Community Action on Air Quality

A **Guidebook** to
Community Involvement in
Air Quality Monitoring and Enforcement

By Cindy Chiasson

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About the
Environmental Law Centre

The Environmental Law Centre (Alberta) Society is a non-profit charitable organization that has been operating in Alberta since 1982. The Society believes in making the law work to protect the environment and, in support of this objective, provides services in environmental law education and assistance, environmental law reform and environmental law research. The Society operates the Environmental Law Centre, which is staffed by four full-time lawyers, a librarian and a small support staff. The Centre maintains an extensive library of environmental law information that is accessible by the public free of charge.

Funding is provided to the Society in part by the Alberta Law Foundation and also through the generous support of the public. The Centre also accepts private and government research contracts for work relevant to and consistent with the Society's objectives.

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Preface

In the beginning…

When I began working as staff counsel at the Environmental Law Centre in late 1997, my chief responsibility was to complete a project titled "Community Monitoring" that had been developed and begun by my predecessor, Elizabeth Swanson. At first blush, I thought that the project sounded simple enough: carry out pilot programs in two Alberta communities to educate members of the public about environmental monitoring and give them skills to become actively involved in monitoring activities. The programs were to be carried out in a way that would bring the participants together with experts from government and industry in a non-confrontational setting.

Once I began to work on this project in greater detail, I found that it was a much more involved and detailed task that I had first expected. It was necessary to deal with existing, and at times contentious, relationships in the pilot program communities. As the Centre was bringing this project into Alberta communities where we may not have been actively involved before, it was important that we dealt with the needs and concerns of the community as a key element of the pilot programs.

Why was this project created?

The Community Action on Air Quality project grew out of the initial Community Monitoring project mentioned above. Staff lawyers at the Environmental Law Centre saw a need that arose out of the public's increasing interest in becoming actively involved in protecting their environment. All too often, that interest has been accompanied by frustration when citizens have been unable to access environmental information related to their concerns. As well, many of these people mistrust the existing system of regulated environmental protection, in which much of the responsibility and control rests in the hands of government and industry.

At the same time, the Centre also heard concerns from industry about a lack of context in which the public could understand environmental information. Unfortunately, this often arises from a general reluctance on the part of industrial operators to make environmental monitoring information readily accessible to the general public and to provide the additional information necessary to allow citizens to fully understand the monitoring data.

There have also been concerns that there is a closed loop within which environmental monitoring information flows between industry and government, with little or no access for concerned members of the public. With the advent of the *Freedom of Information and Protection of Privacy Act* and the public information provisions of the *Environmental Protection and Enhancement Act*, this has become less of a problem. However, there is much that both industry and government can do to improve the situation and create a more open atmosphere of information sharing and cooperation.

The past several years of government cutbacks and deregulation have contributed to an atmosphere of concern and mistrust for many who are involved or interested in environmental protection. This situation has also placed government staff who are involved in the day-to-day regulation of environmental matters in a difficult and often untenable position, as many are pushed to the limits in carrying out their regulatory duties.

By developing and carrying out the Community Monitoring Project, which included the pilot program that lead to Community Action on Air Quality, we hoped to address some of these concerns. The Community Monitoring Project involved three pilot programs, each focusing on a different area of environmental concern or particular segment of the population. One pilot program was carried out in Fort Saskatchewan, Alberta. This pilot dealt specifically with air quality issues and provided the foundation for Community Action on Air Quality. Chapter 1 provides more details about the Fort Saskatchewan pilot program.

What did we hope to achieve?

The main aims in carrying out the pilot program in Fort Saskatchewan were the following:

- to provide interested members of the public with information about air quality issues and the related legal, technical and scientific context in which air quality monitoring and enforcement takes place;

- to provide these people with skills to find information about their air quality concerns and critically evaluate such information; and

- to bring these people together with government regulators, industry representatives and technical experts in a cooperative setting to share concerns and information, as a means of building familiarity and better understanding of the actual and potential roles of all parties in environmental monitoring and enforcement.

Ultimately, we hoped to provide participants in the Fort Saskatchewan pilot program with the skills to

- participate in air quality monitoring activities where possible;

- access information about environmental monitoring; and

- critically assess such information, particularly monitoring results, regardless of who did the monitoring.

Ideally, these skills and the exposure to government and industry representatives involved with air quality monitoring will give the participants the confidence to ask questions and obtain information about their environmental concerns. Although this pilot program focused on air quality issues, many of the skills taught are broad enough to be used to act on concerns about other environmental matters.

How did Community Action on Air Quality come about?

Upon completion of the pilot programs, we evaluated them to gauge the results. Our own evaluation showed positive results in terms of how participants felt about the skills they had gained and how they felt they could use these skills in the future. We also gained a number of constructive suggestions on how such programs could be improved in the future. A consultant also carried out an independent evaluation of the Fort Saskatchewan pilot program. This evaluation confirmed the positive results we had seen in our own evaluation and also provided some valuable input and guidance for future planning.

Community Action on Air Quality seeks to move on from the positive results of the pilot program, by using the experience gained and the information gathered from it to develop this information package. Our intent is to provide an information resource and support for groups or individuals in Alberta that have concerns about air quality in their communities and want to learn how they can take action on those concerns.

Thanks to those who helped

There are a number of people who deserve thanks for their assistance to this project. First, special thanks go to Elizabeth Swanson, who over the course of her ten years with the Environmental Law Centre devoted her energies to ensuring that the environment was protected and that the ordinary citizen was able to understand and participate in environmental matters. Without her concern and vision, this project would never have been created. I thank Elizabeth for having created this excellent project, which has been a stimulating learning experience for me.

Recognition must also go to the funders of this project. The Fort Saskatchewan pilot program was funded in large part by Action 21, a community funding program of Environment Canada. The remaining costs were funded through a creative sentence imposed by the Provincial Court of Alberta under the *Environmental Protection and Enhancement Act*. Thanks go to Susan McRory, Special Prosecutor, Alberta Justice for overseeing the creative sentence.

There were a number of people who assisted in both the Fort Saskatchewan pilot program and the development of this materials package. I appreciate the contributions made by the following members of the committee that helped plan the program for Fort Saskatchewan:

Gary Bodeux, *Fort Saskatchewan Environmental Advisory Commission*
Nola Lamble, *Geon Canada Inc.*
Lan Ngo, *Fort Saskatchewan Environmental Advisory Commission*
Darlene Orsten, *City of Fort Saskatchewan*
Rob Patzer, *Environment Canada*
John Torneby, *Alberta Environmental Protection*

I also want to thank the following individuals who made presentations at the Fort Saskatchewan pilot program and contributed materials to the information binders provided to program participants:

George Bayard, *Alberta Environmental Protection*
Renee Craig, *Alberta Environmental Protection*
Nola Lamble, *Geon Canada Inc.*
Bill Macdonald, *Alberta Environmental Protection*
Karen McDonald, *Environment Canada*
Shauna Mercer, *Environment Canada*
Al Montpellier, *Alberta Environmental Protection*
David Onuczko, *Alberta Environmental Protection*
Fred Schulte, *Alberta Environmental Protection*
John Torneby, *Alberta Environmental Protection*
Wil VandenBorn, *Dow Chemical*

Very special thanks must go to John Torneby for his invaluable role in organizing and moderating the monitoring section of the program and in helping the program run smoothly.

A small committee provided input on the development of this materials package and reviewed drafts of the materials. I appreciate the assistance of the following committee members:

Joan Copp, *Legal Education Society of Alberta*
Karen McDonald, *Environment Canada*
Warren Sarchuk, *Fort Saskatchewan Alliance for Clean Air*
Bob Stone, *Alberta Environmental Protection*

Other important contributions

This project could not have been completed without the able assistance of my colleagues at the Environmental Law Centre. I want to thank them all for their encouragement, support and patience while I broke in on this project as the office “rookie”. Mike Callihoo, summer research assistant, carried out research in support of these materials and wrote Chapter 5 on funding. I greatly value his help and his excellent research and writing skills. Donna Tingley, executive director, has provided me with support and encouragement throughout this project. I would have been lost but for her guidance during my first foray into writing and publishing a long publication. Dolores Noga, librarian, and Susan Dahl, summer library assistant, provided valuable assistance in tracking down resource information for the pilot program and development of the materials package.

Our staff accountant, Laura Ferguson, has been an extremely patient guide through the financial intricacies of a large project. Tammy Allsup, office manager, dealt with all my needs for materials, supplies and computer information in her usual skilled manner. Iris Djurfors, Search Service Coordinator, provided search information for the program and assisted at the program in Fort Saskatchewan during a hands-on library exercise for participants. Debbie Lindskoog, secretary/receptionist, did her usual excellent job in ensuring that all copying, correspondence and other paper was shoved in a timely fashion on my behalf. I also wish to thank Debbie and Iris for their help in putting together the information binders for the program.

Paul Wood, an Internet consultant, did the necessary work to put an electronic version of the materials package on the ELC home page. Birgitta Larsson, an Edmonton consultant, carried out a very insightful evaluation of the Fort Saskatchewan pilot program.

Finally, I want to thank my husband Paul for his constant encouragement and good humour throughout this adventure, particularly on the days when he felt like he was living in a zoo. He has done a wonderful job of holding down the domestic fort while I have been travelling around the province during the pilot programs. I also want to thank Jean-Pierre and Chantal for adapting to (and hopefully understanding) the amount of time that Mom had to spend away from home last winter, and for being so excited when I did return home to them.

Cindy Chiasson
Staff Counsel
Environmental Law Centre
February, 1999

Introduction

What is environmental monitoring?

In many ways, environmental monitoring is a cornerstone of environmental protection. Simply put, it is the act of measuring environmental conditions, and matters that can affect those conditions and the environment as a whole. Monitoring data can give us a picture of the health of our environment and point us to those things that adversely affect it.

Environmental monitoring can be used for a number of purposes. Monitoring can be used to collect initial “baseline data”. Baseline data is used as a starting point to provide an initial snapshot of the condition of an area. Future monitoring results can be compared against the baseline data as a means of assessing any change, either better or worse, in environmental conditions. Monitoring data can also be used to measure the environmental performance of industrial operators, either directly or as an audit. It can indicate when remedial action is needed to restore the environment and can be used as the basis for enforcement action under environmental laws.

Many elements of our environment can be monitored. This includes our air, water, soil and vegetation. As well, the health of animal and human populations can be monitored as an indication of the condition of our environment. Generally, government and industry carry out a great deal of environmental monitoring. Much of this monitoring is technical in nature and can involve complicated and expensive monitoring equipment. However, there are a number of ways that ordinary citizens can become involved in environmental monitoring.

Why is the public interested in environmental monitoring?

One reason for the public’s interest in environmental monitoring is that our society has become much more aware of the effect that we have on our environment, both directly and indirectly through our everyday actions and consumption. With this greater awareness has come greater concern about how our actions and their effects on the environment will ultimately affect us as individuals and future generations.

As well, given past years’ trends of budget cutbacks and deregulation, many citizens feel that environmental protection and their related concerns are being ignored or pushed aside by government and industry. They mistrust monitoring information produced by these organizations, and become frustrated in their attempts to learn about and understand environmental matters. In many instances, members of the public want to take personal action to protect their environment, but are unsure of how to get started and what to do.

What can the public do about environmental monitoring?

Ordinary citizens like you are becoming involved in environmental monitoring in increasing numbers. Their involvement runs from activities such as the annual Christmas bird count, which when compiled gives information about the ranges and numbers of various types of birds, to keeping written and pictorial records of stack emissions, to taking samples of water from local watercourses and analyzing these samples for certain environmental indicators. Others review monitoring data created by government and industry in an auditing function, to reassure themselves that they are being presented with an accurate picture of environmental conditions. Still others sit as representatives of the public or special interest groups on bodies involved in environmental monitoring initiatives. An appendix to Chapter 2, entitled *Volunteer Monitoring: No Limit* gives excellent examples how members of the public can become involved in a wide variety of environmental monitoring activities.

What will use of the *Community Action on Air Quality* package do for you and your community?

At its most basic, use of this package and participation in a community monitoring training program will give you skills that will enable you to find, critically review, understand and analyze information about air quality monitoring and enforcement. This will give you greater confidence in your understanding of air quality issues and monitoring data produced by any source. Many of these skills can also be used in relation to environmental matters other than air quality.

Involvement in the development and presentation of a community monitoring training program can bring you into contact with a wide range of individuals involved in air quality matters and increase your familiarity with these people and air quality issues within your community and Alberta. As well, it can provide your community with a means of focusing its air quality concerns and examining how it wants to deal with those concerns.

Ultimately, you can use the knowledge and understanding that you can gain through the use of this package and participation in a community monitoring training program to take personal action in protecting your environment. Having learned about the regulatory requirements related to air quality, you will be able to assess whether an environmental offence may have occurred, and take action to deal with it by reporting the situation to environmental regulators or initiating an investigation under Alberta's environmental laws. In this way, you can take positive action to protect your community and environment and gain a greater element of personal involvement and control over matters that affect you personally.

How should you use the *Community Action on Air Quality* package?

This package consists of two parts. The first part is this guidebook, and the other is the background materials.

The guidebook is a “how-to” manual of community monitoring, and deals in detail with community monitoring training programs and subsequent community action to monitor and enforce air quality. It provides you with practical guidance in developing and presenting a community monitoring training program, and in establishing a volunteer group within your community to undertake air quality monitoring activities.

The background materials contain information set up in a “fact sheet” format that can be used as part of a community monitoring training program. These materials have been written in plain, straightforward language, and ideally can be used without any expert assistance. They could be used as the main written information source for participants in a community monitoring training program, and could also be supplemented by additional, more detailed information. It is not necessary to use all of the background materials. They have been designed to enable planners of community monitoring training programs to select the portions that are most relevant to their programs and their communities’ interests and concerns.

Both parts include a number of resource lists for the different topics. These resource lists are intended to refer you and participants in your community monitoring training program to further sources of information on air quality related matters.

About the Community Action on Air Quality guidebook

This guidebook consists of five separate chapters, each with its own resource list. Some chapters have appendices such as checklists or sample forms. Every chapter has been written in plain language and contains many practical tips to assist you in increasing your involvement with community-based air quality monitoring.

CHAPTER 1

Chapter 1 provides practical guidance on developing and presenting a community monitoring training program. It takes you through the practical steps you should follow to create a program that will address your community’s specific needs and concerns about air quality. This includes:

- organization;
- funding;
- short and long term planning;
- program development and presentation; and
- evaluation.

One of the appendices describes a successful community monitoring training program that provided the basis for *Community Action on Air Quality*. Another appendix is a checklist for you to follow in setting up your own community monitoring training program.

CHAPTER 2

Chapter 2 sets out a process for establishing a community-based volunteer group to undertake air quality monitoring and enforcement. The emphasis in on the practical concerns that you need to keep in mind in order to give your group its best chance at success. Similar to Chapter 1, it includes a checklist to guide you in setting up your group. Another appendix is an article illustrating the wide range of roles that members of the public can play in environmental monitoring.

CHAPTERS 3-5

Chapters 3 – 5 deal with more specific matters that are relevant to the success of both community monitoring training programs and volunteer monitoring groups. Chapter 3 offers practical suggestions on how to make contacts and build partnerships with those who can help your cause. Appendices include a checklist and a sample sheet for recording contact information.

Many people regard government departments as complicated and confusing structures. Environmental regulators can be an important source of information and feedback for your monitoring activities, particularly if you intend to become involved in enforcement matters. Chapter 4 provides you with guidance on working with government regulators who deal with air quality matters and prepares you to navigate your way through government offices.

Chapter 5 deals with the all-important matter of funding. It leads you through the stages of fundraising, from planning and research through proposals and follow-up. The appendices include general fundraising and budgeting checklists. The resource list refers to a wide range of information sources on fundraising and a variety of potential funders for community-based environmental projects.

About the *Community Action on Air Quality* background materials

As mentioned above, the background materials are intended to provide you with basic information and resource lists for topic areas related to community monitoring of air quality. Like this guidebook, they are written in plain language, to allow you to work through them without assistance if you choose. These materials are presented in an unbound format to facilitate their copying for use in community monitoring training programs, and to allow you to make use of only those materials that relate specifically to the community monitoring training program that you have developed for your community. Chapter 1 of this guidebook discusses the ways that you can make use of these materials as part of your community monitoring training program in greater detail.

The background materials are divided into four separate subject areas. Each subject area includes resource lists that provide other sources of information about that subject.

INTRODUCTION TO AIR MATTERS

The *Introduction to Air Matters* section provides basic background information about different classes of substances that can affect air quality and some air quality issues that may be relevant to your community. The topics covered include:

- acid deposition;

- air toxics;
- climate change;
- ozone depletion; and
- smog and ground level ozone.

The resource list refers to sources of further information about these topics, and also some sources for basic introductory information about atmospheric science.

AIR MONITORING

The *Air Monitoring* section provides you with an introduction to different methods of air quality monitoring. It discusses the purposes and uses of each method and indicates who currently carries out such monitoring in Alberta. This section also provides information on how air monitoring data and results are reported and guidance on how to read and interpret that material. The resource list refers you to various information sources, including sources from which you can obtain monitoring data and results.

BASIC LEGAL REQUIREMENT

The materials in the *Basic Legal Requirements* section provide you with a basic overview of laws in general and our legal system, and deal more specifically with environmental laws that apply to air quality in Alberta. This section covers how you can find, read and understand laws, focusing on environmental laws, and will help you understand how our environmental laws regulate air quality and the activities that can affect air quality.

ENFORCEMENT AND COMMUNITY INVOLVEMENT

The final section, *Enforcement and Community Involvement*, provides an overview of how environmental laws, and more specifically the requirements of the *Environmental Protection and Enhancement Act*, are enforced in Alberta. As well, these materials offer suggestions and discuss different options for personal involvement in air quality monitoring and enforcement. The resource list refers to various sources and contacts that will be helpful to you and your community in increasing your involvement in air quality monitoring.

