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14 UNITED STATES DISTRICT COURT
15 FOR THE WESTERN DISTRICT OF WASHINGTON

16 CENTER FOR BIOLOGICAL DIVERSITY,) Civ. No. CV02-2505L
17 FRIENDS OF THE SAN JUANS, PEOPLE)
FOR PUGET SOUND, ORCA)
18 CONSERVANCY, OCEAN ADVOCATES,) PLAINTIFFS' MOTION FOR SUMMARY
EARTH ISLAND INSTITUTE, RALPH) JUDGMENT
19 MUNRO, and KAREN MUNRO,)
20) NOTE ON MOTION CALENDAR:
Plaintiffs,) FRIDAY, AUGUST 29, 2003
21)
v.)
22)
ROBERT LOHN, Northwest Regional)
23 Administrator of National Marine Fisheries)
Service, and DONALD L. EVANS, Secretary)
24 of Commerce, U.S. Department of Commerce,)
25)
Defendants.)
26)

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1 INTRODUCTION

2 The waters of Puget Sound – from the Strait of Juan de Fuca to Dyes Inlet to the San Juan
3 Islands – are home to the only resident population of orca whales in the contiguous United States.
4 Their mystique has captured the minds and hearts of the people of the Pacific Northwest, infusing
5 them in the region’s legends, art, and culture. The Samish Nation and other Coast Salish people
6 regard the orcas as beings of great power, due respect as fellow hunters of salmon, and a sign that
7 plentiful salmon abound. Today, young and old strive to catch a glimpse of sea breath or a fin
8 breaking the waves – hoping to witness a black and white whale bursting from the sea. Frequent
9 observers know the resident orcas that make their home in Puget Sound by name, recognizing their
10 unique markings and their place in their family and social units. Sadly, the Puget Sound orcas,
11 known as Southern Residents, have suffered a 20% population decline since 1996. If these trends
12 continue, this population of whales – the only resident orca whales that frequent the coast of the
13 contiguous United States – will become extinct.

14 This case challenges the National Marine Fisheries Service’s (“NMFS”) determination that
15 the Southern Resident orcas do not warrant listing under the Endangered Species Act (“ESA”).
16 NMFS found the Southern Residents to be a discrete population of orcas that is at high risk of
17 extinction. Once NMFS made these findings, it had a duty to list the Southern Residents. Instead,
18 NMFS denied the Southern Residents ESA protection based on its conclusion that it would not be a
19 “significant” loss if these whales became extinct. By refusing to list the Southern Residents based
20 on its unlawful view of their significance, NMFS exceeded its statutory authority and relied on a
21 factor that is entirely absent from the ESA’s listing criteria. NMFS also erred by failing to protect
22 the Southern Residents as the lone resident orca population indigenous to the contiguous United
23 States. Finally, NMFS relied on a discredited, outdated species delineation and on speculation that
24 other orcas might re-colonization Puget Sound when the only evidence of such a successful re-
25 colonization comes from the last Ice Age. NMFS’ decision not to list the Southern Residents is in
26 violation of the ESA, contrary to the best available scientific information, arbitrary, and capricious.

1 It unlawfully deprives the Southern Residents of ESA protection that could stem the tide of
2 extinction and preserve the orcas that have enriched this region's people and cultures.

3 BACKGROUND

4 I. THE KILLER WHALE (*ORCINUS ORCA*)

5 Orca whales are revered for their awesome power, remarkable intelligence, and inspiring
6 grace. Dubbed killer whales by humans who observed them killing marine mammals and saw them
7 as competitors for fish and whales, they are also known as orcas from their Latin name, which is
8 derived from *Orcus*, Roman god of the underworld.

9 Orcas can be easily recognized by their striking black and white pigmentation. Their black
10 bodies contrast with their white underbellies and a white or gray saddle patch behind the dorsal fin.
11 The dorsal fin of adult males stands tall and erect, while the female's fin is short and curved. AR 6
12 at 9-10.¹

13 Orca society is sophisticated, with cultural rules passed down from generation to generation.
14 Orcas live in matriarchal units comprised of a mother and one or more of her offspring, and often
15 their progeny as well. These matriarchal units congregate into larger social groups known as pods,
16 which in turn congregate into cohesive populations. AR 6 at 17. Indicative of the intricate
17 matriarchal social fabric "is the large proportion of post-reproductive females. . . . [T]he older
18 whales in a pod may be a valuable resource, because they carry social knowledge and perhaps also
19 pass the legacy of foraging distribution from generation to generation." AR 6 at 55.

20 Using clicks, calls, and whistles, orcas communicate with each other, locate prey, and
21 convey information about their identity, location, well-being, and potential threats. These vocal
22 patterns have been likened to human dialects. Each orca population has one or more unique dialect.
23 AR 6 at xii, 52, 62. One whale biologist described the complexity of their acoustical repertoire as
24

25 ¹ Citations to the Administrative Record filed with the Court are abbreviated "AR" followed by
26 the Exhibit Number of the document and pertinent page cites for the July 2002 "Not Warranted"
27 Decision record; as DPS AR for the administrative record for the joint DPS policy; and as SAR
28 for the supplemental "not warranted" decision record filed in May 2003.

1 follows: “If human speech were likened to a clarinet, orca vocalization would be more like a full
2 symphony orchestra.” Whale Museum Research Director Richard Osborne quoted in S. Yates,
3 Orcas, Eagles & Kings: The Natural History of Puget Sound & Georgia Strait at 33 (1992).

4 Scientists believe orcas possess culture based on their sophisticated language, long-life span,
5 extended childhood, advanced nervous system, and rituals, such as a greeting ceremony observed
6 when Southern Resident pods reunite each summer. AR 313 at 28.

7 II. CLASSIFICATION OF ORCA WHALES IN THE EASTERN NORTH PACIFIC
8 OCEAN

9 Currently, taxonomists recognize only one global species of orca whales: (*Orcinus orca*).
10 Complaint & Answer ¶ 24. The concept of a single orca species is outdated and contrary to
11 available data showing that additional orca species or subspecies exist, but revising a taxonomic
12 classification is difficult and time-consuming. AR 6 at x; xv, 53-54. Whale taxonomy presents
13 particular challenges, due to the lack of skulls to examine in order to classify species. See AR 6 at
14 54; SAR 13 at 7.

15 Orcas are the ocean’s top predators, hunting cooperatively in tight-knit societies. Their
16 favored prey and feeding strategies are correlated with their distribution, social structure, behaviors,
17 communication, and physical appearance.

18 In the Eastern North Pacific Ocean, biologists classify orcas into three reproductively
19 isolated forms: resident, transient, and offshore.² The three forms have marked differences in
20 morphology, ecology, behavior, and genetic composition. Although some of these different types
21 of orcas may utilize overlapping habitats, they have never been observed to interbreed and genetic
22 data show that they are reproductively isolated. AR 6 at 13-24.

23 A. Resident Orca Whales

24 Resident orcas feed solely on fish, particularly on salmon. Their feeding strategy has led to
25 relatively small, predictable home ranges and stable population structures. Resident orcas live in

26 ² “‘Forms, ecotypes and races’ are all terms that can be used to describe subspecies and are the
27 terms used to describe things that likely will end up as formal subspecies.” SAR 13 at 6.

1 large pods with membership ranging from 10 to 60 whales. Offspring of both genders have been
2 observed to live in matriarchal units throughout their lives. Complaint & Answer ¶ 26; AR 6 at 13.

3 Several resident orca populations live in the Eastern North Pacific, namely the Southern
4 Residents, Northern Residents, and two groups of Alaska Residents. The Southern Resident
5 population consists of three pods that have their home range in the inland waterways of Puget
6 Sound, the Strait of Juan de Fuca, and Georgia Strait.

7 Although the ranges of the Southern and Northern Residents overlap at the margins around
8 Vancouver Island, genetic data show that Southern Residents are reproductively isolated and have
9 not interbred with either Northern Residents or Alaska Residents in recent evolutionary history. AR
10 6 at 14; AR 124 at 43. Statistically significant saddle patch frequency differences have been found
11 between the Southern Residents and all other orcas, providing morphological evidence of their
12 isolation and genetic distinctions. AR 65.

13 B. Transient Orca Whales

14 Transient orcas prey almost exclusively on other marine mammals, such as seals, porpoises,
15 and even large whales. Complaint & Answer ¶ 28. They travel across great distances in search of
16 food, establishing a large home range. 67 Fed. Reg. 44,133, 44,135 (July 1, 2002); AR 6 at 15.

17 Transient orcas exhibit offspring dispersal in both sexes, with females dispersing from their
18 pod with their first offspring, and males dispersing at the onset of adulthood. Only the first-born
19 transient male stays with its maternal pod for life, leading to a relatively small pod size typically of
20 1 to 4 individuals. Complaint & Answer ¶ 30.

21 Transient orcas have more erect and pointed dorsal fins and significantly fewer saddle patch
22 patterns than resident orcas. They exhibit different acoustic patterns and are less vocal than resident
23 orcas. Complaint & Answer ¶ 31.

24 C. Offshore Orca Whales

25 Due to their relatively recent discovery, little is known about offshore orcas. They
26 apparently live in the coastal and open ocean areas of the Eastern North Pacific, but are not known
27

1 to intermingle with other types of orcas. AR 6 at 15.

2 III. THE DECLINE OF SOUTHERN RESIDENT ORCAS

3 The Southern Residents are believed to have numbered well over 100 individuals in the
4 mid-1960s. Complaint & Answer ¶ 34; 67 Fed. Reg. at 44,133 (“the best available scientific
5 information suggests a historical abundance of approximately 140-200 whales”). Three major
6 population declines have occurred since then.

