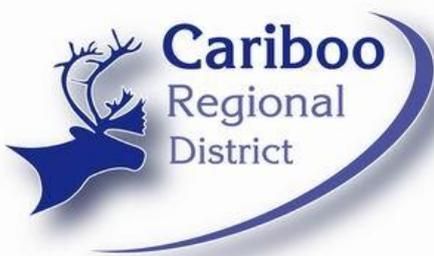
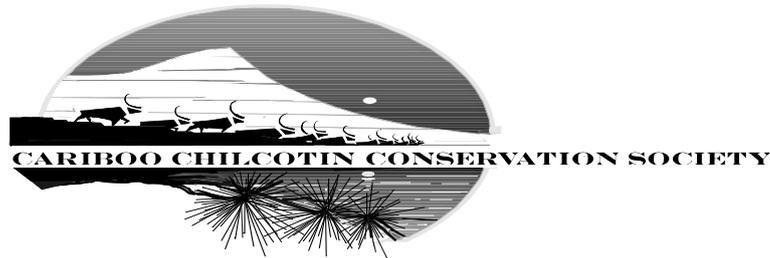


Waste Wise Teacher's Guide



A Project of the Cariboo Chilcotin
Conservation Society

The Cariboo Chilcotin Conservation Society, City of Williams Lake and Cariboo Regional District



PROUDLY PRESENT



A Teacher's Guide to Waste Management and Waste Wise Techniques for a Healthy Generation

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Welcome to Waste Wise

The Cariboo Chilcotin Conservation Society (CCCS), along with the City of Williams Lake and the Cariboo Regional District (CRD) are proud to present **Waste Wise**. The Waste Wise Program was originally initiated in 2010 with the City of Williams Lake. In 2011, the CRD saw the benefits of the program in action and partnered with the CCCS, allowing Waste Wise to be expanded to any school in SD 27 or 28 that has CRD students enrolled.

School Districts 27 and 28 are eligible for free in-school Waste Wise presentations which follow the “Story of Waste” in the Cariboo-Chilcotin and discuss recycling, composting, issues with plastics, and creative ways to make a positive difference every day. Information is presented in an uplifting, fun and interactive style. There are hands-on activities for students that include games, worm composting, interactive displays and art projects. Guided field trips to the Central Cariboo Transfer Station and Central Cariboo Disposal Recycling facilities (both in Williams Lake) are also available. Waste Wise also provides expertise and resources to initiate school-wide composting and gardening.

Follow-up visits are recommended and are used to assess learning outcomes and reinforce the GARBAGE FREE LUNCH message with a prize draw for successful students.

Waste Wise Mission

Waste Wise, a project of the Cariboo Chilcotin Conservation Society, aims to educate and empower residents in Williams Lake and the Cariboo Regional District to reduce waste, and become conscious of waste issues.

City of Williams Lake Goals

(Within the City boundaries; recognizing that students may be from either the City or Regional District)

The City of Williams Lake, in partnership with the development of the Waste Wise Program, aims to educate the residents of Williams Lake about the benefits of reducing and recycling. This is being done through school programs aimed at students in grades K-8. Bringing this knowledge to the youth of this community will ensure that future generations will have the necessary tools to effect change in a way that will benefit all people, and the environment in the future.

Cariboo Regional District (CRD) Goals for Rural schools

The CRD would like Waste Wise programs delivered to all rural students to raise awareness on waste reduction and to educate students on how to properly dispose of all waste including: hazardous wastes, household recyclables, organics, wood waste, metals, and textiles. The CRD encourages students to practice the five “R”s of Refuse, Repair, Reduce, Reuse, and Recycle. CRD students can lead the way to waste reduction and proper waste handling and disposal in CRD homes, and help educate their families.

Cariboo Chilcotin Conservation Society Goals

To promote land use and management decisions which enhance the stability, quality of life, and economic viability of the community over the long term. We seek to ensure the preservation and maintenance of healthy, functioning ecosystems.

In the Classroom

Through in-class presentations that are interactive and visual, the Waste Wise program integrates sustainability, environment and waste concepts into teaching and learning which address many prescribed learning outcomes in Grade 1 – 7 Science and Social Studies curriculum.

- Basic environmental concepts: ecosystems, pollution, environmental footprint, sustainability, biodegradation
- Climate concepts: climate change, effects of greenhouse gases, temperature impacts
- Resources – what they are, which resources are used to make paper/cardboard, glass, aluminum/steel and plastic
- Effects of waste on society through history
- Garbage and landfill processes, methane, leachate (i.e. garbage juice)
- Plastics: single-use disposable items, impacts on the environment, the Pacific garbage patch
- Recycling: how it works, what can be recycled, what recycling becomes
- Composting: decomposition, worm biology, nutrient cycle
- How our choices impact the environment both negatively and positively
- Brainstorm actions that support the environment
- Develop alternatives and solutions to environmental issues
- Determine a plan of action to address a problem, opportunities for participation, and Take Action (at school, at home, in the community, locally, globally) – a campaign, a presentation to City Council, etc.
- How our choices as consumers affect the environment, people elsewhere in the world, quality of life, economies

Actions: clean up your school yard, park or another public space; school recycling program; school garden; school-wide composting; school garbage audit and waste-reduction plan; plant trees, shrubs or other plants; garbage free lunches; present to City Council; express ideas through art; community radio ads; class work bee at community gardens

The Earth's Resources and Sustainable Living

The Earth provides all of the products we use to create the things we find valuable in our lives like cars, phones, computers, and houses. Even all the small things, like the packaging for meats and cheeses, the clothes we wear and shoes we walk in are produced using the Earth's resources. When we live and consume goods and services that rely on natural resources (e.g. water, metal, rocks, trees, petroleum) to produce these things, we need to do it in a way that leaves these resources in a healthy state for future generations. Waste Wise living is simply making choices that produce less waste and pollution while protecting the environment which, if cared for, will supply us with what we need.

All products have environmental impacts in their journey from resource, through production to disposal. Our job is to ensure we do not 'over-consume' and that our waste does not threaten the healthy balance of the earth's resources.

Let's make less waste! Fortunately, it is easy to reduce the amount of garbage we create by following the 6 R's - Rethink, Refuse, Repair, Reduce, Reuse, Recycle and Composting - making everyday choices that take responsibility for the waste we produce. Cumulatively, these actions help to significantly reduce our waste, but alone they are small, simple actions to take.

Be a force for Positive Change,
Several targets for living Waste Wise:

- Ensuring everyone has sufficient resources for the basic necessities of life: food, shelter, water, and clothing
- Increasing relationship-building with nature, especially among children: spending more time, more often, in nature-based activities, such as picnics, hiking, biking, and outdoor play
- Minimizing waste and pollution through thoughtful sharing and wise purchasing habits (ie: limiting packaging, utilizing reusable options such as shopping bags, water bottles and coffee mugs; and purchasing necessities only)
- Improving our community's retail landscape: encouraging stores and businesses to carry sustainable products and participate in local Waste Wise initiatives
- Reducing, Reusing, and Recycling after you first Rethink, Refuse and Repair.
- Increased at-home composting: roughly 40 to 60% of the waste in our landfills is compostable

Visit the **WASTE WISE**
webpage on the CCCS
Website at www.cconserv.org
for more ideas and resources.

