

CONTRACTS/GRANTS AWARDED 2011-2012

AECOM

H. Lenihan
SB110068 10/1/11-12/31/11 \$5,450
Determining Risk Factors for 3 Zero Valent Iron Materials.

California Energy Commission

C. D'Antonio
20111150 8/16/11-6/30/14 \$600,000
Quantifying the Impacts of Interactions Between Fire, Invasive Species, and Hydrologic Cycles.

California Wildlife Foundation

M. Kay
UCSB2012 2/13/12-12/31/12 \$25,000
Fishery Overview Chapter for California Spiny Lobster Fishery Management plan

Conservation International

F. Davis
SB120025 8/1/11-12/31/11 \$10,000
Modeling the Impacts of Climate Change on Indochina's Primates.

F. Davis
SB120091 1/1/12-5/31/12 \$12,361
Food Security and Ecosystem-based Adaptation - Global Indicator Development and Mapping.

Conservation International Subtotal \$22,361

Department of Energy

J. Boles
DE-SC0003676 2/1/12-1/31/13 \$93,539
Fault-Related CO2 Degassing, Geothermics, & Fluid Flow in Southern California Basins---
Physiochemical Evidence & Modeling

Department of Interior

R. Archuleta
G11AP20186 7/1/11-12/31/11 \$15,000
4th IASPEI/IAEE International Symposium on the Effects of Surface Geology on Seismic Motion

S. Seale, R. Archuleta
20111352 1/1/12-12/31/12 \$63,193
Liquefaction Hazard in Western Washington

C. Sorlien
G12AP20069 5/1/12-4/30/13 \$56,267
Plio-Quaternary Reactivation of Miocene Faults by the Newport-Inglewood-Rose Canyon-San Mateo-
Carlsbad-Descanso-Coronado Bank Fault System: Newport Beach to San Diego, California.

Department of Interior Subtotal		\$134,460
<u>Electric Power Research Institute</u>		
A. Keller		
EP-P34405/C15680	10/1/11-12/31/11	\$16,000
Targeted Watersheds Grant for Water Quality Trading in Ohio River Basin.		
A. Keller		
EP-P42069/C18398	11/1/11-12/31/12	\$10,944
	1/1/12-12/31/12	\$25,000
Modeling Nutrient Credit Calculations in Ohio River Basin		
A. Keller		
EP-P42266/C18443	1/1/12-12/31/12	\$48,652
Scientific Basis for Water Quality Trading		
Electric Power Research Institute Subtotal		\$100,596
<u>Goleta Valley Land Trust</u>		
L. Stratton, J. Thorsch		
SB120116	1/1/12-3/31/13	\$36,000
Restoration of Bluff Edge at West Campus Bluffs.		
<u>National Aeronautics and Space Administration</u>		
B. Bookhagen, G. Fisher		
NNX09AO24H	9/1/11-8/31/12	\$30,000
ASTER-Derived River Widths and Spatial Implications for Erosion in the Tectonically Active Himalaya.		
B. Bookhagen, M. Hanshaw		
NNX11AL4GH	10/1/11-9/30/12	\$30,000
Volumetric Glacial Changes in the Central Andes During the Past Four Decades: Climate Change, Debris Coverage, or ENSO Variability.		
J. Dozier		
NNX12AJ87G	4/1/12-3/31/13	\$183,156
Assessing Water Resources in Remote, Sparsely Gauged, Snow-Dominated Mountains Basins.		
J. Dozier, J. Frew		
NNX11AK35A	6/24/11-6/23/12	\$318,191
Error Analysis of MODIS Fractional Snow-Covered Area and Snow Albedo in Mountain Regions.		
J. Dozier, K. Rittger		
NNX09AN75H	10/1/11-3/31/12	\$16,000
Improving Runoff Forecasting with Enhanced Estimates of Snow Properties.		
L. Hess		
NNX12AD27G	1/6/12-1/5/13	\$311,000

Land and Resource Use on the Amazon Floodplain Under Evolving Management Systems and Environmental Change: Fish, Forests, Cattle, and Settlements.

S. Maritorena, D. Siegel
NNX11AE87G 2/8/12-2/7/13 \$129,396
From UV to Fluorescence, a Semi-analytical Ocean Color Model for MODIS and Beyond.

S. Maritorena, D. Siegel, J. Frew, N. Nelson
NNX08AP36A 5/12/12-5/11/13 \$580,659
Beyond Chlorophyll: Implementation and Distribution of Innovative Ocean Color Earth Science Data Records.

N. Nelson, C. Carlson, D. Siegel
NNX09AL09G 5/29/11-5/28/12 \$83,085
5/29/12-5/28/13 \$116,319
Ocean Color Observations on CLIVAR: Inherent Optical Properties and Community Structure on Trans-Ocean Sections.

