

Wake County Solid Waste Management Division

# WASTE & RECYCLING INFORMATION GUIDE



- » Waste and Recycling Options
- » Convenience Centers
- » Household Hazardous Waste Facilities
- » Multi-Material Recycling Facilities
- » Waste Disposal Facilities
- » Outreach and Education Programs
- » and more...





Wake County's Solid Waste Management Division provides waste disposal and recycling services. The division manages 17 waste facilities, including a landfill, a waste transfer station, eleven residential waste and recycling convenience centers, two household hazardous waste drop-off facilities and two multi-material recycling drop-off facilities. The Solid Waste Management Division also provides an array of outreach and education programs, including the Feed the Bin school recycling program and 86it Anti-Litter Campaign.

In 2014, the Solid Waste Management Division landfilled over 400,000 tons of garbage, recycled 30,000 tons of materials collected at Convenience Centers, generated enough energy using landfill gas to power as many as 8,000 homes, and won two national environmental protection and energy awards.

This Waste & Recycling Information Guide is a thorough introduction to the programs and services provided by the Solid Waste Management Division, in addition to other useful waste and recycling resources.





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If you live in the city or town limits, curbside collection is provided by the local municipality.



# WAKE COUNTY SOLID WASTE MANAGEMENT DIVISION

## RECYCLING & DISPOSAL OPTIONS

**R** = recycled

**Re** = reused

**D** = disposed

	AUTOMOTIVE				ELECTRONICS						GLASS		HOUSEHOLD						
	Auto Fluids	Car Batteries	Tires	Used Motor Oil & Filters	Any Corded Electronic Device	Batteries	CD's, DVD's, Tapes	Cell Phones	Computers, Monitors, TV's	Ink Cartridges	Large Appliances	Glass Bottles	Glass Jars	Carpet	Child Car Seats & Strollers	Clothing & Shoes	Fluorescent Tubes	Food Waste	Furniture & Up to 2 Mattresses

### CONVENIENCE CENTERS • Open to Wake County Residents Only • Hours: Daily, 7 a.m. - 7 p.m.

Site 1: 10505 Old Stage Road Raleigh 27603					<b>R</b>							<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 2: 6025 Old Smithfield Road Apex 27539												<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 3: 266 Aviation Parkway Morrisville 27560												<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 4: 3600 Yates Mill Pond Road Raleigh 27606					<b>R</b>							<b>R</b>	<b>R</b>			<b>Re</b>	<b>R</b>		<b>D</b>
Site 5: 8401 Battle Bridge Road Raleigh 27610												<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 6: 3913 Lillie Liles Road Wake Forest 27587												<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 7: 9024 Deponie Drive Raleigh 27614												<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 8: 2001 Durham Road (Hwy.98) Wake Forest 27587												<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 9: 3337 New Hill-Holleman Road New Hill 27562												<b>R</b>	<b>R</b>			<b>Re</b>			<b>D</b>
Site 10: 5216 Knightdale-Eagle Rock Road Knightdale 27545												<b>R</b>	<b>R</b>			<b>Re</b>	<b>R</b>		<b>D</b>
Site 11: 5051 Wendell Boulevard (Bus. 64) Wendell 27591		<b>R</b>		<b>R</b>	<b>R</b>							<b>R</b>	<b>R</b>	<b>R</b>		<b>Re</b>			<b>D</b>

### HOUSEHOLD HAZARDOUS WASTE FACILITIES • Open to Wake County Residents Only • Hours: Monday - Saturday, 8 a.m. - 4 p.m.

North Wake: 9037 Deponie Drive Raleigh 27614	<b>R</b>	<b>R</b>				<b>R</b>											<b>R</b>		
South Wake: 6130 Old Smithfield Road Apex 27502	<b>R</b>	<b>R</b>				<b>R</b>											<b>R</b>		

### MULTI-MATERIAL RECYCLING FACILITIES • Open to Wake County Residents & Businesses • Hours: Monday - Saturday, 8 a.m. - 4 p.m.

North Wake: 9029 Deponie Drive Raleigh 27614		<b>R</b>	<b>R</b>	<b>R</b>	<b>R</b>		<b>Re</b>	<b>R</b>	<b>Re</b>	<b>Re</b>									
South Wake: 6130 Old Smithfield Road Apex 27502		<b>R</b>	<b>R</b>	<b>R</b>	<b>R</b>		<b>Re</b>	<b>R</b>	<b>Re</b>	<b>Re</b>									

### MUNICIPAL SOLID WASTE DISPOSAL FACILITIES • Open to Wake County Businesses • Hours: Monday - Saturday, 7 a.m. - 4 p.m.

South Wake Landfill: 6300 Old Smithfield Road, Apex 27502																			<b>D</b>
East Wake Transfer Station: 840 Corporation Parkway, Raleigh, NC 27610																			<b>D</b>

The following table displays the primary materials that are currently accepted at Wake County's solid waste facilities. Please call ahead (919-856-7400) or visit [www.wakegov.com/recycling](http://www.wakegov.com/recycling) to confirm that the information provided is the most recent. Residents may utilize Convenience Centers, Multi-Material Recycling Facilities and Household Hazardous Waste Facilities free of charge. Commercial businesses may utilize the Multi-Material Recycling Facilities free of charge. Commercial businesses will be charged disposal fees at both the South Wake Landfill and East Wake Transfer Station.

ITEMS					HAZARDOUS WASTE					METAL			PAPER							PLASTIC						
Garbage	Household Cleaners	Oyster Shells	Remodeling Construction Debris	Toys	CFLs/Energy Saving Bulbs	Chemicals & Poisons	Mercury Containing Items	Paints, Stains, Lacquers	Pesticides & Containers	Propane Tanks	Aluminum Cans & Foil	Scrap Metal	Tin & Steel Cans	Books	Cardboard	Cards & Wrapping Paper	Juice, Milk & Soup Cartons	Magazines & Newspapers	Mixed Paper	Paperboard & Chipboard	Phone Books	Shredded Paper	Plastic Caps & Lids	Plastic Jugs & Bottles	Plastic Cartons & Containers	
D	R	D									R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R	D									R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R										R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R	D									R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R										R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R										R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R	D									R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R										R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D	R	D									R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
	R				R	R	R	R	R	R																
	R				R	R	R	R	R	R																
				Re							R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
				Re							R	R	R	Re	R	R	R	R	R	R	R	R	R	R	R	R
D																										
D																										

# CONVENIENCE CENTERS

Convenience Centers are waste and recycling drop-off facilities that are open to all Wake County residents only. Residents may recycle or dispose of waste, free of charge at any of the 11 locations located throughout Wake County.

