Environmental Assessment and Environmental Planning Process
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, ocean, air, weather and sky. To many traditional cultures, the environment includes the natural world and spiritual world, and the connections between these two worlds.

For example, in Yupiaq the word *ella* is the closest translation to the English word environment. When *ella* is combined with different Yupiaq words, it can mean weather, world, creative force, god, or awareness.

“This we know: the earth does not belong to man, man belongs to the earth. All things are connected like the blood that unites us all. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself.” Chief Seattle, Chief of the Suquamish Indians
What is an “assessment”?

An assessment is the result of carefully looking at something and 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 on a snowmachine in the winter, you would analyze how thick the ice is and then make a judgment, 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 Galena there is an old military site. When doing an assessment of the site, the community analyzed how many barrels of contaminants (dangerous or toxic materials) existed, the contents of the barrels, and how long the contaminants had been there. After analyzing the site, they evaluated the possible impact that the contaminants could have on human health and the environment. 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. In the past you may have attended other solid waste or community planning trainings that taught you a method for conducting assessments. One way that an assessment can be done is by involving the whole community and using surveys. This method is outlined in this manual using two different surveys to gather information to make a general environmental assessment of your village. Although the manual teaches two specific survey methods, an environmental assessment can also be completed by intensive interviewing, research, producing a video, hiring a contractor or a combination of different methods.

Where do environmental assessments fit into environmental planning?

Environmental assessments are generally done in the beginning states of planning. Step 3 “Define your community’s needs using environmental assessment surveys,” in the process described is where environmental assessments fit into the planning process described in this manual.
Environmental Planning

What is “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 and the health and welfare of people.

Environmental planning in a community can be approached in a number of different ways. Described in “Village Environmental Planning Steps” on pages 10-23 is an approach to planning that uses the two surveys - Village Environmental Planning Survey and Technical Environmental Survey.

Because community issue’s differ in values, tradition, and culture - the same approach to environmental planning may not work for every community. Some processes already exist that work well in a community. If your community has an approach to planning that works, then use it!

Talk with people from other villages to find out how they have approached environmental planning in their own community. Many villages in Alaska 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 and community successes will strengthen the local government’s ability to achieve its own goals and maximize its use of resources.

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**What is “community-based environmental planning”?**

*It is planning that is performed by local individuals and groups in the community to address the community’s environmental concerns.*
Figure 1. Cycle of steps in village environmental planning.
Village Environmental Planning Steps

Step 1: Put together a planning team

The first step in village environmental planning is to find members of the community who are interested in being part of a planning team. Ask individuals, hold home meetings, and hold community meetings to find out who is concerned about environmental issues and wants to invest their time and energy in environmental planning.

In Cordova, the environmental planner used a survey to find community members who were interested in being on a planning team. Over 30 people responded that they would like to be involved in environmental planning in some way.

Getting community leaders involved, as well as, a variety of people from different interests groups (i.e., water operator, school officials, residents, business owners, etc.) will give more complete input into the planning process. Remember to include the wisdom of elders and the concerns of youth.

Involving children in environmental planning is not only educational, but also better insures that environmental planning will continue with future generations.

Photo Courtesy Bill Stokes
A planning team is most effective with a team 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:**
- Village elders
- Chief
- Mayor
- Village Council Members
- Health Board Members
- Regional Board Members
- Village Corporation Board Members
- Youth representatives

**Other Community Members:**
- Environmental staff / planner
- Water Operator
- Village Sanitarian
- Local Health Aide(s)
- AmeriCorps Member
- School officials
- Lodge owners/other business people
- Concerned residents- both youth and adults
- Community association members
- Emergency response people
- Village safety officer
- Others?

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

If you have any funding available, some communities have provided a small stipend to each planning member following each meeting, as opposed to using the money to hire a contractor to create the plan for them. This creates an incentive for each person to attend all meetings and keeps the funding in the community.
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 community. Before a community begins environmental planning or any other type of planning, the planning team gathers with community members to develop a vision for the future of the community. 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 children in the village 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 villages grow with time. Vision your community with twice the amount of people, twice the number of homes, twice the 4-wheelers, and twice the fishing boats on the river.

A key element in developing a vision is community involvement. All community 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. 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: the community of Galena communicates their hopes, concerns, fears and priorities to the environmental planners through informal discussions that take place around the village offices, the post office, during river trips, in school classrooms and while just walking around town. The community has chosen to be involved in environmental planning in a way that fits easily into their daily routines.

