



## Summer WAS\*IS Workshop Agenda

August 7-15, 2008  
Boulder, Colorado

### Thursday, August 7, 2008 (Center Green, Upstairs Cafe)

- 5:40 p.m. Leave Golden Buff for NCAR (Center Green, Building 1, 3080 Center Green Drive)
- 6:00 p.m. Light reception with sandwiches, salad, and dessert
- 6:20 p.m. Welcome to the WAS\*IS Family (Eve Gruntfest, Julie Demuth, Sheldon Drobot, Jeff Lazo)
- 6:30 p.m. Participants' 1-minute introductions
  - Name, position, and affiliation
- 7:30 p.m. Why WAS\*IS now? (Eve, Julie, Sheldon, Jeff)  
Readings – (1) Demuth et al., 2007: Weather and Society \* Integrated Studies: Building a community for integrating meteorology and social science  
(2) Lazo, 2008: Integrating social science theory into hydrometeorology  
(3) Morss et al., 2007: Societal and economic research and applications priorities for the North American THORPEX program
- 8:30 p.m. Adjourn

### Friday, August 8, 2008 (Mesa Lab, Damon Room)

- 8:15 a.m. Arrive, get settled
- 8:30 a.m. Welcome and discuss logistics
- 🔗 Daily themes: Capacity Building and Laying the Foundation for WAS\*IS Success 🔗
- 8:45 a.m. Getting to know your fellow WAS\*ISers: 5-minute intros to say (a) what you do, and (b) what you want from WAS\*IS  
Moderator: Daniel Nietfeld
  - Lis Cohen
  - Kelly Mahoney
  - Jennifer Zeltwanger
  - Kim Klockow
  - Joe Koval
  - Lindsay Calvert
  - Tom Behler

- 9:30 a.m. **Speaking the same language** (Gina Eosco, University of Oklahoma & American Meteorological Society; Chris Vaccaro; Julie Demuth)  
Readings – Pennesi, 2007: Improving forecast communication: Linguistic and cultural considerations
- 10:30 a.m. **Break**
- 11:00 a.m. **Report back and discuss speaking the same language**
- 11:30 a.m. **Lunch from NCAR cafeteria and walk outside**
- Filming 7 people
- 1:00 p.m. **Getting to know your fellow WAS\*ISers**  
**Moderator: Lis Cohen**
- Nate Johnson
  - Kodi Nemunaitis
  - Renee Curry
  - Roger Turner
  - Aaron Sutula
  - Shanna Pitter
  - Chris Vaccaro
- 1:45 p.m. **The importance of problem definition** (Rebecca Morss, NCAR)  
**Moderator: Julie**  
Readings – Morss, 2005: Problem definition in atmospheric science public policy
- 2:45 p.m. **Break**
- 3:15 p.m. **WAS\*IS\*WILLBE** (Bill Hooke, American Meteorological Society)  
**Moderator: Sheldon**
- Once WAS was all there was; a survivor from that era looks back and looks ahead
- 4:15 p.m. **Question and discussion with Bill Hooke**  
**Moderator: Sheldon**
- 4:45 p.m. **Culture change underway: A panel of WAS\*IS veterans** (Kevin Barjenbruch, NWS; Gina Eosco, OU & AMS; Tanja Fransen, NWS; Rebecca Morss, NCAR; Isabelle Ruin, NCAR; Andrea Schumacher, Cooperative Institute for Research in the Atmosphere; Russ Schumacher, Colorado State University & NCAR)  
**Moderator: Eve**
- 3-5 minutes each to highlight (a) what they do, and (b) thoughts on WAS\*IS and WAS\*IS-type work
- 5:45 p.m. **Adjourn**
- 6:00 p.m. **Friends of WAS\*IS reception** (Outer Damon Room)

## Saturday, August 9, 2008 (Foothills Lab, COMET Classroom)

8:15 a.m. Arrive, get settled

☛ Daily themes: Capacity Building and the Forecasting Process, Challenges, and Opportunities ☛

8:30 a.m. Getting to know your fellow WAS\*ISers

Moderator: Nate Johnson

- Daniel Nietfeld
- Heather Campbell
- Melissa Widhalm
- Tom Sabbatelli
- Kelsey Angle
- Aisha Reed

