

2005

Solid Waste Division  
**Annual Report**



**King County**  
Department of  
Natural Resources and Parks

## Table of Contents

Letter from the Division Director .....	1
Waste Reduction and Recycling .....	2
Capital Projects .....	9
Planning for the Future .....	10
Awards.....	12
Appendices.....	13
Acknowledgements .....	18

For more information or to request this material in alternate formats contact:

**King County Solid Waste Division**

206-296-4466, 1-800-325-6165, ext. 6-4466, TTY Relay: 711, [www.metrokc.gov/dnrp/swd](http://www.metrokc.gov/dnrp/swd)



## Letter from the Division Director

After several years of big changes in the Solid Waste Division and how we do business, the solid waste system in King County seemed to settle down in 2005. At the same time we were busy planning for even greater changes down the road.

With settlement of the Rabanco lawsuit in the Spring and the subsequent changes to hours of operation, hauling patterns by the commercial garbage collection companies have stabilized. Almost all of the tonnage that previously went directly to the Cedar Hills Landfill is now being delivered to King County transfer stations. We are now handling 36 percent more garbage through our transfer and transport system, with less than 15 percent more staff. The employees of the Solid Waste Division have really worked hard to do more with less and I could not be more proud of what they have accomplished.

We have also been making improvements in how the landfill is operated that will allow us to use Cedar Hills longer, which is worth a lot to our ratepayers since it is the least expensive disposal option. In the last few years, we have invested in equipment that helps us compact the waste more efficiently, re-use the rock put down for temporary roads, and cover the waste at the end of the day using alternative cover.

These and other initiatives have made it possible for us to revise the estimate of when the landfill will reach capacity, which will trigger the need to export to a distant landfill. If we continue to operate

as we have been, and make no adjustments to the landfill development plan, we can use Cedar Hills through 2015. It may even be possible to operate to several more years beyond that with revisions to the development plan and additional environmental review.

That does not mean that we have stopped planning for waste export – far from it. In 2005, under the active leadership of County Executive Ron Sims, we worked closely with the cities and other stakeholders on envisioning the future of the system and what steps need to be taken to get there. We met often with our advisory groups – the Metropolitan Solid Waste Management Advisory Committee, the Interjurisdictional Technical Staff Group and the Solid Waste Advisory Committee, as well as the haulers and labor unions – and made good progress laying out all the issues and developing alternatives. Their help has been invaluable. We expect that the final Waste Export System Plan will be submitted to the Metropolitan King County Council for adoption in September of 2006.

This annual report highlights the accomplishments of our award winning recycling and environmental programs as well as information on system activity and finances. As you will see, we've been busy!



*Recently completed Area 6 in the Cedar Hills Regional Landfill.*



# Waste Reduction and Recycling

## Zero Waste of Resources

The King County Solid Waste Division operates under a policy of Zero Waste of Resources. The policy defines waste as something with no value. The Division's strategy, therefore, is to remove materials from the waste stream that are recyclable and have resource value.

## Targeted Materials

The majority of materials currently disposed – 60% – have value and are recyclable. The Division targets those materials with a variety of programs:

**Electronics:** The King County Take it Back Network is an ongoing electronics recycling program coordinated by the Division. The network is a group of local electronics repair and resale shops, recyclers and nonprofit groups that take back electronic equipment from consumers for recycling or reuse. In 2005, it collected about 38,000 computer monitors, 27,000 computers, 20,000 peripherals, 8,200 TVs and 11,000 cell phones.



In September, all Staples stores in King and Snohomish County joined the network and now accept computers, monitors and computer peripherals for recycling. Since September 12, they have collected 12,600 electronic items.

**Residential and commercial food waste collection pilots:** Food waste and soiled paper (paper waste from the kitchen) continue to be targeted materials because of their potential value as a soil amendment and because they comprise more than 25% of the total disposed waste stream.

In a partnership with the Washington Utilities and Trade Commission, private haulers and other agencies, the Division conducted a residential food waste collection pilot in part of the unincorporated franchised territories. As a result, a majority of unincorporated King County will have a subscription food waste service added to yard waste by this spring. Issaquah joined Bellevue, Kirkland and Redmond that include food waste in their new garbage collection contracts.

**On-Site Food Waste Composting:** This program assesses the long-term feasibility of on-site food waste composting systems through partnerships with schools and businesses. Fourteen businesses and schools are taking part in the three-year pilot program. Initial results indicate on-site composting is a viable solution for low volume food waste generators when collection programs are not available.



**Fluorescent lamp recycling:** In a Division-sponsored pilot program, 68 retail stores collected residential compact fluorescent lamps (CFL) and straight tubes for a fee from January to July 2005. When customers brought their lamps into the retail stores for recycling they paid approximately 50¢ per lamp to recycle them and were given four coupons good for 50¢ off the purchase price of their next four CFLs. Overall, 13,691 lamps were collected, and 1,019 coupons were redeemed.

We learned that a fee-based recycling program located in retail stores is convenient for residents and feasible for selected retailers; however, we also learned that a 50¢ coupon is not a large enough incentive to motivate large numbers of residents to redeem them.



**Wood Markets Project:** The goal of this project is to develop the county's strategy for better managing wood waste. A Division planning team was assembled in 2005, including Operations, Engineering, and Recycling and Environmental Services. Based on background research, the team focused on urban wood waste, rather than green wood waste, little of which makes its way to disposal in the landfill.

The team compiled a list of 70 potential approaches that could be undertaken to improve recycling and markets for urban wood waste. These include education and outreach, partnerships, technical assistance to businesses, and policy development.

