

affected small and rural entities some relief from E911 by providing small entities with longer implementation periods than larger, more financially flexible entities that are better able to buy the equipment necessary to successful 911 and E911 implementation and to first attract the attention of equipment manufacturers. We again seek comment on such possible alternatives.

33. In its discussion of MSS, the *Second Further Notice* recognizes that although satellite carriers face unique technical difficulties in implementing both basic and enhanced 911 features, these difficulties are avoided to a larger extent when the carrier has an ancillary terrestrial component (ATC) to its service. Thus, in paragraphs 107–110, the *Second Further Notice* examines the impact of ATC on MSS providers' ability to offer the same enhanced 911 service that terrestrial wireless carriers provide. Paragraph 108 of the *Second Further Notice* notes that several commenters, thus far, have indicated that MSS basic and enhanced 911 service can be improved with ATC. The *Second Further Notice* suggests alternative solutions to this problem, asking whether MSS providers with ATC should be allowed additional time (or transition periods) in order to come into compliance with terrestrial E911 rules, and whether they can meet the location identification standards of § 20.18 (47 CFR 20.18). The *Second Further Notice* also directs the Network Reliability and Interoperability Council to study issues associated with hand-off of calls between satellite and terrestrial components.

34. As mentioned, the *Second Further Notice* seeks comment on reporting and recordkeeping proposals in connection with implementation of the MSS emergency call center requirement. Call center 911 service is a new form of 911 service, and the *Second Further Notice* seeks comment on the collection of call center data, including total volume of calls received during a given period, the number of calls requiring forwarding to a PSAP, and the success rate in handing off the call to an appropriate PSAP. The *Second Further Notice* suggests alternatives for this data collection, seeking comment on whether the information should simply be retained by service providers and available upon Commission request, whether the information should be submitted to the Commission on a regular basis, or whether the information should be submitted to a third party for review. In addition, the *Second Further Notice* seeks comment on whether the proposed data collection/recordkeeping

requirement should be subject to sunset provisions.

35. The *Second Further Notice*, in paragraphs 113–117, examines potential 911 and E911 requirements for multi-line telephone systems. In that regard, the Commission considers whether to impose such regulations on a national basis or whether it is sufficient to rely on actions by state and local authorities to ensure reliable coverage. NENA and APCO, for example, have proposed Model Legislation that would allow states, through legislation, to adopt many of the standards and protocol association with delivering E911 services through multi-line systems. Paragraph 117 considers adopting NENA's proposed new section to our part 64 rules requiring that LEC central offices be provisioned to permit connection of MLTS equipment for E911 purposes in any accepted industry standard format, as defined by the Commission, requested by the MLTS operator. In connection with this recommendation, the *Second Further Notice* seeks comment on NEC's recommendation that the Commission adopt the ANSI T1.628–2000 ISDN network interface standard as an "accepted industry standard," thereby requiring LECs to enable MLTS operators to use a more efficient means of interfacing with the network than is currently available in most instances. Additionally, the *Second Further Notice* asked parties to comment on whether any rules that the Commission adopts may have a disproportionate impact on small entities and requested comment how it might ameliorate any such impacts.

F. Federal Rules That Overlap, Duplicate, or Conflict With the Proposed Rules

36. None.

III. Ordering Clauses

37. Pursuant to sections 1, 4(i), 7, 10, 201, 202, 208, 214, 222(d)(4)(A)-(C), 222(f), 222(g), 222(h)(1)(A), 222(h)(4)-(5), 251(e)(3), 301, 303, 308, and 310 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 157, 160, 201, 202, 208, 214, 222(d)(4)(A)-(C), 222(f), 222(g), 222(h)(1)(A), 222(h)(4)-(5), 251(e)(3), 301, 303, 308, 310, this *Report and Order* is hereby adopted.

38. The Commission's Office of Consumer and Government Affairs, Reference Information Center, shall send a copy of this *Report and Order* and *Second Further Notice of Proposed Rulemaking*, including the Final Regulatory Flexibility Analysis and the Initial Regulatory Flexibility Analysis,

to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects in 47 CFR Parts 20, 25, 64, and 68

Communications common carriers, satellite communications.

Federal Communications Commission.

William F. Caton,

Deputy Secretary.

[FR Doc. 04–2125 Filed 2–10–04; 8:45 am]

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018–AI44

Endangered and Threatened Wildlife and Plants; Listing the Southwest Alaska Distinct Population Segment of the Northern Sea Otter (*Enhydra lutris kenyoni*) as Threatened

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the Fish and Wildlife Service (Service), propose to list the southwest Alaska distinct population segment of the northern sea otter (*Enhydra lutris kenyoni*) as threatened under the authority of the Endangered Species Act of 1973, as amended (Act). Once containing more than half of the world's sea otters, this population segment has undergone a precipitous population decline of at least 56–68 percent since the mid-1980s.

DATES: We will consider comments on this proposed rule received until the close of business on June 10, 2004. Requests for public hearings must be received by us on or before April 12, 2004.

ADDRESSES: If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods:

1. You may submit written comments to the Supervisor, U.S. Fish and Wildlife Service, Marine Mammals Management Office, 1011 East Tudor Road, Anchorage, Alaska 99503.

2. You may hand deliver written comments to our office at the address given above.

3. You may send comments by electronic mail (e-mail) to: fw7_swakseaotter@fws.gov. See the Public Comments Solicited section below for file format and other information about electronic filing.

FOR FURTHER INFORMATION CONTACT:
Douglas Burn, (see ADDRESSES)
(telephone 907/786-3800; facsimile
907/786-3816).

SUPPLEMENTARY INFORMATION:

Background

The sea otter (*Enhydra lutris*) is a mammal in the family Mustelidae and it

is the only species in the genus *Enhydra*. There are three recognized subspecies (Wilson *et al.* 1991): *E. l. lutris*, known as the northern sea otter, occurs in the Kuril Islands, Kamchatka Peninsula, and Commander Islands in Russia; *E. l. kenyoni*, also known as the northern sea otter, has a range that extends from the Aleutian Islands in

southwestern Alaska to the coast of the State of Washington; and *E. l. nereis*, known as the southern sea otter, occurs in coastal southern California and is known as the southern sea otter. Figure 1 illustrates the approximate ranges of the three subspecies.

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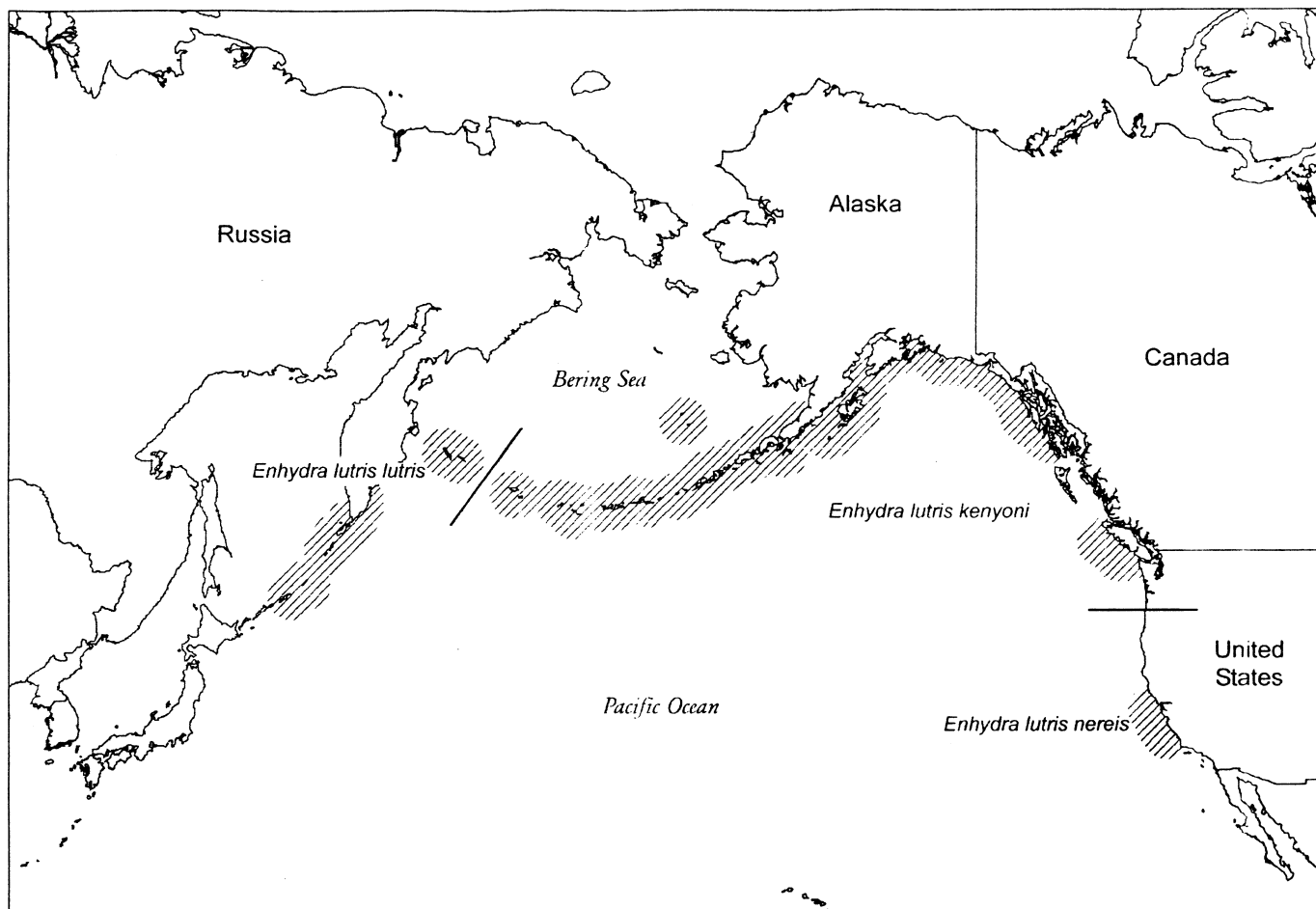


Figure 1. Present distribution of three subspecies of sea otters (hatched areas).

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The two subspecies of northern sea otter are separated by an expanse of open water that measures approximately 320 kilometers (km) (200 miles (mi)) between the Commander Islands in Russia, at the northeastern edge of the range of *E. l. lutris*, and the Near Islands of the United States, which are the northwestern edge of the range of *E. l. kenyoni*. Wide, deep-water passes are an effective barrier to sea otter movements (Kenyon 1969) and thus interaction between these two subspecies is considered very unlikely. (See later sections on food habits and animal movements.)

The southernmost extent of the range of *E. l. kenyoni* is in Washington state and British Columbia, and is the result of translocations of sea otters from Alaska between 1969 and 1972 (Jameson *et al.* 1982). The Washington and British Columbia population is separated from the nearest sea otters in Alaska by a distance roughly of 483 km (300 mi) to the north, and is separated from the southern sea otter (*E. l. nereis*) by a distance of more than 965 km (600 mi) to the south.

The sea otter is the smallest species of marine mammal in the world. Adult males average 130 centimeters (cm) (4.3 feet (ft)) in length and 30 kilograms (kg) (66 pounds (lbs)) in weight; adult females average 120 cm (3.9 ft) in length and 20 kg (44 lbs) in weight (Kenyon 1969). The northern sea otter in Russian waters (*E. l. lutris*) is the largest of the three subspecies, characterized as having a wide skull with short nasal bones (Wilson *et al.* 1991). The southern sea otter (*E. l. nereis*) is smaller and has a narrower skull with a long rostrum and small teeth. The northern sea otter in Alaska (*E. l. kenyoni*) is intermediate in size and has a longer mandible than either of the other two subspecies.

Sea otters lack the blubber layer found in most marine mammals and depend entirely upon their fur for insulation (Riedman and Estes 1990). Their pelage consists of a sparse outer layer of guard hairs and an underfur that is the densest mammalian fur in the world, averaging more than 100,000 hairs per square centimeter (645,000 hairs per square inch) (Kenyon 1969). As compared to pinnipeds (seals and sea lions) that have a distinct molting season, sea otters molt gradually throughout the year (Kenyon 1969).

Sea otters have a much higher rate of metabolism than land mammals of similar size (Costa 1978; Costa and Kooyman 1982, 1984). To maintain the level of heat production required to sustain them, sea otters eat large amounts of food, estimated at 23–33 percent of their body weight per day

(Riedman and Estes 1990). Sea otters are carnivores that primarily eat a wide variety of benthic (living in or on the sea floor) invertebrates, including sea urchins, clams, mussels, crabs, and octopus. In some parts of Alaska, sea otters also eat epibenthic (living upon the sea floor) fishes (Estes *et al.* 1982; Estes 1990).

Much of the marine habitat of the sea otter in southwest Alaska is characterized by a rocky substrate. In these areas, sea otters typically are concentrated between the shoreline and the outer limit of the kelp canopy (Riedman and Estes 1990). Sea otters also inhabit marine environments that have soft sediment substrates, such as Bristol Bay and the Kodiak archipelago. As communities of benthic invertebrates differ between rocky and soft sediment substrate areas, so do sea otter diets. In general, prey species in rocky substrate habitats include sea urchins, octopus, and mussels, while in soft substrates, clams dominate the diet.

