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Ms. Martha Williams, Principal Deputy Director
Mr. Stephen Guertin, Deputy Director for Policy and Management
U.S. Fish and Wildlife Service
1849 C. St., NW
Washington, DC 20249

Via email to: Martha_Williams@fws.gov; Steve_Guertin@fws.gov

RE: Issues for Consideration in the USFWS Study on the Feasibility and Cost of Reestablishing Sea Otters on the Pacific Coast of the Contiguous United States

Dear Ms. Williams and Mr. Guertin:

The undersigned ocean-based industry stakeholders appreciate the opportunity to submit the following comments and recommendations to the U.S. Fish and Wildlife Service (USFWS) for consideration in the study on the feasibility and cost of reestablishing sea otters on the Pacific Coast of the contiguous United States.

President Trump signed the Consolidated Appropriations Act of 2021 ([Pub. L. 116-260](#)) into law on December 27, 2020. This Act includes a provision instructing the Agency to conduct the following one-year study and report to Congress:

Sea Otters. – The Committee recognizes that sea otters play a critical ecological role in the marine environment as a keystone species that significantly affects the structure and function of the surrounding ecosystem. However, sea otters were effectively eliminated from the Pacific Coast of the United States by hunters and traders during the 1700s and 1800s. The Committee directs the U.S. Fish and Wildlife Service to study the feasibility and cost of reestablishing sea otters on the Pacific Coast of the contiguous United States, and to report to Congress on the results of such a study within one year of passage of this bill.

Protected Species Reintroduction Issues

In today's natural resource management system under the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA), robust predator management for any protected species is virtually impossible to achieve. As it is with sea lions on the Columbia and Willamette Rivers, seals in New England, gray wolves in Idaho, and grizzly bears in Montana, so may it be with sea otters successfully reintroduced to the contiguous West Coast of the United States.

In its study, the USFWS must clarify for Congress – and all ocean stakeholders – the current limitations on the Agency's ability to effectively “manage” sea otter populations under current law, juxtaposed with the Agency's policies and objectives to protect and promote population expansion of reintroduced sea otters along the West Coast (Washington, Oregon and California).

Regarding the USFWS objective on the reintroduction of the sea otters (in this case, referencing the southern sea otter reintroduction), the USFWS states on its [Ventura Office web page](#), “the ultimate goal [of southern sea otter recovery] is to reestablish ecological relationships in the ecosystem where sea otters and other nearshore species coevolved.” Other groups supportive of otter reintroductions are suggesting a shifting ecosystem justifies sea otter translocation efforts (see [Elakha Alliance YouTube](#) channel).

This policy falls short for two critical reasons:

- (1) It neglects to account for the coexistence with humans that, pre-fur trade, shared the ecosystem for thousands of years; and
- (2) It neglects to account for the absolute protection of sea otters in today's post-MMPA/ESA context, which eliminates the application of sound wildlife management principles to control (i.e., “manage”) robust sea otter populations and mitigate their impacts on the environment and coastal communities.

In the past, coastal Tribal nations harvested shellfish and effectively managed otter populations (through direct harvest) to maintain a balanced ecosystem. Tribal middens from the Northwest show clear evidence of this. In Port Graham, B.C., the Sugpiaq Nation secured a waiver from the U.S. MMPA to harvest a limited number of otters, but it has not led to sanctioned hunts that new research has indicated is necessary for proper sea otter management ([Ogden, 2020](#)). Also, pre-contact Alaska Native Aleuts and Canadian First Nations reportedly used intense harvests of sea otters to manage marine invertebrate food resources. These localized harvests limited sea otter impacts on local subsistence shellfish resources while not having a significant impact on the sea otter population across its range ([Davis, et al., 2019](#)).

West Coast Commercial Fishing and Aquaculture Issues

Sea otters are considered a “keystone” species, one that has large-scale ecosystem effects disproportionate to their individual size and abundance. They do not store fat, so their metabolic requirements are such that they must continually forage, and populations of otters exist in a perpetual state of density-dependent resource limitation. Individual adult otters eat 15 to 25 pounds of food every day ([Alaska Sea Grant, 2014](#)), and they are capable of opportunistically shifting prey choices (See [Elakha Alliance YouTube](#) channel). In laymen's terms, they eat a lot of whatever may be available to the point that little prey of appropriate size remains which, in turn,

transforms the marine food web in those areas, and also into new areas where otter populations must expand to exploit new trophic resources, *increasing resource conflicts with humans*.

According to the 2014 Alaska Sea grant report, “A growing sea otter population eats a significant amount of shellfish and can be linked to depletion of some commercially important species.” This must be clearly understood if the USFWS is to produce a full, fair, and transparent analysis of the potential economic impacts of sea otter reintroduction on commercial fisheries in WA/OR/CA. Since Alaska is home to nearly 90% of the world’s sea otters, much of the available research on successful sea otter reintroduction and impacts on fisheries is from the 49th and largest State. The USFWS must carefully examine impacts/benefits from otter reintroduction in Alaska and, where scientifically justified, carefully apply those elements to better inform sea otter relocation considerations to the West Coast.