## Waste Reduction and Recycling

### Legislative and Regulatory Efforts

**Electronics and mercury bans:** Beginning October 1, a ban was implemented on the disposal of computers, laptops, monitors, TVs and cell phones from both businesses and residences. Throwing away mercury-containing thermostats, thermometers, fluorescent lamps, mercury-added button batteries and switches is also prohibited.



Advance information about the ban was provided to residents, transfer station customers and suburban cities. The ban received wide local media coverage that was followed by a paid campaign asking people to recycle their electronics at Take it Back Network member locations.

#### State electronics legislation:

The Division helped draft electronics recycling legislation for the 2006 session with a coalition of nonprofit environmental organizations, a large international electronics manufacturer, the Washington Retail Association, Seattle Goodwill, and local governments.

The legislation proposes a shared responsibility for electronics recycling where manufacturers would establish and pay for the collection, transportation and recycling of computers and televisions throughout the state. Retailers, charities, haulers and local governments could voluntarily serve as collection sites and get reimbursed for their recycling costs. Consumers would bring their old TVs and computers to the collection sites for free recycling. The system would provide a convenient, safe and environmentally sound recycling option.

**Mercury:** Mercury switch legislation made excellent progress in its first year in the Legislature, but did not draw enough support to pass. The Division was active in drafting the legislation, coordinating the partners in the coalition and testifying at hearings. The bill was reintroduced during the 2006 session.

**Commercial and institutional building:** As facilitator of the county's overall green building effort, we revamped the county Green Building Team to include a wider range of representatives from departments involved in capital improvement and infrastructure projects. Training sessions were provided for new members and other county staff on topics such as solar energy and pervious pavement.

Technical assistance was provided for a new county office building to be located adjacent to the King County Administration Building and for the new Marymoor Park maintenance facility. The Division also supported efforts to develop statewide green building standards for government buildings.



### Household Hazardous Waste

The Division negotiated a new, five-year contract for HHW disposal services that saved more than \$300,000 in its first year compared to previous contracts. The savings are returned to rate payers through increased collection services.

The Factoria Household Hazardous Waste Collection Service continued to be widely popular among eastside residents. Activity increased over 14%, with more than 15,500 customers and nearly 800 tons of HHW collected. The service will increase from four to six days per week by mid-2006. Participation at the Wastemobile also increased significantly, with nearly 20,000 customers and more than 1,000 tons of HHW collected. All of the collected HHW is recycled or reused; none is landfilled.





# Waste Reduction and Recycling

## Green Building Program

King County chaired the planning of the 2005 annual Built Green™ Conference for the third year and participated on the Built Green executive and steering committees. The program certifies homes as Built Green, posting these results:

- Number of homes certified since 2000: 6,212.
- Homes certified in 2005: 161.
- Total Built Green member companies: 302 (117 builders, 185 associates).

**Department of Development and Environmental Services:** The Solid Waste Division assisted with development and implementation of the 2005 DDES Sustainable Development Work Program. Topics at the five staff trainings included an introduction to the county's Green Building Program; school and residential eco-charrettes; low impact development; a cost benefit analysis of Green Building; and a field trip to three Built Green communities in King County.

**CDL debris management/Construction Works Program:** This program provides education and technical assistance to contractors, project managers and owners on managing construction, demolition and land clearing (CDL) debris as a resource rather than a waste.

2005 saw the creation of a website documenting the recycling rates of CDL recycling facilities in King County. The Division also provided technical assistance to county agencies and private businesses on deconstruction methods to maximize reuse of demolition materials.

The Construction Works program provides recognition to builders who recycle, reduce waste, and use recycled-content building materials. In 2005 six new members joined.

*Construction at Rainier Court after cleanup.*



## Environmental Stewardship

**Brownfields:** Last year, the Brownfields Program received an additional \$400,000 in grant funds from the Environmental Protection Agency to conduct environmental assessments. The Division contracts with the nonprofit Environmental Coalition of South Seattle (ECOSS) and environmental consultant Camp Dresser & McKee Inc. to implement the program. Over the year, environmental assessments were conducted on a number of projects, including:

- **Downtown Auburn Site:** The Division conducted an assessment of a downtown block on behalf of the City of Auburn which wants a mixed-use development on the site that would create jobs and housing downtown.
- **South Cove Site:** We conducted an assessment on this former unpermitted firing range near North Bend to facilitate the county purchasing the property for open space.
- **Ellisport Creek Site:** An assessment was conducted on this former oil storage site. The Vashon Island site is contaminated with heavy oil. Several parties are interested in obtaining the property for open space. Additional sampling in the sediments and beach area will be conducted this year and a cleanup plan prepared.
- **Harborview Medical Center Site:** The Division provided \$200,000 in EPA funds to clean up contamination from a former drycleaners on the site of a new building for Harborview. Excavation and disposal of contaminated soil is complete, and the building is scheduled to open in 2008.
- **Rainier Court Phase One/Courtland Place Site:** We provided substantial technical and financial assistance (including grants and a loan) for assessing and cleaning up this formerly blighted site in the Rainier Valley. South East Effective Development (SEED) redeveloped the site into affordable senior housing and commercial space.

# Waste Reduction and Recycling

**Community Litter Cleanup Program:** This program cleans litter and illegal dump sites on public lands and waterways in King County and funds illegal dump and litter prevention programs. In 2005, more than \$67,000 in grant money from the Department of Ecology was spent with an additional investment from the Division of \$55,000.