Sea otters are considered a keystone species, strongly influencing the composition and diversity of the nearshore marine environment they inhabit (Estes *et al.* 1978). For example, studies of subtidal communities in Alaska have demonstrated that, when sea otters are abundant, epibenthic herbivores such as sea urchins will be present at low densities whereas kelp, which are consumed by sea urchins, will flourish. Conversely, when sea otters are absent, abundant sea urchin populations create areas of low kelp abundance, known as urchin barrens (Estes and Harrold 1988).

Sea otters generally occur in shallow water areas that are near the shoreline. They primarily forage in shallow water areas less than 100 meters (m) (328 feet (ft)) in depth, and the majority of all foraging dives take place in waters less than 40 m (131 ft) in depth. As water depth is generally correlated with distance to shore, sea otters typically inhabit waters within 1–2 km (0.62–1.24 mi) of shore (Riedman and Estes 1990). One notable exception occurs along the coast of Bristol Bay, along the north side of the Alaska Peninsula, where a broad shelf of shallow water extends several miles from shore. Prior to the onset of the sea otter population decline (described below), large rafts of sea otters were commonly observed above this shelf of shallow water at distances as far as 40 km (25 mi) from shore (Schneider 1976).

Since the end of the commercial fur harvests, movement patterns of sea otters have been influenced by the processes of natural population recolonization and the translocation of

sea otters into former habitat. While sea otters have been known to make long distance movements up to 350 km (217 mi) over a relatively short period of time when translocated to new or vacant habitat (Ralls *et al.* 1992), the home ranges of sea otters in established populations are relatively small. Once a population has become established and has reached a relatively steady state within the habitat, movement of individual sea otters appears to be largely dictated by social behaviors and by factors in the local environment, including gender, breeding status, age, climatic variables (*e.g.* weather, tidal state, season), and human disturbance, as described below.

Home range and movement patterns of sea otters vary depending on the gender and breeding status of the otter. In the Aleutian Islands, breeding males remain for all or part of the year within the bounds of their breeding territory, which constitutes a length of coastline anywhere from 100 m (328 ft) to approximately 1 km (0.62 mi). Sexually mature females have home ranges of approximately 8–16 km (5–10 mi), which may include one or more male territories. Male sea otters that are not part of the breeding population do not hold territories and may move greater distances between resting and foraging areas than breeding males (Lensink 1962, Kenyon 1969, Riedman and Estes 1990, Estes and Tinker 1996).

Studies of movement patterns of juvenile sea otters found that juvenile males (1–2 years of age) were found to disperse later and for greater distances, up to 120 km (75 mi), from their natal (birth) area than 1-year-old females, for which the greatest distance traveled was 38 km (23.6 mi) (Garshelis and Garshelis 1984, Monnett and Rotterman 1988, Riedman and Estes 1990). Intraspecific aggression between breeding males and juvenile sea otters may cause juvenile otters to move from their natal areas to lower quality habitat (Ralls *et al.* 1996), and survival of juvenile sea otters, though highly variable, is influenced by intraspecific aggression and dispersal (Ballachey *et al.* in litt.).

Sea otter movements are also influenced by local climatic conditions such as storm events, prevailing winds, and in some areas, tidal state. Sea otters tend to move to protected or sheltered waters (bays, inlets, or lees) during storm events or high winds. In calm weather conditions, sea otters may be encountered further from shore (Lensink 1962, Kenyon 1969). In the Commander Islands, Russia, weather, season, time of day, and human disturbance have been cited as factors that induce sea

otter movement (Barabash-Nikiforov 1947, Barabash-Nikiforov *et al.* 1968).

Due to their dependence on shallow water feeding areas, most sea otters in Alaska occur within 1–2 km (0.62–1.24 mi) from shore. Thus, most sea otters are within State-owned waters, which include the area from mean high tide to 4.8 km (3 miles) offshore, and any that go further offshore are within the U.S. Exclusive Economic Zone, which extends 370.4 km (200 nautical miles) seaward from the coast of the United States.

While sea otters typically sleep in the water, they also haul out and sleep on shore (Kenyon 1969). Female sea otters have also been observed to give birth while on shore (Barabash-Nikiforov *et al.* 1968, Jameson 1983). Although they typically haul out and remain close to the water's edge, sea otters have been observed on land at distances up to several hundred meters from the water (Riedman and Estes 1990). The majority of coastal lands within the range of the southwest Alaska population of the northern sea otter are part of our National Wildlife Refuge (NWR) system, including Alaska Maritime NWR, Izembek NWR, Alaska Peninsula/Becharof NWR, and Kodiak NWR. The National Park Service also has large parcels of coastal lands in southwest Alaska, including Katmai National Park and Aniakchak National Monument and

Preserve. The vast majority of remaining coastal lands in southwest Alaska are owned by the State of Alaska and Alaska Native Corporations. Privately owned lands constitute a very minor proportion of coastal lands in southwest Alaska.

Female sea otters in Alaska live an estimated 15–20 years, while male lifespan appears to be about 10–15 years (Calkins and Schneider 1985). First-year survival of sea otter pups is generally substantially lower than that for prime age (2–10 years old) animals (Monson and DeGange 1995, Monson *et al.* 2000). Male sea otters appear to reach sexual maturity at 5–6 years of age (Schneider 1978, Garshelis 1983). The average age of sexual maturity for female sea otters is 3–4 years, but some appear to reach sexual maturity as early as 2 years of age. The presence of pups and fetuses at different stages of development throughout the year suggests that reproduction occurs at all times of the year. Some areas show evidence of one or more seasonal peaks in pupping (Rotterman and Simon-Jackson 1988).

Similar to other mustelids, sea otters can have delayed implantation of the blastocyst (developing embryo) (Sinha *et al.* 1966). As a result, pregnancy can have two phases: from fertilization to implantation, and from implantation to birth (Rotterman and Simon-Jackson 1988). The average time between

copulation and birth is around 6–7 months. Female sea otters typically will not mate while accompanied by a pup (Lensink 1962; Kenyon 1969; Schneider 1978; Garshelis *et al.* 1984). Although females are physically capable of producing pups annually, the length of pup dependency may be the primary factor determining pupping interval.

Maximum productivity rates have not been measured through much of the sea otter's range in Alaska. Estes (1990) estimated a population growth rate of 17–20 percent per year for four northern sea otter populations expanding into unoccupied habitat. In areas where resources are limiting or where populations are approaching equilibrium density, slower rates of growth are expected. Equilibrium density is defined as the average density, relatively stable over time, that can be supported by the habitat (Estes 1990).

Distribution and Status

Historically, sea otters occurred throughout the coastal waters of the north Pacific Ocean, from the northern Japanese archipelago around the north Pacific rim to central Baja California, Mexico. The historic distribution of sea otters is depicted in Figure 2.

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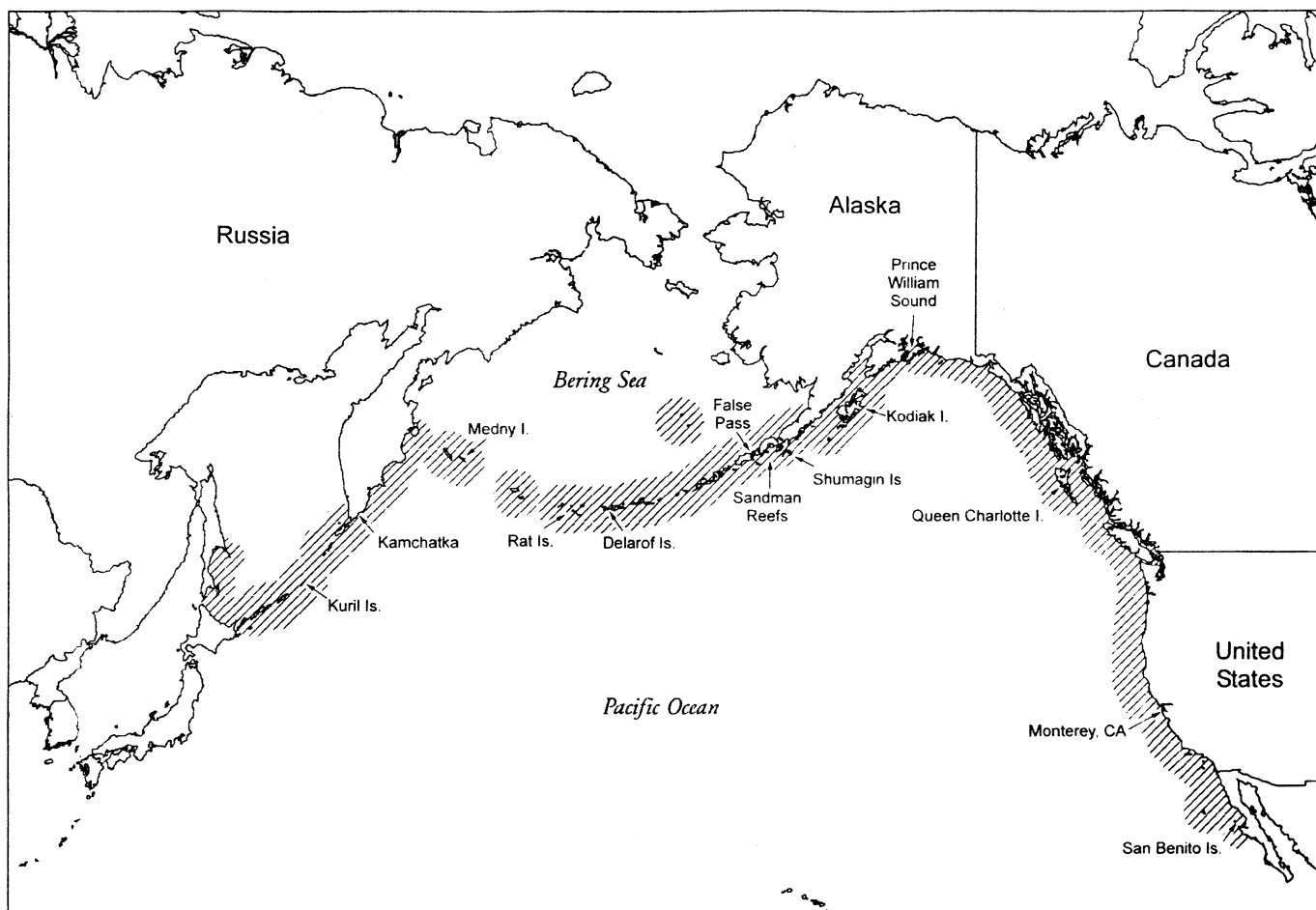


Figure 2. Worldwide distribution of sea otters prior to commercial exploitation (hatched areas) and location of remnant colonies in 1911 (arrows).

Prior to commercial exploitation, the range-wide estimate for the species was 150,000–300,000 individuals (Kenyon 1969, Johnson 1982). Commercial hunting of sea otters began shortly after the Bering/Chirikof expedition to Alaska in 1741. Over the next 170 years, sea otters were hunted to the brink of extinction first by Russian, and later by American fur hunters.

Sea otters became protected from commercial harvests under the International Fur Seal Treaty of 1911, when only 13 small remnant populations were known to still exist (Figure 2). The entire species at that time may have been reduced to only 1,000–2,000 animals. Two of the 13 remnant populations (Queen Charlotte Island and San Benito Islands) subsequently became extinct (Kenyon

1969, Estes 1980). The remaining 11 populations began to grow in number, and expanded to recolonize much of the former range. Six of the remnant populations (Rat Islands, Delarof Islands, False Pass, Sandman Reefs, Shumagin Islands, and Kodiak Island) were located within the bounds of what we now recognize as the southwest Alaska population of the northern sea otter (*see* Distinct Vertebrate Population Segment, below). These remnant populations grew rapidly during the first 50 years following protection from further commercial hunting. At several locations in the Aleutian Islands, the rapid growth of sea otter populations appears to have initially exceeded the carrying capacity of the local environment, as sea otter abundance at these islands then declined, either by

starvation or emigration, eventually reaching what has been described as “relative equilibrium” (Kenyon 1969).

Population Trends of Sea Otters in Southwest Alaska

The following discussion of population trends is related to the southwest Alaska distinct population segment of sea otters addressed in this proposed rule. The southwest Alaska population ranges from Attu Island at the western end of Near Islands in the Aleutians, east to Kamishak Bay on the western side of lower Cook Inlet, and includes waters adjacent to the Aleutian Islands, the Alaska Peninsula, the Kodiak archipelago, and the Barren Islands (Figure 3).

