



GENERATIONS



ADDRESSING ENVIRONMENTAL ISSUES FOR FUTURE
GENERATIONS OF NATIVE AMERICANS IN NEW MEXICO

Acknowledgment



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*If we poison Indian lands, we do far more harm than the damage
we cause to individuals who suffer the immediate consequences.
It must be remembered that Indian tribes are sovereign nations
defined, in large part, by the lands they occupy. Indian tribes cannot
relocate their sovereign power to new territory if their existing
territory is made uninhabitable. If we destroy tribal territory,
we strike at the very roots of tribal existence.*

Peter H. Eichstaedt, author, "If You Poison Us, Uranium and Native Americans"



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About this manual

Pueblo and tribal communities are faced with many unique and complex environmental issues. This manual has been produced in order to address these issues using a common sense approach that promotes and encourages community-driven environmental management.

The approach to environmental planning taken in this manual can be described as “community-based.” A community-based approach to any type of planning is essential in order for communities to develop a greater sense of ownership of problems and solutions. Environmental planning is most successful when the community is involved in the entire process from identifying problems to solving them. Although many environmental planning guides focus on community-based efforts, this manual is specific to pueblo/tribal issues.

“7 Generations: Addressing Environmental Issues for Future Generations of Native Americans in New Mexico,” is divided into three parts:

Part 1

Part 1 of the manual describes an approach to community environmental planning. It also describes how to use the surveys in Part 2 of this manual in community environmental planning.

Part 2

Part 2 of the manual includes the Community Environmental Planning Survey & Technical Environmental Survey. These surveys are used to identify community environmental priorities and to identify environmental issues. Both surveys are described in detail.

Why do you need this manual?

“7 Generations: Addressing Environmental Issues for Future Generations of Native Americans in New Mexico” is a manual designed for pueblos/tribes who want to accomplish environmental planning and management by using a community-based approach. The manual contains valuable tools that enable communities to prioritize and identify environmental issues of concern, and was written to help communities be more self-reliant and take responsibility for their own environmental issues.

As communities begin to take more responsibility for their own environmental concerns and issues, they will rely less on others to solve problems.

Strengthening the ability to identify and solve problems is a powerful process that can lead to a healthier and more sustainable community. Communities that are driven by the interests of their members rather than by outside interests will have a greater sense of ownership and pride in their accomplishments, and also will have a greater influence over their goals and future direction in the environmental realm or other domains. Although this manual focuses solely on selected environmental issues, the people-driven initiatives discussed are an effective way for communities to exercise their inherent right to self-govern in all areas by influencing and taking responsibility for their educational, social, judicial and health efforts.



Sun Shine Eaton, Tesuque Pueblo
Sunny Rose Eaton, Tesuque Pueblo
Alicianna Martinez, San Juan Pueblo
Lauren Vigil, Tesuque Pueblo/San Juan Pueblo



Lauren Vigil, Tesuque Pueblo
Reading a book



Part 1

Environmental Assessments and the Environmental Planning Process

Overview of Part 1:

In Part 1 of this manual you will find a definition of environmental assessments and a summary of general steps that can be followed in community environmental planning. Included within the steps (mostly in Step 3) is a description of how you can use two different surveys in this manual to build an environmental assessment of your community. These two surveys were developed specifically for pueblo/tribal communities. Both surveys are described in further detail in Part 2 of this manual.

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Defining Environmental Assessment



What does the word “environment” mean?

An elder best described the word environment as “everything outside of your body.” The word environment has different meanings to different people. Another definition of environment is everything that surrounds us, both living and nonliving. This includes plants, animals, earth, mountains, air, weather and sky. To many traditional cultures, the environment includes the natural world and spiritual world, and the connections between these two worlds.

The mission of the New Mexico Department of Environment is to manage and protect the natural resources within the boundaries of the state and the health and well-being of its people. It is the policy of the New Mexico Department of Environment to ensure precise, unbiased, complete, representative and comparable measurements.

What is an “assessment?”

An assessment is based on carefully looking at something and then making conclusions based on what you see. In other words, an assessment is the result of analyzing and evaluating something. Analyzing something involves making careful observations. Evaluating something involves making a judgment or opinion based on what you see and know to be true. For example, before crossing a river, you would analyze how deep the water is and then make a judgement, or evaluate, whether the river would be safe to cross.



What is an environmental assessment?

An environmental assessment is an analysis and evaluation of your surroundings. This may include plants, animals, air, earth and water. For example, in your area there may be barrels of contaminants (dangerous or toxic materials). The contents of the barrels, and how long the contaminants have been there may be questions you need to answer. After analyzing the site, an evaluation of possible impacts the contaminants could have on human health and the environment should be done. After all of the information is gathered the assessment is usually presented as a report or other document.

There are many ways to complete an environmental assessment in your community. One way that is described in this manual is by involving the community and using surveys. However, an environmental assessment also can be completed by intensive interviewing, research, producing a video, hiring a contractor or a combination of different methods. Surveys described in this manual can be used to gather information to make a general environmental assessment of your community.

Where do environmental assessments fit into environmental planning?

Environmental assessments are generally done in the beginning stages of planning. Step 3, “Define your community’s needs using environmental assessment surveys,” describes in more detail where environmental assessments fit into the planning process.

Environmental Planning

Environmental planning is a process of identifying, assessing and coming up with solutions to environmental issues. The goal of environmental planning is to improve the quality of the environment within a community and the health and welfare of its people.

Environmental planning in a community can be approached in a number of different ways. Described in “Community Environmental Planning Steps,” on pages 8-17, is an approach to planning that uses the two surveys described in Part 2. This manual focuses mainly on Step 3 of the Community Environmental Planning Steps (page 6).

Because communities differ in their issues, values, traditions and culture, the same approach to environmental planning may not work for all pueblos/tribes. Processes already exist that work well in some areas. If your community has an approach to planning that works, use it!

