Seattle Public Utilities

2015 Recycling Rate Report

July 1, 2016

1. INTRODUCTION

The report starts out by explaining the report's scope, how the recycling rate is calculated, and our recycling program planning background. The second section presents overall 2015 results, as well as results for each solid waste "sector." The third section, on waste prevention, talks about waste prevention activities that touch all sectors. Section 4 lays out recycling program actions for 2016 and 2017. The report concludes with references and links for further information. Comments on the report from the Seattle Solid Waste Advisory Committee will be forwarded and posted once received, as required by Resolution 30990.

1.1 SCOPE OF THE REPORT

This is the ninth annual recycling report for the City of Seattle, as called for by the 2007 Seattle City Council Resolution 30990.

"SPU will report to Council by July 1 of each year on the previous year's progress toward recycling goals, as well as further steps to be taken to meet goals in the current and upcoming years."

The Resolution set Seattle's goal to reach 60% recycling of municipal solid waste (MSW) by the year 2012, and 70% by 2025.

In February 2013 the City Council adopted revised recycling goals by adopting "Seattle's Solid Waste Plan 2011 Revision." The revised goals for MSW are to: recycle 60% by the year 2015, and to recycle 70% by 2022. Further, for the first time Seattle set a goal to recycle 70% of construction and demolition debris by the year 2020.

Four different sectors contribute to the overall MSW rate: single family residential, multi-family residential, self-haul, and commercial.

In 2015, Seattle recycled 58.0% of its MSW, an increase of 0.9 percentage points over 2014. The recycling rate has risen 19.8 percentage points since the 2003 low of 38.2%.

1.2 ABOUT THE RECYCLING RATE

Seattle's recycling rate is the percentage of municipal solid waste (MSW) diverted from the landfill by reuse, recycling and composting.

Seattle's MSW includes:

- Organics managed onsite by Seattle residents (yard debris and food scraps)
- All garbage, organics, and recyclables that businesses and residents set out for collection
- All garbage, organics, and recyclables hauled to the city's recycling and disposal stations for reuse, recycling or composting

Seattle's 60% goal combines separate goals for each of the four primary MSW sectors: single family residential, multi-family residential, self-haul, and commercial. The specific recycling goals for each sector are different since waste stream materials, opportunities to recycle, and likelihood of participation vary among the sectors.

The MSW recycling goal excludes construction and demolition (C&D) material. C&D disposed and recycled tons are counted separately in the C&D stream, and Seattle now has a separate recycling goal for C&D. Also, a large portion of recycled metals (such as car bodies) never enter our MSW or C&D systems, and therefore aren't included in our recycling rate calculations (we do include metals collected at the curb and at our transfer stations).

The MSW goal also excludes other special wastes. Moderate Risk Waste (MRW) includes household hazardous waste (HHW) like garden pesticides, and small quantity generator waste (SQGW) like solvents used at a small business. The Local Hazardous Waste Management Program (LHWMP) manages Seattle's moderate risk waste. The LHWMP is a joint program supported and implemented by Seattle, King County, Public Health - Seattle & King County, and the Sound Cities Association. The Seattle Municipal Code prohibits disposal of HHW and SQGW in the garbage.

Further, the recycling goal does not include other special categories of waste such as: biomedical wastes, biosolids, asbestos, petroleum contaminated soils, and Dangerous Waste (generally industrial), which state regulations exclude from MSW.

1.3 Action Planning Background

In 1998, the Seattle City Council adopted Seattle's Solid Waste Plan *On the Path to Sustainability*. It set a policy framework for the city focused on sustainability and stewardship, and established the goal of eliminating the maximum possible amount of waste as a guiding principle. It also identified programmatic goals and programs to achieve these goals. The 2004 Plan Amendment renewed Seattle's commitment to these policies and goals. The Seattle City Council adopted the 2011 Revision to the Plan in February 2013, and the Plan was approved by Washington Department of Ecology in June 2013.

2. RECYCLING RATES

This section first presents recycling rates for MSW: overall, single and multifamily residential, self-haul, and commercial. Following the MSW sectors, the section goes on to present the results for construction and demolition debris (C&D), which is tracked separately from MSW, and to discuss public space and parks outdoor open space recycling.

