DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[FWS-R8-ES-2008-0049]

[1111 FY08 MO-B2]

Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition To List the Ashy Storm-Petrel (Oceanodroma homochroa) as Threatened or Endangered

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of 90-day petition finding and initiation of status review.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), announce a 90-day finding on a petition to list the ashy storm-petrel (Oceanodroma homochroa) as threatened or endangered under the Endangered Species Act of 1973, as amended (Act). We find that the petition presents substantial scientific or commercial information

indicating that listing the ashy storm-petrel may be warranted. Therefore, with the publication of this notice, we are initiating a status review of the species to determine if listing the species is warranted. To ensure that the review is comprehensive, we are soliciting information and data regarding this species. We will make a determination on critical habitat for this species, which was also requested in the petition, if, and when, we initiate a listing action.

DATES: To allow us adequate time to conduct this review, we request that information be submitted on or before July 14, 2008.

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

- Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.
- U.S. mail or hand-delivery: Public Comments Processing, Attn: FWS-R8-ES-2008-0049; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, Suite 222; Arlington, VA 22203.

We will not accept e-mail or faxes. We will post all information received at http://www.regulations.gov. This generally means that we will post any personal information you provide us (see the Information Solicited section below for more information).

FOR FURTHER INFORMATION CONTACT: Mike Long, Field Supervisor, Arcata Fish and Wildlife Office, 1655 Heindon Road, Arcata, CA 95521; telephone 707-822-7201; facsimile 707-822-8411. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800-877-8339.

SUPPLEMENTARY INFORMATION:

Information Solicited

When we make a finding that substantial information is presented to indicate that listing a species may be warranted, we are required to promptly commence a review of the status of the species. To ensure that the status review is complete and based on the best available science and commercial information, we are soliciting additional information on the ashy storm-petrel. We request information from the public, other concerned governmental agencies, Native American Tribes, the scientific community, industry, or any other interested parties on the status of the ashy storm-petrel throughout its range, including but not limited to:

(1) The historical and current status and distribution of ashy storm-petrel; the species' biology and ecology; ongoing conservation measures for the species and its habitat; and threats to the species and its habitat.

(2) The effects of potential threat factors that are the basis for a listing determination under section 4(a) of the Act, which are:

(a) Present or threatened destruction, modification, or curtailment of the species' 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.

(3) Timing within year, type, and amount of human activities (e.g., commercial and recreational fishing, tourism) at locations where ashy storm-petrels are known or suspected to breed, including but not limited to: Van Damme Rock (Mendocino County); Bird, Chimney, and Double Point Rocks (Marin County); the Farallon Islands (San Francisco County); Castle and Hurricane Point Rocks (Monterey County); San Miguel Island, Castle Rock, Prince Island, mainland locations and offshore islets at Vandenberg Air Force Base, Santa Cruz Island, Santa Barbara Island, Sutil Island, and Shag Rock (Santa Barbara County); Anacapa Island (Ventura County); Santa Catalina Island and San Clemente Island (Los Angeles County); and Islas Los Coronados and Islas Todos Santos, Mexico.

(4) Projected changes in sea level along the coast of California during the 21st century, specifically at the locations listed in (3) above.

(5) Elevations of known and suitable breeding habitat at the locations listed in (3) above.

(6) Projected acidification of oceanic waters of the California Current during the 21st century.

(7) Locations of oil tanker routes, and timing and frequency of oil tanker traffic along the coast of California and Northern Baja California, Mexico.

(8) Nighttime observations of ashy storm-petrels, other storm-petrels, other nocturnal seabirds (e.g., Xantus's murrelets (Synthliboramphus hypoleucus)), and other seabirds (e.g., gulls (Larus sp.)) on or near boats (commercial or recreational) off central and southern California and Baja California, Mexico.

(9) Measured and observed nighttime lighting, and timing within year of nighttime lighting by boats (commercial and recreational) at locations listed in (3) above.

(10) Daily and seasonal activity patterns of ashy storm-petrels and avian predators of ashy storm-petrels (e.g., western gull (Larus occidentalis), burrowing owl (Athene cunicularia)) at breeding locations in general and, specifically, in relation to light intensity at night.