In 2019, Tim Tinker and other researchers estimated the current otter population in Southeast Alaska to be more than 25,000 animals, up from the original 400 animals relocated there in the 1960s. They also estimated the region could support 74,650 animals, with the upper bound of the confidence interval at 136,506 sea otters. However, the Alaska reintroduction and recovery of sea otters has precipitated substantial conflicts with humans over marine resources, even though the current otter population is roughly just one-third of the projected carrying capacity ([Tinker et al., 2019](#)). Similarly, other researchers and journalists have documented otters causing problems for the Dungeness crab fleet ([Rahaim, 2021](#)) and other commercially important shellfish fisheries ([Resneck, 2019](#)) in Southeast Alaska.

The negative impacts from sea otter reintroduction on commercial, charter, recreational, and private and Native subsistence uses of marine resources in Alaska are such that local communities and the entire State are demanding the Federal government address the growing conflicts. In early 2018 the City and Borough of Wrangell, Alaska, passed a resolution detailing the negative impacts sea otters are having in the region ([Wrangell, 2018](#)). The Borough of Petersburg followed suit in the spring of 2018 with a resolution elucidating the negative impacts to fishermen, processors, and seafood dependent-communities (*Editor’s note: No positive elements of sea otter reintroduction were noted – Petersburg, 2018*).

Recently, the State of Alaska charged that, “rather than the United States Fish and Wildlife Service managing sea otters in a manner that allows for ecological balance and human harvest of fishery resources, the United States Fish and Wildlife Service has a record of protecting sea otters to the detriment of other fishery resources and human needs, resulting in a situation in which the fishery resources that sea otters feed on are imperiled and the sea otter population itself placed at risk of collapse.” ([Alaska Legislature, 2018](#)). Thus, there are significant implications here for all ocean stakeholders in Washington, Oregon and California.

In 2019, sea otter conflicts in Southeast Alaska reached the point that the USFWS convened a Sea Otter Stakeholder Meeting in Juneau. In 2020, the Service issued a formal report from that meeting, noting in the Executive Summary that sea otter reintroduction and recovery in Southeast Alaska “has resulted in reductions of some shellfish stocks of value to commercial, subsistence, personal use and sport harvesters.”

The report goes on to say that otter populations offer direct competition to these seafood sectors: “At the same time, many of the shellfish consumed by sea otters—including urchins, clams, crabs, abalone and sea cucumbers—have become significantly less abundant in occupied areas.” The report also notes that as the otter population expands and likely depletes the crab and macro invertebrate species, the situation will worsen. “Because sea otters are opportunistic generalists, it is likely commercial dive fisheries and Dungeness crab fisheries in Southeast Alaska may never return to biomass levels that allow sustainable commercial harvests.” ([USFWS, 2020](#))

Regarding the impacts on fisheries from the California Southern sea otter expansion, the USFWS stated the following in a [Dec. 19, 2012, Federal Register notice terminating the translocation program](#):

*Our assumption that under a scenario involving natural range expansion, **sea otters will eliminate fisheries for urchins, lobsters, crabs and sea cucumbers** is based in part on data proportional prey consumption by sea otters in southern California and in part on past interactions between sea otters and shellfish fisheries along the central coast Based on recent observations of proportional prey consumption by sea otters at San Nicolas Island ... , it is probable that sea urchin fisheries will be more impacted than crab or lobster fisheries. However, **because we lack data on absolute abundance of prey species in question and the level at which fisheries for lobster crabs and sea cucumbers become inviable, we conservatively assume that these fisheries cannot coexist with sea otters once an area of range has been fully reclaimed.** Although effects may be overestimated, they represent an upper bound and are sufficient to inform our decision-making. **[emphasis added]***

In the case of Dungeness crab, one of Oregon’s most important fisheries with more than 400 fishery participants and with a value to the State of more than \$60 million annually, the USFWS must carefully and thoroughly examine the potential for negative impacts to this fishery. In fact, researchers Domonique V. Kone, M. Tim Tinker and Leigh Torres estimated that 76% of potential core otter habitat overlaps with high commercial crab and red urchin harvest areas on the coast of Oregon. Furthermore, higher otter abundance is predicted in southern Oregon, where 19% of highly productive crab grounds overlap with prime otter habitat ([Kone, et al., 2021](#)). They also concluded that otter predation on nearshore juvenile Dungeness crabs could potentially reduce adult crab recruitment, eventually affecting the commercial fishery, and that more research is needed to understand this relationship. **The USFWS must recognize this critical missing data and potentially harmful scenario in its report.**

The above two scenarios could upset a delicate balance of crab markets stratified by product forms. The report, “[Oregon Dungeness Crab Fishery Bioeconomic Model: A Fishery Interactive Simulator Learning Tool, Final Report](#)” notes that markets and timing are key for seafood processors:

“There is a traditional holiday market for whole cooked crab whose demand may not transfer away from the [Christmas/New Year] time period. Processors can move significant quantities of landed crab for the whole cooked product form because labor, packaging, and warehousing is minimal. Processor investments would be needed to handle the changed volume going to different product forms [e.g., crab sections, live crab, meat products]. On the other hand, if Dungeness crab quality is high and supplies are less variable, national and international markets could be developed to maintain higher prices.”

This is another example of potential disruption to processors, distributors, wholesale markets and the communities that depend on Dungeness crab. A thorough exploration of the downstream effects of the sea otter/Dungeness crab predator/prey relationship and the commercial fishery – ***beyond using just the harvesters’ ex-vessel value of the fishery as the sole economic indicator*** – must be included in the USFWS study. The importance of the Dungeness crab fishery cannot be overstated. As the Bioeconomic Model Final Report states, “Dungeness crab is considered an iconic retail product and many Oregon Coast visitors have expectations for it being available year around as a locally caught fresh seafood restaurant menu and store item.”