Talk with people from other communities to find out how they have approached environmental planning. Many pueblos/tribes are doing extensive environmental planning and may be able to provide you with helpful advice and technical expertise. Networking between rural communities about environmental issues will strengthen the local government’s ability to achieve its goals and maximize its use of resources.

Village Environmental Planning Steps

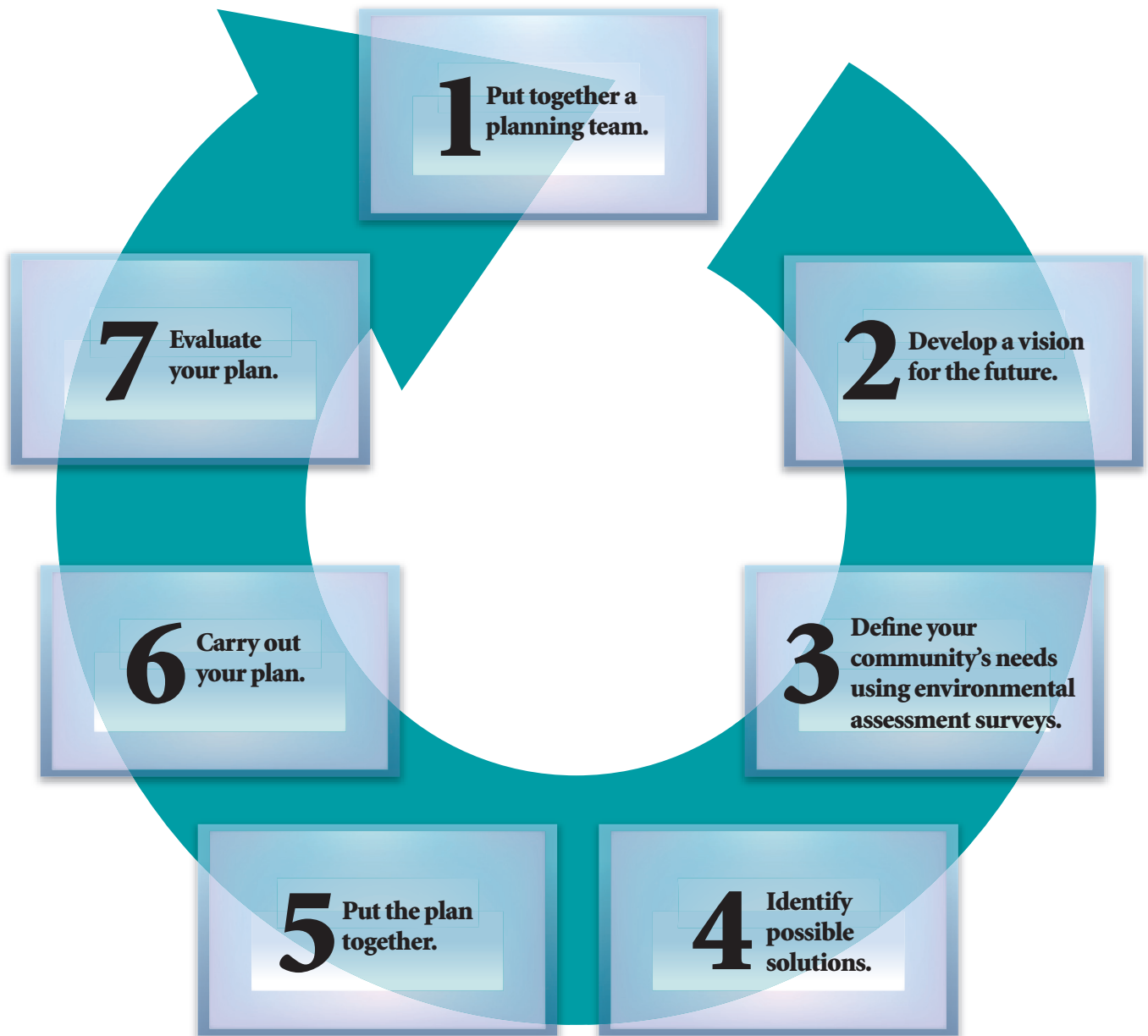


Figure 1

Community Environmental Planning Steps

Step 1: Put together a planning team

The first step in environmental planning is to find members of the community who are interested in being part of a planning team. Ask individuals, hold home meetings or hold town meetings to find out who is concerned about environmental issues and wants to invest their time and energy in environmental planning. These people should be committed to the planning process and be able to attend meetings and offer suggestions and comments.



Getting community leaders involved as well as a variety of people from different interests groups (i.e. tribal/pueblo elders, school officials, residents) will provide a wider variety of perspectives and more complete input into the planning process. Remember to include the wisdom of elders and the concerns of young people. Involving children in environmental planning is not only educational, but also better insures that environmental planning will continue with future generations.

A planning team is most effective with a group of 5-10 interested people. Selecting one or two individuals to take the lead role as environmental planners in the group can be a very effective approach. Community members to consider on your team include:

Community leaders:

- Pueblo/tribal elders
- Chief
- Community council members
- Health board members
- Regional and community corporation board members

Other Community Members:

- Environmental planners
- Water Administration officials
- Pueblo/tribal sanitation workers
- Local health aide(s)
- Community safety officers
- AmeriCorps members
- School officials
- Lodge owners/other business people
- Concerned residents – both children and adults
- Community association members
- Emergency response people
- Others?

The mission of the Nambe Pueblo Department of Environment and Natural Resources (DENR) is to manage and protect the Natural Resources within the boundaries of Nambe Pueblo, and the health and well-being of its Tribal people. It is the policy of the Nambe Pueblo Department of Environment and Natural Resources to ensure the generation of quality data derived from environmentally-related measurements whose precision, bias, completeness, representativeness, and comparability is known.

Mission Statement, Nambe Pueblo Department of Environment and Natural Resources.

