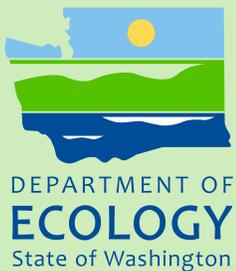




E-Cycle Washington Program Implementation

Report to the Washington State Legislature



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Report to the Washington State Legislature

by

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Executive Summary

The authorizing law for Washington’s Electronic Product Recycling Program, Chapter 70.95N RCW, directed the Washington State Department of Ecology (Ecology) to prepare a report by December 31, 2012, summarizing the program’s accomplishments and areas identified as needing improvement.



This report satisfies that requirement and includes the following information as directed under RCW 70.95N.270(1).

- (a) For each of the preceding program years, the weight of covered electronic products recycled in the state by plan, by county, and in total;
- (b) The performance of each plan in meeting its equivalent share, and payments received from and disbursed to each plan from the electronic products recycling account;
- (c) A description of the various collection programs used to collect covered electronic products in the state;
- (d) An evaluation of how the pounds per capita recycled of covered electronic products in the state compares to programs in other states;
- (e) Comments received from local governments and local communities regarding satisfaction with the program, including accessibility and convenience of services provided by the plans;
- (f) Recommendations on how to improve the statewide collection, transportation, and recycling system for convenient, safe and environmentally sound recycling of electronic products; and
- (g) An analysis of whether and in what amounts unwanted electronic products and electronic components and electronic scrap exported from Washington have been exported to countries that are not members of the organization for economic cooperation and development or the European union, and recommendations for addressing such exports.

On January 1, 2009, Ecology launched the E-Cycle Washington Program, the manufacturer funded electronic product recycling program. With input from stakeholders, Ecology developed a brand logo for the state’s electronic product recycling program and coined the name “E-Cycle Washington.”

The 220 public drop-off locations for free-of-charge recycling of televisions, desktop and laptop computers and monitors began accepting unwanted electronics from households, schools, charities, small businesses, small governments and special purpose districts.

State law created the Washington Materials Management and Financing Authority (Authority) to act as the planning authority for manufacturers of electronic products covered by the law, and sold in or into the state. The Authority, Ecology and local governments promoted the program to inform the public about the availability of free recycling of covered electronic products through E-Cycle Washington. E-Cycle Washington proved to be a success from the outset and exceeded expectations for the volume of electronics collected for recycling.

In addition to recycling, E-Cycle Washington has also increased reuse of working electronics through sales at secondhand stores operated by charities. It is estimated that in the first three years of the program, more than 85,000 working TVs, computers and monitors that came into the program were put back into use through sales and donations. This only includes reuse through secondary market charity stores that resell used household goods and participate as collectors in the E-Cycle Washington Program. This figure does not include reuse by private business collectors and recyclers.

More than 50 percent of all fixed site drop-off locations are secondhand stores operated by charity organizations. These stores are not only convenient, but are also well known to the public as sites that accept used household items. Having a large number of charity operated collection sites has proven to be a great advantage for a product take-back program like E-Cycle Washington.

As of December 2012, more than 340 manufacturers are participating in the E-Cycle Washington Program. There are more than 330 collection sites and services throughout the state. E-Cycle Washington is regarded on a national scale as a model electronics recycling program.

Manufacturers have the option of meeting their requirement to provide recycling for the covered electronic products by operating an independent recycling plan. To date, no independent plans have been approved by Ecology. All manufacturers are participants in the default Standard Plan for Recycling Covered Electronic Products operated by the Authority.

By far the most common suggestion from local governments and others for improving the program is to expand the scope of electronic products accepted for free recycling. Computer peripherals such as printers, keyboards, mice, speakers, external hard drives, etc., in addition to VCRs, DVD players, gaming consoles and other video peripherals are all repeatedly suggested as good candidates to add to the E-Cycle Washington Program list of accepted products.

Ecology supports adding more products to the program's scope of eligible electronics. Ecology will work with the Legislature and interested parties to accomplish this by looking for legislative opportunities to expand the scope of products covered by the E-Cycle law.

Weight of Covered Electronic Products Recycled

Before the E-Cycle Washington Program was launched on January 1, 2009, Ecology estimated the first year of operation would see 26-30 million pounds of electronics come into the program. At the end of 2009, the total volume recycled was 38.5 million pounds.

