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Stream Care

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Why should we take care of our streams?



Healthy streams are important to fish and should be treated with care and respect. The hundreds of small streams in British Columbia produce the majority of our fish. Our streams support eight different species of salmonids: chinook, coho, pink, chum and sockeye salmon; steelhead and cutthroat trout; and Dolly Varden char. Some of these species feed and grow (rear) in streams for long periods. They all return to the streams as adults to spawn.

Streams provide living, feeding and spawning areas for fish. A good stream for salmonids has many different characteristics. Although young fish may not have the same needs as spawning fish, all salmonids need an adequate flow of clean, cool water.

A good rearing stream should have different types of habitat to provide cover for fish (pools, forest debris, boulders, overhanging trees and brush), a constant and even flow of water, moderate summer temperatures, few predators, and lots of insects for food. In a good spawning stream, adult salmonids should be able to reach spawning gravel that has free-flowing, silt-free water.

Unfortunately, it is easy to damage streams, often seriously. The damage may be caused by carelessness in logging or mining practices, or by poorly-planned urban and industrial growth and the pollution that accompanies it. These factors are mainly beyond your control. But there are also stream care guidelines which you can follow to help save and preserve our streams.

What are some stream care guidelines?

Leave natural streamside vegetation alone.

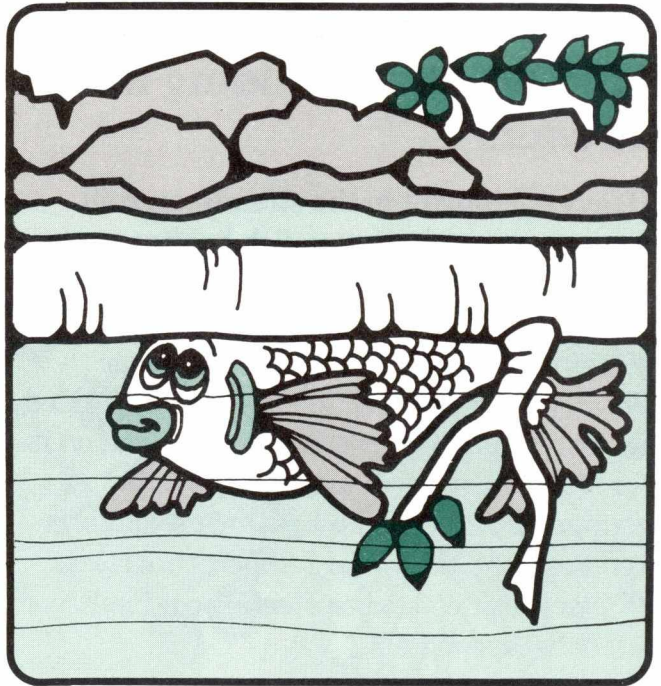
Trees and shrubs shade the stream, keeping the water temperature cool for fish. Insects fall off the vegetation and into the water, providing food for the fish.

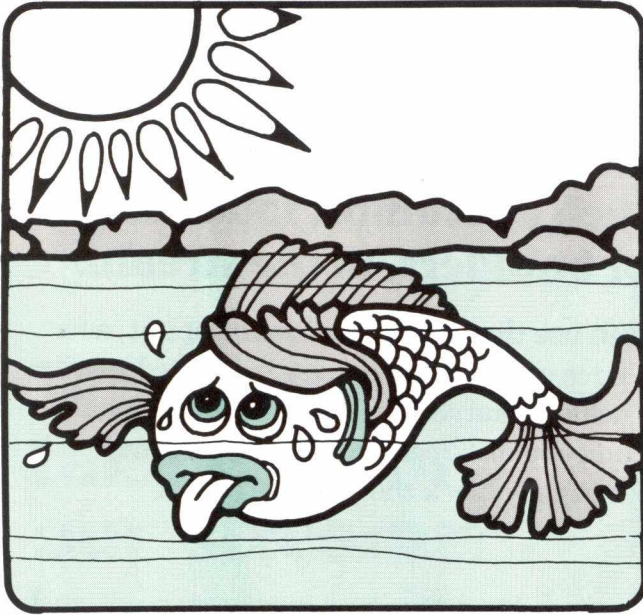
Plant vegetation on the sides of a stream to stabilize its banks.

Any plants that have roots that spread and knit the soil help strengthen the banks and prevent them from being washed away during floods. Blackberry bushes, alder trees and willows provide good root systems for this purpose, and can be planted on the banks.

Leave natural debris, such as stumps, fallen trees or boulders, in the stream.

Fish use these as part of their habitat, as a source of food and as cover from predators (including larger fish, birds, small animals and people). Trees should only be removed when they block the passage of fish.





Be careful when clearing land or when building near streams

Heavy equipment in the stream can ruin spawning gravel, destroy fish habitat, and damage stream banks.