The USFWS should also be mindful that some proponents of sea otter reintroduction ([Rahaim, 2021](#); see [Elakha Alliance YouTube](#) channel) reference the paper, “Examining the potential conflict between sea otter recovery and Dungeness crab fisheries in California,” by Andre M. Boustany et al. ([Boustany et al., 2021](#)) as scientific evidence otters have a minimal impact on Dungeness crab fisheries (e.g., in this paper, examining sea otter diets off California). Unfortunately, in the article, Boustany and the other researchers appear to highlight only those data elements that support this position in their conclusion/abstract.

For example, Boustany et al. note in the abstract that Dungeness crab constitutes “less than 2% of the total diet” of sea otters in southern California. This is the figure currently being cited by proponents of otter reintroduction along the West Coast. However, a closer examination of the full paper reveals the authors chose to exclude data from the abstract and the conclusions relating to the amount of crab biomass observed consumed by otters in a second taxonomic classification that “includes all species of *Cancer* crab species as well as Dungeness crab that were not identified to the species level.” Thus, Dungeness crab consumption is underestimated to some degree in the study’s abstract and conclusion sections ([Boustany et al., 2021](#)).

In truth, the percent biomass of Dungeness crab in the sea otter diet in southern California is not less than 2% but likely ranges somewhere above 2% but probably not more than approximately 20% of the total sea otter diet (i.e., raw data were not available for analysis). Therefore, the USFWS cannot utilize the Boustany et al. assertion of “less than 2% biomass estimate” to calculate sea otter foraging impacts on the OR/WA Dungeness crab fisheries. Contrary to these figures, sea otter impacts in the Dungeness crab fisheries in Oregon and Washington and even California may be much more substantial.

To their credit, Boustany et al. do report that, “... as otters move into more productive Dungeness crab habitat, their diets may shift to take advantage of the more abundant prey, resulting in a detrimental impact on the landings or spatial distribution of Dungeness crab fisheries,” and that “... our findings only hold for impacts of southern sea otters on Dungeness crab in California and may not be representative of interactions in other regions. There is evidence that sea otters negatively affected the landings and distribution of the Dungeness crab fishery in Southeast Alaska” ([Boustany et al., 2021](#)).“

In addition, the USFWS reported in a [Stock Assessment Report for the Northern Sea Otter in Washington Federal Register notice](#) on April 22, 2019, that “... direct evidence of sea otters in California and Alaska being trapped and drowned in crab pot gear that is identical to gear used within the range of sea otter in Washington (*Editor’s Note: Washington and California crab gear is identical to the gear used in the Oregon commercial crab fishery*), and we cannot be sure that all otters that become trapped and subsequently die will be reported via social media.” In this same

context, the USFWS concluded that, “We are unable to definitively state that the total mortality and serious injury of sea otters due to human-caused mortalities and serious injuries is insignificant and approaching a zero mortality and serious injury rate because of the lack of observer data for commercial fisheries that may interact with sea otters.” This observation by the Agency may lead to increased regulations in the West Coast Dungeness crab fishery in the future.

Thus, the USFWS should clarify for Congress and ocean stakeholders any implications for commercial fisheries and human activities that may result in a “take” of sea otters in various West Coast fisheries.

The Oregon Department of Agriculture (ODA) has [cataloged seven “classified commercial shellfish harvest and growing areas”](#) in the State’s nearshore coastal areas. These are lucrative oyster-growing areas and include Clatsop Beaches, Tillamook Bay, Netarts Bay, Yaquina Bay, Umpqua River and Triangle, Coos Bay, and South Slough (a tributary to Coos Bay). These shellfish harvest/aquaculture areas cover 3,847 leased acres supporting 39 businesses with an annual product value of \$3.2 million, according to the ODA’s [2020 Shellfish Production Annual Report](#). Furthermore, this figure underrepresents the total value of Oregon’s oyster aquaculture areas, as many more acres in the Coos Bay estuary are owned and leased by the Oregon International Port of Coos Bay or Coos County. ODA does not directly track the leased figures and oyster production for these leases.

Of these seven classified nearshore shellfish growing/harvest areas, five of them are also identified by Kone, et al. ([2021](#)) as future sea otter core habitat areas with the highest projected sea otter population densities along the Oregon coast. Kone and colleagues estimated the upper bound of the confidence interval (CI) for the carrying capacity of sea otters along the Oregon Coast to be 8,976 animals. The USFWS should use this estimate to calculate maximum otter impacts to stakeholders in the State of Oregon, consistent with the Agency’s use of the upper bound estimate to inform decision-making on California sea otter impacts (See [USFWS statement](#) above, and at [77 FR 75266](#)).

Clearly, the direct and negative impacts from sea otter foraging on nearshore shellfish populations are well documented in literature. Therefore, as a component of the report to Congress, the USFWS must clearly examine the potential impacts on Oregon shellfish production including, but not limited to:

- Projected total and permanent fishery and harvest losses;
- Ripple effects to the State’s coastal economy;
- Estimated losses on grow operations due to sea otter depredations;
- MMPA/ESA options to deter/mitigate otter depredations and possible associated costs; and
- Increased state and federal permitting/monitoring/reporting requirements associated with preventing otter “takes.”