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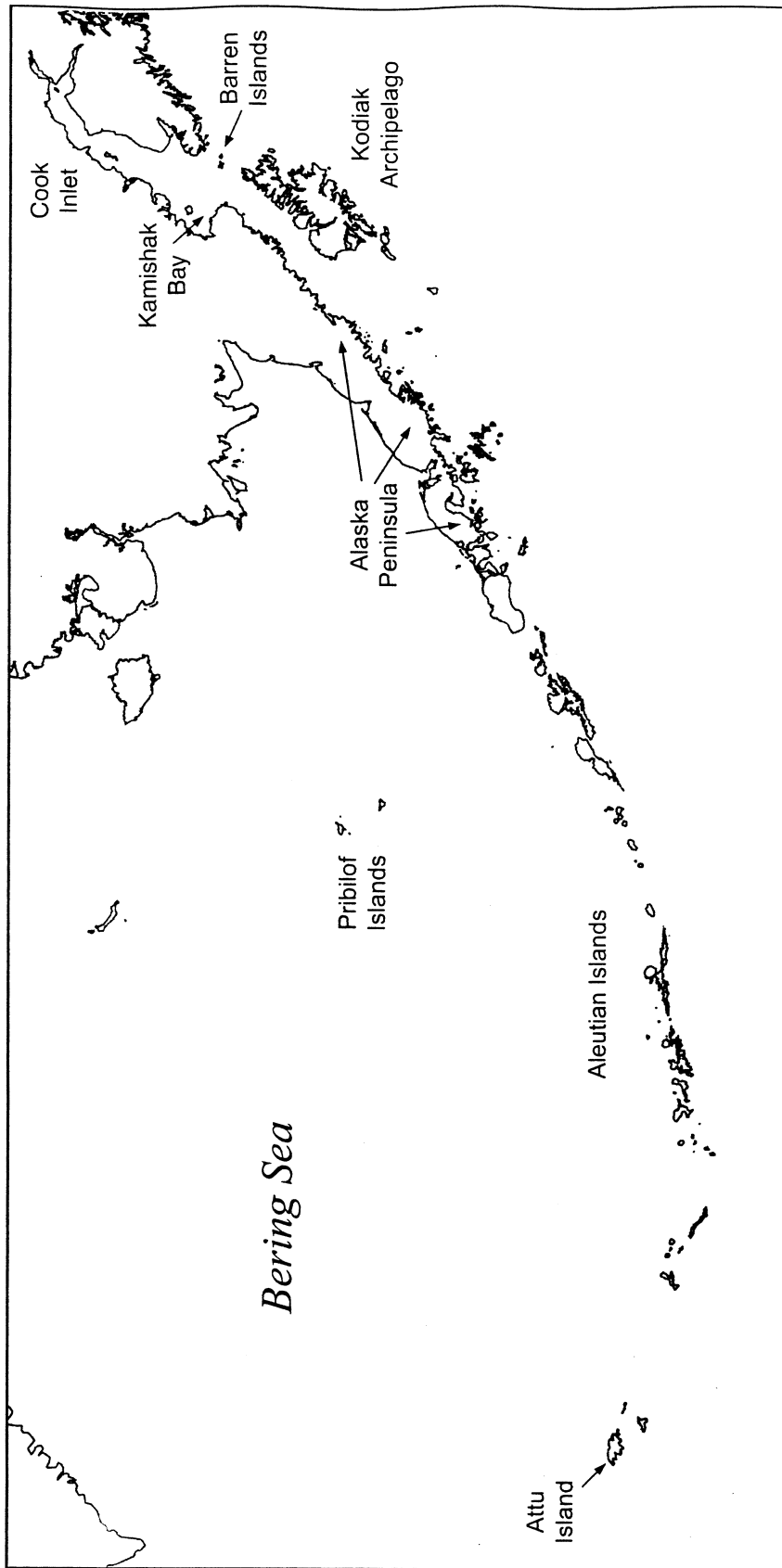


Figure 3. Range of the southwest Alaska DPS of the northern sea otter.

Survey procedures vary in different locations. In some parts of southwest Alaska, sea otters have been counted in a narrow band of water adjacent to the shoreline; in others, transects by boat or plane have been used to sample an area, and the resulting sea otter density is extrapolated to generate a population estimate for the entire study area. Like survey efforts of most species, detection of all the individuals present is not always possible. Sea otters spend considerable time under water, and it is not possible to detect individuals that are below the surface at the time a survey is conducted. Also, observers do not always detect every individual

present on the surface. Only a few surveys have been conducted using methods that allow for calculation of a correction factor to adjust for the estimated proportion of otters not detected by observers. Making such an adjustment entails having an independent estimate of the number of otters present in an area, also known as "ground-truth," and combining it with the regular survey data in order to calculate a correction factor to adjust for sea otters not detected during the survey. Thus, survey results can be of several types: They can be direct counts or estimates, and in either case they may

be adjusted or unadjusted for sea otters not detected by observers.

In the following discussion of population trends, results are presented separately for surveys conducted in the Aleutian Islands, the Alaska Peninsula, the Kodiak Archipelago, and Kamishak Bay. For the Alaska Peninsula, results are presented for the separate surveys that have been conducted for north Peninsula offshore areas, south Peninsula offshore areas, south Alaska Peninsula Islands, and the South Alaska Peninsula shoreline. The general locations of the survey areas are depicted in Figure 4 A–D.

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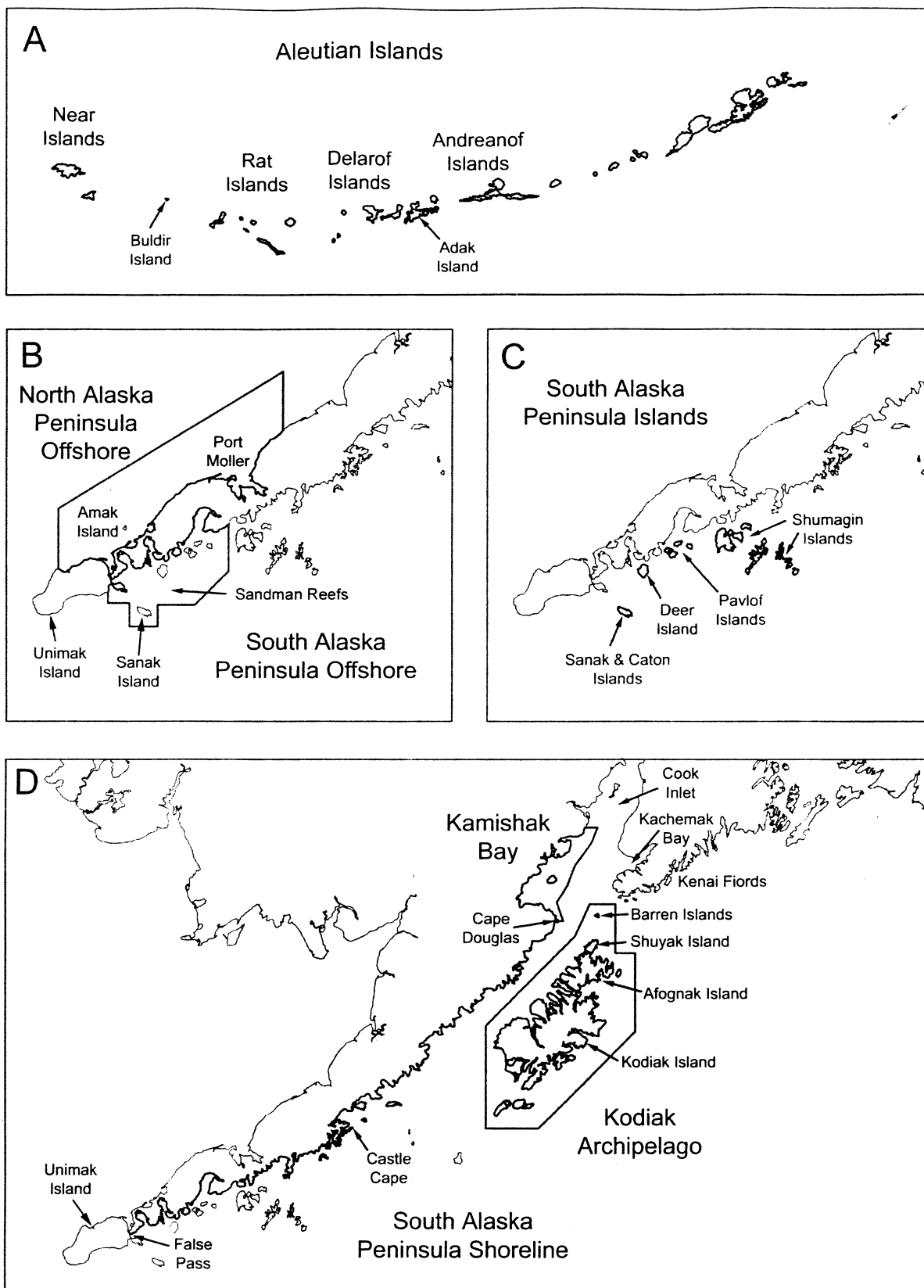


Figure 4 A-D. Sea otter survey areas in southwest Alaska.

Unless otherwise specified, the survey results are unadjusted for otters not detected by observers. Within each study area, recent surveys were conducted using methods similar to those used in the past, so that counts or estimates would be as comparable as

possible with baseline information for that area. Although there may be slight differences in the time of year that surveys were conducted, we do not believe these timing differences hinder comparisons of survey results because otters are likely to remain in the same

general area, as they are not migratory. A summary of sea otter survey data from each survey area within the southwest Alaska population is presented in Table 1, followed by a narrative description of the results for each area.

TABLE 1.—SUMMARY OF SEA OTTER POPULATION SURVEYS IN SOUTHWEST ALASKA

[Estimates include 95% confidence intervals where available. Estimates for the Kodiak archipelago and Kamishak Bay are the only values adjusted for sea otters not detected.]

Survey Area	Year	Count or estimate	Source
Aleutian Islands	1965	9,700	Kenyon (1969).
	1992	8,048	Evans <i>et al.</i> (1997).
	2000	2,442	Doroff <i>et al.</i> (2003).
North Alaska Peninsula Offshore Areas	1976	11,681	Schneider (1976).
	*1986	6,474 ± 2,003 (JUN) 9,215 ± 3,709 (AUG) 7,539 ± 2,103 (OCT)	Brueggeman <i>et al.</i> (1988), Burn and Doroff in prep.
	*1986	13,900 ± 6,456 (MAR) 14,042 ± 5,178 (JUN) 17,500 ± 5,768 (OCT)	Brueggeman <i>et al.</i> (1988). Burn and Doroff in prep.
	2001	1,005 ± 1,597 (APR)	Burn and Doroff in prep.
South Alaska Peninsula Offshore Areas	1962	2,195	Kenyon (1969).
	1986	2,122	Brueggeman <i>et al.</i> (1988).
	1989	1,589	DeGange <i>et al.</i> (1995).
	2001	405	Burn and Doroff in prep.
South Alaska Peninsula Islands	1989	2,632	DeGange <i>et al.</i> (1995).
	2001	2,651	Burn and Doroff in prep.
	1989	13,526 ± 2,350	DeGange <i>et al.</i> (1995).
South Alaska Peninsula Shoreline	1994	9,817 ± 5,169	Doroff <i>et al.</i> (in prep.).
	2001	5,893 ± 2,630	Doroff <i>et al.</i> (in prep.).
	2002	6,918 ± 4,271	USGS in litt. (2002).
Kodiak Archipelago	1989	13,526 ± 2,350	DeGange <i>et al.</i> (1995).
Kamishak Bay	1994	9,817 ± 5,169	Doroff <i>et al.</i> (in prep.).
	2001	5,893 ± 2,630	Doroff <i>et al.</i> (in prep.).
Kamishak Bay	2002	6,918 ± 4,271	USGS in litt. (2002).

* Estimates recalculated by the Service (Burn and Doroff in prep.) from original data of Brueggeman *et al.* (1988).

Aleutian Islands

The first systematic, large-scale population surveys of sea otters in the Aleutian Islands (Figure 4A) were conducted from 1957 to 1965 by Kenyon (1969). The descendants of two remnant colonies had expanded throughout the Rat, Delarof, and western Andreanof Island groups. The total unadjusted count for the entire Aleutian archipelago during the 1965 survey was 9,700 sea otters. In 1965, sea otters were believed to have reached equilibrium densities at roughly one-third of the Aleutian archipelago, ranging from Adak Island in the east to Buldir Island in the west (Estes 1990). Islands in the other two-thirds of the archipelago had few sea otters, and researchers expected additional population growth in the Aleutian to occur through range expansion.

From the mid-1960's to the mid-1980's, otters expanded their range, and presumably their numbers as well, until they had recolonized all the major island groups in the Aleutian. Although the exact size of the sea otter population at the onset of the decline is unknown, a habitat-based computer model estimates the pre-decline population in the late-1980s may have numbered

approximately 74,000 individuals (Burn *et al.* 2003).

In a 1992 aerial survey of the entire Aleutian archipelago we counted a total of 8,048 otters (Evans *et al.* 1997), approximately 1,650 (19 percent) fewer than the total reported for the 1965 survey. Although sea otters had recolonized all major island groups, they had unexpectedly declined in number by roughly 50 percent in portions of the western and central Aleutian since 1965, based on a comparison of the 1965 and 1992 survey results. Sea otter surveys conducted from skiffs during the mid-1990s at several islands also indicated substantial declines in the western and central Aleutians (Estes *et al.* 1998). It was not known at the time if these observed declines were due to an actual reduction in numbers of sea otters or a redistribution of otters between Aleutian Islands.

In April 2000, we conducted another complete aerial survey of the Aleutian archipelago. We counted 2,442 sea otters, which is a 70-percent decline from the count eight years previously (Doroff *et al.* 2003). Along the more than 5,000 km (3,107 miles) of shoreline surveyed, sea otter density was at a uniformly low level. this result showed

clearly that a decline in abundance of sea otters in the archipelago had occurred, as opposed to redistribution among islands.