7 First, during the 1960s and early 1970s, “at least 68 whales were removed or killed during
8 capture operations for public display” from the Southern and Northern Resident populations. 67
9 Fed. Reg. at 44,133; AR 6 at 43. The live captures reduced the Southern Resident population by
10 approximately 30%. Complaint & Answer ¶ 34. The removal of healthy, young whales had an
11 impact beyond their immediate loss.

12 An annual census of the Southern Resident orca whales has documented subsequent
13 population trends. AR 6 at vii, 30. In 1974, scientists began conducting the annual census by
14 identifying individual orcas by their unique saddle patch patterns, dorsal fin size and shape, and
15 other markings. Complaint & Answer ¶ 20.

16 The annual census documented a second population decline of approximately 12% between
17 1980 and 1984. This decline has been attributed to a shortage of reproductive females stemming
18 from the live capture period. AR 6 at 31 (“fewer females than expected became mature . . . because
19 of live-capture removals of juvenile females”). As more female orcas became reproductively
20 mature, the population grew and stabilized. Complaint & Answer ¶ 35.

21 The third population decline embodies the current threat to the Southern Residents’ survival.
22 The Southern Residents have declined by 20% from 97 whales in 1996 to 78 whales in 2001.
23 Complaint & Answer ¶ 36; 67 Fed. Reg. at 44,134; AR 6 at vii (“in the past five years, the
24 population has declined 20%); *id.* at 31 (“annual counts of the total population size now show the
25 Southern Resident population has declined by 20% from 1996-2001.”). This decline has been
26 attributed to external causes, such as prey availability or toxic pollution, rather than demographic
27

1 cycles in the whale population. AR 6 at viii, 33-34.

2 IV. THE ESA STATUTORY FRAMEWORK

3 Section 4 of the ESA requires the Secretary to list a species as endangered or threatened
4 when it meets the statutory listing criteria. 16 U.S.C. § 1533. Compared to previous endangered
5 species legislation, the ESA greatly expanded the imperiled populations eligible for protection in
6 three ways. First, it requires listing of threatened as well as endangered species in order to afford
7 protection before a species is perilously close to extinction. *Id.* § 1532(20) (“threatened” status
8 accorded to species “likely to become endangered within the foreseeable future”). Second, a
9 species may be listed not only when it is at risk of extinction worldwide but also when it “is in
10 danger of extinction throughout all or a significant portion of its range.” *Id.* § 1532(6) (emphasis
11 added). Third, the Act defines “species” broadly to include “any subspecies of fish or wildlife or
12 plants, and any distinct population segment of any species of vertebrate fish or wildlife which
13 interbreeds when mature.” *Id.* § 1532(16).

14 The ESA does not define the term distinct population segment (“DPS”). NMFS and the
15 Fish and Wildlife Service (“FWS”) have jointly adopted a DPS policy. 61 Fed. Reg. 4,722 (1996);
16 AR 63. First, the policy establishes criteria for determining whether a population is “discrete” from
17 other populations of the species. 61 Fed. Reg. at 4,725. Second, the policy requires that a
18 population be “significant” to be a distinct population segment, even though the word “significant”
19 does not appear in the statutory definition of species or its legislative history. *Id.*

20 The Secretaries of Commerce (for most marine species) and Interior (for other species) are
21 charged with listing species as threatened or endangered based “solely on the basis of the best
22 scientific and commercial data available . . .,” *id.* § 1533(b)(1)(A), and whenever listing is
23 warranted based on any one of the following five listing factors:

- 24 (A) the present or threatened destruction, modification, curtailment of its
25 habitat or range;
- 26 (B) overutilization for commercial, recreational, scientific, or educational
27 purposes;
- 28 (C) disease or predation;

- 1 (D) the inadequacy of existing regulatory mechanisms; or
2 (E) other natural or manmade factors affecting its continued existence.

3 Id. § 1533(a)(1). The Secretary of Commerce has delegated his ESA responsibilities to NMFS. 50
4 C.F.R. § 17.2(b).

5 The ESA establishes a process for citizens to petition for listing of species. Within 90 days,
6 NMFS must decide whether the petition presents substantial scientific or commercial information
7 indicating that listing may be warranted, and if so, it must review the status of the species. 16
8 U.S.C. § 1533(b)(3)(A). Within 12 months after receiving the petition, NMFS must determine
9 whether listing is warranted. 16 U.S.C. § 1533(b)(3)(B). A finding that a listing is not warranted is
10 subject to judicial review. Id. § 1533(b)(3)(C)(ii). If NMFS finds that listing is warranted, it must
11 publish a proposed listing regulation in the Federal Register, make a final listing decision generally
12 within one year, and designate critical habitat for the species. Id. §§ 1533(b)(3)(B)(ii), (b)(6)(A) &
13 (C).

14 Once a species is listed, various safeguards prevent activities that harm members of the
15 species or that jeopardize the species' survival and recovery. See id. §§ 1536, 1538. The ESA's
16 ultimate goal is recovery of listed species to the point where they no longer need ESA protection.
17 Id. §§ 1531(b)-(c); 1532(3).

18 V. THE PETITION TO LIST SOUTHERN RESIDENT ORCA WHALES AND NMFS'
19 STATUS REVIEW

20 A. The Petition

21 In May 2001, the Center for Biological Diversity, Ocean Advocates, Orca Conservancy,
22 Friends of the San Juans, People For Puget Sound, Ralph Munro, and others petitioned NMFS to list
23 the Southern Resident orcas as endangered under the ESA. AR 34. The petition detailed the ESA
24 factors warranting listing, provided information on the population's recent decline, reviewed the
25 threats to the Southern Residents' survival and recovery, and submitted a population viability
26 analysis and other scientific evidence showing that Southern Residents are in danger of becoming
27 extinct. AR 34. On July 26, 2001, the petitioners submitted an updated population viability
28 analysis incorporating the 2001 Southern Resident census. AR 35.

1 B. The Biological Review Team Status Review

2 On August 13, 2001, NMFS made a 90-day finding that listing the Southern Residents may
3 be warranted. AR 7; 66 Fed. Reg. 42,499 (Aug. 13, 2001). Accordingly, NMFS convened a
4 biological review team (“BRT”) and initiated a status review of the Southern Residents. Complaint
& Answer ¶ 39. The BRT completed its status review in April 2002. AR 6.

5 1. *The Southern Residents Are a Discrete Population.*

6 The BRT “unanimously concluded that Southern Resident killer whales are discrete from
7 other killer whale populations.” AR 6 at 59. The BRT expressly relied upon two types of genetic
8 data that “clearly show that Southern Resident killer whales belong to an independent population.”
9 Id. From the genetic data, the BRT concluded that:

10 “Significant genetic differences occur among Resident, Transient, and Offshore
11 killer whales.” AR 6 at 15; see also id. at 57 (noting “relatively large genetic
12 differences between all known North Pacific Resident animals and Transient and
13 Offshore animals”).

14 “Resident and Transient killer whales . . . have striking genetic differences [that]
15 indicate reproductive isolation on an evolutionary scale.” AR 6 at 53; id. at 58
16 (“Genetic evidence indicates Resident killer whales differ markedly from
Transient killer whales”); see also id. at 22-23 (noting “strong differences
between Residents and Transients”).

17 “Genetic analysis suggests that Offshores may be reproductively isolated.” AR 6
18 at 15; id. (“Offshore whales are not known to intermingle with Resident or
Transient whales.”).

19 “That females from the Southern and Northern Resident populations have not
20 been migrating between populations within at least the recent evolutionary history
21 of these populations.” AR 6 at ix; see also id. at 14 (“no intermixing . . . has been
noted”).

22 “[Southern Residents] represent[] the group that differs most in nuclear DNA
23 from all other groups.” AR 6 at 56.

24 In finding the Southern Residents to be a discrete population, the BRT also relied on
25 differences in the summer ranges. AR 6 at 59. “Southern Resident killer whales clearly have a core
26 summer range area that is spatially separate from Northern Resident whales, which predominantly
27 frequent the waters of central and northern British Columbia, and Offshore killer whales, which

1 occur along the coast.” AR 6 at 28; see also id. at vii (noting as to Southern and Northern Residents
2 that “[t]he most apparent difference is that the spring, summer, and fall ranges of these populations
3 have little known overlap” with the Southern Residents feeding on salmon returning to Washington
4 and southern British Columbia rivers and the Northern Residents feeding on salmon from more
5 northern rivers).³

6 2. *The Southern Residents Are at Risk of Extinction.*

7 The BRT found that the Southern Residents fall below the threshold established by the
8 World Conservation Union (known as IUCN) for critically endangered population sizes. AR 6 at
9 67 (fewer than 50 mature, breeding individuals); distinct population segment AR References #2. It
10 also assessed population viability under two scenarios: (1) the most recent 1992-2001 population
11 trends on the assumption that whatever has caused the decline in survival will not reverse itself; and
12 (2) the overall population trends since the annual census began in 1974. AR 6 at 70.⁴ The BRT
13 predicted a range of outcomes for each scenario with the higher end accounting for large
14 catastrophic mortality events, such as oil spills. Id. Using the average mortality rate for 1992-2001,
15 Southern Residents have a 12-30% probability of extinction in 100 years and an 86-98% probability
16 of extinction in 300 years. AR 6 at xiv, 71. Using the average mortality rate since 1974, Southern
17 Residents have an extinction probability of 1-5% in 100 years and 5-50% in 300 years. Id. at xiv;
18 71.

