

By Garth Turner MP

Citizen's Guide to a better Environment

Practical, everyday steps to a more sustainable world

Why I wrote this Guide

All of us care about the environment-we have to. The future of our children, our country and our planet depend very much on the decisions made today.

Government has a role in this, and so does business-from huge oil companies sending tankers down the coastline to the corner drycleaners with cans of solvents. But so do you and I, our families and the communities we live in.

I strongly believe we all have a role to play. I know that in our everyday lives there are things we can do. At the time, they may seem to be tiny, but if we all did them, the results could be amazing.

This booklet is my small contribution to the cause. In writing it I wanted to show how our everyday lives can be structured to be positive, not polluting.



I wrote the first version of this booklet back in 1991, when global warming was just an unproven theory and before we witnessed steamy summers, polar ice cap melting or the frightening prospect of electricity brownouts due to airconditioning overload. After being an MP then, I went on to join the national board of the Sierra Legal Defence Fund, a group dedicated to upholding and improving laws protecting our environment.

Today I am an MP again, working to do what I can to help this world and all the creatures we share it with. Distributing this information is a part of that – since if we all did a little, we would accomplish a staggering amount. Let's start now. Our Canada, and our planet, are worth it.

Garth Turner, Member of Parliament for Halton, Canada



Halton voter resources

Garth Turner's web site – www.garth.ca

Personal blog, updated daily; news headline service; MPtv video web casts;

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Introduction

When I was a kid, we used to go skating on the Credit River, where it emptied into Lake Ontario. And I remember we all took for granted that part of the river which never froze.

That was close to the sewage plant—where the open water was always covered with clouds of white, soapy bubbles. Back in the early 1960's everybody just expected the river to be dead.

Today, we know better.

Today we have realized that the only pollution in the world is caused by men and women and what they have done to a perfect planet. We realize we have problems; and the time for solutions is now.

There is a serious concern suddenly that the apples we eat may cause cancer because of chemicals routinely sprayed on them. Scientists have found dioxins in paper—even in milk sold in cardboard cartons.

Every day another species disappears. Acid rain has killed 14,000 lakes. Every Canadian every day produces three pounds of garbage — and most cities have nowhere to put it.

Sure, this is depressing stuff.

But unlike the sick river of my childhood, the news doesn't just inform me anymore. It makes me angry. It makes me want to do something.

And that's why Dorothy and I sat down at the kitchen table and wrote what you will read here. We scoured the news clippings and the government publications;

looking for answers. We went through the house, identifying our own hazardous products, bad habits, excessive packaging, and crimes against the environment.

We went to the stores, looked at how things are bought and sold. We thought about driving the car, drinking water from the well, putting herbicides on our cornfields, putting green plastic garbage bags out at the roadside.

We came to realize quickly that we — the two of us — are polluters. There are so many things we could have been doing over the years to prevent this. But we didn't. Like most Canadians, we lived life as conveniently as we could — not thinking about the paint can thrown into the dump, the drain cleaner flushed away, the yards of plastic brought back from the grocery store, the exhaust from the car, the disposable lighters purchased or the vastness of wasted energy.

We have decided to try and stop polluting. Protecting the environment means not doing damage in the first place. And being an environmentalist doesn't mean wearing blue jeans and eating nuts and berries.

In our daily lives — as in yours — at home, in the office, behind the wheel, we really have control over a great deal of the pollution which is caused. The harm we can do is great, but so is the good.

Individual choices and actions make a difference. It is simply wrong to throw up your hands and wait for "government" or politicians or officials to solve our environmental problems.

Sure, there's a lot more these guys could be doing, and as a Member of Parliament now I'll be pushing for things like rules on excessive packaging and recycling. But making laws takes time. Meanwhile there are things Dorothy and I can do now. You, too. Imagine if a million households made just one decision to help the environment by, say, not buying "disposable" diapers — which take 300 years to break down in a landfill. That could mean well over a billion fewer pieces of garbage to bury each year.

We never used to rely on products like these, and Canada was cleaner for it.

Listen to me: The time for talking is past. Let's do it.

North America has 8% of the world's population and produces 50% of the world's garbage. People in Toronto can't swim at the beaches anymore — too polluted. Fishermen can't eat what they catch in most of Ontario and Quebec — toxic. A third of the wells tested in Atlantic Canada are unfit for drinking— too contaminated.

Metropolitan Toronto spends millions a year shipping garbage to a dumps in Michigan, which are abut to turn it away — since our landfills are full.

It's time now.

As individuals, we can stop this madness. In fact, we have no choice.

Yesterday Dorothy washed the floor with vinegar and water, instead of that yellow stuff she used to buy at the store.

I'll be dammed if it wasn't cleaner.



Every breath we take: Ways to protect air quality.

The gasoline-powered vehicle is a major air polluter. Some of the noxious chemicals emitted from the tailpipes of millions of cars and trucks every day are nitrogen oxides, sulphur oxides, hydrocarbons, carbon monoxide, and metallic compounds.

Automobiles account for about 60% of the total lead emissions into the air in Canada. Emissions from our cars cause 20% of overall nitrogen oxides, 24% of hydrocarbon emissions and 45% of carbon monoxide created by Canadians. Some of these pollutants, because of further chemical reactions in the atmosphere produce ozone (smog) and acid rain.

Automobiles and light-duty trucks contribute to the formation of acid rain, and are responsible for 60% of the total lead emissions in Canada. It's absolutely essential for our war on green house gases and global warming that we address this.

How to keep your car environmentally – friendly. driving tips for clean air.

