

**INITIAL REGULATORY FLEXIBILITY ANALYSIS FOR TERMINATION OF  
THE SOUTHERN SEA OTTER TRANSLOCATION PROGRAM**

**U.S. FISH AND WILDLIFE SERVICE**  
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## Table of Contents

1. Description of the reasons why action by the agency is being considered.....	3
2. Succinct statement of the objectives of, and legal basis for, the proposed rule.....	3
3. Description and estimate of the number of small entities to which the proposed rule will apply .....	3
4. Description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record .....	11
5. Identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule .....	11
6. Description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.....	12

# Initial Regulatory Flexibility Analysis for Termination of the Southern Sea Otter Translocation Program

## Background

The Regulatory Flexibility Act of 1980 (Public Law 96-354) requires agencies to evaluate the potential effects of their proposed and final rules on small businesses, small organizations, and small governmental jurisdictions.

Section 603 of the Act requires agencies to prepare and make available for public comment a regulatory flexibility analysis (RFA) describing the impact of proposed rules on small entities. Section 603(b) of the Act specifies the content of a RFA. Each RFA must contain:

- A description of the reasons why action by the agency is being considered;
- A succinct statement of the objectives of, and legal basis for, the proposed rule;
- A description – and, where feasible, an estimate of the number – of small entities to which the proposed rule will apply;
- A description of the projected reporting, record keeping, and other compliance requirements of the proposed rule including an estimate of the classes of small entities which will be the subject to the requirement and the type of professional skills necessary for preparation of the report or record; and
- An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule.

### 1. Description of the reasons why action by the agency is being considered

The Service is proposing to terminate the southern sea otter translocation program and to allow all sea otters to remain in southern California waters because we have determined, in a draft evaluation of the program, that it has failed to fulfill its primary purpose as a recovery action and that our recovery and management goals for the species under the ESA and MMPA cannot be met by continuing the program.

### 2. Succinct statement of the objectives of, and legal basis for, the proposed rule

The objective of the proposed change is to improve the prospects for recovery of the southern sea otter under the ESA and attainment of its Optimum Sustainable Population level under the MMPA. The Service has management authority for the southern sea otter (which is listed as “threatened” under the ESA and is considered “depleted” under the MMPA) and is authorized by regulations (50 C.F.R. 17.84(d)(8)(vii)) implementing the translocation program under P.L. 99-625 to promulgate a rule to terminate the translocation program if we determine the program has failed.

### 3. Description and estimate of the number of small entities to which the proposed rule will apply

The proposed rule would terminate the southern sea otter translocation program, allow all sea otters in southern California waters to remain where they are, and remove the experimental population designation from the sea otters at San Nicolas Island. This action would allow southern sea otters to recolonize their historic range throughout southern California. We define the baseline (status quo) as the current physical and regulatory environment (i.e., the biological and socioeconomic environment resulting from management practices that have been in place since 1993). These practices include the suspension of containment activities in the management zone. Using the current physical and regulatory environment (rather than the environment as it might be today if containment activities had not been suspended) as the baseline is essential to an accurate characterization of present conditions and to predictions of how conditions would change under each of the alternatives under consideration in the revised draft SEIS. Under baseline conditions, southern sea otter movement throughout the species' range is not restricted or contained. Under the proposed rule, southern sea otters would have the ability to continue to expand their range along the mainland coastline southeast of Point Conception into southern California waters and to increase in number at San Nicolas Island. Accordingly, the economic effects of both the baseline and the proposed rule are the same (in that in both cases sea otters are allowed to naturally expand their range) except in the case of potential indirect economic effects on gill and trammel net fisheries stemming from regulatory changes. This statement should not be interpreted to mean that economic changes are not expected to occur as a result of natural range expansion. An expanding sea otter population will have numerous effects, including effects on certain commercial and recreational fisheries and the industries that depend on them. Effects of all the alternatives under consideration in the revised draft Supplemental Environmental Impact Statement (SEIS) are examined in detail in that document, including an alternative that would entail resuming full implementation of the translocation program and its associated translocation and management zones (Alternative 1), the economic effects of which we present here for comparison.