N. Nelson, D. Siegel
NNX11AE99G 2/8/12-2/7/13 \$226,004
Bermuda Bio-Optics Project: Enhancement of Measurements for New Ocean Color Applications. Renewal

J. Shi
1360781 7/1/11-12/31/12 \$65,000
Technical Development for SMAP Soil Moisture Retrieval.

D. Siegel
NNX11AL94G 7/7/11-7/6/12 \$160,417
7/7/12-7/6/13 \$114,583
Evaluating NPP Ocean Color Data Products in a Complex Coastal Environment: The Plumes and Blooms Program.

D. Siegel, F. Henderikx-Freit
NNX11AQ26H 9/1/11-8/31/12 \$30,000
Bio-optical Variability of Plumes, Blooms and Relaxations in the Santa Barbara Channel: How Biased are our Current Assessments?

D. Siegel, R. Lawson
NH10AP28H 9/1/11-8/31/12 \$30,000
Phytoplankton Community Composition and Inherent Optical Properties (IOP) in a Complex Coastal Environment.

D. Siegel, N. Nelson
NNX11AF63G 4/1/12-3/31/14 \$136,475
4/1/12-3/31/13 \$123,215

A Mechanistic Approach Towards the Remote Assessment of Carbon Export by Sinking Particles in the Open Ocean.

Z. Wan
NNX11AG43G 3/11/12-3/10/13 \$206,296
Science Data Analysis Including TIR BRDF Retrieval for Improvements of the MODIS Land-Surface
Temperature/Emissivity Products in Long-term Accuracy and Consistency.
National Aeronautics and Space Administration Subtotal \$2,889,796

National Oceanic and Atmospheric Administration

L. Carvalho, C. Jones
NA10OAR4310170 8/1/11-7/31/12 \$122,915
An Integrated View of the American Monsoon Systems: Observations, Models and Probabilistic Forecasts.

National Science Foundation

R. Archuleta
1143751 9/1/11-8/31/12 \$28,237
4th International IASPEI Symposium on Effects of Surface Geology on Seismic Motion UC Santa
Barbara, 23 - 26 August, 2011

D. Burbank, B. Bookhagen
1050070 8/1/11-7/31/14 \$275,006
The Pamir Frontal Thrust System: Rates, Style, and Controls on Deformation.

D. Burbank, B. Bookhagen
EAR-1148268 5/15/12-4/30/14 \$143,370
Collaborative Research: Reconstructing Mid-Miocene-to-Recent
Paleo-Erosion Rates in the Eastern Andes, Northern Argentina

L. Carvalho, C. Jones, B. Bookhagen
1116105 8/15/11-7/31/14 \$563,506
Climate Variability and Impacts on Regional Surface Runoff in High Asia Mountains.

J. Clark
OCE-1031352 9/1/10-8/31/12 \$77,741
Collaborative Research: Large-scale, Long-term, Multi-directional, Cross-hole Experiments in the Upper
Oceanic Crust Using a Borehole Observatory Network.

J. Cottle
1050043 5/1/12-4/30/13 \$68,390
Collaborative Research: Improving the Accuracy and Precision of Monazite and Allanite Geochronology
via ID Th-Pb Ages for Reference Materials.

J. Cottle
ANT-1043152 7/1/11-6/30/14 \$311,385

Exploring the Significance of Na-Alkalkine Magmatism in Subduction Systems, a Case Study From the Ross Orogen, Antarctica.

J. Cottle, D. Kellett

EAR-1119380	7/1/11-6/30/12	\$126,078
	7/1/12-6/30/13	\$137,394

How Does the Mid-crust Accomodate Deformation in Large, Hot Collisional Orogens? Insight From the Himalaya-Tibet System.

J. Dozier

EAR-1015057	10/1/12-9/30/13	\$15,232
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Rapid Quantitative Snow Stratigraphy for Avalanche Forecasting Using Near-Infrared Photography.

B. Hacker

EAR-1008760	6/1/12-5/31/13	\$119,333
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Collaborative Research: The Suturing Process: Insight from the India-Asia Collision Zone.

C. Jones, L. Carvalho

AGS-1053294	7/15/11-6/30/12	\$179,422
	7/1/12-6/30/13	\$182,096

The Madden-Julian Oscillation and Predictability of Extreme Precipitation in the United States

A. Keller, P. Holden, H. Lenihan, B. Harthron, G. Stucky, R. Nisbet, B. Cardinale, J. Schimel, W. Freudenburg, E. McC...

SB090050	9/1/11-8/31/12	\$1,850,030
	9/1/08-8/31/12	\$53,114

CEIN-Predictive Toxicological Assessment and Safe Implementation of Nanotechnology in the Environment.