- ✓ Keep your car in good working order according to the manufacturers' suggestions. It will perform better, be cheaper to operate and keep the air cleaner.
- ✓ If your car is labeled "unleaded fuel only", then use unleaded fuel. Leaded gas can destroy pollution control devices like the catalytic converter that, when not working, lets your car emit five times more pollution.
- ✓ Even a car with no converter will benefit from using unleaded fuel – spark plugs foul less often, exhaust systems last longer and no lead is released.
- ✓ Have regular tune-ups based on your driving habits.
- ✓ Maintain recommended tire pressures; that improves fuel economy.
- ✓ Don't overload your vehicle.
- ✓ Have engine fluids checked regularly.
- ✓ Check for fluid leaks and have them fixed quickly.



- ✓ Don't gun the motor. It substantially increases emissions.
- ✓ Avoid fuel spills at the gas pump and make sure your gas cap is securely in place. Spilled fuel is poison to groundwater supplies.
- ✓ Cars built since 1974 can use unleaded fuel, and leaded gasoline does not improve the performance of cars designed to run unleaded. In fact leaded gas may inhibit peak performance – by plugging the converter and reducing engine performance and increasing fuel consumption, not to mention putting toxic lead into the environment.
- ✓ In Ontario and Quebec misfuelling your car is illegal and can result in fines. Misfuelling will also invalidate any emissions control system warranty.
- ✓ Prolonged idling after a cold start before driving off uses more fuel and causes more pollution than driving off as soon as the engine stabilizes.
- ✓ In winter use a scraper to clean the windshield rather than a de-icer in a spray can. In summer, you can use equal parts of vinegar and water for your windshield fluid solution – rather than a commercial brew. Antifreeze and industrial de-icers, by the way, are deadly for pets, which are inclined to drink them because they often taste sweet.
- ✓ Good driving habits help keep the air clean. Drive at moderate speeds and avoid jack-rabbit starts to reduce fuel consumption.
- ✓ Use a block heater to warm your engine before starting it in cold weather.
- ✓ If you do not use a block heater, let the engine idle only until it is running smoothly.
- ✓ Use your car more selectively. Don't drive when you don't have to. Consider alternatives like public transit, and car pools. Better still, if possible, try muscle power – bicycle or walk. Muscle power is totally non-polluting. While it's not practical for most of us to give up our cars completely, we can use them with more discretion.
- ✓ Listen to traffic reports and try to avoid traffic jams. Anticipate stops by watching the traffic.
- ✓ When buying a car, concentrate on fuel economy to protect the environment.
- ✓ Remember that a properly tuned small car produces less pollution than a properly tuned large cars.

Did You Know

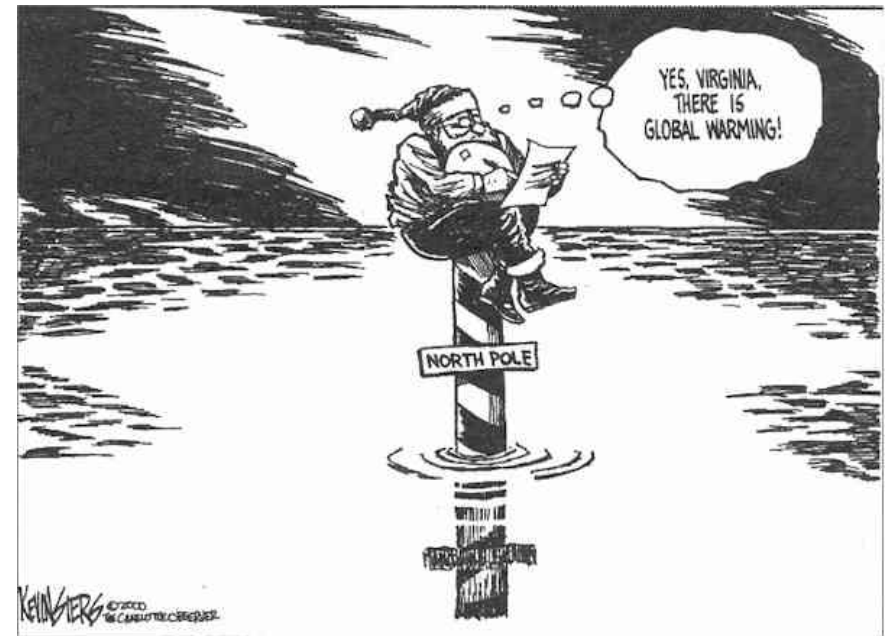
- ❖ That everybody living on Prince Edward Island is dependent on groundwater?
- ❖ That the 57 airlines operating out of Toronto's Pearson airport generate 26 tons of garbage a day?
- ❖ That the earth is losing 24 billion tons of topsoil a year- enough to cover Australia's wheat belt – from over tilling?
- ❖ That putting a brick in your toilet tank can save hundreds of gallons of water a year?

Other ways to reduce your **personal** air pollution

- Buy products which don't harm the environment and look for products that are labeled "environmentally-friendly". An example is paper and cardboard food containers instead of foam plastic containers made using chlorofluorocarbons (CFC'S) which contribute to the greenhouse effect. At home, always use pump sprays instead of aerosol spray cans which contain CFCs. Look for the symbol on the can which says "Ozone Friendly". If you want more information, contact the Canadian Aerosol Information Bureau; 7900 Keele St., Concord, Ont. L1K 2A3.
- Avoid burning trash or coal, which give off polluting carbon deposits.
- Keep your furnace in good repair, with clean filters.
- Avoid using volatile chemicals, cleaners and garden pest and weed killers.
- If you burn wood in a fireplace or woodstove use dry, well-seasoned wood. Hardwoods have a higher heat content and energy, while green wood produces more polluting smoke. Ideally, split your hardwood six to eight months before using it.
- Load your woodstove properly-that is, loosely rather than densely and reload it quickly. A cool stove has more emissions.
- Damper the fire properly. Too little air causes a smoldering fire and more pollution.
- Maintain a hot fire. The ideal flue temperature for minimum smoke is 150-206 degrees C.
- Empty ashes often, as they cause inefficient burning.