Once you identify a team of interested people, present the idea at the next community or traditional council meeting. Ask the council to officially form a “Pueblo/Tribal Environmental Planning Team” and call for volunteers. The planning team can decide when and how often to meet.

Step 2: Develop a Vision for the Future

A vision is a long-term goal or dream.

A vision carries a powerful message that is based on the culture and values of the pueblo/tribe. Before a pueblo/tribe begins environmental planning or any other type of planning, the planning team should meet with community members to develop a vision for the future of the pueblo/tribe. A vision is a dream of what is possible. It is an overall picture of what the community wants to be and how it wants to look in the future. For example, a community’s vision could be that all its children are healthy.



Be daring with your vision. You may not be able to achieve everything you set out for, but your vision will give you a focus and direction. Keep in mind that communities grow with time. Visualize your pueblo/tribal community with twice the number of people and homes.



Alicianna Martinez, San Juan Pueblo - Age 6
School: San Juan Elementary

Little girl crying because the playground is dirty with trash.



Alicianna Martinez, San Juan Pueblo - Age 6
School: San Juan Elementary

Alicianna and her sister Lauren - Playing in a clean area makes them happy.

A key element in developing a vision is community involvement. All pueblo/tribal members need to be invited to participate in all stages of the visioning process. Future projects will have greater support and success if the community is involved. Encourage children, adults and elders to participate throughout the process. Involving all generations will bring a valuable exchange of information and ideas.

There are many other effective ways to get the community involved in visioning other than holding community meetings. For example, a community may communicate their hopes, concerns, fears and priorities to the environmental planners through informal discussions that take place around community offices, the post office, in school classrooms and just walking around town. The community has chosen to be involved in environmental planning in a way that fits easily into their daily routines.

Steps in developing a vision

Where did we come from?

Developing a vision begins with thinking about the values and beliefs of your community and determining which beliefs are important to the local way of life. For example, the Native American way of looking at the world traditionally viewed wasting any part of a plant, animal or other resource as disrespectful. Because of this, waste is not allowed.

Which values, beliefs and ways of looking at the world are important to people living in your pueblo/tribe today? Do pueblo/tribal members practice these? Using this knowledge keeps valued traditions and lifestyles alive and respected by community members.



Not a vision that most communities want to adopt.



Where are we now?

One way to involve the community at this stage is to ask the question, “What environmental issues are of concern to the pueblo/tribe?” Ask people to come up with all the environmental issues that are relevant to the community. Make a list of these issues. Make sure to write every person’s comment on the list. Some examples of concerns that may appear on the list include: too much garbage in the community, dust from the roads and polluted water. Later, you can use this list as a guide when developing a survey. You may want to refer to the issues identified in the Community Environmental Planning Survey on page 19 to see if there are any issues that members of the community did not mention. These issues may be added to the list if the community feels they are important. Once you have all of the issues on a list, you may want to group similar issues together to shorten your list if necessary.

The next step in visioning is to build a picture of the community; identify what works for the community, what doesn’t work, and what items are valued. Later, this picture will help create your vision.

Where are we going?

The next step in developing a vision is for community members to look at the potential consequences if certain practices are not changed. For example, a community that currently benefits from agricultural growing may feel that future crops will be harmed if the harvest continues at the same rate.

This is an important step to determine whether the community is headed in a direction that does not harm the people or the environment. In other words, will present actions threaten the community’s ability to survive or support itself in the future? If so, planners will need to consider alternative actions.

Where do we want to be?

Once you have looked at the past, where you are now and where you are going, the next step is to decide where you want to be in the future. This is your community’s vision. A vision is made up of a community’s hopes and dreams. It describes what people want to see happening in the future. The vision is arrived at through community agreement, then written in a statement. This is called a vision statement. The vision statement should be posted in clear view so that everyone can see what the environmental goals of the community are.

It is important for the community to aim for a method of decision-making where everyone’s input matters. Consensus is only reached when all people agree on a certain issue. We need to hear each voice if we are truly striving for a people-driven, community-based approach to environmental planning.

Use the vision statement to guide your community throughout the process of environmental planning. You will need to reevaluate the vision over time. Vision statements may change as the community changes.

Step 3: Define your community’s needs using Environmental Assessment Surveys

Step 3 in this model of community-based environmental planning is the main focus of the surveys in this manual. You will be able to identify some of your community’s environmental needs using the environmental assessment surveys included in Part 2.



Once an environmental planning team has been established and has met with other community members to develop a vision, the next step is to identify the needs and desires of the community.

The Pueblo/Tribal Environmental Planning Survey

After the community has identified the environmental issues during Step 2, “Where are we now?” the next step is to prioritize these issues. Ranking the importance of environmental issues with community input can lead to greater support and understanding of the planning process. The community decides the best way to prioritize these issues.

One way to prioritize issues is by doing a survey so the entire community has the opportunity to give input. This allows everyone to be involved in the planning process.

The sample Community Environmental Planning Survey on page 19 is designed for pueblos/tribes in New Mexico. This survey is a tool to assist communities in prioritizing their environmental issues. You can use this survey as a model, and add or delete issues from it based on issues specific to your community. However, the best approach is to develop the survey with the help of the community.

Community Environmental Planning Survey

The results of the Community Environmental Planning Survey show how the community ranks different environmental issues in terms of importance. The following are examples of important environmental issues based on a pueblo environmental planning survey.

1. Hazardous materials and toxic waste cleanup in dump sites and other designated areas
2. Raw sewage spills in the community
3. Community lake pollution

The results of this survey are very important to the pueblo/tribe. The pueblo/tribe might have been focusing on another environmental concern in the community. However, because the concerns were so high for other issues the pueblo decided to focus their efforts on something else. A survey can be a powerful tool for future planning, funding requests and prioritizing where funds will be spent.