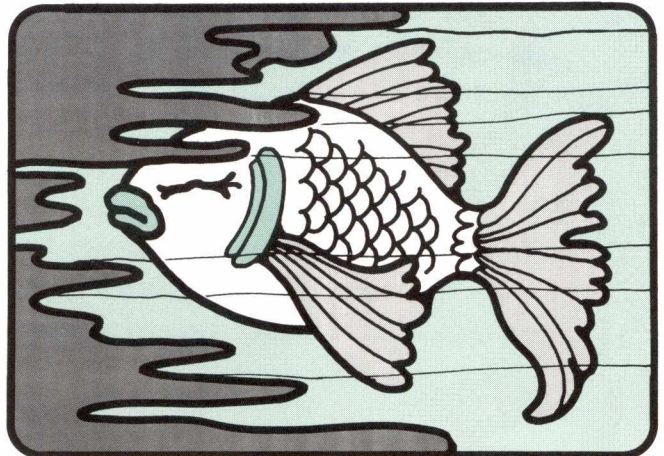
Vegetation which has been damaged or destroyed by construction should be replaced as soon as possible because fish depend on it for food and shelter. When the cover is stripped from the sides of streams, shade is removed and the water temperature rises. Warm water can cause stress, poor health or even disease in fish.

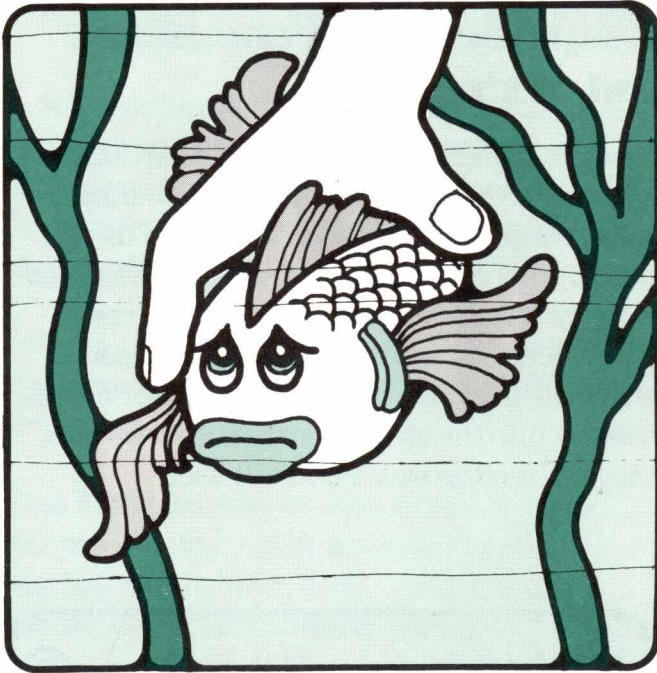
Keep muddy runoff water from construction sites out of streams.

Water which is brown with sediment can smother fish eggs which are incubating in the gravel. Without oxygen, which is dissolved in the water, the eggs will die. Also, fish food organisms will be buried and then fish may go hungry.

Leave soils that could erode (wash away) alone during the wet, rainy season.

Stream banks can be easily damaged during the rainy season. Heavy rainfall can soften and wash down stream banks, sending mud and soil into the stream where it buries eggs, spawning gravel and food sources.





Do not catch small fish and move them to another stream or pond, or take them home.

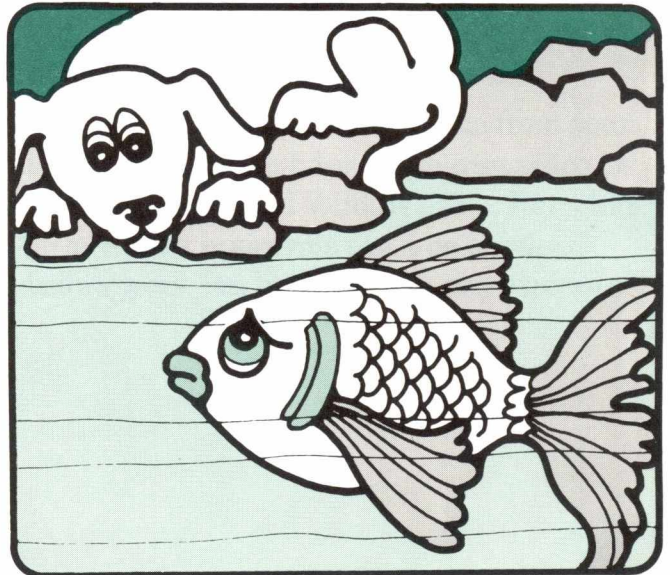
If fish are moved, they may spread diseases from stream to stream. If they are removed from a stream or pond, there may not be enough fish left to continue the species. For these reasons, it is illegal to catch fish and move them to another stream.

Leave the stream alone; don't dig holes or try to redirect the flow of the stream.