(11) Abundance and distribution of predators of ashy storm-petrels at ashy storm-petrel breeding locations.

(12) Observations of ashy storm-petrels or other storm-petrels at night on offshore oil platforms, or additional evidence that ashy storm-petrels are attracted to or have collided with offshore oil platforms.

(13) Locations of proposed offshore liquefied natural gas (LNG) facilities along the coast of California and Northern Baja California, Mexico.

(14) Evidence of organochlorine contamination of ashy storm-petrel eggs and birds.

(15) Ingestion of plastics by ashy storm-petrels, and distribution and abundance of plastics in the California Current.

(16) Military activities at sea and on islands off the coast of California and northern Baja California, Mexico.

(17) Factors that pose a threat to ashy storm-petrels (those listed above, and otherwise) and the potential cumulative effects of these factors that may threaten or endanger ashy storm-petrels.

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 directs that determinations as to whether any species is a threatened or endangered species shall be made "solely on the basis of the best scientific and commercial data available." Based on the status review, we will issue the 12-month finding on the petition, as provided in section 4(b)(3)(B) of the Act.

You may submit your information concerning this finding by one of the methods listed in the ADDRESSES section. We will not consider submissions sent by e-mail or fax or to an address not listed in the ADDRESSES section.

If you submit information via http://www.regulations.gov, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying

information, 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. We will post all hardcopy submissions on http://www.regulations.gov.

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

Background

Section 4(b)(3)(A) of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 et seq.) requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information to indicate that the petitioned action may be warranted. We are to base this finding on information provided in the petition, supporting information submitted with the petition, and information otherwise available in our files at the time we make the determination. To the maximum extent practicable, we are to make this finding within 90 days of our receipt of the petition and publish our notice of the finding promptly in the Federal Register.

Our standard for substantial scientific or commercial information within the Code

of Federal Regulations (CFR) with regard to a 90-day petition finding is “that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted” (50 CFR 424.14(b)). If we find that substantial scientific or commercial information was presented, we are required to promptly commence a status review of the species.

On October 16, 2007, we received a formal petition, dated October 15, 2007, from the Center for Biological Diversity, requesting that we list the ashy storm-petrel. The petition also requested that critical habitat be designated concurrently with the listing. The petition clearly identified itself as a petition and included the requisite identification information as required in 50 CFR 424.14(a). Included in the petition was supporting information regarding the species' taxonomy and ecology, historical and current distribution, present status, and potential causes of decline and active imminent threats. In response to the petition, we sent a letter to the petitioner dated January 11, 2008, stating that we had secured funding and that we anticipated making an initial finding as to whether the petition contained substantial information indicating listing the ashy storm-petrel may be warranted in Fiscal Year 2008. We also concluded in our January 11, 2008, letter that emergency listing of the ashy storm-petrel was not warranted.

Species Information

The ashy storm-petrel is a seabird species belonging to the order Procellariiformes, family Hydrobatidae. The ashy storm-petrel is one of five storm-petrel species (including fork-tailed (O. furcata), Leach's (O. leucorhoa), black (O. melania), and least (O. microsoma) storm-petrels) that nest on islands along the west coast of North America (Harrison 1983, pp. 272-278). The ashy storm-petrel is a smoke-gray, medium-sized bird with long slender wings, a long forked tail, and webbed feet (Ainley 1995, p. 2).

Ashy storm-petrels have been confirmed to breed at 26 locations on islands and offshore rocks from Marin County, California, south to Todos Santos Islands, west of Ensenada, Baja California, Mexico (Carter et al. 1992, pp.77-81; Ainley 1995, p. 2; Carter et al. 2006, p. 6; Carter et al. 2008, p. 118). In addition, ashy storm-petrels possibly breed at five locations from Mendocino County south to San Clemente Island (Carter et al. 2008, pp. 118-119). The species breeds primarily in two population centers at the Farallon Islands and in the California Channel Islands (Sowls et al. 1980, p. 24; Ainley et al. 1990, p. 135; Carter et al. 1992, p. 86). Ashy storm-petrels do not excavate burrows; rather, they nest in crevices of talus slopes, rock walls, sea caves, cliffs, and driftwood (James-Veitch 1970, pp. 87-88; Ainley et al. 1990, p. 147; McIver 2002, p. 1).

