

March 2008

First Day of Spring: March 20th!

Recycling and Reducing Solid Waste Does Make a Difference!

There are a variety of reasons one chooses to recycle or garbage goes into to landfills, where it's compacted and not to recycle. One common reason people do not recy-buried. cle is that they do not think it makes a difference. There Good For The Environment - Recycling requires far are actually many benefits to recycling, and as resources less energy, uses fewer natural resources, and keeps become depleted, we are going to depend on it.

According to U.S. EPA and the Department of Energy figures, approximately 32.5% of municipal solid waste was recycled in the U.S. in 2006. The energy equivalent saved from reduced greenhouse gas emissions as a result of recycling is equal to 1.3 quadrillion BTUs of energy. This is the equivalent of 50 power plants that didn't need to be built! Just think about how much energy would be saved if everyone recycled!

Greenhouse gases are emitted throughout the waste management process in the extraction or mining of raw materials, manufacturing of goods, incineration of items when disposed of, and decomposition of waste in landfills

In addition to recycling, there are other ways to reduce the amount of garbage we produce and save more energy:

Reuse! Instead of throwing things away, find another use for them, fix them, give them to someone else.

Reduce! Buy items with less packaging, think twice before you buy something

Top 10 Reasons to Recycle

Good For Our Economy - American companies rely on recycling programs to provide the raw materials they need to make new products.

Creates Jobs - Recycling in the U.S. is a \$236 billion a year industry. More than 56,000 recycling and reuse enterprises employ 1.1 million workers nationwide.

Reduces Waste - The average American discards seven and a half pounds of garbage every day. Most of this

waste from piling up in landfills.

Saves Energy - Recycling offers significant energy savings over manufacturing with virgin materials. (Manufacturing with recycled aluminum cans uses 95% less energy.)

Preserves Landfill Space - No one wants to live next door to a landfill. Recycling preserves existing landfill space.

Prevents Global Warming - In 2000, recycling of solid waste prevented the release of 32.9 million metric tons of carbon equivalent (MMTCE, the unit of measure for greenhouse gases) into the air.

Reduces Water Pollution - Making goods from recycled materials generates far less water pollution than manufacturing from virgin materials.

Protects Wildlife - Using recycled materials reduces the need to damage forests, wetlands, rivers and other places essential to wildlife.

Creates New Demand - Recycling and buying recycled products creates demand for more recycled products, decreasing waste and helping our economy.

Source: National Recycling Coalition Website: http://getrocycling.org/

Remember to close the Loop—Buy items made of recycled materials when possible!

You can find more and more products out there made from recycled plastic, aluminum and paper. Increased demand has made a lot of these products more affordable and comparable to the same items made from raw materials.

Look for the products marked "recycled content" or "post-consumer" content.

Climate Change 101: The Carbon Cycle

In past newsletters, we explained the greenhouse effect, greenhouse gases and layers of the atmosphere. In addition to these topics, familiarity with the carbon cycle is also important to better understand climate change.

Carbon is found in the atmosphere and is an essential component to life. There is a fixed amount of carbon in the world. In other words, the same amount carbon is always there, it just stored and exchanged in different forms between the oceans, atmosphere, biosphere, and geosphere.

Atmosphere: the layer of gases surrounding the Earth that is held in by gravity. Basically, it is air. The atmosphere provides protection against ultraviolet radiation and extreme temperature changes between night and day. The most common forms of carbon in the atmosphere are carbon dioxide, methane and chlorofluorocarbons (CFCs—solely manmade). These are three of the greenhouse gases.

Biosphere; the part of the earth, including land, air and freshwater, in which life occurs.

Geosphere: the interior portion of the Earth that includes the rocks and minerals that shape the earth's surface. The interior is divided into the crust, mantle and core.

The movement of carbon between these different areas is called the carbon cycle. As previously stated, carbon is stored in

various forms in the atmosphere, oceans, biosphere and geosphere and is exchanged between the different storage areas, otherwise known as sinks or reservoirs. One common carbon cycle is between the atmosphere and vegetation. Carbon in the form of carbon dioxide is absorbed by plants for photosynthesis, or food production. As a result of this process, plants release oxygen into the atmosphere. Carbon dioxide is emitted into the atmosphere from plants and other living beings through a process called respiration. Respiration is better known as breathing in humans and other animals.

Another major carbon cycle is between the ocean and atmosphere. The ocean is one of the largest stores of carbon on the earth's surface. Oceans take in carbon dioxide, which undergoes chemical transformation and is used by marine plants and animals for processes such photosynthesis and tissue formation (e.g. shells). Carbon is released from the ocean into the atmosphere as carbon dioxide as a result of evaporation. In addition to respiration and evaporation, carbon compounds are also released into the atmosphere through volcanic eruptions, decaying plant and animal matter, and the combustion or burning of fossil fuels and plant matter.



https://pao.cnmcc.navy.mil/educate/zeus/ images/rivia/ngin.gif http://www.wikipedia.org

Carbon can be stored for hundreds of years in trees or in the ground layers as fossil fuels. Some human activities, such as deforestation and the excavation and burning of fossil fuels, disrupt the balance of nature's carbon cycle by emitting more carbon into the atmosphere than can be stored in the reservoirs, contributing to the greenhouse effect.

Who's Who?

Fond du Lac Reservation Environmental Program Staff- (218) 878-8001

Wayne Dupuis - Environmental Program Manager	878-8006
Mary Munn, Air Program Coordinator	
Nancy Schuldt - Water Projects Coordinator	878-8010
Shannon Judd - Environmental Education Outreach Coordinator	878-8023
Russell DuFault - Recycling Coordinator	878-8069
Environmental Assessment Specialist	
Rick Gitar - Water Regulatory Specialist	
Kari Hedin - Watershed Specialist	
Andrea Junker - Environmental Health Specialist	878-8011
Tim Krohn - GIS Specialist	
Bill Martineau - Waste Collection Site Supervisor	878-8069
Bruno Zagar - Environmental Specialist	878-8007
Joy Wiecks - Air Quality Technician	
Dave Smith - Land Records Researcher	

Fond du Lac Recycling

Have questions about recycling?

Call the Fond du Lac Waste Collection Site Shed at 878-8069

Other recycling options

Hwy 210 Transfer Station or Perch Lake Shed call 384-9178

Brookston Transfer Station call 453-5692

Leave a cleaner environment for the next generation. Start recycling.