A word of caution about your use of the *Community Action on Air Quality* package

Regardless of how you make use of this guidebook and the background materials in your community monitoring training program and subsequent monitoring activities, it is very important that you check to ensure that the information within them is current to the date of your use. We suggest the following steps:

- Your first step should be to check the Environmental Law Centre home page on the Internet at http://www.elc.ab.ca. The Centre plans to make any necessary updates to the guidebook and the background materials available on the home page. Both the guidebook and the background materials can be downloaded free of charge from that location. You may also wish to contact the Centre directly if you have specific questions.

- You can make use of the resource lists included in the guidebook and the background materials to check their currency. These lists can also be used to update and supplement the background materials in particular.

- You should seek the input of your contacts, including those involved in planning and presenting your community monitoring training program, in assessing the currency of the package. They may have helpful suggestions for other sources of current information.

We cannot emphasize enough the need to ensure that the guidebook and the background materials are current to the date that you make use of them. This applies in particular to the resource lists. Failure to check and update information, as necessary, may lead you to rely on outdated information, which will be of little or no use to you and others who are interested in protecting local air quality. The success of your community monitoring training program and your other air quality monitoring activities depends largely on your familiarity with the most current information related to air quality monitoring and enforcement.

CHAPTER 1

Sharing knowledge and skills

How to Set Up a Community Monitoring Training Program

Your community has concerns about local air quality. You and others do not trust air quality information that is provided by government or industry, but feel limited in what you can do to deal with your concerns. A community monitoring training program that focuses on air quality monitoring and enforcement can benefit you and your community as a whole.

With careful design and delivery, this type of training program can help you and your community understand the context in which air quality monitoring takes place. This includes understanding:

- the scientific, legal and regulatory background;
- the roles of government and industry in air quality monitoring; and
- the role that you and other concerned citizens, as members of the public, can play in monitoring air quality and assisting in enforcement of laws affecting air quality.

As an added benefit, this type of community monitoring training program can bring community members together with government regulators, technical experts and industry representatives in an atmosphere of information sharing and mutual understanding.

Preliminary steps

Establish an organizing committee

One of the first steps in developing a community monitoring training program is to put an organizing committee in place to manage the program. If you have an existing community or environmental group that is interested in undertaking the project, that may be an appropriate body. There should be more than one person involved in managing the program, as there are a number of matters to be dealt with.

The organizing committee will deal with the following matters:

- budgeting and program funding;
- obtaining community input on the program;
- planning the program in detail;
- arranging program instructors;

- compiling program materials;
- overseeing program delivery; and
- carrying out program evaluation and follow-up.

Budgeting and funding

From the beginning, your organizing committee will need to address funding. It should prepare a budget for the program. Budgeting is dealt with in further detail in Chapter 5. Throughout the development and delivery of the community monitoring training program, there are a variety of costs that may arise, including:

- rental of meeting facilities;
- long distance telephone charges;
- postage costs;
- charges related to preparation and reproduction of training materials;
- purchase of supplies;
- equipment rental;
- refreshments; and
- expenses incurred by volunteers, such as travel, accommodation, long distance telephone, meals or child care.

These are only examples of the costs that may be incurred over the course of developing and carrying out a community monitoring training program.

Wherever possible, your organizing committee should seek to minimize costs without sacrificing the program's integrity. Obtaining in-kind contributions, also known as non-monetary contributions, is an important way of keeping costs down. For example, you may be able to obtain meeting space for committee meetings and the community monitoring training program at no charge from your local library, municipality or provincial government office. Or you may get a local business to donate all photocopying for the program. In many instances, it may be easier to obtain in-kind contributions than cash funding within your community.

Your organizing committee may also consider obtaining cash funding for the community monitoring training program. This can be done by finding private sponsors for the program, such as local businesses or industries, or by applying to any of a number of agencies, foundations or other organizations that provide grants for community-based environmental projects. Chapter

5 deals with funding matters in greater detail. As well, your organizing committee may wish to consider a fee to community monitoring training program participants to cover the program's costs.

Where you have obtained cash funding, in-kind contributions, or both, be certain to acknowledge your sponsors in any publicity or communications you do, and in materials provided to participants in the community monitoring training program. As well, ensure that you comply with any reporting and other financial requirements imposed by your sponsors.

Think about the long term

One thing that you should consider at the initial stages of development of your community monitoring training program is your long-term view for the program. Our experience in carrying out and evaluating our Community Monitoring Project pilot programs has been that there is a greater likelihood that a program's momentum will lead to continuing initiatives within the community when a longer-term view has been incorporated from the early stages of the program's development.

In addition, our evaluations have suggested that there will be a greater chance of follow-up and further initiatives within the community after program completion if a local "champion" or "leader" is identified and involved in the community monitoring training program at its early stages. This "champion" or "leader" would commit themselves to dealing with long-term results coming out of the community monitoring training program and to supporting initiatives that may arise from the program.

Over the course of planning your community monitoring training program, you may decide that your program will be a one-time event, with no plans for any further activity. If that is the case, it will not be necessary for you to incorporate elements of long-term planning into the program. However, if you would like to have some longer-term initiatives arising from your community monitoring training program, it is important that you consider the long-term during your early planning stages and identify an individual or group that will take responsibility for overseeing post-program activities.

Planning the program

Set up a planning committee

Once the preliminary steps have been dealt with, your organizing committee should set up a planning committee to provide input and assistance in planning your community monitoring training program. You can choose to have your organizing committee carry out this function, or you may choose to establish a separate committee and involve individuals who are not members of the organizing committee.

The success of your community monitoring training program depends greatly on identifying and addressing your community's particular needs, so it is important that your planning committee be willing and able to obtain input from all interests within your community, if possible. Some sectors that you may wish to approach for input include:

- community members who have an interest in air quality or environmental matters in general;
- local environmental groups, particularly those that deal with or have an interest in air quality matters;
- all levels of government that have an interest or role in regulating or otherwise dealing with air quality in your community;
- industries that affect air quality in your community (keep in mind that if there are a number of industries in your community or region, they may have a regional association or other common organization); and
- any others within your community that may have interests or concerns about local air quality.

Your planning committee should not be so large as to drag out the planning process. If the planning committee has a different membership than your organizing committee, the organizing committee should designate one of its members to oversee the planning process and chair meetings of the planning committee.

Role of the planning committee

It is important to remember that the planning committee's role is to provide input to your organizing committee on the objectives, scope and content of your community monitoring training program, and to provide assistance to the organizing committee as needed in developing and presenting the program.

The planning committee should provide input on the following matters:

- program objectives;
- scope of the program, including topics to be dealt with;
- how the program will be presented; and
- avoiding duplication with any existing programs or efforts within your community.

Objectives

Your planning committee should provide input on the objectives your community monitoring training program should seek to achieve. You will need to address the goal(s) that your group wants to achieve by presenting a community monitoring training program. In many instances, it may be to raise community awareness and increase community knowledge about local air quality issues. In other instances, it may be to teach community members skills that will enable them to obtain air quality information, critically assess it, and take action on any concerns they may have. It may also be to teach people skills needed to be able to actively monitor air quality within your community.

Once you have addressed this broad matter, you should develop some narrower objectives that you want to achieve in pursuit of this broad goal. For example, if your goal is to raise community awareness and increase community knowledge about local air quality issues, some possible objectives could be to have program participants understand the following:

- what types of air contaminants are present in your community;
- which contaminants are of concern;
- the types of problems that can be caused by these contaminants; and
- how these contaminants are regulated and monitored.

On the other hand, if your goal is to teach community members how to actively monitor air quality within your community, some possible objectives could be to have program participants learn the following:

- regulatory requirements that apply to the air contaminants that will be monitored;
- methods for monitoring these air contaminants;
- uses of monitoring data; and
- enforcement of regulatory requirements.

In any event, it is important to develop objectives for your community monitoring training program, as that will be an important measure that you can use in gauging the success of your program.

At this time, you should also decide whether you want to set any long-term goals and objectives related to your community monitoring training program. These are particularly relevant if you want to see longer-term community initiatives resulting from your program.

Program scope and topics

Your planning committee should also provide input on the scope of your community monitoring training program and the topics to be dealt with by the program. The scope of your program relates both to the topics to be dealt with in the program and the detail in which these topics will be addressed. You should use the objectives that you have developed for your community monitoring training program as a guide in determining the program’s scope.
Similarly, your choice of topics to be dealt with in your program will be influenced by the objectives that you have set. Using as an example the second situation referred to above, where

your goal is to teach community members how to actively monitor air quality within your community, some of the topics that you could choose to deal with include:

- background information about local air quality, including information on the types of contaminants emitted and the local emission sources;
- basic scientific information about these contaminants, including their effect on the local atmosphere and your community;
- information about how these contaminants are regulated, which can include a brief overview of relevant environmental law or a detailed examination of the laws and standards that apply specifically to them;
- information about how these contaminants are monitored, and specific instruction in the methods by which the program participants will monitor them;
- information about enforcement of the laws and standards that apply to these contaminants, which can include a brief overview or a detailed examination of how enforcement is carried out.

Aside from the program's goals and objectives, you should also consider your potential audience in developing your program's scope and topics. This is where input on your community's needs and concerns about air quality will be particularly relevant. You want to develop and present a community monitoring training program that will be relevant and useful to your community. All your time and effort will be pointless if people within your community are not willing to commit the time to participate in your program because it does not interest them or address their concerns.

Presentation format

Your planning committee can also provide useful input on the format that should be used to present your community monitoring training program. Options that can be considered include the following:

- lectures;
- seminars;
- workshops;
- field exercises; and
- other hands-on exercises, or tours.

Your choices will likely be influenced by the objectives that you are seeking to achieve and the topics that you have chosen to address. You may want to obtain input from someone with a background in adult education to assist you in developing an effective program.

As well, you should get input from your planning committee on the length and timing of your community monitoring training program. In determining the likely length of your program, consider:

- the number of topics to be addressed,
- the likely number of instructors or speakers,
- the presentation format(s),
- and the detail in which topics will be addressed.

Where you feel that your program may run longer than a day or two, consider breaking it up into sections and offering the sections a few weeks apart. In our experience in carrying out the Community Monitoring Project pilot programs, we found that weekend sessions worked well, and would likely be most effective when held over a relatively short period of time, for example, holding two to three weekend sessions over the course of two or three weeks.

Practical points

It may take a number of meetings for your planning committee to deal with all matters related to planning your community monitoring training program. Be sure to keep notes of all planning meetings as a record of committee recommendations. Unless your planning committee and your organizing committee are one and the same, ensure that planning committee members clearly understand that their committee's function is advisory in nature, and that final decisions about the program rest with the organizing committee.

Setting up your community monitoring training program

Making use of the background materials in the *Community Action on Air Quality* package

Included in this *Community Action on Air Quality* materials package are background materials that can be used as part of your community monitoring training program. These materials are broad in nature, to enable them to be used in community monitoring training programs on air quality anywhere in Alberta.

The materials can be used in any of a number of ways. They can be used, in all or in part, as the main material that is provided to program participants, or as reference materials for program instructors or speakers. You may choose to use only certain parts of these materials, or to supplement them with additional information. For example, you may want to incorporate information related to your community's particular characteristics or circumstances, or that addresses particular air quality concerns within your community.

The materials are designed to be easily read and understood. Participants should be able to refer to and understand these materials without the help of an instructor, although ideally instructors or resource people will be available to them to answer their questions and expand upon the materials.

The background materials are divided into four separate subject areas, each briefly described below. Each subject area includes resource lists, which provide other sources for information about each subject.

- INTRODUCTION TO AIR MATTERS: the materials in this subject area provide an introduction to major air quality concerns.

- AIR MONITORING: the materials in this subject area discuss the different methods of air quality monitoring, the purposes and uses of each method, and how to read and interpret air monitoring data and results.

- BASIC LEGAL REQUIREMENTS: the materials in this subject area provide a basic introduction to laws in general, including how to find and use laws, and to environmental laws related to air quality in Alberta.

- ENFORCEMENT AND COMMUNITY INVOLVEMENT: the materials in this subject area provide an overview of enforcement of environmental laws and roles that members of the public can play in monitoring and enforcement.

Regardless of how you intend to use the background materials in your community monitoring training program, it is of utmost importance that you check to ensure that they are current to the date of your program before using them. We suggest the following steps.

- A first step is to check on the Environmental Law Centre home page on the Internet at http://www.elc.ab.ca. The Centre plans to make any necessary updates to the background materials and this guidebook available on the home page. The materials and the guidebook can be downloaded free of charge from that location.

- Make use of the resource lists included in the background materials to check the materials' currency. These lists can also be used to update and supplement the background materials.

- As well, you should seek the input of your planning committee and your program's instructors and speakers in assessing how current the background materials are and what you might want to update or add to the materials.

Develop your community monitoring training program

Based on the input of your planning committee, the organizing committee should develop the training program in detail. This should include:

- choosing the program's presentation format and length;
- locating instructors or speakers (ideally you should consult with these people about the materials to be provided to program participants and whether they wish to provide any additional materials);
- determining the type and extent of materials that you plan to provide to program participants; and
- making arrangements for preparation of program materials.

Be certain to allow enough time between the planning stage and the actual date of your community monitoring training program to locate speakers and prepare materials.

Assess community interest

The organizing committee should take steps to assess community interest in your community monitoring training program and identify likely participants. Means of doing this include:

- holding an open house about your community monitoring training program for the community as a whole;
- publishing ads about your community monitoring training program in local newspapers;
- issuing press releases about your community monitoring training program to local media;
- making direct mailings of information about your community monitoring training program to local groups and organizations that may be interested in it;
- posting notices about your community monitoring training program in the community;
- by word of mouth;
- making presentations about your community monitoring training program to local groups and organizations that may be interested in it.

In using any of these methods, be sure to include the name and telephone number of a contact person from your organizing committee. This is particularly important in dealing with the media or if you plan to take registrations from interested people. You may want to designate particular people to speak on behalf of your organizing committee, to ensure that information being provided is current and consistent.

Practical considerations

You may wish to limit the number of people who can register in your community monitoring training program. Consider the scope and content of your program and arrive at a group size that will be practical to deal with. Keep in mind that most people will get more out of your community monitoring training program if the group is kept to a size that encourages discussion and active participation. If there is great interest in your program, consider running a second session rather than attempting to manage too large a group.

The organizing committee will also need to make the practical arrangements necessary to have your community monitoring training program take place, as set out below.

- Once a date, time and likely number of participants have been determined, a location should be arranged for presenting your program.

- Depending on the length of your program, you may wish to provide refreshments for participants.

- Make arrangements for compiling, reproducing and packaging any materials to be provided to the participants.

- Confirm in writing the participation of all speakers and instructors previously contacted, especially where they are preparing materials as well. Check with these people to determine whether they will require any particular audio-visual equipment, such as an overhead or slide projector.

- Arrange for any other supplies that will be needed as part of your program, for example, if you are having the participants take part in hands-on field activities.

- Be sure to confirm all arrangements in writing.

Delivering the program

Now your group has reached “D-Day”: the day when your community monitoring training program will take place. Taking certain steps will help your program run smoothly and help the participants get the most from their training experience.

Your organizing committee should designate a couple of its members to fill specific roles. One person should be designated as the moderator, to introduce speakers and ensure the program progresses smoothly. Another person should be designated as a troubleshooter to deal with any problems or practical questions that arise over the course of your program.

At the beginning of your program, take the time to have all participants introduce themselves to the group. You may also want to make use of name tags or name cards in front of each person's seat. This puts names to the faces, making it easier for your organizing committee to run the program and making the surroundings more comfortable for the participants. As well, introduce all speakers and other instructors and all members of your organizing committee who are in attendance.

Over the course of your program, try to leave time for questions whenever possible. If the program threatens to run late, it may be helpful to suggest that participants raise questions with speakers during breaks. Another option is to offer to take down questions and provide answers later. While it is important to try to follow the schedule that has been established for your program, try to do so without overly restricting discussion. This is a point where the skills of the moderator in overseeing and directing the program will be key. Ideally, the moderator will be able to exercise discretion to allow relevant discussion while keeping your program moving.

It is very important to allow time for breaks throughout your program, particularly where your schedule is being presented over a day or weekend session. Try not to go longer than 1½ - 2 hours without a break. Ask speakers beforehand if there is a spot in their presentations that would be convenient for a break. When you are taking a break, be sure to announce to the group the length of the break and the time that the program will begin again. Be sure to start on time again whenever possible.

At the conclusion of your program, deal with any program evaluation that will involve the participants, such as questionnaires, evaluation forms or an open discussion. Keep in mind that your evaluation tools should be designed to determine whether your program achieved its objectives. As well, if you have set goals and objectives related to long-term results, this is the point at which you should deal with them. You may choose to have a discussion or brainstorming session on future initiatives that involves all program participants. This can be led by the "champion" or "leader" who you had identified earlier in your planning.

What's next?

Completion of your community monitoring training program does not mean that the activities of the organizing committee are completed. There are a number of steps that it should take in completing the program.

Evaluation

Your organizing committee should evaluate your community monitoring training program to determine whether its objectives were met. Any of a number of evaluation tools can be used, but your evaluation should be tailored to your program's specific objectives. There are reference materials that can assist you in preparing and carrying out your evaluation activities; see the resource list following this chapter for further information.

Acknowledgement

It is very important to thank all individuals and organizations involved in planning, preparing and delivering your community monitoring training program. One of the most effective means is to do so in writing. As well, in thanking those who have assisted the program, try to mention how their contribution specifically helped your organizing committee and the program. You may also want to provide these people with some information about the results of the program evaluation and what steps your organizing committee plans to take next.

Share your results

Your organizing committee should take steps to make the community as a whole aware of the results of your community monitoring training program. This will maintain community interest and support for the project, and may bring forward individuals or groups who are interested in becoming involved in future related initiatives. Means of doing so include:

- holding an open house to present project results;
- issuing press releases to local media about the program and its results;
- developing a newsletter or information sheet about the program and its results for direct mailing to interested individuals and groups; and
- making presentations on the program and its results to interested groups.

Future plans

Where there is a large amount of community interest in your community monitoring training program, your organizing committee may want to consider holding one or more subsequent sessions for people who could not participate in the initial program. Where subsequent sessions will be held, the organizing committee should review the evaluation of the initial program for guidance in improving or modifying those sessions.