The breeding season is protracted, and activities at nesting locations occur from March through January (James-Veitch 1970, p. 71). Clutch size is one egg per year (Ainley 1995, p. 6). The egg-laying period extends from late March to October, peaking in June and July (James-Veitch 1970, p. 243; Ainley et al. 1990, p. 148; McIver 2002, pp.

34-36). The average period of incubation is 44 days (James-Veitch 1970, p. 244). Hatchlings are "semi-precocial" (James-Veitch 1970, p. 128). The term semi-precocial describes young that have characteristics of precocial young at hatch (open eyes, down, capacity to leave the nest), but that remain at the nest and are cared for by parents until close to adult size (Sibley 2001, p. 573). Chicks are brooded and attended by adults for approximately the first week of life, after which time they are left unattended in the nest during the day (James-Veitch 1970, p. 141). Chicks are fed irregularly, once every 1 to 3 nights on average (James-Veitch 1970, pp. 180-208). At Southeast Farallon Island, James-Veitch (1970, p. 212) reported a mean of 76 days from hatching to fledging; Ainley et al. (1990, p. 152) reported a mean of 84 days from hatching to fledging. Fledging occurs at night, from late August to January, and once they leave the nest, fledglings are independent of their parents (Ainley et al. 1974, p. 303; McIver 2002, p. 36). Nonbreeding ashy storm-petrels also visit breeding locations during the breeding season (James-Veitch 1970, pp. 242-243). Although visitations are reduced during the months of January and February, ashy storm-petrels visit nesting locations throughout the year, and most intensely from February into October (Ainley et al. 1974, p. 301).

The nocturnal activity (return to and departure from nest) and crevice nesting of this species are adaptations to avoid predation by diurnal predators such as western gulls, burrowing owls, peregrine falcons (Falco peregrinus), and common ravens (Corvus corax) (Ainley 1995, p. 5; McIver & Carter 2006, p. 3). Ashy storm-petrels are susceptible to predation at night by barn owls (Tyto alba) (McIver 2002, p. 30). Nesting in crevices and burrows on remote headlands, offshore rocks, and islands generally

reduces predation of storm-petrels by mammalian predators (Warham 1990, p. 13). Known mammalian predators of ashy storm-petrels and their eggs include house mice (Mus musculus), deer mice (Peromyscus maniculatus), and island spotted skunks (Spilogale gracilis amphiala) (Ainley et al. 1990, p. 146; McIver 2002, pp. 40-41; McIver and Carter 2006, p. 3).

Ashy storm-petrels are nonmigratory and forage primarily in the California Current from northern California to central Baja California, Mexico; birds forage in areas of upwelling, seaward of the continental shelf, near islands and the coast (Ainley et al. 1974, p. 300; Briggs et al. 1987, p. 23; Mason et al. 2007, p. 60). Four thousand to six thousand ashy storm-petrels are usually observed in the fall in Monterey Bay, approximately 3 to 10 miles (5 to 16 kilometers) off the town of Moss Landing, California, and as many as 10,000 ashy storm-petrels were estimated to be present in Monterey Bay in October 1977 (Roberson 1985, p. 42). Storm-petrels feed on small invertebrates and fish picked from the ocean surface (Warham 1990, p. 186). The diet of ashy storm-petrels has not been extensively studied, but includes euphausiids (spp. Euphausia, Thysanoessa), other crustaceans, unidentified fish and squid (G. McChesney, personal communication, 1999).

Obtaining direct population counts of ashy storm-petrels is difficult, because the species nests in often deep, inaccessible crevices (Carter et al. 1992, p. 77; Sydeman et al. 1998b, p. 438). The world population of ashy storm-petrels has been estimated to be on the order of 10,000 birds (Sowls et al. 1980, p. 24; Ainley 1995, p. 1); estimates of

breeding birds for California have ranged from 5,187 (Sowls et al. 1980, p. 25) to 7,209 (Carter et al. 1992, p. 87). Results from Sydeman et al. (1998b, p. 445) indicate a reduction in ashy storm-petrel population size at Southeast Farallon Island from 1972 to 1992, ranging from 28 to 44 percent. Sydeman et al. (1998b, p. 445) report that this decline occurred in prime nesting habitat and was apparently greater for breeding birds. Sydeman et al. (1998b, pp. 445-446) suggest that this decline in population size at Southeast Farallon Island may be due, in part, to an increase in the predation rate on ashy storm-petrel adults and sub-adults by western gulls, which expanded into prime ashy storm-petrel nesting habitat over the course of their study.

