

2009
Solid Waste Division
Annual Report



King County

Department of
Natural Resources and Parks
Solid Waste Division



Acknowledgments

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King County Executive

Dow Constantine

King County Council

Bob Ferguson, Council Chair

Jan Drago

Reagan Dunn

Larry Gossett

Jane Hague

Kathy Lambert

Julia Patterson

Larry Phillips

Pete von Reichbauer

Prepared by

King County Solid Waste Division

Department of Natural Resources and Parks

201 South Jackson Street, Suite 701

Seattle, WA 98104-3855

(206) 296-6542 Voice

TTY Relay: 711

www.kingcounty.gov/solidwaste

Department of Natural Resources and Parks

Bob Burns, Interim Director

Solid Waste Division

Kevin Kiernan, Division Director

Terri Hansen, Assistant Division Director

Jane Gateley, Principal Author

Dave Kallstrom, Graphic Designer

City Mayors

David Hill, Algona

Pete Lewis, Auburn

Richard Leider, Beaux Arts Village

Don Davidson, Bellevue

Rebecca Olness, Black Diamond

Mark Lamb, Bothell

Joan McGilton, Burien

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Ava Frisinger, Issaquah

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Joan McBride, Kirkland

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John Dulcich, Newcastle

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Kenneth G. Hearing, North Bend

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Fred Black, Skykomish

Matt Larson, Snoqualmie

Jim Haggerton, Tukwila

Chuck Price, Woodinville

David Cooper, Yarrow Point





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Letter from the Division Director

It has been a year of planning for the Solid Waste Division – comprehensive planning for the system as a whole, planning the future development of the Cedar Hills Regional Landfill, planning for emergency response and recovery, and planning how to manage a multi-faceted solid waste operation in these challenging economic times. Planning work done in 2009 will set the course for management of King County's solid waste in the years to come.

In September, the division issued the *Draft 2009 Comprehensive Solid Waste Management Plan*, updating the last plan published in 2001. The plan recommends goals to further regional efforts to reduce, reuse, and recycle; integrating environmental stewardship and sustainable development into all aspects of solid waste management. It is also the first county solid waste plan to look at ways to address climate change. A final plan incorporating public comments will be published in 2010.




Also in 2009, the division conducted an environmental review of five action alternatives for extending the life of the Cedar Hills Regional Landfill and a no-action alternative. The five action alternatives would increase the capacity of the landfill so that it could continue to receive solid waste beyond its currently estimated closure date of 2018. The environmental review

concluded that none of the five alternatives would pose any significant adverse environmental impacts. The public comment period for the plan was completed in November 2009. In 2010 the division will recommend a preferred alternative based on environmental review, operational feasibility, cost, flexibility, and stakeholder interest, and issue a final plan.

The division also worked with the King County Office of Emergency Management to plan for the possibility of flooding in the Green River valley and other emergencies. The division is working with the cities to develop debris management plans that will ensure a coordinated regional response and recovery in the event of emergency conditions.

An ongoing challenge in 2009 has been the management of our solid waste operation in the midst of an economic downturn. Economic conditions have led to a 15 percent reduction in tonnage and associated revenues over the last two years. In response to the declines, the division has adjusted expenditures by deferring projects, reducing operating hours at some urban transfer stations, decreasing consultant use, and reducing about 10 positions and numerous vacancies from the budget. Together, these measures resulted in cost savings that have helped to assure the long-term financial integrity of the division. While recent tonnage levels appear to be stabilizing, the division is not expecting, in the foreseeable future, a return to the higher tonnage levels that existed prior to the economic downturn. The division will continue to look at ways to balance customer needs with cost-effective services.

I am proud to report these and other major accomplishments for 2009 and to recognize those who helped make them possible – including our customers, the King County Council, our partnering cities and advisory committees, and the many business and nonprofit organizations in the region.



Kevin Kiernan,

Division Director



Waste Prevention and Recycling

The Solid Waste Division continues to focus and refine its waste prevention and recycling programs and services as markets, technologies, and consumer needs change. The primary goal of the division's current efforts is to prevent the disposal of usable resources through waste prevention, reuse, or recycling of materials back into the economy.

Recycling Campaigns Keep Us on Our Toes

The division's recycling campaign – Recycle More. It's Easy to Do. – completed its fourth year of education and outreach, reminding residents and businesses to recycle through a variety of promotional efforts, including radio and television advertisements, workshops, and public events. The newest portion of the campaign – Recycle Food. It's Easy to Do. – completed its third year of outreach, working to raise awareness of the availability of food scrap and food-soiled paper recycling and encouraging single-family households to recycle in the curbside yard waste cart.

Food scrap recycling is currently available to nearly every King County single-family resident with curbside garbage service. Current studies show that about 50 percent of those who subscribe to the service are placing food scraps and food-soiled paper in their yard waste carts – recycling more than 75 percent of the food scraps they generate. Now the focus is to

increase individual participation in this easy-to-use service across the county.

In 2009, the division staged popular events in numerous communities to promote the recycling of food scraps and food-soiled paper through education and healthy neighborhood competition. A Recycling Relay was held in Kent where residents raced the clock to sort through a pile of materials and separate recyclables and organic yard waste and food scraps from the garbage. The "Cube of Food" was also a popular visual for showing the amount of food scraps and food-soiled paper the average single-family household generates in a year. The large, clear cube, containing 477 pounds of food scraps, was showcased at several community fairs and events over the year. These and other events garnered publicity through television, radio, and print media. The division also promoted food scrap recycling through one-on-one education at Farmers Markets and city events.

The Best Workplaces for Recycling 2009 award was presented to 67 county businesses that have successful waste prevention and recycling programs in place. To receive the award, each business was asked to provide a profile of its programs (<http://your.kingcounty.gov/solidwaste/garbage-recycling/apply-best-workplaces.asp>), describing what made their business a Best Workplace for Recycling and offering advice to other businesses. Many of the recipients of this year's award had implemented food scrap recycling at their businesses, in addition to general waste prevention and recycling programs.

EcoConsumer Campaign Blankets the Media

With 27 television appearances, 38 radio segments, and 26 columns in The Seattle Times in 2009, the county's EcoConsumer program took its environmental message directly to the public. Along with other media coverage and online articles, the EcoConsumer



The Cube of Food attracts all manner of friends – both animal and vegetable.



EcoConsumer Tom Watson shows KOMO4 news anchor Mary Nam locally grown products from community farmers markets.

message reached a combined audience of about 22 million in 2009. All of this free media coverage was used to communicate to the public the myriad ways to balance consuming with conserving.

In the local media, the division's EcoConsumer, Tom Watson, has discussed topics such as

electronics recycling, proper disposal of pet waste, the benefits of rain gardens, recycling events, proper disposal of expired drugs, plastics recycling; and more. The EcoConsumer program has been a leader in the use of social media to reach a wider audience, with the EcoConsumer blog and a strong presence on Twitter.

The Web site (www.KCecoconsumer.com) features many of the program's activities, along with the innovative Eco-Cool Remodel Tool. This interactive Web feature allows users to take a virtual tour through a home, click on different rooms, and learn how to make their remodeling more green. The tool is continually updated with the latest information on green remodeling.