Where there is continuing interest in the community on air quality issues and monitoring, the champion or leader who you previously identified, with the assistance of your organizing committee, should take steps to capture that momentum and build on the results of your community monitoring training program. Involve program participants who have expressed an interest in future activities. The scope and type of future activities to be undertaken will depend in large part on your own community, its particular interests and concerns, and the individuals who wish to participate. The next chapter provides further information on organizing a community-based volunteer group for environmental monitoring and enforcement.

Case Study
Fort Saskatchewan Air Quality Community Monitoring Project

The Environmental Law Centre (ELC), a non-profit charitable society based in Edmonton, developed and carried out a community monitoring training program in Fort Saskatchewan. This program focused on environmental monitoring and enforcement related to air quality.

In setting the stage for the program, the ELC had meetings or discussions with various interested parties, including federal, provincial and municipal officials, local environmental groups and local industry. Through these preliminary contacts, the ELC was able to identify groups and individuals interested in participating on the program planning committee.

In November 1997, a program planning committee chaired by the ELC was established. The committee included representatives from:

- the federal and provincial environment departments,
- local industry,
- environmental interests, and
- the general public.

The committee member representing environmental interests was also a municipal councillor, thus providing representation for the municipal government level as well.

The program planning committee met five times over the course of four months. Meetings were held in Fort Saskatchewan City Hall in meeting space donated by the City. Coffee supplies were also donated. Where meetings lasted longer than a half day, lunch was provided for committee members and paid out of funds raised by the ELC for the project.

The program planning committee carried out the following activities:

- identified air quality issues of concern to the community;
- worked on the scope and format of the program;
- provided input on promotional and communications matters;
- provided input on program materials and potential speakers;
- assisted in identifying potential participants; and
- acted as a resource for information about the community.

The program was publicized by issuing a press release, which led to each of the three Fort Saskatchewan newspapers publishing articles about the program. A direct mailing was also made to various groups identified by local members of the program planning committee and to industries in the region. As a result of these promotional efforts, over thirty individuals contacted either the ELC or members of the program planning committee indicating interest in the program.

The following arrangements were made in relation to the program itself.

- The ELC, with assistance from the provincial government member of the program planning committee, arranged speakers and other presenters.

- All speakers agreed to prepare written material that was provided to program participants.

- The ELC coordinated the compilation and reproduction of the program materials. These costs were paid out of funds raised by the ELC.

- The ELC booked the facilities and equipment used for the program, arranged lunch for all participants for a full day session, and assisted speakers as necessary with preparation of their presentations and materials. The cost of the facilities and lunch were paid out of funds raised by the ELC.

- A local member of the program planning committee donated other refreshments for program participants.

The program was presented as an intensive weekend seminar in Fort Saskatchewan on March 19-21, 1998. Three-hour sessions were held on the evenings of Thursday, March 19, and Friday, March 20, and a full-day session was held on Saturday, March 21. Twenty-one individuals participated free of charge in the program. Eight speakers and three support persons were involved in presenting the program. Aside from the seminar sessions, participants were able to view and ask questions about air monitoring equipment brought to the seminar. They also participated in a hands-on research exercise at the local library as part of the program. Participants received a binder of written materials prepared specifically for the program.

The program topics and speakers were as follows:

Thursday, March 19

Introduction –
Cindy Chiasson, Environmental Law Centre

Emissions information for the Fort Saskatchewan region –
Nola Lamble, Geon Canada Inc.

Introduction to the atmosphere: atmospheric structure; global chemical cycles; air quality issues –
Dr. Karen McDonald, Environment Canada

Friday, March 20

Air monitoring: types of monitoring; reasons for monitoring; site selection; monitoring instruments; data reporting and review –
John Torneby, Bill Macdonald and David Onuczko, Alberta Environmental Protection

Viewing of air monitoring equipment –
Al Montpellier and George Bayard, Alberta Environmental Protection

Saturday, March 21

Legal and information skills: statutes and regulations in general; environmental regulators; environmental impact assessment; how approvals and guidelines apply to air quality; accessing government information –
Cindy Chiasson, Environmental Law Centre

Library exercise on finding statutes and regulations –
Cindy Chiasson and Iris Djurfors, Environmental Law Centre

Enforcement: enforcement basics; identifying offences in legislation; reporting offences; evidence –
Renee Craig, Alberta Environmental Protection

Voluntary initiatives by industry –
Wil VandenBorn, Dow Chemical Canada Inc.

Upon completion of the program, participants were asked to complete an evaluation questionnaire. The ELC collected completed questionnaires and carried out a review and analysis of responses. As well, the ELC used project funding to hire a consultant to conduct an independent evaluation of the entire project, for input that could be used to guide future initiatives.

Funding for the program was arranged by the ELC. Funds were obtained from a federal government environmental grant program and as part of a sentencing arrangement in relation to an environmental prosecution. In-kind contributions included:

- donations of meeting space, refreshments, documents and legislation included in participant materials;
- speakers’ travel costs; and
- speakers’ services in making presentations and preparing materials.

For more information about the *Fort Saskatchewan Air Quality Community Monitoring Project,* contact

Environmental Law Centre at
(780) 424-5099 or
1-800-661-4238 (toll-free in Alberta only)

Checklist for
Setting up a Community Monitoring Training Program

Preliminary Steps

- ☐ Establish an organizing committee
- ☐ Make a budget
- ☐ Consider and find funding
- ☐ Acknowledge sponsors

Planning the Program

- ☐ Establish a planning committee
- ☐ Obtain recommendations on:
  - ☐ Objectives
  - ☐ Scope and topics
  - ☐ Presentation format(s)

Setting up the Program

- ☐ Choose program format and length
- ☐ Locate instructors/speakers and confirm participation
- ☐ Determine materials to be provided and arrange for preparation
- ☐ Assess interest and identify likely participants
- ☐ Set limit for registrations and take registrations
- ☐ Arrange necessary facilities, equipment and supplies
- ☐ Confirm all arrangements in writing

Delivering the Program

- ☐ Designate a moderator and a troubleshooter
- ☐ Allow time for questions
- ☐ Provide regular breaks
- ☐ Keep on schedule as much as possible
- ☐ Have participants evaluate the program

What’s Next?

- ☐ Evaluate the program
- ☐ Thank all who helped
- ☐ Provide program results to the community
- ☐ Consider future program/projects

Resource List
Setting Up A Community Monitoring Training Program

Environmental Law Centre

This non-profit charitable organization has carried out 3 community training pilot programs on environmental monitoring and enforcement in Alberta. One pilot focused on air quality issues, another on a regulated industrial facility, and a third on youth.

For information about these pilot programs, contact:

Environmental Law Centre
204, 10709 Jasper Avenue
Edmonton, AB T5J 3N3
Phone: (780) 424-5099
Fax: (780) 424-5133
Alberta toll-free: 1-800-661-4238
E-mail: elc@elc.ab.ca
http://www.elc.ab.ca

A How-To Guide for Millennium Eco-Communities: From Needs Assessment to Evaluation

This Environment Canada publication provides a good basic guide to development of community-based environmental projects. In particular, the last chapter deals with project evaluation and also provides a list of other information sources for evaluation of community projects.

This publication can be obtained from regional offices for the Environment Canada program EcoAction 2000. The Alberta and Northwest Territories regional office is:

EcoAction 2000
Environment Canada
4999 – 98 Avenue
Twin Atria #2, Room 200
Edmonton, AB T6B 2X3
Phone: (780) 951-8710 or 1-800-567-1570
Fax: (780) 495-4367
E-mail: ecoaction2000.edm@ec.gc.ca

This publication can also be obtained on the Internet at http://www.ec.gc.ca/eco/started_e.htm#guide

CHAPTER 2

Taking community action

How to Develop a Community-Based Volunteer Group for Environmental Monitoring and Enforcement

Having held a community monitoring training program, as described in this guidebook, you find that you and others in your community are interested in becoming more actively involved in air quality monitoring and enforcement. One way of doing so is to start a volunteer group within your community to carry out activities related to air quality monitoring and enforcement. The question is: how do you do it?

Initial steps

Gather those who are interested

The first step should be to gather the people in your community who are very interested in starting a group for some discussion and brainstorming.

Commitment

A key element for the success of any volunteer group is commitment, so you would be well advised to address this matter at the outset. Establishing and organizing a volunteer group can be very time-consuming. At this first gathering, you should assess the level of commitment that you and others are willing to devote to starting and maintaining such a group. Be brutally honest with yourselves and each other about the amount of time and energy you are willing to expend on this. If people are not willing to commit the time, skills and energy needed to develop a volunteer monitoring group, it is best that you recognize this at the outset and avoid the frustration of trying to start a group with little interest or commitment.

Brainstorming

Once you have agreed that there is sufficient interest and commitment to merit starting a volunteer monitoring group, you and the other interested people should do some brainstorming about this group, including its purpose, goals and likely activities. At this early stage, you may want to focus on identifying a vision or main purpose for your monitoring group. You should aim to state it clearly and concisely, and should include the reasons why the group will be undertaking monitoring and enforcement activities. It may be helpful to discuss your community's needs and concerns related to air quality.

Do some preliminary research

Once you have developed your group's vision or purpose, you and your fellow planners should gather some initial information to help you build your group. Information that will be helpful at this stage includes:

- identifying community members who share your interests;
- determining community needs and concerns about air quality;
- assessing whether there have been any other groups, activities or initiatives that are similar to your plans and ideas.

In identifying community members who share your interests, take a broad view and have an open mind. Don't assume that certain individuals or groups may not be interested without approaching them first.

Community needs assessment

In determining your community's needs and concerns about air quality and whether any initiatives similar to yours exist, you may want to carry out a needs assessment. The term "needs assessment" basically refers to the process of carrying out research about your community's needs, concerns and problems in relation to a certain matter, such as air quality, and summarizing the results of that research. There are a variety of ways to carry out this type of research. This chapter's resource list provides some sources of information about research and needs assessments.

The results of a needs assessment should provide you with helpful information to guide you in developing your group and planning its activities. By considering the community's needs and concerns in your activities, you better your chances for attracting interested volunteers and community support.

Building the group

Involve more people

At this stage, you will be able to put the information you have gathered to good use. You should develop and hold an open meeting to attract and involve people with interests similar to yours who may be potential volunteers. At this meeting, you will be able to provide people with information about your group's plans and interests, and also obtain input from interested groups and individuals. Be certain to invite all those you have previously identified as having similar interests, particularly those who are committed to bringing about change in your community.

By involving more people in decision-making, communications and networking at your group's early stages, you can raise your group's profile within the community. This can increase community awareness of your group, build general support and improve your group's chances of long-term success. It can be particularly helpful if any of the interested people attracted to your group have past experience in organizing groups or in environmental matters.

Record keeping and communications

A general point to keep in mind is the importance of record keeping. It is not necessary to establish and maintain an elaborate records system. The key is to keep track of all contacts made by you and your colleagues while developing and establishing your group and its activities. This should include all contacts you make while carrying out research for a needs assessment.

This information will be very valuable to your group on an ongoing basis. It can assist you in identifying:

- potential sources of financial and volunteer support;
- contacts for communications purposes; and
- potential leaders for your group.

Chapter 3 includes a sample form for recording contacts.

Don’t limit record keeping to the initial organizational stages. Your group should keep ongoing records of contacts made through its activities and make use of this information to plan new activities and maintain itself.

As an offshoot of record keeping, your group should also plan to carry out regular communications activities. This will maintain community interest in and knowledge about your group and its activities. An effective way of communicating can be to follow up, preferably by telephone, with individuals and groups who have shown interest in your group or participated in its activities.

Identify a steering group

Once you have held an open meeting and identified people with similar interests and possible volunteers, you should establish a steering committee or executive group to provide leadership, organization and coordination. Steering committee members should have skills in:

- leading and coordinating groups,
- speaking and listening in a group setting, and
- building cooperative relationships.

It is also helpful if some steering committee members have contacts within your community, but this should not be a prerequisite.

An important key for a successful steering committee is the ability of its members to commit their time and skills to your group and the steering committee. As mentioned previously, be sure that likely members are realistic about the commitment that they are prepared to make.

While organizational matters are important to your long-term success, don't let them bog your group down in its early stages. Ideally, the steering committee should be able to deal with organizational issues in a way that will contribute to your group's overall goals and enhance its ability to accomplish those goals.

Moving ahead

Once you have laid the groundwork for your group, there are a number of steps that are needed to move it ahead. These steps may, and in many instances should, be undertaken concurrently. This will pave the way for your group to undertake monitoring and enforcement activities.

Set goals and objectives

The steering committee should build on your group's vision by developing goals and objectives, with input from group members. Your goals should set out what your group wants to achieve and take into consideration your reasons for monitoring air quality and what you hope to achieve by doing so. Your objectives will set out the means by which your group will try to achieve these goals.

Goals

In developing your goals, your group will want to consider the extent of involvement that it wants to have in monitoring air quality. You can plan to obtain your own equipment and carry out detailed air monitoring for substances that are of concern in your community. However, you should be aware that this type of air quality monitoring can be very complex and expensive, and will likely require a significant commitment of time, money and expertise by your group. The airshed monitoring zones established under the Clean Air Strategic Alliance are examples of this type of monitoring activity. This chapter's resource list has further information about the Clean Air Strategic Alliance.

Your group may choose to undertake simpler forms of air quality monitoring, by keeping notes, photographs, videos and other records of general air quality and conditions in your community. The *Enforcement and Community Involvement* section of this package's background materials contains further suggestions on becoming involved in air quality monitoring.

Another option your group may choose is to audit air quality monitoring results of industry or government. The *Air Quality Monitoring* section of this package's background materials provides details on the different types of air quality monitoring and tips on reading and understanding air monitoring data. These last two options can be much less expensive and complex than the first option mentioned.

A related matter that your group should consider in developing its goals are the uses it wants to make of any monitoring data it will produce. To some extent, the intended end uses and audiences for your monitoring data will shape the goals that your group will set. There are a number of potential uses for environmental monitoring data, such as

- establishing baseline information by compiling data on existing conditions;
- determining patterns and trends in air quality;
- identifying existing and emerging issues in air quality; and
- monitoring changes in air quality.

Objectives

Once your group has identified its goals, the steering committee, with input from the group members, should develop objectives that your group can follow in trying to achieve these goals. Broad areas in which objectives can be set include:

- air quality matters to be addressed;
- communications and timing of projects; and
- monitoring matters.

In identifying air quality matters to be addressed, the steering committee should consider any matters of concern to your community that were identified through your research, together with any other specific air quality matters that concern group members. It may be helpful to rank the matters in order of importance or significance, to assist the steering committee in setting priorities for group activities.

In setting communications-related objectives, the steering committee should consider your group's priorities and main focus with respect to communications about both group activities and your group in general. With respect to timing of projects, the steering committee should decide whether your group will undertake term or ongoing projects.

Some things that the steering committee should consider in developing monitoring-related objectives include:

- substances or other factors to be monitored;
- locations for sampling or monitoring;
- quality assurance and quality control measures for monitoring, to ensure consistency and credibility of your data; and

- handling and interpretation of monitoring data.

The anticipated uses of your monitoring data and the air quality matters that your group plans to deal with will guide the selection of sampling and monitoring sites, and the way in which data is handled, interpreted and presented. This chapter's resource list refers to information about handling monitoring data. Resource lists in the background materials list information sources related to interpretation of monitoring data.

It is important to set objectives for quality assurance and quality control to ensure that your group's data will be credible. This is particularly significant if you intend to have your monitoring results used for enforcement purposes. This involves establishing standard procedures for carrying out your monitoring and documenting your monitoring data. It is key to follow these procedures every time monitoring takes place to ensure that your monitoring results are consistent and that your group and others will be able to draw sound conclusions from your data.

Form of organization

Your group should consider whether it wants to create itself as a formal legal body. This is usually done by incorporating the group as a society under the provincial *Societies Act*. Although volunteer groups are not required to incorporate, there are advantages to incorporation.

One of the chief advantages of incorporation is that it allows your group access to a wider range of funding. Many funders will only fund groups that are incorporated non-profit organizations. Incorporation can also provide some measure of protection from legal liability for group members. Generally speaking, where an unincorporated group faces legal liability, potentially all members of the group may face the same liability. With an incorporated group, legal liability will generally rest with the group as an incorporated body, and perhaps with the group's board. Incorporated groups may want to consider obtaining directors' liability insurance for its directors.

Incorporation does require some work. A group planning to incorporate must prepare and file incorporation documents and operate in accordance with these documents. As well, an incorporated group must maintain records related to its operations as a society. There is a wide range of resource material about incorporation of groups; some can be accessed from sources listed in this chapter's resource list.

Deal with budgets and funding

At this stage, the steering committee should establish a budget for your group. As much as possible, the steering committee should try to be realistic in setting the budget. It is important to remember to include costs for matters such as sample analysis, data management and project administration.

Once a budget has been prepared, your group should take steps to locate funding. During the initial organizational stages, group organizers should be seeking sources of seed money to be used for group start-up. Be prepared to scale back your group's plans if it takes a while to locate funding. It may also be appropriate to run your group as a pilot project for a specific term. In seeking funding, your group should also look for opportunities to obtain in-kind contributions, such as equipment, office space, office supplies or other non-monetary contributions. Chapter 5 deals with budgets and funding matters in greater detail.

Training

Your group should develop and carry out volunteer training, focused specifically on the particular projects it plans to undertake. You may want to find people with technical background to provide assistance in training development and instruction. As well, seek instructional help from others with related skills and expertise.

Volunteer training should cover relevant safety measures and requirements for the monitoring activities to be undertaken. As well, procedures for monitoring, sampling and record keeping should be established and then taught as part of the training. These procedures are key to ensuring the quality and credibility of monitoring data, and should be documented in a handbook or other format for easy reference by all participants.

Another important point to stress in training is that individuals who are monitoring should obtain permission from the owner of the monitoring location, in order to avoid trespassing charges. Your group may want to develop a permission form that can be signed by landowners to allow group members to enter onto their property for monitoring purposes.

Technical assistance

The steering committee should consider whether your group needs any technical assistance or support. You may be lucky enough to have group members who have scientific or technical expertise or background in air quality matters. If this is not the case, you should decide whether your group would benefit from having technical input and support.

