

Lawrence M. Walsh County Executive

Will County Land Use Department Waste Services Division

2005 ANNUAL REPORT

Taking Care of Today Caring for Tomorrow



Lawrence M. Walsh – County Executive

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Introduction

Each year the Waste Services Division of Will County Land Use summarizes their goals and accomplishments of the previous year. Dedicated to assisting residents and businesses in their efforts to secure safe disposal services and ample recycling opportunities, the Waste Services Division appreciates and values citizen interest in waste reduction, reuse, recycling and proper disposal.

Please direct any questions, comments or suggestions to the Waste Services staff through the web site at www.willcountylanduse.com or by telephone at 815-727-8834.

History

The Waste Services Division was created in 1988 to plan for the future disposal of Will County waste. In that same year, Will County entered into a delegation agreement with the Illinois Environmental Protection Agency (IEPA) to investigate citizen complaints about illegal dumping and/or garbage burning. Additionally, the agreement requires inspections to be conducted at permitted pollution control facilities.

In 1991, the Will County Board adopted the first Will County Twenty-year Solid Waste Management Plan as required by the State of Illinois. The Plan called for the County to develop a landfill. After much study and local input, the Federal Government conveyed a portion of the Joliet Army Ammunition Plant to the County in 2002, to be developed into a landfill site. In January of 2004, Will County's Prairie View Recycling and Disposal Facility began accepting waste.

All the time the County was involved in planning for the safe disposal of municipal solid waste, it was busy encouraging the development of waste reduction education and recycling programs. Newsletters, flyers, guide booklets and other written materials were produced to provide the general public with information about alternatives to disposal. Annual and semi-annual special collection events were held throughout the County for tires, household hazardous materials, books and electronics.

An education program was undertaken to reach schools, teachers and students. Schools were assisted with grant applications, awarded for meeting recycling goals and supported with presentations, suggested classroom activities and learning opportunities.

The County Board passed ordinances and resolutions supporting recycling and requiring all disposal and recycling to be reported to the County in order to comply with State reporting requirements and measure waste diversion progress.

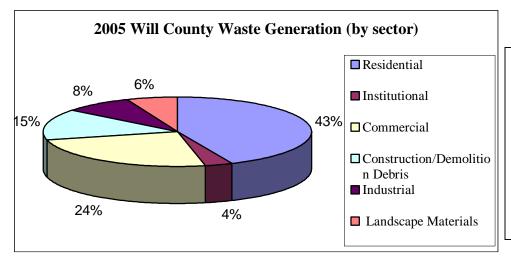
The following report summarizes the Waste Services Division activities of 2005. These activities were part of an evolving and goal oriented environmental program, done in cooperation with citizens, businesses, other units of government and organizations, which began in 1988 and will continue into the future.

Waste Generation and Disposal Capacity

In 2005, Will County residents and businesses generated almost 770,000 tons of non-hazardous municipal solid waste, as indicated in the table below. Given the estimated population of 613,849 people, this amounts to a municipal waste generation rate of 6.88 pounds of waste generated each day for every man, woman and child residing in Will County. Nearly 236,000 tons of municipal waste was recycled (resulting in a 31% recycling rate) and the remaining 533,338 tons of waste required disposal. (Note: Industrial Waste is not included in the waste & recycling numbers reported to the IEPA that are used in the IEPA Annual Capacity Report per standard accepted reporting practices.)

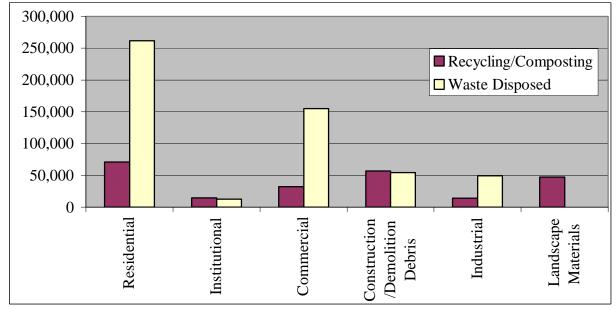
Will County's Municipal Waste Generation – 2005

	Construction							
	MSW	MSW	MSW	/Demolition	MSW	Landscape		
	Residential	Institutional	Commercial	Debris	Industrial	Materials	TOTAL	
Generated	332,585	27,204	187,115	111,632	63,453	47,095	769,084	
Recycled	70,926	14,375	32,106	57,062	14,183	47,095	235,746	
Disposed	261,659	12,829	155,009	54,570	49,270	0	533,338	
Diversion								
Rate	21%	53%	17%	51%	22%	100%	31%	



<u>Left</u>- This chart indicates the amount of Will County's Municipal Solid Waste (MSW) generated in 2005 broken down by sector.