9:08 a.m. Getting to know your fellow WAS\*ISers

Moderator: Kim Klockow

- Deke Arndt
- Jill Coleman
- Jeral Estupiñán
- Donna Franklin
- Monica Zappa
- Joe Bartosik

9:45 a.m. Check-in: How are things going? (Sheldon)

10:00 a.m. Break

10:30 a.m. Evolving from WAS to IS: Societal impacts in NWS service assessments (Kevin Barjenbruch, Daniel Nietfeld, Julie Demuth)

Readings – Barjenbruch, 2008: Societal impacts analysis featured in Super Tuesday tornado outbreak service assessment

11:15 a.m. A glimpse into (some) social science -- Part I

Moderator: Julie

- Communication (Chris Vaccaro and Gina Eosco), 15 min
- Sociology (Tom Behler), 15 min

Noon Lunch

- Filming 7 people

1:00 p.m. Weather briefing (Kelsey Angle, Jeral Estupiñán, Daniel Nietfeld, Jennifer Zeltwanger)

Moderator: Sheldon

- 1:30 p.m.      **Operational forecasting and broadcasting: The process**  
**Moderator: Eve**
- NWS Weather Forecast Offices (**Kelsey Angle, Jeral Estupiñán, Daniel Nietfeld, Jennifer Zeltwanger**), 30 min
  - WRAL-TV (**Nate Johnson**), 30 min
  - WeatherBug and The Weather Channel (**Joe Bartosik, Joe Koval**), 30 min
- 3:00 p.m.      **Break**
- 3:30 p.m.      **Key societal impacts challenges and opportunities facing forecasters, broadcasters, & NOAA**  
**Moderator: Julie**  
**Readings – Graning, 2008: WAS\*IS in practice: Forecast impacts during the blizzard of March 1, 2007**
- What other elements play in?
    - NWS Western Region (**Aaron Sutula**), 15 min
    - NWS Warning Coordination Meteorologist Program (**Donna Franklin**), 15 min
    - NOAA Program Planning and Integration (**Shanna Pitter**), 15 min
    - NOAA Public Affairs (**Chris Vaccaro**), 15 min
  - Group discussion
- 5:15 p.m.      **Adjourn**
- 7:30 p.m.      **Group dinner at The Med (1002 Walnut St.)**

## Sunday, August 10, 2008

**Day off! Everything today is optional!**  
**Sleep in, go on a local hike, shop, relax ... do whatever!**

- 8:00 a.m.      **Leave Golden Buff for Boulder hike followed by lunch at Southern Sun**
- 3:15 p.m.      **Leave Golden Buff for 4:00 p.m. NWS tour**

**NO organized group dinner!**

## Monday, August 11, 2008 (Foothills Lab, COMET Classroom & Mesa Lab)

- 8:15 a.m.      **Arrive, get settled**
- ☘ Morning theme: Social Science, Research Methods, and Examples ☘**
- 8:30 a.m.      **A glimpse into (some) social science -- Part II**  
**Moderator: Sheldon**
- **Geography (Jill Coleman)**, 15 min
  - **History and sociology of science (Roger Turner)**, 15 min

- 9:00 a.m. Institutional Reviews Boards / Human Subjects Committee (Julie, Sheldon)
- 9:30 a.m. Introduction to qualitative research methods (Isabelle Ruin)  
**Moderator: Eve**
- Differences, pros, and cons of qualitative and quantitative methods
  - How qualitative and quantitative methods complement each other
  - Types of qualitative research methods (Interviews, Surveys, Focus groups, Participant observation, Content analysis, more...!)
- 10:15 a.m. Break
- 10:45 a.m. Brief introduction to surveys (Jeff Lazo)  
**Moderator: Julie**
- Background, pros, cons, pitfalls, pointers, examples of work with surveys
- 11:30 a.m. Brief introductions to interviews (Gina Eosco)  
**Moderator: Eve**
- Background, pros, cons, pitfalls, pointers, examples of work with interviews
- 12:15 p.m. Check-in: How are things going? (Sheldon)
- 12:30 p.m. Leave for Mesa Lab
- 1:00 p.m. Lunch at Mesa Lab
- Filming 5 people
- 🍷 Afternoon theme: Joining the AMS Summer Community Meeting 🍷**
- 2:00 p.m. AMS meeting for session on “Communicating and Connecting: Reports on Exciting Projects that Integrate Meteorology and Social Science” (Main Seminar room)
- 4:00 p.m. Break
- 4:30 p.m. Group brainstorming session (Julie, Sheldon, Eve) (Damon Room)
- What questions are coming up?
  - What topics do people want to discuss further?
  - What ideas might people want to pursue?
- 5:30 p.m. AMS icebreaker reception