“Our leaders were instructed to be men of vision and to make every decision on behalf of the seventh generation to come; to have compassion and love for those generations yet unborn.”

Chief Oren Lyons

Accomplishments identified at a community “visioning” meeting in Aniak
Photo Courtesy Bill Stokes
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 Koyukon people’s way of looking at the world traditionally viewed wasting any part of a plant, animal or other resource as disrespectful. Because of this, waste was not allowed.

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

Where are we now?

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

One way to involve the community at this stage is to ask the question: “What environmental issues are of concern to the community?” Ask people to come up with all the environmental issues that are relevant to the village. Make a list of these issues. Make sure to write every person’s comment on the list.

Examples of concerns that may appear on the list include: too much garbage in the village, dust from the roads, and polluted river water. Later, you can use this list as a guide when developing a survey. 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 Village of St. Paul used a similar approach to identify the cultural strengths of the community in an effort to do culturally sensitive economic planning. They used a video to document what people saw as cultural strengths. Some of the strengths identified were the importance of women cooking for large groups, and the fishing knowledge and experience of the men. After building on the fishing knowledge of the community, St. Paul developed a successful halibut industry.

COMMUNITY RELATIONS TIP
Make sure all concerns that are brought up by the community are addressed. Hard feelings will result if individuals’ concerns are not acknowledged.
Where are we going?

The next step in developing a vision is for community members to look at the direction the community will go if certain practices are not changed. For example, a village that currently benefits from commercial fishing may feel that the future fish population 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, the community 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 a picture of what the people want to see happening in the future. A community’s vision is arrived at through community consensus, or agreement, and then written down in a statement. This is called a **vision statement.**

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.

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**THE VILLAGE OF ILIAMNA’S VISION STATEMENT**

Through individuals working together for a better community, Iliamna will maintain the quality of life where residents and visitors will respect the people, land, resources and culture.
Step 3: Define your community’s needs using environmental assessment surveys

This step in 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.

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. Consider the consequences of mining and ecotourism, backyard burning or the impacts that climate change may have on your communities future.

The Village Environmental Planning Survey (VEPS)

After the community has identified the environmental issues and developed a vision for the future, the next step is to prioritize these issues. Ranking the importance of environmental issues with community input can lead to greater community 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. You can use the survey in this manual 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. Each and every person in the community should be encouraged to participate in the survey. A good tool to include every person in the community is to create a list with everyone on it, then make it your mission to get completed surveys from each person on the list. Hand delivering the survey and asking each person if they have a few minutes to complete it, usually helps to get a higher participation rate. If the person doesn’t have time, ask them when a better time would be and let them know that you’d be back.

Although, in person surveys are often more time intensive, they allow you to explain why the survey’s being done, allows you to answer any questions they may have and results are immediate.
Barrow’s Village Environmental Planning Survey

The results of the Village Environmental Planning Survey show how the community ranks different environmental issues in terms of importance. After conducting a Village Environmental Planning Survey in the Native Village of Barrow, the results showed that the community viewed the top 3 most important environmental issues as:

1. Hazardous materials and toxic waste cleanup in dump sites and other designated areas;
2. Raw sewage spills in the village and raw sewage disposed at the lagoon; and
3. Barrow landfill (dump site).

The results of this survey were very important to the Native Village of Barrow. Originally, the North Slope Borough Assembly was considering cutting 1.5 million dollars in Capital Improvements Program funding for the closure of the Barrow landfill.

However, because the sewage lagoon, hazardous materials and toxic waste, and the Barrow landfill were the highest priority issues for the Barrow Tribal Membership, the Assembly eventually took action to keep the 1.5 million dollars for the Barrow landfill closure in the budget for the coming fiscal year.

Eyak’s Village Environmental Planning Survey

The Village of Eyak has also used the Village Environmental Planning Survey. The top 3 issues identified in the Eyak Environmental Survey are:

1. Safe drinking water
2. Eyak Lake water quality
3. Orca Inlet water quality

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, Eyak’s Environmental Program began planning for an Eyak Tribal Water Quality Program.
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.

The Technical Environmental Survey is 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 village for residents to store used oil. If the answer is ‘no,’ it indicates a problem. By completing all of the questions you will become more familiar with different environmental issues in your community.

Combine the information you gather from the Technical Environmental Survey with information you get from other sources such as technical reports, prior surveys conducted or previous assessments. The more information that you gather about the environmental condition of your community, the more complete picture you will have of the local environmental issues that can negatively affect the local environment and human health.

