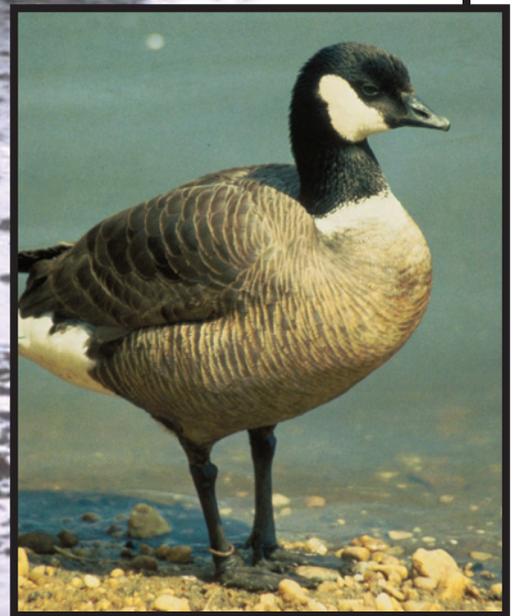
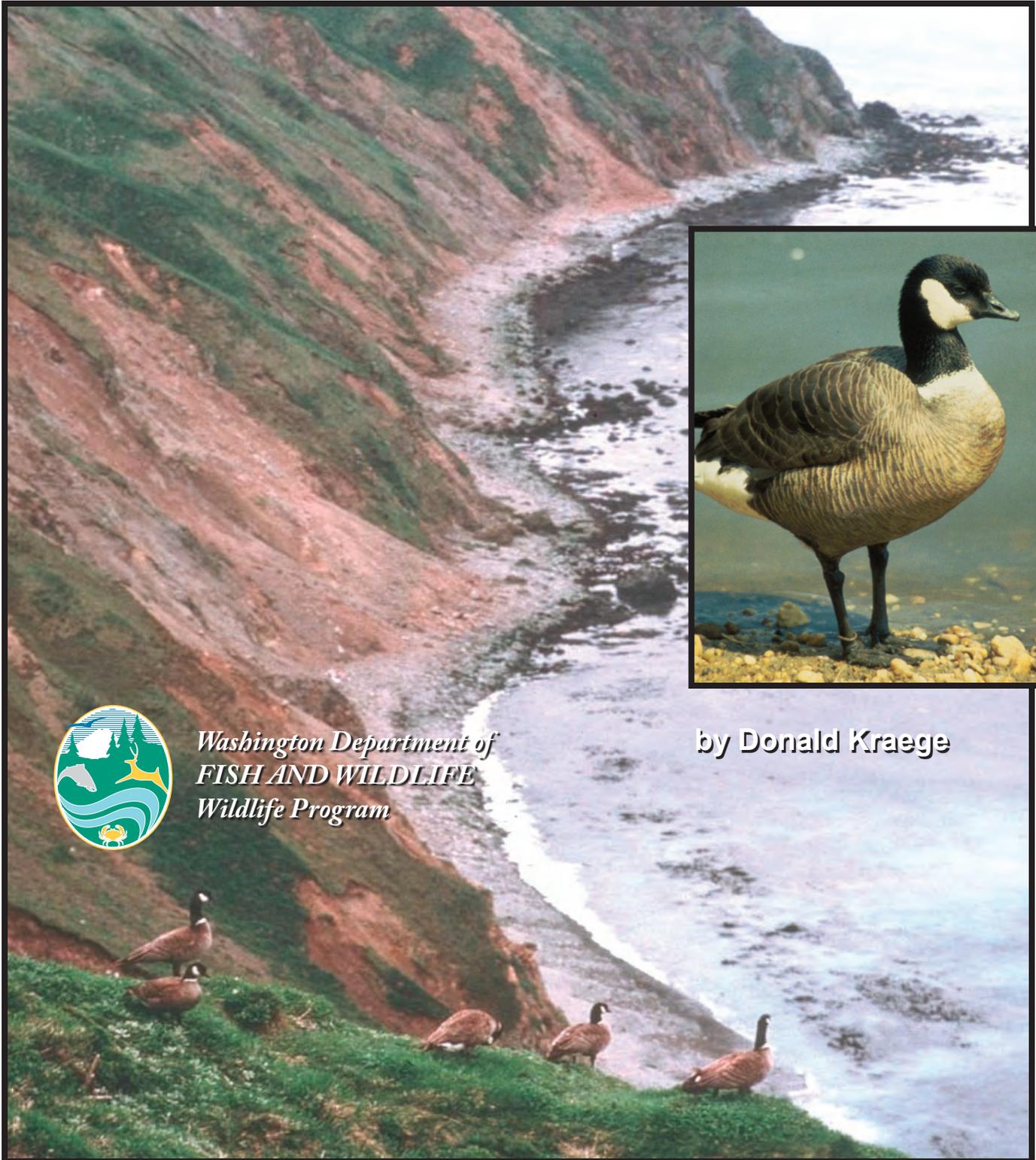


# Washington State Status Report for the Aleutian Canada Goose



*Washington Department of  
FISH AND WILDLIFE  
Wildlife Program*

by Donald Kraege

The Washington Department of Fish and Wildlife maintains a list of endangered, threatened, and sensitive species (Washington Administrative Codes 232-12-014 and 232-12-011, Appendix E). In 1990, the Washington Fish and Wildlife Commission adopted listing procedures developed by a group of citizens, interest groups, and state and federal agencies (Washington Administrative Code 232-12-297, Appendix E). The procedures include how species listings will be initiated, criteria for listing and delisting, public review, and recovery and management of listed species.

The first step in the process is to develop a preliminary species status report. The report includes a review of information relevant to the species' status in Washington and addresses factors affecting its status including, but not limited to: historic, current, and future species population trends, natural history including ecological relationships, historic and current habitat trends, population demographics and their relationship to long term sustainability, known and potential threats to populations, and historic and current species management activities.

The procedures then provide for a 90-day public review opportunity for interested parties to submit new scientific data relevant to the status report, classification recommendation, and any State Environmental Policy Act findings. During the 90-day review period, the Department may also hold public meetings to take comments and answer questions. At the close of the comment period, the Department completes the Final Status Report and Listing Recommendation for presentation to the Washington Fish and Wildlife Commission. The Final Report and Recommendation are then released 30 days prior to the Commission presentation for public review.

The draft Status Report for the Aleutian Canada Goose was reviewed by researchers and the Federal Register Notice it contains was reviewed by state and federal agencies. This review was followed by a 90-day public comment period from July 1-September 30, 2005. Submit written comments on this report by 1 December 2005 to: Endangered Species Section Manager, Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091. The Department will present the results of this status review to the Fish and Wildlife Commission for action at the 13-14 January 2006 meeting in Olympia, Washington.

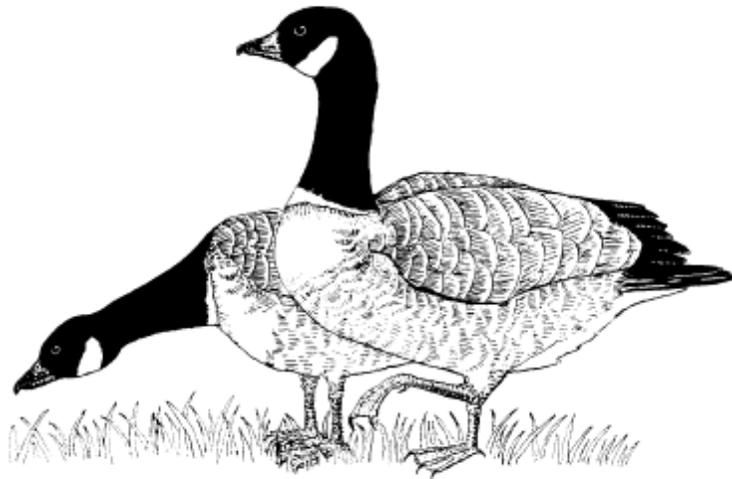
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*Cover photos by Glen Smart (goose) and Vernon Byrd (background, taken in the Aleutians), courtesy of U. S. Fish and Wildlife Service.*

*Black and white illustration on title page and back cover by Darrell Pruett.*

# Washington State Status Report for the Aleutian Canada Goose



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November 2005

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## EXECUTIVE SUMMARY

The Alaska, Washington, Oregon, and California population of Aleutian Canada goose (*Branta canadensis leucopareia*) was first added to the U.S. Department of Interior's list of endangered species in 1967. The primary cause of the population decline was attributed to predation by introduced arctic (*Alopex lagopus*) and red foxes (*Vulpes vulpes*). Aleutian geese were eliminated on many islands in the Aleutian chain after arctic and red foxes were introduced. Control programs started in the 1950s have been successful in significantly reducing and eliminating foxes from several key islands.

The Aleutian Canada goose was formerly one of 11 recognized subspecies of Canada goose. This subspecies was recently assigned to a new species known as the cackling goose (*B. hutchinsii*), which is separate from the Canada goose (American Ornithologists' Union 2004). It is the only known subspecies whose range once included both the North American and the Asian continents. Aleutian Canada geese can be distinguished from most other Canada geese by their small size and a complete ring of white feathers at the base of the neck in birds older than 8 months. They migrate from their breeding grounds in the Aleutian Islands in September, stopping along coastal areas of Washington and Oregon en route to their wintering grounds in California and southwest Oregon. Hunting of Aleutian Canada geese is prohibited in Washington. Washington contains migratory, not wintering, habitat. Principal migratory habitat in Washington is located in the Willapa National Wildlife Refuge (NWR) managed by the U.S. Fish and Wildlife Service (USFWS), and surrounding fields and farms.

In 1991, the species was downlisted by the USFWS from endangered to threatened. The 1991 revised federal recovery plan for the goose outlined 3 major delisting criteria: 1) maintain a wild population of at least 7,500 animals; 2) re-establish self-sustaining populations of geese on three former breeding areas, and 3) maintain adequate migration and winter habitat. The subspecies exceeded 28,000 birds and was proposed for removal from the list of endangered and threatened wildlife in August 1999 (USFWS 1999). The population was delisted in March 2001 (USFWS 2001, Appendix A). Aleutian geese have continued to increase, and currently number over 70,000 as indicated by surveys during the winter of 2003-2004 (Pacific Flyway Council 2005).

In response to its federal endangered status, the Washington Department of Fish and Wildlife (WDFW) listed the Aleutian Canada goose as a state endangered species in 1980. The federal action downlisting the goose from endangered to threatened in 1991 resulted in a similar downlisting of the population by WDFW in 1997. However, the federal action delisting the subspecies in 2001 has not yet resulted in state delisting. No significant circumstances exist specific to Washington State to deviate from following the federal lead in delisting. It is recommended that the Aleutian Canada goose be removed from the list of endangered and threatened species in Washington.

## INTRODUCTION

The USFWS's "Final Rule to Remove the Aleutian Canada Goose from the Federal List of Endangered and Threatened Wildlife" provides information on the subspecies' description, life history, population status and trends, habitat status and trends, and factors influencing the population. The Final Rule is presented in Appendix A.

The Aleutian Canada goose is a small island-nesting form that historically is thought to have bred on many islands near Kodiak Island, Alaska, to the Kuril Islands in northeastern Asia. Populations are thought to have wintered from southern British Columbia to California in North America and in Japan. By the early 1930s, the goose had been decimated throughout most of its breeding range by introduced predators (primarily arctic and red foxes). Apparently, remnant breeders survived the fox-farming era on only three islands: Kiliktagit, in the Semidi group (Hatch and Hatch 1983); Chagulak, in the central Aleutians (Bailey and Trapp 1984); and Buldir, in the western Aleutians (Jones 1963). The subspecies was federally designated as endangered in 1967.

## WASHINGTON DISTRIBUTION AND POPULATION

Washington State, although potentially part of the historical wintering range, today is considered important as migration habitat (Hays 1997). Willapa NWR and surrounding fields and farms in Willapa Bay provide the principal stopover habitat in Washington. Occasionally individuals and small flocks stop briefly in other parts of the state, such as Ridgefield NWR, but no other regularly used areas are known. Birds usually visit Willapa Bay during fall migration from September to late November. Peak numbers of birds seen near Willapa NWR were 330 during October 1995 and 380 during November 1996 (Hays 1997). Sightings of northward-migrating Aleutian Canada geese occur in February and March. The highest number of spring migrants recorded in Washington through 1995 was 52 birds near Willapa Bay in February (Pitkin and Lowe 1995).

## MORTALITY

Hunting of Aleutian Canada geese is currently allowed under federal law, but WDFW maintains a closed season. Following delisting in 2001, the California Department of Fish and Game has allowed limited take of Aleutian geese in some areas during established hunting seasons and the Oregon Department of Fish and Wildlife is considering a similar action. All geese taken by hunters in the major use areas of southwest Washington must be brought to mandatory hunter check stations, a requirement since 1984. Hunting seasons in this area are very restricted, primarily for the conservation of dusky Canada (*B. c. occidentalis*) and cackling geese. Geese are occasionally classified as Aleutian Canada geese at southwest Washington hunter check stations (a total of 23 since 1992, including 15 in 2002-2003), but the classification criteria currently used to discern Canada goose subspecies (culmen length, total tarsus, breast color, age, and sex) do not reliably separate Aleutians from Taverner's (*B. h. taverneri*). Of 197 Aleutian Canada geese banded primarily in Alaska since 1976, hunters in Washington have taken 6 of this total.

## POPULATION STATUS AND TREND

The 1991 revised federal recovery plan for the goose included 3 delisting criteria: 1) maintain a wild population of at least 7,500 birds; 2) re-establish self-sustaining populations of geese on three former breeding areas, and 3) maintain adequate migration and winter habitat. More than 25 years of recovery efforts to remove introduced foxes and reintroduce geese have resulted in an increase in the population to

over 70,000 birds in 2004 (Pacific Flyway Council 2005). Exponential growth has been observed throughout the recovery period, averaging approximately 14% per year for the 30-year period 1974-2004 (Pacific Flyway Council 2005). There are now three self-sustaining breeding populations in the western Aleutians (Buldir, Agattu, Nizki-Alaid islands). Important wintering habitat is being protected and acquired in California. A management plan for the subspecies was updated by management agencies in the Pacific Flyway in 1999 and 2005, which prescribes additional management actions related to surveys, monitoring, habitat protection, and hunting regulation strategies (Pacific Flyway Council 2005).