19 The BRT concluded that the Southern Residents exceed a 1% risk of extinction over 100
20 years, the threshold for extinction recommended for large whales by scientists convened by NMFS.
21 AR 6 at 77. However, if the Southern Residents are lumped together with other orca populations,
22 their combined risk of extinction might not exceed that threshold. Id.

23
24 ³ Although not a basis for the “discreteness” finding, the BRT also found statistically significant
25 differences in morphology, pod structure, prey, and behavior between the Southern Residents
and other orcas. AR 6 at 13-15, 23.

26 ⁴ Instead of the 1996-2001 period associated with the recent decline, the BRT used a longer 9-
27 year period, which lessens the average rate of the decline. It nonetheless found an unacceptably
high extinction risk.

1 3. *The Single, Global Orca Species Delineation is Outdated and Inaccurate.*

2 Based on the available science, the BRT unanimously concluded that “there are
3 unrecognized species or subspecies of killer whales within the currently recognized taxon (the
4 global species).” AR 6 at 66. Accordingly, “[t]he BRT concluded that the current designation of
5 one global species for killer whales is likely inaccurate, because available data suggest that
6 additional species/subspecies of killer whales probably exist. However, formal taxonomic changes
7 are often slow to occur and lag behind current knowledge.” AR 6 at x; see also id. at 53-54, 76.

8 The BRT concluded that transient and resident orcas belong to two different species. The
9 BRT members unanimously voted “YES” to the question: “Based on ecology, morphology and
10 genetics, do transient and resident killer whales in the North Pacific belong in two different taxa
11 (species or subspecies)?” SAR 2; AR 6 at 53. More specifically, the BRT concluded that residents
12 and transients “have striking genetic differences [which] indicate reproductive isolation on an
13 evolutionary scale of these two ecotypes of killer whales, which is the fundamental criterion for
14 defining species.” Id.

15 4. *Significance of the Southern Residents.*

16 The BRT failed to reach consensus on the “significance” prong of the DPS policy, due
17 primarily to uncertainty over the species, subspecies, or distinct population segment to which the
18 Southern Residents belong. AR 6 at 59. The BRT noted that: “The strongest support for a Southern
19 Resident distinct population segment occurred when the taxon was assumed to be North Pacific
20 Resident whales . . . , but there was no consensus.” AR 6 at 76; AR 6 at 66 (“About half the BRT
21 vote supported Southern Residents as a DPS of this taxon.”).⁵

22 The BRT reviewed the significance of the Southern Residents in relation to the outdated
23 global species delineation because it apparently received legal direction that the DPS policy called

24 _____
25 ⁵ The BRT used a form of voting under which all BRT members received the same number of
26 points to distribute among various outcomes. The number of votes did not depend on the BRT
27 member’s level of expertise in taxonomy. AR 6 at 60; id. at 1 n.1 (some BRT members have
28 expertise in toxicology, contaminants, habitat, or risk assessment, rather than whale biology or
29 taxonomy).

1 for such a comparison, even if the current species is not the best available science. AR 6 at 60; SAR
2 8 & 9. The BRT was divided on the question of whether extirpation of the Southern Residents
3 would meet the significance criteria in the DPS policy when applied in relation to the global orca
4 taxon. AR 6 at 60-62.

5 *5. Factors Contributing to the Decline of the Southern Residents.*

6 With regard to the factors causing the decline of the Southern Residents, the BRT
7 concluded:

8 Reduced quantity and quality of prey are expected to continue to affect the
9 Southern Resident population. In addition, levels of OC [organochlorine]
10 contaminants are not declining appreciably or may even be increasing in the
11 habitat used by Southern Residents and their prey. Therefore, Southern Residents
12 may be at risk for chronic, serious sublethal effects, because OC concentrations in
13 these animals currently exceed those shown to have serious sublethal effects in
14 other marine mammal species (e.g., immunotoxicity in harbor seals). Other risk
15 factors that may continue to impact Southern Residents are oil spills and possibly
16 whale watching.

17 AR 6 at 76.

18 VI. NMFS' DECISION NOT TO LIST SOUTHERN RESIDENT ORCA WHALES

19 NMFS publicly announced that it had determined that listing of Southern Residents was
20 "not warranted" on June 25, 2002, and published that determination in the Federal Register on July
21 1, 2002. Complaint & Answer ¶ 41; AR 1; 67 Fed. Reg. 44,133 (July 1, 2002).

22 A. NMFS Found the Southern Residents to Be At Risk of Extinction.

23 NMFS noted that the Southern Residents are at risk of extinction in light of their recent,
24 precipitous decline. 67 Fed. Reg. at 44,137. Relying on the BRT's assessment, NMFS
25 acknowledged that the Southern Residents "face a relatively high risk of extinction." 67 Fed. Reg.
26 at 44,138.⁶

27 B. NMFS Found the Southern Residents to Be a Discrete Population.

28 Under the agencies' distinct population segment policy, a population is discrete if "[i]t is

29 ⁶ While NMFS relied on the BRT's assessment, it erroneously understated the risks of extinction found by the BRT.

1 markedly separated from other populations of the same taxon as a consequence of physical,
2 physiological, ecological, or behavioral factors. Quantitative measures of genetic or morphological
3 discontinuity may also provide evidence of this separation.” 61 Fed. Reg. at 4,725.

4 NMFS concluded that the Southern Residents meet this discreteness criterion based on
5 genetic data and other information. 67 Fed. Reg. at 44,136. Specifically, “[g]enetic data indicate
6 that females from the Southern and Northern Resident populations have not been migrating between
7 populations within at least the recent evolutionary history of these populations, suggesting
8 reproductive isolation . . .” *Id.* at 44,135 & 44,136; *see also id.* (“Significant genetic differences
9 occur among Resident, Transient, and Offshore killer whales.”). Based on genetic data, NMFS
10 concluded that the various resident populations are “reproductively isolated and that the isolation of
11 Southern and Northern Residents from each other is greater than the isolation between the Northern
12 Residents and Southern Alaska Residents.” *Id.* at 44,136.

13 NMFS also found that “Southern Residents have not been seen to associate with other
14 Resident whales.” *Id.* at 44,135; *see also id.* (“no intermixing of [Southern and Northern Resident]
15 pods has been noted”); *id.* (“Transient whales are not known to mingle with Resident or Offshore
16 whales.”); *id.* (“Offshore whales are not known to intermingle with Resident or Transient whales.”).

17 C. NMFS Decided the Loss of the Southern Residents Would Not Be Significant.

18 In deciding not to list the Southern Residents, NMFS assessed three of the DPS policy’s
19 four enumerated criteria for determining “significance.” First, because Northern and Southern
20 Residents both inhabit coastal fjord habitat, NMFS decided that extinction of the Southern
21 Residents would not diminish the orcas’ “persistence in an ecological setting that is unusual or
22 unique for the taxon.” 67 Fed. Reg. at 44,136.

23 Second, NMFS addressed whether loss of the Southern Residents would “represent a
24 significant gap in the range of the taxon.” 67 Fed. Reg. at 44,137. NMFS admitted that the loss of
25 Southern Resident orcas “could result in few, if any, killer whales in parts of Puget Sound for an
26 extended period . . .” *Id.* However, it held out the hope that offshore orcas or other residents might
27

1 recolonize Puget Sound, even though the BRT found no data to suggest that this recolonization
2 would occur or a timeline in which it might prove successful. Id.; AR 6 at 61. NMFS also relied on
3 the possible presence of some transient orca whales in portions of the Southern Residents’ range and
4 the continued presence of orcas in other parts of the Pacific Ocean, despite the BRT’s conclusion
5 that transient and resident orcas constitute different species. 67 Fed. Reg. at 44,137.

6 Third, NMFS assessed whether Southern Residents differ markedly from other orca
7 populations in their genetic characteristics. In determining that Southern Resident orcas are a
8 discrete population, NMFS relied almost exclusively on genetic data and concluded that Southern
9 Residents are “markedly separated from other populations” of whales. 67 Fed. Reg. at 44,136,
10 quoting 61 Fed. Reg. 4,722, 4,725. In addressing the significance of the Southern Residents,
11 however, NMFS looked at the same genetic data and concluded that “the Southern Resident killer
12 whale stock does not have markedly different genetic characteristics.” 67 Fed. Reg. at 44,137.

13 Acknowledging that the “precise circumstances are likely to vary considerably from case to
14 case,” the DPS policy authorizes the Services to consider other information “that might bear on the
15 biological and ecological importance of a discrete population segment.” 61 Fed. Reg. at 4,725. In
16 addressing the significance of losing the Southern Residents, however, NMFS never considered the
17 Southern Residents’ unique language and social fabric, stating that “only the criteria described in
18 the DPS policy were deemed applicable to assessing the significance of the Southern Residents.”
19 67 Fed. Reg. at 44,138.

20 D. NMFS Assessed the Significance of the Southern Residents Strictly in Relation to
21 the Outdated Global Orca Species Classification.

22 NMFS recognized that the global orca whale taxon is outdated and needs to be replaced
23 with multiple taxa covering smaller units of orcas. 67 Fed. Reg. at 44,135-36. Nonetheless, NMFS
24 stated that it “considers the published standard of a single, global species as the best available
25 scientific information.” Id. at 44,138. Because it concluded that loss of Southern Residents would
26 not be significant in relation to the global species, it found listing unwarranted. NMFS refused to
27 consider the significance of the Southern Residents in relation to a smaller, more credible species

1 configuration until a formal taxonomic reclassification is completed.

