Report

2010 Oregon Material Recovery and Waste Generation Rates Report

By: **Land Quality Division**
Solid Waste Policy and Program Development
Oregon Department of Environmental Quality

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Executive Summary

This is the Oregon Department of Environmental Quality's 19th annual report on post-consumer (residential and commercial) material recovery and waste generation in Oregon. DEQ estimates energy savings and greenhouse gas benefits from waste recovery. DEQ also analyzes detailed survey and disposal reports for 2010 to compute recovery and waste reduction amounts.

Energy savings and greenhouse gas reduction

$$\frac{\textit{Total Recovered}}{\textit{Total Generated}} = \textit{Recovery Rate}$$

2010 OR Rate 50.0%

When materials are recovered, industry can create new products with significantly less energy and lower greenhouse gas emissions compared to using virgin materials.

Energy savings for 2010 from recycling and energy recovery:

Approximately 32 trillion BTU – the equivalent of 258,000,000 gallons of gasoline, or roughly 3.0 percent of total energy used (2010) by all sectors of the economy in Oregon.

Greenhouse gas reductions in 2010 from recycling, composting and energy recovery:

Approximately 3 million metric tons of carbon dioxide equivalents – the equal to tailpipe emissions from 620,000 "average" passenger cars, or roughly 4.3 percent of all greenhouse gas emissions statewide (2010).

The amount of greenhouse gas reductions from material recovery – and particularly recycling - continues to be significant. Recycling cardboard produced the greatest benefit, with emissions reductions of nearly 1.1 million metric tons of CO2 equivalent, followed by other paper, with more than 600,000 metric tons, and scrap metal and aluminum with more than 500,000 metric tons of CO2 equivalent each.

2010 statewide recovery, disposal and generation

Oregon recovered 2,170,243 tons, or 50.0 percent, of the municipal post-consumer waste[1] stream in 2010. (To see individual wasteshed rates, go to Survey Report Table 1.) This is a nearly 1.5 percent increase over the 2009 rate of 48.3 percent, and represents the achievement of a significant goal.

Generation is the sum of all discards that are either disposed or recovered. Total disposal in 2010 equals 2,515,646 tons, and that added with total tons recovered equals 4,685,889 tons of waste generated. This is a less than one half of one percent increase in generation since 2009. In 2010, Oregon came very close to achieving its goal of no annual increase in total waste generation.

2010 waste generation equates to 2,442 pounds per person per year, compared to 2,441 pounds per person per year in 2009; 2010 saw a tiny increase (0.05 percent) over 2009. This reflects previous trends and shows that for four years in a row, Oregon has essentially met its goal of no increase in per capita waste generation.

Continued low levels of waste generation correspond with the current economic situation. In hard times, people tend to buy (and discard) less material. However, for parts of the equation, recovery and disposal, disposal fell while recovery rose in 2010. This supports the state's goals, which call for increasing recovery rates and decreasing total waste generation.

[1] Municipal post-consumer waste includes residential and business material recycled, waste composted, waste burned for energy recovery, and disposed materials. It excludes industrial materials.

Individual wastesheds

There are 35 individual wastesheds, each with its own recovery rate and goal. Twenty-one of these increased their recovery rates from 2009 to 2010. And, 25 wastesheds' rates are still higher than their 2009 recovery rate goals.

Materials recovered in 2010:

The following are percents of the total material recovered, not individual recovery rates for individual materials. DEQ does not calculate rates by material.

Paper (includes cardboard) – 29 percent
Yard debris – 21 percent
Metals – 19 percent
Wood waste – 16 percent
Other – 5 percent
Glass – 5 percent
Plastics – 2 percent
Other organics – 2 percent
Electronics – 1 percent

Conclusion

The energy savings and greenhouse gas reduction benefits of composting, energy recovery and recycling are sizable. Reducing these upstream impacts, through waste prevention, can lead to even greater benefits, given the large natural resource, energy and environmental impacts associated with production of many manufactured goods.

In 2010,Oregon met its 2009 recovery rate goal of 50 percent, a 1.7 percent increase from 48.3 percent in 2009. The potential exists to increase recovery even further. Increasing food waste composting and diverting more organics from disposal are two areas that are beginning to show larger gains in recovery.

Total waste generation in 2010 stayed below 5 million tons for the second straight year. Per-capita waste generation stayed the same, suggesting that Oregonians are keeping their use of materials, and production of discards, at a steady level, a contrast to the yearly increases seen for most of the period 1992 - 2006.

Introduction and Purpose

This report describes the results and methodology of Oregon's 2010 Material Recovery and Waste Generation Survey. Each year, the Department of Environmental Quality compiles data on post-consumer waste recovery. A survey is sent to all collection service providers and private recycling companies who handle materials for recycling, composting and energy recovery. This survey data are combined with data gathered from disposal sites from quarterly or annual reporting forms. Together, recovery and disposal numbers make up the amount of waste generated by Oregonians each year.

Recovery information allows DEQ to determine energy savings and greenhouse gas reductions, two important environmental benefits. DEQ also calculates a recovery rate: The percentage of the total waste generated that is recovered in recycling, composting or energy recovery. Recovery, disposal, and generation data, as well as recovery rates, are calculated both on a statewide basis and for each of 35 individual wastesheds.

$$\frac{\textit{Total Recovered}\ \textbf{2,088,265 tons}}{\textit{Total Generated}\ \textbf{(=Total Recovered + Total Disposed)}\ \textbf{4,671,845}} = \textit{Recovery Rate}$$

2010 OR Rate
50.0%

This is the nineteenth year that DEQ sent the survey out and gathered this data. The 1991 Oregon Legislature enacted requirements for this annual survey and set goals for the recycling rate. The state goal is 50 percent recovery by 2010. Individual wastesheds have recovery goals for 2010 ranging from 10 percent for Lake County to 64 percent for Metro. In addition, the 2001 Oregon Legislature established waste generation goals for the State. These waste generation goals are:

- For the calendar year 2005 and subsequent years, no annual increase in **per capita** municipal solid waste generation; and
- For the calendar year 2009 and subsequent years, no annual increase in **total** municipal solid waste generation.

Requirement to Report

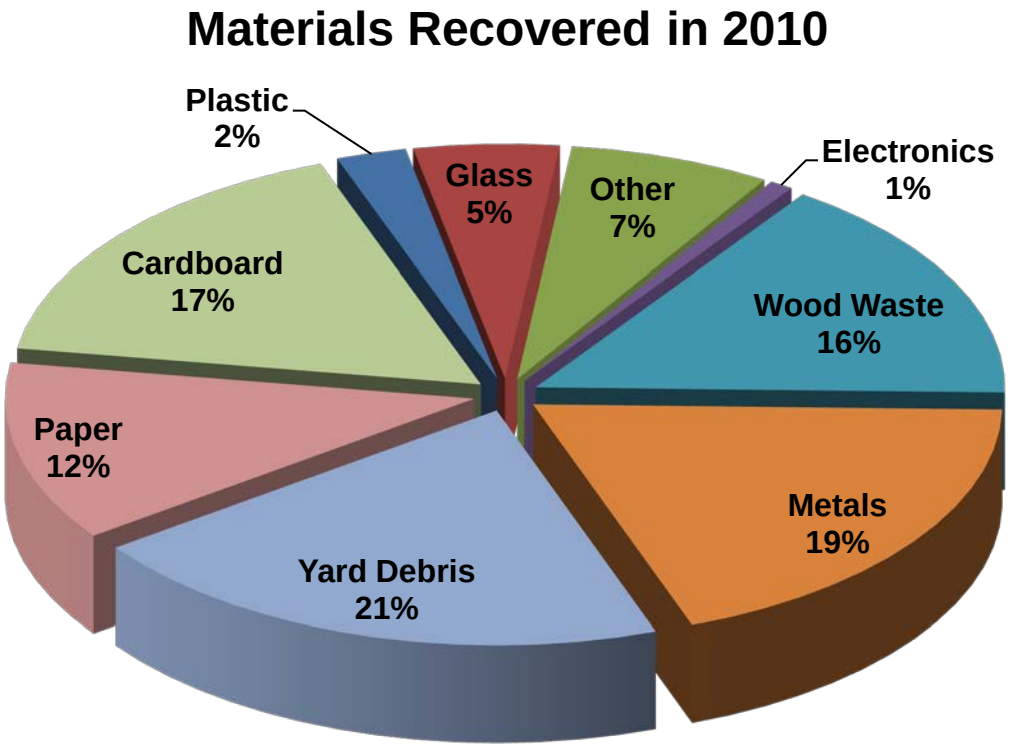
Oregon law requires that all publicly and privately operated recycling and material recovery operations complete a Material Recovery Survey form. This includes landfills, local recycling collectors, private recycling collection companies and depots, transfer stations, material recovery facilities, local governments and any other operation that handles post-consumer recyclable materials. Because of the difficulty of separating post-consumer scrap metal from commercial and industrial scrap metal, those companies handling scrap metal are not required to report on privately obtained post-consumer scrap metal, but many do report on a voluntary basis.

The survey requires that companies report all the recyclable materials they handle, including the amount collected, the county of origin, the company they received any transfers from, and where the materials are marketed.

Oregon law further requires DEQ to keep confidential that information reported by private recyclers. This includes customer lists or specific amounts and types of materials collected or marketed by individual companies. Only aggregated information may be released to the public.

Materials Included in the Analysis

Oregon's analysis of the environmental benefits from material recovery and the recovery rates includes only Oregon post-consumer materials collected for recycling, composting, or energy recovery. Waste from manufacturing and industrial processes (pre-consumer materials), reconditioned and reused materials, inert materials such as brick and concrete, and waste originating out-of-state (but handled in Oregon) are excluded. Some scrap metals, including discarded vehicles or parts of vehicles and metal derived from major demolition activities handled by scrap metal dealers, are also excluded. Scrap metal collected at disposal sites, by collection service providers, at community recycling depots, or through municipally sponsored collections events counts as recovered material.



The first Material Recovery Survey for the 1992 calendar year included 24 types of materials; the 2010 survey contains 33 materials.

The major materials included in 2010 are:

- **Paper** – Paper fiber (combined high-grade paper, newsprint, and mixed waste paper).
- **Cardboard**
- **Plastic** – Rigid plastic containers, plastic film, other plastics, and composite plastic (including carpet pad).
- **Glass** – Container glass and other glass such as windowpanes and ceramics.
- **Electronics**
- **Wood Waste**
- **Metals** – Tinned Cans, aluminum, and other scrap metals
- **Yard Debris**
- **Food Waste**
- **Other** – Tires, used motor oil, batteries of all types, gypsum, asphalt roofing materials, textiles and paint/solvents

Energy Savings and Greenhouse Gas Reduction

DEQ uses the results of the Material Recovery Survey to estimate the energy savings resulting from recycling and counting energy recovery, as well as reductions in greenhouse gases associated with recycling, composting, and counting energy recovery.

Energy

When recycled materials replace virgin feedstock in manufacturing, energy savings are significant. Making aluminum from old beverage containers uses 93 percent less energy than making aluminum from bauxite. Newsprint made from old newspapers requires 46 percent less energy than making newsprint from wood. While the energy conservation benefits of recycling have long been recognized, quantifying these estimates can be difficult. The US Environmental Protection Agency developed a model using methodology to estimate the amount of per ton energy savings for recycling for a wide variety of materials.[2]

DEQ applies these estimates to the results of the 2010 survey for tons recycled and, for the first time, recovered for energy via energy recovery that counts towards the state's recovery rate (composting is not included.) Material categories from Oregon's survey do not perfectly align with EPA's material categories, so some assumptions were made in classifying materials. Additionally, EPA's model is based on national averages, which may not be representative of Oregon's recycling and energy recovery markets. The use of EPA's model does allow for a **rough** estimate of the energy saved from materials recycled and recovered for energy by Oregonians. Energy recovery includes the conversion of certain wastes to energy via processes such as thermal conversion to electricity, direct combustion for heat, and pyrolysis of waste plastics into synthetic fuels. DEQ estimates that recycling by Oregon households and businesses in 2010 (counting only wastes generated in Oregon, not those generated elsewhere and shipped to Oregon for recycling) led to energy savings of approximately 29 trillion British thermal units (BTUs). The energy produced by energy recovery saved an estimated additional 3 trillion BTUs.

To put the energy savings number into context, total energy use in Oregon across all sectors (transportation, electricity, heating, industry) in 2009 was 279 million BTUs per capita. If per capita use remained constant through 2010, then the energy savings from recycling and counting energy recovery equates to a 3.0 percent offset of total energy use. This can also be expressed as equivalent to approximately 258 million gallons of gasoline saved in 2010. These comparisons are not perfect. Many of Oregon's recyclable materials are exported to other states or countries, so the energy conservation benefits occur elsewhere. The actual energy saved by recycling includes a mix of not only gasoline and other liquid fossil fuels, but also coal, hydroelectric, nuclear, and wood. Nonetheless, the energy savings from recycling, and to a lesser extent, energy recovery in Oregon is significant.

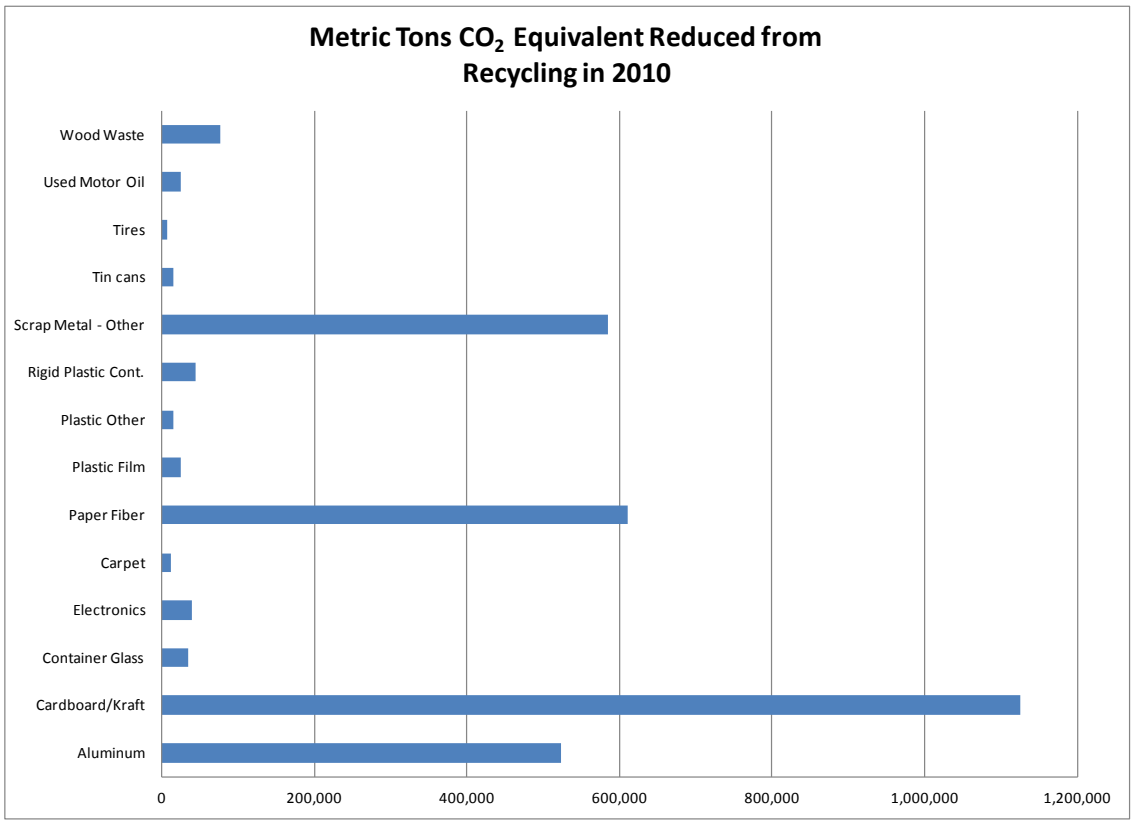
Greenhouse Gases

The US EPA also publishes greenhouse emission factors allowing for the estimation of the greenhouse gas benefits due to recycling, composting and "counting" energy recovery. These calculations are relatively involved and utilize emissions inventory work started in 2004 on behalf of the Governor's Advisory Group on Global Warming, and updated periodically. The greenhouse gas benefits include a variety of emissions, carbon sinks, and emission offsets, which vary by material, management method, and the likely disposal site if the materials were not recovered. Major categories of sinks and offsets include increased carbon storage in forests when recycled paper displaces wood fiber, reductions in fossil fuel use due to the energy savings of recycling, and reductions in methane emissions at landfills.

[2] The methodology for obtaining these estimates changed several times since 2005. Comparisons should not be made between the results for 2010 and previous years.

Net greenhouse gas reductions associated with materials recycled, composted, and burned for energy in 2010 are estimated at 3 million metric tons of carbon dioxide equivalents. This includes only materials that are counted in the Material Recovery Survey and excludes any materials that are generated in other states and shipped to Oregon for handling. An interesting effect of using EPA's published emission factors and Oregon landfill data for comparison is that composting yard debris is shown to add, rather than reduce, greenhouse gas emissions. This is a small amount, and other benefits of composting outweigh this shortfall. Further, EPA's emission factors for yard debris composting vs. landfilling are believed to contain significant uncertainty, and are the topic of considerable discussion and research

The net greenhouse gas emissions for Oregon in 2010 (based on an average of 2006 - 2008 per-capita emissions and applying that average to Oregon's 2010 population), using conventional accounting principles, are projected at 68.9 million metric tons of carbon dioxide equivalents. Thus, recycling, composting, and **counting** energy recovery provide a greenhouse gas offset or "credit" corresponding to 4.3 percent of net statewide emissions (from all sources). Most of the benefit is a result of recycling activities, as opposed to composting or energy recovery. In fact, composting and energy recovery, in total, are believed to slightly increase overall emissions of greenhouse gases.



