Arizona Department of Environmental Quality
Water Quality Improvement Grant Program

A Workbook for
Investing In Clean Water

ADEQ
Arizona Department
of Environmental Quality

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

The Arizona Department of Environmental Quality
Water Quality Improvement Grant Program

Presents

Outcome-Based Grant Planning: Begin With The End In Mind

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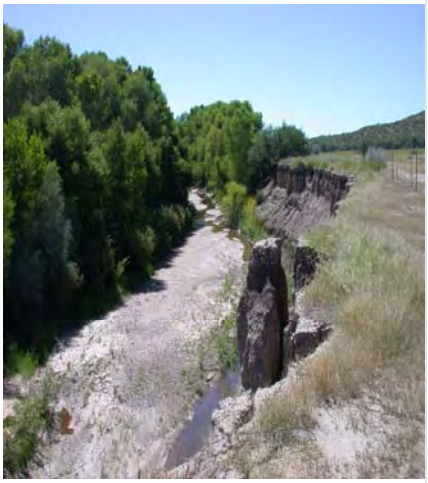
Introduction
In Come The Outcomes

The Arizona Department of Environmental Quality's (ADEQ) Water Quality Improvement Grant Program provides federal grant funds to individuals and public and private entities throughout Arizona to implement on-the-ground water quality improvement projects that control nonpoint source pollution.



Nonpoint source pollution is polluted runoff that can come from many different sources and remains the nation's largest source of water quality problems. Nonpoint source pollution occurs when rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants and deposits them into rivers, lakes, and coastal waters or introduces them into the ground water. Agriculture, forestry, grazing, urban runoff, construction, changes to the stream channel and habitat degradation are just a few examples of potential sources of nonpoint source pollution.

The Water Quality Improvement Grant Program has shifted the focus of its role from that of "Funder" to an "Investor". While the program will continue to serve the same fundamental purpose, emphasis is being placed on project outcomes being seen as returns on the Program's investments. Since our long term vision is for all of Arizona's waters to be clean and safe, suitable returns will be in the form of measurable water quality improvements.

All journeys start with small steps. The Water Quality Improvement Program's short term goal is to see a quantifiable improvement in surface waters. To reach this goal, The Water Quality Improvement Grant Program strives to fund projects that implement sufficient, economically and scientifically sound management practices that result in quantifiable improvements to surface waters. Other outcomes of strong projects include:

- Education and public awareness of water quality issues
- Active citizen involvement
- Innovative approaches to nonpoint source pollution cleanup
- Provision of project longevity
- Utilization of unique funding and partnership opportunities

This workbook will give you an opportunity to try out a sample of the tools needed to develop an outcome based water quality improvement grant. Everything in the workbook is pointed toward performance targets (desired end results), and this workbook will explore the concept of targets and important concepts connected to their achievement. It is our hope that by working through the pages in this workbook you will understand the outcome based approach and incorporate this thinking into the grant application and implementation of the project. This workbook will show you the benefits of beginning with the end in mind!

Problem Statement and Action Plan

The first step in identifying your desired outcomes involves defining the specific problem that you wish to address. This is called your **problem statement**. Once you have identified the water quality issue on which you are focusing, you must identify the changes that need to be made in order to rectify it. The way in which you propose to bring about these changes is your **action plan**.

Think of the people and issues that directly effect the water quality issue at hand. What behaviors or variables do you seek to change in order to make improvements? Whose support or agreement is necessary to get your project successfully completed? These are all questions that must be considered in order to develop an effective action plan. *Remember, Your water Quality Improvement Grant project will have two types influence: through the on-the-ground implementation portion of your project, and through education and outreach.*

The Problem

Necessary changes

How will these changes be made?

Desired Outcomes

Desired outcomes are defined in advance of project implementation, and they must be tangible, verifiable, and within the realm of possibility. Developing your desired outcomes consists of a 3-step sequence for your thinking. These four steps followed in sequence, will help you devise the desired outcome of your project.

1. Identify the changes or conditions you seek;
2. Specify the degree of change you consider success;
3. Estimating how many people's behaviors will change, or how much physical change you will produce;

Step 1. Identify the areas of change you seek.
Setting the target for change implies some comparison to current or expected behaviors or existing physical conditions.

Step 2. Specify how much change is required for you to consider it a success.
Your target must consider the question of degree...how much change. Change maintained for how long; a condition with certain minimum requirements achieved. When you can clearly articulate this you have developed the content language of your desired outcome.

Take a moment now to make some notes about the kind of behavior change or condition you seek and the degree required to consider it a success.

Step 1. Kind of change or condition	**Step 2.** Degree required for success (how much of it, for how long, minimum required?)

Step 3. Now make your *projection* of how many people you/your program will succeed with or how much of the changed condition you will get.

Pulling it all together!