2 STANDARD OF REVIEW

3 This action is brought under the ESA citizen suit provision, 16 U.S.C. § 1540(g)(1),⁷ or
4 alternatively under the Administrative Procedure Act, 5 U.S.C. § 706. Under either authority, the
5 decision not to list Southern Residents must be set aside if it is arbitrary, capricious, or contrary to
6 the ESA. Friends of Endangered Species v. Jantzen, 760 F.2d 976, 981-82 (9th Cir. 1985).

7 ARGUMENT

8 It is undisputed that the resident orcas that make their summer home in Puget Sound face a
9 high risk of extinction if current trends continue. The best available science irrefutably confirms
10 this fact. Indeed, the BRT concluded that the Southern Residents' risk of extinction exceeds
11 thresholds that compel an ESA listing.

12 NMFS denied the Southern Residents ESA protection based on its finding that the Southern
13 Residents are not significant. This decision is erroneous because NMFS lacks the discretion to
14 decide which distinct populations are worthy of protection and which ones may be sacrificed. If a
15 distinct population is at risk of extinction, the ESA compels NMFS to list it. By denying the listing
16 based on its subjective assessment of significance of the Southern Residents, NMFS relied on a
17 factor Congress did not allow it to consider. NMFS also erred by failing to consider the ESA's
18 direction to afford protection to imperiled U.S. populations of species that may be plentiful
19 elsewhere in the world. Moreover, NMFS reached its finding that the Southern Residents are
20 insignificant by placing its faith in a species' delineation that its own biological review team
21 determined was outdated and no longer credible, by surmising that recolonization might occur
22 without any supporting evidence, by discounting evidence that it previously credited, and by
23 ignoring the uniqueness of the Southern Residents. For these reasons, the decision not to list

24
25 ⁷ Pursuant to 16 U.S.C. § 1540(g)(2), plaintiffs sent 60-day notices to defendants on August 6,
26 2002 and September 26, 2002. More than 60 days have passed since defendants received these
27 notices. Complaint & Answer ¶ 13. Plaintiffs are submitting the declarations of Will Anderson,
Stephanie Buffum, Frederic Lawrence Felleman, Kathy Fletcher, and Ralph Munro
demonstrating their standing to bring this case.

1 Southern Residents defies the ESA listing mandates and should be overturned.

2 I. NMFS MUST LIST THE SOUTHERN RESIDENTS BECAUSE THEY SATISFY THE
3 STATUTORY DEFINITION OF AN ENDANGERED SPECIES.

4 Based on the undisputed scientific record, NMFS made two findings that compelled it to list
5 Southern Residents as endangered. First, it found that the Southern Residents are a discrete
6 population of orcas. Second, it found them to be at risk of extinction. Once it made these findings,
7 NMFS was required to list the Southern Residents as “endangered.” By failing to do so, NMFS
8 violated its nondiscretionary duty to list distinct population segments based on the best available
9 science and the ESA’s statutory listing criteria.

10 A. NMFS Found That the Southern Residents Are a Discrete Population of Orcas.

11 The Southern Residents represent the only known resident orca population in the waters of
12 the contiguous United States. They have been reproductively isolated from all other orcas
13 throughout their recent evolutionary history, have a unique home range in the waters of Puget
14 Sound, and interact with other orcas infrequently. 67 Fed. Reg. at 44,135-36; AR 124 at 43, 45.

15 The BRT reviewed genetic, reproductive, morphological, behavioral, and other data on
16 orcas generally and the Southern Residents in particular and unanimously concluded that the
17 Southern Residents “are discrete from other killer whale populations.” AR 6 at 59. It expressly
18 based this finding on genetic data and the Southern Residents’ unique home range. *Id.*

19 Adhering to the BRT’s conclusions, NMFS concluded that Southern Resident orca whales
20 are a discrete population of orca whales. Based on genetic data, NMFS found significant genetic
21 differences among resident, offshore, and transient whales and that the various resident populations
22 are “reproductively isolated.” 67 Fed. Reg. at 44,135-36. NMFS also found that the Southern
23 Residents are not “known to intermingle,” “associate” or “intermix” with transient, offshore, or
24 other resident whales. *Id.* at 44,135.

25 B. NMFS Found that the Southern Residents Are Endangered.

26 Tragically, the Southern Residents have experienced a precipitous decline in population
27 since 1996. Their numbers have dropped from 97 whales in 1996 to 78 whales in 2001. AR 6 at

1 vii, 31.

2 The BRT concluded that the Southern Residents have “a greater than 10% probability of
3 extinction in 100 years” if mortality rates since 1992 continue. AR 6 at 74. Even using trends since
4 1974, the BRT concluded that “the extinction probability is 1-5% in 100 years.” *Id.* The BRT
5 further concluded that the Southern Residents have greater than a 1% probability of extinction over
6 100 years, which exceeds the threshold for endangered status appropriate for whales. AR 6 at 77;
7 AR 109, at 1-2. Based on the BRT’s assessment, NMFS concluded that the Southern Residents
8 “face a relatively high risk of extinction.” 67 Fed. Reg. at 44,137-38.

9 C. NMFS Had a Nondiscretionary Duty to List the Southern Residents Once it
10 Found Them to be a Discrete Population and Endangered.

11 Once NMFS found the Southern Residents to be a discrete population that is endangered,
12 that should have ended the inquiry. Under the ESA, NMFS must list distinct population segments
13 that are in danger of extinction when any of the ESA’s five listing factors are met. As a NMFS
14 scientist explained during the development of the DPS policy, “[a]ccording to the ESA, a vertebrate
15 population that is ‘distinct’ must be considered a ‘species.’” DPS AR 1001; see also DPS AR 219
16 (“once a population can be considered a distinct population segment, it qualifies as a ‘species’ under
17 the ESA. Then we can determine its status.”).

18 The Southern Residents’ extinction risk is beyond dispute. There also is no dispute in the
19 record over whether the Southern Residents warrant listing under the statutory listing factors.

20 The sole question is whether the Southern Residents constitute a population eligible for
21 listing. That question is answered by a plain reading of the ESA’s definition of “species” to include
22 “distinct population segment.” Neither the Act nor its legislative history define this term. Nor is it
23 used in the scientific literature. 61 Fed. Reg. at 4,722. However, “distinct” and “discrete” are
24 synonyms. Roget’s Interactive Thesaurus (1st Ed. 2003); American Heritage Dictionary (4th ed.
25 2000). The words are used interchangeably in dictionary definitions, see Webster’s New Collegiate
26 Dictionary (1997), and neither word contains a “significance” component. Because “discrete” is
27 synonomous with “distinct,” once NMFS determined that Southern Resident orca whales are a

1 “discrete” population at risk of extinction, it had a nondiscretionary duty to list the Southern
2 Residents as endangered.

3 II. IN FAILING TO LIST THE SOUTHERN RESIDENTS BASED ON ITS VIEW OF
4 THEIR SIGNIFICANCE, NMFS EXCEEDED ITS AUTHORITY AND RELIED ON A
5 FACTOR THE ESA DOES NOT AUTHORIZE IT TO CONSIDER.

6 A. Congress Amended the ESA to Include Distinct Population Segments in Order to
7 Afford Portions of Species the Protection They Need.

8 The ESA is “the most comprehensive legislation for the preservation of endangered species
9 ever enacted by any nation.” TVA v. Hill, 437 U.S. 153, 180 (1978). In enacting the ESA,
10 Congress expanded the entities that would be protected. While previous legislation protected only
11 species, the ESA extended protection to “any population of such species” and to species at risk of
12 extinction throughout “any portion of its range.” H.R. Rep. No. 412, 93d Cong., 1st Sess. 10-11
13 (1973). As the legislative history explains, this marked “a significant shift” away from previous
14 federal statutes that protected entire species and only when they face “worldwide extinction.” Id. at
15 10; see Defenders of Wildlife v. Norton, 239 F. Supp.2d 9, 19 (D.D.C. 2002) (previous statutes
16 “narrowly defined endangered species as including only those species facing total extinction.”).

17 In 1978, Congress amended the ESA to provide greater flexibility to protect populations of
18 fish and wildlife. The original ESA authorized listing of species, subspecies, and “smaller taxa in
19 common spatial arrangement that interbreed when mature.” Pub. L. No. 93-205, § 3(11), 87 Stat.
20 884 (1973).⁸ The 1978 amendment replaced the “smaller taxa” prong of the definition with the
21 DPS concept. H.R. Conf. Rep. No. 1804, 95th Cong., 2d Sess. 2 (1978). As amended, the ESA
22 defines species to include “any subspecies of fish or wildlife or plants, and any distinct population
23 segment of vertebrate fish or wildlife which interbreeds when mature.” 16 U.S.C. § 1532(16).

24 The Act does not define distinct population segment. Nor does the term have an accepted
25 scientific meaning. Southwest Center for Biological Diversity v. Babbitt, 926 F. Supp. 920, 926 (D.

26 ⁸ The original ESA “species” definition is drawn from and nearly identical to the Marine
27 Mammal Protection Act (“MMPA”) definition of stock. 16 U.S.C. § 1362(11). NMFS has
28 classified Southern Residents as a separate stock under the MMPA. Complaint & Answer ¶ 33;
29 AR 6 at 14.

