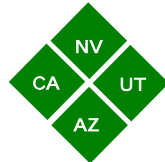




University of Nevada
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The Climate and Deserts Workshop: *Adaptive Management of Desert Ecosystems in a Changing Climate*

Aquarius Casino Resort
Laughlin, Nevada
April 9-11, 2008

*What does everyone need to know about climate change & variability
and the impact on Western desert areas?*

Wednesday April 9:

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| 7:30 – 8:30 | <u>Plenary Session</u>
Breakfast and Registration |
| 8:30 – 8:40 | Introduction/Logistics |
| 8:40 – 9:15 | <i>Separating Anthropogenic Climate Change Science from Spin:</i> Opening Keynote Speaker addresses peer-reviewed, state-of-the-science knowledge and issues of genuine debate versus manufactured conspiracy.
Dr. Lisa Graumlich , Director, School of Natural Resources, University of Arizona |
| 9:15 – 9:45 | <i>Overview – Climate Change and Western Deserts:</i> Climate change and variability affects on arid deserts, including discussion on precipitation and hydrologic variations, milder winter and extreme temperatures, and species responses (including changing fire regimes and invasive species issues).
Dr. Kelly Redmond – Deputy Director and Regional Climatologist, Desert Research Institute, Reno |
| 9:45 – 10:15 | Break |

10:15 – 11:45 **Panel Presentation – *Climate Change and Western Deserts***: Panel presentation of desert specific concerns and issues about climate change and variability and species responses (20 minutes per speaker).
Mohave-Colorado Desert **Dr. Rich Reynolds**, Research Geologist, Earth Surface Dynamics Program, USGS, Denver
Great Basin Desert **Dr. Stan Smith**, Professor of Biological Sciences, University of Nevada, Las Vegas
Sonoran Desert **Dr. Travis Huxman**, Professor of Physiological and Ecosystem Ecology, University of Arizona, Tucson

11:45 – 12:00 Q&A with Morning Speakers
12:00 – 12:15 **Moderator’s Synthesis**
12:15 – 1:10pm **Lunch –**
1:10 – 1:30pm ***Effects of Climate Change and Human Uses on Desert Water Resources***: Implications of changing demographics and land use patterns in desert areas, increasing water and energy demands, and challenges for resource managers.
Dr. Stan Leake – Research Hydrologist, USGS Arizona Water Science Center, Tucson

1:30 – 1:50 **Panel Discussion – *Human Uses/Impacts, Mgmt & Policy Implications***
Alternative Energy Uses and Impacts on Deserts
Dr. Joe Kiesecker – Energy by Design Program, The Nature Conservancy

1:50– 2:10 ***Urban Interface and Desert Areas***
Dr. Rebecca Carter – Growth Policy Program, Sonoran Institute

2:10 – 2:40 ***Groundwater Extraction and Desert Wildlife Water Sources***
Dr. Abe Springer – Professor of Hydrogeology, Northern Arizona University, Flagstaff

2:40 – 2:50 Q&A with Afternoon Speakers
2:50 – 3:00 **Moderator’s Synthesis**
3:00 – 3:10 **Break**
3:10 – 4:45pm ***WorldCafé*** – a creative process for a conversation leading to collaborative dialogue, sharing knowledge and creating possibilities for action.
Dr. Gregg Garfin (Lead Moderator) – Program Manager/Investigator, Institute for the Study of Planet Earth, University of Arizona

4:45 – 5:15pm ***Discussion and Day’s Wrap-up***
6:00 – 7:30pm ***Poster Session – Hors d’ouerves and no-host bar***

Thursday April 10:

8:00 – 8:10am Welcome/Housekeeping Scorpio Room

8:10 – 8:50am ***Climate Change and Western Desert – Adapting to Change***: Further implications for managing desert ecosystems under a changing climate.
Dr. Julio Betancourt – Paleoecologist, USGS Desert Laboratory, Tucson

8:50 – 9:00 Moderator Transition to Panel Presentation

- 9:00 – 9:20am ***Invasive Plants and Emerging Desert Fire Regimes***
Dr. Guy McPherson – Professor of Conservation Biology, School of Natural Resources, University of Arizona, Tucson
- 9:20 – 9:40am ***Wildlife Corridors and Migration***
Dr. Tom Scott – Professor of Conservation Biology, University of California, Riverside
- 9:40 – 10:00am ***Wildlife Linkages***
Dr. Wayne Spencer – Science Advisor, South Coast Wildlands
- 10:00 – 10:15 **Q&A with Morning Speakers**
10:15 – 10:25 **Moderator’s Synthesis**
10:25 – 10:45am **Break**
- 10:45 – 11:15 ***Interfacing Climate Modeling with Natural Resources/Ecosystems Modeling:*** Presentation discussing the use and interface of models for understanding natural systems (specifically deserts and adjacent impacting ecosystems as appropriate) and decision making, issues of downscaling and upscaling models and information.
Speaker – To be determined
Affiliation
- 11:15 –11:45 ***State and Transition Models for Desert Ecosystems*** – Presentation on current status of the use and development of State and Transition models in Western deserts.
Dr. Todd Esque – Ecologist, Western Ecological Research Center, USGS, Henderson
- 11:45 – 12:15 ***The Modeling Toolbox: Web Applications for Resource Managers:*** Presentation demonstrating online resources of climate and other natural resources related models ready for resource managers to use, including the Forecast Evaluation Tool.
Dr. Michael Crimmins – Climate Extension Specialist, University of Arizona, Tucson
- 12:15 – 1:15pm **Lunch**
- 1:15 – 1:45 **Climate Change and Desert Mgmt: Game of States and Transitions**
– **Michael Crimmins, UA**
– Introduction to breakout activities to use state and transition models to illustrate and consider ecological interactions between climate variability/change and desert resources management.
- 1:45 – 3:00 Team Table Exercises
Climate Scenarios and State & Transition Game Playing
- 3:00 – 3:30 Team Scenario Presentations/Summary
3:30 – 4:00 Workshop Wrap-up/Evaluations
4:00 **End Day/Workshop**
- Friday April 11:**
- 7:30 – 8:10am Carpool/Sack Lunches
8:10 – 4:00pm **NPS Mojave National Preserve: Tour of Relevant Sites**