The aerial and skiff survey data both indicate that the onset of the decline began in the latter half of the 1980s or early 1990s. Doroff *et al.* (2003) have calculated that the decline proceeded at an average rate of -17.5 percent per year in the Aleutians. Although otters had declined in all island groups within the archipelago, the greatest declines were observed in the Rat, Delarof, and Andreanof Island groups. this result was unexpected, as the remnant colonies in these island groups were the first to recover from the effects of commercial harvests, and sea otters were believed to have been at equilibrium density at most of these islands in the mid-1960s.

The current estimate of the population in the Aleutian Islands is 8,742 sea otters. This estimate is based on results of the survey conducted in April of 2000, adjusted for otters not detected.

Alaska Peninsula

Three remnant colonies (at False Pass, Sandman Reefs, and Shumagin Islands) were believed to have existed near the western end of the Alaska Peninsula

after commercial fur harvests ended in 1911 (Kenyon 1969). During surveys in the late 1950s and early 1960s, substantial numbers of sea otters were observed between Unimak Island and Amak Island (2,892 in 1965) on the north side of the Peninsula, and around Sanak Island and the Sandman reefs (1,186 in 1962), and the Shumagin Islands on the south side (1,352 in 1962) (Kenyon 1969).

As summarized in Table 1 and described below, surveys of sea otters along the Alaska Peninsula have covered four areas, with the same method being used in a given area. For the north Alaska Peninsula offshore area (Figure 4B), shoreline counts are not an appropriate survey method due to the broad, shallow shelf in Bristol Bay, a condition under which sea otters occur further from the shore than elsewhere. Consequently, the north Alaska Peninsula offshore area has been surveyed from aircraft using north-south transects extending from the shoreline out over the shelf. Using this method, Schneider (1976) calculated an unadjusted population estimate of 11,681 sea otters on the north side of the Alaska Peninsula in 1976, which he believed to have been within the carrying capacity for that area. Brueggeman *et al.* (1988) conducted replicate surveys of the same area during three time periods in 1986. We re-analyzed the original 1986 survey data to address computational errors in the survey report; our re-calculated estimates range from 6,474–9,215 sea otters for this area for the three surveys in 1986 (Burn and Doroff in prep.). In May 2000, we replicated the survey design of Brueggeman *et al.* (1988) using identical survey methods. The 2000 survey estimate of 4,728 sea otters indicates abundance on the north side of the Alaska Peninsula had fallen by 27–49 percent in comparison with the minimum and maximum point estimates of the 1986 survey (Burn and Doroff in prep.).

We believe the decline in this particular area may have been even greater than these results indicate, as the severity of sea ice in Bristol Bay makes the North Alaska Peninsula the only area where seasonal differences in the distribution of otters are likely to occur. Substantially more otters were counted in transects of the Port Moller area in the May 2000 survey than in the 1986 surveys, which occurred later in the year. Large aggregations of sea otters in Port Moller may be a seasonal phenomenon related to sea ice; overflights in July and August, when the sea ice has left, have not recorded large numbers of sea otters in this area (B.

Murphy, Alaska Department of Fish and Game, in litt. 2002). Consequently, had the May 2000 survey been conducted later (*e.g.* July or August) when the sea ice and the otters were more dispersed, it seems likely that fewer would have been in the Port Moller transect areas, which would have resulted in a lower count in the 2000 survey.

Offshore areas on the south side of the Alaska Peninsula (Figure 4B) were surveyed at three different time periods in 1986 (Brueggeman *et al.* 1988). Noting computational errors in the survey report, we re-analyzed the original 1986 survey data, resulting in estimates of 13,900–17,500 sea otters for the three surveys conducted in 1986 (Burn and Doroff in prep.). We replicated the survey in April 2001, when our estimate of 1,005 otters for the south Alaska Peninsula offshore area indicated a decline in abundance of at least 93 percent when compared with the minimum and maximum point estimates in this area from the 1986 surveys. Specific areas of high sea otter concentrations in 1986, such as Sandman Reefs, were almost devoid of sea otters in 2001 (Burn and Doroff in prep.).

Several island groups along the south side of the Alaska Peninsula (Figure 4C; Pavlof and Shumagin Islands, as well as Sanak, Caton, and Deer Islands) are another survey area. In 1962, Kenyon (1969) counted 1,900 otters along these islands. Twenty-four years later, in 1986, Brueggeman *et al.* (1988) counted 2,122 otters in the same survey area. In 1989, DeGange *et al.* (1995) counted 1,589 otters along the shorelines of the islands that had been surveyed in 1962 and 1986, which was approximately 16–28 percent fewer sea otters than were reported in the earlier counts. This decrease was the first indication of a sea otter population decline in the area of the Alaska Peninsula. When we counted sea otters in these island groups in 2001 we recorded only 405 individuals (Burn and Doroff in prep.), which is an 81-percent decline from the 1986 count reported by Brueggeman *et al.* (1988).

The shoreline of the Alaska Peninsula from False Pass to Cape Douglas (Figure 4D) is another survey area. In 1989, DeGange *et al.* (1995) counted 2,632 sea otters along this stretch of shoreline. In 2001 we counted 2,651 sea otters (Burn and Doroff in prep.), nearly the same as the 1989 count. When we subdivided and compared the results for the eastern and western components of the survey areas, we found that the count along the eastern end of the Peninsula, from Cape Douglas to Castle Cape, increased approximately 20 percent, from 1,766 in 1989 to 2,115 in 2001. For the western

end of the Peninsula from False Pass to Castle Cape, however, there was evidence of a population decline, with 866 counted in 1989 as compared to 536 in 2001, a drop of almost 40 percent. (We also counted 42 sea otters along the shoreline of Unimak Island in 2001, but there is no suitable baseline data for comparison.) Based on what is known about sea otter movements and the distance between the eastern and western ends of the Peninsula, we believe that it is unlikely that these observations represent a change in distribution.

The results from the different survey areas along the Alaska Peninsula indicate various rates of change. Overall, the combined counts for the Peninsula have declined by 65–72 percent since the mid-1980s, based on the data presented in Table 1.

We have calculated an estimate of the current population for the entire Alaska Peninsula, including an adjustment for otters not detected by observers. In making this calculation, we first revised the combined total number of sea otters observed during the most recent surveys (8,789), to account for potential double-counting in an area of overlap between two of the study areas along the Peninsula. We then multiplied this revised number of otters (8,328) by the correction factor of 2.38 provided by Evans *et al.* (1997) for the type of aircraft used, to account for otters not detected by observers. The result is an adjusted estimate of 19,821 sea otters along the Alaska Peninsula as of 2001 (Burn and Doroff in prep.).

Kodiak Archipelago

One of the remnant sea otter colonies in southwest Alaska is thought to have occurred at the northern end of the Kodiak archipelago (Figure 4D), near Shuyak Island. In 1959, Kenyon (1969) counted 395 sea otters in the Shuyak Island area. Over the next 30 years, the sea otter population in the Kodiak archipelago grew in numbers, and its range expanded southward around Afognak and Kodiak Islands (Schneider 1976, Simon-Jackson *et al.* 1984, Simon-Jackson *et al.* 1985). DeGange *et al.* (1995) surveyed the Kodiak archipelago in 1989 and calculated an adjusted population estimate of 13,526 sea otters. In July and August 1994, we conducted an aerial survey using the methods of Bodkin and Udevitz (1999) and calculated an adjusted population estimate of 9,817, approximately 27 percent lower than the estimate for 1989 (Doroff *et al.* in prep.). Although both surveys corrected for animals not detected by observers, differences in survey methods led to questions about

the ability to compare results between the two surveys. In June 2001, we surveyed the Kodiak archipelago using the same observer, pilot, and methods as in 1994. The result was an adjusted population estimate of 5,893 sea otters for the archipelago in 2001 (Doroff *et al.* in prep.), which is a 40-percent decline in comparison to the 1994 estimate and a 56-percent decline from the 1989 estimate.

Kamishak Bay

Kamishak Bay is located on the west side of lower Cook Inlet, north of Cape Douglas (Figure 4D). In 1994, Kamishak Bay was included as part of a survey for marine birds and marine mammals in lower Cook Inlet (Aglar *et al.* 1995). The unadjusted population estimate of 5,914 sea otters from the 1994 survey included sea otters from both the southwest Alaska and the southcentral Alaska stocks (*see* section on Distinct Vertebrate Population Segment, below), therefore an estimate for only the Kamishak Bay area is not available. In the summer of 2002, the U.S. Geological Survey (USGS), Biological Resources Division conducted an aerial survey of lower Cook Inlet and the Kenai Fiords area. This survey was designed, in part, to estimate sea otter abundance in Kamishak Bay. The method used was identical to that of the 2001 aerial survey of the Kodiak archipelago, which includes a correction factor for sea otters not detected by the observer (Bodkin and Udevitz 1999). Sea otters were relatively abundant within Kamishak Bay during the 2002 survey, with

numerous large rafts of sea otters observed. The adjusted estimate for the current sea otter population size in Kamishak Bay is 6,918 (USGS in litt. 2002). As no previous estimates for Kamishak Bay exist, the population trend for this area is unknown.

Overall Comparison

The history of sea otters in southwest Alaska is one of commercial exploitation to near extinction (1742 to 1911), protection under the International Fur Seal Treaty (1911), and population recovery (post-1911). By the mid- to late-1980s, sea otters in southwest Alaska had grown in numbers and recolonized much of their former range. The surveys conducted in various areas, described above, provide information about the extent of declines within those areas. However, due to differences in the years of the various baseline surveys for different areas (1962, 1965, 1976, 1989), it is difficult to combine those surveys as a basis for estimating the overall size of the sea otter population throughout southwest Alaska at the onset of the decline. Therefore, as part of our effort to evaluate information reflecting the overall magnitude of the decline, we also have considered information provided by Calkins and Schneider (1985), who summarized sea otter population estimates worldwide based on data collected through 1976. Much of the information they present is from unpublished Alaska Department of Fish and Game survey results, and we include this information as it is the only

comprehensive reference for estimating the overall magnitude of the sea otter decline in southwest Alaska.

Calkins and Schneider (1985) provided estimates as of 1976, adjusted for animals not detected by observers, for the Aleutian Islands (55,100–73,700), north Alaska Peninsula (11,700–17,200), south Alaska Peninsula (22,000–30,000) and Kodiak archipelago (4,000–6,000). They did not report a specific estimate for the Kamishak Bay area, which presumably was included within their estimate for the Kenai Peninsula and Cook Inlet area (2,500–3,500 otters), and we are assuming that half of the sea otters estimated for Kenai Peninsula and Cook Inlet occurred in Kamishak Bay (1,250–1,750). Combining these estimates, the sea otter population in the area encompassing the range of the southwest Alaska population was believed to have numbered between 94,050–128,650 animals as of 1976. As sea otters had not yet fully recolonized southwest Alaska or reached equilibrium density in all areas in 1976, additional population growth was expected. Therefore, the overall population prior to the onset of the decline in the 1980's probably was higher than the population estimate for 1976.

Our estimate for the current size of the southwest Alaska population of the northern sea otter is 41,474 animals (Table 2). This estimate is based on recent survey information, adjusted for animals not detected.

TABLE 2.—CURRENT POPULATION ESTIMATES FOR THE SEA OTTER IN SOUTHWEST ALASKA

[Alaska Peninsula and Unimak Island counts are adjusted using a correction factor of 2.38 for twin-engine aircraft surveys of sea otters according to Evans *et al.* (1997). Aleutian Islands, Kodiak Archipelago, and Kamishak Bay surveys are adjusted using survey-specific correction factors.]

Survey area	Year	Unadjusted count or estimate	Adjusted count or estimate	Reference
Aleutian Islands	2000	2,442	8,742	Doroff <i>et al.</i> (2003).
North Alaska Peninsula Offshore Areas	2000	4,728	11,253	Burn and Doroff (in prep.).
South Alaska Peninsula Offshore Areas	2001	1,005	2,392	Burn and Doroff (in prep.).
South Alaska Peninsula Shoreline	2001	^a 2,190	5,212	Burn and Doroff (in prep.).
South Alaska Peninsula Islands	2001	405	964	Burn and Doroff (in prep.).
Unimak Island	2001	42	100	Burn and Doroff (in prep.).
Kodiak Archipelago	2001	5,893	Doroff <i>et al.</i> (in prep.).
Kamishak Bay	2002	6,918	USGS Unpublished data.
Total	41,474	

^a Does not include a count of 461 sea otters from False Pass to Seal Cape, which was also surveyed as part of the south Alaska Peninsula Offshore Areas survey.

The 1976 population estimate based on the work of Calkins and Schneider (1985) is not directly comparable to our current estimate because of somewhat different survey approaches and estimation techniques. Nevertheless, the

results provide a basis for at least a rough comparison of the overall extent of the decline of sea otters in southwest Alaska. When compared to the estimate of 94,050–128,650 from Calkins and Schneider (1985), our current estimate

of approximately 41,500 sea otters is 53,000–87,000 lower, which is 56–68 percent lower than the estimate for 1976.

