

DEPARTMENT OF
ECOLOGY
State of Washington

Annual Report

2009 Report to the Legislature on Tires

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2009 Report to the Legislature on Tires



Waste 2 Resources Program
Washington State Department of Ecology
Olympia, Washington

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Tire Recycling and Reuse in 2008

Each year the Washington State Department of Ecology (Ecology) collects data on tire recycling and reuse (RCW 70.95.545). This annual report summarizes the increase or reduction in the rates of recycling and reuse since 2002. The Legislature received Ecology's first [Scrap Tire Report](#) in 2002.

Table 1 provides recycling, reuse, disposal and generation data from 2002 to 2008. The totals include Ecology Tire Pile Cleanup Program efforts since May 2007. The next section of this report details the tire pile cleanup efforts through October 2009 (page 8).

"The department of ecology, in conjunction with the appropriate private sector stakeholders, shall track and report annually to the legislature the total increase or reduction of tire recycling or reuse rates in the state for each calendar year and for the cumulative calendar years from June 13, 2002." [RCW 70.95.545](#)

Recycling, reuse, disposal and generation data in this section come from various sources:

- Annual disposal reports from landfills, transfer stations, drop boxes, tire haulers, tire businesses and tire storage sites.
- Reports and survey responses from recycling facilities.
- Tire cleanup program tracking data.
- Vehicle registration data used to estimate waste tire generation.

The totals reported in Table 1 include tire pile cleanup efforts that started in May 2007 (see page 8 for more details). Used tire generation, recycling and reuse changes from 2007 to 2008 include:

- Washington generated 405 tons more used tires in 2008.
- Reports showed recycling, reuse and disposal decreased by 24,835 tons in 2008, most likely due to the large tire pile cleanup effort in 2007.
- Landfill disposal of tires decreased from 46% in 2007 to 31% in 2008.

Table 1 - Summary of Annual Tire Generation, Recycling and Reuse

Used/Waste Tires	2002 Tons	2003 Tons	2004 Tons	2005 Tons	2006 Tons	2007 Tons	2008 Tons
Baled Tires*	-	-	-	-	7,702	9,660	5,912
Landfill Disposal	21,273	22,226	15,246	22,446	33,697	50,703	26,590
Recycled Tires	27,102	27,753	37,568	46,483	23,532	27,869	40,124
Retreaded Tires	1,170	12,976	251	4,089	5,579	4,764	3,829
Tire Derived Fuel	2,817	9,664	15,400	5,167	9,250	16,735	8,440
Total Reported	52,362	72,619	68,465	78,185	79,760	109,731	84,895
Difference between reported and generated	28,626	11,267	12,301	5,707	5,594	-22,753	2,488
Generation**	80,988	83,886	80,766	83,892	85,354	86,978	87,383

* Baled tires are not reported for 2002 through 2005

** Based on number of vehicles registered in Washington

In the following sections, we describe in more detail the categories listed in the table above.

Annual Waste Tire Generation

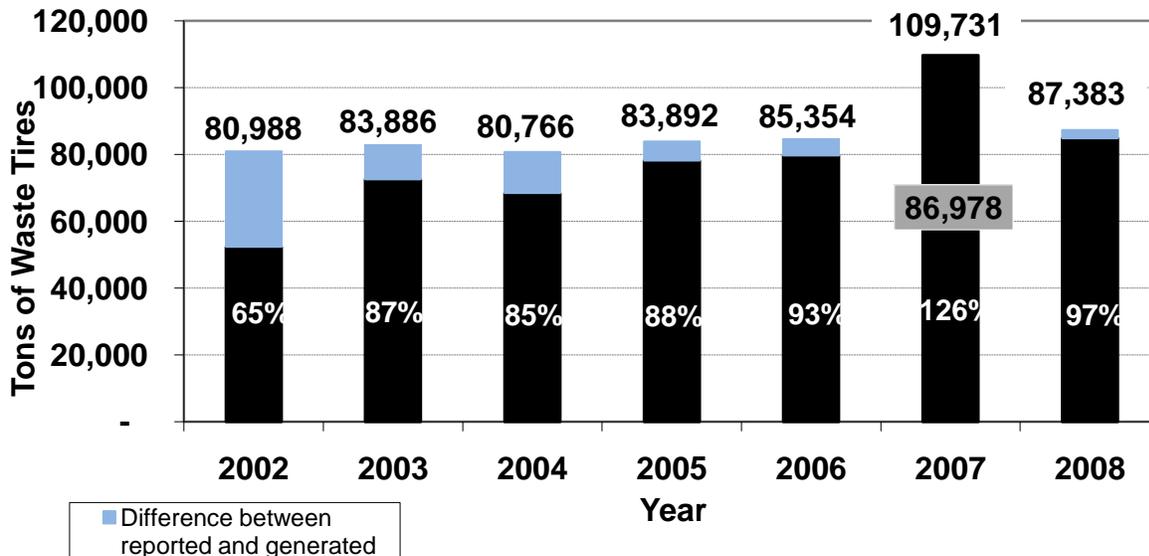
In Washington, we base the annual generation of used tires on the number and types of vehicles licensed in the state. The national average is one used tire a year from each passenger vehicle. The national average for other vehicles such as trucks, trailers or motorcycles is less than one, ranging from 0.25 to 0.4 used tires a year. We applied these percentages to the number of vehicle types registered to estimate the total number of used tires generated. More than 6.9 million vehicles licensed in Washington in 2008 generated more than 5 million used tires.



Waste tires in Prosser

Chart 1 shows estimated waste tire generation for each year since 2002. In 2008, an estimated 87,383 tons of waste tires were generated. Each year landfills, recyclers and tire businesses send reports of waste tire end use to Ecology. The black portion of the column shows the total reported recycling, reuse or landfilling of waste tires. In 2008 reported end use of tires was 97% of the total generated. Most years the generated total was higher than the reported end use total. The difference between the total reported to Ecology and the estimated generation is shown for those years as the blue “unknown end use” portion of the chart. The higher reported end use of waste tires in 2007 and 2008 includes waste tire cleanup program activities (page 8). The peak reported in 2007 is due to the very large tire pile cleanups that landfilled nearly 26,000 tons of tires.