## CONCLUSIONS AND RECOMMENDATION

In response to the federal endangered listing of the Aleutian Canada goose, WDFW listed the subspecies as endangered in Washington in 1980 (Hays 1997). Federal action downlisting the goose from endangered to threatened in 1991 resulted in a similar downlisting by WDFW in 1997. However, the federal action delisting the subspecies in 2001 has not yet resulted in state delisting. No significant circumstances exist specific to Washington to deviate from following the federal lead in delisting. It is recommended that the Aleutian Canada goose be removed from the threatened list in Washington, because the subspecies no longer meets the definition of threatened in Washington, i.e., “any wildlife species native to the state of Washington that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats.” Because of the strong recovery of this subspecies and the low potential for any actions in Washington to impact this subspecies, it also does not meet the definition of sensitive in Washington, i.e., “any wildlife species native to the state of Washington that is vulnerable or declining and is likely to become endangered or threatened in a significant portion of its range within the state without cooperative management or removal of threats.” Similar to past actions, the subspecies would be reconsidered for state threatened status following any action by USFWS to classify it as threatened in the future.

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Appendix A. 2001 *Federal Register* notice removing the Aleutian Canada goose from the federal list of endangered and threatened species.

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Federal Register: March 20, 2001 (Volume 66, Number 54, Pages 15643-15656)  
Rules and Regulations

DEPARTMENT OF THE INTERIOR  
U.S. Fish and Wildlife Service  
50 CFR Part 17  
RIN 1018-AF42

Endangered and Threatened Wildlife and Plants; Final Rule To Remove the Aleutian Canada Goose From the Federal List of Endangered and Threatened Wildlife

AGENCY: U.S. Fish and Wildlife Service.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service, have determined that the Aleutian Canada goose (*Branta canadensis leucopareia*) is no longer an endangered or threatened species pursuant to the Endangered Species Act of 1973 (Act), as amended. This determination is based on available data indicating that the population of Aleutian Canada goose in North America has recovered, primarily as a result of four activities: the removal of introduced arctic foxes (*Alopex lagopus*) and red foxes (*Vulpes vulpes*) from some of its nesting islands; the release of captive-reared and wild, translocated family groups of geese to fox-free islands to establish new breeding colonies; protection of the Aleutian Canada goose throughout its range from mortality due to hunting and disease; and protection and management of migration and wintering habitat. This action removes the Aleutian Canada goose from the List of Endangered and Threatened Wildlife, thereby eliminating the regulatory protection offered by the Act, but would not affect protection provided to the subspecies by the Migratory Bird Treaty Act, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), or State laws and regulations. Section 4(g) of the Act requires us to implement a system in cooperation with the States to monitor a recovered species for at least 5 years following delisting. This rule includes the outline of a monitoring plan for the Aleutian Canada goose.

DATES: This rule is effective March 20, 2001.

ADDRESSES: The administrative file for this rule is available for inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Ecological Services Field Office--Anchorage, 605 West 4th Avenue, Room G-61, Anchorage, Alaska 99501 (telephone (907) 271-2888).

FOR FURTHER INFORMATION CONTACT: Ann Rappoport or Greg Balogh at (907) 271-2888 or the above address.

SUPPLEMENTARY INFORMATION:

Background

The Aleutian Canada goose is a small, island nesting subspecies of Canada goose. Morphologically (in form), it resembles other small Canada goose subspecies, but nearly all Aleutian Canada geese surviving past their first winter have a distinct white neck ring at the base of a black neck. Other distinguishing characteristics include an abrupt forehead, separation of the white cheek patches by black feathering along the throat in most individuals, and a narrow border of dark feathering at the base of the white neck ring. The Aleutian Canada goose is the only subspecies of Canada goose whose range once included both North America and Asia (Amaral 1985). It formerly nested in the northern Kuril and Commander islands, in the Aleutian Archipelago and on islands south of the Alaska Peninsula east to near Kodiak Island. The species formerly wintered in Japan, and in the coastal western United

States south to Mexico. Delacour (1954) considered coastal British Columbia within the former wintering range of this subspecies; however, there are no bona fide records of Aleutian Canada geese from this area (P. Springer, pers. comm. 1999).

The decline of the Aleutian Canada goose was primarily the result of the introduction of Arctic foxes (*Alopex lagopus*) and, to a lesser extent, red foxes (*Vulpes vulpes*) to its breeding islands for the purpose of developing a fur industry. Between 1750 and 1936, Arctic and red foxes were introduced to more than 190 islands within the breeding range of the Aleutian Canada goose in Alaska (Bailey 1993). Several life-cycle stages of the goose, including eggs, goslings, and flightless, molting geese are vulnerable to predation by foxes. The decrease of Aleutian Canada geese on Agattu Island between 1906, when they were termed the most abundant bird (Clark 1910), and 1937, when only a few pairs were observed (Murie 1959), attests to the precipitous nature of their decline. At the time of its listing as endangered in 1967, its known breeding range was limited to Buldir Island, a small, isolated island in the western Aleutian Islands (Jones 1963). A historical record indicates that Arctic foxes were introduced to Buldir Island in 1924, but this is either incorrect or the introduction failed to establish a population (Bailey 1993).

Hunting throughout its range in the Pacific Flyway, especially on the migration and wintering range in California, and loss and alteration of habitat on its migration and wintering range also contributed to the subspecies' decline. Hunting was likely a limiting factor when populations were low.

In response to reduced population levels, we classified the Aleutian Canada goose as endangered on March 11, 1967 (32 FR 4001). Congress afforded additional protection with passage of the Endangered Species Act of 1973. We approved a recovery plan for the Aleutian Canada goose in 1979 and revised it in 1982 and 1991 (U.S. Fish and Wildlife Service 1991). We began recovery activities in 1974. Important features of the recovery program in Alaska and the western United States included: banding of birds on the breeding grounds to identify important wintering and migration areas; closure of principal wintering and migration areas to hunting of all Canada geese; acquisition, protection, and management of important wintering and migration habitat; removal of foxes from potential nesting islands; propagation and release of captive Aleutian Canada geese on fox-free nesting islands in the Aleutians; and translocation of molting family groups of wild geese from Buldir Island to other fox-free islands in the Aleutians. At the time of its listing, data on which to base a population estimate of Aleutian Canada geese were limited. Boeker (in Kenyon 1963) speculated during a 1963 expedition that only 200-300 birds were on Buldir Island. We believed breeding birds to be confined to that one island, and the migration routes and wintering range were unknown. A spring count at a principal migration stopover near Crescent City, California, in 1975 revealed 790 individuals (Springer et al. 1978).

We subsequently found small breeding groups of Aleutian Canada geese on Kiliktagik Island in the Semidi Islands south of the Alaska Peninsula in 1979 (Hatch and Hatch 1983), and on Chagulak Island in the central Aleutians in 1982 (Bailey and Trapp 1984). Geese from Chagulak Island are morphologically identical to those from the western Aleutians. Semidi Islands geese are morphologically similar to geese from the Aleutian Islands but tend to have darker breasts, more variable neck rings and a less distinct subtending line below the neck ring (D. Pitkin, U.S. Fish and Wildlife Service, pers. comm. 1999). Genetic studies indicate that geese from both Chagulak Island and the Semidi Islands are more closely related to Aleutian Canada geese than other Canada goose subspecies (Shields and Wilson 1987; Pierson et al. 2000). We consider the Chagulak Island and Semidi Islands geese to be remnant populations of the previously more continuously distributed Aleutian Canada goose.

Marking of Aleutian Canada geese on Buldir Island beginning in 1974, and later on Chagulak Island and Kiliktagik Island, helped reveal their wintering range and migration routes. These marking studies indicate that there are two, relatively discrete breeding segments of Aleutian Canada geese--the Aleutian Islands segment, including birds from Chagulak Island and the western Aleutian Islands, and the Semidi Islands segment. A recent genetic study found that geese from the Semidi Islands are genetically distinct from geese from the western Aleutian Islands, indicating limited contemporary gene flow and/or major shifts in gene frequency through genetic drift (the random change in gene frequencies in small populations due to chance) (Pierson et al. 2000).

Most Aleutian Canada geese that nest in the Aleutian Islands winter in California, primarily on agricultural lands where they feed on grass, waste beans, and grain, including corn and sprouting winter wheat (Woolington et al. 1979, Dahl 1995, Springer and Lowe 1998). They arrive on the wintering grounds in mid-October. Some geese stop in the Crescent City area in coastal northwest California, but most continue on to the vicinities of Colusa in the Sacramento Valley and Modesto in the northern San Joaquin Valley. The lands used by Aleutian Canada geese near Colusa, California, are primarily privately owned farms and Reclamation District (local government) land. The 733-acre Butte Sink National Wildlife Refuge in the Colusa area is actively managed to attract geese and other waterfowl.

By mid-December, nearly all Aleutian Canada geese are near Modesto, where they winter primarily on two privately owned ranches and on the adjacent San Joaquin River National Wildlife Refuge. In previous years, a large proportion of geese from the Modesto area would periodically shift southward to the nearby Grassland Ecological Area near Los Banos and Gustine. The lands in the Grassland Ecological Area are owned by the Fish and Wildlife Service, State of California, and private duck hunting clubs. Recently, up to several thousand geese have been using night roosts on private duck hunting clubs in this area.

Small numbers of Aleutian Canada geese from the Aleutian Islands stop near El Sobrante on lands owned by a public utility in north San Francisco Bay in late fall and early winter before continuing on to Modesto. The number of birds observed at El Sobrante has steadily declined in recent years from a high of 140 geese in 1985 to a low of 8 birds in 1997. Twenty-one Aleutian Canada geese were observed there in early 1998 (Dunne 1998). Small numbers of wintering Aleutian Canada geese have been occasionally observed in northwestern California near Crescent City, on the Humboldt Bay National Wildlife Refuge, and on the Eel River bottoms (P. Springer, pers. comm. 1999). Six hundred Aleutian Canada geese wintered in the Crescent City area in 1997-1998 (Fisher 1998).

Small numbers of Aleutian Canada geese also occasionally appear in other areas, especially during migration. The most frequent of these areas include Willapa Bay in south coastal Washington, the Willamette Valley in Oregon, Humboldt Bay and vicinity in northern California, and the Sacramento-San Joaquin Delta in San Francisco Bay, California. See Springer and Lowe (1998) for a more thorough discussion of the distribution of Aleutian Canada geese and factors affecting their distribution.

On the northward migration in spring, most Aleutian Canada geese stage near Crescent City, where the birds roost nightly on Castle Rock, an offshore island protected as a National Wildlife Refuge. Some geese also roost on nearby Prince Island, which is owned by the Tolowa Indians, and on Goat Rock, a unit of the Oregon Islands National Wildlife Refuge, just north of the California/Oregon border. During the day birds graze on privately owned farms in the Smith River bottoms and on lands owned and managed by the State of California. In recent years, Aleutian Canada geese have been departing the Crescent City area increasingly early in spring and spending several weeks feeding in privately owned pastures in the New River area in south coastal Oregon near the town of Langlois. These birds roost at night on offshore islands that are part of the Oregon Islands National Wildlife Refuge. In the spring of 1998, about 10,000 Aleutian Canada geese were observed in the Langlois area (Fisher 1998).

The small numbers of geese that breed in the Semidi Islands winter exclusively in coastal Oregon near Pacific City. These birds forage during the day on pastures at two privately owned dairies and roost at night on Haystack Rock in the Oregon Islands National Wildlife Refuge or on the ocean. Since fall 1996, small numbers of geese that nest in the Aleutian Islands have wintered with the Semidi Islands geese in Oregon. In winter 1997-1998, about 20 geese from the Aleutians wintered with the Semidi Islands geese (D. Pitkin, U.S. Fish and Wildlife Service, pers. comm. 1999).

An important component of the Recovery Plan, establishment of closed areas for hunting Canada geese, has contributed to the recovery of the Aleutian Canada goose. Six closed areas for Aleutian Canada geese currently exist, including: islands in Alaska west of Unimak Island, beginning in 1973; northwestern California, the Modesto area, and the Colusa area, beginning in 1975; and the Pacific City area and central and south coastal Oregon, beginning in 1982. In addition, closures of Canada goose hunting in northwestern Oregon and southwestern Washington beginning in 1985 to protect dusky Canada geese (*B. c. occidentalis*) have provided protection for Aleutian Canada geese. Occasionally, hunters kill a few Aleutian Canada geese that are using habitats outside of the closed hunting areas.

Initial population increases of Aleutian Canada geese were likely in response to hunting closures in California and Oregon to protect the geese during migration and during winter. However, a substantial increase in numbers was dependent on reestablishing geese on former nesting islands. Release of captive-reared birds on fox-free islands in the Aleutians was largely unsuccessful due to low survival rates. Once the number of geese on Buldir Island was large enough, we initiated translocation of wild geese from Buldir Island to other fox-free islands. This approach was much more successful, and the release of captive-reared birds was phased out.

As new breeding colonies became established in the Aleutian Islands, the number of Aleutian Canada geese increased rapidly. Annual rates of increase between 1975 and 1989 ranged from 6 to 35 percent, and by winter 1989-1990, the peak winter count reached 6,300 geese. We reclassified the Aleutian Canada goose from endangered to threatened in 1990 (55 FR 51106, December 12, 1990).