1 Ariz. 1996); see also Southwest Center for Biological Diversity v. Babbitt, 980 F. Supp. 1080, 1084
2 (D. Ariz. 1997) (distinct population segment “appears nowhere in taxonomic science or literature”);
3 61 Fed. Reg. at 4,722 (distinct population segment “is not commonly used in scientific discourse.”).
4 Congress eschewed technical species delineations in favor of a more flexible concept that would
5 provide populations the protection they need based on their conservation status. Southwest Center
6 for Biological Diversity, 980 F. Supp. at 1084 (statute does not rigidly adhere to taxonomy and does
7 not prohibit a listing from including distinct population segments of more than one subspecies).

8 In 1979, the Fish and Wildlife Service and NMFS opposed amending the Act in a way that
9 would prevent listings of geographically limited populations of vertebrates because it would
10 “severely limit their ability to require the appropriate level of protection for a species based on its
11 actual biological status. For instance, . . . FWS would be required to provide the same amount of
12 protection for the bald eagle population in Alaska, which is healthy, as for the bald eagle population
13 in the conterminous states, which is endangered. One of the weaknesses of the 1969 Act which was
14 corrected in the 1973 amendments was the inability of the FWS to adopt different management
15 practices for healthy, threatened or endangered populations.” S. Rep. No. 151, 96th Cong., 1st Sess.
16 6-7 (1979). Rejecting any change to the species definition, the Senate Report explained:

17 The committee agrees that there may be instances in which FWS should provide
18 for different levels of protection for populations of the same species. For
19 instance, the U.S. population of an animal should not necessarily be permitted to
20 become extinct simply because the animal is more abundant elsewhere in the
21 world. Similarly, listing populations may be necessary when the preponderance
of the evidence indicates that a species faces a widespread threat, but conclusive
data is available with regard to only certain populations.

22 S. Rep. No. 151, 96th Cong., 1st Sess. 6 (1979).

23 Not surprisingly, the courts have construed distinct population segment to provide flexibility
24 to afford ESA protection to portions of species in need of that protection. In Southwest Center for
25 Biological Diversity, 926 F. Supp. at 924, the court recited a series of listings in which only one
26 portion of a species was listed. Based on this pattern and the term’s legislative history, the court
27 concluded that the term “distinct population segment” “allows different management practices to

1 ensure the appropriate level of protection for a species based on its actual biological status, . . . even
2 where the populations are taxonomically and morphologically identical.” *Id.* In a follow-up case
3 after remand, the court again construed “distinct population segment” to reject rigid taxonomic
4 classifications and instead to afford “the flexibility to protect a portion of a species according to that
5 portion’s conservation status.” Southwest Center for Biological Diversity v. Babbitt, 980 F. Supp.
6 1080, 1085 (D. Ariz. 1997).

7 B. The DPS Policy Adds a Significance Factor that Runs Counter to the ESA’s Plain
8 Language and Congressional Intent.

9 The DPS policy requires that a population must be “discrete” in order to be a distinct
10 population segment. Since “discrete” is synonymous with “distinct,” this factor is consistent with
11 the ESA’s language. Nonetheless, the DPS policy erects an additional hurdle and requires that the
12 population must also be “significant.” This factor contravenes the plain language and purposes of
13 the ESA.

14 The ESA establishes a carefully circumscribed listing process and compels the listing of
15 species and populations in accordance with strict timelines based on the best available science and
16 the statutory listing criteria. 16 U.S.C. § 1533(a)(1) & (b)(1)(A); Center for Biological Diversity v.
17 Norton, 254 F.3d 833, 840 (9th Cir. 2001) (“Congress from the outset recognized that timeliness in
18 the listing process is essential.”). The statutory criteria and mandates remove political and
19 subjective judgments from the listing process. A listing decision or policy prescribing criteria for
20 listing decisions cannot be based on a factor that Congress did not intend the agency to consider.
21 Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983).

22 By superimposing an additional “significance” criterion, the DPS policy illegally allows the
23 Services to determine whether a distinct population will be listed based on the Service’s assessment
24 of that population’s significance. This policy places the Services in the position of second-guessing
25 the congressional policy judgments embodied in the ESA that endangered and threatened species
26 must be listed according to their biological status and the threats posed to their survival. In the
27 ESA, Congress made the policy determination that the loss of species and genetic diversity is “quite

1 literally, incalculable.” H.R. Rep. No. 412, supra at 4-5. It mandates ESA listings based on the best
2 science when the statutory criteria are met. 16 U.S.C. § 1533(a)(1). The DPS policy improperly
3 allows NMFS to refuse to list a population that meets those criteria based on its assessment of the
4 population’s “significance.”

5 During the development of the DPS policy, NMFS scientists repeatedly objected to the
6 addition of a significance requirement. For example, NMFS scientists offered the following
7 critiques:

8 [M]aking [significance] a separate step. . . is problematic for several reasons.
9 First, it creates an additional step in the listing determination that has no
10 basis in the Act itself. Second, it creates the possibility of the bizarre
11 situation in which a population is considered distinct (and hence a species
12 under the ESA) but is not judged to be worthy of even considering whether
13 it is threatened or endangered. Such “insignificant” species would truly be
14 in an ESA limbo. DPS AR 985.

13 According to the ESA, a vertebrate population that is “distinct” must be
14 considered a “species.” The draft policy, however, would seem to allow a
15 situation under which a population is “distinct,” and hence an ESA species,
16 but not ‘significant’ enough to even merit consideration with respect to
17 threatened or endangered status. DPS AR 1001.

16 Given that a population segment is found to be both distinct and either
17 threatened or endangered, my interpretation of the ESA is that the agency
18 has no choice but to list it. However, the draft takes a very different
19 approach, in which the question of threatened or endangered is not even
20 *addressed* unless it can be shown that a distinct population segment is also
21 *significant*. That is, under the present draft, the agency could find that a
22 population segment is distinct (therefore qualifying it as a species under the
23 ESA), but refuse to consider whether it is threatened or endangered on the
24 basis that it is not significant. DPS AR 1003.

22 Another scientist concurred, stating that “once a population can be considered a distinct
23 population segment, it qualifies as a ‘species’ under the ESA The ESA does not give us the
24 authority to determine how significant the ‘species’ is to the ecosystem before we decide to list it.”
25 DPS AR 219-220.

26 In a surreal response to these concerns, the Fish and Wildlife Service simply replaced the
27 word “distinctness” throughout the draft policy with its synonym “discreteness.” The NMFS

1 reviewers identified this switch as the only real change: “[t]he first of the three elements to be
2 considered in a listing determination is now termed “discreteness” rather than “distinctness.” DPS
3 AR 222. As one NMFS reviewer put it: “It may look like the FWS made a lot of changes to
4 accommodate NMFS, but the only real change they made was to change the word “distinct” to
5 “discrete” throughout the document.” DPS AR 221.

6 Since the ESA mandates protection for distinct population segments that meet the statutory
7 listing criteria, the Services cannot add another requirement that will deny some distinct populations
8 the protection they need. Yet that is what the Services jointly did in the DPS policy and what
9 NMFS did in denying the Southern Residents ESA protection.

10 Adding a significance criterion to the distinct population segment concept is further
11 supported by other ESA provisions. The word “significant” appears elsewhere in the Act’s
12 definitions. Specifically, the Act defines “endangered species” as “any species which is in danger
13 of extinction throughout all or a significant portion of its range . . .” 16 U.S.C. § 1532(6) (emphasis
14 added). Similarly, it defines “threatened species” as “any species which is likely to become an
15 endangered species within the foreseeable future throughout all or a significant portion of its range.”
16 16 U.S.C. § 1532(20) (emphasis added). Congress used the term “significant” to authorize listing a
17 species (or a population) when it is imperiled over only a portion of its entire range. See infra at 25-
18 27, 33.

19 This definition reinforces the ESA’s flexibility to provide populations the protection they
20 need, rather than rest on technical species delineations. Defenders of Wildlife v. Norton, 258 F.3d
21 1136, 1145 (9th Cir. 2001). Moreover, Congress’ use of the term “significant” in these definitional
22 provisions demonstrates that Congress knew how to specify when significance should play a role. It
23 expressly included that modifier in some ESA definitions but not others. As the Ninth Circuit has
24 held, “where Congress has carefully employed a term in one place and excluded it in another, it
25 should not be implied where excluded.” Pena-Cabanillas v. United States, 394 F.2d 785, 788 (9th
26 Cir. 1968) (citing City of Burbank v. General Elc. Co., 329 F.2d 825, 832 (9th Cir. 1964)). The
27 Ninth Circuit has applied this presumption in construing the ESA. Oregon Natural Resources

1 Council v. Kantor, 99 F.3d 334, 338 (9th Cir. 1996) (“Congress is presumed to act intentionally and
2 purposely when it includes language in one section but omits it in another.”). It violates this canon
3 of statutory construction for NMFS to give itself the authority to deem populations to be
4 insignificant when Congress used that term in some definitions but not the one at issue. See 82
5 C.J.S. Statutes § 310 (“where the Legislature has carefully employed specific language in one
6 paragraph of a statute but not in others which treat the same topic, the language should not be
7 implied where it is not present.”)

8 In the DPS policy, NMFS and FWS justified adding the “significance” factor, in part,
9 because a 1979 Senate Report stating that a Senate committee “expects the FWS to use this
10 authority to list populations sparingly and only when the biological evidence indicates such action is
11 warranted.” S. Rep. No. 151, 96th Cong., 1st Sess. 6 (1979). This Report accompanied a rejected
12 1979 proposal to eliminate the “distinct population segment” concept that had been added in 1978.
13 As the Supreme Court has established, “views of a subsequent Congress form a hazardous basis for
14 inferring the intent of an earlier one.” United States v. Price, 361 U.S. 304, 313 (1960). NMFS
15 cannot rely on this congressional committee statement to justify its addition of the “significance”
16 factor to the listing criteria contained in the ESA, particularly when it would deny ESA protection to
17 a species that is discrete and endangered based on the biological evidence.