A community-based survey can be a valuable tool to determine the needs and concerns of the pueblo/tribe. It provides an opportunity for the community to voice its environmental concerns and needs. For example, a community may prioritize its concerns as follows:

1. *Safe drinking water*
2. *Water quality*
3. *Water quantity*

Based on the overwhelming majority of tribal members who ranked safe drinking water and the water quality of particular water bodies as the top issues that needed attention, the community might plan for a Water Quality Program.

For more information on how to develop and use the Community Environmental Planning Survey, refer to pages 19-26 in Part 2 of this manual.

Technical Environmental Survey:

Once you have identified the environmental priorities of community members using the Community Environmental Planning Survey, the next step is to identify some actual environmental issues in your community. Completing the Technical Environmental Survey can help you do this. Using these two surveys together can be an effective way to prioritize and identify environmental issues. The two surveys are also excellent educational tools.

The Technical Environmental Survey contains a series of questions concerning drinking water, wastewater, solid waste, fuel tank farms and air quality. For example, one question on the survey asks whether there is a place in the community for residents to store used oil. If the answer is “no,” a problem is indicated. The technical survey may bring out important environmental health issues in your community. By completing all of the questions, you will become more familiar with different environmental issues in your community.

Compare the issues identified in the technical survey with results from the Community Environmental Planning survey. For example, in an ideal world, if the community identified drinking water as the most important environmental issue, the technical survey would show that there are few or no problems associated with drinking water. If the surveys don't match, then community education may be necessary. Part 2 of this manual contains a Technical Environmental Survey that you can use to assess some of your community's environmental issues.

Combine the information you gather from the Technical Environmental Survey with information you get from other sources such as different surveys, technical reports or previous assessments.



Community Clean-Up Day
Aguilar Family - Santo Domingo Pueblo



The more information that you gather about the environmental condition of your community, the more complete a picture you will have of the environmental issues affecting your community.

Involving the community

Once you have completed both surveys, it is important to review the results with the community. Individuals can then see which environmental issues residents identify as most important (Community Environmental Planning Survey Results). The community also will be able to see specific environmental problems identified using the Technical Environmental Survey.

One way that you can present the results of the survey is during a community meeting. The information can also be presented using newsletters, radio announcements or posters. Any approach that effectively brings the information back to the children and adults in the community is useful. Think of a system that would work best in your community for getting the information back to the people and use that approach. The information in Part 2 of the manual can help guide you through explaining the results of the survey to your community. The explanations also can be helpful when preparing an environmental assessment or work plan.

Residents may have identified certain issues as a lower priority on the community Environmental Planning Survey, yet the technical survey may identify problems associated with those issues. For example, let's say that the community ranked the landfill number 6 in order of priority on the Community Environmental Planning Survey. Let's also say that the Technical Environmental Survey results identified the following serious problems associated with the landfill:

- *No operator for the landfill*
- *No fence around the landfill*
- *Uncontrolled access to the landfill*
- *Lead acid-batteries and other hazardous material in the landfill*
- *Large pools of water in the landfill*
- *Animals scavenging at the landfill*
- *No community education programs about solid waste*

Our purpose is to protect and enhance the unique environment of Taos Pueblo to ensure the health and quality of life for future generations. We continue to meet this challenge through environmental research, developing tribal capacity, networking, monitoring, restoration and outreach. We intend to promote cooperative efforts to understand and help mitigate complex environmental issues on the local, regional, national and global scale.

Mission Statement, Taos Pueblo Environmental Office.

People in the community who did not see the landfill as an environmental health problem at first may feel differently once they understand the health hazards associated with a poorly managed landfill. Because some serious issues associated with the landfill were identified with the Technical Environmental Survey, the community's viewpoint may change on the issue. In other words, the results of the Technical Environmental Survey can be educational and may alter some of the perceptions identified in the Community Environmental Planning Survey. Education is a very important part of the planning process.



Students Plant Trees
2004 Earth Day - Santo Domingo School



Kindergarten students prepare to plant trees
2004 Earth Day - Santo Domingo School

Step 4: Identify possible solutions

After residents identify, prioritize and discuss the environmental issues from both surveys, it is time to find solutions. It is important to determine all possible solutions to the problems identified and what it will cost to carry them out during this step. Involving your community throughout the entire planning process and educating them on environmental issues will better prepare members to help find solutions.

Involve community members, both children and adults, as much as possible when identifying solutions. The children in your pueblo/tribe are a valuable resource. Connecting the young people to real issues in the pueblo/tribe builds a stronger educational experience and will benefit the community in the long run.

Remember to network with other pueblos/tribes when identifying solutions. There may be communities that found workable solutions to similar environmental problems. Knowledge of solutions that were tried and did not work is helpful as well.



Step 5: Put the plan together

Now that you have worked with the community to develop a vision statement, reached a consensus on perceived environmental issues and created a list of environmental problems, needs and possible solutions, it is time to produce your environmental plan.

Environmental plans are developed to achieve the community's goals in the area of environmental protection and health. The plan should focus on the highest environmental health priorities identified by the community. You want to solve as many of the urgent problems as possible using the resources available in your community.



Some things to consider when setting priorities for action include:

- *What support is needed?*
- *Which solutions involve short-term projects and which involve long-term projects?*
- *Are any issues beyond the ability of the community to control?*
- *What is the cost?*
- *Which issues are simple to solve?*



Solid waste may be a priority on the Environmental plan.

- *Are volunteers available to carry out tasks?*
Once you have determined the goals or priorities that make up your environmental plan, the next step is to break the goals down into smaller, more manageable steps. For example, if one goal is to begin a recycling program, you can break this down into the following smaller actions:

- *Raise awareness of problems with landfill*
- *Begin a solid waste/recycling education program*
- *Set up a system to collect recyclables*
- *Put together a recycling committee*
- *Identify volunteers to assist with recycling program*



Volunteer roadside clean-up.

Each of the above actions can then be broken down further into more specific steps.