In 2005, crews cleaned up approximately 113 tons of debris from 115 sites. About 44 percent of the debris was recycled. Items included tires, appliances, and junk vehicles. Litter prevention messages reached 16,665 students.

**Illegal Dumping Task Force:** An illegal dumping hotline – the first of a series of four recommendations made by the King County Illegal Dumping Task Force – became operational June 1, 2005. The phone number is 205-296-SITE (7483), and provides citizens with an easier way to report illegal dumping.

The Solid Waste Division is the lead organization for the county interagency task force, formed in 2003 by Executive Ron Sims to combat illegal dumping and fix possible gaps and overlaps in service.

The three remaining recommendations are in various stages of implementation. They include increasing emphasis on field investigator training, making the county enforcement system more effective, and developing an illegal dumping prevention and education outreach program.



*A typical illegal dumping site before clean up.*

*A sample page from the EcoDeals.org website.*

## New Programs

**EcoConsumer campaign:** The Division launched its EcoConsumer campaign in 2005 to help the public consider environmental impacts when making purchasing decisions. This innovative media campaign includes paid TV ads and a regular EcoConsumer monthly feature in the Seattle Times. The campaign emphasizes waste prevention and related practices such as energy conservation.

**EcoDeals.org:** This new website markets recycled content and other environmentally preferable products to consumers through electronic coupons that can be downloaded and used at selected retail stores, as well as through Internet purchasing. The goals of the program are to:

- Increase consumer awareness of the wide range and availability of recycled content and other environmentally preferable products, and encourage their purchase.
- Demonstrate a change in consumer knowledge, behavior and attitude about recycled-content and other environmentally sustainable products.

**2005 natural yard care landscaper training:** In October, King County offered “The Business of Natural Yard Care,” a roundtable session designed to show landscape companies how they can increase revenues and cut costs by implementing natural yard care practices.

During the half-day session, industry leaders presented basic information and practical worksheets to attendees showing them how natural yard care can be profitable. Attendees reported the presentation on savings through mulch mowing was the most valuable topic presented. Most attendees said they planned to add natural yard care practices to their businesses. Landscaper outreach continues in 2006.





# Waste Reduction and Recycling

## Enhanced Residential Curbside Recycling

In 2002, the state enacted legislation that offers incentives to haulers providing residential curbside recycling service to increase the amount and value of materials recycled. Under the legislation, a hauler is eligible to keep part of the revenue from the sale of residential recyclables if the county and the Washington Utilities and Transportation Commission approve the hauler's submitted plan for enhancing recyclable collection. The statute does not apply to cities that contract directly for recyclable collection.

In 2005, about 112,000 households in King County were served by haulers operating under enhanced recycling plans. Service enhancements initiated under these recycling plans include the following:

- New 96-gallon recycling containers were distributed to 52,000 households between 2003 and 2005.
- Materials collected were expanded to include all metals, poly-coated paper and all plastic containers except polystyrene.
- 17,000 households subscribing to yard waste collection service can now put food waste and soiled paper in their yard waste container for composting.
- Haulers have provided additional educational materials to encourage recycling participation, and have worked with King County on pilot programs to test options for expanding food waste collection.
- Programs in the works for 2006 include a campaign to increase multifamily recycling, expansion of food waste recycling to 7,000 more households, and a pilot program to offer on-call electronics collection for recycling.

## Public Information

The Customer Service Unit provides telephone support and answers website e-mail questions with information about county transfer stations and recycling programs. We also answer the Illegal Dumping Hotline during weekdays.

The team answered an average of more than 300 calls each day and served 56,808 customers in 2005. A call tracking database records all calls. The results are broken out in Table A-11.

**SWD Website:** The website is proving to be an increasingly popular tool. Total website visitors went from 552,596 in 2004 to 646,420 in 2005, representing a 17% increase in traffic. Visitors were most interested in these web pages:

- The Online Materials Exchange page was viewed more than 1.2 million times for 27% of total in 2005.
- The "What do I do with...?" page had 600,000 views.
- Visitors seeking information on facilities (fees, directions, transfer stations, calendar) accounted for another 600,000 views.

Seasonal programs and campaigns drew significant traffic. The Northwest Natural Yard Days site accounted for more than 19,639 page views during the spring campaign which ran April 15 through May 15. The Waste Free Holidays site accounted for 80,175 page views, or 22% of total site traffic during December.