Digging in a stream can destroy spawning or fish-producing areas. Fish may be stranded if the flow of the stream is changed.

Keep pets and livestock away from streams.

Livestock should not be allowed to graze on stream banks because they trample on and destroy vegetation or walk on and ruin spawning gravel. Dogs should be controlled when they are near streams — sometimes they chase spawning fish and they can stir up mud and silt in the stream.



Use garden and lawn chemicals sparingly and with care. Follow disposal instructions exactly.

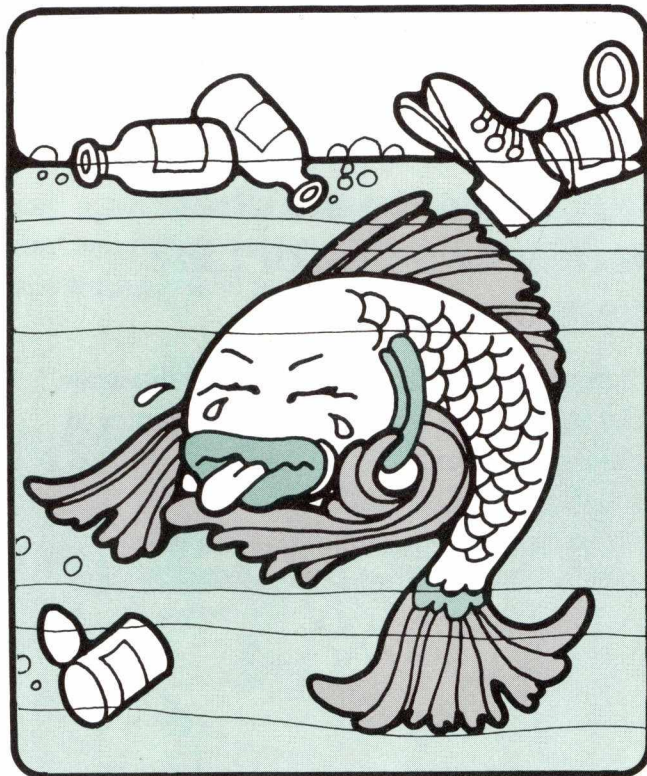
Do not spray streamside vegetation. Some chemicals (bug and weed killers) are toxic. They harm people and fish as well as animals that may drink from the stream. Other chemicals (fertilizers) can make algae and weeds grow too fast in streams and lakes. This can disturb the fish's food supply and may use up the oxygen supply in the water.

Remove garbage from the stream area.

Litter in the stream can ruin the water, and may be toxic to fish and wildlife that use it. The beauty of a stream is spoiled by garbage in the water or on the banks.

Keep household chemicals out of streams.

Never dump chemicals near a stream bank or into a ditch or storm drain. Stream banks are porous and chemicals soon leach into the water. Ditches and storm drains are intended to carry rainwater away. They discharge it, untreated, into nearby streams. If soapsuds, waste oil, gasoline, anti-freeze or other chemicals get into the streams with the rainwater, they pollute the water and kill fish.



What is being done about stream care?

It is important to tell people about our streams and ways to protect them. As well, laws and rules protect streams and natural habitat from willful or negligent damage and destruction.

The most important laws are contained in the Fisheries Act of Canada and in the Water Act of British Columbia.

The Fisheries Act requires a review of any proposed activity which may harm or destroy fish habitat, such as altering the streambed or landscaping the banks.

Under provincial laws, a licence or approval must be obtained before any work can be done on a stream.

Some municipal bylaws restrict changes to streams and watercourses.

The Storm Drain Marking Program, operated by volunteers, paints a yellow fish near storm drains to remind people that chemicals must not go down these drains.

Many volunteer projects, under the supervision of Fisheries and Oceans, clean up streams and plant vegetation. Others monitor streams for siltation or pollution.

Some volunteers have lobbied local, provincial or federal agencies to get pollution problems identified and corrected.

What can you do?

Be informed.

Be observant.

If you see anyone damaging a stream, please call the nearest office of Fisheries and Oceans Canada or the Fish and Wildlife Branch, Province of British Columbia.

Be careful.

Think about your own impact on creeks and streams in your neighbourhood; make it positive.

Be active.

You can become directly involved with stream care by developing or participating in a stream enhancement project. These projects are supervised and in some cases funded by the Salmonid Enhancement Program (SEP), Fisheries and Oceans Canada, through local community advisors. These projects may repair streambeds, clear unwanted debris from streams, plant vegetation or take part in the Storm Drain Marking Program.

Project applications are available from your local community advisor, Fisheries office or provincial Fish and Wildlife office. Remember: government approvals must be obtained before work can be started on any stream.

Who can you contact?

For more information on stream care or about projects to "adopt a stream," contact the SEP community advisor for

your area, or the staff of your local Fisheries and Oceans or Fish and Wildlife office.

SEP Community Advisors

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