Entities impacted by the proposed rule would include: (1) sea urchin vessels, (2) spiny lobster vessels, (3) crab vessels, (4) sea cucumber vessels, (5) halibut vessels, and (6) white seabass vessels. Potential impacts to small businesses are summarized below. For more information pertaining to the economic impacts, please refer to the revised draft SEIS.

Under the baseline (No Action), we expect that commercial shellfish fisheries would be affected due to competition with an increasing population of sea otters. These effects are indirect and stem from estimated impacts of sea otter predation on species targeted by commercial shellfish fisheries. Selected fisheries, both commercial (sea urchin, crab, lobster, and sea cucumber) and recreational (lobster) would likely be eliminated in mainland coastline areas predicted to be re-occupied by sea otters over the next 10 years: Point Conception to Carpinteria (lower bound) or Oxnard (upper bound). These fisheries are also likely to be affected, to some degree, by a growing sea otter population at San Nicolas Island. These predation effects along the coastline and at San Nicolas Island are expected to occur under the baseline and to continue under

implementation of the proposed rule. Therefore, there are no impacts to the shellfish fishing industries under the proposed rule.

This proposed rule would not result in economic effects beyond those described above for baseline conditions, except in the case of potential indirect economic effects stemming from regulatory changes, namely the elimination of incidental take exemptions associated with the management zone upon termination of the translocation program. Incidental take of southern sea otters in commercial fisheries cannot be authorized under the MMPA. Therefore, incidental take of southern sea otters in commercial fisheries throughout southern California would be prohibited, as it is currently prohibited in the remainder of the range of the species (north of Point Conception, California). These regulatory changes may indirectly affect portions of the commercial halibut and white seabass fisheries utilizing gill and trammel net gear.

#### *Estimate of Small Businesses*

The U.S. Small Business Administration (SBA) defines a “small business” as one with an annual revenue or number of employees that meets or is below an established size standard. The SBA “small business” size standard is \$4 million for “Finfish Fishing” and “Shellfish Fishing” (North American Industry Code (NAICS) 114111 and 114112) and fewer than 500 employees for “Fresh and Frozen Seafood Processing” (NAICS 311712). Employment characteristics for the potentially affected counties and industries are summarized in Table 1. Most of the businesses in the finfish and shellfish fishing industries have fewer than 5 employees, and all of the businesses in the seafood processing industry have fewer than 500 employees. Therefore, all businesses participating in these industries are considered “small businesses.” The numbers of commercial fishing vessels participating in selected southern California fisheries in the area expected to be affected within 10 years and in southern California as a whole are shown in Table 2. The number of establishments reported by the U.S. Census for the finfish fishing and shellfish fishing industries (Table 1) differs dramatically from the numbers of commercial fishing vessels participating in selected fisheries reported by the California Department of Fish and Game (Table 2). Although some establishments may own more than one vessel, we utilize the vessel estimate provided by California Department of Fish and Game (*i.e.*, we assume that each vessel constitutes a small entity) to ensure a conservative approach to our analysis of numbers of small entities affected and the degree to which they are affected.

**Table 1. Employment Characteristics of Affected Counties in California, 2008**

Area	Finfish Fishing (NAICS 114111)		Shellfish Fishing (NAICS 114112)		Fresh and Frozen Seafood Processing (NAICS 311712)	
	Total	Number with 1-19 emp.	Total	Number with 1-4 emp.	Total	Number with 1-499 emp.
Los Angeles	8	8	4	4	25	25
Orange	2	2	0	0	0	0
San Diego	19	19	5	5	3	3
Santa Barbara	2	2	1	1	1	1
Ventura	6	6	1	1	3	3
<b>TOTAL SOUTHERN CALIFORNIA</b>	<b>37</b>	<b>37</b>	<b>11</b>	<b>11</b>	<b>32</b>	<b>32</b>

Source: U.S. Census County Business Patterns (2008)

**Table 2. Number of commercial fishing vessels making at least one landing in selected fisheries south of Point Conception**

	Fishery	Number of vessels making at least one landing in southern California (2000-2009 average)	Number of vessels making at least one landing from area expected to be affected within 10 years (2000-2009 average)	Percentage of Small Businesses Affected
Finfish Fishing	Calif. halibut - w/ set and drift gill nets	49	19	39%
	Calif. halibut - all other gears	138	57	41%
	White seabass - w/ set an drift gill nets	45	18	40%
	White seabass - all other gears	42	25	60%
Shellfish Fishing	Sea urchin	131	18-20*	14% - 15%*
	Calif. Lobster	169	23-31*	14% - 18%*
	Crab (all species)	147	34-58*	23% - 39%*
	Sea cucumber	49	13-15*	27% - 31%*

Source: California Department of Fish and Game (2010, 2011)

\*Numbers of vessels are presented as a range not because of uncertainty in the number of vessels making at least one landing from a particular statistical block but because of uncertainty regarding the extent of area likely to be recolonized by sea otters within 10 years.

