

WAS*IS Workshop 1 Agenda

SUNDAY, NOVEMBER 6, 2005

- 6:00 p.m. Icebreaker and dinner buffet at Residence Inn
- 6:15 p.m. Hello from the National Center for Atmospheric Research (NCAR) Societal-Environmental Research and Education Laboratory (SERE) (*Diana Josephson*)
- 6:25 p.m. Quick introductions by everyone
- 6:35 p.m. Welcome and introductions from WAS*IS (*Eve Gruntfest, Julie Demuth, and Jeff Lazo, NCAR*)
- Overview of workshop agenda and logistics
- 6:50 p.m. Short presentation: *Rebuilding a Sinking City* (*Sandy Johnson, NCAR*)
- Assess and improve usability of weather forecasts, watches, and warnings
 - Understand public perceptions of weather and improve education
- 7:10 p.m. Short presentation: *How Much Weather News Can America Stand and Hurricane Katrina Exposes a Myth About Vulnerability to Climate and Weather* (*Mickey Glantz, NCAR*)
- 7:30 p.m. WAS*ISers discuss the 2005 US hurricane season
- 8:30 p.m. **Adjourn**



MONDAY, NOVEMBER 7, 2005

- 8:20 a.m. Welcome (*Eve and Julie*)
- Overview of workshop goals for this session and second session in March
 - Reiterate need for commitment for participation throughout both sessions and between
 - Logistics: computer access, phones, expense reports, etc.
- 8:30 a.m. Hello from NCAR Societal Impacts Program (SIP) (*Jeff Lazo, NCAR*)
- 8:35 a.m. Fairy Tale Come True (*Eve*)
- Why WAS*IS?
 - Mission, objectives, expected outcomes, measurements of success
 - What distinguishes WAS*IS from other efforts
 - Course ground rules
 - BIG WAS*IS ideas
- 9:00 a.m. Participants' introductions (*Participants – approximately 3 minutes each*)
- Brief description of research/work/relevant experience
 - What you hope WAS*IS will mean to you

- 10:20 a.m. Break
- 10:40 a.m. Open discussion for participants to get questions/issues on the table
- WAS*ISers' November workshop expectations – emerging themes
 - WAS*ISers' expectations for change and answered questions by the end of the March 2006 session?
- 11:00 a.m. Presentation and group discussion: *State of the Art Regarding the Integration of Weather and Social Science* (Roger Pielke, Jr., University of Colorado, Center for Science and Technology Policy Research)
- Noon Lunch and question/discussion session with Roger Pielke, Jr.

☞ Afternoon theme: Communication ☞

- 1:00 p.m. Group discussion: Speaking the same language (*Eve and Julie*)
- Common verbiage (e.g., “value”, “effective”, “accuracy”, “precision”, “uncertainty”, “warning”) but different/inaccurate interpretations
 - More unfamiliar terms (e.g., “capacity building”, “stakeholders”, “decision-making”)
 - The dangers of making assumptions about what people think
- 1:30 p.m. Presentation and group discussion: *Warnings and False Alarms* (*Eve and Kim Carsell*)
- Reports from Denver and Boulder, Colorado, and Ventura, California
 - The usefulness of intensity scales (e.g., severe, moderate, Saffir-Simpson scale) in conveying warning information
- 2:30 p.m. Presentation and group discussion: *Communicating with the Media* (*Bob Henson, UCAR Communications and Matt Kelsch, UCAR Cooperative Program for Operational Meteorology, Education, and Training (COMET)*)
- Essential communication skills, knowing your audience and knowing the media, being able to communicate effectively in very little time, getting the message across, communicating complex topics to laypeople, building relationships
- 3:30 p.m. Break
- 4:00 p.m. Presentation and group discussion: *Communicating and Collaborating with Specific User Groups (including Agricultural, Energy, and Transportation Sectors)* (*David Changnon, Northern Illinois University*)
- Identifying your group and initializing contact
 - Identifying and meeting their needs
 - Being willing to learn from them as much or more than they will learn from you
 - Cultivating the relationship prior to an event for good relations before, during, and after event
 - Developing decision-support systems
- 5:30 p.m. **Adjourn for dinner**
- 6:00 p.m. Dinner at Laudisio (2785 Iris Avenue)
- 7:00 p.m. Presentation and group discussion: *Floodsafety.com* (*Marshall Frech, The Flood Safety Education Project*)

- Brief background about his “new” public education efforts and working with local officials
- Discussion of benefits of interactive website as public education tool for officials, residents, students, and others
- What does it mean to be effective?
- Discussion on effective risk communication, beyond brochures
- Who are the vulnerable populations and who isn’t reached (e.g., non-linear warning systems)
- How to communicate to everyone: young, old, non-English speakers, non-natives, tourists, visitors, and others



TUESDAY, NOVEMBER 8, 2005

- 8:20 a.m. Follow-up from first day
- Reiterate key themes that emerged
 - Other questions or ideas from Monday’s discussions and presentations?