This support can take a number of forms. Your group could locate one or two people with relevant technical background who are willing to advise it on a volunteer basis. Your group could also choose to hire technical resource people for particular projects. If you choose to take this route, you should be sure to obtain written quotes for such costs when planning your project, and include these costs as part of the project's budget. In either event, it is important to clearly establish the relationship between your group and its technical advisors. This will include addressing whether these people are providing their technical expertise voluntarily or for payment, and the extent of their involvement in group activities.

Your group may want to use technical advisors to provide advice on matters related to its monitoring and enforcement activities, including input on objectives, design of projects and volunteer training. As well, you may want to have these people review the results and conclusions you draw from your group's monitoring data, to ensure the consistency and quality of results.

Ongoing matters

Once your group is established and has begun its monitoring activities, there are a variety of matters that must be dealt with on an ongoing basis. Dealing with these matters regularly will ensure smooth functioning of your group and its projects.

Data management

Once monitoring has begun, you will have data on your hands. What should you do with it? If your group has access to a computer and database software, consider compiling data in a database. Using electronic means to store data will simplify its interpretation and the presentation of your monitoring results. If a group member has database and computer experience that they are willing to share, take advantage of the opportunity.

Your group should put the data into formats that can be simply presented and interpreted. This may include:

- the use of graphics such as graphs, charts or maps;
- statistical summaries; or
- comparisons with relevant standards, criteria or objectives.

At this stage, the intended uses of data that were previously identified will be relevant in developing the format for data presentation. Your group should seek to match the data presentation format and language used to the target audience for the data. You may want to seek some technical advice in developing data presentation formats.

When your group provides the data to various audiences, it should be prepared to answer questions and share information about its monitoring and quality assurance procedures. This will be very relevant in the early stages of monitoring activities, as data users become familiar with your group and its activities. As well, this will be important if data is being presented to government regulators for enforcement purposes.

Volunteer management

Maintaining volunteer interest and motivation is a key to ensuring the ongoing success of your group. Although any volunteer group experiences some turnover in membership, it is important to retain as many existing volunteers as possible, while attracting new volunteers. This will ensure your group's vitality and help you build upon its initial activities.

Providing a good flow of information to your volunteers will help to keep them interested in the group and its activities. It is particularly important to answer all volunteer questions promptly. Your group may want to designate a member to act as a contact for volunteer questions and concerns. Providing volunteers with regular data reports, information about all uses made of the data gathered by them, and any feedback received from data users will give them a sense of ownership and help to maintain their motivation. As well, your group may want to consider having a regular newsletter that is circulated to volunteers. Volunteers could be encouraged to participate in the writing and production of such a newsletter.

There are a variety of means of providing volunteers with opportunities for growth within your group. This can include:

- providing educational opportunities such as meetings or workshops with guest speakers on relevant topics, and retraining sessions where volunteers can update and maintain their monitoring skills;

- providing volunteers with opportunities to take on new challenges within your group and develop new skills, by making additional training available to interested volunteers, or by having volunteers take on new or different responsibilities within your group; or

- organizing social or other activities that will give volunteers the chance to meet and interact.

Different steps can be taken to recognize your volunteers' efforts and activities. Your group should keep the local media informed of its goals and results of its activities. This will provide a form of community recognition of volunteer efforts. As well, your group should recognize volunteer efforts internally, by choosing and providing an appropriate means of recognition for your particular group. For ideas, there are a number of suggestions in various volunteer resource materials; see this chapter's resource list for further information.

Communications

Generally, ongoing communications will be important in maintaining the profile of your group and its activities and in attracting new participants, funding and ideas. As mentioned above, it is key to keep volunteers updated on monitoring results and program achievements. You may also want to share your results with any technical advisors to your group for assistance in interpretation and in evaluation of monitoring activities. Other significant groups for communication of group activities and monitoring results include:

- people and groups with similar interests,

- the general public,

- government,

- industry,

- funders, and

- the media.

In particular, it is crucial to comply with any communications or reporting requirements tied to any funding that your group has received.

Administration

While administrative matters are not always interesting, dealing with them is a necessary element of maintaining your group and its activities. These matters will include concerns such as ensuring continuing leadership and dealing with planning and evaluation.

Your group, through its steering committee, should evaluate its organization, administration and activities on an ongoing basis and make changes as needed. Input from group volunteers and any technical advisors to your group will be valuable in carrying out evaluations. The steering committee should assess whether your group's objectives are being met, and whether the activities are meeting the community's needs.

A logical offshoot of evaluation of your group and its activities is ongoing planning as needed about organization, administration and activities. It may be wise to update the initial needs assessment on an annual basis. From this, the most important needs of your group and your community can be identified and ranked according to priority. Your group can then develop strategies to meet these needs, choose the appropriate strategy, and develop and carry out a project to implement this strategy. This should be followed by evaluation of the project(s) and progress.

Checklist for Developing A Volunteer Group for Environmental Monitoring And Enforcement

Starting out

- ☐ Gather interested people
- ☐ Assess commitment
- ☐ Brainstorming - develop a vision
- ☐ Background research
- ☐ Community needs assessment

Building the group

- ☐ Involve others
- ☐ Make contacts
- ☐ Record keeping
- ☐ Establish a steering committee

Moving ahead

- ☐ Set goals and objectives
- ☐ Make a budget
- ☐ Find funding
- ☐ Develop and carry out volunteer training
- ☐ Consider needs for technical assistance

Ongoing matters

- ☐ Monitoring
- ☐ Management and presentation of monitoring data
- ☐ Maintain volunteer interest
- ☐ Communications
- ☐ Evaluation and assessment
- ☐ Planning

Resource List
Developing a Volunteer Group for Environmental Monitoring and Enforcement

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A How-To Guide for Millennium Eco-Communities: From Needs Assessment to Evaluation

This Environment Canada publication provides a good basic guide to development of community-based environmental projects. It covers assessment of community needs; setting objectives; development of partnerships; finding and keeping volunteers; communications; and project evaluation.

This publication can be obtained from regional offices for the Environment Canada program EcoAction 2000. The Alberta and Northwest Territories regional office is:

EcoAction 2000
Environment Canada
4999 – 98 Avenue
Twin Atria #2, Room 200
Edmonton, AB T6B 2X3
Phone: (780) 951-8710 or 1-800-567-1570
Fax: (780) 495-4367
E-mail: ecoaction2000.edm@ec.gc.ca

This publication can also be obtained on the Internet at http://www.ec.gc.ca/eco/started_e.htm#guide

Volunteer Monitor

This is a U.S. based newsletter that focuses on volunteer water quality monitoring and is sponsored in part by the United States Environmental Protection Agency. Some issues contain good practical material that can be generally applied to any type of volunteer environmental monitoring.

The *Volunteer Monitor* is published twice a year. Free subscriptions are available by contacting the newsletter at:

The Volunteer Monitor
1318 Masonic Avenue
San Francisco, CA 94117
Phone: (415) 255-8049

Some back issues of the *Volunteer Monitor* are available by mail or through the Internet at http://www.epa.gov/OWOW/monitoring/volunteer/vm_index.htm

Some back issues that contain helpful information for any type of volunteer environmental monitoring group are:

Vol. 15, No. 2 (Fall 1993) – Staying Afloat Financially
Vol. 7, No. 1 (Spring 1995) – Managing and Presenting Your Data
Vol. 8, No. 1 (Spring 1996) – Managing a Volunteer Monitoring Program

Atlantic Coastal Action Program (ACAP)

This program, funded in part by Environment Canada, supports community-based environmental initiatives in the Maritimes. The program's website http://www.ns.ec.gc.ca/acap provides a great deal of useful information on community-based initiatives, with a focus on environmental management. There are also links to the various local groups and initiatives established under ACAP.

This program can also be contacted at:

Atlantic Coastal Action Program (ACAP)
c/o Environment Canada
5th floor, Queen Square
45 Alderney Drive
Dartmouth, N.S. B2Y 2N6
Phone: (902) 426-3766
Fax: (902) 426-4457
E-mail: acap@ec.gc.ca

Organizing Outdoor Volunteers

This book, published by the Appalachian Mountain Club, is a helpful and very inexpensive guide to organizing volunteer groups. Although it focuses on groups that do outdoor conservation projects such as trail maintenance, it has much helpful general information on developing a volunteer group and getting it off the ground. Note that this is an American publication, so references to government requirements and some funding programs are not applicable in Canada.

Written by Roger L. Moore, Vicki LaFarge and Charles L. Tracy, second edition (1992). This book can be ordered from:

Appalachian Mountain Club Books
5 Joy Street
Boston MA 02108
phone: (617) 523-0636

Volunteer Water Monitoring: A Guide for State Managers

This guide is published by the United States Environmental Protection Agency to provide assistance to volunteer monitoring programs organized by state governments. It contains helpful information on organizing volunteer monitoring groups and on presentation of monitoring data.

Publication No. EPA 440/4-90-010 (August 1990). The guide can be ordered from:

United States Environmental Protection Agency
Office of Wetlands, Oceans and Watersheds (4501F)
401 M Street SW
Washington, D.C. 20460

The guide can also be ordered through the Internet by electronic order form at http://www.epa.gov/OWOW/info/PubList/publist6.html. Note that you need the publication number to order the guide through the Internet.

Monitoring Surface Water Quality: A Guide for Citizens, Students and Communities in Atlantic Canada

This Environment Canada document provides helpful information on organizing volunteer monitoring groups, although the focus is on water quality monitoring. It was developed as part of the Atlantic Coastal Action Program. DSS Catalogue No. EN37-109-1994E, published by Environment Canada, 1994.

Copies of this document are available from:

Atlantic Coastal Action Program (ACAP)
c/o Environment Canada
5th floor, Queen Square
45 Alderney Drive
Dartmouth, NS B2Y 2N6
Phone: (902) 426-3766
Fax: (902) 426-4457
E-mail: acap@ec.gc.ca

Where Can I Find…? A Research Guide for Groups Interested in Health and Environment Issues

This booklet, published jointly by Health Canada and Environment Canada, provides helpful information on carrying out research and information gathering activities. In particular, it contains material on contacting experts for information. Note that this booklet was prepared in Halifax, and thus contains some specific references to information sources in Atlantic Canada. However, it contains enough general information to be useful to any group wanting to gather environmental information.

This booklet can be obtained free of charge from:

EcoAction 2000
Environment Canada
16th Floor, Queen Square
45 Alderney Drive
Dartmouth, Nova Scotia B2Y 2N6
Phone: (902) 426-8521
Fax: (902) 426-2062
E-mail: ecoaction2000.mar@ec.gc.ca

This booklet can also be obtained on the Internet at
http://www.ns.ec.gc.ca/ecoaction/research.pdf

Alberta Environmental Network

The Alberta Environmental Network (AEN) operates as a non-profit grassroots umbrella organization for Alberta environmental organizations. It seeks to facilitate sharing of information and resources among member groups and assists them in taking common action. The AEN maintains several groups, known as caucuses, focusing on specific areas of interest and concern.

The AEN can be contacted at:

Alberta Environmental Network
10511 Saskatchewan Drive
Edmonton, AB T6E 4S1
Phone: (780) 433-9302
Fax: (780) 433-9305
E-mail: aen@web.net
http://www.web.net/~aen

AEN publications include the *Alberta Environmental Directory*, a listing of environmental groups and other organizations involved in environmental matters, and *AEN Field*Notes*, the AEN's regular newsletter.

Clean Air Strategic Alliance (CASA)

CASA is a non-profit, multi-stakeholder body that develops policies and strategies for maintaining and improving air quality in Alberta. It is made up of a Board of Directors representing various stakeholders and project teams that address specific air quality issues.

CASA's website (www.casahome.org) is a good source of information about Alberta air quality. As well, CASA makes decisions on a consensus basis, and has developed an information document *Beyond Consultation: Making Consensus Decisions*. This document can be obtained from CASA at the address below, or can be accessed through the Internet at http://www.casahome.org/consenus.htm.

CASA can also be contacted at:

Clean Air Strategic Alliance
9th Floor, Sterling Place
9940-106 Street
Edmonton, AB T5K 2N2
Phone: (780) 427-9793
Fax: (780) 422-3127
E-mail: casa@casahome.org

Resource Centre for Voluntary Organizations

This is a resource centre focussing on fundraising and volunteer management. It has a resource library and does not charge for its services. The Centre is located at:

Grant MacEwan Community College
Room 5-132, 10700 – 104 Avenue
Edmonton, AB T5J 4S2
Phone: (780) 497-5617

Charity Village

The Charity Village Internet site, located at <http://www.charityvillage.com/charityvillage/main.html>, is billed as Canada's supersite for the non-profit sector, and contains more than 2,000 pages of news, jobs, information and resources for executives, staffers, donors and volunteers.

Revenue Canada

The Charities Division of Revenue Canada deals with registration of charities under the *Income Tax Act*. It can be contacted at:

Charities Division
Revenue Canada
400 Cumberland Street
Ottawa, ON K1A 0L5
Phone: 1-800-267-2384
<http://www.rc.gc.ca>

Revenue Canada has a helpful brochure titled *Registering a Charity for Income Tax Purposes* (publication number T4063 (E) Rev. 97 2780E). The brochure discusses whether organizations should apply for charitable registration, and sets out the main factors considered by Revenue Canada in registering an organization. The brochure can be obtained through the Internet at <http://www.rc.gc.ca/E/pub/tg/t4063ed/t4063ed.html>, or can be obtained free of charge from a Revenue Canada tax services office. Contact information for Revenue Canada tax services offices in Alberta is listed below:

Revenue Canada Calgary tax services office
220 – 4 Avenue SE
Calgary, AB T2G 0L1
Phone: (403) 233-5133
Fax: (403) 264-5843

Revenue Canada Edmonton tax services office
Suite 10, 9700 Jasper Avenue
Edmonton, AB T5J 4C8
Phone: (780) 495-5400
Fax: (780) 428-1584

Revenue Canada Lethbridge tax services office
300, 704 – 4 Avenue S
P.O. Bag 3009
Lethbridge, AB T1J 4A9
Phone: (403) 382-3013
Fax: (403) 382-3052

Revenue Canada Red Deer tax services office
4996 – 49 Avenue
Red Deer, AB T4N 6X2
Phone: (403) 341-7006
Fax: (403) 341-7053

NOTE:
This article is reprinted courtesy of the *Volunteer Monitor,* 1318 Masonic Avenue, San Francisco, CA 94117, USA, phone (415) 255-8049, <http://www.epa.gov/OWOW/monitoring/volunteer/vm_index.html>.

The Volunteer Monitor, Vol. 8, No. 2, Fall 1996

Volunteer Monitoring: No Limit

by Eleanor Ely

What can volunteers monitor? Maybe the best reply to that is, What can't they? The following quick tour to a few of the farther corners of the wide world of monitoring demonstrates that volunteers can, and do, keep tabs on everything from underwater reefs to atmospheric ozone to infant birth weights.

Coral Reefs

On a typical day in the Florida Keys, thousands of diving enthusiasts rove silently through the underwater world of North America's most extensive living coral reef system, enjoying the spectacular beauty of brightly colored reef fish, corals, and sponges. In recent years, some of these divers have also been collecting data to help track the distribution and abundance of reef fish. Others have been surveying the reef surface itself.

Concern about the "information gap" in scientific understanding of the reef ecosystem motivated two marine life photographers, Paul Humann and Ned DeLoach, to found an organization called REEF (Reef Environmental Education Foundation) in 1991. Humann and DeLoach reasoned that recreational divers' skills in fish identification could be put to use in the same way that birders' expert knowledge has been used for decades to collect population and diversity data on birds. The basic concept was, as DeLoach puts it, to transform divers from underwater sightseers into underwater naturalists. From this idea grew the Reef Fish Survey Project, a joint endeavor of REEF--which trains the volunteers and conducts trips--and The Nature Conservancy, which provides data analysis, interpretation, and quality control.

Divers participating in the reef fish survey record their observations on a specially designed underwater slate. Later they transfer the information to a computer-scannable data form, which they send to REEF headquarters in Key Largo. To date, over 9,000 data forms have been sent in.

One use for the fish survey data is to evaluate a new "underwater zoning" system that is being implemented in the Florida Keys National Marine Sanctuary. In an effort to protect the reef and its inhabitants, the Sanctuary has designated several zones in which diving and fishing are restricted to various extents. For example, some zones are "no-take" (diving is permitted, but nothing may be removed), and four small research zones are "no dive/no take."

Fish aren't the only form of reef life that is being monitored by volunteers. Volunteer divers participating in The Nature Conservancy's Coral Watch program examine the reef surface, estimating the percent cover of different life forms, such as algae, sponges, and corals. Mark Chiappone, a marine biologist with The Nature Conservancy, explains that the reef surface can be thought of as "a thin living skin covering a chunk of rock." (The "rock" is the calcium carbonate laid down over hundreds of years by corals and algae, and continuing to be deposited by the living organisms on the reef's surface.)

Coral Watch was designed to document the state of reefs in the Florida Keys National Marine Sanctuary. The most active participants are divers from Walt Disney World's Epcot Center--professional divers with scientific experience who are willing to donate their time and expertise to help conserve reefs. They receive training in identifying the reef's major life-form types, and in methods for visually estimating percent cover.

"The reef ecosystem is very complex, and it's hard to tease out human impacts from natural influences," says Chiappone, who supervises the Coral Watch project. "To assess the reef's condition we have to examine a number of parameters, then try to piece together the puzzle." Some of the pieces are coming from the Coral Watch volunteers. For more information on the Reef Fish Survey Project, please contact REEF at P.O. Box 246, Key Largo, FL 33036; ph. 305/451-0312.

For more information on Coral Watch, contact Mary Enstrom at Marine Stewardship Programs, P.O. Box 500368, 5550 Overseas Highway, Main House, Marathon, FL 33050; ph. 305/743-2437.

Air

Air quality can be monitored with a sophisticated piece of equipment that costs over $10,000. It can also be monitored with a homemade device that basically consists of a small rubber band mounted on a piece of wood. The choice of methods depends on what you want to find out, and what your resources are.

