

# Identifying Resource Concerns

Step  
1

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## What is it?

The resource concerns identified by the Planning Committee will guide the entire planning process. The inventory work of the Technical Advisory Committee (TAC) will focus on these resource concerns. The TAC will identify potential management strategies for the concerns, and those strategies which the Planning Committee endorses will be promoted in the final management plan.

## When do we do it?

After a committee of representative stakeholders has been formed, the committee has discussed the procedural issues that will guide the planning process, and they've defined the planning area, then it is time to identify the resource concerns. Identifying resource concerns is the first step in the Nine-Step, Three-Phase Planning Process.

## How do we do it?

Use a facilitator to help the Planning Committee prepare a list of the resource concerns in the planning area. As always, the facilitator should be viewed by the Planning Committee as a neutral party. For this reason, a Planning Committee member should never facilitate the discussion about resource concerns, and sometimes local field staff should refrain from facilitating. Instead, try using a trained facilitator from outside the planning area. During the discussion of resource concerns, it is usually adequate to have the discussion facilitator also record all the ideas, though a separate recorder can be used.

Here is the process for the facilitator to use with the Planning Committee:

1.) Begin by explaining to the Planning Committee why they are identifying their concerns for the planning area, and how these concerns will guide the work of the Technical Advisory Committee and the entire planning process.

2.) Next, explain they will use a technique called "brainstorming" to prepare a list of resource concerns. Give an overview of the brainstorming process:

### Brainstorming...

- Effectively gets people "out of the box," and allows them to think more creatively
- Energizes the group
- Generates many good ideas

“ Each member takes turns identifying a concern in the planning area, until there are no new concerns. The Planning Committee avoids lengthy discussion about the merits of each person's concerns. Instead, everyone identifies all their concerns no matter how trivial or controversial. Then, they rank the entire list so those concerns that are most important to most members of the group will be addressed in the planning process. Also, at this time the Planning Committee should avoid discussing ways to solve the problems identified by the group. The primary role of the TAC is to identify potential solutions to the concerns for the Planning Committee's consideration, so lengthy discussions about how to solve the problems will occur later in the planning process. ”

3.) Review some basic groundrules with the Planning Committee before the brainstorming begins. The committee should add any additional groundrules they think are important. If the Planning Committee veers off track during the discussion (for example, if they begin to debate someone's ideas), the facilitator intervenes and reminds the group of the groundrules. Here's a list of commonly used groundrules:

#### Brainstorming Ground Rules...

- Leave rank and status at the door
- No criticism or evaluation
- Quantity and exaggeration is welcome
- Record all ideas
- Everyone participates
- There are no wrong ideas
- Build on the ideas of others



4.) After the brainstorming process and the groundrules are explained, the facilitator asks each person to silently write down all their concerns for the planning area. The facilitator asks "What are your concerns in this area?" After people stop writing, go around the room and ask each person to share their ideas. Record each idea on a flip chart in the front of the room. Here are some tips for effective recording of ideas:

- Always record ideas in the participant's words only. The facilitator/recorder should never paraphrase. Instead, ask participants to paraphrase their own ideas so the recorder can write it succinctly.
- Leave plenty of space on each page so that similar ideas can be written together.
- Set up several flip charts so the recorder can write on multiple sheets of paper with less page turning.
- As ideas are recorded on the flip chart pages, have someone besides the facilitator (e.g., field staff) post pages on the walls where the Planning Committee can see them.

5.) After there are no new ideas, the entire list of ideas is reviewed and similar ideas grouped together. Always ask the person who offered an idea whether it fits with another idea before merging them. Work with the Planning Committee to ensure the final list has discrete ideas which do not overlap with any other ideas. Also make sure everyone understands the meaning of each idea. Put letters beginning A, B, C, etc. next to each idea or cluster of merged ideas so it's clear to everyone which ideas comprise the list of concerns. Avoid using numbers. Then, review the list to see how many concerns were identified. At their discretion, the Planning Committee may wish to narrow down and prioritize their list. As a general rule, about ten or fewer concerns is usually manageable.

6.) To reduce the list of concerns, each person identifies their top concerns and a tally is made of the top scoring ideas for the entire committee. This is called the "Nominal Group Process" and it helps the Planning Committee quickly reach consensus on their top concerns. If the committee wants a list of the five most important concerns, each person will identify their top five concerns. If they want ten concerns, each person identifies their top ten concerns. The Nominal Group Process is an effective way of eliminating less critical concerns while avoiding contentious discussion.

To use the Nominal Group Process, give each person the appropriate number of sticky dots (i.e., five or ten dots, depending on the size of the desired final list of concerns). Give the group five or ten minutes to privately write down the letters of the concerns that are most important to them. When everyone is finished, have them place their sticky dots next to those concerns on the posted flip charts. Add up the number of "votes" each idea received. Eliminate low scoring ideas. Review the final list with the Planning Committee, and review how the list will be used.

