

Lawrence M. Walsh County Executive

Will County Land Use Department Waste Services Division

2006 ANNUAL REPORT

Recycling Today provides Resources for Tomorrow



May 2, 2006 – 1st Will County Athletic Shoe Collection

Lawrence M. Walsh – County Executive

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Table of Contents

| Table of Contents | 3 |
|--|----|
| Introduction | 4 |
| History | 4 |
| Waste Generation and Disposal Capacity | |
| Current Accomplishments: | |
| Enforcement Activities | 7 |
| Collection Events | 9 |
| Education / Outreach | 11 |
| Conclusion | 14 |



Introduction

This annual report is provided by the Waste Services Division of Will County Land Use to summarize the division's goals and accomplishments of the previous year. Waste Services is dedicated to assisting residents, municipalities and businesses in their efforts to obtain reliable disposal services and sufficient recycling opportunities. All citizens, elected officials and representatives of community organizations are encouraged to familiarize themselves with waste reduction, reuse, recycling and proper disposal issues.

Please direct any questions, comments or suggestions to the Waste Services staff via e-mail at <u>wservices@willcountylanduse.com</u> or by telephone at 815-727-8834.

<u>History</u>

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.

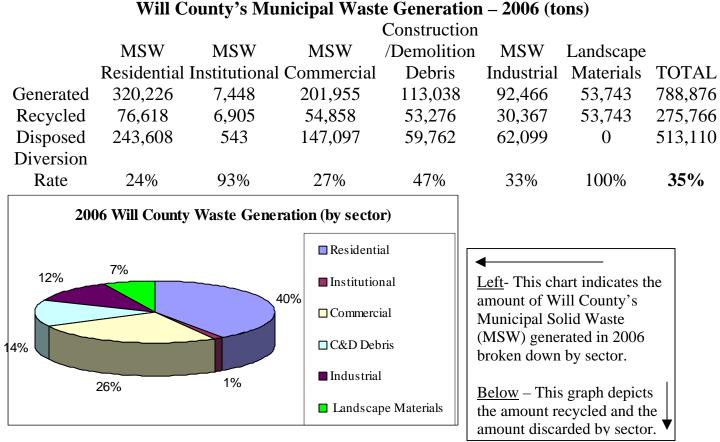
An education program was undertaken to reach schools, teachers and students. Schools were assisted with grant applications, awarded for meeting recycling goals and supported with presentations, suggested classroom activities and learning opportunities.

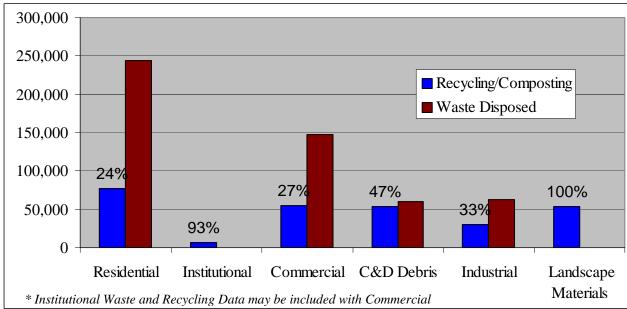
The County Board passed ordinances and resolutions supporting recycling and requiring all disposal and recycling to be reported to the County in order to comply with State reporting requirements and measure waste diversion progress.

The following report summarizes the Waste Services Division activities of 2006. 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 2006, Will County residents and businesses generated almost 789,000 tons of non-hazardous municipal solid waste, as indicated in the table below. Given the estimated population of 657,475 people, this amounts to a municipal waste generation rate of 6.58 pounds of waste generated each day for every man, woman and child residing in Will County. Over 275,000 tons of municipal waste was recycled (resulting in a 35% recycling rate) and the remaining 513,110 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.)*





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 nonhazardous 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 60mil 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 2006, Prairie View RDF received an average of 3,541.87 tons of waste per day. This waste came from residents and businesses within Will County (or from communities with boundaries that extend into Will County) and the Army and Tallgrass Prairie site.

