MPA Goals and Objectives
Why do They Matter?

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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”

How is Your MPA Doing?
A Guidebook of Natural and Social Indicators for Evaluating Marine Protected Area Management Effectiveness

by
Robert S. Pomeroy
John E. Parks
Lani M. Watson
Four Steps to Management Effectiveness

Selecting Indicators
1. Identify your MPA's goals and objectives
2. Match relevant indicators to your MPA's goals & objectives
3. Review the identified indicators
4. Identify how the selected indicators relate to one another

Planning
1. Assess resource needs for measuring the indicators
2. Plan to secure resources
3. Determine the audience(s) who will receive the evaluation results
4. Develop a timeline & workplan for the evaluation

Evaluating
1. Collect data
2. Analyze collected data
3. Determine source of error (e.g., human or sample) & adjust evaluation plan
4. Encourage peer review & independent validation of results

Using the Results
1. Implement the evaluation workplan
2. Manage collected data
3. Use results to adapt management strategies
4. Share results with target audiences

Iterate process
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)

**Goal 1**
- **Marine resources sustained or protected**
  - **1A**: Populations of target species for extract or non-extractive use sustained to or maintained at desired reference points
  - **1B**: Losses in biodiversity and ecosystem functioning and structure prevented
  - **1C**: Populations of target species for extract or non-extractive use protected between activities and historical stages where they become vulnerable
  - **1D**: Overexploitation of living and non-living marine resources maintained, prevented, or prohibited entirely
  - **1E**: Catch yields improve or sustained in fishing areas adjacent to the MPA
  - **1F**: Reproduction rate of fishery stocks increased or sustained within the MPA

**Goal 2**
- **Biological diversity protected**
  - **2A**: Resident ecosytems, communities, habitat species, and gene pools adequately represented and maintained
  - **2B**: Ecosystem functions maintained
  - **2C**: Ecosystem processes maintained
  - **2D**: Areas protected that are essential for life history phases of species
  - **2E**: Environmental threats and human impacts eliminated or minimized in each area and/or outside the MPA
  - **2F**: Risk from unmanageable disturbances adequately managed across the MPA
  - **2G**: A list and index to species and genotypes removed or present in tracts remaining intact

**Goal 3**
- **Individual species protected**
  - **3A**: Focus species abundance increased or maintained
  - **3B**: Ecosystem processes required for focal species, survival restored or maintained
  - **3C**: Habitat threats and human impacts eliminated or minimized in each area and/or outside the MPA
  - **3D**: A list and index to species and genotypes removed or present in tracts remaining intact

**Goal 4**
- **Habitat protected**
  - **4A**: Habitat quality and quantity restored or maintained
  - **4B**: Ecosystem processes maintained in habitat in existence protected
  - **4C**: Environmental threats and human impacts eliminated or minimized in each area and/or outside the MPA
  - **4D**: A list and index to species and genotypes removed or present in tracts remaining intact

**Goal 5**
- **Degraded areas restored**
  - **5A**: Populations of target species sustained to desired reference points
  - **5B**: Ecosystem functions restored
  - **5C**: Habitat quality and quantity restored or maintained
  - **5D**: Environmental threats and human impacts eliminated or minimized in each area and/or outside the MPA
  - **5E**: A list and index to species and genotypes removed or present in tracts remaining intact
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.