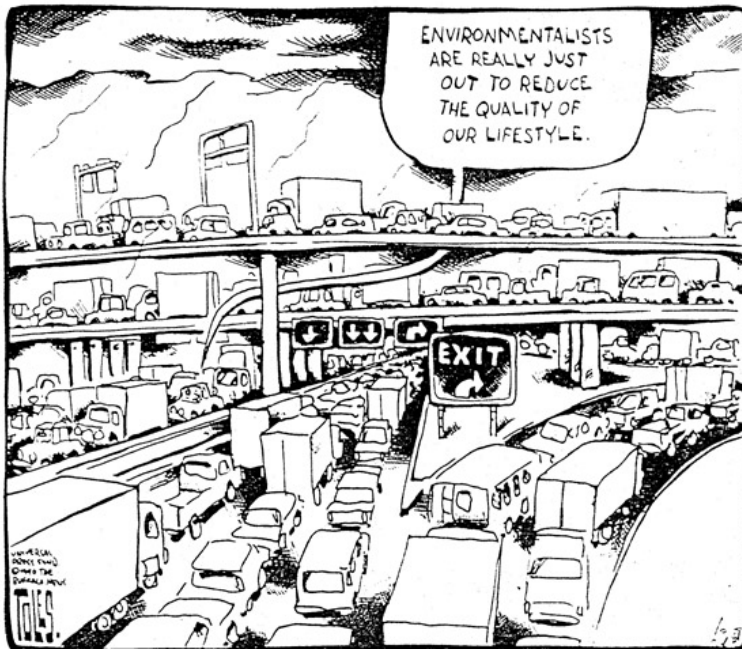
Things you can do at home

- ✓ Be a conservationist in everything you do. If your community doesn't have curbside recycling, find out where depots are for glass, paper, and metals.
- ✓ Use cloth diapers. "Disposable" ones take 300 years to break down- and over 22 billion a year are buried in Canada.
- ✓ Store chemical leftovers from the kitchen or garage or medical cabinet for proper disposal instead of pouring them down the drain.
- ✓ Take a mug to the office, instead of using plastic, or paper cups.
- ✓ Don't buy, or use electric toothbrushes, can openers or knives. You've got muscles- use them.
- ✓ Take your own bags to the grocery store.
- ✓ Stop smoking. The smoke contains the same cancer-causing agents found in the steel and aluminum manufacturing process.
- ✓ Buy only those household and garden products which give clear directions on their safe use and disposal.
- ✓ Replace incandescent light bulbs with mini-flourescent ones. They burn brighter, last longer and save energy.



- ✓ Use a microwave oven. It takes four times as long to cook food in a conventional oven with a lot more energy used.
- ✓ There's no need to use polluting anti-static sprays. Throw a thick wet towel in the dryer with those things being dried- or run the machine a shorter time.
- ✓ Make your house energy-efficient with tight-fitting storm windows and doors. That should cut heating costs by 15%.
- ✓ Cut down on the electricity you use during the peak period of 5 pm to 7pm- that will decrease the demand on the electrical system and help delay the need for more generating capacity.
- ✓ Exchange or give unwanted materials to neighbours to use – things like paint, car cleaners, solvents, bleaches, pesticides and so on.
- ✓ Most water heaters are set to produce near-scalding temperatures. You can save energy by turning down the thermostat on your unit.
- ✓ Save more energy by insulating your basement, using heat deflectors on hot-air registers, turning down the thermostat at night and shutting off lights in unused rooms.
- ✓ Using latex paint is better than an oil-based kind. Latex dissolves in water, while the other stuff only dissolves in solvents which are difficult to dispose of.
- ✓ Change the filter in your furnace regularly to improve its efficiency.
- ✓ Don't bury hazardous household waste – it can pollute the groundwater easily.
- ✓ Reduce your household garbage through recycling. You can accomplish much by establishing a backyard compost heap which will turn grass clippings, leaves, and other organic materials into a rich fertilizer.
- ✓ Trade in your dead car batteries rather than throwing them away.

- ✓ When pesticides are used up, rinse the container out three times before putting it out for garbage collection. Put the rinsing on the area where you used the chemical.
- ✓ Take used motor oil to one of the service stations or depots which collects it for recycling.
- ✓ Use baking soda, instead of commercial cleanser.
- ✓ Buy your food in bulk to avoid excessive packaging.
- ✓ Buy constantly – used products in large, economy – size containers. You'll save money and spare the environment with having to cope with more wrappings.
- ✓ Replace household cleaners with ammonia or vinegar.
- ✓ Avoid buying single serving containers which have no capacity for recycling, like drinking boxes.
- ✓ Try to buy your milk from an outlet which has a returnable jug program, or from one of the few dairies still dealing in glass bottles.
- ✓ Don't pour chemical cleaners down your drains. Instead, clean them regularly by pouring boiling water in, mixed with some sodium carbonate.
- ✓ Don't store half empty paint cans in the house. The paint evaporates, and pollutes your indoor air.

