## Appendix E-Letters received

A few attendees at the open houses arrived with pre-written comments in letter form that they wished to submit to the U.S. Fish and Wildlife Service for consideration. Those letters are included here, with all personally identifiable information removed for privacy.

Crescent City

To: US Fish and Wildlife Service (Service)

Date: June 21, 2023

Regarding: Sea Otter Recovery Efforts in Northern CA

Much appreciation for the Service investigating the potential for re-introducing sea otters in N CA. My concern is for this area to have all the necessary elements for a successful reintroduction of sea otters and for them to thrive.

One critical biological necessity is to have clear water and cool temperatures. Sea otters thrive in a range of 35-60 degrees F ocean temperatures. According to NOAA, to date, the ocean is warming twice as fast than predicted per decade. Further, it's not just the surface temperature that is warming, it's the upper half of the Pacific Ocean.

Another biological requirement for sea otters are healthy kelp beds. Kelp beds need clear water with a cool temperature and sunlight. Kelp does not flourish in water that is too warm. The ideal temperature range for the growth of kelp is between 42 degrees to 72 degrees F.

By 2050, at the best possible prediction (not at all an accurate estimate given to all the uncertainty and fluctuations of worldly climate change), the Pacific Ocean temperature is anticipated to increase by 6 degrees F. The temperature averages 52 degrees F at the Crescent City Harbor. Over the past 20 years, the Pacific Ocean has registered a minimum average temperature of 48 degrees F and maximum average temperature of 58 degrees F.

Given the distribution above, by 2050, the Pacific Ocean temperature has the potential for a minimum average temperature of 54 degrees F and a maximum average temperature of 64 degrees F. Again, the preferred range of temperatures for sea otters is between 35-60 degrees F; this prediction for ocean temperatures is truly above (and possibly far beyond) a healthy level for the sea otters.

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Sea otters have a very fast metabolism and eat 25 -35 0/0 of their body weight daily (a male could consume 25 pounds of food daily). Off the coast of Del Norte County (DNC) salmon and crab availability cannot be guaranteed, because the salmon have been overfished and the crab have tested positive on toxicity levels (domoic acid). A gloomier prediction to consider is the forecast that by 2048 the oceans will be "empty"- no fish!

Given the data above, it does not appear promising to me that the Pacific Ocean off the DNC coast will have the necessary conditions for successful reintroduction of the sea otters (in order to secure their risk against extinction). If the oceans are not "dead" by 2048; it may be that the successful survival of the sea otters' species is possible farther north of DNC. Thank you very much for your consideration. Best wishes for the success of having thriving sea otter colonies along the Pacific Northwest.

June 18, 2023

US Fish & Wildlife Service Public Hearing, June 21, 2023 Garibaldi, OR

## SUBJECT: SUPPORT FOR SOUTHERN SEA OTTER REINTRODUCTION

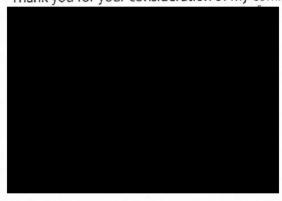
I am an Oregon native and I currently live in on the North Oregon Coast. I strongly support the recovery efforts of the Southern Sea Otter based on in-depth study, monitoring, removal and/or recovery of animals in distress and when other, necessary safeguards are in place to ensure the successful reintroduction of this species.

Man has not been kind to this species. In my opinion, it is time to make reparations for the destruction done not only to sea otters, but to the habitats and ecosystems in which they once thrived. I believe that sea otter recovery and reintroduction represent fundamental values in our current time and with our environmental knowledge: these efforts exemplify the vital need for large, diverse ecosystems.

I anticipate that local marine fishing interests may oppose the reintroduction sea otters, perhaps fearing restrictions on taking marketable ocean products. However, I believe the fishing industry may also experience a recovery as otter populations increase. The benefits of reintroduction are many, such as increased annual bull kelp growth, ocean floor revitalization through reduced urchin populations, increased crabbing, small fish nurseries, and larger fish habitat, to name only a very few.

I urge the US Fish & Wildlife Service to continue its research and efforts to secure the reintroduction of the Southern Sea Otter. I hope that a successful effort will happen in my lifetime, as I would thrill to witness this key species thriving, once again, along our Southern Oregon Coast.

Thank you for your consideration of my comments.



## REASONS FOR REINTRODUCING SEA OTTERS TO NORTHERN CALIFORNIA

Historically, sea otters were very populous, with hundreds of thousands of the small coastal aquatic animals along the California coast. However, But even before the Gold rush, the California fur rush led to the destruction of large numbers of these small animals, along with beaver, marten, fisher, mink, gray fox, weasel, and habor seal. The earliest record of fur being traded with Europeans in California was in 1733 of spanish missionaries trading with tribes in upper and lower California for sea otter pelts.

As their numbers plummeted, the risks to the remaining population increased: pollution, changing ocean temperatures, risks of predation by other species, and other threats could have caused the sea otter to go extinct. Although hunting was prohibited by an international treaty in 1911, by then only a few thousand otters remained. In 1972 the Marine Mammal Protection Act (MMPA) was enacted permitting protection for the approximately 1000 plus individuals remaining, having grown from a low of about 50 animals.

The US Fish and Wildlife Service listed the southern sea otter as threatened under the Endangered Species Act, and adopted a recovery plan I 1982. The recovery plan provided for delisting when the population recovered to over 3,090 animals over a 3 year period. In 2016, there were estimated to be 3,272, a record high, and the 2017 population was estimated at 3,186, but then the population declined, with an estimated 2,962 in 2019. Populaton decline was attributed to shark bites and other causes such as harmful agal blooms and disease.

The historic range of sea otters was from Oregon to Baja California, but they currently occupy only 13% of their historic habitat. Currently the population range is from Monterey Bay to Point Conception. An attempt to extend the range included relocating some otters at San Nicolas Island. Despite that effort being declared a failure in 2012, the population of San Nicolas Island has continued to grow and is estimted at 100 otters in 2019. Thus, even this "failed" relocation has provided an additional population reservoir as a contingency reserve if needed.

Therefore, the proposed reintroduction of sea otters along the Northern California Coast should be pursued for at least 3 reasons:

First, the population has still remained below the delisting level, and has declined due to continuing threats to sea otters.

Second, the historic range of sea otters includes the northern California coast, so restoration of this section of their historic habitat should not be objected to on precedential grounds or impacts on other industries which may have grown up in the absence of sea otters.

Third, as indicated by the San Nicolas Island experiment, even if sea otters do not rapidly increase in a newly restored historic location, their existence could provide an important reservoir of the threatened animals, and if successful, could grow the overall otter population levels more consistent with a sustainable, threat resistant level for this important coastal species.

This threatened

species is worthy of protection, and every effort should be made to extend the range and population of this small, beautiful, sea-faring mammal.