Translocated Sea Otter Populations

As part of efforts to re-establish sea otters in portions of their historical range, otters from Amchitka Island (part of the Aleutian Islands) were translocated to other areas outside the range of what we now recognize as the southwest Alaska distinct population segment, but within the range of *E. l. kenyoni* (Jameson *et al.* 1982). These translocation efforts met with varying degrees of success. From 1965 to 1969, 412 otters (89 percent from Amchitka Island, and 11 percent from Prince William Sound, which is in southcentral Alaska, outside the range of the southwest Alaska DPS) were translocated to six sites in southeast Alaska (Jameson *et al.* 1982). Since that time, these translocated populations have grown rapidly in numbers and expanded their range. The most recent surveys conducted between 1994 and 1996 estimated 12,632 otters in southeast Alaska (USFWS 2002b).

Sea otters from Amchitka Island also were translocated to Washington and Oregon, and to British Columbia, Canada, between 1969 and 1972 (Jameson *et al.* 1982). Sea otters translocated to British Columbia were captured at Amchitka Island and Prince William Sound; the otters translocated to Washington and Oregon were captured at Amchitka Island only. The British Columbia and Washington populations have grown in number and expanded their range, while the Oregon population disappeared. The most recent estimates of population size are 550 in Washington and 2,000 in British Columbia (Jameson and Jeffries 2001; Watson *et al.* 1997). Although these populations, as well as sea otters in southeast Alaska, are descended from sea otters at Amchitka Island, they are geographically isolated from the

southwest Alaska population and their parent population by hundreds of kilometers (see section entitled Distinct Vertebrate Population Segment, below) and are not included in this proposed listing action.

The total number of otters removed from Amchitka as part of this translocation program was just over 600 animals (Jameson *et al.* 1982). Estes (1990) estimated that the sea otter population at Amchitka Island remained essentially stable at more than 5,000 otters between 1972 and 1986, and consequently there is no evidence that removals for the translocation program have been a contributing factor in the current population decline.

Previous Federal Action

Based on the results of the April 2000 sea otter survey in the Aleutian Islands, we added sea otters in the Aleutians to our list of candidate species in August of 2000 (65 FR 67343). On October 25, 2000, we received a petition from the Center for Biological Diversity (Center) in Berkeley, California, requesting that we list the Aleutian population of the northern sea otter as endangered. As we already had identified sea otters in the Aleutians as a candidate species, we considered the petition to be a second, redundant petition, and in accordance with our petition management guidance (61 FR 36075) did not make an additional 90-day or 12-month finding on this petition. On November 14, 2000, we received a Notice of Intent to sue from the Center challenging our decision not to propose to list sea otters in the Aleutians under the Act. We responded to the Center that funds were not available during Fiscal Year 2001 to prepare a proposed listing rule.

On August 21, 2001, we received a petition from the Center to designate the

Alaska stock of sea otters (State-wide) as depleted under the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1361 *et seq.*). Under the MMPA, a marine mammal species or population stock is considered to be depleted when it is below its Optimum Sustainable Population (OSP) level. The OSP is defined in the MMPA as: "the number of animals which will result in the maximum productivity of the population or the species, keeping in mind the carrying capacity of the habitat and the health of the ecosystem of which they form a constituent element." In accordance with the MMPA, we published a notice in the **Federal Register** on September 6, 2001, announcing the receipt of this petition (66 FR 4661). On November 2, 2001, we published our finding on the petition in the **Federal Register** (66 FR 55693). While we acknowledged the evidence of a population decline in the southwest Alaska stock, the best available information suggested that the southeast Alaska stock was increasing, and the southcentral Alaska stock was either stable or increasing. We found that the petitioned action was not warranted under the MMPA for the following reasons: (1) The best estimate of the population size for the entire state of Alaska was greater than the value presented in the petition; (2) based on the best estimate of population size, the Alaska stock of sea otters was above OSP level; and (3) recent information had identified the existence of three stocks of sea otters in Alaska: southwest, southcentral, and southeast (Gorbics and Bodkin 2001). The boundaries of these three stocks are depicted in Figure 5.

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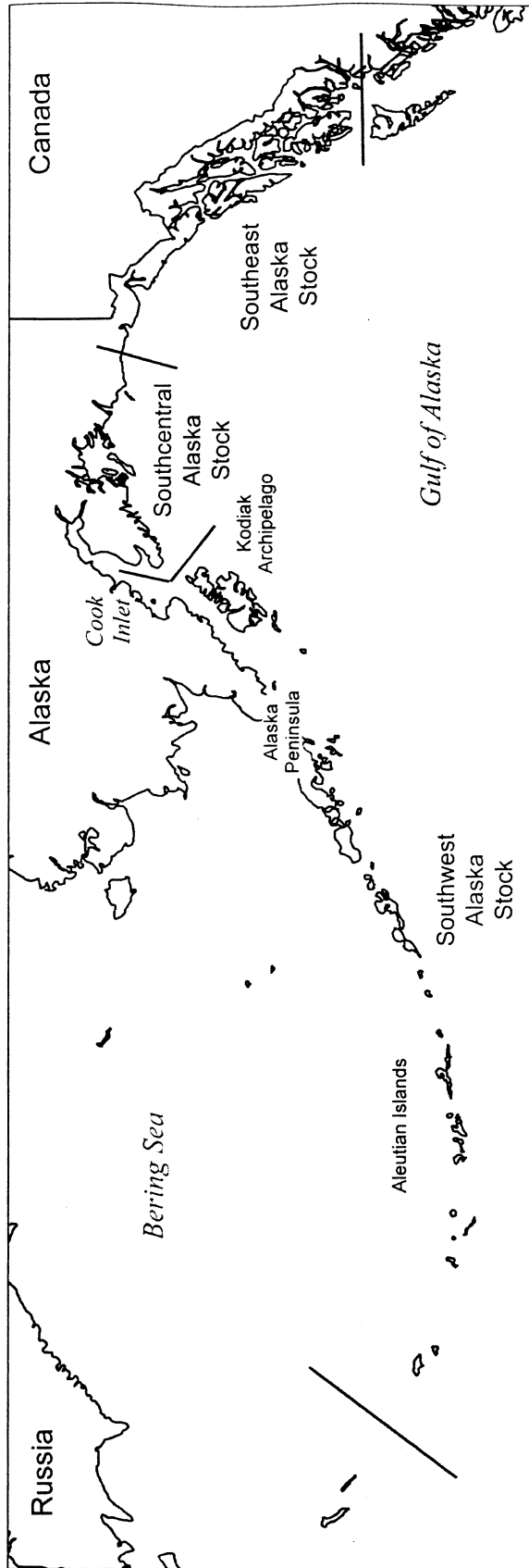


Figure 5. Northern sea otter boundaries in Alaska, from Gorbics and Bodkin (2001).

We recently revised the MMPA stock assessment reports for sea otters in Alaska. Draft stock assessment reports identifying the three stocks of sea otters were made available for public review and comment from March 28 to June 26, 2002 (67 FR 14959). The sea otter stock assessment reports were finalized on August 20, 2002, and notice of their availability was published on October 9, 2002 (67 FR 62979).

On January 11, 2002, we received a petition from the Sea Otter Defense Initiative (SODI), a project of the Earth Island Institute, in Deer Isle, Maine. The petition requested that we emergency and permanently list the southwest Alaska stock of sea otters as endangered. We responded to SODI that, based on the best available population estimate that we prepared in response to the Center's petition to list the Alaska stock of sea otters as depleted under the MMPA, an emergency listing of the southwest Alaska stock was not warranted. We also notified SODI that we had begun the preparation of this proposed rule during Fiscal Year 2002.

Based on additional sea otter surveys along the Alaska Peninsula and Kodiak archipelago, and the identification of multiple stocks of sea otters in Alaska, we expanded the candidate species designation on June 3, 2002, to include the geographic range of the southwest Alaska stock of the northern sea otter. Notification of this change was included in our June 13, 2002, notice of review of candidate species (67 FR 40657).

Distinct Vertebrate Population Segment

Pursuant to the Act, we must consider for listing any species, subspecies, or, for vertebrates, any distinct population segment (DPS) of these taxa if there is sufficient information to indicate that such action may be warranted. To interpret and implement the DPS provision of the Act and Congressional guidance, the Service and the National Marine Fisheries Service published, on December 21, 1994, a draft Policy Regarding the Recognition of Distinct Vertebrate Population Segments Under the Endangered Species Act and invited public comments on it (59 FR 65885). After review of comments and further consideration, the Services adopted the interagency policy as issued in draft form, and published it in the **Federal Register** on February 7, 1996 (61 FR 4722). This policy addresses the recognition of DPSs for potential listing actions. The policy allows for more refined application of the Act that better reflects the biological needs of the taxon being considered, and avoids the inclusion of entities that do not require its protective measures.

Under our DPS policy, three elements are considered in a decision regarding the status of a possible DPS as endangered or threatened under the Act. These are applied similarly for additions to the list of endangered and threatened species, reclassification, and removal from the list. They are: (1) Discreteness of the population segment in relation to the remainder of the taxon; (2) the significance of the population segment to the taxon to which it belongs; and (3) the population segment's conservation status in relation to the Act's standards for listing (*i.e.*, is the population segment, when treated as if it were a species, endangered or threatened?). A systematic application of the above elements is appropriate, with discreteness criteria applied first, followed by significance analysis. Discreteness refers to the isolation of a population from other members of the species and we evaluate this based on specific criteria. We determine significance by using the available scientific information to determine the DPS's importance to the taxon to which it belongs. If we determine that a population segment is discrete and significant, we then evaluate it for endangered or threatened status based on the Act's standards.

Discreteness

Under our Policy Regarding the Recognition of Distinct Vertebrate Population Segments, a population segment of a vertebrate species may be considered discrete if it satisfies either one of the following conditions:

1. It is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological discontinuity may provide evidence of this separation.

2. It is delimited by international governmental boundaries within which differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist that are significant in light of section 4(a)(1)(D) of the Act.

The focus of our DPS evaluation is the subspecies *E. l. kenyoni*, which occurs from the west end of the Aleutian Islands in Alaska, to the coast of the State of Washington (Wilson *et al.* 1991), as depicted in Figure 1. To the west of the Aleutian Islands, the sea otters in Russia are recognized as a separate subspecies, *E. l. lutris*. To the east of the Aleutians, a discontinuity in sea otter distribution occurs at Cook Inlet. This discontinuity also was specifically recognized during the process of identifying marine mammal

stocks under the MMPA, and is reflected by the boundary separating the southwest Alaska stock of sea otters from the southcentral stock, as shown in Figure 4. Although sea otters inhabit both the eastern and western shores of lower Cook Inlet, their distribution around the Inlet is not contiguous because the presence of winter sea ice in upper Cook Inlet forms a natural break in sea otter distribution. This break in sea otter distribution in the upper portion of the Inlet persists throughout the ice-free portions of the year as well (Rotterman and Simon-Jackson 1988).

In the lower portion of Cook Inlet, a different type of barrier exists in the form of an expanse of deep water. The distance across lower Cook Inlet ranges from 50–90 km (31–56 miles). While sea otters are physically capable of swimming these distances, the water depths of up to 260 m (142 fathoms) and lack of food resources for sea otters in deep water areas makes such movements across this open water area quite unlikely.

Surveys conducted for sea otters and other species in the area of Lower Cook Inlet confirm the discontinuity of sea otters in this area. In the summer of 1993, Agler *et al.* (1995) conducted boat-based surveys of marine birds and mammals, including sea otters, in Lower Cook Inlet. During approximately 1,574 km (978 miles) of survey effort, only one sea otter was observed in the center of the Inlet. More recently, during an aerial survey of sea otters conducted in the summer of 2002, no otters were observed on 324 km (201 miles) of transects flown across the center of Cook Inlet (USGS in litt. 2002).

Information gathered incidental to surveys of other species also indicates that sea otters rarely occur in the offshore areas of lower Cook Inlet, further confirming the discontinuity of sea otters in this area. NMFS has conducted aerial surveys of beluga whales, *Delphinapterus leucas*, in Cook Inlet since 1993. In addition to beluga whales, observers recorded observations of other marine mammals, including sea otters. During these surveys, which covered a combined total of 11,583 km (7,197 miles) of systematic transects flown across the inlet over several years, no sea otters were observed in the deeper, offshore areas of Cook Inlet (Rugh *et al.* 2000). The NMFS also conducted a marine mammal observer program during the Cook Inlet salmon drift and set gillnet fisheries in 1999 and 2000 (Fadely and Merklein 2001). During this period with several thousand hours of observations, no sea otters were recorded in the offshore

areas of Cook Inlet. Given the amount of survey effort that has been expended, the almost complete lack of observations in deeper offshore waters indicates that there is little exchange of sea otters between the eastern and western shores of lower Cook Inlet.

The population of sea otters represented by the southwest Alaska stock is genetically different from both the southcentral and southeast Alaska stocks. Studies using mitochondrial DNA analysis identified ten different genotypes within the range of sea otters; six of these ten different genotypes are found in Alaska (Sanchez 1992, Bodkin *et al.* 1992, Cronin *et al.* 1996). Gorbics and Bodkin (2001) demonstrated that mitochondrial DNA haplotype frequencies (a descriptive genetic characteristic) differ significantly among sea otters from southwest Alaska (west of Cook Inlet) compared to those from southcentral Alaska (east of Cook Inlet) and southeast Alaska.

