

# Oregon Paint Stewardship Program Evaluation

**Final Report to  
American Coatings Association and Metro Oregon**

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*Prepared by the Product Stewardship Institute, Inc.*

## **The Product Stewardship Institute, Inc.**

The Product Stewardship Institute (PSI) is a national nonprofit organization dedicated to reducing the health and environmental impacts of consumer products. Founded in 2000, PSI brings together key stakeholders with varying interests to develop product end-of-life solutions in a collaborative manner, with a focus on having manufacturers assume primary financial and managerial responsibility. With a robust membership base of 47 state governments and over 200 local governments, as well as partnerships with more than 95 companies, organizations, universities, and non-U.S. governments, PSI advances both voluntary programs and legislation to promote industry-led product stewardship initiatives.

### **Acknowledgements**

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## EXECUTIVE SUMMARY

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Each year, people in the State of Oregon generate approximately 700,000 gallons of leftover architectural paint—the type of paint that is used to coat the interior and exterior of buildings. Leftover paint is one of the biggest contributors to household hazardous waste (HHW) collection programs, and is a financial burden for shrinking municipal budgets.

Prior to 2010, Oregonians had limited access to collection sites that accepted and properly managed unused paint. However, in 2009, the Oregon Legislature passed the nation's first paint stewardship law, requiring that architectural paint manufacturers finance and operate a system for retrieving, transporting, and processing post-consumer leftover paint. The Oregon Paint Stewardship Program, which is managed by an industry-run nonprofit organization, *PaintCare*®, launched in July 2010. Oregon's legislature established a four-year pilot program that is due to sunset in 2014, pending legislation to make the program permanent. State lawmakers are currently discussing this legislation as part of the 2013 session.

At the request of the American Coatings Association (ACA), the trade association representing architectural paint manufacturers, and Oregon's Metro regional government, the Product Stewardship Institute (PSI) evaluated the performance of the first two years of the *PaintCare* program. This report summarizes PSI's findings based on surveys conducted with four stakeholder groups: HHW and recycling program coordinators; architectural paint manufacturers selling paint in Oregon; retailers serving as collection points for unused paint; and painting contractors. PSI supplemented its evaluation with program documents (see Appendix 1, Bibliography).

### **Based on PSI's evaluation, key program successes include the following:**

- **High approval rating:** The majority of respondents in each of PSI's stakeholder groups believe that the *PaintCare* program should be made permanent.
- **Increased collection of leftover paint:** Since implementing the paint stewardship program, Oregon has achieved a 34 percent increase in the quantity of paint collected and processed through the *PaintCare* program.
- **Cost savings for Oregon's local governments:** The majority of municipalities surveyed say they saved on paint collection, and they attribute the savings to their participation in the *PaintCare* program. In fact, in Year 1, Metro—the largest urban area in Oregon—reported a cost savings of over \$1 million.
- **Decreased paint management costs:** The cost of managing each gallon of paint decreased by almost 11 percent between Year 1 (\$7.03 per gallon) and Year 2 (\$6.27 per gallon) of the program.
- **More convenient options for paint collection:** Before the *PaintCare* program launched in June 2010, approximately 65 percent of all Oregon residents lived within 15 miles of a paint collection location. By the end of Year 2, that figure grew to just over 94 percent.

- **Increased production of recycled latex paint.** The quantity of recycled paint produced from leftover paint increased from Year 1 to Year 2 of the *PaintCare* program. While it was not specifically meant to aid in the development of the post-consumer market, the program has nonetheless played an influential role. In 2011, roughly 57 percent of all latex paint collected by the *PaintCare* program was used to make recycled-content paint. In 2012, that figure increased to 72 percent.

**Some program challenges noted in PSI's evaluation include:**

- **Collection site convenience in rural areas:** While the total number of collection sites for leftover paint has risen sharply over the program's two-year history, six percent of the population, located in more rural areas of the state, lives more than 15 miles from a paint collection location.
- **Consumer confusion about *PaintCare* program:** Retailers reported that some consumers were uncertain about which materials the program collects and about how the program operates (e.g., some consumers expected a deposit return when they brought their leftover paint back).
- **Small gains in paint reuse:** *PaintCare* contracts with 12 Habitat for Humanity ReStores, as well as Metro, to make leftover paint available for reuse to the public at no charge or at a discount. Even so, reuse accounts for less than 5 percent of the total volume of paint managed under the *PaintCare* program.
- **Difficulty in influencing consumer purchasing habits through education alone:** Consumer awareness of the *PaintCare* program has been increasing, but changing some consumer habits – particularly encouraging consumers to estimate the correct amount of paint necessary for a particular project, has proven more difficult.

**Based on PSI's findings, we recommend:**

- **Make the *PaintCare* program permanent:** The majority of stakeholders from every major group participating in the *PaintCare* program believe that the pilot program should be made permanent. As one retailer noted, "[*PaintCare*] should be permanent so that buildup of old paint does not happen!!! It just begs for mishandling of paint without this program."
- **Expand recycling options for rural residents:** The next rollout of collection locations should focus on rural areas, with a preference for finding permanent locations or holding more frequent events. Opportunities for further rollout, however, may be limited in rural areas that lack HHW collection sites or paint and hardware stores.
- **Expand Stakeholder Outreach and Education:** PSI recommends continued outreach and education that address how the paint assessment fee works. Based on the results of *PaintCare's* consumer surveys, public awareness of the program and the perception that the program is convenient are both growing. However, consumers are not always aware of what materials can or cannot be accepted, or they do not realize that the fee assessment does not operate like a bottle bill deposit.

- **Increase source reduction and reuse:** PSI recommends testing incentives and other approaches to encourage source reduction and reuse. Oregon’s paint stewardship legislation directs *PaintCare* to “...provide for the development and implementation of strategies to reduce the generation of post-consumer architectural paint; and promote the reuse of post-consumer architectural paint...”
- **Improve program reporting:** PSI recommends standardized metrics for future reporting to ensure accurate evaluation. *PaintCare* has produced two annual reports to assess its progress against the goals established by the Oregon paint stewardship legislation. However, the type of information reported and the type of metrics used for the reporting were not always consistent.

## I. INTRODUCTION

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The U.S. Environmental Protection Agency (EPA) estimates that about 10 percent of all paint purchased in the country—approximately 64 million gallons<sup>1</sup>—goes unused each year. That’s enough paint to fill more than 101 Olympic-sized swimming pools. The price of managing leftover consumer paint is Olympic-sized, too, reaching upwards of \$8 per liquid gallon.<sup>2</sup> Thus, municipal governments, many of which bear the financial and managerial burden of leftover paint collection and recycling, could reap a potential benefit of more than a half-billion dollars each year if all post-consumer paint was managed properly and if the paint industry and its consumers assumed the financial responsibility.

To relieve cash-strapped governments of this financial burden, the Oregon Legislature in July 2009 passed the nation’s first paint stewardship law, which requires paint manufacturers to implement a cost-effective and environmentally sound program for the management of post-consumer architectural paint.<sup>3</sup> Known as the Oregon Paint Stewardship Program and managed by the industry-run nonprofit organization, *PaintCare*®, the landmark initiative—which was endorsed by the American Coatings Association (ACA), the Oregon Department of Environmental Quality (OR DEQ), and Metro regional government (which represents 1.5 million people in the Portland Metro area)—launched in July 2010.

The Product Stewardship Institute (PSI) prepared this report on behalf of ACA and Metro as a two-year performance evaluation of the *PaintCare* program. The report quantifies the impacts and benefits of the program on local governments, retailers, painting contractors, manufacturers, and residents between July 2010 and July 2012. It also examines the state’s paint collection and recycling infrastructure, assesses the local market opportunities for recycled paint, and explores how the *PaintCare* program has impacted Oregon’s hazardous waste disposal and recycling industries. The report then evaluates existing and emerging trends in post-consumer leftover paint management.

Since Oregon’s industry-led Paint Stewardship Program has been in operation for two consecutive years—longer than any other state—this report assesses that program’s successes and challenges, and provides recommendations. In this way, the report will help the Oregon State Legislature prepare to develop and pass a law that will make the Oregon paint product stewardship program permanent. It will also help ACA, OR DEQ, Metro, and other stakeholders roll out the program’s next phase in 2013 and beyond.

### *Paint Stewardship in the U.S.*

Since 2003, PSI has facilitated a national dialogue aimed at reducing the amount of leftover paint that consumers generate, while increasing reuse and recycling opportunities. Leftover paint can be collected for reuse, recycling, energy recovery, or safe disposal. However, doing so requires sustainable funding and a convenient and effective infrastructure—something that often eludes state and local governments.

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<sup>1</sup> "US Architectural Coatings Forecast to 2015." Decision Metrics (October 2012).

<sup>2</sup> "A Background Report for the National Dialogue on Paint Product Stewardship." The Product Stewardship Institute, March 2004.  
[http://productstewardship.us/associations/6596/files/Background\\_Report\\_for\\_the\\_National\\_Dialogue\\_on\\_Paint.pdf](http://productstewardship.us/associations/6596/files/Background_Report_for_the_National_Dialogue_on_Paint.pdf)

<sup>3</sup> Architectural paint refers to both oil-based and latex paints that are used for the interior and exterior of buildings and that are sold in containers of 5 gallons or less. It does not include industrial coatings, original equipment coatings, or specialty coatings (e.g., arts and crafts).

Knowing that such a problem could not be addressed without participation and input from the paint industry, PSI brought the issue directly to the attention of ACA, which—in turn—agreed to take part in a national dialogue. With more than 200 participants, including a highly supportive U.S. Environmental Protection Agency (EPA), the dialogue resulted in a historic agreement<sup>4</sup> among paint manufacturers, government agencies, paint recyclers, painting contractors, and others. Under the agreement, architectural paint manufacturers would implement a nationally coordinated, cost-effective, and environmentally sound program for managing post-consumer architectural paint. The program would rely on a sustainable financing system in which a built-in fee incurred at the time of final purchase would fund the post-consumer leftover paint management operations. The agreement also established a plan for the passage of state legislation to create a paint product stewardship program in nine initial states.

Oregon was the first state in the nation to enact a law based on the agreement. Passed in 2009, Oregon’s law called for a four-year pilot of a paint product stewardship program, during which time paint manufacturers were prohibited from selling their products in Oregon unless they participated in an approved statewide paint stewardship program. ACA created *PaintCare*, a 501(c)3 nonprofit stewardship organization, to manage the pilot program. Oregon’s law requires that the pilot program be evaluated before the DEQ can make a recommendation regarding the program’s potential permanence. The evaluation will also help the DEQ determine whether the program requires modifications to improve its functioning and efficiency.

The ACA-sponsored legislation has since served as model legislation for three other states. California passed its own paint stewardship law in September 2010 and began implementing the program in October 2012. Next came Connecticut’s law, which was signed in June 2011 and remains on track for implementation by July 2013. Most recently, Rhode Island passed its paint stewardship law in June 2012; its program is expected to be implemented by 2014. Table 1, below, shows which states currently have paint stewardship laws in place, the dates that each law took effect, and the dates that each law’s corresponding paint stewardship program was, or will be, implemented.