## The Next Step

After the resource concerns are identified, the Planning Committee will indicate their objectives or "Desired Future Conditions" for each concern. The Planning Committee and the field staff will also identify technical experts who can address their concerns as part of a Technical Advisory Committee. During this period, the Planning Committee may also want to conduct a tour of the watershed or planning area, if they haven't already done so. Refer to the fact sheet about "Conducting Rapid Resource Appraisal Tours" for ideas.



# Determining Objectives

**Step  
2**

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## What is it?

Objectives are the goals the Planning Committee is working towards or intending to accomplish. Objectives are also known as “Desired Future Conditions” in the NRCS-National Planning Procedures Handbook. They are the Planning Committee’s expression of the desired future state of the resources compared to existing conditions. Objectives can be quantitative (expressed in numbers) or qualitative (expressed in words). For quantitative objectives, target values can be set depending on the availability of data.

## When do we do it?

The Planning Committee determines their objectives after they have identified the resource concerns in the planning area. Determining objectives usually takes place around the third or fourth Planning Committee meeting.

## Why is it important?

The Planning Committee needs to reach consensus about their objectives, and capture the objectives in writing. Reaching consensus and documenting the results is important for several reasons. Discussing objectives among Planning Committee members provides an opportunity for the committee to work out their differences early in the planning process. Without clearly stated objectives that all support, the Planning Committee will later find it difficult to select and endorse solutions to the resource problems. Further, the objectives are critical information for the Technical Advisory Committee. The Technical Advisory Committee uses the objectives to understand what the Planning Committee wants to accomplish, and they identify solutions to the resource problems that can meet these objectives.

## How do we do it?

A facilitator is used to solicit and record the objectives of the group. The facilitator sets the tone and the atmosphere of the meeting by helping participants feel comfortable with each other and encouraging participation. As always, the facilitator is a neutral party. When objectives are being developed, it is particularly important that the facilitator not be perceived as having any personal preferences as to what should happen in the planning area. For this reason, a Planning Committee member should never facilitate the discussion about objectives, and occasionally local field staff should refrain from facilitating. Instead, try using a trained facilitator from outside the planning area.

### Brainstorming “Ground Rules”

- Everyone participates
- No evaluating ideas
- Think BIG
- Leave rank at the door
- Be brief
- Be specific

For each resource concern, have the facilitator lead the Planning Committee through the following questions. All three questions should be answered for each resource concern.

**1. What desired future conditions do we want to achieve with respect to the resource problem?** (Other ways to prompt discussion include: What do we want to happen with this resource problem? In what condition do we want the resource to be? Develop a goal statement for each resource problem.)

**2. What do we know about this problem?** (Ask the committee to describe the

problem: What is happening? Where is it occurring? Why is it occurring? How long has it been happening? Has the intensity of the problem changed? What sources of information are available about the problem?)

**3. What do we need to know about this problem?** (Ask the committee: What questions do we have about this problem that need to be answered in order to solve it? What questions need to be answered in order to implement our solutions?)

Initial discussions typically require objectives be stated in qualitative, or narrative terms. After the technical advisors complete the inventories and devise management strategies, the objectives can be quantified with target values based on the benchmark conditions.

It may take several meetings to record the Planning Committee's objectives, comments and questions for all the resource concerns. The results of these discussions should be typed and distributed to all members for their review. Changes can be made immediately if necessary, or additional changes might be made later in light of findings by the Technical Advisory Committee.

If necessary, the Planning Committee can prioritize their objectives. Consider prioritizing objectives if they identify more than a few objectives for each resource concern. To prioritize objectives, use the same ranking technique explained in the RPG factsheet, "Identifying Resource Concerns."

### Why ask "What do we know?" and "What do we need to know?"

The purpose of questions #2 and #3 is to document the exiting knowledge among committee members about the resource problems, and identify areas they feel need to be further investigated. Information about "what is known" and "what needs to be known" can help the Technical Advisory Committee target their inventory work.

Stakeholders also tend to raise issues during the discussion that can potentially sidetrack their progress towards reaching consensus about objectives. For example, during the discussion someone may ask why the problem is occurring. Or another person may counter someone's opinion by citing a lack of information about some aspect of the problem. Recording these comments with Questions # 2 and #3 validates their concerns while avoiding having to answer the questions at this time. It is important to remember that technical questions about why or where problems are occurring or how the problems should be solved are left to the technical advisors as the planning project unfolds.

The facilitator's challenge is to keep this discussion focused on what the Planning Committee wants to achieve, while minimizing conversation about related issues. There will be time later to discuss these issues. Help the Planning Committee understand that their why, how and what questions are being recorded and the Planning Committee's goals documented so that the Technical Advisory Committee can provide answers for the committee's consideration.