## Summary of Federal Actions

We first designated the Aleutian Canada goose as an endangered species in the United States on March 11, 1967 (32 FR 4001), under the Endangered Species Preservation Act of 1966 (Public Law 89-669, 80 Stat. 926). The Endangered Species Conservation Act of 1969 (Public Law 91-135, 83 Stat. 275), which replaced the 1967 law, authorized the listing of foreign species; the Aleutian Canada goose was included on the foreign species list (proposed April 14, 1970 (36 FR 6069); final June 2, 1970 (35 FR 8495)). We proposed the reclassification of the species from endangered to threatened status on September 29, 1989 (54 FR 40142), and finalized the reclassification on December 12, 1990 (55 FR 51106). On April 9, 1998 (63 FR 17350), we published a Notice of Status Review on the Aleutian Canada goose and notified the public of our intent to propose the removal of the subspecies from the threatened species list. Our proposed rule to delist the Aleutian Canada goose was published August 3, 1999 (64 FR 42058).

## Summary of Current Status

Since the subspecies was reclassified from endangered to threatened in 1990, the overall population of Aleutian Canada geese has sustained a strong increase in numbers. Table 1 summarizes peak counts and indirect population estimates of Aleutian Canada geese on the wintering grounds since the subspecies was reclassified as threatened in 1990. Peak counts are counts of the geese on the wintering grounds near Modesto, California, and during early spring as they arrive at and leave their primary roosts at Castle Rock and Prince Island in northwestern California, and Goat Island in southwestern Washington. Indirect counts are based on a ratio of marked to unmarked birds. (See Other Factors in Support of Delisting for a more detailed discussion of survey techniques). The most recent and highest population estimate of Aleutian Canada geese from the Aleutian Islands is of birds from their staging area near Crescent City in spring 2000. This preliminary estimate suggests that the Aleutian Canada goose population is now about 37,000 individuals (Table 1). Since 1990, the annual rate of growth of the population, based on peak counts of birds in California, has averaged about 20 percent. The overall annual growth rate of the population since recovery activities began in the 1970s has been about 14 percent (M. Fisher, U.S. Fish and Wildlife Service, pers. comm. 1999).

Table 1. Peak Count and Indirect Estimates of Aleutian Canada Geese in California (Aleutian Island Nesting Geese) and Near Pacific City, Oregon (Semidi Islands Nesting Geese).

Year	California		Pacific City, Oregon <sup>1</sup>
	Peak count	Indirect count	
1989-1990	6,300	-	115
1990-1991	7,000	-	128
1991-1992	7,800	-	126
1992-1993	11,680	-	132
1993-1994	15,700	-	105
1994-1995	19,150	21,769	97
1995-1996	21,421	24,643	105
1996-1997	22,815	23,977	114
1997-1998	27,700	28,984	118
1998-1999	32,281	28,628	122
1999-2000	36,978	33,496	129

<sup>1</sup> Dave Pitkin (U.S. Fish and Wildlife Service, pers. comm. 2000). These estimates have been modified since the Federal Register publication of the proposal to delist this subspecies (64 FR 42058).

Despite protection on both the breeding and wintering grounds, the Semidi Islands geese have sustained slower growth than the remainder of the population since 1993 (Table 1). The reasons for this are not clear, although counts from the wintering ground in Oregon indicate poor recruitment in recent years.

Predictably, marked increases of geese on the wintering grounds are mirrored by similar increases on most breeding islands, although nesting geese are far more difficult to enumerate than those on wintering and migration habitat. At the time of their listing, we believed Aleutian Canada geese to be nesting only on Buldir Island, but based on later discoveries, they also probably nested on Chagulak Island and in the Semidi Islands. Our earliest estimate of the number of geese on Buldir Island was 200-300 birds in 1963 (see Kenyon 1963). By 1995, the last year we surveyed the breeding islands, we estimated the number of breeding geese on Buldir Island was 7,000. Assuming 40% of the population are breeders (Byrd 1995), and the population on Buldir Island grew at the same rate as that of the entire subspecies, then by 1995 the number of birds on Buldir Island was probably about 17,500. We released geese on Agattu Island periodically from 1974 to 1984 (U.S. Fish and Wildlife Service 1991). By 1990, 100 birds were nesting there, and in 1995, we estimated 700 birds were nesting there (total 1,750 geese; Byrd 1995). We found similar increases at Alaid-Nizki. We first released geese on Alaid-Nizki in 1981, and, by 1987, they were nesting there. We estimated the number of breeding geese on Alaid-Nizki in 1995 at 248 (or 620 total geese). Byrd (1995) states that the number of geese breeding at Agattu could approach 2,000 in the future and 500 at Alaid-Nizki. It is unknown how numerous geese on Buldir Island will become. Elsewhere in the Aleutian Islands, we estimate that in 1995 about 10 birds nested in the Rat Islands and about 40 birds nested at Chagulak Island (Byrd 1995).

We have also documented recent breeding of Aleutian Canada geese at Amchitka, Amukta, and Little Kiska Islands. Although the current status of Aleutian Canada geese on these islands is unknown, we believe reestablishment of breeding populations via translocations to Amchitka and Little Kiska Islands and natural recolonization of Amukta Island to have a low probability of success. We believe the presence of bald eagles (*Haliaeetus leucocephalus*), a major predator of geese, on islands east of Buldir Island to be a factor that has limited the success of translocations to Amchitka, Little Kiska, and Kiska Islands. We are encouraged, however, by recent reports of several nests and numerous mated pairs sighted on Amchitka Island from 11-21 June, 2000 (M. Murray, Department of Energy, pers. comm. 2000).

We believe the small group of geese nesting on Chagulak Island to be stable in number, but the terrain is steep and nesting habitat is limited. We have removed foxes from most of the islands near Chagulak, and to bolster the population of geese in this portion of the Aleutians, we translocated geese from Buldir Island to Yunaska Island in 1994 and 1995. We also translocated geese from Buldir Island to Skagul Island in the Rat Island group in 1994 and 1995. We have not conducted subsequent surveys on these islands to determine if the translocations have resulted in establishment of breeding populations there. However, in winter 1997-1998, we observed 15 marked, female geese translocated to Yunaska Island and 13 marked, female geese translocated to Skagul Island in California. These sightings indicate that translocated female geese now of reproductive age still survive and may already be breeding on these islands.

In the Semidi Islands, investigators studying Aleutian Canada geese found 14 nests on Kiliktagik Island and 3 nests on Anowik Island in 1995, which is 11 nests (39 percent) fewer than were found on the same islands in 1992 (Beyersdorf and Pfaff 1995). Hatching success and overall nesting success of geese in the Semidi Islands in 1995 were lower than their counterparts in the western Aleutian Islands. In addition, recruitment rates for Semidi Islands geese were low compared with rates we observed among Aleutian Island birds based on censuses of hatching-year birds on the wintering grounds each fall in coastal Oregon (D. Pitkin and R. Lowe, U.S. Fish and Wildlife Service, pers. comm. 1999). The reason for lower productivity of Aleutian Canada geese in the Semidi Islands is unknown.

#### Aleutian Canada Goose Recovery

In accordance with the Act, we appointed a team of experts to write a plan for recovery of the Aleutian Canada goose. The original recovery plan was approved on August 7, 1979, and later revised on September 8, 1982, and September 30, 1991 (U.S. Fish and Wildlife Service 1991). The most recent version of the recovery plan was written after the Aleutian Canada goose was reclassified as threatened in 1990, and established objectives for measuring recovery and indicating when delisting was appropriate. Recovery plans and objectives are intended to guide and measure recovery, but are supposed to be flexible enough to adjust to new information.

The Aleutian Canada Goose Recovery Plan (U.S. Fish and Wildlife Service 1991) identified the following recovery objectives: (1) The overall population of Aleutian Canada geese includes at least 7,500 geese, and the long-term trend appears upwards; (2) at least 50 pairs of geese are nesting in each of three geographic parts of the historic range--western Aleutians (other than Buldir Island), central Aleutians, and Semidi Islands, for 3 or more consecutive years; and (3) a total of 25,000-35,000 acres (ac) (10,125-14,175 hectares (ha)) of specific land parcels identified by the recovery team as feeding and roosting habitat needed for migration and wintering are secured and are being managed for Aleutian Canada geese. The recovery plan states that failure to achieve a specific acreage target of

migration and wintering habitat would not preclude delisting of the Aleutian Canada goose if otherwise warranted. A discussion of the status of the Aleutian Canada goose relative to the recovery objectives follows:

(1) The most recent estimate of the overall population of Aleutian Canada geese is approximately 37,000 birds (December 1999 peak spring count), nearly 5-times the population objective for delisting. The population trend of Aleutian Canada geese continues upward, and has averaged about 20 percent annual growth since the subspecies was reclassified as threatened in 1990. We believe that the subspecies is no longer threatened or endangered and its population is likely to continue to grow in size in the future.

(2) The objective of 50 or more pairs of Aleutian Canada geese nesting in each of 3 geographic parts of the historic range--western Aleutians (other than Buldir Island), central Aleutians, and Semidi Islands, has not been met. The population of Aleutian Canada geese nesting in the western Aleutians far exceeds the delisting objective, with self-sustaining breeding populations established on three islands--Buldir, Agattu, and Alaid-Nizki. In addition, we have received a recent report of numerous breeding birds on Amchitka Island (M. Murray, Department of Energy, pers. comm. 2000). Primarily on the strength of recovery in the western Aleutian Islands, the Recovery Team recommended delisting the subspecies (Byrd 1995).

We have not surveyed geese nesting in the central Aleutians since 1993, but existing data suggest the size of the breeding group at Chagulak Island has been stable at about 20-25 pairs since the time of their discovery in 1982. Chagulak Island is very steep and has limited nesting habitat. A substantial increase in the number of birds in the central Aleutian Islands likely will require colonization of new islands. Although we discovered nesting by Aleutian Canada geese on nearby Amukta Island, we do not know if they are currently nesting there or if breeding occurs on Yunaska Island as a result of the translocation of geese there in 1994 and 1995. We have also removed foxes from several other nearby islands, including Carlisle, Herbert, Kagamil, Uliaga, and Seguam, and these islands could be colonized by Aleutian Canada geese in the future. We believe that increasing numbers of Aleutian Canada geese in the central Aleutians is desirable. However, we do not view the lack of evidence that there are at least 50 pairs of geese breeding in the central Aleutians as a barrier to delisting because they appear to be from the same breeding segment as the western Aleutian geese. We came to this conclusion based on their similar physical characteristics, some preliminary data on mitochondrial DNA (Shields and Wilson 1987), and their use of the same wintering area. However, limited sightings of birds color-banded at Chagulak Island suggest they follow a northward migration route that is slightly more easterly. This has been most evident in the spring when several birds were seen in the Willamette Valley of Oregon (Springer and Lowe 1998).

The Semidi Islands breeding segment more than doubled in size following closure of the wintering area to hunting in 1982. Since 1990, it has fluctuated moderately in size on its wintering area, averaging about 120 geese. However, the lack of an increase in these birds since 1993, given protection of the birds on the breeding and wintering grounds, and the availability of unexploited breeding and wintering habitat, cannot be fully explained with existing information. Local farmers in Oregon maintain that these geese have used the same local farms for at least 65 years and have never been numerous (R. Lowe, U.S. Fish and Wildlife Service, pers. comm. 1999). Despite lack of a persistent and positive population response of Semidi Islands geese in recent years, we believe this is not a barrier to delisting the Aleutian Canada goose subspecies because of the health and vigor of the subspecies as a whole. Furthermore, we can continue to protect this breeding segment from various forms of take under provisions of the Migratory Bird Treaty Act (see Summary of Factors Affecting the Species below). We will continue to monitor the status of the Semidi Islands breeding segment of Aleutian Canada geese on its wintering grounds.

Although the criteria of 50 or more pairs nesting in each of 3 geographic parts of their historic range has not been fully met, the Recovery Team in 1995 considered the following factors overriding: the population is approximately three times higher (now nearly five times higher) than the minimum suggested for delisting; the population is continuing to increase at a high rate; self-sustaining breeding populations now occur in the western Aleutians on Buldir, Agattu, and Alaid-Nizki Islands and perhaps on Amchitka as well (M. Murray, Department of Energy, pers. comm. 2000); and we have removed foxes from islands in the central Aleutians, and translocations of birds there have bolstered goose numbers.

(3) We have not fully met the recovery objective of conserving and managing 25,000-35,000 ac (10,125-14,175 ha) of migration and wintering habitat; however, the recovery team allowed that not attaining this acreage target would not preclude delisting if this action was otherwise warranted. The original target of greater than 25,000 ac (10,125 ha) was derived by summing the acreage of most parcels of land that have been used by Aleutian Canada geese on their wintering grounds and on principal migration stopovers outside of Alaska since their recovery began. At the time the recovery plan was finalized and the target migration and wintering habitat was identified, much of the information that we know now about the distribution of the bird was unknown. The acreage target reflects inclusion of parcels that are no longer used by Aleutian Canada geese (e.g., in Del Norte County: McLaughlin, Log

Pond, Southern Ferguson, Bliss, and Bennett Tracts). The distribution of geese across the landscape shifts somewhat each year depending on weather patterns, the availability of food, and other factors not fully understood by scientists. Detailed maps of lands currently used by this subspecies have been developed by Lyon (2000). It should also be recognized that private landowners have throughout the last 3 decades contributed to the recovery of the Aleutian Canada goose by managing their lands to accommodate the needs of the geese. Thus, we do not believe that all the lands utilized by the Aleutian Canada goose must be held in the public trust to ensure the long-term survival of the species.

Aleutian Canada geese have responded very favorably to management actions taken on the species' behalf by the Service, States, and private landowners throughout the birds' migration and wintering areas. About 7,500 ac (3,038 ha) of currently used winter and migration habitat are secure (Table 2), and we have an active acquisition program for both fee title and perpetual conservation easements in the Sacramento and San Joaquin Valleys. This total secure acreage does not include 33,108 ac (13,409 ha) of National Wildlife Refuge land and 67,000 ac (27,136 ha) of private land protected under perpetual conservation easements within the Grassland Ecological Area located approximately 40 miles south of the main use area for Aleutian Canada geese. Aleutian Canada geese have discovered this vast area of suitable habitat just south of their normal wintering range (D. Woolington, U.S. Fish and Wildlife Service, pers. comm. 2000), and we anticipate their use of this area to increase. We expect that hazing of geese off private lands to the north will hasten the use of this area. To this end, delisting, with its associated easing of restrictions on hazing of birds, may actually result in relief of some of the winter habitat crowding currently experienced by this rapidly growing population.

