



Marine Life Protection Act



MPA Goals and Objectives Why do They Matter?

Presentation to the North Central Coast Regional Stakeholder Group

July 10, 2007 • Pacifica, CA

John Ugoretz - Habitat Conservation Program Manager

Marine Region

California Department of Fish and Game

A Review: What Are Goals & Objectives?

- A goal is a broad statement of intent that is:
 - Brief and clearly defines the desired long-term vision and/or condition that will result from effective management of the MPA;
 - Typically phrased as a broad mission statement; and
 - Simple to understand and communicate.
- Goals are taken primarily from MLPA

What Are Goals & Objectives?

- An objective is a more specific measurable statement of what must be accomplished to attain a goal.
Objectives are:
 - Specific and easily understood;
 - Written in terms of what will be accomplished, not how to go about it;
 - Realistically achievable;
 - Defined within a limited time period; and
 - Can be measured and validated.
- Focus on completing a set of regional objectives
- Individual MPA objectives may vary

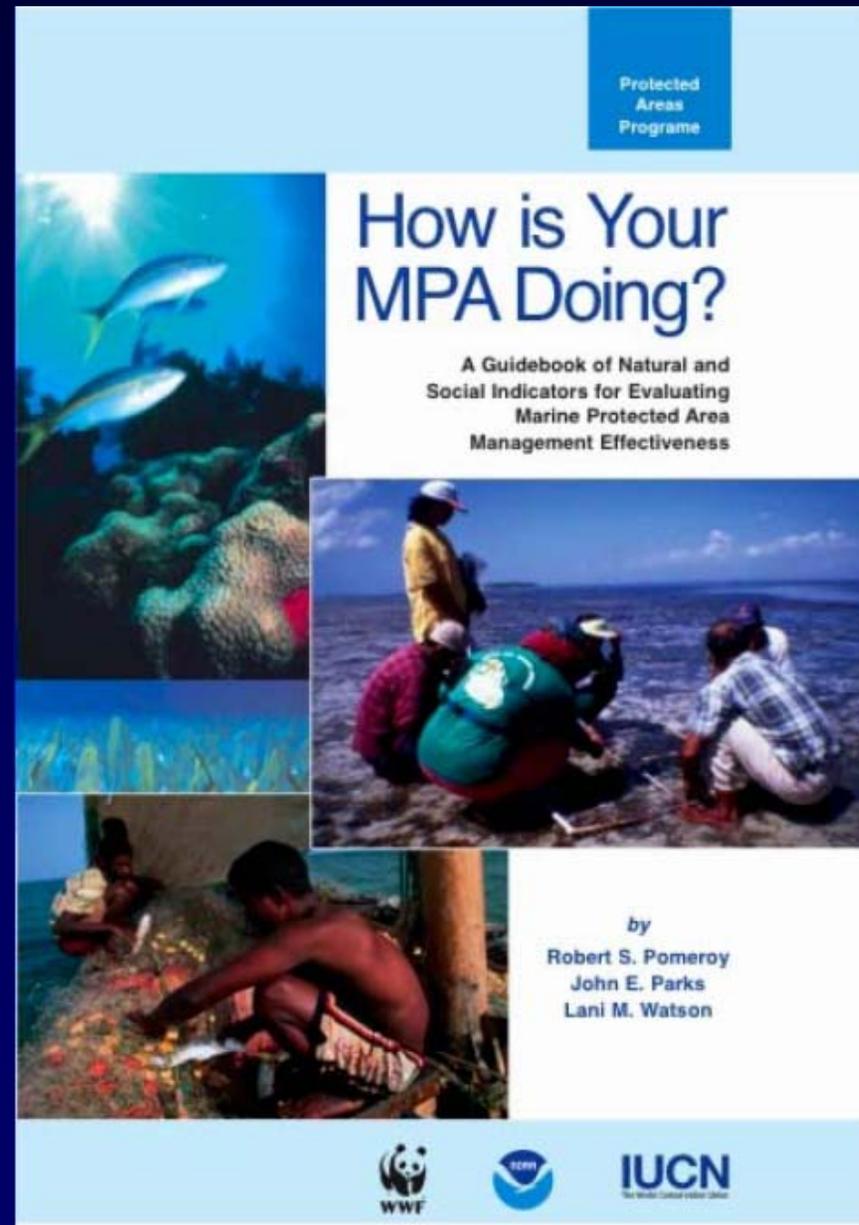
Management Effectiveness & MPAs

- *'Management Effectiveness'* is the measure of how well an MPA or network has met its *stated goals and objectives*.
- In order to measure, goals and objectives must be established in advance
- Management effectiveness is key to fulfilling the administrative portion of an improved network of MPAs

