

## Core Modeling Practices

**Award Year:**

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**Associated Program:**

[Enhancing Socio-Environmental Research & Education](#) [1]

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Models play a key role in understanding and managing socio-environmental issues. Successful models help integrate various sources of data, perspectives, and knowledge; facilitate stakeholder participation; and support decision making. Such success depends on the use of effective practices throughout the model development lifecycle starting from defining objectives through using the model to draw insights and recommendations. From an interdisciplinary research perspective, access to best modeling practices is often limited because these practices are often captured and evaluated from a single field or disciplinary viewpoint and in a vacuum from what stakeholders think and need. This synthesis project aims to identify and articulate core modeling practices into products and methods that are accessible and relevant to different disciplinary and stakeholder perspectives. We will address the following fundamental question: From an interdisciplinary perspective, what are the core practices that should be employed in developing and using models to support integrated water resource management? Effective practices can be wrapped in different forms and formats to serve research (e.g. research publications), teaching (e.g. curricula), management (e.g. training courses and accreditation), and implementation (e.g. documented methodologies) purposes.

*The Theme [Building Resources for Complex, Action-Oriented Team Science](#) [5] provides opportunities for the wider global community to interact with this Pursuit.*

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