We believe that, currently, enough feeding and roosting habitat for both migrating and overwintering geese is publicly held to ensure the continued viability of the subspecies at or near current population levels. If habitat availability were in any way limiting population growth of this subspecies, we would expect to see a leveling off in the population, not the steady high rate of growth that the subspecies has exhibited for many years now.

We acknowledge the existence of one bottleneck in publicly held land that is suitable as goose habitat: spring migration feeding habitat in Northwestern California, particularly in the Smith River bottoms, near Crescent City (P. Springer, pers. comm. 2000). The concentration of relatively large numbers of Aleutian Canada geese on this small area of migration habitat, most of which is in private ownership, has created conflicts between landowners and geese. Such conflicts also occur elsewhere in the subspecies' wintering and migration habitats, but the problem is most acute here. Typically the conflicts occur over sprouting grain or pasture grass that is used by both geese and livestock. This remains an increasingly controversial area for Aleutian Canada geese because only about 750 ac (304 ha) of State land are now actively managed as foraging habitat for geese in this area. Most other public land in that area is not particularly suitable as pasture land.

Many geese forage on intensively managed, privately owned pastures in this area during their brief fall stopover and more extensive spring stopover. Most owners of these pastures are currently willing to support some of the burden resulting from foraging geese, although most of these landowners would like to see more goose management taking place on nearby publicly held lands. However, because the urgency of this situation (geese grazing on private lands) will only increase with increasing goose numbers, we do not see this as a threat to the subspecies. That is, the problem of goose grazing on private lands becomes more acute because there are more geese. If there are more geese, the threat that the subspecies will eventually become extinct is further diminished. But because the burden upon these landowners is rapidly increasing due to the rapid growth of the Aleutian Canada goose population, it is incumbent upon us to continue efforts to secure additional public lands in this area. Such efforts are under way. In addition, the Service in the Modesto area and the State of California in northwestern California are more actively managing their lands to attract geese away from private parcels. We, along with the State of California, also provide technical assistance to willing landowners to help them manage their lands for geese. Given the success of efforts by us, the State of California, and some private landowners to address crop depredation, and the size and growth rate of the Aleutian Canada goose population, we do not believe that the current shortage of publicly held spring migration habitat in this area places this subspecies in danger of extinction now or in the foreseeable future.

A less intense, but increasingly serious problem is developing on private pastures in the Langlois area of southern coastal Oregon where 10,000-20,000 geese concentrate for a week or longer in the spring after leaving the Smith River bottoms. Specifically, the geese are using about 150 acres (61 ha) within the New River Area of Critical Environmental Concern (ACEC) designated by the Bureau of Land Management. This habitat is suitable for resting and roosting, but not for feeding. Most suitable goose habitat in the area (about 2,000 acres (810 ha)) occurs on adjacent private lands (S. Richardson, U.S. Fish and Wildlife Service, pers. comm. 2000). The ACEC 1995 Management Plan provides direction in land management for enhancing goose population recovery. The easing of restrictions on hazing that will come with the delisting of this subspecies will allow those landowners that do not

welcome these geese to keep them off their land. Again, we view this as a problem that is only manifesting itself due to the large population size of this goose. Therefore, the fact that the problem even exists attests to the fact that this species is no longer in danger of extinction now or in the foreseeable future.

We acknowledge the important role that private landowners have played in the recovery of the Aleutian Canada goose. Aleutian Canada geese have used and continue to heavily use private lands for feeding, loafing, and roosting. Some landowners actively manage their lands for geese with technical assistance from State and Service wildlife biologists. Other landowners have shown considerable patience as goose numbers have increased and geese have impacted their crops and competed with their livestock for grass. The crop depredation problem will almost certainly intensify as Aleutian Canada goose numbers continue to increase.

Table 2. Secure Lands in Migration or Wintering Areas Under Federal, State, or Private Ownership and Currently Being Managed for Aleutian Canada Geese.

Location	Owner/manager	Acreage	Goose use
Castle Rock <sup>1</sup>	FWS	13	Roosting
Prince Island <sup>1</sup>	Tribal	6	Roosting
Lake Earl Wildlife Area <sup>1</sup>	State of CA	470	Feeding
Lake Earl Project <sup>1</sup>	State of CA	230	Feeding
833 Reclamation District <sup>2</sup>	Local Govt	2,000	Feeding/roosting
Butte Sink NWR <sup>2</sup>	FWS	733	Feeding/roosting
East Bay Utility District <sup>3</sup>	Local Govt	-	Feeding/roosting
San Joaquin River NWR <sup>4</sup>	FWS	1,607 <sup>5</sup>	Feeding/roosting
Faith Ranch <sup>4</sup>	Gallo Family	1,964	Feeding/roosting
Oregon Islands NWR <sup>6</sup>	FWS	45	Roosting
Nestucca Bay NWR <sup>6</sup>	FWS	120	Feeding
Floras Lake Park <sup>6</sup>	Curry County	300	Feeding
Total		7,488	

<sup>1</sup> Northwestern California area

<sup>2</sup> Colusa, California area

<sup>3</sup> El Sobrante area

<sup>4</sup> Modesto area

<sup>5</sup> The refuge has 6,108 acres, but only 1,607 acres are suitable for Aleutian Canada geese

<sup>6</sup> Oregon

In order to facilitate the expected future population growth, we plan to secure additional parcels of migration and wintering habitat. Acquisition of additional goose habitat remains a top priority for the San Joaquin River National Wildlife Refuge for geese that nest in the Aleutian Islands, and for the Nestucca Bay National Wildlife Refuge in coastal Oregon for geese that nest in the Semidi Islands. We intend that acquisition of refuge lands will be accompanied by appropriate increases in refuge operating budgets to facilitate effective management of these new parcels for this subspecies.

Although we describe above future land acquisition activities with regard to Aleutian Canada goose management, we have not based our decision to delist this subspecies based on the anticipated outcome of any of these negotiations. The sustained growth in the population of the Aleutian Canada goose over the last 3 decades has occurred despite a mosaic of landownership patterns within its migratory and wintering habitat. We have no reason to suspect that this population increase will not continue once the species is delisted. Future planned Federal and State acquisition and management activities will likely further enhance future population growth. Land acquisition or conservation activities within and near the San Joaquin River National Wildlife Refuge that are under way are as follows:

(1) We are in the process of acquiring 3,100 ac (1,256 ha) south of Highway 132 and along the San Joaquin River. About a quarter of this parcel is considered to be suitable winter range for Aleutian Canada geese, mostly as roost pond habitat, with some foraging opportunities as well.

(2) We are negotiating a perpetual conservation easement with the owner of a 2,147 ac (870 ha) ranch, 1,548 acres (627 ha) of which is suitable habitat for Aleutian Canada geese. The landowner is currently working with the Service to manage this land for geese. This ranch is included within the authorized boundary of the San Joaquin River National Wildlife Refuge. The negotiations for this parcel are in their final stages.

(3) We are negotiating for fee title acquisition of 423 acres (171 ha) of ranch land, 413 acres (167 ha) of which has a high potential for use by geese. However, whether this parcel will be managed for use by geese, or will be converted to riparian forest, is currently unclear. On a different portion of the same ranch, we are negotiating a perpetual conservation easement on 3,907 acres (1,582 ha), 3,880 acres (1,571 ha) of which is suitable for use by Aleutian Canada geese for feeding, loafing, and roosting. Agricultural practices used on these parcels favor Aleutian Canada geese, although conflicts between the geese and the landowner are intensifying as goose numbers increase. This ranch is also included within the authorized boundary of the San Joaquin River National Wildlife Refuge.

Activities to acquire or conserve other lands within the wintering and migration range of the Aleutian Canada geese include:

(1) Negotiation for purchase of the two dairies on which Aleutian Canada geese from the Semidi Islands winter. These dairies are within the authorized boundary of the Nestucca Bay National Wildlife Refuge. The Service has made offers on both pieces of property, but the owner has declined the offers; and

(2) Evaluation by the State of California of acquisition proposals for additions to the Lake Earl Wildlife Area in northwestern California as suitable goose foraging habitat.

#### Other Factors in Support of Delisting

The Aleutian Canada Goose Recovery Team lists three additional factors in support of removing the Aleutian Canada goose from the list of threatened and endangered species (Byrd 1995). First, a program designed to reestablish Aleutian Canada geese in the Asian portion of their range is under way through our cooperation with Japanese and Russian wildlife agencies. Lee (1998) provides a chronological history of this effort, which began in the 1970s through contact between the recovery team and the Japanese Association for Wild Geese Protection. In 1983, we provided 15 captive Aleutian Canada geese for captive breeding in Japan, but subsequent attempts to reintroduce these geese to the wild were largely unsuccessful.

Russian biologists entered the cooperative program in the late 1980s. In 1992, we transported 19 captive Aleutian Canada geese to Petropavlovsk, Kamchatka, Russia to establish a captive population of geese as a nucleus for reintroduction of Aleutian Canada geese in Russia. In 1993, a Japanese/Russian team identified Ekarma Island in the northwest Kuril Islands as a suitable fox-free island for future releases of Aleutian Canada geese. A total of 86 captive-reared geese were released in 1995, 1996, and 1997. In winter 1997-1998, Japanese scientists observed at least 15 Aleutian Canada geese on the wintering grounds in Japan, including 4 marked birds from the 1997 release of 33 geese. Seven of the birds appeared to be a family group, and Gerasimov (1998) speculated that the unmarked Aleutian Canada geese may have been progeny of birds from the earlier releases on Ekarma Island. We are very encouraged by the early successes of the goose restoration efforts in Russia and Japan, and will continue to support and participate in this international phase of the overall restoration program.

The State of California and some cooperating local landowners have implemented a plan to reduce depredation by geese on privately owned pastures in the Smith River bottoms in northwestern California. This plan focuses on providing high-quality forage for geese on about 200 ac (81 ha) of managed pastures owned by the State of California and hazing birds off private pastures. In addition, a multi-agency "Lake Earl Working Group" was formed to address the depredation problem in the vicinity of Lake Earl in northwestern California, and local farmers are working with the State of California to help manage State lands for geese through fertilization of pastures and grazing by livestock. Results are encouraging thus far. In 1995 almost no use by geese occurred on State lands. The amount of time geese spent on State land increased to 12 percent in 1996, 20 percent in 1997, and 44 percent in 1998, but decreased to 37 percent in 1999.

Although intensive management of State lands in northwestern California has provided considerable relief to landowners, a finite amount of forage is available there and these lands must also be managed for other wildlife species and habitat values. Furthermore, most State lands consist of poor soils, which are not as amenable to intensive management for geese as nearby privately owned parcels.

We have developed a new procedure to monitor the population of Aleutian Canada geese wintering in California, enabling us to detect and respond early to any future reversal in population growth. We currently use two procedures to measure population size. The first involves coordinated peak counts of Aleutian Canada geese on the wintering grounds near Modesto, and during early spring as they arrive at and leave their primary roosts at Castle

Rock and Prince Island in northwestern California, and Goat Island in southwestern Oregon. This technique has proved extremely reliable in the past; however, because numbers of Aleutian Canada geese are now large, obtaining complete counts is difficult. In addition, Aleutian Canada geese now often winter in mixed flocks with the similar-looking cackling Canada goose (*Branta canadensis minima*). As a result, we recently developed an indirect survey technique that is based on a ratio of marked to unmarked birds. Comparisons of surveys using the indirect method with "complete" counts of geese suggest a high degree of concordance between the methods. We anticipate that the indirect count method will become more reliable and widely used if the Aleutian Canada goose population continues to grow.

In summary, the Recovery Plan for the Aleutian Canada goose identified three criteria to use for evaluating when recovery had occurred and when delisting was appropriate. To date, only one recovery objective, attainment of a total population of the subspecies of at least 7,500, has been completely achieved, but we believe that the population is of sufficient size, and threats to the subspecies have been sufficiently reduced, to warrant delisting.

Contrary to our expectations, the Aleutian Canada geese in the central Aleutians have not recovered despite protection of these birds both on the breeding and wintering grounds. Similarly, the segment of birds breeding in the Semidi Islands has not increased in number as much as we had hoped, although it is not known how large this group of birds was historically. Nevertheless, the explosive growth of the western Aleutian breeding segment assures the future viability of the Aleutian Canada goose subspecies for the foreseeable future.

We remain concerned about the lack of growth of the Semidi Islands breeding segment. However, in recent history this small group of birds has been relatively stable, and obvious threats have been removed. We believe we can effectively protect this breeding segment from various forms of take under provisions of the Migratory Bird Treaty Act (see Summary of Factors Affecting the Species below). With regard to conservation and management of migration and wintering habitat, we believe enough habitat is currently held in public ownership and conservation easements to ensure the continued viability of the subspecies at or near the current population level. However, we encourage additional acquisition and management of appropriate parcels of land, both to secure wintering and migration habitat and to reduce future conflicts between geese and farmers.

#### Summary of Issues and Recommendations

In the August 3, 1999, proposed rule (64 FR 42058) and associated notifications, we invited all interested parties to submit comments or information that might contribute to the final delisting determination for this subspecies. The public comment period ended November 1, 1999. We contacted and sent more than 180 announcements of the proposed rule to appropriate Federal and State agencies, borough and county governments, scientific organizations, recovery team members, and other interested parties. We also published announcements of the proposed rule in Alaska in "The Anchorage Daily News" on August 9, 16, and 22, 1999, and in Crescent City, California, in "The Daily Triplicate" on September 9, 1999. We received responses to requests for peer review of the proposed rule to delist the Aleutian Canada goose from three individuals who are experts in Aleutian Canada goose biology.