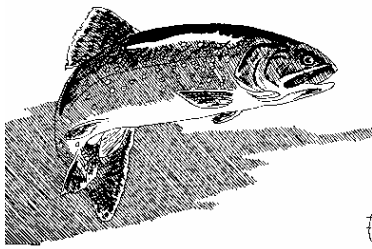


- ✓ Buy pump-aerosol cans rather than pressurized spray cans. Some sprays contain CFCs- chlorofluorocarbons- which are partially responsible for ozone layer depletion. Look for cans which carry the “ozone-friendly” logo on them.
- ✓ Think biodegradable when shopping for things like detergent, garbage bags and disposable diapers (although cloth is still better).

- ✓ Replace toxic chrome cleaner for your car with a soft cloth and some rubbing alcohol.
- ✓ Instead of putting liquid waste down the drain, mix it with soil or kitty litter until completely disposed, then put in a sealed container for garbage collection.
- ✓ When shopping use refillable or returnable containers.
- ✓ Talk to others about reducing our levels of garbage. Ask the grocer if the produce really needs to be shrink wrapped in plastic. Ask fast food restaurants if they can find alternatives to plastic trays and cans.
- ✓ Don't take old furniture to the dump- call organizations which will come, pick it up, and pass it on to some needy family.
- ✓ Think about the environmental impact of every single thing you buy.
- ✓ Use organic fertilizers on your garden- and that means manure not chemicals.
- ✓ Buy recycled products. Actively seek them out.
- ✓ Write down all the garbage you create for one week, then have a family meeting to see what on the list could have been reused; and what was brought into the house unnecessarily. Strive to cut garbage output by a third.

Did You Know

- ❖ That the swift fox, a species once extinct in Canada, is now making a comeback in Alberta and Saskatchewan?
- ❖ That a family's yearly supply of newspapers can be recycled into enough insulation for one house?
- ❖ That in Ontario and Quebec it is illegal to use leaded gas in a car with a catalytic converter?
- ❖ That 84% of the best farmland in eastern Canada is showered with acid rain?
- ❖ That of the ten million tons of trash generated every year in Ontario, between 30% and 60% is packaging waste?
- ❖ That slag from steel companies and fly- ash from coal burning power plants are being used to extend cement?
- ❖ That in Saskatchewan treated urban sewage is being recycled and used as crop fertilizer?
- ❖ That 11 of 30 wells tested in Ontario were contaminated with a popular herbicide?
- ❖ That Shell Canada of Calgary extracts sulphur from sour gas before it is released in the air, processes the mineral and sells it at a profit?
- ❖ That Canada imported 120,000 tons of hazardous waste from the U.S. last year- 80,000 tons more than we sent south?
- ❖ That planting chrysanthemums in your garden will protect it from many insect pests?



Water: You are what you drink!

Water is a precious resource. Without it, life is impossible. Without a steady supply of clean water, health will elude us.

It costs a lot of money to treat our waste water – so much, in fact, that many municipalities still continue to dump raw sewage into our waterways.

As individuals we can do our part to ensure this resource is not wasted, and not contaminated. Above all else, conservation of water is the goal.

Today, Canadians are using more water than ever before. When that fact is combined with the increasing instance of drought, whole communities can find themselves facing restrictions or absolute shortages.

Solutions to our water problems can come at a staggering cost. Billions of tax dollars will have to be spent to increase sewage capacity or build new water lines- unless individuals use less, and waste less.

If we all become water conservationists and change just a few habits, we can have a steady supply of water, while postponing costly new projects.

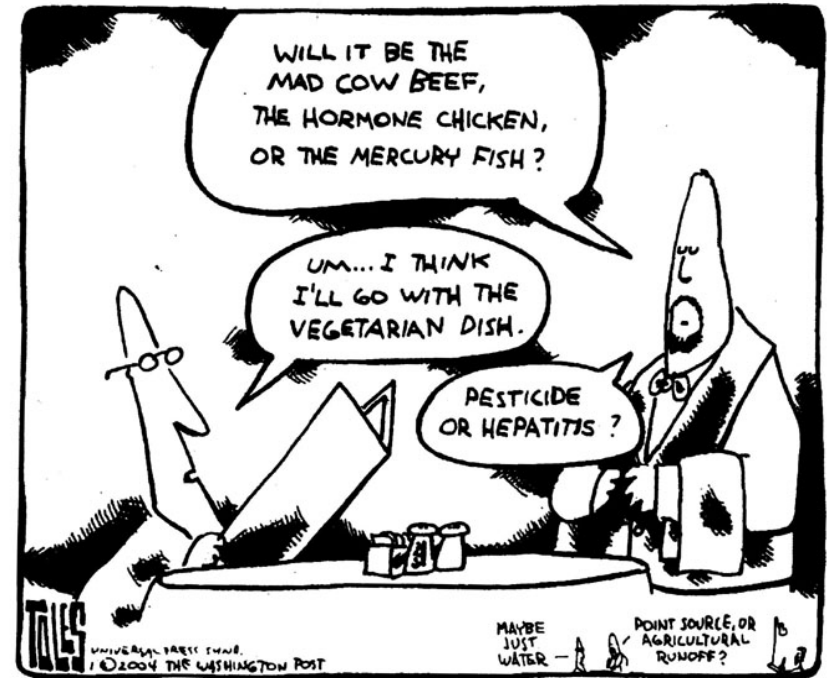
Where does our water go?

Inside the home, toilets use 45%; bathing, shaving, and cleaning teeth account for 30%; washing clothes and dishes takes 20%; while drinking and cooking account for 5%.

During the summer, water usage soars – by as much as 40% to about 100 gallons per day per household – as we water gardens and lawns, wash cars and fill pools.