<u>Below</u> – This graph depicts the amount recycled and the amount discarded by sector.



Prairie View Recycling and Disposal Facility

The parcel of land to be used for a Will County landfill was deeded to the County free of charge by the Federal Government in 2002. The parcel is located within the former Joliet Army Ammunition Plant near Wilmington and is 455 acres, however the disposal area is only 223 acres. The landfill site was named the Prairie View Recycling and Disposal Facility and is permitted by the IEPA for 20 million tons of municipal waste and non-hazardous waste that is to be accepted free from the Army, Forest

Service and Veteran's Cemetery as part of the redevelopment of the Joliet Arsenal. Before each permitted area "cell" is allowed to receive waste, it must have three feet of recompacted clay, a synthetic 60-mil high-density polyethylene geomembrane, a geotextile cushion, a foot-thick leachate drainage layer, and a fabric filter.

The Prairie View Recycling and Disposal Facility accepted its first load of waste on January 19, 2004. During 2005, Prairie View RDF received an average of 1,800 tons of waste per day exclusively from residents and businesses within Will County (or from communities with boundaries that extend into Will County).

Through the landfill operating agreement, the facility generated almost \$1.275 million for the



Above – A load of waste from a transfer trailer being dumped at the Prairie View Recycling and Disposal Facility.

County and other units of local governments in 2005 through host fees. An additional \$224,000 was paid to various taxing bodies during 2005. Over \$671,000 in surcharges and other revenues was also generated from the landfill property. Over 470,000 tons of waste was received (including taxable and non-taxable) during the facility's second calendar year of operation.



The site plans to have a gas to energy system once enough methane gas is generated. Gas and groundwater is monitored throughout the life of the site, and through the post closure period. The site also contains a drop off for recyclables and for waste from the general public.

Left – Daily cover being spread over waste at the Prairie View Recycling and Disposal Facility.

Education / Outreach Programs

Upon request, the Waste Services Division can provide environmental education to any resident, business, school, or community group. Staff routinely provides presentations, participates in public events (i.e. County Fair, Joliet Business Expo and Earth Day events). In 2005, over 1,000 adults were provided materials through these outlets.

The majority of educational efforts in 2005 were directed towards schools. In 2005, the Waste Services Staff presented information to 7,880 children and teachers across the county. Will County, with the support of the Illinois Department of Commerce and Economic Opportunity, awarded Earth Flags to the schools listed below for receiving educational presentations to one grade level of students and successfully reducing and recycling waste in their buildings.



A replica of an Earth Flag awarded to the following schools.

2005/06 Illinois Earth Flag Award Recipients

Arbury Hills - Mokena Arnold J. Tyler - New Lenox Chelsea Elementary – Frankfort Beecher Elementary - Beecher **Bruning Elementary – Wilmington** Goodings Grove – Homer Glen Frankfort Square - Frankfort Gompers Jr. High – Joliet **Grand Prairie Elementary - Frankfort** Hickory Creek Middle- Frankfort Holy Family – Shorewood Joliet Catholic Academy - Joliet Joliet Junior College – Joliet Joliet Township High Central Campus – Joliet Jonas E. Salk – Bolingbrook Kelvin Grove Jr. High – Lockport

Meadow View Elementary - Plainfield Mokena Intermediate - Mokena N.B. Galloway – Channahon Nelson Prairie – New Lenox Peotone Jr. High - Peotone Reed Custer Middle -- Braidwood River View Elementary - Plainfield St. Joseph – Joliet St. Joseph – Manhattan St. Jude – Joliet St. Mary – Park Forest St. Rose – Wilmington Trinity Services – Mokena Troy Heritage Trail – Joliet University of St. Francis - Joliet Wood View - Bolingbrook

Each of the schools receiving an Earth Flag or award for continued recycling excellence, is invited to an award ceremony, usually held at Bicentennial Park in Joliet. Students and faculty arrive from throughout the County for an award presentation. The 2005-06 ceremony included an address from the County Executive, Larry Walsh and an environmental education presentation on reptiles.









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Collection Events

Each year, since 1996, the Waste Services Division has held at least one special collection event to provide residents an opportunity to recycle. In 2005, Waste Services planned and executed nine (9) collection events for items such as household hazardous waste, used tires, books and consumer electronics. This is a summary of each type of event.

