

Science on the Landscape for California and the Pacific West

The Western Ecological Research Center (WERC)

WERC is a U.S. Geological Survey science center serving California, Nevada and the greater Pacific West — the most ecologically diverse geographic region in the United States.

As part of the USGS mission to survey the ecosystems and organisms of our Nation and its global partners, WERC provides scientific information and products that help natural resource managers address critical issues in our changing world.



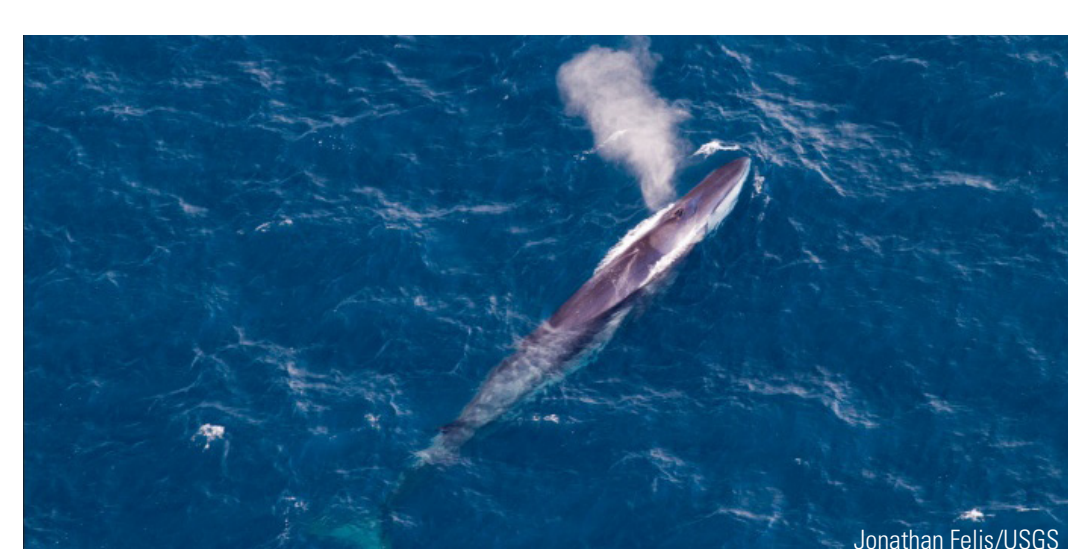
Avian Influenza Transmission

Working with the United Nations, WERC scientists use satellite telemetry to find links between bird flu outbreaks and waterfowl migration routes.
<http://www.werc.usgs.gov/takekawa>



Wildfire Risk to Communities

Why do some neighborhoods burn and others don't? WERC provides research and tools to help Southern California communities plan for wildfires.
<http://www.werc.usgs.gov/socalfirerisk>



Marine Hotspots and Migrations

Aerial surveys and tracking studies let WERC scientists pinpoint hotspots of seabirds and marine mammals, helping inform marine resource management.
<http://www.werc.usgs.gov/adams>



Sea Level Rise and Coastlines

Coastal managers need science-based tools to plan for climate change. WERC surveys and models will offer forecasts for wetlands of the U.S. West Coast.
<http://www.werc.usgs.gov/SFBaySLR>



Invasive Species Biosecurity

WERC research is helping Pacific island nations recover from and stop invasions of rats, snakes and other alien species.
<http://www.werc.usgs.gov/fisher>
<http://www.werc.usgs.gov/palmyra>



Parasites and Tropical Diseases

Parasites and microbes are often overlooked in ecological surveys, but WERC studies their interactions with ecosystem health and human communities.
<http://www.werc.usgs.gov/lafferty>



California Biodiversity

WERC conducts surveys on amphibian, reptile and bird communities from the Central Valley to the Bay-Delta.
<http://www.werc.usgs.gov/pointreyes>
<http://www.werc.usgs.gov/sfbc>



Salt Pond Restoration Project

WERC studies on mercury toxicity and marsh ecology are guiding restoration of ecosystem services to Silicon Valley.
<http://on.doi.gov/southbayrestoration>
<http://www.werc.usgs.gov/ackerman>



California Sea Otter Populations

Each year, WERC scientists survey the population of this threatened species, working with partners statewide to study stressors hindering sea otter recovery.
<http://www.werc.usgs.gov/tinker>



Channel Islands Ecology

Together with Channel Islands National Park, WERC monitors rare and endemic plants and seeks to understand how these unique fog-driven ecosystems function.
<http://www.werc.usgs.gov/mceachern>



Human Barriers to Wildlife

How do species cope with Southern California's suburban wilderness? Local governments look to WERC for answers.
<http://www.werc.usgs.gov/sandiego>
<http://www.werc.usgs.gov/samo>



North Coast Riparian Systems

How will old-growth forests respond to rising global temperatures? Will fog cycle changes impact salmon-bearing streams? WERC scientists investigate.
<http://www.werc.usgs.gov/redwood>



Waterfowl and Wetlands

What effects do wetland conservation acreage and water supply decisions have on the biomass of waterfowl species? WERC scientists seek the answers.
<http://www.werc.usgs.gov/fleskes>



Greater Sage-Grouse Modeling

Vegetation, telemetry and nest surveys help create a habitat suitability map to help Nevada industry and state offices manage the sagebrush-steppe biome.
<http://www.werc.usgs.gov/casazza>



Research for National Parks

WERC scientists study vegetation and alpine wildlife, and test fire and forest management methods for park units.
<http://www.werc.usgs.gov/yosemite>
<http://www.werc.usgs.gov/seki>



The Future of the Mojave Desert

From desert tortoises to blackbrush, WERC surveys and models help guide management plans for desert land-use.
<http://www.werc.usgs.gov/boxsprings>
<http://www.werc.usgs.gov/lasvegas>

WERC Principle Investigators

Josh Ackerman
Josh Adams
Kristin Berry
Erin Boydston
Mike Casazza
Lesley DeFalco
Todd Esque
Gary Fellers
Robert Fisher
Joe Flekes
Roger Hothem
Jon E. Keeley
Barbara Kus
Kevin Lafferty
Kathy Longshore

<http://www.werc.usgs.gov/ackerman>
<http://www.werc.usgs.gov/adams>
<http://www.werc.usgs.gov/berry>
<http://www.werc.usgs.gov/boydston>
<http://www.werc.usgs.gov/brooks>
<http://www.werc.usgs.gov/casazza>
<http://www.werc.usgs.gov/defalco>
<http://www.werc.usgs.gov/esque>
<http://www.werc.usgs.gov/fellers>
<http://www.werc.usgs.gov/fisher>
<http://www.werc.usgs.gov/fleskes>
<http://www.werc.usgs.gov/hothem>
<http://www.werc.usgs.gov/keeley>
<http://www.werc.usgs.gov/kus>
<http://www.werc.usgs.gov/lafferty>
<http://www.werc.usgs.gov/longshore>

Kathryn McEachern
Mary Ann Madej
A. Keith Miles**
Ken Nussear
Steve Schwarzbach*
Nate Stephenson
John Takekawa
Karen Thorne
M. Tim Tinker
Phil van Mantgem
Laura Valoppi
Amy Vandergast
Julie Yee

*Center Director
**Deputy Center Director

