Nevada EPSCoR

NASA EPSCoR HIGHLIGHTS

CHARATERIZATION OF AEROSOL OPTICAL PROPERTIES FOR REMOTE SENSING AND RADIATIVE FORCING

Recent observations are being combined with measurements of aerosol and cloud physical properties to wide-spread pollution over the North Indian Ocean.

WEB-BASED EDUCATIONAL PLATFORM

The platform was launched www.climate101.org and is used to train middle and high school teachers in Nevada with Green Power Initiative.

CLIMATE 101
climate change education

MENTOR EARLY CAREER

A former NASA GSFC civil servant and former DRI PostDoc with expertise in aerosol science were hired at DRI.

ENHANCE NEVADA'S EDUCATIONAL CAPACITY

4 Graduate students, 10 Undergraduate Are engaged in web-based educational efforts.

NEW COLLABORATIONS

Scripps Institution of Oceanography, UC San Diego, University of Wisconsin, Madison and Stockholm University.

NSF EPSCoR RESEARCH & EDUCATION HIGHLIGHTS

Nevada Climate Change Portal

A major goal of NCCP is to sustain an easily accessible, and expandable infrastructure for geospatial data (such as climate information). By providing access to real-time and archived environmental data the project significantly enhances the ability of scientists, land managers educators and students to analyze and graphically present environmental data observations. This website provides information on the Nevada Climate Change Project and access to both the NevCAN (Nevada Climate-ecohydrology Assessment Network) and climate modeling output.

Graduate Student Kerensa Kruse, UNR, in the field studying runoff characterizations.

NevCAN

NevCAN provides scientists and students with full access to climate variability and its impact along elevation gradients within the most arid regions of the US. This data will allow greater understanding of variables that affect temperature, precipitation, and water availability in dry regions.

NEVADA STEM PIPELINE
SCIENCE · TECHNOLOGY · ENGINEERING · MATHEMATICS

Nevada STEM Pipeline

There is a growing need in our nation to prepare more students, teachers, and practitioners in the areas of science, technology, engineering, and mathematics (STEM). The Nevada STEM Pipeline serves as a user-friendly web portal that provides information on various STEM programs for K-20 students, parents, and the community.

Middle School Summer Institute

Builds educational infrastructure among in-service middle school science, math, and English teachers to teach lessons in climate change as it relates to Nevada communities. Teachers from middle schools that have student populations 50% or more minority participate in the two-week summer trainings on climate change curriculum to supplement class lessons. NSHE climate change faculty and graduate students act as mentors and content specialists to the in-service teachers.

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NSF EPSCoR WORKFORCE DEVELOPMENT HIGHLIGHTS

SCOTTY STRACHAN, MS OF UNIVERSITY OF NEVADA, RENO

He is a coordinator for environmental research and presently involved in an NSF-EPSCoR project entitled "Nevada Infrastructure for Climate Change Science, Education, and Outreach", an interdisciplinary endeavor funded for a total of $15 million over five years, where he is helping to manage installation of instrumental transects over two Great Basin mountain ranges.

GRADUATE STUDENTS on NSF EPSCoR

Graduate Fellowships

Have provided funding for 11 fellows (1 MS/MA and 10 PhD) from 2009-2012 and 2 have graduated and entered the workforce.

Graduate Research Assistantships

have provided funding for 32 graduate students (17 MS/MA and 15 PhD) and 17 have graduated and entered the workforce.

FACULTY HIRES on NSF EPSCoR

Within Nevada System of Higher Education new faculty have been employed: 3 at Desert Research Institute, 2 at University of Nevada, Reno, and 4 at University of Nevada, Las Vegas.

NSF EPSCoR PARTICIPATION AND DIVERSITY

FROM 2008-2012

PARTICIPANTS

Increased participation from baseline of 24 participants increased seven-fold to 176 participants.

WOMEN

Increased participation from baseline of 4 women represented on the project to 69 female participants.

UNDERREPRESENTED MINORITIES

Increased participation from baseline of 0 to 20 underrepresented minorities.

NSF EPSCoR RETURN ON INVESTMENT

IN 2012

33 awarded follow-on proposals yielded a return on investment of $13,397,357 for Nevada.

EPSCoR NEVADA

NEVADA EPSCoR TOTAL PROJECT FUNDING FROM 2002-2012

National Science Foundation

2002-2005	$ 9,000,000
2005-2009	$ 9,000,000
2009-2013	$18,176,475

National Aeronautics and Space Administration

2002-2005	$ 2,800,000
2006-2012	$ 3,850,000

Department of Defense

2002	$ 1,000,000
2004	$ 876,822
2005-2007	$ 1,679,638
2008	$ 620,709

Department Of Energy

2002-2004	$ 1, 300,000
2006-2010	$ 1,500,000

National Institutes of Health
Biomedical Research Infrastructure Network

2002-2005	$7,163,425

National Institutes of Health
IDeA Network of Biomedical Research Excellence

2005-2013	$ 27,480,846