Household Hazardous Waste Collections

Household Hazardous Waste (HHW) includes many products throughout the average home; such as oil-based paint, pesticides, fertilizers, drain cleaners, automotive fluids like motor oil, gasoline, antifreeze and brake fluid. It also encompasses batteries, cleaning fluids, pool chemicals, expired medications and mercury containing objects (thermostats, fluorescent lights, thermometers, etc.).



Everyone has some hazardous products in their home, usually stored safely, but when they want to discard these products, they become HHW. Since most of them are liquid or have liquid elements, they pose a risk in landfills where they will mix with leachate (the rain water and waste liquids in the garbage). To reduce the potential toxicity of leachate and the risk of garbage truck and dumpster fires or explosions (known to happen when different HHW products are mixed in the waste as it is collected), the County offers several disposal alternatives.

Waste Services contributes funds to the permanent Naperville Regional HHW facility. Although it is located a few miles north of the County line, off State Route 59, it is one of only two permanent collection sites in Illinois and has been serving residents throughout Will County since 1995. For residents that are moving or cleaning the home of a loved-one due to a death or illness, unable to wait for a one-day collection event within Will County, they may use this facility that is open every weekend, both Saturday and Sunday, except on holidays. In 2005, approximately 1,950 Will County residents utilized this service.

Given the size of the County, many residents prefer a HHW collection option closer to their residence than the Naperville site. In 2005 Waste Services offered five (5) one-day HHW collections held

throughout Will County (the locations are noted in the summary chart on the following page). Two of the events were funded by the Illinois EPA and two were provided by Waste Management, Inc. through the county's landfill contract. The cost per event averaged \$22,299 and participant cost per averaged \$46.67, while amount per participant averaged 57 pounds.



Workers unloading household hazardous waste brought to a collection event.

The following table depicts the statistics associated with the 2005 HHW events:

Summary of HHW Collection Events for 2005								
Location	Participants	Pounds Collected	Cost of Event	Funding Provided by				
Memorial Stadium, Joliet	826	30,093	\$40,761	IL EPA				
Hickory Creek Metra, Lockport	411	29,784	\$14,330	WM / County				
Bonnie McBeth Learning Ctr, Plainfield	375	19,908	\$13,740	WM / County				
Continental/Midland LLC., Park Forest	440	34,562	\$29,674	IL EPA				
Wilmington City Hall, Wilmington	283	19,108	\$12,989	County				
TOTAL	2,335	133,455	\$111,494	\$111,494				

Tire Collection

Tire recycling collections are held to eliminate breeding grounds for mosquitoes, clean up illegal dumpsites, and prevent air pollution from the open burning of tires.

Waste Services held two tire collection events in 2005. The first was funded by the Illinois EPA, in June at the County Highway Dept. in Crest Hill. The second, held in November, was at Tire Grinders Transporters located in Joliet.



Municipal public works departments, township highway departments and residents brought a total of 9,801 tires to these events. Recovered tires are commonly used for retreads, industrial fuel, athletic surfaces, road aggregates and playground material.



Above – A large pile of tires illegally dumped along a road, later taken to the tire collection event for recycling.

Left – The tire contractor used a shredder to reduce the size of the tires prior to hauling them to a recycling facility.

Book Collection

Will County's 8th annual Book ReUse and Recycling Event was held at the Joliet Park District's Pilcher Park Nature Center. This location has been very successful in attracting residents and teachers willing to browse the eclectic collection of dropped-off books. Additionally, the Park District generously donated the facilities for use by the Waste Services Division.

Residents, schools, libraries and businesses brought their "gently used" books to be given away for reuse or recycling at the event. As books were brought in, the Land Use Department staff and several student volunteers



Residents browsing through books for reuse at the annual 3-day book collection event.



from the area arranged them on tables by type/genre. Any person attending the event or visiting the park was allowed to take books. Tyler Elementary School in New Lenox did their own in-school collection and then brought over 600 children's books they gathered to the county's collection event.

Approximately 460 people participated in the event, dropping-off nearly 7,000 books. Of those, it is estimated that 48% were saved, destined to be used and read again.

Consumer Electronics

In 2005 Will County held it's 7th Consumer Electronics Collection Event since its first event in 2000. Over the past two decades electronic devices, once made to be durable and long-lasting have become increasingly obsolete as innovations in technology occur at rapid speed. Items such as computers, monitors, keyboards, peripherals, telephones, cell phones, answering machines, televisions, stereos, cameras and more have become a disposal issue due to their short life-spans and specialty components. To ensure proper recycling and disposal of these items, Waste Services offers an annual collection event to residents, schools, small businesses and local governmental agencies. In 2005 two semi-trailers were filled with surplus electronics from County offices. Nearly 260 vehicles came to the event held at Romeoville High School on Rt. 53 in Romeoville. All told, a total of 52,599 pounds or 26.3 tons of consumer electronics were collected. This event was paid for by Waste Management through the county's landfill contract.