Chart 1 - Estimated Annual Waste Tire Generation



Tire Bales Used for Construction

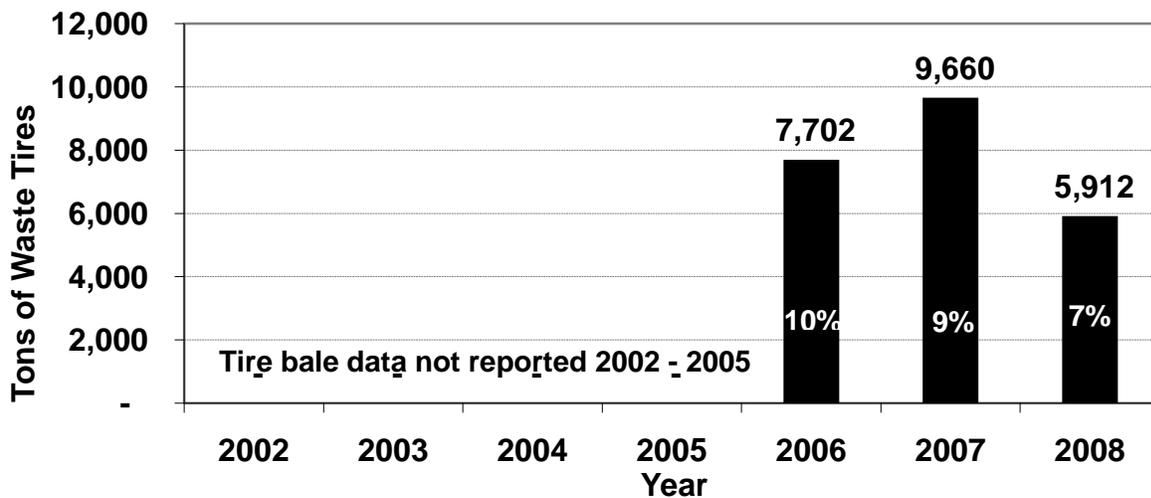
Recycling reports have separated out tire bales used in construction since 2006. A tire bale contains about 100 passenger tires compressed into a block wrapped with galvanized steel bands. Tire bales can take the place of other fill materials at construction sites. In 2008, construction projects used 5,912 tons of tire bales in road base, noise reduction walls, erosion control, firing ranges and racetrack walls. Tire bale use decreased 39% from 2007 to 2008. Percentages shown on the chart



Tire bales used in home construction.

below represent the baled tires compared to the total reported uses of tires. The photo on the right shows use of tire bales in construction of a home in eastern Washington (photo courtesy of L&S Tire Company). In addition to a tire bale foundation for this home, the walls were built with tire bales and sealed with a concrete mix.

Chart 2 - Use of Tire Bales



Landfill Disposal of Waste Tires Continues

Tires are a problem in landfills because they are difficult to compact and do not decompose easily. Tires take up valuable landfill space.

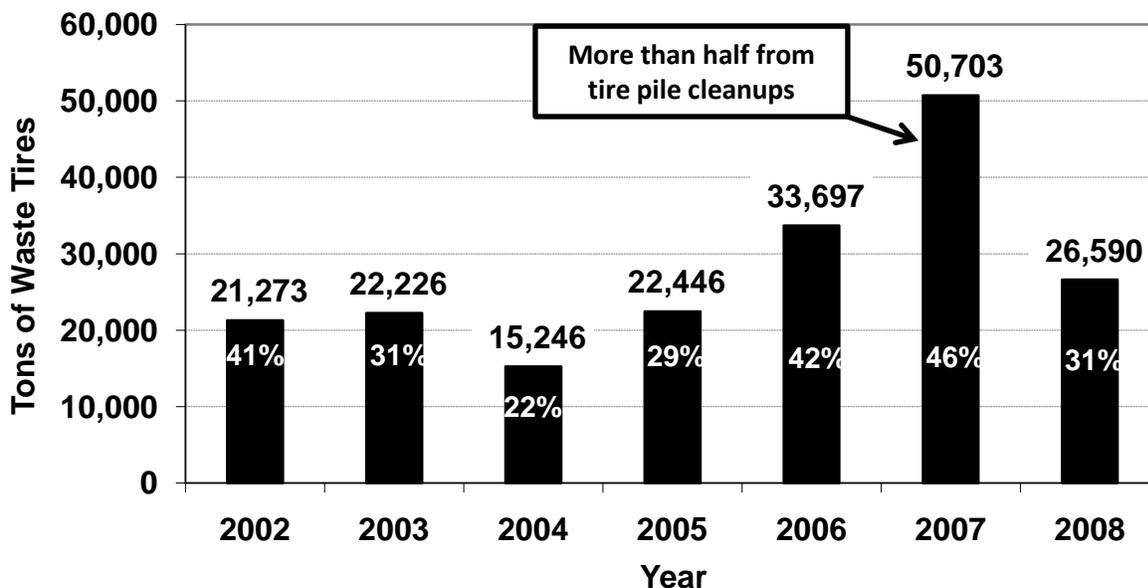
Over time whole tires can float to the top, working their way up through the waste and soil. Tires disposed of in landfills are usually shredded or at least cut in half before disposal.



Tire piles shredded and landfilled in 2007.

Chart 3 shows changes in the reported total tons of tires landfilled each year from 2002 to 2008. Percentages shown on the graph represent landfilled waste tires compared to the total reported uses of tires. The highest volume and percentage of waste tire landfilling was reported in 2007. More than half of the total came from tire pile cleanups (nearly 26,000 tons). Totals in 2007 and 2008 include Ecology tire pile cleanup efforts, which started in May 2007.

Chart 3 - Landfilled Waste Tires



Recycling Waste Tires Creates New Products

Tires can be recycled by grinding up the rubber and remolding it for other purposes. Some uses of ground rubber include groundcover under playground equipment (photo courtesy of Perfect Rubber Mulch), running track material, and components of sports and playing fields. Tires can also be cut, punched or stamped into various rubber products, including floor mats, belts, gaskets, shoe soles, dock bumpers, seals, muffler hangers, shims and washers.

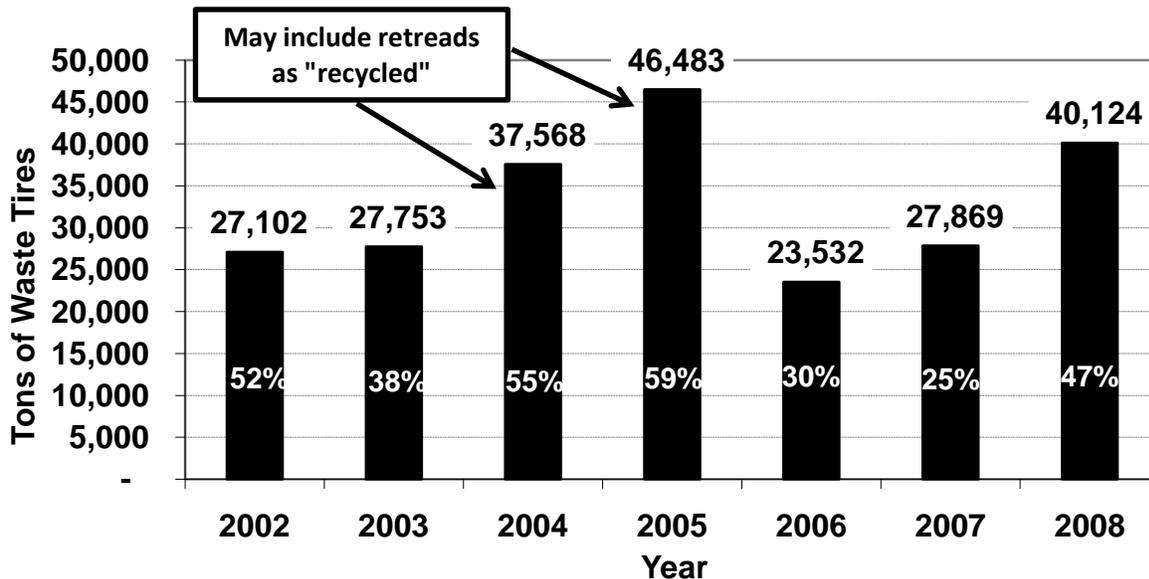


White House playground uses recycled tire mulch.

