

Supplementary Material

Mediated modeling lessons for stakeholder engagement with science-based management: case study focused on Texas Gulf Coast (USA) estuaries

Best Practices for Facilitating Community-based Collaborative Modeling (for detailed descriptions and examples, see Clark & Peterson, 2015).

Facilitating any collaborative process should focus on enabling individual participants to:

1. become better informed about the issue
2. become better able to engage with the best available scientific knowledge about the issue
3. develop and exhibit respect for diverse values, interests, and concerns about the issue

As individual participants develop these capacities, the facilitator shifts to encouraging the group to develop a more widely shared understanding of:

1. the challenges involved in the collaborative process
2. goals and objectives of the collaborative process

Activating these community-based phases becomes appropriate only when participants feel their individual needs and concerns have been sufficiently recognized and validated. So long as the process continues, the facilitator will continue to lead participants to circle back through both individual and community concerns.

The process explicitly focuses on building communication skills and mutual trust. The facilitator is responsible for enabling participants to:

1. Welcome diversity and accept multiple perspectives
2. Value public involvement
3. Engage in deliberation and dialogue
4. Participate in creative thought experiments and constructive debate
5. Discuss challenges associated with implementation of proposals
6. Engage in joint problem solving and inclusive decision making
7. Forge relationships with diverse stakeholders
8. Recognize incremental progress
9. Accept partial responsibility for management of the natural resource at issue

Summary: appropriate facilitation will design and guide a process that enables information transfer between all parties, provides opportunities for all participants to offer suggestions, and encourages decision makers and citizen participants to seriously discuss both challenges and opportunities associated with implementation of those suggestions.