2.1 Overall MSW Recycling Performance

In 2015, Seattle's MSW recycling increased from 57.1% to 58.0%, an increase of 0.9 percentage points. This marks the 12th straight year of continuous recycling rate growth since 2003.

Table 1 Recycling Rates All MSW Sectors 2000-2015

Year	Single Family	Multi Family	Res Total	Self-Haul	Commercial	Overall
2000	58.0%	17.8%	47.8%	17.2%	41.6%	40.0%
2001	57.0%	22.0%	48.5%	17.8%	39.6%	39.3%
2002	57.5%	21.5%	48.3%	18.1%	40.7%	39.7%
2003	57.5%	22.2%	48.4%	18.1%	37.3%	38.2%
2004	58.9%	22.2%	49.4%	18.8%	42.5%	41.2%
2005	61.4%	25.2%	52.1%	19.2%	46.6%	44.2%
2006	64.0%	26.3%	54.3%	18.8%	51.7%	47.6%
2007	64.8%	27.6%	55.1%	19.2%	52.5%	48.2%
2008	65.4%	28.3%	55.9%	18.4%	54.7%	50.0%
2009	68.7%	27.0%	58.4%	16.7%	54.9%	51.1%
2010	70.3%	29.6%	60.3%	13.5%	58.9%	53.7%
2011	70.5%	28.7%	60.2%	13.1%	61.4%	55.4%
2012	71.1%	32.2%	61.0%	12.5%	61.4%	55.7%
2013	70.8%	34.3%	60.9%	12.2%	62.9%	56.2%
2014	71.1%	34.6%	60.9%	10.6%	62.2%	57.1%
2015	74.3%	36.8%	63.9%	10.4%	62.3%	58.0%
2015 Goal	75.4%	42.5%	66.9%	32.9%	63.4%	60.0%

Overall, Seattle generated 365 fewer total MSW tons in 2015 than in 2014. Recycling grew by 6,683 tons. Disposal decreased by 7,048 tons.

Table 2 Tons MSW Overall 2000-2015

Year	Generated	Disposed	Recycled	Recycle Rate
2000	793,842	476,132	317,710	40.0%
2001	782,809	475,270	307,539	39.3%
2002	768,346	463,086	305,260	39.7%
2003	741,094	458,011	283,083	38.2%
2004	780,044	458,389	321,655	41.2%
2005	790,457	440,693	349,763	44.2%
2006	836,499	438,381	398,118	47.6%
2007	848,759	439,407	409,352	48.2%
2008	789,608	394,748	394,860	50.0%
2009	719,424	351,689	367,735	51.1%
2010	724,468	335,570	388,898	53.7%
2011	715,996	319,341	396,655	55.4%
2012	713,803	315,966	397,837	55.7%
2013	724,383	317,258	407,125	56.2%
2014	721,269	309,515	411,754	57.1%
2015	720,904	302,467	418,437	58.0%

The city needs a 2.0 percentage point rise to achieve its 2015 recycling rate goal. In terms of 2015 tons, 14,418 more tons would have needed to be recycled in order for the city to have hit its 2015 goal last year.

2.2 Total MSW Disposed

This section addresses the active Resolution 30990 (2007) goal for total MSW waste disposed (landfilled). Specifically:

"The city will not dispose of any more total solid waste in future years than went to the landfill in 2006 (438,000 tons MSW)."

In 2015 Seattle disposed 302,467 tons, which is 135,914, or 31%, fewer tons compared to 2006. Compared to 2014, 7,048 (or 2.3 %) fewer tons were disposed.

