A Scenario Exploration of Operationalizing the Principles of Resilience-Based Governance through a Specific Policy Option in the Bering Strait

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Abstract

Resilience scholars have identified a series of principles to guide the governance of social-ecological systems. The principles are geared towards either promoting the resilience of systems that are in favorable states or facilitating transformations of systems that are in unfavorable states. While the principles of resilience-based governance are theoretically sound and have been empirically validated through local-scale case studies, questions remain about operationalizing the principles at larger scales. The challenges of applying resilience theory are especially prodigious when resistant legal systems entangle efforts to adapt environmental policy at different scales. After defining the principles of resilience-based governance, we explore their applicability at the regional scale through a case study of the Bering Strait. Arctic experts have suggested that the International Maritime Organization designate the Bering Strait—a social-ecological marine system in a favorable state but vulnerable to rapidly increasing international shipping—as a Particularly Sensitive Sea Area in order to sustain the flow of ecosystem services. We use this scenario to analyze the capacity of a specific international policy option to achieve the principles of resilience-based governance at local scales. We highlight important challenges and opportunities for scholars to advance their thinking about applying resilience theory in a proactive and anticipatory manner by focusing on the multiple tradeoffs between economic development and environmental protection in our case study. We will present this paper in the session entitled Pathways of Resilience in a Rapidly Changing Alaska.

Keywords: adaptive governance, international shipping, law, protected areas, marine, social-ecological system, scenario analysis, Bering Strait, arctic

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