

**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric Administration****50 CFR Part 223**

[Docket No. 041213348-4348-01; I.D. 110904E]

RIN 0648-AS95

**Endangered and Threatened Wildlife and Plants: Proposed Threatened Status for Southern Resident Killer Whales**

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

**ACTION:** Proposed rule; request for comments.

**SUMMARY:** We, the NMFS, have completed an update on the status review of Southern Resident killer whales (*Orcinus orca*) under the Endangered Species Act (ESA). Based on the review of the best available scientific and commercial information, including new data, published papers, and workshop reports available since the review in 2002, we are proposing to list the Southern Resident killer whales as threatened because these killer whales constitute a distinct population segment (DPS) under the ESA and are likely to become endangered in the foreseeable future throughout all or a significant portion of their range. We are not proposing to designate critical habitat at this time, but are requesting public comments on the issues pertaining to this proposed rule.

**DATES:** Comments must be received by March 22, 2005. Requests for public hearings must be made in writing by February 7, 2005. We have already scheduled public hearings on this proposed rule as follows:

Thursday, February 17, 2005, from 1:30 – 4:30 pm and 6:30 – 9 pm at the Seattle Aquarium, 1483 Alaskan Way, in Seattle, WA 98101;

Monday, February 28, 2005, from 1:30 – 4:30 pm and 6:30 - 9 pm at the Friday Harbor Labs, 620 University Road, Friday Harbor, WA 98250.

The 1:30 – 4:30 pm afternoon sessions will be provided for local practitioners and stakeholder parties, and the 6:30 – 9:30 pm evening “open house” sessions are designed for broader public participation. Additional information regarding the meetings is available via the Internet at <http://www.nwr.noaa.gov>.

**ADDRESSES:** Comments should be submitted to Chief, Protected Resources Division, 525 NE Oregon Street, Suite

500, Portland, OR, 97232-2737. Comments may also be submitted electronically via the Federal e-Rulemaking Portal at <http://www.regulations.gov> or by sending an e-mail message to [SRKWstatus.nwr@noaa.gov](mailto:SRKWstatus.nwr@noaa.gov).

**FOR FURTHER INFORMATION CONTACT:** Mr. Garth Griffin, Northwest Regional Office, Portland, OR (503) 231-2005, or Ms. Marta Nammack, Office of Protected Resources, Silver Spring, MD (301) 713-1401, ext. 180.

**SUPPLEMENTARY INFORMATION:****Electronic Access**

A list of references cited in this notice is available via the Internet at <http://www.nwr.noaa.gov>. Additional information, including agency reports and written comments, is also available at this Internet address.

**Background**

On May 2, 2001, we received a petition from the Center for Biological Diversity and 11 co-petitioners (CBD, 2001) to list Southern Resident killer whales as threatened or endangered under the ESA. On August 13, 2001, we provided notice of our determination that the petition presented substantial information that a listing may be warranted and requested information to assist with a status review to determine if Southern Resident killer whales warranted listing under the ESA (66 FR 42499). To assist in the status review, we formed a Biological Review Team (BRT) of scientists from our Alaska, Northwest, and Southwest Fisheries Science Centers. We convened a meeting on September 26, 2001, to gather technical information from co-managers, scientists, and individuals having research or management expertise pertaining to killer whale stocks in the North Pacific Ocean. Additionally, the BRT discussed its preliminary scientific findings with Tribal, State and Canadian co-managers on March 25, 2002. The BRT considered information from the petition, the September and March meetings, and comments submitted in response to our information request to prepare a final scientific document on Southern Resident killer whales (NMFS, 2002).

After conducting the status review, we determined that listing Southern Resident killer whales as a threatened or endangered species was not warranted because Southern Resident killer whales did not constitute a species as defined by the ESA. The population was considered in the context of the global taxon (i.e., all killer whales worldwide) and we found that Southern Resident

killer whales did not meet the significance criteria for consideration as a DPS. The finding, along with supporting documentation, was published on July 1, 2002 (67 FR 44133). The 2002 status review and other documents supporting the “not warranted” finding are available on the Internet (see Electronic Access). Because of the uncertainties regarding killer whale taxonomy (i.e., whether the killer whale should be considered as one species or as multiple species and/or subspecies), we announced that it would reconsider the taxonomy of killer whales within 4 years.

The scientific information evaluated during the ESA status review indicated that Southern Resident killer whales may be depleted under the Marine Mammal Protection Act (MMPA). We initiated consultation with the Marine Mammal Commission (Commission) in a letter dated June 25, 2002, and published an advance notice of proposed rulemaking (ANPR) on July 1, 2002 (67 FR 44132), to request pertinent information regarding the status of the stock and potential conservation measures that may benefit these whales. After considering comments received in response to the ANPR and from the Commission, we published a proposed rule to designate the Southern Resident stock of killer whales as depleted (68 FR 4747; January 30, 2003) and solicited comments on the proposal. Based on the best scientific information available, consultation with the Commission, and consideration of public comment, we determined that the Southern Resident stock of killer whales was depleted under the MMPA (68 FR 31980; May 29, 2003) and announced our intention to prepare a Conservation Plan.

On December 18, 2002, the Center for Biological Diversity (and other plaintiffs) challenged our “not warranted” finding under the ESA in U.S. District Court. The U.S. District Court for the Western District of Washington issued an order on December 17, 2003, which set aside our “not warranted” finding and remanded the matter to us for redetermination of whether the Southern Resident killer whales should be listed under the ESA (*Center for Biological Diversity, et al., v. Robert Lohn, et al.*, 296 F. Supp. 2d. 1223 W.D. Wash. 2003). The court order held that “[w]hen the best available science indicates that the ‘standard taxonomic distinctions’ are wrong . . . NMFS must rely on the best available science.”

Although we announced in 2002 that the status of killer whales would be revisited in 4 years, the schedule for reevaluating Southern Resident killer

whales was expedited as a result of the court's order. We reconvened a BRT in 2004 to consider new scientific and commercial data available since 2002 and update the status review for Southern Residents in accordance with that order. We announced the status review update and requested that interested parties submit pertinent information to assist us with the update (69 FR 9809, March 2, 2004). In addition, we co-sponsored a Cetacean Taxonomy workshop in 2004, which included a special session on killer whales. The papers and reports from the workshop were made available to the BRT.

In August 2004, we met with Washington State and Tribal co-managers to provide information on the status review update and receive comments. These comments were evaluated by the BRT, who then prepared a final status review document for Southern Resident killer whales (NMFS, 2004).

#### *Biological Background*

Killer whales are one of the most strikingly pigmented of all cetaceans, making field identification easy. Killer whales are black dorsally and white ventrally, with a conspicuous white oval patch located slightly above and behind the eye. A highly variable gray or white saddle is usually present behind the dorsal fin. Saddle shape varies among individuals, pods, and from one side to the other on a single animal. Sexual dimorphism occurs in body size, flipper size, and height of the dorsal fin. More detailed information regarding this species' distribution, behavior, genetics, morphology, and physiology are contained in the BRT's status review documents (NMFS, 2002, 2004) and the Washington State Status Report for the Killer Whale (Wiles, 2004).

