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111TH CONGRESS *2d Session*	SENATE	REPORT 111–362

THE SOUTHERN SEA OTTER RECOVERY AND RESEARCH ACT

R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ON

S. 1748

DECEMBER 10, 2010.—Ordered to be printed

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

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THE SOUTHERN SEA OTTER RECOVERY AND RESEARCH ACT

DECEMBER 10, 2010.—Ordered to be printed

Mr. ROCKEFELLER, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

[To accompany S. 1748]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 1748) to establish a program of research, recovery, and other activities to provide for the recovery of the southern sea otter, having considered the same, reports favorably thereon with an amendment (in the nature of a substitute) and recommends that the bill (as amended) do pass.

PURPOSE OF THE BILL

The purpose of S. 1748 is to establish a program of research, recovery, and other activities to provide for the recovery of the southern sea otter, including monitoring, analysis, and assessment of southern sea otter population demographics, health, causes of mortality, and life history parameters including wide-ranging population surveys. The bill would also require the development and implementation of measures to reduce or eliminate potential factors limiting southern sea otter populations related to marine ecosystem health or human activities.

BACKGROUND AND NEEDS

The southern sea otter (*Enhydra lutris nereis*) is a subspecies of sea otter that is currently listed as "threatened" under the Endangered Species Act (ESA) and protected under the Marine Mammal Protection Act (MMPA). The southern sea otter is a "keystone" species in the California kelp forest ecosystem, which strongly influences the abundance and diversity of species. It is also considered

a "sentinel" species, or a species that warns of compromised ecosystem function or health, and may foreshadow threats to human health.

The subspecies occupies the coastal waters of California. Its habitat ranges from San Mateo County at the northern edge of its range to Santa Barbara County at the southern extent. There is also a small, isolated population that was translocated to San Nicolas Island, roughly 75 miles west of Los Angeles in 1987 as part of an experimental recovery program. Historically, the southern sea otter inhabited coastal waters from Baja to Northern California,[1] and may have extended as far north as Prince William Sound in Alaska.[2] However, during the 18th and 19th centuries, the population was decimated by fur hunters seeking their high-value pelts and assumed to be extinct for the next several decades.[3] In the early 1900s, a small group of roughly 50 otters was discovered along the Big Sur coast, and the current population of southern sea otters is completely derived from this small group.[4] In 1911, the International Fur Seal Treaty, the first international treaty for wildlife conservation, gave sea otters protection from hunting.

The most common causes of mortality among southern sea otters are bacterial infections, parasitic disease, shark attack, and cardiac disease.[5] Many scientists believe that the prevalence of infectious and parasitic disease, as well as cardiac disease, may be linked to pollutants reaching the near-shore marine environment. These pollutants likely include sewage from treatment facility overflow, urban run-off, and agricultural chemicals.[6] The diet of the southern sea otter consists primarily of filter-feeding bottom dwellers, such as abalone, mussels, and sea urchins, which tend to concentrate contaminants and disease-causing pathogens. This makes sea otters very susceptible to marine pollutants. Entanglement and drowning in fishing gear, shootings, and boat strikes are also low-level, but persistent, causes of direct human-caused mortality.[7] Food availability and habitat degradation may be limiting factors in southern sea otter population recovery.

In 1982, the U.S. Fish and Wildlife Service (USFWS) formed a Southern Sea Otter Recovery Team and created a recovery plan for the species. Revised drafts were completed in 1991, 1996, 2000, and 2003. The recovery plan sets a goal of at least 8,400 animals as the optimal sustainable population level (there are currently about 2,800 southern sea otters). It also sets forth criteria for delisting[8]

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[1] Wilson, DE, MA Bogan, RL Brownell Jr., AM Burdin, and MK Maminov (1991) Geographic variation in sea otters, Enhydra lutris. J. Mammal, 72(1) 22-36.

[2] Riedman, ML and JA Estes (1990) The sea otter: behavior, ecology and natural history. US Fish and Wildlife Service, Biol. Rep. 90(14) 126-127.

[3] Bryant, HC (1915) Sea otters near Point Sur. California Department of Fish and Game Bulletin 1, 134-135.

[4] Jessup, David A, Melissa Miller, Jack Ames, Mike Harris, Christine Kreuder, Patricia A. Conrad, and Jonna A.K. Mazet (2004) Southern sea otter as sentinel of marine ecosystem health. EcoHealth 1, 239-245.

