Making Environmental Policy in the Face of Scientific Uncertainty

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The classical academic thinking about public policy has often assumed that decisions are reached in a rational fashion, based on the wise application of sound and relevant information. Yet, actual practice in environmental management consistently shows otherwise. For instance, marine policy practitioners are typically forced to make hurried decisions in the face of pressing demands and limited information. Given our growing need for improved environmental protection in resource governance, new attention should be given ways we can better understand and apply principles of ecology in ocean/coastal policymaking.

In addition to better incorporating "ecosystem processes" and "sustainable development" within policymaking, environmental governance should likewise strive to overcome the severe reductionism implicit in modern science. Incredible advances recently achieved throughout the modern sciences have come at the cost that few recognize: by pigeonholing nature into discrete components such as Biology, Chemistry, Geology, etc., this segregation has regrettably created a blinkered view of nature where interdependence is masked and interconnectedness is forgotten. An ever-narrowing focus is undoubtedly necessary to penetrate deeper into the unending queries that both eternally plague and enliven science, but there is an important instance where our species must consciously force itself along the other route. In questions of environmental management, one often finds that it is the "Big Picture" that is most important; here artificial bounds among the sciences must be torn down. By heeding the holistic nature of the world around us, the distant impacts of our present actions can be more readily foreseen.