## Waste Reduction and Recycling Programs

Program Name	Intent of Program	Results
<b>Educational Programs</b>		
<b>Green Schools Program</b>	<p>This program helps schools start or expand conservation practices in:</p> <ol style="list-style-type: none"> <li>1. Waste reduction and recycling,</li> <li>2. Hazardous waste management and reduction,</li> <li>3. Litter reduction,</li> <li>4. Environmental purchasing,</li> <li>5. Water conservation,</li> <li>6. Energy conservation,</li> <li>7. Reducing greenhouse gas emissions, and</li> <li>8. Environmental education.</li> </ol> <p>Participants set measurable goals in two to four of the eight categories. WRR is required. Schools receive technical assistance and supplies over a 1-2 year period.</p>	<p>In 2005, the program continued assistance to Federal Way, Northshore, and Vashon school districts and began assistance to Issaquah and Lake Washington districts. The five have 142 schools. Accomplishments include:</p> <ul style="list-style-type: none"> <li>• Two districts developed waste management, energy and water conservation policies.</li> <li>• Two districts tracked garbage, recycling, energy and water data per student.</li> <li>• We developed and presented recycling training to Federal Way custodians.</li> <li>• 31 schools received recycling help.</li> <li>• 13 Federal Way schools, 7 Issaquah schools and 3 Northshore schools started or improved recycling.</li> <li>• Issaquah initiated use of water timers for irrigation and a custodian won an Earth Hero Award.</li> <li>• Northshore installed a low impact storm water management system at one school.</li> </ul> <p>We gave follow-up help to 8 schools that joined the program in 2004.</p>
<b>School Recycling &amp; Waste Reduction Assistance Program</b>	<p>Schools are assisted with: site visits; written recommendations for improvement; recycling containers; signs, equipment and supplies; hands-on help to start recycling programs; adding new materials to existing programs; and promoting the recycling program.</p>	<p>13 schools received assistance in 2005.</p> <ul style="list-style-type: none"> <li>• Two initiated recycling programs; two began to recycle paper.</li> <li>• Nearly all started recycling plastic bottles, aluminum cans, milk cartons or other materials.</li> </ul> <p>Nearly half made significant increases in recycling levels and reductions in garbage service.</p>
<b>Schools Program</b>	<p>Resources conservation messages are taught through an assembly program, classroom workshops, and assistance in forming Green Teams.</p>	<p>The Elementary School Program presented assemblies to 79 schools reaching 17,928 students; presented 141 classroom workshops to 3,442 students; and supported 67 Green Teams, reaching 1,897 students.</p>
	<p>Middle and high school students receive classroom workshops based on the DNRP video, <i>Natural Connections</i>.</p>	<ul style="list-style-type: none"> <li>• 158 Natural Connections workshops were presented to 4,683 students.</li> </ul>
	<p>Middle and high school students receive classroom workshops through the Division's Waste Busters program.</p>	<ul style="list-style-type: none"> <li>• 321 Waste Busters workshops were delivered to 7,990 students.</li> </ul>
<b>Household Hazardous Waste School Program</b>	<p>Teachers learn about household hazardous waste in workshops, and can request follow-up support through classroom presentations. Teachers also receive assistance to do HHW related projects with their students. Parents of young children also receive presentations about HHW.</p>	<ul style="list-style-type: none"> <li>• 75 teachers were trained in HHW, reaching 8,201 students.</li> <li>• 86 classroom presentations reached 2,276 students.</li> <li>• 11 teachers received assistance on projects, reaching 1,085 students.</li> <li>• 23 presentations to parent groups reached more than 355 parents.</li> </ul>



## Waste Reduction and Recycling Programs Continued

Program Name	Intent of Program	Results
<b>Outreach Programs</b>		
<b>Waste Free Holidays</b>	This November-December program encourages people to give experience gifts rather than "stuff" that creates unnecessary waste. Businesses participate by offering discounts on gift certificates, tickets and memberships for plays, concerts, sports events, museums, massages, meals, etc.	In 2005, the program's Web site received more than 10,800 visits. More than 110 businesses and organizations participated at 124 locations.
<b>Northwest Natural Yard Days</b>	Northwest Natural Yard Days promotes natural yard care to residents by educating about practices such as mulch mowing, conserving water, using compost and organic slow-release fertilizer, and hand weeding. The Division and 41 agencies partnered to provide discounts on natural yard care tools at retail stores from April 15-May15.	Residents purchased 92,615 bags of compost, 2,998 mowers, 3,676 soaker hoses, 3,588 weed pullers, 6,158 bags of organic fertilizer, 3,146 containers of insecticidal soap, and 575 water timers.
<b>LinkUp Program</b>	The LinkUp program provides technical and marketing assistance to businesses that process recyclable materials, use recycled materials in the products they manufacture or make reusable materials available. The goal of LinkUp is to develop local markets for recycled and reusable materials.	LinkUp worked with 9 partner businesses, conducting technical or marketing assistance projects. The projects included technical and market research, target marketing, website development, and media campaigns. More than three-fourths of partners who received program services the past two years processed or used more recycled materials in 2005 than 2004.
<b>Collection Programs</b>		
<b>Household Hazardous Waste (HHW)</b>	The Wastemobile and Factoria Collection Service are funded by the Local Hazardous Waste Management Program (LHWMP) and administered by the Division. The program enables residents to properly dispose of items such as pesticides, paints, cleaning products, and fluorescent light bulbs.	<b>Collection:</b> The Wastemobile held 27 events in 2005 and collected 1,110 tons of HHW from 19,814 customers. The Factoria Collection Service served 5,552 customers and collected 791 tons of HHW. All materials collected were then recycled or reused, none were disposed at a landfill.  <b>Education:</b> Education staff discussed waste reduction and safer alternatives with 16,700 (85%) of visitors to the Wastemobile.



Computer equipment recovered from a electronics recovery event sponsored by Staples®.

## Capital Projects

The Division completed capital projects at the Cedar Hills Regional Landfill and at our Harbor Island property. Major projects planned for the transfer stations were deferred pending recommendations that will be included in the Waste Export System Plan, due out in September of 2006.

**Cedar Hills:** The largest of the Capital Improvement Program (CIP) projects completed in 2005 was development of Area 6 at the Cedar Hills Landfill in Maple Valley. Area 6 began accepting waste on August 10. With a capacity of 6.8 million cubic yards (4.2 million tons), it will receive waste into 2010.

**Harbor Island:** Work was completed on a deconstruction project at the Harbor Island property that was purchased in 2003 as a potential site for a future intermodal facility. With deconstruction, as opposed to demolition, structures are dismantled

with the intent of retaining as much of the materials as possible for reuse or recycling.

