Participatory Modeling for Adaptive Management: Reports from the Field

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Abstract: Participatory environmental modeling is an adaptive management tool which natural resource managers, those dependent upon natural resources, property owners, and government agencies may use to help them understand the complexities of ecosystem management. Models have been used for sage-grouse, bear and fishery management, estuary systems and watersheds. These models share adaptive management theory, but differ on many other aspects such as the number of stakeholders and the degree to which they are involved. There can be many levels of involvement that are layered in a representative fashion with the modelers and intensely involved participants at the core. Varying physical, social and economic boundaries and the availability of data affect the time spent on different facets of the process. Finally, the intended use of the model may differ. Some processes are designed around group learning while others create tools which will assist with management decisions.

Key words: participatory modeling, adaptive management, collaboration, system dynamics, watershed, estuary, wildlife management.