Continuing the topic of shellfish impacts, Kone et al. reported a high level of overlap existed between sea otter core habitat areas and urchin/abalone harvest areas off the Oregon coast. It was further suggested that “... Oregon could experience similar declines in large sea urchins, eventually making it difficult or impossible for a commercial urchin fishery to persist in areas where otters

have recovered,” and that the State might need to identify alternative economic opportunities for fishermen and divers prior to reintroduction ([Kone et al., 2021](#)).

Recently, the Secretary of Commerce approved Federal fishery disasters for the following West Coast shellfish fisheries: California Dungeness Crab and Rock Crab (2015-16); Washington Dungeness Crab, Quileute (2015); and California Red Urchin (2016 and 2017). The target species of these fisheries also comprise the core diet of sea otters. The USFWS must consider the trophic impacts of foraging sea otters on the condition of these fisheries/species; along with the wisdom of adding the burden of reintroduced protected species complications on stakeholders (and species) that have also suffered recent fishery disasters.

As stated above, *the scientifically determined estimate of the carrying capacity for sea otters in Oregon is 8,976 animals*. This number of otters can have a significant impact on the regional marine food web. In 1969, Canada reintroduced 89 Alaska Northern Sea Otters to Checleset Bay, British Columbia, to restore the population to the numbers from the 1700s of about 150,000 to 300,000 animals, prior to the fur trade eradication of the 18th and 19th centuries. By 2020, the population had grown to more than 7,000 animals. Even at less than 3% of their original population size, sea otters were already reportedly exhausting their food supplies, searching for crabs, clams, abalone and shellfish, and bringing a number of unintended consequences to British Columbia’s First Nations ([Ogden, 2020](#)).

The USFWS report should also address a very specific question, especially with respect to the coast of Oregon: *What other marine species will 8,976 sea otters eat after the available urchin biomass has been quickly consumed?* Alaska Sea Grant ([2014](#)) reported individual sea otters eat 15 to 25 pounds of seafood every day. As noted earlier, assuming a science-based estimated carrying capacity of 8,976 otters for the coast of Oregon, that single population could eat up to 65,542,800 pounds of marine animals annually, assuming a reasonable mid-range estimate of 20 pounds of daily consumption. The potential impacts of otter reintroduction on commercial fisheries and the entire marine food web off the coast of Oregon must be fully contemplated in the context of this report.

In the [USFWS rulemaking on terminating the California Sea otter translocation program](#), public comments noted the negative impacts to commercial fisheries from sea otter foraging as well as sea otter-related fishing gear closures. The USFWS noted that while the Agency does not manage fisheries directly, the commercial fishing net closures imposed by NOAA/NMFS and the State of California in response to sea otter reintroduction “are a potential indirect consequence.”

Consistent with the use of area-based closures as a tool to further protect reintroduced sea otters, Kone et al. note that the five existing state marine reserves on the Oregon Coast would likely **not** contribute much to the protection of otters since the conservation areas were implemented prior to any thought of sea otter reintroduction in Oregon and thus, do not include any of the core otter habitat areas. Therefore, USFWS must clarify for Congress and all ocean users that marine reserves, closed areas, and “no take” and “no transit” zones – all considered forms or subsets of so-called marine protected areas – are clearly potential components of a comprehensive West Coast sea otter protection program.

As further evidence of our concerns regarding fisheries interactions, the USFWS in June 2021 revised the [Stock Assessment Report for the Southern Sea Otter in California](#). The Agency noted in its response to comments that it is adding the California squid purse seine fishery to the report as a potential threat to sea otters based merely on an analogy with the northern anchovy and Pacific sardine fisheries. In addition, the USFWS added information indicating the “Mortality of sea otters in traps set for crabs, lobsters, and finfish is likely under-reported due to the challenges of identifying drowning as a cause of mortality in marine mammals.” Thus, even without the addition of any new sea otters in California, the USFWS is already having to address fishery/otter interactions. Therefore, the potential for future regulation in these West Coast fisheries to protect a larger reintroduced otter population is real.

Finally, in Kone et al. (2021), the authors conclude the cost/benefit calculation of the direct negative impacts to commercial fisheries versus the ecological benefits of sea otter reintroduction is the critical missing element. Thus, we know for certain negative economic impacts will result from sea otter reintroduction. *It is incumbent upon the USFWS to clarify and estimate the extent of these impacts for Congress and the entire West Coast seafood industry.*

Port, Vessel, and Maritime Issues

Since sea otters are a nearshore/sub-tidal species, it is widely expected that a broad spectrum of West Coast port-related vessel and maritime activities will be subject to USFWS review and management, leading to increases in project times, complexity and costs, and possibly even vessel speed restrictions and no-transit zones.

For example, on the Oregon Coast, seven of 10 sea otter “core habitat areas” identified by Kone et al. currently have vessel activity with the potential to disturb (i.e., harass) sea otters. Human interaction and disturbance from vessels, commercial shipping and tow lanes, and activity at seaports have been suggested as possible reasons why the first Oregon sea otter translocation effort failed between 1971 and 1981 ([Kone et al., 2021](#)).