The project deconstructed two wooden warehouses, a sky bridge and other miscellaneous structures. More than 75 percent of the recovered materials were reused or recycled. This resulted in a salvage value of \$120,000.

### Planned for 2006

Construction of the new First Northeast Transfer Station in Shoreline begins May 1, 2006. It will be the first major improvement to the transfer system in many years and will give us the opportunity to incorporate changes in how garbage is handled.

The design of the new facility incorporates the Leadership in Energy and Environmental Design Green Building Rating System™, which is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings.

LEED™ building features include passive ventilation, natural daylighting, rainwater harvesting and recycled-content building materials. These features are consistent with the Division's environmental focus and are also expected to result in lower operating costs than the use of more conventional building designs.

*Planks salvaged from the Harbor Island deconstruction site.*



*First trucks unloading at newly completed Area 6 at the Cedar Hills Regional Landfill.*





# Planning for the Future

## Solid Waste Export System Plan

The Cedar Hills Regional Landfill is expected to reach its permitted capacity in the next 10 or 15 years. A decision was made in the 1990s that another landfill would not be developed in King County. This means that approximately 1 million tons of solid waste will be exported annually to a landfill outside King County once Cedar Hills is closed. As directed by the 2001 Comprehensive Solid Waste Management Plan, work has been underway to plan the county's future solid waste handling system.

King County Ordinance 14971 created the Metropolitan Solid Waste Management Advisory Committee (MSWMAC) to involve the cities and share responsibility for analyzing and developing regional solid waste policies. This group met throughout the year, working collaboratively with the Solid Waste Advisory Committee (SWAC) and the Regional Policy Committee (RPC).

Ordinance 14971 also outlined four milestone reports leading toward a Final Solid Waste Export System Plan. Three of the milestone reports have been approved by RPC and the Metropolitan King County Council:

- Transfer System Level of Service Evaluation Criteria and Standards
- Analysis of Transfer System Needs and Capacity
- Public/Private Options for Ownership/Operation of Transfer and Intermodal Facilities.

The fourth milestone report, Preliminary Transfer and Waste Export Facility Recommendations and Estimated System Costs, Rate Impacts, and Financial Policy Assumptions, was completed in February 2006.

The fourth report identified packages for transfer and intermodal facilities, long haul transport, and out-of-county disposal. It also discussed public and/or private ownership and operation of the transfer and intermodal facilities, provided an analysis of the remaining capacity of the Cedar Hills Regional Landfill, and presented a sensitivity analysis of three alternative disposal scenarios: partial early waste export; full early waste export; and withdrawal of 200,000 tons from the solid waste system.

More work lies ahead in the process to complete a Final Waste Export System Plan by September 2006. Important elements to be completed in conjunction with the final system plan include an environmental review, development of

siting criteria and a siting process, a rate study, and an independent third party review of the plan.

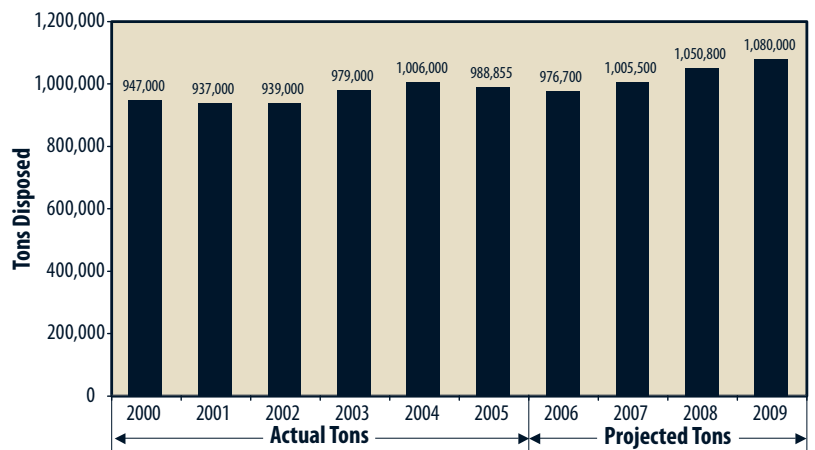
The above work will serve to inform the update of the 2001 Comprehensive Solid Waste Management Plan, a draft of which is expected to be completed in 2007. The process to begin work on this update began in December 2005.

**Solid Waste Projections:** Solid Waste forecasts are an integral part of King County's solid waste management system. The Division uses an econometric model to forecast future waste tonnage. The model takes into account several variables including the disposal tip fee, per capita income, employment and population. Forecasts produced are then adjusted to take into account program changes.

In 2005, tonnage disposed at Cedar Hills declined slightly – 1.7 percent – from the previous year to 988,885 tons. During 2004, self-haulers from Snohomish County brought garbage to the First Northeast Transfer Station while the Southwest Recycling & Transfer Station at Mountlake Terrace was under construction.

Tonnage is expected to decline slightly this year because of reconstruction of the First Northeast station. Waste typically taken to First Northeast by commercial haulers will be taken to the Snohomish County station where it will be compacted and then transported to the Cedar Hills Landfill. Self-haulers who normally would have taken their refuse to First Northeast will need to use a different transfer station. If they take their waste to the Mountlake Terrace station, it will be exported, along with Snohomish County refuse, to a landfill in Klickitat County, resulting in lower King County tonnage.