In practice, people share their thoughts without necessarily connecting them to one of the three questions. That is, the facilitator may encourage the group to identify their objectives for a water quality problem, when someone calls out, "But how do we know the regulatory standard is fair?". The facilitator should acknowledge the comment, record it under the question, "What do we need to know?" and then continue soliciting comments. Because this is the way this exercise tends to proceed, it's helpful to use three flip charts, each headed by one of the questions. This allows the facilitator to record comments under the appropriate topic as they are offered.

**Key Points**

- Initially, most objectives will be stated qualitatively. Later, inventory work can help the Committee quantify their goals.
- Let the Committee set initial objectives (what, where, how much) for each problem.
- Encourage the committee to establish priority objectives.
- Help the committee begin thinking about who can provide technical expertise for each resource concern.

## The Next Step

After objectives are identified, it's time to organize the Technical Advisory Committee using the list of resource concerns and objectives. Also, help the Planning Committee develop a mission statement for their committee. Refer to the factsheets on "Setting Up the Technical Advisory Committee" and "Developing a Mission Statement."



# Conducting Resource Inventories

Step  
**3**

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## What is it?

“Resource inventories” are information about current conditions in the planning area. Resource inventories detail the condition of soil, water, air, plant, animal and human resources (SWAPA+H).

## Why is it important?

Resource inventories provide factual, objective data about the planning area, and are vital for sound decision-making. Resource inventories are needed to determine the severity of resource concerns, identify opportunities for improvement, and determine which strategies may be most appropriate given conditions in the planning area. They help local stakeholders understand the human interaction with the environment, and interrelationships among resources in the planning area. Inventories provide a description of current conditions— called “benchmarks”— which are compared with future conditions desired by the Planning Committee. Inventories are also used to forecast potential impacts resulting from various resource management alternatives.

## When do we do it?

Resource inventories are compiled after the Planning Committee has identified the resource concerns and objectives in the planning area. This is Step 3 of Phase One of the resource planning process.

## How do we do it?

The Technical Advisory Committee (TAC) is primarily responsible for compiling resource inventories. They are occasionally assisted by members of the Planning Committee. At a minimum, the Planning Committee should advise the TAC on where they believe problems are occurring, the severity of problems, and any questions they have about the resource concerns (see “Determining Objectives”). The TAC and the Planning Committee should communicate throughout the inventory work.

Technical advisors use various methods and procedures to collect inventory data. Inventory methodology is not detailed in this fact sheet. Instead, page 2 of this fact sheet lists typical inventories that are conducted and the specialists who can help get them done.

In addition to conducting inventories for resources related to the concerns and opportunities identified by the Planning Committee, the TAC may suggest more areas that need to be investigated. The scoping process (see fact sheet, “Scoping the Planning Process”) helps to identify which inventories need to be conducted.

# Potential Inventories and their Characteristics

## SOIL--

Erosion- Sheet and Rill Erosion, Ephemeral Erosion, Classic Gully Erosion, Streambank Erosion, Scour Erosion, Road Banks, and Construction Site Erosion, Wind Erosion

Condition- Soil Tilth, Soil Compaction, Soil Contaminants (Chemical, Animal Waste, Fertilizer, Pesticide)

Deposition-Onsite and Offsite Damages, Onsite and Offsite Safety Issues

### *Specialists who can assist with inventories:*

*NRCS State Geologist, NRCS State Soil Scientist, NRCS State Agronomist, NRCS Planning Engineers, NRCS State Streambank Stabilization Specialist, NRCS FOD Resource Soil Scientist, NRCS FOD Agronomist/Water Quality Specialist, NRCS FOD Engineer, Univ. of IL Cooperative Extension, Natural Resource Management Specialist, IDOA BLWR Watershed Management Specialist, IDOA, BLWR Sustainable Agriculture Specialist.*

## WATER--

Quantity- Excess Amounts, Inadequate Outlets, Deficient Amounts, Restricted Capacity Water Bodies, Streams, Lakes

Quality - Chemical, Physical and Biological conditions:  
Groundwater-Pesticides, Nutrients, Salinity, Heavy Metals, Pathogens

Surface Water-Pesticides, Nutrients, Pathogens, Sediment, Low Dissolved, Oxygen, Salinity, Heavy Metals, Temperature

### *Specialists who can assist with inventories:*

*NRCS State Water Quality Specialist, NRCS State Environmental Specialist, NRCS State Biologist, NRCS FOD Biologist, NRCS FOD Agronomist/Water Quality Specialist, NRCS Engineers, IL State Water Survey Geologist, IL State Geological Survey Geologist, IL EPA, US EPA, IDNR Ground Water Specialist, IDNR EcoWatch Program coordinators, Local EcoWatch Volunteers.*

## AIR--

### Quality

- Particulates
- Odors
- Chemical Drift
- Fungi, Molds, & Pollens

### *Specialists who can assist with inventories:*

*IDOA Livestock Specialist, IEPA, US Fish and Wildlife Service, Local County Health Department*