Additional genetic analysis of both mitochondrial and nuclear (microsatellite) DNA (these are two different approaches for examining genetic diversity) has shown similar patterns of genetic differentiation and supports the identification of multiple populations of sea otters in Alaska. As mitochondrial DNA is maternally inherited, it can only be used to assess gene flow in females. Analysis of nuclear genetic markers, such as microsatellite DNA, can be used to assess gene flow by both males and females and provide a better quantification of genetic differentiation than mitochondrial DNA alone (Cronin *et al.* 2002). Pairwise comparisons of both mitochondrial and nuclear DNA between individual sampling locations from southwest and southcentral Alaska had 40 significant differences out of 60 comparisons (67%). In addition, tests of heterogeneity between pooled sampling locations showed significant differences between sea otters in southwest and southcentral Alaska in three out of three tests (Cronin *et al.* 2002). These genetic differences are most likely the result of little or no movement of animals across stock boundaries (Gorbics and Bodkin 2001). The boundary between the southwest and southcentral stocks of sea otters is in the area of Cook Inlet, and the aforementioned genetic differences and lack of observations from the center of Cook Inlet indicate that sea ice and deep water constitute physical barriers that effectively limit animal movements between the southwest and southcentral Alaska stocks of sea otters.

Sea otters in southwest and southcentral Alaska also differ morphologically. Comparison of 10

skull characteristics between 26 adult sea otters from Amchitka Island and 42 sea otters from Prince William Sound showed numerous statistically significant differences, with the Amchitka otters being the larger of the two (Gorbics and Bodkin 2001).

These genetic and morphological differences were part of the basis for identification of sea otter population stocks under the MMPA (USFWS 2002a, USFWS 2002b, USFWS 2002c). The Service and NMFS have adopted the methods of Dizon *et al.* (1992), who outlined four criteria for consideration when identifying marine mammal population stocks: (1) Distribution; (2) population response; (3) morphology; and (4) genetics. Applying these criteria to the best available scientific information, Gorbics and Bodkin (2001) identified three stocks of sea otters in Alaska, the southwest, southcentral, and southeast stocks, with ranges as depicted in Figure 5.

In summary, sea otters from the Aleutians Islands to the middle of Cook Inlet are a population that differs from other sea otters in several respects. Sea otters to the west of the Aleutians are recognized as belonging to a different taxon, the subspecies *E. l. lutris*. Within the taxon *E. l. kenyoni*, there are physical barriers to movement across the upper and the lower portions of Cook Inlet, and there are morphological and genetic differences between sea otters that correspond to the southwest and southcentral Alaska stocks that we identified under the MMPA, with Cook Inlet being the boundary separating these stocks. The geographic separation between the southwest and southeast Alaska stocks is even greater than between the southwest and southcentral Alaska stocks. In addition, Bodkin *et al.* (1999) note that haplotype frequencies in southeast Alaska (a translocated population) differed significantly from both "parent" stocks.

Based on our consideration of the best scientific information available, we find that the southwest Alaska population of the northern sea otter that occurs from the Aleutian Islands to Cook Inlet, corresponding to the southwest Alaska stock as identified by us previously under the MMPA (Figure 5), is markedly separated from other populations of the same taxon as a consequence of physical factors, and there is genetic and morphological discontinuity that is evidence of this separation. Therefore, the southwest Alaska population of the northern sea otter meets the criterion of discreteness under our Policy Regarding the Recognition of Distinct Vertebrate Population Segments.

Significance

If we determine a population segment is discrete, we next consider available scientific evidence of its significance to the taxon to which it belongs. Our policy states that this consideration may include, but is not limited to, the following:

1. Persistence of the discrete population segment in an ecological setting unusual or unique for the taxon,
2. Evidence that loss of the discrete population segment would result in a significant gap in the range of the taxon,
3. Evidence that the discrete population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range, or
4. Evidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.

The sea otter population that corresponds to the southwest Alaska stock contains over 60 percent of the range for the subspecies *E. l. kenyoni*. Following protection from commercial exploitation in 1911, sea otters recovered quickly in southwest Alaska, which is a remote part of the State. In the mid-1980s, biologists believed that 94 percent of the subspecies *E. l. kenyoni*, and 84 percent of the world population, existed in southwest Alaska (Calkins and Schneider 1985). Despite the recent population decline, current information indicates that roughly half of all sea otters in the subspecies *E. l. kenyoni* exist in the southwest Alaska population. Thus, the loss of this population segment would result in a significant gap in the range of the taxon because it comprises 60 percent of the range and approximately half of the population of the subspecies. In addition, the best scientific information available demonstrates the southwest Alaska population differs significantly from the southcentral and southeast Alaska stocks in terms of genetic characteristics (Gorbics and Bodkin 2001). Therefore, we find that the southwest Alaska population segment is significant to the taxon to which it belongs because the loss of this segment would result in a significant gap in the range of the taxon, and because there is evidence that it differs markedly from other populations of the taxon in its genetic characteristics.

Summary of Discreteness and Significance Evaluations

Based on the above consideration of the southwest Alaska population of the northern sea otter's discreteness and its

significance to the remainder of the taxon, we find that it is a distinct population segment, or DPS, as described under our Policy Regarding the Recognition of Distinct Vertebrate Population Segments. The population's discreteness is due to its separation from other populations of the same taxon as a consequence of physical factors, and there are morphological and genetic differences from the remainder of the taxon that are evidence of this separation. The population segment's significance to the remainder of the taxon is due principally to the significant gap that its loss would represent in the range of the taxon, and also to the fact that it differs markedly from other populations of the species in its genetic characteristics. We refer to this population segment as the southwest Alaska DPS for the remainder of this proposed rule.

Conservation Status

Pursuant to the Act, we must consider for listing any species, subspecies, or, for vertebrates, any distinct population segment of these taxa, if there is sufficient information to indicate that such action may be warranted. We have evaluated the conservation status of the southwest Alaska DPS of the northern sea otter in order to make a determination relative to whether it meets the Act's standards for listing the DPS as endangered or threatened. Based on the definitions provided in section 3 of the Act, endangered means the DPS is in danger of extinction throughout all or a significant portion of its range, and threatened means the DPS is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Summary of Factors Affecting the Species

Section 4 of the Act and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal list. As defined in section 3 of the Act, the term "species" includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species or vertebrate fish or wildlife which interbreeds when mature. We may determine a species to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act. These factors, and their application to the southwest Alaska DPS of the northern sea otter, are as follows:

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

Habitat destruction or modification are not known to be major factors in the decline of the southwest Alaska DPS of the northern sea otter. At present, no curtailment of range has occurred, as sea otters still persist throughout the range of the DPS, albeit at markedly reduced densities. However, as there is no evidence to suggest that the decline has abated, it is possible that additional losses may occur that would curtail the range of sea otters in southwest Alaska.

Human-induced habitat effects occur primarily in the form of removal of some of the prey species used by sea otters as a result of resource use such as commercial fishing, which occurs throughout southwest Alaska. While there are some fisheries for benthic invertebrates in southwest Alaska, there is little competition for prey resources due to the limited overlap between the geographic distribution of sea otters and fishing effort. In addition, the total commercial catch of prey species used by sea otters is relatively small (Funk 2003).

In studies of sea otters in the Aleutians, there was no evidence that sea otters are nutritionally stressed in that area, and foraging behavior, measured as percent feeding success, has increased during the 1990's (Estes *et al.* 1998).

Development of harbors and channels by dredging may affect sea otter habitat on a local scale by disturbing the sea floor and benthic invertebrates that sea otters eat. Typically, the number and size of these activities are small relative to the overall range of the DPS.

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

Following 170 years of commercial exploitation, sea otters were protected in 1911 under the International Fur Sea Treaty, which prohibited further hunting. In 1972, the Marine Mammal Protection Act (MMPA) established a moratorium on the take of all marine mammals in U.S. waters. Section 101(b) of the MMPA provides an exemption for Alaska Natives to take marine mammals for subsistence purposes. Although the Native exemption was established in 1972, subsistence harvest of sea otters did not begin in earnest until the mid-1980s (Simon-Jackson 1988). In October 1988, we initiated the marine mammal Marking, Tagging, and Reporting Program (MTRP) to monitor the harvest of sea otter, polar bear (*Ursus maritimus*), and Pacific walrus

(*Odobenus rosmarus divergens*) in Alaska (50 CFR 18.23(f)). The majority of the sea otter harvest occurs in southeast and southcentral Alaska. Information from the MTRP estimates the subsistence harvest of sea otters from the southwest Alaska DPS averaged less than 100 sea otters per year during the 1990s (Burn and Doroff in prep.). Based on the magnitude of the current decline, the impact of the subsistence harvest is negligible.

Scientific research on sea otters occurs primarily as aerial and skiff surveys of abundance, and such surveys are conducted infrequently (once every few years) and when they occur, they last for very short durations of time. During the 1990s, 198 otters were captured and released as part of health monitoring and radio telemetry studies at Adak and Amchitka (T. Tinker, University of California at Santa Cruz, *in litt.* 2003). Based on the magnitude of the current decline, we do not believe that the impact of surveys, or the impact of capture/release activities, is a significant factor.

Translocations of sea otters from southwest Alaska to other areas also has occurred. These translocations took place from 1965 to 1972, and involved removal of a total of just over 600 sea otters from Amchitka Island (Jameson *et al.* 1982). Estes (1990) estimated that the sea otter population at Amchitka Island remained essentially stable at more than 5,000 otters between 1972 and 1986, and consequently there is no evidence that removals for the translocation program have resulted in overutilization.

C. *Disease or Predation*

Fish processing operations produce large quantities of organic waste, which can affect the health of sea otters on a local scale. In some areas of Alaska, sea otters have been observed consuming fish waste. Necropsies of carcasses recovered in Orca Inlet, Prince William Sound (which is not within the range of the southwest Alaska DPS), revealed that some otters in these areas had developed parasitic infections and fish bone impactions that contributed to the deaths of these animals (Ballachey *et al.* 2002, King *et al.* 2000). Measures such as heating and grinding waste materials, or barging it further offshore, have proven successful at eliminating these impacts. There is no evidence that the fish processing operations are resulting in disease on any substantial scope or scale for the southwest Alaska DPS of the northern sea otter.

The cause of the sea otter decline in the Aleutians has been explored by reviewing available data on sea otter

reproduction, survival, distribution, habitat, and environmental contaminants. Estes *et al.* (1998) concluded that the observed sea otter declines there were most likely the result of increased adult mortality. While disease, pollution, and starvation may all influence sea otter mortality, no evidence available at this time suggests these factors are contributing to the decline in the Aleutians.

The weight of evidence of available information suggests that predation by killer whales (*Orcinus orca*) may be the most likely cause of the sea otter decline in the Aleutian Islands (Estes *et al.* 1998). Data that support this hypothesis include: (1) A significant increase in the number of killer whale attacks on sea otters during the 1990s (Hatfield *et al.* 1998); (2) scarcity of beachcast otter carcasses that would be expected if disease or starvation were occurring; and (3) markedly lower mortality rates between sea otters in a sheltered lagoon (where killer whales cannot go) as compared to an adjacent exposed bay. Similar detailed studies have not yet been conducted in other areas within the southwest Alaska DPS, and the role of killer whale predation on sea otters outside of the Aleutians is unknown. (See the discussion of Factor E, below, for additional information concerning killer whales.)

Besides killer whales, other predators on sea otters include white sharks (*Carcharodon carcharias*), brown bears (*Ursus arctos*), and coyotes (*Canis latrans*) (Riedman and Estes 1990). Carcasses of sea otter pups have been observed in bald eagle (*Haliaeetus leucocephalus*) nests (Sherrod *et al.* 1975). Although there is anecdotal information regarding shark attacks on sea otters in Alaska, we believe that the impact of sharks and predators other than killer whales on the southwest Alaska DPS of the northern sea otter is negligible.

D. The Inadequacy of Existing Regulatory Mechanisms

The MMPA (16 U.S.C. 1361), enacted in 1972, is an existing regulatory mechanism that involves sea otters. The MMPA placed a moratorium on the taking of marine mammals in U.S. waters. Similar to the definition of "take" under section 3 of the ESA, "take" is defined under the MMPA as "harass, hunt, capture, or kill, or attempt to harass, hunt, capture or kill" (16 U.S.C. 1362). The MMPA does not include provisions for restoration of depleted species or population stocks, and does not provide measures for habitat protection.

Section 101(b) of the MMPA provides an exemption to allow Alaska Natives to take marine mammals for subsistence purposes. The MMPA does not allow any regulation of the subsistence harvest prior to a finding of depletion. By definition, a marine mammal species or stock that is designated as "threatened" or "endangered" under the Endangered Species Act is also classified as "depleted" under the MMPA. The converse is not true, however, as a marine mammal species or stock may be designated as depleted under the MMPA, but not be listed as threatened under the ESA. As stated earlier, current levels of subsistence harvest of sea otters, which amounted to fewer than 100 sea otters per year during the 1990s, are believed to have a negligible impact on this DPS, and is therefore not a cause for concern at this time.

Section 118 of the MMPA addresses the taking of marine mammals incidental to commercial fishing operations. This section, which was added to the MMPA in 1994, establishes a framework that authorizes the incidental take of marine mammals during commercial fishing activities. In addition, this section outlines mechanisms to monitor and reduce the level of incidental take. Information from monitoring programs administered by NMFS indicates that interactions between sea otters and commercial fisheries result in less than one instance of mortality or serious injury per year within the southwest Alaska DPS and are, therefore, not a cause for concern at this time (USFWS 2002a).