In every year of program operation, the total volume recycled surpassed the preceding year.

Table 1.1
E-Cycle Washington
Electronics Recycled 2009-12

Year	Pounds Recycled
2009	38,548,674
2010	39,467,798
2011	42,193,038
2012	43,000,000*

* Full year estimate based on 11 months of data.

The following pages provide a year-end summary of the recycling data for each program year, including a breakdown by county and a breakdown by product type. Please note 2012 data is through November 2012. All collection data is posted on the E-Cycle Washington website at www.ecyclewashington.org.

Table 1.2



**Washington Materials Management & Financing Authority
CEP* pounds collected by type and by county
E-Cycle Washington December 2009 and YTD**



	Pounds by CEP* type			CEP* Pounds by County			
	Estimated quantity in pounds by CEP* type collected December	YTD Pounds	Percent of total pounds by CEP* type YTD	WA State County	Estimated quantity in pounds by WA State county December	Estimated quantity in pounds by WA State county YTD December	Percent of total pounds by county YTD December
*Covered Electronic Products TYPE (CEP) Plan accepts only computers, monitors and TVs							
TELEVISIONS				Adams	NR	28,103	0.1%
Household TV	1,760,250	22,157,784		Asotin	6,708	105,662	0.3%
School District TV		64,740		Benton	17,220	531,031	1.4%
Small Business TV		128,088		Chelan	42,239	277,392	0.7%
Total TELEVISIONS	1,760,250	22,350,612	58.0%	Clallam	33,790	417,463	1.1%
				Clark	164,350	1,631,456	4.2%
				Columbia	1,397	24,211	0.1%
				Cowlitz	50,884	460,493	1.2%
				Douglas	3,158	30,531	0.1%
				Ferry	NR	19,002	0.0%
MONITORS				Franklin	NR	28,764	0.1%
Household Monitors	873,012	11,537,361		Garfield	838	15,478	0.0%
School District Monitors	7,617	619,220		Grant	16,754	224,432	0.6%
Small Business Monitors	1,429	105,375		Grays Harbor	26,503	253,974	0.7%
Small Government Monitors		25,778		Island	32,474	433,480	1.1%
Total MONITORS	882,058	12,287,734	31.9%	Jefferson	8,236	113,498	0.3%
				King	1,110,687	14,897,664	38.6%
				Kitsap	119,363	1,738,263	4.5%
				Kittitas	25,479	375,765	1.0%
COMPUTERS (includes laptops)				Klickitat	3,426	32,100	0.1%
Household Computers	271,748	3,593,279		Lewis	20,590	288,108	0.7%
School District Computers	4,000	296,463		Lincoln	NR	30,824	0.1%
Small Business Computers	300	15,899		Mason	24,088	275,990	0.7%
Small Government Computers		4,687		Okanogan	9,724	78,313	0.2%
Total COMPUTERS	276,048	3,910,328	10.1%	Pacific	NR	74,537	0.2%
				Pend Oreille	2,108	30,654	0.1%
				Pierce	333,417	4,405,285	11.4%
				San Juan	NR	35,006	0.1%
				Skagit	46,966	501,009	1.3%
				Skamania	3,891	40,982	0.1%
				Snohomish	384,014	5,495,051	14.3%
				Spokane	148,674	1,702,177	4.4%
				Stevens	6,316	70,154	0.2%
				Thurston	100,824	1,507,710	3.9%
				Wahkiakum	NR	12,635	0.0%
				Walla Walla	19,005	265,245	0.7%
				Whatcom	76,285	1,111,034	2.9%
				Whitman	18,079	179,360	0.5%
				Yakima	60,869	805,838	2.1%
Total pounds CEPs by type	2,918,356	38,548,674	100%	Total	2,918,356	38,548,674	100.0%

NOTES: Pounds allocation by CEP device/type are estimated based on information from collectors and covered entities

1. Report represents all pounds collected, transported, and processed, by month end December 2009 and YTD
2. Pounds reflect NET weight of CEPs based on actual net weights as received and verified by processors at month end and YTD December 2009
3. When no pounds are reported for smaller county collectors they are shown as NR=(Not Reported) and will be updated as pounds are reported