The lowest-cost alternative is the "TERC ozonometer," which students can build using a thin band of natural rubber, a wooden board, a plastic coffee stirrer, and some simple hardware. This device tests the level of ground-level ozone, which is a major smog component and very damaging to the human respiratory system. The TERC ozonometer is based on the fact that natural rubber deteriorates rapidly in the presence of ozone. Instructions for making the ozonometer are found in *Air Pollution: Ozone Study and Action*, by Jeffery Frank, Gail R. Luera, and William B. Stapp. The book also contains learning activities and suggestions for action-taking. It is available for $19.95 plus shipping from GREEN, 206 S. Fifth Ave., Suite 150, Ann Arbor, MI 48104; ph. 313/761-8142.

Another inexpensive device for testing ground-level ozone is the "Eco-Badge" kit. Gary Short, who designed the Eco-Badge, estimates that students in at least 1,000 schools around the U.S. are using it. His favorite story is that of a 15-year-old Texas student who used the Eco-Badge to demonstrate that photocopy machines in the school district superintendent's office were generating harmful levels of ozone. The badge, which is pinned to clothing and worn for 8 hours, contains a piece of chemically treated filter paper that changes color when exposed to ozone, allowing the measurement of ozone levels between 10 and 350 parts per billion (ppb). (The National Ambient Air Quality Standard for ambient ozone averaged over a one-hour period is 120 ppb). For more information on the Eco-Badge kit and accompanying lessons books, contact Gary Short at Vistanomics, Inc., 230 N. Maryland Ave., Suite 310, Glendale, CA 91206; ph. 818/409-9157.

Since living organisms are vulnerable to air pollution, it's possible to use a variety of bioindicators. For example, air pollution can be measured by the type and size of lichens present in an area (for more information on lichens as bioindicators, see the book *Air Pollution*, mentioned above). In North Carolina, Brian Morton, a senior economist with the Environmental Defense Fund, conducted a pilot project in which volunteers monitored the effects of ozone pollution on four plant species – tulip poplar and black cherry trees, blackberry, and milkweed — in the Appalachian Mountains. With technical assistance from the U.S. Forest Service and the National Park Service, Morton trained the volunteers to identify the target species and recognize symptoms of ozone exposure, especially patterns of discoloration in leaves (see photo). Volunteers measured both the extent of injury (that is, the proportion of leaves showing any symptoms of injury) and the severity of injury (the amount of injury on a representative leaf). A copy of the field methods used in the study is available for $2.50 from North Carolina Environmental Defense Fund, 128 E. Hargett St., Suite 202, Raleigh, NC 27601; ph. 919/821-7793.

One project that uses the high-end equipment mentioned at the beginning of this article is AIRNET, a multidisciplinary high school air quality monitoring project in New Hampshire. AIRNET was started in 1992 by Marian Baker at the Harris Center for Conservation Education. "We had been doing water monitoring projects for 12 years," Baker explains, "and we wanted to expand to air monitoring. Air is a universal resource--no buses required for a field trip!—and it can be done in urban as well as rural schools." Baker was surprised to find a dearth of materials for air quality education and monitoring, and she set about researching various methods.

Baker began by investigating all the cheapest methods available. She found the various bioindicators--particularly lichens, leaf yeasts, and white pines--to be valuable, and the Center continues to use these methods. For chemical and physical monitoring, Baker reports, methods such as the TERC ozonometer and Eco-Badge were "good for education, but not as useful for collecting longer-term, continuous data that could be analyzed statistically." So the program decided to invest in an ACCESS Air Analyzer (manufactured by PAX Analytics)--a portable, battery-operated apparatus that uses direct probes to measure 12 parameters, including carbon monoxide, carbon dioxide, nitrogen dioxide, sulfur dioxide, ozone, background ionizing radiation, and EMF/ELF (extremely low frequency radiation). These measurements are taken every 10 seconds, and the data downloaded into a Macintosh computer.

AIRNET now owns three of the analyzers, and each participating school has the use of the equipment for one month. Students design their own projects, interpret the data they collect, and share their findings with other schools via the Worldwide Web. Many students have found poor ventilation (indicated by high carbon dioxide levels) in school rooms, and some have been able to use their results to get the problem corrected. One class compared snowmobiles to pickup trucks and found the snowmobiles were far worse in emissions of carbon monoxide, carbon dioxide, and nitrates. Students also learn that a variety of factors, such as temperature and wind direction, affect ozone readings.

"It's been really exciting to get some real data," says Baker. "At present, we're interested in encouraging others to form local clusters of schools or organizations, copy our methods, and share their data via our web site."

For more information, contact Marian Baker at 603/525-3394; email m_baker@mentor.unh.edu; or visit AIRNET's web site at http//www.info@airnet.org.

Sea Turtles

Very early one morning, about 10 years ago, Wilma Katz accompanied a friend on "sea turtle patrol." From that day, Katz was hooked. She became a member of the Manasota Key Sea Turtle Patrol, joining the ranks of volunteers who monitor Florida beaches daily during sea turtle nesting and hatching season to collect data that helps track the turtles' population and nesting success.

There are five species of sea turtles in Florida waters (loggerheads are the most common), and all of them are protected as either threatened or endangered. Male sea turtles spend their entire lives in the ocean, but females come ashore to lay their eggs. At night, the female turtle drags her heavy body (adult loggerheads weigh from 200 to 350 pounds) up the beach. There she digs a flask-shaped hole in the sand and deposits her eggs, which look like ping-pong balls. The average clutch size is about 100 eggs. After covering the nest with sand, she returns to the sea. About two months later, the babies hatch and make their own way to the sea.

The nesting season runs from the beginning of May to the end of August, and the hatching season from about the Fourth of July to Halloween. During the entire six-month nesting and hatching season, volunteers like Katz patrol their beaches every morning. At the height of nesting season, there's usually at least one new nest every day. The nests themselves are so well covered that they're hard to spot, so monitors look for the telltale tracks left by the female. ("It looks as if a little tractor has come out of the water," says Katz.) Volunteers mark the nest with a wooden stake, placed about a yard away and labeled with the date.

Once hatching season begins, the volunteers start watching out for baby tracks as well. The hatchlings are only about two inches long, and their tracks are hard to see; Katz describes them as resembling tiny zippers. After the first signs of hatching, monitors wait two or three days to give "late bloomers" a chance to hatch, then dig up the nest and count the number of shells, unhatched eggs, and dead baby turtles. This information is used to determine the average clutch size and percentage of live hatchlings.

The Manasota Key volunteers, like other turtle monitoring projects around the state, send their data to the Florida Department of Environmental Protection (DEP). Allen Foley, a marine biologist with DEP's Marine Turtle Recovery Program, explains that anyone who wants to monitor sea turtles needs a permit from DEP, and one condition of the permit is that they send their data to DEP. Currently there are about 100 permit holders--including universities, conservation organizations, private labs, and small citizen groups like the Manasota Key Sea Turtle Patrol. "The data we get from the permit holders is very useful to us," says Foley, "and we can't get it any other way."

Some permit holders gather other kinds of data on the turtles. For example, in addition to monitoring nests, the Mote Marine Laboratory in Sarasota tags nesting females by attaching a noncorrosive metal tag to each front flipper. The tagging program provides valuable information about migration patterns, the number of times a turtle nests per season, and the intervals between nesting by a given turtle.
Katz says that people who see her patrolling the beach are always fascinated. "People love turtles," she says. "Children love them, adults love them. And they need all the help they can get."

For more information on sea turtle monitoring, please contact Jerris Foote at Mote Marine Laboratory, 1600 Ken Thompson Parkway, Sarasota, FL 34236; ph. 941/388-4441.

Community Sustainability

Every volunteer monitoring project faces the fundamental question of what indicators to track. A stream monitoring program, for example, might weigh the relative benefits of chemical tests versus macroinvertebrate counts. But a project that seeks to monitor community sustainability is faced with an almost limitless choice of potential indicators.

Sustainability itself depends on complex relationships among a host of social, economic, and environmental factors, all linked to each other in ways difficult to measure or predict. Around the country, groups seeking to monitor the sustainability of their communities have chosen such diverse indicators as:

- population growth rate
- miles of road, bike lanes, and sidewalks added per year
- number of species in an annual bird count
- acres of wetlands
- adult literacy rate
- number of salmon returning to spawn
- infant birth weight
- pounds of solid waste landfilled per capita per year
- rate of volunteerism

Sustainable Seattle, founded in 1991, was one of the first community sustainability projects in the United States. With few models to draw on, the group assembled a panel of citizen leaders, government representatives, educators, and others to research and recommend a set of indicators. The process took several years and resulted in an initial list of 99 indicators. Several more months were required to winnow the list to a more practical 40.

In the course of this effort, Sustainable Seattle developed a set of criteria for sustainability indicators. A good indicator is:

- A bellwether test of sustainability (i.e., it reflects something basic to the long-term health of a community)
- Accepted by the community
- Attractive to local media
- Statistically measurable
- Logically or scientifically defensible

One question confronted by the panel was whether the availability (or lack) of data should determine whether an indicator was kept. While some indicators were dropped for lack of data, others were considered too important to drop. As Sustainable Seattle co-founder Alan AtKisson notes, lack of data "is itself an indicator that the issue is receiving insufficient attention."

Hundreds of volunteers went to work to compile data on the 40 indicators, and in 1995 Sustainable Seattle published the results. The report revealed that 8 indicators were improving, 14 were moving Seattle away from sustainability, and the remainder were stable or did not yet reveal a trend. But, as the report writers note, "measuring progress is not the same as making it." The indicators must be used to guide change "in our priorities, in our collective decision-making and policy development, and in our individual and organizational behavior."

Today nearly 150 community indicator projects are active around the country, according to Redefining Progress, a nonprofit public policy organization that is creating a nationwide Community Indicators Net-work to facilitate information exchange among existing projects. For more information about the Network and web page, or about the Community Indicators

Handbook (due out in early 1997), contact Kate Besleme, Redefining Progress, One Kearny St., 4th floor, San Francisco, CA 94108; ph. 415/781-1191 x312; email besleme@ progress.org.

Some other helpful resources on tracking sustainability are:

Three booklets published by the Izaak Walton League of America – *Securing Your Future: Pathways to Community Sustainability; Monitoring Sustainability in Your Community;* and *Community Sustainability* (a mini-curriculum for grades 9 -12) – are available for $2 apiece (includes shipping) from IWLA, Carrying Capacity Project, 707 Conservation Lane, Gaithersburg, MD 20878; ph. 301/548-0150.

Indicators of Sustainable Community 1995 discusses the results for 40 indicators tracked by Sustainable Seattle. Available for $15 (includes postage) from Sustainable Seattle, Metrocenter YMCA, 909 Fourth St., Seattle, WA 98104; ph. 206/382-5013.

CHAPTER 3

Expanding your universe:

Suggestions on Making Contacts and Building Partnerships

Acting on your interests and concerns about local air quality, you have worked with others to start a volunteer monitoring group within your community, as discussed in the previous chapter. In your planning and research, you may have come across resource material that stresses the importance of making contacts and developing partnerships. How does this affect your group and its projects? Why are contacts and partnerships important to groups and projects like yours?

Benefits

Making contacts and building partnerships can provide the following benefits for your group and its projects.

- It is an inexpensive method for distributing information within your community about your group and its projects.
- It is a means of gaining broad community support for your group and its projects.
- It can be used to locate and attract support (financial, in-kind and manpower) and participants.
- It can reduce the costs of your group's projects.
- It can provide your group with access to information and expertise.
- It is a tool for identifying and addressing community needs and concerns about environmental matters.

Making contact with individuals and groups who represent a wide range of community interests can be helpful in developing ideas and projects for your group. By identifying your community's needs and concerns about air quality, your group can develop projects that help to address those needs and concerns. As well, by making and maintaining a broad range of contacts, your group and its projects will receive greater exposure and familiarity within your community. This helps to set the stage for community support and involvement in any subsequent projects.

Getting started

When to make contacts

Making contacts should be an ongoing process, but it is most effective to begin doing so in your group's infancy. You will also want to renew existing contacts and make new ones at the initial planning stages of any new project. Early contact allows you to consider, represent and involve a greater range of interests from the beginning of your project. You should work to identify potential contacts in the preliminary process of planning and developing your project. This can be done as part of your basic information-gathering activities, and all members of your group should be involved. Look at all perspectives in identifying potential contacts, and try not to restrict your approach only to those whom you think may have a favourable view of your project. Where possible, make use of connections that members of your group have to potential contacts.

Who to contact

An important source of information and contacts is other groups who have carried out projects similar to yours. These groups will be able to advise you of their experiences, and may be able to put your group in touch with helpful contacts. This chapter's resource list includes information on locating these types of groups.

Environmental groups

A logical initial step is to determine whether there are any environmental groups in your area. These groups will likely have an interest in your group and its projects and may be able to assist you in making contacts.

Another helpful information source is the Alberta Environmental Network, an umbrella organization for environmental groups within Alberta. The Canadian Environmental Network, a similar organization that operates on a national basis, may be helpful in making contacts outside of the province.

You may also want to consider contacting the Environmental Law Centre. The Centre carried out pilot community monitoring programs within Alberta and has helpful information to share. See this chapter's resource list and Chapter 1 for further information.

Government

Both the federal and provincial governments have responsibilities to regulate environmental matters. Regional or divisional offices for both levels of government can be helpful contacts, and may be able to put you in touch with possible contacts in your community and the surrounding area. As well, consider contacting government staff responsible for monitoring, enforcement and air quality matters. They may be aware of other groups who have similar interests or have carried out projects similar to yours. Depending on the size of your local municipality, there may be a local government office or staff dealing with environmental matters.

Industry

A first step is to identify local industries with an actual or perceived effect on air quality. If there are any employees of these industries involved in your group or project, seek their input and involvement in making the appropriate contacts. Where possible, try to make contact with higher level staff of these industries. Another option is to contact local industry staff who deal with environmental matters for the facilities.

As well, consider whether there is any industry association that may have an interest in your project. These types of associations may be based over a regional area or may be organized to represent a particular industrial sector. Where such associations exist in your area, they may be an efficient means of contacting local industries.

Technical experts

Many individuals with technical expertise are employed by or familiar to government and industry. This can include scientists, engineers, technologists, meteorologists or others. Check with the contacts you make in those areas for input on approachable technical experts. Another option is to contact universities and other secondary institutes that provide instruction or carry out research related to air quality matters. Keep in mind that this is a livelihood for these individuals; be clear at the outset of your contact with them whether there is or will be any cost factor involved in terms of payment of a fee.

Practical pointers

Behaviour and ethics

An important element of successfully making contacts is to use professional and considerate behaviour. When speaking with or meeting new contacts, limit your time with them. Most people are very busy and will appreciate it if you are direct, to the point and considerate of their time constraints. Be sure to thank all contacts for their time, both at the time of your meeting and in a subsequent letter. The letter can also be used as an opportunity to summarize your discussion in writing. Remember to leave all contacts with your name and telephone number to allow them to contact you in the future. Some contacts may prefer to communicate by e-mail instead; ask them about their preferences at the close of your initial contact with them.

Keep in mind that the parties involved in environmental matters are well known to each other and that there is a fair amount of communication that passes between them. It is extremely important to be open, honest and fair with all your contacts and to deal with them in a manner that facilitates cooperation wherever possible. You will make little progress where your activities bring your contacts into direct conflict with one another.

Seek referrals

Consider asking contacts if they can suggest other individuals or groups that you should contact. Where these people provide you with suggestions, be sure to ask their permission to mention their name when getting in touch with these new contacts. Follow through on contacts referred to you, and remember to thank the person who provided you with the referral.

Record keeping

A key to successful organization of your efforts in making contacts is to keep records of all contacts. It is not necessary to create an elaborate record-keeping system, but information that should be recorded includes:

- name of contact;
- address;
- telephone and fax numbers;
- e-mail address (where applicable);
- who met with the person;
- the date that they met; and
- the substance of their discussion.

Keeping a copy of all thank-you letters sent to contacts is helpful. Be sure to use your record-keeping system to share information and progress with all group members. It is key to avoid duplication, as you may create a poor impression of your group and your project if a person is contacted a number of times on the same matter by different members of your group.

Building partnerships from contacts

In developing partnerships with your contacts, it is important to think strategically. Consider the contacts you have made, and in particular follow up with those who showed an interest in your project and who you think can help your project. Invite these contacts to participate or otherwise become involved in your project, and provide them with updates on project progress.

Where there is a well-connected person who is interested in your project, have that person help your group to promote its project to their organization or contact. Try to capture and channel their enthusiasm for your project whenever possible. As well, in discussions with potential partners, identify ways in which their partnership in your project will benefit them and their activities within the community.

In taking on partners, it is important to clearly outline the roles and responsibilities of all partners at the outset. You should have partners commit, on an ongoing basis, to the partnership and the goals of the project. It is important to manage partnerships to maintain a balance among all partners; it is helpful to keep focused on the results you want to achieve through your project. As well, it is important to be clear on the relationship between your group and its partners. Be certain at the outset whether partners are volunteering their time and resources, or whether they have been “hired” for pay by your group. This will be particularly relevant in relation to technical experts.

Communication is the main key to maintaining partnerships. Be certain to keep partners up to date on project activities and deal promptly with their concerns and questions. It is also important to acknowledge the involvement of all partners in promotional and other materials related to the project.