## PLANTS--

### Suitability

Plants are unsuitable, Adaptability

### Condition

Productivity, Health and Vigor

### Management

Establishment, Growth and Harvest, Nutrient Management, Pests

### Threatened and Endangered Species

### Environmental Evaluations

### Grassing Land Management Evaluations

### *Specialists who can assist with inventories:*

*NRCS Agroforester, NRCS State Biologist, NRCS State Environmental Specialist, NRCS FOD Biologist, NRCS Grazing Land Specialist, Illinois Natural History Survey Biologists, IDNR Wildlife Biologists, IDNR Fisheries Biologist.*

## ANIMALS--

### Habitat

Food, Wildlife Habitat, Cover and Shelter, Quantity and Quality of Drinking Water

### Management

Population/Resource Balance, Animal Health

### Threatened and Endangered Species

### Environmental Evaluations

### *Specialists who can assist with inventories:*

*NRCS State Biologist, NRCS State Environmental Specialist, NRCS FOD Biologist, NRCS Grazing Land Specialist, University of IL Cooperative Extension Livestock Production Specialist, IDNR Wildlife Biologists and the IDNR Fisheries Biologist.*

## HUMAN FACTORS--

### Social and Economics Considerations- Cost

Effectiveness, Financial Conditions, Market Conditions, USDA Farm Programs, Sustainability of Ag Systems, Attitudes, Values, Public Health and Safety, Client Characteristics, Client Expectations, Risk Tolerance or Aversion, Employment Trends, Population Trends, Land Use Trends, Acceptability of Alternatives, Farmland Protection

Cultural Considerations- Absence or Presence of artifacts, Significance of Artifacts Present, Effects of Alternatives

### *Specialists who can assist with inventories:*

*NRCS State Economist, NRCS Agricultural Economist, NRCS State Sociologist, NRCS State Archeologist, NRCS Field Cultural Resources Coordinators.*

## **Additional Considerations**

Before beginning inventory work, the TAC reviews existing data. For example, look at previously-developed resource plans, community plans, demographic studies, and floodplain studies. In some cases, data from these studies only needs to be updated for current conditions.

Occasionally, cost considerations or lack of technical staff make it impossible to gather all the information needed for a full inventory of certain resources. In these situations, the TAC makes the recommendation that funding should be sought to complete the inventory. A typical example is when a watershed lacks a hydrologic model to accurately assess the impact of various flood-mitigation measures. The TAC might identify general strategies for reducing flooding, but also recommend that a hydrologic model eventually be developed to better gauge the impacts of each alternative.

The inventory process includes documenting the data found. Worksheets help the TAC document the inventory data in an easy-to-understand format. Examples of these worksheets are: the Problems Identification Worksheet that is contained in the NRCS Field Office Technical Guide, the Woodland Planning Worksheet, the Sheet and Rill Erosion Worksheet, or the Grazing Land Evaluation Worksheet.

Inventory documentation includes a description of the methodology used to complete the inventories, a detailed description of the TAC findings and interpretation of results, and identification of additional information, if any, that needs to be collected in subsequent studies. This inventory information is reviewed by the Planning Committee.

## **For more information**

For additional guidance on conducting resource inventories, see the NRCS Field Office Technical Guide (FOTG). Also contact NRCS resource specialists for assistance.

## **The Next Step**

As inventory information is compiled, the data needs to be analyzed. See fact sheet, "Analyzing Resource Data " for more information about Step 4.





# Analyzing Resource Data

Step 4

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## What is it?

Analysis of resource data involves the review and interpretation of the resource inventories.

## Why is it important?

Resource data analysis helps technical advisors and the Planning Committee use the information to full advantage. Studying the resource data reveals how individual resources relate to each other, and identifies causes and effects. Analysis also helps technical advisors present the information in a meaningful way to the Planning Committee.

## When do we do it?

Although “conducting resource inventories” is Step 3 of the planning process, and “analyzing resource data” is Step 4, in reality these two activities usually occur at the same time. As resource data is accumulated, technical advisors are continually evaluating the results to determine if more investigation is needed for that particular resource, or if techniques for other resources need to be changed in light of the findings.

## How do we do it?

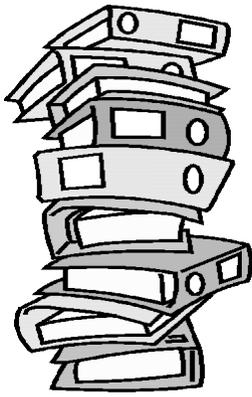
The Technical Advisory Committee (TAC) is primarily responsible for analyzing the resource inventory data, but they seek input from the Planning Committee and if necessary, use the expertise of additional agencies and groups. Manual and automated data analysis tools are used during this step. These include but are not limited to the models, GIS analysis, and Site Specific Physical Effects Worksheet in the NRCS Field Office Technical Guide, Section V. Although they are not detailed in this fact sheet, the TAC is encouraged to use such models during data analysis.