Waste Wise Fact!

In one year, one trillion plastic bags are used worldwide for an average of 5 minutes! Three million Water Bottles are thrown away every day in California alone. (Garbage! The Revolution Starts at Home)

Book a Waste Wise Presentation

Request to teachers

In order to ensure your students have the best possible experience, we ask for your help with the following:

- Book early if you would like the Waste Wise Program to coordinate with classroom curriculum.
- Provide the presenter with an open space in front of the class: a table (or two desks pushed together) and space to write on the chalkboard.
- Schools in the Cariboo Regional District: A rolling cart with an extension cord, access to an electrical outlet, and a screen or white wall.
- Booking a school bus – always remember to state it is for a “Waste Wise Field Trip,” and if you have a change in plans, be sure to notify both the bus garage and the Waste Wise Instructor.
- Please contact the Cariboo Chilcotin Conservation Society (250-398-7929) if there is a change in time/date of a scheduled program as soon as possible.

To Book a Class

Go to **Appendix B** for the Booking Confirmation Form

Waste Wise Program Modules

Waste Wise consists of several classroom modules and each module is approximately one hour in length. Each year, new modules are introduced for classes that have already taken the other modules. Classes are also taught at the High School, University and Elder College levels; as well as to community groups by request year round. Modules are mixed and merged to suit the particular needs of the group.

Intro to Waste Wise (Grades K – 3): Recycling

Recycling Overview

- What is recycling? (Terminology – Page 18).
- What shape means recycling? The recycle symbol or “Mobius Loop” is a triangle made of three arrows with a number inside.
- What materials can be recycled: Paper, glass, metal and plastic.
Activity: Fun, simple, repetitive Simon-says style game where students find paper, glass, metal and plastic in the classroom.

Natural Resources: What are these materials made from?

- **Paper** is made from harvested trees.
- **Metal/aluminum** in cans is made from minerals that are mined.
Activity: Use magnets to differentiate between metals found in the classroom (magnetic, not magnetic).
- **Glass** is made from sand that is heated at very high temperatures. Glass is recyclable; HOWEVER, glass cannot be put into the City of Williams Lake household recycling bins. Take glass to Canadian Tire or the Transfer Station at Frizzi Road.
- Recyclable **plastics** have the recycle symbol or “Mobius Loop” (discussed above) with a number inside that identifies what kind of plastic it is.
Activity: Use the game “Hangman” to figure out the answer to “What are plastics made from?” Oil. Your car drinks oil in the form of gasoline. Our food is packaged in plastic which is made from oil therefore, you need to remember:

“Plastics 4, 5 and 2 – all the rest are bad for you”

Hand motions for rhyme: “4 (hold up left hand with 4 fingers up); 5 (hold up right hand with all 5 fingers up) and 2 (keep up only the index finger on each hand), are good or you (thumbs up).”

Make sure you **NEVER** reuse plastic water bottles (#1 phthalates). Avoid #3 (PVC), #6 (Styrofoam) and #7 (unless BPA free) – these plastics are not good for you; avoid and never reuse. Bisphenol A (BPA) is a hormone disrupting chemical banned by Health Canada.

- **Water** – an important resource used to make all of these things.

Recycling Activities

- **Activity:** Recycling Game - From a bag of recyclables, pull items out, have the kids stand up if it can be recycled; remain sitting if not recyclable.
- **Activity:** Split the class into two groups and play a sorting game in which the kids practice their skills in identifying what can and cannot be recycled. Hide a surprise item in the bag – a toy, a book, piece of clothing – discuss options as to where this item could go (Share Shed, Salvation Army, Big Red Book Shelf, etc.)
- **Garbage free lunch activity** – Ask “Is your lunch garbage free?” Garbage-free lunches reduce waste, save money and are good for the environment! Skip single serving packages, bring your refillable water bottle, use reusable containers, compost your banana or apple peel. Have kids with a garbage free lunch show their lunch; or go around the classroom and check lunchboxes; discuss how to make lunches garbage free.
- **Activity:** Read “The Lorax” by Dr. Seuss. The book shows the consumerist and waste cycle that affects everyone. Note: This can be included if the session is set up to be longer than 1 hour. Great if teachers can read “The Lorax” to the class prior to the Waste Wise visit.
- **Activity for Cariboo Regional District – Rural Schools – Grades 2/3**
Garbage Bingo – Cards show items that do belong and items that do not belong (i.e. propane canisters, vehicles, glass, tires, car batteries, etc.) in the landfill.

In closing:

Encourage recycling at home: Imagine you are at home ... would you put your shoes in the refrigerator? “No!” **Putting recycling in the garbage should feel as weird as putting your shoes in the fridge! Put recycling in its proper place.**

Did you know?

One school child on average produces approximately 30 kilograms or 70 pounds of garbage a year from their lunches. Multiply that by those in your class, then your school, then your school district. That is a lot of garbage!

Module 1 (Grades 3/4/5): The Three R's

Note: In this module kids already know what is recyclable, what resources are used to make materials, how to check for the recycling triangle (Intro to Waste Wise: K-3).

Discuss the Three R's: “Reduce, Reuse, Recycle”

- Recycling is great and saves valuable natural resources but recycling still requires resources like water and energy to make something new from something else. Also, collecting, sorting, and transporting recyclables requires people, equipment and buildings in communities and all of these involve some degree of pollution.
- Reducing and Reusing are choices that should be considered first.

- Reducing consumption is the best option, try buying less “stuff.” Re-evaluate your requirements and buy only what you will need. Reuse (and Re-purpose): Find ways to use items again and again. Borrow, lend, repair, share and find new purposes for things rather than purchasing new.

Activity: Show the journey that plastic takes when it is recycled using a world map (Williams Lake to Vancouver to China and back). As trucks, ships and planes travel they use oil and as they burn oil they create gases which are hurting our planet.

Activity: Glass versus Plastic – consider the characteristics of each. Glass weighs more than plastic and therefore more energy is required to transport and deliver goods packaged in glass. However, glass has many other benefits that are not shared with plastic. Glass is inert and does not leach anything into food or drink when stored or heated. Glass is durable and items such as jars or bottles can be reused over and over. Glass can be recycled locally, whereas plastic must be shipped long distances to be recycled. Optimally, choose locally made products, packaged in glass or other environmentally friendly packaging.

Activity: Water and Garbage are closely tied to one another.

- Show a map of the world with the oceans and continents. Water covers most of the planet. But only 3 percent of the water on Earth is freshwater. Most of that is ice. Less than 1 percent of all freshwater is readily accessible for human use (less than 0.007%). *Source: Thirst PowerPoint Presentation*
- Using a 5 gallon (approx. 18 litre) water container – have each student estimate how much water is fresh and how much is saltwater. Those who pointed to near the top were correct.

Did You Know?