18 III. NMFS ERRED BY NOT CONSIDERING THE SOUTHERN RESIDENTS TO BE A
19 DISTINCT POPULATION SEGMENT BECAUSE THEY COMPRISE THE ONLY
20 KNOWN RESIDENT ORCA POPULATION IN THE CONTIGUOUS UNITED
21 STATES.

22 The Southern Residents require ESA protection because they are the only resident orca
23 whales that have their home range in coastal waters of the contiguous United States. As explained
24 in a BRT white paper: “Southern Residents are the only resident-type (salmon specialist) killer
25 whales along the west coast of the continental U.S. [Southern Residents] are the southern-most
26 resident-type killer whale known from the North Pacific, although little is known about resident-
27 type whales from the western Pacific. However, it is clear that the existence of resident-type whales
28 on the west coast of the U.S. is dependent upon this population.” SAR 13.

1 In denying the Southern Residents protection, neither NMFS nor the BRT considered the
2 fact that the Southern Residents constitute the sole resident orca population in the contiguous United
3 States. NMFS never even acknowledged this fact. The BRT was well aware of this unique status
4 of the Southern Residents. Nonetheless, it believed that “the presence of a jurisdictional boundary
5 does not provide support, by itself, for identification of a distinct population segment.” AR 6 at 3.⁹

6 A. The Southern Residents are a Distinct Population Segment Under the ESA as the
7 Lone Resident Orcas in the Contiguous United States.

8 NMFS and the BRT erred by failing to deem the Southern Residents a distinct population
9 segment because they are the only resident orcas in the contiguous United States. The BRT’s
10 interpretation runs counter to congressional intent, past practice, and pertinent case law.

11 First, Congress defined species to include distinct population segments, at least in part, to
12 ensure that species in the United States would be afforded ESA protection. Congress originally
13 developed this species definition in the 1972 Marine Mammal Protection Act to ensure protection of
14 Alaskan polar bears in the face of a scientific disagreement over whether the Alaskan and other
15 arctic bears belong to the same species. Congress wanted to protect the domestic population.
16 Doremus, “Listing Decisions Under the ESA: Why Better Science Isn’t Always Better Policy, 75
17 Wash. U.L.Q. 1029, 1094 (1997). The 1973 Act’s definition of endangered species further
18 mandates protection for U.S. populations of species that have their principal range abroad. H.R.
19 Rep. No. 412, at 10; see also 16 U.S.C. § 1531(a)(3) (in statutory findings, Congress found and
20 declared that species in danger of extinction “are of esthetic, ecological, educational, historical,
21 recreational, and scientific value to the Nation and its people.”) (emphasis added). The 1978
22 amendment adding distinct population segment continued to allow protection of U.S. populations,
23 as substantiated by a subsequent congressional report:

24
25
26 ⁹ For this proposition, the BRT cited a policy that pertains to Pacific salmon. *Id.* Regardless of
27 the legality of this view in that context, the salmon policy is inapplicable to the Southern
28 Residents, and neither the BRT nor NMFS purport to apply it in this listing determination.

1 For instance, the U.S. population of an animal should not necessarily be permitted
2 to become extinct simply because the animal is more abundant elsewhere in the
3 world.

4 S. Rep. No. 151, 96th Cong., 1st Sess. 6 (1979) (noting protection of bald eagles in coterminous U.S.
5 even though Alaskan populations may be healthy).¹⁰ As one court summarized, the legislative
6 history reflects a consistent policy decision: “that the United States should not wait until an entire
7 species faces global extinction before affording a domestic population segment of a species
8 protected status.” Southwest Ctr. For Biological Diversity v. Babbitt, 926 F. Supp. 920, 924 (D.
9 Ariz. 1996).

10 Second, numerous past ESA listings have afforded protection to U.S. populations, even
11 though more abundant populations of the species may exist across international borders. For
12 example, the Fish and Wildlife Service listed bald eagles in the lower 48 states, even though they
13 are not reproductively isolated or genetically different from eagles in Canada or Alaska. 43 Fed.
14 Reg. 6,230 (1978). Similarly, in listing grizzly bears, it focused solely on grizzly populations in the
15 coterminous United States, making no effort to assess declines in Canada or Alaska. 40 Fed. Reg.
16 31,734 (1975). The gray wolf, woodland caribou, and bull trout listings adhered to this same
17 pattern. See Defenders of Wildlife v. Babbitt, 958 F. Supp. 673, 675 (D.D.C. 1997) (noting listings
18 of contiguous U.S. populations of bald eagles, grizzly bears, gray wolves, and woodland caribou);
19 Friends of the Wild Swan v. Fish & Wildlife Serv., 12 F. Supp.2d 1121, 1133 (D. Or. 1997)
20 (consideration of coterminous U.S. bull trout populations, but not Canada and Alaska populations);
21 DPS AR 188 (same in marbled murrelet & Steller’s eider listings).

22 Third, an unbroken line of case law compels consideration of contiguous U.S. populations

23 ¹⁰ While this same report called for biological evidence to ensure that populations would be
24 listed sparingly, it did not apply this same cautionary statement to listing of the sole U.S.
25 population of a species. Such a listing would be based on political boundaries, rather than
26 biological or taxonomic criteria. See Doremus, *supra*, at 1095. Indeed, the General Accounting
27 Office report that triggered the proposed amendment would have allowed listings based on “the
28 need to maintain the species with the United States.” GAO, “Endangered Species – A
29 Controversial Issue Needing Resolution,” CED-79-65, at 60, 106 (1979) (Exh. 1). That is,
populations in the United States should not be listed “sparingly” because Congress commanded
that U.S. populations be protected regardless of the species’ status elsewhere in the world.

1 as distinct population segments. In Defenders of Wildlife, 958 F. Supp. at 685, the court held that
2 the Fish and Wildlife Service “cannot be allowed to dismiss the contiguous United States population
3 of a species merely because it is more plentiful elsewhere. The agency must consider the scientific
4 evidence relevant to the threat of extinction or lack thereof, for that portion of the Lynx’s range
5 within the contiguous United States.” More recently, a district court upheld the listing of U.S.
6 Atlantic salmon populations based on a combination of international boundaries and biological
7 differences between the populations. The court reasoned that “[t]he use of international boundaries
8 to delineate distinct population segments is consistent with congressional intent that we should not
9 allow the United States population of an animal to go extinct merely because it is more abundant
10 elsewhere.” State of Maine v. Norton, ___ F. Supp.3d ___, 2003 WL 1955541, *26 (D. Maine Apr.
11 24, 2003); see also Friends of the Wild Swan, 12 F. Supp.2d at 1133-34 (Fish and Wildlife Service
12 erred by failing to consider listing of bull trout in coterminous U.S.).

13 By failing to consider the significance of the Southern Residents as the only remaining
14 resident orcas that have their home range in contiguous U.S. waters, NMFS acted in blatant
15 violation of Congress’s intent, past listing practice, and the uniform case law.

16 B. Listing is Warranted Because Orcas are in Danger of Extinction in Their Only
17 Home Range in the Contiguous United States.

18 Listing of the U.S. population of resident orcas is compelled under another ESA provision,
19 regardless of whether the Southern Residents are characterized as a distinct population segment.
20 Specifically, a species must be listed as endangered if it “is in danger of extinction throughout all or
21 a significant portion of its range,” 16 U.S.C. § 1532(6) (emphasis added), and as threatened if it is
22 “likely to become an endangered species within the foreseeable future throughout all or a significant
23 portion of its range.” 16 U.S.C. § 1532(20) (emphasis added). The legislative history explains that
24 this provision is designed to protect U.S. populations of species:

25 This definition is a significant shift in the definition in existing law, which
26 considers a species to be endangered only when it is threatened with worldwide
27 extinction. It includes the possibility of declaring a species endangered within the
United States where its principal range is in another country, such as Canada or

1 Mexico, and members of that species are only found in this country insofar as
2 they exist on the periphery of their range.

3 H.R. Rep. 412, supra at 9.

4 Neither NMFS nor the BRT considered this ESA mandate. Instead, they began and ended
5 their analysis with their unsuccessful attempts to define the distinct population segment and species
6 to which the Southern Residents belong. Whatever the appropriate distinct population segment,
7 however, the sole U.S. home range for resident orcas constitutes a significant portion of the orcas'
8 range. See Marbled Murrelet v. Lujan, No. C91-522R Memorandum Opinion Re: Plaintiffs'
9 Second Motion for Summary Judgment, at 12 (W.D. Wash. Sept. 1992) (Exh. 2) ("based on the
10 uncontradicted findings that the marbled murrelet qualifies for listing as a threatened species
11 throughout a significant portion of its range within the meaning of the ESA, there is no need to
12 consider the alternative basis of whether the tri-state population is a distinct population segment");
13 Maine v. Norton, __ F. Supp.3d __, 2003 WL 1955541, *35 (district court upheld finding that
14 extinction of Gulf of Maine population of Atlantic salmon would result in significant gap in species'
15 range by eliminating the southernmost portion of Atlantic salmon range by one degree latitude).

16 In two recent cases, the Services have been chastised for failing to assess whether listing is
17 warranted under this ESA authority. These cases reversed "crabbed interpretation[s] of the phrase
18 'significant portion of its range,' which would mean that a species that had once survived in a
19 region, but no longer did, was not entitled to the protections of the ESA." Defenders of Wildlife v.
20 Norton, 239 F. Supp.2d at 20 n.7.