Table 3 shows the average annual ex-vessel revenues and average per-vessel yield for the selected shellfish fisheries and finfish fisheries. Average annual ex-vessel revenues for the commercial sea urchin fishery in southern California from 2000-2009 were \$7,346,637. During this time, an average of 131 vessels participated in the sea urchin fishery, resulting in an average per-vessel yield of \$56,081. We assume that all participants in this fishery meet the SBA “small business” size standard. Average annual ex-vessel revenues for the commercial lobster fishery in southern California from 2000-2009 were \$6,783,254. During this time, an average of 169 vessels participated in the lobster fishery, resulting in an average per-vessel yield of \$40,138. Average annual ex-vessel revenues for the commercial crab fishery in southern California from 2000-2009 were \$1,588,473. During this time, an average of 147 vessels participated in the crab fishery, resulting in an average per-vessel yield of \$10,806. Average annual ex-vessel revenues for the commercial sea cucumber fishery in southern California from 2000-2009 were \$783,185. During this time, an average of 49 vessels participated in the sea cucumber fishery, resulting in an average per-vessel yield of \$15,983. Clearly, all participants in these four fisheries meet the SBA “small business” size standard. The numbers of vessels making at least one landing from the area expected to be affected within 10 years are 18-20, 23-31, 34-58, and 13-15 for the sea urchin, lobster, crab, and sea cucumber fisheries, respectively (Table 2).

Entities participating in selected finfish fisheries may also be impacted by the rule. Average annual ex-vessel revenues for the portion of the southern California halibut fishery using gill and trammel net gear from 2000-2009 were \$677,168. During this time, an average of 49 vessels participated in the southern California halibut fishery using gill and trammel net gear, resulting in an average per-vessel yield of \$13,820. Average annual ex-vessel revenues for the portion of the southern California white seabass fishery using gill and trammel net gear from 2000-2009 were \$653,011. During this time, an average of 45 vessels participated in the southern California white seabass fishery using gill and trammel net gear, resulting in an average per-vessel yield of \$14,511. Clearly, all participants in gill and trammel net gear portion of the halibut and seabass fisheries meet the SBA “small business” size standard. The numbers of vessels utilizing gill and trammel net gear and making at least one landing from the area expected to be affected within 10 years are 19 and 18 for halibut and white seabass, respectively (Table 2). To the extent that the same vessels participate in both the halibut and white seabass fisheries, these numbers are duplicative.

**Table 3. Average Annual Ex-Vessel Revenue in Southern California (2000-2009)**

Fishery	Industry Average Ex-Vessel Revenue	Average Revenue Per Vessel
Sea Urchin Fishery	\$7,346,637	\$56,081
Spiny Lobster Fishery	\$6,783,254	\$40,138
Crab Fishery	\$1,588,473	\$10,806
Sea Cucumber Fishery	\$783,185	\$15,983
Halibut Fishery (with set and drift gill nets)	\$677,168	\$13,820
Seabass Fishery (with set and drift gill nets)	\$653,011	\$14,511

Source: California Department of Fish and Game

*Impacts on Small Businesses due to Proposed Rule (Alternative 3C)*

The proposed rule would not result in any effects on small entities, relative to the baseline, except potential indirect economic impacts stemming from regulatory changes. Thus, the sea urchin, lobster, crab, and sea cucumber industries would not be impacted by the proposed rule. However, an additional gill and trammel net closure, if imposed by the State in response to the elimination of incidental take exemptions associated with the management zone, would affect portions of the halibut and white seabass fisheries utilizing gill and trammel net gear in Santa Barbara County and Ventura County within the next 10 years. Industries in Los Angeles, Orange, San Diego, Santa Barbara, and Ventura counties (hereafter referred to collectively as “southern California”) are included in the analysis because of their proximity to the affected area.