In 2009, King County introduced the highly publicized Green Holidays campaign (expanding on the popular Waste Free Holidays). Green Holidays offers a broad range of holiday tips on giving experiences and other types of green gifts, green entertaining and decorating, reducing and recycling food waste, and energy conservation.

Product Stewardship Concept Takes Hold

Product stewardship is an overarching strategy for conserving resources and minimizing waste throughout the life cycle of a product. It is a management strategy used to encourage environmentally friendly product design and to shift the responsibility for financing and management of the product at its end of life from ratepayers and government to product producers and users.

The division has assisted in the implementation or pursued product stewardship strategies for a number of commodities, including:

- Electronic Products:** State legislation was passed in 2006 that requires manufacturers of computers, monitors, and televisions to develop a recycling program for collecting, transporting, and recycling these products at no cost to residents, small businesses, charities, small governments, school districts, and special purpose districts. The program – E-Cycle Washington – launched in January 2009 and includes a network of 54 take-back locations in King County. The majority of King County Take it Back Network members have now become collectors for the E-Cycle Washington program. While the E-Cycle Washington program accepts only computers, monitors, and televisions, the Take it Back Network members continue to provide recycling services for a broader range of products, such as printers, copiers, and household electronics. The division promotes both the Take it Back Network and the E-Cycle Washington program through our Web site, brochures, and the media to provide the public with the most comprehensive information about environmentally sound options for recycling electronics. In 2009, the E-Cycle Washington program collected 14.9 million pounds of electronics from King County residents, small businesses, small local governments, charitable organizations, and school districts. This figure constitutes 39 percent of the 38.5 million pounds of equipment collected across Washington State.
- Pharmaceuticals:** Group Health pharmacies in King, Kitsap, Pierce, Snohomish, Spokane, and Thurston counties are currently collecting unwanted pharmaceuticals for disposal. Select local retailers began participating in 2008. State legislation that would require retailers to implement take-back programs was introduced, but did not pass in 2009. It was reintroduced during the 2010 legislative session.
- Mercury-containing lights:** State legislation that would require the lighting manufacturers to finance and implement a take-back system for residents, small businesses, and small school districts was introduced in 2009 but did not pass. Discussions were held with stakeholders during the interim, and the bill was reintroduced in 2010.



Waste Prevention and Recycling Programs (continued)

LinkUp Program Facilitates Market Development for Recyclable Materials

The LinkUp program works to expand markets for selected recyclable and reusable materials by facilitating an interactive community of businesses, public agencies, and other organizations. Each year LinkUp focuses on recyclable materials that are identified as priorities for King County and conducts projects designed to address market barriers, such as lack of recycling infrastructure and poor end-markets for the materials. Asphalt shingles, carpet, and mattresses were the focus of LinkUp activities in 2009:

- **Asphalt Roofing Shingles:** A 2-mile stretch of road near Enumclaw was paved with hot mix asphalt (HMA) containing recycled asphalt roofing shingles as part of a collaborative demonstration project with the county's Road Services Division. The goal is to create a viable market for the nearly 17,000 tons of asphalt shingles stripped from roofs in King County each year that are disposed in landfills. The newly paved roadway will be monitored over the next three years to evaluate its resistance to wear from traffic and weather. If the experimental pavement performs as well as expected, the Road Services Division will consider allowing the use of recycled asphalt shingles in

HMA on an ongoing basis. The Washington State Department of Transportation also worked on the demonstration project and is interested in the results as they may apply to paving state roadways. The project received funding from the Washington State Department of Ecology.

- **Carpet:** Working in partnership with Seattle Public Utilities, LinkUp sponsored a Carpet Recycling Work Group to develop and carry out a *Northwest Carpet Recycling Strategy*. The strategy includes a set of tactics to achieve the following objectives:
1) establish processing capacity for used carpet in the region, and 2) support the development of end markets for carpet-derived commodities. The work group hosted two well-attended business roundtable meetings/webinars to gather input from interested parties in the local and national carpet and recycling industries and from current and potential material end users. The input from the roundtables was incorporated into the draft strategy report. The strategy report is expected to be finalized in early 2010, at which time the work group and additional stakeholders will begin implementation.
- **Mattresses:** To begin to address the significant quantities of mattresses disposed in the landfill each year, LinkUp conducted some preliminary research and published a white paper on mattress disposal in King County and recycling programs across the country. A pilot project for mattress collection was conducted at the Auburn recycling event in October. From this event, Washington State Correctional Industries (CI) collected 100 mattresses for recycling. Mattresses are disassembled by CI to separate foam, cotton fibers, steel, and wood from each unit. Metal pieces are magnetically removed and all components are sorted and baled for recycling. The division is planning to accept mattresses at all of its 2010 recycling collection events and anticipates that the number of mattresses collected will increase with greater public awareness of collection opportunities.



This Enumclaw roadway will be put to the test with its new coat of paving material.

Added Service for Household Hazardous Waste in South King County a Hit

In July 2009, the division began providing a twice monthly Household Hazardous Waste (HHW) collection service at the Auburn Supermall, enhancing HHW collection for residents of south King County. With this added service, the division has seen a 26 percent increase in HHW customers over the year. This new location, which is close to the Green River flood zone, will also provide additional support to affected communities should flooding occur.

As part of the Local Hazardous Waste Management Program (LHWMP), the division provides HHW collection services via the traveling Wastemobile in communities throughout the county and at the Factoria Transfer Station in Bellevue. HHW collected at all locations is recycled, beneficially reused, or incinerated, when necessary. None is disposed at the Cedar Hills Regional Landfill.

In 2009, the Factoria HHW location served nearly 12,000 customers, collecting 278 tons of waste. In 26 collection events last year, the roving Wastemobile served more than 14,000 King County residents, collecting an average of

49 pounds of hazardous waste per customer (for a total of 358 tons). The new bi-monthly Wastemobile service at the Auburn Supermall provided HHW collection to an additional 3,344 customers, collecting more than 76 tons of waste in six months of operation.

The division continued its pilot program to accept hazardous wastes from small businesses at the Factoria station and the Wastemobile. (Previously only residential customers were offered the service.) The facilities received materials from 145 small businesses. The division will continue to promote the service for small businesses in 2010.



The Auburn HHW collection site is open to customers two weekends a month.



