A garden club dedication in June 1968. Photograph by M.E. Croxton. From the Nature Center at Shaker Lakes collection.

*At times we do fall back and become discouraged, but it is not that we are making no progress. Simply, this is the very nature of life — that it is a climb — and that the resolution of each issue in turn creates other issues, born of plights which are unimaginable today. The pursuit of happiness is never-ending; happiness lies in the pursuit.*

**— Saul D. Alinsky**

***Rules for Radicals***

# 9 The Future of the Doan: The Need for Watershed Management

**The first eight chapters of this handbook depict the past and present of Doan Brook and the options for its future. We must finally ask where we want to take the brook from here. Human beings are now the dominant species in the brook's watershed — its future depends entirely upon us. If we do not act to protect Doan Brook, the Shaker Lakes will gradually clog with overgrown vegetation, and Rockefeller Park will never again be a place to appreciate the beauty of the stream.**

**As previous chapters suggest, there is much interest in the brook, and there are many exciting plans for it. Our challenge now is to make these plans a reality and to do so as effectively as possible. Changes that are made one-by-one may be beneficial, but no single change will best help the stream, and an uncoordinated series of improvements will be a poor use of resources. To best restore the brook, we need a watershed management plan that sets forth a coordinated series of actions that can be taken over a period of time by many participants.**

**The process of creating and implementing a watershed management plan for Doan Brook is far along. The NEORSD study and its Doan Brook Study Committee assessed the stream's problems, set goals for restoration, evaluated options, and developed a conceptual plan for the watershed. The task of refining the conceptual plan, making it into a concrete blueprint for restoration, and carrying it forward will be spearheaded by the newly-created Doan Brook Watershed Partnership. This chapter describes the steps that are involved in creating and realizing a watershed management plan and discusses the process of making the plan for restoration of Doan Brook a reality.**

## 9.1 Step Zero: The Commitment

Restoration of Doan Brook will stem from citizens' conviction that the brook and its parks are worth preserving and restoring. Such conviction was evident in the efforts of those who opposed the Clark and Lee freeways, who worked to stop dumping in the gorge, and who fought the construction of Site 14. It is again evident in the work that the Doan Brook Study Committee undertook to prepare the NEORSD watershed management plan. The watershed cities have supported their citizens by creating the new Doan Brook Watershed Partnership to move the watershed management plan forward. A continued commitment from both the cities and their citizens will be needed to fund and realize work for the benefit of the brook.

## 9.2 Step One: Gathering the Players

Doan Brook and its watershed span parts of Cleveland, Cleveland Heights, and Shaker Heights. The three cities have jurisdiction over some things that affect the brook — the streets, the building codes, the parks, and some of the sewers — while the Northeast Ohio Regional Sewer District (NEORSD) has jurisdiction over significant aspects of the sanitary sewer system. Ohio EPA has certain regulatory authority over water quality in the brook. The

### Existing Meetings of the Players

Various efforts toward gathering the Doan Brook stakeholders have been made over the years. The Joint Committee on the Doan Brook Watershed is an ongoing effort by Cleveland, Cleveland Heights, and Shaker Heights to coordinate activities for the benefit of the brook. In addition, the NEORSD Doan Brook Study Committee brought more interested citizens and community groups together. The newly-formed Doan Brook Watershed Partnership, created in 2001 to further watershed management, includes members from the three cities, Holden Parks Trust, the Nature Center at Shaker Lakes, and NEORSD. In addition to standing groups, the Nature Center at Shaker Lakes, University Circle, Inc., and others have convened periodic gatherings in the interest of the brook.

U.S. Army Corps of Engineers may have authority over work in the watershed's wetlands. The Ohio Department of Natural Resources has responsibility for the safety of the Shaker Lake dams. The Nature Center at Shaker Lakes and the Shaker Historical Society are intimately concerned with different aspects of the upper watershed's environment and history. The Holden Parks Trust has similar interests in the lower watershed. The Cultural Gardens Association is involved in the upkeep and restoration of part of Rockefeller Park. University Circle, Inc., is interested in controlling flooding on the brook in University Circle, and perhaps also in restoring the brook there so that it can serve as the focus of the area. Case Western Reserve University (CWRU), the brook's neighbor and the chief victim of flooding, shares these interests. Scientists and engineers at CWRU, John Carroll University, Cleveland State University, and the Cleveland Museum of Natural History are interested in the brook's biology, geology, and hydrology. In addition to these and other organizations, many individual citizens are interested in the fate of the brook and willing to be active to influence its future.