The TAC determines the type of analysis needed based on the resource concerns, opportunities and objectives of stakeholders. They also consider the planning scope, potential for adverse impacts, and the ecological and human setting of the planning area. Data analysis is comprehensive. It addresses all ecological, economic, and social factors.

The TAC uses data analysis to determine present conditions in the planning area. Working with the Planning Committee, the TAC also evaluates whether present conditions meet their objectives.

Data analysis is used to identify present and future resource trends and for ways to moderate those trends. The TAC identifies causes and effects— asking, “why is this occurring?” to identify causes and “what is occurring?” to identify effects.

The results of the analysis is communicated in a format easily understood by the Planning Committee, other local groups, and the general public.



#### KEY POINTS

- **Involve the Planning Committee, other agencies and local groups in data analysis.**
- **Establish a schedule for completing resource inventories and data analysis.**
- **Consider public opinion and communicate frequently with the Planning Committee.**
- **Review existing reports and studies for relevant data and data analysis. How do the findings compare?**

#### **For more information**

The NRCS Field Office Technical Guide (FOTG) provides a list of resource analysis methods for most resources. Also contact NRCS resource specialists for assistance.

#### **The Next Step**

After resource inventory data is collected and analyzed, the Planning Committee reviews the results of Steps 1, 2, 3 and 4 in their entirety. Review the resource concerns, opportunities, and objectives which were initially identified to see if revisions should be made given the inventory findings of the Technical Advisory Committee. New concerns may have been identified, objectives may need to be changed, or new opportunities may have been revealed.

Once the problems, opportunities and objectives are finalized, the plan moves into Phase Two. Technical advisors will formulate management alternatives that can meet the Planning Committee's objectives. Refer to "Developing Alternatives" for more information about Step 5 in Phase Two.



# Developing Alternatives

Step  
**5**

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## What is it?

Alternatives are the resource management strategies identified by the Technical Advisory Committee (TAC). The TAC develops alternatives that can solve the problems and meet the objectives of the Planning Committee. The Planning Committee reviews the alternatives with help from technical advisors. Those that the Planning Committee feels it can endorse are then included in the Resource Plan.

## When do we do it?

Alternatives are formulated after the inventory data has been analyzed.

## How do we do it?

The Technical Advisory Committee develops alternatives based on their resource inventories and analysis of the resource data. In addition to formulating strategies that will solve the problems identified by the Planning Committee, they consider acceptability to stakeholders, NRCS quality criteria, existing opportunities, and ways to prevent additional problems from occurring. Management system templates and the NRCS Field Office Technical Guide (FOTG) are used to develop alternatives.

The Planning Committee should be involved throughout the process of formulating alternatives so that decisionmaking is improved and the acceptability of solutions is continually considered. Typically, this involvement is accomplished via periodic informal presentations from technical advisors to the Planning Committee about the progress of the Technical Advisory Committee. Further, participation of one or more members of the Planning Committee on the TAC helps facilitate communication among the two groups.

Initially, multiple solutions are identified for the Planning Committee's consideration. These may include structural approaches (e.g., floodwalls or streambank stabilization measures), non-structural measures (e.g., flood-proofing or emergency evacuation procedures), market-based measures (e.g., incentive payments), and institutional approaches (e.g., regulations or buyouts). Multiple alternatives give the Planning Committee the opportunity to select the best approaches given the unique social, political, economic, and cultural considerations in their area.

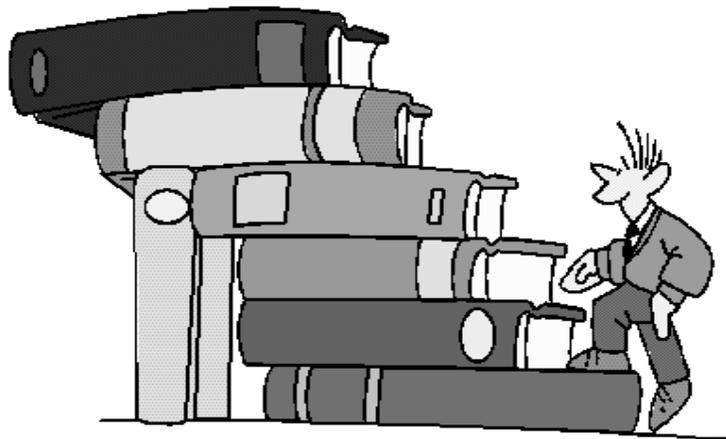
## Additional Suggestions

- Technical advisors need to rely heavily on the problem statements and objectives identified by the Planning Committee early in the planning process. Review meeting minutes and other notes taken during the meetings to understand the Planning Committee's concerns and objectives. Planning Committee perceptions are critical to identifying appropriate alternatives.