Comparing recovery-related greenhouse gas reductions (3 million metric tons) with statewide emissions (68.9 million metric tons) is potentially misleading because the emission reductions from materials recycled and composted in 2010 occur over multiple years, while the estimated emissions of 68.9 million metric tons are "same-year" (2010) emissions. The reductions are spread over multiple years because they include avoided methane emissions from slow decay in landfills, as well as an increase in long-term carbon sequestration in forests and agricultural soils treated with compost. However, just as some of the greenhouse gas benefit from recycling and composting in 2010 will actually occur in subsequent years, some of the greenhouse gas benefit counted for previous years actually occurred in 2010.

Another way to look at the greenhouse gas reductions is to express emission reductions in terms of **average cars**. Using data from the EPA, Oregon Department of Transportation, and Oregon Department of Energy, DEQ estimates that 3 million metric tons of carbon dioxide equivalents is comparable to the greenhouse

gas benefit of eliminating tailpipe emissions from approximately 620,000 “average” passenger cars (out of the state’s stock of 3.2 million registered passenger vehicles). As with energy savings, the greenhouse gas benefit of recycling is significant. Not generating waste in the first place likely produces even greater greenhouse gas and energy benefits; but these are not estimated here.

Recovery Rates

Oregon met its recovery rate goal (set for 2009) in 2010 of 50 percent. This rate is determined by using the total recovered tons as a percentage of total waste generation. It is determined for the state as a whole and for each of the 35 individual wastesheds in the state. The 2001 Legislature set state and wasteshed recovery rate goals for 2009. (See Survey Report Table 1, P 15.) The state 2009 recovery rate goal includes credits.

Oregon Recovered Tons and Recovery Rates

Year	Tons	Calculated Rate	Total Rate*
1992	839,679	27.1	-
1993	974,685	29.9	-
1994	1,118,912	32.6	-
1995	1,257,204	34.7	-
1996	1,338,259	34.9	-
1997	1,462,114	35.7	-
1998	1,604,985	37.3	-
1999	1,626,271	36.8	-
2000	1,765,817	38.9	-
2001	1,999,085	43.1	46.8
2002	2,029,261	42.7	46.3
2003	2,116,880	43.1	46.8
2004	2,317,064[1]	44.2	48.0
2005	2,523,367[1]	45.5	49.2
2006	2,494,050[1]	43.5	47.3
2007	2,437,569[1]	42.9	46.6
2008	2,326,146[1]	44.6	48.2
2009	2,082,631[1]	44.6	48.3
2010	**2,170,243**	**46.3**	**50.0**

***** These rates are including the addition of any two percent credit allowances enacted by the 2001 Legislature

[1]- These tonnage figures are corrected from the published values – see P.11

2010 Statewide Recovery Rate

The state of Oregon recovered 2,170,243 tons of material or 50.0 percent of the municipal post-consumer waste stream in 2010. This rate is 1.7 percent higher than the 48.3 percent rate of 2009. The increase in recovered tons is 4.2 percent, the first increase since 2005 when recovered tons began to drop.

The three components of the recovery rate calculation, recovered tons, disposed tons, and generated tons (the sum of recovered tons plus disposed tons) rose and fell in a manner that reflects the economy. It also shows increased consumer awareness with smarter consumption and materials management patterns. Generation remained the same while disposal fell and recovery rose. Total disposed was 2,515,646 tons in 2010 and that added with total recovered equals 4,685,889 tons of total waste generated in 2010.

How the Statewide Recovery Rate Is Calculated

Information about the quantities of material collected from privately-operated recycling and material recovery facilities is combined with recovery information from collection service providers and disposal site collections. This determines the total weight of material recovered.

Next, the total weight of material recovered is added to the total weight of material disposed obtained from disposal site reports. This determines the total weight of material generated. The total weight of material recovered is divided by the total weight generated. This results in the **calculated recovery rate**.

The method of calculating the **total recovery rate** for the state was changed by the 2001 Legislature to include the 2 percent reuse and residential composting credits earned by wastesheds. This statutory change requires a more complex series of calculations to determine the total recovery rate.

The statewide total recovery rate is derived by first estimating what is called "adjusted recovery" for each wasteshed. The calculation of adjusted recovery involves calculating the tonnage that would be recovered if the 2 percent credits earned for reuse and residential composting were included in each wasteshed's calculated recovery rate, holding disposal tonnage as a constant. For wastesheds where no 2 percent credits were obtained, adjusted recovery is equal to calculated recovery. For wastesheds with recovery credits, adjusted recovery is higher than calculated recovery because adjusted recovery includes the tonnage attributed to reuse and residential backyard composting.

To obtain the statewide total recovery rate, the adjusted recoveries for all wastesheds are summed together to equal a statewide adjusted recovery amount. This is then added to the actual statewide disposal tonnage to get a new estimate of waste generation (adjusted generation). The statewide total recovery rate is then calculated by dividing the adjusted recovery by the adjusted generation.

Individual Wastesheds

The total weight of material recovered is broken down by wasteshed of origin. Direct collectors of materials are the primary and best source of information for the collected materials' wasteshed of origin. When information from direct collectors is not available, or when a survey respondent does not know the wasteshed of origin for the collected materials, the markets' and end users' estimates are the secondary method used to allocate material back to wastesheds. In rare cases, material is allocated back to wastesheds using population when survey respondents and market information cannot accurately estimate wasteshed of origin.

The total weight of material disposed is also broken down by wasteshed enabling a determination of individual wasteshed waste generation amounts. The total weight of material recovered is divided by the total weight generated. For each wasteshed, this results in an individual **calculated recovery rate**.

Recovery credits for waste prevention, reuse, and residential composting are then added to the **calculated recovery rate** in order to obtain the **total recovery rate**. The total recovery rate is used for determining whether wastesheds are achieving their recovery goals. Each wasteshed must apply for these credits as part of their annual Opportunity to Recycle Report submitted to DEQ Technical Assistance staff. The applications are reviewed against statutory standards for each of the three types of credits and a determination is made. A wasteshed may warrant zero to three recovery credits for an additional 0-6 percent added to the calculated recovery rate.

Marion County Adjustment.

As home to the state's only municipal waste-to-energy incinerator, Marion County's recovery and disposal tonnages are revised each year to include certain wastes burned for energy as recovered, as directed by the 2001 Legislature. In 2010, 12,899 tons of waste burned for energy in the county's waste-to-energy incinerator were counted as recovered instead of disposed. This result was obtained by multiplying the quantity of non-industrial, in-county, **counting** solid waste processed at the facility by waste composition percentages[3]. The six materials that may be counted towards the recovery rate when burned for energy are: Wood, yard waste, tires, used motor oil, fuels, and oil-based paint.

Recovery Credits.

Since 1997, wastesheds have been eligible to add 2 percent credits toward their recovery rates if they certify that they implemented programs in waste prevention, residential composting, or reuse (one 2 percent credit for each program, for a potential total of 6 percent).

Nineteen wastesheds received at least one 2 percent credit in 2010.

Baker	2%	Hood River	6%	Linn	6%	Tillamook	6%
Benton	6%	Jackson	6%	Marion	6%	Union	2%
Columbia	2%	Josephine	4%	Metro	6%	Wasco	6%
Deschutes	6%	Lane	6%	Polk	2%	Yamhill	6%
Douglas	6%	Lincoln	2%	Sherman	6%		

[3] The percentages are from the 2009-10 Marion County waste composition study.

Wasteshed Recovery Rates.
Twenty-one of the 35 wastesheds have total recovery rates in 2010 that are greater than their 2009 rates, as compared to twenty-five wastesheds having total recovery rates in 2008 that were less than their 2007 rates. This reversal points up the increased helps to highlight that recovery tonnages increased throughout the state. Disposal tonnages also decreased, but not as much as recovery.

To measure progress toward the statewide recovery goals, each wasteshed set 2005 and 2009 goals, which were incorporated into Oregon Revised Statute 459A.010. (Wasteshed recovery rates existed in statute for 1995, but were replaced by the 2001 Legislature with the goals for 2005 and 2009.) Twenty-five wastesheds still have higher recovery rates than their 2009 recovery rate goals, the DEQ's chief measurement tool. These 2009 goals may be updated by DEQ's current broad based Materials Management analysis.

Survey Report Table 1 shows a breakdown of 2010 recovery rates by wasteshed, and Survey Report Table 2 gives the amount of materials recovered in 2010 by wasteshed. Survey Report Table 3 shows the amount of solid waste disposed by wasteshed in 2010. For a historical look at recovery, disposal, and generation data in Oregon, Survey Report Tables 4, 5, 6, and 7 give the recovery rates, recovered material amounts, disposal tonnages, and amounts of solid waste generated in the previous years since the Material Recovery Survey began in 1992.

Materials Recovered

2010 recovery includes materials recycled, burned for energy (including tires, fuels, oil-based paint, used oil, wood waste, and some yard debris), and composted (including yard debris, food waste, and some wood waste). By category, 62.7 percent of the material recovered in Oregon was recycled, 16.3 percent was burned for energy, and 21.0 percent was composted.

Metals. The total amount of recovered metals, after dropping 6 percentage points last year, rose by 11.6 percent. Most areas of the state showed increased metals collections roughly corresponding to an increase in prices paid at the recyclers.

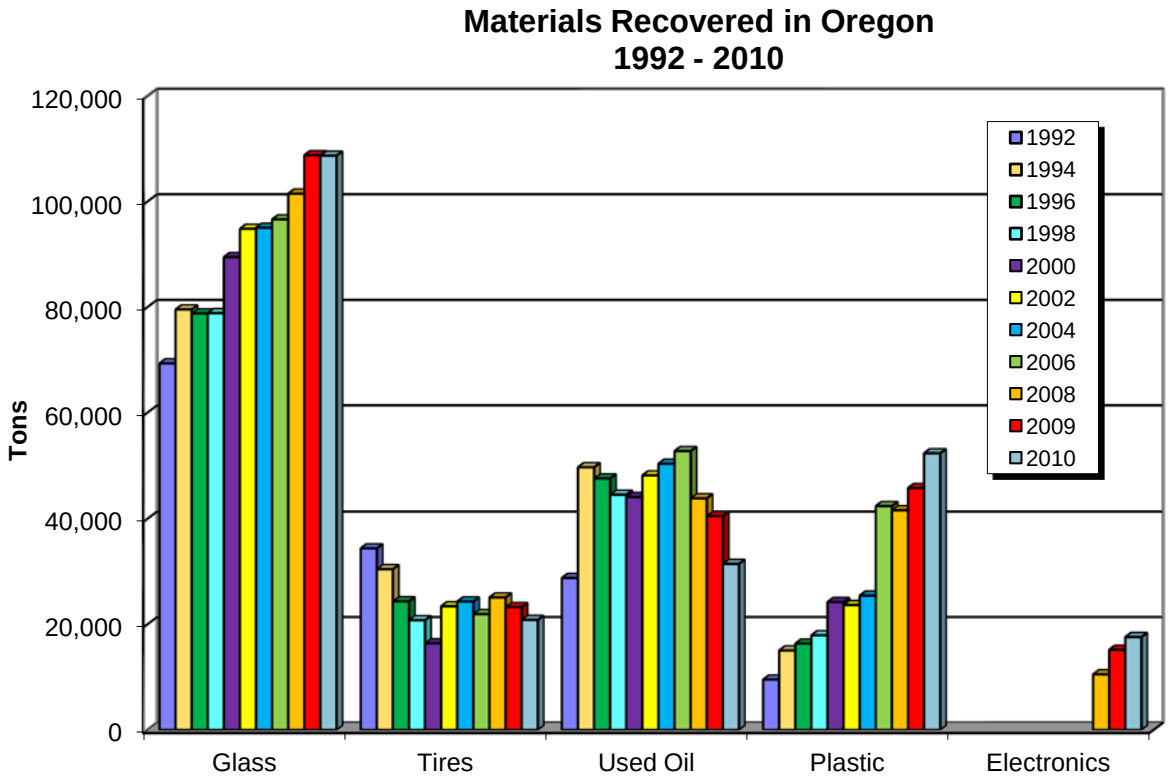
Paper (including cardboard). Last year, paper fibers showed large drops correlating to the steep fall in recycling markets that occurred in late 2008 and into the first part of 2009 In 2010, papers showed a small increase in recovery tons of 1.7 percent.

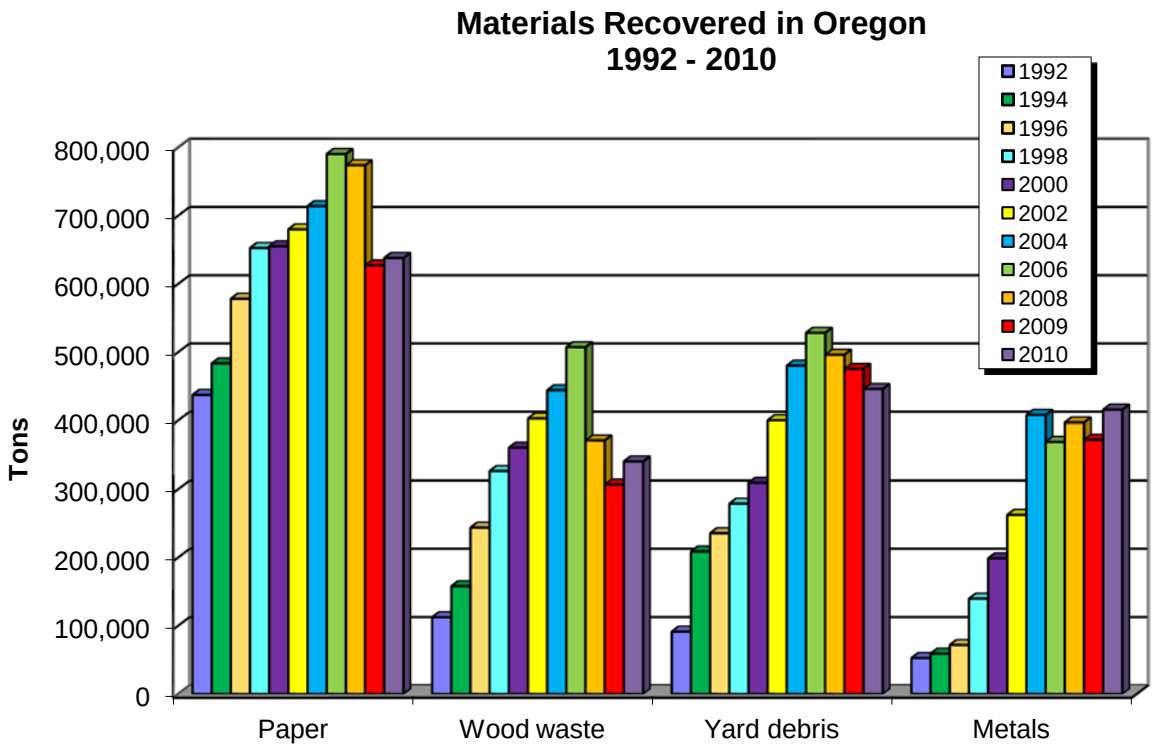
Plastic. Total plastics recycling increased slightly over 10 percent in 2009 and an additional increase of 14.4 percent for 2010. Rigid plastic containers continued to show the largest increase of 22.3 percent. This likely shows the effect of including water bottles in the Bottle Bill materials – those containers that have a return deposit assigned to them.

Glass. Glass recovery stayed constant. This shows a correlation to demand – new recycled glass markets planned for Oregon may increase the amount used for recycled glass products.

Electronics. This material showed a 16 percent increase in total tons recovered in 2010. The increase is due to the Oregon E-Cycles program and the electronics landfill ban.

Organics. The amount of recovered organic material (food, yard and wood wastes) increased 3 percent in 2010. The largest increase was for food waste at nearly 80 percent, reflecting the increase in the number of food waste collection programs developing in Oregon.