Table 1: Paint Stewardship Laws in the U.S.		
State	Law Passed	Program Implemented
Oregon	June 2009	July 2010
California	September 2010	October 2012
Connecticut	June 2011	July 2013
Rhode Island	June 2012	July 2014

### Overview of Oregon Paint Stewardship Program

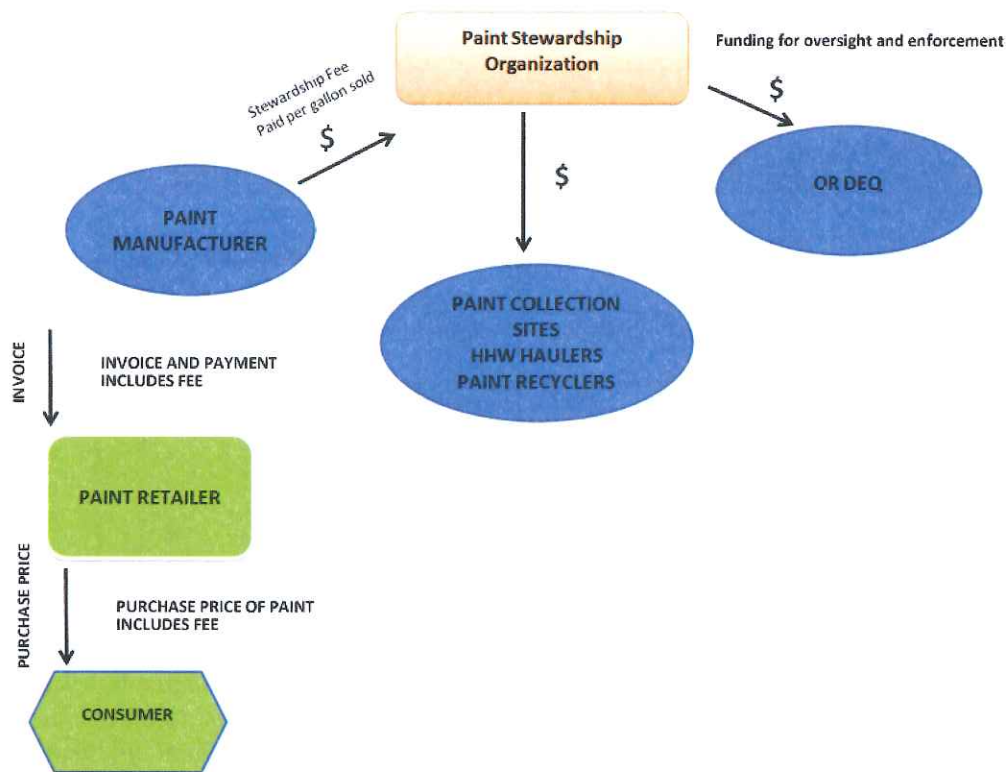
Figure 1 graphically represents the flow of financing for the Paint Stewardship Program, which works as follows: Paint manufacturers pay a per unit “assessment” fee to *PaintCare* on each unit of new paint sold in Oregon; it is this assessment fee that ultimately funds the program’s implementation. The law

<sup>4</sup> Paint Product Stewardship Initiative Memorandum of Understanding, October 6, 2004. [http://productstewardship.us/associations/6596/files/Final\\_Paint\\_MOU.doc](http://productstewardship.us/associations/6596/files/Final_Paint_MOU.doc)



requires that the manufacturers pass that fee to their dealers (distributors or retailers), which, in turn, must pass it to consumers. Each retailer can decide for itself whether to show the fee on customers' receipts. *PaintCare* contracts with transporters and recyclers to pick up the paint from paint collection sites. *PaintCare* also provides partial funding to OR DEQ for program oversight and enforcement.

**Figure 1: The Flow of Funds through the OR Paint Stewardship System**



Source: Chittenden County, VT (2013)

Consumers can return unused architectural paint to *PaintCare* participating retailers, HHW collection centers, transfer stations, special collection events, Habitat for Humanity ReStores, and other participating locations. *PaintCare's* contracted transporters pick up leftover paint from the collection centers, but also provide direct pickup from institutional, commercial, and industrial sites.

In Year 1 of the paint program, two vendors provided transportation and/or processing services: Metro and PSC. In Year 2, two additional vendors joined: the Lincoln County Haulers Association (LCHA) and Marion County, both of which had already had successful leftover paint recycling programs in place. By contracting with *PaintCare*, both programs were able to recoup their costs.

Collection and management of leftover paint varies depending on whether the paint is latex or oil-based, as well as on the location of the collection site. PSC transports most of Oregon's collected paint to a consolidation center in Washington State. PSC then delivers latex paint either to Metro's paint recycling facility or to Amazon Environmental in California, where it is used in the production of recycled-content paint. Marion County and Lincoln County have their own latex paint collection systems and facilities. PSC also collects oil-based paint and ships it to a fuel blending facility in Washington. The different strategies for managing leftover paint are further described in Section II of the report.

## II. QUANTITATIVE RESULTS OF OREGON PAINT PROGRAM

### Quantity of Paint Collected

General information exists about the number of collection sites and the total volume of paint collected during the years leading up to the *PaintCare* program's launch. Unfortunately, detailed data about the quantity of paint collected and managed outside of municipal HHW programs were not tracked prior to the launch (this information is being actively tracked *now*, however, through *PaintCare*). OR DEQ aggregated 2008 collection data from local government reports. Table 2 shows the baseline data that were available for the time period closest to the September 2010 launch of the *PaintCare* program.<sup>5</sup>

Table 2: Summary of Baseline Data							
January-December 2008							
	Latex Collected		Oil-Based Collected		Total Volume of Paint Collected		Percentage of Total Paint Collected
	Pounds	Gallons	Pounds	Gallons	Pounds	Gallons	
HHW & Solid Waste Sites	3,023,739	302,373	1,524,519	152,451	4,548,258 <sup>6</sup>	454,825 <sup>7</sup>	Unknown
Retailers	0		0		0		0
ReStores	Unknown		Unknown		Unknown		Unknown

The amount of paint processed in Year 1 of the *PaintCare* program totaled 469,665 gallons. By Year 2, this number had increased to 609,471 gallons, a growth of nearly 30 percent, half of which is due to Marion County joining the *PaintCare* program. Table 3 illustrates that there were significant increases in the amount of both latex paint and oil-based (alkyd) paint that was processed. This indicates that the product stewardship program is growing because it collected and processed more of the leftover paint available in Oregon during Year 2.

Table 3: Gallons of Paint Processed			
	Baseline	Year 1	Year 2
Gallons of latex paint	302,373	352,136	420,227
Gallons of oil-based paint	152,451	117,529	189,244
<b>Total Gallons of paint</b>	<b>454,825</b>	<b>469,665</b>	<b>609,471</b>

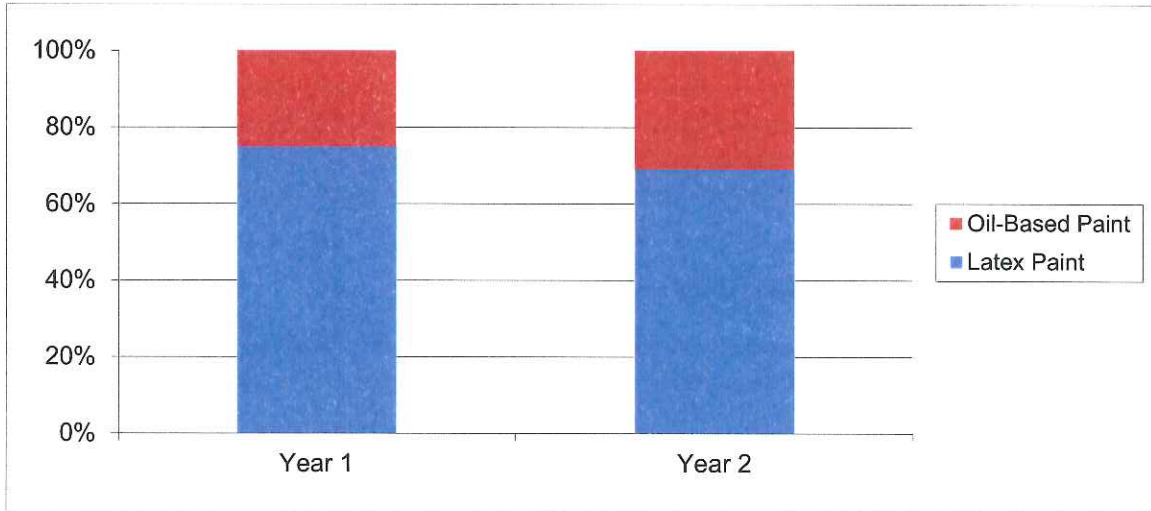
<sup>5</sup> DEQ is reviewing HHW and solid waste site data from 2008-2009 to verify their accuracy.

<sup>6</sup> PaintCare. Oregon Paint Stewardship Pilot Program Plan. June 21, 2010.  
[www.deq.state.or.us/lq/pubs/docs/sw/PaintProdStewardshipPilotPlan2010June.pdf](http://www.deq.state.or.us/lq/pubs/docs/sw/PaintProdStewardshipPilotPlan2010June.pdf)

<sup>7</sup> MSDS sheets and Paints and Coatings Resource Center, Ask the Expert. September, 2006.  
<http://www.paintcenter.org/rj/sep06d.cfm>

The type of paint most commonly collected by the *PaintCare* program over both years of operation was latex, as seen in Figure 2, below. However, oil-based paint collections did increase by the end of Year 2, ultimately accounting for about one-third of all paint collected.

**Figure 2: Leftover Paint Collected by Type: Year 1 and Year 2**



### Collection Infrastructure

To facilitate leftover paint collection, *PaintCare* expanded the then-current collection infrastructure. Since the program's inception, the number of permanent collection sites has grown over 400 percent, from 20 collection locations to 102 locations at the end of Year 2 (see Table 4). Although the number of HHW and solid waste collection sites held steady at 15 for Year 1, the number of retail sites jumped significantly, from four to sixty-nine. The number of Habitat for Humanity ReStore collection sites also grew, from one to nine. The types of retailers that chose to participate in the program were paint stores, hardware stores, and building supply businesses. Big box stores (e.g., Lowe's, Home Depot, and Walmart) did not participate as collection sites. In Year 2, the program added four HHW and solid waste collection sites, three new retail sites, and two new ReStores.

Collection Site	Baseline	Year 1	Year 2
HHW & Solid Waste Sites	15	15	19
Retailers	4	69	72
ReStores	1	9	11
<b>Total</b>	<b>20</b>	<b>93</b>	<b>102</b>

*Access to Collection Sites*

The *PaintCare* pilot program plan<sup>8</sup> states:

*The Program will use distance and population as criteria for determining convenient and available statewide collection under the legislation. The Program will use a 15 mile radius as the criteria for distance and incorporated cities and towns. The PaintCare system of collection sites as proposed in the Program Plan would establish paint collection sites within a 15 mile radius of 97.21% of residents who live in all incorporated cities, towns, and Census Designated Places (CDP)<sup>9</sup> in Oregon. Based on the current Oregon population of 3,471,700, as reported by the US Census, 71.88% of the Oregon population will have a collection site within 15 miles of where they live, which PaintCare believes fulfills the intent of a statewide program and provides a baseline for further evaluation.*

This statement establishes two types of convenience goals:

- (1) Just over 97 percent of ***Oregon residents who live in an incorporated city, town, or Census Designated Place*** will be located within a 15 -mile radius of a paint collection site.
- (2) Nearly 72 percent of ***all Oregon residents*** will be located within a 15-mile radius of a paint collection site.

Table 6 summarizes the percentage of Oregon’s population living within a 15 mile radius of a collection site prior to the program’s start date, at the end of Year 1, and at the end of Year 2. Two datasets are used for defining population: (1) those living in incorporated cities, towns, and CDPs; and (2) all residents (e.g., statewide population).

Table 6: Percentage of Population with Convenient* Collection Site				
Population Group	Baseline	Goal**	End of Year 1	End of Year 2
Oregon residents who live in an incorporated city, town, or Census Designated Place	69.9%	97.21%	95.5%	96.4%
All Oregon residents	64.7%	71.88%	93.1%	94.4%

\* Defined as living within a 15 mile radius of a collection site.

\*\* To be met by December 31, 2010.

*PaintCare* has either come close to, or exceeded, its convenience goals, with 96.4 percent of Oregon’s population within incorporated cities, towns, and CDPs living within a 15-mile radius of a collection site (as compared to the 97.21 percent goal), and 94.4 percent of the entire population living within a 15-mile radius (as compared to the 71.88 percent goal). At the end of Year 2, four to six percent of the

<sup>8</sup> *PaintCare*, Oregon Paint Stewardship Pilot Program Plan, submitted to Oregon Department of Environmental Quality, June 2010, <http://www.paintcare.org/oregon/PaintProdStewardshipPilotPlan2010June.pdf>.