**Tonnage Disposed at Cedar Hills: Actual and Projected**



# Awards

## 2005 King County Solid Waste Division Awards Roundup

Program or Project	Award Name	Sponsoring Organization
Landfill Gas Control	2005 Gold: Landfill Gas Control Excellence Award	Solid Waste Association of North America (SWANA)
Landfill Management	2005 Bronze: Landfill Management Excellence Award	SWANA
Good Guys Electronics Recycling Pilot Program	2005 Bronze: Special Waste Excellence Award	SWANA
Interagency Resource Achieving Cooperation Troublesome Sites Workgroup	2005 Policy Advancement Award	North American Hazardous Materials Management Association (NAHMMA)
Internal Waste Prevention and Recycling Program	2005 Internal Waste Prevention and Recycling Program Award	National Association of Counties (NACO)
Mercury Switch Removal Project in Fleets	2005 Mercury Switch Removal Project in Fleets	NACO
Solid Waste Division Website Management	2005 Digital Government Achievement Award, Government to Citizen Category: "What do I do With ..." website	Center for Digital Government
Mercury Switch Removal Project in Fleets	2005 Conditionally Exempt Small Quantity Generator Pollution Prevention Award	NAHMMA
Local Hazardous Waste Management Program in King County	2005 Longstanding Program Excellence	NAHMMA
Good Guys Electronic Recycling Pilot Project	2005 Silver Anvil Award	Public Relations Society of America
U.S. Environmental Protection Agency (EPA) Plug In to E-Cycling Pilot Projects	2005 Environmental Innovator, EPA Industry Leader Award	EPA
Green Schools Program	2005 Recycler of the Year, Large Government	Washington State Recycling Association (WSRA)
Good Guys Electronic Recycling Pilot Project	2005 Recycler of the Year, Large Government	WSRA
Mercury Switch Removal Program	2005 Recycler of the Year, Large Government	WSRA
Brownfields Redevelopment Program with partner, South East Effective Development (SEED)	Phoenix Award™	EPA



# Appendices

**Table A-1: 2005 Estimated Population and 2004 Housing Data**

Jurisdiction	Population 2005	Single Family Units 2004	Multi Family Units 2004	Mobile Homes 2004
Unincorporated	364,498	109,396	19,327	7,523
Incorporated	884,737	221,443	139,158	11,500
<b>Total</b>	<b>1,249,235</b>	<b>330,839</b>	<b>158,485</b>	<b>19,023</b>

*Sources: Washington State Office of Financial Management (OFM), "Population of Cities, Towns, and Counties Used for Allocation of Selected State Revenues." King County 2005 Annual Growth Report. American Community Survey, 2004.*

**Table A-2: 2005 Single-Family (1-4 units) Curbside Collection - Service Subscribers**

Area	Curbside Garbage and Recycling*	Curbside Yard Waste
Unincorporated	99,344	41,360
Incorporated	183,988	122,006
<b>Total</b>	<b>283,332</b>	<b>163,366</b>

\* All garbage customers have also been counted as recycling customers.

**Table A-3: 2005 Single-Family (1-4 units) Curbside Collection - Average Pounds per Month**

Area	Pounds Per Household Per Month		
	Garbage	Recycling	Yard Waste
Unincorporated	134	63	130
Incorporated	123	66	114
<b>Average</b>	<b>128.5</b>	<b>64.5</b>	<b>122.0</b>

**Table A-4: 2005 Curbside Residential Recycling Tonnage**

	Mixed Paper	News-Print	Card-board	Glass	Tin & Steel	Alum.	Plastic	Yard Waste	Total
Unincorporated	15,238	10,645	2,682	4,908	645	323	717	32,171	67,328
Incorporated	30,840	19,632	5,073	9,654	1,228	624	1,349	83,392	151,793
<b>Total</b>	<b>46,078</b>	<b>30,277</b>	<b>7,755</b>	<b>14,562</b>	<b>1,873</b>	<b>947</b>	<b>2,066</b>	<b>115,563</b>	<b>219,121</b>

**Table A-5: 2005 Transfer Station and Drop Box Tonnage Disposal**

Transfer Stations & Drop Boxes	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
Algona	35,508	40,051	40,468	36,433	152,460
Bow Lake	63,050	73,821	79,763	75,417	292,050
Cedar Falls Drop Box	921	1,092	1,218	953	4,184
Enumclaw	5,316	6,250	6,643	5,402	23,612
Factoria	32,787	39,134	44,454	40,863	157,237
First Northeast	13,107	16,151	15,945	13,726	58,929
Houghton	39,469	45,062	46,921	42,643	174,095
Renton	16,689	18,983	18,918	17,693	72,282
Skykomish Drop Box*	152	181	199	143	675
Vashon	2,041	2,355	2,727	2,128	9,251
<b>Total Transfer Station Refuse</b>	<b>209,039</b>	<b>243,080</b>	<b>257,255</b>	<b>235,401</b>	<b>944,775</b>

\* Transported to Houghton; not added to totals.