☞ Daily theme: Research and Analysis Tools and Methods ☞

- 8:45 a.m. Discussion and break-out groups: Survey development, sampling, and analysis (*Eve and Jeff*)
- Overview on survey design, analysis (e.g., focus groups, one-on-one, pre-test)
 - Analyze and discuss specific surveys (e.g., warning project, household survey) including question design and response analysis
- 10:15 a.m. Break
- 10:45 a.m. Discussion and working groups: GIS (*Olga Wilhelmi, NCAR*)
- Overview of GIS and its applicability for weather/society problem-solving
 - Hands-on activity teaching people ArcGIS, with sets of sample data to analyze and to compare and contrast findings
- 12:30 p.m. Lunch
- 1:30 p.m. Group discussion about participants’ interim projects
- Ground rules and outline for projects
 - Explore potential topics
 - Begin small group discussions
 - Identify points/pitfalls/ideas for each project
- 2:30 p.m. Break
- 3:00 p.m. Discussion and break-out groups: Qualitative research methods (the example of weather and public health) (*Mary Hayden, University of Colorado at Colorado Springs and Emily Zielinski-Gutierrez, Centers for Disease Control Division of Vector-Borne Diseases*)
- Identifying types and benefits of qualitative research.
 - Understanding how qualitative and quantitative research methods complement one another
 - Identifying key priority areas and when to utilize different methods.

- Analyzing and classifying data
- 4:30 p.m. Presentation and group discussion: More on qualitative research methods (*Rebecca Morss, NCAR*)
- Study of weather forecasters and emergency managers in California
- 5:30 p.m. **Adjourn for dinner**
- 6:00 p.m. Dinner at the Taj Restaurant (*2630 Baseline Road*)
- 7:00 p.m. Presentation and group discussion: The Collaborative Adaptive Sensing of the Atmosphere example (CASA) (*Brenda Phillips and Havidan Rodriguez*)
- Overview of CASA
 - Discussion of the integration of end-user (intermediaries, value-added end users, the public, and researchers) needs
 - Discussion of CASA's pilot study with emergency managers, users, and the National Weather Service



WEDNESDAY, NOVEMBER 9, 2005

- 8:20 a.m. Follow-up from previous day
- More questions or ideas from Tuesday's discussions and presentations?
- 8:45 a.m. Break-out groups and discussion (*Brenda Philips and Havidan Rodriguez*)
- Individual groups discuss how CASA can best use survey information from stakeholders
- 10:45 a.m. Break

☞ Afternoon theme: A Real-Life Example ☞

- 11:00 a.m. Leave for Fort Collins (**everyone to ride on bus**)
- Discussion about chronology, synoptic conditions and experiences the night of July 28, 1997 (*Matt Kelsch*)
- 12:30 p.m. Lunch at Beau Jos (*100 N. College Avenue*)
- 2:00 p.m. Arrive at site of Fort Collins flood (*College and Drake*)
- Have discussion about what happened before, during, and after the, flood including meteorology, hydrology, land use regulations, and emergency response (*Matt Kelsch*)
- 3:15 p.m. Arrive at Fort Collins Storm Water Utility (*700 Wood St.*)
- Discuss the actions of the City of Fort Collins during and after the flood (*Marsha Hilmes-Robinson, Fort Collins Storm Water Utility*)
 - Discuss the local floodplain regulations before, immediately following, and eight years after the flood (*Susan Hayes, Fort Collins Storm Water Utility*)
- 4:15 p.m. Leave for Boulder
- 5:45 p.m. Arrive in Boulder; **NO organized group dinner!**



THURSDAY, NOVEMBER 10, 2005

- 8:20 a.m. Follow-up from previous day
- CASA discussion
 - Field trip discussion

☞ Theme: More Research and Analysis Tools and Methods ☞

- 8:45 a.m. Presentation and group discussion: Economics (*Jeff Lazo*)
- Relevance of economics to weather
 - Value theory
 - Discussion of ongoing SIP activities (analysis of Overall U.S. Sector Sensitivity Assessment data, cost-benefit study related to supercomputers for NOAA's Forecast Systems Lab, and non-market valuation associated with U.S. household survey)
- 10:15 a.m. Break
- 10:45 a.m. Presentation and group discussion: Decision-analysis (*Jennie Rice, Independent Consultant*)
- Theory, process, and mechanics of decision analysis
 - Effective decision making in the face of uncertainty, complexity, and risk
 - Problem structuring and identifying crucial variables
- 12:30 p.m. Lunch and question/discussion session with Jennie Rice

☞ Afternoon theme: Interim Group Projects ☞

- 1:30 p.m. Start working on group projects
- Toward the development of a work plan including an identification of problem, objectives, methods, analysis, and final project format
- 3:30 p.m. Break
- 3:50 p.m. Continue working on group projects
- 5:30 p.m. **Adjourn for dinner**
- 6:00 p.m. Dinner at Casa Alvarez (*3161 Walnut Street*)
- 7:30 p.m. Evening session: Designing the ideal weather/social science program for education, research, and practice
- Brainstorming sessions, people present the best ideas based on their experiences
 - Seamlessness and public-private-academic partnerships



FRIDAY, NOVEMBER 11, 2005

☞ Daily theme: Moving Forward with this Interdisciplinary Work ☞

- 8:20 a.m. Group presentations of project ideas and work plans with feedback and critique (allowing time for short nature walk in back of the lab—weather permitting)
- 11:00 a.m. Leave Mesa Lab for Foothills Lab
- 11:30 a.m. WAS*IS lives on! Wrapping up Session 1
- How do we keep our energy and passion going?
 - What are roadblocks to our efforts?
 - As researcher, how do you identify and then communicate with your user group?
 - As a user, how do you identify and communicate your needs to the wx providers and researchers?
 - Troubleshooting projects and what needs to happen before next meeting
 - Guidelines for continued conversations before March
 - What we have planned for AMS meeting in Atlanta
 - What we have to include in March workshop
 - Follow up on ideal weather/social science program
- 1:00 p.m. **Adjourn workshop** and have lunch for those who can stay