- Strive for different and innovative solutions, and avoid dwelling on costs during the early stages of identifying alternatives.
- Make a preliminary evaluation of the effects of the alternatives, including an estimate of future conditions if no action is taken. Effects should include estimates of ecological, social, economic, and other consequences of the alternatives.
- Avoid the need for environmental mitigation by developing alternatives that avoid cultural, social, and ecological damages. If alternatives cannot avoid negative impacts, try to minimize impacts, or plan to mitigate for losses per the National Environmental Policy Act (NEPA). Estimated costs to mitigate any potential ecological damages need to be shared with the Planning Committee.
- Prepare a concise summary of each alternative with maps and other supporting data to help the Planning Committee understand the suggestions.

### **The Next Step**

After alternatives have been identified, the solutions need to be evaluated and decisions made as to which alternatives are most acceptable to the Planning Committee and other stakeholders. Refer to the factsheet "Evaluating Alternatives" for more information about Step 6.





# Evaluating Alternatives

Step 6

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## What is it?

The purpose of evaluating alternatives is to help the Planning Committee make sound decisions about which management strategies they will advocate in the resource plan. Alternatives are evaluated to determine their effectiveness in addressing the concerns, taking advantage of opportunities, and meeting objectives in the planning area.

## When do we do it?

Evaluating alternatives is Step 6 of Phase Two in the Resource Planning Process.

## How do we do it?

After alternatives or strategies have been identified, the Planning Committee and Technical Advisory Committee evaluate the acceptability of the alternatives. A facilitator is used during this step, and technical advisors are available to provide information and answer questions.

Evaluate alternatives by examining the benefits and drawbacks of each alternative. During the evaluation of alternatives, careful consideration is given to social, economic, and ecological factors that influence the predicted outcome. Encourage discussion and use visual aids to help explain alternatives. Technical advisors can prepare technical specifications and a short concise narrative for each alternative. For each alternative include costs, and positive and negative benefits.

The Planning Committee considers the “effects” and the “impacts” of each alternative. The alternatives are compared to benchmark conditions to evaluate their ability to solve problems, meet quality criteria and meet the Planning Committee’s objectives. Technical advisors can help the committee evaluate the effects of each alternative and describe the impacts. The effects are outcomes or results of the management strategy. Impacts are the differences between initial conditions and the effects of the alternatives. Here is an example:

- The “benchmark” is a soil loss of 20 tons per acre per year.  
*(This is the present condition.)*
- The “effect” of one alternative is soil loss of 4 tons per acre per year.  
*(This is the effect of one alternative strategy.)*
- The “impact” is soil loss reduced 16 tons per acre per year.  
*(This is the difference between the benchmark condition and the effect of the alternative.)*

Alternatives are compared based on their potential to bring about the desired future conditions identified by the Planning Committee. They are also evaluated by their effect on other resource conditions using the NRCS Field Office Technical Guide (FOTG) quality criteria. Limitations to using FOTG quality criteria is that they do not cover all ecological, economic, and social considerations that can be used for evaluating alternatives. Another way to evaluate alternatives is to use an Evaluate Alternatives Worksheet. An example worksheet follows.



Public review or comment may be needed during the evaluation of alternatives. This will help inform the Planning Committee about the various effects and acceptability of the alternatives.

During this step, give some thought as to how the strategies might be implemented. Identify NRCS programs, programs of other agencies, and other funding opportunities that may be available to implement the alternatives. Doing this helps in the evaluation of alternatives by providing information about how feasible they may be. The Planning Committee may also need to revisit the objectives and mission statement in order to determine if they need to be changed in light of the range of possible management alternatives suggested by the Technical Advisory Committee.

### **The Next Step**

After alternatives have been evaluated, the next step is to make decisions as to which alternatives are the most acceptable to the Planning Committee and other stakeholders. These decisions will be documented in the resource plan. The factsheet "Making Decisions" gives suggestions for Step 7.

# Making Decisions

**Step  
7**

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## What is it?

Making decisions involves the Planning Committee selecting the preferred management alternatives among those identified by technical advisors. The preferred strategies will be documented in the resource plan.

## When do we do it?

Decisions about alternatives are made during Step 7 of Phase Two of the Resource Planning Process. Decision-making occurs after each alternative is evaluated for the ecological, economic and social effects and impacts as well as for their acceptability to the community.

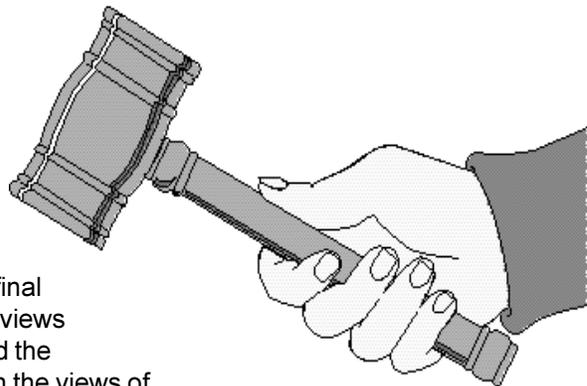
## How do we do it?