Waste Prevention and Recycling Programs

Program Name	Intent of Program	Results
Schools Education Program	Elementary school students learn resource conservation messages through assembly programs, classroom workshops, and assistance in forming Green Teams to carry out environmental projects.	At the elementary level, the division presented assemblies to 107 schools, reaching 28,086 students; presented 174 classroom workshops to 4,306 students; and supported 61 Green Teams totaling 1,627 students.
	Middle and high school students receive the EcoConnections classroom workshops. Green Team assistance is also offered at the middle and high school levels.	The division presented 558 EcoConnections workshops to 16,150 students and provided assistance to 33 Green Teams totaling 1,948 students.
Household Hazardous Waste School Program	Workshops for teachers of grades 4 to 12 provide information on household hazardous waste (HHW) and how this topic can be incorporated into lesson plans for a variety of subjects. Teachers can request follow-up support through classroom presentations and assistance on projects with their students. Parents of young children also receive presentations about HHW.	The division provided its standard HHW training to 39 teachers, responsible for 3,596 students. In addition, it organized specialized workshops for 18 art teachers responsible for 3,896 students. It delivered 27 classroom presentations, reaching 760 students. Assistance was given to 13 teachers on projects or lessons that affected 1,300 students. Presentations were given to 17 parent groups (including 3 groups of English Language Learners), reaching 298 parents.
Green Schools Program	<p>Helps schools (both public and private) and school districts to begin or expand conservation practices in:</p> <ul style="list-style-type: none"> • Waste reduction and recycling • Litter reduction • Green building • Hazardous materials management and reduction • Environmental education • Environmental purchasing • Energy conservation • Water conservation • Transportation choices 	<p>In 2009, the division recognized 53 schools for completing level one of the Green Schools Program, which focuses primarily on waste reduction and recycling. Success stories can be found at: http://your.kingcounty.gov/solidwaste/greenschools/participants.asp.</p> <p>By the end of 2009, the division was assisting 95 schools in 16 school districts throughout King County. Some of the 95 schools worked on level one, while others moved on to level two, which includes energy conservation and one additional conservation practice from the list in the column to the left.</p> <p>Below is a summary of some of the school accomplishments in 2009:</p> <ul style="list-style-type: none"> • 25 schools began to recycle food scraps and food-soiled paper. • Most participating schools achieved recycling rates between 40 and 60 percent. One school increased its recycling rate from 20 percent to 57 percent and cut its garbage volume by 50 percent by increasing classroom recycling and starting to recycle at lunchtime. • Many schools reduced their paper use, including one school that saved more than \$300 in a single month by decreasing paper use and making double-sided copies. Another school converted a parent newsletter and other parent outreach materials to electronic documents, saving approximately 39,000 pieces of paper each school year. • The schools that are working on level two conducted energy conservation outreach campaigns, reduced energy use, set up no-idling zones, and promoted walking, biking, and carpooling to and from school.



Program Name	Intent of Program	Results
Take It Back Network	Provides residents and small businesses with recycling opportunities for their electronic products and fluorescent lamps. The network is an ongoing recycling program that the division coordinates with retailers, recyclers, repair shops, and charitable organizations. The network members sign an agreement with the division obligating them to recycle the products in an environmentally sound manner. The division publicizes the network members on the Web site, in brochures, and through paid media.	There are currently 27 companies in the Take It Back Network, which provide 34 recycling options for electronics and 72 options for fluorescent lamps. In 2009, network members recycled: <ul style="list-style-type: none"> • 29,752 televisions • 43,329 monitors • 3,770 computers • 64,674 fluorescent bulbs • 92,515 fluorescent tubes
Master Recycler Composter (MRC) Program	Trains volunteers to serve as community educators about waste prevention, recycling, home composting, and alternatives to household hazardous wastes. MRCs learn practical “how-to” information to educate citizens and motivate them to action. MRCs bring information to people’s homes, workplaces, community events, neighborhoods, and schools to help King County residents make informed decisions about managing their waste.	During the 2009 MRC Volunteer training program, 28 volunteers were trained, bringing the number of active MRCs on the roster to more than 275. MRCs participated in 178 outreach events, recording more than 900 hours of outreach to more than 9,000 King County residents. Outreach venues included large-scale community events such as the Puget Consumers Co-op Healthy Living Fair, Concerts at Marymoor Park, the Green Festival, and Issaquah Salmon Days. At these events MRCs staffed general information booths to discuss pertinent issues related to solid waste management and recycling. In 2009, the MRC program provided targeted outreach support primarily on the Recycle More and Recycle Food programs. MRCs provided information on curbside recycling and food scrap recycling through presentations, staffing booths at community events, and giving out samples of compostable food scrap bags at farmers markets and retail stores throughout the county.



Sustainable Building

The division's green building program – GreenTools – supports internal county agencies, cities, the building community, and the public in designing buildings and structures that have less impact on the environment, are energy efficient, and use recycled materials.



Powered by the Solid Waste Division

Recycling and Reuse of Construction and Demolition Materials Continues to Flourish

The division provides information and technical assistance to contractors, property managers, and homeowners on how to maximize the recycling and reuse of construction and demolition (C&D) materials generated during building construction, remodeling, and deconstruction. In 2009, the division's GreenTools staff provided assistance to more than 1,500 contractors and homeowners who requested information on the management of C&D. The level of outreach and assistance provided by the division continues to grow each year as C&D recycling and reuse become more and more popular.

In the policy arena, the division is working with several public agencies on the development of best management practices (BMPs) for preventing asbestos from being disposed at C&D processing facilities. According to state and local laws, airborne particles from asbestos-containing materials can pose a risk to human health and are required to be properly disposed. The division is working with cities and the Puget Sound Clean Air Agency (PSCAA) to add language to building permits to increase notice to contractors about the need to follow PSCAA requirements for asbestos identification and notification before work on a building begins.

The division has also partnered with the City of Seattle to explore viable options for increasing C&D diversion during building deconstruction. One idea in the planning phase is the development of a hybrid deconstruction center. Instead of deconstructing a building on site, heavy equipment would be used to remove sections of the building at a time, which would be hauled to the center and systematically disassembled to separate all of the usable materials into discreet salvageable loads.

Green Building Assistance Provided to the Public, Cities, and Builders

The GreenTools team collaborated with jurisdictions and industry experts to support green building in urban and rural communities, providing education and technical assistance. For more than a decade, the GreenTools program and Master Builders Association of King & Snohomish Counties have collaborated on the establishment and implementation of the residential Built Green™ program. Through successful outreach to the residential construction industry and consumers, there are currently nearly 15,000 Built Green™-certified homes and more than 750 member companies across the two counties. In 2009, 1,007 homes were certified.

In 2009, GreenTools added features to the award-winning Eco-Cool Remodel Tool (at www.ecocoolremodel.com). The Web site now includes links to interactive communication tools, such as Facebook, to enhance the exchange of ideas, and additional energy-efficiency tools developed in partnership with Home Performance Washington.

The GreenTools team provided a technical training series to help cities create and implement green building programs. Through the Suburban Cities Program, the team revived the Sustainability Roundtable, a collaboration of King County jurisdictions, staff, and industry experts. An average of more than 25 people attended each of the six roundtables in 2009, up from an average of 12 in 2007.

The roundtables were attended by 28 different cities, with regular participation from Bellevue, Issaquah, Kirkland, Redmond, Sammamish, Seattle, and Shoreline. In addition to city staff, attendees from Port Townsend, Snohomish County, the Washington State Department of Ecology, and various King County agencies also participated. Topics at the roundtables included Incentive Zoning Tools in Sustainable Redevelopment, Showcase of Resources for Sustainable Communities, Rating Programs: Beyond New Construction, and more.

The GreenTools team partnered with the county's Department of Development and Environmental

Services (DDES) and the Water and Land Resources Division to educate the public on rural stewardship through hands-on trainings and the development of brochures and other resources. In partnership with DDES, GreenTools provided green building assistance to DDES customers, and provided extensive, direct technical assistance to 10 King County jurisdictions.