For every 4 litres of water on earth, only ½ cup is freshwater, and of that, 1 drop available for human consumption! (UNESCO water site)

Plastics:

Always check the number on the plastic food container (found in the recycling triangle symbol). Remember: ***Plastics #4, 5 and 2. All the rest are bad for you.***

Remember this rhyme: Plastic #4, 5 and 2. All the rest are bad for you.		
 Polyethylene Terephthalate	 Polyvinyl Chloride (new car smell!)	 Polypropylene
 High Density Polyethylene	 Low Density Polyethylene	 Polystyrene (trade name: Styrofoam)
		 Other (beware of BPA!)

Number 1: Do not reuse! Number 1 plastics (PETE) degrade with each use and reuse, leaching phthalates into the water at room temperature and because the plastic is thin

and wrinkled it can build up germs. Phthalates are used to make plastics soft and flexible.

Number 3: PVC plastics readily leach phthalates (vinyl).

Number 6: Styrofoam is currently not recyclable in Williams. In May 2014 there will be a special Styrofoam recycling bin available at the Central Cariboo Transfer Station in Williams Lake. However, it is still best to avoid Styrofoam* where possible as it takes thousands of years to break down in the landfill, and is harmful to wildlife and fish who mistakenly ingest it.

* leaches benzene (carcinogen) during manufacturing

Number 7: Leaches a hormone disrupting chemical called Bisphenol A (BPA). Choose plastics that are BPA-free.

Recycling Activities:

- **Activity:** Class chooses two recycling champions who represent two teams to sort one bag of recycling each BLINDFOLDED to reinforce their skills in identifying if the item is recyclable (put it on your right) or garbage (put it on your left). **“Recycling is so easy you can do it blindfolded.”**
 - **Activity:** Include surprise items (a book, a toy car) – discuss options other than the landfill for these items. The book could go to the Big Red Book Shelf or the Rotary, the car could go to the Share Shed or the Salvation Army.
 - **Activity:** Split the class into four teams. Using enlarged laminated photos from the Williams Lake Transfer Station, identify the items that are in the landfill but could have been recycled or reused. Empower kids to “teach their parents” what they need to know about reducing, reusing and recycling.
 - **Garbage free lunch activity** – Ask “Is your lunch garbage free?” Garbage-free lunches reduce waste, save money and are good for the environment! Skip single serving packages, bring your refillable water bottle, use reusable containers, compost your banana or apple peel. Have kids with a garbage free lunch show their lunch; or go around the classroom and check lunchboxes; discuss how to make lunches garbage free.
 - **Activity:** Quiz Game - List of questions on page 16. Correct answers win a “Waste Wise Sticker or Magnet.”
 - **Activity for Cariboo Regional District – Rural Schools – Grades 4/5 (and 6)**
 1. Garbage Bingo – Cards show items that do belong and items that do not belong (i.e. propane canisters, vehicles, glass, tires, car batteries, etc.) in the landfill.
 2. Show pictures taken at local rural transfer stations and identify the items that are in the landfill but could have been recycled or reused.
 3. Discuss safety at transfer stations: no shooting, no breaking things, etc. Examples of unsafe practices, and why.
-

Module 2 (Grades 3/4/5): The New Three R's

Review:

- Key points from Module 1: Grades 3/4/5.
- How many of you have started to recycle at home?

Introduce the new three R's: Repair, Rethink and Refuse

- **Repair:** Fix items whenever possible, rather than tossing them out and buying new ones. If the item cannot be repaired or the cost to repair is too much relative to a new one; ensure that the item is recycled properly and not taken to the landfill.
- **Rethink:** Ask yourself questions like: Do you really need this item? Can you borrow the item from a friend? Can the packaging be recycled? Where was it made? Is there something you could adapt to the needed purpose, or obtain from a waste free source like a garage sale, share shed or thrift store? Think about where products come from and where they go when you are finished using them. Your decisions can reduce the amount of waste you create.
- **Refuse:** Refuse items that cannot be recycled and “always” end up being thrown away. These items are just plain wasteful and can be damaging to the environment; especially when they are tossed as litter. GREAT NEWS! Environmentally friendly, convenient affordable alternatives exist and are available to everyone.

Packaging

Manufacturing of packaging takes energy and resources and disposal of packaging, if not recyclable, impacts our landfills. Review where packaging comes from (paper = trees; tin cans = minerals from mining; plastic = oil).

Biodegradable:

- Introduce the term (Terminology – Page 18).
- Show students examples of biodegradable cups, chip bags, take-out containers and doggy waste bags.
- Leave examples of “Corn Eco Ware” and “Taterware” for the kids to experiment with.
- How do landfills impact biodegradable products?
- Ask the kids how they could avoid using even these biodegradables: bring your own containers for your take-out food or to take home leftovers, bring your own bag, small reusable food containers, mug or water bottle.

Activities

- Show examples of recycling from the game last time (glass, plastic, metal, Styrofoam) and get the class to re-think how these items can be re-purposed, re-used before being recycled or taken to the landfill.
 - Bring out examples of things that have already been re-purposed; e.g. felted sweater baby blanket, wind chimes made of found items, shopping bags made from old City banners, bags made of crocheted plastic bags, dog toys made from worn-out t-shirts or sheets, etc.
 - Have kids share their stories of items that have been re-purposed at home.
-

Additional Resources

The Recycling Council of B.C.'s free Smartphone Application: RECYCLEPEDIA
The Recycling Council of B.C.'s "Road to Waste!" for Grade 5 classes.

<http://rcbc.bc.ca/education/road-to-zero-waste>

There are Teacher Resource Materials which include a set of seven activities that touch on various aspects of waste reduction and a Student Handbook that has handouts that correspond to the activities (learning tools, crossword puzzles, etc.).

Module 3 (Grades 5/6/7): Waste My Time

- Expanded version of "Getting off the Bottle" business presentation (information regarding bottled water).
- Present 5 minute Slide Show "Thirst" in silence.
- Empower the students to see their abilities and that they can make changes in the world as youth citizens.

Activity:

- Provide the students with the opportunity to do a class project/event for Earth Day, Biodiversity Week, Waste Reduction Week, World Water Day, etc. Help organize the event and put it on.

Module 4 (Grades 5/6/7): Get it To Go

- Expanded version of "Get it to Go" business presentation for packaging. Addresses consumerism and how it controls waste.
- "Vote with your money" and buy things that conform to what you want them to produce.
- Includes the "Wasteline" Shopping Game where students, divided into two teams, have three different "stores" to shop at. Students discuss which products they chose to buy and why, based upon manufacturing, materials, cost, packaging, recyclability, and repurposability. Topics include clothing, entertainment and food.

Sustainability Module (Grades 6/7)

- This is for those classes that have taken all the Waste Wise modules and would like to extend the idea of "waste footprint" to overall "ecological footprint".
- Topics covered include where greenhouse gases come from and how they are changing the planet (methane from landfills, CO₂ from vehicles/planes, CFC's from aerosols, Nitrous Oxide from combustions).
- The concept of sustainability is introduced and we go on to discuss small choices we can make every day in our lives to reduce our individual ecological footprints.