Why Care about Effectiveness

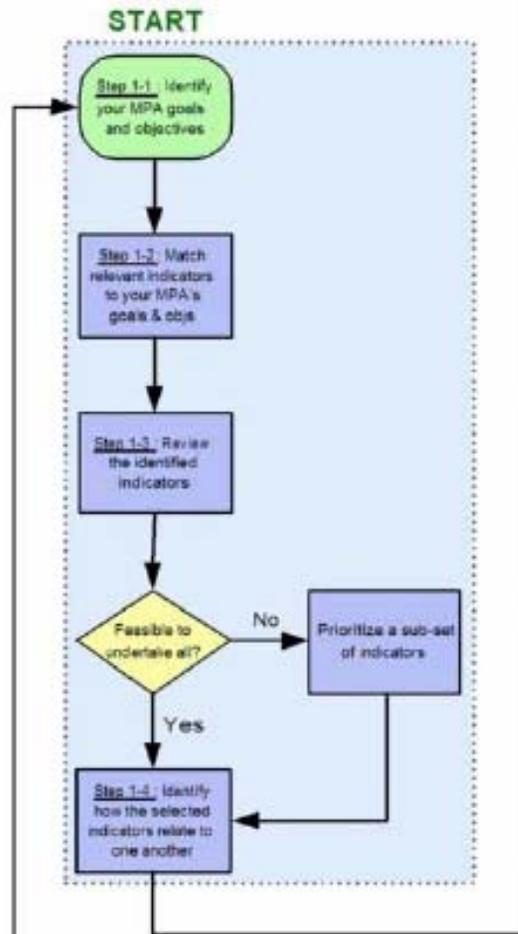
- Policy / Legal Considerations
 - Often required by statute or regulation
 - Growing demand for performance measures
 - Linked to periodic management reviews
- Operational / Management Considerations
 - Track status and trends of key resources and uses
 - Improves project planning, enhances priority setting
 - Promotes adaptive management
 - Informs broader ecosystem-based management
- Stakeholder Issues
 - Responds to concerns for accountability
 - Documents and illustrates successes and failures

Developing Measures of Effectiveness or “Indicators”