Table 1.3



Washington Materials Management & Financing Authority
CEP* pounds collected by type and by county
E-Cycle Washington December 2010 and YTD



	Pounds by CEP* type			CEP* Pounds by County			
	Estimated quantity in pounds by CEP* type collected December	YTD Pounds	Percent of total pounds by CEP* type YTD	WA State County	Estimated quantity in pounds by WA State county YTD December	Estimated quantity in pounds by WA State county YTD December	Percent of total pounds by county YTD December 2010
*Covered Electronic Products TYPE (CEP) Plan accepts only computers, monitors and TVs							
TELEVISIONS				Adams	NR	34,418	0.1%
Household TV	2,435,486	24,873,291		Asotin	11,676	138,540	0.4%
School District TV	5,326	47,769		Benton	45,441	586,290	1.5%
Small Business TV	1,998	48,579		Chelan	13,168	237,115	0.6%
Total TELEVISIONS	2,442,810	24,969,639	63.3%	Clallam	44,473	385,856	1.0%
				Clark	303,105	2,258,234	5.7%
				Columbia	1,719	20,044	0.1%
				Cowlitz	63,403	504,612	1.3%
				Douglas	7,146	62,473	0.2%
				Ferry	NR	9,084	0.0%
MONITORS				Franklin	NR	33,752	0.1%
Household Monitors	822,872	10,390,936		Garfield	1,031	12,027	0.0%
School District Monitors	23,007	309,762		Grant	25,040	240,291	0.6%
Small Business Monitors	5,890	24,428		Grays Harbor	35,721	371,890	0.9%
Small Government Monitors	2,812	13,114		Island	36,354	493,804	1.3%
Total MONITORS	854,581	10,738,240	27.2%	Jefferson	12,741	113,791	0.3%
				King	1,138,569	13,522,168	34.3%
				Kitsap	129,046	1,491,118	3.8%
COMPUTERS (includes laptops)				Kittitas	39,581	500,695	1.3%
Household Computers	312,130	3,637,878		Klickitat	6,208	39,198	0.1%
School District Computers	2,100	115,514		Lewis	31,853	284,478	0.7%
Small Business Computers	1,811	4,232		Lincoln	NR	40,709	0.1%
Small Government Computers	2,295	2,295		Mason	6,789	180,044	0.5%
Total COMPUTERS	318,336	3,759,919	9.5%	Okanogan	4,014	73,609	0.2%
				Pacific	NR	112,503	0.3%
				Pend Oreille	NR	76,058	0.2%
				Pierce	378,062	4,461,919	11.3%
				San Juan	8,066	63,999	0.2%
				Skagit	56,538	477,356	1.2%
				Skamania	4,734	47,263	0.1%
				Snohomish	603,371	6,405,153	16.2%
				Spokane	194,566	1,936,471	4.9%
				Stevens	7,146	88,249	0.2%
				Thurston	180,577	1,592,002	4.0%
				Wahkiakum	NR	4,450	0.0%
				Walla Walla	29,481	333,812	0.8%
				Whatcom	102,774	1,172,020	3.0%
				Whitman	10,273	201,861	0.5%
				Yakima	83,061	860,442	2.2%
Total pounds CEPs by type	3,615,727	39,467,798	100%	Total	3,615,727	39,467,798	100.0%

NOTES: Pounds allocation by CEP device/type are estimated based on information from collectors and covered entities

1. Report represents all pounds collected, transported, and processed, by month end December 2010 and YTD
2. Pounds reflect NET weight of CEPs based on actual net weights as received and verified by processors at month end and year ending December 2010
3. When no pounds are reported for smaller county collectors they are shown as NR=(Not Reported) and will be updated as pounds are reported

Table 1.4



Washington Materials Management & Financing Authority
CEP* pounds collected by type and by county
E-Cycle Washington December 2011 and YTD