Majestic Plastic Bag (DVD)

<http://www.youtube.com/watch?v=GLgh9h2ePYw>

Chris Jordan Power Point Presentation (40 minutes)

There are three main reasons why we have a problem with garbage:

1. **The amount of garbage we make is unimaginable.** Our minds can't process huge numbers; if we cannot "see it," we do not care about it. When we talk about waste, huge numbers are involved. For example, 1 million plastic cups are used and thrown away on airline flights in the U.S. every 6 hours.
2. **We are embarrassed about garbage.** We use the English language to protect ourselves and disassociate from the topic. If we are uncomfortable about a word (garbage) we come up with other words that mean the same thing to separate ourselves from it (litter, trash). How many words can you think of that mean trash? Can you think of other topics in the English language where we make up new words to protect ourselves from an embarrassing topic? E.g., - the toilet.
3. **We hide our garbage.** Our culture hides what we are embarrassed of. We have hidden our garbage in black plastic bags, dumpsters and landfills – out of sight away from our communities, under dirt – literally. Out of sight, out of mind. We throw things away, but we do not stop to consider where "away" is.

Act Locally, Think Globally

- Midway is the name of some extremely remote islands in the Pacific Ocean where Albatross breed and nest. Chris Jordan has documented dead baby Albatross, their stomachs filled with plastic (bottle lids, plastic rings, etc.). The adult birds fly out to the ocean, pick up food for their babies and return to the island to feed their young. The adult birds cannot differentiate plastic from their regular food sources; therefore, they mistake plastic floating in the ocean as food. Five tonnes of plastic is brought to Midway each year by parent albatross and fed to their hungry babies.
- According to a Yale study, globally we produced 245 million tons of plastic in 2006, compared to only 1.5 million tons in 1950.
- Great Pacific Garbage Patch – 2x the size of Texas. That equates to the size of British Columbia and some of the Yukon. Imagine driving to Vancouver and seeing garbage the entire way! The plastic breaks down into smaller and smaller pieces and has turned the ocean waters in the Pacific Garbage Patch into a plastic soup or plastic jello. You always see plastic. The ratio of plastic pieces to plankton is 6 to 1. Sea life is eating plastic, meaning plastic is now part of our food chain affecting us through biomagnification (*Definitions – Page 18*).

Module 5 (Grade 8): Waste Reality – Classroom/Field Trip

- Review waste issues in Williams Lake as well as on a global scale i.e. the Great Pacific Garbage Patch (the size of BC and the Yukon put together).
 - Review waste sources, recycling and landfills.
 - Discuss the connectivity of waste with water – leachate (garbage juice) that can contaminate water.
 - Discuss chemical waste, paint, batteries, compact fluorescent light bulbs (CFL), electronics, junk cars, oil, pesticides, etc.
 - Discuss "End of Life" products and product stewardship; i.e. tires.
 - **Field Trip:** Visit the Williams Lake Transfer Station and Recycling Facilities.
 - Locally: Identify animals that are affected by the way we treat our waste (the marmot behind recycle shed, ravens, crows, bears, seagulls, etc.).
 - Globally: Picture of an albatross chick killed by plastic (Chris Jordan)
-

The following modules are for High School and University:

Module 6: Water and Waste Connections

Through the use of films such as “The Clean Bin Project,” “Flow,” “Water on the Table” (Teachers Guide available), work with students on issues of resource overuse. Discuss opportunities for engagement in processes to assure sustainable practices.

Module 7: The History of Garbage

A slide show and class conversation containing many elements of other presentations including, “Getting Off the Bottle.” This module was developed for high school Social Studies students and looks at the history of garbage and how people have dealt with it through history; e.g., war recycling, documentaries, etc.

Module 8: The Chemistry of Garbage

Using images from Cariboo Regional District transfer stations and images by Chris Jordan students are engaged in a scientific discussion about biomagnification, estrogen and hormone mimicking chemicals, bisphenol A, phthalates, benzene, carcinogens, greenhouse gases and climate change, surface area, recycling energy costs, rare valuable recyclable materials captured in the Electro-Recycling programs and much more.

Composting Module (Grades K – High School/University)

- Many people think of food waste as a benign substance. It rots down in the landfill anyway, so no problem, right? Wrong! For food to compost properly, it needs light and air. In the landfill, it has neither. Instead, food devoid of light and air produces methane gas, which contributes to global warming.
- Over 40% of household waste that is sent to the landfill could actually be composted.
- Composting is nature’s way of recycling organic matter to replenish the soil and nourish plant growth. The composting process creates ideal conditions for the rapid decomposition of organic materials, such as vegetable and fruit peels, egg shells, coffee grounds and tea leaves, grass clippings, dead leaves and paper.
- Once organic materials are decomposed, compost is the dark, crumbly material that looks and feels like soil, enriches your garden with nutrients and helps the soil hold moisture.

Vermicomposting

- Compost with worms in your classroom. A limited number of bins with red wiggler composting worms are available each year to classes.
 - One pound of red wiggler worms can eat a pound of veggies or junk mail every two days and transform it into soil 11 times more powerful than regular compost.
 - Worms can eat most of your lunch time compostable leftovers and all your classroom paper towels.
-

Bin Composting

Some schools have been provided with outdoor compost bins, particularly those who have a school garden and are trying to compost school wide! **Check out Appendix A for great “Composting Tips”** – how to compost, what you can compost and more. Or contact our free **Compost Coaches** at Waste Wise for answers to all your composting questions.

Bokashi

A fermenting system which allows you to compost cheese, bread, eggs, fish, small bones and meat, as well as your regular vegetable and fruit compostables. Compact and works well in classrooms, offices and homes. www.bokashicycle.com



Community Education through ART by Waste Wise Students: Grades: K – Highschool

Children take their knowledge of how to live sustainably by reusing and re-creating with second hand materials to create artistic messages to share with the public. The art is displayed at various venues within the community.

Quiz Questions

Q: If 4, 5 & 2 are food safe plastics, what plastics are not food safe and should never be used to store food or drinks?

A: 1, 3, 6 & 7 (if not BPA free)

Q: What does BPA stand for?

A: Bisphenol A (Big Poopy Animals – the mnemonic used for younger classes).

Q: What is BPA?

A: Bisphenol A. A chemical that when ingested mimics the female hormone estrogen.

Q: What plastic # are phthalates found in?

A: #1 PETE plastic (bottled water)

Q: What makes water taste “old” in #1 plastic water bottles?

A: Phthalates

Q: What are the best choice for the environment – Reduce, Reuse or Recycle?

A: Reduce and Reuse

Q: What are the new 3 R's?

A: Repair, Rethink and Refuse

Q: How do you take the buoyancy out of a plastic bag?

A: Tie it in a knot.

Q: Which of the following items are compostable?

- a. Dryer lint
- b. Banana peel
- c. Paper

A: All are compostable.

Q: Which of the following is not part of a garbage free lunch?

- a. Zip Lock bag
- b. Juice box
- c. Single serve yogurt in a #3 plastic recyclable container

A: None of these are part of a garbage free lunch. Only reusable containers qualify along with fresh fruit and vegetables (compost peel/cores).

Q: Where are places in your community where you can reduce and reuse items?

A: Salvation Army, Share Shed, Big Brothers/Big Sisters, Garage Sales, For sale ad in the newspaper or online and more ...

Q: What is the name of a free APP that tells you exactly where to take all your recyclable items?