The annual totals and percentages of recycled tires are shown in Chart 4. The amount of tires recycled is based on tire business reports and recycling facility surveys. During the first few years of collecting these reports, we found that some businesses included retreaded tires as recycled. That may be the reason for the high recycling totals reported in 2004 and 2005. Recycling totals in 2007 and 2008 include waste tire pile cleanup efforts.

The ground rubber product market has shown the greatest growth in recycled tire materials. However, the conversion to synthetic field turfs for football, soccer and other playing surfaces will be limited by the finite number of athletic fields. The cut, punched and stamped rubber products market is limited to tires that do not have steel belts, known as “bias-ply” tires. There is a limited supply of bias-ply tires available for this market.

Chart 4 - Recycled Waste Tires



Retreading a Tire Saves 15 Gallons of Oil

Retreaded tires contain up to 75% recycled content. Manufacturing one new truck tire takes 22 gallons of oil. Most of the oil is found in the casing. The retreading process places a new tread on the old tire casing. As a result, it takes only 7 gallons of oil to produce a retread.

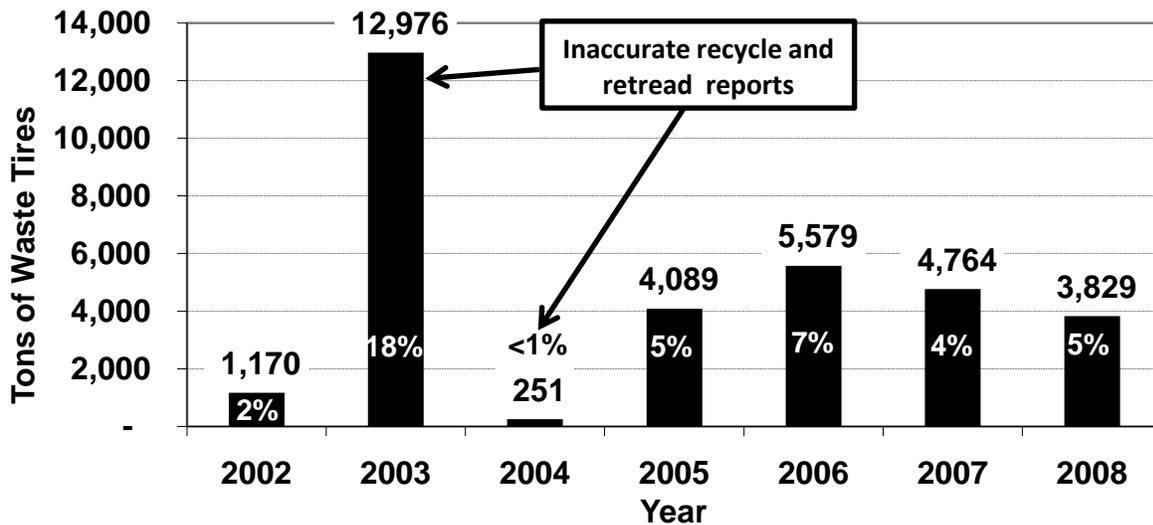
Chart 5 shows the reported retreaded tires in total tons and percent of total reported uses. Reported tire retread data show retreading varied greatly between 2002 and 2006. During the early years some businesses combined several categories together in their reports to Ecology.



Used tire (left) remanufactured into a retreaded tire (right).

The spike in 2003 was because some tire companies combined some recycled and retreaded tires into the retread category. Then in 2004 some tire company reports included retreaded tires in the recycled category. The retread data shown for 2005 through 2008 provide a more reliable data trend.

Chart 5 - Retreaded Waste Tires



Tire-Derived Fuel Provides Energy

Because of their high heating value, waste tires make good fuel. Tire-derived fuel (TDF) can provide up to 15,000 British thermal units (BTUs) per pound, which is higher than coal, oil or wood. Burning waste tires is not recycling (under the state’s definition), but we consider it a higher use than landfilling. Tires serve as fuel either shredded or whole, depending on the type of conveyor or combustion device.

In Washington, cement kilns use whole tires as fuel (photo courtesy of Portland Cement Association). The high BTUs provided by tires allow a cement plant to reduce use of other fuel sources, which results in cost savings. Cement kilns operate at very high temperatures (around 2,600°F) and have long residence times. This results in complete combustion of the tires. The metal in the steel belted tires combine with the cement product. Compared to coal, use of tires in cement kilns has been reported to lower some nitrogen oxide emissions.

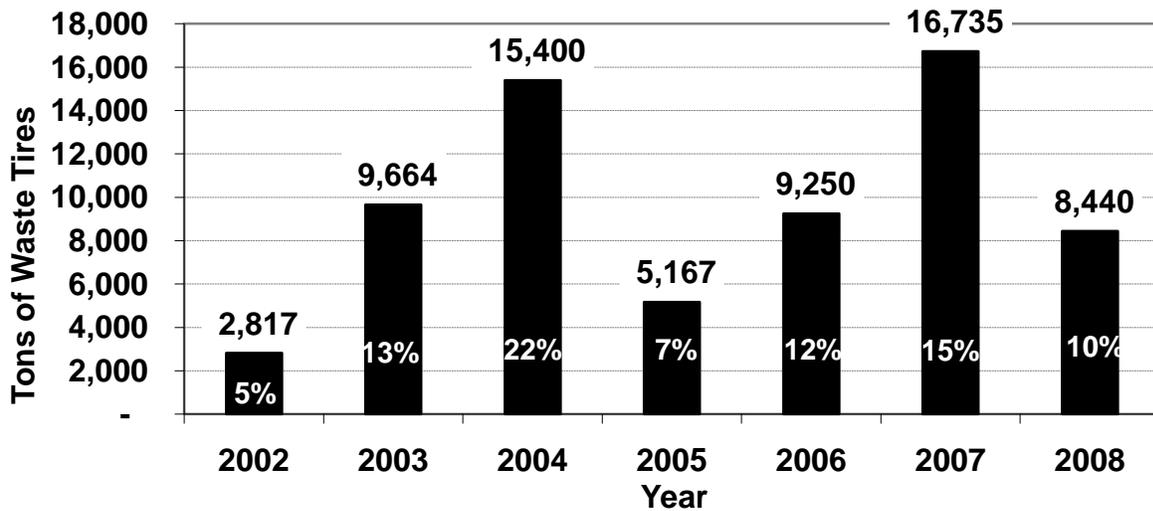


Tires on a conveyor headed into a kiln.