[5] Kreuder, C., MA Miller, DA Jessup, LJ Lowenstine, MD Harris, JA Ames, TE Carpenter, PA Conrad, and JAK Mazet. (2003) Patterns of Mortality in Southern Sea Otters from 1998-2001. Journal of Wildlife, 39(3) 495-509.

[6] Jessup, David A. Melissa Miller, Chris Kreuder-Johnson, Patricia A. Conrad, Timothy Tinker, James Estes and Jonna AK Mazet. (2007) Sea Otters in a Dirty Ocean. Journal of the American Veterinary Medical Association, 231(11) 1648-1652.

[7] USFWS (2008) Final Southern Sea Otter Stock Assessment Report. Ventura, CA

[8] The southern sea otter population should be considered for delisting under the ESA when the average population level over a three-year period exceeds 3,090 animals.

or uplisting[9] the subspecies, and sets out monitoring and research plans, necessary mitigation actions and a cost of recovery program.[10] The State of California has also enacted a law to reduce southern sea otter entanglement and drowning in fishing gear.[11]

On November 7, 1986, Public Law 99–625 was enacted, which authorized the Secretary of the Interior to develop and implement a plan to relocate and manage an experimental population of southern sea otters. Under the program, some sea otters were relocated to San Nicolas Island as an experimental population. Additionally, an "otter free" management zone was created along the coast, south of Point Conception. Animals found in the management zone were removed and relocated to the northern part of their range. This process of relocation ended in 1998, resulting in controversy among the fishing community, as a small number of otters moved in and out of the management zone on a seasonal basis. Some in the fishing community, like urchin and abalone fishermen, view otter presence as competition for scarce resources.

In 2000, an ESA section 7 consultation determined that the relocation program would jeopardize the recovery of the southern sea otter.[12] In 2005, USFWS drafted a Supplemental Environmental Impact Statement on the Translocation of Sea Otters, proposing the termination of the southern sea otter translocation program on San Nicolas Island and a cessation of otter removal from translocation or management zones.[13]

From 2007–2009, the southern sea otter population averaged 2,813 individuals—about 20 percent of the estimated carrying capacity of the region (approximately 16,000 individuals[14]). Overall, the population growth rate appears to be stable or slightly declining.[15] However, the population has higher growth rates at the southern extent of its range and lower growth rates at the central and northern parts.[16] The recovery of this species in California remains a concern for wildlife managers. Other recovering sea otter populations in Washington, British Columbia, and Alaska have been growing at a rate of up to 17 to 20 percent, while southern sea otter population growth from 2003–2008 was only about 3 percent.[17]

On Wednesday, November 4, 2009, the Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard held a hearing entitled, "The Future of Ocean Governance: Building Our National Ocean Policy," at which testimony was provided by several departments and agencies of the Federal government, including the U.S. Depart-

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[9] The southern sea otter population should be considered for listing as "endangered" under the ESA if the population declines below an "effective population size of 500 animals," or 1,850 animals.

[10] USFWS (2003) Final revised recovery plan for the southern sea otter. Portland, OR. xi+165 pp.

[11] California Senate Bill No. 2563

[12] USFWS. (2000) Reinitiation of formal consultation on the containment program for the southern sea otter (1-8-99-FW-81). California/Nevada Operations Office. 19 July.

[13] USFWS (2005) Draft Supplemental Environmental Impact Statement, Translocation of Southern Sea Otters. Ventura, CA.

[14] Laidre, Kristin L, Ronald J Jameson, Douglas Demaster (2000) An estimation of the carrying capacity for sea otters along the California coast. Marine Mammal Science 17 (2) 294–309.

[15] USGS, http://www.werc.usgs.gov/Project.aspx?ProjectID=91

[16] Tinker, MT, JA Estes, K Ralls, TM Williams, D Jessup, and DP Costa (2006) Population dynamics and biology of the California sea otter at the southern edge of its range. MMS OCS Study 2006–2007. Coastal Research Center, Marine Science Institute, University of California, Santa Barbara, California. MMS Cooperative Agreement Number 14–35–0001–31063.

