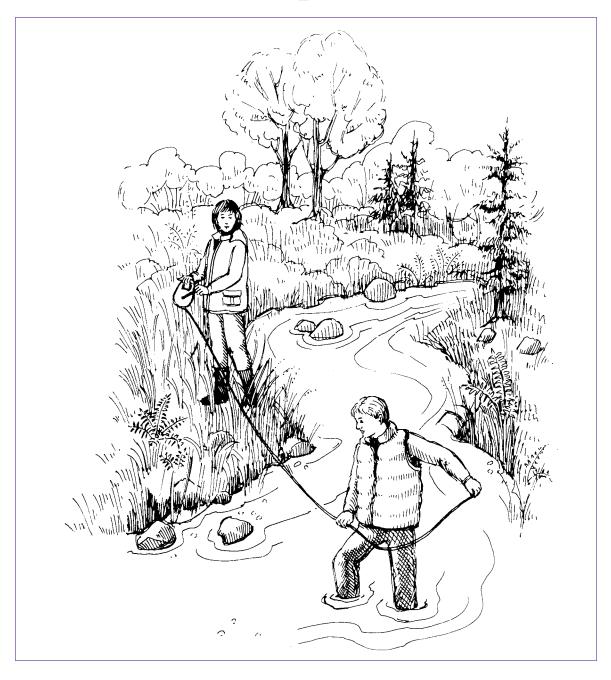
# A Practical Guide To Stream And Wetland Care

# The Streamkeepers Handbook



Canadä'



### **STREAMKEEPERS**

# Module 6 Stream Cleanup



Project Approval Required	Training	Time Commitment (per year)	Number of People	Time of Year
yes	Not necessary	30 minutes to ongoing	2 to many	Summer: instream All year: streambanks

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#### **MODULE 6:**

# Stream Cleanup

Welcome to the Streamkeepers Program! The Department of Fisheries and Oceans Community Involvement Program provides Streamkeepers training modules. These modules encourage "hands on" environmental activities in watersheds in British Columbia. Volunteer groups, schools, and individuals are using this material to monitor and restore local waterways. Your local Fisheries and Oceans Community Advisor can provide more information.

#### Acknowledgements

The staff of the Community Involvement Program and the Adopt-A-Stream Foundation, Everett, Washington provided the information for this section.

#### **Project Activity and Purpose**

You will check a length of a stream for the extent of the garbage problem, then organize a cleanup project along the stream bed and banks. This involves mobilizing a work crew and organizing the collection and disposal of garbage.

You can damage stream habitat by removing all large material from the stream. Logs and stumps provide cover for fish, dissipate stream energy, and trap sediment. REMOVE ONLY HUMAN PRODUCED MATERIAL AND DO NOT DISTURB NATURAL MATERIAL.

#### Introduction

Cleaning up a stream or wetland area is a simple but very satisfying project. Many of us know a lovely spot along a stream. Then, one day, someone dumps a load of garbage there, and before it can be removed, someone else adds more. Sadly, garbage attracts more garbage. This can lead to poor water quality and loss of habitat for fish and wildlife. When you clean up a stream, you set a good example for others and help to halt the cycle of deterioration.

## **Project Guidance and Approval**

You will need no prior approval to clean up stream banks at any time of year. If you wish to clean up a stream channel, you should contact the Department of Fisheries and Oceans. DFO guidelines usually restrict instream work between mid-September and mid-July to protect incubating fish eggs you may get permission to work in the

stream during the spring or fall if you can show that you will not cause siltation or disturb spawning areas.

Contact your Community Advisor for advice on locations and necessary approvals. He or she can advise you about dealing with special situations, such as removing large, deeply embedded material from streambeds. You may need to contact your municipality, Department of Fisheries and Oceans (Habitat Management) or the Ministry of Water, Land, Air and Parks. Consult landowners if you plan to cross or use private property. You may wish to arrange with your municipality to have a dumpster available or some other method of garbage removal.

#### **Level of Effort**

Adapt the cleanup to your needs and resources. You may simply wish to take a few children and garbage bags out for a stroll along the banks of your local creek. Alternatively, you may wish to organize a major project to drag oil cans, household appliances, shopping carts, and other garbage out of streams.

#### **Working Conditions and Time of Year**

You can clean up stream banks throughout the year. Instream cleanups usually are done during the summer, when stream flows are low and environmental impacts are low. Be prepared to get dirty, muddy, and wet. Access may be difficult and you may have to scramble through underbrush. You should be in good shape for all this physical labour. Know your limitations.

#### Safety PERSONAL SAFETY

Concern for your personal safety is essential when working outdoors. Always tell someone where you are going and when you will return. Work in pairs, never alone. Carry emergency phone numbers for police and ambulance. Supervise children closely around any body of water.

Do not attempt to wade in fast flowing water or water higher than your knees. Watch out for slippery stream beds, undercut banks, waterfalls, and fast flowing areas. Log jams can be very dangerous.

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Lift using you knees, not your back. Get help carrying heavy objects. Workers Compensation does not cover you!