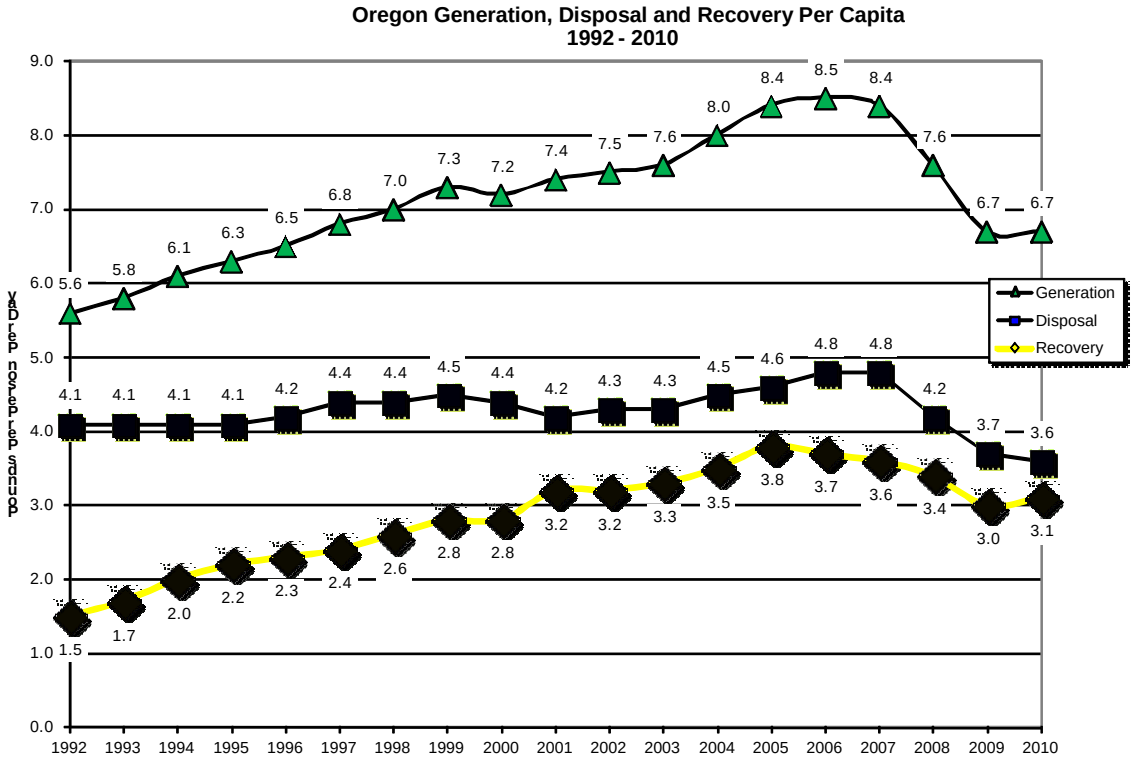

Materials Recovered in Oregon
1992 - 2010
Tons
120,000
100,000
80,000
60,000
40,000
20,000
0
Glass
Tires
Used Oil
Plastic
Electronics
1992
1994
1996
1998
2000
2002
2004
2006
2008
2009
2010


Materials Recovered in Oregon
1992 - 2010
Tons
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
Paper
Wood waste
Yard debris
Metals
1992
1994
1996
1998
2000
2002
2004
2006
2008
2009
2010

Waste Generation

Survey results show that the total amount of municipal solid waste generated (materials recovered plus waste disposed) in Oregon stayed nearly constant from 2009 to 2010. Total waste generation shows a slight increase of 0.46 percent from the previous year. The unmoving amount of total generation could correlate to the current economic situation. In hard times, people tend to buy and discard less material. It could also indicate that people are more intentional about generating less waste.

Total waste generation for 2010 equates to 2,442 pounds per person per year (6.7 pounds per day), compared to 2,441 pounds per person per year (6.7 pounds per day) in 2009. The state's 2005 waste generation goal states that there should be no annual increase in per capita municipal solid waste generation in 2005 and subsequent years. As is shown in the chart below, Oregon had been meeting that goal since 2007. The state's 2009 waste generation goal states that there should also be no annual increase in total municipal solid waste generation in 2009 and subsequent years. Oregon did not meet that more challenging goal in 2010. Meeting that goal in the face of rising population would require a corresponding decrease in per-capita generation.



Environmentally, the relative stasis in both total and per capita waste generation in the last year is a positive development. Generation is a crude measure of consumption, and for many materials, the environmental impacts of production (the corollary of consumption) are many times higher than the impacts of disposal. For example, recent analysis by the US EPA suggests that roughly 40 percent of the country's greenhouse gas emissions are associated with the production and transportation of goods. The leveling off of waste generation in 2007, then the decline in 2008 and 2009, and the lack of any significant increase this year likely indicates a reduction in use of materials. This could indicate reductions of emissions in greenhouse gases associated with all stages of the life cycle of materials. Many other environmental impacts associated with materials have likely also decreased.

2010 Disposition of Total Waste Generated

Disposed*	53.7 percent
Recycled	29.1 percent
Composted	9.7 percent
Recovered for Energy*	7.5 percent

*For the Marion County waste-to-energy incinerator, “Recovered for Energy” includes the portion of waste that counts toward the county’s and state’s recovery rates (see discussion above). Other wastes are counted as “Disposed”.

Conclusion

The energy savings and greenhouse gas reductions from materials recovered in 2010 are significant and compares to nearly 216 million gallons of gasoline or nearly three percent of Oregon's total 2010 energy use. The greenhouse gas reductions from material recovery in 2010 were approximately 3.0 million metric tons of CO2 equivalents. Composting, energy recovery, and recycling contribute to the benefits, but even larger benefits come from reducing the generation of waste in the first place. The benefits from using less virgin materials, using less energy for manufacturing and transportation and preventing end of life disposal costs are large. These benefits contribute even more to helping the environment, but estimates of what is not generated due to waste prevention are hard to calculate and cannot be included in this report.

Oregon met its 2009 recovery rate goal of 50 percent with its hitting the exact rate of 50.0 percent, a small increase from 48.3 percent in 2010. The efforts of many hard working people and successful programs in the Oregon materials recovery area shows this pay off in recovery gains and added benefits of increased recovery of more and different materials. Food waste composting and diverting other organics from disposal are showing increased recovery tonnages gains, and we expect that trend to continue.

Total waste generation in 2010 stayed below 5 million tons for the second year in a row, after topping that figure for five straight years, with per capita waste generation essentially flat. As a rough proxy for consumption, the fact that waste generation has remained well below pre-recession highs suggests that Oregonians are still buying and consuming less. Individuals and businesses are also making changes that may help to keep waste generation at lower levels even after the economy improves. Given the large natural resource and environmental impacts associated with production of many manufactured goods, continued effort is needed to help Oregonians do a better job in reducing, reusing, and recycling.

Oregon solid waste disposal and recycling companies and DEQ worked together to provide this annual calculation of the generation, recovery, and disposal of solid waste in Oregon in 2010. This is one of the most complete and accurate collections of disposal and recycling data in the country.

Adjustments to Reports from Previous Years

DEQ continues to review and use survey data even after publishing the final report each year. Occasionally, we encounter and correct errors in previously reported results. Thus, tonnages published in this report for previous years may not match the tonnages originally reported for that year. DEQ corrected that data in previous years, for the following reasons:

- An error in reporting was discovered by one of the recycling processors; a large amount of newspaper was double counted in the previously published 2004 results. The paper was counted both at the processing facility and at the paper mill.
- An enforcement action carried out by Metro showed that most of the brick reported as being recycled by one facility was falsely reported. DEQ subsequently decided that brick more closely resembled other inert materials such as cement and asphalt. Since these are not counted toward the recovery rate, brick was removed from all previous recovery tonnages.
- New information showed that corrections needed to be made to tonnages for roofing and non-container glass in 2003 and 2004, as well as other minor adjustments in other categories.
- Field visits showed that some plastic for 2005 had been reported as 'Plastic Other' and that this material was actually 'Rigid Plastic Containers'. The 2005 numbers have been adjusted for this change, along with a few other minor adjustments.
- Field visits and continued investigation showed that previously reported 'Wood Waste' collections for 2006 were actually collected in three years – 2004, 2005 and 2006. These years are now correct.
- The 2006 and 2007 plastics numbers were adjusted between grades of "Rigid Plastic Containers", "Plastic Other", and "Plastic Film". This may have led to small changes in the recovered tonnages for these materials.
- Investigation of the disposal numbers at two landfills led to deductions in the amount of SW disposed – these were really Industrial Waste, non-counting for the purposes of this survey.
- Some changes were made in 2006 and 2007 to disposition of materials. Changes were made to composted, burned for energy recovery and disposed amounts.
- Adjustments were made to the 2007 collection amounts, correctly identifying the wasteshed of origin.
- For 2006 and 2007, some non-counting slaughterhouse material was deleted from the recovered tonnage.
- Sawdust material from manufacturing was deleted for 2006 and 2007.
- Beginning with 2006, material previously identified as "CD – Construction and Demolition" was separated out into individual materials.
- Textiles previously counted were determined to be re-used, which does not count for recovery. 2006 and 2007 recovered tonnage was decreased.
- Some gypsum sent for disposal was included in the 2006 and 2007 tonnage – this was removed.
- Bottle bill materials, container glass and aluminum, had better reporting for 2009, and some adjustments were made to those materials for 2008.
- Municipal solid wastes from another landfill were determined to be industrial and were deleted from the 2007 and 2008 counting tonnages.
- Minor disposal adjustments were made to two wastesheds for 2006 data with incorrectly reported county of origin.

DEQ made the following adjustments for the 2010 report:

- Yard debris numbers contained a large double counting for the Metro region – the correction caused a decrease in recovered tons
- Some roofing material was deleted - it was determined to be industrial material

2010 Survey Report Tables

Table 1: Wasteshed Recovery Rates, 2010

Wasteshed	Tons Disposed	Tons Recovered	Tons Generated	Calculated Recovery Rate[1]	Recovery Credits[2] Prevention	Reuse	Residential Composting	Total Recovery Rate	HB 3744 Goal[5] 2009
Baker	13,692.6	3,793.4	17,486.0	**21.7%**			**2%**	**23.7%**	25%
Benton	50,474.7	32,911.6	83,386.3	**39.5%**	**2%**	**2%**	**2%**	**45.5%**	50%
Clatsop	31,036.3	17,467.8	48,504.1	**36.0%**				**36.0%**	25%
Columbia	24,616.1	13,703.8	38,319.9	**35.8%**	**2%**			**37.8%**	32%
Coos	34,574.2	22,600.4	57,174.6	**39.5%**				**39.5%**	30%
Crook	13,860.0	7,006.7	20,866.7	**33.6%**				**33.6%**	20%
Curry	16,982.3	4,349.3	21,331.6	**20.4%**				**20.4%**	30%
Deschutes	115,029.8	62,082.8	177,112.6	**35.1%**	**2%**	**2%**	**2%**	**41.1%**	45%
Douglas	75,047.2	42,215.5	117,262.7	**36.0%**	**2%**	**2%**	**2%**	**42.0%**	40%
Gilliam	2,254.6	881.0	3,135.6	**28.1%**				**28.1%**	20%
Grant	3,895.8	1,104.8	5,000.6	**22.1%**				**22.1%**	19%
Harney	3,152.7	1,122.0	4,274.6	**26.2%**				**26.2%**	40%
Hood River	17,782.3	6,391.9	24,174.1	**26.4%**	**2%**	**2%**	**2%**	**32.4%**	25%
Jackson	141,765.1	102,924.6	244,689.7	**42.1%**	**2%**	**2%**	**2%**	**48.1%**	40%
Jefferson	10,387.4	7,303.0	17,690.4	**41.3%**				**41.3%**	25%
Josephine	49,268.5	33,108.8	82,377.3	**40.2%**		**2%**	**2%**	**44.2%**	38%
Klamath	49,933.2	20,576.0	70,509.2	**29.2%**				**29.2%**	20%
Lake	5,925.2	2,214.6	8,139.8	**27.2%**				**27.2%**	10%
Lane	225,987.8	238,891.4	464,879.2	**51.4%**	**2%**	**2%**	**2%**	**57.4%**	54%
Lincoln	38,932.0	18,809.1	57,741.1	**32.6%**			**2%**	**34.6%**	20%
Linn	80,588.5	62,976.1	143,564.7	**43.9%**	**2%**	**2%**	**2%**	**49.9%**	40%
Malheur	20,713.3	6,289.2	27,002.5	**23.3%**				**23.3%**	22%
Marion[4]	205,923.4	207,793.6	413,717.0	**50.2%**	**2%**	**2%**	**2%**	**56.2%**	54%
Metro	1,029,314.0	1,112,741.9	2,142,055.9	**51.9%**	**2%**	**2%**	**2%**	**57.9%**	64%
Milton-Freewater	5,898.9	2,215.9	8,114.8	**27.3%**				**27.3%**	25%
Morrow	10,734.2	3,020.2	13,754.4	**22.0%**				**22.0%**	20%
Polk	39,552.0	33,107.5	72,659.5	**45.6%**	**2%**			**47.6%**	35%
Sherman	1,190.2	154.1	1,344.3	**11.5%**	**2%**	**2%**	**2%**	**17.5%**	20%
Tillamook	22,373.0	10,147.5	32,520.4	**31.2%**	**2%**	**2%**	**2%**	**37.2%**	30%
Umatilla	66,345.2	27,609.0	93,954.1	**29.4%**				**29.4%**	20%
Union	17,841.1	7,159.7	25,000.8	**28.6%**			**2%**	**30.6%**	25%
Wallowa	2,990.0	718.8	3,708.9	**19.4%**				**19.4%**	20%
Wasco	18,196.3	7,079.3	25,275.6	**28.0%**	**2%**	**2%**	**2%**	**34.0%**	35%
Wheeler	427.3	37.6	464.9	**8.1%**				**8.1%**	20%
Yamhill**	68,961.4	49,734.1	118,695.5	**41.9%**	**2%**	**2%**	**2%**	**47.9%**	45%
OR Totals[3]	2,515,646	2,170,243	4,685,889	**46.3%**				**50.0%**	

**Yamhill tons disposed estimated value at time of publication

[1] The recovery rate is calculated using the following formula:
1) Tons Disposed + Tons Recovered = Total Tons Generated
2) Tons Recovered / Total Generated = Calculated Recovery Rate
3) Calculated Recovery Rate + Recovery Credits = Total Recovery Rate

[2] Legislation enacted in 1997 allows each wasteshed to apply for 2% credits toward the recovery rate for certified programs in waste prevention, home composting, and reuse. A 2001 amendment allows for greater than 2% for residential composting if quantitatively verified.

[3] The total recovery rate for Oregon includes recovery credits for reuse and residential composting weighted by the recovery and generation of those wastesheds receiving credits (ORS 459A.010(4)(i)).

[4] The Marion County disposal and recovery rates reflect 12,899.47 tons of recyclable materials burned for energy in 2009 (per ORS 459A.010(3)(f)(B)).

[5] ORS 459A.010(6).

Table 2: Amount Recovered in 2010 by Wasteshed

Wasteshed	2010 Tons Recovered	2010 Pounds Per Capita	2010 Wasteshed Population
Baker	3,793	469	16,185
Benton	32,912	832	79,148
Clatsop	17,468	942	37,070
Columbia	13,704	554	49,430
Coos	22,600	717	63,035
Crook	7,007	667	21,020
Curry	4,349	389	22,355
Deschutes	62,083	786	157,905
Douglas	42,215	784	107,690
Gilliam	881	942	1,870
Grant	1,105	296	7,460
Harney	1,122	301	7,445
Hood River	6,392	571	22,385
Jackson	102,925	1,012	203,340
Jefferson	7,303	672	21,750
Josephine	33,109	800	82,775
Klamath	20,576	619	66,505
Lake	2,215	561	7,890
Lane	238,891	1,357	352,010
Lincoln	18,809	815	46,135
Linn	62,976	1,019	123,652
Malheur	6,289	401	31,345
Marion*	207,794	1,317	315,675
Metro	1,112,742	1,353	1,644,635
Milton-Freewater	2,216	583	7,600
Morrow	3,020	541	11,175
Polk	33,107	887	74,650
Sherman	154	175	1,765
Tillamook	10,147	803	25,260
Umatilla	27,609	807	68,400
Union	7,160	555	25,810
Wallowa	719	205	7,005
Wasco	7,079	561	25,235
Wheeler	38	52	1,440
Yamhill	49,734	992	100,250
OREGON TOTALS	**2,170,243**	**1,131**	**3,837,300**

Source for population data is the Center for Population Research and Census, Portland State University, published May 17, 2011. Westesheds populations are not the same as County populations for the Wastesheds of Benton, Linn, Marion, Metro, Milton-Freewater, Polk, Umatilla, and Yamhill (see OAR 340-090-0050).

*Includes certain Marion County recyclable materials burned for energy (per ORS 459A.010(3)(f)(B)).

Table 3: Solid Waste Disposed in 2010 by Wasteshed

Wasteshed	2010 Tons Disposed	2010 Pounds Per Capita	2010 Wasteshed Population
Baker	13,693	1,692	16,185
Benton	50,475	1,275	79,148
Clatsop	31,036	1,674	37,070
Columbia	24,616	996	49,430
Coos	34,574	1,097	63,035
Crook	13,860	1,319	21,020
Curry	16,982	1,519	22,355
Deschutes	115,030	1,457	157,905
Douglas	75,047	1,394	107,690
Gilliam	2,255	2,411	1,870
Grant	3,896	1,044	7,460
Harney	3,153	847	7,445
Hood River	17,782	1,589	22,385
Jackson	141,765	1,394	203,340
Jefferson	10,387	955	21,750
Josephine	49,268	1,190	82,775
Klamath	49,933	1,502	66,505
Lake	5,925	1,502	7,890
Lane	225,988	1,284	352,010
Lincoln	38,932	1,688	46,135
Linn	80,589	1,303	123,652
Malheur	20,713	1,322	31,345
Marion*	205,923	1,305	315,675
Metro	1,029,314	1,252	1,644,635
Milton-Freewater	5,899	1,552	7,600
Morrow	10,734	1,921	11,175
Polk	39,552	1,060	74,650
Sherman	1,190	1,349	1,765
Tillamook	22,373	1,771	25,260
Umatilla	66,345	1,940	68,400
Union	17,841	1,382	25,810
Wallowa	2,990	854	7,005
Wasco	18,196	1,442	25,235
Wheeler	427	593	1,440
Yamhill**	68,961	1,376	100,250
OREGON TOTALS	**2,515,646**	**1,311**	**3,837,300**

Source for population data is the Center for Population Research and Census, Portland State University, published May 17, 2011. Westesheds populations are not the same as County populations for the Wastesheds of Benton, Linn, Marion, Metro, Milton-Freewater, Polk, Umatilla, and Yamhill (see OAR 340-090-0050).

*Excludes certain Marion County recyclable materials burned for energy recovery (per ORS 459A.010(3)(f)(B)).

