SECTION 8.0. BEFORE YOU BEGIN RESTORATION

THIS SECTION CONTAINS:

- Legal considerations
- Contacting property owners & the community
- Working with professionals
- Organizing and educating volunteers
- A quiz to test your knowledge

8.0 Introduction

Before you begin any kind of restoration (clean-up or enhancement) on a watercourse make sure:

- **You have involved as many people as possible** from the community in a well-organized way
- **You understand how your watercourse is structured**, and how it works.
- **You have researched and surveyed your area** to understand past and current land use patterns and the overall history of the watercourse.
- **You have contacted landowners** along the system (see the tips on the next page)
- **You have created a rehabilitation plan-of-action** in consultation with a habitat professional. Remember what is good for one watercourse may not be beneficial to another. Don't try to make decisions by yourself.
- **You have organized and educated your volunteers** (covered in this section).
- **You have obtained the necessary permits required** for work in watercourses (covered in this section).

TIPS FOR DEALING WITH STAKEHOLDERS AND LANDOWNERS

- Educate people rather than lecture them. Very often attitudes have been formed because of a lack of information. For example, many people are not aware that very small brooks are important fish habitat.
- Learn to listen. Many people just want a chance to express their opinion and once that is done they're quite willing to listen to you.
- Have your facts straight. There is nothing worse than accusing the wrong person of something.
- Put yourself in the other person's shoes. How would you like someone telling you what to do on your land? How would you like to be approached if you were the landowner?
- Emphasize the benefits of the program and the positive things that will come out of it.

Resist the temptation to point a finger and lay blame.

- Find out what aspects of the natural world the landowner is interested in. Most people are interested in some aspect. Perhaps the landowner is a birdwatcher and hasn't made the connection between a healthy environment and seeing more birds. Perhaps the landowner likes to fish but has no idea why there are less fish than there were thirty years ago.

- Kitchen table type meetings as well as small to medium sized community meetings are good forums to introduce project. Kitchen meetings, or on-site visits good for potentially difficult stakeholders. Taking the time to do both the one on one and the larger meeting can be very beneficial.

- Take property owners, community folks etc out into the field and walk through the site and talk about site and the proposed project etc. Like children, adults learn very well by spending time in the field.

8.1. Legal Considerations

If you are working on private property you will need at least verbal permission from the landowners involved and written permission is best. Liability issues are a growing concern for all projects and activities. Before you undertake any work or field visits consult your insurance agent and be sure you understand the risks to are taking on. Make sure parents of children have given written permission for their children to participate in the work.

Some of the work you may be planning will require special government permits. Your NSSA contact will be able to advise as to what these are. You will need a permit if you plan to:

- Rebuild or remove a culvert or any other obstruction
- Stabilize a bank
- Install instream structures of any type
- Use heavy machinery
- make any alterations in the watercourse
- modify or remove an abandoned beaver dam
- fish sampling
- Remove infill or dredge material
- Recreate tidal creeks, pannes etc
- Remove, replace, modify a tidal barrier (causeway, culvert, aboiteau)
- any other activity aimed at restoring estuarine habitat

You will need to apply to the Nova Scotia Department of the Environment and Labour for a "Watercourse Alteration" permit for any instream work, or to work in any area (lake, wetland etc.) that drains into a watercourse (see the section **Where to Go For Help**). Contact the local office for the appropriate forms or ask your NSSA contact for advice and help. All the information is available on the web at http://www.gov.ns.ca/snsmr/paal/enviro/paal181.asp

You may also require a Navigable Waters Protection Act permit if your work is going to affect the use of the watercourse by watercraft of any type. See details on this web site http://www.tc.gc.ca/marinesafety/Ships-and-operations-standards/nwp/guide.htm

Or a Nova Scotia Natural Resources permit for work on crown lands in the coastal areas. http://www.tc.gc.ca/marinesafety/Ships-and-operations-standards/nwp/guide.htm

Applications to any of the above processes will enter into a referral system and the Department of Fisheries and Oceans will review your application for impacts on fish habitat. If the habitat will be harmfully altered, disrupted or destroyed (HADD) during any stage of the restoration, you will need a DFO authorization. There is no formal application process in Nova Scotia so for advice on whether or not you will cause a HADD contact the NSSA coordinator or the nearest DFO office. See the contact list.

For more detail see Section 11 Laws and Regulations

8.2. Maintaining a Relationship with Professionals

The habitat professionals you will be working with are committed to the Adopt-A-Stream program. However, Adopt-A-Stream may only be one of their projects. You will find that they are busy people. Here are some guidelines for maintaining a relationship that is convenient to everyone:

- **Call ahead and give lots of warning** about when you need to meet. Don't expect people to be available at the "drop of a hat".

