

BOEMRE ENVIRONMENTAL STUDIES PROGRAM: Ongoing Studies

Region: Pacific OCS Region

Planning Area: Southern California

Title: Southern Sea Otter Range Expansion and Habitat Use and Interaction with Manmade Structures

BOEMRE Information Need(s) to be Addressed: The southern sea otter (*Enhydra lutris nereis*) is exceptionally vulnerable to oil spills. This species is also listed as threatened under the Endangered Species Act. In the past five years, the southern sea otter population has significantly expanded its range down the coast of California into areas of existing oil and gas production. BOEMRE needs to understand where and how southern sea otters are using habitat near oil and gas facilities in order to calculate risks to otters in environmental analysis of on-going OCS activities and oil spill response planning. Such information, coupled with ongoing research being done by USGS and funded by BOEMRE, fingerprinting seep oils, would inform BOEMRE of the possible source of oil on any otters that potentially become oiled.

Total BOEMRE Cost: TBD **Period of Performance:** FY 2011 - 2014

Conducting Organization: TBD

Principal Investigator: TBD

BOEMRE Contact: [Greg Sanders](#)

Description:

Background: The southern sea otter was listed as threatened primarily because of its small population size and the risk of oil spills. Since listing, the southern sea otter population has gradually increased its size and range. Approximately 2,800 sea otters now inhabit the coastline from Half Moon Bay to Santa Barbara. Within the past five years, about 100 sea otters have been routinely observed in the Point Conception area, adjacent to active oil and gas facilities and natural oil and gas seeps. Very little is known about their daily activity patterns and habitat use in this area.

Objectives: Research objectives include 1) identification of important sea otter resting and foraging areas adjacent to oil and gas facilities; 2) delineation of movement patterns along the southern California coast; and 3) assessment of sea otter distribution and behavior in the vicinity of natural oil and gas seep areas (e.g., Coal Oil Point, Santa Barbara County).

Methods: Up to 20 sea otters per year will be captured on the southern California coast over a two year period. Each animal will be implanted with a VHF radio tag and a time-depth-recorder using well established techniques developed by the U.S. Fish and Wildlife

Service and the U.S. Geological Survey. Geospatial tags may be considered and used if they are developed and approved for use in sea otters by the time this study is initiated. These movement data would be correlated to the location of known seeps in the Santa Barbara Channel and correlations to possible oiling estimated.

Tagged animals will be tracked for a two year period from land and air on a weekly basis with periodic intensive survey periods designed to determine daily movement and activity patterns in relationship to oil and gas facilities and naturally occurring oil seeps. In the third year of the project, some of the tagged sea otters will be recaptured to recover their time-depth-recorders for more detailed analysis of their activity patterns.

Current Status:	Planned New Start
Final Report Due:	TBD
Publications Completed:	None
Affiliated WWW sites:	None
Revised Date:	March 4, 2011