<sup>9</sup> CDP is defined as a statistical entity defined for each decennial census according to Census Bureau guidelines, comprising a densely settled concentration of population that is not within an incorporated place.

population—including those located mainly in rural areas—did not live within a 15-mile radius of a permanent collection site. These residents are served either by permanent collection sites that are located beyond a 15-mile radius (20-minute drive) or by collection events. The collection site phase-in proposed in the *PaintCare* pilot program plan anticipated that 34 out of 36 counties<sup>10</sup> would have collection site access. At the end of Year 2, six counties—Gilliam, Lake, Polk, Sherman, Wallowa, and Wheeler—did not have any collection sites.

### How Leftover Paint is Managed

To fully understand the way that the *PaintCare* program manages leftover paint in Oregon, it is helpful to be familiar with the U.S. EPA's Solid Waste Management Hierarchy (see Figure 3). According to this hierarchy, source reduction and reuse are the best approaches to managing waste, followed by recycling and composting, energy recovery and, finally, disposal.

Figure 3: U.S. EPA Waste Management Hierarchy



#### Definitions as used in Oregon Paint Stewardship Program

**Leftover paint** (also referred to as post-consumer paint in Oregon's paint stewardship legislation) is paint that has not been used and is no longer wanted by its purchaser. **Source reduction** involves strategies to reduce the generation of leftover paint. **Paint reuse**, as the name implies, is the act of carrying out painting projects with leftover paint, thus preventing unnecessary waste through disposal or storage. Often, reuse occurs when consumers donate their leftover paint to a paint exchange center, which either gives it away or sells it at a significantly discounted price to other consumers. **Recycling** entails transforming leftover paint into a new, usable, or marketable material, including recycled paint. Recycled paint can be either 100 percent post-consumer paint or a blend of post-consumer and virgin paint. **Energy recovery** means that paint is used either to power other manufacturing processes, such as cement production, or in an energy recovery facility. Latex paint that cannot be reused, recycled, or used for energy recovery is mixed with process water from Metro's paint facility and injected into the Columbia Ridge Landfill in Arlington, Oregon for **biodegradation**.

<sup>10</sup> *PaintCare* 2010, *op cit.* p. 17.

**Source Reduction and Reuse:** *PaintCare* developed the “paint calculator” tool to reduce the amount of leftover paint. This source reduction tool offers tips for consumers on how to choose and purchase only the amount of paint necessary for a particular project.

Latex and oil-based paint can be reused if the paint is in good condition and in containers that are more than half-full. By Year 2 of the program, 4 percent of latex paint and 2 percent of oil-based paint were reused. Nearly 12 percent of all collection locations offer some form of paint exchange, including one operated by Metro and 11 Habitat for Humanity ReStores, where paint is sold at a discounted price, along with other donated building materials.

**Recycling:** In Year 2 of the *PaintCare* program, service providers turned 71 percent of all latex paint collected into recycled paint. These service providers were: MetroPaint, a subdivision of Metro; Amazon Environmental; Marion County paint recycling program; and Lincoln County paint recycling program.

MetroPaint was the first manufacturer to have its paint certified by Green Seal, an independent certification body. The GS-43 Recycled Content Latex Paint certification indicates that the paint meets rigorous, third-party standards for technical performance as established by the Master Painters Institute (MPI)—standards equivalent to those that are required for virgin paint. In addition, Green Seal certified recycled content latex paints meet extra environmental criteria, such as low content levels of volatile organic compounds.<sup>11</sup> MetroPaint’s Green Seal certified paint always contains more than 95 percent post-consumer content (by volume). MetroPaint also produces non-certified paint that typically contains more than 95 percent post-consumer content, but the recycled content may fluctuate to 66 percent.

Latex paint collected by PSC is also sent to Amazon Environmental, Inc. to produce recycled-content paint. Amazon produces paint certified to the Green Seal GS-43 Recycled Content Latex Paint certification standard, as well. Marion County and Lincoln County have their own latex paint collection systems and facilities for blending collected latex paint to produce 100 percent recycled-content paint.

**Energy Recovery and Biomass:** The majority of oil-based paint is used for energy recovery. PSC collects all oil-based paint and ships it to a fuel blending facility in Washington. Amazon Environmental uses a small amount of latex paint (four percent and six percent in Year 1 and 2, respectively) to produce a biomass fuel product, which uses waste paint as a binder for sawdust and other high British Thermal Unit (BTU) materials. The resulting biomass product is burned for fuel, primarily in cement production.<sup>12</sup> In Year 2 of the *PaintCare* program, four percent of the latex paint was also used directly for energy recovery. In Marion County, the local government collects paint and uses it to fuel its waste-to-energy facility.

**Biodegradation:** Latex paint processed through Metro that is unsuitable for recycling is mixed with process water from Metro’s paint facility and injected into the Columbia Ridge Landfill in Arlington, Oregon. The landfill has a special research, development, and demonstration permit to test whether this approach will increase degradation of landfilled waste and improve landfill gas recovery. This process is referred to as biodegradation in *PaintCare*’s annual reports.

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<sup>11</sup> Green Seal GS-43 Recycled Content Latex Paint is Green Seal’s Standard for Recycled Paint.

<sup>12</sup> “Oregon’s Paint Stewardship Law Report,” Oregon Department of Environmental Quality, November 14, 2011.

Figure 4 illustrates the percentage of latex paint that undergoes each management option. The biggest changes from Year 1 to Year 2 occurred in paint-to-paint recycling (up 14 percentage points) and disposal via biodegradation (down 13 percentage points). In addition, no recycled paint product was produced in Year 2. Management options for oil-based paint remained virtually unchanged between Year 1 and Year 2. Table 7 summarizes the gallons of latex and oil-based paint managed each year.

**Figure 4: Latex Paint Disposition in Year 1 vs. Year 2**

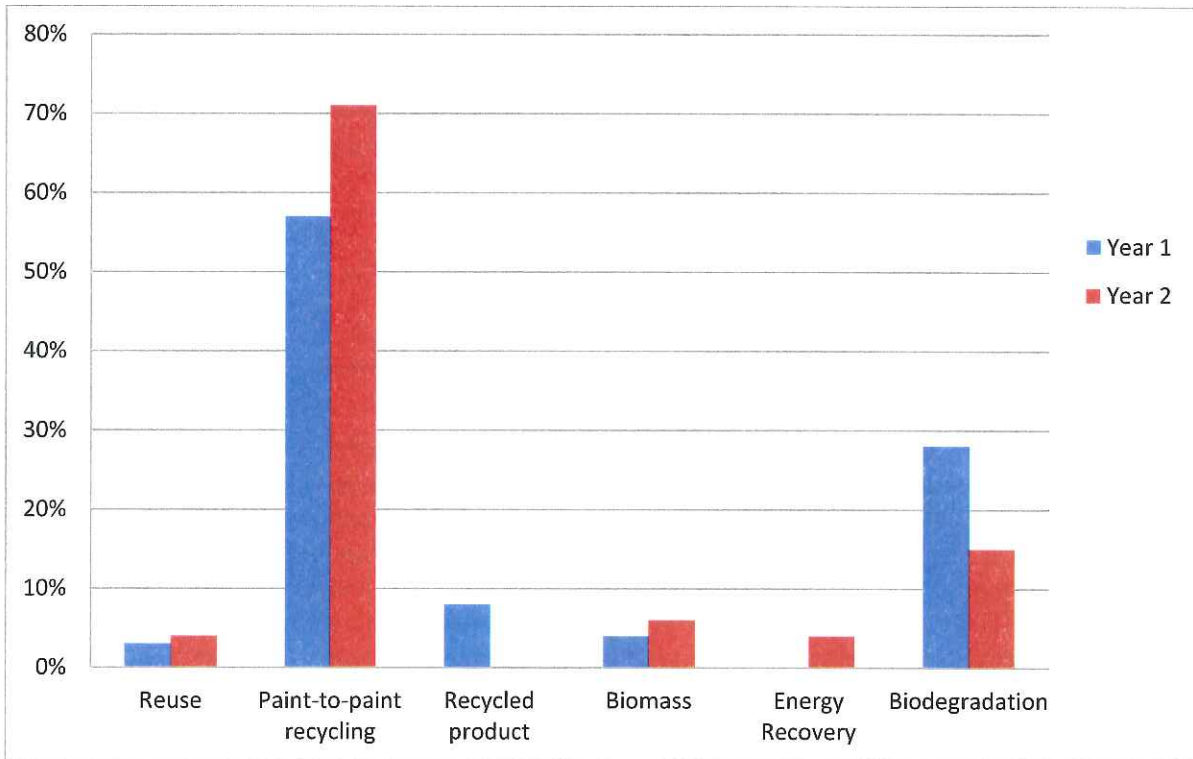


Table 7: Quantity of Paint (gallons) by Disposition Method				
Disposition	Year 1 (gallons)		Year 2 (gallons)	
	Latex	Oil	Latex	Oil
Reuse	10,564	3,526	16,809	3,785
Paint to paint recycling	200,718	--	298,361	--
Other recycled product	28,171	--	0	--
Biomass	14,085	--	25,214	--
Energy recovery	--	--	16,809	--
Fuel blending	--	114,003	0	185,459
Biodegradation	98,598	--	63,034	--

*Program Costs and Revenues*

The *PaintCare* program operates via funding from a special paint assessment fee, which consumers pay at the time of purchase in addition to the retail price of the paint. Retailers can determine whether to show this assessment fee on the consumers' purchase receipt. The fee structure depends on the size of the paint container (see Table 8).

<b>Table 8: <i>PaintCare</i> Assessment Fee</b>	
<b>Paint Container Volume</b>	<b><i>PaintCare</i> Assessment Fee</b>
<b>1/2 pint container or less</b>	No Charge
<b>More than 1/2 pint to 1 gallon</b>	\$ 0.35
<b>1 gallon container</b>	\$ 0.75
<b>More than 1 gallon to 5 gallons</b>	\$ 1.60

The revenue collected from the assessment fees covers program expenses (summarized in Table 9). The average cost of managing Oregon's *PaintCare* program was \$7.03 per gallon during Year 1 and \$6.27 per gallon during Year 2. This per-gallon cost includes transportation and processing, along with Metro's collection costs as part of a wider contractual agreement. However, it does not include the cost of collection for other collectors, which SCS Engineers and Cascadia Consulting Group estimate to be approximately \$2 to \$3 more per gallon.<sup>13</sup> Program start-up costs are also excluded in Table 9. Both Year 1 and Year 2 show positive net assets. Since sales of paint tend to be seasonal (May through September), the net assets allow the program to operate through periods of lower paint sales.

	<b>Table 9: <i>PaintCare</i> Program Revenue and Expenses</b>	
	<b>Year 1</b>	<b>Year 2</b>
<b>Revenue from assessment fees</b>	\$4,021,565	\$4,247,071
<b><i>PaintCare</i> Program Expenses</b>	\$3,301,977	\$3,822,562
<b>Net Assets</b>	\$ 719,588	\$ 424,509
<b>Average cost/gallon</b>	<b>\$7.03</b>	<b>\$6.27</b>

<sup>13</sup> SCS Engineers and Cascadia Consulting Group, "Paint Product Stewardship Initiative Infrastructure Project," March 2007. [http://www.productstewardship.us/associations/6596/files/Paint\\_Infrastructure\\_Report-FINAL.doc](http://www.productstewardship.us/associations/6596/files/Paint_Infrastructure_Report-FINAL.doc). This report estimates collection costs at \$1.98 per gallon. Cascadia Consulting Group and DSM Environmental, "Management of Unwanted Architectural Paint in Washington," January 2013. <http://productstewardship.net/sites/default/files/Docs/paint/paint-mgmt-in-wa-2013.pdf>. This report estimates collection costs ranging from \$2.26 per gallon to \$3.22 per gallon.



### III. PSI STAKEHOLDER EVALUATION

#### Data Collection

PSI used data for this report from a number of sources, including both the 2011<sup>14</sup> and 2012<sup>15</sup> installments of the “Oregon Paint Stewardship Pilot Program Annual Report” (which *PaintCare* is required by law to submit each year), as well as OR DEQ’s 2011 Legislative Report.

Additionally, with the help of an online survey generation and data collection tool, PSI developed four questionnaires, each focused on one of the following audience groups: retailers; painting contractors; local recycling and HHW coordinators; and paint manufacturers. The Painting and Decorating Contractors of America (PDCA), a trade organization, distributed the painting contractor survey, and PSI distributed the other three surveys. All surveys were conducted in October 2012. Each questionnaire posed a series of quantitative and qualitative questions about the survey taker’s experience with the *PaintCare* program, discussing such topics as awareness, convenience, ease of use, costs, benefits, time commitments, drawbacks, challenges, and overall preferences.