Things YOU can do to CONSERVE water:

- ✓ Stop leaks. Water running through a tiny hole just a thirty – second of an inch in diameter can cost 50 gallons in a day.
- ✓ Toilets commonly leak because of worn fittings. Listen for a slight hissing sound from the tank. Or put a drop or two of food colouring in the tank and see if it spreads to the bowl. New fittings are available at hardware stores, and easy to install.
- ✓ Reduce the amount of water your toilet takes. Every flush with a standard unit means five gallons of water is used. Get a newer model, with a small three gallon tank.
- ✓ Or buy a water saving device for the tank, like a toilet dam or displacement bottle.
- ✓ Simpler (and cheaper) still, get a brick and put it in the tank, out of the way of moving parts.
- ✓ Find out if you have other leaks by reading your water meter at night after all water use is finished. Read it again in the morning before any water is used. If you have leaks, the meter will be higher – so start looking for them.



- ✓ Take shorter showers. If you want to soak, have a bath.
- ✓ You can buy a water saving shower head, which will cut the water used during a five minute shower by about 40 litres.
- ✓ A bath in a partially filled tub will use less water than a long shower.
- ✓ Don't let water run needlessly. If you're washing or shaving, then run some water in the basin and shut the taps off. When brushing your teeth, shut the taps off until you are ready to rinse.
- ✓ A running tap loses about 10 litres of water a minute. If you put water in a basin for rinsing, you'll use only about two litres.
- ✓ Don't run the dishwasher half full. Buy a dishwasher which has an energy saving cycle, and use it – that will save about 20 litres of water. ...continued...

Did You Know

- ❖ That recycling a ton of paper means that 19 mature trees live?
- ❖ That Brazil has a third of the entire world's rainforests, and this year an area the size of West Germany will be cut and burned?
- ❖ That Metro Toronto generates a third of Ontario's garbage, and 10% Canada's? That throwing away an aluminum pop can, wastes as much energy as pouring out a half filled can of gasoline?
- ❖ That composting was developed in India in the early 1900's ?
- ❖ That in 1970 Canada had only 15 pairs of peregrine falcons. And now we have hundreds?

- ✓ Don't use your toilet as someplace to throw trash. You'll waste water using the toilet to flush away paper towels or cigarette butts, for example. In the city, that will only put more burden on sewage treatment plants. In the country, it will hurt the efficiency of your septic system.
 - ✓ Your washing machine has a dial to adjust water level. Use it so the minimum amount is required for the wash. The machine has the capacity to hold about 130 litres; and that can easily be cut back by about a third.
 - ✓ When rinsing dishes, use a dishpan or a filled sink – don't hold them under running water. Or you can use a spray attachment with a shut off trigger.
 - ✓ If you like to drink cold water, fill a pitcher and stick it in the refrigerator; don't turn on the tap and run water until it cools off.
 - ✓ Water your lawn or garden early in the morning during the summer months. That will cut the amount which ends up being evaporated in the mid day heat.
 - ✓ When using your washing machine, make sure loads are full and that you use the shortest cycle possible.
 - ✓ Don't water the sidewalk and the driveway when doing the lawn. Make sure your sprinkler attachment doesn't leak, and that you have a supply of washers for hose connections.
 - ✓ Wash your car with a sponge and a bucket – or a hose with a spray attachment – using it only for rinsing the vehicle – not for loosening dirt.
 - ✓ When you are preparing food, partially fill the sink with water, and use that for rinsing veggies – don't do it under a running tap.
 - ✓ Don't water outside during windy periods – hitting your target will be harder and evaporation is speeded.
 - ✓ Never use a hose without a shut – off nozzle on it. And don't waste water washing off sidewalks or driveways – use a broom instead.
- You can install an aerator on your kitchen faucet – which will give you better tasting water, while restricting the amount flowing out.
- ✓ When cooking vegetables, use just enough water to cover the food, and make sure the pot has a lid which fits tightly.
 - ✓ Be careful to repair all leaks around taps and hoses and fittings in the kitchen and bathroom and laundry area.

- ✓ Wrap your hot water tank in insulation, and wrap hot water pipes. This will not only save electrical energy, but hot water will run sooner after you turn on the tap.
- ✓ In the early summer, give your lawn a good, deep soaking. That will build up root systems and make the grass more resistant to drought so in the really hot weather, you can afford to water less.
- ✓ Buy a sprinkler which is not an extrovert. Sprinklers which throw water droplets high into the air aid in evaporation. Ones that deliver large droplets closer to the ground do a better job of getting the moisture around.
- ✓ Lawns take a lot of water, so think about alternative plantings – maybe a rock garden, or shrubs which resist drought, or perennials. This is especially important where there is a southern exposure, with more sunlight.
- ✓ You can avoid a lot of evaporation with alternative watering methods – like a drip irrigation system. In this case water is delivered to trees and plants by means of narrow tubes buried in the soil. The amount of water necessary can be slashed by 60%.
- ✓ In the garden, use a layer of mulch to hold water in soil, protecting plants and their roots from drying out between rains or watering. Mulches can be made from chewed up bark, leaves, straw, manure, wood chips – or the product of your back yard composter.