Killer whales are classified as top predators in the food chain and the world's most widely distributed marine mammal (Leatherwood and Dahlheim, 1978; Heyning and Dahlheim, 1988). Although observed in tropical waters and the open sea, they are most abundant in coastal habitats and high latitudes. In the northeastern Pacific Ocean, killer whales occur in the eastern Bering Sea (Braham and Dahlheim, 1982) and are frequently observed near the Aleutian Islands (Scammon, 1874; Murie, 1959; Waite *et al.*, 2001). They reportedly occur year-round in the waters of southeastern Alaska (Scheffer, 1967) and the intercoastal waterways of British Columbia and Washington State (Balcomb and Goebel, 1976; Bigg *et al.*,

1987; Osborne *et al.*, 1988). There are occasional reports of killer whales along the coasts of Washington, Oregon, and California (Norris and Prescott, 1961; Fiscus and Niggol, 1965; Rice, 1968; Gilmore, 1976; Black *et al.*, 1997; NMFS, 2004), both coasts of Baja California (Dahlheim *et al.*, 1982), the offshore tropical Pacific (Dahlheim *et al.*, 1982), the Gulf of Panama, and the Galapagos Islands. In the western North Pacific, killer whales occur frequently along the Soviet coast in the Bering Sea, the Sea of Okhotsk, the Sea of Japan, and along the eastern side of Sakhalin and the Kuril Islands (Tomilin, 1957). There are numerous accounts of their occurrence off China (Wang, 1985) and Japan (Nishiwaki and Handa, 1958; Kasuya, 1971; Ohsumi, 1975). Data from the central Pacific are scarce. They have been reported off Hawaii, but do not appear to be abundant in these waters (Tomich, 1986; Caretta *et al.*, 2001).

The killer whale is the largest species within the family Delphinidae. Various scientific names have been assigned to the killer whale (Hershkovitz, 1966; Heyning and Dahlheim, 1988). These various names can be explained by sexual and age differences in the size of the dorsal fin, individual variations in color patterns, and the cosmopolitan distribution of the animals. The genus *Orcinus* is currently considered monotypic with geographical variation noted in size and pigmentation patterns. Two proposed Antarctic species, *O. nanus* (Mikhalev *et al.*, 1981) and *O. glacialis* (Berzin and Vladimirov, 1982; Berzin and Vladimirov, 1983), both appear to refer to the same type of smaller individuals. However, because of significant uncertainties regarding the limited specimen data, these new taxa have not been widely accepted by the scientific community. New observations of color pattern, size, habitat and feeding ecology have led to the conclusion that there are three types of killer whales in Antarctica (Pitman and Ensor, 2003). Recent genetic investigations note marked differences between some forms of killer whale (Hoelzel and Dover, 1991; Hoelzel *et al.*, 1998; Barrett-Lennard, 2000; Barrett-Lennard and Ellis, 2001). Killer whale taxonomy was reviewed as part of the "Workshop on Shortcomings of Cetacean Taxonomy in Relation to Needs of Conservation and Management" held on April 30 - May 2, 2004 in La Jolla, California, and the results were published in a report (Reeves *et al.*, 2004).

#### *Ecotypes of Killer Whales*

Killer whales in the Eastern North Pacific region (which includes the

petitioned whale pods) have been classified into three forms, or ecotypes, termed residents, transients, and offshore whales. Significant genetic differences occur among resident, transient, and offshore killer whales (Stevens *et al.*, 1989; Hoelzel and Dover, 1991; Hoelzel *et al.*, 1998; Barrett-Lennard, 2000; Barrett-Lennard and Ellis, 2001; Hoelzel *et al.*, 2002). The three forms also vary in morphology, ecology, and behavior. All of these characteristics play an important role in determining whether the monotypic species *O. orca* can be subdivided under the ESA.

#### *Resident Killer Whales*

Resident killer whales in the Eastern North Pacific are noticeably different from both the transient and offshore forms. The dorsal fin of resident whales is rounded at the tip and falcate (curved and tapering). Resident whales have a variety of saddle patch pigmentations with five different patterns recognized (Baird and Stacey, 1988). Resident whales occur in large, stable pods with membership ranging from 10 to approximately 60 whales. Their presence has been noted in the waters from California to Alaska. The primary prey of resident whales is fish. A recent summary of the differences between resident and transient forms is found in Baird (2000).

Resident killer whales in the North Pacific consist of the following groups: Southern, Northern, Southern Alaska (includes Southeast Alaska and Prince William Sound whales), western Alaska, and western North Pacific Residents.

*Southern Residents:* The Southern Resident killer whale assemblage contains three pods-- J pod, K pod, and L pod--and is considered a stock under the MMPA. Their range during the spring, summer, and fall includes the inland waterways of Puget Sound, Strait of Juan de Fuca, and Southern Georgia Strait. Their occurrence in the coastal waters off Oregon, Washington, Vancouver Island, and more recently off the coast of central California in the south and off the Queen Charlotte Islands to the north has been documented. Little is known about the winter movements and range of the Southern Resident stock. Southern Residents have not been seen to associate with other resident whales, and mitochondrial and nuclear genetic data suggest that Southern Residents interbreed with other killer whale populations rarely if at all (Hoelzel *et al.*, 1998; Barrett-Lennard, 2000; Barrett-Lennard and Ellis, 2001).

*Northern Residents:* The Northern Resident killer whale assemblage

contains approximately 16 pods. They range from Georgia Strait (British Columbia) to Southeast Alaska (Ford *et al.*, 2000; Dahlheim, 1997). On occasion they have been known to occur in Haro Strait (west of San Juan Island, Washington). Although some overlap in range occurs between the Northern and Southern Residents, no intermixing of pods has been noted. However, in Southeast Alaska, Northern Resident whales are seen in close proximity to Southern Alaska Residents (Dahlheim *et al.*, 1997), and there may be limited gene flow between the two populations (Hoelzel *et al.*, 1998; Barrett-Lennard, 2000; Barrett-Lennard and Ellis, 2001).

*Alaska Residents:* There are two groups of Alaska Resident animals, Southern Alaska Residents and Western Alaska Residents. The resident whales of Southeast Alaska and Prince William Sound comprise the Southern Alaska Resident killer whale assemblage. At least 15 pods have been identified in these two regions. Resident killer whales photographed in Southeast Alaska travel frequently to Prince William Sound and intermix with all resident groups from this area (Dahlheim *et al.*, 1997; Matkin and Saulitis, 1997). Prince William Sound Resident whales have not been seen in Southeast Alaska, but have been noted off Kodiak Island intermixing with other, yet unnamed, resident pods (Dahlheim, 1997; NMFS, 2004). Vessel surveys in the southeastern Bering Sea have provided preliminary estimates of approximately 400 killer whales (Waite *et al.*, 2001) and preliminary counts, based on photo-identification, suggest a minimum of 800 individual resident whales inhabiting this region (NMFS, 2004).

