Implementing MRRP:
Evaluating the Program

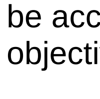
Evaluation is perhaps the most important, but often most neglected component of any program. Reviewing the program's design and implementation allows you to determine what worked and what didn't, if you achieved desired outcomes, and whether goals and objectives for the program have been accomplished. Once you've completed your evaluation, it will be much easier to encourage others to participate in and fund the program because you can share program success stories and specific results.

MRRP Evaluation Plan

One of the first steps in planning MRRP program evaluation is defining goals and measurable objectives. Goals are statements that describe what the program hopes to successfully accomplish through implementation. They are broad reaching, long-term program aspirations. Suggested MRRP program goals are:

- Raise public awareness about the destruction caused by monofilament line left in the environment.
- Involve the community and its residents in accomplishing the objectives of the project through active participation.
- Reduce the amount of monofilament line in the natural habitat.
- Facilitate monofilament line recycling by establishing a fishing line recycling network.

Objectives are short-range statements that indicate successful steps in reaching goals. When writing objectives, use action verbs that describe things that can be seen or shown like: develop, create, conduct, prepare, demonstrate, teach, justify, show, list, construct, decide, and organize. There are two types of objectives - process objectives and outcome objectives. By understanding how to use objectives to measure successful actions and changes in attitude, a well-rounded and comprehensive evaluation plan can be developed. Actions that will be accomplished during program implementation are described by process objectives.



Process objectives provide information about what the project hopes to accomplish, who will accomplish it, and how. These are usually the intermediary steps to achieving goals and should answer the following questions:

1) Who is performing the activity?
2) What will be accomplished?
3) When will the activity be completed?
4) What is the measurement of successful completion?

Examples of MRRP process objectives:

Process Objective 1: Within the first year of program implementation, the Boy Scouts will construct and install thirty-five (35) MRRP outdoor recycling bins.

Who? Boy Scouts
What? Construct and install bins
When? During the first year of the program
Measurement of success? 35 bins installed

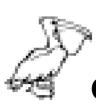
Accomplishing this objective demonstrates a step toward accomplishing the goal of establishing a countywide indoor and outdoor recycling network.

Process Objective 2: During the course of the one-year project, the County Environmental Protection Department will recruit thirty-five volunteers to check outdoor recycling bins, clean line and take the cleaned material to a tackle shop.

Who? Environmental Protection Department
What? Recruit volunteers
When? During one-year project
Measurement of success? 35 volunteers recruited.

This objective demonstrates a step to achieving the goals of involving the community in the program and establishing a recycling network.

Measuring success at reaching a target audience is better described by demonstrating an attitudinal change such as changes in behavior and awareness. Outcome objectives are used to define these types of attitudinal changes.



Outcome objectives describe a more general change that occurs as a result of program activities. Outcome objectives should be measurable and should include the following:

1) Who is the targeted audience or beneficiary of project outcomes?
2) What is the anticipated outcome? (Change in knowledge, awareness, or skill)
3) How will the outcome be accomplished?
4) Is the outcome measurable and quantifiable?
5) Evaluation method employed to measure the change?
6) What is the timeframe for change?

Examples of MRRP outcome objectives:

Outcome Objective 1: After completion of the MRRP advertising and education campaign, anglers will demonstrate a 25% increase in line recycling knowledge when compared with anglers surveyed prior to the campaign.

Who targeted? Anglers
Anticipated outcome? Increased line recycling knowledge
How accomplished? Education and advertising campaign
Measurable? Yes, 25% increase in awareness.
Evaluation method? Pre- and post surveys
Timeframe? – Unclear, but before and after the advertising campaign.

Successfully meeting this objective confirms that the advertising and education campaign has impacted the awareness and knowledge of anglers about fishing line recycling.

Outcome Objective 2: During the course of the project, a 25% increase in the number of anglers who recycle line will be demonstrated by pre-and post- project surveys.

Who targeted? Anglers
Anticipated outcome? Increase in recycled line
How accomplished? Unclear, but as a result of the project
Measurable? Yes, 25% increase in line recycling
Evaluation method? Pre- and post- surveys
Timeframe? – During the course of the project

Surveys

Test survey questions in advance to insure they are understandable and that you are getting the answers to the questions you are asking.

Brevard County MRRP depended primarily on two evaluation methods to determine program impact and success – surveys and quantities. Pre- and Post-project surveys were conducted to measure changes in awareness and the numbers of anglers who were recycling. Measuring the quantity of line recovered through cleanup events and through the recycling network confirmed that line was being removed and kept from negatively impacting the environment. The number of volunteers and participating businesses indicated community support.

A pre- and post- project survey was conducted to define the MRRP target audience demographic and also to assess a change in awareness and behavior. A copy of the survey can be found in the resources section of the website (click here for sample of Brevard County survey (***link to sample survey).***

The advantages to conducting a survey are that you can reach a large audience with one document, the responses are quantifiable and can demonstrate change, qualitative responses can clarify the data collected, they can be completed in a timely fashion, and they can be administered randomly or to a targeted audience.

The disadvantages to surveying are that once the survey is started, the questions can not be changed; survey questions are closed, so it is impossible to know how the respondent interpreted the questions; not everyone will respond; and the results are completely dependent on the quality of the questions.