Table 10 summarizes the number of survey recipients per stakeholder group, along with the response rate. While PSI received a high response from retailers, HHW coordinators, and paint manufacturers, only 3 percent of painting contractors who received the survey responded. However, PDCA maintains that such a response rate is commensurate with the response rates of its own inquiries.

<b>Stakeholder Group</b>	<b>Total Contacted</b>	<b>Total Responses</b>	<b>Response Rate</b>
<b>Retailers</b>	102	71	70%
<b>Manufacturers</b>	24	18	75%
<b>HHW Coordinators</b>	15	15	100%
<b>Contractors</b>	>1000	30	<3%

These questionnaires were not intended to yield statistically quantifiable results, but rather to assess trends and progress over the first two years of the paint pilot project. Each questionnaire, along with a tally of responses, can be found in Appendix 2. Using data generated from these questionnaires, in conjunction with supplemental data derived from other secondary and primary sources (see full bibliography in Appendix 1), PSI evaluated the performance of Oregon’s *PaintCare* program since July 2010.

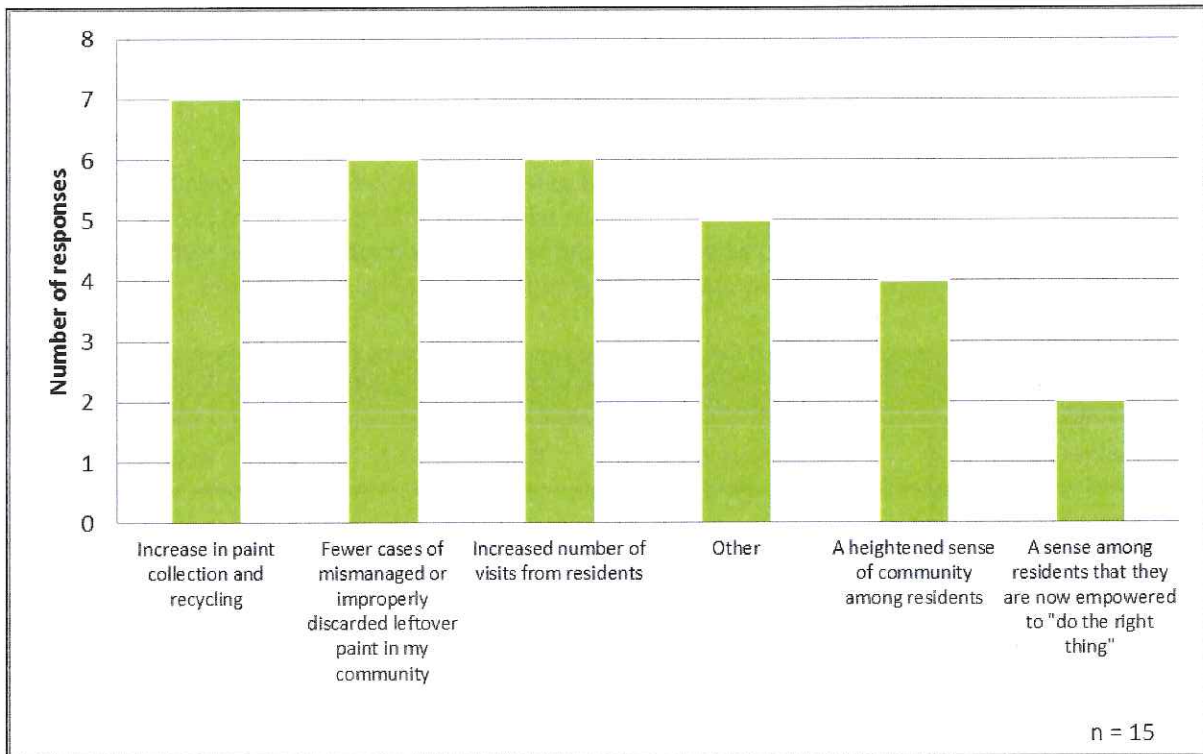
<sup>14</sup>“Oregon Paint Stewardship Pilot Program Annual Report 2011,” submitted 9/1/11 to OR DEQ by *PaintCare*.

<sup>15</sup>“Oregon Paint Stewardship Pilot Program Annual Report 2012,” submitted 9/4/12 to OR DEQ by *PaintCare*.

### Recycling and HHW Program Operators

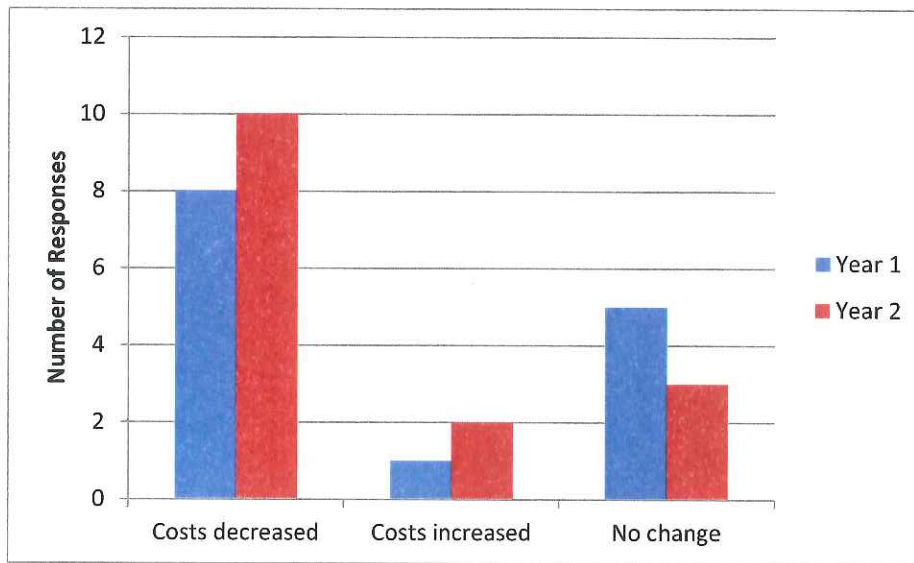
Feedback from recycling and HHW coordinators was generally positive. Eighty-six percent of the coordinators said that they would like the program to be in place permanently, and 14 percent thought that the program should be allowed to sunset. Over 90 percent of those surveyed said that they experienced at least one benefit from the *PaintCare* program since its launch. Such benefits included an increase in the number of items that consumers are dropping off for recycling; an increase in paint collection and recycling; and an increase in number of visits from residents (see Figure 5).

**Figure 5: What benefits to your collection/recycling center do you believe have resulted from the PaintCare program?**



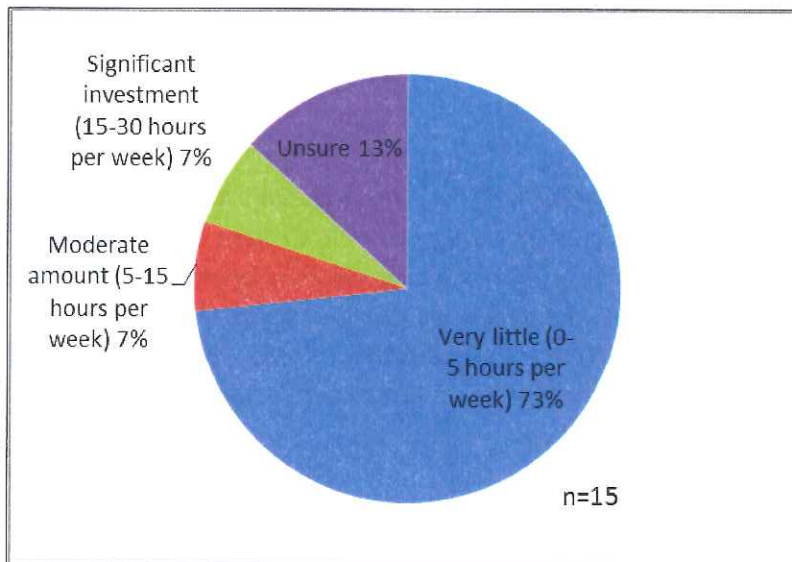
The majority of recycling and HHW coordinators also cited cost savings as a benefit of the program. In the Oregon Paint Stewardship Program, costs are shifted away from taxpayers and onto producers and consumers. In Year 1 of the program, 8 out of 14 recycling and HHW collection coordinators reported that their costs decreased. By Year 2, this increased to 10 out of 15 (Figure 6). All coordinators who had reported decreased costs attributed these savings to the *PaintCare* program. In fact, Metro, the largest urban area in Oregon, reported a cost savings of over \$1 million in the first program year. Two respondents in Year 1, and one respondent in Year 2, reported an increase in paint management costs, although the respondents did not specify the nature of the costs.

**Figure 6: In terms of paint, did your facility experience any cost savings in Year 1 and 2?**

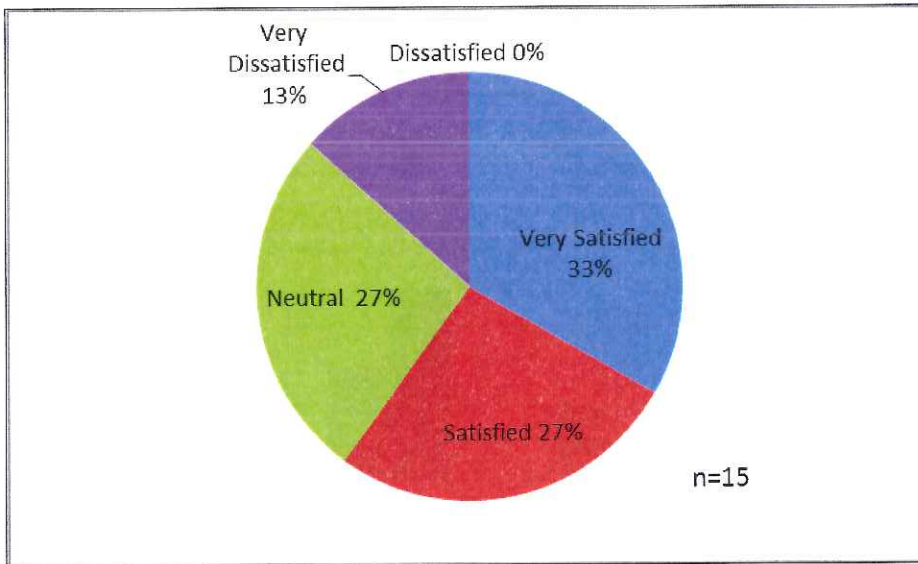


Eighty-seven percent of coordinators believe that residents find the program convenient, while the remaining 13 percent were evenly split between those believing that residents did *not* find the program convenient and those who were unsure. Three of the fifteen respondents expressed the need for additional collection sites, particularly in rural areas. Regarding program ease, 73 percent of coordinators think that the program took “very little” staff time to implement (Figure 7) and 60 percent of coordinators believe that their staff is either satisfied or very satisfied with the program (Figure 8). Selected quotes from three recycling coordinators are also provided, below.