- If you reach an answering machine, voice mail system, or secretary **leave a precise message** identifying yourself and the reason for your call. If you state the reason, professionals may be able to find the information you need before returning your call. Don't be shy about using answering machines and voice mail systems.

- **Be organized**. If you want a professional to visit a site with you, visit the site first yourself. Be prepared and write out a list of questions. Mark the area you want to visit on a topographical map, your hand-drawn map or by leaving flagging tape or brightly covered ribbon tied around a tree.

- **Make sure you are also using other sources of expertise in your own community**

before calling for help. Libraries, service clubs, schools, senior's clubs are only a few of the many organizations that may be able to answer some of your questions. Don't discount the wisdom and experience of non-professionals.

- At the end of a meeting with a professional, **plan when you will get together next**. Always end your meetings with a plan of action (When is the next meeting? What is the next task?)

- **Don't expect instant answers** and ready-made solutions. Habitat Biologists are always learning new things about ecosystems. Remember that each watercourse is unique and much of the rehabilitation and enhancement work must be planned by analyzing individual situations. This takes time, no matter how thorough your survey has been.

- **It is best if only one main person (Project manager, Leader, or Chairperson) is the main contact** with any professional or government official. It can be confusing for the professional to deal with many different names on each project.

8.3. Organizing Volunteers

Volunteers will be more committed to their task if:

- **They are well-informed (see the next section on educating volunteers)**
    1. They understand the **ecological** goals and benefits of the project.
    2. They understand the **economic** goals and benefits of the project.
    3. They understand the **community** goals and benefits of the project.
    4. They understand the **concept of stewardship**.
    5. They feel motivated to help the environment.

- **The program is well organized**
    1. Meetings are well-run.
    2. Time and money are not wasted.
    3. Meetings start and finish as indicated in the meeting notice.
    4. Tasks are clearly assigned and evenly divided.
    5. Events are planned and communicated well in advance.
    6. They are given the appropriate information to prepare for an event (footwear, equipment, insect repellant etc.)
    7. Maps and directions to field sites are clear- there's nothing worse for enthusiasm than having a set of volunteers get lost their first time out!

- **A sense of teamwork is encouraged**
    1. They get a chance to contribute their ideas and thoughts at all stages of the project.
    2. The project strengthens their sense of being part of a community.
    3. Their opinions are respected even if they may be different from others in the group.

- **Contributions are recognized**
    1. They are thanked for everything they do - no matter how small.
    2. Their names are publicized (in newspaper articles, press releases, reports).

- **There is support available**
    1. You should always have a contact person within the group whom volunteers can call for help and support. At some time during the project they might feel confused or have practical questions. Make them feel comfortable asking for help, and tell them where they can get it.

- **The work is enjoyable and fun**
    1. Fieldwork can be combined with picnics, bonfires, camping and family outings.
    2. Dances can be held as fund-raisers to celebrate work that is completed.

3. Don't take work so seriously that there isn't an element of fun involved.
4. Fieldwork can be combined with bird watching or wildflower identification. Many people who are interested in projects enjoy being amateur naturalists. This gives a double sense of accomplishment when the day is done.

One of your most important tasks as an organizer will be to make sure that you don't get "burned out". Try and delegate the tasks so you don't have too much of a burden. Ask as many people in the community as you can for help. Your enthusiasm will be catchy if you talk to people about what you want to do. Remember, this is a group project and will be the most successful when many people and organizations are involved. Sharing your expectations, successes, and frustrations will ensure that you don't feel too burdened.

Remember that every community is different. You also may be able to get help from a service club in your area that has a reputation for being well organized. They may be able to assist you with some of your chores or give you advice.

8.4. Educating Volunteers

Here are some tips for teaching your group about the material in this manual.

Adults in Nova Scotia have varied degrees of reading and writing ability. They generally learn best when:

- **They are physically comfortable**. A little thing like not letting the room get too hot is important. Coffee, tea, or juice is important to many people at a meeting setting.

- **They don't feel threatened**. Adults do not like to feel "inferior" to the presenter. The best learning takes place when the "teacher" and the adults are learning from each other. Adults need to feel respected.

- **They get a chance to discuss things**. Adults do not learn well if simply "lectured at", especially at night after a long day of work. Adults have a tremendous amount of experience and like to learn from each other. Make sure you give people the opportunity to do so.