Table 3 MSW Tons Change – Overall Generated & Disposed

Year	Generated	Percent Change	Disposed	Percent Change
2000	793,842	NA	476,132	NA
2001	782,809	-1.4%	475,270	-0.2%
2002	768,346	-1.8%	463,086	-2.6%
2003	741,094	-3.5%	458,011	-1.1%
2004	780,044	5.3%	458,389	0.1%
2005	790,457	1.3%	440,693	-3.9%
2006	836,499	5.8%	438,381	-0.5%
2007	848,759	1.5%	439,407	0.2%
2008	789,608	-7.0%	394,748	-10.2%
2009	719,424	-8.9%	351,689	-10.9%
2010	724,468	0.7%	335,570	-4.6%
2011	715,996	-1.2%	319,341	-4.8%
2012	713,803	-0.3%	315,966	-1.1%
2013	724,838	1.5%	317,258	0.4%
2014	721,269	-0.4%	309,515	-2.4%
2015	720,904	-0.1%	302,467	-2.3%

Recycling and waste reduction programs reduce MSW tons disposed. However, this effect can be muddled by factors in the overall economy that also drive MSW tons generated. We suspect that a good share of the sizable drop after 2007 was due to the economic downturn.

2.3 RESIDENTIAL: SINGLE FAMILY RECYCLING PERFORMANCE

The single family sector includes households on "can" (or cart) garbage service (as opposed to dumpsters). These are mostly single family, and duplex to 4-plex households. They set out garbage (disposal), recycling and organics (yard and food) for collection at the curb. They also compost some food and yard waste at their homes.

In 2015, recycling in the single family sector increased, by 3.2 percentage points, to 74.3%, reaching its highest level ever. The growth was likely caused by the prohibition on the disposal of food waste and compostable paper, which was new in 2015. The growth would have been higher if we had not observed an increase in contamination of the curbside/apartment "dry" recycling effective in 2015.

2015 also saw a 1.3% decrease in total generated tons. Recycled tons increased by 4,648 (3.2%), and disposed tons decreased by 7,243 (12%).

Table 4 Tons Single Family 2000-2015

Year	Generated	Disposed	Recycled	Recycle Rate
2000	208,468	87,499	120,969	58.0%
2001	211,982	91,072	120,910	57.0%
2002	206,474	87,834	118,640	57.5%
2003	205,748	87,426	118,322	57.5%
2004	209,132	86,029	123,103	58.9%
2005	208,675	80,478	128,197	61.4%
2006	216,946	78,078	138,868	64.0%
2007	220,128	77,494	142,634	64.8%
2008	213,889	73,961	139,928	65.4%
2009	215,015	67,229	147,786	68.7%
2010	216,484	64,309	152,175	70.3%
2011	212,861	62,779	150,082	70.5%
2012	211,030	60,906	150,124	71.1%
2013	206,592	60,291	146,301	70.8%
2014	206,992	59,772	147,220	71.1%
2015	204,397	52,529	151,868	74.3%

The single family sector needs a 1.1 percentage point rise to achieve its 2015 recycling rate goal. In terms of 2015 tons, 2,247 more tons would have needed to be recycled in order for this sector to have hit its 2015 goal last year.

2015 Program Highlights – Single Family

- Completed broad outreach campaign, raising residential and commercial awareness of new food waste requirements and increase diversion. Household awareness of food waste

requirements increased to over 80%, with over 75% actively using their food waste carts and 5,000 new food waste tons diverted by residents, exceeding 2015 targets.

- Targeted media partnerships included two extensive 8-week campaigns with television and radio spots in mainstream and ethnic outlets, in multiple languages, bus advertising, and ethnic print ads and feature stories.
- Direct mail outreach included citywide newsletters to all residents; reminder notices to all non-compliant households; targeted mailings, highlighting translated content, to 90,000 residents in Southeast and West Seattle; community mailings to 30,000 households with container and bulk compost giveaways in Southeast and West Seattle.
- Community engagement efforts including reaching over 8,000 residents at 50 community events, distributing 8,000 free kitchen compost containers including targeted outreach and education in Vietnamese, Cantonese, Mandarin, Tagalog, Somali, Spanish, Oromo, and Amharic through community events, ethnic organizations, customer surveys, printed and multimedia materials.

2.4 Residential: Multi Family Recycling Performance

The multi-family sector includes apartment and condominium buildings. These buildings contain five or more units and generally use dumpsters instead of tote carts for garbage. Material collected includes garbage, recycling, and food and yard waste.

In 2015, recycling in the multi-family sector continued its trend of gains by rising 2.2 percentage point to 36.8%, setting a new record high for the fourth year in a row. The improvement was likely caused by the prohibition on the disposal of food waste and compostable paper, which was new in 2015. The growth would have been higher if we had not observed an increase in contamination of the curbside/apartment “dry” recycling effective in 2015.

