

## Appendix E: Social Science Tools and Methods

This table contains summaries of a combination of selected social science tools and methods that can be used in research design, data collection and data analysis.

Tool/Method	What Is It?	What Can It Be Used For?
<b>Case Study Research</b>	An in-depth investigation of issues at specific instances and locations.	To identify the attitudes, perceptions, and beliefs of most groups involved, as well as the interactions among those groups.
<b>Comparative Research</b>	A comparison of different analyses, that compares attributes, characteristics, or particular treatments across two or more situations.	Managers can compare certain characteristics of one MPA or compare the same group over time (also called "longitudinal comparison").
<b>Content Analysis</b>	A review of interview transcripts, newspapers, books, manuscripts, Web sites, or other documents to identify underlying meanings, or qualify occurrences of key words or phrases.	To help identify patterns and trends in discussions about biological, social, and political phenomena. Also to identify patterns that depict associated attitudes, perceptions, and values.
<b>Cost-Benefit Analysis</b>	A tool for comparing the benefits of proposed projects with the costs to identify the alternative with the maximum net benefit (benefits minus costs).	To understand the social costs and benefits of the marine protected area on to stakeholders or to identify alternatives that are the most cost-effective.
<b>Demographic Analysis</b>	A tool used to study the characteristics of human populations, such as size, growth, density, and distribution.	To highlight trends in the size, distribution, and density of human populations in communities.
<b>Ethnographic Research</b>	A method for obtaining an in-depth understanding of the history, practices, values, traditions, and circumstances of the groups and surrounding resources being studied.	To help managers better understand the stakeholder groups with whom they interact. Also, to reveal cultural values and practices, helping managers identify how these values and practices affect MPA management.
<b>Focus Groups</b>	A focus group is a group interview, typically involving 8 to 12 people about a specific topic.	To identify opinions, attitudes, and perceptions about a specific idea. Focus groups can also be used to inform survey development.
<b>Geographic Information System (GIS)</b>	A compilation of hardware, software, and data that enables users to manipulate, analyze, and display geographically referenced information.	To document human use patterns, identifying culturally sensitive areas, prioritizing regions for additional public access, or highlighting demographic trends within a community.

Tool/Method	What Is It?	What Can It Be Used For?
<b>Historical Research</b>	A review or analysis of past resource use and the social and population characteristics related to a particular geographic resource. A type of secondary data analysis.	To determine past social attitudes and community structure, as well as how these have changed over time. Also to identify how the attitudes, perceptions, and uses of communities and groups have evolved.
<b>Interviewing</b>	A method of eliciting answers to predetermined questions from one individual at a time. Questions can be modified to fit a given situation.	To collect detailed information from individuals which may not be available in written or published format. To provide insight into individual feelings and experiences.
<b>Non-market Valuation</b>	A method used to estimate the economic value of items that have no assignable market value, such as ecosystems and environmental services.	To estimate the value of a reef, beach, or any other resource or use that has no assignable market value.
<b>Observation</b>	An information-gathering technique based on personal observation and recording of human activities and behaviors.	To collect information about social groups, community behaviors, and resource use in normal-use situations.
<b>Predictive Modeling</b>	A technique that creates a model to simulate real-world situations to predict future conditions.	To understand possible long-term impacts of management decisions and to prevent future problems from occurring.
<b>Rapid Rural Appraisal</b>	A broad-level evaluation, usually through consultation with experts and stakeholders, that provides a general overview of the relationship between humans and natural resources.	To identify areas of concern in an MPA, such as safety issues or access issues, quickly and thoroughly. In addition, this type of broad-level evaluation can be used as a precursor to planning and can help justify decisions that need to be made quickly.
<b>Secondary Data Analysis</b>	Analysis of data that were collected by individuals other than the investigator. These data include newspapers, census data, maps, etc.	To identify or analyze characteristics of a group, populations, or issue using existing data and information.
<b>Social Assessment</b>	A method of data collection and analysis used to characterize the social environment in the area in which one manages (e.g., watershed, protected area).	To identify the principal stakeholders and to generate information about social structures, processes, and changes being produced in any given area or community. Used as a precursor to management planning.

Tool/Method	What Is It?	What Can It Be Used For?
<b>Social Impact Assessment</b>	Used to predict impacts related to implementation of management resources or policy changes.	To identify how people and communities could potentially react to changes and to predict probable impacts of the implementation of rules and regulations.
<b>Social Network Analysis</b>	A method used to collect, analyze, and graphically represent data that describe patterns of communication and relationships within a community.	To identify community opinion leaders and other influential individuals, as well as those most responsible for disseminating information, and to determine how new ideas or information will spread through a community and how fast.
<b>Surveys</b>	A standardized list of questions administered by mail, telephone, Internet, or in person.	To obtain information and opinions from a representative sample of stakeholders related to specific MPA issues.

(Adapted from NOAA Coastal Services Center, <http://www.csc.noaa.gov/mpass/tooltable.html>.)