## LOCATIONS

- 1 10505 Old Stage Road, Raleigh
- 2 6025 Old Smithfield Road, Apex
- 3 266 Aviation Parkway, Morrisville
- 4 3600 Yates Mill Pond Road, Raleigh
- 5 8401 Battle Bridge Road, Raleigh
- 6 3913 Lillie Liles Road, Wake Forest
- 7 9024 Deponie Drive, Raleigh
- 8 2001 Durham Road/Hwy. 98, Wake Forest
- 9 3337 New Hill-Holleman Road, New Hill
- 10 5216 Knightdale-Eagle Rock Road, Knightdale
- 11 5051 Wendell Blvd./Business 64, Wendell

## OPERATIONAL HOURS

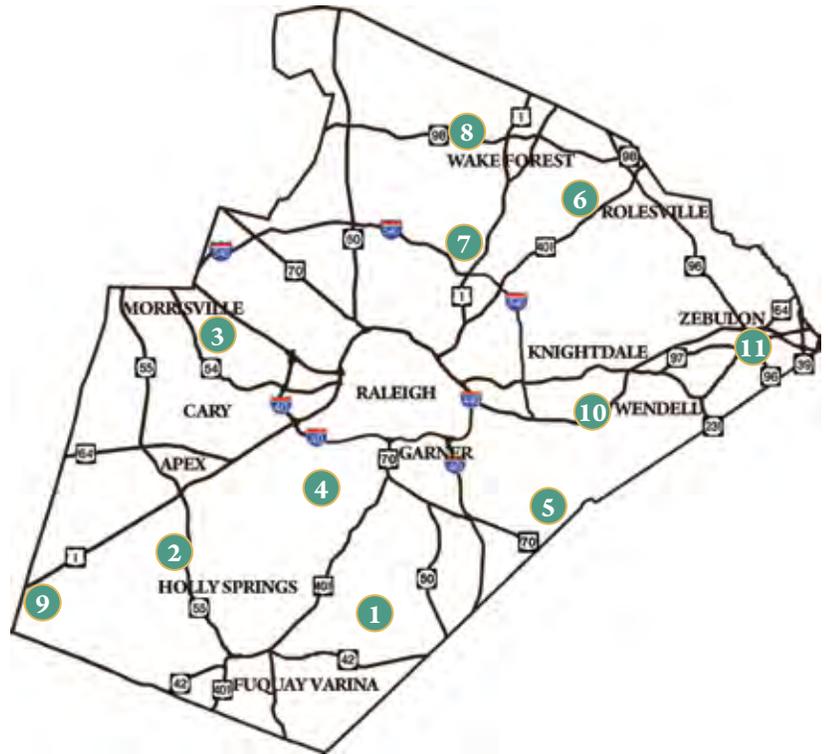
Open Daily: 7 a.m. to 7 p.m.

Open to Wake County residents only

Closed on Thanksgiving Day, Christmas Eve (at noon) and Christmas Day.



Convenience Center Site #7 at 9024 Deponie Drive off of Durant Road in Raleigh.



# CONVENIENCE CENTERS



## CARDBOARD

Corrugated Cardboard



## CLOTHING & SHOES

Books  
Clothing  
Shoes



## CONSTRUCTION WASTE (SITES 1, 2, 4, 7, 11 ONLY)

Wood  
Drywall  
Shingles  
Carpet



## GARBAGE

Bulky Garbage (under 8 feet long/wide)  
Furniture (under 8 feet long)  
Garbage  
Mattresses (up to 2)



## ELECTRONICS (SITES 1, 4, 11 ON WEEKENDS ONLY)

Any Corded Electronic Device  
Computer Equipment  
Game Consoles  
Printers & Copiers  
Small Appliances  
Stereo, Audio, Video Players  
Televisions  
VCRs, DVDs, Tape Players



## MIXED RECYCLING

Aluminum Cans & Foil  
Cartons (Aseptic Containers)  
Glass Bottles & Jars  
Magazines & Newspapers  
Metal, Steel & Tin Cans  
Mixed Paper  
Phone Books & Catalogs  
Paperboard & Chipboard  
Plastic Bottles, Jugs & Containers (caps ok)



## OYSTER SHELLS

Oyster Shells



## SCRAP METAL

Bicycles  
Buckets  
Frames  
Lawn Mowers (all oil & gas removed)  
Mixed Metals  
Pipes  
Sinks (not ceramic)

## UNACCEPTABLE ITEMS

Business or commercial waste  
Bricks, concrete and/or stone  
Burning or smoldering material  
Dead animals

Drums or tanks  
Household hazardous waste  
Medical waste  
Items larger than 8 feet

Liquid waste  
Radioactive waste  
Sewage plant sludge  
Yard waste, stumps or logs

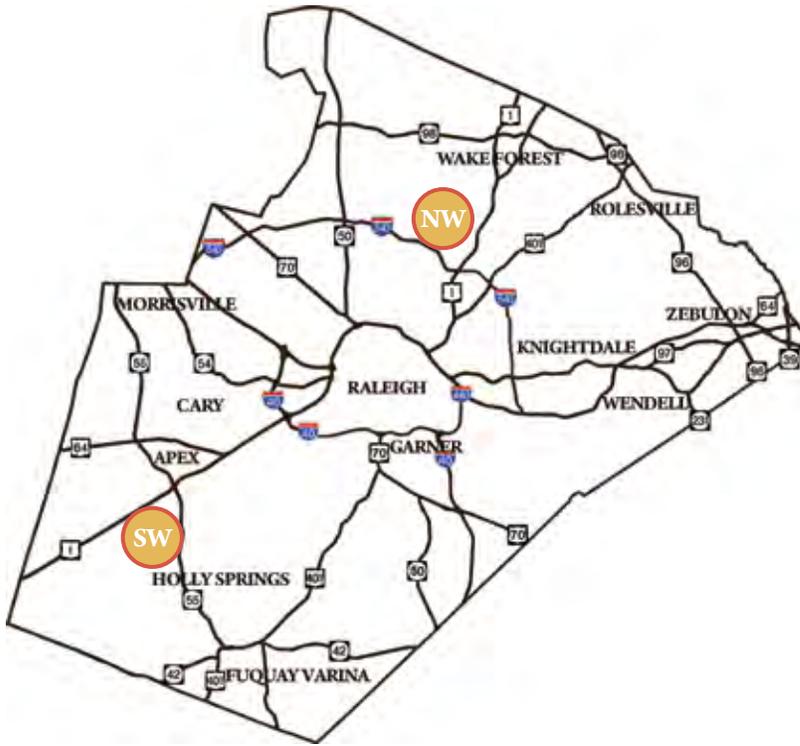
# HOUSEHOLD HAZARDOUS WASTE FACILITIES

Common household items may contain hazardous materials that should not be disposed of in household garbage due to their harmful properties. Wake County residents only may drop off such materials at a Household Hazardous Waste Facilities free of charge.