Most operations that use TDF have tires delivered and stored onsite in trailers. Those tires are delivered directly into the combustion device from the trailer. This eliminates outdoor storage of tires in any kind of pile. Outdoor tire storage requires a storage and handling plan, permits for all applicable state and federal environmental programs, and compliance with all the permit requirements.

Chart 6 shows total tons (and percentage) of tires used for fuel each year. Cement kiln demand for TDF dictates the use of tires for fuel. The greatest reported TDF use occurred in 2007, which includes tires from waste tire pile cleanup efforts. As the chart shows, demand for TDF varies considerably from year to year.

Chart 6 - Waste Tires Used for Fuel



Use of Tires as Art

The “Re-Tire” installation at the Shoreline Transfer Station uses recycled truck tires as audiovisual art. The tires came from the scraper trucks that leveled the landfill. Natural and manmade sounds emanate from the tire speakers. *“The audio is triggered by the presence of the visitor. The variable sound element speaks to the great beauty of the environment and the need to be mindful of both what we throw away and how that waste is disposed.”*

(<http://www.4culture.org/publicart/collection/profile.aspx?projectid=37&cat1=Collection&cat2=Project&cat3=S-Z&cat3b=>)



“Re-Tire” installation at the Shoreline Transfer Station.

Tire Pile Cleanup Status for 2009

In 2005, the Legislature passed Substitute House Bill (SHB) 2085, creating the Waste Tire Removal Account to fund cleanup of unauthorized and unlicensed tire piles. Funds for this account come from a \$1 fee charged on each new replacement tire sold in Washington. The 2009 Legislature removed the sunset on this fee and allocated an annual budget of \$500,000 to Ecology (Senate Bill 5796). The balance of the account transfers to the Department of Transportation's Motor Vehicle Account on September 1 of odd numbered years.

"On September 1 of even-numbered years, the department of ecology shall provide a report to the house [of representatives] and senate transportation committees on the progress being made on the cleanup of unauthorized waste tire piles in the state and efforts underway to prevent the formation of future unauthorized waste tire piles." [RCW 70.95.530](#)

Waste Tire Removal Account funds will continue to be used for tire pile removals. However, the limited funds will no longer be available for tire piles created by businesses that collect tires as a function of their business. For example, auto dealers, tire dealers and auto wrecking operations are no longer eligible for the cleanup program. Previously, these facilities were eligible for legacy tire pile cleanup. Eligible tire piles must contain more than 800 waste passenger tires (or the combined weight of 16,000 pounds of any tire sizes). Ecology will continue to coordinate waste tire pile cleanup with local health departments, fire departments, businesses, tribes and private citizens. Tire pile prevention activities may be funded using this account.

Continued Waste Tire Pile Cleanup

By October 2009, Ecology identified 201 tire pile sites in Washington State, containing over 5.6 million waste tires. Cleanup information in the following tables and charts are provided in tons of tires; one ton of tires equals about 100 passenger tires. Common recycling and reuse of waste tire materials includes crumb rubber, stamped rubber bumpers, tire rings, fuel for cement kilns and scrap steel (wheel rims).

Tire pile cleanup activities started in May 2007. By the end of 2007, a total of 26 tire pile sites containing over 3 million tires (over 30,000 tons of tires) were removed. In order to remove the largest single tire pile (containing over 2 million tires) as quickly as possible, 92% of the tires from the Goldendale-Wing Road site were shredded and landfilled. Nearly 60% of the tires from the other 25 sites were recycled or reused. Table 2 provides a corrected total for 2007 compared to [last year's report](#) where one site completed in 2008 was included in the 2007 total. Table 2 provides cleanup totals for the entire 2008 calendar year.



Edwards tire pile cleaned up in January 2009.

Last year's report did not include December 2008. The 2009 totals reported in Table 2 do not include efforts in November or December 2009. Next year's report will provide the total for all of 2009.

In the past 3 years more than 5 million tires (50,678 tons) were removed from 149 tire pile sites. After the first year (2007), tire recycling and reuse improved to more than 80%. Tire pile removal efforts at the remaining 52 sites will likely continue into 2011. The average cost per year in Table 2 is provided for reference. The higher cost per site experienced in 2007 is due to several very large cleanups conducted at the start of the program. The largest tire pile cleanup was at the Goldendale tire pile which contained over 2 million tires. More than 200,000 tires each were removed from Pumphouse Road, Petty and Napavine cleanups. Excluding those four large cleanup efforts, tire piles across the state averaged 15,600 tires with a median size of 9,000 tires.

Table 2 - Summary of Completed Tire Pile Cleanups by Calendar Year
(1 ton of tires = 100 passenger tires)

Year	Sites	Tons	Recycled or Reused	Total Cost	Average Cost Per Site	Average Cost Per Ton
2007	26	32,671	55%	\$4,300,079	\$165,388	\$132
2008	53	8,324	86%	\$1,933,954	\$36,490	\$232
2009	70	9,683	92%	\$2,139,094	\$30,558	\$221
Completed	149	50,678	83%	\$8,373,127	\$56,195	\$165
Remaining	52	6,079	> 80%	\$1,417,704	\$27,264	\$233
TOTAL	201	56,757	> 80%	\$9,790,832	\$48,711	\$173

Recycling and Reuse of Tire Pile Cleanup Tires

The following two charts show recycling, reuse and landfilling of cleanup program tires.

Chart 7 shows the overall end use of tires for all tire pile cleanups. Trends from 2007 to 2009 include:

- Landfilled tires represent the overall greatest end use in the brown slice (55%). Two thirds of the landfilled tires came from the 2007 cleanup activities at the largest site in Goldendale, Washington.
- Reuse of tires as fuel represented by the red slice (25%).
- Recycled tires are shown in the green slice (18%).
- Civil engineering use of cleanup tires is the yellow slice (2%).



Tires in the shredder at L&S Tire Company.

