The Weather And Society * Integrated Studies Program

Yesterday, Today, and Tomorrow
Tom Behler, Eve Gruntfest, Julie Demuth, Jeff Lazo, Emily Laidlaw

90th Annual AMS Meeting Atlanta, Georgia
January 2010

Changing from what WAS to what IS the future of integrated weather studies
WAS*IS came about in response to a persistent need.

“I want to do work that integrates meteorology & societal impacts BUT...

– I don’t know how & - I don’t know anyone else who does this kind of work.”
What is WAS*IS

WAS*IS is a growing grassroots movement to change the weather enterprise by comprehensively and sustainably integrating social science into meteorological research and practice.

www.sip.ucar.edu/wasis/

Sponsored by the NCAR Societal Impacts Program

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Build an ever growing interdisciplinary community, dedicated to the integration of meteorology and social science.

Capacity building – creating a community for lifelong collaboration & support!
Provide this community with a means to learn about and further examine ideas, methods, and real-life examples related to integrated weather-society work.

- **Tools** - GIS, surveys, qualitative methods
- **Concepts** - problem definition, speaking the same language, a process that involves clear goals
- **Topics** - risk perception, vulnerability, resilience, patterns of public response to and interpretations of weather information
To understand the true significance of weather and weather-related events we need to look at how these phenomena, and the responses to them, impact people’s lives; rather than viewing such occurrences in strictly meteorological terms.

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WAS*IS Background

Emily Laidlaw
Associate Scientist
National Center for Atmospheric Research

Jeff Lazo, Director
Societal Impacts Program
National Center for Atmospheric Research

Julie Demuth
Associate Scientist
National Center for Atmospheric Research

Sheldon Drobot
Program Manager
National Center for Atmospheric Research

Eve Gruntfest, Director
Social Science Woven Into Meteorology
University of Oklahoma

Tom Behler, Visiting Scientist
National Center for Atmospheric Research

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WAS*IS WORKSHOPS

- ORIGINAL Boulder WAS*IS (Nov 2005 & Mar 2006)
- Norman WAS*IS (Apr 2006)
- Australia WAS*IS (Jan-Feb 2007)

In planning … Caribbean WAS*IS (June 2010)
Summer WAS*IS (Aug 2010)

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Broadening the **WAS*IS** Footprint

### Other related workshops

- NWS Advanced **WAS*IS** (October 2007)
- Advanced **WAS*IS** in conjunction with the NOAA Hazardous Weather Testbed’s (HWT) Experimental Warning Program (EWP) (Sept 2008)
- NWS Kansas City/Pleasant Hill Weather Forecast Office Integrated Warning Team (IWT) (January 2009)
- NOAA/NWS Omaha Integrated Warning Team (IWT) (Sept 2009)
- **WAS*IS** North Carolina (coming soon)

- **Societal Impacts Meteorologist** now in the **NWS**
- **Social Science representation** in **NWS** Director’s Office

- **New American Meteorological Society Journal**
  - *Weather, Climate & Society*

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**SSWIM**

University of Oklahoma
Eve Gruntfest, Director

[SSWIM]

**SOCIAL SCIENCE woven into Meteorology**

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NWS WFO Elko, Nevada
Pamela Szatanek
**WAS*IS** Boulder
2005-2006

Working on curriculum to develop Hazards Literacy Initiative for their Outreach and Education Program.

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Curricula
Columbia University – Climate and Society Masters Program
Penn State University – Weather Risk Management Concentration

Courses
University of North Carolina, Asheville – Weather and Society
University of Oklahoma – Applied Climatology and Meteorology
Michigan State University – Climate Change and Society
Millersville University – History of Meteorology in the 20th century
Colby College – Weather, Climate and Society
Penn State University – Weather Risk and Financial Markets
Ball State University – Atmospheric Hazards
Mississippi State University – Weather and Society
Northern Illinois University – Natural Hazards and Environmental Risk
  – Severe and Hazardous Weather
University of Nebraska, Lincoln – Severe Storms

Lectures
Michigan State University - “El Niño, Ecosystems, and Society in Latin America” and “Hurricanes and Society”
Ways we keep in touch

• SOCIETAL IMPACTS DISCUSSION BOARD
  http://www.rap.ucar.edu/forums/phpBB2/

• WAS*IS EMAIL LIST SERVE
  Contact: Tanja.Fransen@noaa.gov

• FACEBOOK
  http://www.facebook.com/group.php?gid=10193441674

• TWITTER  www.twitter.com
  Nate Johnson  http://twitter.com/nsj
  Sheldon Drobot  http://twitter.com/sheldon_drobot
  Carlie Lawson  http://twitter.com/naturalhazards
From the workshop I was able to bring back innovative knowledge, ideas, and techniques for better integrating weather and societal data into my current research. WAS*IS has become my new reality!

I’m confident a lot of good collaborations and culture changes will continue to grow out of WAS*IS.”

I liked the fact that the learning went both ways (Social Science <-> Meteorology). No one was an expert on it all – and we all had something to share and bring to discussion.

Best career-related “training” I have EVER been involved with!!

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Rebecca Jennings  WAS*IS 2007
FEMA Hazard Mitigation Planner
• Communication undergraduate degree but wanted to be a Meteorologist
• Through persistence, completed MS in atmospheric science.
• First job, after internship, was at The Weather Channel.

“When we came back from WAS*IS our boss said we were totally different – we had a new confidence in our abilities”

Tanja Fransen WAS*IS  2005
Warning Coordination Meteorologist
Glasgow, Montana
• Developing a cold warning index for livestock
• Collaborating on many projects
• Mentoring new NWS employees
• Attention to weather & vulnerability - building NWS career with focus on impacts & service

Eric Holthaus WAS*IS 2005
Research Staff Associate, International Research Institute for Climate and Society
• Meteorology undergraduate degree  St. Louis University
• Switched to Masters in Climate & Society- Columbia University, NY

Dan Nietfeld WAS*IS 2008
Science Operations Officer Omaha, Nebraska
• Redefining job to include social & physical sciences.
• Brings stakeholders to meetings and attends THEIR meetings.
• Teaches several classes with weather & society focus; supports societal impacts research.

“Since WAS*IS, I try to look at everything the NWS does from … the perspective of people who are impacted by our products, services & efforts.”

• Arranges for small business loans and drought insurance for farmers in Ethiopia

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WAS*IS Tomorrow

- WAS*IS Compendium
- Quarterly Webinar Series
- WAS*ISers post work on website
- More regional WAS*IS workshops
- Competitive program for research seed money
- Workshop to introduce meteorology to social scientists
- Further develop university curricula
- Creation of on-line courses
- Specifically focused advanced workshops
- Mentorship of non-WAS*ISers
- Continued presence at AMS and AAG
- Expand into education/outreach; emergency management; special needs populations
- Create one-day AMS short course

There's no stopping us now!!
The undeniable importance of sustained funding for the WAS*IS effort
How do I **LEARN MORE** about **WAS*IS**?

**Attend the WAS*IS/AMS SPC Reception**

TOMORROW –
Tuesday, January 19th
8:30 pm – 10:30 pm
Grand Ballroom A, Omni Hotel, CNN Center

Check out the **WAS*IS** website

[www.sip.ucar.edu/wasis](http://www.sip.ucar.edu/wasis)

**CONTACT**

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