Making decisions involves using information generated during the “evaluation step” about the economic viability, social and political acceptability, and environmental integrity of each alternative.

The Planning Committee— assisted by a facilitator— reviews the evaluation information for each alternative. During this review, there should be a lot of discussion among Planning Committee members about the pros and cons of the strategies, how each member views the alternatives, how achievable the alternatives may be, and whether the alternatives can be supported by the community. This discussion is the primary opportunity for the Planning Committee to assess the acceptability and feasibility of the various management strategies.

During the decision-making discussion, the various differences among committee members in values, objectives or concerns may come to a head. Conversations may become heated as members take a stand for or against a strategy. Effective ground rules for discussions and a skilled facilitator is therefore crucial at this step. Technical advisors should be present to answer questions, clarify information, and provide feedback.

Occasionally the Planning Committee contracts with a technical writer to draft the resource plan. At a minimum, the technical writer will want to be present during discussions about alternatives.



It is important to note that the final resource plan must reflect the views of the Planning Committee (and the community at large) rather than the views of the technical writer.

It is often useful to make decisions about the whole range of alternatives in a single meeting. This may entail an entire day devoted to this task, because oftentimes the Technical Advisory Committee recommends many management strategies. Stopping discussions and starting again a week or two later may inhibit the decision-making process. It is harder for people to remember all the strategies, keep in mind their various interrelationships, and account for concerns and comments during the discussions.

### **Remember Public Input!**

Public input is critical during both evaluation of alternatives (Step 6) and during decision-making (Step 7). Public participation reveals information about socio-economic impacts, effects and acceptability which is critical for the Planning Committee to make sound decisions. Public input can be obtained in a variety of ways. Another fact sheet in the Resource Planning Guidebook gives suggestions about how to conduct public input during the planning process. If the Planning Committee makes decisions in isolation from the community, it risks the plan being rejected or never implemented. Therefore, no matter how it's done, public input is most useful during the evaluation and decision-making steps rather than only after the plan is drafted. One outcome of this public review process may be a need to modify concerns, revise objectives, or restate effects. Giving adequate time and attention to this stakeholder review process will pay off in a better resource plan that is more likely to stand the test of time.

### **Tips for Decision-Making**

- Making good decisions requires understanding the economic, social and environmental advantages and disadvantages of each alternative.
- Stakeholders, through a facilitated process, should be given the opportunity to review the proposed alternatives. Technical advisors should be available during discussions.
- The results of public input and review should be documented in the resource management plan.

## **The Next Step**

Decisions will be documented in a “draft” resource plan, along with a description of the planning process, inventory data, implementation strategies and other information deemed important by the Planning Committee. This draft resource plan will be reviewed by the local agencies and interest groups, and their comments incorporated into the final plan. Refer to “Resource Plan Format and Content.”

Once decisions are reached, implementation strategies for achieving the alternatives are devised. This means that the resource plan will include implementation information indicating who, what, when, and how the actions will be applied to the planning area. See factsheet “Implementing the Resource Plan” for advice on how to implement the resource plan.



# Implementing the Resource Plan

Step 8

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## What is it?

Implementing the resource plan involves carrying out the intended management strategies. The resource plan includes information about how the plan will be implemented. This implementation information details where, how, who, and when various actions will be taken.

## When do we do it?

In theory, plan implementation occurs after a written resource management plan is finalized. In practice, however, some elements of the plan may be implemented before the plan is finalized and distributed throughout the planning area.

## How do we do it?

Implementation of areawide resource plans requires the participation of citizens and local, state, and federal partners. Implementation entails using the resource plan to seek financial and technical support from many sources, meeting program requirements and deadlines, and designing, laying out, constructing, inspecting, and maintaining practices.

Typically, the Planning Committee is responsible for ensuring the resource plan is implemented. This often entails reconfiguring the Planning Committee into a new "Implementation Committee." Doing this gives closure to stakeholders who have been actively involved in the long planning process. Some Planning Committee members may choose to not take part in the implementation activities, and new stakeholders can be invited to help.

Implementation Committees often organize themselves as "Friends of" or "Coalition" groups. They may have many citizen members, a Board of Directors, and non-profit status. These coalitions spearhead projects, act as community advisors and advocates for the plan, and seek project funds. Their membership tends to be fluid with new stakeholders continually participating.

To help coordinate multiple activities and participants, the Implementation Committee should strategize about what needs to be done to apply the practices recommended in the plan. Regardless of whether it's included in the resource plan or documented separately, some kind of implementation strategy is necessary to determine how the actions in the plan will be applied. This will ensure that the plan is actually carried out, rather than shelved and forgotten.