	Pounds by CEP* type			CEP* Pounds by County			
	Estimated quantity in pounds by CEP* type collected December	YTD Pounds	Percent of total pounds by CEP* type YTD	WA State County	Estimated quantity in pounds by WA State county December	Estimated quantity in pounds by WA State county YTD December	Percent of total pounds by county YTD December 2011
*Covered Electronic Products TYPE (CEP) Plan accepts only computers, monitors and TVs							
TELEVISIONS				Adams	NR	24,752	0.1%
Household TV	2,934,544	29,076,120		Asotin	8,315	109,839	0.3%
School District TV	1,800	46,365		Benton	57,031	658,069	1.6%
Small Business TV	5,422	134,856		Chelan	26,694	217,619	0.5%
Total TELEVISIONS	2,941,766	29,257,341	69.3%	Clallam	35,939	468,225	1.1%
				Clark	304,283	2,904,574	6.9%
				Columbia	1,732	18,606	0.0%
				Cowlitz	47,604	627,085	1.5%
				Douglas	6,304	71,250	0.2%
				Ferry	NR	21,093	0.0%
MONITORS				Franklin	12,785	114,951	0.3%
Household Monitors	694,309	9,107,361		Garfield	1,039	11,164	0.0%
School District Monitors	39,653	164,046		Grant	35,442	247,680	0.6%
Small Business Monitors	11,560	52,935		Grays Harbor	41,115	377,806	0.9%
Small Government Monitors		2,967		Island	46,606	411,348	1.0%
Total MONITORS	745,522	9,327,309	22.1%	Jefferson	17,520	153,905	0.4%
				King	1,580,033	15,766,452	37.4%
				Kitsap	112,250	1,466,498	3.5%
				Kittitas	46,813	606,386	1.4%
COMPUTERS (includes laptops)				Klickitat	3,167	47,457	0.1%
Household Computers	293,562	3,460,140		Lewis	32,976	351,796	0.8%
School District Computers	6,621	113,169		Lincoln	NR	45,168	0.1%
Small Business Computers	1,475	28,872		Mason	5,211	117,212	0.3%
Small Government Computers		6,207		Okanogan	3,230	46,685	0.1%
Total COMPUTERS	301,658	3,608,388	8.6%	Pacific	NR	114,739	0.3%
				Pend Oreille **	5,973	72,117	0.2%
				Pierce	357,892	4,315,169	10.2%
				San Juan	15,328	71,697	0.2%
				Skagit	43,684	517,132	1.2%
				Skamania	8,289	50,812	0.1%
				Snohomish	468,108	5,202,882	12.3%
				Spokane	213,115	2,214,408	5.2%
				Stevens	6,304	80,761	0.2%
				Thurston	193,540	1,826,315	4.3%
				Wahkiakum	NR	4,680	0.0%
				Walla Walla	27,821	309,358	0.7%
				Whatcom	120,822	1,343,329	3.2%
				Whitman	16,729	213,859	0.5%
				Yakima	85,252	970,158	2.3%
Total pounds CEPs by type	3,988,946	42,193,038	100%	Total	3,988,946	42,193,038	100.0%

NOTES: Pounds allocation by CEP device/type are estimated based on information from collectors and covered entities
 1. Report represents all pounds collected, transported, and processed, by month end December 2011 and YTD
 2. Pounds reflect NET weight of CEPs based on actual net weights as received and verified by processors at month end and YTD ending December 2011
 3. When no pounds are reported for smaller county collectors they are shown as NR=(Not Reported) and will be updated as pounds are reported
****NOTE:** An error by the WMMFA for Pend Oreille county resulted in an 80,860 lb. YTD overstatement that was corrected on the August YTD report going forward

Table 1.5

Washington Materials Management & Financing Authority
CEP* pounds collected by type and by county
E-Cycle Washington November 2012 and YTD



***Covered Electronic Products TYPE (CEP)** Plan accepts only computers, monitors, e-readers, tablets and TVs

TELEVISIONS

Estimated quantity in pounds by CEP* type collected November	YTD Pounds	Percent of total pounds by CEP* type YTD
Household TV	2,376,128	29,304,870
School District TV	900	6,080
Small Business TV	3,210	90,751
Total TELEVISIONS	2,380,238	29,401,701

MONITORS

Estimated quantity in pounds by CEP* type collected November	YTD Pounds	Percent of total pounds by CEP* type YTD
Household Monitors	459,381	7,152,482
School District Monitors	10,050	177,551
Small Business Monitors	1,100	26,674
Small Government Monitors	6,215	7,737
Total MONITORS	476,746	7,364,444

COMPUTERS (includes laptops)