Including our peer reviewers, we received a total of 11 written comments from individuals and organizations. Three organizations and two individuals supported the delisting proposal. One individual (not a peer reviewer) did not support delisting. Three organizations and two individuals did not clearly state a position.

We grouped and discussed comments of a similar nature under the following issue headings. In addition, we considered and incorporated, as appropriate, into the final rule all biological and commercial information obtained through the public comment period.

Issue 1: Three commenters were concerned about the lack of public lands managed for Aleutian Canada geese on the migration and wintering grounds, and of the potential conflicts with private land owners as the Aleutian Canada goose population continues to increase.

Our response: Although it is not feasible to secure as public land all the migration and wintering habitat used by this growing population, we are continuing a program of habitat protection through a variety of activities as described in the section titled "Summary of Factors Affecting the Species," including: (1) fee title land acquisition, (2) establishment of conservation easements, (3) habitat management, and (4) implementation of a Disease and Contaminants Hazard Contingency Plan. We intend to continue our work with State agencies, private landowners, and other partners to help alleviate current and future problems associated with Aleutian Canada goose-induced crop depredation. The protection and management of migration and wintering habitat is a high priority in the recently developed Pacific Flyway Management Plan for Aleutian Canada geese (Pacific Flyway Council 1999). However, we believe that enough habitat is currently held in public ownership (mostly Federal and State) and in perpetual

conservation easements to ensure the continued viability of the subspecies at or near current population levels. Future habitat acquisition and management efforts will facilitate future growth of this population.

Issue 2: Three commenters were concerned about the status of the geese that nest in the Semidi Islands, and recommended additional study of the factors limiting the growth of this breeding population.

Our response: We believe that the Semidi Islands breeding segment is an important component of the Aleutian Canada goose population, and agree that additional research is necessary to determine what factors have prevented these geese from experiencing the same population growth as their western counterparts. The Pacific Flyway Council (1999) has recommended additional study of the Semidi Islands nesting geese as a high priority. With regard to protection of the existing Semidi Islands-nesting geese, we believe that the protective measures available under the Migratory Bird Treaty Act (i.e., continued hunting closures, and regulation of various forms of take) will provide adequate protection.

We rejected the notion of retaining threatened species status for the Semidi Islands subpopulation of Aleutian Canada geese while delisting the remainder of the subspecies. For this particular listing action, the listed entity in question is the entire Aleutian Canada goose subspecies. We have not recognized any distinct vertebrate population segments within this subspecies. Our decision to delist is based upon our analysis of the status of the listed entity: the entire subspecies. Although recent genetic analysis found that geese from the Semidi Islands and the western Aleutian Islands could be considered separate management units (Pierson et al. 2000), we consider the Chagulak Island and Semidi Islands geese remnant populations of the previously more continuously distributed Aleutian Canada goose.

Issue 3: One commenter was concerned that our motivation to delist the Aleutian Canada goose is influenced more by political pressures than biological considerations, as evidenced by the fact that only one of three recovery goals has been completely achieved. The commenter stated that this approach could set a bad precedent for other decisions affecting the status of listed species.

Our response: We are required to base listing decisions on the best available scientific and commercial information. Biological information collected throughout the recovery program, and resulting from our recent public status review, clearly indicate that the Aleutian Canada goose population has reached a sufficient size (nearly five times the delisting threshold set by the recovery team), and that the threats to its continued existence have been eliminated or reduced enough to warrant delisting. Goals identified during the recovery planning process provide a guide for measuring the success of recovery, but are not intended to be absolute prerequisites, and should not preclude a reclassification or delisting action if such action is otherwise warranted.

Issue 4: One commenter recommended that additional genetic analyses of the three breeding segments be conducted to fully identify their relationships within the subspecies, and among other Canada goose subspecies. In particular, the existing evidence is not adequate to fully associate the central Aleutian (Chagulak Island) breeding segment with the western Aleutian geese.

Our response: Our Ecological Services, Anchorage Field Office recently contracted for more extensive genetic analysis of recently rediscovered archived tissue samples of Aleutian Canada geese, including samples of geese that bred on the Semidi Islands. We expect the results of this study to increase our understanding of the genetic relationships within this subspecies.

While we agree that additional genetic analyses could provide information that would help reduce uncertainty regarding the relationships of the three breeding segments of Aleutian Canada geese, we do not believe the information that could be gained would suggest a change in our management strategies for the subspecies. Based on available biological and historical information, we consider the Chagulak Island and Semidi Islands geese to be remnant populations of the previously more continuously distributed Aleutian Canada goose. Accordingly, we determined that the central and western breeding segments were similar enough to warrant translocating western Aleutian geese into the central Aleutians at Yunaska Island in 1994 and 1995 for the purpose of supplementing the existing breeding population.

Issue 5: A cooperator from Russia indicated that the delisting action was premature, apparently because the goal of establishing a breeding population of Aleutian Canada geese in Asia has not been reached.

Our response: Recovery activities in Asia, including captive breeding and reintroduction of geese to the wild, are under way, but it is difficult to predict when a self-sustaining wild population will become established. We intend to continue cooperating with our Asian counterparts as they endeavor to return the Aleutian geese to their historic range in Russia and Japan. In any event, we believe that the North American population alone has progressed to a point where the subspecies no longer requires protection under the Endangered Species Act. Furthermore, because this subspecies had become extirpated from Russia prior to its initial listing, birds breeding in

Russia were not considered to be part of the listed entity. Aleutian Canada geese were listed only in the United States and Japan (50 CFR 17.11).

### Summary of Factors Affecting the Species

In accordance with the Act and implementing regulations at 50 CFR part 424, a species shall be listed if the Secretary of the Interior determines that one or more of five factors listed in section 4(a)(1) of the Act threatens the continued existence of the species. A species may be delisted according to Sec. 424.11(d) if the best available scientific and commercial data indicate that the species is neither endangered nor threatened for one of the following reasons: 1) extinction, 2) recovery, or 3) original data for classification of the species were in error.

After a thorough review of all available information, we have determined that Aleutian Canada geese are no longer in danger of extinction throughout all or a significant portion of their range, and are not likely to become endangered within the foreseeable future. A substantial recovery has taken place since the mid-1970s, and none of the five factors addressed in section 4(a)(1) of the Act places this subspecies of Canada goose in danger of extinction now or in the foreseeable future. These factors and their relevance to Aleutian Canada geese are discussed below.

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

Threats to habitat of Aleutian Canada geese still exist in the form of development and modification of wintering and migration habitat, and the continued presence of foxes on former nesting islands in Alaska. Conversion of farmlands used by migrating and wintering geese to other human uses is always a threat, although it does not appear to have been a serious problem in recent years. On the breeding grounds, we have addressed the primary threat to goose habitat through fox trapping and continue with these efforts. On the migration and wintering grounds, we have addressed goose habitat issues through: (1) Fee title acquisition; (2) establishment of conservation easements to protect migration and wintering habitat, and (3) management of migration and wintering habitat for geese.

#### Breeding Areas

Habitat improvement of Aleutian Canada goose breeding grounds through fox removal has been and continues to be a high-priority conservation effort. Since 1949, we have restored 33 islands, totaling more than 596,000 ac (241,393 ha), by removing arctic and red foxes. In 1998, 2 additional islands were cleared of foxes, and 11 islands are scheduled for restoration between 1999 and 2004. Initial confirmation surveys indicate we successfully removed foxes from 223,000 ac (90,320 ha) on Attu Island in 1999. Attu Island is close to Agattu Island and to the Alaid-Nizki Island group, all of which have rapidly growing reestablished populations of Aleutian Canada geese. Once colonized by geese, Attu will provide a substantial amount of available nesting habitat. If follow-up surveys confirm that Attu Island is fox-free, transplanting family groups of Aleutian Canada geese will be logistically feasible.

Even if additional fox-free nesting islands are not colonized by Aleutian Canada geese, we believe that the availability of currently unoccupied, but fox-free nesting habitat in the Aleutian Islands is not likely to limit population growth. We do not consider reintroduction of foxes to goose nesting islands in the Aleutians to be a threat to the subspecies. Nearly all Aleutian Canada goose breeding habitat is within the boundaries of the Alaska Maritime National Wildlife Refuge. Service policy prohibits introduction of exotic species unless the species would have value as a biological control agent and would be compatible with the objectives of the Refuge. The Comprehensive Conservation Plan (CCP) for the Alaska Maritime National Wildlife Refuge indicates that the Refuge will be managed to favor indigenous populations, restore endangered species and other species to natural levels, and monitor and eradicate introduced wildlife. The CCP further specifies that wildlife populations management will concentrate on increasing the number and range of the Aleutian Canada goose, and indicates that eradication of introduced arctic and red foxes on the refuge is essential to allow natural populations of birds to reestablish themselves. Accordingly, we cannot imagine a scenario in which the Refuge would permit the reintroduction of foxes. Doing so would be counter to nearly all of the Refuge's goals. Parties caught conducting such reintroductions without a permit would be acting illegally, and would likely be prosecuted.

Despite the availability of suitable but unoccupied nesting habitat, natural expansion to unoccupied islands east of Buldir is not expected to occur rapidly. Bald eagles, a predator of Aleutian Canada geese, are common on these islands and may limit population expansion. However, based on our knowledge of the interactions between eagles and geese, we do not anticipate that eagles would ever cause population level effects on this subspecies.

## Migration and Wintering Areas

On the migration and wintering grounds, threats to goose habitat have been substantially reduced through: (1) Fee title acquisition; (2) establishment of conservation easements to protect migration and wintering habitat, and (3) management of migration and wintering habitat for geese. About 7,500 ac (3,038) of winter and migration habitat are now securely in the public ownership (Table 2) and are being used by Aleutian Canada geese. In addition, 33,108 ac (13,409 ha) of National Wildlife Refuge land and 67,000 ac (27,136 ha) of private land protected under perpetual conservation easements within the Grassland Ecological Area are located approximately 40 miles south of the main use area for Aleutian Canada geese and have recently been used by Aleutian Canada geese. Efforts to manage these lands and conservation easements for the benefit of Aleutian Canada geese and to assist willing private landowners in managing their land for geese, have been described above.

We believe that enough migration and wintering habitat is currently held in public ownership or conservation easements to ensure the continued viability of the subspecies at or near current numbers. If habitat availability were in any way limiting population growth of this subspecies, we would expect to see a leveling off in the population. Instead, as described earlier in this rule, the subspecies annual population growth rate has averaged about 20% since 1990.

We acknowledge that the amount of public land in the spring migration areas in the Smith River bottoms area is not currently sufficient to accommodate all the geese that stop there, forcing them to also graze on nearby private land for a short period of time each year. Private landowners have throughout the last 3 decades contributed to the recovery of the Aleutian Canada goose by managing their lands so as to accommodate the needs of the geese. We do not believe that the current shortage of publicly held spring migration habitat in this area places this subspecies in danger of extinction now or in the foreseeable future given the population size and growth rate of the Aleutian Canada goose population and the success of efforts to address crop depredation by us, the State of California, and some private landowners.

The concentration of relatively large numbers of Aleutian Canada geese on small areas of wintering and migration habitat, most of which is in private ownership, has created conflicts between landowners and geese. Typically the conflicts occur over sprouting grain or pasture grass that is used by both geese and livestock. The problem is most acute in northwestern California, particularly in the Smith River bottoms, because only about 750 ac (304 ha) of State land are now actively managed as foraging habitat for geese in this area. An increasingly serious problem is developing on private pastures in the Langlois area of southern coastal Oregon where 10,000-20,000 geese concentrate for a week or longer in the spring after leaving the Smith River bottoms.

The crop depredation problem will almost certainly intensify as Aleutian Canada goose numbers continue to increase. As goose numbers increase, goose use of private lands may also increase, and the resulting crop depredation is likely to increase. Consequently, requests for permits allowing for lethal hazing under the Migratory Bird Treaty Act are likely to increase. We do not view this as a threat to the survival of the subspecies, because the problem (geese grazing on private lands) becomes more acute directly as a result of increasing goose populations. If the goose population increases, the threat that the subspecies will eventually become extinct is further diminished. Thus, we do not believe that crop depredation and subsequent lethal hazing will ever be a factor that affects this subspecies at the population scale. To the contrary, an increased need for lethal hazing will serve as an indicator of an increasing goose population. In the San Joaquin Valley and Modesto area of California, delisting, with its associated easing of restrictions on hazing of birds, may actually result in relief of some of the winter habitat crowding as hazing of geese off private lands will hasten use of nearby public lands within the Grasslands Ecological Area. Finally, as discussed further in the section on regulatory mechanisms, we can control the amount of lethal hazing because permits are required under the Migratory Bird Treaty Act.

The size of the current population and the management practices on currently used goose habitats also lead us to believe that potential threats such as development, variable market conditions, changing agricultural practices, and adverse climactic conditions do not currently threaten the continued survival of the Aleutian Canada goose now or in the foreseeable future. We believe that the size of the population is such that we would have time to intervene on behalf of the subspecies should any of these become threats to the continued survival of the subspecies.

Further improvements to Aleutian Canada goose habitat are ongoing through fee title acquisition of land, and establishment of conservation easements. Efforts are also under way to increase the amount of public land that can be managed for feeding, loafing, and roosting by Aleutian Canada geese and to explore the possibilities of developing programs with private landowners that will provide additional foraging grounds for the geese in the Smith River bottoms area. These efforts were described earlier in this document. The intent is to provide attractive, high-quality habitat for geese on managed lands to reduce crop depredation on neighboring private farms and

ranches. These future habitat acquisition and management efforts are not necessary to assure the viability of the subspecies, but rather to accommodate its future growth.

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

Historically, Aleuts residing in the Aleutian Islands harvested Aleutian Canada geese for food. In addition, market hunters on the wintering grounds, and more recently, sport hunters, harvested Aleutian Canada geese in the Pacific Flyway. After introduced foxes had reduced the breeding range and production of the Aleutian Canada goose and prior to the identification of the goose's wintering range, sport hunting also limited population growth. Therefore, establishment of areas closed to hunting was an effective conservation measure and was shown to be responsible for early increases in goose numbers.