Northern sea otters are not on the State of Alaska lists of endangered species or species of special concern. Alaska Statutes sections 46.04 200–210 specify State requirements for Oil and Hazardous Substance Discharge and Prevention Contingency Plans. These sections include prohibitions against oil spills and provide for the development of contingency plans to respond to spills should they occur. The potential impacts of oil spills on sea otters are addressed in Factor E.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Sea otters are particularly vulnerable to contamination by oil (Costa and Kooyman 1981). As they rely solely on fur for insulation, frequent grooming is essential to maintain the insulative properties of the fur. Vigorous grooming bouts generally occur before and after feeding episodes and rest periods. Oiled sea otters are highly susceptible to hypothermia resulting from the reduced insulative properties of oil-matted fur. Contaminated sea otters also are

susceptible to the toxic effects from oil ingested while grooming. In addition, volatile hydrocarbons may affect the eyes and lung tissues of sea otters in oil-contaminated habitats and contribute to mortality.

The sea otter's vulnerability to oil was clearly demonstrated during the *Exxon Valdez* oil spill in 1989, when thousands of sea otters were killed in Prince William Sound, Kenai Fiords, the Kodiak archipelago, and the Alaska Peninsula. Although the spill occurred hundreds of miles outside the range of the southwest Alaska DPS of the northern sea otter, an estimated 905 sea otters from this population segment died as a result of the spill (Handler 1990, Doroff *et al.* 1993, DeGange *et al.* 1994).

Although numerous safeguards have been established since the *Exxon Valdez* oil spill to minimize the likelihood of another spill of catastrophic proportions in Prince William Sound, vessels and fuel barges are a potential source of oil spills that could impact sea otters in southwest Alaska. Since 1990 in Alaska, more than 4,000 spills of oil and chemicals on water have been reported to the U.S. Coast Guard National Response Center. Of these, nearly 1,100 occurred within the range of the southwest Alaska DPS of the northern sea otter. Reported spills include a variety of quantities (from a few gallons to thousands of gallons) and materials (primarily diesel fuel, gasoline, and lubricating oils). Reports of direct mortality of sea otters as a result of these spills are lacking and the impact of chronic oiling on sea otters in general, or on the southwest Alaska DPS, is unknown. Also, despite the fact that locations such as boat harbors have higher occurrences of small spills than more remote areas, individual sea otters have been observed to frequent some harbors for years. The overall health, survivorship, and reproductive success of these otters is not known.

Currently, there is no oil and gas production within the range of the southwest Alaska DPS of the northern sea otter. Proposed Outer Continental Shelf (OCS) oil and gas lease sales are planned, however, for lower Cook Inlet. Based on a review of the draft Environmental Impact Statement for these lease sales, it is our opinion that the potential impacts of this development on the southwest Alaska DPS will be negligible as sea otters occur primarily in the nearshore zone and the lease sale area is at least three miles off shore. Therefore, sea otters do not significantly overlap with the lease sale area.

Contaminants may also affect sea otters and their habitat. Potential sources of contaminants include local sources at specific sites in Alaska, and remote sources outside of Alaska. One category of contaminants that has been studied are polychlorinated biphenyls (PCBs), which may originate from a wide variety of sources. Data from blue mussels collected from the Aleutian Islands in southwest Alaska through southeast Alaska indicate background concentrations of PCBs at most sampling locations, with "hot spots" of high PCB concentrations evident at Adak (Sweeper Cove), Dutch Harbor, and Amchitka. Notwithstanding these "hot spots," PCB levels in samples from southwest Alaska actually are lower than those in southeast Alaska sites. The PCB concentrations found in liver tissues of sea otters from the Aleutians were similar to or higher than those causing reproductive failure in captive mink (Estes *et al.* 1997, Giger and Trust 1997), but the toxicity of PCBs to sea otters is unknown. Population survey data for the Adak Island area indicates normal ratios of mothers and pups, which suggests that reproduction in sea otters is not being suppressed in sea otters in that area (Tinker and Estes 1996). As PCB's typically inhibit reproduction rather than cause adult mortality, these findings do not suggest a reproductive impact due to PCBs. Sample sizes were limited, however, and data needed to fully evaluate the potential role of PCBs and other environmental contaminants in the observed sea otter population decline are incomplete. In summary, a conclusive link between the sea otter decline and the effects of specific contaminants in their habitat has not been established.

Sea otters are sometimes taken incidentally in commercial fishing operations. Information from the NMFS list of fisheries indicates that entanglement leading to injury or death occurs infrequently in set net, trawl, and finfish pot fisheries within the range of the southwest Alaska DPS of the northern sea otter (67 FR 2410, January 17, 2002). During the summers of 1999 and 2000, NMFS conducted a marine mammal observer program in Cook Inlet for salmon drift and set net fisheries. No mortality or serious injury of sea otters was observed in either of these fisheries in Cook Inlet (Fadely and Merklein 2001). Similarly, preliminary results from an ongoing observer program for the Kodiak salmon set net fishery also report only four incidents of entanglement of sea otters, with no mortality or serious injury (M. Sternfeld,

NMFS, in litt. 2003). Additional marine mammal observer programs will continue to improve our understanding of this potential source of sea otter mortality.

The hypothesis that killer whales may be the principal cause of the sea otter decline suggests that there may have been significant changes in the Bering Sea ecosystem (Estes *et al.* 1998). For the past several decades, harbor seals (*Phoca vitulina*) and Steller sea lions (*Eumetopias jubatus*), the preferred prey species of transient, marine mammal-eating killer whales, have been in decline throughout the western north Pacific. In 1990, Steller sea lions were listed under the Act as threatened under the ESA (55 FR 49204). Their designation was later revised to endangered in western Alaska, and threatened in eastern Alaska, with the dividing line located at 144 degrees west longitude (62 FR 24345). Estes *et al.* (1998) hypothesized that killer whales may have responded to declines in their preferred prey species, harbor seals and Stellar sea lions, by broadening their prey base to include sea otters. While the cause of sea lion and harbor seal declines is the subject of much debate, it is possible that changes in composition and abundance of forage fish as a result of climatic changes and/or commercial fishing practices may be contributing factors.

It also recently has been hypothesized that the substantial reduction of large whales from the North Pacific Ocean as a result of post-World War II industrial whaling may be the ultimate cause of the decline of several species of marine mammals in the north Pacific (Springer *et al.* 2003). Killer whales are considered to be the foremost natural predator of large whales. By the early 1970's, the biomass of large whales had been reduced by 95 percent, a result attributed to commercial harvesting. This reduction may have caused killer whales to begin feeding more intensively on smaller coastal marine mammals such as sea lions and harbor seals. As those species became increasing rare, the killer whales that preyed on them may have expanded their diet to include the even smaller and calorically less profitable, sea otter. The information supporting this theory is still under review. Although the proximate cause of the current sea otter decline may be predation by killer whales, the ultimate cause remains unknown.

Conclusion of Status Evaluation

We have carefully assessed the best scientific and commercial information available regarding the past, present,

and future threats faced by the southwest Alaska DPS of the northern sea otter in determining to propose this rule. The Act defines an endangered species as one that is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become an endangered species in the foreseeable future throughout all or a significant portion of its range.

To date, investigations of the cause(s) of the sea otter decline have been limited to the Aleutian islands; little research has been conducted in other portions of the southwest Alaska DPS. Although killer whale predation has been hypothesized to be responsible for the sea otter decline in the Aleutian islands, the cause(s) of the decline throughout southwest Alaska are not definitively known.

At present, sea otters have not been extirpated from any portion of the range of the southwest Alaska DPS, however they have been reduced to markedly lower densities, particularly in the Aleutian Islands and south Alaska Peninsula areas. Recent survey information indicates that the southwest Alaska DPS has declined by at least 56–68 percent during the past 10–15 years. Estimated rates of decline have been as great as 17.5 percent per year in the Aleutian archipelago (Doroff *et al.* 2003). At present, we have no evidence to indicate that the decline has abated, and we have no reason to expect that the decline will cease. If the trend were to continue at the overall estimated decline rates for the southwest Alaska DPS, which range from 5.2–10.6 percent per year, the DPS would be further reduced from its current level by 66–89 percent in 20 years, and could become extirpated in portions of its range.

Regardless of its cause, the severity and widespread nature of the decline in the southwest Alaska sea otter DPS is quite serious. The decline may be due to predation by killer whales, which in turn may be the result of changes in the ecosystem. Also, regardless of what the reason for the decline may be, at present we have no evidence to indicate that the decline has abated, and we have no reason to expect that the decline will cease. Given the current population size and distribution, we do not believe the DPS is presently in danger of extinction throughout all or a significant portion of its range. Based on our evaluation of the best available scientific information, however, we believe it is likely to become an endangered species in the foreseeable future throughout all or a significant portion of its range. Therefore, we are proposing to list the

southwest Alaska DPS of the northern sea otter as threatened.

Critical Habitat

Critical habitat is defined in section 3 of the Act as: (i) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. "Conservation" is defined in section 3 as meaning the use of all methods and procedures needed to bring the species to the point at which listing under the Act is no longer necessary.

The primary regulatory effect of critical habitat is the section 7(a)(2) requirement that Federal agencies shall insure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of designated critical habitat.

Section 4(a)(3) of the Act and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, we designate critical habitat at the time a species is determined to be endangered or threatened. Our regulations (50 CFR 424.12(a)(1)) state that designation of critical habitat is not prudent when one or both of the following situations exist—(1) the species is threatened by taking or other activity and the identification of critical habitat can be expected to increase the degree of threat to the species, or (2) such designation of critical habitat would not be beneficial to the species. Our regulations (50 CFR 424.12(a)(2)) further state that critical habitat is not determinable when one or both of the following situations exist: (1) Information sufficient to perform required analysis of the impacts of the designation is lacking, or (2) the biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat.

Delineation of critical habitat requires identification of the physical and biological habitat features that are essential to the conservation of the species. In general terms, critical habitat for the southwest Alaska DPS of the northern sea otter may be a function of several factors, including: (1) Water depth; (2) proximity to shore; and (3) sheltered areas that provide refuge from

rough weather and/or aquatic predators. Unlike other marine mammal species such as seals and sea lions, sea otters do not occur at high-density focal areas such as rookeries and haulout sites. Although they are occasionally observed on land, sea otters are typically distributed at low densities throughout shallow, nearshore marine waters. In addition to nearshore foraging areas, sea otters may move from exposed, open-water areas, into protected bays, lagoons, and inlets when inclement weather produces large waves. These sheltered areas may be important resting areas for sea otters, especially mothers with dependent pups. In addition, some sheltered areas may provide refuge from aquatic predators, such as killer whales and sharks.

With respect to whether it is prudent to designate critical habitat for the southwest Alaska DPS of the northern sea otter at the time of listing, such a designation would not be expected to increase the threat to the DPS. However, information sufficient to perform the required analysis of the impacts of the designation of critical habitat is lacking at this time. Further, at this time the identification of specific physical and biological features and specific areas for consideration as critical habitat is complicated by uncertainty as to the extent to which habitat may or may not be a limiting factor for this DPS, resulting in uncertainty as to which specific areas might be essential to the conservation of the species and thus meet a key aspect of the definition of critical habitat. Consequently, the designation of critical habitat for the southwest DPS of the northern sea otter is not determinable at this time. In the Public Comments Solicited section of this proposed rule we specifically request information regarding critical habitat. If the listing of the DPS becomes final, we then will consider whether to propose the designation of critical habitat.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain activities. Recognition through listing results in public awareness and conservation actions by Federal, State, and local agencies, private organizations, and individuals. The Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required of Federal agencies and the

prohibitions against taking and harm are discussed below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is listed as endangered or threatened and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) requires Federal agencies to confer informally with us on any action that is likely to jeopardize the continued existence of a species proposed for listing or result in destruction or adverse modification of proposed critical habitat. If a species is subsequently listed, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with us under the provisions of section 7(a)(2) of the Act.

Several Federal agencies are expected to have involvement under section 7 of the Act regarding the southwest Alaska DPS of the northern sea otter. The National Marine Fisheries Service may become involved through their permitting authority for crab and ground fisheries. The Environmental Protection Agency may become involved through their permitting authority for the Clean Water Act. The U.S. Corps of Engineers may become involved through its responsibilities and permitting authority under section 404 of the Clean Water Act and through future development of harbor projects. Minerals Management Service may become involved through administering their programs directed toward offshore oil and gas development. The Denali Commission may be involved through their potential funding of fueling and power generation projects. The U.S. Coast Guard may become involved through their development of docking facilities.

The listing of the southwest Alaska DPS of the northern sea otter would subsequently lead to the development of a recovery plan for this species. Such a plan will bring together Federal, State, local agency, and private efforts for the conservation of this species. A recovery plan establishes a framework for interested parties to coordinate activities and to cooperate with each other in conservation efforts. The plan will set recovery priorities, identify responsibilities, and estimate the costs of the tasks necessary to accomplish the

priorities. It will also describe site-specific management actions necessary to achieve the conservation of the southwest Alaska DPS of the northern sea otter. Additionally, pursuant to Section 6 of the Act, we would be able to grant funds to the State of Alaska for management actions promoting the conservation of the southwest Alaska DPS of the northern sea otter.