Checklist For
Contacts and Partnerships

- ☐ Start early
- ☐ Use group members' connections
- ☐ Potential contacts:
  - ☐ Similar groups
  - ☐ Environmental groups
    - ☐ *local*
    - ☐ *Alberta Environmental Network*
    - ☐ *Canadian Environmental Network*
  - ☐ Federal government
    - ☐ *national/head offices*
    - ☐ *regional offices*
    - ☐ *monitoring*
    - ☐ *enforcement*
    - ☐ *air quality*
  - ☐ Provincial government
    - ☐ *main/head offices*
    - ☐ *regional offices*
    - ☐ *monitoring*
    - ☐ *enforcement*
    - ☐ *air quality*
  - ☐ Local government
    - ☐ *environmental staff*
    - ☐ *public works*
  - ☐ Industry operators
  - ☐ Industry associations
  - ☐ Technical experts
    - ☐ *government*
    - ☐ *industry*
    - ☐ *post-secondary education*
- ☐ Behave professionally
  - ☐ *limit your time*
  - ☐ *be direct*
  - ☐ *thank them*
  - ☐ *leave contact information*
- ☐ Ask for referrals
- ☐ Keep records of all contacts
- ☐ Follow up with contacts
- ☐ Use interested people inside organizations to promote your cause
- ☐ Outline roles and responsibilities of all partners
- ☐ Communicate with and acknowledge partners regularly

Sample Contact Record Sheet

CONTACT INFORMATION

Name: ____

Address: ____

Phone: ____

Fax: ____________________________

E-Mail: ____________________________

INITIAL CONTACT

Made By: ____

- ☐ in-person
- ☐ telephone
- ☐ other

Date: ____________________________

Matters
Discussed: ____

____

____

Thank-You
Letter Sent (Date): ______________________________

Copy Attached? ☐Yes ☐No

Referrals? ☐Yes ☐No
(if yes, attach details on separate sheet and also fill out separate contact sheet)

Resource List
Making contacts and building partnerships

A How-To Guide for Millennium Eco-Communities: From Needs Assessment to Evaluation

This Environment Canada publication provides a good basic guide to development of community-based environmental projects. It includes a chapter on the development of partnerships.

This publication can be obtained from regional offices for the Environment Canada program EcoAction 2000. The Alberta and Northwest Territories regional office is:

EcoAction 2000
Environment Canada
4999 – 98 Avenue
Twin Atria #2, Room 200
Edmonton, AB T6B 2X3
Phone: (780) 951-8710 or 1-800-567-1570
Fax: (780) 495-4367
E-mail: ecoaction2000.edm@ec.gc.ca

This publication can also be obtained on the Internet at
http://www.ec.gc.ca/eco/started_e.htm#guide

Organizing Outdoor Volunteers

This book, published by the Appalachian Mountain Club, is a helpful and very inexpensive guide to organizing volunteer groups. Although it focuses on groups that do outdoor conservation projects such as trail maintenance, it has very helpful general information on developing a volunteer group and getting it off the ground, including building partnerships. Note that this is an American publication, so references to government requirements and some funding programs are not applicable in Canada.

Written by Roger L. Moore, Vicki LaFarge and Charles L. Tracy, second edition (1992). This book can be ordered from:

Appalachian Mountain Club Books
5 Joy Street
Boston, MA 02108
phone: (617) 523-0636

Where Can I Find…? A Research Guide for Groups Interested in Health and Environment Issues

This booklet, published jointly by Health Canada and Environment Canada, provides helpful information on carrying out research and information gathering activities. In particular, it contains material on contacting experts for information. Note that this booklet was prepared in Halifax, and thus contains some specific references to information sources in Atlantic Canada. However, it contains enough general information to be useful to any group wanting to gather environmental information.

This booklet can be obtained free of charge from:

EcoAction 2000
Environment Canada
16th Floor, Queen Square
45 Alderney Drive
Dartmouth, Nova Scotia B2Y 2N6
Phone: (902) 426-8521
Fax: (902) 426-2062
E-mail: ecoaction2000.mar@ec.gc.ca

This booklet can also be obtained on the Internet at http://www.ns.ec.gc.ca/ecoaction/research.pdf

Environment Canada

This federal government department deals with a wide range of environmental matters. The Prairie and Northern Region, which includes Alberta, can be contacted at:

Environment Canada
Prairie and Northern Region
200, Twin Atria Building
4999 – 98 Avenue
Edmonton, AB T6B 2X3
Phone: (780) 951-8600 (general information & enquiries);
(780) 951-8899 (environmental protection)

Environment Canada also maintains a website on the Internet called “The Green Lane”. It can be accessed at http://www.ec.gc.ca. Regional “Green Lane” sites can be accessed through this main site.

The Environment Canada program EcoAction 2000 encourages community-based environmental action and provides funding for local environmental projects. Information about community-based environmental projects funded by this program can be accessed through its website at http://www.ec.gc.ca/ecoaction. Information can also be obtained from EcoAction 2000 regional offices. The Alberta and Northwest Territories regional office can be contacted at:

EcoAction 2000
Environment Canada
4999 – 98 Avenue
Twin Atria #2, Room 200
Edmonton, AB T6B 2X3
Phone: (780) 951-8710 or 1-800-567-1570
Fax: (780) 495-4367
E-mail: ecoaction2000.edm@ec.gc.ca

Alberta Environmental Protection

This provincial government department is primarily responsible for regulation of environmental matters within Alberta.

The Environmental Service is the area of the department dealing specifically with environmental matters, including monitoring, enforcement and air quality. The Service is located at:

Alberta Environmental Protection
Environmental Service
10th Floor, 9915 – 108 Street
Edmonton, AB T5K 2G8
Phone: (780) 427-6247 (toll-free in Alberta by calling 310-0000)
Fax: (780) 427-1014

The Enforcement and Monitoring Division deals with environmental enforcement and monitoring matters on a broad basis, and carries out ambient air monitoring in various areas of the province. This division can be contacted at:

Alberta Environmental Protection
Enforcement and Monitoring Division
11th Floor, 9820 – 106 Street
Edmonton, AB T5K 2J6
Phone: (780) 427-2560 (toll-free in Alberta by calling 310-0000)
Fax: (780) 427-3178

The Science and Technology Branch of the Environmental Sciences Division deals with air issues, develops standards related to ambient air and compiles inventories related to dispersion modelling and emissions. This branch can be contacted at:

Alberta Environmental Protection
Environmental Sciences Division
Science and Technology Branch
4th Floor, 9820 – 106 Street
Edmonton, AB T5K 2J6
Phone: (780) 427-5883 (toll-free in Alberta by calling 310-0000)
Fax: (780) 422-4192

Alberta Environmental Protection has six regional offices for different areas of the province. These regions are responsible for enforcement and monitoring matters at the regional level, and have staff designated to perform related functions. To determine the region in which your community is located, contact the regional office closest to your community. The contact information for the regions is listed below.

Alberta Environmental Protection
Northwest Boreal Region
3rd Floor, Provincial Building
9621 – 96 Avenue, Bag 900, Box #5
Peace River, AB T8S 1T4
Phone: (780) 624-6402 (toll-free in Alberta by calling 310-0000)
Fax: (780) 624-6542

Alberta Environmental Protection
Northeast Boreal Region
4th Floor, 9820 – 106 Street
Edmonton, AB T5K 2J6
Phone: (780) 427-7617 (toll-free in Alberta by calling 310-0000)
Fax: (780) 422-4192

Alberta Environmental Protection
Northern East Slopes Region
107, 1111 – 54 Street
Edson, AB T7E 1T2
Phone: (780) 723-8395 (toll-free in Alberta by calling 310-0000)
Fax: (780) 723-8386

Alberta Environmental Protection
Parkland Region
3rd Floor, Provincial Building
4920 – 51 Street
Red Deer, AB T4N 6K8
Phone: (403) 340-7744 (toll-free in Alberta by calling 310-0000)
Fax: (403) 340-5022

Alberta Environmental Protection
Bow Region
201 Deerfoot Square
2938 – 11 Street N.E.
Calgary, AB T2E 7L7
Phone: (403) 297-7948 (toll-free in Alberta by calling 310-0000)
Fax: (403) 297-5944

Alberta Environmental Protection
Prairie Region
245 Provincial Building
200 – 5th Avenue South
Lethbridge, AB T1J 4L1
Phone: (403) 381-5512 (toll-free in Alberta by calling 310-0000)
Fax: (403) 382-4008

See the organizational chart at the end of this resource list for another description of the areas of Alberta Environmental Protection that deal with air quality matters.

Alberta Environmental Protection maintains a website at:<http://www.gov.ab.ca/env>. You may prefer to contact the department directly to obtain information. Alberta Environmental Protection's general public information number is (780) 944-0313 (toll- free in Alberta by calling 310-0000).

Clean Air Strategic Alliance (CASA)

CASA is a non-profit, multi-stakeholder body that carries out strategic management of air quality in Alberta by developing policies and strategies to maintain and improve air quality. It is made up of a Board of Directors representing various stakeholders and project teams that address specific air quality issues. Given its broad range of stakeholder involvement, CASA may be a good resource for identifying contacts relevant to specific regions or communities.

CASA's website (www.casahome.org) is a good source of information about Alberta air quality. As well, CASA makes decisions on a consensus basis, and has developed an information document *Beyond Consultation: Making Consensus Decisions*. This document can be obtained from CASA at the address below, or can be accessed through the Internet at http://www.casahome.org/consenus.htm

CASA can be contacted at:

Clean Air Strategic Alliance
9th Floor, 9940-106 Street
Edmonton, AB T5K 2N2
Phone: (780) 427-9793
Fax: (780) 422-3127
E-mail: casa@casahome.org

Alberta Environmental Network

The Alberta Environmental Network (AEN) operates as a non-profit grassroots umbrella organization for Alberta environmental organizations. It seeks to facilitate sharing of information and resources among member groups and assists them in taking common action. The AEN maintains several groups, known as caucuses, focusing on specific areas of interest and concern.

The AEN can be contacted at:

Alberta Environmental Network
10511 Saskatchewan Drive
Edmonton, AB T6E 4S1
Phone: (780) 433-9302
Fax: (780) 433-9305
E-mail: aen@web.net
http://www.web.net/~aen

The AEN publishes the *Alberta Environmental Directory*, which is a listing of environmental groups and other organizations involved in environmental matters in Alberta. Copies of the Directory can be purchased for $31.05 (tax and postage included) from:

The Pembina Institute for Appropriate Development
Box 7558
Drayton Valley, AB T7A 1S7
Phone: (780) 542-6272
Fax: (780) 542-6464

Canadian Environmental Network

The Canadian Environmental Network (CEN) is a national umbrella organization for environmental non-governmental groups. It maintains several groups, known as caucuses, focusing on specific areas of interest and concern. Provincial and territorial networks are affiliated with the CEN.

The CEN can be contacted at:

Canadian Environmental Network
300 – 945 Wellington
Ottawa, ON K1Y 2X5
Phone: (613) 728-9810
Fax: (613) 728-2963
E-mail: cen@cen.web.net

Environmental Law Centre

This non-profit charitable organization has carried out 3 community training pilot programs on environmental monitoring and enforcement in Alberta. One pilot focused on air quality issues, another on a regulated industrial facility, and a third on youth.
For information about these pilot programs or general information about community-based environmental initiatives, contact:

Environmental Law Centre
204, 10709 Jasper Avenue
Edmonton, AB T5J 3N3
Phone: (780) 424-5099
Fax: (780) 424-5133
Alberta toll-free: 1-800-661-4238
E-mail: elc@elc.ab.ca
http://www.elc.ab.ca

The Centre maintains a library of environmental information that is accessible to the public free of charge. The library, located at the Centre's offices, is open Monday – Friday, 8:30 a.m. – 12:00 noon and 1:00 p.m. – 4:30 p.m. Many of the documents and publications referred to in this guidebook are included in the Centre's library collection.

Local government

Some Alberta municipalities have branches or staff dedicated to environmental matters. Where there is not a specific environmental office, check with public works or similar areas of your local government that may be responsible for municipal environmental concerns. A possible starting point is to contact any general information number maintained by your local municipality.

Alberta Environmental Protection
Department areas related to air quality monitoring

Assistant Deputy Minister, Environmental Service

This service is the area of AEP that deals specifically with environmental matters, including monitoring, enforcement & air quality.

Regions

These offices are responsible for approvals, enforcement & monitoring at the regional level, & have staff designated to perform these functions

- Northwest Boreal (Peace River)
- Northeast Boreal (Edmonton)
- Northern East Slopes (Edson)
- Parkland (Red Deer)
- Bow (Calgary)
- Prairie (Lethbridge)

Approvals

Enforcement & Monitoring

Environmental Sciences Division (Edmonton)

Science & Technology Branch

This branch deals with air issues, develops ambient air standards & compiles dispersion modelling & emission inventories

Enforcement & Monitoring Division (Edmonton)

This division deals with enforcement & monitoring matters province-wide, & carries out ambient air monitoring.

CHAPTER 4

Working cooperatively

Suggestions on Working with Government Regulators

When you set up a community-based volunteer group for environmental monitoring, one element to consider is how your group will interact with the government and its regulatory staff. Both the federal and provincial governments have environmental departments and other agencies with responsibilities for environmental protection and regulation. The municipal government in your area may have an official or department responsible for environmental matters. As a result of these roles, government has expertise and experience in both environmental monitoring and enforcement matters, as well as access to current technical information.

Government roles in air quality

Federal government

The different levels of government play different roles in dealing with air quality matters. At the federal level, Environment Canada is the department mainly responsible for environmental matters, including air quality. Much of Environment Canada's role at a regional or provincial level relates to technical matters rather than monitoring and enforcement, as many of its enforcement responsibilities have been delegated to provincial environmental regulators through administrative agreements. Environment Canada can provide your group with access to information on broad air quality matters. In particular, its website has good information available on air quality matters; see this chapter's resource list.

Other federal government departments that deal with issues that may interact with air quality matters include:

- Natural Resources Canada: forests, climate change;
- Heritage Canada: parks, wilderness;
- Agriculture Canada: farming; and
- Health Canada: human health.

Alberta government

In Alberta, the government department chiefly responsible for environmental matters, including air quality, is Alberta Environmental Protection (AEP). One of the main statutes enforced by AEP, the *Environmental Protection and Enhancement Act*, regulates air quality matters generally within the province. As well, the Energy and Utilities Board deals with some air quality matters related to the petroleum industry in particular.

The Clean Air Strategic Alliance (CASA) is a multi-stakeholder body, whose participants include the provincial departments of Environmental Protection, Energy and Health. While it is not a government body, CASA deals with Alberta air quality matters in detail on a consensus basis, and the involvement of a wide range of stakeholders, including government, at a senior level makes its activities very significant. CASA develops policies and strategies for maintaining and improving air quality in Alberta. This can include air quality monitoring programs.

Municipal government

Municipal governments in Alberta have responsibility for approving local planning matters. This may include some environmental review by municipal authorities prior to granting planning approval. As well, some local governments may have a designated official or department to deal with local environmental matters.

Preliminary considerations

What do you want from government?

Before taking direct steps to involve government in your group's activities, you should determine generally what you want from government. This could include any or all of the following:

- input and guidance;
- practical advice;
- technical or scientific expertise;
- funding or in-kind contributions.

Identification of your needs related to government can help you to determine which level(s) of government, and which department or area within that particular level of government, to approach.

How do you want government to use your monitoring data?

As well, you should give some thought to the uses that you would like to see government make of the monitoring information generated by your group. Potential government uses of community-based monitoring results include:

- establishing baseline conditions for a specific location or area;

- establishing and tracking trends or patterns in substance levels or environmental conditions;
- auditing industry's environmental monitoring results;
- enforcement of environmental laws.

At the very least, you should have some idea of the use you would like government to make of your monitoring data before meeting with government regulators. However, be prepared to be flexible in order to address government concerns and needs as well. The use that regulators make of your data can be determined in greater detail and refined as you build the relationship between their branch of government and your group. The use that government intends or is willing to make of your data will be very relevant to the development of your sampling methods and monitoring protocols.

Making contact with government – practical suggestions

Getting in the door

Make use of contacts you have already established and people with access to government regulators to establish further contacts within government. If you have had government staff involved in a community monitoring training program in your area, seek their advice and assistance in locating the government staff who will be the greatest help to your group's monitoring efforts. It may well be that these individuals with whom you have dealt previously will be the people who will assist you the most. If you do not have previous government contacts to help you get started, contact other groups that are involved in community monitoring or air quality matters and get their input. It is likely that some of these groups will have contacts within government to whom they can refer you.

Keep on looking

Don't be afraid to ask questions when seeking and making contacts with government staff. It can seem confusing and frustrating to navigate your way through large government departments, but government staff are usually quite willing to provide you with as much assistance as they can. However, they may not be able to help you much if you do not provide them with a clear idea of what you are looking for. As well, be persistent. It may take a few tries to locate the people you are seeking.

Above all else, be sure to behave in a professional and considerate manner, as you would in making any other contacts. Thank all those who have assisted you along the way. Make sure your requests are to the point, and keep meetings with government staff to a time that is brief, yet sufficient to deal with your needs. Once you have found the person(s) you need, ask them about the best way to communicate with them on an ongoing basis. It may be most convenient to carry out the bulk of your interaction by e-mail or voice mail.

What if they say no?

Your group should also be prepared for the possibility that government staff may turn down your attempts to establish a working relationship with them. If this occurs, keep in mind that it is likely not due to any fault on your part. Although you may have been turned down, there is nothing wrong with being politely persistent. Consider keeping government posted about your group's activities by mailing them information on a regular basis. There may be something that will catch their interest. As well, governments have been known to change their policies and staff, so it is wise to keep in touch.

Building and continuing the relationship

Keep in touch

In dealing with government, it is important to maintain regular contact. Keep in mind that government positions are not the secure career spots they were once thought to be. If you let communications lapse for a long period, you may find that your main contact has moved on and that his or her replacement has no idea what you and your group are about. Work with your contact to develop a pattern of regular communication that is effective for both parties. This communication can certainly go beyond telephone or e-mail, where both parties are comfortable with it. Invite your government contacts to attend group events or monitoring activities, or ask them to make a presentation to your group.

You may want to consider having government staff involved as technical advisors to your group, if they are willing to commit the time and energy to do so. Chapter 2 provides more detailed information about the role of technical advisors. As well, if government will be making use of the monitoring data produced by your group, it will be important to obtain government input on your monitoring methods and means of quality assurance and quality control. Government guidance on these matters will assist you in producing monitoring data that is credible and can be put to effective use.

Keep your contacts up to date on your group's monitoring activities. Ask for their input on new activities or projects that your group is thinking of undertaking. They may have helpful suggestions or additional ideas. Ask your contacts to keep you informed about new developments in air quality monitoring and enforcement, and to suggest potential information sources. As well, obtain your contacts' input and guidance whenever you review and update your monitoring methods and protocols. Ask for regular feedback from them regarding the monitoring data you submit to them and use their comments to guide your ongoing monitoring activities.

