CLIMAS Update

NEWSLETTER OF THE CLIMATE ASSESSMENT FOR THE SOUTHWEST

integrating science, policy, and community

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CLIMAS Completes Its First Year

Hard to believe that a year has gone by already! The results of our first year s research, including the ranching study, urban water sensitivity analysis, forecasting assessment, and climate literature review, are being sent out right now for review by members of our Stakeholder Advisory Committee and others selected for their expertise in each area. The full report on the Benson community case study is anticipated to be ready for review in mid- to late August. CLIMAS will be building on the findings of the first year s research over the remainder of 1999, and will be initiating preliminary exploration in two new areas: climate impacts on Native American groups and on the U.S.-Mexico border.

Ranching Study: The ranching study will be continued, under the direction of Tom Sheridan of UA s Arizona State Museum, with expansion into the higher elevations of the Mogollon Rim to allow comparison across ecological regions. A survey of ranchers, initiated in late Spring, will also be continued.

Urban Water Study: The results of the sensitivity analysis have provided necessary foundations for undertaking an analysis, led by Barbara Morehouse, CLIMAS Program Manager, of the policies and institutions which underlie water resource management in Arizona, and which may facilitate or impede effective and sufficient response to climate impacts. This institutional analysis, in turn, is being carried out in tandem with a survey of water providers. The survey consists of a written questionnaire and personal interviews with providers in the study areas. The intent is to develop a profile of providers in order to identify their vulnerabilities to climate variability and to ascertain their climate information needs.

Community Case Study: An all-important follow-up to the Benson-area case study is development of outreach activities aimed at improving the community s access to climate information and at providing education and training in how to monitor and use climate information at the seasonal, annual, and longer time scales. Tim Finan, Director of Bureau of Applied Research in Anthropology (BARA), in conjunction with Tom McGuire of BARA and the CLIMAS core office team, will be directing this effort.

Native Americans and Climate Variability:

Diane Austin, of BARA, has already initiated cooperative interactions with the Intertribal Council of Arizona to scope out potential areas for research into climate impacts on region s tribes, and their specific needs for climate information. The project is being carried out in cooperation with Verna Teller and Lynn Mortensen who are pursuing parallel efforts in New Mexico. The objective is to work with the tribes to identify where research and outreach efforts might be most beneficially directed, then to focus collaborative research with the participating tribe(s) in those areas.

Border Research: Diana Liverman, Director of the UA Latin American Studies Center, will be setting the groundwork this Fall for an investigation of how climate affects the U.S.-Mexico border region. The scoping activity is important, for the impacts of climatic activity and conditions in northern Mexico often extend into the U.S. border states as well. Plans are also in the works to translate the materials available on the CLIMAS web site into Spanish.

Analysis of Forecasts: Following completion of initial efforts to characterize the status of climate and hydrologic forecasting for the Southwest, the forecasting team plans to focus on assessment of seasonal water supply outlooks and winter

precipitation forecasts. The aim of these assessments, being directed by Roger Bales and Soroosh Sorooshian of UA s Department of Hydrology and Water Resources, is to improve the flexibility and resilience of water resource managers and others in coping with the impacts of climate on the region s all-important water supply.

Climate Research: Building on the literature review and metadatabase that formed the nucleus of the research effort over the past year, the climate research team, headed by Malcolm Hughes of the UA Tree Ring Lab and Andrew Comrie of the UA Department of Geography, are moving forward. They plan to downscale historical information from the instrumental and paleo time scales to a finer spatial scale. The intent, if feasible, is to provide such information at a scale of approximately one square kilometer. The team will also begin looking at identifying the nature and causes of climate variation at the sub-regional scale. The initiative is important, for it is at this scale that people often experience climate impacts most directly.

NEW RELEASES ON OUR WEB SITE!
We have added a new La Ni a section to our web site. Here you can find information and official forecasts produced by the Climate Prediction Center as well as information and forecasts provided by other entities. We are adding pages that provide information on the implications of La Ni a for our region, a service which we will continue for the duration of La Ni a conditions.

We are repeating our survey of users who visit the National Weather Service-Tucson Office s Convective Web Site. In cooperation with the local NWS office, we invite you to visit the web site and fill out the survey. Your information is important to our efforts to tailor information to our constituents. By the way, the results of last year s survey may be found on our web site too.

Soon to be added to the CLIMAS web site: more information about climate and commentary pertinent to the Southwest about current climate forecasts. Also be on the lookout for the reports emerging from our first year of research!

NATIONAL CLIMATE ASSESSMENT

NEWS FROM THE SOUTHWEST REGION

The National Assessment Synthesis Team (NAST) is summarizing input from the Southwest Assessment, along with assessments received from other regional and sectoral teams, into a national assessment report. (Kathy Jacobs, Director of ADWR s Tucson AMA office is authoring the national water sector report.)

In April, Dr. William Sprigg, the Southwest Assessment's Regional Coordinator, met with representatives from the other teams and with the NAST in Atlanta to discuss their interim findings. A draft of the key climate change issues the region may face in the next century is now being compiled based two-page papers submitted by several Southwest Assessment team members and on input from the NAST. The areas covered are: current climate and climate change scenarios for the Southwest; water resources and use; water management; ranching; mining; reactivation of stabilized sand dunes on the Colorado Plateau; and urban areas. Other areas expected to be included are: human health (including Hantavirus Pulmonary Syndrome and Valley Fever), U.S.-Mexico border issues, rangeland ecosystems, energy; and Native American lands and peoples.

Following National Assessment guidelines, each topic will be examined to answer four points: the importance to the region and the current problems faced in that area; how climate change and variability might exacerbate or ameliorate those problems; coping strategies that could be utilized to build resilience to current environmental stresses, and to minimize the negative impacts of climate change; and recommendations for further research that could better prepare policy makers to reach wise decisions related to climate variability and change. (For more information on the goals of the National Assessment, see www.nacc.usgcrp.gov/faq.html.)

The report will be submitted to the National Assessment Working Group in September for review. It will be revised in the fall and the final report will be presented to Congress in January 2000.

TO CONTACT US...
The CLIMAS web address is
http://geo.ispe.arizona.edu/swclimate/
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