Research on reproductive success of the ashy storm-petrel has been conducted at Southeast Farallon Island (James-Veitch 1970; Ainley et al. 1990; Sydeman et al. 1998a; Sydeman et al., unpublished data) and Santa Cruz Island (McIver 2002; McIver et al., in preparation). Reported productivity values have been variable. For example, on Southeast Farallon Island, reported productivity values are: 0.40 chicks per pair during 1964 to 1965 (James-Veitch 1970, p. 235); 0.69 chicks per pair during 1972 to1983 (Ainley et al. 1990, p. 155); and 0.73 chicks per pair during 1971 to 1995 (Sydeman et al. 1998a, p. 20)and 0.52 chicks per pair during 1995 to 1998 (Sydeman et al., unpublished data). On Santa Cruz Island, reported productivity values are: 0.51 chicks per pair during 1995 to 1998 (McIver 2002, p. 44); and 0.63 chicks per pair during 2005 to 2007 (McIver et al., in preparation, p. 25).

No data are currently available regarding adult life span, survivorship, and age at first breeding of ashy storm-petrels (Ainley 1995, p. 8). However, like other procellariids, storm-petrels are long-lived (Warham 1996, p. 20). Some ashy storm-petrels reach 25 years old (Sydeman et al. 1998a, p. 7), and breeding adults over 20 years in age have been reported in the closely-related Leach's storm-petrel (Morse and Buchheister 1977, p. 344). Mean age of first breeding in the Leach's storm-petrel has been reported at 5.9 years ± 1.3 standard deviation (Huntington et al. 1996, p. 19). Sydeman et al. (1998a, p. 7) conducted population viability analyses based upon observations by C. Huntington, and assumed that 90 percent of adult ashy storm-petrels were capable of breeding at 6 years of age.

Factors Affecting the Species

Section 4 of the Act (16 U.S.C. 1533), and implementing regulations at 50 CFR 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) Present or threatened destruction, modification, or curtailment of habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. In making this 90-day finding, we evaluated whether information on threats to the ashy storm-petrel in our files and presented with the October 2007 petition constitute substantial scientific or

commercial information such that listing under the Act may be warranted. Our evaluation of this information is presented below.

A. The Present or Threatened Destruction, Modification, or Curtailment of Habitat or Range

The petitioner asserts that the ashy storm-petrel's island breeding habitat is being modified and degraded by artificial light pollution, introduced species, and current and future climate change; they further assert that its at-sea foraging habitat is being modified and degraded by artificial light pollution, chemical and plastics pollution, and current and future ocean climate change (Petition, p. 15).

The market squid (*Loligo opalescens*) fishery is a source of artificial light at night near breeding locations in the California Channel Islands, and could result in increased mortality of storm-petrels due to predation by diurnal predators and direct collision with lights (McIver 2002, pp. 51-2; Maxwell et al. 2004, pp. 666-69). Ashy storm-petrels have been recovered dead on an offshore oil platform off the coast of southern California, and from mainland locations in southern California, presumably due to attraction to and collision with bright lights (Carter et al. 2000, p. 443).

In addition, oil pollution may pose a threat to ashy storm-petrels. A major oil spill off Monterey Bay during the fall could affect thousands of ashy storm-petrels that concentrate in that area (Roberson 1985, p. 42; Sydeman et al. 1998, p. 439). Hampton et

al. (2003, p. 32) analyzed dumping of tank washings of oil tankers at sea and suggested that the greatest threat of oiling existed for seabird species occurring (while at sea) greater than 80 kilometers (50 miles) offshore, including ashy storm–petrels.

We found substantial evidence presented in the petition indicating that artificial light pollution near breeding colonies and at sea, and at-sea oil pollution may threaten ashy storm-petrels.