**Figure 7: How much staff time is involved in participating in the *PaintCare* program?**



**Figure 8: How satisfied are your employees with the *PaintCare* program?**



#### *Oregon Recycling and HHW Officials – Comments on PaintCare Program*

*PaintCare is important for proper management of unwanted paint in Oregon, but also as a model for the country. Though our particular hazardous waste collection program worked seamlessly with PSC to implement the PaintCare program, there is still a need for improved equity of service in remote areas. We recommend an expansion of PaintCare in the types of covered items and the indirect local government costs covered.*

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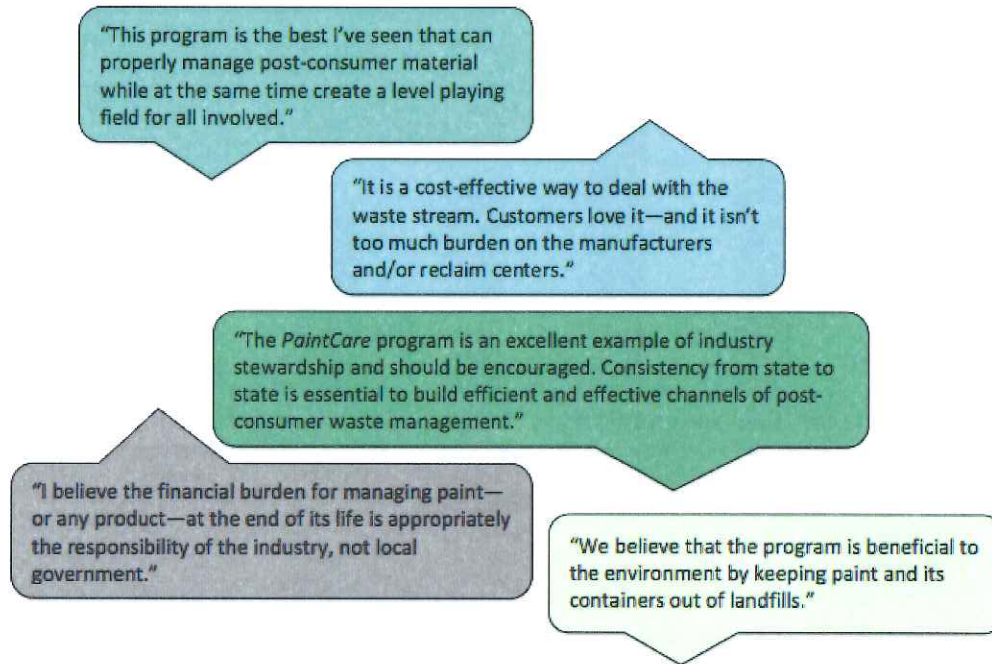
*[The paint stewardship law] is fulfilling a role in keeping the manufacturers responsible for the products they produce. One of my biggest frustrations is that, so often, solid waste/recovery companies are charged with the task of finding ways to properly dispose or reuse/recycle items that did not have this fact considered into their design process. All products should have an end life designed into them; whether that is being able to biodegrade, be re-used, or turned into raw material again. PaintCare is a step in this direction and should be kept around in our opinion.*

\*\*\*

*We already had a very strong program, including curbside collection, so the main benefit to our residents is that the county is reimbursed for costs, making these funds available for other environmental efforts.*

## Paint Manufacturers

When asked if Oregon's *PaintCare* program should be made permanent, nearly 65 percent of the paint manufacturers that responded to this question (11 out of 17) answered "yes," with 19 percent reporting that they were unsure, and only one respondent answering "no." See below for a sample of manufacturers' comments expressing support for the paint program.



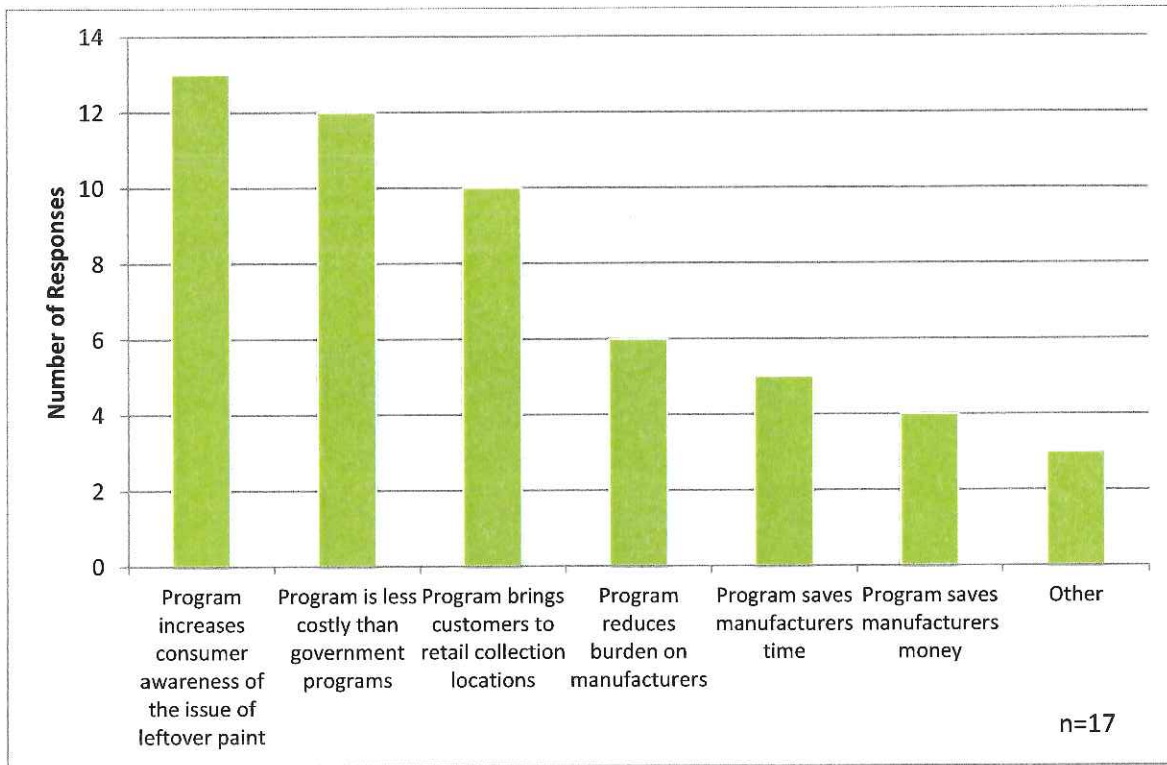
Paint manufacturers cited various benefits of the *PaintCare* program. The two most commonly reported benefits were an increase in consumer awareness of the issue of leftover paint and a reduction in costs compared to government programs. The next most commonly reported benefit was that the "program brings customers to retail collection locations."<sup>16</sup> PSI's analysis concludes that this benefit pertains both to manufacturers with retail outlets as well as to those without those stores. Figure 9 shows a comprehensive list of *PaintCare*'s benefits to paint manufacturers.

Manufacturers reported that their costs for implementing the *PaintCare* program were \$25,000 or less, with 16 out of 18 survey respondents reporting costs in the range of \$0 - \$10,000. Two of the 18 respondents stated that their costs for implementing the program were between \$20,001 and \$25,000.

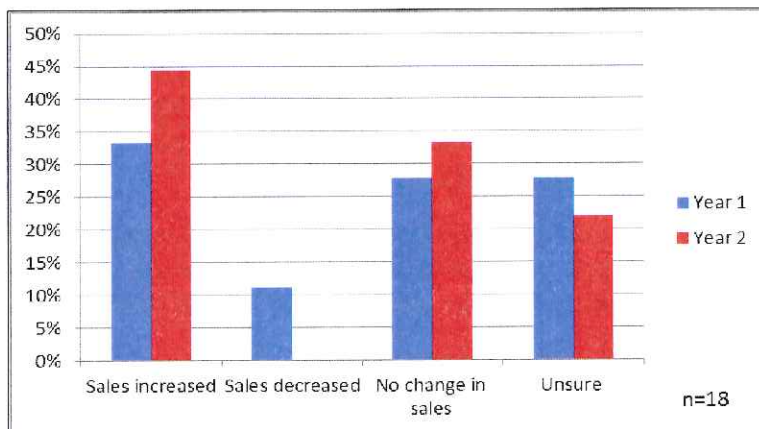
Thirty-three percent of paint manufacturers reported experiencing an increase in paint sales in Year 1, and 44 percent experienced an increase in sales in Year 2 (Figure 10). Twenty-five percent of manufacturers attributed the increase in sales to the paint stewardship program (Figure 11). The two manufacturers that reported a decrease in sales (Year 1 only) did not attribute this decrease to the program.

<sup>16</sup> Six of the eighteen paint manufacturers responding to this questionnaire also operate retail stores. PSI compared responses of those manufacturers with stores to those without stores to assess whether this may have influenced manufacturer responses. (For example, were manufacturers with retailer stores more likely to respond that the *PaintCare* program brings customers to retail collection locations?) PSI found no difference in the responses between these groups.

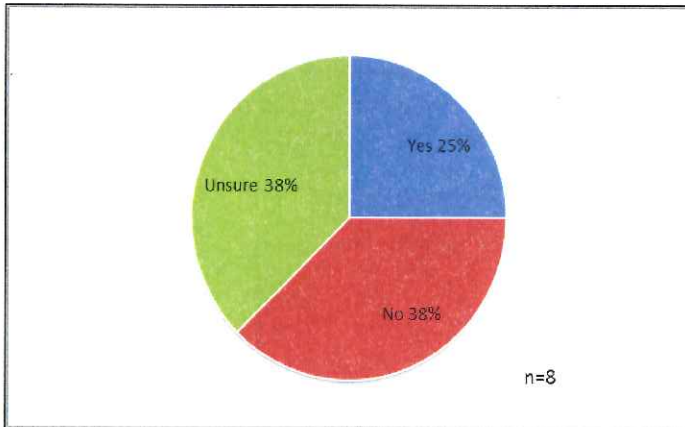
**Figure 9: What benefits did you experience with the *PaintCare* program?**



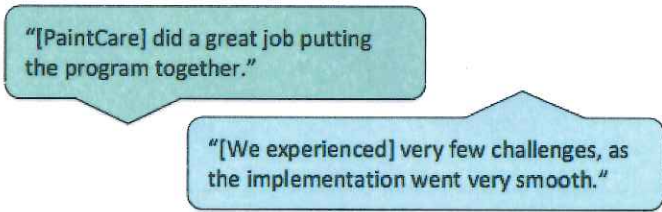
**Figure 10: Did your company experience a change in total sales in Year 1 and/or Year 2**



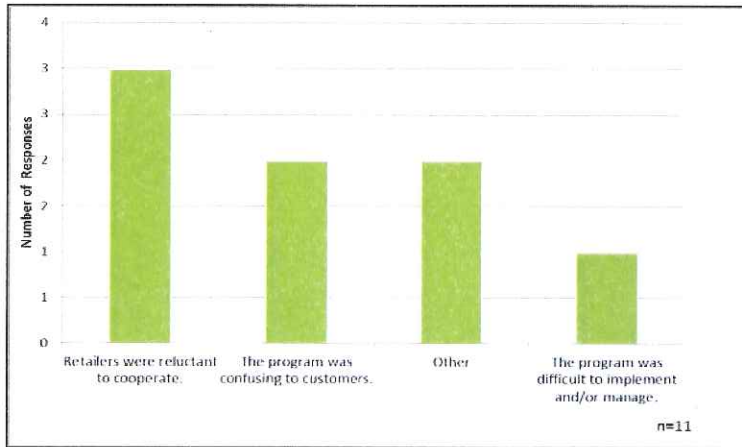
**Figure 11: Are increased sales attributable to program?**



The vast majority of manufacturers did not experience any challenges with the *PaintCare* program (see Figure 12, along with relevant quotes from two manufacturers, below).<sup>17</sup> Three manufacturers said that retailers were reluctant to cooperate, although they did not provide additional insight.