Designing the Survey

1) Clarify the survey's purpose.
2) Clarify terms used to describe the survey's purpose.
3) Identify specific elements of the survey that would collect information for each objective.
4) Design questions that make sense to the respondent, use appropriate language, vary the type of questions but repeat types in a series, avoid biased words, avoid double questions, and avoid changing scales. Make the survey short and put the easier questions (like demographic information) at the end of the survey.
5) Organize questions by theme, like demographic information, impact awareness information, recycling knowledge, etc... Include an explanation of why the survey is being conducted, whom the information will benefit, directions for completion, incentives for participating and thanks. If mailing the survey, explain procedures to return the survey and the due date.
6) Pilot test the survey! Test the vocabulary and understanding of questions with the target audience. Test the content of the survey with other program evaluators and your task force.
7) Implement the survey and increase response rates. If conducting a mail-out survey, send out reminder postcards and re-send the survey. Call non-respondents and ask a few key questions to see if they differ from respondents. If conducting an interview type survey, go to a variety of locations to interview different demographic audiences. In the case of MRRP, surveys were conducted at beach accesses, fishing piers, boat ramps, and fishing expositions in an attempt to represent a variety of angler types.

Analyzing Data & Assessing the Program

Survey Data

The easiest method for analyzing the survey data is to count the number of responses to a question and divide the number of total respondents by the number of responses to that question. The percentage that is provided is the percentage of respondents who answered in that manner. Re-asking the same question after program completion and doing the same calculation presents a percentage of total respondents who answered that question after the program was implemented. Any significant change in the percentage who answered in an identical manner pre-project and post-project, can represent a change in audience knowledge of the topic area. Significance of the change can be tested by using a Chi-square test, a t-test or ANOVA statistical test.

Measuring line

There are several ways to measure the amounts of monofilament line collected and several areas of collection to be considered:

- Measuring the amount of line collected in the outdoor recycling bins. Stuff a typical recycling bin with line, empty the line out and weigh it. One 6" bin packed full of monofilament contains about 5 lbs of line, however it is rare that a bin is packed with line. For one project area, volunteers were asked to pack the line down, and then estimate the fullness of the container (< ¼, ¼-½, ½ - ¾, and ¾ - full). The amount of line collected was estimated by how much each bin contained compared to the weight of a full container. Another and potentially more accurate method for weighing line collected in outdoor bins is to provide each volunteer a letter scale and ask them to weigh the line with the scale each time they check their bin and record that weight on a form.

- Measuring the total amount of line collected through the recycling network. If the line collected by volunteers is taken to tackle shops to send out for recycling, then the tackle shops are the ultimate place to measure the total amount of line collected by the recycling network. Ask each participating tackle shop to keep track of how many boxes of line they mail off and to ask the mail service to provide the weight of each box. Generally, a box takes six months-1 year to fill and weighs between 35 and 50 pounds.

- Measuring the amount of line collected during cleanup events. Line collected during cleanup events is the most difficult to measure accurately, because it is often clumped with organic matter, barnacles, and gear. Volunteers must be diligent in removing the excess matter before weighing the line. Line can be placed in garbage bags and weighed at any grocery store or tackle shop. Or better yet, bring a fish scale to your cleanup site to weigh the line!

Informing the Audience

Whether or not you have reached the target audience with the educational materials is perhaps the most difficult aspect of the program to evaluate. It is easy enough to create educational materials and count how many are shared, but impossible to know how the target audience interprets the information, if the increased education results in a change in behavior, or if the materials are even read.

There are several things that you can do to determine the appropriateness of the educational materials and estimate the numbers of people reached with the materials. To insure quality educational materials, use your task force or other outside sources of expertise to provide input on the design. Test the materials on several audiences to determine which is most affected by that specific educational medium. Track the numbers of materials shared and to whom they were given. Also keep a count of presentations, the audience type, and the number of attendees at each presentation. Include a survey question on your target audience survey that specifically asks where they heard about the program.

Evaluating Program Efficiency

To evaluate the efficiency and performance of the program, it is important to keep track of the resources expended to conduct the program and compare those with the estimated resources initially estimated as well as the a number of activities conducted and the success of those activities. The following information may be helpful to determine whether your program is being conducted efficiently and effectively. How much time, money and other resources are going into the program? How do the actual amounts of the resources used compare to the resource estimates at the beginning of the program? Were the costs greater than expected? Was in-kind assistance under-utilized? Assessing this information comes through conducting preliminary estimated of costs (the budget) and then comparing with post results, i.e. what actually happened.

What and how many activities did we conduct? What were the objectives of the activities? What did participants do? What worked well, what didn’t work so well? What would we do differently next time? Keep a timeline/record of what happened: start dates, ending dates, duration.

Reporting

The evaluation report should be a clear and easily interpreted presentation of evaluation results. Using graphical interpretation of data and tables of measurable objectives can be helpful. The evaluation report should include an introduction that describes the evaluation plan, the objectives, and the limitations of the project. Evaluation methods and procedures should be explained including the instruments used to collect data, how the instruments were tested, and how the data collected was determined to be valid. Any analysis that is performed must be described including statistical methods. Results of the evaluation should be expressed in careful terms that suggest potential outcomes instead of “proving” or “disproving” the objective. A summary of the evaluation method should be included that describes the overall picture and suggests methods for future program improvements. Finally, appendices should include copies of all instruments or forms, lists of participants, training materials, schedules, and staff assignments. Some granting agencies may also request a budget comparison of estimated vs. real costs.