

# NAWMP Revision



*North American Waterfowl  
Management Plan*

*Plan nord-américain de  
gestion de la sauvagine*

*Plan de Manejo de Aves  
Acuáticas de Norteamérica*

## Consultation Workshop

*January 27, 2010*

*Memphis, TN*

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*and members of the NAWMP Revision Steering Committee*



# ***Draft Purpose of the NAWMP***

***The purpose of the Plan is to sustain abundant waterfowl populations while preserving the traditions of wildfowling and achieving broad benefits to biodiversity, ecosystem processes and the people of North America.***

**(NAWMP Scoping Report for the 2011 Plan Revision, 8 Aug 09)**



# A Vision for Integrated Waterfowl Management

- ... the Plan should seek to establish a unified system of waterfowl conservation ...
- ... a fully coherent management system would feature:
  - A set of widely supported fundamental goals for waterfowl conservation
  - A decision framework that allows managers to understand and balance tradeoffs
  - Managers using that framework to efficiently allocate resources

# A Vision for Integrated Waterfowl Management

- ... the Plan should seek to establish a **unified system** of waterfowl conservation ...
- ... a fully **coherent** management system would feature:
  - A set of widely supported **fundamental goals** for waterfowl conservation
  - A **decision framework** that allows managers to understand and balance **tradeoffs**
  - Managers using that framework to efficiently **allocate resources**

# What makes decisions hard?

- Sometimes you don't know all the possible actions
- The objectives may be complex or contradictory, or in dispute
- The system dynamics may be poorly known
- Sometimes we confuse all the components
- Even knowing all the other components, the solution (optimization) may be difficult to figure out

# Structured Decision Making

- Is a formal method for analyzing a decision, by breaking it into components
- Helps identify where the impediments to a decision are, to focus effort on the right piece
- Provides a wide array of analytical tools for dealing with particular impediments

# Benefits of structured decision making

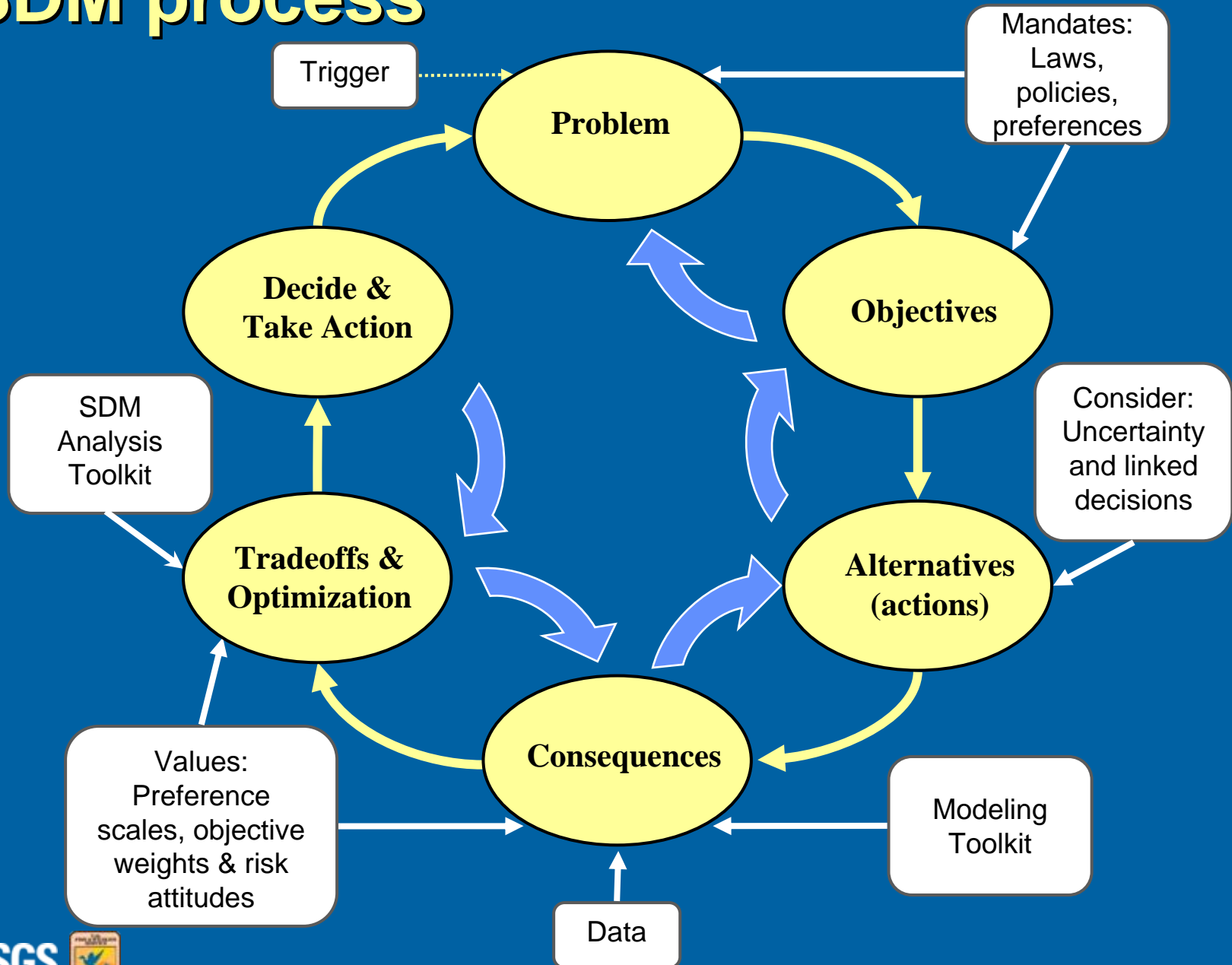
- Decision processes that are
  - Relatively bias free
  - Transparent
  - Explicit
  - Deliberative
  - Able to be documented
  - Replicable
  - Efficient, especially when no single person or entity is the decision maker
- *An important goal is that everyone agrees with the process, knowing that not everyone will agree with the outcome(s)*

