

Social Science Woven into Meteorology (SSWIM) Strategic Plan WEAVING SOCIAL SCIENCE INTO CLIMATE AND WEATHER RESEARCH & PRACTICE: A LIVING ROADMAP May, 2009

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TWO INTERWOVEN GOALS – RESEARCH AND CAPACITY BUILDING

The **Social Science Woven into Meteorology (SSWIM)** initiative at the National Weather Center (NWC) *aims to sustainably weave social science into the fabric of weather and climate research and practice locally, nationally, and globally*. As of 2009 social science has attained a level of salience and value within non-traditional venues that makes this initiative particularly timely and relevant. **SSWIM** aims to actualize this paradigm shift by providing a tangible and rigorous focal point for social science at the National Oceanic and Atmospheric Administration (NOAA) and beyond. The new tapestry that is woven with **SSWIM's** leadership will represent different ways solving complex weather/climate/society problems. The University of Oklahoma and NOAA provide current funding. **SSWIM** is housed in the Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the National Weather Center in Norman, OK.

In May, 2009 **SSWIM** consists of a small, committed group of people who work across several disciplines and come from diverse backgrounds. This strategic plan presents a *living roadmap* to guide **SSWIM's** near-term growth that will be carried out in conversation with members of an advisory council. We will function simultaneously at multiple scales to cultivate a presence locally at the National Weather Center and the University of Oklahoma, nationally through NOAA and other academic, public and private collaborations, and internationally. **SSWIM's** footprint extends way beyond our employees to encompass several NWC and OU students and staff who are eagerly engaged in **SSWIM** pursuits. These **SSWIM** affiliates collaborate with **SSWIM** and actively weave social science methods and concepts into their professional and academic efforts.

We are taking advantage of nearby and short-term opportunities and we are pursuing long-term funding opportunities. **SSWIM** has received a very positive reception in its first year.

*The Strategic Plan reflects **SSWIM's** dual mission for social science capacity building and cutting edge research.* The components of the Living Road Map represent a wide range of projects that are the threads of the new tapestry. Sustainability will be achieved through this two-part approach. **SSWIM's** objectives, activities, and deliverables with respect to capacity and research are outlined below with an eye to development over three years. Through building capacity locally, nationally, and internationally, **SSWIM** will encourage and enable social science awareness, research, and practice. Building capacity will entail bringing diverse

social scientists on board as well as raising awareness of societal relevance of social science work. Through novel research collaborations at the National Weather Center and beyond, **SSWIM** will develop a new tapestry that demonstrates the power of social science woven into meteorology and climatology.

SOCIAL SCIENCE WOVEN INTO METEOROLOGY (SSWIM)

Vision

To lead efforts to creatively and sustainably weave social science into the fabric of weather and climate research and practice through academic, and professional activities locally, nationally, and globally.

Mission

To promote collaborative research and applications in the social sciences and meteorology, climatology, and hydrology that enhances societal relevance and reduces risks from atmospheric and related hazards.

SSWIM's objectives are innovative research and capacity building through

- increasing the appreciation of the value of qualitative as well as quantitative approaches including archival, ethnographic, statistical, and participatory methods and
- partnering with public, private, and academic sectors, including students, practitioners, and policymakers across the spectrum of stakeholders.

PERSONNEL

As of May 2009 Dr. Eve Gruntfest is **SSWIM** Director at 25% time. Heather Lazrus is the **SSWIM** full-time Post-doctoral researcher and is expected to take over leadership of **SSWIM** by May 2011. **SSWIM** employs risk communication Ph.D. student Gina Eosco at 25% time.

We expect to hire students or hourly help for particular tasks including webpage design and updating, workshop management, proposal writing, and literature searches. Monica Zappa will join **SSWIM** as a new graduate research assistant for Fall 2009 at 50% time. She is committed to working closely on all aspects of **SSWIM's** success. Staff expansion will be considered when/if new funding becomes available.

EVE GRUNTFEST RESPONSIBILITIES

Since the inception of **SSWIM** in May 2008, Eve has been in Norman from August 24-October 4, from December 1-5, 2008 and from February 2 – March 31, 2009.