According to Kone et al., no sea otters have existed in Oregon for 100 years and, during that time, human activity has increased substantially, possibly making habitat unsuitable for otters to return. Therefore, one must assume the only way to render habitat more “suitable” for otter reintroduction is for the USFWS to control human activity in and around suitable otter habitat areas. This has serious ramifications for the region’s maritime community.

Sea otter populations reintroduced to the West Coast (even if not listed under the ESA) will require coastal seaport managers to comply with [MMPA Section 101\(a\)\(5\)\(D\)](#) and secure one-year duration harassment authorizations for every port improvement and maintenance project that may have the potential to “take” sea otters as defined at [16 U.S.C. 1362\(13\)](#). Such “takes” include *any* disruption of sea otter behavior including but not limited to: migration, breathing, nursing, breeding, feeding or sheltering. Port managers will be required to request MMPA harassment authorizations (for each project) from the USFWS, which are published in the Federal Register, subject to a 30-day public comment period, and subject to a formal finding from the USFWS.

In addition to MMPA concerns, port operations may be further affected if the USFWS chooses to formally list re-introduced sea otters (or even Distinct Population Segments (DPS)) within re-introduced populations) under the ESA as a threatened /endangered species, along with critical

habitat designations. For example, in 2005, the USFWS listed the Southwestern DPS of the Alaska Northern Sea Otter as threatened and 15,000 km² of critical habitat was also designated in 2009; in 1977, the Agency listed the California southern sea otter as threatened and both stocks remain ESA-listed today.

From a port perspective, ESA otter listings will at a minimum also trigger formal ESA Section 7 consultations, development of biological opinions, mitigation concerns, and increased impacts to the U.S. Army Corps of Engineers (USACE) permit review process, leading to complications for regional port projects. These new otter-related requirements will be heaped on current ESA permit requirements for existing over-water port structures and exacerbated by staff shortages leading to project delays and increased infrastructure costs.

In addition to automatic MMPA protections, the USFWS may choose to list sea otter DPS units under the ESA as a Section 10(j) Non-Essential Experimental Population, similar to the Agency's 1987 USFWS Red Wolf (*Canis rufus*) Recovery Program in Eastern North Carolina. However, even as a 10(j) population, the Agency still specifies take/harassment regulations which may impact port and vessel activities in the region ([60 FR 18940](#)). In the case of red wolf reintroduction, strong local stakeholder opposition and mortalities from human interactions persisted and in 1998 the species reintroduction program was ruled a failure by the USFWS.

Finally, we know the USFWS has cited oil spills as the primary threat to otter populations ([84 FR 16690](#)). The foreign-flagged vessel *M/V New Carissa* ran aground near Coos Bay, Oregon, on Feb. 4, 1999, spilling between 70,000 and 140,000 gallons of oil onto the Oregon coastline and estuaries. The oil spread over roughly 200 miles, between Cape Arago and the Columbia River, from subsequent salvage and removal incidents. More than 3,000 animals in the nearshore ecosystem were negatively affected ([Ford, 2001](#)).

Therefore, the USFWS will be required to manage sea otters in Washington, Oregon and California in a very precautionary manner to protect them from threat of catastrophic oil spill. It is incumbent upon the Agency to clarify the implications for restricting vessel, port and other maritime activities on the West Coast to protect reintroduced otter populations.

Offshore Renewable Energy Issues

The Biden Administration has proposed substantial growth in offshore wind power generation in the coming decade, particularly off the coasts of California and Oregon. The USFWS must account for the enhanced protection of reintroduced sea otter populations in the cost and feasibility study for all potential impacts to wind power surveys, installation, and service vessel activities.

This is especially important for coastal Oregon, which the Bureau of Ocean Energy Management has been identified as a potential wind lease area on the West Coast ([BOEM, 2019, 2020](#)). While prime sea otter habitat will likely be located inshore of wind lease areas, there is little doubt wind-related surveys, vessel, port, and cable installation activities will pass directly through or near projected core sea otter habitat areas with the highest projected densities of sea otters, such as near the ports of Astoria and Newport, and especially toward the southern portion of the coast ([Kone et al, 2021](#)).

Coastal Tribal Issues

It is common public perception that proponents of the West Coast sea otter reintroduction campaign are suggesting that federally recognized Indian Tribes will be able to exercise their traditional, ceremonial and subsistence rights to utilize sea otters. These statements are inaccurate and very likely mislead members of coastal minority communities regarding what they actually will be allowed to do with re-introduced sea otters. Section 101 of the MMPA implements a complete take moratorium (to include all levels of harassment) on all species of marine mammals, regardless of their population status. This take moratorium will apply to all West Coast reintroduced sea otter populations in Washington, Oregon and California.

MMPA Section 101(b) provides an exception for Native subsistence use of sea otters but only for Alaska Natives who reside in Alaska and who possess either a 25 percent Alaska native blood quantum or are enrolled under the Alaska Native Claims Settlement Act. This exception is not available to any tribal member in any other West Coast state.

MMPA Section 119 allows the Secretary to enter into co-management agreements for Native subsistence use of sea otters but here again, this applies only to Alaska Native Organizations and Alaska Natives residing in the State of Alaska.