[17] USFWS (2008) Final Southern Sea Otter Stock Assessment Report. Ventura,CA.

ment of the Interior (DOI). As a part of that hearing, DOI described the beneficial role that narrowly focused conservation efforts, such as recovery efforts for individual species, can play as part of a more comprehensive, ecosystem-based approach for managing natural resources.

DOI noted that sea otters are important predators in the nearshore marine ecosystems of the North Pacific Ocean and are generally considered to be a keystone species in these communities. Sea urchins are a preferred prey item of sea otters, and are also commonly viewed as the most important subtidal grazers of large algae, including kelp, in California. Recovery of the southern sea otter would be beneficial to nearshore kelp forests and the species they support because, in areas where sea urchin grazing is limiting kelp establishment and growth, the presence of sea otters can generally be expected to keep sea urchin populations under control, resulting in increased stability and persistence of kelp forest habitat. Healthy kelp forests, in turn, provide numerous direct and indirect ecosystem benefits, including reductions in coastal erosion and improved habitat for numerous fish and invertebrate species.

DOI also stated that a recovery and research program would have benefits for understanding and addressing factors affecting other species in California's kelp ecosystem and human health. For example, research into parasitic infection of southern sea otters associated with the otters' use of particular areas of coastline and selection of certain types of prey may allow the development of management interventions that will have implications for a wide range of marine and other animals that are vulnerable to the same parasites.

Summary of Provisions

S. 1748 would direct USFWS and US Geological Survey (USGS) to implement a southern sea otter recovery and research program. This program would include (1) monitoring, analysis, and assessment of population ecology and health; and (2) implementation of measures to reduce or eliminate potential factors limiting populations that are related to marine ecosystem health or human activities. The bill would mandate the establishment of a southern sea otter recovery implementation team as authorized under the ESA and the creation of a peer-reviewed, merit-based process to award competitive grants for: (1) research regarding the major stressors on southern sea otters; and (2) projects assisting in the recovery of southern sea otter populations.

Legislative History

Senator Boxer introduced S. 1748 on October 1, 2009. Senator Feinstein is a cosponsor of the legislation. The bill was referred to the Committee on Commerce, Science, and Transportation on October 29, 2009. A companion bill, H.R. 556, was introduced by Rep. Sam Farr of California on January 15, 2009, and was passed by the House of Representatives on July 28, 2009.

Estimated Costs

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget

Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

S. 1748—Southern Sea Otter Recovery and Research Act

Summary: S. 1748 would authorize the appropriation of $5 million annually over the 2011–2016 period for the Fish and Wildlife Service and the United States Geological Survey to conduct research and recovery programs affecting southern sea otters along the coast of California. Assuming appropriation of the authorized amounts, CBO estimates that carrying out the program would cost $20 million over the next five years and an additional $10 million after 2015. Enacting the bill would not affect direct spending or revenues; therefore, pay-as-you-go procedures would not apply.

S. 1748 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

Estimated cost to the Federal Government: The estimated budgetary impact of S. 1748 is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and environment).

	By fiscal year, in millions of dollars—					
	2011	2012	2013	2014	2015	2011–2015
CHANGES IN SPENDING SUBJECT TO APPROPRIATION						
Authorization Level	5	5	5	5	5	25
Estimated Outlays	2	3	5	5	5	20

Basis of estimate: For this estimate, CBO assumes that S. 1748 will be enacted near the end of fiscal year 2010 and that the authorized amounts will be appropriated for each year. Estimated outlays are based on historical spending patterns for similar programs.

Estimated intergovernmental and private-sector impact: S. 1748 contains no intergovernmental or private-sector mandates as defined in UMRA and would impose no costs on state, local, or tribal governments.

Previous CBO estimate: On June 16, 2009, CBO transmitted a cost estimate for H.R. 556, the Southern Sea Otter Recovery and Research Act, as ordered reported by the House Committee on Natural Resources on June 10, 2009. H.R. 556 and S. 1742 are similar but would authorize appropriations for different years. The CBO cost estimates reflect this difference.

Estimate prepared by: Federal Costs: Martin von Gnechten; Impact on State, Local, and Tribal Governments: Melissa Merrell; Impact on the Private Sector: Amy Petz.

Estimate approved by: Theresa Gullo, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

NUMBER OF PERSONS COVERED

S. 1748 would establish a program of research, recovery, and other activities to provide for the recovery of the southern sea otter, which has been listed as threatened under the ESA since 1977, and therefore also deemed to be "depleted" under the MMPA. The program that would be established under the bill would deal solely with the recovery of the southern sea otter.

