

LINKING DECISIONS TO STAKEHOLDER VALUES IN THE GUÁNICA BAY WATERSHED, PUERTO RICO

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This presentation lays the foundation for the session by introducing the Structured Decision-Making (SDM) approach that is being used by the Environmental Protection Agency (EPA) in the Guánica Bay watershed of southwestern Puerto Rico. EPA is working with other agencies in Guánica Bay to protect coral reefs from effects of sediment, nutrients and contaminants in watershed runoff.

SDM is an organized approach for identifying and evaluating alternatives, and making defensible choices in complex decision situations. SDM has six steps: 1) clarify the decision context; 2) define objectives and evaluation criteria; 3) develop alternative(s); 4) estimate consequences; 5) evaluate trade-offs and select alternatives; 6) implement and monitor. The presentation will provide an overview of SDM and application of the six SDM steps in Guánica Bay.

A key aspect of SDM is the engagement of stakeholders, experts and decision-makers to create a deliberative environment that deals rigorously with both facts and values in decision-making. Three workshops with stakeholders, experts and decision-makers were held to explore past decisions, characterize the decision landscape for the watershed management plan, and better understand what stakeholders value in the watershed. The workshops included detailed discussions of the effects of human activity in the watershed on downstream environmental condition and ecosystem services.

Outcomes of this research include: 1) an improved understanding of the values and perceptions of citizens in different communities of the watershed; 2) an improved understanding of the broader decision landscape (beyond coral reef protection); 3) a clearer understanding of the decision alternatives and how they might support or conflict with different objectives; 4) important insights to the value of engaging stakeholders early and often in the decision process.

The application of SDM in the Guánica Bay project demonstrates that SDM can be successfully used in the watershed setting for identifying and evaluating alternatives and making defensible choices in complex decision situations.

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