



Climate in Context

Science and Society Partnering for Adaptation

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Ryan Meyer, and Sarah L. Close**
Editors

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Foreword

From the beginning, the Regional Integrated Sciences and Assessments (RISA) program has been an experiment. Unlike other experiments in climate-related services and in connecting science with decision-making, it has survived and thrived since 1995, despite numerous challenges. A partnership between the National Oceanic and Atmospheric Administration (NOAA), universities and stakeholders, RISA is focused on place-specific problems and solutions and explores the space between research and decision-making. It is designed to respond in a flexible way to the chain of requests for climate-related information at multiple time scales that has risen from regions and sectors across the United States.

RISA's origins lie in the vision of a few important leaders in the federal government and in academia; they include J. Michael (Mike) Hall, the former director of the Office of Global Programs at NOAA and a widely influential visionary in the U.S. government; Edward (Ed) Miles, the director of the first RISA, the Climate Impacts Group at the University of Washington; and Claudia Nierenberg, who served as the first program director for RISA. Of course, there have been literally dozens of visionary leaders associated with the program since the early days, but without the contributions of these three people, the program would not be what it is today. A strong vision from the beginning, a flexible management approach, and strong central coordination and leadership have all played a major role in building the program.

The 11 RISA program “experiments” across the country are linked to a multi-institutional network managed centrally in the Climate Program Office at NOAA. Each RISA has

evolved in response to the interests and capabilities of Principal Investigators (PIs) within the partner universities as well as to the interests and needs of its regional stakeholders. Because there are so many issues related to climate impacts, vulnerability assessment, and building relevant decision-support products over a range of time and space scales, there is a need for multiple different approaches across the United States.

Clearly, the seed funding provided by NOAA has provided incentives to take the experiments in particular directions, but in virtually all cases, a highly leveraged program has evolved that includes a range of different local, regional, and federal funding sources and partnerships. This flexibility and diversity is one of the institutional strengths of RISA. Although the program has always been underfunded, RISA is widely acknowledged as a success story in providing decision-relevant science products. It has been a constant challenge to maintain and/or grow the program over time. Program funding has been threatened for a variety of internal (agency) and external reasons, but it has continued to provide incentives for interdisciplinary and transdisciplinary work that has been truly groundbreaking. In some cases, the interdisciplinary teams have been together for almost 20 years, and in all cases the opportunity to do longitudinal studies and engage with stakeholders over years-to-decades has been instrumental in building an understanding of both the art and science of connecting science and decision-making.

The fact that each of the RISAs has different topical focus areas and different strengths in engaging with stakeholders is an important part of the success of RISA as a system, and there are many examples of how the system itself has evolved as an institution over time. Not only are there far more collaborative projects across the RISA network now than there were historically, but there are also purposeful

efforts to design the research in ways that fill both social and physical science gaps in the whole network. This approach is unprecedented in federal science programs and likely has no parallel globally, though there are now many examples of science networks that emulate portions of this approach.

Although there is an ongoing debate within the RISA community about where on the “science-to-action” continuum the work should focus, part of the rationale has always been to experiment with the space between research and applications, building an understanding of the role of science in policy and the role of academia and government investments in building science-based solutions. In building local communities of practice that are linked to a truly functional network of practitioners, there have been contributions to the careers of researchers and students who have been funded by the program as well as to the careers of external stakeholders who have been drawn into the experiment.

Building communication and planning tools, reporting back to the larger RISA community about successes and failures, and a significant dose of self-reflection have been the hallmarks of the program. In fact, self-reflection has been strongly encouraged. This willingness to openly expose weaknesses and identify the needs for improvement is extremely unusual in government-sponsored programs. There has been significant stress underlying all of the progress that has been made, but in many cases that stress has provided for enhanced learning opportunities (see also, RISA in a Nutshell).