## 2006 Recycling Summary

This summary is a review of all recycled materials diverted from Montana landfills in 2006. The data presented in this summary on total recycled materials was obtained by reviewing permit renewal applications from all state licensed solid waste management facilities including landfills, transfer facilities, compost operations and resource recovery facilities. Data from non-licensed recycling organizations businesses and end processors was obtained through voluntary participation in the 2006 Montana Recycling Survey.

Summary of Data	Total Tons	Percentage of Total
Solid Waste Generated:	1, 461,542	100%
Landfilled Waste:	1,189,539	81.4%
Incinerated Waste:	0	0
Recycled Commodities:	194,904.30	13.3%
Other Materials:	33,935.11	2.3%
Composted Material:	43,163.14	3.0%
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Total Diversion Rate:	272,003.0	18.6%

The EPA's recyclable commodities list was used to determine the recycling rate list.

Commodities list is as follows:

Aluminum Cans Plastics Steel Cans Paper

Mixed Metals Corrugated Cardboard

Ferrous Scrap Metal Glass

Other Materials

Food Scrap Yard Trimmings

Fly Ash Construction/Demolition

Construction Batteries

Mixed Recyclables Other Recyclables

Carpet Electronics

Sewage Sludge

This data has been used with conjunction with the National Recycling Coalition's Environmental Benefits Calculator. The calculator generates estimates of environmental benefits based on the number of tons of specified materials recycled, landfilled and incinerated in Montana. The calculator yields detailed information in the following areas:

- Reductions in Greenhouse Gas Emissions through Recycling
- Energy Savings from Recycling
- □ Life Cycle Stage Comparisons
- Air Emissions and Waterborne Wastes
- Select National Resource Savings
- Number of Trees Saved

## Review of Montana Recycled Materials Converted by Environmental Benefits Calculator

## Reductions in Greenhouse Gas Emissions through Recycling

Greenhouse Gas Emissions Associated with Recycling	-270,128
Greenhouse Gas If All Landfilled	-5,185
Net Greenhouse Gas Emissions from Recycling Compared To Landfilled	-275,314
Greenhouse Gas Reduction in Passenger Cars Equivalent	-207,741

# **Energy Savings from Recycling**

(millions BTU)

Net Energy from Recycling Compared to Disposal (millions BTU)	-12,061,948
Energy Savings in Per Household Equivalent	-114,657
Life Cycle Stage Comparisons	
Energy Used During Recycling and Processing	163,501

Energy Used Waste Collection and Landfill 60,874

Energy Used During Waste Collection, Processing and Incineration	212,278
Energy Used for State's Average Mix of Landfill and Incineration	60,874
Air Emissions and Waterborne Wastes	
Reduced Emissions Due to Recycling (tons) AIR EMISSIONS	242,085.5
Reduced Emissions Due to Recycling (tons) WATERBORNE WASTES	901.3
Total (Excluding CO2 and Methane)	5,503.0
Select National Resource Savings	
Total Tons Resources Saved	24,709
Number of Trees Saved	

From recycling newsprint, mixed paper and office paper 197,176.

In summary, there are many ways to express the resource savings that recycling effects. Even when considering energy used to recycle, the savings in resources rationalizes the value of recycling. As Montana recycling statistics increase, the efficiency will only become more evident. For more information on recycling visit the

DEQ website at: <a href="www.deq.mt.gov/recycle/index.asp">www.deq.mt.gov/recycle/index.asp</a>

Recycling Rates for the State of Montana

2003 15.0%

2004 15.0%

2005 18.7%

### State Government's Recycling Efforts

From January 1, 2006 thru October 31, 2006 the totals are as follows:

Cardboard - 35,674 pounds Newspaper - 73,581 pounds Office Pack - 338,241 pounds Phone books - 2,476 pounds Magazines - 1174 pounds Aluminum - 172 pounds

#### Note:

Prices for all recycled materials tend to follow expansions and contractions in overall demand for manufactured goods. At the same time, specific trends in each industry be it paper, cardboard, steel, aluminum, or plastics can push prices for the different recycled materials in opposite directions. These factors combined with the many market development projects and continued education through out the state, have helped to make recycling the new buzz word.