Putting the “Green” in Affordable Housing

The division’s GreenTools program provides Built Green™ and Leadership in Energy and Environmental Design (LEED) grants to a variety of affordable housing projects across King County. These projects include student housing, single-family homes, and multi-family units. In partnership with Washington State Commerce and King County Housing and Community Development Program, in 2009 the GreenTools team provided assistance to eight affordable and transitional housing projects in two days. Technical assistance included mini eco-charettes, design critiques, funding analysis, and consulting. This assistance for affordable housing supports the county’s Equity and Social Justice Initiative by broadening access to healthy, green communities across the county.



Schematic of the YWCA affordable housing village planned for Issaquah.

Tools Developed to Assist Countywide Green Building

In accordance with King County Ordinance 16147, *Green Building and Sustainable Development*, the division coordinates the countywide Green Building Team. This multi-agency team is charged with helping countywide project teams achieve the maximum possible standards of green building on county building projects. In 2009, the division worked

collaboratively with other county agencies to develop two tools mandated under the ordinance.

The first tool, *Green Operations and Maintenance Guidelines*, was developed to help agencies operate and maintain facilities in an environmentally sound manner. The guidelines are designed so that agencies can tailor the strategies and practices to suit the needs of each individual facility.

The second tool, *Sustainable Infrastructure Scorecard and Guidelines*, is designed for infrastructure projects that are not of the size or scope to be able to achieve a LEED rating. Modeled after a LEED scorecard, it awards points for categories such as planning and design, construction using best management practices, natural site amenities, community impacts, energy reduction, water management, and use of sustainable materials.

Green Building Grants Provide Incentives

In 2009, King County GreenTools partnered with the Wastewater Treatment Division, the Water and Land Resources Division Grant Exchange Program, Seattle Public Utilities, and Built Green™ to offer green building grants to projects pursuing LEED or Built Green™ certification. To qualify for grant funds, residential projects are required to meet four- or five-star Built Green™ certification, while commercial projects are required to achieve LEED Gold certification or better.

The grants provide incentives for organizations to increase the environmental performance of buildings, providing operations and maintenance cost savings, healthier indoor environments, and benefits to the regional ecology. The grants also help offset “soft” costs often associated with green building and encourage a wider range of business to build green projects.

In 2009, five projects received LEED grants totaling \$95,000. Ten projects received Built Green™ awards, totaling \$72,500. The awards fund costs associated with the application of green building strategies involving solar energy, grey water recycling, and reclaimed materials and deconstruction.



Environmental Stewardship

The division places environmental stewardship at the forefront of all its current activities and future plans. Through its participation on the countywide Climate Team, the division continues to support the Executive's *2007 King County Climate Plan* through its operations and programs, as well as participation on state and regional forums.

Division Team Addresses Climate Change

The division formed a climate team in 2009 to provide leadership and to coordinate responses to climate change within the division and with the Department of Natural Resources and Parks (DNRP) Climate Team. Planning for climate change requires consideration of both how our actions may affect the climate and how climate changes may affect our facilities and operations.

Both the *2007 King County Climate Plan* and the *King County Comprehensive Plan 2008* established a countywide goal to reduce the amount of greenhouse gas emissions by 80 percent from their 2007 levels by the year 2050. While these plans established a broad policy framework, the division is responsible for

developing strategies that address climate change related to solid waste management.

The division held its first climate team meeting in June with participation from across the division and the support of management team sponsors. The team compiled information about all of the actions the division is currently taking to address climate change concerns. In most cases these actions are also consistent with other environmental and economic goals. The team's formation has improved coordination across sections, established a climate change resource library and database, and created a common understanding of current climate change efforts. The team has improved the division's ability to track climate response efforts and provide information efficiently to the department and others when requested.





In 2009, the division undertook the following internal and external actions to respond to climate change:

- **Promoting participation in the recycling program for food scraps and food-soiled paper** – The food scrap recycling collection program encourages diverting food scraps and food soiled paper from disposal to composting. Diverting these materials eliminates methane gas generation since organics are managed aerobically during composting. Compost, produced from yard waste and food scrap recycling, improves soil and plant health and sequesters carbon when applied to residential and commercial landscapes. The program includes collection infrastructure development, and education, outreach and promotion through partnerships.
- **Expanding the E-Cycle and Take-It-Back programs among private businesses and organizations to increase recycling and reuse** – The E-Cycle Washington and Take-it-Back Network of private businesses, organizations, and retail stores provides reuse and recycling options for electronic products and fluorescent bulbs and tubes. These products contain both toxic substances, such as lead, cadmium, and mercury, that should be handled as hazardous waste, and recyclable materials, such as metals, plastics, and glass. These take-back programs lead to private-sector savings and encourage producer innovations to benefit the climate and environment. In just the first half of 2009, 58,800 fluorescent bulbs and tubes were collected and recycled. E-Cycle Washington recycled more than 14,897,644 pounds of materials from King County in 2009.
- **Reducing vehicle emissions and fuel usage** – The division continues its commitment to reducing the total impact and greenhouse gas emissions of the division fleet by purchasing and maintaining fuel-efficient and environmentally preferable vehicles and equipment necessary for operations. Hybrid or other alternative fuel vehicles are considered prior to any fleet replacements or additions. In addition, solid waste compactors are now scheduled for delivery in 2011 to the newly constructed Bow Lake Transfer Station to compact solid waste received at the station and reduce the number of hauling trips from the transfer station to the landfill.
- **Promoting and using green building strategies to reduce greenhouse gas emissions during construction and ongoing operations** – The Countywide Green Building Team, led by the division, has developed tools for implementing the *Green Building and Sustainable Development* ordinance. As discussed in *Sustainable Building, Tools Developed to Assist Countywide Green Building*, the division, in collaboration with other county agencies, has developed tools and guidance to help county agencies reduce greenhouse gas emissions through energy and water management, the use of recycled and sustainable materials, and more.
- **Reducing energy use at division facilities** – The division's newest transfer station, the Shoreline Recycling and Transfer Station, uses design features, technology, and employee actions to reduce energy consumption and greenhouse gas emissions, and to create savings in operational costs. Station design features and technology include solar panels on the roof, which supply 5 percent of the station's power, and a 3,800-gallon rainwater tank, which captures water for use in washing floors and flushing toilets. In 2009, station personnel proactively reduced idling time of the station's garbage compactor and turned off unneeded lights during evening hours, resulting in \$5,000 in energy savings. A further reduction in energy use is being seen at the landfill where the eight aerator pumps for the leachate ponds have been synchronized to provide proper aeration while minimizing run time. In just eight months of synchronized operation, the average monthly energy consumption by the aerators was reduced about 50 percent, resulting in a \$45,000 savings in the energy bill for 2009.



Environmental Stewardship (continued)

Landfill Gas Facility in Testing Phase

In May 2009, the gas-to-energy facility at the Cedar Hills Regional Landfill began the start-up and testing phase. The facility captures and processes gas produced by naturally decomposing garbage to remove and destroy harmful emissions. The clean gas is conveyed by natural gas pipelines to Puget Sound Energy to supply energy to thousands of King County homes. This renewable resource reduces carbon dioxide emissions. When it reaches full capacity, the facility is expected to generate about \$1 million in annual revenue for the division.