The collective energies and resources of all of these organizations and individuals will be needed to plan and carry out a successful Doan Brook restoration. The political entities with primary responsibility and jurisdiction — the cities and NEORSD — must work together in all phases of planning to form the core of the restoration effort. Other agencies must be involved when they may have useful input to offer or when they have jurisdiction over an activity. Interested institutions should be included whenever their ideas and resources might make a contribution. Finally, all interested citizens should have an opportunity to take part in watershed planning.

In 2001, the Joint Committee on the Doan Brook Watershed formed the Doan Brook Watershed Partnership to provide a focal point for those interested in Doan Brook and to further Doan Brook watershed management. The Partnership's first task will be to bring all of the players together and use the existing efforts toward coordination and communication as a springboard to the future. The Partnership should seek to combine the resources and interests of all the parties for the benefit of the brook.

## 9.3
## Step Two: Assessing the Problem

Once the players are gathered, the next step will be to assess Doan Brook's problems. We are fortunate here, because much or all of the necessary work has been done. NEORSD's Doan Brook Watershed Study has provided more information about Doan Brook than is generally available about any stream. This information and other data summarized in the earlier chapters of this handbook provide a clear picture of the brook's problems. It should be possible to review the data and move ahead with little or no additional data collection.

## 9.4
## Step Three: Setting Goals

The next step, goal setting, will be more complicated than assessing the brook's problems. A variety of sometimes conflicting interests will need to be weighed. The goals should take into account a realistic assessment of the stream's condition and its watershed and should include an unsentimental evaluation of the best condi-

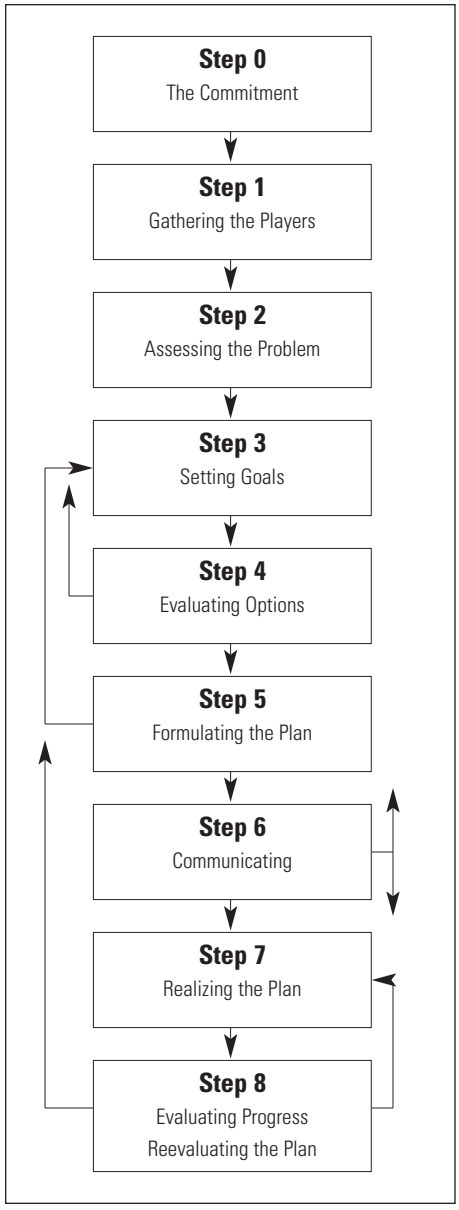


**Figure 9-1** The Watershed Planning Process

tion that is achievable for the urban brook. Overall goals should be broken down into short and long term goals, and a mechanism for measuring progress toward the goals should be established. Again, the work done by NEORSD's Study Committee has gone far toward setting goals for restoration of Doan Brook.

## 9.5 Step Four: Evaluating Options

As goals for the watershed are set, consideration of options for achieving the goals will need to begin. Goal setting, at least for short term goals, and the evaluation of options should go hand-in-hand; goals that can be readily achieved using available measures deserve special consideration. As is discussed in Chapter 8, options for restoring Doan Brook will include large projects, small projects, and citizen action. No single approach will solve all of the stream's problems, and data about the effectiveness, feasibility, and cost of different options will be incomplete.