Step 6: Carry out your plan

The next step in the planning process is to put your plan into action. This involves:

- *Developing a timetable for accomplishing tasks. Consider community members who need to be available for each task. If possible, plan to carry out tasks when people are available to help.*
- *Determining the costs to carry out the plans and where the funds will come from.*
- *Determining who will be involved in accomplishing each of the tasks (i.e. local government, community residents, outside organizations).*



Step 7: Evaluate your plan

After you produce and carry out your plan, it is important to measure how well it worked and make any changes necessary to improve it. Develop a good monitoring system that guides workers and volunteers in measuring accomplishments. This way you will know if the actions taken have been effective. Perhaps a community environmental advocacy group could be formed to monitor the progress of projects. This will motivate the workers as well as provide the necessary checks and balances. An ideal monitoring system uses input from all age groups from both inside and outside the community.



Outside consultants can be useful in evaluating a plan. However, in order for your planning efforts to continue and be supported by future generations, it is essential for your community to be involved with designing the evaluation plans. This creates community ownership of the plan.

An environmental plan is constantly changing. Once you have reached the point of evaluating your plan, the whole process begins again. Environmental planning is a continuous cycle. You will need to revisit your vision and the needs of the community over time. The needs of the community will change; however, the community's vision may or may not remain the same.

“The earth our mother has provided for us, cared for us, gave us life. It is our turn as her children to take care of her, and replenish what she has given us.”

Tribal Councilman Raymond Martinez, Pueblo of San Ildefonso, Department of Environmental & Cultural Preservation



Part 2

Environmental Assessments and the Environmental Planning Process

Overview of Part 2:

Part 2 of this manual includes the Community Environmental Planning Survey and the Technical Environmental Survey. These surveys are used to identify environmental priorities and issues within the community. This section describes both surveys in detail and includes examples from rural pueblos/tribes.

Part 2 - Environmental Assessment Surveys

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The Community Environmental Planning Survey

About the Community Environmental Planning Survey

What is the Community Environmental Planning Survey?

A survey is a tool used to gather information. A survey can be a written document or a list of interview questions. There are many ways to gather needed information. The Community Environmental Planning Survey is used to identify a community’s environmental priorities. The sample survey shown on pages 22-23 is used to build consensus within the community over environmental issues. The survey identifies many issues that are relevant to rural communities in New Mexico. Some of these environmental issues may not relate to your community. You may also have environmental issues specific to your community that do not appear on the survey. For this reason, each community will want to design their own survey form to better reflect local issues and concerns.

Example

Not important			Very Important		
1	2	3	4	5	Safe Drinking Water
1	2	3	4	5	Abandoned vehicles or other equipment left in or around the community

Issues covered on sample Community Environmental Planning Survey:

- *Safe drinking water*
- *Abandoned vehicles etc*
- *Beach and/or river bank erosion*
- *Pueblo dump/landfill*
- *Construction materials left by contractors*
- *Abandoned drums/vehicles/tires*
- *Raw sewage spills/sewage disposal*
- *Annual clean-up*
- *Indoor air pollution*
- *Fuel oil contaminated soils*
- *Air pollution outdoors*
- *Dead animals*
- *Trash left around the pueblo*
- *Contaminated subsistence foods*
- *Old military sites*
- *Hazardous or toxic materials*
- *Other issues*



Explanation of Community Environmental Planning Survey Issues:

A brief explanation of each issue on the Pueblo Environmental Planning Survey on pages 19-25 is provided below. It may be useful to use these explanations when conducting your Pueblo Environmental Planning Survey door-to-door.

Safe drinking water

Safe drinking water is water that is safe from disease and contaminants. Untreated or improperly treated water can make people sick, especially children and elders.

Abandoned vehicles or other equipment left in or around the village

Materials such as deserted cars, boats, old generators and engines left around the village are ugly and contain hazardous materials like antifreeze and lead-acid batteries. These abandoned materials can pollute the environment and are dangerous for children who play with them.

Beach and/or river bank erosion

Erosion of the river bank or beach means that soil or sand at the river or lakeside is being washed away by weather. Erosion can kill fish and prevent them from reproducing. Erosion also threatens housing, roads and old landfills.

Annual clean-up program

Annual clean-up programs are a good way to involve the community in improving the appearance of the village.

Why do you use the Community Environmental Planning Survey?

The Community Environmental Planning Survey is a powerful tool that can be used to build community consensus. Community-based environmental planning begins by finding out which environmental issues the community sees as most important. The Pueblo Environmental Planning Survey can be used to rank your community's perception of environmental issues. The results show a consensus on community environmental issues.

Benefits of doing a Community Environmental Planning Survey

- *Allows for input from each person in the community*
- *Involves the community in environmental planning*
- *Serves as an educational tool for the community*
- *May help your community get funding*
- *Shows potential donors that the community is involved in environmental planning*
- *Helps people in the community work together*



How is the Community Environmental Planning Survey used in planning?

Steps 2 and 3 discussed in Part 1 of this manual describe how to use the Community Environmental Planning Survey in the planning process. The Community Environmental Planning Survey should be developed with the help of your community. Use the sample survey on pages 22-23 as a model, and add or delete issues from it based on input from the community. The Community Environmental Planning Survey provided in this manual can be used as a guide to help write a survey specific to our community's needs.

When do you use the Community Environmental Planning Survey?

The Community Environmental Planning Survey is used at the beginning of the planning process to help identify the environmental priorities of the community. Part 1 of the manual describes in further detail when to use the Community Environmental Planning Survey (Steps 2-3 of the Environmental Planning Process).

What other information can be added to the Community Environmental Planning Survey?

You may choose to add items to your survey to get more information. For example, the sample Community Environmental Planning Survey in this manual asks people to rank the importance of different issues. You may also want to find out how satisfied people are with the community's efforts on each of the issues. One way you could find out this information is by using the format below in your survey:

Example

	Importance of issue					Satisfaction with the community's efforts				
	Not				Very	Not				Very
Safe drinking water	1	2	3	4	5	1	2	3	4	5
Abandoned vehicles or other equipment left in and around the community.	1	2	3	4	5	1	2	3	4	5

When you are developing your survey, remember to keep the survey simple and easy to understand. A complicated survey is difficult to answer and may end up giving you false information. Also, it is important to develop a survey that can be used again in the future to monitor the environmental changes that take place in your community. If you keep the survey the same, you will be able to see the progress your community has made over time.