Table 4: Oregon Calculated Recovery Rates by Wasteshed, 1992-2010

Wasteshed	1992 Rate	1993 Rate	1994 Rate	1995 Rate	1996 Rate	1997 Calc. Rate*	1998 Calc. Rate*	1999 Calc. Rate*	2000 Calc. Rate*	2001 Calc. Rate*	2002 Calc. Rate*	2003 Calc. Rate*	2004 Calc. Rate*	2005 Calc. Rate*	2006 Calc. Rate*	2007 Calc. Rate*	2008 Calc. Rate*	2009 Calc. Rate*	2010 Calc. Rate*
Baker	10%	14%	17%	22%	25%	19%	19%	18%	18%	24%	21%	22%	20%	23%	17%	22%	21%	26%	22%
Benton	27%	30%	36%	35%	37%	41%	41%	35%	35%	41%	41%	39%	43%	40%	36%	39%	41%	38%	39%
Clatsop	19%	22%	20%	19%	20%	23%	22%	24%	25%	28%	25%	29%	31%	39%	34%	34%	36%	36%	36%
Columbia	34%	28%	22%	27%	22%	28%	29%	25%	31%	38%	34%	38%	31%	32%	30%	28%	30%	32%	36%
Coos	21%	20%	23%	28%	29%	28%	27%	22%	23%	23%	26%	21%	21%	23%	21%	20%	22%	24%	40%
Crook	16%	23%	19%	30%	23%	15%	14%	23%	27%	37%	27%	14%	21%	21%	26%	25%	33%	32%	34%
Curry	21%	25%	27%	31%	35%	33%	29%	27%	41%	39%	36%	25%	25%	15%	18%	24%	21%	20%	20%
Deschutes	15%	18%	24%	22%	23%	25%	32%	25%	31%	29%	27%	28%	27%	28%	27%	30%	31%	39%	35%
Douglas	26%	23%	23%	24%	26%	29%	30%	26%	26%	30%	29%	29%	31%	25%	24%	26%	34%	29%	36%
Gilliam	17%	6%	15%	20%	19%	21%	18%	15%	14%	13%	20%	10%	11%	7%	8%	13%	14%	27%	28%
Grant	18%	14%	16%	19%	16%	15%	16%	18%	19%	19%	18%	16%	19%	28%	21%	24%	25%	22%	22%
Harney	18%	21%	20%	34%	24%	21%	34%	34%	20%	27%	28%	27%	21%	27%	28%	25%	34%	24%	26%
Hood River	16%	24%	26%	16%	17%	17%	17%	19%	18%	30%	34%	35%	37%	36%	33%	30%	28%	29%	26%
Jackson	15%	19%	35%	33%	34%	34%	34%	29%	28%	32%	36%	32%	31%	32%	34%	30%	32%	36%	42%
Jefferson	21%	16%	18%	22%	24%	33%	33%	21%	27%	27%	21%	23%	34%	33%	28%	36%	34%	31%	41%
Josephine	14%	19%	27%	34%	38%	37%	41%	42%	33%	34%	37%	35%	37%	37%	39%	34%	39%	38%	40%
Klamath	13%	12%	17%	18%	15%	16%	17%	15%	18%	31%	30%	23%	31%	37%	34%	35%	45%	33%	29%
Lake	6%	6%	9%	8%	7%	6%	8%	11%	8%	11%	11%	25%	25%	15%	19%	22%	35%	25%	27%
Lane	19%	28%	32%	32%	39%	39%	40%	41%	46%	46%	44%	46%	45%	48%	47%	46%	46%	46%	51%
Lincoln	20%	20%	21%	19%	16%	19%	20%	19%	23%	28%	27%	28%	29%	33%	26%	28%	31%	29%	33%
Linn	15%	27%	29%	30%	32%	33%	31%	33%	29%	34%	38%	34%	44%	43%	41%	37%	41%	40%	44%
Malheur	19%	15%	12%	15%	20%	19%	22%	24%	25%	26%	27%	26%	27%	25%	23%	23%	22%	19%	23%
Marion	26%	27%	27%	29%	28%	28%	30%	32%	38%	**50%	**51%	**47%	**47%	**50%	**52%	**50%	**52%	**52%	**50%
Metro	35%	37%	39%	42%	41%	42%	43%	43%	45%	49%	47%	50%	51%	53%	50%	49%	50%	50%	52%
Milton-Freewater	16%	13%	13%	22%	21%	20%	19%	18%	21%	21%	24%	25%	24%	30%	33%	31%	43%	35%	27%
Morrow	11%	16%	13%	12%	13%	17%	17%	20%	15%	16%	16%	20%	20%	14%	21%	26%	25%	23%	22%
Polk	20%	25%	24%	23%	19%	24%	26%	29%	33%	39%	38%	43%	44%	50%	48%	46%	47%	46%	46%
Sherman	24%	17%	20%	20%	21%	11%	16%	24%	17%	15%	14%	16%	26%	16%	19%	16%	15%	14%	11%
Tillamook	31%	27%	28%	27%	26%	26%	26%	28%	26%	28%	28%	27%	39%	37%	33%	31%	32%	29%	31%
Umatilla	14%	15%	15%	19%	20%	25%	24%	25%	26%	28%	35%	33%	36%	36%	35%	36%	38%	32%	29%
Union	16%	19%	21%	30%	26%	29%	27%	24%	22%	22%	28%	26%	27%	27%	34%	32%	30%	29%	29%
Wallowa	6%	8%	11%	18%	11%	16%	16%	19%	21%	19%	19%	16%	18%	19%	22%	27%	24%	23%	19%
Wasco	25%	23%	26%	29%	30%	29%	31%	34%	34%	26%	28%	31%	25%	24%	19%	23%	23%	33%	28%
Wheeler	7%	8%	11%	24%	20%	20%	25%	18%	14%	13%	25%	27%	16%	34%	24%	27%	27%	20%	8%
Yamhill	19%	22%	25%	30%	35%	25%	31%	36%	44%	49%	54%	42%	50%	45%	39%	36%	36%	40%	42%
OREGON TOTALS	**27.1%**	**29.9%**	**32.6%**	**34.7%**	**34.9%**	**35.7%**	**37.3%**	**36.8%**	**38.9%**	**43.1%**	**42.7%**	**43.1%**	**44.2%**	**45.5%**	**43.5%**	**42.9%**	**44.6%**	**44.6%**	**46.3%**

*does not include 2% credits
**does include certain Marion County recyclable materials burned for energy

Table 5: Oregon Amount Recovered by Wasteshed, 1992-2010

Wasteshed	1992 Rvd (tons)	Per Capita (lbs.)	1994 Rvd (tons)	Per Capita (lbs.)	1996 Rvd (tons)	Per Capita (lbs.)	1998 Rvd (tons)	Per Capita (lbs.)	2000 Rvd (tons)	Per Capita (lbs.)	2001 Rvd (tons)	Per Capita (lbs.)	2002 Rvd (tons)	Per Capita (lbs.)	2003 Rvd (tons)	Per Capita (lbs.)	2004 Rvd (tons)	Per Capita (lbs.)	2005 Rvd (tons)	Per Capita (lbs.)	2006 Rvd (tons)	Per Capita (lbs.)	2007 Rvd (tons)	Per Capita (lbs.)	2008 Rvd (tons)	Per Capita (lbs.)	2009 Rvd (tons)	Per Capita (lbs.)	2010 Rvd (tons)	Per Capita (lbs.)	Change in Per Capita 2010-09
Baker	982	124	1,659	202	3,644	438	2,934	349	2,849	340	3,488	418	3,375	404	3,533	428	3,016	364	3,756	455	2,782	338	3,565	434	3,366	409	4,067	494	3,793	469	-5.2%
Benton	21,480	626	24,054	676	30,352	830	31,957	865	28,488	779	35,609	966	36,427	978	34,366	923	42,092	1,115	38,852	1,017	35,728	921	36,292	922	38,210	966	31,438	789	32,912	832	5.4%
Clatsop	5,148	300	7,125	405	7,118	403	8,512	478	10,586	593	11,999	669	11,370	630	13,425	740	14,739	810	22,706	1,239	19,576	1,057	19,029	1,017	20,984	1,113	17,584	929	17,468	942	1.4%
Columbia	7,894	407	5,233	262	6,258	302	9,252	433	10,361	474	14,050	634	11,831	531	14,758	656	11,360	498	13,209	572	12,940	551	13,647	574	12,968	539	12,001	496	13,704	554	11.8%
Coos	10,035	323	11,522	364	14,972	472	13,905	440	11,754	374	11,075	352	13,825	441	11,614	369	12,446	397	13,826	441	13,364	425	12,162	386	13,529	428	12,666	402	22,600	717	78.5%
Crook	1,581	206	1,554	189	3,156	363	2,267	247	5,215	540	7,040	709	6,175	611	2,829	279	4,617	447	4,817	423	7,075	577	7,004	541	7,871	586	6,273	462	7,007	667	44.4%
Curry	2,863	288	4,212	407	6,011	572	4,905	466	10,387	980	9,464	878	10,099	951	6,838	648	7,003	662	3,992	377	4,830	452	6,632	618	5,161	480	4,223	396	4,349	389	-1.7%
Deschutes	12,858	305	30,411	663	30,222	605	48,309	898	49,993	858	49,459	810	46,857	741	53,550	821	55,395	818	62,503	871	69,443	910	75,346	937	64,276	770	75,362	883	62,083	786	-10.9%
Douglas	29,467	614	27,418	562	30,945	621	37,476	746	31,390	625	38,983	770	35,009	691	36,007	707	42,007	821	33,960	660	31,980	616	36,158	691	44,082	838	30,846	585	42,215	784	33.9%
Gilliam	177	205	199	222	284	306	295	314	266	280	252	265	370	389	272	287	266	280	159	168	225	239	301	319	370	393	768	815	881	942	15.7%
Grant	911	232	872	219	687	171	610	150	791	199	897	230	947	244	731	191	954	246	1,665	433	1,055	277	1,342	354	1,325	352	1,098	292	1,105	296	1.5%
Harney	600	171	648	179	678	188	921	248	806	212	1,076	283	1,099	289	1,034	283	820	214	1,149	300	1,165	304	1,203	313	1,573	408	944	245	1,122	301	23.2%
Hood River	1,855	212	3,308	360	3,333	345	3,112	313	3,403	332	6,517	633	7,986	781	8,842	863	9,961	946	9,775	923	9,200	862	8,365	779	7,479	692	7,466	687	6,392	571	-16.9%
Jackson	17,134	221	57,705	706	60,292	707	71,544	810	63,872	701	71,666	776	88,855	947	83,585	884	83,826	877	85,192	876	92,807	935	80,422	795	76,330	744	79,275	766	102,925	1,012	32.2%
Jefferson	1,269	170	1,838	225	2,667	307	4,339	472	3,661	382	3,963	409	3,061	308	3,075	309	6,404	632	6,772	657	5,506	514	8,132	738	6,217	554	4,475	394	7,303	672	70.4%
Josephine	7,826	239	12,462	359	21,688	600	28,020	753	26,534	698	25,556	665	32,644	841	31,345	800	36,526	929	36,554	918	42,005	1,036	32,943	800	35,957	863	29,510	705	33,109	800	13.4%
Klamath	8,827	301	11,950	394	11,171	360	13,111	415	14,070	440	21,617	673	25,246	782	17,636	546	27,328	843	38,476	1,183	36,650	1,120	34,502	1,048	48,819	1,475	26,256	791	20,576	619	-21.8%
Lake	269	74	597	160	601	161	553	150	369	99	643	171	585	157	1,650	446	1,629	434	1,020	272	1,360	361	1,691	447	2,950	778	1,754	461	2,215	561	21.6%
Lane	72,072	493	118,788	788	153,843	992	171,708	1,077	216,532	1,337	206,010	1,264	202,262	1,233	218,368	1,326	213,033	1,278	243,261	1,448	248,599	1,463	237,578	1,385	217,537	1,258	190,877	1,098	238,891	1,357	23.6%
Lincoln	6,886	338	8,665	404	7,823	352	10,416	465	12,192	547	15,128	678	15,162	678	15,799	702	17,785	801	22,974	1,035	18,030	810	20,035	898	21,355	955	17,010	761	18,809	815	7.1%
Linn	17,232	352	25,213	500	33,201	634	34,631	647	33,830	623	36,510	670	44,739	817	38,884	700	57,999	1,029	62,504	1,099	60,754	1,057	51,543	888	54,219	924	56,125	950	62,976	1,019	7.2%
Malheur	3,283	237	2,142	149	4,808	319	5,662	364	7,212	454	7,204	450	8,138	509	7,297	456	7,886	495	7,492	471	6,862	433	7,045	446	6,437	406	4,909	310	6,289	401	29.6%
Marion	55,834	462	72,009	566	85,731	645	104,053	752	134,032	937	191,817	1,331	205,041	1,410	187,275	1,267	203,346	1,364	238,914	1,582	264,168	1,724	251,673	1,619	239,441	1,522	218,787	1,376	207,794	1,317	-4.3%
Metro	514,747	825	635,869	976	752,470	1,106	912,018	1,294	970,850	1,338	1,097,409	1,496	1,053,618	1,420	1,188,457	1,580	1,283,273	1,686	1,402,299	1,817	1,337,848	1,705	1,325,112	1,663	1,234,180	1,529	1,106,279	1,356	1,112,742	1,353	-0.2%
Milton-Freew.	908	323	744	254	1,186	392	1,310	403	1,317	406	1,344	410	1,641	509	1,771	545	1,879	578	2,167	663	2,612	793	2,351	718	3,598	994	2,319	640	2,216	583	-9.0%
Morrow	930	227	822	188	842	181	1,227	242	1,428	257	1,364	245	1,608	286	1,941	330	2,245	382	1,477	247	2,874	474	3,967	643	3,868	620	3,548	566	3,020	541	-4.5%
Polk	4,873	187	7,604	276	6,787	237	13,195	438	18,000	581	22,550	717	23,785	758	28,009	885	32,517	1,012	40,116	1,235	38,074	1,155	33,838	1,013	34,828	1,032	32,201	946	33,107	887	-6.3%
Sherman	270	278	202	207	264	275	210	219	217	223	234	246	243	263	239	251	432	455	182	194	232	249	239	258	256	278	204	222	154	175	-21.5%
Tillamook	4,518	406	5,157	447	5,246	438	5,372	446	6,174	508	7,113	578	7,052	573	7,087	569	13,202	1,058	12,551	996	12,554	983	11,435	885	11,994	921	9,271	710	10,147	803	13.2%
Umatilla	6,641	236	8,537	292	12,454	414	16,949	549	20,115	625	23,097	718	33,428	1,036	31,496	975	36,467	1,109	33,083	1,005	35,495	1,082	38,402	1,169	40,616	1,247	30,306	930	27,609	807	-13.2%
Union	2,525	210	4,329	348	5,203	419	5,848	474	5,062	412	5,578	454	7,253	590	6,779	550	7,504	604	7,328	587	7,518	599	9,180	727	8,102	639	7,119	559	7,160	555	-0.8%
Wallowa	433	119	841	225	503	135	847	231	1,219	336	1,045	294	1,325	371	1,005	281	1,160	324	1,287	361	1,431	401	1,767	496	1,339	376	1,211	341	719	205	-39.8%
Wasco	5,443	485	5,751	504	7,519	648	8,154	697	9,194	771	6,240	517	7,249	610	8,046	683	6,180	517	6,785	567	5,131	426	6,650	551	6,545	542	9,236	762	7,079	561	-26.4%
Wheeler	59	82	98	124	185	226	119	152	100	129	67	86	167	216	187	242	109	141	236	305	161	206	204	260	166	211	102	129	38	52	-59.5%
Yamhill	11,850	338	19,374	524	26,116	663	31,244	752	53,548	1,242	63,021	1,447	80,791	1,832	49,150	1,106	71,656	1,594	62,327	1,370	64,017	1,386	57,816	1,233	50,200	1,056	47,122	982	49,734	992	1.0%
OR. TOTALS	**839,679**	**562**	**1,118,912**	**717**	**1,338,259**	**825**	**1,604,985**	**958**	**1,765,817**	**1,028**	**1,999,085**	**1,152**	**2,029,261**	**1,158**	**2,116,880**	**1,195**	**2,317,064**	**1,294**	**2,523,367**	**1,390**	**2,494,050**	**1,352**	**2,437,569**	**1,302**	**2,326,146**	**1,227**	**2,082,631**	**1,089**	**2,170,243**	**1,131**	**3.83%**
change in total from previous year			14.80%		6.45%		9.77%		8.58%		13.21%		1.51%		4.32%		9.46%		8.9%		-1.16%		-2.26%		-4.57%		-10.47%		4.21%		
change in per capita from previous year				12.56%		4.40%		8.20%		7.25%		12.06%		0.52%		3.23%		8.20%		7.4%		-2.74%		-3.70%		-5.72%		-11.23%		3.83%	

Data from 1993, 1995, 1997 and 1999 is not shown due to page formatting. Please contact DEQ directly for data from these years.

Certain recoverable materials in mixed waste burned at the waste-to-energy facility in Brooks are excluded from Marion County and Statewide recovery in years prior to 2001 but included in 2001 and subsequent years (per ORS 459A.010(3)(f)(B)).

