

## ***Introduction to Structured Decision Making Problem Solicitation***

Problems, we all have them don't we?

One of the major goals of the Introduction to Structured Decision Making course is to provide you with examples of structured decision making using real FWS management problems of small to moderate scale. Many of you are more familiar with structured decision making examples that consist of large-scale, contentious problems. This falsely conveys the idea that structured decision making is only useful for big problems. A portion of your course time at NCTC will allow you to practice time using a "rapid prototyping technique" to apply structured decision making to smaller, real-life FWS decision problems. **But we need your participation!**

Think of a problem in your office. It might be related to resource management, budget allocation, grant or permit application; anything you actually work on. Think of a problem of a small to moderate scale for which you are the decision maker.

Hand your problem over!

Please submit at least one problem description for the instructors to use during the course. It should be one for which you are involved. If your problem is selected for use in a small group exercise we'd like you to provide additional details to the small group. Starting May 9, the instructors will review all the problem descriptions before you arrive to class.

Problem descriptions should be fairly succinct (no more than one page; one paragraph is fine), and should emphasize the overall framework for the decision, not the details. Your **problem description** should include the following information:

**1. Decision Problem.**

In *one short paragraph at most*, describe the decision in question. Include the context (who is the decision maker, under what authority do they act, who else has influence on the decision), the nature of the decision, and the timing and frequency of the decision.

**2. Background.**

*Very Briefly* describe the legal, regulatory, and political context and constraints. *Briefly* mention the relevant ecological context.

**3. Decision Structure.**

Answer anything that applies (if you do not know, say that)

Have alternative management actions been identified?

Have objectives, consequences, or uncertainty been described?

Is a team of decision makers involved?

## Sample Problem Description (Example from January 2011)

### ***Culvert Replacement Legislation and Fish Passage***

#### **Background**

The state of Maine is currently in the planning phase of developing legislation that would require the Department of Transportation and municipalities throughout the state to adopt sizing and construction standards that would ensure fish passage at each road crossing. The secondary goal is to have the legislature identify funding to help with the associated cost of installing, replacing, and maintaining culverts at these new standards. The wording of the legislation is being drafted by a planning panel made up of individuals representing municipalities, state and federal resource agencies, and non-government organizations. The legislation, as currently proposed, would require the standards be met throughout the state when installing new culverts. But due to the number of structures and the associated cost, culverts that need to be replaced or have a need for maintenance would either be exempt or held to lower sizing and construction standards that may risk fish not being able to move through these structures under certain stream flow conditions, but would likely result in improved conditions from what currently exists. Requiring both the municipalities and the Department of Transportation to adopt the sizing and construction standards for replacement and maintenance of culverts possibly would risk support for the proposed legislation from the legislature and an unwillingness to identify and provide partial state funding for fish passage projects throughout the state.

#### **Decision Problem**

Members of the planning panel who are interested in maximizing the benefits for aquatic species would like to know is it best to compromise on the need to meet the standards for replacement and maintenance of culverts or push to make sure any legislation enforces sizing and construction standards for all culverts, either new or existing, at road crossings in Maine?

#### **Submit Problem Description to:**

[Ashley\\_Fortune\\_Isham@fws.gov](mailto:Ashley_Fortune_Isham@fws.gov) as an email attachment in a Microsoft WORD format **no later than October 1, 2013.**

\*\*\*\*Please title your email and your file as **SDM Problem “your last name”** (i.e., SDM Problem Isham)\*\*\*\*