Estimates of the relative impact on vessels and the number of vessels affected may be overestimates because the data available to us do not allow us to account for vessels participating in multiple fisheries. Additionally, estimates of relative impact are averages (i.e., some vessels will be more affected than others in the same fishery). All estimates of decreases in ex-vessel revenues assume that fishers would not choose to fish elsewhere or with alternate gear and hence would not supplement their revenues or increase harvest pressure in other areas. Finally, ex-vessel values reflect gross rather than net revenues and thus overestimate impacts because they fail to account for the savings in boat fuel and labor that could be re-employed elsewhere if commercial fishing activity in affected areas were reduced. Ex-vessel revenue and vessel number data are from the California Department of Fish and Game.

Table 4 shows the potential indirect effects if the State of California extends the existing gill and trammel net closure along the mainland coastline in Santa Barbara and Ventura Counties to deeper waters. Potential indirect effects on the commercial halibut fishery range from \$0 (no additional closure) to \$2.5 million (immediate closure of the affected area) totaled over 10 years, representing a loss to the commercial halibut fishery in southern California of 0-41 percent of landings (gill and trammel net gear only) or 0-21 percent of landings (all gear types) relative to the baseline. Potential indirect effects on the commercial white seabass fishery range from \$0 (no additional closure) to \$2.8

million (immediate closure of the affected area) totaled over 10 years, representing a loss to the commercial white seabass fishery in southern California of 0-44 percent of landings (gill and trammel net gear only) or 0-42 percent of landings (all gear types) relative to the baseline.

**Table 4. Estimated Maximum Annual Impact on Ex-Vessel Revenue for Selected Fisheries from Proposed Alternative 3C (2009 \$)**

	<b>Total Annualized Industry Gross Revenue Loss (2012-2021)</b>	<b>Gross Revenue Annual Impact per Small Business</b>
Halibut Fishery (with set and drift gill nets)	\$250,467	\$13,182
Seabass Fishery (with set and drift gill nets)	\$284,638	\$15,813
Sea Urchin Fishery	no impact	no impact
Spiny Lobster Fishery	no impact	no impact
Crab Fishery	no impact	no impact
Sea Cucumber Fishery	no impact	no impact

*Impacts on Small Businesses due to Alternative 1*

For comparison purposes, we analyze the effects on small entities that would occur if southern sea otters were excluded from the management zone through a resumption of zonal management (full implementation of the translocation program) as detailed in the revised draft SEIS under Alternative 1. These effects are also indirect and stem from estimated impacts of sea otter predation on species targeted by commercial shellfish fisheries. If zonal management were resumed as described under Alternative 1 in the SEIS, the following industries would be affected, relative to the baseline: (1) Shellfish Fishing (NAICS 114112) and (2) Seafood Manufacturing (NAICS 3117). Industries that support recreational diving are not included here because economic impacts to those entities are expected to be negligible, as shown in the baseline section. Under baseline conditions, changes over the next 10 years are expected to occur along the coastlines of Santa Barbara County and Ventura County as a result of a naturally expanding sea otter population. Alternative 1 would prevent this expansion and would entail the removal of sea otters currently residing within the management zone. Enforcement of a management zone, if successful, would benefit commercial shellfish fisheries because competition with sea otters would be eliminated. Industries in southern California are included in the analysis because of their proximity to the affected area. Within the shellfish fishing industry, we analyze four fisheries in depth: the sea urchin fishery, lobster fishery, crab fishery, and sea cucumber fishery. These effects, resulting from predation by sea otters, are expected to occur under the baseline and under implementation of the proposed rule, but they would not occur if sea otters were excluded from all southern California waters except those surrounding San Nicolas Island, as would be required under Alternative 1.