Even in Alaska, with arguably the most progressive Native sea otter management system in the U.S. and which is home to nearly 90% of the world's sea otters, the USFWS continues to deny Alaska Natives their customary and traditional practice of selling intact sea otter pelts. Furthermore, the State of Alaska has charged that, "The USFWS has failed to develop a management plan for sea otters in consultation with any Alaska Native organization, even though Alaska Native organizations have approached the service about developing a plan" ([Alaska Legislature 2018](#)). *If Native Alaskans have no remedy, what then is the hope for tribal communities in Washington, Oregon or California?*

The Smithsonian Magazine article, "[Bringing Back Sea Otters Benefits People, Too](#)," articulates that, according to indigenous knowledge-bearers and archaeological records, "... people have managed the dynamic between otters, shellfish and urchins ever since there were otters and people on the Pacific Coast. An economic assessment can add an important dimension to management ... but solutions that benefit everyone should involve Indigenous knowledge and possibly traditional methods of managing otters, such as allowing them to be hunted near the most productive beaches."

Therefore, the USFWS must fully consider and clarify all limitations and restrictions on Federally recognized Indian Tribes in Washington, Oregon and California with respect to any Native subsistence use (i.e., "take") of re-introduced sea otters.

Enforcement Issues

The USFWS must also clarify for Congress and the public the potential consequences for unintended human interactions with reintroduced sea otters in the three West Coast states. The [Mercury News](#) reported in June 2021 that a southern sea otter was found dead in an illegal fishing trap near Moss Landing, California, on April 18, 2021. The legality of the trap was not the real question but rather, it was the fact that a sea otter was dead due to human activity which is illegal under the MMPA and ESA.

USFWS Agent Rebecca Roca stated in the news article, “This is extremely serious. Sea otters are beloved along the coast. It is devastating when we find something like this. We are asking the public for any help they can give.” In addition, the USFWS Forensics Laboratory is currently conducting a full investigation and the public is being encouraged to report any information to a toll-free tip line. The penalty for killing an ESA-listed sea otter is up to \$100,000 and one year in jail. *Note: For sea otters not listed under the ESA, the MMPA civil fine for a taking is \$10,000 per incident and \$20,000 if the violation was knowingly perpetrated.* (See [MMPA Section 105](#); [16 U.S.C. 1375](#)).

Thus, a consideration for the coastal residents in the states of Oregon, Washington and California should include this warning: Any owner/operator of a commercial fishing vessel, pleasure boat, sport/charter/dive vessel, port/harbor service boat, tugboat and any and all commercial traffic passing through nearshore otter habitat to or from regional ports has the potential to unintentionally “take” a sea otter and could be subject to prosecution by the USFWS and the U.S. Department of Justice. *It is incumbent upon the USFWS to elucidate these realities for all ocean stakeholders on the West Coast who are near areas of reintroduced sea otter populations.*

Litigation Issues

The reintroduction of protected species such as sea otters to West Coast States also brings the potential for litigation against individual coastal States for any permitted activities that result in the “take” of sea otters.

For example, on October 3, 2017, the Center for Biological Diversity (Center) sued California in San Francisco Federal Court for failing to protect marine mammals and sea turtles from the state’s Dungeness crab fishery. The lawsuit forced the State to seek a Section 10 ESA take permit in 2018, and the [case was eventually settled](#) on March 26, 2019, no doubt resulting in increased administrative/legal costs to the State and expenditures of substantial staff time and materials. This scenario must be contemplated concurrently with the USFWS’s clearly stated position on direct evidence of sea otters drowning in crab pots ([84 FR 16691](#)).

Here again, *the USFWS should clarify for Congress and the States that reintroducing sea otters to the contiguous U.S. West Coast brings a real threat of possible region-wide litigation.*

Other Management Issues

The USFWS must also clarify and consider a suite of additional important management issues in the context of feasibility and cost for sea otter reintroduction to the entire contiguous U.S. West Coast. These include but are not limited to the following:

- **Optimum Sustainable Populations:** Pursuant to the MMPA, the USFWS is required to maintain populations of marine mammals, including reintroduced sea otters, at an Optimum Sustainable Population (OSP) level. This level is considered at the stock level (i.e., DPS/regional level) to be a population range between the Maximum Net Productivity Level (MNPL) and the carrying capacity (K). The lower threshold of OSP is calculated to be between 60 to 80 percent of K ([USFWS, 2020](#)).

Therefore, since otters are managed at the regional DPS/stock level, otter populations could far exceed the carrying capacity of a wide area, but the Agency will still not declare the stock to be at an optimum sustainable population across its entire range. Thus, the potential for substantial negative impacts on localized commercial resources may be even more pronounced – and again, the USFWS should make this clear in its report.

- **Ongoing Surveys:** The USFWS will be required to regularly survey reintroduced otter populations in Washington, Oregon and California. In order to adequately manage otter stocks and estimate abundance and impacts on commercial and tribal subsistence fisheries, surveys will be crucial. According to stakeholders at the 2019 USFWS Southeast Alaska Stakeholder meeting, even in Alaska current Agency survey efforts are insufficient for management, occurring only every 10 years ([USFWS, 2020](#)).

[Tinker et al. \(2019\)](#) noted region-wide aerial surveys are expensive and logistically difficult and therefore, completed infrequently. The authors also noted frequent and smaller scale surveys will be more accurate and precise and provide for a better sense of impacts on fisheries at the sub-regional level. So far, the USFWS plans and budgetary resources for adequately surveying reintroduced sea otter populations and impacts to fisheries along the West Coast are unclear. *Will the surveys be done in just one State? All three? How frequently? What compliment of surveys are necessary for sound wildlife management?* All these questions must be answered by the Agency in the context of this report.