## LOCATIONS

**NW** North Wake Household Hazardous Waste Facility  
9037 Deponie Drive, Raleigh

**SW** South Wake Household Hazardous Waste Facility  
6130 Old Smithfield Road, Apex



Paints are collected at the Household Hazardous Waste Facility.



Staff sort materials delivered to the Household Hazardous Waste Facility.

## OPERATIONAL HOURS

Open Monday - Saturday: 8 a.m. to 4 p.m.

Open to Wake County residents only

Closed Sundays, New Years Day, 4th of July, Thanksgiving Day, Christmas Eve (at noon) and Christmas Day



Mercury containing elements are sorted at the Household Hazardous Waste Facility.

# HOUSEHOLD HAZARDOUS WASTE FACILITIES

## ACCEPTABLE ITEMS

### BATTERIES

Alkaline  
Cell Phone  
Computer  
Lead Acid/Vehicle  
Lithium  
Power Tool  
Rechargeable

### FIRE EXTINGUISHERS

### CHEMICALS

Acids & Bases  
Herbicides  
Household Cleaners  
Photographic Chemicals  
Pesticides  
Poisons  
Solvents

### FLUORESCENT LIGHT BULBS

### FINISHES

Lacquers  
Paints  
Polishes  
Stains  
Thinners  
Wood Preservatives

### MERCURY THERMOMETERS

### FLAMMABLES

Gas  
Fuel Oil  
Lighter Fluid  
Kerosene

### PROPANE TANKS



## UNACCEPTABLE ITEMS

Business or commercial waste  
Ammunition  
Explosives/shock-sensitive items

Hypodermic needles/syringes  
Medical waste  
Radioactive materials

Smoke detectors  
Garbage  
Unknown materials

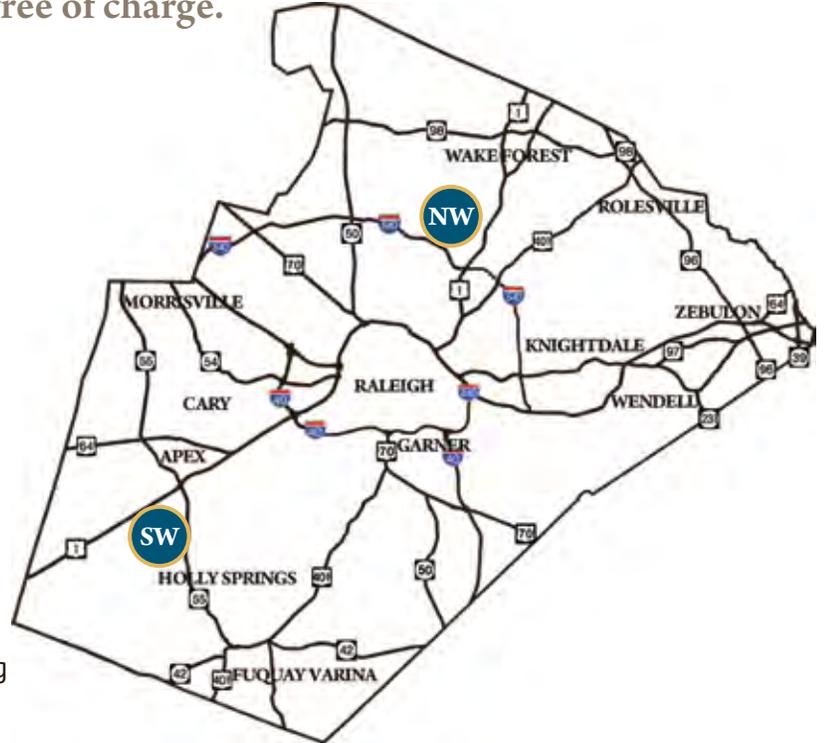
# MULTI-MATERIAL RECYCLING FACILITIES

Multi-Material Recycling Facilities are designed to accept recyclable materials that may not be accepted curbside or at Convenience Centers. Businesses and residents may utilize either of the Multi-Material Recycling Facilities free of charge.

## LOCATIONS

**NW** North Wake Multi-Material Recycling Facility  
9029 Deponie Drive, Raleigh

**SW** South Wake Multi-Material Recycling Facility  
6130 Old Smithfield Road, Apex



## OPERATIONAL HOURS

Open Monday - Saturday: 8 a.m. to 4 p.m.

Open to Wake County residents & businesses

Closed Sundays, New Years Day, 4th of July, Thanksgiving Day, Christmas Eve (at noon) and Christmas Day.



# MULTI-MATERIAL RECYCLING FACILITIES

## ACCEPTABLE ITEMS



**ANTIFREEZE**



**DISKS & TAPES**



**MIXED RECYCLING**

Aluminum Cans & Foil  
Cartons & Aseptics  
Glass Bottles & Jars  
Magazines & Newspaper  
Metal, Steel & Tin Cans  
Mixed Paper  
Phone Books & Catalogs  
Paperboard & Chipboard  
Plastic Bottles, Jugs &  
Containers (caps ok)



**RIGID PLASTIC**

Plastic Baskets  
Plastic Buckets  
Plastic Crates  
Plastic Garbage Cans  
Plastic Furniture  
Plastic Recycling Bins



**CARDBOARD**



**ELECTRONICS**

Any Corded Electronic Device  
Computer Equipment  
Game Consoles  
Printers & Copiers  
Small Appliances  
Stereo, Audio, Video Players  
Televisions  
VCR, DVD & Tape Players



**CELL PHONES**



**SCRAP METAL**

Bicycles  
Buckets  
Frames  
Lawn Mowers  
(all oil & gas removed)  
Mixed Metals  
Pipes  
Sinks



**CHILD ITEMS**

Car Seats  
Strollers  
Toys



**LARGE APPLIANCES**

Air Conditioners  
Dish Washers  
Dryers  
Fridges & Freezers  
Stoves & Ovens  
Washing Machines  
Water Heaters



**MOTOR OIL**



**OIL FILTERS**



**TIRES**



**COOKING OIL**



**WOOD PALLETS**

# WASTE DISPOSAL FACILITIES

## SOUTH WAKE LANDFILL

The South Wake Landfill, located between Apex and Holly Springs is the only active municipal solid waste (MSW) landfill in Wake County. South Wake Landfill provides waste disposal for Wake County residents and businesses. The landfill opened in 2008 and is expected to have a disposal capacity of 30 plus years.