Warn everyone, especially children, about urban hazards such as syringes, needles, broken glass, and condoms. Remove them with tongs and place them in a special hazardous materials bucket, or flag them with red tape.

Avoid foul smelling areas, spills of unknown substances, or containers of hazardous or unidentified materials. Contact emergency response agencies or municipal crews for advice on removal of the materials.

Beware of domestic animals and wildlife.

#### HEALTH

Do not drink stream water. Although it may look pristine, it can harbour bacteria or parasites that will make you sick. Do not expose cuts and wounds to stream water.

#### **EQUIPMENT**

Always carry a first aid kit. When working in isolated areas, bring a survival kit containing at least a lighter, fire starter, candle, and flares. Carry a cell phone if you have one.

#### **CLOTHING**

Dress for the weather and stream conditions. Wear waders with felts when walking in the stream. The water may be fast flowing and the bottom may be slippery. Wear a personal flotation device (PFD) when working in large streams.

# Materials and Equipment

Work gloves rubber gloves

Bright flagging tape plastic garbage bags

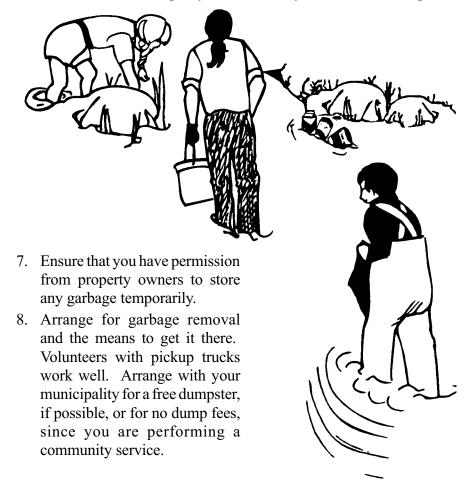
Rope shovel Pry bar camera

First aid kit wheel barrows
Hazardous material buckets waders or boots
Dumpster (for large projects) or pickup trucks
Winch or come-along (optional) and choker



# **Procedure for Large Cleanup Projects BEFORE YOU GET YOUR FEET WET**

- 1. Survey the area you intend to clean up. Take photos. Contact your municipality if you want suggestions on locations to clean up.
- 2. Make sure you have enough people for the area you want to cover. Have one or two planning meetings with a small group and plan to get more volunteers for the day of the cleanup.
- 3. List tasks (approvals, garbage disposal, etc.) and applicable dates; assign volunteers to take on the tasks.
- 4. Call the volunteers to confirm their assignments.
- 5. Well before the cleanup day, obtain permission from property owners and appropriate agencies. Arrange for garbage bags, cans, and a dumpster at the site. Ask people to bring trucks and wheelbarrows.
- 6. Advertise the cleanup in your community ask for more help.



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#### ON THE CLEANUP DAY

- Leave logs, other natural material, and overhanging vegetation in the stream. THEY PROVIDE IMPORTANT AQUATIC HABITAT. Remove only manmade material from the stream. Seek advice before removing deeply embedded material from the stream bottom.
- 2. Establish a "staging area" with first aid supplies, refreshments and restroom facilities. Always station someone there.
- 3. Have volunteers sign in when they arrive and sign out when they leave. Get names and addresses.
- 4. Make everyone aware of safety concerns.
- 5. Make a map of where people will be working and keep track of everyone involved in the cleanup. Have only a few people in the stream, and have the rest haul away garbage.
- 6. Make the event as festive as possible. Provide refreshments.
- 7. If you find evidence of the source of the garbage, keep it and report it to the authorities.

# **Collecting, Reporting and Evaluating Information**

Take photographs of the stream before and after the cleanup. Record the amount and types of debris collected and take photographs of the pile of garbage. Send thank-you notes to the volunteers. Keep a short report on the project. If you do the cleanup again next year, you can compare the results.

Advise the Community Advisor and your municipality of the results of the cleanup. Send a copy of the Stream Cleanup Summary Sheet to the Streamkeepers Database. The current address is in the Handbook.

You may wish to set up a "Garbage Watch" program. This will help to discourage illegal dumping of garbage. Consider posting signs where roads cross the stream (Module 11) to inform the public about sensitive stream habitat.

#### **Public Relations**

You can clean up streams, monitor their condition, and undertake enhancement projects, but you need the support of your community for these projects to succeed. Talk about your project with others whenever and wherever you can, including at schools and public meetings. Contact newspapers, radio stations and television stations. Module 10 contains specific information about increasing awareness and working with the media.

## Resources

Adopt-A-Stream Foundation. *Stream Cleanup Tips*. Everett, Washington.

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Send the data to the Streamkeepers Database

## MODULE 6: STREAM CLEANUP SUMMARY SHEET

(See module 1 for additional information)

Stream Name

Organization Name	Crew size
Contact Name	Phone #
Municipality	
Upstream limit of work (directions, distance	e to known landmarks)
Downstream limit of work (directions, dista	nce to known landmarks)

Date

Details of stream cleanup			
Length of stream cleaned up (m):			
Volume of garbage removed			
Types of garbage found			

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