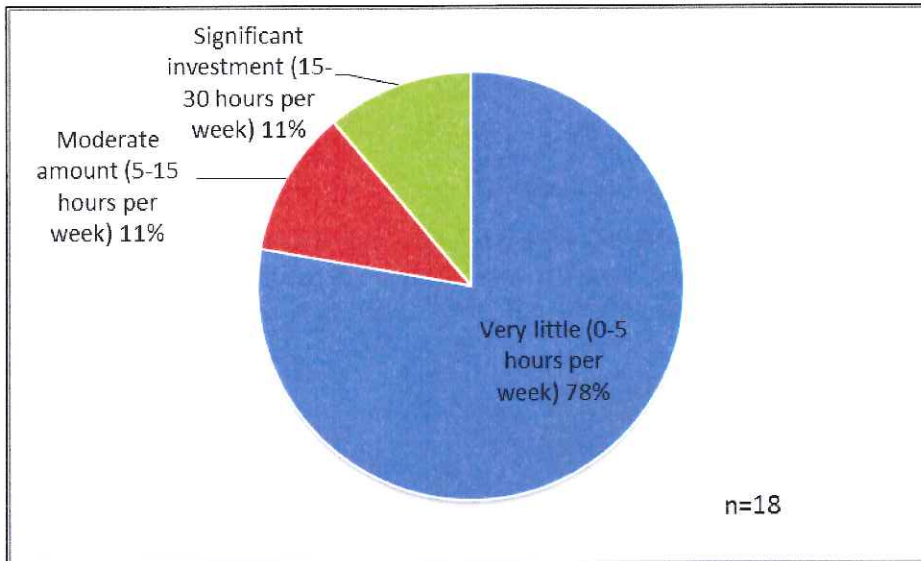
**Figure 12: What challenges or problems did you experience with the PaintCare Program?**



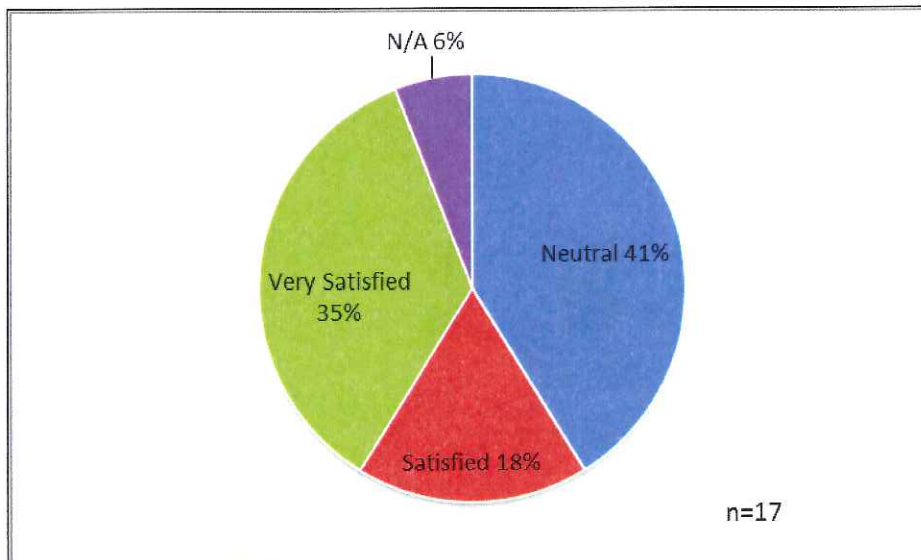
<sup>17</sup> Seven manufacturers did not provide a response to this question. Four respondents selected “other” as their answer to this question, but then entered “none” in the “please explain” box, presumably because “none” was not presented as a choice in answering this question. PSI combined the lack of responses with the response “none.”

The *PaintCare* program required very little employee time (0 to 5 hours), according to 78 percent of paint manufacturers surveyed, with 11 percent reporting that employee time took 5-15 hours, while another 11 percent reported that employee time took 15-30 hours (see Figure 13). More than half of the manufacturers surveyed reported that their employees were either “satisfied” or “very satisfied” with the *PaintCare* program, with another 41 percent expressing a neutral opinion. No manufacturer expressed that its employees were dissatisfied with the program (see Figure 14).

**Figure 13: How much staff time is involved in participating in the program?**



**Figure 14: How satisfied are your employees with the program?**



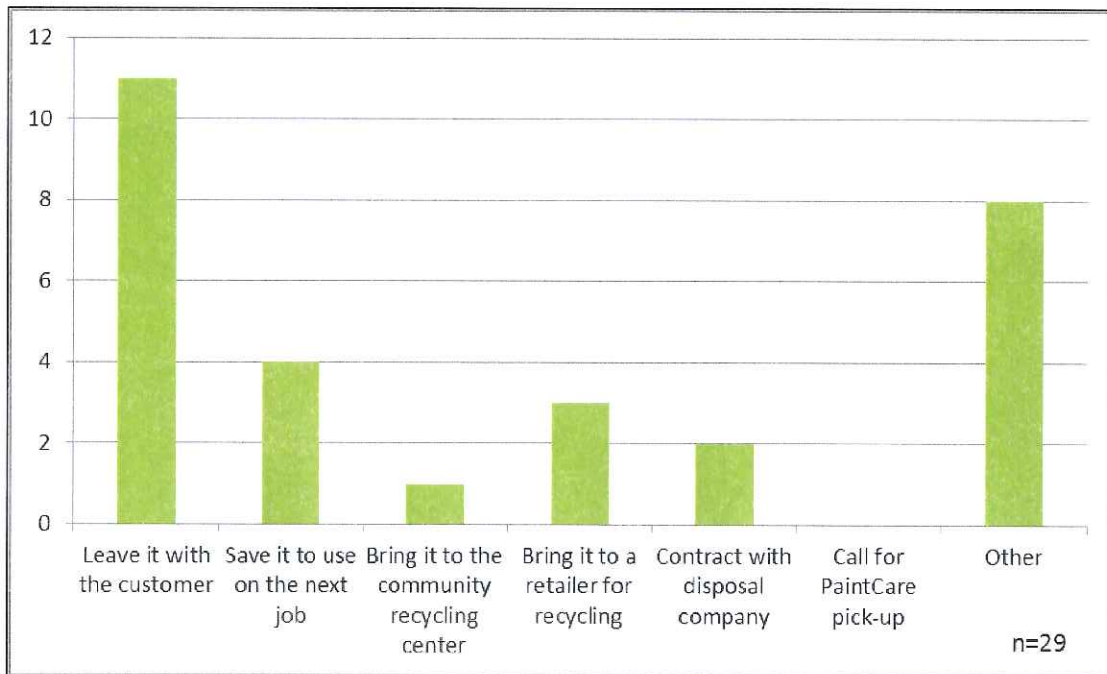


### Painting Contractors

PSI encountered difficulty in obtaining survey responses from painting contractors. The Oregon chapter of PDCA distributed the survey to more than 1,000 painting contractors in its membership base. However, only 30 responded (representing a response rate of less than 3 percent). Of the 30 respondents, many left questions unanswered. While PDCA confirmed that such a low response rate is typical—even for its own surveys—PSI cannot say with certainty that the responses received are representative of this stakeholder group, or if there may be a response bias.<sup>18</sup> Even so, 54 percent of the respondents indicated that they would like the *PaintCare* program to become permanent. Twenty-five percent were unsure, and about 21 percent said that they wanted the program to end. The main concern among the painting contractors who responded to the survey is that they are paying for a service that they, themselves, do not use. This is because painting contractors typically do not have large quantities of leftover paint to dispose of, since they leave it with the client for future use or, because of their expertise, they do not overestimate the amount of paint needed for a job. Some also believe that the service adds cost to their business, and that there was no convenient collection site available to them.

About 38 percent of the contractors responding to the survey said that they leave leftover paint with their customers (see Figure 15), thereby shifting responsibility for disposition to their clients. However, this amount seems to be underestimated, since those who “other” also said that they left some or all of the leftover paint with the client. Additional responses also categorized as “other” included reusing it or recycling it, which might also indicate that some of the responses related to reuse and recycling (e.g., “Bring it to the community recycling center”) might also be underestimated.

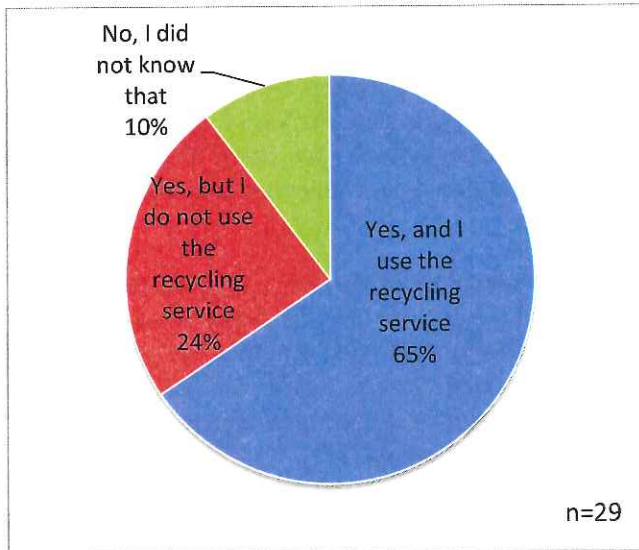
**Figure 15: When you've completed a job and there is paint left over, what do you do with that leftover paint?**



<sup>18</sup> Response bias occurs when the answers provided by survey respondents are not indicative of those of non-respondents because the groups differ in one or more ways (e.g., number of employees, length of service, etc.)

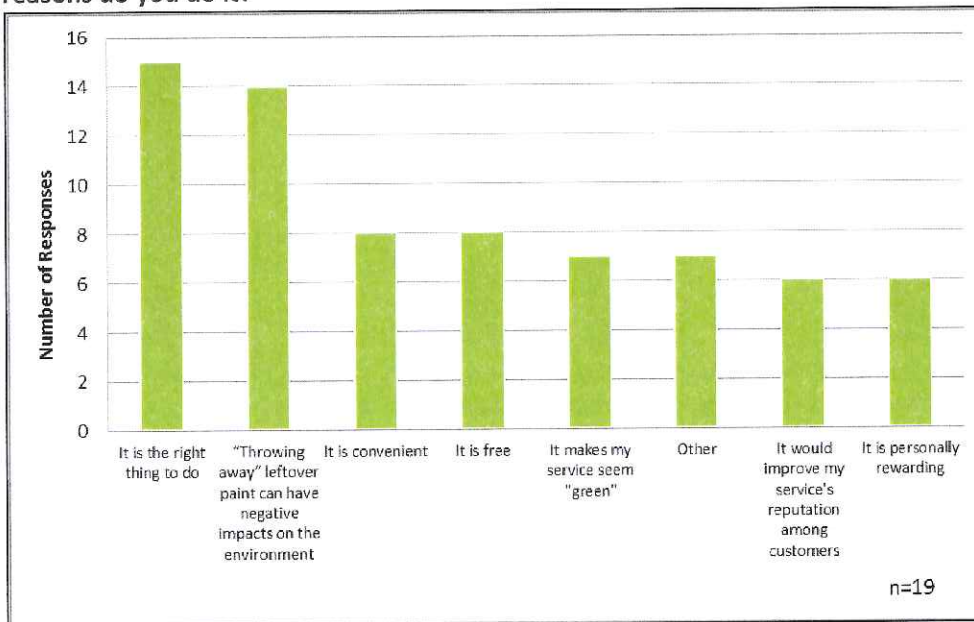
About 90 percent of painting contractors who responded to the survey said that they were aware of the *PaintCare* program, with the large majority also using the recycling service. However, 24 percent of those who responded said that, while they were aware of the program, they did not use the service because there was no convenient collection site, recycling locations were not well advertised, or it is too time-consuming to drop off paint (see Figure 16).

**Figure 16: Are you aware that you can recycle your leftover paint at no cost in Oregon as part of the state's *PaintCare* Program?**



The reasons that painting contractors participate in the *PaintCare* program vary, with nearly 80 percent participating because they believe that it is the right thing to do and because discarding paint is bad for the environment (See Figure 17).

**Figure 17: If you bring your leftover paint to a community center or to a retailer for recycling, for what reasons do you do it?**



## Retailers

To assess retailer experience with the *PaintCare* program, PSI sent the questionnaire only to those retailers that serve as *PaintCare* collection sites. The majority of respondents supports the *PaintCare* program and thinks the program should be made permanent (Table 11). Specific program benefits voiced by retailers are highlighted on the next page.

