

KA Moore-O'Leary et al. – Supporting Information

WebPanel 1. The many roles (a) of ecologists in renewable energy development and examples of the work select ecologists (b) are engaged in.

(a) Ecologists play vital roles in the development of renewable energy, including through the:

- Identification and quantification of environmental trade-offs, co-costs, and co-benefits in energy technology implementation;
- Development of decision-support and multiple-criteria modeling tools for energy planning and mitigation;
- Quantification of land and environmental constraints in pathway-, projection-, and optimization-type energy studies;
- Determination of environmental risk and impact assessment of energy development, production, and consumption;
- Achievement of landscape sustainability in energy design, integrating its principles regarding complexity, the nature of applied problems, implementation gaps, and restoration ecology.

(b) Ecologists study the ecology of energy in diverse sectors, including academia, government, and industry.

Jeff Lovich
Research Ecologist
US Geological Survey, AZ



S V Madrak

"My research seeks to identify the effects of renewable energy development on wildlife like the federally protected Agassiz's desert tortoise."

Rebecca R Hernandez
Assistant Professor
University of California, Davis



A Swanson

"Our lab studies ecological trade-offs, synergies, and patterns of renewable energy development across multiple spatial scales."

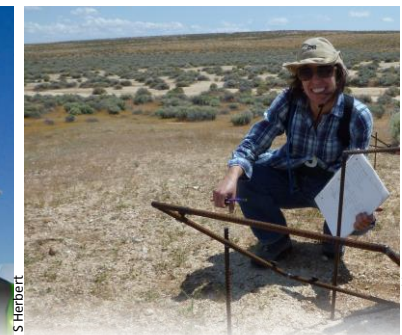
Kara Moore-O'Leary
Assistant Adjunct Professor
University of California, Davis



S Herbert

"My research asks questions about the effects of solar facilities on plants and their interactions with other species."

Karen Tanner
PhD Candidate
University of California, Santa Cruz



BM Pavlik

"I study effects of energy infrastructure on annual plant demography and community composition."

Amanda Swanson
PhD Candidate
University of California, Riverside



R Hernandez

"I study how soil carbon dynamics are impacted by disturbance of solar energy development."

Jason Kreidler
Research Geographer
US Geological Survey, ID



S McIlroy

"My work addresses the consequences of development on conservation, including decision support for siting."

Scott Abella
Assistant Professor
University of Nevada, Las Vegas



R Hernandez

"Our group is focused on the restoration of desert ecosystems when impacted by energy-related disturbances."

David S Johnston
Adjunct Professor
San Jose State University



A Wierschel

"I focus on bat conservation ecology and renewable energy impacts to bats and other wildlife."