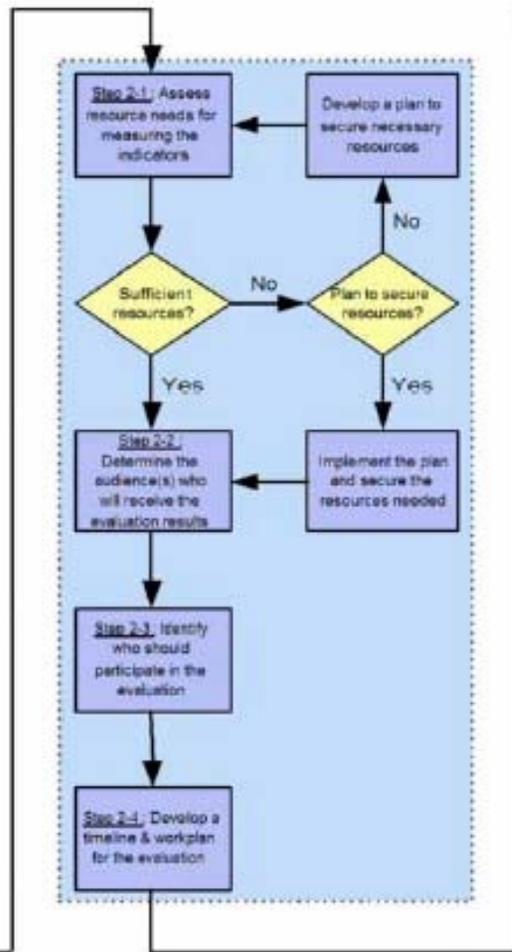


Four Steps to Management Effectiveness

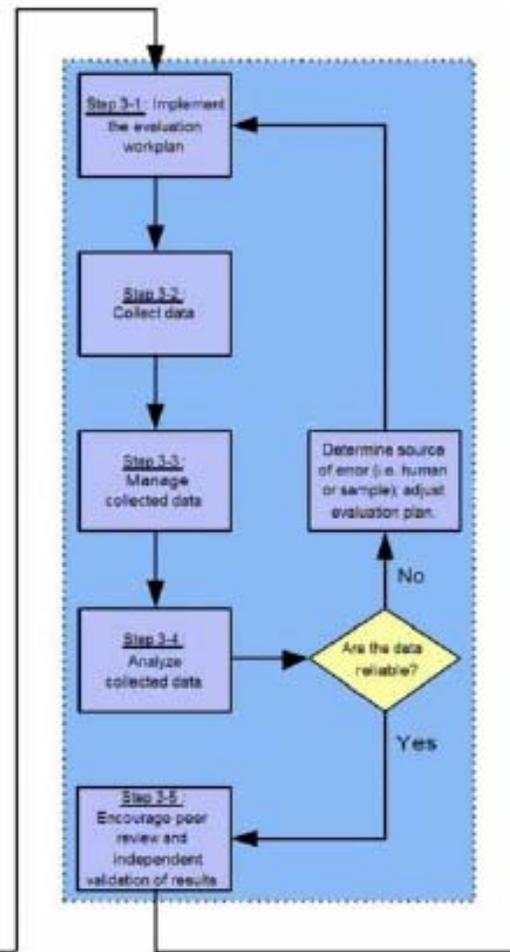
Selecting Indicators



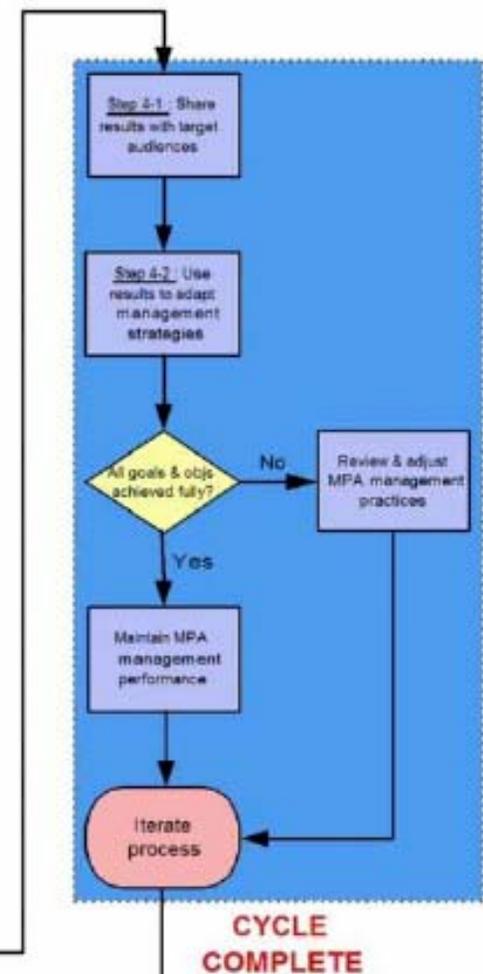
Planning



Evaluating



Using the Results



Selecting Indicators to Measure Effectiveness

- Management effectiveness can be measured in three distinct currencies:
 - Biophysical indicators (10, pg. 49)
 - Social indicators (16, pg. 113)
 - Governance indicators (16, pg. 163)
- The selected indicators should reflect the MPA's or network's stated goals and objectives
 - What is the MPA is intended to achieve?