Things YOU can do to protect water

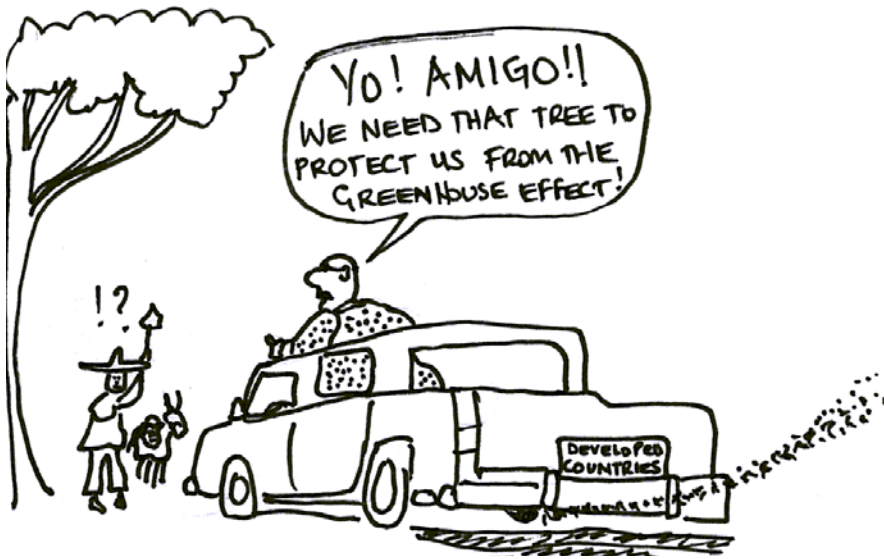
- ✓ Never pour hazardous household wastes – paint, turpentine kerosene, solvents – down the drain. In cities, sewage treatment plants are not equipped to handle that kind of waste, and much of it ends up contaminating the water supply. In the country, the waste can easily poison groundwater – from which many households draw all their water.
- ✓ Avoid using salt as a solution to winter ice and snow. Salt will render water unfit for use. It forms a harmful runoff – instead use sand or birdseed to gain traction.
- ✓ Animal waste is a fact of life, but too much of it can contaminate groundwater. Yes, folks. That means poop'n scoop.
- ✓ Never bury any toxic or hazardous waste. Don't allow fuel oil or gasoline to leak or spill – a single litre can make a million litres of water useless.
- ✓ If you have a cottage on a lake or stream, don't fertilize lawns which are near the water.
- ✓ Be very wary of commercial lawn- feeding, and weed control compounds. Most are far stronger than required, and produce a deadly runoff which can pollute groundwater. Hire companies providing a 'green service.'

Things We can do as a Community

There are many small steps individuals and families can take outside their own households to help the environment by influencing others around them.

A few suggestions:

- ❑ Make nature oriented activities a family affair. Approximately 80% of Canadians live in cities so it's important to get out beyond the concrete and into the natural world. A good place to start is a national or provincial park. Try some new hobbies like bird watching, wildlife photography, or animal and plant study during your camping or hiking trips.
- ❑ Try to avoid motorized sports in favor of non polluting ones like cross country skiing, hiking or canoeing.
- ❑ When you travel the Trans Canada highway, pick up a Canadian Forestry Service ecotour booklet. It will describe historical points of interest as well as landforms and wildlife to watch for as you drive.
- ❑ Subscribe to Canadian magazines about the outdoors like Canadian Geographic, Equinox, Nature Canada: and for children, Owl or Chickadee.
- ❑ Urge local stores to use only biodegradable plastics and ask supermarkets to replace foam containers and packaging. A short note to the manager expressing your concern is a good start.
- ❑ Show your concern by example. Take your own shopping bags to the store. Don't buy overly packaged food, try buying bulk foods, and products packaged in paper and glass. Shun products which are non recyclable, like disposable kitty litter containers, disposable diapers, throwaway lighters and cameras.
- ❑ Point out the energy waste of door-less freezers in grocery stores.
- ❑ At the office, paper is the prime candidate for recycling. It's easy to separate from other waste and can be turned into other products.
- ❑ In industry, unwanted wastes may provide raw materials which another industry could use. Environment Canada runs a Waste Management exchange and publishes a bulletin letting recycling industries know what waste materials are available for reuse. Investigate these options before disposing of your plant's waste. Oil, rubber, plastic, metals, and old batteries are all possible candidates.
- ❑ Start attending your local council meetings. Let councilors know of specific problems in your community and suggest solutions for them.
- ❑ Find out what proportion of your municipality's waste management budget goes into reduction, reusing and recycling efforts, and if any funds are set aside for public information projects.
- ❑ Extend your personal effectiveness by joining with other concerned neighbours to form your own lobby. Seek out other citizen's groups with similar goals and learn from their experience.



The Dirty Side of Driving

Cars are great, but they pollute in a huge way.

The exhaust is mostly carbon dioxide and water, which is fine but the fumes also contain hydrocarbons, carbon monoxide and nitrogen oxides. And cars that burn leaded gasoline spew out lead at the other end, as well.

Cars exhaust smells because of unburned or partially burned fuel. Carbon monoxide and nitrogen oxides are bad for your health, while contributing to problems like acid rain and smog. You can help solve the problem.

For hydrocarbon emissions: Don't have too rich or too lean a fuel mixture. Make sure the spark plugs are clean and that the engine is timed properly. Don't tolerate broken ignition wires or valves that stick.

To cut back on carbon monoxide: Have the proper fuel/air mixture to the engine. Clean your air filter, along with all carburetor passages. And get the choke adjusted.

And the best way to diminish nitrogen oxide emissions is to buy a small, fuel efficient car.

Did You Know

- ❖ That burning wood gives off the same pollutants as your car's engine?
- ❖ That in Ontario, businesses produce more than 300,000 tons of waste paper a year?
- ❖ That plastics are made almost entirely of petroleum and natural gas?
- ❖ That it takes 70% less energy to produce aluminum from recycled materials than raw materials?
- ❖ That a single litre of gasoline can make a million litres of water undrinkable?
- ❖ That between 1965 and 1980 in New Brunswick alone, 7.2 million litres of gasoline leaked into the ground?
- ❖ That World Environment Day is June 5?