A: RECYCLEAPEDIA

Q: What cannot go in the City of Williams Lake Curbside Recycle bins?

A: Glass

Q: Where does glass get recycled?

A: Bottles with a refund can be taken to a bottle depot. Other glass, such as jars, can go to Canadian Tire in Williams Lake or to a bin at the Central Cariboo transfer station on Frizzi Road. In Quesnel, they are accepted at the Quesnel Landfill on Sam Toy Road.

Q: How far are the City recycling and garbage bins supposed to be apart?

A: The City garbage bin must be located two arms lengths away from the recycle bin on the curb.

Q: If a plastic container came with soap in it, can you eat out of it?

A: No, it is not food safe.

Q: If tap water tastes like chlorine what can you do?

A: Fill a pitcher and leave the water out overnight. The chlorine evaporates.

Q: What kind of water bottle should you bring to your sports practices and games?

A: Refillable/reusable, phthalate free.

In – depth questions to facilitate discussion with students on waste issues & possible solutions, how they can reduce waste personally, at home, at school and at work:

What causes environmental pollution?

How can you reduce your environmental pollution?

How can you reduce your Waste Footprint?

In what ways is your home not Waste Wise?

In what ways is your school not Waste Wise?

How many things do you do in your home to be Waste Wise?

How many things do you do in your school to be Waste Wise?

What actions are needed to make your home and school Waste Wise?

What happens to biodegradable products in landfills? Are they beneficial?

Resources

RCBC (Recycling Council of British Columbia) Factsheets:

<http://rcbc.bc.ca/education/additional-resources/recycling-factsheets>

This page has a few of our factsheets on a variety of waste reduction topics.

Waste Reduction Week – School Resource Kit: <http://rcbc.bc.ca/events/waste-reduction-week/schools>

Tips and ideas for reducing waste at school. Click on “School Kit” to download.

EPR Handbook: <http://www.return-it.ca/ips/index.html>

This booklet outlines some of BC’s stewardship programs. A few new programs have launched since this was published – Light Recycle, the expanded electronics program, thermostats, small appliances, and smoke alarms.

Society Promoting Environmental Conservation (SPEC) –

<http://www.spec.bc.ca/school-gardens>

Ministry of Environment Green Schools - <http://www.bced.gov.bc.ca/greenschools/>

Environmental Youth Alliance - <http://www.eya.ca/teacher-resources.html>

Waste Wise Terminology



Biodegradable: Living organisms break down organic substances from plants or animals into small particles which eventually become part of the soil and then create new life. Waste that cannot be broken down, by other living organisms, such as plastics, are called non-biodegradable. Plastic never biodegrades, instead it just breaks into smaller and smaller pieces that never disappear. Biodegradable waste can be commonly found in municipal solid waste as fruit and vegetable peels, other food waste, paper waste, biodegradable plastics, manure, etc.



Biomagnification: The process whereby certain substances such as pesticides or mercury; now plastic; are eaten by tiny plankton or bacteria, then by tiny fungi, which are then eaten by small insects, which are then eaten by larger fish or birds, which are then eaten by larger animals or humans ... the collection of tiny pieces of plastic moves up the food chain and as it moves up the food chain there are greater concentrations in each level – the food that the larger mammals, sealife and humans eat contains high quantities of plastic polymers.



Bisphenol A (BPA): A strengthening agent added to #7 plastics. BPA mimics the hormone estrogen and in the body can influence hormone levels and increase the

risk of health problems. BPA has been banned in plastic food container production by Health Canada.



Buoyant: Plastic bags that float on the wind are buoyant until tied in a knot. Plastic bags that land in the ocean are mistaken for food by many marine life species. An even better option is to carry your reusable shopping bag with you and refuse plastic bags. And if you must use a plastic bag, ensure that it is recycled properly.



Composting: Nature's recycling system. It keeps organic material out of the waste stream, reducing up to 40% or more of materials going to local landfills, and provides a nutrient rich, natural fertilizer for gardens.



Consumption: Using up resources and products.



Conservation: Caring for or managing a natural resource such as water, trees and animals sustainably so that the supply never runs out and quality is maintained.



Ecosystem – All living organisms (plants, animals and microbes) and non-living components (air, water, soil) that exist in a defined area and interact. Examples of some common ecosystems in the Cariboo-Chilcotin are forest ecosystems, grassland ecosystems and wetland ecosystems.



Environmental pollution – The introduction of materials into an ecosystem that have a negative effect on that ecosystem. Some common pollutants are many household cleaning products, exhaust from burning fossil fuels, heavy metals, leaching of chemicals from plastics as they break down, untreated sewage and chemical herbicides and pesticides.



Incinerator- A furnace used to burn waste



Greenhouse gases and climate change: Much like the glass of a greenhouse, gases in our atmosphere sustain life on Earth by trapping the sun's heat. These gases allow the sun's rays to pass through and warm the Earth, but prevent this warmth from escaping our atmosphere into space. Without naturally-occurring, heat-trapping gases—mainly water vapour, carbon dioxide and methane—Earth would be too cold to sustain life as we know it. The danger lies in the rapid increase of carbon dioxide and other greenhouse gases that intensify this natural greenhouse effect. For thousands of years, the global carbon supply was essentially stable as natural processes removed as much carbon as they released. Modern human activity—burning fossil fuels, deforestation, large-scale agriculture—has added huge quantities of carbon dioxide and other greenhouse gases.

Today's atmosphere contains 42 per cent more carbon dioxide than it did at the start of the industrial era (1750). Levels of methane and carbon dioxide are the highest they have been in nearly half a million years. **Carbon dioxide** is the main contributor to climate change, especially through the burning of fossil fuels. **Methane** is produced naturally when vegetation is burned, digested or rotted without the presence of oxygen. **Nitrous oxide**, released by chemical fertilizers and burning fossil fuels, has a global warming potential 310 times that of carbon dioxide.



Leachate: the liquid (toxic garbage juice) that leaks out of garbage as it breaks down in a landfill and can leach into our water resource if garbage is not properly disposed of.



Methane gas: Organic materials that decompose in landfills produce methane gas which is 21 times more potent than carbon dioxide as a greenhouse gas. The best place for organic materials (vegetable/fruit waste, leaves, etc.) is in a composter.



Micro-organisms Tiny organisms (i.e. fungi and bacteria) that help break down organic waste into nutrient rich plant food.



Mobius Loop: Known commonly as the “recycle symbol.” The symbol was created in 1970 as part of the first Earth Day celebrations.



Petroleum: Means “rock-oil” and is formed from the fossils of dead plants and animals that have been exposed to heat and pressure deep in the earth for millions of year. It is found in liquid form in rocks. Petroleum products include: gasoline, oil, diesel & jet fuel, plastics, pesticides, fertilizers and more.



Phthalates: Plasticizer added to #1 plastics that leaches out of the bottle into the water at room temperature, makes the water taste “old” and is an identified carcinogen (cancer causing agent).