*Western North Pacific Residents:* The presence of resident killer whales has been documented along the coastline of Russia (NMFS, 2004). It is likely that resident killer whales also occur along the coastline of Japan, but additional information is required to confirm this hypothesis.

#### Transient Killer Whales

Transient whales occur throughout the Eastern North Pacific with a preference towards coastal waters. Their geographical range overlaps that of the resident and offshore whales. Individual transient killer whales have been documented to move great distances reflecting a large home range (Goley and Straley, 1994). There are several differences between transient and resident killer whales; these have most recently been summarized by Baird (2000). The dorsal fin of transient whales tends to be more erect (i.e.,

straighter at the tip) than those of resident and offshore whales. Saddle patch pigmentation of Transient killer whales is restricted to three patterns (Baird and Stacey, 1988). Pod structure is small (e.g., fewer than 10 whales) and dynamic in nature. The primary prey of transient killer whales is other marine mammals. Transient whales are not known to intermix with resident or offshore whales. Recent genetic investigations indicate that up to three genetically different groups of transient killer whales exist in the eastern North Pacific (the "west coast" Transients, the "Gulf of Alaska Transients" and the AT1 pod) (Barrett-Lennard, 2000; Barrett-Lennard and Ellis, 2001).

#### Offshore Killer Whales

Offshore killer whales are similar to resident whales, but can be distinguished (i.e., their fins appear to be more rounded at the tip with multiple nicks on the trailing edge, smaller overall size, less sexual dimorphism), but these characteristics need to be further quantified. Offshore whales have been seen in considerably larger groups (up to 200 whales) than residents or transients have. They are known to range from central coastal Mexico to Alaska and occur in both coastal and offshore waters (300 miles off Washington State). While foraging, it is assumed that the main target is fish, but observations of feeding events are extremely limited. Offshore whales are not known to intermingle with resident or transient whales. Genetic analysis suggests that offshore whales are substantially reproductively isolated from other killer whale populations (Barrett-Lennard, 2000; Hoelzel *et al.*, 2004).

#### Consideration as a "Species" under the ESA

The ESA defines a species to include "any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." Guidance on what constitutes a DPS is provided by the joint NMFS-U.S. Fish and Wildlife Service (FWS) interagency policy on vertebrate populations (61 FR 4722; February 7, 1996). To be considered a DPS, a population, or group of populations, must be "discrete" from other populations and "significant" to the taxon (species or subspecies) to which it belongs. A population segment of a vertebrate species may be considered discrete if:

(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 also provide evidence of this separation; or

(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 ESA.

If a population segment is considered discrete, we must then consider whether the discrete segment is "significant" to the taxon to which it belongs. Criteria that can be used to determine whether the discrete segment is significant include:

(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; and

(4) Evidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.

A population segment needs to satisfy only one of these criteria to be considered significant. Furthermore, the list of criteria is not exhaustive; other criteria may be used, as appropriate.

#### Killer Whale Taxonomy

Correctly identifying the killer whale taxon is critical because the criteria used to evaluate "significance" of a DPS are defined relative to the larger taxon to which it belongs. Uncertainty about the taxonomic status of killer whales posed a problem for the 2002 BRT. In particular, it noted that the current designation of one global species for killer whales was likely inaccurate because there was increasing evidence to suggest that additional species or subspecies of killer whales probably exist. The previous prevailing concept of a single species has recently evolved into a diversity of views that include the possibility of multiple species. Recent new observations and data on morphology and genetics of both the Antarctic and North Pacific killer whales have re-opened the question, and two divergent bodies of expert opinion have emerged. At the 2004 Cetacean Taxonomy workshop, experts prepared cases for two taxonomic scenarios. Under one line of reasoning, killer whales are a single highly variable species, with locally differentiated

forms, or ecotypes, representing recently evolved and relatively ephemeral forms not deserving species status. According to the opposing body of opinion, congruence of several lines of evidence for the distinctness of sympatrically (i.e., same place, same time) occurring forms support multiple species.

In the North Pacific, the seasonally sympatric resident and transient killer whale forms show consistent differences in mitochondrial and nuclear genetic markers, coloration, acoustic calls, and foraging habits. The majority of experts participating in the killer whale working group at the Cetacean Taxonomy workshop believed that the resident and transient ecotypes in the North Pacific might be distinct species or subspecies.

The 2004 BRT reviewed new information and the competing lines of evidence cited during the Cetacean Taxonomy workshop and considered whether killer whales are a single species or multiple species. After discussion of this information, the BRT reached consensus that, although multiple species may exist and may be confirmed in the future, the present data do not adequately support recognition of any new species. In particular, the BRT concluded that, provisionally, North Pacific transients and residents should be considered as belonging to a single species.

The 2004 BRT next considered the question of whether North Pacific residents, transients and offshore whales likely belong to different subspecies, although current standard taxonomic classification does not include any named subspecies. A number of differences between residents and transients have been suggested to support subspecific separation between the two groups: (1) Residents and transients differ on average in external morphology, including dorsal-fin size and shape, saddle-patch shape, and pigmentation; (2) differences between the two ecotypes have been found in skull features, although the sample size is still small and uncontrolled for age and sex; (3) residents and transients are sympatric in the summer range, but no intermingling or interbreeding has ever been observed; (4) the two groups have markedly different feeding specializations and social organization; (5) the two ecotypes exhibit markedly different acoustic dialects and acoustic practices that may relate to differences in feeding ecology; (6) the two forms are genetically divergent at both mitochondrial DNA (mtDNA) and nuclear DNA markers, and the average level of divergence between the residents and transients is higher than the average level of divergence within

populations of either group; and (7) residents and transients fall into two different global mtDNA clades. The BRT concluded that Southern Residents likely belong to a subspecies separate from that of transients.

The 2004 BRT agreed that if the Southern Residents belong to a subspecies separate from that of the transients, the subspecies would include the Southern Residents and the Northern Residents, as well as the resident killer whales of Southeast Alaska, Prince William Sound, Kodiak Island, the Bering Sea and Russia. In short, the subspecies would include all of the resident, fish-eating killer whales of the North Pacific. The rationale for this decision was that all of these groups are apparently fish-eating specialists, occupy relatively similar habitats, and appear to be genetically more closely related to each other than to sympatric transient populations. After considering the arguments for existence of subspecies and the conclusions of the Cetacean Taxonomy workshop, the BRT concluded that the taxon to use for determining a DPS under the ESA should be the North Pacific residents, an unnamed subspecies of *O. orca*. After considering whether the North Pacific offshore or eastern Tropical Pacific killer whales belonged to the same taxon as the North Pacific residents, the BRT concluded that they did not.

#### Determination of DPS

##### *Discreteness*

The first criterion for determining if a population or group is a DPS is that it meets the test for discreteness. Two types of genetic data for killer whales have proven useful for identifying DPS boundaries in other species: microsatellite (nuclear) DNA and mitochondrial DNA (mtDNA). The magnitude of the genetic differences between Southern and Northern Residents was about half that found between residents and transients and about twice that found between Northern Residents and Southern Alaska Residents. These differences indicate that the Southern Resident, Northern Resident, and Alaska Resident populations are reproductively isolated populations and that the isolation of Southern and Northern Residents from each other is greater than the isolation between Northern and Southern Alaska Residents. There may be some gene flow between the Northern Residents and Southern Alaska Residents (Hoelzel *et al.*, 1998; Barrett-Lennard, 2000; Barrett-Lennard and Ellis, 2001).