Occasionally, some implementation has occurred before the resource plan is finalized. Grant money may have been obtained, floodprone homes bought out, or demonstration projects installed. The Implementation Committee should review the Resource Plan and identify any actions that are currently being pursued, and anything else that needs to be done to complete these projects. Then, for the remaining actions they should determine:

**Which activities should be a priority?** Initially consider tackling easy projects that are not controversial to build confidence and community support. Also prioritize projects based on how serious the need is and how likely it is to be successful.

**Where will the activities take place?** Locations probably were identified in the resource plan, but additional surveying or more detailed data collection may need to be done.

**Who are the responsible parties to implement the actions, and what sources of technical assistance is available to help?** Consider local, state, and federal agencies, as well as non-profit and for-profit organizations.

**How will the actions be financed?** Consider staffing needs and opportunities for local communities to provide matching monetary and non-monetary contributions.

**When will the actions take place?** Devise a tentative implementation timetable to guide the work.

## Additional considerations



- Keep the public informed and involved. Try demonstration projects, kick-off campaigns, field days, newsletters, and regularly report activities in local media and to community leaders. Seek citizen volunteers and community groups to participate, so results happen and community support increases.
- Particularly for the design and installation of structural practices, coordination at multiple levels will be needed for the survey, design, layout, certification, and maintenance of work.
- Identify projects for which financial assistance is needed. Include in the implementation strategy any steps that need to be taken to obtain funding. Identify who will apply for grants and any additional documentation that may be needed.
- Identify any mitigation issues, environmental requirements, and other information needed to implement the plan. Items to consider include federal, state and local permitting requirements, interagency agreements, and other laws and executive orders, such as NEPA and those concerning threatened and endangered species, historic properties, and cultural resources.
- Coordinate implementation with other planning and implementation bodies, especially with county, municipal neighborhood, and growth management plans. Also coordinate with the independent conservation activities of individual landowners, local municipalities, and non-government organizations.
- Identify land rights and permits that will need to be secured. Ensure all parties clearly understand their responsibilities, and that project sponsors secure necessary permits such as dam safety permits and those required under Sections 401 & 404 of the Clean Water Act.
- Identify the agreements that will be needed for cooperative projects, and for the operation and maintenance of completed projects. Consider contracting issues--for example, long-term contracts needed for upland treatments.
- Consider documenting the implementation approach, including:

- Tasks
- Responsible Persons or Organizations
- Sources of Funding and In-kind Services/Amount
- Scheduled Start Date/Scheduled Finish Date
- Actual Start/Actual Finish

Implementation Activities			
Task	Responsible Person	Sources of funds	Schedule dates
1.			
2.			
3.			
4.			

## The Next Step

Continual evaluation of the resource plan follows plan implementation. "Evaluating the Resource Plan" gives suggestions for Step 9.



# Evaluating the Resource Plan

Step  
9

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### What is it?

Evaluating the resource plan involves assessing the effectiveness of the implemented plan to ensure desired results are being achieved. Plan evaluation provides information about how implementation is proceeding, and if necessary, reveals why actual results differ from what was desired and anticipated. Plan evaluation also provides an opportunity for stakeholders to modify their objectives and actions.

### When do we do it?

Plan evaluation and plan implementation go hand in hand. As projects are implemented, their outcomes are evaluated. Subsequent actions may be modified in light of the findings.

In addition to continual evaluation, stakeholders may want to work with technical advisors to conduct a systematic plan evaluation at a specific future time. For example, stakeholders may want to do an annual plan evaluation and update.

### How do we do it?

Evaluation of the plan is conducted by stakeholders in the planning area with assistance from technical experts. Usually stakeholders are represented by the coordinating committee--or "Implementation Committee"--which was formed to coordinate implementation of the plan. To evaluate the effectiveness of the resource management plan over time, the Implementation Committee needs to be a viable and on-going organization. Evaluation also requires continued support from technical experts, and direct input from stakeholders who carry out the projects specified in the plan.

A necessary first step for plan evaluation is to identify the purpose of doing the evaluation. Stakeholders can ask themselves, "How will we use the results of the evaluation?" Stakeholders may want to evaluate some projects to determine if similar projects should be undertaken again; they may want to document results to provide progress reports to partners; or they may need to evaluate the plan in order to revise it in the future.

Details on how to conduct the analysis of specific projects is provided in various NRCS technical manuals and program manuals. During evaluation of the plan, the actual ecological, economic, and social effects and impacts are reviewed and compared to those anticipated by stakeholders. Significant differences are addressed by stakeholders, partners and technical experts.

### The Next Step

Resource management never ends. Conditions change, new opportunities arise, public support for particular projects wanes or increases and additional projects are identified. Stakeholders continually respond to these challenges, evaluating the successes and failures of the plan and modifying it as necessary.

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