Impacts under Alternative 1 are summarized in Table 5. Potential indirect effects

on the commercial sea urchin fishery totaled over 10 years are estimated to be \$1.8 million relative to the baseline, representing a gain to the commercial sea urchin fishery in southern California of 3 percent of landings relative to the baseline. Potential indirect effects on the commercial lobster fishery totaled over 10 years are estimated to be \$4.2-\$5.3 million relative to the baseline, representing a gain to the commercial lobster fishery in southern California of 6-7 percent of landings relative to the baseline. Potential indirect effects on the commercial crab fishery totaled over 10 years are estimated to be \$2.1-\$3.1 million relative to the baseline, representing a gain to the commercial crab fishery in southern California of 15-16 percent of landings relative to the baseline. Potential indirect effects on the commercial sea cucumber fishery totaled over 10 years are estimated to be \$1.2 million relative to the baseline, representing a gain to the commercial sea cucumber fishery in southern California of 15 percent of landings relative to the baseline. Minor positive indirect effects on the sea urchin processing industry could result from an increase in sea urchin landings, depending on operating capacity and consumer demand. Thirty-two (32) seafood product preparation and packaging entities meet the SBA “small business” size standard in southern California. Maximum benefits would reflect the gain to the commercial sea urchin fishery in southern California of 3 percent of landings relative to the baseline.

**Table 5. Estimated Annual Ex-Vessel Revenue Benefit for Selected Fisheries from Alternative 1 (2009 \$)**

	<b>Annualized Industry Gross Revenue Benefit (2012-2021)</b>	<b>Gross Revenue Annual Impact per Small Business</b>
Sea Urchin Fishery	\$184,054 to \$186,140	\$9,307 to \$10,225
Spiny Lobster Fishery	\$419,812 to \$528,611	\$17,052 to \$18,253
Crab Fishery	\$207,601 to \$311,647	\$5,373 to \$6,106
Sea Cucumber Fishery	\$116,157 to \$118,338	\$7,889 to \$8,935
Halibut Fishery (with set and drift gill nets)	no impact	no impact
Seabass Fishery (with set and drift gill nets)	no impact	no impact

Under Alternative 1, the regulatory environment would remain unchanged relative to the baseline. Because any potential effects on the portion of the halibut and seabass fisheries using gill and trammel net gear would stem from regulatory changes, there is no effect on these two fisheries.

Under Alternative 1, impacts to the sea urchin processing industry would be a positive function of the change in sea urchin landings. Impacts to the sea urchin processing industry would be dependent upon whether individual companies are operating at capacity and whether they are capable of processing different seafood products. If companies are operating at capacity, then there may be room for growth in the industry for an additional company. If companies are not operating at capacity, then revenues may increase in relation to any increase in raw product. Companies receiving sea urchins harvested along the affected coastline would be disproportionately affected.

Because the expected increase in sea urchin inputs from the Southern California Bight is only 3 percent, Alternative 1 is not expected to have a significant impact on the seafood processing industry.

4. Description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record

The proposed rule does not directly impose any reporting or recordkeeping requirements. However, the proposed rule would result in regulatory changes, namely changes in compliance requirements under the ESA and MMPA for otherwise legal activities that may affect southern sea otters in the Southern California Bight. These regulatory changes are expected to result in negligible reporting, recordkeeping, and other compliance requirements on small entities.

Federal agencies planning activities that may affect sea otters in southern California would be required to consult with the Service under the ESA, and if their activities would result in take of southern sea otters, to seek authorization for incidental take under both the ESA and the MMPA. However, federal agencies are not “small entities.” Therefore, we do not discuss them further here.

If otherwise allowable under applicable state law, non-Federal activities that would result in take of southern sea otters in California would require an incidental take permit from the Service under the ESA and authorization for incidental take of sea otters under the MMPA. The effects of this change are expected to be negligible in light of the fact that few otherwise legal activities result in take of southern sea otters and the expectation that sea otters would not be present in most areas of southern California for decades.

Incidental take of southern sea otters in commercial fisheries cannot be authorized under the MMPA. Therefore, incidental take of southern sea otters in commercial fisheries throughout southern California would be prohibited, as it is currently prohibited in the remainder of the range of the species (north of Point Conception, California). Because incidental take of southern sea otters in commercial fisheries cannot be authorized under the MMPA, there are no additional reporting, recordkeeping, or compliance requirements that would otherwise be associated with obtaining such authorizations.

5. Identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule

The proposed rule conflicts with and is intended to supersede 50 CFR 17.84(d). The proposed rule terminates the southern sea otter program and removes the regulations at 50 CFR 17.84(d).