Estimated quantity in pounds by CEP* type collected November	YTD Pounds	Percent of total pounds by CEP* type YTD
Household Computers	220,692	3,047,865
School District Computers	2,355	136,949
Small Business Computers	678	17,401
Small Government Computers	0	2,415
Total COMPUTERS	223,725	3,204,630

Pounds by CEP* type			CEP* Pounds by County				
Estimated quantity in pounds by CEP* type collected November	YTD Pounds	Percent of total pounds by CEP* type YTD	WA State County	Estimated quantity in pounds by WA State county November	Estimated quantity in pounds by WA State county YTD November	Percent of total pounds by county YTD November 2012	
			Adams	NR	13,042	0.0%	
			Asotin	10,279	89,873	0.2%	
			Benton	38,457	677,624	1.7%	
			Chelan	23,114	255,496	0.6%	
			Ciallam	26,013	361,141	0.9%	
			Clark	263,830	2,950,327	7.4%	
			Columbia	2,141	18,722	0.0%	
			Cowlitz	55,457	607,631	1.5%	
			Douglas	7,619	76,251	0.2%	
			Ferry	NR	8,865	0.0%	
			Franklin	9,067	168,995	0.4%	
			Garfield	1,285	11,236	0.0%	
			Grant	27,674	193,646	0.5%	
			Grays Harbor	23,867	362,070	0.9%	
			Island	49,834	452,949	1.1%	
			Jefferson	17,571	177,009	0.4%	
			King	1,028,730	14,841,004	37.1%	
			Kitsap	78,851	1,216,125	3.0%	
			Kittitas	54,631	575,703	1.4%	
			Klickitat	4,958	51,514	0.1%	
			Lewis	29,423	302,003	0.8%	
			Lincoln	NR	43,557	0.1%	
			Mason	6,705	114,990	0.3%	
			Okanogan	1,815	37,632	0.1%	
			Pacific	27,361	104,826	0.3%	
			Pend Oreille	5,848	41,401	0.1%	
			Pierce	317,241	4,024,668	10.1%	
			San Juan	NR	81,609	0.2%	
			Skagit	34,817	508,471	1.3%	
			Skamania	6,426	44,427	0.1%	
			Snohomish	328,007	4,610,858	11.5%	
			Spokane	214,283	2,313,332	5.8%	
			Stevens	12,196	105,792	0.3%	
			Thurston	158,291	1,779,119	4.5%	
			Wahkiakum	NR	5,456	0.0%	
			Walla Walla	32,146	356,104	0.9%	
			Whatcom	86,764	1,227,347	3.1%	
			Whitman	21,123	235,131	0.6%	
			Yakima	74,885	924,829	2.3%	
Total pounds CEPs by type	3,080,709	39,970,775	100%	Total	3,080,709	39,970,775	100.0%

NOTES: Pounds allocation by CEP device/type are estimated based on information from collectors and covered entities

1. Report represents all pounds collected, transported, and processed, by month end November 2012 and YTD
2. Pounds reflect NET weight of CEPs based on actual net weights as received and verified by processors at month end and YTD ending November 2012
3. When no pounds are reported for smaller county collectors they are shown as NR=(Not Reported) and will be updated as pounds are reported

Recycling Plan Performance

The enabling legislation for the E-Cycle Washington Program requires all manufacturers whose covered products are sold in or into the state to participate in an Ecology approved electronic products recycling plan. The legislation allows manufacturers to meet this requirement by participating in the Standard Plan or operating an independent recycling plan.

The Standard Plan is the default plan administered by the Authority. If certain conditions are met, a manufacturer or a group of manufacturers could opt out of the Standard Plan and meet the legislative requirement to provide recycling of electronic products through an independent recycling plan approved by Ecology.

In the first four years (2009-12) of implementing Chapter 70.95N RCW, all manufacturers have participated in the Standard Plan.

RCW 70.95N.270(1) requires Ecology to include in this report information on *“the performance of each plan in meeting its equivalent share, and payments received from and disbursed to each plan from the electronic products recycling account.”*

By definition, since the Standard Plan is the only approved electronics recycling plan, its equivalent share (or responsibility for the collection of electronics for recycling) is 100 percent. If this situation changes and Washington has two or more recycling plans for electronics, the law states that a balancing mechanism be put into action should any plan fail to meet its recycling obligation. A plan that does not collect and recycle its equivalent share of electronics is required to reimburse any plan that exceeded its equivalent share for those extra costs plus a fee.