The landfill gas-to-energy facility is sending clean gas to the Puget Sound Energy grid.

Community Litter Cleanup Program is an Ongoing Success

The Community Litter Cleanup Program funds the cleanup of litter and illegal dumpsites on public lands and waterways in King County, as well as prevention and education programs. In 2009, more than \$55,000 in grant money from the Washington State Department of Ecology (Ecology) was spent on the program, with an additional investment of more than \$52,000 from the division.

In 2009, crews cleaned up approximately 116 tons of debris from 122 sites. About 17 percent of the debris was recycled – items included tires, appliances, and junk vehicles.

Ecology also provided \$20,264 in additional funds to support advertising on buses for the division's anti-littering and Secure Your Load outreach efforts. Of the callers to the shared Washington State Litter Hotline (1-866-LITTER1), 1,095, or slightly more than 7 percent of callers reported seeing the ads on a King County bus.

Division's Secure Your Load Efforts Strong, But State Funding To Be Cut in 2010

Since 2006, the division has used a number of public outreach methods to promote public awareness of the importance of secured loads when transporting materials in truck beds, in trailers, atop cars, and in open trunks. These efforts were carried out in collaboration with the Maria Federici Foundation and Ecology.

In 2009, the division continued its public outreach efforts with the following results:

- Scale Operators at division transfer stations distributed 3,785 brochures to customers on Tips for Securing Loads and assessed unsecured load fees on 3,150 customers who arrived at stations with unsecured loads (a 32 percent increase over 2008).
- In the three-week period from May 18 through June 7, 2009, law enforcement officers made 356 contacts of facility customers for violations. Of those contacts, 242 were given verbal warnings, 19 were given written warnings, and 89 received tickets.
- In April and August, the division ran ads on buses in south and east King County focused on anti-littering and secured loads. The ads also featured the Washington State Litter Hotline number for motorists to call to report littering and unsecured loads.

2009 marked the final year of funding from Ecology for law enforcement emphasis patrols and for advertising. The division will continue to highlight secured loads messaging, but efforts will be adjusted given the reduction in funding.



Cleanup of Illegal Dumping Remains a Division Priority

The Community Cleanup Assistance Program (CCAP) was implemented in 2008 to help keep our communities clear of litter and illegal dumping. Through CCAP, environmental site inspectors from the county, cities, and other agencies can issue vouchers for free solid waste disposal to 1) victims of illegal dumping and 2) those on a limited or fixed income that need assistance in getting their properties cleaned up. In 2009, site inspectors across the county issued more than 500 vouchers.

These vouchers made it possible to clean up an entire low-income neighborhood in the Ravensdale area, as well as more than two dozen sites that have been out of compliance for some time due to lack of cleanup funds or other reasons. The voucher program has also inspired a tremendous amount of goodwill between the county and the cities and between the county and its residents. The program saves agencies and residents money by getting problem sites taken care of quickly and decreasing the need for repeat inspections and costly enforcement actions.

In 2008 the King County Council adopted an ordinance to clarify and increase the county's role in enforcing laws that prohibit illegal dumping. In particular, it gives agency directors the authority to issue citations. The division is working with other county agencies to develop a citation form and to design a training program for staff on how to properly assess illegal dump sites, gather corroborating evidence, and issue the citation.



Before: Current site of the Chubby and Tubby store.

Brownfields Work Continues to Enhance the Urban Environment

In 2009, the King County Brownfields Program continued to use U.S. Environmental Protection Agency (EPA) grant funds to conduct environmental site assessments and provide technical assistance to businesses, municipalities, and nonprofit organizations in the county. The purpose of the program is to promote cleanup and reuse of contaminated sites. The division contracts with the nonprofit Environmental Coalition of South Seattle (ECOSS) and environmental consultant CDM to implement the program.

CDM conducted site-specific environmental site assessments for the following sites:

- A right-of-way in the City of Bothell that the city hopes to clean up as part of its downtown redevelopment master plan
- A former Chubby and Tubby store and gas station in the Rainier Valley that SouthEast Effective Development is cleaning up and developing into a mixed use, affordable housing project
- A former gas station in Georgetown that an artists collaborative would like to purchase and turn into a community art project and park
- A former gas station on Capitol Hill that Capitol Hill Housing wishes to purchase and redevelop into affordable housing



After: Schematic of the affordable housing planned for the future.

Brownfield's Project



Capital Projects

The division continues to implement its program of facility updates, as approved by the King County Council in the 2006 *Solid Waste Transfer and Waste Management System Plan*. The major focus of activity in 2009 was on preparation of the Bow Lake Transfer Station site for construction. The next station slated for reconstruction – the Factoria Transfer Station – is still in its early design and permitting phase, with construction expected to begin in 2012.

Bow Lake Station Reconstruction Well Underway

The Bow Lake Transfer and Recycling Station is being reconstructed at the site of the existing facility in Tukwila and on adjoining property. Site work began in 2009 to prepare the property for the new transfer building and is nearly complete. The new station will include expanded recycling collection; multiple scales for inbound and outbound customers; sustainable building design features to improve energy efficiency; and environmental enhancements to stormwater and wastewater systems. The division will seek Leadership in Energy and Environmental Design certification.

Throughout construction, the division has successfully managed traffic and operations to keep the existing station open to serve both commercial and self-haul customers. The division expects a smooth transition to

the new station that will allow uninterrupted service to customers. All construction is expected to be completed in last quarter 2012.

Landfill Development Continues with Area 7

Solid waste is disposed at the landfill in engineered cells or refuse areas. As each refuse area fills with garbage and begins to reach its permitted capacity, it is closed in successive stages. The currently active refuse area, Area 6, has reached about 80 percent capacity. Filled sections of Area 6 have been closed by placing interim or final cover on them, which consists of an 18-inch soil layer, textured membrane liner, and a top soil layer for growing vegetation. Once the remainder of Area 6 is filled, disposal will be transitioned to the new Area 7, which is expected to occur in second quarter 2010. Excavation of Area 7 began in 2008, and its facility components (e.g., landfill gas, stormwater, and leachate collection pipes; geomembrane liners; and pump stations) will be installed by early 2010.

Tipplers Reduce Damage to Garbage Trucks and Trailers

In 2008, the division began using tipplers at the landfill to empty garbage trailers rather than the walking floor trailers used previously. The walking floor trailers require a large, rock-covered surface placed over the refuse for the trucks to drive on as they unload (as the trucks pull forward on the rock surface, the walking floor rolls the garbage out the back of the trailer). The tipplers eliminate the need for the rock driving surface. Instead, the garbage trailers are backed onto the tippler unit, which tilts the trailer, allowing the garbage to slide out of the back and into the refuse area.

Not only do tipplers make unloading quicker and more efficient, division data indicate they are substantially reducing the repair and maintenance costs associated with unloading trailers. In the 15 months since the tipplers went into use, repairs to garbage trailers have



The site property (lower right) is nearly ready for construction of the new Bow Lake station.

decreased nearly 30 percent compared with the 15-month period before their use – and at a cost savings of more than \$650,000. This decrease is directly attributable to the drop in high maintenance costs associated with the walking floor trailers. Because the trailers are no longer driven over the rock and garbage surfaces, tire damage is also down. Over the same time period, tire replacements have declined by more than half, resulting in an additional \$75,000 in savings.