- **They have a need to learn**. If you have decided to work on a lake, adults are not going to be as interested in learning about coastal salt marshes. Adults learn best when the learning has a direct relevance and can be used right away. Learning should always have a purpose that relates to what you're doing in the project.

Educating your group about some of the basic concepts in this manual will make your work easier. We don't expect everyone to become experts in water and fish ecology but learning a few of the basic concepts is important.

Here are some simple learning activities that most adults enjoy.

True and False Quizzes

When most people think of quizzes they think of school classrooms and nervousness. Learning does not have to be that way. For example, take some of the true and false quizzes at the end of the sections and divide your group into smaller groups. Have each group try and come up with the correct answers to the quizzes. You will find that there will be lively discussion. This is a good method because not everyone in the group has to be able to read. One person can read the questions and then there can be debate about the answers. Many people with lower levels of reading and writing ability have managed to accumulate an astonishing amount of knowledge from practical experience. The quizzes will help to reinforce important concepts and most adults have fun if the groups compete against each other in a friendly fashion. The key to this method's success is that there is no pressure on the

individual to do well. If your group is highly literate, you can let everyone complete their own test. This method has been used successfully with many different kinds of people in our province from pulp cutters to senior industry officials.

Slides and Videos

Slides and videos can be a very effective way of teaching adults. Slide shows, films, and videos related to the material in this manual are listed in the section on **Resource Materials.** Some biologists and naturalists in your area may also have a private collection of slides that can be presented. Tell them exactly what you need.

SLIDE PRESENTATIONS

Make sure everyone can see clearly and that the room is dark enough.

Don't show too many slides. Most people try to pack in too many at one time. A dark, warm room promotes sleepiness. Most of us have been to presentations where we have "nodded" off.

Don't make more than one point per slide and reinforce your points often.

Allow time for questions and discussion.

Small Discussion Groups or Study Circles

When adults sit down together and try to solve a problem, they are usually more successful than if they tried to solve it individually. Adults learn a lot from talking to each other. You can use small discussion groups to help plan your work, and to learn material in this manual. Avoid "big group" sessions as much as possible. In big groups, usually only the most brave and vocal people get a chance to express their opinion. In small groups, everyone gets a chance to say something.

Small "kitchen study circles" can be a very effective way of learning. Adults can get together to go over a section of the manual and then talk about it. You may want to appoint one person to sum up the material. Use the quizzes at the end of each section to help you in these study circles.

For more information about Teaching Adults see the section **Resource Materials**.

Teaching Children

Children learn best about natural systems by out-of-door observation and research.

Although much of the material in this manual can be used in a classroom or indoors, try to involve children in actual outside work. Field trips that complement indoor study are best. Children will be eager to learn if they know they will have a chance to apply their knowledge. Young people also respond well to situations where they

are researchers or "detectives". Use the checklists and survey forms in this manual. Let children know they are collecting valuable information about natural systems in their community, information that will benefit everyone.

What follows are some extra activities that may supplement the material in this book.

- **Have an older member of your community come in and talk to the children** about changes in the watercourses in your community.

- **Visit places in your community that have to do with "fish"** (hatcheries, docks, wharves, fish plants, university labs, grocery stores, fishing clubs). Young children can often learn a great deal just by visiting the fish department in a grocery store and hearing where the fish come from.

- **Have habitat professionals talk to the children about sections in this manua**l. They might be able to bring equipment to demonstrate study methods. Better still have a habitat professional come on a field trip and teach children how to do research.

- **Set up an aquarium, for fish collected by the children from a local pond or lake**. For information see the section **Resource Materials**.

- **Use activities in the Aquatic part of Project Wild or The Atlantic Salmon Federation's Fish Friends.**

at http://www.wildeducation.org/programs/project_wild/prog_wld.asp
Or Fish Friends at http://www.asf.ca/fishfriends/

Now that you have completed the early stages of the project (Research and Preparation) you are ready for the actual enhancement work on site. All projects should now refer to the next Section: Restoring the Watercourse.

TEST YOUR KNOWLEDGE!
HOW WELL HAVE YOU READ THIS SECTION?

TRUE AND FALSE QUIZ

	True	False
1. You need verbal permission to work on someone's land.		
2. Some work that you do in watercourses might require a permit from the Nova Scotia Department of the Environment and Labour.		
3. You do not need a permit to drive a machine in the water if you are going to be doing something helpful.		
4. Educating volunteers should be done by an expert and preferably by giving them lectures on the topic.		
5. When it comes to slide shows a good rule of thumb is that the more slides you have, the better people will like it.		

ANSWERS CAN BE FOUND AT THE END OF THIS MANUAL