

Management Goals and Objectives for Lake Sturgeon



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The opinions expressed in this presentation are solely those of the second author and in no way reflect the opinions, beliefs, or work ethic of the presenter nor his agency. All inquiries/legal proceedings should be directed at the second author.

“A prudent question is one-half of wisdom.” Sir Francis Bacon

Management Plans - purpose



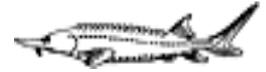
- To address FCO's (Great Lakes)
- To address Regional/Jurisdictional Fisheries plans
- To address agency strategies/policy
- To address legislation ("listings")
 - Old style legislation simply lists, new style requires action

Q1. So why DO we need a Plan?



- Populations have been extirpated
 - They need to be re-established
- Populations have been depleted
 - They need to be re-built
- Populations are under stress
 - They need to be managed
- Populations have been LISTED
 - They need to be “delisted”

Let there be Plans...



- Management Plans
- Recovery Plans
- Rehabilitation Plans
- Restoration Plans
- Rehabilitation Guides
- Management Strategies
- Recovery Programs
- Rehabilitation Strategies
- Recovery Strategies
- Stewardship Plans
- etc.....

Existing plans with respect to Great Lakes



- State of Michigan Lake Sturgeon Rehabilitation Strategy (1997, under review)
- Wisconsin Lake Sturgeon Management Plan (2000, updated Jan 2008)
- Ohio's Lake Sturgeon Management and Recovery Program for Lake Erie (August 1994)
- A Recovery Plan for the Lake Sturgeon (*Acipenser fulvescens*) in New York (January 2000)
- The Next 10 Years of Planning for the Management of Lake Sturgeon (*Acipenser fulvescens*) in New York (2005)
- A Lake Sturgeon Rehabilitation Plan for Lake Superior (2003)

Existing plans with respect to Great Lakes



- St. Lawrence River Lake Sturgeon management Plan, 2000-2002. (May 2000)
- Fish Community Objectives for Lakes Superior, Michigan, Huron, Erie, and Ontario (2003, 1995, 1995, 2003, 2003, respectively)
- Nmé (Lake Sturgeon) Stewardship Plan for the Manistee River and 1836 Reservation (Draft, 2008?)
- Lake Sturgeon Rehabilitation Plan for Lake Ontario, the Lower Niagara River and the Upper St. Lawrence River (Draft)
- Lake Michigan Lake Sturgeon Rehabilitation Plan (Draft)
- Genetic Guidelines for the Stocking of Lake Sturgeon (*Acipenser fulvescens*) in the Great Lakes Basin (Draft)

Existing plans with respect to Great Lakes



- Guidelines For Genetic Conservation, Propagation And Stocking Of Lake Sturgeon In Lake Michigan (Draft)
- Menominee Reservation Lake Sturgeon Management Plan (Draft)
- Lake Sturgeon Plan for the Green Bay Basin (non operational)
- Lake Sturgeon Rehabilitation with the Bay of Quinte (non operational)
- Framework for the management and Conservation of Paddlefish and Sturgeon Species in the United States (non-operational)

Plan outlines



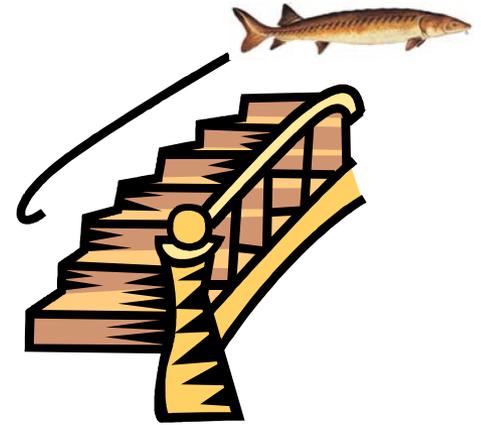
- Introduction (background)
- Goal (rarely more than one)
- Objectives (sub-goals, issues, strategies, tasks, tactics)
- Management actions (recommendations, education, legislation)
- *** Follow-up *** (assessment, research)

Q2. Do all plans need to be the same?