# Two key elements of SDM

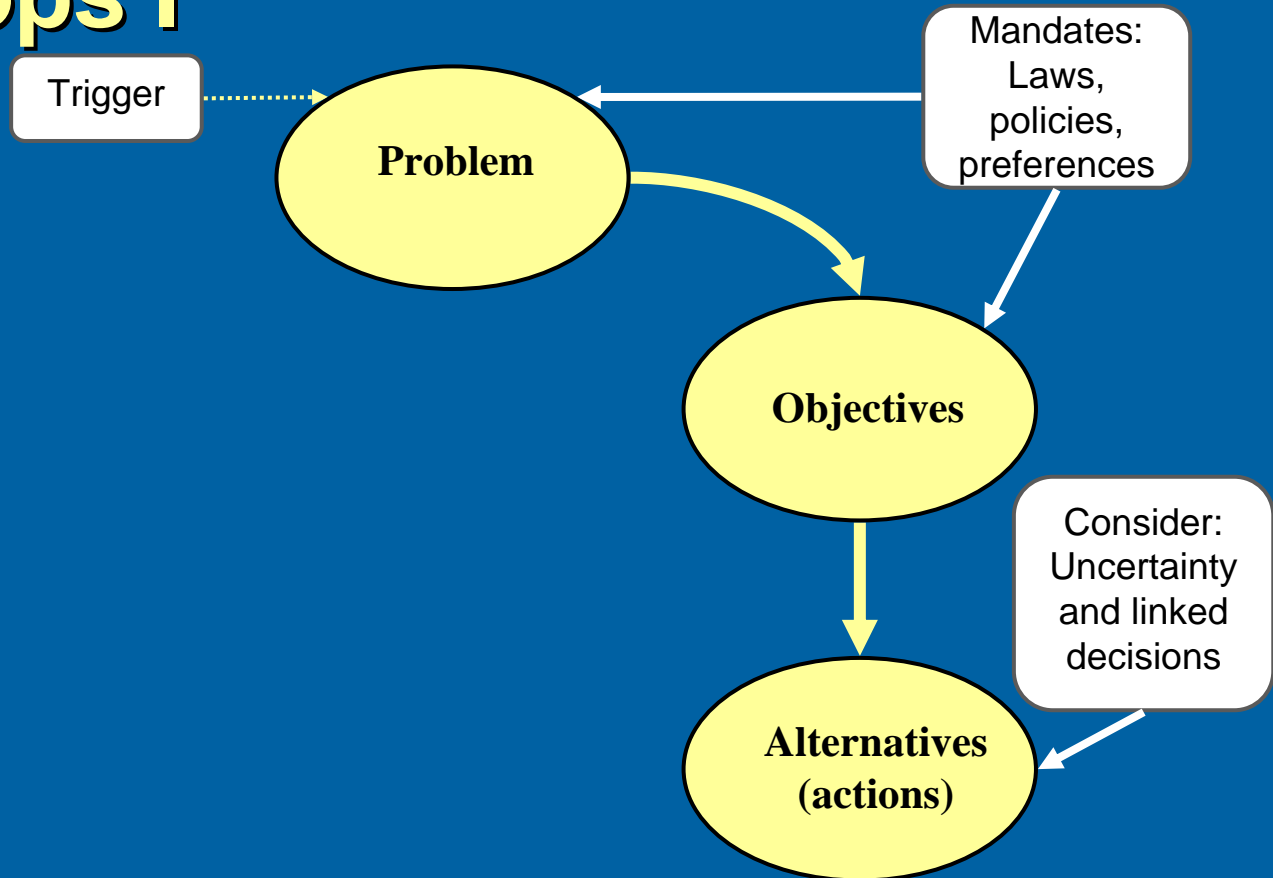
- **Values-focused**
  - The objectives (values) are discussed first, and drive the rest of the analysis
  - This is in contrast to our intuitive decision-making, which usually jumps straight to a debate of alternative actions or outcomes
- **Problem decomposition**
  - Break the problem into components, separating policy from science
  - Specify components, gather & analyze relevant information
  - Recompose the parts to make a decision