Total generation decreased 1,911 tons (-2.4%). This is especially interesting given the dramatic increase in the city’s multi-family population. There was an increase in recycling (1,085 tons, or a 3.9% rise) compared to a decrease in disposal (2,996 tons, or -5.7%).

Table 5 Tons Multi Family 2000-2015

Year	Generated	Disposed	Recycled	Recycle Rate
2000	70,944	58,333	12,611	17.8%
2001	68,611	53,487	15,124	22.0%
2002	70,144	55,076	15,068	21.5%
2003	72,149	56,106	16,043	22.2%
2004	72,640	56,498	16,142	22.2%
2005	72,325	54,080	18,245	25.2%
2006	75,545	55,643	19,903	26.3%
2007	77,108	55,847	21,261	27.6%
2008	74,223	53,199	21,024	28.3%
2009	70,524	51,497	19,028	27.0%
2010	70,675	49,788	20,887	29.6%
2011	70,145	49,993	20,152	28.7%
2012	74,532	50,497	24,035	32.2%
2013	76,970	50,547	26,423	34.3%
2014	80,189	52,439	27,750	34.6%
2015	78,278	49,443	28,835	36.8%

The multi-family sector needs a 5.7 percentage point rise to achieve its 2015 recycling rate goal. In terms of 2015 tons, 4,462 more tons would have needed to be recycled in order for this sector to have hit its 2015 goal last year.

2015 Program Highlights – Multi Family

- Nearly all elements of the 2015 food waste campaign reached multifamily residents, including citywide mailings, neighborhood mailings, media partnerships and community outreach. Multifamily residents were 80% aware of food waste requirements and 71% reported regularly using food waste carts.
- Provided technical assistance to 75 large apartments or condos, serving nearly 5,000 residents. Supported 920 buildings with educational resources and program information. Field outreach to large and underserved buildings and sites that do not routinely set out food and yard waste carts.
- Delivered 15,000 free kitchen compost containers to multifamily properties and trained 175 new Friends of Recycling and Composting volunteers. Conducted onsite education presentations to 27 properties and with 28 community groups

2.5 SELF-HAUL

The self-haul sector includes material brought (or "self-hauled") by residents, businesses and governmental agencies to the two city-owned recycling and disposal (transfer) stations. It does not include the material transferred by Seattle's contracted collection haulers.

Recycling in the self-haul sector includes organics (food and yard waste, clean wood), appliances and metals, and other recyclable material. Seattle's self-haul recycling count does not include recycling and organics self-hauled by customers to other facilities.

In 2015, the self-haul sector recycling rate fell 0.2 percentage points compared to 2014, continuing the trend of annual decreases since 2007. Total generation increased 3,312 tons ` (5.1%) compared to 2014. Disposal increased by 3,091 tons (5.3%), and recycling increased 221 tons (3.2%). Since 2007, total generation has dropped 48.7%.

Table 6 Tons Self-Haul 2000-2015

Year	Generated	Disposed	Recycled	Recycle Rate
2000	123,024	101,883	21,141	17.2%
2001	124,453	102,305	22,148	17.8%
2002	125,710	102,981	22,729	18.1%
2003	123,597	101,232	22,365	18.1%
2004	122,819	99,750	23,069	18.8%
2005	124,364	100,499	23,865	19.2%
2006	127,444	103,429	24,015	18.8%
2007	132,545	107,098	25,447	19.2%
2008	111,229	90,814	20,415	18.4%
2009	97,893	81,565	16,328	16.7%
2010	91,618	79,293	12,325	13.5%
2011	81,776	71,033	10,743	13.1%
2012	80,568	70,474	10,094	12.5%
2013	84,341	74,019	10,322	12.2%
2014	64,681	57,847	6,834	10.6%
2015	67,993	60,938	7,055	10.4%

The self-haul sector needs a 22.5 percentage point rise in its recycling rate to achieve its 2015 recycling rate goal. In terms of 2015 tons, 15,298 more tons would have needed to be recycled in order for this sector to have hit its 2015 goal last year.

