

ABSTRACT

Mobilizing the NOAA Sea Grant Network for Coastal Community Climate Resilience

Principal Investigator: Co-Principal Investigator:

Mr. Joseph Cone

Oregon Sea Grant College Program

Oregon State University

Mr. Patrick Corcoran

Oregon State University, Department of Geosciences

OSU Extension Service, Clatsop Co.

Helping coastal communities prepare for climate change is a vital concern, as they face potentially significant effects of climate variability and change during this century. The main barriers to effective coastal community preparation for climate change are two. First, coastal decision makers at all levels are looking for trustworthy information, decision-support, and guidance on how both to assess and to respond to climate risks. Second, a nationwide decision support infrastructure has yet to be mobilized to assist local coastal communities. Those problems can be addressed with an effective approach to engagement facilitated by a trusted national coastal organization, grounded in local communities. The organization proposed is the NOAA National Sea Grant program, organized around its cadre of outreach professionals, including Extension and public communication personnel.

Operating in all coastal and Great Lakes states, Sea Grant, founded in 1968, is unique among coastal programs in its well-established history of integrating applied research and stakeholder engagement.

This project would extend the learning and results in Maine and Oregon being achieved through the project team's current (2007-09) SARP project to other coastal and Great Lake states of the national Sea Grant network. Sea Grant programs that have confirmed their interest in partnering on the project are Florida (Gulf region), South Carolina and North Carolina (Southeast), Maryland (Mid-Atlantic), Minnesota (Great Lakes), and Washington (West Coast). While public and private decision makers may want trusted information support on coastal climate, and Sea Grant may be a vehicle for providing that support, important questions remain regarding the factors that influence use of climate information by decision makers. Key questions that will be addressed include 1) the conceptual framework (mental model) that local coastal decision makers have of the risks associated with climate change; 2) the management framework (including, potentially, "resilience") in which decision makers frame risks and responses; 3) barriers to information use by decision makers, including individual attitudes, sense of personal ability (self-efficacy), lack of support from those who influence them, and organizational and societal barriers; 4) the critical information needs, including those related to the process of responding to, as well as the local content of, climate change; 5) the role of leaders and leadership, including how appropriate leadership may be identified and supported.

Our approach to addressing these factors is an interdisciplinary composite of social science research in risk communication and behavior change, science communication research and methods, and Extension outreach methods. In brief, the project team will consult with, assist, and train our Sea Grant state partners to accomplish local planning and audience research, and then

use that research to engage local communities successfully.