ECONOMIC IMPACT

The bill would authorize annual appropriations of $5 million for each of fiscals years 2010 through 2015. These funding levels are not expected to have an inflationary impact on the Nation's economy.

PRIVACY

The reported bill would not have any adverse impact on the personal privacy of individuals.

PAPERWORK

S. 1748 would not impose any new paperwork requirements on private citizens, businesses, or other entities.

CONGRESSIONALLY DIRECTED SPENDING

In compliance with paragraph 4(b) of rule XLIV of the Standing Rules of the Senate, the Committee provides that no provisions contained in the bill, as reported, meet the definition of congressionally directed spending items under the rule.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title

This section would provide that this Act may be cited as the "Southern Sea Otter Recovery and Research Act."

Section 2. Definitions

This section would define the terms "recovery and research program" as "the southern sea otter recovery and research program carried out under section 3(a)" and "Secretary" as "the Secretary of the Interior, acting through the Director of the United States Fish and Wildlife Service and the Director of the United States Geologic Survey."

Section 3. Southern Sea Otter Recovery and Research Program

Subsection (a) of this section would direct the Secretary of the Interior, acting through the USFWS and the USGS to carry out a recovery and research program for southern sea otter populations along the coast of California informed by: (1) the USFWS Final Revised Recovery Plan for the southern sea otter; (2) the USFWS Research Plan for California Sea Otter Recovery, drafted by the Southern Sea Otter Recovery and Implementation Team in 2007; and (3) any other USFWS recovery, research or conservation plan adopted after the enactment of this Act. It would require that this recovery and research program include: (1) monitoring, analysis, and assessment of the population demographics, health, causes of

mortality, and life history parameters of southern sea otters; and (2) development and implementation of measures to reduce or eliminate potential factors limiting southern sea otter populations related to marine ecosystem health or human activities.

Subsection (b) of this section would require the appointment of a Recovery Implementation Team not later than one year after the date of enactment.

Subsection (c) of this section would authorize the establishment of a peer-reviewed, merit-based process to award competitive grants for southern sea otter research, and for projects assisting in the recovery of southern sea otter populations. The Secretary would be required to establish, as necessary, a peer review panel to provide scientific advice and guidance to prioritize proposals for these grants. Research funded by grants made under this program may focus on: (1) causes of mortality; (2) demographics and natural history of sea otters; (3) effects and sources of poor water quality on sea otters and mechanisms for addressing their effects and sources; (4) effects and sources of infectious diseases and parasites; (5) limitations on food availability and impacts on carrying capacity; (6) interactions with fisheries and other human marine activities; (7) the keystone ecological role of sea otters, including effects of sea otter predation, especially how this impacts human welfare, health and ecosystem services; and (8) emergency response and contingency plans. Recovery projects funded with grants made under this program may include projects that (1) protect and recover southern sea otter populations; (2) reduce, mitigate, or eliminate potential human-caused factors that limit population growth (such as habitat degradation, factors that cause mortality, compromise health, or factors restricting distribution or abundance); or (3) implement emergency response and contingency plans.

Subsection (d) of this section would require a report within one year after the date of enactment on (1) the status of sea otter populations; (2) the implementation of the recovery and research program and grant program; and (3) any relevant formal ESA consultation. It would require a second report within two years after the date of enactment and every five years thereafter, in consultation with the southern sea otter recovery and implementation team, that includes: (1) an evaluation of health, causes of mortality and interactions with California coastal marine ecosystems; (2) an evaluation of actions taken for the improvement of sea otter health or habitat, or reduction of mortality; (3) recommendations to further improve sea otter and California coastal marine ecosystem health and reduce sea otter mortality; and (4) funding recommendations.

Section 4. Authorization of appropriations

This section would authorize $5,000,000 for each of fiscal years 2010 through 2015, and would cap administrative expenses at 7 percent. The authorization is further allocated with 30 percent of the authorization for research, 30 percent for recovery activities, and the remainder provided to the Secretary of the Interior for additional grants for either research or recovery projects.

Section 5. Termination

This section provides that the Act would terminate on the date that the Secretary publishes a determination that the southern sea otter be should be removed from ESA listing.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, the Committee states that the bill as reported would make no change to existing law.

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