6. Description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities

We have considered six alternatives in depth in the associated revised draft SEIS, which is hereby incorporated by reference. These alternatives include: No Action Alternative (Baseline); Alternative 1 – Resume implementation of 1987 translocation plan; Alternative 2 – Implement modified translocation program with smaller management zone; Alternative 3A – Terminate translocation program; remove all sea otters residing within the translocation and management zones at the time the decision to terminate is made; Alternative 3B – Terminate translocation program; remove only sea otters residing with the translocation zone at the time the decision to terminate is made; and Alternative 3C (Preferred Alternative) – Terminate translocation program; do not remove sea otters residing within the translocation or management zones at the time the decision to terminate is made. For more information pertaining to the alternatives analyzed, please refer to the SEIS.

The proposed rule implements Alternative 3C. Although Alternative 1, the effects of which are presented above, maximizes the economic benefits to small entities, we are not proposing to adopt it because it conflicts with our conservation and management goals under the ESA and MMPA. Alternative 2, while allowing for more range expansion than Alternative 1, would still require that sea otters be removed from a modified management zone in perpetuity. Neither Alternative 1 nor Alternative 2 recognizes that the translocation program has failed, whereas we have concluded, in a draft translocation evaluation, that the translocation program has failed to fulfill its primary purpose as a recovery action and that our recovery and management goals for the species cannot be met by continuing the program.

Alternatives 3A and 3B recognize that the translocation program has failed. Both alternatives require removal of the sea otters from San Nicolas Island. Alternative 3A additionally requires the removal of sea otters from the management zone at the time the decision to terminate the program is made. Subsequent to these removals, natural range expansion would be allowed to progress unimpeded. The short-term removal of sea otters from the management zone would not likely have any discernible benefits for small entities compared to the baseline because 1) sea otters have not become established in any parts of the management zone except the Cojo Anchorage area, which fluctuates in sea otter numbers on a seasonal basis, and 2) sea otters are capable of returning rapidly to areas from which they have been removed. Therefore, the effects on small entities of the short-term removal of sea otters from the management zone under Alternative 3A are negligible. The short-term removal of sea otters from San Nicolas Island, which would occur under both Alternative 3A and Alternative 3B, could result in modest benefits to small entities participating in commercial shellfish fisheries (0.4 percent for the southern California sea urchin fishery, 0.6 percent for the southern California lobster fishery, 0.1 percent for the southern California crab fishery, and 1.0 percent for the southern California sea cucumber fishery). However, the removal of sea otters from San Nicolas Island could have unpredictable effects. Some sea otters could return to San Nicolas

Island immediately, in which case the benefits projected as resulting from the complete removal of sea otters from the island would be diminished by some unknown amount. Additionally, it is possible that sea otters attempting to return to San Nicolas Island after removal could establish the seed of a colony at San Miguel Island or another island. In this case, benefits to small entities would be diminished by some unknown amount or even reversed.

Despite the possible modest benefits to small entities resulting from the removal of sea otters from San Nicolas Island, we are not proposing to adopt Alternatives 3A or 3B because relocating sea otters from the management zone or San Nicolas Island to the northern or central portion of the mainland sea otter range would increase competition among sea otters, especially in areas of the central coast now thought to be food-limited (see Tinker *et al.* 2008), disrupt natural behaviors, and likely result in the deaths of otherwise healthy animals. The incidental injury or death of sea otters removed from San Nicolas Island would likely be unavoidable. The relocation of sea otters may result in increased risk of mortality due in part to the stress associated with capture, handling, and time out of water, and in part to the general lack of familiarity of the animals with their new environments (Estes *et al.*, n.d.). Sea otters that have learned to forage in prey-rich environments (such as San Nicolas Island) may experience additional stress or even starvation resulting from their inability to find adequate food in prey-limited areas of the mainland range. For males, there may be an added risk of death or injury from encountering territorial males in foreign habitats (Estes *et al.*, n.d.). Some sea otters would likely attempt to return to their location of capture, depleting their energy reserves and increasing their risk of mortality. Overall, relocating sea otters from the management zone or San Nicolas Island to the mainland range would be disruptive, harmful, or possibly lethal, both to the relocated animals and to those in the receiving population. As such, selection of Alternatives 3A or 3B, while less harmful to sea otters and therefore preferable to Alternatives 1 or 2, would nevertheless be contrary to our conservation and management goals under the ESA and MMPA.

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