Through the landfill operating agreement, the facility generated almost \$1.505 million for the County and other units of local governments in 2006 through host fees. An additional \$262,455.61 was paid to various taxing bodies during 2006 and another \$604,617.43 was generated in surcharges. Furthermore, \$177,747388 in contractual fees and other revenue was generated from the landfill property. Over 924,427 tons of waste was received (including taxable and non-taxable) during the facility's third calendar year of operation. Of that total, 387,640 tons of waste was accepted at no charge from the United States Army and Midewin National Tallgrass Prairie pursuant to a condition of conveyance for obtaining the landfill parcel from the federal government.

The site plans to have a gas energy system once to 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.



Enforcement Activities

Permitted Facilities Inspections

The Waste Services Division conducted 51 inspections at permited sites throughout Will County in 2006. 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. The Laraway Recycling and Disposal Facility applied for an expansion in 2006, to allow for the treatment of soil and the performance of an environmental remediation project to facilitate the closure of two phosphogypsum stacks already on the site. Due to capacity restrictions during this permit application process, Laraway accepted only a small amount of waste during the year.

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 183 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 2006, 36 illegal dump sites were brought into compliance.

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 2006, thousands of cubic yards of illegally dumped or burned material was legally disposed due to the Waste Service Division's involvement.

Photos of sites found in 2006 to be of concern:





Before & After Photos of one of the many sites cleaned-up through the enforcement program:



Collection Events

For twenty years, the Waste Services Division has held at least one special collection event to provide residents an opportunity to recycle. In 2006, Waste Services planned and executed seven (7) collection events for items such as books, electronics, gym shoes, household hazardous waste and used tires. This is a summary of each type of event.

Gym Shoes

The County's first Gym Shoe collection was held in May of 2006. Schools were invited to collect athletic shoes and bring them to the County Office Building on Chicago Street in Joliet during normal operating hours Monday through Friday the first week of the month. 840 pairs of sneakers were recovered for reuse or recycling. The majority were taken to NIKE's Reuse-a-Shoe program but several in very good condition were donated to the non-profit organization known as Share Your Soles in Alsip, Illinois. This program was widely accepted with requests for its continuation and expansion.

Book Collection

Will County's 9th annual Book ReUse and Recycling Event was held the Pilcher Park Nature Center in Joliet. Each year, this location draws an increasing number of residents and teachers willing to browse the eclectic collection of dropped-off books. Additionally, the Park District generously donates their facilities for three days of continual use by the Waste Services Division.



Residents, schools, businesses and especially

libraries throughout Will County participated in this year's event. Over 7,000 "gently used" books were dropped-off to be given away for reuse or recycling at the event. So many books, in fact, that the Park District allowed a second room to be used as a stand-alone children's book section.

As books were brought in, the Land Use Department staff and several student volunteers from the area arranged them on tables by type/genre. Approximately 530 people participated in the event and all were encouraged to take books. It is estimated that 53% of all the books and

magazines dropped-off found their way to new homes to be used and read again.



Electronics

The County's 8th Consumer Electronics Collection Event since 2000 was a great success. It was held in the parking lot of the Lincoln-Way High School (East Campus) in Frankfort and accepted items monitors, computers, keyboards, such as peripherals, telephones, cell phones, answering machines, televisions, stereos, cameras, VCRs, camcorders and more. These electronic items have been a disposal issue for years due to their short life-spans and specialty components. То 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 2006, an additional semi-

trailer was filled with surplus electronics from County offices. Nearly 350 vehicles came to the event. Frankfort, Joliet and New Lenox had the highest participation rates. A total of 63,128 pounds or 31.6 tons of consumer electronics were collected. This event was paid for by Waste Management through the County's landfill contract.



Above - Residents unloading their vehicle with assistance from the County's Contractor, Chesapeake

Below- Staff survey participants



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 its 16th tire collection event in 2006 since it began collecting tires in 1997. This event was funded by the Illinois EPA, in July at the Will County Fair Grounds in Peotone and generated one of the highest numbers of tires ever collected, on the hottest day ever held, with temperatures reaching 101 f.

A total of 32,000 tires weighing over 645,000 pounds were accepted from municipal public works departments, township highway departments and residents. It took over five days for the IEPA's contractor to load all of them in semi-trailers and take them for recycling. Recovered tires are commonly used for retreads, industrial fuel, athletic surfaces, road aggregates and playground material. This was one of the most successful tire recycling events the County has ever held.