SPU does not expect to see significant self-haul recycling rate increases until SPU's solid waste facility improvements are complete. The new North Transfer Station is planned to be completed in 2016. However, separate reuse and recycling drop off at the south facility won't be in place until the completion of South Transfer Station's Phase 2 Project, expected in 2019.

2015 Program Highlights – Self-Haul

- **North Transfer Station (NTS) remained closed for rebuild all of 2015.** All Seattle self-haul customers were directed to take their materials to the new South Transfer Station. Extending the hours at South Transfer still attracted back some customers but it appears many customers still used the King County station north of Seattle in Shoreline and/or other disposal and recycling options. The extended hours were reduced in January 2016 and NTS is scheduled to reopen in the fall of 2016. The asphalt paving at NTS was successfully installed with both RAS, (recycled asphalt shingles) and RAP, (recycled asphalt paving) incorporated in the specified mix.
- **Construction and Demolition Waste (C&D) sorting pilot improved**. During the pilot station staff visually screened incoming self-haul loads, and directed those with over 50% C&D to a dedicated area of the tipping floor. The separated material was transferred and trucked to a C&D sorting facility. In 2015 staff experimented with improved techniques for selecting loads and additional separation of material with heavy equipment. Over 290 tons of material was diverted with an increased recovery rate of 46% compared to the 36% achieved in 2014.

2.6 COMMERCIAL

The commercial sector includes garbage, recyclables and compostable materials collected from businesses.

The commercial sector's recycling rate increased very slightly to 62.3%, or 0.1 percentage points. Considering that we know that organics diversion increased in 2015, non-composting recycling must have decreased.

Total commercial generation increased for the third year in a row, up 837 tons in 2015. Recycling rose 737 tons, and disposal, increased 107 tons. Compared to 2007, total generated tons are down by 11.6%

Table 7 Tons Commercial 2000-2015

Year	Generated	Disposed	Recycled	Recycle Rate
2000	391,406	228,417	162,989	41.6%
2001	377,927	228,405	149,522	39.6%
2002	366,224	217,195	149,029	40.7%
2003	339,844	213,247	126,597	37.3%
2004	375,739	216,112	159,627	42.5%
2005	385,093	205,637	179,456	46.6%
2006	416,564	201,231	215,333	51.7%
2007	418,979	198,968	220,011	52.5%
2008	390,267	176,774	213,493	54.7%
2009	335,992	151,398	184,593	54.9%
2010	345,692	142,180	203,511	58.9%
2011	351,214	135,536	215,678	61.4%

2012	347,673	134,089	213,584	61.4%
2013	356,480	132,401	224,079	62.9%
2014	369,407	139,457	229,950	62.2%
2015	370,237	139,557	230,680	62.3%

The commercial sector needs a 1.1 percentage point rise to achieve its 2015 recycling rate goal. In terms of 2015 tons, 4,073 more tons would have needed to be recycled in order for this sector to have hit its 2015 goal last year.

2015 Program Highlights – Commercial

- Continued growth in commercial food waste diversion with approximately 8,000 new tons of commercial food waste diverted in 2015.
- Provided technical assistance to 750 businesses through Seattle's 'Green Business' program. Conducted 370 recycling and composting program site visits to businesses. Conducted 80 food service business visits to support compostable food packaging implementation.
- Provided outreach via 15 business community events or tradeshows. Supported public food and recycle diversion at special events
- Provided technical assistance to 250 ethnic businesses; provided in-Language support in Vietnamese, Ethiopian, Somali, Korean and Spanish, as well as translated printed materials.
- Mailed postcards to 16,000 business, to provide information regarding new recycling and food waste composting requirements

2.7 Construction and Demolition Debris (C&D)

The C&D sector is comprised of C&D materials (sometimes called "CDL") – construction, demolition, and land clearing debris) which are not mixed with MSW. These materials are collected by a firm under contract with the city for C&D, or are self-hauled, to C&D recycling facilities. Smaller amounts of C&D materials mixed with MSW, and delivered to the SPU's transfer stations, are counted as MSW and not included in the measure of C&D recycling and disposal. In general, C&D generation correlates closely with economic and building activity cycles.

The hierarchy of C&D materials that SPU tracks includes:

Recycling – Wastes separated for recycling or reuse.