Two mtDNA sequences have been found in North Pacific Resident killer

whales. The Southern Residents have one sequence and the Northern Residents have another that differs by one DNA nucleotide. Southern Alaska Residents have both sequences. Both males and females inherit the mtDNA of their mother, so these data indicate that females from the Southern and Northern Resident populations have not been migrating between populations within at least the recent evolutionary history of these populations.

The understanding of killer whale population genetic structure has expanded considerably since the last status review in 2002. In particular, the mtDNA differentiation among eastern North Pacific resident, transient and offshore populations can now be seen in the context of variation worldwide. The most notable result from the new mtDNA data is the lack of strong mtDNA structure worldwide, suggesting that the current distribution of killer whales populations may be relatively young on an evolutionary scale (e.g., several hundred thousand years compared to the approximate 5 million year old age of the *Orcinus* genus and possibly associated with a population bottleneck followed by a worldwide expansion). With regard to identifying DPSs, one of the implications of the new data is that the relative degree of mtDNA divergence among populations is not necessarily a good predictor of the length of time that the populations have evolved independently. For example, animals with the "southern resident" haplotype have been found in populations from Washington (the Southern Residents), Alaska, Russia, Newfoundland and the United Kingdom. Evolutionarily, these populations are almost certainly more closely related to other geographically proximate populations than to each other (a hypothesis supported by the microsatellite data) and therefore, share a mtDNA haplotype purely by chance. Thus, it would be inappropriate to rely heavily on simple mtDNA divergence as a criterion for identifying a DPS, especially on a global scale. On a local scale, however, mtDNA remains useful for helping to identify populations, especially when combined with other types of information.

In addition to more mtDNA data, the amount of nuclear microsatellite data expanded greatly in the last 2 years, both in terms of numbers of whales and loci analyzed. Within the eastern North Pacific, both the mtDNA and microsatellite data remain consistent with a hypothesis of four to five resident populations, at least two to three transient populations and at least one offshore population. The issue of

whether any contemporary gene flow occurs among eastern North Pacific populations remains unresolved, but the microsatellite data are consistent with low levels of gene flow (at most a few mating events among populations per generation). Despite some uncertainty about the evolutionary history that produced the current patterns of variation, both the mtDNA and the microsatellite data indicate a high degree of contemporary reproductive isolation among eastern North Pacific killer whale populations.

The BRT concluded that Southern Residents are an independent population that is discrete from other North Pacific resident killer whale populations. Southern Resident whales have a core summer range that is spatially separate from other North Pacific Resident whales including their closest neighbor, the Northern Residents. In addition, Southern Residents exhibit behaviors unique with respect to other North Pacific Residents. Southern Residents exhibit a distinct "greeting" behavior. They have not been observed using rubbing beaches or taking fish from longline gear, which appear to be unique to other North Pacific Resident Populations. Based on range, demography, behavior, and genetics, the BRT determined that Southern Residents meet the criterion for "discreteness" under the DPS policy.

#### *Significance*

The second test for determining if a population is a DPS is its significance to the taxon to which it belongs. The BRT discussed at length the significance of the Southern Residents with respect to the North Pacific resident taxon. The BRT concluded that the Southern Residents are significant with regard to the North Pacific resident taxon and, therefore, should be considered a DPS. The arguments favoring significance were as follows:

*Ecological setting.* The Southern Residents appear to occupy an ecological setting distinct from the other North Pacific resident populations. In particular, the Southern Residents are the only North Pacific resident population to spend a substantial amount of time in the California Current ecosystem, an ocean habitat that differs considerably from the Alaskan Gyre occupied by the Alaska Residents and Northern Residents. There is some evidence of differences in prey utilization, with Southern and Northern Residents favoring chinook salmon and certain Alaska Residents also eating groundfish such as halibut and turbot.

*Range.* The BRT discussed data related to the Southern Residents' year

round and summer core ranges and concluded that loss of the Southern Residents would result in a significant gap in the range of the North Pacific resident taxon. In particular, the Southern Residents are the only North Pacific resident population to be sighted in the coastal areas off of California, Oregon and Washington and are the only population to regularly inhabit Puget Sound. Based on experience from other cetaceans, the BRT found little reason to believe that these areas would be repopulated by other North Pacific resident populations in the foreseeable future should the Southern Resident population become extinct.

This conclusion differs from that of the 2002 BRT for several reasons. New sightings of the Southern Residents in recent years have provided additional information on the amount of overlap in range between Southern Residents and other North Pacific resident populations. Also, the 2002 BRT considered transient, offshore, and other resident killer whales and their respective range overlap with Southern Resident killer whales when determining if the loss of Southern Resident would represent a significant gap in the range of the global taxon. The 2004 BRT considered only the overlap with other North Pacific residents.

*Genetic differentiation.* The Southern Residents differ markedly from other North Pacific resident populations at both nuclear and mitochondrial genes. The Southern Residents also differ from other North Pacific resident populations in the frequency of certain saddle patch variants, a trait believed to have a genetic basis.

*Behavioral and cultural diversity.* The BRT noted that culture (knowledge passed through learning from one generation to the next) is likely to play an important role in the viability of killer whale populations. For example, the Southern Residents may have unique knowledge of the timing and location of salmon runs in the southern part of the North Pacific Residents' range. The BRT also noted that there was some evidence that cultural traditions, such as greeting behavior, beach rubbing, and utilization of prey from longlines, differed among the resident populations.

#### **Conclusions**

The BRT concluded: (1) although multiple species of *O. orca* may exist and be confirmed in the future, there is currently insufficient evidence to describe any new species; and (2) provisionally the North Pacific Residents and transients should be considered to belong to one species;

however, (3) there is sufficient information to indicate that there is likely a North Pacific Resident subspecies of *O. orca*. Given the District Court's direction, the BRT considered this unnamed subspecies as the reference taxon for making a DPS determination and concluded that Southern Resident killer whales are discrete from other populations within the North Pacific Resident taxon and are significant to the North Pacific Resident taxon. The BRT also considered the hypothesis that the North Pacific Residents and offshores belong to the same subspecies, and concluded that Southern Residents would also meet the DPS criteria under this alternative taxonomic scenario.