The task of evaluating the options will be somewhat daunting in the face of many possible approaches and incomplete information about the effectiveness and feasibility of each option. To make the evaluation more manageable, it should be broken down into several stages. One workable set of evaluation stages is as follows:

- Stage 1 — Information gathering to review previous planning efforts by the NEORSD Study Committee and others (chiefly for the Rockefeller Park area [by Holden Parks Trust] and the Shaker Lakes area). Also information gathering about legal and institutional issues that may have an impact on watershed management options.
- Stage 2 — General screening to eliminate options that clearly have little benefit or are infeasible for one reason or another.
- Stage 3 — Moderately detailed screening to gather information needed to determine the effectiveness and feasibility of the remaining options. This screening should include sufficient additional information gathering to indicate whether additional options are ineffective or infeasible.
- Stage 4 — Detailed screening of remaining options to allow a comparative evaluation of effectiveness, level of impact, feasibility, and approximate cost. This evaluation should be done in sufficient detail to allow remaining options to be combined into a watershed management plan.

The criteria and methods that are used for each evaluation should be clearly spelled out, and the results of the evaluations should be documented. Although the process of defining and documenting evaluations is cumbersome, it is essential. Otherwise, options that have been evaluated and discarded will continue to re-surface, and the work of the evaluation will be endlessly repeated.

The work done by the NEORSD Study Committee will again serve as the foundation for this step; however, it may be desirable to broaden the plan developed by the Study Committee to include some more ambitious projects (development of a Gordon Park wildlife sanctuary or creation of a park around a daylighted brook in University Circle, for example) that might be accomplished by coordinating a number of different interests.

## 9.6
## Step Five: Formulating the Plan

Formulating the watershed management plan involves taking the options that emerge from the Step Four evaluation and combining them to meet watershed management goals. The final plan should include the following elements:

- A clear statement of the plan goals.
- The measures that are included to reach each of the goals and a statement of how each measure will help achieve each goal.
- A timeline for implementation of the plan.
- A statement of the priority attached to each measure included in the watershed management plan.
- Methods to monitor progress toward the goals and the effectiveness of each measure.
- A mechanism for regular reporting on the progress of the watershed management plan.
- A mechanism for keeping the general public informed about watershed management work.
- A provision for a periodic reevaluation of the plan and the progress that has been made.

In formulating the watershed management plan and the approach to monitoring the progress of the plan, it may be useful to break the watershed into subwatershed areas. This will make it easier to evaluate the impact of any given part of the plan.

While the watershed management plan prepared by the NEORSD Doan Brook Study Committee includes a good framework of goals and actions, it is largely a conceptual plan rather than a concrete plan of action. There is no timeline for implementation of the plan, and there are no specific mechanisms for monitoring progress or updating the plan over time. These elements will need to be part of the final watershed management plan in order for the plan to be implemented and in order for the long-term effort needed to restore the brook to be sustained.

## 9.7
## Step Six: Communicating

The long-term success of watershed management will require that the general public be educated about the need for watershed restoration, the progress of watershed planning, and the progress of watershed management. Communication among the various "stakeholder" entities will also be important. The watershed management plan must therefore include a sustained emphasis on communication with the general public and among participating entities.

## 9.8
## Step Seven: Realizing the Plan

This step moves the watershed management plan from paper to reality, and it is here that the commitment of the watershed's citizens and cities becomes critical. Although the effort required to create the plan is substantial, the effort that will be required to realize it is much greater. Restoring Doan Brook will require that the cities not only continue their own financial commitments, but also combine their interests with those of other institutions that surround the brook and procure additional funding from appropriate outside sources.

## 9.9
## Step Eight: Evaluating Progress, Reevaluating the Plan

Once the watershed management plan is being implemented, its success and progress will need to be evaluated, and it will need periodic review and revision. The plan for each restoration measure should be accompanied by a means for its evaluation. As each measure is implemented, its success should be monitored, and its success or failure should be considered in a periodic reevaluation of the overall watershed management plan. Reevaluation should include assessments of whether plan implementation is on schedule, whether work has been more or less effective than expected, and whether the plan should be changed to reflect the successes or failures to date. The results of the evaluation should be communicated to watershed citizens and institutions.