Beneficial Use – Not recycled or reused, but used for some other purpose such as wood as pulp mill boiler fuel.

Alternative Daily Cover (ADC) – Counted as disposal (not beneficial use) in the recycling rate. ADC covers the active face of a landfill instead of using soil cover. C&D waste is no longer disposed as Industrial Waste Stabilizer (IWS), which provided structure in specialized landfills.

Disposal – Material permanently placed in a landfill.

In addition to the recycling rate, for C&D we calculate the "**diversion**" rate, the sum of recycling and beneficial use.

According to preliminary numbers, in 2015 reported C&D generation decreased particularly for concrete which has a large impact on the C&D recycling rate. The recycling of C&D commodities other than concrete such as wood waste increased and the amount of C&D disposed through the private solid waste transfer stations and processing facilities decreased. Overall, however, the C&D recycling rate fell from 64% to 57% and the amount of wood recovered for beneficial use increased from 7.4% to 9.9%. The preliminary C&D diversion rate from landfill disposal is estimated at this time to be 67.2%.

Further investigation is being conducted into the decrease in the estimated concrete number in particular. If SPU revises these numbers, they will be published in late July at www.seattle.gov/util/CDWasteManagement .

Table 8 Tons Construction & Demolition Debris 2007-2015

Year	Total Generated	Disposed*	Recycled	Beneficial Use	Recycle Rate	Diversion Rate
2007	415,801	201,156	204,907	9,738	49.3%	51.6%
2008	397,052	181,241	200,851	14,961	50.6%	54.4%
2009	288,551	115,446	162,742	10,362	56.4%	60.0%
2010	288,957	97,241	178,794	11,864	61.9%	66.0%
2011	359,390	118,216	227,049	14,125	63.2%	67.1%
2012	376,328	129,383	224,060	18,519	59.9%	64.5%
2013	386,200	127,040	234,982	24,178	60.8%	67.2%
2014	494,055	136,837	317,331	39,887	64.2%	72.3%
2015	408,395	133,804	234,255	40,336	57.4%	67.2%

*Includes ADC and residuals from recycling

2015 Program Highlights – C&D

- Clean wood was added to the recycling requirement in 2015 for construction job sites which already include concrete, asphalt paving, bricks, cardboard, metal and clean wallboard scrap. Carpet, clean plastic wrap, and tear-off asphalt shingles were delayed due to a lack of processing infrastructure.
- Seattle and the King County continued C&D processing facility residuals sampling as part of the certification process for C&D recyclers. By the end of 2015 the certification programs included five mixed recycling sort facilities in Seattle, King County, Tacoma and Snohomish County with quarterly sampling to ensure that facilities were not disposing prohibited materials.
- Waste diversion reporting by construction and demolition project improved from 25% in 2014 to 60% in 2015 with the assistance of Seattle Department of Construction and Inspection and with automated notifications and reminders to building permit holders.

Reports are required after completion on projects with value over $30,000. Over 5,000 construction projects have submitted reports over past two years.

- Seattle and King County staff presented at trade associations, architecture firms, and construction companies to educate state holders on construction recycling requirements, facility certification programs and waste diversion plans and reports.

3. WASTE PREVENTION

SPU's waste prevention programs work to reduce waste volumes from households and businesses. They also seek to reduce toxics in goods purchased by people, institutions and businesses. Wherever possible, SPU seeks to quantify results, and reflects these results in the MSW recycling rate. In the future we hope to quantify additional waste prevention efforts and also quantify related social benefits in addition to tonnage.

