2012, p. 12; Shigeta *in litt.* 2014, entire).

In addition to this review of redundancy, representation, and resiliency, which indicates a high likelihood of future viability for the Interior least tern, the Service worked with multiple partners to develop a habitat-driven, rangewide population model for the tern in order to consider status and population dynamics with and without continued management at local, regional, and rangewide scales (Iglay *et al.* 2012, entire; Lott and Sheppard 2017a, b, entire). The model, known as TernPOP (Lott and Sheppard 2017a, b, entire), applied simulation analyses that were designed to explore stakeholder-defined scenarios of potential future habitat change or changes in management. Fifty-five discrete scenarios spanned the geographic range of the Interior least tern and covered the topics of (1) sandbar nesting habitat loss, (2) habitat degradation, (3) changes in predator management programs, and (4) deliberate efforts to create mid-channel nesting sandbars for the tern. All 55 scenarios were evaluated relative to a ''No Action'' scenario. Thirty replicates of the model were run for 30 years, and population growth (or decline) rates were calculated for each replicate (and then averaged across replicates) at the spatial scales of scenario area, subpopulation, drainage population, and the entire listed population of the Interior least tern. Nearly all scenarios of regional management or habitat loss, even some viewed as implausible in the foreseeable future (*e.g.,* loss of 50 percent of all sandbars on the Lower Mississippi River), had minimal effects on population growth rates calculated across the 30-year period at the spatial scales of subpopulation, population, and range (Lott and Sheppard 2017b, pp. 42–61). In most cases, severe habitat degradation in even relatively large areas was insufficient to change the baseline population increases observed during ''No Action'' scenarios to population declines, beyond very local areas. Therefore, quantitative evaluation of population model outputs are similar to and support prior qualitative observations that Interior least tern populations are resilient to many potential changes in habitat conditions across their large river network (Lott *et al.* 2013, pp. 3622–3623, Lott and Sheppard 2017b, pp. 59–62).

Based upon the analysis presented above, the Interior least tern cannot be considered to be conservation reliant because it has shown to be able to adapt to and exploit substantial habitat changes throughout its range. Although some (10 percent) local colonies and peripheral population segments of the Interior least tern may require management for long-term persistence their success or failure within individual sites is not essential to the continued existence of the Interior least tern. Viability of the Interior least tern is assured by its resilience, representation, and redundancy throughout the remainder of its range. The tern will continue to be conserved by habitat management programs over more than 80 percent of its range (see *Habitat Criteria under Recovery section, above*).

Inadequacy of Existing Regulatory Mechanisms

The Interior least tern is covered by the Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703 *et seq.*). The MBTA makes it unlawful, at any time and by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or eggs of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof (16 U.S.C. 703(a)). 16 U.S.C. 704(a) states that the Secretary of the Interior (Secretary) is authorized and directed to determine when, to what extent, if at all, and by what means, the take of migratory birds should be allowed, such as for educational, scientific, and recreational purposes, and to adopt suitable regulations permitting and governing the take. In adopting regulations, the Secretary is to consider such factors as distribution and abundance to ensure that any take is compatible with the protection of the species.

When the Interior least tern was listed in 1985, the listing rule (50 FR 21784) noted that while the MBTA protected migratory birds from harm or harassment, it did not provide a mechanism to address habitat threats. It concluded, therefore, in the absence of protection under the Endangered Species Act, the MBTA and other existing regulatory mechanisms were inadequate to prevent deterioration to habitats of the Interior least tern due to channel engineering. As noted above, however, the effects of channel engineering on the species may have been more beneficial than detrimental, at least in portions of the range (*see Habitat Loss and Curtailment of Range, above*).

The protection, restoration, conservation, and management of ecological resources within the Interior least tern's range have been broadly enhanced through Executive Orders and Federal regulations since the species was listed. These include provisions emphasizing the protection and restoration of ecosystem function and quality in compliance with existing Federal environmental statutes and regulations (*e.g.,* under National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*), Clean Water Act (CWA), and MBTA) and endorsing Federal efforts to advance environmental goals. Recent water resources authorizations have also enhanced opportunities for USACE and other Federal agency involvement in studies and projects to specifically address objectives related to the restoration of ecological resources (*e.g.,* section 1135 of the Water Resources Development Act of 1986, as amended, 33 U.S.C. 2201 *et seq.*).