Using the Guidebook to help

- Develop common understanding of:
 - Expected measurable outcomes
 - Potential influence of external events (e.g., environment)
 - Application of adaptive management & policy context
- Develop capacity to:
 - Rigorously monitor and assess results
 - Objectively synthesize and interpret results
 - Consistently store, manage and serve monitoring data
- Front End MPA Planning
 - Compare proposed MPA objectives with guidebook's
- Developing Monitoring
 - Select from “cook book” of pre-determined indicators

Information on Indicators

- Name of the indicator
- Goals/objectives related to indicator
- Difficulty rating: 1-5 (see page 47)
- Definition (What is...?)
- Purpose/rationale (Why measure it?)
- Resources needed to measure it

Information on Indicators (cont.)

- How to collect the data (methods)
- How to analyze and interpret results
- Expected outputs
- Strengths and limitations
- Example from the field (pilot MPA site)
- Useful references

Example Linkages: Goals - Objectives - Indicators

(pp. 52-53)

Focal species abundance
 Focal species population structure
 Habitat distribution & complexity
 Competition & structure of the community
 Recruitment success within the community
 Food web structure
 Type, level & return on fishing effort
 Water quality
 Area showing signs of recovery
 Area under no or reduced human impact

GOAL 1	Marine resources sustained or protected	GOAL 1	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1A	Populations of target species for extractive or non-extractive use restored to or maintained at desired reference points	1A	●	●				●	●			
1B	Losses to biodiversity and ecosystem functioning and structure prevented	1B			●	●	●			●		
1C	Populations of target species for extractive or non-extractive use protected from harvest at sites and/or life history stages where they become vulnerable	1C	●	●		●		●	●		●	●
1D	Over-exploitation of living and/or non-living marine resources avoided, prevented, or prohibited entirely	1D	●	●		●		●	●			●
1E	Catch yields improved or sustained in fishing areas adjacent to the MPA	1E	●				●		●		●	●
1F	Replenishment rate of fishery stocks increased or sustained within the MPA	1F	●	●					●		●	
GOAL 2	Biological diversity protected	GOAL 2										
2A	Resilient ecosystems, communities, habitats, species, and gene pools adequately represented and protected	2A				●	●		●		●	●
2B	Ecosystem functions maintained	2B						●		●	●	
2C	Rare, incipient, or endemic species protected	2C	●	●		●						
2D	Areas protected that are essential for life history phases of species	2D		●	●				●	●		●
2E	Unnatural threats and human impacts eliminated or minimized inside and/or outside the MPA	2E				●				●		●
2F	Risks from unmanageable disturbances adequately spread across the MPA	2F										
2G	Alien and invasive species and genotypes removed or prevented from becoming established	2G	●			●						
GOAL 3	Individual species protected	GOAL 3										
3A	Focal species abundance increased or maintained	3A	●	●	●			●	●		●	
3B	Habitats and ecosystem functions required for focal species survival restored or maintained	3B			●	●		●	●	●	●	
3C	Unnatural threats and human impacts eliminated or minimized inside and/or outside the MPA	3C							●	●		●
3D	Alien and invasive species and genotypes removed from area or prevented from becoming established	3D	●	●		●						
GOAL 4	Habitat protected	GOAL 4										
4A	Habitat quality and/or quantity restored or maintained	4A			●	●	●			●	●	
4B	Ecological processes essential to habitat existence protected	4B			●	●	●			●	●	
4C	Unnatural threats and human impacts eliminated or minimized inside and/or outside the MPA	4C			●	●	●			●		●
4D	Alien and invasive species and genotypes removed or prevented from becoming established	4D	●		●	●				●		
GOAL 5	Degraded areas restored	GOAL 5										
5A	Populations of native species restored to desired reference points	5A	●					●	●		●	
5B	Ecosystem functions restored	5B	●	●		●				●	●	
5C	Habitat quality and/or quantity restored or rehabilitated	5C		●	●	●				●	●	
5D	Unnatural threats and human impacts eliminated or minimized inside and/or outside the MPA	5D	●			●				●	●	●
5E	Alien and invasive species and genotypes removed or prevented from becoming established	5E	●		●	●				●		

Goals and Objectives: A Summary

- Overall network should lead towards achieving MLPA goals
- Each MPA has objectives that work towards portions of the goals
- Objectives are needed to develop monitoring plans
- Goals and objectives guide the adaptive management process
- Goals and objectives will help when developing proposals and when selecting indicators.