2015 Program Highlights – Waste Prevention

- **Reuse:** Began discussions with charitable and for-profit reuse organizations on how better to quantify reuse activities in Seattle, including sales of donated reusable goods. This includes other possible measurement tools, including social benefits in addition to tonnage.
- **Packaging:** Engaged with industry organizations and others, including Sustainable Packaging Coalition, PAC Next, Biodegradable Products Institute and the Food Packaging Institute, to address packaging design, labeling, tinting and recyclability and compostability issues.
- **Food Waste Prevention**: 450 residents educated through booth outreach, presentations, classes, and door-to-door outreach; reduced 4.5 tons of apples from the waste stream through a partnership with City Fruit
- **Commercial Food Waste Prevention & Recovery**: Partnered with Office of Sustainability and Environment to conduct analysis of commercial sector barriers and opportunities for food waste prevention and recovery. Conducted 26 interviews across local restaurants, grocers, emergency food relief agencies and other public sector departments working in food waste across the country.
- **Threadcycle**: launched campaign with eight textile collection partners (non-profit and for-profit) to raise public awareness about the opportunity to recycle damaged textiles when donating used clothing.
- **Junk Mail Opt Out Service**: 30,147 total opt out accounts, an increase of 433 accounts in Q1 2015 (no data available for Q2-4); 415,366 total opt outs, an increase of 28,463 in 2015
- **Master Composter/Soil Builder Volunteers**: 1,206 hours served contacting 8,893 residents in 2015; 34 new volunteers recruited and trained from across the city
- **Garden Hotline**: 9,432 public contacts in 2015, including Hotline staff attending 159 events and classes
- **Pesticide Reduction (LHWMP**): 255 landscape professionals attended fall IPM workshop; trained 122 staff at 8 area nurseries; reached 32 Spanish-speaking landscape professionals in targeted trainings

4. RECYCLING & WASTE REDUCTION ACTIVITIES FOR 2016-17

The following lists the new 2016-17 waste reduction and recycling activities that are underway or planned, to close the gap between our recycling goals and performance.

Table 9 Recycling Activities 2016-17

Sector	Work Item	Description
Single Family Multi Family Commercial	Food Waste Diversion	Continued focus on increasing awareness and performance of Seattle's new food waste requirements for all sectors and communities. Outreach will include adverting, direct mail, site visits, technical assistance, and community engagement. Target audiences include young and new residents, large multifamily buildings, food service providers and ethnic businesses.
Self-Haul	Add separate drop off for banned materials and mattresses	In 2016 we will work with purchasing and the contracted process facilities to increase the amount of material diverted.
	Reinstitute C&D floor sort pilot	In 2016 or 2017 we will re-establish this program (at least at STS) with a goal of diverting a significant number of C&D tons.
	Open New North Transfer Station	NTS will open to the public in fall of 2016. The new facility will include a new, more convenient, **recycling & reuse drop-off** area that does not require crossing the scale. We are working to develop a competitive contract with a reuse vendor to collect items that will sold at a separate location.
	Add collection of reusables to New North Transfer Station	In 2016 SPU will solicit industry interest and proposals for collecting reusable items adjacent to the recycling drop-off area and implement reuse services at NTS.
Commercial	Compostable food service ware	Director's Rule updates in 2016 and 2017. Bag ordinance recommendations in 2016 followed by foam ordinance recommendations in 2017. Stakeholder work in 2016 to develop actions on food service ware in 2017. Participating in regional compost contamination work group and developing BMPs through that workgroup related to food service ware.
Construction & Demolition Debris	Construction material bans	2016 focus on enforcing current banned materials though construction project reporting and recycling facility compliance. In 2017, tear-off asphalt shingles, carpet and clean plastic

		wrap from construction projects may be banned from disposal if local processing capacity is available.
Waste Prevention	Support alternative technologies for onsite food waste processing	Monitor three demonstration projects for on-site food waste processing or treatment, featuring technologies such as the WISErg Food Harvester the Impact Bioenergy micro-anaerobic digester. A final report on technology performance with monitoring data will be developed in 2017.

5. CONCLUSION

We congratulate all of Seattle in again setting an all-time high recycling rate. Disposal is staying down at an historic low, even through the climb out of the Great Recession. This is a remarkable achievement. Nonetheless, we have much more to do to achieve our 2015 and 2022 recycling goals. Seattle's continued commitment to environmentally responsible solid waste management will get us there.

Please see Seattle's Solid Waste Plan for more background on recycling planning. More detailed sector and historical information may be found on SPU's web site at Solid Waste Reports--Seattle Public Utilities, including: Prior annual recycling reports; composition studies by sector/garbage/recycling; quarterly and yearly tons for garbage, recycling, organics, C&D; recycling market and Seattle recycling value; and, surveys.

Recycling continues to be a sound investment by the city as well as a key part of our climate action strategy.