### LOCATION

South Wake Municipal Solid Waste Landfill  
6300 Old Smithfield Road, Apex

### OPERATIONAL HOURS

Open Monday - Saturday: 7 a.m. to 4 p.m.

Closed: Sundays, New Years Day, Memorial Day, 4th of July, Labor Day, Thanksgiving Day, Christmas Eve (at 1 p.m.) and Christmas Day

### ACCEPTABLE ITEMS

South Wake Landfill is permitted to take municipal solid waste from Wake County sources only. MSW consists of general household and business garbage and other non-hazardous wastes. South Wake Landfill receives about 150 garbage trucks a day, which amounts to over 400,000 tons of garbage each year.



Garbage trucks unload waste at the South Wake Landfill.

### LANDFILL DESIGN

The South Wake Landfill is designed and engineered to protect public health and the environment. The South Wake Landfill is built with a thick liner system designed to separate trash from the surrounding environment. The landfill gas collection system extracts landfill gas and sends it to the Landfill Gas-to-Energy Facility located adjacent to the landfill. Leachate, rainwater that percolates through the landfill, is collected through a series of pipes and is treated at Holly Springs Water Reclamation Facility. At the end of each day, waste is covered to reduce odors, control litter and deter scavengers.



Workers install a rain flap to manage stormwater.



Leachate collection pipes are installed to collect rainwater that percolates through the landfill.

# WASTE DISPOSAL FACILITIES

## ENVIRONMENTAL MONITORING

South Wake Landfill is carefully monitored to safeguard the environment and public health. The groundwater around the landfill is routinely monitored through an extensive system of wells to insure that the liner system is performing as expected. The landfill also has an air permit issued by the State that requires routine sampling of methane emissions. Environmental monitoring of municipal solid waste landfills continues long after the landfill closes. MSW landfills are required by law to be monitored for an additional 30 years post closure.



A capped landfill gas collection monitoring well.



## EAST WAKE TRANSFER STATION

### LOCATION

East Wake Transfer Station  
840 Corporation Parkway, Raleigh

### OPERATIONAL HOURS

Open Monday - Saturday: 6 a.m. to 3 p.m.

Closed: Sundays, New Years Day, 4th of July, Thanksgiving Day, Christmas Eve (at noon) and Christmas Day

### ABOUT

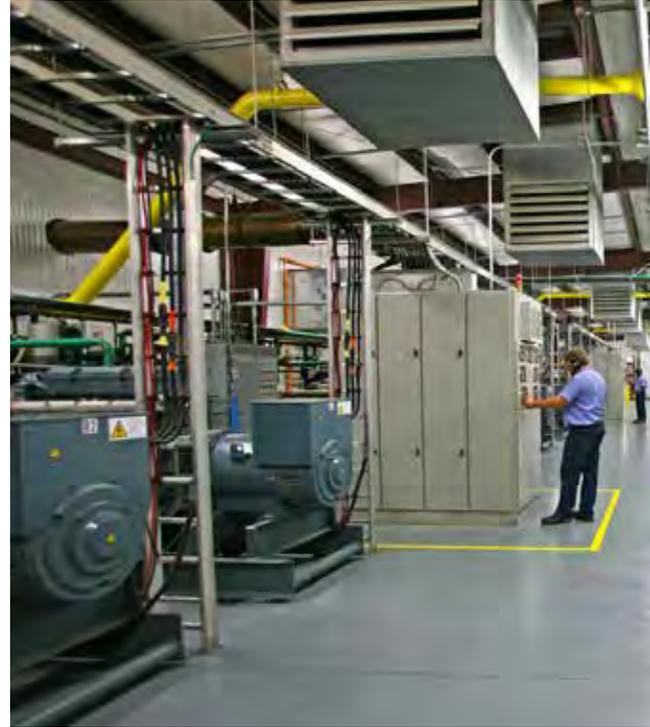
East Wake Transfer Station is a waste consolidation station. Municipal solid waste collected from routes in the eastern and northern parts of Wake County is unloaded and transferred into larger tractor trailer vehicles for transport to the South Wake Landfill. By combining the loads of several smaller garbage trucks into a single tractor trailer, garbage haulers can save time and costs associated with hauling garbage to the South Wake Landfill. Once garbage trucks unload waste at the transfer station, loaders push waste into tractor trailers. Once the tractor trailer is full, it is transported to the South Wake Landfill. In addition to saving time and money, the transfer station also reduces the number of garbage trucks traveling to and from the landfill, which reduces their impact such as, carbon footprint, and the amount of congestion near the landfill.



A garbage truck unloads waste at the East Wake Transfer Station.

# LANDFILL GAS-TO-ENERGY FACILITY

Landfill Gas is a natural byproduct of the decomposition of organic material in municipal solid waste landfills. It contains approximately 50% methane and 50% carbon dioxide. Both gases occur naturally in the environment in smaller quantities, but landfills are the second largest man-made source of methane in the United States. Methane is a volatile and harmful greenhouse gas, over 20 times more potent than carbon dioxide. In greater concentrations, such as those produced from municipal solid waste landfills, landfill gas must be captured to prevent emission into the environment.



Landfill gas collection well.



Industrial blower.



Blower and flare station.



Landfill gas-to-energy facility.

At South Wake Landfill, gas collection wells have been inserted into the landfill cells. The wells are then connected to a network of collection pipes that are connected to an industrial blower. The gas blower creates a vacuum that slowly pulls the gas out of the landfill. From here the landfill gas is piped to a landfill gas-to-energy facility or it is burned off at a flare station (if the gas-to-energy facility is experiencing lower demand).

The landfill Gas-to-Energy facility is owned and operated by Ingenco. Once the gas enters the gas-to-energy facility there are currently 18 refurbished diesel engines that have been converted to run off landfill gas. Diesel engines are used because they do not ignite the fuel, rather they compress it, which makes the whole process much safer. The combined power produced by the diesel engines generates about 4 megawatts of energy - enough to power 4,000 homes at peak demand or 8,000 plus homes at low demand. As the landfill fills with waste it will produce more gas. The facility has the ability to produce up to 12 megawatts, or enough energy to power up to 24,000 homes.