## Appendices

**Table A-6: 2005 Total Tonnage Disposed**

System Origin	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
Total Transfer Station Refuse	208,887	242,899	257,056	235,258	944,100
Total Regional Direct	13,245	9,241	2,226	592	25,304
Total - Other	4,776	5,425	5,147	4,103	19,451
<b>Total Refuse Disposed</b>	<b>226,908</b>	<b>257,565</b>	<b>264,429</b>	<b>239,954</b>	<b>988,855</b>

**Table A-7: 2005 Transfer Station Disposal by Customer Type**

Transfer Station	– Self Haul Customers –		– Collection Companies –	
	Tons Disposed	% of Total	Tons Disposed	% of Total
Algona	36,826.70	24%	114,639.93	76%
Bow Lake	43,768.22	15%	245,166.64	85%
Cedar Falls Drop Box	4,170.85	100%	0.00	0%
Enumclaw	14,147.93	60%	9,346.68	40%
Factoria	29,976.10	19%	125,541.85	81%
First Northeast	30,192.15	51%	28,948.13	49%
Houghton	36,400.07	21%	137,242.66	79%
Renton	16,392.34	23%	54,860.20	77%
Skykomish	348.69	76%	109.60	24%
Vashon	6,245.35	72%	2,424.38	28%
<b>Total</b>	<b>218,468.39</b>	<b>23%</b>	<b>718,280.06</b>	<b>77%</b>

**Table A-8: 2005 Transfer Station Transactions by Customer Type**

Transfer Station	– Self Haul Customers –		– Collection Companies –	
	Transactions	% of Total	Transactions	% of Total
Algona	139,291	86%	22,045	14%
Bow Lake	140,795	73%	52,458	27%
Cedar Falls Drop Box	21,620	100%	0	0%
Enumclaw	51,878	97%	1,616	3%
Factoria	109,891	84%	20,798	16%
First Northeast	110,699	96%	4,781	4%
Houghton	121,974	84%	23,253	16%
Renton	77,358	87%	11,500	13%
Skykomish	2,413	89%	284	11%
Vashon	24,296	98%	419	2%
<b>Total</b>	<b>800,215</b>	<b>85%</b>	<b>137,154</b>	<b>15%</b>



## Appendices

**Table A-9: 2005 Transfer Station and Drop Box Recycling Tonnage**

Facility	Mixed Paper	Newspaper	Cardboard	T-A-P-G1	Total
Bow Lake	658	7	589	289	1,543
Cedar Falls Drop Box	164	22	121	84	391
Enumclaw	392	54	128	233	807
First Northeast	332	24	335	261	952
Houghton	34	18	207	220	479
Renton	352	12	308	249	921
Skykomish	19	1	12	23	55
Snoqualmie	17	-	24	55	96
Vashon	124	131	95	349	699
<b>Total</b>	<b>2,092</b>	<b>269</b>	<b>1,819</b>	<b>1,763</b>	<b>5,943</b>

(1) T-A-P-G = Tin, Aluminum, Plastic, Glass

**Note:** The Algona and Factoria transfer stations do not have recycling bins because of space and operational constraints.

**Table A-10: Total Refuse Tonnage Disposed, 1977- 2005**

Year	Rural Landfills	Transfer Stations	Cedar Hills Reg'l 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	44,290	848,439	483,950	58,105	1,434,784
1991	28,553	814,919	258,319	53,014	1,154,805
1992	23,656	770,448	119,340	21,317	934,761
1993	21,020	716,437	144,973	24,740	907,170
1994	10,288	633,408	150,400	22,422	816,518
1995	7,388	642,498	146,024	26,610	822,520
1996	7,766	594,736	190,790	23,740	817,032
1997	8,110	607,256	229,007	24,448	868,821
1998	8,228	626,874	226,617	22,005	883,724
1999	3,949	692,921	214,422	18,015	929,307
2000	-	711,565	216,169	19,440	947,174
2001	-	696,664	222,664	16,982	936,310
2002	-	683,965	238,290	17,233	939,488
2003	-	704,127	257,283	17,426	978,836
2004	-	867,917	119,110	19,136	1,006,163
2005	-	944,100	25,304	19,451	988,855



## Appendices

**Table A-11: 2005 Program Inquiries by Type**

Phone Inquiries	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
Customer service general <sup>1</sup>	2,952	4,383	4,627	2,874	14,836
Hours of operation	1,057	1,602	1,969	1,334	5,962
General recycling	734	699	636	560	2,629
Appliance recycling	716	730	834	590	2,870
CDL <sup>2</sup>	487	690	804	359	2,340
Electronics recycling <sup>3</sup>	831	841	1,171	840	3,683
Curbside recycling	181	216	108	80	585
TreeCycling	298	-	2	91	391
Compost/soils/bins	49	28	25	8	110
Special collection events	71	148	188	107	514
Garbage haulers/pickup	517	664	775	593	2,549
Hazardous waste	495	604	765	517	2,381
Junk vehicles	12	10	17	14	53
Transfer stations	3,313	4,910	6,025	3,487	17,735
Complaints	55	30	47	38	170
<b>Total</b>	<b>11,768</b>	<b>15,555</b>	<b>17,993</b>	<b>11,492</b>	<b>56,808</b>

1) Includes directions, rates, acceptance of materials, hauler questions, junk mail, illegal dumping, schools, et al.  
 2) Construction/demolition/land clearing.  
 3) Includes TVs.



New walking floors being welded into existing trailers.