21 In Defenders of Wildlife v. Norton, 258 F.3d at 1145, the Ninth Circuit held that "a species
22 can be extinct 'throughout . . . a significant portion of its range' if there are major geographical areas
23 in which it is no longer viable but once was." It recited numerous past listings that protected U.S.
24 populations, and specifically concluded that a listing can coincide with national or state political
25 boundaries. Id. (grizzly bears listed in contiguous 48 states, but not Alaska; marbled murrelets
26 listed in California, Oregon, and Washington, but not Canada or Alaska; desert bighorn sheep listed
27 in southern California but not into the Baja Peninsula). In Defenders of Wildlife, the Fish and

1 Wildlife Service withdrew its proposal to list the flat-tailed horned lizard based on a reduction in the
2 threats on public lands under a new conservation agreement. The Service erred by failing to
3 consider whether the private lands constitute a significant portion of the lizard’s range and whether
4 the lizard “may face unique threats” in certain states or on private lands left unaffected by the
5 conservation agreement. *Id.* at 1146-47.

6 In the second case of the same name, the district court held that the Fish and Wildlife
7 Service erred by focusing exclusively on one region where Lynx are more prevalent because Lynx
8 were naturally more rare in its other three regions. *Defenders of Wildlife*, 239 F. Supp.2d at 19.
9 The court explained that “[t]he Service’s reasoning ‘would allow the most fragile, at-risk species to
10 receive the least protection under the law.’ Such a consequence flies in the face of the plain
11 language of the ESA and its purpose.” *Id.* at 19-20 (citation omitted).

12 NMFS never even asked whether the only resident orca home range in the contiguous
13 United States comprises a significant portion of the orca range. Its failure to do so flouted the
14 ESA’s mandates.

15 IV. BY RELYING ON AN OUTDATED AND SCIENTIFICALLY DISCREDITED
16 GLOBAL ORCA SPECIES TAXONOMY, NMFS VIOLATED THE ESA’S
17 MANDATE TO USE THE BEST AVAILABLE SCIENCE IN LISTING DECISIONS.

18 A. NMFS Cannot Rely on the Global Orca Taxon Because It is Not the Best
19 Available Science.

20 The current species for orca whales lumps all orcas into one global species, but, as the BRT
21 found, “the global species is an outdated concept that needs to be updated.” AR 6 at xv. The BRT
22 explained that “the current designation of one global species for killer whales is likely inaccurate,
23 because available data suggest that the present taxonomy does not reflect current knowledge and
24 that additional species or subspecies should be officially recognized.” *Id.* Even though the BRT
25 “found little support for considering killer whales to be a global species,” in the status review
26 “‘significance’ of Southern Residents was judged with respect to the taxon represented by the
27 currently recognized global species.” AR 6 at 60. This approach stirred dissent within the BRT
28 with a white paper noting: “a clear case can be made that a criterion for ‘taxon’ that required a

1 named subspecies or species would be non-precautionary for marine mammals. It often takes many
2 years to acquire sufficient data (including skulls) to satisfy the rigorous standards of traditional
3 systematists It is simply a technicality that there remains a single species of killer whale: the
4 taxonomy does not reflect the current state of knowledge.” SAR 13 at 7.

5 Even NMFS acknowledged in its listing determination that “the current designation of one
6 global species for killer whales is likely inaccurate” 67 Fed. Reg. at 44,136; see also id. at
7 44,137 (“current killer whale taxonomy is outdated”); id. at 44,137 (“the current designation of one
8 global species for killer whales is likely inaccurate because available data suggest that the present
9 taxonomy does not reflect current knowledge and additional species/subspecies of killer whales
10 should be ‘officially’ recognized.”).

11 Although NMFS acknowledged the BRT’s critique of the global species for orcas, it
12 nonetheless based its listing decision on the current discredited global taxa. It went so far as to state
13 that: “NMFS considers the published standard of a single, global species as the best available
14 scientific information,” 67 Fed. Reg. at 44,138, and NMFS insisted that “classifying Southern
15 Resident killer whales into a particular distinct population segment cannot be resolved until the
16 taxonomic structure of *O. orca* is clarified.” Id. Because NMFS concluded that the Southern
17 Residents are not a distinct population segment of this single, global orca species, it found them
18 ineligible for listing.¹¹

19 The ESA directs NMFS to base listing determinations on the best available scientific data,
20 16 U.S.C. § 1533(b)(1)(A), and the single, global species is not the best available scientific
21 information. The ESA’s species definition is flexible in order to allow the Services to give species
22

23 ¹¹ NMFS indicated that it would reconsider its determination within four years if the global
24 species has been subdivided in a manner that would allow Southern Residents to be considered a
25 DPS. 67 Fed. Reg. at 44,138. During this time, the Southern Residents will be unprotected,
26 even though the next years may be critical to the orcas’ survival. In contrast, in 1999, the Fish
27 and Wildlife Service decided that the St. Mary-Belly River DPS of bull trout was significant in
28 relation to the portion of the species within the coterminous United States, rather than to the
29 species as a whole. 64 Fed. Reg. 58,918 (1999) (assessing significance in relation to species in
coterminous U.S. and east of the Continental Divide).

1 the protection they need according to their biological status, rather than some technical taxonomic
2 classification. See Southwest Center, 980 F. Supp. at 1085. By finding the Southern Residents
3 ineligible for listing status based on an outdated, discredited species delineation for orca whales,
4 NMFS adhered to a rigid taxonomic species delineation that runs counter to the ESA’s listing of
5 “distinct population segments” and the Act’s best available science mandate.

6 The Ninth Circuit has explained that the ESA’s best available science mandate gives “the
7 benefit of the doubt to the species.” Conner v. Burford, 848 F.2d 1441, 1454 (9th Cir. 1988). Under
8 this mandate, ESA listing decisions must be based on “the scientific information presently
9 available” and “preventive action to protect species [must] be taken sooner rather than later.” See
10 Defenders of Wildlife, 958 F. Supp. at 680. NMFS cannot disregard the science that is available
11 today in the hope that better, more definitive science will emerge in the coming years. Id.;
12 American Wildlands v. Norton, 193 F. Supp.2d 244, 251 (D.D.C. 2002) (the best available science
13 mandate requires protection before conclusive evidence that the species is headed for extinction).
14 As the Marine Mammal Commission explained in urging NMFS to “use the precautionary
15 principle,” “[g]iven the current small size and declining status of the Southern Resident population
16 of killer whales, the consequences of a decision that they do not now deserve protection as a distinct
17 population segment may later become irreversible even if new information comes to light to verify
18 the population’s significance based on the Service’s own criteria.” AR 13 at 3, 4.

19 B. NMFS Erroneously Concluded That Extinction of the Southern Residents Would
20 Not Leave a Significant Gap in the Orcas’ Range By Relying on Sporadic Visits
21 of Transient Orcas Which Are Part of a Different Species.

22 The DPS policy deems a population significant if its loss will leave a significant gap in the
23 species’ range. In concluding that extirpation of Southern Residents would not be a significant loss,
24 NMFS concluded that their extirpation “might” not result in a significant gap in the range of orca
25 whales. 67 Fed. Reg. at 44,136.

26 In making this finding, NMFS relied on the fact that some transient whales are known to
27 visit parts of the Southern Residents’ range. 67 Fed. Reg. at 44,137. However, NMFS never

1 acknowledged that the biological review team unanimously voted “YES” to the question: “Based on
2 ecology, morphology and genetics, do transient and resident killer whales in the North Pacific
3 belong in two different taxa (species or subspecies)?” SAR 2; AR 6 at 53. More specifically, the
4 BRT concluded that the resident and transient orcas “have striking genetic differences [which]
5 indicate reproductive isolation on an evolutionary scale of these two ecotypes of killer whales,
6 which is the fundamental criterion for defining species . . .” *Id.* The status review elaborated:
7 “perhaps more importantly – Residents and Transients have different diets and different external
8 morphology. This suggests that if Residents were extirpated, Transients might not fill the vacant
9 ecological niche left open in an ecological timeframe.” AR 6 at 53.

10 It runs counter to the BRT’s scientific findings for NMFS to rely on the presence of transient
11 orcas in portions of Puget Sound to conclude that the extirpation of Southern Residents would not
12 result in a significant gap in the orcas’ range. *See Northern Spotted Owl v. Hodel*, 716 F. Supp.
13 479, 483 (W.D. Wash. 1988) (court rejected agency rationale for not listing species “where the
14 agency spurns un rebutted expert opinions without itself offering a credible alternative
15 explanation.”).

16 C. NMFS Erroneously Concluded that the Southern Residents Do Not Have
17 Markedly Different Genetic Characteristics By Comparing the Southern Residents
18 to Transient Orcas that Are Part of a Different Species.

19 The DPS policy defines a population as “discrete” if “it is markedly separated from other
20 populations of the same taxon as a consequence of physical, physiological, ecological, and
21 behavioral factors.” NMFS found that the Southern Residents meet this criterion based principally
22 on genetic differences between Southern Residents and other orca whales.

23 Under the DPS policy, a population is “significant” if it differs “markedly” from other
24 populations in genetic characteristics. The policy does not require total genetic isolation for a
25 population to be significant. *See* 61 Fed. Reg. at 4,724 (absolute reproductive isolation not
26 required); *see, e.g.*, 65 Fed. Reg. 38,778 (2000) (Cook Inlet beluga whale population deemed
27 “significant” where “little or no” genetic mixing was found); 62 Fed. Reg. 10,730 (1997) (“potential

1 for genetic distinctness further supports a distinction between eastern and western pygmy-owl
2 populations”) (emphasis added).