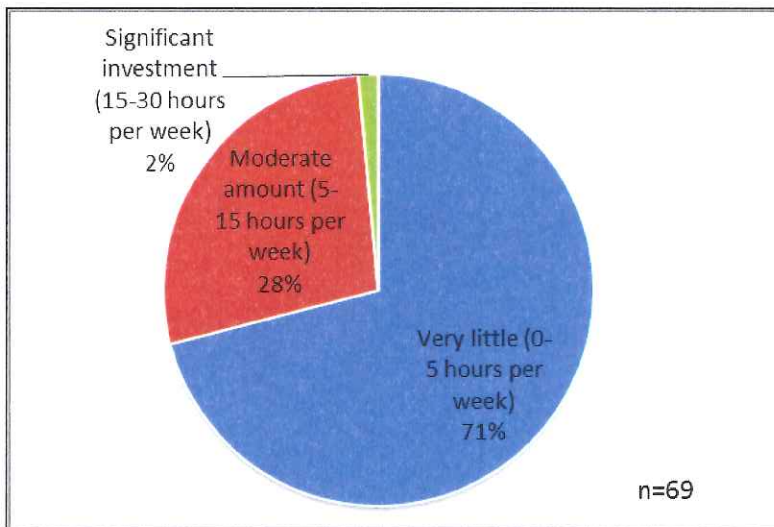
Table 11: Do you think the paint stewardship program should be made permanent?	
Yes	72%
No	15%
Unsure	13%

Nearly three-quarters reported that the program required very little staff time each week (see Figure 18), indicating that most retailers do not find the program burdensome to administer. Respondents provided multiple reasons for participating in the *PaintCare* program. Forty to 70 percent of respondents cited the following reasons (Figure 19):

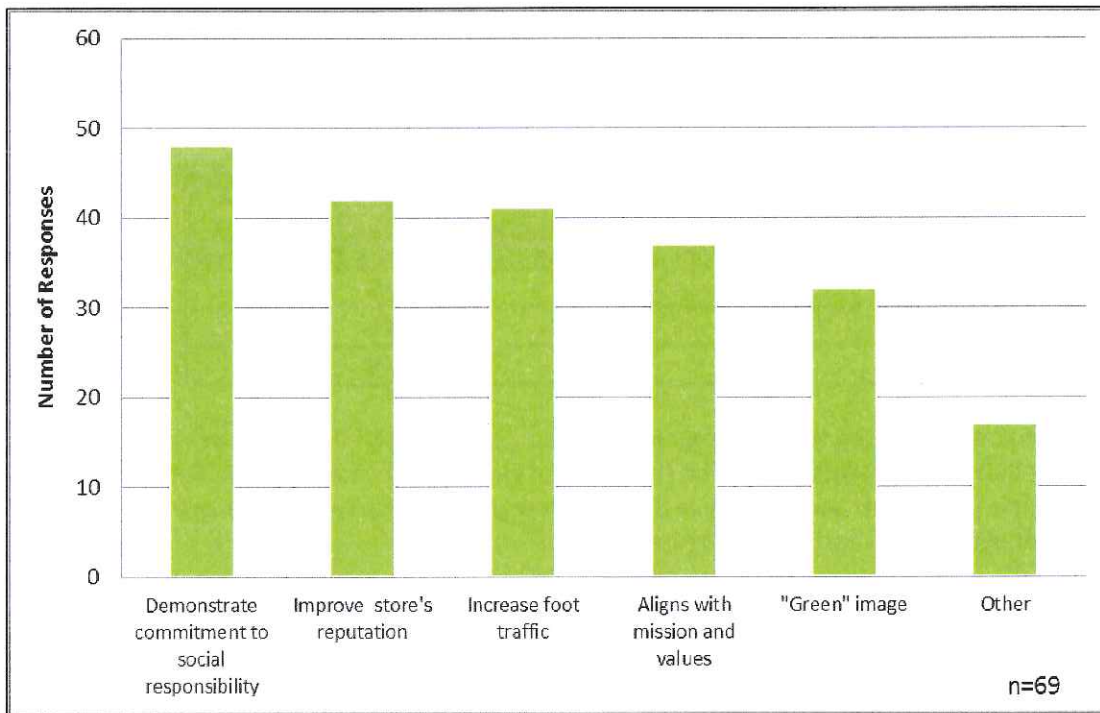
- To improve my store's reputation among consumers;
- To make my store seem "green";
- To demonstrate my store's commitment to social responsibility;
- To increase foot traffic to my store and, therefore, boost sales; and
- It aligns with my store's mission and core values.

Given that big box retailers (e.g., Lowe's, Home Depot, and Walmart) are not participating as collection sites, paint and hardware stores may have greater incentive to join the program as a way to differentiate themselves from these larger competitors. However, it was difficult for retailers to assess whether program participation fostered store loyalty (responses were virtually evenly split among "yes," "no," and "unsure").

**Figure 18: How much staff time is involved in participating in the program?**



**Figure 19: What motivated you to participate in the program as a retail collection site?**



Sixty-one percent of retailers noted that customers who dropped off their leftover paint either “sometimes” or “frequently” purchased other products from their store (Figure 20). PSI also queried retailers about their stores’ total sales over the two-year period (see Table 12). Thirty-seven percent of retailers reported increased sales in Year 1, and 60 percent reported increased sales in Year 2. However, because PSI did not collect sales information from non-participating stores, we cannot say with certainty that program participation is responsible for the sales increases.

**Figure 20: How often did customers who dropped off their leftover paint purchase other products from your store?**

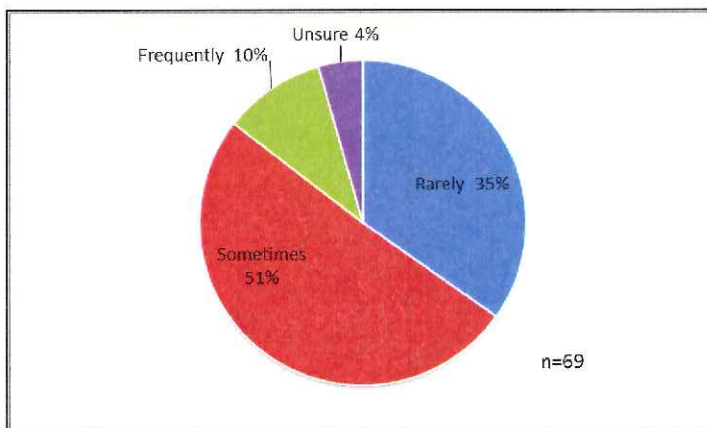


Table 12: Changes in Annual Store Sales		
Response	Year 1	Year 2
Sales increased	37%	60%
Sales decreased	15%	5%
No change in sales	36%	25%
Unsure	12%	10%

When asked about the challenges that retailers experienced with the *PaintCare* program (Table 13), one-quarter of respondents reported that the program was too confusing for consumers. Comments received under the “other” category—such as anecdotes about consumers dropping off the wrong type of materials, placing paint in the wrong containers, and expecting to receive a deposit refund—indicate that consumer confusion is not limited to the collection process. Nearly one-quarter of the retailers also expressed concerns over space limitations.

On the positive side, very few retailers felt that the program was confusing to employees, that it took too much time, or that it was difficult to implement and/or manage. And, very few retailers believed that haulers were reluctant to cooperate.

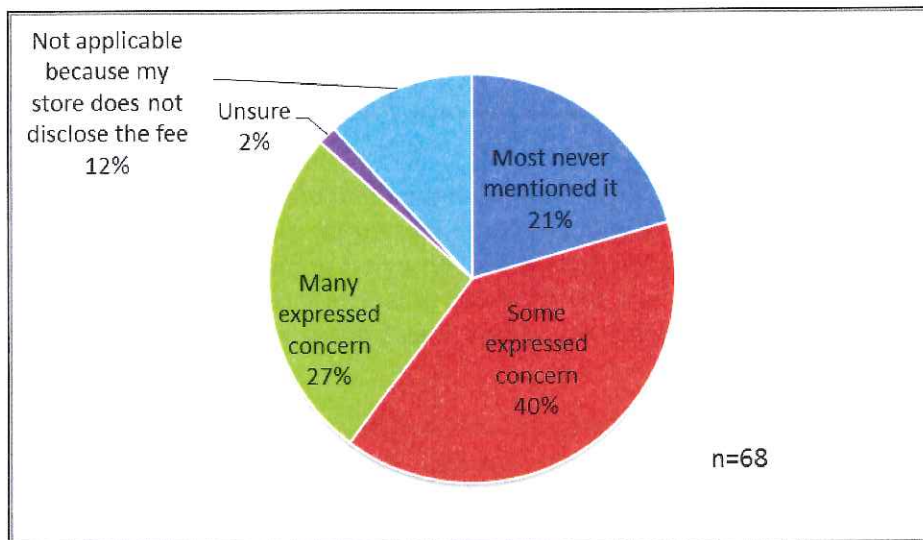
Table 13: Challenges Faced by Retailers	
The program was confusing to customers.	26%
Space limitations.	23%
None/no answer <sup>19</sup>	23%
Other	17%
The program was confusing to my employees.	5%
The program took too much time to implement/manage.	5%
The program was difficult to implement and/or manage.	1%
Haulers were reluctant to cooperate.	1%

Additionally, the responses suggest that the challenges reported were not a barrier to program participation; only four of the 71 respondents stated that they no longer participate in the program, and three of those retailers dropped out because their stores closed.

<sup>19</sup> Twelve respondents selected “other” as their answer to this question, but then entered “none” in the “please explain” box accompanying this answer. This is presumably because “none” was not presented as a choice in answering this question. PSI counted these responses as “none.”

Oregon retailers have the option of either including the paint assessment fee in the sales price of paint, or having it appear as a separate line item on a customer's sales receipt. PSI asked retailers if their customers had expressed concerns about the fee. Roughly two-thirds of respondents reported that many or some of their customers had, in fact, expressed concern (Figure 21). Twelve percent of survey respondents noted that this question was not applicable to them because their store does not disclose the fee to the consumer.

**Figure 21: How often did customers express concern about paying the fee for paint recycling?**





### *Oregon Paint Retailers – Comments on PaintCare Program*

*It's a great program! We get more foot traffic in our store (which is sorely needed these days) and our customers (as well as, potential new customers) feel great about recycling their old paint, in turn helping our environment.*

\*\*\*

*The amount of paint that we have taken in over the last two years is mind boggling. It is nice to know that it is being disposed of properly. Efforts should be made to make it easy for people to get rid of other items that contaminate our ground water, etc. like aerosol paints & solvents. People assume that we can take these things as well.*

\*\*\*

*Being in a rural area it is difficult to properly deal with this kind of waste. Paint Care has made this process absolutely painless.*

\*\*\*


*It's unbelievable the amount of paint just lying around in peoples sheds, garages and even outside because they don't know what to do with it. We had a huge turnout for such a small community when we first started, and it's amazing how many people are still bringing old paint in. [The program] should be permanent so that buildup of old paint does not happen!!! It just begs for mishandling of paint without this program.*

\*\*\*

*The amount of paint people have is amazing. Most people just store the paint in unsafe conditions as the containers break down. We hear stories every day about people so thankful they now have a place to take the paint.*

\*\*\*

*[The program] should be made permanent because it is the only thing that gets old unused paint out of people's homes currently. It is a relief to many people to know that they are not stuck with it until the end of time. From talking to customers, I strongly feel that people would not recycle old paint if it cost them money to do so at the time of turning it in. The program is well thought out as far as the model of where in the cycle funding should come from.*



## IV. PROGRAM SUCCESSES AND CHALLENGES

This section summarizes the successes and challenges to the Oregon paint stewardship program as derived from PSI’s stakeholder surveys and *PaintCare*’s annual program reports.