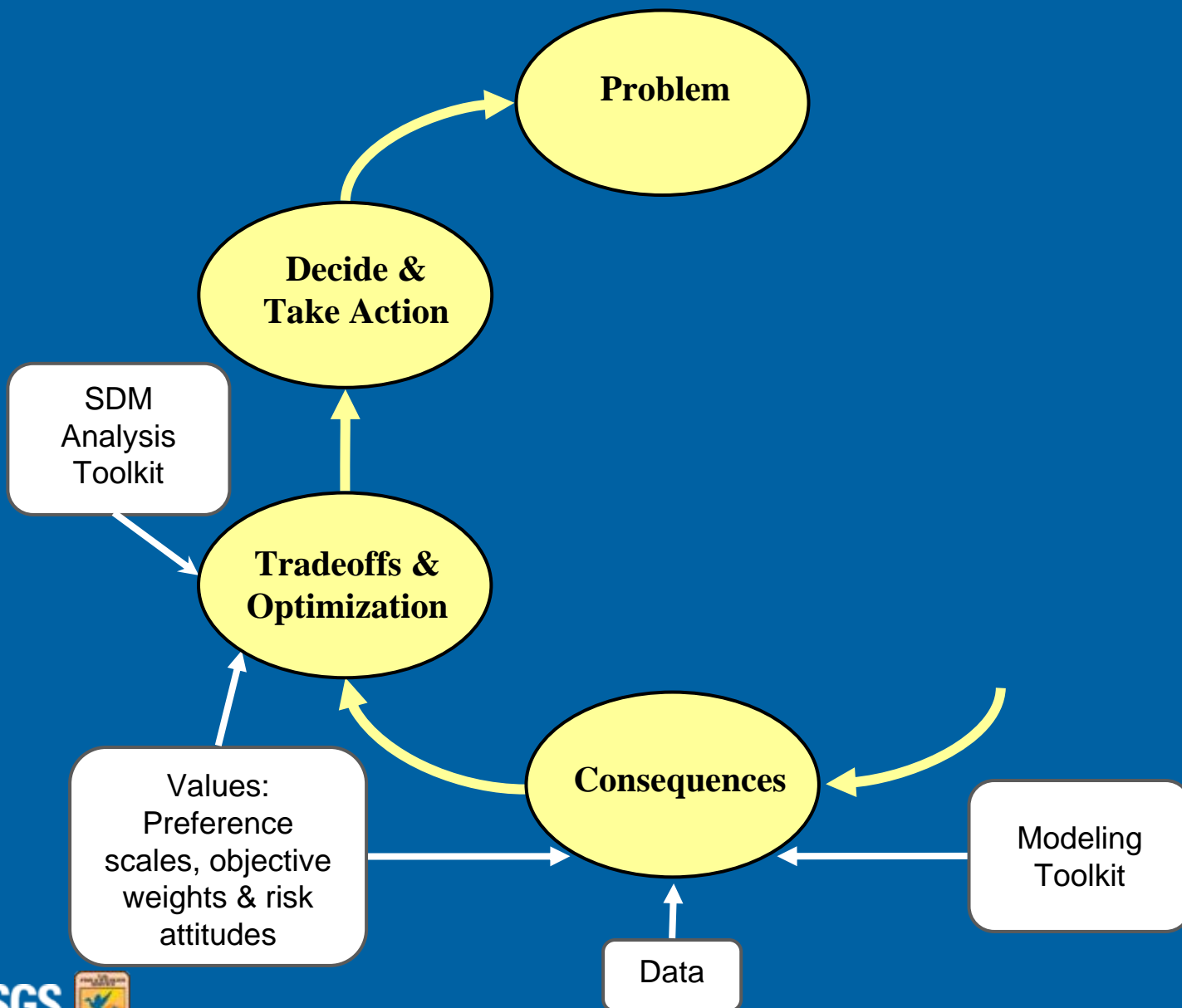
# SDM process



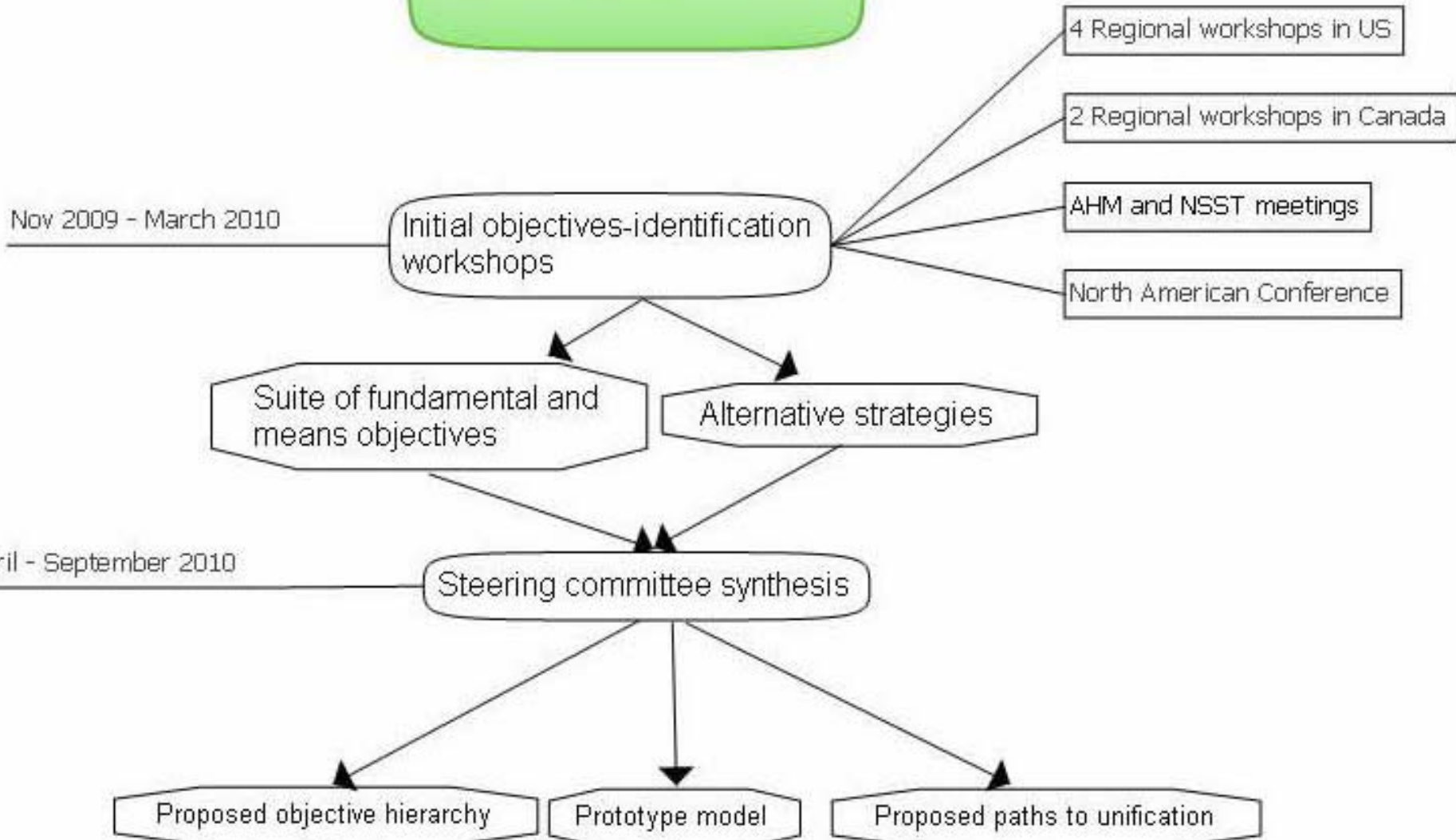
# Workshops I

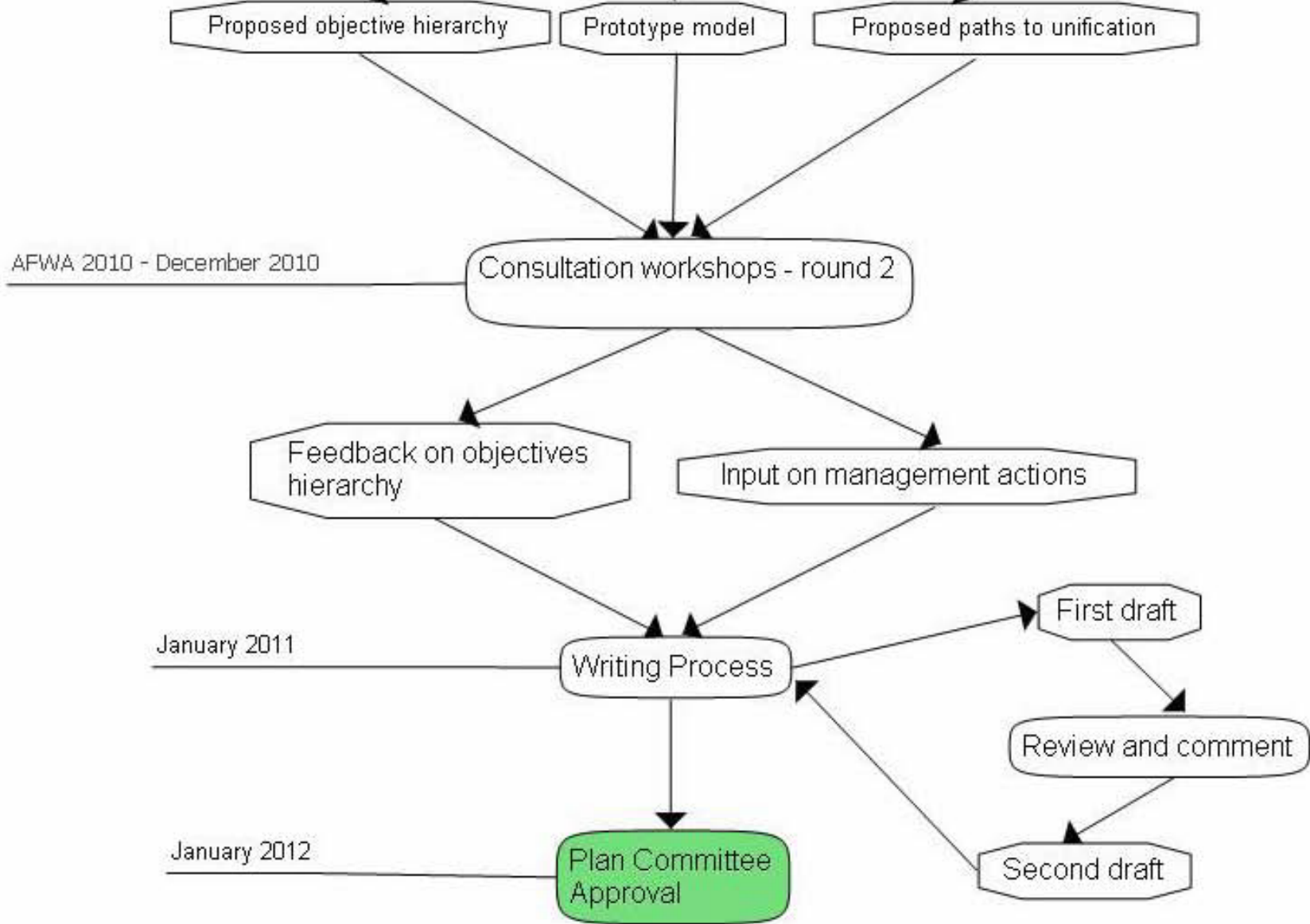


# Workshops II



# NAWMP Revision Process





# Workshop I goals

- 1) To gather input on the overarching objectives of waterfowl management, and opinions on how such objectives might best be pursued from a large-scale, strategic perspective**
- 2) To obtain information from stakeholders that will help inform the Plan Committee as they develop the scope and nature of the pending Plan Revision**
- 3) To discuss with waterfowl managers the practical aspects of fulfilling “A Vision for Integrated Waterfowl Management”**

# Workshop agenda

- Today:
  - Introduction
    - The Revision Vision
    - Taking a SDM approach
  - Break-out groups to:
    - Discuss the nature of the decision problem