**NO organized group dinner!**

## Tuesday, August 12, 2008 (Field Trip)

🔗 Daily theme: Real-Life Examples of the Intersection of Weather and Society 🔗

- 7:00 a.m.**      **Leave from Golden Buff for Fort Collins (everyone to ride on bus)**
- Discuss the chronology, synoptic conditions, and experiences of the Fort Collins flood the night of July 28, 1997 ([Matt Kelsch, UCAR Cooperative Program for Operational Meteorology, Education, and Training](#))
- 8:00 a.m.**      **Arrive at site of Fort Collins flood**
- Discuss what happened before, during, and after the flood, including meteorology, hydrology, land use regulations, and emergency response ([Matt](#))
- 9:30 a.m.**      **Arrive at Fort Collins Storm Water Utility (700 Wood St.)**
- The 1997 Fort Collins Flood: Putting the Stormwater System to the Test ([Marsha Hilmes-Robinson, Fort Collins Storm Water Utility](#))
    - Discuss the actions of the City of Fort Collins during and after the flood
  - City of Fort Collins: Regulatory changes after a natural disaster ([Susan Hayes, Fort Collins Storm Water Utility](#))
    - Discuss the local floodplain regulations before, immediately following, and nine years after the flood
- 10:45 a.m.**      **Bathroom breaks**
- 11:00 a.m.**      **Leave for site of Big Thompson flood of July 31, 1976**
- 11:30 a.m.**      **Lunch at Viestenz-Smith park just above the narrows in the canyon**
- Filming for 7 people
- 12:30 p.m.**      **Reminders of the past and the current state**
- Look at tree scars from the flood and observe engineering of the river ([Matt](#))
  - Take self-guided tour around the ruins of the power plant that was destroyed by the Big Thompson flood
- 1:15 p.m.**      **Continue up the canyon**
- Point out evidence of the flood ([Matt](#))
  - Talk about Olympus dam upon arriving in Estes Park
- 2:00 p.m.**      **Arrive at Rocky Mountain National Park to visit scar of Lawn Lake flood of July 15, 1982**
- Look at the topographic replica of the park at the visitor's center and Matt will explain where Lawn Lake is ([Matt](#))
- 2:30 p.m.**      **Arrive at the Lawn Lake Alluvial Fan**
- Explain the timeline of the 1982 flood ([Matt](#))
  - Explore the rocks and waterfalls ... take photos!

- 4:00 p.m. Depart for Boulder
- 4:45 p.m. Check-in: How are things going? ([Sheldon](#))
- 5:00 p.m. Return to Boulder
- 7:00 p.m. Group dinner at Dushanbe Teahouse ([1770 13th Street](#))

## Wednesday, August 13, 2008 (Foothills Lab, COMET Classroom)

- 8:15 a.m. Arrive, get settled
  - 🔗 Daily theme: Some Essential Concepts and Research Tools 🔗
- 8:30 a.m. Focus group on weather forecast uncertainty information ([Julie](#))
- 9:30 a.m. Recent work on estimating and conveying uncertainty information ([Julie](#))  
 Readings – (1) [Morss et al., 2008: Communicating uncertainty in weather forecasts: A survey of the U.S. public](#)
- 10:00 a.m. Group discussion and questions  
 Moderator: [Julie](#)
- 10:30 a.m. Break
- 11:00 a.m. Vulnerability and resilience  
 Moderator: [Eve](#)
  - Minorities during Hurricanes Andrew and Katrina ([Aisha Reed](#)), 15 min
  - Homeless people ([Kelly Mahoney](#)), 15 min
  - Nicaraguan communities ([Monica Zappa](#)), 15 min
  - Learning from the WCM Initiative Team and strengthening StormReady ([Donna Franklin](#)), 15 min
- Noon Group discussion and questions  
 Moderator: [Eve](#)
- 12:30 p.m. NCAR catered lunch
- 1:30 p.m. GIS in weather and society ([Olga Wilhelmi, NCAR](#))  
 Moderator: [Julie](#)
  - Overview of GIS and its applicability for societal impacts work
- 2:00 p.m. Case study
- 3:00 p.m. Report back on GIS ([Olga](#))
- 3:30 p.m. Break