Eve is an adjunct faculty member in the OU Geography Department. She will stay in close contact with Heather even when she is not in Norman. **SSWIM** will hold at least bi-weekly staff meetings. She will represent OU and **SSWIM** when she is invited to give presentations, in proposal budgets, and in her publications. If funding becomes available she is willing to consider a larger percentage of official time commitment to **SSWIM** in Norman and from Colorado Springs. She will direct **SSWIM** and be responsible for personnel and budget decisions. She is also Professor Emeritus of Geography and Environmental Studies at the University of Colorado at Colorado Springs where she has some active research projects.

Gruntfest publications in preparation

- with J. J. Gourley – invited editorial for *Journal of Flood Risk Management* (submitted March 8, 2009)
- with C. Doswell, H. Lazrus, and D. Stensrud (?) Progress in integrating social science into meteorology (working title) Journal to be determined
- with Kristin Kuhlman, Greg Stumpf, Heather Lazrus and others Bringing stakeholders into the Hazardous Weather Testbed – Ways Forward (working title) Journal to be determined – preprint presented at AMS 2009 Phoenix
- with Isabelle Ruin and Heather Lazrus, Social Science and Societal Impacts Work in Weather and Climate for *Weather Climate and Society*

HEATHER LAZRUS POST DOC RESPONSIBILITIES



Heather Lazrus’s work will be balanced between new research, capacity building, and ongoing research based on the SSWIM objectives, goals, and deliverables. She defended her dissertation in May 2009. She will publish based on her dissertation, and develop new research projects with anthropological foci or contributions. Developing sustainable collaborations with the Geologic and Nuclear Sciences Group (GNS) in New Zealand is a high priority. Her performance will be evaluated based on these three overlapping objectives.

Lazrus Publications from dissertation & beyond (with working titles)

In Press:

- Perspectives on Vulnerability to Climate Change and Migration in Tuvalu in *SOURCE* (Peer reviewed United Nations University Environment and Human Security publication)

Proposed and in Preparation:

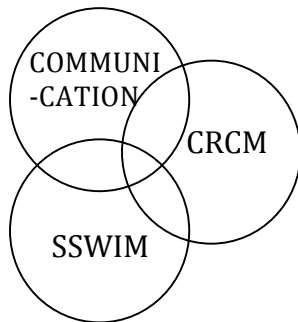
- ‘Te mafulifuliga i te tao o aso’ Perceptions of environmental change on Nanumea Atoll in *Weather, Climate, and Society*

- ‘The beginning of things’: Governance of vulnerability on Nanumea Atoll in *Human Organizations*
- Vulnerable islands, resilient nation? *Conference and workshop follow-up with other participants –Journal to be determined*
- Resilience: All politics is local A collaborative effort publication at CICERO (Center for International Climate and Environment Research - Oslo) on local politics of disaster risk reduction in *Environmental Hazards* (with I. Kelman)

GRADUATE STUDENT RESPONSIBILITIES

SSWIM is a very small group with a large agenda. Eve, Heather and the graduate students will be required to participate in all aspects of **SSWIM** activities to include preparing literature reviews, preparing and giving presentations, arranging and hosting workshops, and other tasks as may be required. Per OU expectations – the **SSWIM** graduate student Research Assistants will function more like Teaching Assistants. They will be expected to work on **SSWIM** assignments in proportion to their funding from **SSWIM**, which is 20 hours per week for a 50% funded assistantship.

GINA EOSCO RESPONSIBILITIES



Gina’s graduate assistantship is 25% with **SSWIM** and 25% with the Center for Risk and Crisis Management (CRCM). She is pursuing a PhD in communication. She has begun to build more social science capacity in the NWC by attracting students to participate in social science and meteorology work. In Spring 2009 she led an independent study for Dan O’Hair with 3 meteorology graduate students, and an undergraduate meteorology student to develop a systematic literature review of communicating hurricane information. Gina is a research assistant on the “Communicating Hurricane Information” grant in partnership between OU and the Societal Impacts Program at NCAR. Her research activities include finishing the second phase of her NSF SGER grant to evaluate public perceptions of the cone of uncertainty. Eosco publications in preparation

- In draft form: Eosco, G. Multiple meanings of a visual: A case study of the cone of uncertainty. *Bulletin of the American Meteorological Society or Weather and Forecasting*
- Writing in progress: Shafer, M., Eosco, G., and Keim, B. Lessons learned: Evacuation management of Hurricane Gustav. Journal to be determined