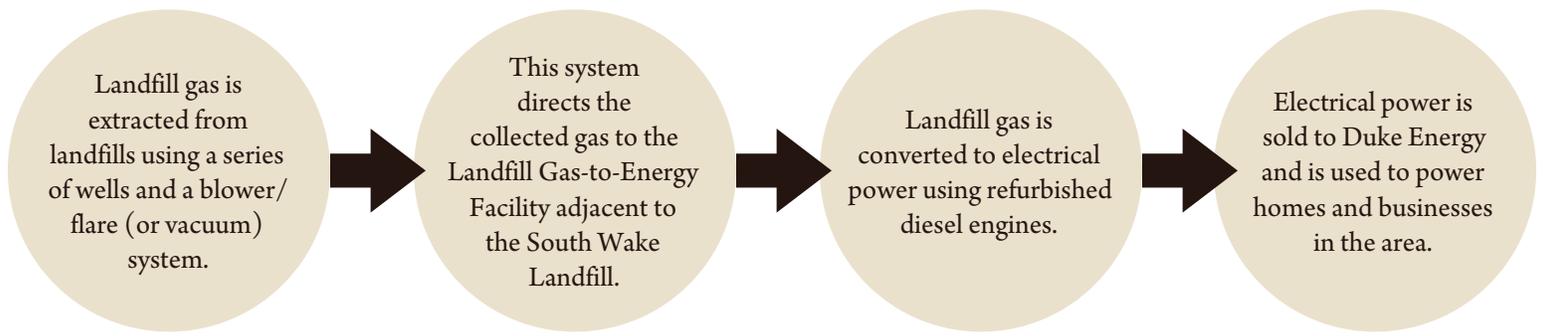
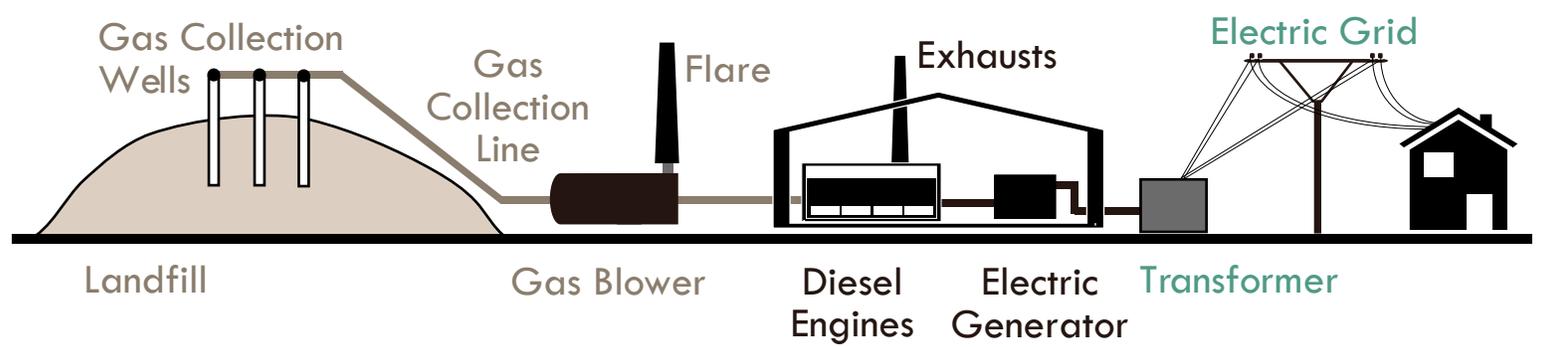
# LANDFILL GAS-TO-ENERGY FACILITY



Refurbished diesel engines from tractor trailers convert landfill gas into electricity.

## BENEFITS

- ⚡ Prevents harmful greenhouse gases produced by landfill sites from entering the atmosphere
- ⚡ Provides a local, renewable source to generate electrical power
- ⚡ Reduces dependence on nuclear and fossil fuels to produce power
- ⚡ Generates revenue for the County through the sale of electricity
- ⚡ Creates jobs, and encourages economic development



# OUTREACH & EDUCATION PROGRAMS

## SOLID WASTE OUTREACH & EDUCATION PROGRAMS

Wake County Solid Waste provides various an array of outreach and educational programs to the public, including the 86it Anti-Litter Program, Feed the Bin School Recycling Program and more. Outreach staff also provide

presentations to community and school groups as well as participate in various events to promote waste reduction and recycling. Connect with us on Facebook [www.facebook.com/wakecountywasteandrecycling](http://www.facebook.com/wakecountywasteandrecycling) for more information.



Students participate in a Feed the Bin school recycling assembly.



Outreach staff conduct a recycling information session to local businesses.

Visit our web page to request a presentation

[www.wakegov.com/recycling/outreach](http://www.wakegov.com/recycling/outreach)

or waste reduction booth at your event.



A child plays trash toss at the 86it anti-litter campaign booth during a community event.



Wake County Solid Waste Management Division's information booth at a community event.

To learn more about Wake County's outreach and education programs visit [www.wakegov.com/recycling](http://www.wakegov.com/recycling) or like us on Facebook Wake County Waste & Recycling.

# OUTREACH & EDUCATION PROGRAMS

## 86IT ANTI-LITTER CAMPAIGN

In 2008, the Wake County Board of Commissioners adopted a goal to address the increasing roadside litter problem. The 86it Anti-litter Campaign was launched in 2010 with strategies to emphasize the importance of citizen participation by focusing on the positive action of throwing trash away instead of shaming those who litter. Since then, 86it has been thriving by participating in community events, organizing clean-ups, and providing litter kit supplies to groups for the purpose of conducting cleanup events in their respective communities.

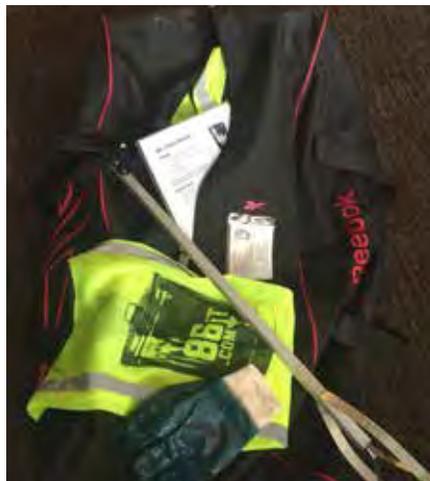
The 86it Anti-Litter Campaign stands apart by engaging citizens to be part of the solution, while emphasizing the importance of personal responsibility in the reduction of litter in our community. Stopping old litter habits is about starting new positive behaviors, so 86it focuses on celebrating positive behavior and the act of “86ing” litter.



Screenshot of the 86it.com webpage.



“86ables” (a litter bag, car magnet and sticker) are available by request via 86it.com



86it Litter Kits are customized for individuals conducting litter cleanups.



Local high school group that conducted a cleanup utilizing 86it litter kits.