Q3. What is a valid goal?



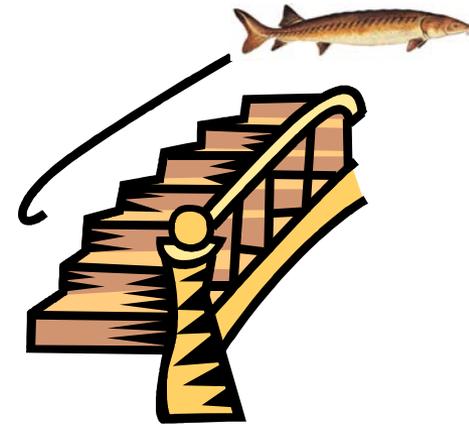
- The target, the “state”, the product
- Can be global or specific
- Broad, general, abstract, not directly measurable
- “the treasure at the top of the stairs”
- Addresses fisheries policy / agency directives
- Addresses social, cultural, environmental and economic needs of the day
- Can be achieved



Q4. What is a valid Objective?



- The means of achieving a goal
- Narrow, specific, concrete, measurable
- Often comprised of “issues”, “concerns”, “strategies”, “tactics”
 - Multi faceted
- Should be based upon best scientific data / traditional knowledge
- Should be well defined, clear, concise
- Addresses social, cultural, environmental and economic needs of the day
- “the stairs which lead to the treasure”



Examples (Goal)



- Successful sturgeon management
- Conserve, rehabilitate, and re-establish self-sustaining populations to levels that permit delisting as a threatened species.
- Maintain, enhance, and rehabilitate self-sustaining populations where they historically occurred
- Enhance self-sustaining populations
- Conserve and rehabilitate self-sustaining populations to a level that will permit delisting as a threatened species under the state, provincial and federal Endangered Species legislations.
- Protect Tribal sovereignty and Treaty rights.

Examples (Objectives)



- Protect and conserve existing stocks
- Quantify natural reproduction of lake sturgeon
- Protect concentrations of adults in areas where they aggregate prior to spawning
- Learn more about lake sturgeon biology and life history
- Closely regulate and limit harvest
- Include some artificial propagation and re-introduction to former areas and tributaries
- Use risk assessment to determine consumption guidance for current contaminant levels

Examples (Objectives)



- Identify and quantify critical habitat necessary for lake sturgeon reproduction and survival and rehabilitate and protect such areas throughout the species' historic range
- Develop sub-adult populations over 300 fish, within 5 years
- Maximize recruitment potential of sturgeon by transferring fertilized eggs and fingerlings...
- Select 3 water bodies for lake sturgeon restoration or population enhancement
- Determine minimum stock size appropriate for maintaining a subsistence and ceremonial fishery

Recommendations



■ DEPENDING UPON YOUR GOAL...

Objective Categories included:

- Population Management
 - Genetics, Stocking, Abundance, Life History
- Mortality Management
 - Natural, Fisheries, Lamprey, Diseases
- Habitat Management
 - Enhancement, Protection, Creation
- Ecological Integration
 - Community Interactions, Invasives, Niche
- Public Management
 - Stewardship, Education
 - Inter-jurisdictional Cooperation
 - Enforcement
- Follow Up
 - Assessment, Topical Research, Evaluation of Management Actions

