MEMORANDUM

To: WAS*IS fans and other interested folks

From: Eve Gruntfest, Julie Demuth, and Jeff Lazo – National Center for Atmospheric Research (NCAR) Societal Impacts Program, Institute for the Study of Society and Environment, Research Applications Laboratory

Re: Summary of the first WAS*IS Workshop, November 7–11, 2005, Boulder, Colorado (http://www.rap.ucar.edu/was_is/)

Weather and Society * Integrated Studies (WAS*IS) is a two-part workshop being held by the NCAR Societal Impacts Program, which is funded jointly by NCAR and NOAA’s U.S. Weather Research Program (USWRP). WAS*IS is dedicated to moving beyond rhetoric to action by shifting societal impact efforts from being a cursory “add-on” at the end of major research projects to being an integral part of new project development for scientists and practitioners.

WAS*IS is changing from what WAS to what IS the future of integrated weather studies!

The first intensive workshop was held in Boulder with 23 elite invitees from varied backgrounds forming the group of WAS*ISers. During our first busy week together, this dynamic, interdisciplinary group learned new tools, participated in hands-on exercises, interfaced with researchers and practitioners, and worked collaboratively on new ideas to better integrate societal impacts into the weather enterprise. The week was filled with constructive discussions and debates about challenges and opportunities of the cross-disciplinary visions of WAS*IS. The discussions, energy, projects initiated, and questions from the first workshop powerfully demonstrate how a small, passionate group can create new ways of integrating social science and physical science.

The WAS*ISers’ toolkit from the first week consisted of the following workshop presentations, activities, and hands-on exercises (presentations are available on the WAS*IS webpage):

- Challenges for integrating weather and social science
- Communicating and collaborating with users and decision-makers
- Communicating with the media
- Decision analysis
- Economics
- Fort Collins flood of 28 July 1997: preparedness, response, and recovery
- Fort Collins flood of 28 July 1997: societal impacts
- GIS
- Lessons from Hurricane Katrina
- Public education and outreach
- Qualitative research methods
- Survey research methods
- Warnings and false alarms

WAS*ISers will meet again in Boulder March 13–17, 2006, to learn more valuable societal impacts research methods, techniques, and applications; to present findings and recommendations from their new research projects; and to determine how to keep the WAS*IS initiatives and energies moving forward!

The WAS*IS webpage provides more information about efforts to date, WAS*IS participants, ongoing group projects, and our developing reference list of articles, books, and presentations related to societal impacts of weather. Check it out at http://www.rap.ucar.edu/was_is/. Contact Eve Gruntfest <ecg@ucar.edu> or Julie Demuth <jdemuth@ucar.edu> with any questions.
**The WAS*ISers: Workshop Participants & Organizers**

**Federal employees**
1. Amanda Brandt, NOAA/NWS
2. Jeff Craven, NOAA/NWS
3. Tanja Fransen, NOAA/NWS
4. Keelin Kuipers, NOAA/CSC
5. Jason Samenow, EPA
6. Neil Stuart, NOAA/NWS
7. Pam Szatanek, NOAA/NWS/HPC
8. Susanne Theis, German Weather Service

**Non-profit employee**
17. Gina Eosco, AMS

**Private sector employee**

**Research scientists**
19. Sheldon Drobot, U. of Colorado
20. Rebecca Morss, NCAR
21. Dave Schultz, U. of Oklahoma/NSSL
22. Olga Wilhelmi, NCAR

**University professor**
23. Dave Changnon, Northern Illinois U.

**Organizers**
1. Eve Gruntfest
2. Julie Demuth
3. Jeff Lazo
The WAS*ISers’ Toolkit: Workshop Presentations, Activities, and Hands-On Exercises – Presentations available on our webpage

- Challenges for integrating weather and social science – Roger Pielke, Jr., University of Colorado, Center for Science and Technology Policy Research
- Communicating and collaborating with users and decision-makers – David Changnon, Northern Illinois University; Brenda Phillips, University of Massachusetts; Havidan Rodriguez, University of Delaware
- Communicating with the media – Bob Henson, UCAR Communications; Matt Kelsch, UCAR/COMET
- Decision analysis – Jennie Rice, Independent Consultant
- Economics – Jeff Lazo, NCAR
- Fort Collins flood of 28 July 1997: preparedness, response, and recovery – Marsha Hilmes-Robinson, City of Fort Collins; Susan Hayes, City of Fort Collins
- Fort Collins flood of 28 July 1997: societal impacts – Matt Kelsch, UCAR/COMET
- GIS – Olga Wilhelmi, NCAR
- Lessons from Hurricane Katrina – Mickey Glantz, NCAR; Sandy Johnson, NCAR
- Public education and outreach – Marshall Frech, The Flood Safety Education Project
- Qualitative research methods – Mary Hayden, University of Colorado at Colorado Springs; Emily Zielinski-Gutierrez, Centers for Disease Control Division of Vector-Borne Diseases; Rebecca Morss, NCAR
- Survey research methods – Jeff Lazo, NCAR
- Warnings and false alarms – Eve Gruntfest, NCAR; Kim Carsell, David Ford Consulting Engineers, Inc.

The WAS*ISers’ Group Projects: Using New Tools and Developing Collegial Collaborations Related to How People Interpret and Use Weather Information

- Expressing Forecast Uncertainty (Craven)
- Increasing Societal Resilience to Heat and Winter Storms (Fransen, Samenow, Uejio, Wilhelmi)
- Methods to Assess Communication of Uncertainty (Biddle, Lazo, Morss, Schultz, Theis)
- Optimizing Communication of Weather Information and Uncertainty (Stuart)
- Precipitating an Understanding of Weather: A Focus on First Responders (Brandt, Jans, Szatanek)
- Severe Weather and School Closures (Call, Ruin)
- Taking it Global: Landscape of Weather and Society (Carsell, Eosco, Gratz, Kuipers)
- The Impact of Weather on Organic Farming (Changnon, Drobot, Holthaus, Moore)
- Weather Effects on Local Social Programs (Demuth)