Acknowledge government help

It is very important to acknowledge the assistance provided by your government contacts. Be sure to thank them when appropriate, particularly if they come to meet with your group or attend a group event or activity. As well, make your contacts' supervisors aware of the assistance that your contact provides; send their boss a letter about their involvement and give specific examples of how your contacts have aided your group. Be sure to give a copy of any such letter to your contacts as well. This kind of acknowledgement is often as valuable as any other type of recognition you can provide.

Access to government information

Governments hold and have access to a wide range of information, including a great deal of environmental information. Much of this information can be accessed by the public. The federal government collects annual data on amounts of chemicals that are released into the environment. The provincial government carries out air quality monitoring throughout Alberta and compiles the data from that monitoring. It also receives monthly and annual air monitoring reports from industries operating in Alberta.

Both the federal and provincial governments have laws that allow citizens to gain access to information held by government. As well, the provincial *Environmental Protection and Enhancement Act* lists various types of environmental information that are publicly available under that Act, including monitoring data generated by both government and approval holders (industry) and the information necessary to understand that data. The resource list provides further information on this topic.

Resource List
Working with Government

Environment Canada

This federal government department deals with a wide range of environmental matters. The Prairie and Northern Region, which includes Alberta, can be contacted at:

Environment Canada
Prairie and Northern Region
200, Twin Atria Building
4999 – 98 Avenue
Edmonton, AB T6B 2X3
Phone: (780) 951-8600 (general information & enquiries);
(780) 951-8899 (environmental protection)

Environment Canada also maintains a website on the Internet called "The Green Lane". It can be accessed at http://www.ec.gc.ca. Regional "Green Lane" sites can be accessed through this main site.

Alberta Environmental Protection

This provincial government department is primarily responsible for regulation of environmental matters within Alberta.

The Environmental Service is the area of the department dealing specifically with environmental matters, including monitoring, enforcement and air quality. It is located at:

Alberta Environmental Protection
Environmental Service
10th Floor, 9915 – 108 Street
Edmonton, AB T5K 2G8
Phone: (780) 427-6247 (toll-free in Alberta by calling 310-0000)
Fax: (780) 427-1014

The Enforcement and Monitoring Division deals with environmental enforcement and monitoring matters on a broad basis, and carries out ambient air monitoring in various areas of the province. This division can be contacted at:

Alberta Environmental Protection
Enforcement and Monitoring Division
11th Floor, 9820 – 106 Street
Edmonton, AB T5K 2J6
Phone: (780) 427-2560 (toll-free in Alberta by calling 310-0000)
Fax: (780) 427-3178

The Science and Technology Branch of the Environmental Sciences Division deals with air issues, develops standards related to ambient air and compiles inventories related to dispersion modelling and emissions. This branch can be contacted at:

Alberta Environmental Protection
Environmental Sciences Division
Science and Technology Branch
4th Floor, 9820 – 106 Street
Edmonton, AB T5K 2J6
Phone: (780) 427-5883 (toll-free in Alberta by calling 310-0000)
Fax: (780) 422-4192

Alberta Environmental Protection has six regional offices for different areas of the province. These regions are responsible for enforcement and monitoring matters at the regional level, and have staff designated to perform related functions. To determine the region in which your community is located, contact the regional office closest to your community. The contact information for the regions is listed below.

Alberta Environmental Protection
Northwest Boreal Region
3rd Floor, Provincial Building
9621 – 96 Avenue, Bag 900, Box #5
Peace River, AB T8S 1T4
Phone: (780) 624-6402 (toll-free in Alberta by calling 310-0000)
Fax: (780) 624-6542

Alberta Environmental Protection
Northeast Boreal Region
4th Floor, 9820 – 106 Street
Edmonton, AB T5K 2J6
Phone: (780) 427-7617 (toll-free in Alberta by calling 310-0000)
Fax: (780) 422-4192

Alberta Environmental Protection
Northern East Slopes Region
107, 1111 – 54 Street
Edson, AB T7E 1T2
Phone: (780) 723-8395 (toll-free in Alberta by calling 310-0000)
Fax: (780) 723-8386

Alberta Environmental Protection
Parkland Region
3rd Floor, Provincial Building
4920 – 51 Street
Red Deer, AB T4N 6K8
Phone: (403) 340-7744 (toll-free in Alberta by calling 310-0000)
Fax: (403) 340-5022

Alberta Environmental Protection
Bow Region
201 Deerfoot Square
2938 – 11 Street N.E.
Calgary, AB T2E 7L7
Phone: (403) 297-7948 (toll-free in Alberta by calling 310-0000)
Fax: (403) 297-5944

Alberta Environmental Protection
Prairie Region
245 Provincial Building
200 – 5th Avenue South
Lethbridge, AB T1J 4L1
Phone: (403) 381-5512 (toll-free in Alberta by calling 310-0000)
Fax: (403) 382-4008

Alberta Environmental Protection maintains a website at http://www.gov.ab.ca/env. Unfortunately, at times it is rather out of date. Contacting the department directly may be more effective in obtaining information. Alberta Environmental Protection's general public information number is (780) 944-0313, toll-free in Alberta by calling 310-0000.

Alberta Energy and Utilities Board

This provincial government agency regulates energy-related industries and developments within Alberta, including oil and gas, hydro and coal. It deals with air quality matters for these industries jointly with Alberta Environmental Protection. The Board can be contacted at:

Alberta Energy and Utilities Board
640 – 5 Avenue S.W.
Calgary, AB T2P 3G4
Phone: (403) 297-8311 (toll-free in Alberta by calling 310-0000)
Fax: (403) 297-7336
http://www.eub.gov.ab.ca

Clean Air Strategic Alliance (CASA)

CASA is a non-profit, multi-stakeholder body that carries out strategic management of air quality in Alberta. It is made up of a Board of Directors representing various stakeholders and project teams that address specific air quality issues. Both provincial and federal government departments are involved in CASA, so CASA may be a helpful information resource in establishing contacts with government regulators dealing with air quality matters.

CASA's website (www.casahome.org) is a good source of information about Alberta air quality. As well, CASA makes decisions on a consensus basis, and has developed an information document *Beyond Consultation: Making Consensus Decisions*. This document can be obtained from CASA at the address below, or can be accessed through the Internet at http://www.casahome.org/consenus.htm.

CASA can also be contacted at:

Clean Air Strategic Alliance
9th Floor, 9940-106 Street
Edmonton, AB T5K 2N2
Phone: (780) 427-9793
Fax: (780) 422-3127
E-mail: casa@casahome.org

Access to government information

The *Disclosure of Information Regulation* (A.R. 116/93) sets out the procedure for accessing information under that is publicly available under the *Environmental Protection and Enhancement Act*. To obtain copies of such information, contact

Alberta Environmental Protection
Regulatory Approvals Centre
Main Floor, 9820 – 106 Street
Edmonton, AB T5K 2J6
Phone: (780) 427-6311 (toll-free in Alberta by calling 310-0000)
Fax: (780) 422-0154

Information held by the provincial government can also be accessed under the *Freedom of Information and Protection of Privacy Act* (S.A. 1994, c. F-18.5). The government of Alberta maintains a home page for this Act at http://www.gov.ab.ca/foip. Each provincial government department also has staff designated to deal with information requests under this Act. For Alberta Environmental Protection, contact

Alberta Environmental Protection
FOIP Coordinator
6th floor, 9915 – 108 Street
Edmonton, AB T5K 2G8
Phone: (780) 427-4429 (toll-free by calling 310-0000)
Fax: (780) 427-9838

Information held by the federal government can be accessed under the *Access to Information Act* (R.S.C. 1985, c. A-1). The website http://infoweb.magi.com/~accessca/brochure.html provides basic information about accessing information under this Act. The home page for the federal Information Commissioner is located at http://infoweb.magi.com/~accessca/oic.html#1.

The *Guide to Access to Information and Protection of Privacy – Alberta and Canada* is an excellent practical information resource to guide you through the process of accessing information held by either the provincial or federal government. The guide is written and published by the Alberta Civil Liberties Research Centre, and can be purchased from the Centre for $3.00 plus shipping and handling. The Centre can be contacted at:

Alberta Civil Liberties Research Centre
c/o Faculty of Law
University of Calgary
2500 University Drive N.W.
Calgary, AB T2N 1N4

Phone: (403) 220-2505
Fax: (403) 284-0945
e-mail: aclrc@calcna.ab.ca
http://www.calcna.ab.ca/populati/communit/acl/aclrc.html

The full text of the *Guide to Access to Information and Protection of Privacy – Alberta and Canada* is also available on the Alberta Civil Liberties Research Centre's home page. Note that the Centre holds copyright to the Guide, which is available for people to download and print a copy for personal use only. The Guide can be accessed at http://www.calcna.ab.ca/populati/communit/acl/foip.html.

CHAPTER 5

Dealing with dollars and cents:

Suggestions on Funding for Community-Based Environmental Monitoring Projects

The importance of funding

The key to most successful environmental projects is to have a secure source of funding, so unless your group's members are fortunate enough to be able to fund your projects themselves, your first priority after identifying a need for a project is to raise funds for it. Fundraising is a sometimes intimidating, sometimes frustrating process, but it need not be. The secret to making it less so lies in concentrating your efforts at the start, putting most of them toward the preparation and research stages.

The fundraising process can be broken down into four related but distinct stages:

- **Preparation** - Making a game plan and budgeting;
- **Research** - Targeting specific funders;
- **Asking** - Approaching funders; and
- **Following up**

As you can see, two of the four stages must be completed *before* even approaching a funding source, emphasizing again the importance of preparation and research.

Preparation

Stating your vision

Chapter 2 indicated that a good first step for your group is to clearly identify and formulate your vision or mission. This is essential before you begin the fundraising process. It involves two tasks:

- The case statement — This should be a concise one to two page description of your group, what it does, and why it does what it does. The case statement serves two purposes in relation to fundraising: it gives some background on your group and it answers the question "Why should we give you money?"

- The mission statement — This is a one to two sentence statement that states what your group stands for and why it exists.

These statements are extremely important when applying to corporations and other sources for funding.

As the case and mission statements are a key element of your proposal, be sure to have them proofread by as many people as possible, along with anything else you submit to a funder. While marks aren't deducted for spelling as they are in grade school, a funding application that is full of errors reflects badly on your organization, and could cost you a funding source.

Making a budget

One of the hardest things for a new group to do is to draw up a program budget, but this step is also essential in presenting your "pitch" to a potential funder. A detailed budget gives you an idea of your group's overall financial needs. Preparing a budget also makes you think about the sorts of things funders like to see in applications: where the money will be going, and why.

Often funding applications will require inclusion of a detailed budget. You should generally include a budget in each application, as this provides concrete evidence that your group has put some forethought into your project. Asking for a thousand dollars "for our group" is definitely not as effective as providing specific details on the project for which those funds are sought.

If possible, your group should try to recruit someone with experience in handling tasks such as budgeting as treasurer. Experience will allow the treasurer to more accurately predict the likely types and amounts of expenses. In any event, your budget should generally include the following categories:

- *Salaries* - at first, your group may consist entirely of volunteers, but over time it may choose to hire staff. As an organization grows, salaries generally become the most expensive item on the budget, so you should start thinking about this early.

- *Benefits and insurance* - again, this category may be small to begin with, but even purely volunteer groups should consider volunteer insurance. An organization with paid employees must pay, at a minimum, Employment Insurance, Canada Pension Plan, and Worker's Compensation premiums.

- *Office rental* – this will include utilities and office insurance. In the beginning, you may be able to set up in a member's home. You may also find a supporter willing to donate office space.

- *Office equipment* – this can include computers and software, telephones, photocopiers, desks, fax machines. Donations of these items are also possible.

- *Office supplies* – this will include paper, postage, subscriptions, and fax, printing and photocopying charges (if using your own machine, allow 8-10 cents per copy to cover depreciation).

- *Professional costs* – you may need to hire a consultant or other professional to assist with your project. As well, where some funders provide a substantial financial contribution to a project, they will require the recipient to provide an audited financial statement at project completion. Be sure to obtain a written quote from any consultant or other professional you anticipate involving in your project.

- *Telephone and Internet charges* – this will include long distance and line charges. Many groups also find it effective to set up on the Internet, by either running their own web pages or "piggybacking" on another site.

- *Monitoring equipment* – this will include maintenance and upkeep. Don't forget that you will also need some sort of data management system, in addition to the monitoring equipment.

- *Training* – this will include learning to use the monitoring equipment and data management system.

- *Travel* - to monitoring sites, conferences, etc. Allowances for people using their own vehicles are generally between 20 and 30 cents per kilometer. You can also include airfare and accommodations if your group foresees such expenses and has the resources to provide for them.

- *Meetings* - community monitoring involves meeting with various interested parties. While this may often happen in their facilities, you may need to rent space and cater some meetings.

- *Publications and self-promotion* – this may include advertising costs. While your group may not want or need to start up an official newsletter, you should provide some sort of information on your monitoring results and future plans, both for funders and for other interested parties.

These categories are by no means exhaustive, nor are they fixed in stone. It may be helpful to contact existing groups and ask them what kinds of expenses to expect, or what surprises they may have encountered. The key is to have a budget that works for your group and helps you know what to ask for.

In-kind contributions

Where you can obtain donations of time, equipment, supplies or services (also known as in-kind contributions), be sure to take these opportunities. Using in-kind contributions will help to keep your project costs down. As well, many funders who require that you locate contributions to match their grant will allow you to value in-kind contributions for them to match. This is an important point to keep in mind over the course of your fundraising.

Begin to focus your planning

In developing a fundraising plan, it is important to focus your efforts. While some groups have the luxury of doing mass mail-outs to the public at large to solicit funds, it is likely that your group will not; even if it does, this is one of the least effective uses of your limited resources. It is much more effective to pre-determine who is most likely to provide a return on the investment of your time and money, for that is what fundraising really is — an investment — and like any investment you want to get as high a return as possible.

For community-based projects, a good first choice in making your plan will be to target the specific community or communities your projects will benefit. This group may still be too large, depending on your available resources, so it will be necessary to sit down with your fellow members and brainstorm about the categories of community members you should target. Possible categories include government, industry, foundations, and sectors of the general public, and within these categories other distinctions can be made.

It is a good idea to seek funding from a number of sources, as being too dependent on too few funding sources can leave an organization vulnerable. In making your plan, try to include as many target groups as possible.

Deal with any legal requirements

Chapter 2 discussed the differences between non-profit and charitable organizations. If your group is a registered charity under the *Income Tax Act*, it will be subject to certain limitations on how donations can be spent on its activities. You will want to take this into consideration in making your project budgets if you plan to rely largely on charitable donations.

As well, you should be aware that your group may become subject to the provincial *Charitable Fund-Raising Act* over the course of its fundraising activities. This Alberta law, although it refers to “charitable organizations”, can apply to non-profit organizations that are not registered charities under the *Income Tax Act*. The *Charitable Fund-Raising Act* sets out requirements that must be met by organizations involved in fundraising by soliciting donations. This chapter’s resource list provides sources for further information about this Act.

Research

Once you have determined your financial needs and settled on some target groups, the next stage of your fundraising efforts will require you to further narrow your focus, this time to specific funders, and determine how to reach them. Government, corporate sponsors, and foundations often have specific requirements about who they give money to and how to solicit funds from them. Different kinds of individuals may also require different approaches.

Individuals

Individuals are by far the biggest source of funds for charities in general, both in terms of numbers of donations and amounts given, contributing approximately 85 percent of all Canadian donations annually. Accessing this source of funds is the tricky part, especially for a new group with few resources, so it may be better to approach the public after funding is in place from other sources. At any rate, you will have to narrow your target group to the point where your resources can obtain the best results.

When targeting individuals, different approaches lead to different results. An effectively placed advertisement may yield as much as a day on the phones or a mail-out. Face-to-face solicitation is often the most effective method, but this too has variations, such as going door-to-door or setting up a booth in a mall or at an event. Other techniques include holding a conference or workshop and charging a fee, holding a membership drive, or producing and charging for a newsletter. You may also want to consider having the members of your group pay a membership fee. Researching and experimenting with different approaches will determine what is best for your group.

Organizations

Organizations must be targeted even more specifically than individuals. You should always tailor-make your funding application to the specific organization you are approaching. There are several types of organizations that you might approach for funds, including government, foundations, service clubs, and corporate sources. Each requires a somewhat different type of research.

Government

Government funding is not as certain a prospect as it used to be. Government departments at all levels have faced budget cuts for several years, and this has had an effect on the amount of funds they commit to projects of all kinds. One way to find out if a department has available funds is to contact its public affairs or communications area, remembering that for the federal government this means both regionally and nationally, as often both levels have separate budgets. Another possibility is to contact a department’s community affairs or public outreach area, if it has one. Government directories are available on the Internet, at the sites listed in this chapter’s resource list.

Good starting points are the environment departments of the various levels of government: Alberta Environmental Protection, Environment Canada, and the environmental departments of major cities. Other less obvious departments may also be interested in your project. For example, health departments may be impressed with your project’s health benefits. If your monitoring area includes a First Nation, approach Indian and Northern Affairs Canada. As well, the federal Department of Canadian Heritage runs a Community Partnerships program, which promotes the growth and diversity of the voluntary sector and enhances its independence.

Once you have exhausted your options, be sure to obtain from the department(s) a detailed description of the kinds of projects they fund (if available), and the application guidelines. Often government funding programs will also provide information about projects that they have previously funded.

Foundations

Several of the larger foundations are included in this chapter's resource list, which may save you some research time. However, local foundations are usually your best bet when it comes to local programs such as a community-based environmental monitoring program. To find and access these, try to locate a directory of local foundations, which may be available at your local library, through government departments such as Alberta Community Development, or at a United Way office. Smaller foundations may also be located through local banks or trust companies. As well, more and more foundations are establishing Internet sites, so an Internet search is a must. Some of these sites are listed in this chapter's resource list.

As with government, don't limit yourself to the obvious categories. Instead, think of how your program has effects beyond strictly environmental ones, and search the categories associated with those effects. When you find some matches, your research is not over. If a description exists in the directories, use that as a starting point only, and obtain the foundation's application guidelines and annual reports. Also try to obtain information about its grantmaking history, if possible. Only then will you be ready for the next step.