Polystyrene: One of the most widely used plastics, the scale of its production being several billion kilograms per year.* It is a colorless solid that is used in disposable cutlery, plastic models, CD and DVD cases, smoke detector housings, and more. Products made from foamed polystyrene are found everywhere, for example packing materials, insulation, and foam drink cups. A popular foam polystyrene packaging is better known as “Styrofoam.” (*Wikipedia)



Recycling: A process to change used materials into new products. Recycling reduces the consumption of fresh raw materials, uses less energy and reduces air pollution (from incineration) and water pollution (from landfills). Recyclable materials

include many kinds of glass, paper, metal, plastic, textiles, and electronics. Materials to be recycled are either brought to a collection centre or picked up from the curbside, then sorted, cleaned, and reprocessed into new materials bound for manufacturing.



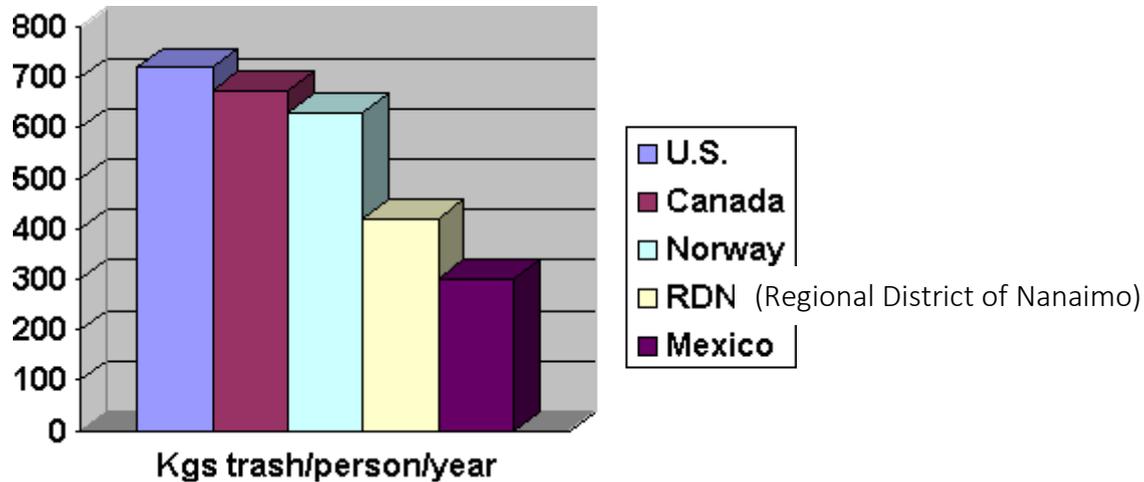
Renewable resources Naturally occurring materials that are potentially limitless if managed in a sustainable manner, such as water, trees and wild salmon.

Waste Wise Fact!

95% less energy is required to produce a new aluminum can from recycled material than raw material.

Facts About Our Waste

Canada- How do we compare?

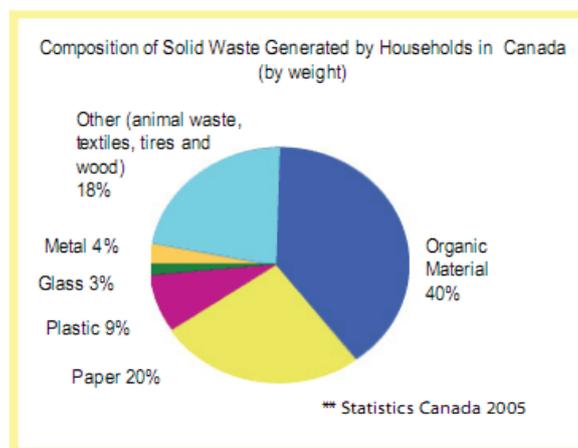


Source: <http://www.rdn.bc.ca/cms.asp?wplD=100>

- Canadians are world leaders when it comes to producing garbage. 21 million tons of garbage annually is produced in Canada according to Statistics Canada.
- Canada is in the top five in the world when it comes to per capita waste generated. (See chart to view how we compare).
- Adults create 45 tons of garbage in a life time.
- 2007 – 1.3 million dollars of recyclables went into the landfill (Toxic Free Canada).
- A country's ecological footprint lets us know how much productive land and water we require to produce the food and material goods we consume, and how much is needed to absorb the waste we create. Residents of Canada, the U.S. and other western countries require up to 30 acres of productive land and water per capita to support their consumer lifestyles. By comparison, the per capita ecological footprint of even a rapidly developing country such as China is less than 5 acres.
- If the entire population of the world consumed resources at Canadian levels, four additional earth-like planets would be required to continue sustainably.
- Zero Waste means changing our attitudes towards the Earth's resources. Michael Jessen, a waste management specialist who has written on "The Need for a Zero Waste Policy" in B.C., says "the first thing we do is discard the idea of waste. Everything is made from resources and waste is a resource going in the wrong direction. To throw away resources is to be inefficient and non-competitive."
- What we can do: we can demand change, take responsibility for our purchasing decisions and refuse to buy products that aren't consistent with the goal of Zero Waste. So if a product cannot be reused, repaired, recycled or composted, do not purchase it.

Reducing Waste Quantity

To reduce our quantity of waste, we have to understand where our garbage comes from. Graph showing waste for a typical household in Canada:



Note: Paper = 26% (not 20%)

Do Biodegradable Items Really Break Down In Landfills?

The following article is from [about.com](http://environment.about.com/od/recycling/a/biodegradable.htm); *Environmental Issues; Earth Talk*
<http://environment.about.com/od/recycling/a/biodegradable.htm>

Organic substances “biodegrade” when they are broken down by other living organisms (such as enzymes and microbes) into their constituent parts, and in turn recycled by nature as the building blocks for new life. The process can occur aerobically (with the aid of oxygen) or *anaerobically* (without oxygen). Substances break down much faster under aerobic conditions, as oxygen helps break the molecules apart.

Landfills Too Tightly Packed for Most Trash to Biodegrade

Most landfills are fundamentally anaerobic because they are compacted so tightly, and thus do not let much air in. As such, any biodegradation that does take place does so very slowly. “Typically in landfills, there’s not much dirt, very little oxygen, and few if any microorganisms,” says green consumer advocate and author Debra Lynn Dadd. She cites a landfill study conducted by University of Arizona researchers that uncovered still-recognizable 25-year-old hot dogs, corncobs and grapes in landfills, as well as 50-year-old newspapers that were still readable.

Processing May Inhibit Biodegradation

Biodegradable items also may not break down in landfills if the industrial processing they went through prior to their useful days converted them into forms unrecognizable by the microbes and enzymes that facilitate biodegradation. A typical example is petroleum, which biodegrades easily and quickly in its original form: crude oil. But when petroleum is processed into plastic, it is no longer biodegradable, and as such can clog up landfills indefinitely.

Some manufacturers make claims that their products are *photodegradable*, which means that they will biodegrade when exposed to sunlight. A popular example is the plastic “polybag” in which many magazines now arrive protected in the mail. But the

likelihood that such items will be exposed to sunlight while buried dozens of feet deep in a landfill is little to none. And if they do biodegrade at all, it is only likely to be into smaller pieces of plastic.