Executive Order (E.O.) 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds; 66 FR 3853), enacted in 2001, requires all Federal agencies to use their authorities and conduct their actions to promote the conservation of migratory bird populations. Actions authorized by E.O. 13186 include: (1) Avoiding and minimizing adverse impacts to migratory birds; (2) habitat restoration and enhancement, and preventing pollution or detrimental alteration of migratory bird environments; (3) designing habitat and population conservation principles, measures, and practices into agency plans and planning processes; (4) promoting research and information exchange, including inventorying and monitoring; and (5) ensuring full consideration under NEPA of migratory birds such as the Interior least tern. These concepts have been incorporated by the USACE into its Environmental Operating Principles (USACE 2019b and 2019c), and are being implemented within the jurisdictional waters inhabited by the Interior least tern. In the absence of the Act's protections, E.O. 13186 and USACE operating principles and programs will continue to provide for protection and management of the Interior least tern and its habitats (see *Habitat Criteria,* above).

The Civil Works Ecosystem Restoration Policy of 1999 (CWERP) (USACE ER 1165–2–501) identifies ecosystem restoration as one of the primary missions of the USACE Civil Works program. This policy requires a comprehensive examination of the problems contributing to ecosystem degradation, and the development of alternative means for their solution, with the intent of partially or fully reestablishing the attributes of a naturalistic, functioning, and self-regulating system.

Implementation of actions authorized under E.O. 13186 and CWERP are discretionary, and contingent upon opportunity and annual appropriations and other budgetary constraints. However, many Federal action agencies now have an extensive history of managing and restoring Interior least tern habitats (some more than two decades) in compliance with non-discretionary requirements of section 7(a)(2) of the Act (in the Missouri, Red, Arkansas, middle Mississippi Rivers), as well as discretionary components of section 7(a)(1) of the Act, E.O. 13186, and CWERP (in the Lower Mississippi River). As a result, many conservation measures have become standard operating practices (see *Recovery,* above).

Interior least terns are listed as endangered in the following 16 of the 18 States where they occur: South Dakota, Nebraska, Colorado, Iowa, Illinois, Missouri, Kansas, Mississippi, Arkansas, Louisiana, Kentucky, Tennessee, Indiana, New Mexico, Montana, and Texas. Many of the States noted above actively manage Interior least terns, including seasonal posting to prevent disturbance of nesting areas (*e.g.,* Kentucky, Kansas); facilitating cooperative partnerships to protect and manage the bird (*e.g.,* Nebraska, Indiana); developing State management plans for the Interior least tern (*e.g.,* South Dakota; Aron 2005); conducting site-specific research (*e.g.,* Mississippi); and participating in multi-agency planning, management, and monitoring programs (*e.g.,* Missouri River Recovery Implementation Committee).

Interior least tern protection under State laws may continue following Federal delisting. This proposed rule, if made final, might prompt some to several States to follow the final federal delisting determination and remove the Interior least tern from their endangered species lists, but in other States, the tern may continue to meet the definition of State endangered. Regardless of Federal laws, most State laws protect native wildlife (including the Interior least tern) from take, and require State permits, in addition to Federal permits, to collect, harm, or harass migratory bird species such as the Interior least tern.

Activities that may adversely affect the Interior least tern and its habitats will also continue to be subject to numerous regulatory mechanisms, including the MBTA, CWA, Fish and Wildlife Coordination Act (FWCA; 16 U.S.C. 661 *et seq.*), and NEPA. Federal actions to conserve and enhance Interior least tern habitats are now authorized by Executive Orders and Federal regulations enacted since the Interior least tern was listed in 1985. Additionally, post-delisting habitat management commitments by USACE encompass about 80 percent of the Interior least tern population (see

Recovery, above). Therefore, we conclude that the existing regulatory mechanisms are adequate to protect the Interior least tern and address stressors to this species absent protections under the Act.

Proposed Determination

Since its 1985 listing under the Act, the Interior least tern has shown an ability to adapt to changing environmental conditions caused by both human and natural disturbances. The Interior least tern nesting population encompasses hundreds of colonies in 18 States throughout the Interior Basin, from Montana southward through North Dakota, South Dakota, Nebraska, Colorado, Iowa, Kansas, Missouri, Illinois, Indiana, and Kentucky to eastern New Mexico, Oklahoma, Arkansas, Tennessee, Texas, Louisiana, and Mississippi (see supplemental documents at *https://www.regulations.gov* under Docket No. FWS–R4–ES–2018–0082). Therefore, the Interior least tern is highly redundant and resistant to future catastrophic events. Its representation is ensured by its continued occurrence within all known historical habitats (*i.e.,* Salt Plains, multiple river and stream orders) across a large latitudinal and longitudinal gradient and a wide variety of climatic conditions. Interior least tern resilience is demonstrated by metapopulation dynamics, its ability to adapt to multiple natural and anthropogenic conditions, and by evidence of high genetic connectivity between drainage subpopulations. Because the Interior least tern has been considered to be increasing and self-sustaining since listing (34 years), and consists of a relatively large number of individuals with demonstrated high redundancy, representation, and resilience, we expect it to persist into the future.