Delisting of the Aleutian Canada goose will not result in overutilization of the subspecies because take will still be governed by the Migratory Bird Treaty Act and corresponding regulations codified in 50 CFR part 20. After the Aleutian Canada goose is delisted, we must decide if, and when, they can be taken for recreational hunting and for other purposes. A regulatory framework already exists for managing migratory waterfowl in the United States (U.S. Fish and Wildlife Service 1988). (See discussion of existing regulatory mechanisms under factor D.)

Other than sport hunting, no appreciable demand for Aleutian Canada geese for commercial or recreational purposes is anticipated. There may be a small demand for birds for scientific purposes. As with hunting, we will regulate take for scientific purposes through the Migratory Bird Treaty Act.

#### C. Disease or Predation

Because many waterfowl species in the Pacific Flyway are now highly concentrated on the greatly reduced wetland acres of their wintering grounds, they are vulnerable to disease. Disease and other health factors accounted for 28 percent of the known mortality of Aleutian Canada geese on wintering and migration areas between 1975 and 1991 (n = 583 birds; Springer and Lowe 1998). Avian cholera, a highly infectious disease caused by the bacterium *Pasteurella multocida*, has been identified as the cause of mortality of most of the Aleutian Canada geese found dead on the wintering grounds near Modesto. From 1983 to 1998, the number of Aleutian Canada geese that are known to have died annually from avian cholera has ranged from none to 155. However, an exceptional cold period during December 1998 in California set the stage for an extensive and intense avian cholera outbreak during January 1999. Approximately 809 Aleutian Canada geese died of avian cholera during that month. Additional birds probably died that are not included in this mortality count; coyotes (*Canis latrans*) likely carried off and scavenged some of the goose carcasses before we could find them. Although this avian cholera outbreak was the worst known for Aleutian Canada geese, it claimed only about 2.5 percent of the total population. Rapid response to the outbreak and effective management of afflicted wetlands minimized the disease toll on the subspecies.

Based on these data, we conclude that disease is a chronic, low-level problem on the wintering grounds, which may occasionally flare up into a severe outbreak. However, even the most severe outbreak did not result in population level impacts (i.e., during the year of the most severe avian cholera outbreak ever known, the Aleutian Canada goose population still increased substantially). In addition, effective land management should prevent future outbreaks from having serious consequences at the population level. The Aleutian Canada Goose Recovery Team has prepared and revised a Disease and Contamination Hazard Contingency Plan that provides information and direction to reduce the incidence and severity of both disease and contamination hazards (Byrd et al. 1996). We implement this plan through an active program of collecting and disposing of dead and diseased waterfowl to reduce exposure of healthy geese.

Currently, we employ seasonal biologists to monitor Aleutian Canada geese and other geese in the Sacramento and San Joaquin Valleys and in the Crescent City area. Much of this effort is focused on the San Joaquin River National Wildlife Refuge and neighboring areas and includes monitoring for disease outbreaks. When a disease outbreak occurs, these employees and other Refuge staff begin an intensive effort of carcass retrieval and disposal to break the cycle of cholera infection. Refuge staff also have the ability to manage disease by managing water levels at roost sites and wetland basins to avoid concentrating bacteria in those waters. Such efforts will continue even with the delisting of the Aleutian Canada goose.

Besides disease, other sources of mortality of Aleutian Canada geese include shooting (49 percent), drowning (see Factor E below), collisions and predation (12 percent), and trapping accidents (2 percent) (Springer and Lowe 1998). Collectively, they account for only a small amount of annual mortality. Shooting of Aleutian Canada geese

occurred prior to establishment of hunting closures, but declined after closures were established. Occasionally, Aleutian Canada geese are shot outside the closed areas (Springer and Lowe 1998).

On the breeding grounds, predators still prevent breeding on many islands. As mentioned above, we continue to implement an aggressive program to eradicate introduced foxes from islands within the Alaska Maritime National Wildlife Refuge. However, on islands east of Buldir, predation by bald eagles, in concert with the high degree of site fidelity exhibited by geese, may limit colonization of new nesting islands. Nonnative rats, ground squirrels, and voles have also been introduced on a variety of islands within the nesting range of the Aleutian Canada goose and will be difficult, if not impossible, to eradicate. These species may prey on Aleutian Canada goose eggs, hatchlings, or goslings if they have the opportunity, although a study completed in the Semidi Islands suggests that ground squirrels were not a predator of goose eggs (Beyersdorf and Pfaff 1995). Predation of goslings in the Semidi Islands by ground squirrels and Glaucous-winged gulls (*Larus glaucescens*) may be a factor limiting production of this breeding segment, although it has not been quantified (Beyersdorf and Pfaff 1995).

#### D. The Inadequacy of Existing Regulatory Mechanisms

Upon being delisted, the Aleutian Canada goose will also be taken off the State lists in Washington and Oregon (B. Bortner, U.S. Fish and Wildlife Service, pers. comm. 2000). This species has never been listed on California's endangered species list, so no change in State status will result from this rule (D. Yparraguirre, California Department of Fish and Game, pers. comm. 2000). In Alaska, the Aleutian Canada goose is a species of special concern, and will likely remain so after Federal delisting (T. Rothe, Alaska Department of Fish and Game, pers. comm. 2000).

Aleutian Canada geese will remain protected under the Migratory Bird Treaty Act, which regulates taking of all migratory birds in the United States. Soon after delisting this subspecies, we will evaluate, with cooperation from the States through the Pacific Flyway Council, and with public comment, whether protections should be relaxed to allow some take through sport hunting and other means, and to manage current and future depredation problems on the wintering grounds and along migration routes. Thus this rulemaking may affect the status of waterfowl hunting seasons, which undergo annual formal section 7 consultation. An effective regulatory framework is in place to manage waterfowl (U.S. Fish and Wildlife Service 1988). This annual rulemaking process provides for participation by the States through the Flyway Councils and opportunity for public input.

The Pacific Flyway Council, which is composed of wildlife agency directors from each of the western States and Canadian provinces in the Pacific Flyway, including Alaska, will participate in the formulation of any regulations regarding future hunting of Aleutian Canada geese. An Aleutian Canada Goose Subcommittee of the Pacific Flyway Study Committee (waterfowl experts from the Flyway States) has undertaken the drafting of a management plan for the Aleutian Canada goose that will ensure that overutilization does not occur (T. Rothe, Alaska Department of Fish and Game, pers. comm. 2000). Continued closure of Canada goose hunting in the wintering area of the Semidi Islands geese will be a part of any regulatory framework for Aleutian Canada geese.

Two recent case histories provide good examples of the effectiveness of waterfowl management under the provisions of the Migratory Bird Treaty Act. By the mid-1980s, populations of the cackling Canada goose and Pacific white-fronted goose (*Anser albifrons frontalis*) had plummeted from 400,000 and 500,000 to 25,800 birds and 91,700 birds, respectively. As a result of reductions in sport hunting bag limits, establishment of areas closed to hunting on the wintering grounds, and voluntary reductions in take by Alaska Natives on the breeding grounds, the population of cackling Canada geese has increased to more than 200,000 birds and, Pacific white-fronted geese, to more than 300,000 birds (R. Oates, U.S. Fish and Wildlife Service, pers. comm. 2000).

The Migratory Bird Treaty Act does not prevent habitat modification or destruction; however, we believe that sufficient habitat is currently held in public trust and conservation easements to allow for the continued existence of this subspecies at current population levels. We also believe the provisions of the Migratory Bird Treaty Act will allow sufficient protection of the Aleutian Canada goose, including the small group of birds that breeds in the Semidi Islands and winters near Pacific City, Oregon, to prevent the need to relist it.

#### E. Other Natural or Manmade Factors Affecting Its Continued Existence

Three incidences of drowning of Aleutian Canada geese in ocean surf have occurred in recent years (Springer et al. 1989, Pitkin and Lowe 1994): 43 geese near Crescent City, California, in 1984; 23 geese near Pacific City, Oregon, in 1987; and 10 geese near Pacific City, Oregon, in 1993. All drowning incidents were related to storms. Because the number of birds in the Semidi Islands breeding segment is small, we are concerned about these

drowning incidents, but little can be done to prevent their reoccurrence. Although these drowning incidents contributed to the decline of this breeding segment to just 97 birds in 1995, the Semidi Islands breeding segment grew to about 129 birds by 2000. As stated earlier, in making our decision of whether to delist this subspecies, we considered the status of the listed entity: the subspecies as a whole. We considered the status of the various breeding segments only to the extent that they affected the status of the subspecies. It is possible that future studies and analysis may cause us to consider a subpopulation of this subspecies to be a listable entity (e.g., a distinct vertebrate population segment). If this is the case, and if the status of any subpopulation of this subspecies warrants the protections afforded by the Act, then we will make efforts to provide these protections by listing the entity.

At their lowest population level, Aleutian Canada geese may have numbered in the low hundreds (see Kenyon 1963) and were distributed on three widely separated remnant nesting islands. Populations that go through small population bottlenecks may exhibit reduced genetic variability and suffer from inbreeding depression. Such populations may not be able to successfully adapt to changes in the environment or to random events. The lack of recent growth of the Semidi Islands breeding segment of Aleutian Canada geese has led to speculation that this breeding segment was inbred and lacked genetic variability. A recent genetic study showed several potential indicators of a recent genetic bottleneck, including the fact that the Semidi Islands geese have fewer alleles per loci, as well as a lower haplotype and nucleotide diversity when compared to Buldir Island birds, indicating lower overall genetic diversity. However, statistical tests were inconclusive (Pierson et al. 1998).

In summary, we have carefully reviewed all available scientific and commercial data and conclude the threats that caused the population of Aleutian Canada geese to decline no longer pose a risk to the continued survival of the listed entity: the entire subspecies. This determination is based on available data indicating that the population of Aleutian Canada goose in North America has recovered, primarily as a result of four activities: the removal of introduced arctic fox and red fox from some of its nesting islands; the release of captive-reared and wild, translocated family groups of geese to fox-free islands to establish new breeding colonies; protection of the Aleutian Canada goose throughout its range from mortality due to hunting and disease; and protection and management of migration and wintering habitat. This recovery indicates that the subspecies as a whole is no longer endangered or likely to become endangered in the foreseeable future throughout all or a significant portion of its range. Therefore, the subspecies no longer meets the Act's definitions of endangered or threatened. Under these circumstances, removal from the List of Endangered and Threatened Wildlife is appropriate.

In accordance with 5 U.S.C. 553(d), we have determined that this rule relieves an existing restriction and good cause exists to make the effective date of this rule immediate. Delay in implementation of this delisting would cost government agencies staff time and monies conducting formal section 7 consultation on actions that may affect a species no longer in need of the protections under the Act. Relieving the existing restriction associated with this listed species will enable Federal agencies to minimize any further delays in project planning and implementation for actions that may affect Aleutian Canada geese.

#### Effects of This Rule

This final rule will remove the protections afforded to the Aleutian Canada goose in North America under the Act. Removal of protections for the Aleutian Canada goose in North America under the Act does not alter the protections provided to the Aleutian Canada goose under the Migratory Bird Treaty Act. The Migratory Bird Treaty Act regulates the taking of migratory birds for educational, scientific, and recreational purposes. It also states that the Secretary of the Interior is authorized and directed to determine, if, and by what means, the take of migratory birds should be allowed, 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 take is compatible with the protection of the species.

Some protections of the Act provided to the Aleutian Canada goose through incidental take permits associated with Habitat Conservation Plans (HCPs) issued under section 10(a)(1)(B) of the Act will continue by virtue of the Aleutian Canada goose remaining as a covered species in HCPs that continue to cover other listed species. Because many HCPs contain an implementing agreement (IA), and such agreements form a legally binding contract, all signatories must fulfill their responsibilities under the IA, even if the permittee chooses to surrender the permit. The term of the IA typically is the same as the term of the permit.

Although the Aleutian Canada goose in North America will be delisted, it will still continue to be covered by existing HCPs. Eight multi-species HCPs include the Aleutian Canada goose. The Aleutian Canada goose will no longer be a covered listed species under these existing multi-species HCPs; instead the Aleutian Canada goose becomes a covered non-listed species under the same HCP as of the effective date of this final rule. In order to

receive No Surprises assurances, as well as a promise that the Service will not pursue prosecution under the Migratory Bird Treaty Act, the permit holder must continue to abide by all of the original conditions of the permit (50 CFR 17.22(b)(5) and 17.32(b)(5)) after the Aleutian Canada goose is delisted. If the permittee's actions violate the terms of the permit, then the permittee is outside the safety net of No Surprises and would therefore also be subject to permit revocation and possible prosecution for illegal take under the Migratory Bird Treaty Act.

HCP regulations at 50 CFR 17.22(b)(5) state: "The assurances in this paragraph (b)(5) apply only to incidental take permits issued in accordance with paragraph (b)(2) of this section [issuance criteria for HCPs] where the conservation plan is being properly implemented, and apply only with respect to species adequately covered by the conservation plan." The definition of "adequately covered" can be found at 50 CFR 17.3, which states: "\* \* \* with respect to unlisted species, that a proposed conservation plan has satisfied the permit issuance criteria under 10(a)(2)(B) of the ESA that would otherwise apply if the unlisted species covered by the plan were actually listed. For the Service to cover a species under a conservation plan, it must be listed on the section 10(a)(1)(B) permit."

After the effective date of this rule, Federal agencies will no longer be required to consult with the Service under section 7 of the ESA if activities they authorize, fund, or carry out may affect the Aleutian Canada goose. For actions covered by completed consultations where incidental take was anticipated, we will not refer those actions for prosecution under the Migratory Bird Treaty Act, provided that the Federal agency and permittee/designee continue to comply with the Reasonable and Prudent Measures (50 CFR 402.02), and implementing Terms and Conditions (50 CFR 402.14(i)(1)(iv)), of our biological opinion. However, the Aleutian Canada goose will still be afforded protection under the Migratory Bird Treaty Act.

