

BOEMRE ENVIRONMENTAL STUDIES PROGRAM: Ongoing Studies

Region: Pacific OCS Region

Planning Area: Southern California

Title: A Shoreline Survey of Coastal Birds in Ventura County, California

BOEMRE Information Need(s) to be Addressed: Knowledge of the status of populations of shorebirds serves as a sensitive and integrative metric of the health of coastal communities in general and potentially as an indicator of human disturbances (such as oil spills and pipeline beach construction). This study continues to add to the long term data set that will improve our understanding of offshore oil and gas activities effects on the coastal environment.

Total BOEMRE Cost: \$68,680.30 **Period of Performance:** FY 2007 – 2011

Conducting Organization: California State University Channel Islands

Principal Investigator: Don Rodriguez

BOEMRE Contact: [Greg Sanders](#)

Description:

Background: The motivation for this study is continuing the development of a long term data set of coastal bird observations in the areas adjacent to offshore oil and gas operations. Such a data set allows the BOEMRE to perform rigorous analyses on any potential effects of offshore operations on the sensitive coastal shorebirds that inhabit the region. Seabirds and shorebirds have long been recognized as among the most vulnerable fauna in case of oil spills and as sensitive harbingers of the health of the coastal marine ecosystem because of their biology and ecology coupled with generally long life. The past decade has also seen major physical and climatic changes along the California Coast caused by major El Nino events, global climate change with shifting temperatures related to the Pacific Decadal Oscillation (PDO), and increasing urbanization of the coast. All these factors make it even more imperative that a long term data set of shorebird populations be established and continued in order to allow more spatially and temporally limited changes in coastal populations (that may be triggered by human induced impacts) from those that are more global in nature and therefore detectable only over longer temporal and spatial scales.

Objectives: The primary goal of this study is to quantitatively investigate and characterize the shorebird species and their seasonal populations along the Ventura County coastline. The research should be able to detect geographic and temporal variability in abundance and composition of the shorebird community. This research will use monthly surveys along the coast of Ventura County and will create a database of observations. Annual reports and a final report on the results of the study will be

completed.

Specific Objectives include:

- To quantitatively document the assemblages of shorebirds along the Ventura County Coast using monthly surveys conducted on foot according to the methods established by McCrary and Pierson in the previous survey,
- To investigate spatial patterns of abundance in the most common species and taxa, and,
- To introduce global positioning system, and geographic information system technological innovation into the study protocols.

Methods: Identified transects on several Ventura County beaches are walked by qualified ornithologists on a monthly basis. Birds are counted, identified to species, and other characteristics are noted including age, presence of injury or oiling. Environmental conditions of the beach including presence of people and dogs are quantified along these transects.

Current Status: Completing final report.

Final Report Due: March 2011

Publications Completed: None at this time.

Affiliated WWW Sites: None at this time.

Revised Date: March 4, 2011