- ❑ Find out how hazardous wastes are collected and disposed of in your community and if there is an adequate plan for hazardous waste management.
- ❑ Write letters to your newspaper, local, provincial and federal representatives and businesses expressing your environmental concerns. Try to ask specific questions and offer your suggestions. Politicians need to be constantly reminded of the need to save the planet.
- ❑ Join world wide organizations like the World Wildlife Fund or the United Nations Environment Program.
- ❑ World Environment Day is June 5 every year and Canadian Environment Week is that week. Try with your neighbours to plan a local activity to mark the occasion, perhaps through the schools with essay or poster contests.
- ❑ Let federal politicians know you support a “debt for nature” program which swaps a piece of Third World debt for a national commitment to environmental protection. Anything’s possible.
- ❑ If you want rainforests to live, consider joining the World Wildlife Fund’s Guardian of the Rainforest campaign –a \$25 donation will save an acre in Mexico, Guatemala or Belize.



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Did You Know

- ❖ That burning wood at too low a temperature drastically increases polluting smoke?
- ❖ That as few as ten tank fulls of leaded gas can kill the catalytic converter in a car?
- ❖ That a hissing toilet means you’re wasting water through leakage.
- ❖ That the total household waste generated each year in Ontario would fill a line of garbage trucks from Toronto to St. John’s and back again?
- ❖ That it takes 70% less energy to make an aluminum can from recycled, rather than new, material?
- ❖ That recycling was first made mandatory in the Ontario township of South West Oxford?
- ❖ That coffee cups are being recycled into fence posts?
- ❖ That Canada has 20% of the world’s fresh water, enough to flood the place to a depth of over six feet?
- ❖ That the world’s rainforests slow the Greenhouse Effect by soaking up carbon dioxide that would otherwise trap the sun’s heat.
- ❖ That a recycled bottle is used an average of 10 to 15 times?

“Me, I kill no more, unless in case of absolute necessity, having had perhaps my share and over. Some prefer to have a den full of trophies, others a hunting lodge decorated with skins. Each to his own; I like mine alive.”

Grey Owl, 1936

Stopping pollution at the source: ways to reduce waste

The simplest thing people can do is to cut down, wherever possible, the amount of stuff they throw out. The simplest way to do that is to cut down on the amount of material you bring into your household. There are five “R’s” to remember to help us reduce pollution.

Reduce - the amount of garbage we generate.

Reuse - bottles, containers, and other household items.

Recycle - by participating in local programs, and in your home.

Recover - putting materials back to work again.

Rethink - by turning our minds around from being consumers to conservers and by putting all our actions and all our purchases in an environmental context.

Other ways to help reduce waste:

- ❑ Save electrical energy by reducing wattage; turning down the thermostat; shutting off unneeded lights; using fluorescent bulbs.
- ❑ Avoid buying products in non-returnable containers. Shop bulk. Reuse shopping bags. Ask for paper, rather than plastic.
- ❑ Buy durable products which would last a long time.
- ❑ Exchange or donate unwanted clothes, books, magazines, household goods and furniture.
- ❑ Give extra produce from your garden to a local food bank or charitable institution.
- ❑ Try sharing common tools in a co-op arrangement with your neighbours (like power lawnmowers).
- ❑ Analyse your grocery list. Can you do without a lot of today's disposable or unnecessary convenience items?
- ❑ Be creative. Substitute natural solutions for commercial ones. Clean glass with vinegar and water or rubbing alcohol and water. Soften water in your washing machine with a quarter cup of vinegar. Clean copper with a paste of lemon juice, salt and flour. Clean stainless steel with baking soda and mineral water. Clean the toilet bowl with boiling water and vinegar. Use cedar chips instead of moth balls. Freshen the air with an open box of baking soda. Polish furniture with a mix of three parts olive oil and one part vinegar.

To every thing there is a season: Ways to help protect our environment throughout the year.

Spring/Summer

- ✓ Drain sediment from your hot water heater; that build-up makes it inefficient and consumes more energy.
- ✓ Repair leaking faucets, to cut down on wasted water.
- ✓ Dry your clothes outside, instead of in the dryer.
- ✓ Get better organized and plan all errands where you need the car into one trip.
- ✓ Start walking and ride your bicycle for short trips.
- ✓ Get your car tuned up; put on summer tires.
- ✓ Turn off lights you don't need.
- ✓ Use low wattage bulbs where possible.

- ✓ If you have a yard, plan and plant a flower and vegetable garden. When landscaping, plant domestic, rather than exotic species of plants. They are hardier and easier to maintain, and provide a more native habitat for birds and butterflies.
- ✓ Help garden and yard predators like birds and toads with a supply of water. Encourage beneficial insects with plants like parsley, anise and carrots.



"I'm starting to get concerned about global warming."

- ✓ Plant a tree. Summer drought combined with the effects of acid rain have taken a heavy toll on maples and other hardwood trees. You can help reverse this decline by replacing them. Trees consume carbon dioxide and produce oxygen. Placed properly around buildings, they can dramatically cut the energy consumed in air conditioning.
- ✓ Find out more about composting, which allows you to reduce kitchen and yard wastes while generating your own organic fertilizing material. Simple enclosures like a large garbage can, barrel or wood box with the bottom knocked out and some air holes in the side are a good start. Ordinary kitchen scraps are the main "fuel" for composting. Typical composting materials include leftovers, peelings, coffee grounds, nut shells, leaves, straw and hay, grass and garden clippings.
- ✓ Research alternatives to chemical pesticides. Pesticides are poisons- that's how they work. But they are toxic to more than just your garden pests. Honeybees and ladybugs are useful insects which pesticides can kill. Pesticides work their way into the food chain- birds eat pesticide infected insects, lay abnormal eggs and side effects can put healthy animal and human life at risk. Other ways to deal with garden pests include- picking off infested leaves by hand, pruning, or using a garden hose to wash plants.
- ✓ Feed brewer's yeast and garlic to your pets as a natural form of bug repellent. Fennel, rue and rosemary repel fleas. So do eucalyptus seeds and leaves, which should be placed around your pet's sleeping areas.

