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Title: Risky Business: Engaging the Public in Policy Discourse on Sea-Level Rise and Inundation

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ABSTRACT

In the United States, public discourse about adaptation to anthropogenic climate change began more recently and thus far has been more muted than ongoing debates over mitigation through reductions in greenhouse gas emissions. Whether public opinion on adaptation responses would become as sharply polarized as it has been on mitigation policies has been unclear. To examine this question, I surveyed a representative sample of residents of a coastal county in Maryland ($n=378$; response rate = 4%), and tested the impact of a community deliberative event ($n=40$; participation rate = 11%) in which survey participants learned about sea-level rise and projected local impacts and adaptation policy responses as a potential strategy to reduce polarization. The survey results showed that the same preferences for societal “ways of life,” such as degree of individualism and hierarchy, that have contributed to polarized beliefs about climate change are also associated with people’s perceptions of local sea-level rise risk. These preferences are predictive of perceptions of sea-level rise risk to the county – the level at which local governmental policy responses will be decided – whereas living near coastal flooding and inundation hazards is not. Coastal proximity is a significant predictor of sea-level rise risk perceptions, but only for people’s own homes and neighborhoods. The community deliberative event – a daylong process of expert presentations, access to property-level risk data, and small-group discussions – significantly increased topic knowledge among participants ($t(35) = -3.51$, $p < .001$, one-tailed), and significantly increased problem identification ($t(7) = 2.38$, $p = 0.025$ one-tailed) and issue concern ($t(7) = -2.75$, $p = 0.014$ one-tailed) among those participants with a worldview disposing them to lower risk perceptions. I interpret these findings to suggest that individuals can interpret risk information through the lens of any number of group identities that they hold – including as a member of their local community – and argue for a theoretical reinterpretation of the stability versus mobility of cultural worldviews.