- **Precautionary Management:** The USFWS already applies highly precautionary management policies for sea otter populations wherever they exist, which are inconsistent with NOAA's marine mammal stock assessment guidelines, and which have serious implications for human activities in Washington, Oregon and California. For example, in its calculation of the MMPA's Potential Biological Removal (PBR) for otters in northwest Washington, the USFWS applies the most conservative recovery factor (Fr) equal to 0.1., rather than what some scientists consider to be a more appropriate recovery factor of 0.75 for a robust otter population at or near OSP ([84 FR 16688](#)).

In defense of the Agency's highly precautionary policy position, the USFWS references the fact that Washington's sea otter population "is considered to be vulnerable because of their restricted range, making more than 50% of the stock vulnerable to a potential catastrophe, such as an oil spill, at any time." ([84 FR 16690](#)). This position is likely to be the exact same justification that will be used to aggressively protect reintroduced otter populations off the three West Coast states and the USFWS should elucidate the potential for this scenario.

Summary

The potential reintroduction of sea otters to the West Coast is a complex issue with the potential for significant impacts. In this letter, we have identified several key questions that should be addressed in the USFWS feasibility study, including:

- Protected Species Reintroduction Issues: The USFWS should clarify its inability to effectively “manage” robust sea otter populations under current law, using a policy that neglects to account for the coexistence with humans prior to the fur trade and does not account for the post-MMPA/ESA absolute protection of sea otters has serious implications for coastal states and ocean stakeholders;
- Commercial Fishing and Aquaculture Issues: The USFWS must consider sea otters’ status as a “keystone species” and should clarify potential impacts to commercial fisheries and any implications for commercial fisheries and activities that may result in a “take” of sea otters. The USFWS should also examine the potential impacts to shellfish production such as projected harvest losses, estimated losses to grow operations due to otter depredation, options for mitigation of sea otter depredation and increased reporting requirements;
- Port, Vessel and Maritime Issues: As either an ESA-listed or MMPA-protected species (or both), the presence of sea otters will trigger ESA Section 7 consultations and development of biological opinions, increase mitigation concerns and impacts to permit review processes, adding more complications and increased costs for port and harbor maintenance projects. The USFWS should identify the implications of restricting vessel, port, and other maritime activities on the West Coast to protect reintroduced otter populations;
- Offshore Renewable Energy: The USFWS must account for the enhanced protection of otter populations for all potential impacts to offshore wind/wave energy surveys, installations and service vessel activities;
- Tribal Issues: The USFWS must consider and clarify all limitations on federally recognized Indian Tribes with respect to any Native subsistence use of sea otters;
- Enforcement: Unintended human interaction with sea otters must be considered in the feasibility study and stakeholders should be fully informed about potential consequences;
- Litigation: The USFWS should clarify the potential for region-wide litigation due to potential “takes” of sea otters in permitted activities; and
- Other issues: The USFWS must consider optimum sustainable populations of sea otters, ongoing sea otter surveys, and USFWS precautionary management pursuant to the MMPA.

Thank you for the opportunity to provide comments from the perspective of numerous ocean-based industry stakeholders. We look forward to the USFWS analysis of our comments and recommendations and the Agency’s final report to Congress on the feasibility of sea otter reintroduction to the Pacific Coast of the contiguous United States.

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Senate Committee on Environment and Public Works; Subcommittee on Fisheries, Water
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Senate Commerce Science & Transportation Committee; Subcommittee on Surface
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House Committee on Transportation & Infrastructure; Subcommittee on Coast Guard and
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House Natural Resources Committee; Subcommittee on Water, Oceans and Wildlife

Literature Cited

Alaska Legislature, 2018. CS Senate Joint Resolution No.13, Urging the United States to Amend the MMPA and for the USFWS to Review Evidence and Wave Certain Provisions of the Moratorium on Taking Sea Otters, and for other purposes. 5-pgs <http://www.akleg.gov/PDF/30/Bills/SJR013B.PDF>

Alaska Sea Grant, 2014. Sea Otters in Southeast Alaska -- What We Know Now. AK Sea Grant Fact Sheet. 2-pgs. <https://seagrant.uaf.edu/research/projects/10/otter/docs/sea-otter-2014-summary.pdf>

Bureau of Ocean Energy Management 2019. BOEM Slide Presentations to Oregon Task Force Meetings; September 2019 (Slide 11). <https://www.boem.gov/sites/default/files/renewable-energy-program/State-Activities/OR/BOEM-OR-TF-Sep-27-Meeting-Presentation---FINAL.pdf>

Bureau of Ocean Energy Management, 2020. BOEM Slide Presentations to Oregon Task Force Meetings; June 2020 (Slide 18): <https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/OR-TF-Mtg-Presentation.pdf>

Boustany, A.M., 2021. Examining the Potential Conflict between Sea Otter Recovery and Dungeness Crab Fisheries in California. *Biological Conservation* 253 (2021) 108830 <https://www.sciencedirect.com/science/article/pii/S0006320720308880>

Center for Biological Diversity, 2019. CBD Press Release; March 26, 2019 https://www.biologicaldiversity.org/news/press_releases/2019/fishery-entanglement-settlement-03-26-2018.php