Table 6: Oregon Solid Waste Disposed by Wasteshed, 1992-2010

Wasteshed	1992 Disposed (tons)	Per Capita (lbs.)	1994 Disposed (tons)	Per Capita (lbs.)	1996 Disposed (tons)	Per Capita (lbs.)	1998 Disposed (tons)	Per Capita (lbs.)	2000 Disposed (tons)	Per Capita (lbs.)	2001 Disposed (tons)	Per Capita (lbs.)	2002 Disposed (tons)	Per Capita (lbs.)	2003 Disposed (tons)	Per Capita (lbs.)	2004 Disposed (tons)	Per Capita (lbs.)	2005 Disposed (tons)	Per Capita (lbs.)	2006 Disposed (tons)	Per Capita (lbs.)	2007 Disposed (tons)	Per Capita (lbs.)	2008 Disposed (tons)	Per Capita (lbs.)	2009 Disposed (tons)	Per Capita (lbs.)	2010 Disposed (tons)	Per Capita (lbs.)	Change in Per Capita 2010-09
Baker	8,419	1,062	8,253	1,005	10,897	1,310	12,376	1,472	12,617	1,507	11,317	1,355	13,047	1,563	12,590	1,526	12,122	1,465	12,734	1,543	13,770	1,672	12,730	1,549	12,973	1,577	11,391	1,385	13,693	1,692	22.18%
Benton	58,761	1,713	43,586	1,224	50,840	1,390	45,551	1,234	53,835	1,472	51,577	1,399	52,377	1,406	53,861	1,447	55,849	1,479	58,322	1,527	62,940	1,622	57,109	1,451	54,675	1,382	51,470	1,292	50,475	1,275	-1.30%
Clatsop	22,263	1,299	27,939	1,587	28,671	1,623	30,716	1,726	31,489	1,764	31,318	1,747	33,745	1,870	33,400	1,840	33,492	1,840	35,717	1,950	38,125	2,058	36,874	1,970	36,529	1,938	31,316	1,655	31,036	1,674	1.17%
Columbia	15,131	780	18,314	918	22,650	1,095	23,004	1,078	23,201	1,062	23,197	1,047	23,130	1,037	24,133	1,073	25,420	1,114	28,082	1,215	29,541	1,258	34317.0*	1443.*	30,412	1,265	25,365	1,048	24,616	996	-4.95%
Coos	37,596	1,211	39,014	1,234	36,436	1,148	37,434	1,184	39,329	1,253	37,711	1,198	40,349	1,288	43,520	1,382	46,378	1,479	46,433	1,481	50,868	1,617	49,459	1,569	47,266	1,496	39,372	1,249	34,574	1,097	-12.14%
Crook	8,378	1,091	6,621	805	10,646	1,224	14,232	1,552	13,841	1,434	11,872	1,196	16,907	1,674	16,877	1,663	16,920	1,639	18,638	1,637	20,566	1,677	20,867	1,612	15,827	1,179	13,566	998	13,860	1,319	32.14%
Curry	10,555	1,062	11,278	1,089	11,121	1,059	12,264	1,166	14,644	1,382	14,996	1,392	17,986	1,693	20,372	1,931	20,791	1,966	22,582	2,131	21,834	2,044	21,404	1,993	19,470	1,810	17,093	1,602	16,982	1,519	-5.16%
Deschutes	72,529	1,720	98,801	2,155	103,397	2,070	101,313	1,884	111,013	1,904	120,334	1,972	129,607	2,049	135,235	2,073	151,494	2,237	160,708	2,240	188,146	2,466	177,543	2,208	142,400	1,705	117,292	1,374	115,030	1,457	6.02%
Douglas	85,040	1,772	93,566	1,917	87,325	1,751	86,369	1,718	89,451	1,780	90,379	1,786	85,648	1,691	87,899	1,727	92,684	1,811	103,833	2,018	103,061	1,985	103,772	1,983	84,164	1,599	76,578	1,453	75,047	1,394	-4.09%
Gilliam	872	1,008	1,128	1,254	1,176	1,271	1,320	1,405	1,663	1,751	1,622	1,707	1,508	1,587	2,357	2,481	2,082	2,192	2,217	2,346	2,429	2,577	2,026	2,150	2,197	2,333	2,074	2,201	2,255	2,411	9.56%
Grant	4,178	1,063	4,629	1,165	3,492	869	3,174	782	3,441	866	3,790	972	4,301	1,110	3,939	1,030	3,987	1,029	4,233	1,102	3,918	1,027	4,205	1,109	3,944	1,048	3,798	1,010	3,896	1,044	3.46%
Harney	2,650	756	2,579	713	2,126	591	1,794	484	3,160	832	2,892	761	2,889	760	2,748	753	3,039	794	3,139	819	2,999	782	3,578	932	3,080	799	3,058	793	3,153	847	6.82%
Hood River	9,959	1,139	9,509	1,035	16,016	1,659	14,931	1,502	15,741	1,536	15,397	1,495	15,710	1,536	16,229	1,583	16,780	1,594	17,332	1,637	18,620	1,745	19,965	1,860	19,035	1,760	17,972	1,655	17,782	1,589	-3.97%
Jackson	98,002	1,265	108,813	1,331	115,011	1,348	136,337	1,544	165,129	1,813	152,562	1,652	155,293	1,656	176,162	1,863	184,353	1,928	183,543	1,887	182,404	1,837	184,062	1,820	159,636	1,555	143,484	1,386	141,765	1,394	0.59%
Jefferson	4,813	645	8,380	1,026	8,380	965	8,709	947	9,889	1,033	10,929	1,127	11,744	1,183	10,358	1,041	12,436	1,228	13,680	1,328	14,385	1,344	14,248	1,294	12,243	1,091	10,118	891	10,387	955	7.21%
Josephine	47,687	1,457	34,399	991	35,873	992	40,518	1,089	54,033	1,421	50,436	1,313	56,070	1,444	58,593	1,496	61,211	1,558	62,774	1,576	66,105	1,630	63,004	1,529	56,445	1,355	49,054	1,173	49,268	1,190	1.52%
Klamath	57,247	1,950	59,498	1,964	66,874	2,153	62,603	1,980	64,619	2,023	48,182	1,501	57,802	1,791	58,897	1,823	60,699	1,873	64,739	1,990	72,315	2,210	64,641	1,964	58,740	1,775	53,652	1,617	49,933	1,502	-7.15%
Lake	4,364	1,196	5,859	1,575	7,468	2,002	6,361	1,724	4,057	1,089	5,120	1,365	4,833	1,297	4,925	1,331	4,891	1,304	5,932	1,581	5,651	1,499	6,051	1,600	5,599	1,476	5,244	1,380	5,925	1,502	8.84%
Lane	302,695	2,072	251,328	1,668	239,310	1,542	261,958	1,644	256,205	1,582	240,984	1,479	258,470	1,575	256,204	1,556	260,859	1,565	266,729	1,587	281,347	1,656	275,032	1,603	251,260	1,453	223,028	1,283	225,988	1,284	0.08%
Lincoln	27,601	1,355	32,766	1,526	42,443	1,908	41,127	1,834	40,406	1,812	38,835	1,740	40,675	1,820	40,555	1,802	43,263	1,949	46,014	2,072	50,537	2,270	52,580	2,356	47,876	2,141	40,801	1,826	38,932	1,688	-7.55%
Linn	94,644	1,931	63,079	1,251	69,506	1,328	75,807	1,417	83,701	1,540	70,471	1,294	71,571	1,307	75,185	1,353	73,780	1,309	81,764	1,437	89,163	1,551	86,370	1,488	76,961	1,312	82,520	1,397	80,589	1,303	-6.71%
Malheur	13,815	996	15,948	1,109	18,776	1,246	20,052	1,288	21,338	1,344	20,995	1,312	22,079	1,380	21,007	1,313	21,656	1,360	22,734	1,430	23,292	1,468	24,152	1,528	23,008	1,453	21,134	1,333	20,713	1,322	-0.82%
Marion	158,109	1,307	195,990	1,540	219,182	1,648	237,166	1,714	222,098	1,552	194,190	1,347	197,699	1,360	211,510	1,430	225,430	1,512	242,809	1,608	245,214	1,600	247,331	1,591	217,172	1,380	200,420	1,261	205,923	1,305	3.49%
Metro	945,634	1,516	977,730	1,501	1,097,246	1,613	1,196,486	1,697	1,207,348	1,663	1,151,339	1,569	1,165,762	1,571	1,185,743	1,577	1,234,687	1,622	1,263,721	1,637	1,356,955	1,730	1,385,870	1,740	1,223,706	1,516	1,088,580	1,334	1,029,314	1,252	-6.19%
Milton-Freew.	4,642	1,649	5,070	1,729	4,332	1,431	5,586	1,719	5,029	1,549	5,024	1,532	5,235	1,623	5,280	1,625	5,888	1,812	5,168	1,580	5,349	1,625	5,280	1,612	4,770	1,318	4,321	1,193	5,899	1,552	30.11%
Morrow	7,221	1,763	5,685	1,298	5,883	1,264	5,893	1,164	8,253	1,487	7,394	1,326	8,620	1,532	7,893	1,344	9,152	1,558	9,053	1,516	10,506	1,733	11,024	1,788	11,749	1,882	11,777	1,878	10,734	1,921	2.28%
Polk	19,036	729	24,190	877	28,655	1,000	36,790	1,221	37,322	1,204	34,914	1,110	38,102	1,215	37,402	1,182	41,300	1,286	39,969	1,231	41,453	1,257	39,129	1,172	39,340	1,165	37,985	1,116	39,552	1,060	-5.06%
Sherman	876	903	804	825	987	1,028	1,092	1,138	1,031	1,057	1,306	1,375	1,552	1,677	1,243	1,308	1,244	1,310	961	1,022	1,021	1,095	1,219	1,314	1,478	1,604	1,222	1,335	1,190	1,349	1.02%
Tillamook	9,940	893	13,488	1,168	15,212	1,271	15,063	1,249	17,807	1,466	18,324	1,490	18,405	1,496	19,538	1,569	20,813	1,668	21,437	1,701	24,988	1,958	25,952	2,008	26,046	1,999	22,600	1,730	22,373	1,771	2.41%
Umatilla	41,059	1,461	47,273	1,616	51,388	1,709	52,484	1,700	57,952	1,801	59,854	1,861	61,143	1,894	62,530	1,936	64,978	1,977	57,622	1,750	65,980	2,011	66,763	2,033	66,601	2,045	65,260	2,002	66,345	1,940	-3.11%
Union	12,866	1,069	16,010	1,287	14,676	1,181	15,610	1,266	18,311	1,492	20,051	1,633	19,065	1,550	19,509	1,583	19,900	1,602	19,401	1,555	14,801	1,179	19,923	1,578	19,055	1,503	17,207	1,351	17,841	1,382	2.32%
Wallowa	6,801	1,876	7,104	1,905	4,024	1,076	4,526	1,233	4,655	1,284	4,393	1,237	5,542	1,550	5,456	1,526	5,134	1,436	5,323	1,493	5,009	1,403	4,692	1,316	4,221	1,187	3,953	1,114	2,990	854	-23.34%
Wasco	16,760	1,494	16,145	1,415	17,480	1,508	17,997	1,538	18,118	1,519	17,884	1,481	18,387	1,548	18,120	1,539	18,983	1,589	21,354	1,784	22,089	1,835	22,250	1,845	21,387	1,770	19,033	1,571	18,196	1,442	-8.21%
Wheeler	758	1,053	763	972	763	930	359	458	596	769	461	595	497	641	509	657	583	752	453	584	512	655	555	707	446	567	409	517	427	593	14.87%
Yamhill	52,199	1,490	57,130	1,546	48,909	1,241	68,901	1,659	67,141	1,558	65,022	1,493	67,617	1,533	67,010	1,508	71,183	1,583	77,313	1,699	99,934	2,163	104,150	2,221	90,790	1,910	71,663	1,493	68,961	1,376	-7.88%
Rounding adj.																															
OR. TOTALS	**2,263,099**	**1,513**	**2,312,669**	**1,483**	**2,497,170**	**1,539**	**2,695,903**	**1,609**	**2,778,463**	**1,617**	**2,635,072**	**1,518**	**2,723,365**	**1,554**	**2,796,787**	**1,579**	**2,923,462**	**1,632**	**3,026,457**	**1,667**	**3,235,828**	**1,754**	**3,248,126**	**1,734**	**2,890,503**	**1,525**	**2,583,811**	**1,352**	**2,515,646**	**1,311**	**-2.99%**
change in total from previous year			1.41%		5.72%		2.39%		-0.37%		-5.16%		3.35%		2.70%		4.53%		3.52%		6.92%		0.38%		-11.01%		-10.61%		-2.64%		
change in per capita from previous year				-0.57%		3.68%		0.92%		-1.62%		-6.12%		2.37%		1.63%		3.33%		2.13%		5.21%		-1.09%		-12.08%		-11.37%		-2.99%	

Data from 1993, 1995, 1997 and 1999 is not shown due to page formatting. Please contact DEQ directly for data from these years.

Certain recoverable materials in mixed waste burned at the waste-to-energy facility in Brooks are included in Marion County and Statewide disposal in years prior to 2001 but excluded in 2001 and subsequent years (per ORS 459A.010(3)(f)(B)).