Since there have been no independent recycling plans, there have been no payments to balance any equivalent share shortfalls.

Collection Programs

The Standard Plan administered by the Authority is based on a collection system of public drop-off locations. In addition, consumers and other entities eligible to participate in the E-Cycle Washington Program can generally find collection services providers who offer (often for a fee) a pickup service.

The Authority also works with entities such as schools that generate larger quantities of electronics, and may not be able to self-transport their materials to a collection or recycling center. A toll-free number (866-779-6632) can be called to make arrangements for an onsite pickup.

In some municipalities and especially in more rural areas, collection events are the most convenient or preferred method for collecting materials such as household hazardous waste, including electronics, for recycling. The Authority sponsors collection events in municipalities where fixed locations for drop-off collections are not feasible.

In addition, some communities or organizations choose to conduct collection events in areas that are adequately covered by drop-off locations. The Authority works with those event organizers to provide recycling for covered electronics.

Collection services are provided in all 39 counties of the state as required by law. Cities with a population of 10,000 or more have at least one collection site. The total number of sites and services in 2012 exceeded 330. More than 50 percent of all fixed site drop-off locations are secondhand stores operated by charity organizations. These stores are not only convenient, but are also well known to the public as sites that accept used household items. Having a large number of charity operated collection sites has proven to be a great advantage for a product take-back program like E-Cycle Washington.

How Does E-Cycle Washington Compare to Similar Programs in Other States?

The E-Cycle Washington Program’s efficiency at bringing in electronics for recycling has from the outset been nationally recognized as a success. Every year the program has been in operation has seen Washington’s per capita collection rate in the top tier nationally, when compared to other states with similar, well-established recycling programs for electronics.

Table 4.1
Comparison of Select State Electronics Recycling Programs
(Pounds collected per capita)

State	2009	2010	2011
Washington	5.8	5.9	6.2
California	5.0	5.2	5.2
Maine	6.0	4.9	6.1
Maryland	3.1	3.0	3.0
Minnesota	5.8	6.7	6.2
Oregon	5.0	6.3	6.7

Note: The differences in recycling programs from state to state make direct comparisons of recycling rates inexact. For instance, Washington’s program is not open to large businesses (50 + employees) or large governments, while Oregon’s program accepts up to seven items per day from any entity.

At the time this report was written, the collection data for 2012 was not yet final. However, Ecology estimates that in 2012 the E-Cycle Washington Program will have brought in 6.2 pounds per person in the state.

The reasons for the success of the E-Cycle Washington Program include:

- A strong recycling ethic in Washington State in general.
- A collaborative public outreach effort by the Authority, Ecology, local governments and non-governmental organizations that started months before collections began on January 1, 2009, with the goal of educating the public about the availability of the free recycling program.
- Ecology’s emphasis on the requirement that retailers provide consumers with information about E-Cycle Washington at the point-of-sale when a new TV, computer or monitor is purchased.
- Continuing emphasis on public outreach and education, even as E-Cycle Washington completes its fourth year of operation. Television, radio, print media, online advertising, utility bill inserts, a billboard on Interstate 5, bus ads, e-mail subscription lists, and both public and private fairs and events have been used to reach out to and educate the public about the availability of the E-Cycle Washington Program.

Local Government and Local Community Satisfaction with E-Cycle Washington

E-Cycle Washington Survey

At the end of each year, Ecology solicits the opinions of local governments and communities on how well the E-Cycle Washington Program is working, and to gather any suggestions about improvement.

A short questionnaire is prepared each year and made available on the E-Cycle Washington website. At least 135 contacts from local governments and community organizations that have expressed an interest in electronics recycling are asked to provide feedback to Ecology about the effectiveness of the E-Cycle Washington Program in their area.

**Table 5.1
Summary of E-Cycle Washington Survey Responses
2009-11**

	2009	2010	2011
Were the E-Cycle Washington collection services provided in your community accessible and convenient to the public?	96% of the 31 responses were "Yes"	80% of the 15 responses were "Yes"	89% of the 29 responses were "Yes"
Are any services in your community not working?	70% responded that the services were working.	67% responded that the services were working.	79% responded that the services were working.