The 2002 BRT had also explored the plausibility of various taxa and DPS scenarios, including Southern Residents as a DPS of a North Pacific Resident taxon. The 2002 BRT was almost evenly split on the question of whether the Southern Residents would be a DPS of a putative North Pacific Resident taxon and there was only minor support to the idea that Southern Residents would be a DPS of a taxon consisting of North Pacific residents and offshores. In contrast, the 2004 BRT was more confident that the Southern Residents should be considered a DPS under either scenario. The 2004 BRT discussed this increase in support for the Southern Residents as a DPS and attributed it primarily to the amount of new information that has been collected since 2002. For example, knowledge about worldwide patterns of genetic variation in killer whales has increased dramatically and has demonstrated that sharing of a similar mitochondrial DNA haplotype does not necessarily indicate a close evolutionary relationship between two populations. This is important because the offshores and Southern Residents are characterized by very similar mtDNA haplotypes, a factor that influenced the conclusions of the 2002 BRT. In addition, the 2004 BRT was aware of recently collected information about the social structure, morphology, behavior and diet of offshore killer whales that was unavailable at the time of the 2002 status review. This information tends to suggest that the offshores are more distinct from resident killer whales than was appreciated by the 2002 BRT. Finally, knowledge about ecological and behavioral diversity within killer whales has increased as a result of ongoing studies in British Columbia, Alaska, and the Russian Far East. The BRT generally concluded that this new information tended to suggest

substantial ecological differentiation between the Southern Residents and other populations.

### Risk Assessment

Section 4(a)(1) of the ESA and the listing regulations (50 CFR part 424) set forth procedures for listing species. We must determine, through the regulatory process, if a species is endangered or threatened based upon any one or a combination of the following factors: (1) the present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or human-made factors affecting its continued existence. The 2004 BRT identified the factors that currently pose a risk for Southern Residents and discussed whether they might continue in the future. Concern remains about whether reduced quantity or quality of prey are affecting the Southern Resident population. In addition, levels of organochlorine contaminants are not declining appreciably and those of many "newly emerging" contaminants (e.g., brominated flame retardants) are increasing, so Southern Residents are likely at risk for serious chronic effects similar to those demonstrated for other marine mammal species (e.g., immune and reproductive system dysfunction). Other important risk factors that may continue to impact Southern Residents are oil spills, as well as noise and disturbance from vessel traffic.

The BRT conducted a Population Viability Analysis (PVA) to synthesize the potential biological consequences of a small population size, a slowly increasing or a declining population trend, and potential risk factors. The probability of the Southern Resident population going extinct was estimated using demographic information from the yearly census through 2003. Both the probability of extinction (defined as <1 male or 1 female) as well as the probability of "quasi-extinction," (defined as <10 males or 10 females) were determined, because the BRT believed that a population at the quasi-extinction level would be "doomed" to extinction, even though literal extinction might still take decades for long-lived organisms, such as killer whales. Under the assumption that population growth rates in the future will accurately be predicted by the full 29-year time series of available data (the most optimistic scenario considered), the model predicted the probability of Southern Residents becoming extinct was less than 0.1 to 3 percent in 100

years and 2 to 42 percent in 300 years. If a quasi-extinction threshold was used instead of actual extinction, the predicted probability of meeting the threshold ranged from 1 to 15 percent in 100 years and 4 to 68 percent in 300 years. For both scenarios, the higher percentages in each range were associated with higher probability and magnitude of potential catastrophic mortality events (e.g., oil spills, disease outbreaks), as well as with a smaller carrying capacity (i.e.,  $K = 100$ ). When it was assumed that the population survival for a subset (the last 10 years) of all data available would best predict the future (the most pessimistic scenario considered), the analysis predicted a probability of extinction of 6 to 19 percent in 100 years and 68 to 94 percent in 300 years. If a quasi-extinction threshold was used in lieu of actual demographic extinction, the predicted probability of meeting the threshold ranged from 39 to 67 percent in 100 years to 76 to 98 percent in 300 years.

The PVA modeled combinations of a variety of parameters, some of which are unknown (e.g., carrying capacity and probability of catastrophic mortality), so multiple scenarios were analyzed in order to address the uncertainty of how these parameters would affect the probability that the population would go extinct. For the unknown parameters, a range of inputs were used in the model and this resulted in a range of results. The PVA produced some high probabilities for extinction, which were associated with the highest levels of potential catastrophic mortality, small carrying capacity, and when only a subset of available data was used. Scenarios incorporating the most optimistic parameters produced probabilities for extinction that were low, but not insignificant. There is no indication that the optimistic scenario is the most likely and therefore, the PVA extinction probabilities, even under the most optimistic conditions, indicate that Southern Resident killer whales are at risk.

The population dynamics of the Southern Residents describe a population that is at risk of extinction, due either to incremental small-scale impacts over time (e.g., reduced fecundity or subadult survivorship) or to a major catastrophe (e.g., disease outbreak or oil spill). Additionally, the small size of this killer whale DPS makes it potentially vulnerable to Allee effects (e.g., inbreeding depression) that could cause a major decline. Furthermore, the small number of breeding males, as well as possible reduced fecundity and subadult

survivorship in the L-pod, may limit the population's potential for rapid growth in the near future. Although the Southern Resident DPS has demonstrated the ability to recover from lower levels in the past and has shown an increasing trend over the last several years, the factors responsible for the decline are unclear, may still exist and may continue to persist, which would potentially preclude a substantial population increase.

### Summary of Conclusions

Although multiple species of killer whales may exist and may be confirmed in the future, the 2004 BRT concluded that present data do not adequately support designation of any new species. Accordingly, North Pacific transients and residents should be considered to belong to a single species. The BRT agreed that Southern Residents likely belong to a subspecies that includes the Southern and Northern Residents, as well as the resident killer whales of Southeast Alaska, Prince William Sound, Kodiak Island, the Bering Sea and Russia (but not the transients or offshores). Thus, the smallest taxon to which the Southern Residents belong would be resident killer whales in the North Pacific, an unnamed subspecies of *O. orca*. The BRT unanimously concluded that the Southern Residents are discrete from other North Pacific resident killer whale populations. The BRT also concluded that the Southern Residents are significant with respect to the North Pacific resident taxon and therefore should be considered a DPS. Factors that might pose a future risk to the Southern Resident population are: reduced quantity and quality of prey; persistent pollutants that could cause immune or reproductive system dysfunction; oil spills; and noise and disturbance from vessel traffic. The BRT conducted a PVA and the most optimistic model (29-year data set) predicted that the probability of Southern Residents becoming extinct was less than 0.1 to 3 percent in 100 years and 2 to 42 percent in 300 years. Using the most pessimistic model (the last 10 years of data; quasi-extinction threshold), the probability of meeting the threshold ranged from 39 to 67 percent in 100 years to 76 to 98 percent in 300 years. For both scenarios, the higher percentages in each range were associated with higher probability and magnitude of potential catastrophic mortality events (e.g., oil spills), as well as with a smaller carrying capacity (i.e.,  $K = 100$ ).

Overall, the BRT was concerned about the viability of the Southern Resident DPS and concluded that it is at risk of

extinction, because of either small-scale impacts over time (e.g., reduced fecundity or subadult survivorship) or a major catastrophe (e.g., disease outbreak or oil spill). Additionally, the small size of this killer whale DPS makes it potentially vulnerable to Allee effects (e.g., inbreeding depression).