Table 7: Oregon Solid Waste Generated by Wasteshed, 1992-2010

Wasteshed	1992 Generated (tons)	Per Capita (lbs.)	1994 Generated (tons)	Per Capita (lbs.)	1996 Generated (tons)	Per Capita (lbs.)	1998 Generated (tons)	Per Capita (lbs.)	2000 Generated (tons)	Per Capita (lbs.)	2001 Generated (tons)	Per Capita (lbs.)	2002 Generated (tons)	Per Capita (lbs.)	2003 Generated (tons)	Per Capita (lbs.)	2004 Generated (tons)	Per Capita (lbs.)	2005 Generated (tons)	Per Capita (lbs.)	2006 Generated (tons)	Per Capita (lbs.)	2007 Generated (tons)	Per Capita (lbs.)	2008 Generated (tons)	Per Capita (lbs.)	2009 Generated (tons)	Per Capita (lbs.)	2010 Generated (tons)	Per Capita (lbs.)	Change in Per Capita 2010-09
Baker	9,401	1,186	9,911	1,207	14,540	1,748	15,310	1,820	15,466	1,847	14,805	1,773	16,422	1,967	16,123	1,954	15,138	1,829	16,490	1,999	16,552	2,010	16,295	1,983	16,339	1,986	15,457	1,879	17,486	2,161	14.98%
Benton	80,241	2,339	67,640	1,900	81,192	2,220	77,508	2,099	82,323	2,250	87,186	2,365	88,803	2,383	88,227	2,370	97,941	2,593	97,174	2,544	98,668	2,543	93,400	2,374	92,885	2,347	82,908	2,081	83,386	2,107	1.23%
Clatsop	27,411	1,600	35,063	1,992	35,789	2,027	39,228	2,204	42,075	2,357	43,317	2,416	45,115	2,499	46,825	2,580	48,230	2,650	58,423	3,189	57,701	3,115	55,903	2,986	57,513	3,051	48,900	2,585	48,504	2,617	1.25%
Columbia	23,025	1,187	23,547	1,181	28,908	1,397	32,256	1,511	33,562	1,536	37,247	1,681	34,961	1,568	38,891	1,728	36,779	1,611	41,291	1,787	42,482	1,809	47,964	2,017	43,381	1,804	37,366	1,544	38,320	1,550	0.44%
Coos	47,631	1,534	50,536	1,598	51,409	1,620	51,339	1,624	51,083	1,627	48,786	1,550	54,174	1,729	55,133	1,750	58,825	1,876	60,259	1,922	64,232	2,042	61,621	1,955	60,794	1,924	52,038	1,650	57,175	1,814	9.92%
Crook	9,959	1,297	8,175	993	13,802	1,586	16,499	1,799	19,056	1,975	18,912	1,905	23,082	2,285	19,705	1,941	21,537	2,086	23,455	2,060	27,642	2,254	27,871	2,153	23,697	1,765	19,839	1,460	20,867	1,985	36.03%
Curry	13,418	1,350	15,490	1,496	17,132	1,632	17,169	1,633	25,031	2,361	24,460	2,270	28,086	2,643	27,210	2,579	27,794	2,628	26,574	2,508	26,663	2,496	28,036	2,611	24,631	2,290	21,317	1,998	21,332	1,908	-4.47%
Deschutes	85,387	2,025	129,210	2,818	133,618	2,676	149,622	2,783	161,006	2,762	169,793	2,782	176,464	2,790	188,785	2,893	206,889	3,055	223,211	3,111	257,589	3,376	252,889	3,145	206,676	2,475	192,654	2,257	177,113	2,243	-0.61%
Douglas	114,507	2,386	120,984	2,479	118,269	2,372	123,845	2,464	120,841	2,405	129,362	2,556	120,657	2,382	123,906	2,434	134,691	2,632	137,793	2,678	135,041	2,602	139,929	2,674	128,246	2,437	107,424	2,039	117,263	2,178	6.83%
Gilliam	1,049	1,213	1,328	1,476	1,459	1,577	1,615	1,718	1,929	2,031	1,874	1,972	1,877	1,976	2,629	2,768	2,348	2,471	2,377	2,515	2,654	2,816	2,327	2,469	2,567	2,725	2,842	3,015	3,136	3,354	11.21%
Grant	5,089	1,295	5,501	1,384	4,179	1,040	3,784	932	4,232	1,065	4,687	1,202	5,248	1,354	4,670	1,221	4,942	1,275	5,898	1,535	4,973	1,304	5,546	1,463	5,269	1,400	4,896	1,301	5,001	1,341	3.02%
Harney	3,249	927	3,227	893	2,804	779	2,715	732	3,966	1,044	3,968	1,044	3,989	1,050	3,782	1,036	3,859	1,009	4,288	1,119	4,163	1,086	4,782	1,245	4,653	1,208	4,002	1,038	4,275	1,148	10.68%
Hood River	11,814	1,352	12,817	1,395	19,349	2,004	18,043	1,815	19,144	1,868	21,914	2,128	23,696	2,317	25,071	2,446	26,742	2,541	27,107	2,560	27,820	2,608	28,330	2,639	26,514	2,452	25,438	2,342	24,174	2,160	-7.77%
Jackson	115,135	1,486	166,517	2,037	175,303	2,054	207,881	2,355	229,001	2,514	224,228	2,428	244,148	2,603	259,747	2,747	268,180	2,805	268,735	2,763	275,210	2,771	264,484	2,615	235,967	2,299	222,759	2,152	244,690	2,407	11.83%
Jefferson	6,082	815	10,218	1,251	11,047	1,272	13,048	1,418	13,550	1,415	14,892	1,536	14,804	1,492	13,433	1,350	18,840	1,861	20,451	1,986	19,892	1,858	22,380	2,032	18,460	1,644	14,593	1,285	17,690	1,627	26.60%
Josephine	55,513	1,696	46,861	1,351	57,560	1,592	68,538	1,842	80,567	2,119	75,992	1,978	88,715	2,285	89,937	2,296	97,738	2,487	99,328	2,494	108,110	2,665	95,947	2,329	92,402	2,219	78,564	1,878	82,377	1,990	5.98%
Klamath	66,074	2,251	71,448	2,358	78,044	2,512	75,714	2,394	78,689	2,463	69,799	2,174	83,048	2,573	76,532	2,369	88,027	2,717	103,214	3,173	108,965	3,329	99,143	3,013	107,559	3,251	79,908	2,409	70,509	2,120	-11.97%
Lake	4,633	1,269	6,456	1,735	8,069	2,163	6,914	1,874	4,426	1,188	5,763	1,536	5,418	1,454	6,575	1,777	6,520	1,739	6,952	1,853	7,011	1,860	7,742	2,047	8,549	2,254	6,998	1,841	8,140	2,063	12.05%
Lane	374,767	2,565	370,116	2,456	393,153	2,534	433,666	2,721	472,737	2,919	446,994	2,743	460,732	2,808	474,573	2,881	473,892	2,843	509,990	3,035	529,946	3,120	512,611	2,988	468,797	2,711	413,905	2,381	464,879	2,641	10.94%
Lincoln	34,487	1,693	41,432	1,930	50,266	2,259	51,543	2,299	52,598	2,359	53,963	2,418	55,837	2,498	56,354	2,505	61,048	2,750	68,988	3,107	68,566	3,080	72,615	3,254	69,231	3,097	57,810	2,587	57,741	2,503	-3.23%
Linn	111,875	2,282	88,292	1,750	102,707	1,962	110,438	2,064	117,531	2,163	106,981	1,964	116,309	2,123	114,069	2,053	131,779	2,338	144,268	2,536	149,917	2,608	137,913	2,375	131,181	2,236	138,645	2,347	143,565	2,322	-1.08%
Malheur	17,098	1,233	18,091	1,258	23,583	1,565	25,714	1,652	28,550	1,798	28,199	1,762	30,217	1,889	28,303	1,769	29,541	1,855	30,226	1,901	30,155	1,901	31,197	1,973	29,445	1,859	26,044	1,642	27,002	1,723	4.92%
Marion	213,943	1,768	267,999	2,106	304,913	2,293	341,219	2,466	356,130	2,489	386,007	2,678	402,741	2,770	398,785	2,697	428,776	2,875	481,723	3,191	509,383	3,324	499,004	3,210	456,613	2,902	419,207	2,637	413,717	2,621	-0.59%
Metro	1,460,380	2,341	1,613,599	2,478	1,849,716	2,719	2,108,504	2,991	2,178,198	3,001	2,248,748	3,065	2,219,380	2,991	2,374,200	3,157	2,517,960	3,308	2,666,020	3,454	2,694,802	3,435	2,710,982	3,403	2,457,886	3,045	2,194,860	2,690	2,142,056	2,605	-3.18%
Milton-Freew.	5,551	1,972	5,814	1,983	5,518	1,823	6,896	2,122	6,346	1,954	6,368	1,942	6,876	2,132	7,051	2,170	7,767	2,390	7,335	2,243	7,961	2,418	7,631	2,330	8,368	2,312	6,640	1,834	8,115	2,135	16.46%
Morrow	8,151	1,990	6,507	1,486	6,725	1,445	7,120	1,406	9,681	1,744	8,758	1,571	10,229	1,818	9,834	1,674	11,396	1,940	10,530	1,763	13,380	2,207	14,992	2,431	15,618	2,502	15,325	2,444	13,754	2,462	0.71%
Polk	23,909	916	31,794	1,153	35,442	1,237	49,985	1,659	55,322	1,785	57,464	1,827	61,886	1,973	65,411	2,067	73,818	2,298	80,085	2,466	79,527	2,412	72,967	2,185	74,168	2,197	70,186	2,062	72,660	1,947	-5.61%
Sherman	1,146	1,181	1,006	1,032	1,252	1,304	1,302	1,356	1,248	1,280	1,540	1,621	1,795	1,940	1,482	1,560	1,676	1,765	1,143	1,216	1,254	1,344	1,458	1,572	1,734	1,882	1,425	1,558	1,344	1,523	-2.20%
Tillamook	14,458	1,300	18,645	1,614	20,458	1,709	20,435	1,695	23,981	1,974	25,437	2,068	25,458	2,070	26,625	2,139	34,015	2,727	33,987	2,697	37,542	2,941	37,387	2,893	38,040	2,920	31,870	2,439	32,520	2,575	5.55%
Umatilla	47,700	1,698	55,811	1,908	63,843	2,123	69,433	2,249	78,067	2,426	82,951	2,579	94,570	2,930	94,026	2,911	101,445	3,086	90,705	2,755	101,475	3,094	105,165	3,202	107,218	3,292	95,566	2,932	93,954	2,747	-6.30%
Union	15,391	1,279	20,339	1,635	19,879	1,599	21,458	1,740	23,373	1,904	25,629	2,087	26,318	2,140	26,288	2,133	27,404	2,206	26,729	2,143	22,319	1,778	29,102	2,305	27,157	2,142	24,327	1,910	25,001	1,937	1.42%
Wallowa	7,234	1,996	7,945	2,130	4,528	1,211	5,373	1,464	5,874	1,620	5,438	1,531	6,867	1,921	6,461	1,807	6,294	1,760	6,610	1,854	6,440	1,804	6,459	1,812	5,559	1,563	5,164	1,455	3,709	1,059	-27.21%
Wasco	22,202	1,980	21,897	1,919	24,999	2,156	26,151	2,234	27,312	2,290	24,124	1,998	25,636	2,159	26,166	2,222	25,162	2,106	28,138	2,351	27,220	2,262	28,900	2,396	27,932	2,311	28,269	2,333	25,276	2,003	-14.15%
Wheeler	817	1,135	861	1,097	948	1,156	478	608	696	898	528	681	665	857	696	898	692	893	689	889	673	860	759	967	611	777	512	646	465	646	0.02%
Yamhill	64,049	1,829	76,504	2,070	75,024	1,904	100,144	2,411	120,689	2,800	128,043	2,940	148,408	3,365	116,159	2,614	142,839	3,177	139,640	3,068	163,951	3,549	161,965	3,453	140,989	2,967	118,785	2,475	118,696	2,368	-4.34%
OR. TOTALS	**3,102,776**	**2,075**	**3,431,581**	**2,200**	**3,835,427**	**2,364**	**4,300,887**	**2,568**	**4,544,280**	**2,645**	**4,634,157**	**2,670**	**4,752,627**	**2,712**	**4,913,666**	**2,775**	**5,240,525**	**2,926**	**5,549,824**	**3,057**	**5,729,878**	**3,105**	**5,685,695**	**3,036**	**5,216,649**	**2,752**	**4,666,442**	**2,441**	**4,685,889**	**2,442**	**0.05%**
change in total from previous year			5.42%		5.84%		5.02%		2.93%		1.98%		2.56%		3.39%		6.65%		5.90%		3.24%		-0.77%		-8.25%		-10.55%		0.42%		
change in per capita from previous year				3.36%		3.81%		3.52%		1.65%		0.95%		1.57%		2.32%		5.43%		4.48%		1.59%		-2.23%		-9.35%		-11.31%		0.05%	

Data from 1993, 1995, 1997 and 1999 is not shown due to page formatting. Please contact DEQ directly for data from these years.

Table 8: Oregon Materials Recovered, 1992-2010

Material Type	1992 Tons	1994 Tons	1996 Tons	1998 Tons	2000 Tons	2001 Tons	2002 Tons	2003 Tons	2004 Tons	2005 Tons	2006 Tons	2007 Tons	2008 Tons	2009 Tons	2010 Tons
Container glass	69,284	73,512	77,231	78,492	87,889	83,240	90,476	89,199	92,204	94,670	95,946	96,926	100,496	108083.714	107,830
Other glass	41	6,030	1,557	365	1,578	9,530	4,358	4,052	2,827	106	673	901	999	709	867
Total glass	**69,325**	**79,542**	**78,788**	**78,857**	**89,467**	**92,770**	**94,833**	**93,251**	**95,030**	**94,776**	**96,619**	**97,827**	**101,496**	**108,793**	**108,697**
Aluminum	18,245	16,805	17,815	16,734	18,209	20,511	17,428	14,671	17,871	20,453	21,521	26,932	32,888	30,673	38,495
Scrap metal	26,927	33,699	45,271	114,084	165,728	223,623	228,723	261,119	375,464	477,513	339,723	361,152	354,908	332,781	368,249
Tinned cans/aluminum					14,779	23,387	16,240	11,616	14,575	0	0	0	0	0	0
Tinned cans	7,400	8,557	8,635	8,745	0	0	0	0	0	8,719	8,399	10,174	9,177	9,003	8,890
Aerosol cans	0	0	0	8	0	0	0	0	1	1	1	1	1	1	0.4
Total metals	**52,572**	**59,061**	**71,722**	**139,570**	**198,716**	**267,521**	**262,390**	**287,406**	**407,910**	**506,686**	**369,644**	**398,260**	**396,975**	**372,458**	**415,634**
Cardboard/kraft paper	204,729	251,559	304,093	321,501	310,776	332,876	381,027	388,427	368,668	392,774	440,813	444,449	429,703	367536.277	368,602
Paper Fiber[6]	0	0	0	0	0	0	0	0	0	0	0	348,250	344,119	259625.629	269,353
High-grade paper[6]	67,077	35,401	49,298	69,449	54,358	62,185	41,659	57,418	56,307	39,847	47,324	0	0	0	0
Magazines	11,246	11,911	17,250	26,342	8,375	0	0	0	0	0	0	0	0	0	0
Phone books[1]	0	1,799	3,103	2,368	2,881	0	0	0	0	0	0	0	0	0	0
Mixed waste paper[6]	24,012	38,770	53,771	78,863	91,559	81,418	46,203	51,553	28,820	29,147	39,347	0	0	0	0
Newspaper[6]	130,181	143,911	141,412	154,014	187,108	203,021	211,082	235,959	260,151	268,585	263,193	0	0	0	0
Fiber-based fuel			9,235	0	0	0	0	0	0	0	0	0	0	0	0
Total papers	**437,245**	**483,352**	**578,161**	**652,536**	**655,057**	**679,499**	**679,971**	**733,357**	**713,946**	**730,353**	**790,677**	**792,699**	**773,822**	**627,162**	**637,956**
#1 PET beverage	3,329	4,392	5,803	5,142	0	0	0	0	0	0	0	0	0	0	0
#1 other	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0
#2 milk jugs	1,940	4,289	3,049	2,361	0	0	0	0	0	0	0	0	0	0	0
#2 other	1,841	976	1,331	572	0	0	0	0	0	0	0	0	0	0	0
#3 PVC	25	5	144	1	0	0	0	0	0	0	0	0	0	0	0
#4 LDPE	1,196	3,843	2,501	988	0	0	0	0	0	0	0	0	0	0	0
#5	360	157	283	51	0	0	0	0	0	0	0	0	0	0	0
#6	471	292	430	280	0	102	0	0	0	0	0	0	0	0	0
Composite plastic	0	497	1,077	2,364	863	1,095	723	745	272	370	2,004	1,539	1,784	1,823	1,964
Mixed plastic	300	584	1,708	6,173	0	0	0	0	0	0	0	0	0	0	0
Other plastic (P7)	0	13	12	1	0	0	0	0	0	0	0	0	0	0	0
Plastic bottles[2]					0	0	0	0	0	0	0	0	0	0	0
Plastic film					3,969	4,825	6,724	6,927	6,581	11,297	11,594	9,625	10,739	11,327	12,839
Plastic other					3,718	2,005	3,771	3,365	4,287	8,193	9,426	9,500	9,302	9,299	9,019
Rigid plastic containers					15,672	16,352	12,430	15,211	14,297	16,047	19,439	21,990	19,790	23376.793	28,599
Total plastic	**9,520**	**15,049**	**16,338**	**17,933**	**24,222**	**24,380**	**23,647**	**26,248**	**25,437**	**35,907**	**42,463**	**42,655**	**41,615**	**45,826**	**52,421**
Antifreeze	5	11	52	188	424	1,864	2,181	1,387	2,307	2,871	3,085	2,683	2,720	2,515	6,762
C & D -- roofing[7]				5,914	25,162	28,904	19,846	20,159	9,770	11,852	10,072	5,980	3,885	7829.882	15,803
Carpeting -- used				304	919	1,064	540	355	696	784	0	645	300	515	1,641
Diesel							20	0	9	16	151	156	152	145	33
Electronics					617	1,640	2,216	2,023	3,350	3,790	6,345	9,813	10,513	15,174	17,587
Fluorescent lamps	0	15	7	91	21	267	263	312	232	374	453	514	451	400	620
Gypsum wallboard	3,695	6,726	9,419	8,501	5,300	13,164	3,781	5,209	3,891	3,121	4,174	2,655	3,126	3,338	3,261
Household Haz Waste					14	12	105	92	28	106	143	157	305	436	452
Alkaline batteries						4	26	44	0	0	0	0	0	0	0
Mixed batteries									75	154	120	204	188	218	244
Lead acid batteries[3]	176	417	559	739	1,184	10,134	12,614	6,673	18,483	12,861	15,509	12,906	14,602	13,794	15,305
Lithium batteries							1	0	1	0	0	0	0	0	0
NiCad batteries				9	0	18	32	17	27	0	0	0	0	0	0
Old broken crayons	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Paint[5]	120	153	489	298	555	1,403	1,586	1,972	1,958	2,366	1,434	1,730	1,141	1,308	1,931
Porcelain	0	13	5	5	0	483	694	254	8	227	307	1,258	553	590	327
Rubber tire buffings[4]	0	2,698	2,935	0	0	0	0	0	0	0	0	0	0	0	0
Scrap film (X-ray)	42	58	68	36	21	0	0	74	0	0	0	0	0	0	0
Solvents[5]	16	6	110	290	188	248	223	217	249	280	261	274	526	237	312
Textiles			508	3,198	4,033	3,762	4,527	4,279	4,370	3,620	1,819	1,519	1,244	958	936
Tires[5]	34,392	30,454	24,360	20,782	16,420	17,339	23,423	20,432	24,315	27,293	21,931	20,045	25,091	23,264	20,834
Used Motor Oil[5]	28,796	49,769	47,632	44,567	44,114	45,675	48,225	43,580	50,439	55,466	52,837	43,123	43,871	40,513	31,443
Total other	**67,243**	**90,320**	**86,145**	**84,920**	**98,969**	**125,979**	**120,302**	**107,080**	**120,207**	**125,181**	**118,640**	**103,662**	**108,668**	**111,235**	**117,489**
Animal waste/grease	0	22,986	22,957	22,897	25,670	26,226	32,805	30,160	17,392	22,537	15,928	13,783	14,512	12,853	11,907
Food waste	0	2,000	5,000	3,590	3,486	9,685	12,339	14,937	13,008	9,644	12,430	16,407	21,475	21,949	39,402
Wood waste[5]	112,425	157,881	243,773	326,688	360,819	424,569	402,799	420,889	444,017	449,791	503,967	460,896	371,531	307004.664	340,794
Yard debris[5]	91,348	208,722	235,562	278,750	309,407	348,472	400,174	403,552	480,117	548,493	543,683	511,380	496,052	475350.761	445,944
Total organics	**203,773**	**391,589**	**507,292**	**631,925**	**699,382**	**808,951**	**848,117**	**869,538**	**954,533**	**1,030,465**	**1,076,008**	**1,002,466**	**903,570**	**817,157**	**838,047**
Adj. rounding/unspecified			2		1	-1	0	0							
OREGON TOTALS	**839,678**	**1,118,913**	**1,338,446**	**1,605,741**	**1,765,814**	**1,999,099**	**2,029,261**	**2,116,880**	**2,317,064**	**2,523,367**	**2,494,050**	**2,437,569**	**2,326,146**	**2,082,631**	**2,170,243**

[1] Phone books included in mixed waste paper in 1992, 1993 and 2001 and subsequent years.

[2] About 900 tons of plastic bottles was included with mixed plastics in the 1995 survey.

[3] Includes only batteries collected at household hazardous waste collection events until 2001.

[4] From 1998 rubber tire buffings were included with tires.

[5] Includes Marion Co. materials in 2001 and subsequent years burned for energy.

[6] In 2007 and subsequent years, Mixed Waste Paper, Hi Grade & Newspaper was combined into Paper Fiber

[7] Asphalt Roofing was included as burned for energy only in years 2001-2006

Data from 1993, 1995, 1997 and 1999 is not shown due to page formatting. Please contact DEQ directly for data from these years.