We have carefully assessed the best scientific and commercial information available regarding the threats faced by the Interior least tern in developing this proposed rule. Our analysis found an increase in the abundance, number of breeding sites, and range of the Interior least tern, resiliency to existing and potential threats, active habitat management and the implementation of beneficial management practices, and changes in existing regulatory mechanisms that are protective of migratory bird habitats. Known threats at the time of listing—habitat loss and curtailment of range (Factor A) and predation (Factor C)—have been reduced or adequately managed, and we have analyzed possible new threats (Factor E) and determined that they are not significant threats to the Interior least tern. Existing State and Federal regulatory mechanisms (Factor D) are adequate to protect the tern from the reduced threats. The net effect of current and predictable future stressors to the species, after considering applicable conservation measures and the existing regulatory mechanisms, are not sufficient to cause the Interior least tern to meet the definition of an endangered or threatened species. We find that the Interior least tern has recovered so that it no longer meets the definition of an endangered species or a threatened species under the Act throughout its range.

Determination of Status Throughout a Significant Portion of Its Range

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so in the foreseeable future throughout all or a significant portion of its range (SPR). Where the best available information allows the Services to determine a status for the species rangewide, that determination should be given conclusive weight because a rangewide determination of status more accurately reflects the species' degree of imperilment and better promotes the purposes of the Act. Under this reading, we should first consider whether the species warrants listing ''throughout all'' of its range and proceed to conduct a ''significant portion of its range'' analysis if, and only if, a species does not qualify for listing as either an endangered or a threatened species according to the ''throughout all'' language.

Having determined that the Interior least tern is not in danger of extinction or likely to become so in the foreseeable future throughout all of its range, we now consider whether it may be in danger of extinction or likely to become so in the foreseeable future in an SPR. The range of a species can theoretically be divided into portions in an infinite number of ways, so we first screen the potential portions of the species' range to determine if there are any portions that warrant further consideration. To do the ''screening'' analysis, we ask whether there are portions of the species' range for which there is substantial information indicating that: (1) The portion may be significant; and, (2) the species may be, in that portion, either in danger of extinction or likely to become so in the foreseeable future. For a particular portion, if we cannot answer both questions in the affirmative, then that portion does not warrant further consideration and the species does not warrant listing because of its status in that portion of its range. We emphasize that answering these questions in the affirmative is not a determination that the species is in danger of extinction or likely to become so in the foreseeable future throughout a significant portion of its range—rather, it is a step in determining whether a more detailed analysis of the issue is required.

If we answer these questions in the affirmative, we then conduct a more thorough analysis to determine whether the portion does indeed meet both of the SPR prongs: (1) The portion is significant and (2) the species is, in that portion, either in danger of extinction or likely to become so in the foreseeable future. Confirmation that a portion does indeed meet one of these prongs does not create a presumption, prejudgment, or other determination as to whether the species is an endangered species or threatened species. Rather, we must then undertake a more detailed analysis of the other prong to make that determination. Only if the portion does indeed meet both SPR prongs would the species warrant listing because of its status in a significant portion of its range.

At both stages in this process—the stage of screening potential portions to identify any portions that warrant further consideration and the stage of undertaking the more detailed analysis of any portions that do warrant further consideration—it might be more efficient for us to address the ''significance'' question or the ''status'' question first. Our selection of which question to address first for a particular portion depends on the biology of the species, its range, and the threats it faces. Regardless of which question we address first, if we reach a negative answer with respect to the first question that we address, we do not need to evaluate the second question for that portion of the species' range.