    - Identify fundamental & means objectives for waterfowl management
    - Identify some measurable attributes
  - Group discussion; opportunity for individual input
- Tomorrow:
  - Introduction to objectives hierarchies
  - Break-out groups to:
    - Construct an objectives hierarchy
    - Identify strategic actions to achieve objectives
  - Group presentations; synthesis

# Break-out Groups

- Review and discuss the Problem Statement
- Review the handout of potential objectives
- Add missing objectives
- Discuss and reach agreement on whether each is a fundamental or means objective
- Suggest re-wording for clarity if necessary
- Suggest one or more measurable attributes for your fundamental objectives



# Fundamental vs. means objectives

## ■ Fundamental objectives

- An essential reason for your interest in the problem or decision
- Constitute the broadest objectives influenced by your (conservation) actions
- Important because *it just is!*

## ■ Means objectives

- Represent a way station in the progress toward a fundamental objective (e.g., decrease natural mortality)
- Serve to help generate potential actions and can deepen understanding of the decision problem

# Fundamental vs. means objectives

- Is this where I want to go? (FUNDAMENTAL) or is it a way to get there? (MEANS)
- Fundamental objectives answer “why?”  
Means objectives answer “how?”
- The distinction usually is dependent on the decision problem; a means objective in one problem may be a fundamental objective in another (and vice-versa)
- The distinctions in our context can ultimately help us define and bound the scope of “integrated waterfowl management”

# Objectives vs. actions

- The two are often confused in wildlife management planning documents
- E.g., “protect 1000 additional acres of habitat” - Not an objective, but a management action chosen (either explicitly or implicitly) from a broader set of actions
- Means objectives help define a potential set of actions; e.g., increase recruitment (means objective) by restoring native prairie, or constructing predator-proof fences, or creating nesting islands (set of potential actions)

# Measurable attributes

<b>Fundamental objective</b>	<b>Measurable attribute</b>
<b>Maintain duck hunting tradition</b>	<b>Number of people who identify themselves as duck hunters</b>
<b>Ecosystem goods and services</b>	<b>Wetland acres (not counting farmed wetland)</b>
<b>Hunt quality</b>	<b>Proportion of hunters who say they were satisfied or very satisfied with their season</b>
<b>Promote conservation behavior in the public</b>	<b>Annual total of public and private dollars for habitat conservation (\$billion)</b>

# Break-out groups