Landfill Design and Technology May Enhance Biodegradation

Some landfills are now being designed to promote biodegradation through the injection of water, oxygen, and even microbes. But these kinds of facilities are costly to create and, as a result, have not caught on. Another recent development involves landfills that have separate sections for compostable materials, such as food scraps and yard waste. Some analysts believe that as much as 65 percent of the waste currently sent to landfills in North America consists of such “biomass” that biodegrades rapidly and could generate a new income stream for landfills: marketable soil.

Reduce, Reuse, Recycle is Best Solution for Landfills

But getting people to sort their trash accordingly is another matter entirely. Indeed, paying heed to the importance of the environmental movement’s “Three R’s” (Reduce, Reuse, Recycle) is likely the best approach to solving the problems caused by our ever-growing piles of trash. With landfills around the world reaching capacity, technological fixes are not likely to make our waste disposal problems go away.

The Story of the Invention of Plastic

Plastic was invented during the age of the automobile. A black residue was created in the oil & gas manufacturing process. Originally, this black residue was being dumped into rivers killing aquatic life. Plastic was “invented” to use up this black residue. The first plastics “Bakelite” and similar products were fragile and thick. Through time plastics became incorporated into packaging and disposable food culture. To improve marketability of plastics containing foods, bisphenol A and phthalates were added to some plastics to improve clarity and marketability (plastics #1 and #7).

A Story of Waste – the Plastic Water Bottle

- 1.5 million tons of plastic are used each year to manufacture water bottles, requiring considerable resources and energy. A very small proportion of these bottles are recycled.
 - These bottles are then shipped all over the world, using huge quantities of fuel, in turn contributing to greenhouse gas production.
 - 40% of bottled water is actually municipal tap water.
 - During the bottle manufacturing process, more water is used to produce the bottle, than how much water the bottle contains (approximately 3 litres of water is used to produce a 1 litre water bottle!)
 - Plastic bottles leach contaminants into the bottled water, especially, over time, when they warm up or are reused. The safest plastics to store food or water in are #s 4, 5 and 2, whereas most water bottles are #1 or #7 (look on the bottom of the bottle for the number).
 - In taste tests, most people cannot distinguish between bottled and tap water. In fact one large study in the U.S. showed that 75% of people preferred tap water.
 - Bottled water costs around \$1.50 a litre. Tap water costs about 0.1c a litre.
-

Tips For Reducing Waste



When Out: at school or work, shopping, walking, sports activities

- Shop with an eye for packaging, and try to buy only products with minimal or recyclable packaging. Avoid Styrofoam if possible.
- Buy in bulk when possible and bring your own containers.
- Purchase and use mesh bags for produce or bulk items.
- Avoid individually wrapped portions (single serving) (granola bars, cheese strings, single serving yogurts, juice boxes, bottled water). Buy a larger container of yogurt and dish into small reusable containers to carry in your lunch.
- Buy used whenever possible (especially children's items; refurbished cell phones, computers or other electronics; bicycles, sports equipment, etc.). Or SHARE items with friends and neighbors (for example, a lawnmower). If you need an item for a short time only, see if you can borrow it from someone.
- Buy toilet paper, napkins and paper towels made of recycled paper.
- Reduce the number of "single use" items that you purchase, use and toss in the landfill.
- Take along your refillable drink bottle made of glass, metal or BPA free plastic. If you are out and need a water refill look for a "**Tap to Bottle**" sticker on a local business window – you can fill up there.
- Bring your own reusable travel mug to your local coffee shop (and when you're planning to sit and sip, ask for a mug rather than a paper cup).
- Carry reusable cloth bags for groceries and other purchases.
- Create a potluck kit – bring your own fork, spoon, knife, plate and cup in a mesh bag (you do not have to use disposable plates, forks, cups, etc.)
- Pack a waste free (or litterless) lunch using reusable containers and cloth napkins. Compost fruit or vegetable peelings/cores.
- Purchase doggy bags that are biodegradable



At Home

- Use cloth napkins rather than paper napkins. If you choose paper napkins look for unbleached paper and compost when finished. This applies to paper towels too. Try to use rags first though and reduce the number of paper towels you require.
- Choose glass over plastic. Do not microwave food in plastic containers or in plastic wrap.
- Reuse safe plastic containers (such as those that yogurt comes in). Read plastic numbers and know which plastics are food safe (4, 5 and 2 are good for you ☺).
- Recycle at home – set up bins for paper, plastic, cardboard, aluminum, glass.
- Before recycling household paper, turn it into note-sized paper for grocery lists, to-do's, etc.
- Donate bottles and cans to an organization that you support through your local bottle depot - the refund amount goes to the organization.

- Compost your vegetable and fruit peelings/cores. The soil you create is excellent for gardens, your grass and flower beds.
- Make your own simple cleaning supplies, or buy products that are biodegradable, concentrated and packaged in reusable or recyclable containers.
- If you must use disposables, try sustainable and earth-friendly varieties.
- Use rechargeable batteries and recycle when worn out.
- Use a battery operated razor (or at least use razors with replaceable heads, rather than disposables).
- Choose to have your bills and bank statements sent to you online, instead of by mail. Cancel unwanted mail by requesting that your name be removed from mailing lists.
- Get a reusable coffee filter to replace your paper filters.
- Use loose leaf teas with a French press instead of tea bags.
- Recycled everything that you can (paint, electronics, used car oil, etc.).
- Use natural and earth friendly alternatives to chemical herbicides and pesticides.



At the Office or at School

- Photocopy or print on both sides of the paper to reduce paper use by 50%.
- Share newspapers and magazines with others.
- Use the blank side of used paper for scratch paper, then recycle it.
- Reuse cardboard and paperboard boxes.
- Use small stick-on fax notes on the first sheet of each fax and omit cover sheets.
- Purchase items that can be used for more than one application.
- Refold and reuse file folders.
- Use reusable envelopes for interoffice mail; reuse envelopes with metal clasps.
- Purchase stationery, scratch pads, business cards, paper towels, toilet paper and facial tissue made from recycled paper.
- Bring lunch in reusable containers rather than paper or plastic bags.
- Toner cartridges – refill if possible. If not, recycle.
- Use recycled yard waste mulch and crumb rubber from recycled tires in workplace landscaping and parking lots.
- Set up a recycling system: paper, cardboard, glass, plastic, refundable drink bottles, etc.
- Provide a compost bucket for compostables such as banana peels, apple cores, and more. Contact **Compost Coaches** at the Waste Wise Program for help with setting up an office composting program.
- **Host Waste Wise Events** – see **Appendix C** for more ideas. Use cutlery, glasses, coffee mugs and plates that can be reused, not disposables.



In General

- Have less stuff, and learn to love it! Buying less means less resource consumption, less waste, and less spending.
- Learn to creatively re-purpose or repair items before purchasing new.
- Donate items you no longer need to charities or drop them off your local Share Shed.

- Give old magazines and books to nursing homes, charities, schools, hospitals, etc.
- Rent or borrow seldom used equipment.
- Use inexpensive, biodegradable cleaners like: white vinegar & lemon juice (which cut grease); baking soda (which cleans, deodorizes, softens water & boosts the cleaning power of soap); washing soda (which disinfects, cuts grease and removes stains); borax (which softens water, cleans, deodorizes, disinfects and also kills insects).
- Go to the library to borrow books rather than buying new books.