Service clubs

Service clubs, which donate millions of dollars each year to community projects and charities, require a somewhat different approach than that used with foundations or government. They are sometimes harder to research because as a rule they give to a wide variety of charity projects; as a result, more of the fundraising effort is in cultivating personal relationships with the club members than in targeting specific clubs.

The easiest way to establish these relationships is to be a member of these clubs, or to know a member who can get you in the door. If no one in your group is in a service club that you think you could benefit and that could benefit your group, consider joining them yourself. As a last resort, don't be afraid to "cold call" by simply asking them for the funds you need. The worst they can do, after all, is say no.

Once you are in the door, then your research starts, much as you would do with any other funder, by asking for information about the types of projects the club likes to contribute to, and getting an idea of how you could present your group's project in a way that would appeal to this club. One option is to make a formal presentation, in which case you will want to be aware of the club's particular procedures.

Another option is to network with club members, spreading the word informally about your group. An added benefit of this approach is that club members have lives and influence outside of the club, which could benefit your group in the long run. Club members tend to be on the more affluent side, and are often involved in the corporate or government worlds, so networking with them may give you an "in" with these groups as well. The cliche of the fundraising business is that you don't raise funds, you make friends, and it is never truer than when it comes to soliciting funds from service clubs.

Corporate sources

Corporations, like government, have faced budget reductions in recent years. In addition, corporations, for a variety of reasons, are hesitant in their donations; there may be no shareholder support for such actions, or the risk of controversy may scare them off.

On the other hand, if you can access corporate donations, you have access to a sizeable amount of money or in-kind donations, and you can take advantage of corporate peer pressure to get other corporate donors on board. The public relations angle can also play in your favor if your project will provide a definite benefit to the community that could make the donor look good if they were to contribute.

Some groups seeking funding may have a problem with this last item, as some members may have moral or ethical objections to accepting donations from businesses they see as part of the problem. Your group should address such issues before they arise, in order to prevent the fragmentation (or worse) that can result from such debates.

Research is also a key in securing corporate donations. Smaller businesses can be approached in much the same way as service clubs, with the emphasis on creating relationships with the people in charge of the purse-strings. This may be more difficult to do with large corporations due to their more complicated corporate structure. Proper, thorough research will allow you to target the right corporations, and to make an impression that will outlast any particular contact.

One good place to start is with large companies that have a history of charitable or community contributions. IMAGINE is an organization that maintains a list of the top 400 "Caring Companies". These are companies that have pledged to give away 1% of their pre-tax profits. The list, which is available free of charge, does not include contacts or addresses, but these can be researched through corporate registries or over the Internet. IMAGINE is listed in this chapter's resource list.

Another good place to start is with companies that have a local connection. Your project has benefits for people in your community, people who in turn support the businesses in that community. Impressing this connection upon a corporation may help your cause. The opposite also holds true: companies whose employees use or will benefit from your services may be better targets than those whose employees don't.

Once you have narrowed down your corporate targets, you still need to dig deeper. You should learn about the donations practice of the corporation. Determine whether there is a donations committee or coordinator, or if there is a corporate foundation. Find out what the funding and application guidelines are, who the contact person is, who administers corporate donations, and if they have any specific focus to their giving. Doing any less wastes both your time in sending in an application and their time in reading it. If the corporation does not have a specific structure in place for dealing with donations, go to the upper management of the corporation or approach any contacts that you have within the corporation.

A sometimes overlooked aspect in approaching large corporations is employee funds, where employees contribute to a general charity fund, with this money periodically being distributed to various groups. Many large Canadian corporations have such funds (some are listed in this chapter's resource list), so when doing your research, don't forget to check into this.

Approaching funders

Your targets have been researched, your preparatory work is finished. Now you are ready to approach funders for funds. An essential element in asking for contributions is the proposal. While there is no one way to write a proposal, and often funders will have their own specific requirements, use the following as a guide. First, some general tips:

- Write for your audience. You must tailor your proposal to the specific funder to whom you are applying. Emphasize different things for different funders. This is not telling people what they want to hear so much as it is playing to your strengths.

- Put yourself in the position of the funder. Think of what it would take to convince you to accept your proposal if you were the one receiving it.

- Emphasize your connections with the funder. Wherever possible, show how funding your project is right for the funder, with specific details that reveal your research.

It is extremely important to determine whether the funder has specific requirements for the format and submission of the application. Many may provide an application package that contains explicit instructions. Where the funder requires a specific format or information, be sure to follow the instructions. This is one time where doing things differently will not gain any points in your favour.

If the funder does not require a specific format for its applications, start with a cover letter. The cover letter should be like a good introduction to an essay; don't say too much, but give an overview of what is to come. Cover letters should be no more than a page, and should show your purpose, need, successes, results expected, what you are requesting and how you will follow up. Some funders are so busy or swamped with applications that your package may be reviewed on the strength of this letter alone, so make it count.

Within the proposal, write a clear and concise definition of the problem. Use this section to educate the funder about the problem you are trying to solve. Use statistics, and provide a human interest story for the reader if possible. Personalize the problem for the reader.

Show how your group will solve the problem. Be specific, and be sure your solution relates to the problem in a way that is obvious to the outsider. Avoid using jargon; assume your reader knows nothing about monitoring, and explain your project in clear and practical terms. In this section, include how your project will be measured and evaluated, which requires that your group have certain goals. Close this section with a clear picture of why your group is uniquely suited to solve the problem.

Describe your organization and its goals. Avoid repetition of your case statement in this section, as you will include it here. In addition, emphasize the expertise and qualifications of your group's members. Biographies may be appropriate. Also include any press clippings or endorsements that may exist about your group.

Show them how much it will cost. Include your budget, which you have already determined will fit within the funder's guidelines. Ask for a specific amount, which may be either all or part of the budget. Describe the donation in terms of what it will do for the environment and the community, not what it will do for your group. In some cases, you may also wish to break down the funds into per-unit terms. For example, state that a donation of X will purchase one air monitor, or Y will run and maintain it for six months. You don't necessarily need to use the money for that purpose, but some funders like to see the concrete results of their donations.

Indicate how you will acknowledge funders. Be specific in explaining how you will make others aware of their donation to your group. Acknowledgement can include:

- explicit mention of funders and use of their logos in print material such as newsletters or other publications;

- posting signs of acknowledgement at group events; and

- listing their contribution in press releases or other communications.

Keep in mind that some funders may have specific requirements related to acknowledgement of their contributions.

You may also want to list other sources and potential sources of funds, as well as your plans for securing future funding. It will be necessary to provide this information to funders that provide matching funds only. Some funders may require written confirmation of funding from your other funding sources.

Following up

After your request package has been submitted, there are two possible outcomes: rejection or acceptance. Neither puts an end to your relationship with the funder.

If you have been unsuccessful, write a letter thanking the funder for considering your application. Consider asking for advice on how your next request could be improved, or for reasons why this application was rejected if none were given. Above all, be gracious in your temporary defeat. Being a "good loser" can help build up good will toward your group for the next time around.

If you have been successful in obtaining funding, it is even more important to thank the donor. Thank them as often and in as many ways as is reasonably possible. Mention them in newsletters, and recognize their contribution in other ways. Send them progress reports periodically, pointing out the difference the donor's contribution has made. Invite them to any special events your group hosts, especially ones related to the project they have funded. Also keep in mind that it is very important to meet any reporting requirements that are tied to the funds.

As a final point, be sure to keep records of all your funding applications, both successful and unsuccessful. Include in these files all relevant contacts and notes on meetings and conversations with them, as well as all correspondence. This will save uncounted hours should the person or people in charge of raising funds for your group leave or take on other responsibilities.

General Fundraising Checklist

Keep the following things in mind while carrying out fundraising activities.

Preparation

- ☐ Prepare case statement
- ☐ Prepare mission statement
- ☐ Make a project budget
- ☐ Begin to target potential funders

Research

- ☐ Research different potential funders
  - ☐ who do they fund?
  - ☐ how to approach them
- ☐ Determine potential funders
  - ☐ government
  - ☐ foundations
  - ☐ service clubs
  - ☐ businesses

Approaching funders

- ☐ Follow their requirements!
- ☐ Proposal elements
  - ☐ cover letter
  - ☐ define problem
  - ☐ your solution
  - ☐ your group
  - ☐ your budget
  - ☐ your funding request
  - ☐ acknowledgement plans

Follow-up

- ☐ Thank-you to funder
- ☐ Obtain input where unsuccessful
- ☐ Report regularly to funder where successful
- ☐ Keep records of all applications

Program Budget Checklist

Consider which of these expenses should be included in your project's budget.

Salaries
- ☐ for paid project staff

Benefits & insurance
- ☐ volunteer insurance
- ☐ for paid staff:
  - ☐ Employment Insurance
  - ☐ Canada Pension Plan
  - ☐ Workers Compensation

Office rental
- ☐ rental costs
- ☐ utilities
- ☐ insurance

Office equipment
- ☐ computers
- ☐ software
- ☐ printer
- ☐ telephone(s)
- ☐ photocopier
- ☐ furniture
- ☐ fax machine

Office supplies
- ☐ paper
- ☐ envelopes
- ☐ pens/pencils
- ☐ computer diskettes
- ☐ postage
- ☐ reference materials
- ☐ fax charges
- ☐ printing charges
- ☐ photocopying charges

Professional costs
- ☐ consultants
- ☐ professional help (lawyer, accountant)

Telephone & Internet
- ☐ line charges
- ☐ long distance
- ☐ Internet service charges

Monitoring equipment
- ☐ acquisition
- ☐ maintenance & cleaning costs
- ☐ replacements

Training
- ☐ trainer's expenses
- ☐ training materials
- ☐ lunches/refreshments

Travel (monitoring sites, conferences)
- ☐ mileage (set a rate)
- ☐ airfare
- ☐ accommodations
- ☐ meals

Meetings
- ☐ meeting space rental
- ☐ refreshments
- ☐ materials

Publications & promotions
- ☐ advertising
- ☐ newsletters
- ☐ mailings

Resource List
Funding for community-based environmental monitoring projects

Fundraising for Grassroots Groups

This book is an essential starting point, with comprehensive coverage of all of the steps described in this chapter, and more, including a 21-page resource/reference list.

This book is available free from the federal Department of Canadian Heritage, phone (819) 997-0055, or from

EcoAction 2000
Environment Canada
16th Floor, Queen Square
45 Alderney Drive
Dartmouth, Nova Scotia B2Y 2N6
Phone: (902) 426-8521
Fax: (902) 426-2062
E-mail: ecoaction2000.mar@ec.gc.ca

This book is also available to download from the Internet at http://www.ns.doe.ca/ecoaction/fr4grass.pdf

Written by Ken Wyman, (1995) Voluntary Action Program (now Community Partnerships), Department of Canadian Heritage, Ottawa, Ontario K1A 0M5.

Fundraising for Nonprofit Groups

This book provides concise and essential information, and is available in many bookstores.

Written by Joyce Young. This book is published by:

Self-Counsel Press
1481 Charlotte Road
North Vancouver, BC V7J 1H1
Phone: (604) 986-3366

IMAGINE

This organization maintains and provides, at no charge, a list of companies that have pledged to give away 1% of their pre-tax profits.

The list can be obtained from:

IMAGINE
Suite 200, 1329 Bay Street
Toronto, ON M5R 2C4
Phone: (416) 515-0764

Resource Centre for Voluntary Organizations

This is a resource centre focussing on fundraising and volunteer management. It has a resource library and does not charge for its services.

The Centre is located at:

Grant MacEwan Community College
Room 5-132, 10700 – 104 Avenue
Edmonton, AB T5J 4S2
Phone: (780) 497-5617

Volunteer Monitor

This is a U.S. based newsletter that focuses on volunteer water quality monitoring and is sponsored in part by the United States Environmental Protection Agency. Some issues contain good practical material that can be generally applied to any type of volunteer environmental monitoring.

The *Volunteer Monitor* is published twice a year. Free subscriptions are available by contacting the newsletter at:

The Volunteer Monitor
1318 Masonic Avenue
San Francisco, CA 94117
Phone: (415) 255-8049

Some back issues of the *Volunteer Monitor* are available by mail or through the Internet at http://www.epa.gov/OWOW/monitoring/volunteer/vm_index.htm. The Fall 1993 issue (Vol. 15, No. 2) is titled “Staying Afloat Financially” and contains helpful funding information for any type of volunteer environmental monitoring group.

CharityVillage

The CharityVillage Internet site, located at http://www.charityvillage.com/charityvillage/main.html, is billed as Canada's supersite for the nonprofit sector, and contains more than 2,000 pages of news, jobs, information and resources for executives, staffers, donors, and volunteers.

The Canadian FundRaiser publication can be found on the CharityVillage website at http://www.charityvillage.com/charityvillage/cfr.html. It includes many helpful articles and a cumulative index from 1991 to present.

Volunteer Canada

This Internet site, at http://www.volunteer.ca/dev/default_e.htm, provides some useful information for fundraising. Most importantly, it includes a directory of the various volunteer centres in Western Canada, where much fundraising information can be found.

Blue Book of Canadian Business

This site, located at http://www.bluebook.ca, provides corporate and executive profiles for a number of businesses in a searchable database.

Foundation Center Online

At http://www.fdncenter.org is a huge American-based site containing lots of useful information on fundraising in the foundation context, including the Foundation Center's *User-Friendly Guide to Funding Research and Resources,* grant-maker information, and information on fundraising trends.

Environment Canada

This Internet site at http://www.ec.gc.ca/eco/fundorg_e.htm provides links to a number of potential funding sources, including government, foundations, service clubs and corporations.

Environmental Funding Guide for Alberta and the Northwest Territories

This resource list, compiled by Environment Canada, lists assistance programs available for environmental projects in Alberta and the Northwest Territories. This list is not comprehensive, but it gives groups seeking funding information a very good start.

The list can be obtained from:

EcoAction 2000
Environment Canada
4999 – 98 Avenue
Twin Atria #2, Room 200
Edmonton, AB T6B 2X3
Phone: (780) 951-8710 or 1-800-567-1570
Fax: (780) 495-4367
E-mail: ecoaction2000.edm@ec.gc.ca

The list is also accessible on the Internet at http://www.mb.ec.gc.ca/ENGLISH/COMMUNITY/ecoACTION/funding.htm

Other Government Possibilities

Most government departments offering funding are covered in the funding guide mentioned above. To follow up some other leads you may have, you can get contact names and numbers for the Alberta government over the Internet at http://gov.ab.ca/dept/index.html. Federal Departments can be accessed at http://www.gc.ca/main_e.html. Both allow for searches of all or part of their sites, which may be useful if you are not sure where to start.

Federal government staff at Community Partnerships (formerly Voluntary Action) will also be able to help. Contact:

Department of Canadian Heritage
15 Eddy, 7th floor
Hull, Quebec K1A 0M5
Phone: (819) 997-0055

Another helpful information resource is *Easy Money: Your Guide to Government Giveaways*, by Hawley Black (1989) Macmillan Canada, Agincourt, ON. Phone (416) 293-8141. This book is somewhat dated, but still provides useful information.

North American Fund for Environmental Cooperation (Commission for Environmental Cooperation)

The purpose of this fund is to provide funding to sustainable development projects that will make a difference in providing new information and promoting public awareness of environmental issues in North America. Grants are awarded to non-governmental organizations for projects that support the goals and objectives of the Commission for Environmental Cooperation. Grants cannot exceed $100,000 Canadian. Contact:

North American Fund for Environmental Cooperation
c/o Commission for Environmental Cooperation
393 St.-Jacques West, Room 200
Montreal PQ H2Y 1N9
Phone: (514) 350-4357
Fax: (514) 350-4314
e-mail: NAFEC@ccemtl.org
http://www.cec.org

Body Shop Charitable Foundation

The purpose of this fund is to provide funding for international, national, and grass roots groups. Canadian funding has been mostly for Ontario-based projects. Contact:

The Body Shop Canada
33 Kern Road
Don Mills ON M3B 1S9
Phone: (416) 441-4189, ext. 296
Fax: (416) 441-0712

Canada Trust — Friends of the Environment

The purpose of this fund is to encourage initiatives that benefit local communities. Funding is provided on a project basis, and applicants can apply either locally or regionally. To obtain application information, contact:

Canada Trust Friends of the Environment Canada Fund
161 Bay Street, 33rd Floor
Toronto, ON M5J 2T2
http://www.fef.ca

Wild Rose Foundation

This foundation provides funding to volunteer, non-profit organizations that provide valuable services to Albertans. For more information, contact:

Wild Rose Foundation
907, 10405 Jasper Avenue
Edmonton, AB T5J 3N4
Phone: (780) 422-9305 (toll-free in Alberta by calling 310-0000)
http://www.gov.ab.ca/wrf

Canadian Airlines Foundation

This foundation uses contributions from Canadian Airlines employees and retirees to provide funding to non-profit charitable organizations across Canada. For more information about the Canadian Airlines Foundation, call 1-800-661-4549.

Mountain Equipment Co-op

Mountain Equipment Co-op provides funding to projects that preserve the quality of the environment and educate on responsible use of the outdoors. Contact:

Environment Committee
Mountain Equipment Co-op
1655 West 3rd Avenue
Vancouver, BC V6J 1K1
Phone: (604) 732-1989
Fax: (604) 731-6483
http://www.mec.ca/coop/communit/meccomm/envifund.htm

Alberta Ecotrust

This foundation provides support to Alberta non-profit and community environmental groups for practical and educational projects that involve public participation and benefit the natural environment. Contact:

Alberta Ecotrust
Suite 102, 725 – 12 Avenue S.W.
Calgary, AB T2R 0H9
Phone: (403) 209-2245 or 1-800-465-2147
Fax: (403) 209-2086
E-mail: abeco@telusplanet.net
http://www.alberta.com/homepages/ecotrust

Shell Environmental Fund

This fund provides financial support for innovative, action-oriented projects that improve and protect the Canadian environment, to a maximum grant of $5,000 per project. Contact:

Shell Environmental Fund
400 – 4 Avenue S.W.
P.O. Box 100, Station M
Calgary, AB T2P 2H5
Phone: (403) 691-2071
Fax: (403) 269-8031
http://www.shell.ca/people2.htm