Side-by-side tippers keep greatly reduce unloading time for solid waste transfer trailers.

Public Information

From Web sites, podcasts, blogs, Facebook, and Twitter to good, old-fashioned brochures, fliers, and telephone calls, the division takes advantage of the ever-growing array of communication tools to keep our customers informed and engaged. Social networking tools, such as Twitter, Facebook, and blogs, are more than just a way to get messages out – they are avenues for learning from the public and others working in the field of solid waste, recycling, waste prevention, “green” living, and more.

The division’s EcoConsumer Web site illustrates use of the many new communication tools available (at www.KCecoconsumer.com). EcoConsumer is an informational program that focuses on striking a balance between consuming and conserving. This Web site links to a wide array of informative radio and television segments, print articles, a blog site, and the *EcoConsumer on Twitter*. It also features the award-winning interactive Web feature called The Eco-Cool Remodel Tool, with a virtual home where users can view tips on how to make a home more “green.” Visitors to the Web site can use the blog or Twitter to exchange ideas with the division’s personal EcoConsumer, Mr. Tom Watson.

The division’s campaign also has a Facebook page at www.facebook.com/recyclemore. The page features recycling “how to” quizzes, event notices, and all manner of recycling information and promotions.

The division’s Web site continues to be a well-tapped source of solid waste information, with about a half million visits to the site in 2009. Nearly two-thirds of those visits were to the following sites:

- **The “What Do I Do With ...?” feature:** Guides the user to the many vendors that accept materials for reuse, recycling, or disposal.
- **Transfer station- and facility-related information:** Includes division hours of operation, directions, and station closures, as well as daily updates on the status of facilities during major weather events, such as heavy snow storms, floods, and icy conditions.
- **The Take it Back Network:** A partnership of government agencies, retailers, repair shops, charitable organizations, and recyclers that provides consumers with options for recycling certain wastes – and their hazardous components – in a safe and cost-effective manner.

The division’s Customer Service Unit (CSU) fields customer inquiries that come by telephone and through the “Contact Us” Web site comment form. In 2009, the team responded to nearly 47,000 telephone inquiries and 1,365 Web site e-mail requests. The CSU assists customers with Web site searches to help them download brochures and access detailed information about programs. They also answered 748 calls to the Illegal Dumping Hotline.



2009 Solid Waste Division Awards

It was an award-winning year for the Solid Waste Division with strides in public outreach, green building, environmental stewardship, and solid waste system engineering. A list of awards for 2009 follows.

International

Eco-Cool Remodel Tool

Digital Government Achievement Award – Government-to-Citizen

Center for Digital Government

Eco-Cool Remodel Tool

Communicators Award – Award of Distinction
International Academy of the Visual Arts

Eco-Cool Remodel Tool

Communicators Awards – Eco Friendly
International Academy of the Visual Arts

Eco-Cool Remodel Tool

Communicators Awards – Government
International Academy of the Visual Arts

Recycling Guide

Communicators Award – Award of Distinction
International Academy of the Visual Arts

Eco-Cool Remodel Tool

W3 Award – Silver, Environmental Awareness Category
International Academy of the Visual Arts

Eco-Cool Remodel Tool

W3 Award – Silver, Green Category
International Academy of the Visual Arts

National

Shoreline Recycling and Transfer Station Public Art – ReTire and Terra Firma

Public Art Year in Review Award
Americans for the Arts

Shoreline Recycling and Transfer Station

Engineering Excellence Award Finalist
American Council of Engineering Companies

Shoreline Recycling and Transfer Station

Public Works Project of the Year – Environmental Category
American Public Works Association

GreenTools Green Building Program

Innovations in American Government Award – Top 50 Government Innovators
Harvard Kennedy School's Ash Institute for Democratic Governance and Innovation

"Recycle More. It's Easy to Do."

Anvil Award – Bronze, PSAs
Public Relations Society of America

Regional

Neighborhood Recycling Challenge

Totem Award – Public Relations Components, Special Events and Observances (8 days or more) – Government
Public Relations Society of America, Puget Sound Chapter

State

Shoreline Recycling and Transfer Station

Engineering Excellence Award – Gold
American Council of Engineering Companies, Washington State Chapter

Shoreline Recycling and Transfer Station

Project of the Year – Environmental Category
American Public Works Association, Washington State Chapter

King County Green Schools Program

Recycler of the Year – Outstanding Public Education Program
Washington State Recycling Association



Planning for the Future

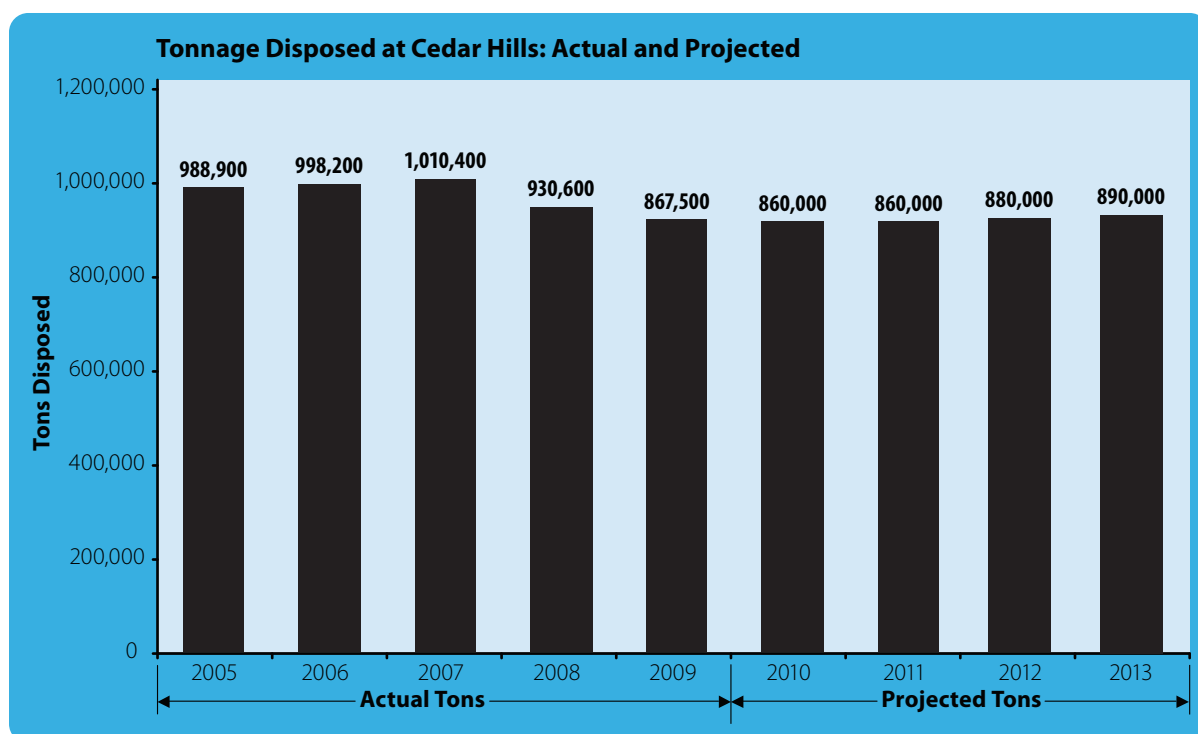
In 2010, the division will continue with the transfer system renovation plan currently in progress. We will begin to identify and evaluate potential sites for new transfer stations in Northeast Lake Washington and South County. These two stations would replace capacity once the Algona and Houghton transfer stations are closed, and the Renton station is considered for closure or modification. The division will finalize the site development plan for the Cedar Hills Regional Landfill and proceed with development in accordance with the selected alternative.