# Appendices

Chart A-1: Solid Waste Division Actual Revenues and Expenditures. Year ending 12/31/2005

<b>Manager / Administration</b>			
<b>Waste Reduction &amp; Recycling and Mod. Risk Waste</b>	<ul style="list-style-type: none"> <li>Education</li> <li>Technical and financial assistance</li> <li>Collection services</li> </ul>	<b>Expenditure</b> \$8,890,578 29 FTEs	<b>Revenue</b> Disposal fees \$5,717,068.00 Haz. waste \$2,940,664.00 Uninc. household fees \$232,846.00
<b>Landfill Operations</b>	<ul style="list-style-type: none"> <li>Operate and maintain active and closed landfills</li> <li>Landfill and equipment Replacement transfer</li> <li>Landfill rent</li> </ul>	<b>Expenditure</b> \$27,137,190 42 FTEs	<b>Revenue</b> Disposal fees \$26,375,062.00 Interest \$762,128.00
<b>Transfer Station Operations</b>	<ul style="list-style-type: none"> <li>Collect fees</li> <li>Monitor waste</li> <li>Equipment replacement transfer</li> </ul>	<b>Expenditure</b> \$11,087,737 100 FTEs	<b>Revenue</b> Disposal fees \$10,932,640.00 Interest \$155,097.00
<b>Transportation Operations</b>	<ul style="list-style-type: none"> <li>Transport garbage to landfill</li> <li>Haul leachate &amp; maintenance material</li> <li>Equip. replacement transfer</li> </ul>	<b>Expenditure</b> \$8,283,733 76 FTEs	<b>Revenue</b> Disposal fees \$8,283,733.00
<b>Maintenance Operations</b>	<ul style="list-style-type: none"> <li>Maintain facilities and equipment</li> <li>Procure and control inventory</li> </ul>	<b>Expenditure</b> \$8,931,689 68 FTEs	<b>Revenue</b> Disposal fees \$8,931,689.00
<b>Operations Administration</b>	<ul style="list-style-type: none"> <li>Maintenance planning for operations functions</li> </ul>	<b>Expenditure</b> \$1,111,094 10 FTEs	<b>Revenue</b> Disposal fees \$1,111,094.00
<b>Capital Facilities<sup>1</sup></b>	<ul style="list-style-type: none"> <li>Plan and execute capital projects</li> <li>Environmental monitoring</li> <li>Operations support</li> </ul>	<b>Expenditure</b> \$4,487,625 34 FTEs	<b>Revenue</b> Disposal fees \$3,132,236.00 CDL fees <sup>2</sup> \$826,293.00 DOE and EPA grants \$529,096.00
<b>Debt Service</b>		<b>Expenditure</b> \$6,262,745 0 FTEs	<b>Revenue</b> Disposal fees \$6,262,745.00
<b>Administration &amp; Fiscal Services</b>	<ul style="list-style-type: none"> <li>Manage fiscal functions</li> <li>Administer customer service</li> <li>Personnel functions</li> <li>Payroll</li> <li>Planning</li> <li>Communication</li> </ul>	<b>Expenditure</b> \$11,517,898 47 FTEs	<b>Revenue</b> Disposal fees \$10,399,974.00 Interest \$762,128.00 Other \$344,743.00 Parks reimbursement \$11,053.00

(1) Operating portion only of capital facilities budget; does not include debt-financed design/construction costs.

(2) Supports Construction, Demolition and Landclearing Program costs in the Engineering Section.

<b>Summary of 2005 Actual Activities</b>	
2005 Total revenues	\$88,855,246
Fund balance added	\$1,144,957
2005 Total operating expenditures	\$87,710,289
2005 Total employees	406 FTEs

## Acknowledgements

Published April 2006 by the Solid Waste Division, Department of Natural Resources and Parks, King County, Washington. This Annual Report discusses the Division's major activities for the year 2005.

### King County Executive

Ron Sims

### King County Council

Bob Ferguson

Larry Gossett, Vice Chair, Policy and Administration

Kathy Lambert

Larry Phillips, Chair

Julia Patterson

Jane Hague, Vice Chair, Council Affairs

Pete von Reichbauer, Vice Chair, Regional Affairs

Dow Constantine

Reagan Dunn

### 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

<http://dnr.metrokc.gov/swd>

### Department of Natural Resources and Parks

Pam Bissonnette, Director

Bob Burns, Deputy Director

### Solid Waste Division

Theresa Jennings, Division Director

Geraldine Cole, Assistant Division Director

Bert Tarrant, Principal Writer

Dave Kallstrom, Graphic Designer

### Suburban City Mayors

Joe Scholz, Algona

Pete Lewis, Auburn

Judee Wells, Beaux Arts Village

Grant Degginger, Bellevue

Howard Botts, Black Diamond

Mark Lamb, Bothell

Joan McGilton, Buriem

Bill Paulsen, Carnation

George Martin, Clyde Hill

Margaret Harto, Covington

Bob Sheckler, Des Moines

Will Ibershof, Duvall

John Wise, Enumclaw

Michael Park, Federal Way

Fred McConkey, Hunts Point

Ava Frisinger, Issaquah

Randy Eastwood, Kenmore

Suzette Cooke, Kent

James L. Lauinger, Kirkland

Dave Hutchinson, Lake Forest Park

Laurie Iddings, Maple Valley

Miles Adam, Medina

Bryan Cairns, Mercer Island

Jean Garber, Newcastle

Shawn McEvoy, Normandy Park

Kenneth G. Hearing, North Bend

Rich Hildreth, Pacific

Rosemarie M. Ives, Redmond

Kathy Keolker, Renton

Michele Petitti, Sammamish

Gene Fisher, SeaTac

Bob Ransom, Shoreline

Charlotte L. Mackner, Skykomish

Matt Larson, Snoqualmie

Steve Mullet, Tukwila

Cathy VonWald, Woodinville

David Cooper, Yarrow Point

# 2005

## Solid Waste Division Annual Report



**King County**

Department of  
Natural Resources and Parks

**Solid Waste Division**

King Street Center, Suite 701

201 S. Jackson St.

Seattle, WA 98104-3855