For Submission to Conference:

Resilience 2011: Resilience, Innovation, and Sustainability: Navigating the Complexities of Global Change. Second International Science and Policy Conference, Tempe Arizona. March 11-16, Arizona State University.

Invited to panel session entitled: Participatory modeling: A way to promote collaborative learning in multilevel governance, Chair O. Barreteau. (abstract 500 words or less)

Title: Contributions of participatory modeling to development and support of coastal and marine management plans.

Author: Marilyn Buchholtz ten Brink

Affiliation and Address: U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, 27 Tarzwell Drive, Narragansett RI 02882, Email: tenbrink.marilyn@epa.gov

The role of participatory modeling- at various scales- to assist in developing shared visions, understanding the decision landscape, identifying and selecting management options, and monitoring outcomes will be explored in the context of coastal and marine planning, ecosystem service trade offs, and potential climate change pressures. The US National Ocean Policy (NOP, 2010) lays out a vision and goals to move towards balanced use and regional governance of our critically important and heavily utilized coastal regions, and sets requirements to develop regional coastal and marine spatial plans (CMSP). Implementation of the actions and recommendations associated with the NOP will require creation of new collaborations, increased compliance with protective regulations, alignment of community priorities, and innovative new approaches. Decisions that affect the use of coastal and marine resources, well-being of communities, and ecosystem health must consider complex systems and often competing interests. The capacity for stewardship is enlarged by increasing the levels of public participation in governance decisions, i.e., by not only informing and consulting stakeholders, but by engagement that is characterized by involvement, collaboration, and empowerment.