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

The petitioner asserts that research activities may impact ashy storm-petrels, but also states that there is no evidence that this impact has had significant negative consequences on studied populations (Petition, p. 30). Therefore, we do not consider this a significant factor affecting the species.

C. Disease or Predation

The petitioner asserts that predation by native predators, including western gulls, burrowing owls, barn owls, and peregrine falcons, and nonnative predators, including house mice (*Mus musculus*), black rats (*Rattus rattus*), and feral cats (*Felis domesticus*), impact ashy storm-petrel populations (Petition, pp. 30-32).

Sydeman et al. (1998, pp. 438-447) reported an increase in the western gull population at Southeast Farallon Island, and an expansion of nesting by western gulls into prime nesting habitat of ashy storm-petrels on the island. They suggested that the decline in population size of ashy storm-petrels at Southeast Farallon Island between the early 1970s and the early 1990s may be due (in part) to an increase in the predation rate on ashy storm-petrels by western gulls.

We find substantial information presented in the petition indicating that predation at nesting colonies may threaten ashy storm-petrels.

D. Inadequacy of Existing Regulatory Mechanisms

The petitioner asserts that existing regulatory mechanisms have been ineffective at preventing the decline of the ashy storm-petrel and in mitigating many of the threats to the species (Petition, p. 32). The petitioner claims that the ineffectiveness of regulatory mechanisms is demonstrated by the failure to eradicate nonnative predators, the inadequate regulation of artificial light pollution, the failure to restrict human disturbance at breeding sites, the lack of regulations on greenhouse gases, and the failure of the Migratory Bird Treaty Act to protect the species from identified threats (Petition, pp. 32-35).

As discussed above, we do find threats to the species from artificial light pollution and predation, and thus find that the petition presents substantial evidence that the inadequacy of existing regulatory mechanisms may threaten ashy storm-petrels.

E. Other Natural or Manmade Factors Affecting Continued Existence

The petitioner cites human disturbance through tourism and military activities as the primary threats under this category (Petition, p. 35). We do not find that the petition presents substantial information supporting the petitioner's claimed threats under this category. However, information in the petition indicates that the ashy storm-petrel may be threatened by the contamination of eggs and birds by organochlorine chemicals.

Eggshell thinning and organochlorine contamination of ashy storm-petrel eggs have been documented during the 1970s and 1990s (Coulter and Risebrough, pp. 254-255; Fry 1994, pp. 1-29; Kiff 1994, pp. 1-24; D. Welsh and H. Carter, unpublished notes).

We find that the petition presents substantial information that the contamination of eggs and birds by organochlorine chemicals may threaten ashy storm-petrels.

Finding

We reviewed the petition, supporting information provided by the petitioner, and information in our files, and we evaluated that information to determine whether the sources cited support the claims made in the petition. Based on this review, we find that the petition presents substantial information indicating that the ashy storm-petrel may be threatened by Factor A, due to artificial light pollution near breeding colonies and at sea, and by at-sea oil pollution; by Factor C, due to predation at nesting colonies; by Factor D, due to the inadequacy of existing regulatory mechanisms; and by Factor E, due to contamination of eggs and birds by organochlorine chemicals.

On the basis of our review, we find that the petition presents substantial information indicating that listing the ashy storm-petrel as threatened or endangered may be warranted. Therefore, we are initiating a status review to determine if listing the species under the Act is warranted.

The petitioner also requested that critical habitat be designated for the ashy storm-petrel. We always consider the need for critical habitat designation when listing species. If we determine in our 12-month finding following the status review of the species that listing the ashy storm-petrel is warranted, we will address the designation of critical habitat at the time of the proposed rulemaking.

References Cited

A complete list of all references cited in this document is available, upon request, from our Arcata Fish and Wildlife Office (see FOR FURTHER INFORMATION CONTACT).

Author

The primary author of this notice is the staff of the U.S. Fish and Wildlife Service, Arcata Fish and Wildlife Office (see FOR FURTHER INFORMATION CONTACT).

Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

Dated: May 6, 2008

/s/ Kenneth Stansell

Acting Director, U.S. Fish and Wildlife Service

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