Changes Implemented

In addition to asking if local governments are satisfied with the program, Ecology asks for suggestions on how to improve the program. As a direct result of those suggestions, Ecology has worked with the Authority to make a number of changes over the last four years, including:

- Adding six collection sites/services in areas identified by local governments as underserved with regard to collection convenience.
- Sponsoring more collection events in rural areas where staffed drop-off sites are not feasible.
- Increasing public outreach efforts to educate the public about the availability of the free E-Cycle Washington Program.

- Providing funding support to small collection sites (government operated and privately operated) looking to advertise their location as an E-Cycle Washington drop-off site.
- Providing more or replacement signage to collectors to identify sites to the public as E-Cycle Washington drop-off sites.

Future Changes Suggested by Local Governments

By far the most common suggestion from local governments and others for improving the program is to expand the scope of electronic products accepted for free recycling. Computer peripherals such as printers, keyboards, mice, speakers, external hard drives, etc., in addition to VCRs, DVD players, gaming consoles and other video peripherals are all repeatedly suggested as good candidates to add to the E-Cycle Washington Program list of accepted products.

Ecology supports adding more products to the program's scope of eligible electronics, and will work with the Legislature and interested parties to accomplish this by looking for legislative opportunities to expand the scope of products covered by the E-Cycle law.

Recommendations for Improving the E-Cycle Washington Program

Ecology believes the E-Cycle Washington Program was an undeniable success in its first four years of operation with more than 163,000,000 pounds of electronics recycled. However, there is room for improvement. Following are Ecology's recommendations for improving the program.

- Expand the Program. The list of products eligible for the E-Cycle Washington Program should include printers, keyboards, mice and other computer peripherals. Other devices such as non-portable DVD players, VCRs and gaming systems should also be added to the list. This will require amending the definition of "covered electronic product" in the authorizing law, Chapter 70.95N RCW.
- Provide More Latitude to Ecology. To allow an orderly expansion of the program now and in the future as new electronic products are developed for the consumer marketplace, the law should be amended to allow Ecology to determine when and how the scope of eligible products will be expanded. This could include a requirement that Ecology conduct a public comment process to gather input on proposed additions to the list of electronic products covered by the E-Cycle Washington Program.

This process would benefit the state by enabling E-Cycle Washington to responsibly manage the expanding field of consumer electronics. It would also be a tangible example of government efficiency by eliminating the need to amend the law every time a product needs to be added to the program.

Analysis of the Export of Electronic Products, Components and Scrap from the E-Cycle Washington Program

As noted in the Purpose section of this report, RCW 70.95N.270(1)(g) states this report shall include:

“An analysis of whether and in what amounts unwanted electronic products and electronic components and electronic scrap exported from Washington have been exported to countries that are not members of the organization for economic cooperation and development or the European union, and recommendations for addressing such exports.”

The Authority representing the Standard Plan and any authorized parties representing independent plans for recycling electronics are required to submit annual reports to Ecology. These annual reports must include the total weight of unwanted electronic products, electronic components, and electronics scrap that have been exported from Washington State to countries that are not members of the Organisation for Economic Cooperation and Development (OECD) or the European Union.

E-Cycle Washington processors (recyclers) of electronics are required to conduct annual audits. Those audits include verification and review of all exports of “materials of concern” to countries that are not members of the (OECD) or the European Union. Materials of concern are:

- a) Any devices, including fluorescent tubes, containing mercury or PCBs;
- b) Batteries;
- c) Cathode Ray Tubes and leaded glass; and
- d) Whole circuit boards.

From 2009-12, the processors’ annual audits and the Authority’s annual reports verified that no electronic products, components or scrap were exported to non-OECD or European Union countries. However, some processed materials from the disassembly of electronics sold on the global market as commodities were shipped to non-OECD countries.

The goal of the electronics recycling industry is to generate metals, glass and plastics as commodities to sell on the open market for use as basic materials in the manufacture of new products. Shipments of these materials to non-OECD countries did occur through the global market system; however, no whole electronic units, electronic components, electronic scrap or materials of concern were exported to developing countries.

Ecology and the Authority take the issue of preventing the “dumping” of Washington’s electronics or potentially hazardous components of electronics on developing countries very seriously. Proper management of the electronics collected through the E-Cycle Washington Program is and will remain a priority for Ecology.