Pueblo/Tribal Environmental Planning Survey

Pueblo/Tribe _____

There may be very serious environmental pollution problems in our pueblo/tribe. We need your help in ranking the environmental issues listed below.

This survey form is designed to obtain your input to develop our community environmental plan. Our goal is to make our community an environmentally safe place to live and raise families now and for future generations. Your participation in this survey will greatly assist us in reaching this goal. This survey will help us address serious problems with solid waste, hazardous and toxic pollutants and other environmental issues in our community. Listed below are some environmental health problems or issues that may need to be addressed.

Each environmental issue listed below should be ranked as to how important you believe the issue is in your community “1” is the lowest ranking (not important) and “5” is the highest (very important).

Circle the value of importance that you would give to each of the issues below. Please respond to each issue.

	Not important		Very important			
	1	2	3	4	5	
A	1	2	3	4	5	Safe drinking water.
B	1	2	3	4	5	Abandoned vehicles, boats or other equipment left in or around the village.
C	1	2	3	4	5	Beach and/or river bank erosion.
D	1	2	3	4	5	Village dump/landfill.
E	1	2	3	4	5	Construction materials that are left behind by contractors.
F	1	2	3	4	5	Abandoned drums in or around the village.
G	1	2	3	4	5	Raw sewage spills in the community and improper sewage disposal at the lagoon.
H	1	2	3	4	5	Annual clean-up program.
I	1	2	3	4	5	Indoor air pollution, such as cigarette/wood stove smoke.
J	1	2	3	4	5	Fuel oil contaminated soils in or around the village.
K	1	2	3	4	5	Air pollution problems caused by the village electric generator, vehicles or smoke from burn barrels in the village.
L	1	2	3	4	5	Dead animals and dead fish left in or around the village.
M	1	2	3	4	5	Trash left in or around the village.



Please use the space below for comments or if you feel there are other environmental health issues in your pueblo that you feel need to be addressed.

This survey information is very important to your community. Thank you for taking the time to complete it.

Optional: If you would like to receive a copy of your survey along with the results, please write your name and address below:

Name _____

Address _____

Conducting the Community Environmental Planning Survey

Who do you give the survey to?

Ideally, every person in your community should complete the survey. The information that you collect will better represent the pueblo/tribe's concerns if more people fill out the survey.

It is important to involve teachers and students in completing the Community Environmental Planning Survey. It would be interesting to compare children's perceptions of environmental issues to those of the adults.



Santo Domingo School Students

What is the best way to survey the community?

The best way to survey the community is by going door-to-door and waiting while the survey is being filled out. You will get the most responses if you administer the survey this way. This also allows people to ask questions in case there is any confusion. The disadvantage to this method, however, is that it can take a lot of time. Other methods, such as mailings or dropping the survey off at a person's house, may take less time but will also yield fewer responses. Involving community youth is a good way to distribute the work.



Children at play - Santo Domingo School



You may need to interview people and fill in the survey for them. Do not exclude people from the survey if they cannot read or understand the survey. Each person's input is very important. The pictures and explanation of survey questions on pages 19-21 may be helpful when giving the survey.

It's a good idea to get feedback on your survey from a few people before giving the survey to the entire community. This way you can correct any problems and make improvements to your survey.

How do you fill in the Community Environmental Planning Survey?

Each issue on the survey should be ranked with a number between 1 and 5 with the number 1 indicating "not important" and 5 indicating "very important." It is important that a response is given for each question, otherwise the results will not accurately show the community's views. You will be able to control this better if you give the survey door-to-door. If a person has a question about a certain question on the survey, you will be there to assist him/her.

Each person should rank the issues on the Pueblo Environmental Planning Survey according to how important each issue is to him/her every day or all of the time. For example, you are not trying to determine if people think "safe drinking water" is an important issue only at a certain moment. Rather, you want to know how important they feel "safe drinking water" is all of the time.

If the person filling out the survey does not understand one of the statements, make sure you help him/her without giving your opinion about the statement. For example, when you explain the statement "safe drinking water" on the survey, don't change the intent of the statement by the way you ask the question. Do not ask, "safe drinking water is an issue, isn't it?" Instead, ask "Is safe drinking water an issue for you?"

Encourage people to fill in the section that asks for their comments. This is a valuable part of the survey and can reveal important information that is not addressed in the rest of the survey.

Why is there a space for people to put their name and address on the Community Environmental Planning Survey?

At the end of the Community Environmental Planning Survey, there is a section for the person being surveyed to enter their name and address. This allows you to return a copy of the survey to that person along with a copy of the survey results for the entire community. Encourage people to fill this information in but let them know that it is optional. Some people may prefer not to put their name on the survey.

It is a good idea to make a list of all the people who have completed the survey just in case some people do not fill in their name and address. Then you will know who has completed the survey.

Make sure that each person who filled out a survey gets a copy of his or her survey along with the results from the community. Bringing the survey back to each person involves them in the whole planning process.



Compiling the results from the Village Environmental Planning Survey

After all the surveys are filled out, the next step is to take the answers from the surveys and summarize them to show the results for the entire community. One way you can put together the results is described below.

Using the example of “Safe drinking water” on the sample Pueblo Environmental Planning Survey, we will go through one way to compile the information. For example, let’s say that the answers below for “Safe drinking water” came from ten people who filled out the survey:

1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water
1	2	3	4	5	Safe drinking water

If you add up all the points for the drinking water statement, the total points equal 35. You can then use this number and compare it with the total points you get for other statements. For example, if you do the same for “Pueblo dump/landfill” and you get a total of 39 points, then you can conclude that the community sees the dump as a higher priority issue than safe drinking water. After adding up the answers for each issue, you can arrange the numbers in order from highest to lowest to show the issues from highest to lowest priority.