Table 9: Disposition of Recovered Materials, 2010

Wasteshed	Total Recovered	Recycled	% of Total	Energy Recovery	% of Total	Compost	% of Total	Stock
Baker	3,793	2,870	76%	139	4%	756	20%	28
Benton	32,912	19,042	58%	1,349	4%	12,502	38%	19
Clatsop	17,468	8,984	51%	6,462	37%	2,014	12%	8
Columbia	13,704	8,769	64%	1,129	8%	3,792	28%	14
Coos	22,600	14,058	62%	7,364	33%	1,149	5%	29
Crook	7,007	5,213	74%	1,369	20%	417	6%	7
Curry	4,349	4,137	95%	201	5%	3	0%	8
Deschutes	62,083	46,740	75%	3,996	6%	11,315	18%	32
Douglas	42,215	28,705	68%	12,642	30%	838	2%	30
Gilliam	881	819	93%	60	7%	0	0%	3
Grant	1,105	1,020	92%	60	5%	0	0%	25
Harney	1,122	995	89%	49	4%	66	6%	11
Hood River	6,392	5,676	89%	244	4%	440	7%	32
Jackson	102,925	62,067	60%	20,484	20%	20,337	20%	36
Jefferson	7,303	6,819	93%	138	2%	342	5%	4
Josephine	33,109	19,401	59%	3,884	12%	9,786	30%	38
Klamath	20,576	14,753	72%	4,276	21%	1,472	7%	74
Lake	2,215	2,087	94%	33	1%	87	4%	8
Lane	238,891	138,879	58%	45,203	19%	54,692	23%	117
Lincoln	18,809	12,015	64%	6,642	35%	138	1%	14
Linn	62,976	37,501	60%	13,082	21%	12,364	20%	29
Malheur	6,289	5,687	90%	459	7%	109	2%	34
Marion	207,794	120,721	58%	34,343	17%	52,646	25%	84
Metro	1,112,742	696,412	63%	175,752	16%	239,322	22%	1,255
Milton-Freewater	2,216	1,523	69%	149	7%	541	24%	2
Morrow	3,020	2,991	99%	29	1%	0	0%	1
Polk	33,108	25,159	76%	749	2%	7,183	22%	16
Sherman	154	147	95%	5	3%	0	0%	3
Tillamook	10,147	8,378	83%	1,623	16%	141	1%	5
Umatilla	27,609	22,952	83%	3,740	14%	901	3%	16
Union	7,160	4,648	65%	671	9%	1,836	26%	4
Wallowa	719	491	68%	16	2%	116	16%	95
Wasco	7,079	5,772	82%	337	5%	932	13%	39
Wheeler	38	21	57%	11	28%	0	0%	6
Yamhill	49,734	23,416	47%	6,816	14%	19,479	39%	23
Total	**2,170,243**	**1,358,867**	**63%**	**353,508**	**16%**	**455,722**	**21%**	**2,146**

Appendix I: Methodology

Data Sources

In 2010, DEQ collected recycling and disposal data from:

- 243 private companies handling recycled materials, including buy-back centers, intermediate processors, material recovery facilities, yard debris composting facilities, beer and soft drink distributors, and end users
- 174 collection service providers
- 10 scrap metal dealers
- 38 disposal sites handling municipal and construction and demolition wastes.

Data Collection and Management

Recyclers and collection service providers who directly collect material in each county were surveyed. However, since it is not practical to identify and survey each individual generator of recyclable materials (such as all the retail stores in the state), DEQ also surveyed material processors and end users. Survey recipients were asked to return the completed surveys to DEQ by February 28, 2011. Metro-area and individual county wasteshed collection service provider forms were reviewed by Metro and local government staff for completeness and accuracy before being forwarded to DEQ. As surveys were received, DEQ staff checked the data for completeness, and in many instances, verified information by calling the survey respondent. Once approved, the data was entered into a database, and a number of quality control checks were performed. The two most important checks were:

Comparing information from different sources. For example, often collectors report sending more material to recyclers (or end users) than the recyclers report receiving. This issue is usually resolved by calling the receiving recycler or both the recycler and the collector to determine the source of the discrepancy. When a discrepancy cannot be resolved by talking to the involved recyclers and collectors, the information provided by the end user is used in most cases.

Examining per capita recycling calculations for unlikely results. For example, occasionally more material is reported as recovered than would be expected in a county, based on estimates using population. This issue is resolved by determining which survey respondents reported collecting or handling the material for the county in question, looking for unlikely results in their reports, and calling the involved recyclers and collectors. Problems in the units of measurement used sometimes cause these anomalies.

Quality of Data

This is the nineteenth year DEQ has collected recovery and waste generation rate data. Many companies who report have set up their own record-keeping mechanisms to help them provide complete, accurate, and timely data. However, each year DEQ staff encounter problems with reported data that need to be resolved. For example, the 2010 surveys included instances of materials being improperly reported as r**ecycled** rather than **disposed**, and numerous of double counts by multiple branches of the same company. Other errors in reporting include composted materials and material burned for energy reported as **recycled**. Some reporters provided good data on materials they have traditionally handled, but failed to report on new additions, such as scrap electronics. Other companies did not include data for all facilities they operate or failed to submit a survey form.

Double Counting of Materials

The processing and handling chain for each recyclable material is varied and complex – it can involve multiple companies handling the same material. In addition, DEQ determines recovery rates for individual wastesheds as well as the state as a whole. The potential for double counting of materials in this process is a

major issue. For example, companies collecting materials, processors who purchase the materials from the collectors, and markets and end users of materials are all surveyed and report on the same materials. Having information on where each collector or recycler sells their material allows DEQ to eliminate the double counting of that material. DEQ's database is designed to track materials transferred from collector to recycler, collector to collector, or recycler to recycler, accounting for each material a company sold to an intermediate processor, while at the same time keeping track of the county of origin for that material. Thus, no matter where a material is ultimately recycled, composted, or burned for energy, DEQ can give proper credit to the wasteshed of origin.

Commingled Collection

Many areas of Oregon collected commingled recyclable materials. A dual stream system is used – glass is kept separate from the other mixed materials. This material is sent to processors or material recovery facilities. These were asked to complete an additional commingled survey form. The added information details the individual materials that are sorted out of the commingled collection material mix.

DEQ combines the received commingled amounts into one type – Commingled All. The MRF receipt and sorting data is used to apply back to the companies that collect and transfer commingled materials to the MRFs. The individual materials sorted from the Commingled All collections are allocated back to the collecting wasteshed. These allocations are based on sorting estimates of for individual materials. All areas sending materials to one processor receive the same sorting percentage allocation which may not exactly match the actual collections percentages of their commingled mix. The sorted data integrity is "homogenized" and so a bit weakened. To further complicate material tracking, some commingled materials now pass through a transfer operation in-between the collection service provider and MRF. The difficulty in identifying specific materials in mixes is an unfortunate outcome of collecting and transferring recyclables in commingled packs. However, the volume of collected materials is greatly increased by this collection method.

Disposal Data

Information on disposal tonnage comes from annual or quarterly reports filed with DEQ by disposal sites for fee collection purposes. Disposal sites report **counting** waste by county and this amount is used in the recovery rate calculation.[4] "Counting" waste includes municipal solid waste as well as construction and demolition wastes such as wood waste, asphalt roofing, carpet pad, upholstery foam, and gypsum wallboard. Also included in the counting disposal tonnage is animal waste and grease and tires. The following **non-counting waste** is excluded from this survey: industrial waste from manufacturing processes; sewage sludge; asbestos; petroleum-contaminated soil; and inert waste (full loads only) such as rock and gravel, dirt, concrete, brick, and asphalt paving.

[4]The Yamhill County disposal display is an estimated amount. The quarterly disposal reports showed an unexplained drop in municipal solid waste disposed. DEQ estimated the 2010 amount by using the 2009 disposal amount and reducing it by the same percentage that the entire state's disposed amount fell. DEQ continues to investigate this and will correct the Yamhill disposal tonnage as soon as possible.