For the Interior least tern, we chose to evaluate the status question (*i.e.,* identifying portions where the Interior least tern may be in danger of extinction or likely to become so in the foreseeable future) first. To conduct this screening, we considered whether the threats are geographically concentrated in any portion of the species' range at a biologically meaningful scale. If a species is not in danger of extinction or likely to become so in the foreseeable future throughout all of its range and the threats to the species are essentially uniform throughout its range, then the species would not have a greater level of imperilment in any portion of its range than it does throughout all of its

range and therefore no portions would qualify as an SPR.

We examined the following threats: Habitat loss, curtailment of range, predation, and inadequacy of regulatory mechanisms, including cumulative effects. We found no concentration of threats in any portion of the Interior least terns range at a biologically meaningful scale. Since we found no portions of the species' range where threats are significantly concentrated or substantially greater than in other portions of its range, we did not identify any portions where the species may be in danger of extinction or likely to become so in the foreseeable future. Therefore, no portions warrant further consideration through a more detailed analysis, and the species is not in danger of extinction or likely to become so in the foreseeable future in any significant portion of its range. Our approach to analyzing SPR in this determination is consistent with the court's holding in *Desert Survivors* v. *Department of the Interior,* No. 16–cv–01165–JCS, 2018 WL 4053447 (N.D. Cal. Aug. 24, 2018).

Our review of the best available scientific and commercial information indicates that the Interior least tern is not in danger of extinction nor likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Therefore, we find that the Interior least tern does not meet the definition of an endangered species or a threatened species under the Act.

Conclusion

We have determined that none of the existing or potential threats, either alone or in combination with others, is likely to cause the Interior least tern to be in danger of extinction throughout all or a significant portion of its range, nor is any likely to cause the species to become an endangered species within the foreseeable future throughout all or a significant portion of its range. On the basis of our evaluation, we conclude that, due to recovery, the Interior least tern is not an endangered or a threatened species. We therefore propose to remove the Interior least tern from the Federal List of Endangered and Threatened Wildlife at 50 CFR 17.11(h).

Effects of This Proposed Rule

If we adopt this rule as proposed, the prohibitions and conservation measures provided by the Act would no longer apply to the Interior least tern. Federal agencies would no longer be required to consult with us under section 7 of the Act to ensure that any action authorized, funded, or carried out by them is not likely to jeopardize the Interior least tern's continued existence. The provisions of the MBTA will remain in place. The MBTA protects the bird and its parts, nests, and eggs from taking and trade; and Federal permits are required for certain actions like scientific collecting and relocation (see *Inadequacy of Existing Regulatory Mechanisms,* above).

If adopted, this rule would not affect the Interior least tern's status as an endangered or threatened species under State laws or suspend any other legal protections provided by State law. States may have more restrictive laws protecting wildlife, and these will not be affected by this Federal action. However, this proposed rule, if made final, may prompt some States to remove protection for the Interior least tern under their State endangered species laws.

Post-Delisting Monitoring

Section 4(g)(1) of the Act requires us to monitor for not less than 5 years, the status of all species that are delisted due to recovery. Post-delisting monitoring (PDM) refers to activities undertaken to verify that a species delisted due to recovery remains secure from the risk of extinction after the protections of the Act no longer apply. The primary goal of PDM is to monitor the species to ensure that its status does not deteriorate, and if a decline is detected, to take measures to halt the decline so that proposing it as endangered or threatened is not again needed. If at any time during the monitoring period, data indicate that protective status under the Act should be reinstated, we can initiate listing procedures, including, if appropriate, emergency listing. At the conclusion of the monitoring period, we will review all available information to determine if relisting, the continuation of monitoring, or the termination of monitoring is appropriate.

Section 4(g) of the Act explicitly requires that we cooperate with the States in development and implementation of PDM programs. However, we remain ultimately responsible for compliance with section 4(g) and, therefore, must remain actively engaged in all phases of PDM. We also seek active participation of other entities that are expected to assume responsibilities for the species' conservation after delisting.

We have prepared a draft PDM plan for the Interior least tern (Service 2017). The draft plan:

(1) Summarizes the Interior least tern's status at the time of delisting;

(2) Defines thresholds or triggers for potential monitoring outcomes and conclusions;

(3) Lays out frequency and duration of monitoring;

(4) Articulates monitoring methods, including sampling considerations;

(5) Outlines data compilation and reporting procedures and responsibilities; and

(6) Proposes a PDM implementation schedule, including timing and responsible parties.

The draft PDM plan is availability for public review at *http://www.regulations.gov* under Docket Number FWS–R4–ES–2018–0082. Copies can also be obtained from the U.S. Fish and Wildlife Service, Mississippi Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**). We seek information, data, and comments from the public regarding the Interior least tern and the PDM plan.