## VISIT WWW.86IT.COM TO

- 🍌 Take the litter pledge
- 🍌 Check out a litter cleanup kit to organize your own cleanup event
- 🍌 Request free litter bags
- 🍌 Volunteer at cleanup events



Screen shot from 86it commercial, featuring Carolina Hurricane defenseman Justin Faulk. (visit <https://www.youtube.com/user/Channel86it> to view)

# OUTREACH & EDUCATION PROGRAMS

## FEED THE BIN SCHOOL RECYCLING PROGRAM

FEED THE BIN is a county-sponsored paper recycling program at Wake County Public Schools and public charter schools. It also provides complimentary educational resources for students and teachers. The program is offered to public school students and is intended to reach the majority of the Wake County population as students share information regarding waste reduction and recycling with their families. Since FEED THE BIN began in 2004, the program has proven very successful in promoting recycling and reducing waste at school sites and in educating students about solid waste issues. Presently, 179 school participate in the program with the addition of new schools each year. Each school is recycling mixed paper that consists of: white and colored paper, brochures, pamphlets, envelopes, file folders, junk mail, letterhead, magazines and catalogs, newspaper, notebook paper, posters, and sticky notes.

### SERVICE LEARNING

The success of the FEED THE BIN program is attributed to the service learning component for students to be actively engaged in the program. This creates a sense of teamwork and responsibility when students are given charge to move recyclables through the school. Many schools have formed clubs and teams to collect the bins and hold contests and make announcements during the school day. Most importantly, this component is essential to teach leadership, teamwork and problem-solving skills among students.

Since it began more than 12 million pounds of paper have been recycled through the FEED THE BIN program. The program has won several awards including a national award from the American Forest and Paper Association as the “Best School Recycling Program in the U.S.” Additionally, FEED THE BIN is a nationally recognized school recycling program, and is frequently used as best practice for system-wide school recycling programs.



Students recycle paper at Wake County Public Schools.

### ENVIRONMENTAL EDUCATION

A large component that has made the program so successful is the education of students and school staff. Each new school is required to have an interactive assembly-style presentation for the first 3 years to firmly set expectations and develop good recycling habits among both students, teachers, and staff. After the three year guideline schools have the option to request a solid waste educator visit the school. Many request education every year as a reminder for students and staff. Other education activities that are provided at no-cost to the schools are:

- Teacher activity kits for classroom use
- Recycling and solid waste teacher workshops
- Free hands-on lesson plans on recycling, landfills, composting, and plastics
- Curriculum alignment document that connects all presentations and activities to the state standards
- Free landfill and recycling center field trips
- Free promotional incentive items for students and staff

Visit [www.wakegov.com/recycling/recycle/ftb](http://www.wakegov.com/recycling/recycle/ftb) or contact the Feed the Bin Program Coordinator at [feedthebin@wakegov.com](mailto:feedthebin@wakegov.com) for more information.

# OUTREACH & EDUCATION PROGRAMS

## SOUTH WAKE SOLID WASTE FACILITY TOURS

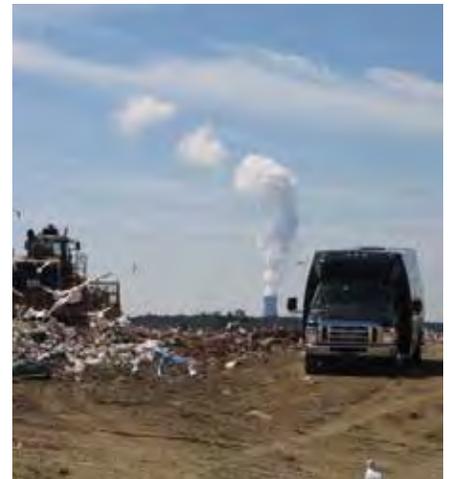
Wake County's solid waste outreach staff provide public landfill tours for residents to learn what happens to their waste. The tour also provides participants with the opportunity to learn where they can recycle additional household items too large to collect at the curb, what common household items are harmful to the environment if placed in the garbage, where residents can dispose of hazardous household items safely, and how Wake County is leading the State in modern waste management practices by recycling hazardous household items and turning household garbage into a renewable energy source.

In addition to touring the South Wake Landfill, participants will get to ride through a Multi-Material Recycling Drop-off Facility, a Convenience Center, a Household Hazardous Waste Drop-off Facility, and a Landfill Gas-to-Energy Facility. The tours take place at the South Wake Solid Waste Management Facilities, 6000 Old Smithfield Road, Apex.

Tours last approximately one hour and participants are required to ride in a multi-passenger vehicle around the 700+ acre facility. Space on the tours is limited and registration is required. To learn about the tours including upcoming dates, visit [www.wakegov.com/recycling/outreach](http://www.wakegov.com/recycling/outreach).



Landfill tour participants overlook the South Wake Landfill from the top of a closed landfill.



Facility tour bus drives to the working face of the South Wake Landfill.



South Wake Solid Waste Management Facility Tour Map



Participants line up to get on the facility tour bus.

# RECYCLING IN WAKE COUNTY

Have you ever wondered what happens after you leave your recycling at the curb or drop it off at a Convenience Center?

## #1 COLLECTION

Recyclable materials collected curbside or at drop-off locations are transported to a materials recovery facility, (or a MRF - pronounced "murf"). A MRF is a specialized plant that receives, separates and prepares recyclable materials to be sold to manufacturers.



#1

## WHAT HAPPENS TO YOUR RECYCLING?

## #4 RE-MANUFACTURING

Once the processed materials arrive at the manufacturer what happens next depends on the material. Aluminum can be used over and over again because it never breaks down or loses quality. Aluminum can be used to make soda cans, airplanes or bicycles. In fact, 75 per cent of all the aluminum produced since 1888 is still in use today. Likewise, there is no limit to the amount of times glass is recycled. Recycled glass is primarily used to make new containers. Plastics can be recycled into new containers, fabrics, plastic lumber or carpeting. In fact, recycling just five 2-liter bottles can produce a square yard of carpet. Paper and cardboard can be made into paper, packaging or tissue.



#4



# 5 COMMON RECYCLING MYTHS DEBUNKED

## #2 SORTING

Recyclables are unloaded onto a conveyor belt in preparation for sorting. The sequence by which each material is then sorted from the stream varies based on the design of the MRF, but the types of sorting mechanisms used operate on the same principles. Steel cans are sorted using magnets and aluminum cans are sorted using eddy currents, which shoot the aluminum into a catch bin, plastic bottles are sorted using optical eyes or laser sensors, which can detect different densities of plastic and trigger jets of air that push the plastic into different catch bins, paper and cardboard is separated using rotating disc screens that push cardboard over the top and allow paper to fall between the discs, and finally glass bottles and jars are sorted using gravity, as denser materials such as glass will drop into glass pits.