Chart 7 - Tire Pile Cleanup 2007-2009

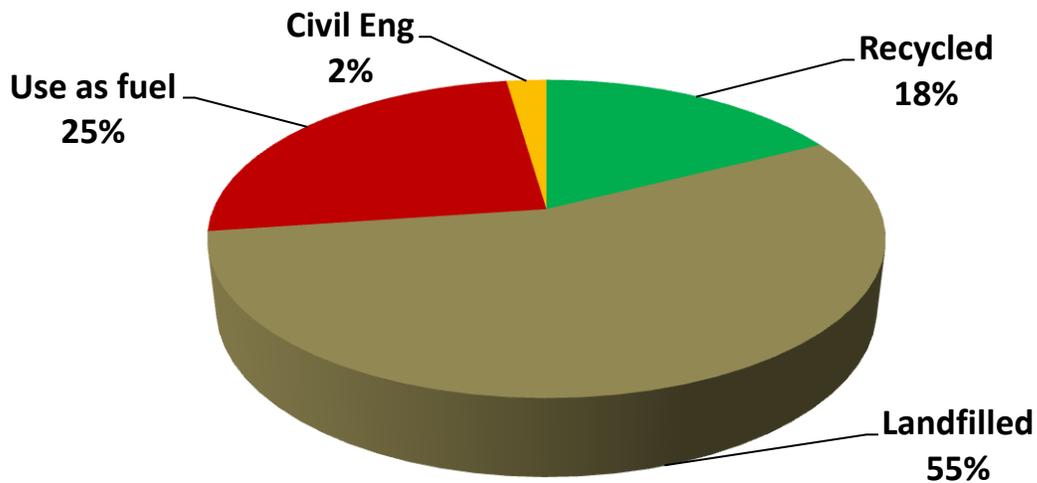
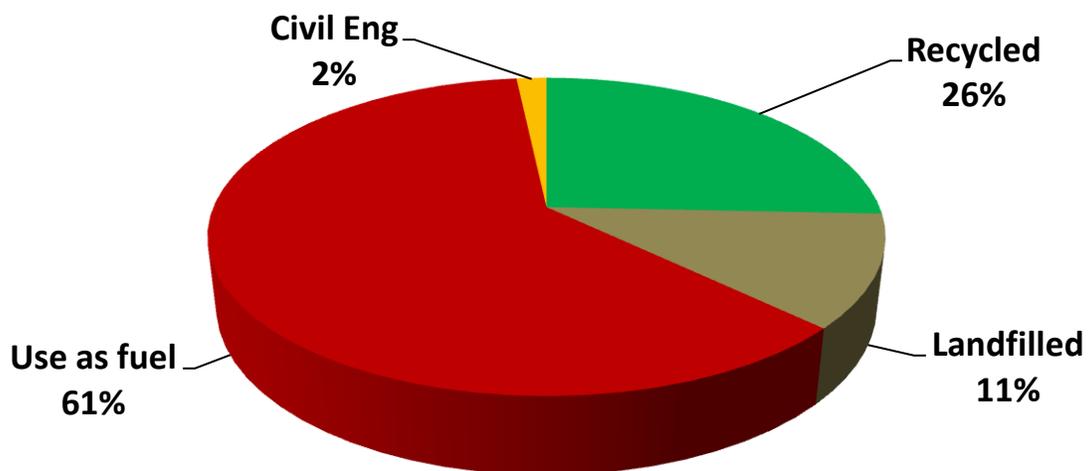


Chart 8 shows tire pile cleanup activities for 2008 and 2009, showing the greater alternatives to landfilling. This chart does not include cleanups from 2007, when much of the cleanup efforts ended up in landfills. Trends from 2008 and 2009 include:

- Reuse of tires as fuel increased to 61%. Much of this demand for tires as fuel comes from overseas markets in China, Japan, Vietnam and Korea.
- Tire recycling increased to 26%.
- Landfilling tires reduced to 11%.
- Civil engineering use of tires remained small at 2%.

Chart 8 - Tire Pile Cleanup 2008-2009



Waste Tire Pile Cleanup Status by County

In collaboration with local governments, Ecology continues to identify tire pile sites across the state. The following table summarizes by county the status of tire pile cleanup efforts in 32 counties in Washington.

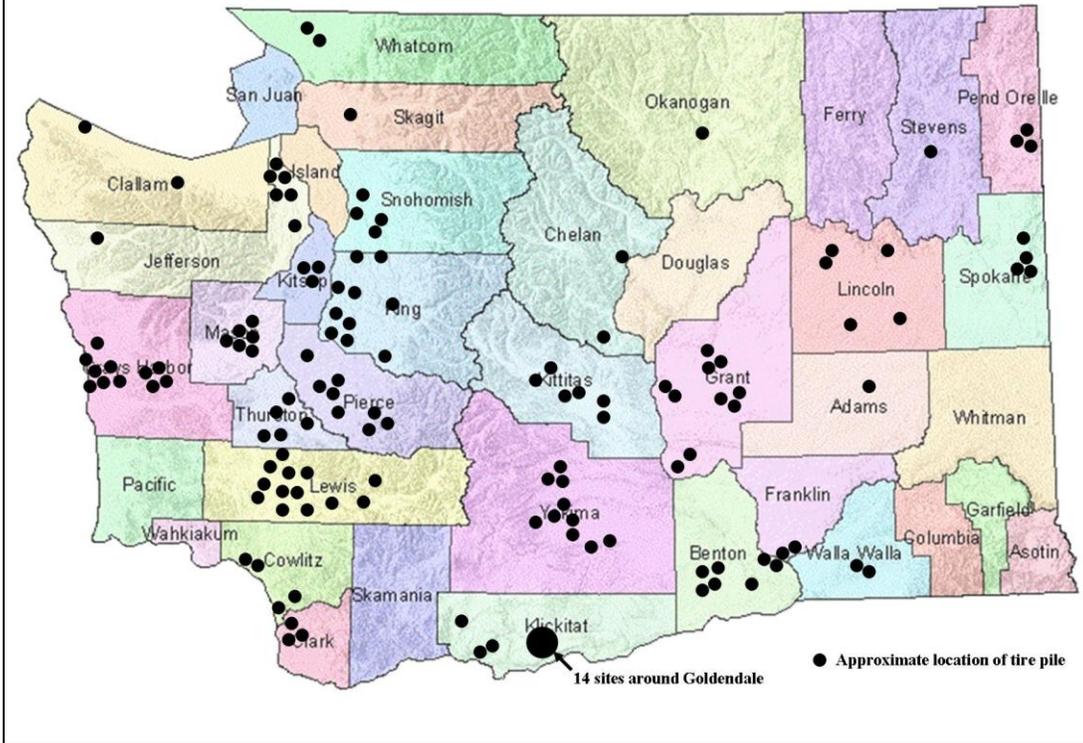
Table 3 - Tire Pile Cleanup Progress by County (2007-09)