Davis, R.W., et al. 2019. Future Directions in Sea Otter Research and Management. *Marine Science*, 21, January 2019 <https://www.frontiersin.org/articles/10.3389/fmars.2018.00510/full>

Dinneen, James. 2020. Bringing Back Sea Otters Benefits People, Too. *Smithsonian Magazine*; June 12, 2020, smithsonianmag.com <https://www.smithsonianmag.com/science-nature/sea-otter-benefits-180975086/>

Elakha Alliance, 2021. Alliance webinar, "The Return of Oregon's Sea Otters: Considering the cultural Dimensions of Restoration." (See [Elakha Alliance YouTube](#) channel)

Ford, R.G., et al., 2001. Final Report to the USFWS: Seabird Mortality Resulting from the *M/V New Carissa* Oil Spill Incident February-March 1999. RG Ford Consulting Company; 55-pgs <https://www.fws.gov/oregonfwo/contaminants/spills/newcarissa/RestorationPlan/Documents/NewCarissaDARPAAppendix4SeabirdMortalityReport.pdf>

Kone, D.V., et al., 2021. Informing Sea Otter Reintroduction through Habitat and Human Interaction Assessment. *Endangered Species Research*; Vol. 44:159-176. <https://www.int-res.com/abstracts/esr/v44/p159-176/>
Full text: <https://www.int-res.com/articles/esr2021/44/n044p159.pdf>

Ogden, Leslie Evans, 2020. "The Sea Otter Plan That Worked Too Well." BBC Future Planet, August 18, 2020. <https://www.bbc.com/future/article/20200818-the-canadian-sea-otter-rescue-plan-that-worked-too-well>

Oregon Department of Agriculture, 2021. Map of Commercial Shellfish Harvest and Growing Areas; 2020 Shellfish Production Annual Report. OR Food Safety Program, *current as of March 4, 2021* <https://www.oregon.gov/oda/shared/Documents/Publications/FoodSafety/ClassifiedCommercialShellfishGrowingMap.pdf>,
<https://www.oregon.gov/oda/shared/Documents/Publications/FoodSafety/AnnualShellfishProductionReport.pdf>

Petersburg, Alaska, 2018. Resolution Requesting the US Congress to Support Sea Otter Management in Southeast Alaska by Amending the MMPA and Urging the US Department of Interior to Permit Alaska Native Organizations and the AK Department of Fish & Game to Co-Manage, Take, and Study Marine Mammals under the MMPA. Resolution #2018-07; March 5, 2018. 5-pages <http://www.akleg.gov/PDF/30/Bills/SJR013B.PDF>

Rahaim, Nick, 2021. For California Crabbers, Sea Otters Are Not a threat to Dungeness Catch; New Research Shows that Dungeness Crab Harvest in California is not affected by the Resurgence of Sea Otters; Hakaimagazine.com; March 31, 2021 <https://www.hakaimagazine.com/news/for-california-crabbers-sea-otters-are-not-a-threat-to-dungeness-catch/>

Resneck, Jacob. 2019. Solutions Sought to Ease Conflicts Over Southeast Alaska's Rising Sea Otter Populations. *CoastAlaska -Juneau*. <https://www.alaskapublic.org/2019/11/11/solutions-sought-to-ease-conflicts-over-southeast-alaskas-rising-sea-otter-populations/>

Tinker, Tim. 2019. Trends and Carrying Capacity of Sea Otters in Southeast Alaska. *The Journal of Wildlife Management*. <https://wildlife.onlinelibrary.wiley.com/doi/full/10.1002/jwmg.21685>

USFWS, 2020. Report of the Southeast Sea Otter Stakeholder Meeting. Report #MMM 2020-1, September 2020. 38 pgs https://www.fws.gov/alaska/sites/default/files/2020-10/SSOSW_REPORT_FINAL_508_0.pdf

USFWS, 2021. Current online "Southern Sea Otter Species Profile." USFWS, Ventura, CA Field Office. <https://www.fws.gov/Ventura/endangered/species/info/sso.html>

Wrangell, Alaska, 2018. Resolution of the Assembly of the City and Borough of Wrangell, AK Supporting Sea Otter Management in Southeast Alaska. Resolution No. 01-18-1387. January 9, 2018. 2-pgs
https://www.wrangell.com/sites/default/files/fileattachments/borough_assembly/meeting/7871/2018-02-06_regular_assembly_packet.pdf

Other Websites/Information

60 FR 18940
<https://www.govinfo.gov/app/details/FR-1995-04-13/95-9291>

77 FR 75265-75297

<https://www.federalregister.gov/documents/2012/12/19/2012-30486/endangered-and-threatened-wildlife-and-plants-termination-of-the-southern-sea-otter-translocation>

84 FR 16688-16891:

<https://www.federalregister.gov/documents/2019/04/22/2019-08056/marine-mammal-protection-act-stock-assessment-report-for-the-northern-sea-otter-in-washington>

Oregon Dungeness Crab Commission: Bioeconomic model report, March 2017.

<https://oregondungeness.org/wp-content/uploads/2017/06/ODCC-crab-model-report-ver.-5.7.pdf>

USFWS, Ventura Fish and Wildlife Office, Southern Sea Otter

<https://www.fws.gov/ventura/endangered/species/info/sso.html>