This rule will not affect the Aleutian Canada goose's Appendix I status under CITES, and CITES permits will still be required to import and export Aleutian Canada geese to and from the United States. CITES permits will not be granted if the export will be detrimental to the survival of the subspecies or if a goose was not legally acquired.

Delisting of the Aleutian Canada goose under the Act will not affect ongoing negotiations to secure habitat in the migration and wintering grounds (see discussion under factor A). We will continue to acquire or conserve additional lands for Aleutian Canada geese and other migratory waterfowl through fee title acquisition of land or establishment of conservation easements.

## Monitoring

Section 4(g)(1) of the Act requires that we monitor species for at least 5 years after delisting. If evidence acquired during this monitoring period shows that endangered or threatened status should be reinstated to prevent a significant risk to the subspecies, we may use the emergency listing authority provided by the Act to do so. At the end of the 5-year monitoring period, we will decide if relisting, continued monitoring, or an end to monitoring activities is appropriate. We have developed the following plan for monitoring Aleutian Canada geese following delisting.

## Monitoring Plan

This monitoring plan is designed to detect changes in the status of the Aleutian Canada goose primarily by: (1) monitoring population size on wintering and migration areas; (2) monitoring productivity of the Semidi Islands population segment on the wintering grounds; and (3) monitoring the status of breeding birds on nesting islands in Alaska.

(1) Monitoring population size on wintering and migration areas: We plan to monitor the population of Aleutian Canada geese by using either or both the indirect population estimation procedure based on a marked to unmarked ratio of birds on their wintering grounds in the Modesto area, or direct counts of geese as they leave their roosts while staging in northwestern California in spring. Aleutian Canada geese nesting in the Semidi Islands will be most effectively monitored by conducting counts of foraging birds on their wintering grounds near Pacific City, Oregon.

(2) Monitoring productivity of the Semidi Islands breeding segment on its wintering range: Lack of productivity on Kiliktagik and Anowik Islands appears to be the principal factor in the lack of growth in the Semidi Islands breeding segment. The reasons for this lack of productivity are not understood. Because it is possible to distinguish hatching year birds from older birds on their winter range, we plan to monitor production of the Semidi Islands geese by making direct counts of birds on their winter range in Oregon.

(3) Monitoring the status of breeding birds on nesting islands in Alaska: The status of Aleutian Canada geese on their nesting islands was last summarized in 1995 (Beyersdorf and Pfaff 1995, Byrd 1995). At least once during the 5-year monitoring period we plan to determine the status of nesting Aleutian Canada geese on all the known nesting

islands (Agattu, Alaid-Nizki, Buldir, Chagulak, Amukta, Kiliktagik, Anowik), and islands on which transplants of geese have occurred but for which the current breeding status is unknown (Little Kiska, Amchitka, Skagul, Yunaska). Although we have not recently surveyed Amchitka Island, we have reliable reports of breeding there (M. Murray, Department of Energy, pers. comm. 2000).

In addition, monitoring on the migration and wintering areas will attempt to determine the survival of birds translocated to fox-free islands, the success of the program to reduce the number of geese grazing on private land, and the incidence of avian cholera and other sources of mortality.

We will conduct a status review if during, or after, the 5-year monitoring period, it appears that a reversal of the recent recovery has taken place. We have not established any firm thresholds that if reached will trigger a status review, but the following factors will be considered:

(1) The overall population of Aleutian Canada geese declines by 25 percent below the current level, and there is a negative population trend for 2 or more years based on either direct or indirect population estimates of birds in migration and wintering areas; and if

(2) Through disease or other random events, Aleutian Canada geese decline appreciably and may be extirpated from one or more of their principal nesting islands (Agattu, Alaid-Nizki, or Buldir Islands).

We may determine that monitoring is no longer warranted if data indicate that the overall population of Aleutian Canada geese is stable at current levels or increasing and that no known factors threaten the subspecies. If we identify one or more factors that are believed to have the potential to cause a decline, monitoring will be continued beyond the 5-year period. Consistent with all other flyway management plans, the Pacific Flyway Management Plan for the Aleutian Canada Goose (Pacific Flyway Council 1999) includes a population objective and monitoring activities to assess the effects of management activities.

We remain committed to monitoring the status of the Aleutian Canada geese associated with the Semidi Islands as long as necessary. Consequently, we will continue to monitor this breeding segment beyond the 5-year period on an annual basis on the wintering grounds and occasionally on the breeding grounds. The Pacific Flyway Council (1999) recommends that additional research of the limiting factors affecting the Semidi Islands geese be initiated within the 5-year monitoring period.

In addition to monitoring the status of the Aleutian goose in the United States, we also intend to actively support and participate in the ongoing efforts to restore Aleutian Canada geese in Russia and Japan.

#### Executive Order 12866

This rule was not reviewed by the Office of Management and Budget (OMB) under Executive Order 12866.

#### Paperwork Reduction Act

The OMB regulations at 5 CFR part 1320, which implement provisions of the Paperwork Reduction Act, require that Federal agencies obtain approval from OMB before collecting information from the public. The OMB regulations at 5 CFR 1320.3(c) define a collection of information as the obtaining of information by or for an agency by means of identical questions posed to, or identical reporting, record keeping, or disclosure requirements imposed on ten or more persons. Furthermore, 5 CFR 1320.3(c)(4) specifies that "ten or more persons" refers to the persons to whom a collection of information is addressed by the agency within any 12-month period. For purposes of this definition, employees of the Federal Government are not included.

This rule does not include any collections of information that require approval by OMB under the Paperwork Reduction Act. The information needed to monitor the status of the Aleutian Canada goose following delisting will be collected primarily by our personnel. We do not anticipate a need to request data or other information from ten or more persons during any 12-month period to satisfy monitoring information needs. If it becomes necessary to collect information from 10 or more non-Federal individuals, groups, or organizations per year, we will first obtain information collection approval from OMB.

#### National Environmental Policy Act

We have determined that we do not need to prepare an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the Federal Register on October 25, 1983 (48 FR 49244).

## References Cited

A complete list of all references cited herein is available upon request from the Ecological Services Field Office--Anchorage (see ADDRESSES section).

## Authors

The primary authors of this rule are Brian Anderson and Anthony DeGange (see ADDRESSES section).

## List of Subjects in 50 CFR Part 17

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

## Regulations Promulgation

For the reasons set out in the preamble, we hereby amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

### PART 17--[AMENDED]

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

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

### Sec. 17.11 [Amended]

2. Section 17.11(h) is amended by removing the entry for "Goose, Aleutian Canada, *Branta canadensis leucopareia*" under "BIRDS" from the List of Endangered and Threatened Wildlife.

Dated: November 28, 2000.

Jamie Rappaport Clark  
Director, Fish and Wildlife Service  
[FR Doc. 01-6894 Filed 3-19-01; 8:45 am]  
BILLING CODE 4310-55-P

Appendix B. Washington Administrative Code 232-12-011, 232-12-014, and 232-12-297.

**WAC 232-12-011 Wildlife classified as protected shall not be hunted or fished.**

Protected wildlife are designated into three subcategories: threatened, sensitive, and other.

(1) Threatened species are any wildlife species native to the state of Washington that are likely to become endangered within the foreseeable future throughout a significant portion of their range within the state without cooperative management or removal of threats. Protected wildlife designated as threatened include:

Common Name	Scientific Name
western gray squirrel	<i>Sciurus griseus</i>
Steller (northern) sea lion	<i>Eumetopias jubatus</i>
North American lynx	<i>Lynx canadensis</i>
Aleutian Canada goose	<i>Branta canadensis leucopareia</i>
bald eagle	<i>Haliaeetus leucocephalus</i>
ferruginous hawk	<i>Buteo regalis</i>
marbled murrelet	<i>Brachyramphus marmoratus</i>
green sea turtle	<i>Chelonia mydas</i>
loggerhead sea turtle	<i>Caretta caretta</i>
sage grouse	<i>Centrocercus urophasianus</i>
sharp-tailed grouse	<i>Phasianus columbianus</i>

(2) Sensitive species are any wildlife species native to the state of Washington that are vulnerable or declining and are likely to become endangered or threatened in a significant portion of their range within the state without cooperative management or removal of threats. Protected wildlife designated as sensitive include:

Common Name	Scientific Name
gray whale	<i>Eschrichtius gibbosus</i>
common Loon	<i>Gavia immer</i>
peregrine falcon	<i>Falco peregrinus</i>
Larch Mountain salamander	<i>Plethodon larselli</i>
pygmy whitefish	<i>Prosopium coulteri</i>
marginated sculpin	<i>Cottus marginatus</i>
Olympic mudminnow	<i>Novumbra hubbsi</i>

(3) Other protected wildlife include:

Common Name	Scientific Name
cony or pika	<i>Ochotona princeps</i>
least chipmunk	<i>Tamias minimus</i>
yellow-pine chipmunk	<i>Tamias amoenus</i>
Townsend's chipmunk	<i>Tamias townsendii</i>
red-tailed chipmunk	<i>Tamias ruficaudus</i>
hoary marmot	<i>Marmota caligata</i>
Olympic marmot	<i>Marmota olympus</i>
Cascade golden-mantled ground squirrel	<i>Spermophilus saturatus</i>
golden-mantled ground squirrel	<i>Spermophilus lateralis</i>
Washington ground squirrel	<i>Spermophilus washingtoni</i>
red squirrel	<i>Tamiasciurus hudsonicus</i>
Douglas squirrel	<i>Tamiasciurus douglasii</i>
northern flying squirrel	<i>Glaucomys sabrinus</i>
wolverine	<i>Gulo gulo</i>
painted turtle	<i>Chrysemys picta</i>
California mountain kingsnake	<i>Lampropeltis zonata</i>

All birds not classified as game birds, predatory birds or endangered species, or designated as threatened species or sensitive species; all bats, except when found in or immediately adjacent to a dwelling or other occupied building; mammals of the order Cetacea, including whales, porpoises, and mammals of the order Pinnipedia not otherwise classified as endangered species, or designated as threatened species or sensitive species. This section shall not apply to hair seals and sea lions which are threatening to damage or are damaging commercial fishing gear being utilized in a lawful manner or when said mammals are damaging or threatening to damage commercial fish being lawfully taken with commercial gear.

[Statutory Authority: RCW 77.12.047, 77.12.655, 77.12.020. 02-11-069 (Order 02-98), § 232-12-011, filed 5/10/02, effective 6/10/02. Statutory Authority: RCW 77.12.047. 02-08-048 (Order 02-53), § 232-12-011, filed 3/29/02, effective 5/1/02; 00-17-106 (Order 00-149), § 232-12-011, filed 8/16/00, effective 9/16/00. Statutory Authority: RCW 77.12.040, 77.12.010, 77.12.020, 77.12.770. 00-10-001 (Order 00-47), § 232-12-011, filed 4/19/00, effective 5/20/00. Statutory Authority: RCW 77.12.040, 77.12.010, 77.12.020, 77.12.770, 77.12.780. 00-04-017 (Order 00-05), § 232-12-011, filed 1/24/00, effective 2/24/00. Statutory Authority: RCW 77.12.020. 98-23-013 (Order 98-232), § 232-12-011, filed 11/6/98, effective 12/7/98. Statutory Authority: RCW 77.12.040. 98-10-021 (Order 98-71), § 232-12-011, filed 4/22/98, effective 5/23/98. Statutory Authority: RCW 77.12.040 and 75.08.080. 98-06-031, § 232-12-011, filed 2/26/98, effective 5/1/98. Statutory Authority: RCW 77.12.020. 97-18-019 (Order 97-167), § 232-12-011, filed 8/25/97, effective 9/25/97. Statutory Authority: RCW 77.12.040, 77.12.020, 77.12.030 and 77.32.220. 97-12-048, § 232-12-011, filed 6/2/97, effective 7/3/97. Statutory Authority: RCW 77.12.020. 93-21-027 (Order 615), § 232-12-011, filed 10/14/93, effective 11/14/93; 90-11-065 (Order 441), § 232-12-011, filed 5/15/90, effective 6/15/90. Statutory Authority: RCW 77.12.040. 89-11-061 (Order 392), § 232-12-011, filed 5/18/89; 82-19-026 (Order 192), § 232-12-011, filed 9/9/82; 81-22-002 (Order 174), § 232-12-011, filed 10/22/81; 81-12-029 (Order 165), § 232-12-011, filed 6/1/81.]

**WAC 232-12-014 Wildlife classified as endangered species.** Endangered species include:

Common Name	Scientific Name
pygmy rabbit	<i>Brachylagus idahoensis</i>
fisher	<i>Martes pennanti</i>
gray wolf	<i>Canis lupus</i>
grizzly bear	<i>Ursus arctos</i>
sea otter	<i>Enhydra lutris</i>
sei whale	<i>Balaenoptera borealis</i>
fin whale	<i>Balaenoptera physalus</i>
blue whale	<i>Balaenoptera musculus</i>
humpback whale	<i>Megaptera novaeangliae</i>
black right whale	<i>Balaena glacialis</i>
sperm whale	<i>Physeter macrocephalus</i>
killer whale	<i>Orcinus orca</i>
Columbian white-tailed deer	<i>Odocoileus virginianus leucurus</i>
woodland caribou	<i>Rangifer tarandus caribou</i>
American white pelican	<i>Pelecanus erythrorhynchos</i>
brown pelican	<i>Pelecanus occidentalis</i>
sandhill crane	<i>Grus canadensis</i>
snowy plover	<i>Charadrius alexandrinus</i>
upland sandpiper	<i>Bartramia longicauda</i>
spotted owl	<i>Strix occidentalis</i>
western pond turtle	<i>Clemmys marmorata</i>
leatherback sea turtle	<i>Dermochelys coriacea</i>
mardon skipper	<i>Polites mardon</i>
Oregon silverspot butterfly	<i>Speyeria zerene hippolyta</i>
Oregon spotted frog	<i>Rana pretiosa</i>
northern leopard frog	<i>Rana pipiens</i>

[Statutory Authority: RCW 77.12.047, 77.12.655, 77.12.020. 02-11-069 (Order 02-98), § 232-12-014, filed 5/10/02, effective 6/10/02. Statutory Authority: RCW 77.12.040, 77.12.010, 77.12.020, 77.12.770, 77.12.780. 00-04-017 (Order 00-05), § 232-12-014, filed 1/24/00, effective 2/24/00. Statutory Authority: RCW 77.12.020. 98-23-013 (Order 98-232), § 232-12-014, filed 11/6/98, effective 12/7/98; 97-18-019 (Order 97-167), § 232-12-014, filed 8/25/97, effective 9/25/97; 93-21-026 (Order 616), § 232-12-014, filed 10/14/93, effective 11/14/93. Statutory Authority: RCW 77.12.020(6). 88-05-032 (Order 305), § 232-12-014, filed 2/12/88. Statutory Authority: RCW 77.12.040. 82-19-026 (Order 192), § 232-12-014, filed 9/9/82; 81-22-002 (Order 174), § 232-12-014, filed 10/22/81; 81-12-029 (Order 165), § 232-12-014, filed 6/1/81.]