County	Completed Tire Piles				Remaining Tire Piles		
	# Sites	Tons	Cost	Recycle Reuse	# Sites	Estimated Tons	Estimated Cost
Adams	1	213	\$ 51,659	100%	1	24	\$ 5,601
Benton	7	972	\$ 210,244	85%	1	125	\$ 29,548
Chelan	2	700	\$ 162,668	68%	2	265	\$ 59,971
Clallam	2	99	\$ 31,257	96%	7	1,400	\$ 375,396
Clark	3	742	\$ 144,209	94%	-	-	-
Cowlitz	4	328	\$ 69,473	93%	1	50	\$ 10,404
Ferry	-	-	-	-	1	50	\$ 13,850
Franklin	2	341	\$ 85,235	100%	3	735	\$ 187,577
Grant	10	2,251	\$ 617,325	76%	5	370	\$ 84,232
Grays Harbor	11	1,620	\$ 289,573	92%	3	300	\$ 60,000
Island	-	-	-	-	1	50	\$ 9,098
Jefferson	7	1,046	\$ 221,390	78%	1	100	\$ 20,000
King	10	2,130	\$ 384,473	91%	2	150	\$ 36,380
Kitsap	2	249	\$ 42,630	99%	-	-	-
Kittitas	6	965	\$ 242,169	100%	-	-	-
Klickitat	17	21,489	\$ 2,464,005	13%	-	-	-
Lewis	13	6,390	\$ 1,036,278	39%	1	100	\$ 20,000
Lincoln	5	424	\$ 136,559	86%	3	290	\$ 75,489
Mason	6	1,303	\$ 237,354	97%	1	100	\$ 20,000
Okanogan	1	363	\$ 104,005	100%	1	50	\$ 13,850
Pacific	-	-	-	-	1	100	\$ 20,000
Pend Oreille	3	213	\$ 26,693	98%	2	200	\$ 40,000
Pierce	8	823	\$ 158,789	95%	1	100	\$ 28,615
Skagit	1	62	\$ 13,154	91%	1	100	\$ 20,000
Snohomish	4	486	\$ 122,858	92%	2	200	\$ 40,000
Spokane	4	1,225	\$ 236,948	100%	2	200	\$ 43,456
Stevens	1	97	\$ 23,367	100%	-	-	-
Thurston	5	1,225	\$ 244,165	97%	3	300	\$ 60,000
Walla Walla	2	202	\$ 53,153	100%	2	160	\$ 34,760
Whatcom	2	159	\$ 42,444	99%	1	60	\$ 14,891
Whitman	-	-	-	-	2	400	\$ 74,588
Yakima	10	4,560	\$ 921,052	20%	1	100	\$ 20,000
TOTALS	149	50,677	\$ 8,373,129	86%	52	6,079	\$ 1,417,706

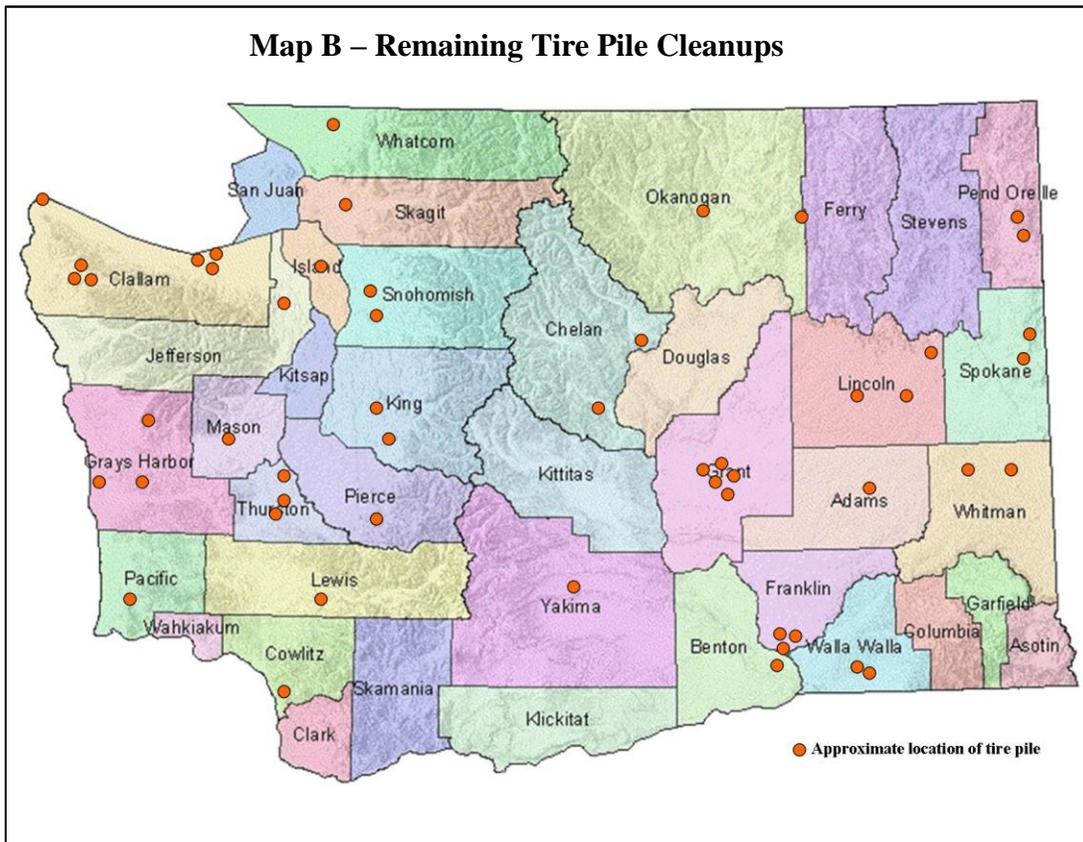
The maps on the next page show progress of tire pile cleanup by county as of October 2009.

- The black dots on Map A show locations of completed tire cleanups. The 14 tire piles in the Goldendale area are represented by one large black dot in Klickitat County.
- The red dots on Map B show approximate location of remaining tire cleanup sites.

Map A – Completed Tire Pile Cleanups



Map B – Remaining Tire Pile Cleanups



Tire Pile Prevention Program

The 2009 Legislature allocated an annual budget of \$500,000 to Ecology (Senate Bill 5796) for tire pile cleanup and prevention efforts. This portion of the report identifies the remaining unauthorized waste tire piles. This section also lists the licensed and permitted waste tire pile storage and hauling operations.

“The report must detail any additional unauthorized waste tire piles discovered since the last report and present a plan to clean up these new unauthorized waste tire piles if they have not already done so, as well as include a listing of authorized waste tire piles and transporters.” [RCW 70.95.530](#)

Unauthorized Waste Tire Piles

Table 3 and Map B in the previous section identified the general locations (by county) of unauthorized waste tire piles in Washington. Table 4 lists the sites by name, city and county, sorted alphabetically by county. More than half of these sites will be cleaned up using Waste Tire Removal Account funds under an existing contract at a cost of about \$900,000. Another contract may be awarded in 2010 for cleanup of the remaining sites (site names listed in *italics*) depending upon available funding.