3 NMFS decided that the genetic differences between Southern Resident and other orca
4 whales may not be “marked” because they are smaller than the differences between resident and
5 transient orcas. 67 Fed. Reg. at 44,137. However, the BRT unanimously concluded that the
6 resident and transient orcas constitute different species. SAR 2; AR 6 at 53. It is unreasonable for
7 NMFS to require a population to show genetic differences of the same magnitude that distinguish
8 species, such as residents and transient orcas.

9 While the BRT did not reach a formal consensus as to whether the genetic differences
10 between the Southern and other Residents are “marked,” the BRT repeatedly used adjectives to
11 describe the genetic differences it found that equate with “marked” differences. All BRT members
12 agreed that the genetic differences between resident and transient orcas are “significant.” AR 6 at
13 61; see also id. at 53 (“striking genetic differences”); 58 (“differ markedly”). The BRT also noted
14 “relatively large genetic differences” between all known resident orcas and transient and offshore
15 whales. Id. at 57. The BRT likewise described the genetic differences among all three types of
16 whales as “significant.” Id. at 15; 67 Fed. Reg. at 44,135 (“Recent genetic investigations note
17 marked differences between some forms of killer whale.”) (emphasis added). Finally, the BRT
18 described the Southern Residents as “the group that differs the most in nuclear DNA from all other
19 groups.” Id. at 56. These characterizations of the genetic differences as significant collide with
20 NMFS’ subsequent attempts to minimize these differences when it made its significance
21 determination.

22 They also collide with the differences seen in other species of marine mammals. The long-
23 beaked common dolphin and short-beaked common dolphin, which are separate species, have the
24 same magnitude of genetic differences as the Southern and Northern Residents. SAR 13; see also
25 id. (2 subspecies of Dall’s porpoise have less fixed genetic differences than the Southern and
26 Northern Residents). NMFS did not explain why these types of differences distinguish species and
27 subspecies of other marine mammals yet are not significant enough to warrant deeming the

1 Southern Residents a significant distinct population.

2 V. NMFS ACTED CONTRARY TO THE BEST AVAILABLE SCIENCE AND ITS DPS
3 POLICY IN CONCLUDING THE SOUTHERN RESIDENTS ARE NOT
4 SIGNIFICANT.

5 A. NMFS Acted Contrary to the Best Available Science In Concluding That Other
6 Orcas Could Recolonize Puget Sound.

7 In concluding that extirpation of the Southern Residents might not leave a gap in the orcas'
8 range, NMFS relied on the possibility that offshore or other resident orcas "could re-colonize" Puget
9 Sound after extirpation of the Southern Residents. 67 Fed. Reg. at 44,137. NMFS had no evidence
10 that this theoretical possibility would occur, and the evidence in the record is directly to the
11 contrary.

12 Remarkably, past evidence of recolonization is drawn from the last Ice Age, which the BRT
13 candidly admits is not a relevant time frame. In searching for past evidence of recolonization, the
14 BRT noted that "the inland waterway habitat has been re-colonized by Residents after ice age
15 coverage in the past." AR 6 at 61.

16 The BRT identified numerous examples "where local extirpations by over-harvest have not
17 yet experienced re-colonization despite healthy neighboring populations." AR 6 at 55.¹² In
18 particular, the BRT cited a scientific study of large-scale whaling effects that "indicate[s] that when
19 subpopulations of whales within relatively small geographic areas are extirpated or greatly reduced,
20 no repopulation of the area occurs by immigration from adjacent populations The timescale
21 since extirpation ranges from four decades . . . to several centuries." AR 167 at 6. Aptly reflecting
22 on the time frame posed by re-colonization since the Ice Age, a BRT white paper states: "The
23 prospect of re-colonization of this region by other residents may be remote on a time scale relevant
24 to humans and our management of living resources." SAR 13 at 10 (emphasis added).

25 ¹² The Canadian Department of Fisheries and Oceans provided NMFS with data showing that the
26 Northern Residents have experienced an 8.7% decline from 1997-2001. AR 6 at 9. Given the
27 recent decline in the population of Northern Residents, leading to their listing as threatened in
28 Canada, *id.* at 5 & n.2, NMFS had no basis for assuming that the Northern Resident population
29 would be sufficiently resilient to re-colonize the range of the Southern Residents.

1 The BRT candidly admitted that “there are no data to evaluate whether other Resident or
2 Offshore animals might re-colonize the current range of Southern Residents should that population
3 be extirpated.” AR 6 at 61. The BRT summarized the lack of evidence: “It is unclear how re-
4 colonization of this region by Resident whales would take place” and “it is not known what would
5 actually occur if the Southern Resident territory were to become unoccupied.” AR 6 at 55.

6 NMFS acted contrary to the BRT’s findings and the scientific evidence in the record in
7 concluding that resident orcas might recolonize Puget Sound in the face of only such a remote and
8 speculative possibility of re-colonization. See American Wildlands v. Norton at 251 (Services may
9 not base listing decisions on “speculation or surmise or disregard superior data”) (citation omitted).
10 Accordingly, it erred in not deeming the Southern Residents to meet the DPS policy’s significance
11 test on this basis.

12 Not only was NMFS required to consider the Southern Residents a distinct population
13 segment because of this gap in the range, but this gap would necessitate listing of the Southern
14 Residents quite apart from its designation of the pertinent distinct population segment. Under the
15 ESA, NMFS must list a population if it is at risk of extinction “over a significant portion of its
16 range.” The general existence of orca whales elsewhere in the Pacific Ocean cannot be a basis for
17 refusing to list the Southern Residents if their extirpation would eliminate resident orcas from a
18 significant portion of the range.

19 As explained above, as the sole resident orcas in contiguous U.S. waters, the Southern
20 Residents currently occupy a significant portion of the orcas’ range. In addition, the Southern
21 Residents occupy the most southerly habitat of any resident orca. Populations that live in the
22 extremes of their species habitat have previously been found significant under the DPS policy. 68
23 Fed. Reg. 15,674 (April 1, 2003) (smalltooth sawfish population significant because it occupies
24 northernmost habitat of the species in the western hemisphere); see Maine v. Norton, ___ F. Supp.3d
25 ___, 2003 WL 1955514 (upholding listing of U.S. population of Atlantic salmon as sole U.S. Atlantic

1 salmon and as constituting significant portion of range).¹³

2 NMFS erred by relying on the speculative and entirely theoretical possibility that some
3 orcas might recolonize Puget Sound in thousands of years. The scientific record compels the
4 conclusion that extirpation of the Southern Residents would leave a significant gap in the orcas’
5 range, making them eligible for listing as a significant population under the DPS policy and as a
6 species endangered throughout a significant portion of its range.

7 B. NMFS Acted Arbitrarily and Contrary to the DPS Policy in Refusing to Consider
8 Whether the Southern Residents are Significant Because of their Unique Social
9 Structure, Language, and Customs.

10 The DPS policy allows the Services to consider other case specific factors to find that loss of
11 a population will be significant. 61 Fed. Reg. at 4,725. NMFS acknowledged that the DPS policy’s
12 “list of criteria is not exhaustive; other criteria may be used, as appropriate.” 67 Fed. Reg. at
13 44,136. Inexplicably, NMFS refused to consider any other factors. 67 Fed. Reg. at 44,138 (“only
14 the criteria described in the DPS policy were deemed applicable to assessing the significance of the
15 Southern Residents.”)

16 One of the remarkable features of the Southern Residents is their specialized culture or
17 behavioral means for passing along knowledge. AR 313 at 28. The Southern Residents teach their
18 young, from generation to generation, their unique language, social structure, rituals, and knowledge
19 about feeding areas. AR 6 at 62; AR 34 at 15; AR 313 at 28-29; AR 194 at 96. No other orca
20 populations “speak” the same dialect as the Southern Residents. To the extent their acoutistic
21 repertoire has imprinted in the Southern Residents an acoutistic map of their marine environment,
22 this map and the knowledge it carries will be lost if the Southern Residents are wiped out.

23 The BRT discounted the loss of the Southern Residents’ acoustic repertoire and culture

24 ¹³ The gap left by extinction of the Southern Residents may be larger than the loss of their
25 current range. Because the genetic evidence indicates that the Southern Residents were once a
26 much larger population, some BRT members believed the Southern Residents previously utilized
27 coastal habitat from southern British Columbia to California. AR 6 at 61-62; see also SAR 4
28 (noting uniqueness of Southern Residents as remnant of larger population that ranged to the
29 south).

1 because it could not determine whether they have an inherited or learned basis. AR 6 at xii, 62.
2 NMFS was silent on this issue. Whether inherited or learned, the extirpation of the Southern
3 Residents would result in a loss of this culture, which would undoubtedly be a significant loss.

4 The DPS policy requires NMFS to consider all relevant factors, whether learned or
5 inherited, in assessing a population's significance. By refusing to consider the Southern Residents'
6 unique language and internal whale culture, NMFS violated its own DPS policy.

7 CONCLUSION

8 For these reasons, the Center asks the Court to grant its motion for summary judgment, set
9 aside NMFS' "not warranted" finding, and order NMFS to issue a new 12-month and publish a
10 proposed regulation to list Southern Resident orca whales within 60 days.

11 Respectfully submitted this 23rd day of May, 2003.

12
13 /s/ Patti Goldman

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