Recommendations



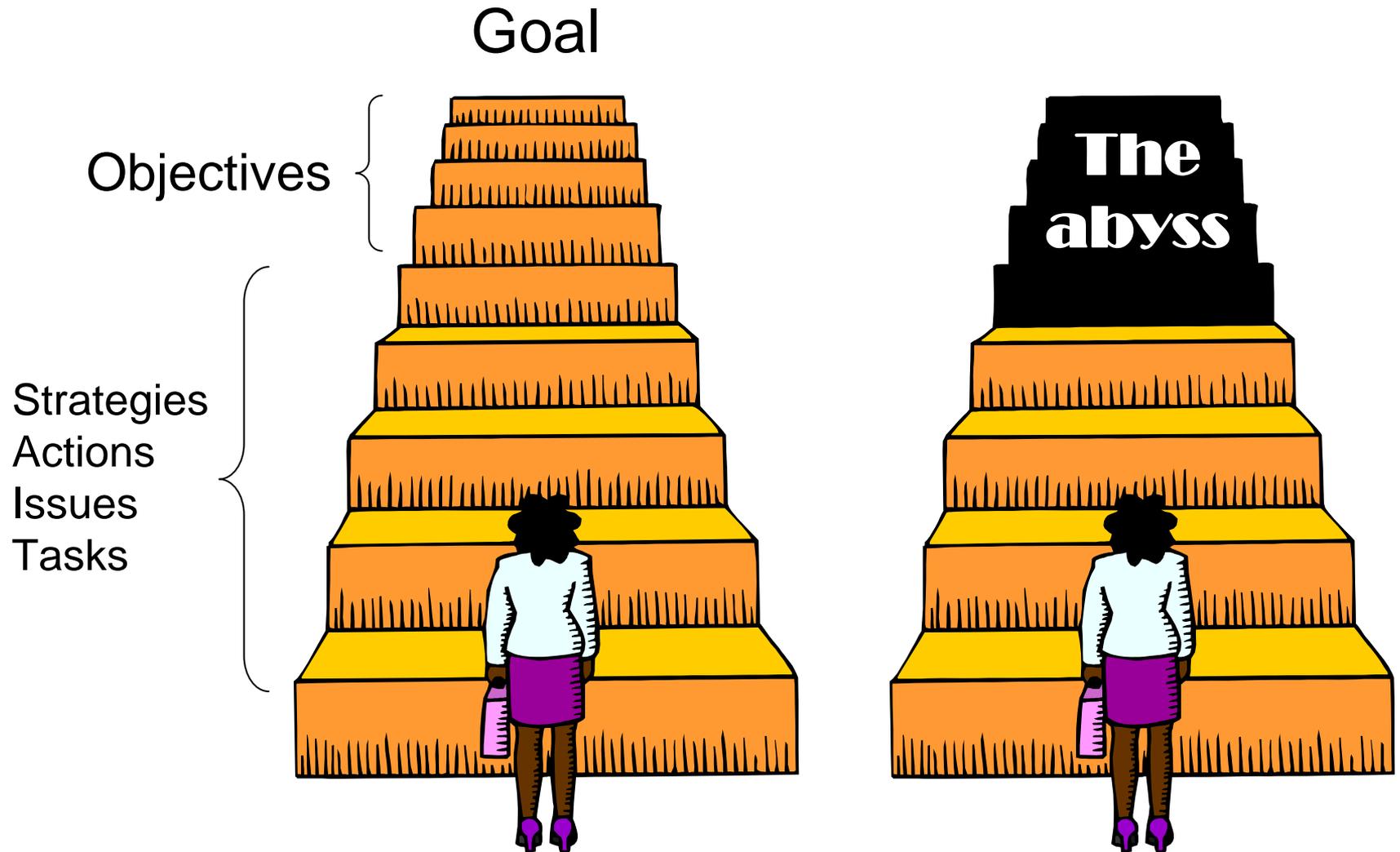
- Be sure you have a valid goal(s)
 - Ecologically, culturally, economically, socially
 - Legal

- Be sure that your objectives will lead to achieving the goal
- Be sure that the objectives are well defined, scientifically, knowledge based
- Be sure you take the right actions to achieve your objectives

- Be sure to assess your progress, review goals and objectives regularly, adjust accordingly

Q5. Are we THERE yet?

Recommendations





Acipenser beatlescens

Questions?