The division will also finalize the *Draft 2009 Comprehensive Solid Waste Management Plan* for approval by the cities and the King County Council. The plan builds upon past and current efforts to increase our waste prevention and recycling and advance green building practices in the region and in our own operations. We will continue to refine operational practices and facility designs in ways that further reduce our carbon footprint and promote the greening of our natural and built environments.

Solid Waste Projections

Projections of solid waste tonnage play an important role in planning for the future, as fees for disposal are the division's primary source of revenue. These projections are developed using an econometric model that incorporates variables such as population, per capita income, employment, and the disposal tipping fee. Also factored into the equation is the estimated success of future waste prevention and recycling efforts in reducing the rate of solid waste disposal. The estimated recycling rate for 2009 is about 46 percent.

The downturn in the economy has led to reduced consumer spending and business activity, a significant loss in employment and income, and an unprecedented drop in housing prices. As a result, tonnage disposed at the Cedar Hills landfill has decreased another 7 percent since last year to about 867,500 tons. Since 2007 the tons disposed at the Cedar Hills landfill has dropped by a total of 15 percent. The amount of materials recycled has also dropped significantly because of the economy.





Appendices

Note: Totals may vary slightly due to rounding.

Table A-1: 2009 Estimated Population and Housing Data (excludes Seattle)

Jurisdiction	Population	Single-Family Units	Multi-Family Units	Mobile Homes
Unincorporated	343,180	102,820	16,184	6,728
Incorporated	979,270	246,689	152,003	12,341
Total	1,322,450	349,509	168,187	19,069

Sources: Office of Financial Management (OFM) April 1 Population of Cities, Towns, and Counties and 2009 Housing Unit Inventory by County Used for Allocation of Selected State Revenues.

Table A-2: 2009 Single-Family (1-4 units) Curbside Collection - Service Subscribers (excludes Seattle)¹

Area	Curbside Garbage and Recycling	Curbside Organics
Unincorporated	82,019	36,065
Incorporated	218,911	153,016
Total	300,929	189,081

¹ Data for City of Enumclaw not available.

Table A-3: 2009 Single-Family (1-4 units) Curbside Collection - Average Pounds per Month (excludes Seattle)¹

Area	Garbage	Recycling	Organics
Unincorporated	127	52	119
Incorporated	110	58	120
Countywide	114	57	120

¹ Data for City of Enumclaw not available.

Table A-4: 2009 Single-Family Curbside Recycling Tonnage¹

	Mixed Paper	News-Print	Card-Board	Glass	Tin & Steel	Alum.	Plastic	Organics	Total
Unincorporated	9,551	4,636	4,529	3,870	604	389	1,821	25,731	51,132
Incorporated	28,424	13,766	14,385	11,594	1,805	1,171	5,430	110,111	186,687
Total	37,975	18,402	18,914	15,464	2,409	1,560	7,252	135,842	237,819

¹ Data for City of Enumclaw not available.

**Table A-5: 2009 Tons Disposed at Transfer Facilities**

Transfer Stations & Drop Boxes	Total Tons	% Self-Haul	% Commercial
Algona	141,770	27%	73%
Bow Lake	270,139	17%	83%
Cedar Falls Drop Box	3,602	100%	0%
Enumclaw	20,903	58%	42%
Factoria	139,811	19%	81%
Houghton	151,538	20%	80%
Renton	66,356	23%	77%
Shoreline	45,502	38%	62%
Skykomish Drop Box ¹	840	70%	30%
Vashon	7,766	70%	30%
Total	847,386	23%	77%

¹ Solid waste transported from Skykomish to the Houghton station; this row not added to totals.

Table A-6: 2009 Transactions at Transfer Facilities

Transfer & Drop Box Stations	Total Transactions	% Self-Haul	% Commercial
Algona	145,397	87%	13%
Bow Lake	180,390	73%	27%
Cedar Falls Drop Box	19,117	100%	0%
Enumclaw	43,333	97%	3%
Factoria	110,156	81%	19%
Houghton	121,516	83%	17%
Renton	75,035	86%	14%
Shoreline	60,898	91%	9%
Skykomish Drop Box	2,662	89%	11%
Vashon	20,967	98%	2%
Total	779,471	84%	16%

**Table A-7: Annual Solid Waste Tons Disposed, 1977- 2009**

Year	Rural Landfills	Transfer Stations	Cedar Hills Regional Direct	Cedar Hills Other Waste	Total Disposed
1977	55,100	264,100	-	48,800	368,000
1978	56,746	320,181	-	40,668	417,595
1979	54,498	428,187	156,554	36,342	675,581
1980	54,827	460,577	218,560	35,756	769,720
1981	44,280	509,680	244,417	50,755	849,132
1982	33,890	519,931	213,715	24,943	792,479
1983	32,318	498,643	206,691	9,566	747,218
1984	33,649	527,522	256,459	10,512	828,142
1985	36,862	568,342	268,795	13,592	887,591
1986	39,053	624,247	272,485	22,345	958,130
1987	36,979	681,472	595,058	28,165	1,341,674
1988	38,655	667,651	556,247	39,954	1,302,507
1989	41,614	712,156	476,602	55,462	1,285,834
1990	43,097	846,422	483,950	58,105	1,431,573
1991	28,553	842,083	258,319	53,014	1,181,969
1992	23,656	769,177	119,341	21,317	933,490
1993	21,020	710,077	144,974	24,740	900,811
1994	10,288	631,274	150,400	22,423	814,385
1995	7,388	642,498	146,089	26,610	822,585
1996	7,765	595,300	190,797	23,740	817,602
1997	8,180	610,941	229,007	24,449	872,577
1998	8,229	626,871	226,618	22,004	883,722
1999	3,949	692,921	214,422	18,015	929,306
2000	-	711,565	216,169	19,440	947,174
2001	-	696,665	222,664	16,982	936,310
2002	-	683,966	238,290	17,233	939,489
2003	-	704,128	257,283	17,426	978,837
2004	-	867,917	119,110	19,136	1,006,163
2005	-	944,100	25,304	19,451	988,855
2006	-	962,407	19,331	16,468	998,207
2007	-	956,549	37,099	16,781	1,010,429
2008	-	907,678	8,802	14,137	930,616
2009	-	847,386	5,192	14,902	867,481

**Table A-8: 2009 Transfer Station and Drop Box Recycling Tonnage**

	Cardboard / Mixed Paper / Newspaper	Appliances / Electronics	T-A-P-G ¹	Misc. ²	Scrap Metal	Yard Waste/ Food Scraps	Wood	Total
Bow Lake	259	114	62	0	0	0	0	436
Cedar Falls Drop Box	229	31	122	4	0	257	0	644
Enumclaw	520	221	229	5	0	361	3	1,339
Houghton	642	0	108	4	0	0	0	754
Renton	780	0	250	5	0	0	0	1,035
Shoreline	519	359	116	4	624	2,513	145	4,280
Skykomish Drop Box	24	0	16	0	0	0	0	40
Snoqualmie Pass Recycling Area	62	13	33	0	0	0	0	108
Vashon	269	74	485	3	0	0	0	831
Total	3,304	813	1,421	25	624	3,131	148	9,466

¹ T-A-P-G = tin cans; aluminum cans; plastic bottles, jugs, and tubs; glass bottles and jars.

