



NATIONAL *fish, wildlife & plants*
CLIMATE ADAPTATION STRATEGY

Project Title: Downscaling Climate Change Models to Local Site Conditions: Effects of Sea-Level Rise and Extreme Events on California Coastal Habitats

Headline Title (2-5 words): Effects of Climate Change on California Coast

Brief Summary (Abstract): This project is downscaling climate change models to understand how climate change will effect coastal habitats.

Project Location: California

Partners: Researchers of this project are from the U.S. Geological Survey Western Ecological Research Center, Pacific Science Center, Pautxent Wildlife Research Center, and Pacific Coastal & Marine Science Center, the University of California – Los Angeles, University of California – Davis, U.S. Fish and Wildlife Service, and the San Diego Refuge Complex.

Background: Climate change impacts, such as sea-level rise, are altering the productivity and diversity of ecosystems along the California coast, but little is known about the exact ways in which these ecosystems are being affected or how they will be changed in the future. Understanding the physical processes and complex relationships within these nearshore habitats can be used to develop comprehensive vulnerability assessments for wildlife and ecosystems along the California coast.

Project Goals: The goal of this project is to provide scientific information to support future planning and conservation of coastal natural resources as the climate changes. The study will examine current weather patterns, elevations, tides, and sediment of connected coastal habitats to determine how they affect plants and animals, as well as to project how climate change may alter that balance.

Strategy Goals Implemented: Goal 4, Strategy 4.2, Action 4.2.1.: Develop regional downscaling of Global Climate models to conduct vulnerability assessment of living resources.