Once both the Village Environmental Planning Survey and the Technical Environmental Survey is complete compare the issues identified. For example: if the community identified drinking water as the most important environmental issue - the technical survey should show that there are few or no problems associated with drinking water. If the surveys don’t match - community education may be necessary.

Involving the community

It is important to review the results with the community. Individuals can then see which environmental issues the community identifies as most important (Village 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 to the community is during a community meeting. The information can also be presented using newsletters, radio announcements, fliers, posters, etc. 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 village for getting the environmental news and information to the community. The information in this manual can help guide you through explaining the results of the survey to your community. The explanations can also be helpful when preparing an environmental assessment or work plan for your community.

The community may have identified certain issues as lower priorities on the Village Environmental Planning Survey - yet the technical survey identified problems associated with those issues.

For example: the community ranked the landfill number 6 in order of priority on the Village Environmental Planning Survey and The Technical Environmental Survey results identified the following issues associated with the landfill:

- No operator for landfill
- No Fence around the landfill
- Uncontrolled access to the landfill
- Lead-acid batteries and other hazardous Materials in the landfill
- Large pools of water in the landfill
- Animal scavenging at the landfill
- No community education programs about solid waste.

People in the community who did not see the landfill as an environmental health problem at first may feel different 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 Village Environmental Planning Survey...

**Education is a very important part of the planning process.**
Step 4: Identify possible solutions

After the community identifies, prioritizes, and discusses the environmental issues from both surveys, it is time to find solutions. At this step, it is important to determine all possible solutions to the problems identified and the costs to carry them out. Involving your community throughout the entire planning process and educating them on environmental issues will better prepare community members to help find solutions.

Involve community members - both children and adults - as much as possible when identifying solutions. Connecting the young people to real issues in the community builds a stronger educational experience and benefits the community. It is very important to consider all of the solutions suggested. Every idea is a good idea and every person participating should feel that their ideas are valued. When it comes to implementing a solution, all suggestions can then be evaluated more thoroughly.

Remember to network with other communities when identifying solutions. There maybe Villages that found workable solutions to similar environmental problems. Knowing solutions that did not work is also helpful. Your EPA IGAP Project Officer, Regional Health Corporation, or Native Association may be able to connect you to villages with similar issues.

BATTERY RECYCLING
For the most up to date storage and collection information contact Total Reclaim in Anchorage or visit them on the web.

A simple solution for keeping batteries from polluting the landfill
Photo Courtesy Bill Stokes

Battery recycling in King Cove
Photo Courtesy Desirae Roehl
Step 5: Put the plan together

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

Environmental plans are developed to help lay the road map for the goals or priorities that the community has identified in the area of environmental protection and health. It is important to put the plan down on paper. This will help ensure that the issues identified will still be visible even if there is a turn over in staff. A written plan will help current and future staff identify areas of concern and to determine if work still needs to be done. Many granting agencies also require some sort of plan when applying for funding.

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 village to control?
- What is the cost?
- Which issues are simple to solve?
- Are volunteers available to carry out tasks?

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 village. Although it’s important to put the highest priority plans at the top of the list, keep in mind that you may be able to address some less urgent issues with limited resources. For example: sanitation presentations at the school are a simple goal to achieve. Consider simple achievable goals when prioritizing issues. Pay special attention to any solutions that can address more than one problem at a time.

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
- Identify volunteers to assist with recycling program
- Set up a system to collect recyclables
- Put together a recycling committee
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 when you would like to accomplish tasks. Consider community members who need to be available for each task. If necessary, plan to carry out tasks when people are not away fishing, hunting or gathering.
- Determine the costs to carry out the plans and where the funds will come from.
- Determine who will be involved in accomplishing each task (i.e. local government, individuals and outside organizations.)

Use your plan to help you figure out what to write into grant proposals. For example, use it to help when developing your work-plan activities for the EPA Indian General Assistance Program (IGAP) grant.

Savannah Yatchmeneff tests out the recycle bins crafted out of old fish totes in King Cove
Photo Courtesy Desirae Roehl & Agdaagux Tribe of King Cove
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 the plan. Develop a good monitoring system that guides workers/volunteers in measuring accomplishments. This way you will know if the actions taken have been successful or effective. Perhaps a community environmental advocacy group could be formed to monitor the progress of the 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 within 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.

COMMUNITY RELATIONS TIP
Give constant feedback to the community. In order to build the community’s trust, they need to be informed of both good and bad developments at every step.