#### Proposed Determination

The ESA defines an endangered species as any species in danger of extinction throughout all or a significant portion of its range, and a threatened species as any species likely to become an endangered species in the foreseeable future throughout all or a portion of its range (16 U.S.C. 1532 (6) and (20)). Section 4(b)(1) of the ESA requires that the listing determination be based solely on the best scientific and commercial data available, after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any state or foreign nation to protect and conserve the species.

We have reviewed the petition, the reports of the BRT (NMFS, 2002, 2004), co-manager comments, Cetacean Taxonomy workshop papers and reports, and other available published and unpublished information, and we have consulted with species experts and other individuals familiar with killer whales. On the basis of the best available scientific and commercial information, the Southern Resident killer whale population meets the discreteness and significance criteria for a DPS. The genetic differences, spatial separation, unique behavior, and demography indicate that the Southern Resident killer whale population segment is discrete from other population segments. The gap in the range of the North Pacific Resident killer whale taxon that would occur if the Southern Resident killer whale population segment were to disappear is an important factor indicating that the Southern Resident killer whale population segment is significant with regard to the North Pacific Resident killer whale taxon, though other factors such as unique ecological setting, frequency of certain saddle patch variants, and greeting behavior lend further support.

This DPS is not presently in danger of extinction throughout all or a significant portion of its range. The small population increase in the past several years and population increases after previous declines, the presence of reproductive age males in each pod, several juvenile males reaching the age of sexual maturity in the next 2 to 6 years and several juvenile females

reaching reproductive age in a few years all indicate that the Southern Resident killer whale DPS is not presently in danger of extinction. Based on our evaluation of the best available scientific information, however, the Southern Resident killer whale DPS is threatened (likely to become a endangered in the foreseeable future throughout all or a significant portion of its range). This threatened determination is based on concerns regarding the population decline from 1996–2001, the limited number of reproductive age males, the presence of females of reproductive age that are not having calves, and that the factors for the decline may continue to persist until more is known and actions are taken. The small population size of the Southern Residents and their socially cohesive nature makes them susceptible to catastrophic events such as oil spills and disease outbreaks. While the PVA included some high probabilities for extinction, particularly at the highest levels of catastrophic mortality, the PVA was conducted under the assumption that the Southern Residents are a closed population and also included Allee effects (e.g., inbreeding depression) for the small population. This is a conservative approach until the uncertainty regarding breeding patterns is more thoroughly understood. Therefore, NMFS proposes to list the Southern Resident killer whale DPS as threatened.

#### Conservation Measures

Conservation measures that may apply to listed species include conservation measures implemented by tribes, states, foreign nations, local governments, and private organizations. Also, Federal, tribal, state, and foreign nations' recovery actions (16 U.S.C. 1533(f)), Federal consultation requirements (16 U.S.C. 1536), and prohibitions on taking (16 U.S.C. 1538) constitute conservation measures. In addition, recognition through Federal government or state listing promotes public awareness and conservation actions by Federal, state, tribal governments, foreign nations, private organizations, and individuals.

The Southern Resident killer whale stock was designated as depleted under the MMPA, and a Conservation Plan is under development. In addition to the Conservation Planning process, NMFS has responded to requests for immediate conservation actions by implementing and supporting several programs. Working in partnerships with The Seattle Aquarium and The Whale Museum, we have supported education, outreach and stewardship activities to

increase public awareness about the conservation status and needs of killer whales. To promote responsible viewing of killer whales, we have also provided support for additional hours of on-water stewardship through the Soundwatch program and enforcement presence through the Washington Department of Fish and Wildlife (WDFW).

On April 3, 2004, the Washington Fish and Wildlife Commission voted to add Washington State's killer whale population to the list of the State's endangered species. The State endangered designation is given to native Washington species that are seriously threatened with extinction throughout all or a significant portion of that range within the state (WAC 232–12–297). The designation directs special management attention and priority to recover the species in Washington. WDFW is working with us on conservation strategies for killer whales.

Southern Resident killer whales are listed as endangered and Northern Residents are listed as threatened under Canada's Species at Risk Act (SARA). Under SARA "endangered species" means a wildlife species that is facing imminent extirpation or extinction and "threatened species" means a wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction. Canada's Department of Fisheries and Oceans has convened a Recovery Team, which includes WDFW and NMFS staff members, and has begun developing a Recovery Plan for Southern and Northern Resident Whales under the SARA.

In addition to conservation and recovery planning efforts, our Northwest Fisheries Science Center (NWFS) is engaged in an active research program for Southern Resident killer whales. Research that is currently being conducted is designed to fill identified data gaps and to improve our understanding of the risk factors that may be affecting the decline or recovery of the Southern Resident killer whales. The new information from research will be used to enhance our understanding of the risk factors affecting recovery thereby improving our ability to develop effective management measures. The Conservation Plan under the MMPA will contain both management measures based on the known current condition and research objectives from the NWFS Long-Range Research Plan.

#### Prohibitions and Protective Measures

Section 9 of the ESA prohibits certain activities that directly or indirectly affect endangered species. These

prohibitions apply to all individuals, organizations and agencies subject to U.S. jurisdiction. Section 4(d) of the ESA directs the Secretary of Commerce (Secretary) to implement regulations “to provide for the conservation of [threatened] species,” that may include extending any or all of the prohibitions of section 9 to threatened species. Section 9(a)(1)(g) also prohibits violations of protective regulations for threatened species implemented under section 4(d). We will evaluate protective regulations pursuant to section 4(d) for Southern Resident killer whales and if necessary propose such regulations in a forthcoming rule that will be published in the **Federal Register**.

Sections 7(a)(2) and (4) of the ESA require Federal agencies to consult with us to ensure that activities they authorize, fund, or conduct are not likely to jeopardize the continued existence of a listed species or a species proposed for listing, or to adversely modify critical habitat or proposed critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with us.

Examples of Federal actions that may affect Southern Resident killer whales include coastal development, oil and gas development, seismic exploration, point and non-point source discharge of persistent contaminants, contaminated waste disposal, water quality standards, emerging chemical contaminant practices, vessel operations and noise level standards and fishery management practices.

Sections 10(a)(1)(A) and (B) of the ESA provide us with authority to grant exceptions to the ESA’s Section 9 “take” prohibitions. Section 10(a)(1)(A) scientific research and enhancement permits may be issued to entities (Federal and non-Federal) for scientific purposes or to enhance the propagation or survival of a listed species. The type of activities potentially requiring a section 10(a)(1)(A) research/enhancement permit include scientific research that targets killer whales.

Section 10(a)(1)(B) incidental take permits may be issued to non-Federal entities performing activities that may incidentally take listed species, as long as the taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. The types of activities potentially requiring a section 10(a)(1)(B) incidental take permit include scientific research, not targeting killer whales, that incidentally takes Southern Resident killer whales.

### **Our Policies on Endangered and Threatened Wildlife**

On July 1, 1994, we and FWS published a series of policies regarding listings under the ESA, including a policy for peer review of scientific data (59 FR 34270) and a policy to identify, to the maximum extent possible, those activities that would or would not constitute a violation of section 9 of the ESA (59 FR 34272).