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 four 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 2006, approximately 1,867 Will County households utilized this service.

Given the size of the County, many residents prefer a HHW collection option closer to their residence than the permanent site. In 2006 Waste Services offered three (3) one-day HHW collections held

throughout Will County (the locations are noted in the summary chart on the following page). Waste Management, Inc. reimbursed the County for two of the events through the County's landfill contract. The cost per event averaged \$22,399 and cost per participant averaged \$41.10, while the amount per participant averaged 90.65 pounds.



Workers unloading household hazardous waste brought to a collection event.

| Summary of HHW Collection Events for 2006 | | | | | |
|---|--------------|---------------------|------------------|------------------------|--|
| Location | Participants | Pounds Collected | Cost of Event | Funding Provided by | |
| Luther J. Schilling School, Homer Twp | 504 | 35,420 | \$21,241 | WM / County | |
| Nelson Prairie & Ridge School, New Lenox | 484 | 53,342 | \$22,177 | WM / County | |
| Joliet Jr. College, Joliet | 647 | 59,451 | \$23,778 | County | |
| TOTAL | 1,635 | 148,213 | \$67,196 | | |

The following table depicts the statistics associated with the 2006 HHW events:

Education / Outreach Programs

Upon request, the Waste Services Division provides environmental education to residents, businesses, schools, or community groups. Staff routinely provides presentations, participates in public events (i.e. County Fair, Joliet Business Expo and Earth Day events). In 2006, over 2,000 adults were provided materials through these outlets.

In 2006, a **Business Recycling program** and **Local Government Assistance Program** was started. All municipalities were sent information on waste and recycling collection contracts with an offer of consulting assistance and encouragement to enhance recycling and yardwaste collection opportunites for all residents. The Village of Crete utilized the new assistance program during their contract negotiations. The first Recycling Guide for Businesses was created and released, featuring many recycling opportunities available for materials generated in large quantities.



America Recycles Day was celebrated in November in cooperation with two WalMart stores in Joliet and Plainfield, as well as the IKEA store in Bolingbrook. All three stores created displays featuring products they sell that have recycled content. One of the WalMart's had a video presentation on the many "green" features the retail giant is implementing in their establishments. The IKEA invited the County to give out literature and answer questions in-person on November 15

as they shared information on their 70% waste diversion success.

The Waste Services Staff presented recycling and composting information to over 8,000 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 schools.

2006/07 Illinois Earth Flag Award Recipients

Arbury Hills – Mokena Beecher Elementary - Beecher Bruning Elementary – Wilmington Chelsea Elementary – Frankfort Elwood School - Elwood Frankfort Square - Frankfort Gompers Jr. High - Joliet Grand Prairie Elementary - Frankfort Irene King - Bolingbrook Joliet Central – Joliet Jonas E. Salk – Bolingbrook Kelvin Grove Jr. High – Lockport Ludwig School – Lockport Meadow View - Plainfield Mokena Intermediate – Mokena N.B. Galloway – Channahon Nelson Prairie – New Lenox Peotone Jr. High - Peotone Reed Custer Middle -- Braidwood St. Joseph – Joliet St. Joseph – Manhattan St. Jude – Joliet St. Rose – Wilmington Tyler School – New Lenox Wesmere Elementary - Plainfield Each of the schools receiving an Earth Flag or award for continued recycling excellence, was invited to an award ceremony, held at Bicentennial Park in Joliet. Students and faculty arrived from throughout the County for an award presentation filled to standing-room-only capacity. The 2006-07 ceremony included an address from the County Executive, Larry Walsh and an environmental education presentation on reptiles.







Conclusion

The year 2006 was a wonderful year for the Waste Services Division. The overall recycling rate reached 35%, up 4% from the previous year, getting ever closer to the goal of 40%. 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 2007. These goals include:

- Build on the Program to Increase Commercial and Industrial Recycling
- Assist Municipalities, Townships and other organizations 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 will forge new partnerships with other units of local government to improve recycling. 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