## #3 PROCESSING

Once sorted, materials are then baled by weight (usually one ton bails), and are ready for market. Where they are bought by re-processors and turned into new products. Whether materials are reprocessed domestically or overseas depends on the market demand for specific materials.



### MYTH: A RECYCLE SYMBOL ON THE BOTTOM OF A PLASTIC CONTAINER MEANS IT'S RECYCLABLE

No. The recycling symbol represents the type of plastic the material is made from, not that it is recyclable. There are thousands of types of plastic products, made from a different recipe of chemical resins. Refer to your local municipality on whether certain plastic containers can be recycled.

### MYTH: PLASTIC BOTTLE CAPS SHOULD BE REMOVED FROM THE BOTTLE BEFORE THEY ARE RECYCLED

No. Plastic bottle caps should be put back on the empty bottle to ensure they get recycled. Removing them will cause them to get lost in the material sorting machinery, and eventually disposed of.

### MYTH: IF I THINK AN ITEM SHOULD BE RECYCLED ITS OK TO PUT IT IN MY RECYCLING CART WITHOUT CHECKING FIRST

No. People may think they are helping by recycling more, but in reality the presence of a significant amount of non-recyclable items in a load may be rejected by the MRF and ultimately thrown away. The right thing to do is to follow instructions from your local municipality.

### MYTH: ITEMS RECYCLED IN WAKE COUNTY ARE SENT OVERSEAS

Maybe. The recyclables that Wake County collects are sent to local vendors, the majority of whom operate within NC. However, the recycling industry is a global market. Recyclables are a commodity driven by economics. Whether materials are used domestically or abroad is a function of market demand for specific materials.

### MYTH: PIZZA BOXES CANNOT BE RECYCLED

No. Unsoiled pizza boxes without food or grease can be recycled as cardboard. Heavily soiled pizza boxes with grease and food debris cannot be recycled. Alternatively, heavily soiled pizza boxes can be composted in your backyard compost bin (just remember to cut them up first).

# THE JOURNEY OF TRASH IN WAKE COUNTY

Trash is a part of our daily life, we all make it. In Wake County, it begins with 1,000,000 people and ends with 410,000 tons of household garbage each year.

#1



When we roll our trash cart to the curb on collection day that's just the first step in a long journey for our trash.

#2



Modern garbage trucks pick up the trash and transport it to either the East Wake Transfer Station or the South Wake Landfill, depending on where you live.

Bulldozers spread the trash out evenly and a large compactor rolls over the waste several times to minimize air and space between the trash in order to achieve a high compaction rate. At the end of each day, the compacted trash is covered to minimize odors, control litter and deter scavengers.

#6



#7



Landfills are filled in sections. Once a section is full, it is capped with a thick plastic liner that totally encapsulates the trash. Another layer of soil is added and then special grasses are planted to control erosion. Because of the anaerobic conditions (no oxygen) waste decomposes very slowly. Trash will remain in the landfill indefinitely.

#8



At the East Wake Transfer Station trash is unloaded from garbage trucks and reloaded into large tractor trailers for transfer to the South Wake Landfill. By combining the loads of several garbage trucks into a tractor trailer, it reduces the number of trips to and from the landfill, saving time, operating costs, and reducing our carbon footprint.

Tractor trailers from the East Wake Transfer Station, as well as local garbage trucks bring trash to the South Wake Landfill. Upon entering the landfill, all trucks are weighed at the scale house.

#3



#4



The trucks then drive up to the working face of the landfill and unload their waste. As the trucks exit the landfill they are weighed once again at the scale house and issued a weigh ticket for the tons of trash disposed.

#5



Once the landfill reaches capacity, it is capped and monitored for a minimum of 30 years. Landfills can have a second life, like the North Wake Landfill in North Raleigh that is now a park.

#9



Landfill gases are produced as the organic matter in the landfill slowly decomposes. This process releases methane and carbon dioxide gases that are captured throughout the landfill by a vacuum system that transports it to the landfill gas-to-energy facility located adjacent to the South Wake Landfill. At this facility the landfill gas is converted to electrical power that is used to power homes and businesses.

# NORTH WAKE LANDFILL DISTRICT PARK

The North Wake Landfill disposed of most of Wake County's household waste for more than 20 years until the site reached capacity and closed in 2008. As disposal operations ceased, it was apparent there was a good opportunity to turn the site into a community asset, beneficial to all the areas inhabitants.

In 2004, a group of residents and Wake County staff formed the North Wake Landfill Citizens Committee as part of the post-closure planning process to seek ideas from local residents as to how the site would ultimately be used after the active landfill closed. The committee met monthly for more than a year to assist the County in the development of a post closure land use plan.

When the landfill closed in 2008, the first phase of the multi-phase master plan started construction and in 2010, the North Wake Landfill District Park opened. Another phase of the land use plan also includes the development of an elementary school, and an athletic and community recreation complex. The Abbott's Creek Elementary School is currently under construction and is expected to open in 2015, as well as a City of Raleigh's Abbott's Creek Park and Community Center.

## LOCATION

North Wake Landfill District Park  
9300 Deponie Drive, Raleigh

## OPERATIONAL HOURS

Daily, 8 a.m. to dusk

Closed: Thanksgiving Day, Christmas Eve, Christmas Day and New Year's Day



North Wake Landfill District Park.



Photos courtesy of the Wake County Parks, Recreation and Open Space Natural Resources Inventory Database.

The North Wake Landfill District Park is home to a variety of local wildlife including a number of frog and toad species, over 60 species of birds including, herons, hawks, kestrels, woodpeckers, blue jays, chickadees, nuthatches, wrens, robins, mockingbirds, starlings, warblers, sparrows, cardinals, and finches to name but a few, as well as species of possums, woodchucks, rabbits, squirrels, coyotes, raccoons, and deer! To search the Wake County's Natural Resource Inventory Database for a full list of critters that call the North Wake Landfill District Park home visit [wcnrid.wakegov.com/public.php](http://wcnrid.wakegov.com/public.php)

# NORTH WAKE LANDFILL DISTRICT PARK

## PARK AMENITIES:

### TOP OF THE HILL TRAIL (.07 MILE)

You can climb to the top of the hill (469 feet above sea level) and you will be rewarded with a nice view of the surrounding area including downtown Raleigh.



Northward view from the Top of the Hill Trail.

### PLAYGROUND AND OPEN PLAY AREA

The playground is unsupervised and includes a kid's lot (ages 5-12) and a tot lot (ages 2-5) features a climbing wall and big climbing web.