Having gone though these four steps you are ready to pull it all together in a clear statement of your desired project outcomes. Your outcomes can focus on a single change or a "menu" or individual set of changes/conditions from which customers can be judged a success, or a specific physical change that will result from the project

Management Methods

You have developed a Problem Statement and Action Plan, and have determined what the desired outcomes of your project will be. Now, you must determine how you will manage the project in order to ensure the achievement of your outcomes. Consider your project carefully—you want to be sure that you are not only implementing best management practices to reverse or diminish the *effects* of the problem you are addressing, but to manage and control the *source* of the problem.

Imagine that your project proposes to remove abandoned vehicles from a wash that serves as an ephemeral tributary to a major river. In this scenario, the people abandoning the vehicles are the ultimate source of the pollution. For you proposed project, what is the pollutant of concern? What is the source of that pollutant? You may have multiple pollutants of concern.

Identify the pollutant of concern	**Identify the source of the pollutant**

List pollutant sources	**Identify ways to manage or control those sources**

Verification Methods

Verifying is a simple way of determining that the desired outcomes have or have not been achieved. The point of this is both for investor and implementer to have evidence of result accomplishment. Without verification, there is no way of knowing whether change really happened. Specify how you will verify achievement of each area of change that you outlined in your Desired Outcomes and Management Methods. You've determined what level of change you will consider "successful" — now, determine how you will prove that a successful level of change has been achieved?.

Outcome	**Method of Verification**

Beyond the Pre-Proposal: Planning a Project Timeline

Milestones
Interim points of progress

Effective projects and their investors need a way to "track" progress to ensure that the initiative is on course to reach the desired outcomes. They also need a way to make course corrections if they find they are off-track. ***Milestones*** fill the bill. The *Milestones* is sets targets focused on the number of critical incremental behavior changes being completed, or the critical "mini-achievements" necessary to get to a specific change.

Note: You may be surprised after you complete this section. It is not unusual for groups to find that their original thoughts about how their desired outcomes will be achieved are way "off base".

Product steps and customer behaviors-the first step in defining milestones

In thinking about your project, it's logical to do so in a step-wise fashion outlining what you, the implementer, must do to ultimately arrive at your desired outcomes. But this is only half the story and, in many ways, the less important half. Each step is intended to lead to a mile-stone that signifies movement toward the final outcome.

These milestones will be highly important since they give early indication whether a project is on course to reach its desired outcomes. They will form a chronological progression of points of achievement critical to the eventual achievement of the outcome.

Examples:

Steps	***Milestones***
1. Plant 3 vegetated buffer strips in April 2008	*1. At least 70% of planted vegetation has taken root and established in each strip by June 2008*
2. Conduct tours to educate the public about the effectiveness of vegetated filter strips	*2. At least ten individuals attend each tour*
3. Conduct certification/testing sessions	*3. Attendees can demonstrate that they learned a new skill or technique as a result of the sessions.*
4. Do follow-up visits with participants	*4. Participants have implemented at least one new skill or technique in their work.*
5. Recruit volunteer labor for buffer strip maintenance	*5. At least ___ volunteers commit hours.*

(continued —>)

(continued)

Using the examples on the previous page as a guide, establish some draft steps and milestones for your project. Keep in mind that your milestones should be a way to pinpoint your progress throughout the life of the project.

Steps	***Milestones***
1.	**1.**
2.	**2.**
3.	**3.**
4.	**4.**
5.	**5.**
6.	**6.**
7.	**7.**
8.	**8.**
9.	**9.**
10.	**10.**

Pulling it All Together…

Now that you've completed this workbook, you should have all of the key elements necessary to submit a Pre-proposal for the Water Quality Improvement Grant Program. Hopefully, you will leave this workshop with a more clear idea of the following aspects of your project:

- The problem you wish to address and how you wish to address it
- A list of outcomes that you aim to achieve with your project
- The methods you will use to manage the source(s) of your pollutant(s) of concern
- How you will verify project progress and success

The Water Quality Improvement Grant Manual offers specific detail regarding Pre-proposal requirements and format. While not required, Pre-proposal submission is strongly encouraged to help ensure that you are on the right track before submitting your full application. Also, submitting a Pre-proposal will give the Water Quality Improvement Grant staff a chance to determine early in the process whether or not your project will require additional information in the application, such as a preliminary Sampling Analysis Plan. If you do not choose to submit a Pre-proposal, the steps completed during this workshop will aid you in preparing the Project Summary portion of your grant application.

For more information on Pre-proposals, please refer to Chapter 3 (Pre-proposal/Project Summary) of the Water Quality Improvement Grant Manual.

Thank you for joining us today. We hope that this workshop helped you expand upon your project ideas, as well as your understanding of outcome-based thinking. If you have any questions during the preparation of your pre-proposal or application, please contact us:

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