Table 4 – Unauthorized Tire Piles
(Sites in *Italic font* are for the upcoming 2010 cleanup contract)

Site Name	County	City	Site Name	County	City
Rodriguez Property	Adams	Othello	Kossian Property	King	Enumclaw
Benton County	Benton	Kennewick	<i>Constantine Property</i>	<i>King</i>	<i>Ravensdale</i>
Rowe’s Auto	Chelan	Chelan	<i>Matchett Property</i>	<i>Lewis</i>	<i>Glenoma</i>
TC Repair	Chelan	Dryden	<i>King Property</i>	<i>Lincoln</i>	<i>Davenport</i>
<i>Richard Welch</i>	<i>Clallam</i>	<i>Agnew</i>	Angel Property	Lincoln	Ford
West End Auto	Clallam	Forks	Telecky Property	Lincoln	Harrington
Gilmore Tire	Clallam	Forks	<i>Stolen Property</i>	<i>Mason</i>	<i>Shelton</i>
<i>Nelson Property</i>	<i>Clallam</i>	<i>Forks</i>	Colville Tribe 1	Okanogan	Omak
Neah Bay	Clallam	Neah Bay	<i>Anderson Property</i>	<i>Pacific</i>	<i>Long Beach</i>
K&B Automotive	Clallam	Port Angeles	<i>Graham Property</i>	<i>Pend Oreille</i>	<i>Newport</i>
Midway Metals	Clallam	Port Angeles	<i>NE Tri-County Site</i>	<i>Pend Oreille</i>	<i>Newport</i>
Cowlitz Co Mosquito	Cowlitz	Woodland	<i>Scamhorn Property</i>	<i>Pierce</i>	<i>Buckley</i>
Colville Tribe 2	Ferry	Inchelium	<i>Sundland Bark & Topsoil</i>	<i>Skagit</i>	<i>Anacortes</i>
Port of Kennewick	Franklin	Kennewick	<i>Qualco Energy</i>	<i>Snohomish</i>	<i>Monroe</i>
Tommy’s Steel	Franklin	Pasco	<i>Hendrickson Property</i>	<i>Snohomish</i>	<i>Snohomish</i>
Wiswall Farm	Franklin	Pasco	Nordhagen Property	Spokane	Chattaroy
DJs Auto Wrecking	Grant	Ephrata	<i>Stella Property</i>	<i>Spokane</i>	<i>Elk</i>
Webb Estates	Grant	Ephrata	<i>Nisqually Land Trust</i>	<i>Thurston</i>	<i>Nisqually</i>
<i>Bellamy Property</i>	<i>Grant</i>	<i>Moses Lake</i>	<i>Rents Property</i>	<i>Thurston</i>	<i>Olympia</i>
Harrison Property	Grant	Quincy	<i>Chapman Property</i>	<i>Thurston</i>	<i>Tumwater</i>
Miller Property	Grant	Soap Lake	<i>Filan Property</i>	<i>Walla Walla</i>	<i>Walla Walla</i>
<i>Beach cleanup</i>	<i>Grays Harbor</i>	<i>Aberdeen</i>	Stubblefield Auto	Walla Walla	Walla Walla
<i>Cole Property</i>	<i>Grays Harbor</i>	<i>Oakville</i>	Hardwick Property	Whatcom	Everson
<i>Quinault Community</i>	<i>Grays Harbor</i>	<i>Quinault</i>	Malden Auto Wrecker	Whitman	Malden
Cerullo Farm	Island	Oak Harbor	Babt Property	Whitman	Rosalia
<i>Ackerman Property</i>	<i>Jefferson</i>	<i>Quilcene</i>	<i>Yakima Training Center</i>	<i>Yakima</i>	<i>Yakima</i>

Authorized Waste Tire Storage and Hauling

There is one authorized waste tire storage site in Washington. The operation has a solid waste handling permit from the Skagit County Health Department. This permit limits storage at a maximum of 10,000 tire bales on the property. The operation also has a waste tire storage license and has posted financial assurance sufficient to pay for removal of all collected tires by a third party.

There are 11 waste tire haulers licensed to operate in Washington (Table 5). These operations obtained a waste tire carrier license from the Department of Licensing and also posted a \$10,000 bond. Businesses that use company owned vehicles to transport their own waste tires for the purposes of disposal, retreading or recycling are not required to obtain a waste tire carrier license ([WAC 173-350-350](#)).



Tire Disposal & Recycling

Table 5 – Licensed Waste Tire Storage and Haulers

Waste Tire Storage	*UBI Number	License Expires
Larry's Auto & Truck Parts, Inc. Burlington, WA	297 004 683	3/31/2010
Waste Tire Haulers	UBI Number	License Expires
Enviro-Tire Inc. Kalispell, MT	602 879 404	11/30/2009
L&S Tire Company Spokane, WA	601 988 813	10/31/2010
Lakin Tire West Inc Santa Fe Springs, CA	600 341 245	6/30/2010
Larry's Auto & Truck Parts, Inc. Burlington, WA	297 004 683	3/31/2010
Mission Valley Renewable Energy, LLC (aka Tire Depot) Polson, MT	602 845 744	7/31/2010
Northwest Recycling LLC (aka Northwest Tire Recycling Products) Richland, WA	602 913 167	4/30/2010
Tire Disposal & Recycling, Inc. Seattle, WA	601 911 765	11/30/2009
Tire Disposal Co, Inc. Molalla, OR	601 181 257	5/31/2010
Tire Dogs, Inc. Lacey, WA	602 241 368	10/31/2009
Tire Shredders, Inc. Goldendale, WA	601 222 460	1/31/2010
Washington Used Tire and Wheel, Inc. Puyallup, WA	601 312 013	4/30/2010

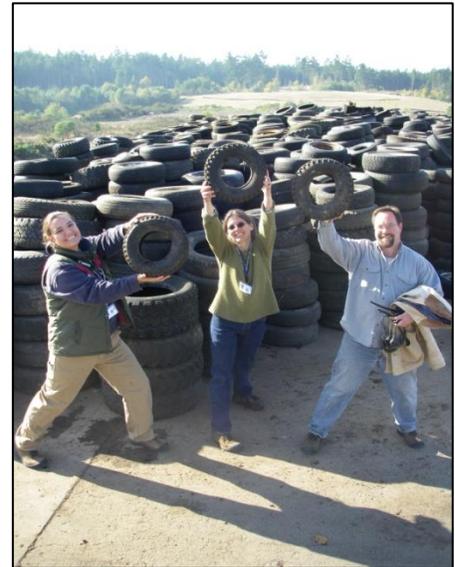
*UBI –Unified Business Identifier

Tire Pile Prevention

Ecology coordinates waste tire pile removal efforts with jurisdictional health departments across the state. Ecology solicited suggestions from health jurisdictions about waste tire pile prevention activities. Prevention efforts will be a focus next year. Here are some of those suggestions:

- Hold individuals and businesses accountable using court ordered abatement.
- Fine individuals and businesses that refuse to properly remove collected tires.
- Provide free collection of tires at amnesty events with educational handouts.
- Make followup visits to completed tire cleanups and enforcement for continued waste tire collections.
- Provide a partially subsidized, one-time tire removal for businesses.
- Provide a list of local places accepting tires and what they charge.
- Do public outreach and education on tire disposal and recycling options.
- Offer reduced cost collection (not free) of waste tires at amnesty events, businesses not eligible.
- Ensure tire producers take responsibility for waste tire collection, recycling and disposal.