Playground at the North Wake Landfill District Park.

### SYCAMORE PICNIC SHELTER AND OTHER PICNIC AREAS

The shelter has 10 regular tables and 2 wheelchair accessible tables for seating up to 100 people.

### PAVED TRAILS (1.8 MILES)

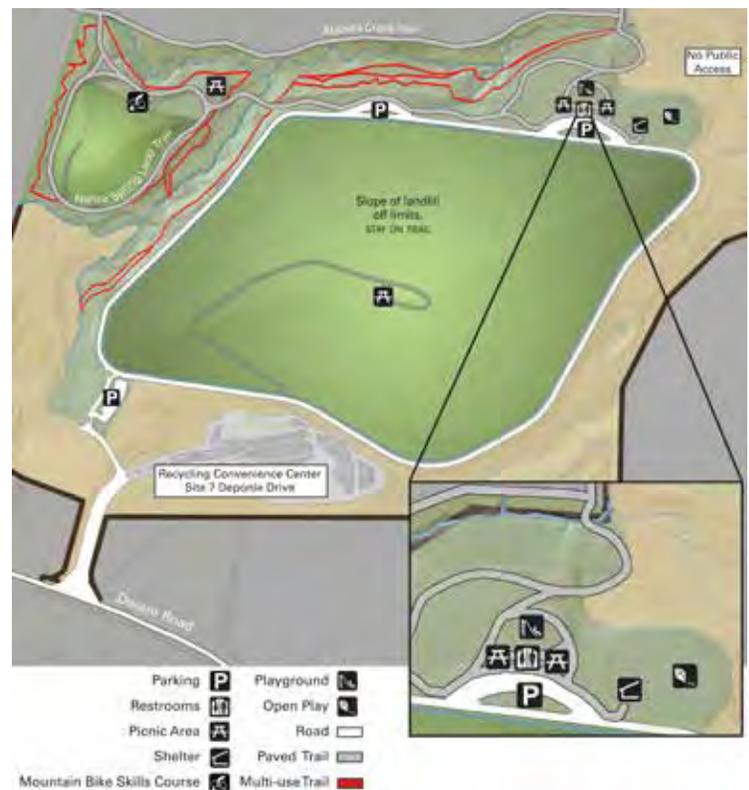
The paved walking trails connect all of the park amenities and also include the popular Nance Spring Loop Trail, which is 0.4 miles. The park's paved trails also connect to the City of Raleigh's Falls River Greenway.

### HIKING AND MOUNTAIN BIKE TRAILS (2 MILES)

There are 2 miles of hiking and mountain bike trails.

### MOUNTAIN BIKE SKILLS AREA

There is an area for those wishing to build their mountain biking skills.



Schematic of the North Wake Landfill District Park.

# ORGANIC WASTE

Organic waste is anything that comes from plants or animals that is biodegradable. The most common organic material in the waste stream is food waste and yard waste. According to a 2011 waste characterization study, over 37% of Wake County's waste stream consisted of organic materials. Food waste accounted for 15% of the organic waste.

## FOOD WASTE

At 15% of the waste stream, food waste is one of the largest single items going into Wake County's landfill. Food waste can be separated and processed into a rich compost material for gardening, landscaping and farming.

Wake County Solid Waste is piloting the first food waste recycling drop-off program in Wake County. Residents can bring their food waste to two designated drop-off locations:

- Convenience Center #4: 3600 Yates Mill Pond Rd, Raleigh
- Convenience Center #10: 5216 Knightdale-Eagle Rock Rd, Knightdale

Both sites are open 7 days a week, 7 a.m. to 7 p.m. Visit [www.wakegov.com/recycling/recycle/Pages/food.aspx](http://www.wakegov.com/recycling/recycle/Pages/food.aspx) for more information.

Residents can also manage their own food waste at home through composting. For more information about food waste management, visit [www.wakegov.com/recycling/recycle/Pages/organics.aspx](http://www.wakegov.com/recycling/recycle/Pages/organics.aspx)



## YARD WASTE

Yard waste is vegetative material such as grass clippings, plant trimmings, leaves, pine straw, hay, pine cones, twigs, weeds, brush, small logs, small tree branches and limbs, shrubby clippings, small stumps, and roots.

North Carolina state law prohibits yard waste from being disposed of in municipal solid waste landfills. Therefore, yard waste must be managed separately from household garbage.

Many of the municipalities in Wake County offer curbside collection of some types of yard waste. If you live within the city or town limits, contact your municipality to get more information about the collection schedule.

Another option is to haul yard waste to a privately owned land clearing and inert debris (LCID) facility. For a list of facilities visit [www.wakegov.com/recycling/recycle/Pages/yardwaste.aspx](http://www.wakegov.com/recycling/recycle/Pages/yardwaste.aspx)

# CURBSIDE WASTE COLLECTION

If you live within the city or town limits, your garbage, recycling and yard waste collection is coordinated by the municipality. For more information about these services, please contact your town/city.

## Town of Apex Public Works

[www.apexnc.org](http://www.apexnc.org)

919.362.8676

## Town of Cary Public Works

[www.townofcary.org](http://www.townofcary.org)

919.469.4090

## Town of Fuquay-Varina Public Works

[www.fuquay-varina.org](http://www.fuquay-varina.org)

919.753.1027

## Town of Garner Public Works

[www.garnernc.gov](http://www.garnernc.gov)

919.772.7600

## Town of Holly Springs Public Works

[www.hollyspringsnc.us](http://www.hollyspringsnc.us)

919.552.5920

## Town of Knightdale Public Works

[www.knightdalenc.gov](http://www.knightdalenc.gov)

919.217.2290

## Town of Morrisville Public Works

[www.townofmorrisville.org](http://www.townofmorrisville.org)

919.463.7070

## City of Raleigh Solid Waste Services

[www.raleighnc.gov](http://www.raleighnc.gov)

919.996.6890

## Town of Rolesville Utilities

[www.rolesvillenc.gov](http://www.rolesvillenc.gov)

919.556.3506

## Town of Wake Forest Public Works

[www.wakeforestnc.gov](http://www.wakeforestnc.gov)

919.435.9570

## Town of Wendell Public Works

[www.townofwendell.com](http://www.townofwendell.com)

919.365.4822

## Town of Zebulon Public Works

[www.townofzebulon.org](http://www.townofzebulon.org)

919.269.5285



Residents that live in the unincorporated areas of Wake County can contract with a private hauling company to provide curbside trash and recycling services. To locate a service provider search “trash service” in a web browser.

We hope you will use this guide as a reference.  
If not, please share it with another or recycle it.