² Includes fluorescent bulbs and tubes, batteries, reusable household goods and building materials, and textiles.

Note: The Algona and Factoria transfer stations do not have recycling bins because of space and operational constraints. Bow Lake discontinued accepting recycling materials during transfer station construction beginning in March 2009.

Table A-9: Number of Telephone Inquiries by Type in 2009

Appliance Recycling	1,874
Complaints	115
Computer/Electronics Recycling	987
Construction/Demolition/Landclearing Debris	2,133
Curbside Recycling	606
Directions to Facilities	1,947
Furniture	1,038
General Recycling	1,784
Hazardous Waste/Wastemobile	1,777
Hours of Operation	5,115
Illegal Dumping	748
Junk Vehicles	110
Latex Paint Disposal Policy	557
Metal	1,088
Non-assistance Transfers and Wrong Numbers	1,087
General/Other Inquiries ¹	5,102
Residential/Business Garbage Issues	2,250
Special Collection Events	600
Special Waste	469
Televisions	1,323
Transfer Stations	14,730
Yard Waste	1,412
Total	46,852

¹ Other general inquiries include calls about personnel, weather-related events, junk mail, business recycling, school programs, composting, council contacts, accounts, publications, etc.


Table A-10: Solid Waste Division Legislation Summary for 2009

Name	Description	Approved by Council
Flood Debris Fee Waiver	Motion 12913 approving a flood debris disposal fee waiver from 1/10/09 to 1/26/09. The division is working with specific communities that have experienced significant impacts from recent storms.	1/12/2009
Flood Debris Fee Waiver	Motion 12915 extending the flood debris fee waiver.	1/26/2009
Annual Report Due Date	Ordinance 16364 changing the due date for the division's annual report from April 1 of each year to May 1.	2/23/2009
Illegal Dumping Enforcement Limited Fee Waiver	Ordinance 16377 allowing the voucher program to pay for disposal fees for low income residents and victims of illegal dumping.	3/9/2009
Bow Lake Transfer Station - Change in Operating Hours	Ordinance 16444 approving hours changes at the Bow Lake Transfer Station during construction.	4/6/2009
Storm Debris Voucher Program	Ordinance 16646 establishing a voucher program in Executive-declared emergencies for one free disposal at county transfer facilities.	9/9/2009
		Transmitted to Council
Flood Debris Fee Waiver	A motion extending the flood debris fee waiver.	1/26/2009
Countywide Green Building	Countywide Green Building Annual Report.	4/29/2009
Division Annual Report	Solid Waste Division Annual Report as required under KCC 10.14.080.	4/29/2009
Environmentally Preferable Purchasing Annual Report	Environmentally Preferable Purchasing Annual Report.	5/27/2009
09 Budget: Section 101: Proviso 1: ILAs	First of two semi-annual progress reports to be submitted on the progress of negotiations to extend Interlocal Agreements with cities.	7/30/2009
Notice: Transfer Station Hours Changes	Notice to Council per KCC 10.10.025 that hours at five of the urban transfer stations will change on January 2, 2010 due to the decline in tonnage and corresponding decline in revenues.	10/1/2009
Preliminary Draft 2009 Comprehensive Solid Waste Management Plan	Transmittal of preliminary draft; begins 120-day public review.	10/8/2009
09 Budget: Section 101: Proviso 1: ILAs	Second of two semi-annual progress reports to be submitted on the progress of negotiations to extend Interlocal Agreements with cities.	10/27/2009
Notice: Bow Lake Transfer Station - Adjustment in operating hours	Notice to Council that subsequent to consideration of comments about the previous transfer station hours change notice, the division will adjust proposed Friday night closing time at Bow Lake from midnight to 11:30 p.m.	12/4/2009


Chart A-1: Solid Waste Division Actual Revenues and Expenditures. Year ending 12/31/2009¹

Manager / Administration			
Waste Prevention & Recycling and Mod. Risk Waste	<ul style="list-style-type: none"> • Education • Technical and financial assistance • Collection services 	Expenditure \$8,689,992 27 FTEs	Revenue Disposal fees \$6,073,212 Haz. waste \$2,402,614 Uninc. household fees \$214,166
Landfill Operations	<ul style="list-style-type: none"> • Operate and maintain active and closed landfills • Landfill and equipment Replacement transfer • Landfill rent 	Expenditure \$24,059,158 49 FTEs	Revenue Disposal fees \$23,693,488 Interest \$351,618
Transfer Station Operations	<ul style="list-style-type: none"> • Collect fees • Monitor waste • Equipment replacement transfer 	Expenditure \$12,954,976 101 FTEs	Revenue Disposal fees \$12,953,805
Transportation Operations	<ul style="list-style-type: none"> • Transport garbage to landfill • Haul leachate & maintenance material • Equip. replacement transfer 	Expenditure \$10,234,660 78 FTEs	Revenue Disposal fees \$12,953,805
Maintenance Operations	<ul style="list-style-type: none"> • Maintain facilities and equipment • Procure and control inventory 	Expenditure \$9,323,546 68 FTEs	Revenue Disposal fees \$10,217,095
Operations Administration	<ul style="list-style-type: none"> • Maintenance planning for operations functions 	Expenditure \$877,580 9 FTEs	Revenue Disposal fees \$877,580
Engineering	<ul style="list-style-type: none"> • Plan and execute capital projects • Environmental monitoring • Operations support 	Expenditure \$6,337,682 36 FTEs	Revenue Disposal fees \$5,435,572 C&D fees ² \$369,573 DOE and EPA grants \$532,537
Debt Service		Expenditure \$5,950,665 0 FTEs	Revenue Disposal fees \$5,950,665
Administration & Fiscal Services	<ul style="list-style-type: none"> • Manage fiscal functions • Administer customer service • Personnel functions • Payroll • Planning • Communication 	Expenditure \$13,612,660 57 FTEs	Revenue Disposal fees \$13,181,108 Interest \$431,552

¹ Based on year-end data as of February 19, 2010.

² Supports construction and demolition debris program costs.

Summary of 2008 Actual Activities

2009 Total revenues	\$88,041,557
Fund balance	-\$582,472
2009 Total operating expenditures	\$92,040,918
2009 Total employees	425



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formats upon request by contacting the

King County Solid Waste Division

206-296-4466

1-800-325-6165, ext. 6-4466

TTY Relay: 711

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2009
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Annual Report



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Solid Waste Division