Required Determinations

Clarity of the Proposed 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:

(a) Be logically organized;

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

(c) Use clear language rather than jargon;

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

(e) 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 **ADDRESSES**. 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.

National Environmental Policy Act

We have determined that we do not need to prepare an environmental assessment or environmental impact statement, as defined in the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*), in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244).

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951), Executive Order 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. We have determined that there are lands of 20 different tribes within the range of the listed Interior least tern that may be affected by this proposal. We intend to contact each of these Tribes during the open comment period for this proposed rule so they may fully evaluate any potential impact of this proposed rule and the draft PDM plan.

References Cited

A complete list of references cited is available on *http://www.regulations.gov* under Docket Number FWS–R4–ES–2018–0082, or upon request from the Field Supervisor, Mississippi Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Author

The primary author of this document is Paul Hartfield of the Mississippi Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

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.

§ 17.11 [Amended]

■ 2. Amend § 17.11(h) by removing the entry for ''Tern, least [Interior DPS]'' under ''BIRDS'' from the List of Endangered and Threatened Wildlife.

Dated: August 8, 2019.

Margaret E. Everson,

Principal Deputy Director, U.S. Fish and Wildlife Service, Exercising the Authority of the Director for the U.S. Fish and Wildlife Service.

[FR Doc. 2019–23119 Filed 10–23–19; 8:45 am]

BILLING CODE 4333–15–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 679

[Docket No.: 191016–0065]

RIN 0648–BJ07

Fisheries of the Exclusive Economic Zone off Alaska; IFQ Program; Modify Medical and Beneficiary Transfer Provisions

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS proposes regulations to modify the medical and beneficiary transfer provisions of the Individual Fishing Quota (IFQ) Program for the fixed-gear commercial Pacific halibut and sablefish fisheries. This proposed rule is intended to simplify administration of the medical and beneficiary transfer provisions while promoting the long-standing objective of maintaining an owner-operated IFQ fishery. This proposed rule would also make minor technical corrections to regulations for improved accuracy and clarity. This proposed rule is intended to promote the goals and objectives of the IFQ Program, the Magnuson-Stevens Fishery Conservation and Management Act, the Northern Pacific Halibut Act of 1982, and other applicable laws.

DATES: Submit comments on or before November 25, 2019.

ADDRESSES: You may submit comments, identified by docket number NOAA–NMFS–2019–0069, either of the following methods:

- *Electronic Submission:* Submit all electronic public comments via the Federal eRulemaking Portal. Go to *www.regulations.gov/#!docketDetail;D=NOAA-NMFS-2019-0069,* click the ''Comment Now!'' icon, complete the required fields, and enter or attach your comments.
- *Mail:* Submit written comments to Glenn Merrill, Assistant Regional Administrator, Sustainable Fisheries Division, Alaska Region NMFS, Attn: Records Office. Mail comments to P.O. Box 21668, Juneau, AK 99802–1668.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (*e.g.,* name, address), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. NMFS will accept anonymous comments (enter ''N/A'' in the required fields if you wish to remain anonymous).

Electronic copies of the Regulatory Impact Review (referred to as the ''Analysis'') and the Categorical Exclusion prepared for this proposed rule are available from *http://www.regulations.gov.*

Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted by mail to NMFS at the above address; by email to *OIRA_Submission@omb.eop.gov;* or by fax to (202) 395–5806.

FOR FURTHER INFORMATION CONTACT: Stephanie Warpinski, 907–586–7228.

SUPPLEMENTARY INFORMATION:

Authority for Action

NMFS manages the groundfish fisheries in the exclusive economic zone off Alaska under the Fishery Management Plan (FMP) for Groundfish of the Gulf of Alaska (GOA) and under the FMP for Groundfish of the Bering Sea and Aleutian Islands Management Area (BSAI). The North Pacific Fishery Management Council (Council) prepared the FMPs under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), 16 U.S.C. 1801 *et seq*. Regulations governing U.S. fisheries and implementing the FMPs appear at 50 CFR parts 600 and 679.

The International Pacific Halibut Commission (IPHC) and NMFS manage fishing for Pacific halibut through regulations established under the authority of the Northern Pacific Halibut Act of 1982 (Halibut Act). The IPHC promulgates regulations governing the halibut fishery under the Convention between the United States and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea (Convention). The IPHC's regulations are subject to