## **WAC 232-12-297 Endangered, threatened, and sensitive wildlife species classification.**

### PURPOSE

1.1 The purpose of this rule is to identify and classify native wildlife species that have need of protection and/or management to ensure their survival as free-ranging populations in Washington and to define the process by which listing, management, recovery, and delisting of a species can be achieved. These rules are established to ensure that consistent procedures and criteria are followed when classifying wildlife as endangered, or the protected wildlife subcategories threatened or sensitive.

### DEFINITIONS

For purposes of this rule, the following definitions apply:

2.1 "Classify" and all derivatives means to list or delist wildlife species to or from endangered, or to or from the protected wildlife subcategories threatened or sensitive.

2.2 "List" and all derivatives means to change the classification status of a wildlife species to endangered, threatened, or sensitive.

2.3 "Delist" and its derivatives means to change the classification of endangered, threatened, or sensitive species to a classification other than endangered, threatened, or sensitive.

2.4 "Endangered" means any wildlife species native to the state of Washington that is seriously threatened with extinction throughout all or a significant portion of its range within the state.

2.5 "Threatened" means any wildlife species native to the state of Washington that is likely to become an endangered species within the foreseeable future throughout a significant portion of its range within the state without cooperative management or removal of threats.

2.6 "Sensitive" means any wildlife species native to the state of Washington that is vulnerable or declining and is likely to become endangered or threatened in a significant portion of its range within the state without cooperative management or removal of threats.

2.7 "Species" means any group of animals classified as a species or subspecies as commonly accepted by the scientific community.

2.8 "Native" means any wildlife species naturally occurring in Washington for purposes of breeding, resting, or foraging, excluding introduced species not found historically in this state.

2.9 "Significant portion of its range" means that portion of a species' range likely to be essential to the long-term survival of the population in Washington.

### LISTING CRITERIA

3.1 The commission shall list a wildlife species as endangered, threatened, or sensitive solely on the basis of the biological status of the species being considered, based on the preponderance of scientific data available, except as noted in section 3.4.

3.2 If a species is listed as endangered or threatened under the federal Endangered Species Act, the agency will recommend to the commission that it be listed as endangered or threatened as specified in section 9.1. If listed, the agency will proceed with development of a recovery plan pursuant to section 11.1.

3.3 Species may be listed as endangered, threatened, or sensitive only when populations are in danger of failing, declining, or are

vulnerable, due to factors including but not restricted to limited numbers, disease, predation, exploitation, or habitat loss or change, pursuant to section 7.1.

3.4 Where a species of the class Insecta, based on substantial evidence, is determined to present an unreasonable risk to public health, the commission may make the determination that the species need not be listed as endangered, threatened, or sensitive.

### DELISTING CRITERIA

4.1 The commission shall delist a wildlife species from endangered, threatened, or sensitive solely on the basis of the biological status of the species being considered, based on the preponderance of scientific data available.

4.2 A species may be delisted from endangered, threatened, or sensitive only when populations are no longer in danger of failing, declining, are no longer vulnerable, pursuant to section 3.3, or meet recovery plan goals, and when it no longer meets the definitions in sections 2.4, 2.5, or 2.6.

### INITIATION OF LISTING PROCESS

5.1 Any one of the following events may initiate the listing process.

5.1.1 The agency determines that a species population may be in danger of failing, declining, or vulnerable, pursuant to section 3.3.

5.1.2 A petition is received at the agency from an interested person. The petition should be addressed to the director. It should set forth specific evidence and scientific data which shows that the species may be failing, declining, or vulnerable, pursuant to section 3.3. Within 60 days, the agency shall either deny the petition, stating the reasons, or initiate the classification process.

5.1.3 An emergency, as defined by the Administrative Procedure Act, chapter 34.05 RCW. The listing of any species previously classified under emergency rule shall be governed by the provisions of this section.

5.1.4 The commission requests the agency review a species of concern.

5.2 Upon initiation of the listing process the agency shall publish a public notice in the Washington Register, and notify those parties who have expressed their interest to the department, announcing the initiation of the classification process and calling for scientific information relevant to the species status report under consideration pursuant to section 7.1.

### INITIATION OF DELISTING PROCESS

6.1 Any one of the following events may initiate the delisting process:

6.1.1 The agency determines that a species population may no longer be in danger of failing, declining, or vulnerable, pursuant to section 3.3.

6.1.2 The agency receives a petition from an interested person. The petition should be addressed to the director. It should set forth specific evidence and scientific data which shows that the species may no longer be failing, declining, or vulnerable, pursuant to section 3.3. Within 60 days, the agency shall either deny the petition, stating the reasons, or initiate the delisting process.

6.1.3 The commission requests the agency review a species of concern.

6.2 Upon initiation of the delisting process the agency shall publish a public notice in the Washington Register, and notify those parties who have expressed their interest to the department, announcing the initiation of the delisting process and calling for scientific information relevant to the species status report under consideration pursuant to section 7.1.

#### SPECIES STATUS REVIEW AND AGENCY RECOMMENDATIONS

7.1 Except in an emergency under 5.1.3 above, prior to making a classification recommendation to the commission, the agency shall prepare a preliminary species status report. The report will include a review of information relevant to the species' status in Washington and address factors affecting its status, including those given under section 3.3. The status report shall be reviewed by the public and scientific community. The status report will include, but not be limited to an analysis of:

7.1.1 Historic, current, and future species population trends.

7.1.2 Natural history, including ecological relationships (e.g. food habits, home range, habitat selection patterns).

7.1.3 Historic and current habitat trends.

7.1.4 Population demographics (e.g. survival and mortality rates, reproductive success) and their relationship to long term sustainability.

7.1.5 Historic and current species management activities.

7.2 Except in an emergency under 5.1.3 above, the agency shall prepare recommendations for species classification, based upon scientific data contained in the status report. Documents shall be prepared to determine the environmental consequences of adopting the recommendations pursuant to requirements of the State Environmental Policy Act (SEPA).

7.3 For the purpose of delisting, the status report will include a review of recovery plan goals.

#### PUBLIC REVIEW

8.1 Except in an emergency under 5.1.3 above, prior to making a recommendation to the commission, the agency shall provide an opportunity for interested parties to submit new scientific data relevant to the status report, classification recommendation, and any SEPA findings.

8.1.1 The agency shall allow at least 90 days for public comment.

#### FINAL RECOMMENDATIONS AND COMMISSION ACTION

9.1 After the close of the public comment period, the agency shall complete a final status report and classification recommendation. SEPA documents will be prepared, as necessary, for the final agency recommendation for classification. The classification recommendation will be presented to the commission for action. The final species status report, agency classification recommendation, and SEPA documents will be made available to the public at least 30 days prior to the commission meeting.

9.2 Notice of the proposed commission action will be published at least 30 days prior to the commission meeting.

#### PERIODIC SPECIES STATUS REVIEW

10.1 The agency shall conduct a review of each endangered, threatened, or sensitive wildlife species at least every five years after the date of its listing. This review shall include an update of the species status report to determine whether the status of the species warrants its current listing status or deserves reclassification.

10.1.1 The agency shall notify any parties who have expressed their interest to the department of the periodic status review. This notice shall occur at least one year prior to end of the five year period required by section 10.1.

10.2 The status of all delisted species shall be reviewed at least once, five years following the date of delisting.

10.3 The department shall evaluate the necessity of changing the classification of the species being reviewed. The agency shall report its findings to the commission at a commission meeting. The agency shall notify the public of its findings at least 30 days prior to presenting the findings to the commission.

10.3.1 If the agency determines that new information suggests that classification of a species should be changed from its present state, the agency shall initiate classification procedures provided for in these rules starting with section 5.1.

10.3.2 If the agency determines that conditions have not changed significantly and that the classification of the species should remain unchanged, the agency shall recommend to the commission that the species being reviewed shall retain its present classification status.

10.4 Nothing in these rules shall be construed to automatically delist a species without formal commission action.

#### RECOVERY AND MANAGEMENT OF LISTED SPECIES

11.1 The agency shall write a recovery plan for species listed as endangered or threatened. The agency will write a management plan for species listed as sensitive. Recovery and management plans shall address the listing criteria described in sections 3.1 and 3.3, and shall include, but are not limited to:

11.1.1 Target population objectives.

11.1.2 Criteria for reclassification.

11.1.3 An implementation plan for reaching population objectives which will promote cooperative management and be sensitive to landowner needs and property rights. The plan will specify resources

needed from and impacts to the department, other agencies (including federal, state, and local), tribes, landowners, and other interest groups. The plan shall consider various approaches to meeting recovery objectives including, but not limited to regulation, mitigation, acquisition, incentive, and compensation mechanisms.

11.1.4 Public education needs.

11.1.5 A species monitoring plan, which requires periodic review to allow the incorporation of new information into the status report.

11.2 Preparation of recovery and management plans will be initiated by the agency within one year after the date of listing.

11.2.1 Recovery and management plans for species listed prior to 1990 or during the five years following the adoption of these rules shall be completed within 5 years after the date of listing or adoption of these rules, whichever comes later. Development of recovery plans for endangered species will receive higher priority than threatened or sensitive species.

11.2.2 Recovery and management plans for species listed after five years following the adoption of these rules shall be completed within three years after the date of listing.

11.2.3 The agency will publish a notice in the Washington Register and notify any parties who have expressed interest to the department interested parties of the initiation of recovery plan development.

11.2.4 If the deadlines defined in sections 11.2.1 and 11.2.2 are not met the department shall notify the public and report the reasons for missing the deadline and the strategy for completing the plan at a commission meeting. The intent of this section is to recognize current department personnel resources are limiting and that development of recovery plans for some of the species may require significant involvement by interests outside of the department, and therefore take longer to complete.

11.3 The agency shall provide an opportunity for interested public to comment on the recovery plan and any SEPA documents.

#### CLASSIFICATION PROCEDURES REVIEW

12.1 The agency and an ad hoc public group with members representing a broad spectrum of interests, shall meet as needed to accomplish the following:

12.1.1 Monitor the progress of the development of recovery and management plans and status reviews, highlight problems, and make recommendations to the department and other interested parties to improve the effectiveness of these processes.

12.1.2 Review these classification procedures six years after the adoption of these rules and report its findings to the commission.

#### AUTHORITY

13.1 The commission has the authority to classify wildlife as endangered under RCW 77.12.020. Species classified as endangered are listed under WAC 232-12-014, as amended.

13.2 Threatened and sensitive species shall be classified as subcategories of protected wildlife. The commission has the authority to classify wildlife as protected under RCW 77.12.020. Species classified as protected are listed under WAC 232-12-011, as amended.

[Statutory Authority: RCW 77.12.047, 77.12.655, 77.12.020. 02-02-062 (Order 01-283), § 232-12-297, filed 12/28/01, effective 1/28/02. Statutory Authority: RCW 77.12.040. 98-05-041 (Order 98-17), § 232-12-297, filed 2/11/98, effective 3/14/98. Statutory Authority: RCW 77.12.020. 90-11-066 (Order 442), § 232-12-297, filed 5/15/90, effective 6/15/90.]

## Washington State Status Reports and Recovery Plans

### Status Reports

2005	Mazama Pocket Gopher, Streaked Horned Lark, Taylor's Checkerspot	√
2005	Aleutian Canada Goose	√
2004	Killer Whale	√
2002	Peregrine Falcon	√
2001	Bald Eagle	√
2000	Common Loon	√
1999	Northern Leopard Frog	√
1999	Olympic Mudminnow	√
1999	Mardon Skipper	√
1999	Lynx Update	
1998	Fisher	√
1998	Margined Sculpin	√
1998	Pygmy Whitefish	√
1998	Sharp-tailed Grouse	√
1998	Sage-grouse	√
1997	Aleutian Canada Goose	√
1997	Gray Whale	√
1997	Olive Ridley Sea Turtle	√
1997	Oregon Spotted Frog	√
1993	Larch Mountain Salamander	
1993	Lynx	
1993	Marbled Murrelet	
1993	Oregon Silverspot Butterfly	
1993	Pygmy Rabbit	
1993	Steller Sea Lion	
1993	Western Gray Squirrel	
1993	Western Pond Turtle	

### Recovery Plans

2004	Greater Sage-Grouse	√	
2003	Pygmy Rabbit: Addendum		√
2002	Sandhill Crane	√	
2004	Sea Otter	√	
2001	Pygmy Rabbit: Addendum		√
2001	Lynx	√	
1999	Western Pond Turtle	√	
1996	Ferruginous Hawk	√	
1995	Pygmy Rabbit		√
1995	Upland Sandpiper		
1995	Snowy Plover		

√: These reports are available in pdf format on the Department of Fish and Wildlife's web site:  
<http://wdfw.wa.gov/wlm/diversty/soc/concern.htm>.

To request a printed copy of reports, send an e-mail to [wildthing@dfw.wa.gov](mailto:wildthing@dfw.wa.gov) or call 360-902-2515.