### **Role of Peer Review**

The intent of the peer review policy is to ensure that listings are based on the best scientific and commercial data available. Prior to a final listing, we will solicit the expert opinions of three qualified specialists, concurrent with the public comment period. Independent specialists will be selected from the academic and scientific community, Federal and state agencies, and the private sector.

### **Identification of Those Activities That Would Constitute a Violation of Section 9 of the ESA**

The intent of this policy is to increase public awareness of the effect of our ESA listing on proposed and ongoing activities within the species’ range. We will identify, to the extent known at the time of the final rule, specific activities that will be considered likely to result in violation of section 9, as well as activities that will not be considered likely to result in violation. Activities that we believe could result in violation of section 9 prohibitions against “take” of the Southern Resident killer whale DPS include, but are not limited to, the following:

1. Coastal development that adversely affects Southern Resident killer whales (e.g., dredging, land clearing and grading, waste treatment).
2. Discharging or dumping toxic chemicals or other pollutants into areas used by Southern Resident killer whales.
3. Operating vessels in a manner that disrupts foraging, resting or care for young or results in noise levels that disrupt foraging, communication, resting or care for young.
4. Land/water use or fishing practices that result in reduced availability of prey species during periods when Southern Resident killer whales are present.

We believe, based on the best available information, the following actions will not result in a violation of Section 9:

1. Federally funded or approved projects for which ESA section 7 consultation has been completed, and

that are conducted in accordance with any terms and conditions we provide in an incidental take statement accompanying a biological opinion.

2. Takes of killer whales that we authorize pursuant to section 10 of the ESA.

These lists are not exhaustive. They are intended to provide some examples of the types of activities that we might or might not consider as constituting a take of Southern Resident killer whales under the ESA and its regulations.

### **Critical Habitat**

Critical habitat is defined in section 3 of the ESA (16 U.S.C. 1532(3)) as: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the ESA, in which are found those physical or biological features (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed upon a determination that such areas are essential for the conservation of the species.

“Conservation” means the use of all methods and procedures needed to bring the species to the point at which listing under the ESA is no longer necessary.

Section 4(a)(3)(a) of the ESA (16 U.S.C. 1533(a)(3)(A)) requires that, to the extent prudent and determinable, critical habitat be designated concurrently with the listing of a species. Designations of critical habitat must be based on the best scientific data available and must take into consideration the economic, national security, and other relevant impacts of specifying any particular area as critical habitat. Once critical habitat is designated, section 7 of the ESA requires Federal agencies to ensure that they do not fund, authorize or carry out any actions that are likely to destroy or adversely modify that habitat. This requirement is in addition to the section 7 requirement that Federal agencies ensure that their actions do not jeopardize the continued existence of listed species.

We are currently in the information-gathering phase, compiling information to prepare a critical habitat proposal for Southern Resident killer whales. In previous **Federal Register** notices (69 FR 9809, March 2, 2004; and 66 FR 42499, August 13, 2001) we requested specific information on critical habitat and are again seeking public input and information to assist in gathering and analyzing the best available scientific data to support critical habitat

designations. We will continue to meet with comanagers and other stakeholders to review this information and the overall designation process. We will then initiate rulemaking with the publication of a proposed designation of critical habitat, opening a period for public comment and the opportunity for public hearings.

Joint NMFS/FWS regulations for listing endangered and threatened species and designating critical habitat at section 50 CFR 424.12(b) state that the agency “shall consider those physical and biological features that are essential to the conservation of a given species and that may require special management considerations or protection (hereafter also referred to as ‘Essential Features’).” Pursuant to the regulations, such requirements include, but are not limited to the following: (1) space for individual and population growth, and for normal behavior; (2) food, water, air, light, minerals, or other nutritional or physiological requirements; (3) cover or shelter; (4) sites for breeding, reproduction, rearing of offspring, germination, or seed dispersal; and generally; (5) habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species. These regulations go on to emphasize that the agency shall focus on essential features within the specific areas considered for designation. These features “may include, but are not limited to, the following: spawning sites, feeding sites, seasonal wetland or dryland, water quality or quantity, geological formation, vegetation type, tide, and specific soil types.”

Southern Resident killer whales reside for part of the year in the inland waterways of the Strait of Georgia, Strait of Juan de Fuca, and Puget Sound, particularly during the spring, summer and fall. Southern Residents visit coastal sites off Washington, Oregon and Vancouver Island and are known to travel as far south as central California and as far north as the Queen Charlotte Islands, British Columbia. Information on the range of Southern Residents along the outer Pacific Coast is limited, with only 27 confirmed coastal sightings over the last 20 years (NMFS, 2004). Killer whale habitat utilization is dynamic and does not appear to include use of specific breeding, nursing or resting areas. Foraging areas are dependent on variable temporal and spatial patterns of migratory prey species. These characteristics present challenges in identifying critical habitat for Southern Resident killer whales. The

physical or biological features of their habitat include:

- (1) Water quality to support growth and development;
- (2) Prey species of sufficient quantity, quality and availability to support growth and development;
- (3) Sound levels that do not exceed thresholds that inhibit communication or foraging activities or result in temporary or permanent hearing loss; and
- (4) Safe passage conditions to support migration and foraging.

We are seeking information and comment on the appropriateness of considering these features for critical habitat designation.

The geographical area occupied by Southern Resident Killer Whales, where these features may be found, includes the Strait of Georgia, Strait of Juan de Fuca, Puget Sound, coastal Washington, Oregon and California. We are seeking comment and information on the specific areas within this geographical area where these features may be found.

Section 4(b)(2) of the ESA requires the Secretary to consider the “economic impact, impact on national security, and any other relevant impact,” of designating a particular area as critical habitat. For this, section 4(b)(2) authorizes the Secretary to exclude from a critical habitat designation those particular areas where the Secretary finds that the benefits of exclusion outweigh the benefits of designation, unless excluding that area will result in extinction of the species. As such, we seek information regarding the conservation benefits of designating areas in the Strait of Georgia, Strait of Juan de Fuca, Puget Sound, coastal Washington, Oregon and California as critical habitat. We also seek information on the economic benefit of excluding areas from the critical habitat designation, and the economic benefits of including an area as part of the critical habitat designation. In keeping with the guidance provided by the Office of Management and Budget (2000, 2003), we seek information that would allow it to monetize these effects to the extent possible, as well as information on qualitative impacts to economic values. We are also seeking information on impacts to national security and any other relevant impacts of designating critical habitat in these areas.

In accordance with the Secretarial Order on American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act, we will coordinate with Federally recognized American Indian Tribes on a Government-to-Government basis to

determine how to make critical habitat assessments in areas that may impact Tribal trust resources. In accordance with our regulations at 50 CFR 424.13, we will consult as appropriate with affected states, interested persons and organizations, other affected Federal agencies, and, in cooperation with the Secretary of State, with the country or countries in which the species concerned are normally found or whose citizens harvest such species from the high seas. Data reviewed may include, but are not limited to, scientific or commercial publications, administrative reports, maps or other graphic materials, information received from experts, and comments from interested parties.

