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Attention Lynne Barre, Branch Chief
Protected Resources Division
NMFS, Northwest Region,
Protected Resources Division
7600 Sand Point Way NE

RE: Listing Endangered or Threatened Species: Proposed Amendment to the Endangered Species Act Listing of the Southern Resident Killer Whale Distinct Population Segment [Docket No. 130321272-4020-01; 0648- XC589]

To Whom It May Concern:

Pacific Whale Foundation would like to officially express its support for the proposed amendment to the Endangered Species Act that would include Lolita, the sole captive individual of the Southern Resident Killer Whale DPS, as part of the Southern Resident Killer Whale DPS that is listed as "Endangered" under the U.S. Endangered Species Act.

Utilizing the best available science regarding genetic and acoustic analysis, National Marine Fisheries Service (NMFS) has already confirmed that Lolita is, in fact, a member of the Southern Resident killer whale DPS. Research has indicated that Lolita has a genotype consistent with the Southern Resident DPS, and that her calls are unique to the L25 subpod (Hoelzel et al., 2007; Garrett; Ford, 1987). As Lolita shares *both* genetic and acoustic characteristics with the Southern Resident killer whale DPS, there is little doubt that Lolita should be included as a member of the Southern Resident killer whale DPS.

National Marine Fisheries Service, furthermore, has also determined that the Endangered Species Act does not allow captive animals to be assigned different legal status from wild counterparts on the basis of their captive status. NMFS notes that while the Endangered Species Act authorizes the listing, delisting, or reclassification of a species or distinct population segment (DPS), it does not authorize NMFS to exclude certain individuals of a listed species from a listing decision. In its 12 month finding, NMFS references the case *Alsea Valley Alliance v. Evans*, in which the court ruled that once NMFS had identified and listed a DPS (for Oregon Coast coho), the ESA did *not* allow NMFS to specifically exclude ten captive hatchery stocks of that DPS. The case *Alsea Valley Alliance v. Evans* provides the necessary precedence to guide NMFS's current decision with respect to Lolita.

Additional questions remain regarding those actions that constitute, or do not constitute, violations of the Endangered Species Act (ESA).

National Marine Fisheries Service has stated that a potential violation of the ESA would be the release of captive animals into the wild, as the release of a captive animal into the wild "has the potential to injure or kill...the wild populations of that same species through introduction of diseases or inappropriate genetic mixing."

To begin, the likelihood that Lolita's introduction back into her native habitat would result in inappropriate genetic mixing is considered negligible, given the fact that NMFS has already determined, through genetic and acoustic analysis, that she is an original member of the Southern Resident killer whale DPS. **It behooves NMFS to remember that Lolita was, in fact, born in the wild and that her birth mother remains, to this day, part of the Southern Resident killer whale DPS.** Inappropriate genetic mixing would be of much greater concern if the discussion involved an extremely high number of potential wild releases and/or if the individuals facing potential release had originally been captive-bred and thus did not share the same genetic makeup as the wild population. As Lolita is not a captive-bred killer whale, and as she is the sole member of the Southern Resident Killer Whale DPS to remain in captivity (and thus proposed for release), it is highly unlikely that her presence in the wild would result in inappropriate genetic mixing.



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Pacific Whale Foundation also finds it highly unlikely that Lolita's reintroduction into the wild would result in the transmission of injurious or fatal disease to other members of the Southern Resident killer whale DPS. Lolita's release plan, as formulated by respected orca scientists from both the Orca Network and the Center for Whale Research, includes a thorough examination of Lolita to be conducted by a team of veterinarians and pathologists prior to her release to detect any potential communicable diseases. If no diseases are detected, it is unlikely that Lolita's reintroduction into the wild would, in itself, result in a population-wide disease outbreak.

While the issues of inappropriate genetic mixing and the introduction of communicable diseases are severe concerns in such cases as the accidental release of farmed salmon into the wild (for example), as has been described above, these concerns are not warranted in the case of Lolita's release.

Pacific Whale Foundation would also like to suggest that NMFS approach the environmental impact of Lolita's release from the opposite perspective. As it is currently stated, NMFS harbors concerns that Lolita's release into the wild could have a significant, negative impact on the wild population the Southern Resident Killer Whale DPS, and thus Lolita's release could constitute a violation of the Endangered Species Act.

Consider, though, that the Southern Resident Killer Whale DPS is comprised of a total of only 81 individuals, 36 of which are specific to the L-pod (Lolita's original group). Taylor & Plater (2001) describe the Southern Resident killer whale as "one of the most imperiled killer whale stocks in the world", and, utilizing population viability analysis by stochastic population modeling, concluded that extinction of the Southern Resident Killer Whale population within 100 years was highly likely (Taylor & Plater, 2001). Analyzing a 26 year record of Southern Resident Killer Whale demography, the study further revealed that in the five (5) year span between 1996 and 2001, the population decreased at an annual rate of 4.9% (Taylor & Plater, 2001). This annual population decline is attributed to declines in both individual survival and fecundity (Taylor & Plater, 2001).

As the Southern Resident Killer Whale population is in severe and significant decline, with the best available science indicating that the population has a high likelihood of going extinct within *the foreseeable future*, it begs to be argued that the continued holding of an individual that has full recognition as an endangered species in captivity is, in itself, a gross violation of the Endangered Species Act.

In the time Lolita has spent confined to captivity, she could have birthed an average of 3 to 6 calves, a contribution to the species that may or may not have proved significant, but that nevertheless would have provided that much more insulation to a severely vulnerable population.

To now argue that her return to the wild would be a *violation* of the Endangered Species Act seems like a senseless case of bureaucratic hairsplitting, especially given the population's status and Lolita's unique condition as an original member of that population.

It is true that curbing the Southern Resident Killer Whale's fate will require sweeping changes in how humans treat and maintain the ocean environment. There is much that can be done, for example, to restore native prey populations, decrease ocean pollution and maintain an overall healthier marine environment for the Southern Resident Killer Whales. Yet the timeliest opportunity is right before us, and by amending the ESA to not only include Lolita, but to furthermore see that she has the opportunity to reunite with her pod in the wild, would represent a significant contribution to the population's continued survival.

Sincerely,

A handwritten signature in cursive script that reads "Lauren Campbell".

Lauren Campbell
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Pacific Whale Foundation
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References Cited

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Hoelzel, A. R., et al. (2007). Evolution of population structure in a highly social top predator, the killer whale. (*Orcinus orca*). *Molecular Biology and Evolution* 24(6):1407-1415.

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