

CLIMAS Update

NEWSLETTER OF THE CLIMATE ASSESSMENT PROJECT FOR THE SOUTHWEST

integrating science, policy, and community

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FIRST STAKEHOLDER ADVISORY COMMITTEE MEETING

The CLIMAS core office held its first stakeholder advisory committee meeting in mid-January. Committee members attending included Dallas Riegler-Salt River Project, Beau McClure-BLM, Dennis Rule-Tucson Water Company, Glen Sampson-Tucson office of NWS, and Larry Kreps-Benson director of community development. Barbara Morehouse and Roger Bales provided a progress update and discussed the advisory committee's roles: providing input to the research agendas, reviewing research products, evaluating the project's success in fulfilling its stated goals and objectives, and when needed, facilitating access to individuals or information sources. The advisory committee will be convened again in summer, 1999 to review the first year's research activities.

BENSON FIELD WORK

In February, the Bureau of Applied Research in Anthropology began intensive fieldwork in Benson. The team of graduate students and researchers from UA interviewed a broad range of local residents, including ranchers, farmers, utility managers, health providers, RV park owners and many others. The interviews, together with considerable background research, reveal important information about the character and dynamics of the community. This information provides the basis for exploring how climate affects the community and identifying what sorts of climate information would improve the community's ability to address local climate impacts.

URBAN WATER STUDY

Considerable progress has been made in analyzing the sensitivity of urban water supply and demand to

climate variability. The analysis is based on a supply and demand water budget, disaggregated according to supply and demand categories, for a selected baseline year. The analysis involves modifying these baseline values based on selected climate scenarios. The scenarios used are based on the maximum one-year and ten-year droughts on record, and maximum one-year and ten-year wet periods on record. Also included are less extreme one-year and ten-year drought and wet periods derived from statistical distributions. Preliminary results of the analysis will be available on the CLIMAS website within the next few months.

CLIMATE AND FORECAST REVIEWS

An impressive amount of work has gone into gathering information about exactly what we know and don't know about historic and paleo climates in the Southwest. A white paper summarizing the status of knowledge about the region's climate and detailing what sorts of research need to be done over the short and medium term is nearing completion. This paper will be available for review by the end of spring.

An equally large effort has gone into gathering information about climate forecasts for the Southwest. Considerable progress has been made recently with regard to improving the accuracy of seasonal and annual climate forecasts, such as the most recent El Niño-La Niña episodes. A white paper due to be released shortly examines the types of forecasts available, who does them and how they are done, and much more. Watch the CLIMAS web site for announcements that the climate and forecasting white papers are available online.

RANCHING STUDY

The ranching research team has been focusing on gathering information about the land use arrangements of ranchers in Cochise County and the eastern portion of Pima County. This information is being combined with background data (cattle prices, cost of supplemental feed, etc.) and information obtained from personal interviews identify the extent to which the ranchers are vulnerable to climate conditions, the nature of their vulnerability, and what options are available to them to cope with climate stress. Ultimately, the goal is to identify what sorts of information and assistance ranchers need to decrease their vulnerability to climate-induced stresses. Given the current drought conditions, this study is particularly timely.

NEW RELEASES ON THE CLIMAS WEB SITE!

The final report for the Stakeholder Pilot Survey is now on the CLIMAS web site, as is a report on the pilot on-line survey the NWS-Tucson Office's summer 1998 Convective Outlook Web page. You can easily find these pages from the CLIMAS home page. Also new on the CLIMAS web site are the land use/land tenure section (available now) and the socioeconomic/ demographics chapter of the Southwest Context report.

TO CONTACT US...

The CLIMAS web address is
<http://geo.ispe.arizona.edu/swclimate/>

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NATIONAL CLIMATE ASSESSMENT

NEWS FROM THE SOUTHWEST REGION

The Steering Committee and the Regional Assessment Team for the Southwest Regional Assessment project met jointly in December to formulate strategies and identify what each person would contribute to the regional assessment. The goal is to produce a regional assessment report by December 1999. A National Assessment Synthesis Team is summarizing input from the Southwest Assessment, along with assessments received from other regional and sectoral teams, into a national assessment report. This report will be submitted to members of Congress in January 2000.

An initial draft of the key climate change issues the region may face in the next century is now being compiled, based on two-page papers submitted by several Southwest Assessment team members. David Minke, an engineer at one of ASARCO's copper mines in Arizona, provided a summary of the importance of mining to the economy of the Southwest and Janie Chermak, faculty member in the Department of Economics at the University of New Mexico contributed a discussion of the economics of mining. Jan Matusak, Metropolitan Water District of Southern California, contributed a paper on economics and water demand forecasting. Linda Mearns, climate researcher at the National Center for Atmospheric Research in Boulder, Colorado contributed a series of climate change scenarios for the region. The impacts of climate change on sand dunes, and on the residents of the Four Corners region, were explored by Daniel Muhs of the U.S. Geological Survey in Denver, Colorado. Hallie Eakin, Ph.D. student in the Department of Geography at the University of Arizona, discussed potential impacts of climate change on the ranching industry in southeastern Arizona and Barbara Morehouse, program manager for CLIMAS, provided information on how climate change could affect urban water resources in the region. Potential impacts of climate change on urban areas of the Southwest were addressed by Wil Orr of Prescott College, Prescott, Arizona.