Your final results might look something like this:

Example

Priority	Position	Issue	Number of	Total on People Points	Survey Responding
1	D	Village dump/landfill		10	39
2	N	Contaminated subsistence foods		10	38
3	P	Hazardous/toxic materials left in dump		10	36
4	A	Safe drinking water		10	35
5	C	Beach and/or river erosion		10	34
6	G	Raw sewage spills in the community		10	34
7	K	Air pollution problems...		10	33
8	O	Old military sites cleanup		10	31
9	J	Fuel oil contaminated soils		10	30
10	M	Trash left in or around village		10	30
11	B	Abandoned vehicles, etc.		10	28
12	H	Annual clean-up program		10	27
13	F	Abandoned drums in village		10	26
14	L	Dead animals and fish left around village		10	22
15	Q	Other issues beyond village control		10	20
16	I	Indoor air pollution		10	16
17	E	Construction materials left behind		10	14

The Technical Environmental Survey (TES)

Once you have identified the environmental priorities of community members using the Village Environmental Planning Survey, the next step is to identify some actual environmental issues in your community. Completing the Technical Environmental Survey can help you do this. Using these two surveys together can be an effective way to prioritize and identify environmental issues in your community. The two surveys are also excellent environmental tools for your community.

About the Technical Environmental Survey (TES)

What is the Technical Environmental Survey?

The Technical Environmental Survey includes the following sections: community information, drinking water,

We, the unique Tribal Employees of San Juan Pueblo a sovereign, diverse, traditionally and culturally based entity operating within the Pueblo Land Grant, with its own language, are here to serve, provide for and protect our community, people, environment and surrounding communities through the guidance of the Tribal Council and progressive administrative leadership.

Mission Statement, San Juan Pueblo Tribal Employees.



wastewater, solid waste, fuel tank farms and air quality. The survey helps to identify environmental issues relevant to rural New Mexico communities. Most of the questions require a yes/no response and many ask for further information.

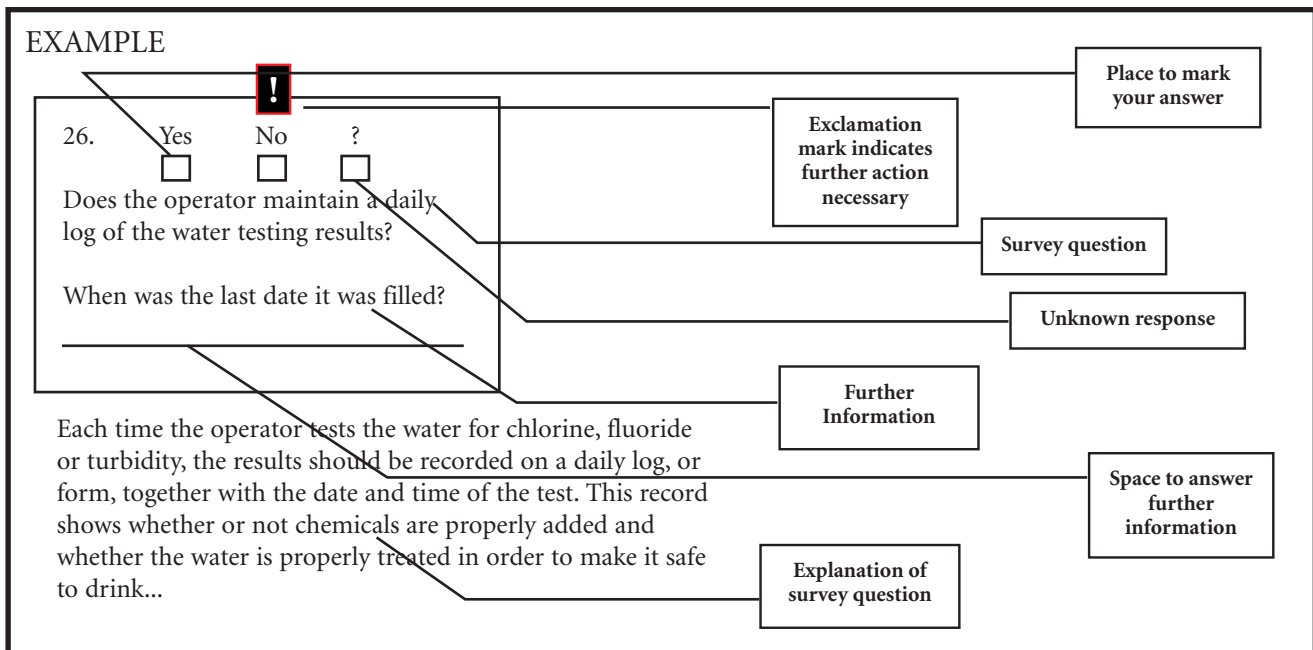
Why do you use the Technical Environmental Survey?

The Technical Environmental Survey is used to identify environmental issues in your community. The identified issues can then be used to help develop a plan of action.

Who fills out the Technical Environmental Survey?

Any interested person in the community can fill out the Technical Environmental Survey. Only one person needs to fill in this survey. The person completing the survey is not expected to know all of the answers to the questions. The questions require the help of many people in the community.

Following is an example of the survey:



Each section on the survey has a box at the beginning that identifies who to ask for information. For example, in the “drinking water” section, the person to ask for information is the water treatment plant operator. You may need to set up appointments with the people you need to speak with in order to complete the survey.

The questions on the Technical Environmental Survey are written so most people can pick up the survey and complete it. This manual provides an explanation for each question on the survey in order to assist the person conducting the survey.



How is the Technical Environmental Survey used in environmental planning?

The Technical Environmental survey is used in environmental planning to help identify environmental issues and needs in your community and to assess current environmental conditions. The results of the survey can be used to help develop an environmental plan.