- 4:00 p.m. The value of weather information and weather forecasts as public goods (Jeff Lazo)  
Moderator: Sheldon
- 5:00 p.m. Group discussion and questions  
Moderator: Sheldon
- 5:30 p.m. Adjourn

**NO organized group dinner!**

## Thursday, August 14, 2008 (Foothills Lab, EOL Atrium)

8:15 a.m. Arrive, get settled

**☞ Morning theme: Learning from Users ☞**

8:30 a.m. Engaging end users to ensure project success (Bill Mahoney, NCAR)  
Moderator: Sheldon

9:15 a.m. More perspectives on interacting with users  
Moderator: Julie

- Emergency managers (Lindsay Calvert), 10 min
- Oklahoma Climatological Survey (Derek Arndt), 10 min
- WeatherOutreach.org (Lis Cohen), 10 min
- Group discussion, 15 min

10:00 a.m. Break

10:30 a.m. Users, warnings, and verification: Examples from two quick response grants (Sheldon)  
Readings – (1) Drobot, 2007: Evaluation of winter storm warnings: A case study of the Colorado Front Range December 20-21, 2006, winter storm

11:00 a.m. Confronting prevailing myths about warnings and false alarms: Lessons from the National Science Foundation Warning Project (Eve)

Readings – (1) Mooney and Grunfest, 2008: A perspective on the importance of social science to the nation's natural disaster warning system  
(2) Drobot et al., 2007: Risk factors for driving into flooded roads  
(3) Ruin et al., 2007: How to get there? Assessing motorists' flash flood risk perception on daily itineraries

11:30 a.m. More on weather warnings and false alarms  
Moderator: Eve

- Missed events versus false alarms (Kelly Mahoney), 10 min
- More of my IS work (Isabelle Ruin), 10 min
- AMS or bust! Oklahomans decision-making about driving to the 2007 Annual AMS Meeting, (Kim Klockow), 10 min



- Noon            Group discussion and questions  
**Moderator: Eve**
- 12:30 p.m.      Lunch from NCAR cafeteria
- ☞ Afternoon theme: Moving from WAS to IS in Our Own Ways ☞**
- 1:30 p.m.        Group brainstorming and group work all afternoon (**Julie, Sheldon, Eve**)
- 4:30 p.m.        Report in
- 5:30 p.m.        Adjourn
- 7:30 p.m.        Final group celebratory dinner at Carelli's (**645 30<sup>th</sup> Street**)

## Friday, August 15, 2008 (Foothills Lab, EOL Atrium)

- 8:15 a.m.        Arrive, get settled
- ☞ Morning theme: Building a Sustainable Future for WAS\*IS and You ☞**
- 8:30 a.m.        The 2008 Summer WAS\*IS identity (**Everyone**)
- 9:15 a.m.        Looking forward: Next steps to getting to IS (**Eve, Julie, Sheldon**)
- Funding
  - Getting to know the rest of the WAS\*IS family
  - Ideas for the future of WAS\*IS
  - Changing the culture and measuring progress
  - Maintaining the WAS\*IS webpage, resources, and contributing to Weather and Society Watch (**Emily Laidlaw, NCAR**)
- 10:00 a.m.        Break
- 10:30 a.m.        **After the WAS\*IS ecstasy, the laundry (Julie and Sheldon)**  
 Readings – Schumacher, 2008: After WAS\*IS ecstasy, the laundry: One atmospheric scientist's experience
- Strategies for when you go back to the real world
  - Addressing the work-life balance issues and using your fellow WAS\*ISers as resources
- 11:30 a.m.        Ciao ciao! (**Eve, Julie, Sheldon**)
- Noon            Wrap-up and lunch from NCAR cafeteria for those who want to stay