“On September 1, 2010, the department shall also make recommendations to the committees for an ongoing program to prevent the formation of future unauthorized waste tire piles. Such a program, if required, must include joint efforts with local governments and the tire industry.”
[RCW 70.95.530](#)



Jefferson County tire amnesty day

Waste Tire Removal Account

The Waste Tire Removal Account (Fund 08R) is funded through a \$1 fee on the sale of new replacement tires. Tire retailers started collecting this fee on July 1, 2005 (Fiscal Year 2006 is July 1, 2005 to June 30, 2006). The tire fee is not collected on the sale of tires to the federal government that are exempt from sales tax; sale of tires delivered to enrolled tribal members living on recognized Native American reservations; or sale of re-treaded vehicle tires or tires provided free of charge under the terms of a recall or a warranty service ([WAC 458-20-272](#)). If a customer returns a tire and is refunded the entire selling price, the \$1 tire fee is refundable as well.

“The report must also include the status of funds available to the program and a needs assessment of the program.” [RCW 70.95.530](#)

Waste Tire Removal Account Status

Table 6 provides details on the fee collection, expenditures and transfers. Expenses by the Department of Revenue relate to setup and oversight of the fee collection. Ecology’s expenses include management of tire pile cleanups, proper waste tire management outreach and education, and technical assistance to the tire industry. The table shows funds transferred in 2009 to the

Washington State Department of Transportation (WSDOT) “. . . motor vehicle account for the purpose of road wear related maintenance on state and local public highways” ([RCW 70.95.532](#)). The table provides a cumulative account balance for each fiscal year and shows the fund status at the end of Fiscal Year 2009.

Table 6 - Waste Tire Removal Fee Revenue and Expenses

Fiscal Year	Tire Fee Collection	Ecology and Revenue Expenditures	Transfer to WSDOT	Tire Fee Account Balance
2006	\$3,193,007	\$222,106	\$0	\$2,970,901
2007	\$3,789,059	\$665,774	\$0	\$6,094,186
2008	\$3,802,147	\$4,522,302	\$0	\$5,374,031
2009	\$3,602,051	\$2,715,345	\$5,600,000	\$660,737
TOTAL	\$14,386,264	\$8,125,527	\$5,600,000	\$660,737

Table 7 details Ecology’s budget (technically termed an “appropriation”), expenses and annual account balance for each fiscal year. Ecology budget status at the end of Fiscal Year 2009 (June 30, 2009) totals \$1,063,522. Ecology continues to use this funding on cleanup projects in Fiscal Year 2010. Legislation passed in 2009 ([RCW 70.95.532](#)) provides Ecology a biennial budget of \$1 million for fiscal years 2010 and 2011.

Table 7 – Ecology Waste Tire Removal Account Expenditures

Fiscal Year	Ecology Appropriation	Ecology Expenses	Appropriation Balance
2006	\$4,000,000	\$35,057	\$3,964,943
2007	\$0	\$665,774	\$3,299,169
2008	\$5,000,000	\$4,520,302	\$3,778,867
2009	\$0	\$2,715,345	\$1,063,522
TOTAL	\$9,000,000	\$7,936,478	\$ 1,063,522

Waste Tire Program Needs Assessment

In 2009 legislation passed requiring a Waste Tire Program needs assessment that is due to the Legislature on September 1, 2010 ([RCW 70.95.530](#)). In the coming year, Ecology will evaluate the program and identify efforts that prevent formation of future unauthorized waste tire piles. As part of this assessment, Ecology will work with representatives from tire industries and associations, recycling businesses, environmental organizations, local governments, other state agencies and citizens.

2009 Tire Pile Cleanup Efforts

Auto Wrecking Yard Cleanups

Thirty-seven of the 72 tire pile cleanups completed in 2009 were collections of waste tires at auto wrecking yards across Washington. A total of 7,047 tons of tires were removed from those locations. More than 92% of the tires from these sites were recycled or reused. Cleanup of the sites cost a total of \$1,439,702, which averaged \$38,910 per site or about \$2.04 per tire (or \$204 per ton).

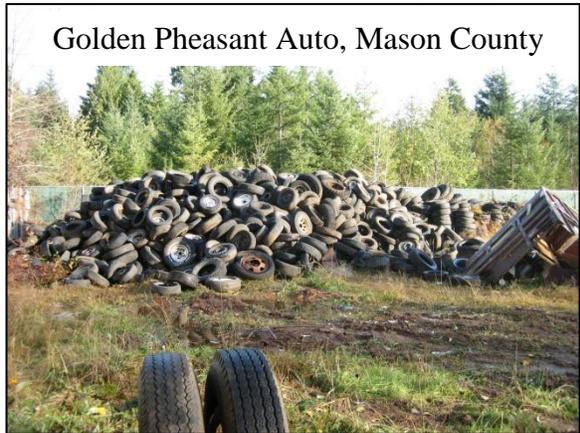
Moses Lake Auto, Grant County



Competitive Auto, Yakima County



Golden Pheasant Auto, Mason County



Monster's Auto, King County



IKAN Auto, Grays Harbor County



Hiway Auto, Benton County



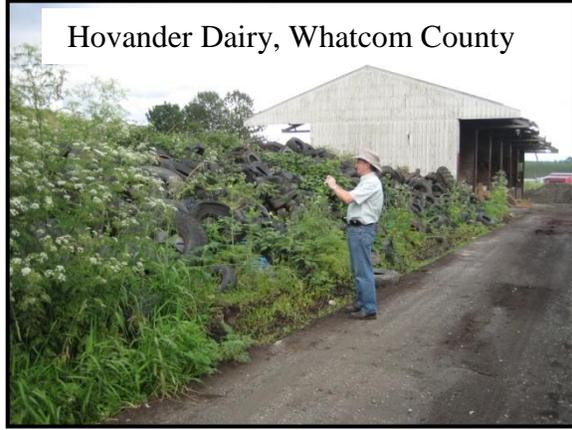
Other Tire Piles Across Washington

Thirty-three of the 72 tire pile cleanups completed in 2009 were collections of waste tires at sites other than auto wrecking yards. A total of 6,012 tons of tires were removed from these locations. More than 92% of the tires at these sites were recycled or reused. Cleanup of these sites cost a total of \$653,554, which averaged \$19,805 per site or about \$2.51 per tire (or \$251 per ton).

Lewis County flood debris tires



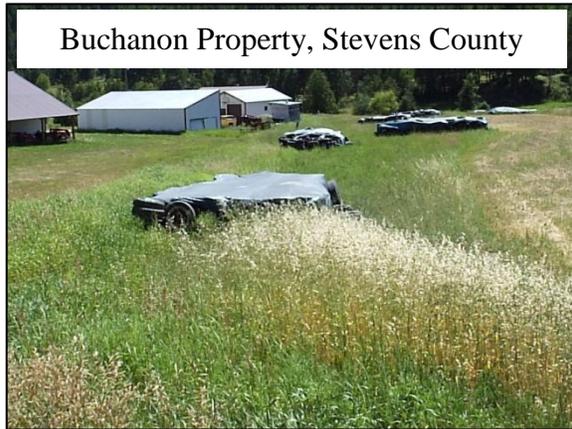
Hovander Dairy, Whatcom County



Lamona Property, Lincoln County



Buchanon Property, Stevens County



Clallam Bay/Sekiu, Clallam County



Duculon Property, Pierce County