B. Kendall

DEB-1120865	8/1/11-7/31/12	\$111,146
	8/1/12-7/31/13	\$111,918

Collaborative Research: Demographic heterogeneity in landscapes and communities

M. Rioux

OCE-1144648	2/15/12-7/31/13	\$35,046
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Collaborative Research: Plutons as ingredients for continental crust: Pilot study of the differences between intermediate plutons and lavas in the intra-Aleutian arc

D. Rood

1103532	9/15/11-8/31/14	\$89,382
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Collaborative Research: Synchronizing the North American Varve Chronology and the Greenland Ice Core Record Using Meteoric 10-BE-Flux.

D. Rood

1114436	9/15/11-8/31/14	\$150,017
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Collaborative Research: Deciphering Connections Among Land Management, Soil Erosion, and Sediment Yield in Large River Basins.

J. Schimel
DEB-0919049 9/15/11-8/31/13 \$92,093
Collaborative Research: MSB: Microbial Control of Litter Decay at the Cellulose-Lignin Interface

J. Schimel, P. Holden
DEB-1145875 5/1/12-4/30/13 \$408,228
Collaborative Research: Controls over C Sequestration: Physiology vs. Physics

D. Siegel, R. Simons, B. Kendall
OCE-1155813 2/1/12-1/31/15 \$370,141
Quantifying the importance of biological factors in the estimation of larval connectivity and population dynamics in the coastal ocean.

J. Thorsch
DBI-0956281 9/1/10-8/31/15 \$35,545
Collaborative Proposal: Harnessing the Power of Herbarium Specimens to Understand the Changing Flora of a Biodiversity

National Science Foundation Subtotal \$5,533,850

Northeastern University

J. Steidl
501947-78052 10/1/11-9/30/12 \$4,401
Induced-Partial Saturation Through Transport and Reactivity for Liquefaction Mitigation.

Office of Naval Research

E. Fleishman
N00014-09-1-0896 12/31/11-12/31/12 \$20,633
Population Consequences of Acoustic Disturbance of Marine Mammals.

Purdue University

J. Steidl
NEES-4101-31902 10/1/11-9/30/12 \$76,975
10/1/11-9/30/12 \$177,433
10/1/11-9/30/12 \$121,160
10/1/11-9/30/12 \$127,204
10/1/11-9/30/12 \$35,000

NEES Consortium Operations: 2004-2014.

Purdue University Subtotal \$537,772

The Institute of Museum and Library Services IMLS

J. Thorsch, S. Sweet
MA-05-11-0256-11 8/1/11-7/31/13 \$80,655
Vertebrate Collections Management Project.

University of California – Merced

C. Tague
EAR 0725097 9/1/11-8/31/13 \$88,625
The California Critical Zone Observatory

University of California – San Diego

L. Romero
20042310 1/1/12-12/31/12 \$24,355
Modeling and Analysis of Measurements of Waves Interacting with Eddies in the Gulf of Mexico

University of California – Santa Cruz

R. Nisbet
20110022 10/1/11-9/30/12 \$113,553
Investigations in Fisheries Ecology.

University of California – UC Mexus

C. Ji
SB120026 7/1/11-6/30/12 \$1,160
Modeling of Large Earthquakes in the Mexican Subduction Zone: Estimating the Distribution of Slip During an Hypothetical Earthquake.

University of North Carolina, Charlotte

C. Tague
20100588-01-UCS 9/1/11-8/31/12 \$13,688
Influence of Stormwater Management Structures on Ecological Function in Urban Streams.

University of Southern California

R. Archuleta, T. Tanimoto
120044 2/1/11-1/31/12 \$15,000
Using Seismic Noise for the Purpose of Improving Shallow S-Wave Velocity Models

University of Washington

J. Shi
727195 6/20/11-6/19/12 \$9,000
6/20/11-6/19/12 \$31,001
Forward Physical Radiative Transfer Models and Retrieval Algorithms for Radar Remote Sensing of Terrestrial Snow at X Band and Ku Band.

University of Washington Subtotal \$40,001

US Geological Survey

J. Cottle
G12AP20049 2/28/12-3/1/13 \$26,645
Evaluating Mechanisms for Rare Earth Phosphate Mineralization in the Proterozoic Pinto Gneiss, Music Valley, Eastern Mojave, California

C. Tague		
G10AC00309	7/1/11-6/30/12	\$78,555
	7/1/12-6/30/14	\$73,004
The Western Mountain Initiative: Vulnerability and Adaptation to Climate Change in Western Mountain Ecosystems.		
US Geological Survey Subtotal		\$178,204
Grand Total		\$10,682,014