And Saving Money

It costs the Cariboo Regional District and the City of Williams Lake millions of dollars to run the landfill and numerous transfer stations across the region. In addition, the recycling program is an expense. So, think before you buy and try to reduce the amount of waste that will be sent to the landfill or to recycling programs.

By following these easy waste reducing tips, we can keep billions of kilograms of waste out of our landfills. When we reduce the amount we send to the landfills or even to recycling we are reducing the costs that the City and Regional District must pay to run these facilities allowing that money to be spent on other city facilities and infrastructures such as parks, bike trails, recreation services, roads, etc.

So let's reduce our **waste footprint!**



Appendix A - Composting Tips

Spring/Summer Composting

Moisture: Decomposers in your compost piles need moisture to work effectively, but not too much. Compost should be “as wet as a wrung out sponge”: moist, but not dripping.

Aeration: Compost piles tend to pack down and squeeze out oxygen, so the pile should be aerated about once a week. Use a compost turner, poke holes with a crowbar or broom handle or turn the pile with a garden fork. Aeration also ramps up microbial activity, composting your pile even faster.

Layering: Alternate at least 3 layers of *carbon rich browns* with 1 layer of *nitrogen rich greens*, separated by one ½ layer of garden soil.

Browns (Carbon rich, slower to rot, allow air flow)	Greens (Nitrogen rich, quick to rot, add moisture)
Leaves (best if chopped first)	Fruit and vegetable waste*
Newspaper/paper products (veggie ink only)*	Egg shells (crushed)
Straw	Seaweed/kelp
Dried grass/garden plants/chopped twigs/branches	Coffee grounds/filters and tea bags/leaves
Vacuum dust, pet hair, dryer lint	Green grass clippings*
Cardboard*	Garden waste/weeds (no seeds)*
Well-weathered sawdust*	Well-rotted manure (2 years or more)

*These items have higher nitrogen or carbon content: use them more sparingly than other listed compost ingredients to avoid an unbalanced C:N ratio

Keep these OUT of your compost:
Meat, dairy products, eggs, bones, oils or dressings*
Plastic bags or wrap, metal or glass
Dog or cat waste, cat litter
Particle board, plywood, pressure treated wood – anything with glue
Persistent weeds/diseased or invasive plants
Toxic plants like walnut shells/leaves

*these items can be composted separately by using a bokashi or green cone composter

Think of your composter as a **giant layer cake** with 3:1 Carbon to Nitrogen ratio:

Layer 1: 6” coarse **brown** material (twigs or stalks) to encourage air flow

Layer 2: 12” finer **brown** materials

Layer 3: 2” finished compost or good garden soil - a source of bacteria
(If the composter sits on concrete, asphalt or wood, this layer is a necessity)

Layer 4: 4” **green** materials, chopped if possible

Layer 5: 12” finer **brown** materials

Layer 6: 2” finished compost or good garden soil

Layer 7: 4” **green** materials, chopped if possible

Continue to layer: Alternate layers, maintaining a 3:1 C/N ratio, separated by soil. Always end with a carbon layer on top to discourage flies and rodents.

Winter Composting

As outdoor temperatures drop, microbial activity in your compost pile slows down considerably, or even stops if it freezes. You can keep decomposition moving if you insulate your pile and continue to add layers as normal (described below)

- **Try to maintain a bigger compost pile in the winter: bigger (ie: at least 4 cubic metres) retains heat better than a small pile**
- **Insulate the pile with straw bales, or home insulation with cardboard barrier**
- **Break green waste down into smaller pieces before adding: helps when microbial activity is slow**
- **Do not turn your compost pile during the winter – wait until Spring**
- **Continue 3:1 C/N ratio layering!**

Browns (Carbon rich, slower to rot, allow air flow)	Greens (Nitrogen rich, quick to rot, add moisture)
Leaves (best if chopped first)	Fruit and vegetable waste*
Newspaper/paper products (veggie ink only)*	Egg shells (crushed)
Straw	Seaweed/kelp
Dried grass/garden plants/chopped twigs/branches	Coffee grounds/filters and tea bags/leaves
Vacuum dust, pet hair, dryer lint	Green grass clippings*
Cardboard*	Garden waste/weeds (no seeds)*
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Layer 7: 4" **green** materials, chopped if possible

Continue to layer: Alternate layers, maintaining a 3:1 C/N ratio, separated by soil. Always end with a carbon layer on top to discourage flies and rodents.

Appendix B - Booking Form



Address: Unit 102, 197 2nd Ave N, Williams Lake, BC V2G 1Z5
Email: wastewise@ccconserv.org or Phone 250.398.7929 to book.

Waste Wise Booking Form Confirmation

Name: _____

School/Grade: _____

Phone #: _____

E-mail: _____

First Visit:

Follow-up visit :

WASTE WISE Presentations follow the story of waste in the Cariboo Chilcotin and discuss recycling, composting, the problems with plastics and creative ways to make a positive difference every day. A follow up visit assesses learning outcomes and reinforces the message of a GARBAGE FREE LUNCH with prizes for successful students.



Host a Waste Wise Event

Hosting an event, meeting or workshop?

Events can create a lot of trash. **REDUCING** waste is the best way to reduce an events impact on the environment.

Our Waste Wise Program can assist you by:

Supplying a Waste Wise can for recyclables and a compost bucket.

Providing a reusable water bottle for a door prize.

We have brochures and displays on how to reduce waste and conserve water available for your use.

Contact CCCS @
250.398.7929

E-mail: sustain@ccconserv.org
www.ccconserv.org

Tips for Reducing Waste

- Use washable plates, mugs, glasses and utensils.
- Encourage people to bring their own mug or reusable water bottle to the event.
- Consider using cloth napkins and table cloths.
- Alternatively, if you have to use disposables, use paper plates and napkins (dye-free) that can be composted.
- Say NO to styrofoam and plastic.
- Supply pitchers of tap water. Or set up a water refill station using a 5 gallon bottle of water. Guests can fill their water bottles or glasses as needed.
- Include foods that are locally grown. Check out Cariboo Growers Food Co-op for great options.
- Get the guests sorting – provide a recycling bin and compost bucket for compostable food waste next to the garbage bin.
- Decorate with natural materials that can be returned to nature or composted. Re-purpose items you may already have at home or in the office.
- Purchase items with limited packaging.
- Always carry reusable shopping bags.



In partnership with the City of Williams Lake and the Cariboo Regional District.

Contact List

- Cariboo Chilcotin Conservation Society (250) 398-7929
Unit 102, 197-2nd Ave North.
Williams Lake, B.C. V2G 1Z5
Email: wastewise@ccconserv.org
Website: www.ccconserv.org/
- City of Williams Lake (250) 392-2311
450 Mart Street
Williams Lake, B.C. V2G 1N3
Email: access from website
Website: www.williamslake.ca
- Cariboo Regional District (250) 392-3351
180 N 3rd Avenue
Williams Lake, B.C. V2G 1A1
E-mail: access from website
Website: www.cariboord.bc.ca

References:

For a complete list of references used in this guide, please contact the CCCS office at 250.398.7929 or wastewise@ccconserv.org