When do you use the Technical Environmental Survey?

The Technical Environmental Survey is used in Step 3 of the environmental planning process described in Part 1 of the manual: “Define your community’s needs using environmental assessment surveys.” See pages 12-15 for more details.

How do you fill in the answers on the Technical Environmental Survey?

Most of the questions on the Technical Environmental Survey require a yes/no response. There is also a space to mark if the answer is unknown (?), however, the response “?” should only be used as a last resort. The person filling out the survey should make every effort to contact the right person in order to get a response for each question.

Some questions in the survey require more information than just a yes/no response. There is a space on the survey form to write in additional information. This information should be filled in as completely as possible. Often, these added comments are the most valuable information. See Appendix 1 for a copy of the Technical Environmental Survey you can complete for your community.

How does using the Technical Environmental Survey help you identify environmental problems in your community?

When you look at the results of the survey, if the symbol “*” appears above one of the responses, this indicates a problem that requires further action. Some problems are more serious than others, but the same symbol is used for all questions. If the question does not have a “*” above one of the responses, the answer does not necessarily indicate a problem.



Santa Domingo Pueblo students - Earth Day 2004



Technical Environmental Survey

Date

Surveyor & Title

This survey is a list of questions about environmental issues that may be present in your community. To the best of your ability and knowledge, answer each question that applies to your community. Most of the questions can be answered with a Yes, No or ? (Unknown) response. Many questions will ask for a specific answer that involves time or amounts. Some of the questions will require you to contact the village for additional information on time or amounts. Some of the questions will require that you contact the village council or the person(s) or operator responsible for a particular facility, such as the water treatment plant. As necessary, find out the answer to each question using the response “?” only as a last resort. Please note that an exclamation mark is used to show a response that indicates a problem.

General Community Information

1. Does your pueblo/tribe have a tribal council? Who is responsible for the sanitation services in your village?

Many pueblos/tribes have more than one governing council. The purpose of this question is to identify the council(s) that is responsible for making decisions about sanitation services in your pueblo/tribe. This way concerns can be directed to the correct governing council.

The sanitation facilities (i.e. drinking water system, sewage system and the landfill) in your village are owned by one of the village governments. Residents in the community, however, often refer to the water plant or the sewage plant as the “PHS” or the “Community Safe Water Plant.” This name can be confusing because some people believe that these organizations own and are responsible for the operation of these facilities. This is not true. The village or Tribal Council owns and is responsible for the safe operation of these facilities, the responsible council can take steps to address the problems.

2. Does the pueblo/tribe regularly collect fees for village services? If yes, which services? Water, sewer? If no, how does the village pay for the services?

Providing safe water, safe sewage disposal and safe landfills for a pueblo/tribe require money. A community that does not regularly collect user fees will not be able to hire trained operators to properly operate and maintain the village sanitation facilities. If the village wants to improve sanitation services, it is important that the village councils and residents understand that user fees must be collected to pay for those services.

Having a system in place for regularly collecting user fees can be very helpful when applying to the Village Safe Water Program (at the department of Environmental conservation) for funding. Your community has a greater chance of getting funding for projects if there is a system in place for collecting user fees for village services.

3. Does your tribal council receive technical help from environmental/public health programs or agencies?

4. Are local pollution problems an issue with the tribal council? If yes, what issues?

Pollution refers to contamination of the air, land or water with materials that are harmful to living things. Examples of different pollution problems that may be issues in your community include: littering in and around the community, an overflowing dump, flooding of the sewage lagoon, unsafe water, improper disposal of batteries, waste oil, fuel spills, abandoned drums and vehicles, and toxic smoke from burning plastics.

The tribal councils have the ability to make decisions that affect the entire community. If pollution problems are an issue with the councils, there is a greater chance of these problems getting attention. It is important that the council representatives are educated on pollution issues so they are better able to make decisions that will protect the health of the community.

5. Does the community school have an environmental education curriculum? If yes, which grade levels?

The school district should include environmental education in the curriculum at all grade levels. Environmental concepts can be included in the school curriculum in all subject areas. There is no need to have a separate class to cover environmental information. With planning, this information can be applied to mathematics, language arts, science, history and other subjects.

Environmental programs that are community-based and centered around local environmental issues can be a very effective way to get information across. They also can benefit the community.



6. Does the community have any environmental programs or groups that meet regularly?

One way to involve the community in environmental issues is to form groups and/or begin programs that focus on environmental issues. Environmental groups can be helpful in accomplishing the environmental and public health goals of the community. A committed group that meets regularly and gains the support of the community will be a benefit to the pueblo/tribe. Examples of groups or programs that cover environmental issues include: annual clean-up groups, environmental newsletter committees, environmental work groups and recycling committees. Sometimes, villages include environmental issues within programs such as spirit camps.



Pollution prevention concepts are often integrated into environmental programs.

What is pollution prevention?

Pollution prevention means not creating waste in the first place. Activities that avoid, eliminate or reduce waste at its source prevent pollution. For example, using the same canvas bag over and over again at the community store prevents the waste of many plastic bags.

Pollution prevention requires a change in thinking from asking the question, “How do I properly dispose of my waste?” To “How can I prevent waste in the first place?”

Mind pollution is a short-sighted, self-centered and resource-consumptive attitude toward the Earth. Mind pollution is when a person believes and acts as if he or she is not a community member of the Earth. Mind polluters either take pleasure, are unaware or do not care if they walk heavily upon the Earth. People with mind pollution act as if they plan on leaving pollution and contamination for their children and those 7 generations forth.

It is Time

It is time to protect our land, our natural resources and our mother Earth. For years to come this place we now live in and on, this place we call home, must be protected. It is important to remember that what we do today makes an impact on what is here tomorrow - for our children, our grandchildren and all the generations to come.

Copies of this manual can be obtained from:
The New Mexico Environment Department
Pollution Prevention Program
P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-0677