### Successes

- Increased collection of leftover paint.** Since implementing the paint stewardship program, Oregon has achieved a 34 percent increase in the quantity of paint collected and processed through the *PaintCare* program. Much of this success was achieved in Year 2 of the program. The 2011 inclusion of Marion County into the *PaintCare* program certainly played a role in this increase because of the County’s preexisting collection program. Additionally, Year 1 included a long period of infrastructure “ramping up,” such as incorporating additional collection locations and distributing promotional materials, from which Year 2 no doubt benefited.
- Cost savings for Oregon’s local governments.** The majority of municipalities surveyed saved on paint collection, and they attributed the savings to their participation in the *PaintCare* program. Metro, the largest urban area in Oregon, reported a cost savings of over \$1 million in the first program year.
- Decreased paint management costs.** The cost of managing each gallon of paint decreased by almost 11 percent between Year 1 (\$7.03 per gallon) and Year 2 (\$6.27 per gallon) of the program. While variable costs were incurred at the same rate regardless of the amount of paint collected, the fixed program costs were spread over a larger volume of paint. As the amount of paint collected continues to increase, it is likely that program costs per gallon will continue to decline, although, over time, they will likely plateau.
- More convenient options for paint collection.** Before the *PaintCare* program launched in June 2010, approximately 65 percent of all Oregon residents lived within 15 miles of a paint collection location. By the end of Year 2, that figure grew to just over 94 percent. When the program started, 20 recycling and HHW sites collected leftover paint. By the end of Year 2, this number had grown to 102 collection sites, including 72 retail sites.
- High approval rating.** The majority of respondents in each of PSI’s stakeholder groups believes that the *PaintCare* program should be made permanent (Table 14). Nearly every HHW coordinator said s/he benefited from the program, while manufacturers, which are regulated entities, overwhelmingly believe that the program is successful and easy to implement

Table 14: “Yes, make <i>PaintCare</i> permanent”	
HHW Coordinators	86% (12)
Retailers	72% (49)
Manufacturers	65% (11)
Contractors	54% (15)



- Increased production of recycled latex paint.** The quantity of recycled paint produced from leftover paint increased from Year 1 to Year 2 of the *PaintCare* program. While the Oregon pilot program was not meant to have a direct impact on the development of a post-consumer market, it has nonetheless played an influential role. Of the 352,136 gallons of latex paint that the *PaintCare* program collected in 2011, roughly 57 percent of it, or 185,328 gallons, was used to make recycled-content paint. In 2012, that figure increased to 72 percent out of a total 420,277 gallons. (See Table 15 for the increased volume and sales of recycled paint from 2009 to 2012.) Thus, the *PaintCare* program indirectly aids in the strengthening and enhancement of Oregon’s post-consumer paint market by providing a larger supply of paint eligible for recycling. In fact, one recycled paint manufacturer interviewed for this project noted that “more leftover paint feedstock for our recycling process” has become available since the launch of the *PaintCare* program.

Table 15: MetroPaint – Paint and Sales Volumes		
	Gallons sold by MetroPaint	MetroPaint Sales
2009	122,380	\$846,401
2010	118,007	\$810,802
2011	129,761	\$917,156
2012	173,689	\$1,097,592

### Challenges

- Collection site convenience in rural areas.** While the total number of collection sites for leftover paint has risen sharply over the program’s two-year history, there remains a shortfall of convenient collection points in rural areas of the state. This challenge was noted by recycling and HHW coordinators, as well as by painting contractors. Some survey respondents expressed frustration that they were paying for a system that they cannot use.
- Consumer confusion about *PaintCare* program.** Retailers and painting contractors both mentioned that consumers are confused about several aspects of the program. Twenty-five percent of retailers reported that consumers were uncertain about which materials the program collects and how the program operates (e.g., some consumers expected a deposit return when they brought their leftover paint back).
- Small gains in paint reuse.** *PaintCare* contracts with 12 Habitat for Humanity ReStores, as well as Metro, to make leftover paint available for reuse to the public at no charge or at a discount. Reuse accounts for less than 5 percent of the total volume of paint managed under the *PaintCare* program. Table 16 shows that reuse of architectural paint increased by almost 19 percent from Year 1 to Year 2 of the program. While the increase in reuse is promising, it is nonetheless still an area for improvement.

Table 16: Architectural Paint Reuse in Oregon		
	Program Year 1	Program Year 2
<b>Total Direct Reuse (gallons)</b>	15,122	17,949
<b>Latex Reuse: Percent of Disposition</b>	3%	4%
<b>Oil-Based Reuse: Percent of Disposition</b>	3%	2%
<b>Number of Reuse Sites</b>	10	13

- Difficultly in influencing consumer purchasing habits.** It is hard to influence consumer purchasing habits through education alone. The *PaintCare* program seeks to reduce the amount of leftover paint that consumers generate. Informational materials and point-of-sale signage, such as “the paint calculator,” offer tips to consumers on how to estimate the correct amount of paint necessary for a particular project. However, *PaintCare’s* consumer survey results found that, of the 253 respondents who had recently bought paint, only 19 percent had recalled seeing a paint estimating tool, and more than 90 percent of the respondents said that advertising did not influence their paint purchase decision.

## V. RECOMMENDATIONS

PSI offers the following recommendations based on information gleaned from stakeholder surveys, as well as information provided in *PaintCare’s* 2011 and 2012 annual program reports.

### 1. *Make the PaintCare Program Permanent*

Table 15 contains PSI’s survey results collected from the four stakeholder groups between October and December 2012. While there is an opportunity to improve the *PaintCare* program, the table demonstrates that the majority of stakeholders from every major group participating in the *PaintCare* program believes that the pilot program should be made permanent. Even painting contractors, who expressed dissatisfaction with having to pay the fee for paint recycling, still held a majority position that the program should be made permanent. In total, 68 percent of respondents said that the pilot program should be made permanent, while only 14 percent recommended that it be sunset. The remaining 18 percent did not have an opinion of the matter. As one retailer noted, “[The *PaintCare* program] should be permanent so that buildup of old paint does not happen!!! It just begs for mishandling of paint without this program.”

<b>Table 15: Results from Stakeholder Survey Questions: Do you think that the <i>PaintCare</i> program should be made permanent?</b>			
	<b>Yes</b>	<b>No</b>	<b>Unsure</b>
<b>Retailers</b>	72% (49)	13% (9)	15% (10)
<b>Manufacturers</b>	65% (11)	6 % (1)	29% (5)
<b>HHW Coordinators</b>	86% (12)	14% (2)	0.0% (0)
<b>Contractors</b>	54% (15)	21% (6)	25% (7)
<b>Total</b>	<b>68% (87)</b>	<b>14% (18)</b>	<b>17% (22)</b>

## 2. Expand Recycling Options for Rural Areas and Residents

PSI recommends that the next rollout of collection locations focus on rural areas, with a preference for finding permanent locations or establishing more frequent events. Opportunities for further rollout, however, may be limited in rural areas that lack HHW collection sites or paint and hardware stores.

Compared to other HHW program coordinators, rural coordinators expressed the most dissatisfaction with the *PaintCare* program due to limited collection opportunities. Rural coordinators felt as though they were subsidizing the cost of the collection and recycling infrastructure in Metro Portland and other densely populated areas.

Based on analysis conducted by *PaintCare*, it appears that, in general, most Oregon residents find the collection convenient. Urban centers seem to have the best access to permanent collection locations (96 percent of those living within cities, towns, and census designated places, or CDPs, have a collection site within a 15-mile radius of their home). On the other hand, rural areas have access to sporadic collection events (there were 63 such events during Year 2, including 57 municipally sponsored events and six *PaintCare*-sponsored events).

## 3. Expand Stakeholder Outreach and Education

Informing consumers about the *PaintCare* program is required by statute, and is critical to program success. Based on the results of *PaintCare's* consumer surveys (see table 16), public awareness of the program, as well as the perception that the program is convenient, are both growing. Currently, around 43 percent of Oregonians are aware of the *PaintCare* program.

However, as noted by retailers responding to the PSI survey, consumers are not always aware of what materials can or cannot be accepted, or they do not realize that the fee assessment does not operate like a bottle bill deposit. Oregon's bottle bill has been operational for over 40 years. Given this longevity, Oregon consumers may require further clarification of how the paint assessment fee works, and how it differs from bottle deposits.

Table 16: <i>PaintCare</i> Survey Results Regarding Collection Infrastructure Awareness and Convenience			
	July 2011	August 2012	Percent Increase
Respondents who purchased paint and are aware of a collection site	31%	43%	10%
Respondents who are aware of a collection site and who consider the site to be convenient	63%	73%	12%

Painting contractors represent a unique challenge for the program’s success; as such, future outreach activities should focus on educating them. Ten percent of painting contractors surveyed were not aware that they could recycle their leftover paint at no additional cost, and more than half of the contractors surveyed said that they would like to receive additional information about the program. In addition, 24 percent of those contractors said that, while they were aware of the program, they did not use the paint recycling service. PSI recommends that *PaintCare*, perhaps in collaboration with the Oregon chapter of PDCA, assess various opportunities for outreach to this stakeholder group.

In addition to current outreach activities, PSI suggests that *PaintCare* explore novel options for public education, perhaps through a label or sticker placed directly on each can of paint purchased. While not based on a direct recommendation from any of the survey groups, PSI believes that an informational label that includes the *PaintCare* phone number and website could help consumers locate a paint collection site. As some retailers already affix labels to paint cans to denote custom-mixed colors, *PaintCare*’s messaging could be incorporated onto these or similar labels. Labeling would also be helpful when paint ownership is transferred. For example, many contractors noted that, after completing a job, they leave some or all of the leftover paint with their clients, thereby shifting responsibility for the leftover paint to their clients. Labels would educate consumers not only at the point-of-sale, but also when they no longer need the leftover paint.

#### 4. Increase source reduction and reuse

Oregon’s paint stewardship legislation states that the stewardship organization must “provide for the development and implementation of strategies to reduce the generation of post-consumer architectural paint; and promote the reuse of post-consumer architectural paint....” *PaintCare*’s paint calculator has been the main tool for educating consumers on source reduction strategies, providing information to help consumers better estimate how much paint they should buy. In *PaintCare*’s most recent survey, summarized in the 2012 Program Annual Report, 19 percent of respondents recalled seeing the paint calculator, up one percentage point from the 2011 Program Annual Report. Although PSI did not survey respondents about *PaintCare*’s source reduction efforts, *PaintCare*’s own research, summarized in the program annual reports, suggests that its source reduction strategies need improvement.

Promoting reuse of post-consumer paint is another objective of the Oregon paint legislation. Since the beginning of the *PaintCare* program, the number of Habitat for Humanity ReStores selling leftover paint has increased from one to 11; the amount of latex paint being reused had increased by 6,245 gallons;

and reuse of oil-based paint has increased by 259 gallons. OR DEQ and *PaintCare* have discussed awarding collection sites with an incentive payment of 25 cents per container as a way to encourage them to offer a reuse option. *PaintCare* should test whether this incentive can improve paint reuse.

### 5. Improve program reporting

PSI recommends standardized metrics for future reporting to ensure accurate and efficient program evaluation, particularly regarding the quantity of paint collected per collection site, as well as the quantity and type of paint processed per facility. *PaintCare* has produced two annual reports to assess its progress against the goals established by the Oregon paint stewardship legislation.<sup>20</sup> However, the type of information reported and the type of metrics used for the reporting were not always consistent.

Below are two examples of the type of metrics and reporting formats that *PaintCare* should consider:

#### Quantity of Paint Collected Per Collection Site

Collection Site	Year xx	
	Gallons	Percent
HHW & Solid Waste Sites	xx	xx
Retailers	xx	xx
ReStores	xx	xx
Large Volume Pick-up	xx	xx
Collection events	xx	xx
<b>Total</b>	<b>xx</b>	<b>xx</b>

<sup>20</sup> The following program goal is set forth in the Oregon paint stewardship legislation: "...for architectural paint manufacturers to finance and manage an environmentally sound, cost-effective architectural paint stewardship pilot program, undertaking responsibility for the development and implementation of strategies to reduce the generation of post-consumer architectural paint, promote the reuse of post-consumer architectural paint and collect, transport and process post-consumer architectural paint for end-of-product-life management, including reuse, recycling, energy recovery and disposal."

**Quantity and Type of Paint Processed Per Facility**

Disposition	Year xx (gallons)	
	Latex	Oil
Reuse	xx	xx
Paint to paint recycling	xx	xx
Other recycled product	xx	xx
Biomass	xx	xx
Energy recovery	xx	xx
Fuel blending	xx	xx
Biodegradation	xx	xx

## Appendix 1: Bibliography

*PaintCare*. Oregon Paint Stewardship Pilot Program Plan. June 21, 2010.

[www.deq.state.or.us/lq/pubs/docs/sw/PaintProdStewardshipPilotPlan2010June.pdf](http://www.deq.state.or.us/lq/pubs/docs/sw/PaintProdStewardshipPilotPlan2010June.pdf)

"Oregon's Paint Stewardship Law Report," Oregon Department of Environmental Quality. November 14, 2011.

"Oregon Paint Stewardship Pilot Program Annual Report 2011," submitted 9/1/11 to OR DEQ by *PaintCare*.

"Oregon Paint Stewardship Pilot Program Annual Report 2012," submitted 9/4/12 to OR DEQ by *PaintCare*.

## Appendix 2: Survey Responses