Appendix II: Respondents to the 2010 Material Recovery Survey

PRIVATE RECYCLING Survey Respondents

A&P RECYCLING
The Dalles, OR

ACCESS INFORMATION MANAGEMENT
Eugene, OR

ADVANCED M & D SALES
Portland, OR

AGRIPLAS INC
Keizer, OR

ALBERTSONS DISTRIBUTION CENTER
Portland, OR

ALLWOOD RECYCLING
Fairview, OR

AMERICAN RAG AND METAL
Portland, OR

ANKMAR, LLC
Sweet Home, OR

ARMSTRONG WORLD IND INC
St Helens, OR

ASH GROVE CEMENT
Durkee, OR

ASTORIA LIONS CLUB
Astoria, OR

ASTORIA WAREHOUSING
Astoria, OR

BAKER COMMODITIES
Seattle, WA

BAR 7A TRUCKING
Redmond, OR

BATTERY SYSTEMS OF MEDFORD
Medford, OR

BEAVER BARK, INC
Scappoose, OR

BEND METRO PARKS & RECREATION DIST
Bend, OR

BEST BUY IN TOWN
Hillsboro, OR

BIO-MASS-ONE, LP
White City, OR

BLUE GOOSE RECYCLING
Weston, OR

BLUE HERON NEWSPRINT CO
Oregon City, OR

BOISE CASCADE
St. Helens, OR

BON APPETIT MGMT CO
Portland, OR

BRING RECYCLING
Eugene, OR

BUREAU OF LAND MANAGEMENT
Vale, OR

CALBAG METALS CO
Portland, OR

CAROTHERS TIRE
Hillsboro, OR

CASCADE AUTO RECYCLERS
Grants Pass, OR

CHERRY CITY METALS
Salem, OR

CINTAS DOCUMENT MANAGEMENT
Portland, OR

CITY OF COTTAGE GROVE
Cottage Grove, OR

CITY OF EUGENE
Eugene, OR

CITY OF FLORENCE
Florence, OR

CITY OF GRANTS PASS
Grants Pass, OR

CITY OF KLAMATH FALLS
Klamath Falls, OR

CITY OF PORTLAND
Portland, OR

CITY OF THE DALLES
The Dalles, OR

CITY RECYCLE, LLC
Portland, OR

CLACKAMAS COMPOST
Tualatin, OR

CLATSOP DISTRIBUTING CO
Astoria, OR

CLAYTON WARD CO
Kennewick, WA

CLAYTON WARD CO
Salem, OR

CLEAN IT UP MARK
Portland, OR

COLUMBIA COUNTY SOLID WASTE
St. Helens, OR

COLUMBIA GORGE PRESS
Hood River, OR

COLUMBIA RECYCLING PDX
Portland, OR

COMPOST OREGON
Aumsville, OR

COMPUTER DRIVE CONNECTION
Cornelius, OR

CONAGRA FOODS
Boardman, OR

D & R DIETRICH & SONS, INC
Vancouver, WA

D.A.D.S. RECYCLING
Vernonia, OR

DAISHOWA AMERICA (NIPPON IND)
Port Angeles, WA

DARLING INTERNATIONAL
Boise, ID

DARLING INTERNATIONAL
Tacoma, WA

DENNIS CARLIN HAULING
Woodburn, OR

DENTON PLASTICS INC
Portland, OR

DEPARTMENT OF ENVIRONMENTAL QUALITY
Portland, OR

DUFUR LIONS CLUB
Dufur, OR

EARTH CYCLE
Grants Pass, OR

EAST OREGON PLASTICS
Baker City, OR

EC RESTAURANT SERVICES
Harrisburg, OR

ECHANIS DISTRIBUTING CO
Ontario, OR

ECOSORT
Eugene, OR

ECS REGENESYS
Medford, OR

EMERALD SERVICES
Tacoma, WA

ENVIRONMENTAL FIBERS INTERNATIONAL
Portland, OR

ENVIRONMENTAL PROTECTION SERVICES INC
Brooks, OR

ENVIRONMENTALLY CONSCIOUS RECYCLING
Portland, OR

EPSON
Hillsboro, OR

ERICKSONS SENTRY MARKET
Burns, OR

ETECH
Hillsboro, OR

EUGENE MISSION
Eugene, OR

EXIDE TECHNOLOGIES
Portland, OR

FAR WEST FIBERS
Portland, OR

FRED MEYER
Clackamas, OR

FRED MEYER
Portland, OR

FREE GEEK
Portland, OR

FULL SAIL BREWERY
Hood River, OR

GARDNER ENTERPRISES INC
John Day, OR

GARTEN FOUNDATION
Salem, OR

GARY GRUNER CHEVROLET
Madras, OR

GEORGIA PACIFIC CORP
Halsey, OR

GEORGIA PACIFIC CORP
Toledo, OR

GODFREY & YEAGER EXCAVATING
Coos Bay, OR

GOING GREEN RECYCLING
Roseburg, OR

GOODWILL INDUSTRIES
Eugene, OR

GOODWILL INDUSTRIES
Portland, OR

GORGE SECURITY SHRED
Hood River, OR

GOSPEL RESCUE MISSION
Grants Pass, OR

GRAF PAPER SALVAGE
Portland, OR

GREENWAY RECYCLING
Portland, OR

GRIMMS FUEL CO
Tualatin, OR

HANKE'S RECYCLING
Portland, OR

HI-SCHOOL PHARMACY
Vancouver, WA

HILTON FUEL
Central Point, OR

HINES NURSERY
Forest Grove, OR

HOOD RIVER COUNTY
Hood River, OR

HOOD RIVER LIONS
Hood River, OR

HOOKER CREEK CO
Bend, OR

INTERNATIONAL PAPER
Beaverton, OR

INTERNATIONAL PAPER
Eugene, OR

INTERSTATE PLASTICS
Vancouver, WA

IRAS SALES & SERVICE
Madras, OR

IRON MOUNTAIN
Portland, OR

JEFFERSON AVENUE RECYCLERS
LaGrande, OR

JOHNSON CONTROLS
Canby, OR

K&S RECOVERY
Aloha, OR

KB RECYCLING
Canby, OR

KE MCKAYS
Gold Beach, OR

KINGSLEY AIR FIELD
Klamath Falls, OR

KIWANIS CLUB
Tillamook, OR

KNEZ BUILDING MATERIALS
Clackamas, OR

LAKESIDE RECLAMATION
Beaverton, OR

LAKIN TIRES WEST INC
Santa Fe Springs, CA

LANE FOREST PRODUCTS
Eugene, OR

LAURELWOOD FARMS
Gearhart, OR

LES SCHWAB WAREHOUSE CENTER
Prineville, OR

LIFESPAN TECHNOLOGY RECYCLING
Denver, CO

MARION RESOURCE FACILITY
Brooks, OR

MARKET OF CHOICE
Eugene, OR

MCFARLANES BARK INC
Milwaukie, OR

MCGOVERN METALS
Roseburg, OR

MCKENZIE RECYCLING
Eugene, OR

MERLIN PLASTICS
Delta, BC

METRO
Portland, OR

MIC TOTAL RECYCLE
Forest Grove, OR

MONROVIA NURSERY
Dayton, OR

MORROW COUNTY PUBLIC WORKS
Lexington, OR

MYERS CONTAINER CORPORATION
Portland, OR

NATURES NEEDS
North Plains, OR

NEXT STEP RECYCLING
Eugene, OR

NORPAC
Longview, WA

NORTHWEST ENVIRONMENTAL & RECYCLING INC
Cornelius, OR

NORTHWEST GREENLANDS
McMinnville, OR

NORTHWEST POLYMERS
Molalla, OR

NORTHWEST WOOD AND FIBRE RECOVERY INC
Troutdale, OR

OAK LEAF ENTERPRISES
Central Point, OR

OIL RE-REFINING INC
Portland, OR

ON TO TECHNOLOGY
Bend, OR

OREGON BEVERAGE RECYCLING CO-OP
Portland, OR

OREGON COMPUTER RECYCLING, INC
Warrenton, OR

OREGON PALLET
Salem, OR

OREGON RECYCLING SYSTEMS
Portland, OR

OWENS ILLINOIS GLASS CONTAINER INC
Portland, OR

OWYHEE DISTRIBUTING CO INC
Nyssa, OR

P & E DISTRIBUTING CO
Baker City, OR

PACIFIC DISC INC (PACIFIC RUBBER)
Toledo, OR

PACIFIC PALLET
Eugene, OR

PAINT CARE
Clackamas, OR

PALLET DOCTOR
Cornelius, OR

PAPER CHASE RECYCLING
Portland, OR

PENDLETON BOTTLING CO
Pendleton, OR

PEPSI COLA BOTTLING CO
Corvallis, OR

PEPSI COLA BOTTLING CO
Klamath Falls, OR

PEPSI COLA BOTTLING CO
La Grande, OR

PEPSI COLA BOTTLING CO
Medford, OR

PEPSI COLA BOTTLING CO
The Dalles, OR

PHILIP SERVICES CORPORATION
Kent, WA

POLK COUNTY
Dallas, OR

PORT OF BROOKINGS
Brookings, OR

PORTLAND HABILITATION CENTER INC
Portland, OR

PRIDE
Sherwood, OR

PRINCES AUTOMOTIVE
Madras, OR

PROVIDENCE MEDICAL CENTER
Portland, OR

QUALITY COMPOST
Milton-Freewater, OR

QUANTUM RESOURCES
Beaverton, OR

QUICK STOP RECYCLING
Portland, OR

QWEST DEX
Lone Tree, CO

RB RECYCLING
Portland, OR

RB RUBBER
McMinnville, OR

REACH INC
Klamath Falls, OR

RECALL
Kent, WA

RECHARGEABLE BATTERY RECYCLING CORP
Atlanta, GA

RECOLOGY OREGON MATERIAL RECOVERY
Portland, OR

RECYCLE AMERICA
Troutdale, OR

REKLAIM TECHNOLOGIES
Boardman, OR

RESCO PLASTICS INC
Coos Bay, OR

RETRONICS
Portland, OR

REXIUS FOREST BY-PRODUCTS
Eugene, OR

RIMROCK RECYCLING
Burns, OR

RITE AID
Wilsonville, OR

ROGUE MATERIAL RECOVERY
Central Point, OR

ROSAUER'S SUPER MARKET
Hood River, OR

S & H LOGGING
Tualatin, OR

SAFETY KLEEN
Elgin, IL

SAFEWAY DISTRIBUTION CENTER
Clackamas, OR

SCHNITZER INDUSTRIES
Portland, OR

SCIENTIFIC DEVELOPMENT INC
Eugene, OR

SEAPORT INTERNATIONAL
Issaquah, WA

SHRED-IT
Tualatin, OR

SMURFIT-STONE RECYCLING
Portland, OR

SOUTHERN OREGON COMPOST
Grants Pass, OR

SP NEWSPRINT CO
Newberg, OR

SP RECYCLING CORP
Clackamas, OR

SPARC ENTERPRISES
Grants Pass, OR

ST VINCENT DEPAUL
Eugene, OR

ST VINCENT DEPAUL
The Dalles, OR

STAPLES
Framingham, MA

STAR OF HOPE RECYCLING
Coos Bay, OR

STRATEGIC MATERIALS, INC
San Leandro, CA

STRUT
The Dalles, OR

SUPERVALU
Tacoma, WA

TAYLORMADE PRODUCTS INC
Scappoose, OR

TECHNOLOGY CONSERVATION GROUP INC
Portland, OR

THERMO FLUIDS INC
Clackamas, OR

TILLAMOOK COUNTY CREAMERY ASSOCIATION
Tillamook, OR

TIRE DISPOSAL
Molalla, OR

TIRE DISPOSAL & RECOVERY (KRIDER)
Prineville, OR

TIRE DISPOSAL & RECYCLING INC
Portland, OR

TOTAL RECLAIM INC (ECOLIGHTS NW)
Seattle, WA

TRAIL'S END RECOVERY
Warrenton, OR

TREX COMPANY
Winchester, VA

TUALATIN VALLEY WASTE RECOVERY
Hillsboro, OR

UNIFIED WESTERN GROCERS
Milwaukie, OR

VAN DUSEN BEVERAGES
Astoria, OR

VEOLIA ES ENVIRONMENTAL
Vancouver, WA

WALLA WALLA RECYCLING
Walla Walla, WA

WAL-MART STORES
Bentonville, AR

WASTE CONTROL RECYCLING
Kelso, WA

WASTE MANAGEMENT

LAMP TRACKER
Phoenix, AZ

WASTE RECOVERY WEST
Portland, OR

WASTE XPRESS
Portland, OR

WEST UNION GARDENS
Hillsboro, OR

WEST VANCOUVER MATERIAL RECOVERY FAC
Vancouver, WA

WESTERN OREGON UNIVERSITY
Monmouth, OR

WESTERN PULP PRODUCTS
Corvallis, OR

WESTERN RECYCLING
Boise, ID

WHITE CITY RECYCLERS
White City, OR

WILLAMETTE LANDSCAPE SUPPLY COMPOST FACILITY
Salem, OR

WILLAMETTE RESOURCES
Wilsonville, OR

WINCO
Woodburn, OR

WOOD WASTE MANAGEMENT
Portland, OR

WOODCO FUEL
Aloha, OR

WRIGHT CHEVROLET
Fossil, OR

YAMHILL CO SOLID WASTE MANAGEMENT
McMinnville, OR

YAQUINA RECYCLING
Newport, OR

SCRAP METAL
Survey Respondents

BURCHAMS METALS
Albany, OR

CLYDE & REBECCA REDMAN
Irrigon, OR

DAVIS RS RECYCLING STATION
Clackamas, OR

HAMILTON METALS
Klamath Falls, OR

METRO METALS NORTHWEST
Portland, OR

PACIFIC RECYCLING
Eugene, OR

RBBG, INC
Parkdale, OR

RIVERGATE - CALBAG LLC
Portland, OR

SWIFT & MCCORMICK
Redmond, OR

THE STEEL RECYCLERS
Roseburg, OR

WINTERS SALVAGE
Tigard, OR

COLLECTION SERVICE PROVIDER
Survey Respondents

ALLIED WASTE OF ALBANY LEBANON
Albany, OR

ALLIED WASTE OF CORVALLIS
Corvallis, OR

ALLIED WASTE OF DALLAS
Dallas, OR

ALLIED WASTE OF GRANTS PASS
Grants Pass, OR

ALLIED WASTE OF MARION COUNTY
Woodburn, OR

ALLIED WASTE OF SALEM
Salem, OR

BAKER SANITARY SERVICE
Baker City, OR

BEAVER HILL INCINERATOR & DISPOSAL SITE
Coquille, OR

BEND GARBAGE & RECYCLING CO
Bend, OR

BRANDTS SANITARY SERVICE
Monmouth, OR

C & B SANITARY SERVICE
Burns, OR

CART'M
Manzanita, OR

CASCADE RECYCLING COMPANY
Bend, OR

CENTRAL COAST DISPOSAL
Florence, OR

CITY OF CANNON BEACH
Cannon Beach, OR

CITY OF ELGIN
Elgin, OR

CITY OF HAINES
Haines, OR

CITY OF JUNCTION CITY
Junction City, OR

CITY OF LONG CREEK
Long Creek, OR

CITY OF MILTON FREEWATER
Milton Freewater, OR

CITY OF MONUMENT
Monument, OR

CITY SANITARY & RECYCLING
McMinnville, OR

CITY SANITARY SERVICE
Tillamook, OR

CLARKS DISPOSAL
John Day, OR

COBURG SANITARY SERVICE, INC
Coburg, OR

CONDON TRANSFER STATION
Condon, OR

CONFEDERATED TRIBES OF THE WARM SPRINGS
Warm Springs, OR

COOS BAY SANITARY SERVICE
Coos Bay, OR

COTTAGE GROVE GARBAGE SERVICE, INC
Cottage Grove, OR

COUNTRYSIDE DISPOSAL SERVICE
Junction City, OR

COUNTY TRANSFER & RECYCLING
Elmira, OR

CROOK COUNTY LANDFILL
Prineville, OR

CROOKED RIVER SANITARY
Terrebonne, OR

CURRY TRANSFER & RECYCLING
Brookings, OR

D & O GARBAGE SERVICE INC
Salem, OR

DAHL & DAHL INC, RECYCLING & TRANSFER
Waldport, OR

DESCHUTES RECYCLING
Bend, OR

DESCHUTES TRANSFER CO
Bend, OR

DON G AVERILL RECYCLING INC
Tillamook, OR

DOUGLAS COUNTY PUBLIC WORKS DEPARTMENT
Roseburg, OR

ECOSYSTEMS TRANSFER & RECYCLING
Veneta, OR

ENVIRONMENTAL WASTE SYSTEMS INC
St. Helens, OR

EUGENE DROP BOX
Eugene, OR

FINLEY BUTTES LANDFILL
Boardman, OR

HIGH COUNTRY DISPOSAL
Redmond, OR

HOLLIDAY ENTERPRISES
Prineville, OR

HOOD RIVER GARBAGE, RECYCLE & TRANSFER
Hood River, OR

HORIZON PROJECT INC
Milton Freewater, OR

HUMBERT REFUSE & RECYCLING (RAHN'S)
Milton Freewater, OR

JEFFERSON COUNTY PUBLIC WORKS DEPARTMENT
Madras, OR

JOSEPHINE COUNTY RECYCLING & TRANSFER
Grants Pass, OR

KLAMATH COUNTY SOLID WASTE MANAGEMENT
Klamath Falls, OR

KLAMATH DISPOSAL
Klamath Falls, OR

KNOTT LANDFILL
Bend, OR

LAKE COUNTY ROAD DEPARTMENT
Lakeview, OR

LAKEVIEW SANITATION
Lakeview, OR

LANE APEX DISPOSAL
Eugene, OR

LANE COUNTY SOLID WASTE DIVISION
Eugene, OR

LES SANITARY SERVICE
Coos Bay, OR

LINCOLN COUNTY SOLID WASTE DISTRICT
Newport, OR

LORENS SANITATION SERVICE
Keizer, OR

MADRAS SANITARY SERVICE
Madras, OR

MALHEUR COUNTY ENVIRONMENTAL HEALTH
Vale, OR

MARION COUNTY PUBLIC WORKS - ENV SERV
Salem, OR

MARION RECYCLING CENTER INC
Salem, OR

MCKENZIE DISPOSAL SERVICE LLC
Walterville, OR

MEL'S SANITARY SERVICE
Tygh Valley, OR

MID OREGON RECYCLING
Bend, OR

NESTUCCA VALLEY SANITARY
Hebo, OR

NORTH BEND SANITATION
North Bend, OR

NORTH LINCOLN SANITARY SERVICE
Lincoln City, OR

NORTH MARION RECYCLING & DISPOSAL
Keizer, OR

OAKRIDGE SANI-HAUL INC
Oakridge, OR

OCEANSIDE SANITARY SERVICE
Tillamook, OR

ONTARIO SANITARY SERVICE INC
Ontario, OR

OREGON WASTE SYSTEMS INC
Arlington, OR

PACIFIC SANITATION
Salem, OR

PENDLETON SANITARY SERVICE, INC
Pendleton, OR

PINE VALLEY RECYCLING COMMITTEE
Baker City, OR

R-SANITARY SERVICE Garibaldi, OR

RECOLOGY ASHLAND SANITARY SERVICE
Ashland, OR

REGIONAL DISPOSAL CO
Seattle, WA

RIVERSIDE TRANSPORT SERVICE
Arlington, OR

ROGUE DISPOSAL & RECYCLING, INC
Central Point, OR

ROSEBURG DISPOSAL CO
Roseburg, OR

ROYAL REFUSE SERVICE
Eugene, OR

RYAN MILLER & SONS DISPOSAL SERVICE
Heppner, OR

S & S DISPOSAL
Nyssa, OR

SANIPAC INC
Eugene, OR

SANITARY DISPOSAL INC
Hermiston, OR

SOURCE RECYCLING
Albany, OR

SOUTHERN OREGON SANITATION
Eagle Point, OR

SOUTHERN OREGON SANITATION INC
Grants Pass, OR

STAR GARBAGE SERVICE
Eugene, OR

SUBURBAN GARBAGE SERVICE
Salem, OR

SUNRISE ENTERPRISES
Roseburg, OR

SUTHERLIN SANITARY SERVICE
Sutherlin, OR

SWEET HOME SANITATION SERVICE
Sweet Home, OR

THE DALLES DISPOSAL SERVICE
The Dalles, OR

THOMPSONS SANITARY SERVICE
Newport, OR

TOLEDO RECYCLING AND TRANSFER
Toledo, OR

TRIBAL ENVIRONMENTAL RECOVERY FACILITY
Pendleton, OR

VALLEY LANDFILLS INC
Corvallis, OR

VALLEY RECYCLING AND DISPOSAL, INC
Salem, OR

WADSWORTH GARBAGE DISPOSAL SERVICE
Coquille, OR

WALLOWA COUNTY PUBLIC WORKS
Enterprise, OR

WASCO COUNTY LANDFILL
The Dalles, OR

WASTE MANAGEMENT -
NEWBERG
Newberg, OR

WASTE MANAGEMENT OF COLUMBIA COUNTY
St. Helens, OR

WASTE PRO (CITY GARBAGE SERVICE)
La Grande, OR

WEST COAST RECYCLING AND TRANSFER
Coos Bay, OR

WESTERN OREGON WASTE
McMinnville, OR

WHEELER COUNTY COURT
Fossil, OR

WILDERNESS GARBAGE & RECYCLING SERVICE
La Pine, OR

WINSTON SANITARY SERVICE
Winston, OR

METRO COLLECTION SERVICE PROVIDER
Survey Respondents

AGG ENTERPRISES INC
Portland, OR

ALLIED WASTE OF CLACKAMAS AND WASHINGTON
Wilsonville, OR

ALLIED WASTE OF LAKE OSWEGO
Lake Oswego, OR

ALLIED WASTE OF PORTLAND
Portland, OR

ALOHA GARBAGE CO
Aloha, OR

AMERICAN PROPERTY MANAGEMENT
Portland, OR

ARROW SANITARY (WASTE

CONNECTIONS)
Portland, OR

BLISS SANITARY SERVICE
Boring, OR

CANBY DISPOSAL CO
Canby, OR

CITY OF ROSES DROP BOX SERVICE
Portland, OR

CITY SANITARY SERVICE
Portland, OR

CLACKAMAS GARBAGE CO
Milwaukie, OR

CLOUDBURST RECYCLING
Portland, OR

CORNELIUS DISPOSAL SERVICE
Cornelius, OR

CROWN POINT REFUSE INC
Corbett, OR

DEINES, MEL SANITARY SERVICE INC
Milwaukie, OR

DEYOUNG SANITARY SERVICE
Portland, OR

ECKERT SANITARY SERVICE INC
Portland, OR

ELMERS SANITARY SERVICE
Portland, OR

FLANNERY'S DROP BOX SERVICE
Fairview, OR

GARBARINO DISPOSAL SERVICE INC
North Plains, OR

GLADSTONE DISPOSAL CO INC
Oregon City, OR

GRESHAM SANITARY SERVICE INC
Gresham, OR

GRUETTER SANITARY SERVICE
Portland, OR

HEIBERG GARBAGE SERVICE
Portland, OR

HILLSBORO GARBAGE DISPOSAL
Hillsboro, OR

HOFFMANN SANITATION
Portland, OR

HOODVIEW DISPOSAL & RECYCLING
Canby, OR

HOUSING AUTHORITY OF PORTLAND
Portland, OR

LEHL DISPOSAL INC
Canby, OR

MOLALLA SANITARY
Oregon City, OR

MULTNOMAH COUNTY DROP BOX SERVICE
Portland, OR

OAK GROVE DISPOSAL CO INC
Milwaukie, OR

ON SITE DEMOLITION
Portland, OR

OREGON CITY GARBAGE CO
Oregon City, OR

PAPASADERO JF & SONS
Portland, OR

PORTLAND DISPOSAL & RECYCLING
Portland, OR

PRIDE DISPOSAL
Sherwood, OR

RIVER CITY ENVIRONMENTAL
Portland, OR

ROCKWOOD SOLID WASTE INC
Gresham, OR

SANDY TRANSFER STATION
Sandy, OR

SUNSET GARBAGE COLLECTION INC
Portland, OR

SWATCO SANITARY SERVICE
Banks, OR

TWELVE MILE DISPOSAL SERVICE
Corbett, OR

VALLEY GARBAGE & RECYCLING, INC
Beaverton, OR

VALLEY WEST REFUSE DISPOSAL INC
Aloha, OR

WACKER DAVE SANITARY
Boring, OR

WALKER DAN DISPOSAL SERVICE
Estacada, OR

WALKER GARBAGE SERVICE
Portland, OR

WASHINGTON COUNTY DROP BOX
Hillsboro, OR

WASTE MANAGEMENT INC
Portland, OR

WASTE MANAGEMENT OF WASHINGTON COUNTY
Portland, OR

WEISENFLUH, J & R SANITARY SERVICE
Portland, OR

WEITZELS GARBAGE SERVICE & RECYCLING
Portland, OR

WEST LINN REFUSE & RECYCLING INC
Canby, OR

WEST SLOPE GARBAGE SERVICE
Portland, OR

WICHITA SANITARY SERVICE
Gladstone, OR

WOODFEATHERS, INC. Beaverton, OR

DISPOSAL SITE Survey Respondents

ANT FLAT LANDFILL
Enterprise, OR

BAKER SANITARY LANDFILL
Baker City, OR

BEAVER HILL INCINERATOR & DISPOSAL SITE
Coquille, OR

BROWNS ISLAND DEMOLITION LANDFILL
Salem, OR

BURNS/HINES
Burns, OR

CHEMULT DISPOSAL SITE
Klamath Falls, OR

COFFIN BUTTE SANITARY LANDFILL
Corvallis, OR

COLUMBIA RIDGE LANDFILL & RECYCLING
Arlington, OR

CROOK COUNTY LANDFILL
Prineville, OR

DELTA SAND & GRAVEL DEMOLITION LANDFILL
Eugene, OR

DIAMOND DISPOSAL SITE
Burns, OR

DREWSEY DISPOSAL SITE
Burns, OR

DRY CREEK DISPOSAL SITE
Medford, OR

ENERGY RECOVERY FACILITY
Salem, OR

FIELDS DISPOSAL SITE
Burns, OR

FINLEY BUTTES LANDFILL
Boardman, OR

FRENCHGLEN DISPOSAL SITE
Burns, OR

HAINES LANDFILL
Haines, OR

HILLSBORO LANDFILL
Hillsboro, OR

HUMBERT SANITARY LANDFILL
Milton-Freewater, OR

JOE NEY DISPOSAL SITE
Coquille, OR

KLAMATH FALLS LANDFILL
Klamath Falls, OR

KNOTT LANDFILL
Bend, OR

LAKE COUNTY ROAD DEPARTMENT
Lakeview, OR

LARUE SANITARY
Halfway, OR

LYTLE BOULEVARD LANDFILL
Vale, OR

MILTON-FREEWATER LANDFILL
Milton-Freewater, OR

ONTARIO SANITARY SERVICE INC
Ontario, OR

PRAIRIE CITY LANDFILL
Prairie City, OR

REGIONAL DISPOSAL COMPANY
Seattle, WA

REGIONAL TIRE RECOVERY AND DISPOSAL
Prineville, OR

RILEY DISPOSAL SITE
Burns, OR

RIVERBEND SANITARY LANDFILL
McMinnville, OR

ROSEBURG LANDFILL
Roseburg, OR

SALEM AIRPORT DISPOSAL SITE
Salem, OR

SHORT MOUNTAIN LANDFILL
Eugene, OR

TIRE DISPOSAL
Molalla, OR

WASCO COUNTY LANDFILL
The Dalles, OR