- ✓ If you must use a pesticide, buy a biodegradable kind such as a biological pesticide, or one containing pyrethrum- a natural substance found in chrysanthemum flowers.
- ✓ Always follow the directions on pesticide containers for safe disposal, and check with local authorities for the safest way of getting rid of leftover pesticides.
- ✓ Remember that damage by garden pests is probably more troubling to you than it is to the plant.
- ✓ Find out more about companion planting. Marigolds planted throughout the garden protect tomatoes and beans from a variety of insects. Chives, dill, garlic and onions do the same for other plants. Basil will protect tomato plants, onions help carrots; horseradish and beans near the potatoes do the same. Gardening books often have diagrams for companion planting arrangements.
- ✓ Remove snow tires from your vehicles; they make a car less fuel-efficient.
- ✓ Take off the storm windows.
- ✓ Clean filters before installing air conditioners. Better yet, don't install an air conditioner at all. The unit contains CFC's, which are harmful to the ozone layer. Wait for new technology which will replace these chemical compounds.
- ✓ Remove CFC coolant and foam insulation from discarded air conditioners and refrigerators.
- ✓ Don't buy things made from rare hardwoods like teak and mahogany; also shun exotic wildlife like parrots or orchids.
- ✓ Have your car air conditioning serviced at a centre that recycles CFC's.
- ✓ Inspect pipes for leaks and corrosion and repair.
- ✓ Clean out fuel tanks, woodstoves and furnaces.
- ✓ Chop wood for winter and stack to dry.
- ✓ Plant a tree, and give the planet another lung.

Fall/Winter

- ✓ Clean outside drains and gutters.
- ✓ Can and preserve your garden's harvest. Buy recyclable jars in which to do it.
- ✓ Put mulch around plants, to help them winter.
- ✓ Remove and clean screens and put up storm windows to minimize heat loss and conserve energy.
- ✓ Turn off outside water and drain outside water pipes.
- ✓ Caulk windows and weather strip doors and windows.
- ✓ Insulate necessary pipes in your basement and garage.
- ✓ Clean chimney flues, for both safety and efficiency.
- ✓ Clean or change furnace filters.
- ✓ Winterize your car.
- ✓ Lower your thermostat at night for more comfortable sleep.
- ✓ Consider investing in a programmable control which will do that automatically.
- ✓ Use your oven economically by cooking several dishes at once.
- ✓ Use automatic timers for lights.
- ✓ Keep your Christmas lights simple, and don't let them burn all night.

- ✓ Clean the lint filter in your dryer after every load, to increase air flow and decrease energy used.
- ✓ Make your own Christmas decorations, instead of buying ones fabricated of plastic material. Save decorations, ribbons and wrapping paper to use again.
- ✓ Build a bird feeder.
- ✓ Spread sand on icy walks, instead of salt which is toxic to wildlife, harmful to vegetation and deadly to groundwater.
- ✓ In late winter, start your seedlings for an early spring planting of your garden.

Did You Know

- ❖ That Americans pay twice what we do for water; Europeans four times; and Japanese fifteen times?
- ❖ That cars are responsible for almost 70% of the lead pumped into the world's atmosphere?
- ❖ That a 40- watt fluorescent bulb lasts 10 times longer than a normal one, and produces five times more light?
- ❖ That Canadians produce 16 million tons of garbage a year, most of which is buried in 10,000 dumps?
- ❖ That, world-wide, an area of trees equal to the size of 220 football fields is destroyed every minute- twice the size of PEI every month?
- ❖ That cigarette smoke contains the same cancer-causing crud found in the manufacture of steel and aluminum?

We all have a role to play

I've tried to show in this booklet that there are many ways that ordinary Canadians can work to help make the air cleaner, the garbage bags emptier and the water more pure. I hope you can find this useful; I hope you pass it along to a friend or family member; and that, of course, you recycle this pamphlet.

The environment is not so much a problem as a challenge and a trust. We have inherited a vast, beautiful, rich and wondrous country. Canadians are blessed in a way few others can even imagine.

Our role now is to preserve that richness, and never to take it for granted.

To do that, we must have a meaningful national dialogue. Government, families, communities, individuals and business interests must work together. There are alternatives to excessive packaging, brimming landfill sites and sulphur in the air. Putting them in place will take a dose of common sense and a real desire to leave this country in better shape than we received it.

We're doing it for ourselves, and for our kids. For the animals that depend on us for their very existence. For the millions around the world that our farmland feeds. For today and the future.

Can we- you and I- make a difference?

You bet. **And we will.**

About this Guide

This booklet is being made available to all Canadians, free of charge, on the Internet, available for download. This is my preferred method of distribution because, of course, it is the least wasteful, and allows me to constantly update it with new information. One of the great technological advances of our time has been the democratization and globalization of the Internet, which allows us to do digitally that which took great natural resources and vast quantities of energy to accomplish in the past.

However, I have also prepared a shorter version of the Guide, which is being printed and distributed to each home in my riding of Halton. This will bring the information to about 160,000 people who, I seriously hope, will read it and follow it. The printed version is paid for by my MP's budget – money which would have normally been spent on political promotion.

Comments

I value your opinion and observations. Please take a moment to send them to me, along with any additional information you think might make this Guide more useful or relevant.

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Thank you.