Section 9 of the Act prohibits take of endangered wildlife. The Act defines take to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct. However, the Act also provides for the authorization of take and exceptions to the take prohibitions. Take of listed species by non-Federal property owners can be permitted through the process set forth in section 10 of the Act. For federally funded or permitted activities, take of listed species may be allowed through the consultation process of section 7 of the Act. The Service has issued regulations (50 CFR 17.31) that generally apply to threatened wildlife the prohibitions that section 9 of the Act establishes with respect to endangered wildlife. Our regulations for threatened wildlife also provide that a "special rule" under section 4(d) of the Act can be tailored for a particular threatened species. In that case, the general regulations for some section 9 prohibitions do not apply to that species, and the special rule contains the prohibitions, and exemptions, necessary and appropriate to conserve that species. The Act provides for an exemption for Alaska Natives in section 10(e) that allows any Indian, Aleut, or Eskimo who is an Alaskan Native who resides in Alaska to take a threatened or endangered species if such taking is primarily for subsistence purposes. Non-edible by-products of species taken pursuant to section 10(e) may be sold in interstate commerce when made into authentic native articles of handicrafts and clothing. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Further, it is illegal for any person to commit, to solicit another person to commit, or cause to be committed, any of these acts. Certain exceptions to the prohibitions apply to our agents and State conservation agencies.

The Act provides for the issuance of permits to carry out otherwise prohibited activities involving threatened or endangered wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22 and 17.23. Such permits are available for scientific purposes, to

enhance the propagation or survival of the species, and/or for incidental take in the course of otherwise lawful activities. Permits are also available for zoological exhibitions, educational purposes, or special purposes consistent with the purposes of the Act. Requests for copies of the regulations on listed species and inquiries about prohibitions and permits may be addressed to the Endangered Species Coordinator, U.S. Fish and Wildlife Service, 1011 East Tudor Road, Anchorage, Alaska 99503.

It is our policy, published in the **Federal Register** on July 1, 1994 (59 FR 34272), to identify, to the maximum extent practicable at the time a species is listed, those activities that would or would not likely constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effects of the listing on proposed and ongoing activities within a species' range.

For the southwest DPS of the northern sea otter, we believe that, based on the best available information, the following activities are unlikely to result in a violation of section 9, provided these activities are carried out in accordance with existing regulations and permit requirements:

(1) Possession, delivery, or movement, including interstate transport of authentic native articles of handicrafts and clothing made from northern sea otters that were collected prior to the date of publication in the **Federal Register** of a final regulation adding the southwest Alaska DPS of the northern sea otter to the list of threatened species;

(2) Sale, possession, delivery, or movement, including interstate transport of authentic native articles of handicrafts and clothing made from sea otters from the southwest Alaska DPS that were taken and produced in accordance with section 10(e) of the Act;

(3) Any action authorized, funded, or carried out by a Federal agency that may affect the southwest Alaska DPS of the northern sea otter, when the action is conducted in accordance with an incidental take statement issued by us under section 7 of the Act;

(4) Any action carried out for the scientific research or to enhance the propagation or survival of the southwest Alaska DPS of the northern sea otter that is conducted in accordance with the conditions of a section 10(a)(1)(A) permit; and

(5) Any incidental take of the southwest Alaska DPS of the northern sea otter resulting from an otherwise lawful activity conducted in accordance with the conditions of an incidental take permit issued under section 10(a)(1)(B)

of the Act. Non-Federal applicants may design a habitat conservation plan (HCP) for the species and apply for an incidental take permit. HCPs may be developed for listed species and are designed to minimize and mitigate impacts to the species to the greatest extent practicable.

We believe the following activities could potentially result in a violation of section 9 and associated regulations at 50 CFR 17.3 with regard to the southwest DPS of the northern sea otter; however, possible violations are not limited to these actions alone:

(1) Unauthorized killing, collecting, handling, or harassing of individual sea otters;

(2) Possessing, selling, transporting, or shipping illegally taken sea otters or their pelts;

(3) Unauthorized destruction or alteration of the nearshore marine benthos that actually kills or injures individuals sea otters by significantly impairing their essential behavioral patterns, including breeding, feeding or sheltering; and,

(4) Discharge or dumping of toxic chemicals, silt, or other pollutants (*i.e.*, sewage, oil, pesticides, and gasoline) into the nearshore marine environment that actually kills or injures individuals sea otters by significantly impairing their essential behavioral patterns, including breeding, feeding or sheltering.

We will review other activities not identified above on a case-by-case basis to determine whether they may be likely to result in a violation of section 9 of the Act. We do not consider these lists to be exhaustive and provide them as information to the public. You may direct questions regarding whether specific activities may constitute a violation of section 9 to the Field Supervisor, U.S. Fish and Wildlife Service, Anchorage Ecological Services Field Office, 605 West 4th Avenue, Room G-62, Anchorage, Alaska 99501.

Public Comments Solicited

We intend that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, we request comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any other interested party concerning this proposed rule. We particularly seek comments concerning:

(1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to this DPS;

(2) The location of any additional populations of this DPS;

(3) The specific physical and biological features to consider, and specific areas that meet the definition of critical habitat and that should or should not be considered for critical habitat designation as provided by section 4 of the Act;

(4) Additional information concerning the range, distribution, and size of this DPS; and

(5) Current or planned activities in the subject area and their possible impacts on this DPS.

If you wish to comment, you may submit your comments and materials concerning this proposal by any one of several methods, as listed above in **ADDRESSES**. If you submit comments by e-mail, please submit them as an ASCII file format and avoid the use of special characters and encryption. Please include "Attn: [RIN 1018-A144]" and your name and return address in your e-mail message. If you do not receive a confirmation from the system that we have received your e-mail message, contact us directly by calling our Marine Mammals Management Office at phone number 907/786-3800. Please note that this e-mail address will be closed out at the termination of the public comment period.

Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours.

Individual respondents may request that we withhold their home address from the rulemaking record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. Anonymous comments will not be considered. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

We will take into consideration your comments and any additional information received on this DPS when making a final determination regarding this proposal. The final determination may differ from this proposal based upon the information we receive.

Peer Review

In accordance with our policy published on July 1, 1994 (59 FR 34270), we will solicit the expert opinions of at least three appropriate and independent specialists for peer

review of this proposed rule. The purpose of such review is to ensure that listing decisions are based on scientifically sound data, assumptions, and analyses. We will send these peer reviewers copies of this proposed rule immediately following publication in the **Federal Register**. We will invite these peer reviewers to comment, during the public comment period, on the specific assumptions and conclusions regarding the proposed listing of this species. We will summarize the opinions of these reviewers in the final decision document, and we will consider their input as part of our process of making a final decision on the proposal.

Public Hearings

The Act provides for one or more public hearings on this proposal, if requested. You may request a public hearing on this proposed rule. Your request for a hearing must be made in writing and filed at least 15 days prior to the close of the public comment period. Address your request to the Supervisor (see **ADDRESSES** section). We will schedule at least one public hearing on this proposal, if requested, and announce the date, time, and place of any hearings in the **Federal Register** and local newspapers at least 15 days prior to the first hearing.

Clarity of the Rule

Executive Order 12866 requires agencies to write regulations that are easy to understand. We invite your comments on how to make this proposal easier to understand including answers to questions such as the following: (1) Is the discussion in the **SUPPLEMENTARY INFORMATION** section of the preamble helpful in understanding the proposal? (2) Does the proposal contain technical language or jargon that interferes with its clarity? (3) Does the format of the proposal (groupings and order of sections, use of headings, paragraphing, etc.) aid or reduce its clarity? What else could we do to make the proposal easier to understand? Send a copy of any comments that concern how we could make this rule easier to understand to: Office of Regulatory Affairs, Department of the Interior, Room 7229, 1849 C. Street NW., Washington, DC 20240. You may also e-mail the comments to this address: Exsec@ios.doi.gov.

Executive Order 13211

On May 18, 2001, the President issued Executive Order 13211 on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when

undertaking certain actions. This rule is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

National Environmental Policy Act

We have determined that we do not need to prepare an Environmental Assessment and/or an Environmental Impact Statement 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).

Paperwork Reduction Act

This rule does not contain any new collections of information that require approval of the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*. This proposed rule will not impose new recordkeeping or reporting requirements on State or local governments, individuals, business, or organizations. We may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

References Cited

A complete list of all references cited in this proposal is available upon request. You may request a list of all references cited in this document from the Supervisor, Marine Mammals Management Office (see **ADDRESSES**).

Author

The primary author of this proposed rule is Douglas M. Burn, Marine Mammals Management Office (see **ADDRESSES**).

List of Subjects in 50 CFR Part 17

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

Regulation Promulgation

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

PART 17—[AMENDED]

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

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

2. Section 17.11(h) is amended by adding the following, in alphabetical order under MAMMALS, to the List of

Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *
(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
MAMMALS							
* Otter, northern sea	* <i>Enhydra lutris kenyoni</i> .	* U.S.A. (AK, WA, OR, CA).	* Southwest Alaska, from Attu Island to Western Cook Inlet, including Bristol Bay, the Kodiak Archipelago, and the Barren Islands.	* T	*	* NA	* NA
*	*	*	*	*	*	*	*

Dated: December 9, 2003.
Steve Williams,
Director, Fish and Wildlife Service.
 [FR Doc. 04-2844 Filed 2-10-04; 8:45 am]
 BILLING CODE 4310-55-P

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
50 CFR Parts 223 and 635
[Docket No. 040202035-4035-01; I.D. 112403A]
RIN 0648-AR80

Atlantic Highly Migratory Species (HMS); Pelagic Longline Fishery
AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.
ACTION: Proposed rule; request for comments; public hearings.

SUMMARY: This proposed rule would reduce bycatch and bycatch mortality of sea turtles caught incidentally in the Atlantic and Gulf of Mexico HMS pelagic longline fisheries, consistent with the requirements of the Endangered Species Act (ESA). Based upon the results of an experiment in the Northeast Distant (NED) statistical reporting area and information indicating that the level of incidental takes of sea turtles established for the HMS pelagic longline fishery has been exceeded, NMFS proposes to implement new sea turtle bycatch mitigation measures throughout the fishery, including the NED statistical reporting area, and to reopen the NED closed area. Through experimentation in the NED, certain hook and bait measures have

proven to be effective at reducing sea turtle bycatch, and are expected to reduce bycatch mortality and interactions with these species. The proposed bycatch mitigation measures include mandatory pelagic longline circle hook and bait requirements, and mandatory possession and use of onboard equipment to reduce sea turtle bycatch mortality. The intent of this proposed action is to reduce interactions with, and post-release mortality of, threatened and endangered sea turtles in HMS pelagic longline fisheries to comply with the ESA and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).
DATES: Written comments on the proposed rule must be received no later than 5 p.m., eastern standard time, on March 15, 2004. NMFS will hold public hearings from March 2, 2004, through March 9, 2004. See **ADDRESSES** for specific locations, dates, and times.
ADDRESSES: The public hearing locations, dates and times are:
 1. Tuesday, March 2, 2004 - North Dartmouth, MA, 7 - 9 p.m. University of Massachusetts at Dartmouth, 285 Old Westport Road, Deon Building, Room 105, North Dartmouth, MA 02747-2300;
 2. Thursday, March 4, 2004 - New Orleans, LA, 7 - 9 p.m. New Orleans Airport Hilton Hotel, 901 Airline Drive, Kenner, LA 70062; and
 3. Tuesday, March 9, 2004 - Manteo, NC, 7 - 9 p.m. North Carolina Aquarium on Roanoke Island, 374 Airport Road, Manteo, NC 27954-0967.
 Written comments on the proposed rule should be submitted to Christopher Rogers, Chief, Highly Migratory Species (HMS) Management Division (SF/1), National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, MD 20910. Comments may be sent via

facsimile (fax) to 301-713-1917. Comments on this proposed rule may also be submitted by e-mail. The mailbox address for providing e-mail comments is:
0648AR80.PROPOSED@noaa.gov. Include in the subject line of the e-mail comment the following document identifier: 0648-AR80. For copies of the Draft Supplemental Environmental Impact Statement/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (DSEIS/RIR/IRFA), contact Russell Dunn at (727) 570-5447.
FOR FURTHER INFORMATION CONTACT: Russell Dunn, Greg Fairclough, or Richard A. Pearson at (727) 570-5447 or fax (727) 570-5656.
SUPPLEMENTARY INFORMATION: The Atlantic tuna and swordfish fisheries are managed under the authority of the Magnuson-Stevens Act and the Atlantic Tunas Convention Act (ATCA). Atlantic sharks are managed under the authority of the Magnuson-Stevens Act. The Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks (HMS FMP), finalized in 1999, is implemented by regulations at 50 CFR part 635. The Atlantic pelagic longline fishery is also subject to the requirements of the ESA and the Marine Mammal Protection Act (MMPA).
Management History of Sea Turtle Bycatch Reduction
 Under the ESA, Federal agencies must consult with either the U.S. Fish and Wildlife Service or NMFS whenever they authorize, fund, or carry out an action that may adversely affect a threatened or endangered species or its designated critical habitat. In the case of marine fisheries, the NMFS Office of Sustainable Fisheries consults with its Office of Protected Resources. After consultation, NMFS issues a Biological