Left – A pallet of computer monitors, wrapped with plastic to be loaded on a semi-trailer and taken for recycling.

Right – Various types of equipment collected at a consumer electronics event.



Enforcement Activities

Permitted Facilities Inspections

The Waste Services Division conducted 89 inspections at permited sites throughout Will County in 2005. This included landfills, transfer stations, a landscape waste transfer station, compost sites and several land application sites. Four of the landfills were considered "open" from a regulatory standpoint.

Of the landfills inspected, Will County does not inspect the Prairie View Recycling and Disposal Facility because the County owns the landfill. (This site is regularly inspected directly by the Illinois EPA.) Waste Services staff visit the Prairie View RDF regularly to review the site's activities.

Of the remaining open landfills in the County, two of them, Renwick Landfill and Lincoln Stone Quarry, are monofills meaning they accept only one type of waste, that being coal combustion-derived wastes from local coal-fired electricity-generating power plants.

The Laraway Recycling and Disposal Facility accepted general construction and demolition debris and permitted special wastes. The Laraway Recycling and Disposal Facility began accepting contaminated soil in 2005, after being permitted at the end of 2004 by the Illinois EPA to operate a contaminated soil bioremediation facility at the landfill. Due to capacity issues, the Laraway Recycling and Disposal Facility accepted a very low amount of waste overall in 2005.

The CDT Disposal Facility continued to be considered an "open" landfill, although no waste has been accepted at the landfill since 1999. Final cover must be placed over certain areas of the landfill before it will be considered "closed."

"Closed" landfills in Will County were also inspected, due to long-term monitoring requirements. These facilities include Beecher Development I, II, and III, CDT Landfill, CDT-Barrett Landfill, the former Joliet Army Ammunition Plant, Land & Lakes/Willow Ranch Landfill, Wheatland Prairie Recycling and Disposal Facility, and the Wilmington Municipal Landfill. Closed landfills are inspected to ensure the integrity of the final cover, leachate and gas collection/removal systems, groundwater monitoring systems, and compliance with other permit conditions and applicable rules and regulations.

Complaint/Illegal Activity Responses

The Waste Services Division responded to 257 complaints involving open dumping, burning, suspicious leaks and spills in addition to other waste related pollution concerns. Staff personally inspected a variety of locations throughout the County based on complaints or observations.

When it was determined that violations were occurring, staff identified property owners and responsible parties, notified them of the violations and encouraged them to clean-up or cease illegal pollution causing activities. In 2005, 44 illegal dump sites were brought into compliance.





Above – An example of "illegal dumping" of scrap metals, barrels, and potentially pollution causing liquid materials.

Right – An example of "illegal dumping" of wood, cardboard and scrap materials.

In cases where the property owners or the responsible party did not comply, staff worked with the State's Attorney's office to pursue legal action. In 2005, 3,818 cubic yards of illegally dumped or burned material was legally disposed due to the Waste Service Division's involvement.







Above – Photos of an illegal dump site. Waste Services issued a "Non-Compliance Notice" in the summer of 2005. After repeat inspections and verbal commitment to clean-up the site, a December 2005 inspection revealed the open-dumped waste had been burned. A "Violation Notice" was issued and legal action (which can include fines and penalties) began to be pursued.

Conclusion

The year 2005 was a challenging year for the Waste Services Division. Although the overall recycling rate reached 31%, the goal of 40% requires continued effort. A variety of educational activities, one-day special collection events, inspections and reporting activities were completed. Analysis of participation levels, complaints and recycling measurements provided the means to establish the goals for 2006. These goals include:

- Establish a Program to Increase Commercial and Industrial Recycling
- Assist in Programs to Increase Residential Recycling
- Increase Monitoring of Open-Dump Sites
- Review all Pollution Control Facility Applications
- Maintain award and educational programs for schools
- Produce the Five-Year Solid Waste Plan Update
- Continue Collection Events for HHW, Electronics, Tires and Books

Waste Services staff will continue to work in cooperation with other Land Use divisions such as Planning & Zoning, Building and Subdivision Engineering, in addition to relying upon the County State's Attorney for enforcement assistance. Waste Services is dedicated to providing safe disposal and recycling programs for all residents, businesses and organizations within Will County.

Comments, Concerns or Suggestions may be sent to:

Will County – Land Use Waste Services Manager 58 E. Clinton Street Joliet, IL 60432 815-727-8834 www.willcountylanduse.com