### Public Comments

We exercised our best professional judgment in developing this proposal to list Southern Resident killer whales. To ensure that the final action resulting from this proposal will be as accurate and effective as possible, we are soliciting comments and suggestions from the public, other governmental agencies, the Government of Canada, the scientific community, industry, and any other interested parties. Comments are encouraged on this proposal as well as on the Status Review (See **DATES and ADDRESSES**). Specifically, we are interested in information regarding: (1) the factors we considered in determining whether the Southern Resident killer whale population is significant to the North Pacific resident killer whale taxon; (2) biological or other relevant data concerning any threats to Southern Resident killer whales; (3) the range, distribution, and abundance of Southern Resident killer whales; (4) current or planned activities within the range of Southern Resident killer whales and their possible impact on Southern Resident killer whales; (5) efforts being made to protect Southern Resident killer whales; and (6) areas that may qualify as critical habitat.

We will review all public comments and any additional information regarding the status of Southern Resident killer whales and will complete a final determination within 1 year of publication of this proposed rule, as required under the ESA. Final promulgation of the regulation(s) on this species will consider the comments and any additional information we receive, and such communications may lead to a final regulation that differs from this proposal.

**Classification***National Environmental Policy Act*

The 1982 amendments to the ESA, in section 4(b)(1)(A), restrict the information that may be considered when assessing species for listing. Based on this limitation of criteria for a listing decision and the opinion in *Pacific Legal Foundation v. Andrus*, 675 F. 2d825 (6th Cir. 1981), We have concluded that ESA listing actions are not subject to the environmental assessment requirements of the National Environmental Policy Act (NEPA). (See NOAA Administrative Order 216-6.)

*Executive Order 12866, Regulatory Flexibility Act and Paperwork Reduction Act*

As noted in the Conference Report on the 1982 amendments to the ESA, economic impacts cannot be considered when assessing the status of a species. Therefore, the economic analysis requirements of the Regulatory Flexibility Act are not applicable to the listing process. In addition, this rule is exempt from review under Executive Order 12866. This proposed rule does not contain a collection-of-information requirement for the purposes of the Paperwork Reduction Act.

*Federalism*

In keeping with the intent of the Administration and Congress to provide continuing and meaningful dialogue on issues of mutual State and Federal interest, this proposed rule will be given to the relevant state agencies in each state in which the species is believed to occur, who will be invited to comment. We have conferred with the State of Washington in the course of assessing the status of Southern Resident killer whales, and considered, among other things, state and local conservation measures. Washington has listed killer whales under the Washington Administrative Code 232-12-014 and is coordinating with us to develop a State recovery plan. As the process continues, we intend to continue engaging in informal and formal contacts with Washington, and other affected local or regional entities, giving careful consideration to all written and oral comments received. We also intend to consult with appropriate elected officials in the establishment of a final rule.

**List of Subjects in 50 CFR Part 223**

Endangered and threatened species, exports, imports, transportation.

Dated: December 15, 2004.

**Rebecca Lent,**

*Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.*

For the reasons set out in the preamble, 50 CFR part 223 is proposed to be amended as follows:

**PART 223—THREATENED MARINE AND ANADROMOUS SPECIES**

1. The authority citation for part 223 continues to read as follows:

**Authority:** 16 U.S.C. 1531-1543 and 16 U.S.C. 1361 *et seq.*

2. In § 223.102, paragraph (c), add the following to the List of Threatened Marine and Anadromous Species, in alphabetical order under MARINE MAMMALS:

**§ 223.102 Enumeration of threatened marine and anadromous species.**

\* \* \* \* \*

(c) Marine Mammals.

\* \* \* \* \*

Killer whale (*Orcinus orca*), Southern Resident population (DPS), which consists of whales from J, K and L pods.

\* \* \* \* \*

[FR Doc. 04-27929 Filed 12-21-04; 8:45 am]

**BILLING CODE 3510-22-S**

**DEPARTMENT OF COMMERCE****National Oceanic and Atmospheric Administration****50 CFR Part 679**

[Docket No. 041126332-4332-01; I.D. 112204A]

**Fisheries of the Exclusive Economic Zone Off Alaska; Bering Sea and Aleutian Islands; 2005 and 2006 Proposed Harvest Specifications for Groundfish; Correction**

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

**ACTION:** Proposed rule; correction.

**SUMMARY:** This document corrects a proposed rule to implement 2005 and 2006 harvest specifications and prohibited species catch (PSC) allowances for the groundfish fishery of the Bering Sea and Aleutian Islands management area (BSAI). This document corrects errors in Table 8 to the proposed specifications.

**DATES:** Comments must be received by January 7, 2005.

**ADDRESSES:** Send comments to Sue Salvesson, Assistant Regional

Administrator, Sustainable Fisheries Division, Alaska Region, NMFS, Attn: Lori Durall. Comments may be submitted by:

- Mail to P.O. Box 21668, Juneau, AK 99802;

- Hand Delivery to the Federal Building, 709 West 9th Street, Room 420A, Juneau, AK;

- E-mail to

2005AKgroundfish.tacspeccs@noaa.gov and include in the subject line of the e-mail comments the document identifier: 2005 Proposed Specifications. E-mail comments, with or without attachments, are limited to 5 megabytes;

- FAX to 907-586-7557; or

- Webform at the Federal

eRulemaking Portal:

[www.regulations.gov](http://www.regulations.gov). Follow the instructions at that site for submitting comments.

Copies of the draft Environmental Assessment/Initial Regulatory Flexibility Analysis (EA/IRFA) prepared for this action are available from NMFS at the addresses above or from the Alaska Region website at [www.fakr.noaa.gov](http://www.fakr.noaa.gov). Copies of the final 2003 Stock Assessment and Fishery Evaluation (SAFE) report for the groundfish resources of the BSAI, dated November 2003, are available from the North Pacific Fishery Management Council (Council), West 4th Avenue, Suite 306, Anchorage, AK 99510-2252 (907-271-2809), or from its website at [www.fakr.noaa.gov/npfmc](http://www.fakr.noaa.gov/npfmc).

**FOR FURTHER INFORMATION CONTACT:**

Mary Furuness, 907-586-7228, or e-mail at [mary.furuness@noaa.gov](mailto:mary.furuness@noaa.gov).

**SUPPLEMENTARY INFORMATION:** NMFS proposed 2005 and 2006 harvest specifications and PSC allowances for the groundfish fishery of the BSAI on December 8, 2004 (69 FR 70974). That rule lists proposed pollock allocations to the seven inshore catcher vessel pollock cooperatives. Allocations in the proposed rule reflect cooperative applications for 2005 that are due to NMFS by December 1 of each year. All of the changes based on these applications were not reflected in the proposed Table 8. This document corrects the proposed rule by reflecting accurately all of the applications received for the 2005 year.

**Correction**

As published, proposed rule FR Doc. 04-26952, December 8, 2004 (69 FR 70974) contains an error and needs to be corrected. The corrected table adds member vessel PACIFIC CHALLENGER to the Peter Pad Fleet Cooperative and corrects data in columns 2, 3, 4, and 5 for the Westward Fleet Cooperative. The corrected table reads as follows: