



## Garbage & Recycling Timeline (basic version)

500 BC	The first municipal dump is established in ancient Athens
1710	Colonists in Virginia commonly bury their trash. Holes are filled with building debris, ceramic objects, and suits of armor.
1800	Pigs loose in city streets throughout the country eat garbage.
1860	American newspapers are now printed on paper made from wood pulp fiber rather than rags
1872	New York City stops dumping its garbage from a platform built over the East River
1875	The Public Health Act began—prevent mass scavenging, clean up the U.S., and to give authority for waste collection.
1895	The first recycling center is established in New York City
1900	Small and medium sized towns build piggeries, where swine are fed fresh or cooked garbage It was estimated that pigs could eat 1 ton of trash per day.
1904	Large-scale aluminum recycling begins in Chicago and Cleveland
1907	An unexpectedly thick run of toilet paper is converted to become the first paper towels
1924	Kleenex tissue is introduced
1928	Cellophane is invented by the DuPont™ Cellophane Company
1929	Aluminum foil is invented
1940	The aluminum beverage can is developed. It's distributed in the '60's to consumers.
1942	Americans collect rubber, paper, glass, metals, and fats to help the war effort.
1944	Styrofoam® is invented by Dow Chemical Company
1960	The first disposable razors are sold.
1965	The Federal Govt. realizes that garbage has become a major problem and enacts the Solid Waste Disposal Act that calls for the nation to find better ways of dealing with trash.
1970	The first Earth Day— April 22; the U.S. Environmental Protection Agency (EPA) is created.
1973	PET soda bottles are introduced to replace glass bottles. The plastic was first developed in England in 1941.
1974	The first city-wide use of curbside recycling bins occurs in University City, Missouri for collecting newspapers.
1979	EPA issues landfill criteria to prohibit open dumping.
1988	The Plastic Pollution Research and Control Act banned ocean dumping of plastic materials.
1990	Researchers worked to reduce, reuse, and recycle waste from the Skylab Space Station to avoid the \$50,000 per pound cost of bringing it back to Earth and the problem of creating free-floating waste in space.
1993	Municipal solid waste landfill criteria become effective for most landfills in the US.
1996	U.S. reaches its goal of recycling 25% of its waste
2000	Cities in California are required to recycle 50% of its waste; the “pay-as-you-throw” idea begins in about 5,000 U.S. cities. Citizens pay for garbage disposal based on how many bags are being disposed (the less trash you have the less money you pay).
2008	<b>South Wake Landfill in Wake County, NC opens and expected to remain in use for 30+ years</b>

### Sources:

Trash Timeline- [http://www.alliedwastedalycity.com/kids\\_trash\\_timeline-printer.cfm](http://www.alliedwastedalycity.com/kids_trash_timeline-printer.cfm)

History of Garbage Collection—<http://www.acedisposal.com/index.php/history-of-garbage>

Solid Waste History— <http://beginwiththebin.org/resources/for-education>

Updated 1/10/17



## Garbage/Recycling Timeline (Extended Version)

1500 BC	1. Citizens of Troy dumped waste on floors and streets. 2. There is archeological evidence that in the Cretan capital, Knossos, the Minoan people created landfill sites where waste was placed in large pits and covered with earth at various levels.
500 BC	The first municipal dump is established in ancient Athens approximately one-mile away.
200 AD	The first sanitation force is created by the Romans. Teams of 2 men walk along the streets, pick up garbage, and throw it in a wagon.
1297	In response to the increasing amount of waste deposited in towns in Britain, a law passed to make householders keep the front of their house clear from refuse. It was largely ignored. Most waste was burned on household open fires.
1354	“Rakers” (who earlier were responsible for sweeping human waste from gutters where chamber pots and privies were emptied) were ordered by King Edward III to rake all refuse from streets and alleys, load it into carts, and remove it once a week. These men were some of the earliest garbage men.
1388	English Parliament banned waste disposal in public waterways and ditches.
1400	Garbage piled up so high outside the gates of Paris, France that it interfered with the city’s defenses.
1407	British government ruled that household trash was to remain indoors until it could be removed by the rakers (and either sold as compost or dumped in marshes). This was an early attempt to regulate and control waste disposal.
1500	Spanish copper mines used scrap iron for cementation of copper, a recycling practice that survives to this day.
1588	Elizabeth I granted special privileges for the collection of rags for papermaking in Great Britain.
1600	Colonial Americans used corralled pigs to eat garbage.
1657	New Amsterdam (now New York City) passed a law against casting waste in the streets.
1690	Rittenhouse Mill, America’s first paper mill, opened in Philadelphia, making paper from recycled cotton and linen as well as used paper.
<b>1700</b>	New business developed around trash hauling called “Rubbish Carters”.
1710	Colonists in Virginia commonly bury their trash. Holes are filled with building debris, ceramic objects, and suits of armor.
1757	Benjamin Franklin started the first American municipal street-cleaning operation in Philadelphia, Pennsylvania.
<b>1800</b>	Pigs loose in city streets throughout the country eat garbage.
1834	Charleston, West Virginia enacted a law protecting vultures from hunters, as the birds helped eat The city’s garbage.
1850	Junk dealers in Reno, Nevada scavenged personal belongings from the Oregon, Santa Fe, and California trails. Pioneers abandoned the items on the long trek west.
1860	American newspapers are now printed on paper made from wood pulp fiber rather than rags
1866	New York City’s Metropolitan Board of Health declared a war on garbage, forbidding the “throwing of dead animals, garbage or ashes into the streets.”
1872	New York City stops dumping its garbage from a platform built over the East River
1875	The Public Health Act began—prevent mass scavenging, clean up the U.S., and to give authority for waste collection.
1885	First U.S. incinerator is built on Governor’s Island in New York
1890	The British Paper Company was established specifically to make paper and board from recycled materials. Waste paper was obtained from organizations such as the Salvation Army and rag-and-

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- bone men.
- 1893 Boston Sanitary Committee found that a large number of citizens (in order to get rid of their garbage and avoid paying for its collection) “burned it, wrapped it up in paper and carried it on their way to work then dropped it when unobserved, or threw it into vacant lots, or the river.” [First noted instance of littering].
- 1895 The first recycling center is established in New York City
- 1896 Waste reduction plants, which compressed organic wastes to extract grease, oils, and other by-products, were introduced to the U.S. by Vienna, Austria. The plants later were closed because of their noxious emissions.
- 1898 New York has first rubbish sorting plant for recycling.
- 1899 The federal Rivers and Harbors Act restricts dumping in all navigable rivers to keep them open for shipping.
- 1900** Small and medium sized towns build piggeries, where swine are fed fresh or cooked garbage  
It was estimated that pigs could eat 1 ton of trash per day.
- 1904 Large-scale aluminum recycling begins in Chicago and Cleveland
- 1905 New York City began using a garbage incinerator to generate electricity to light the Williamsburg Bridge
- 1907 An unexpectedly thick run of toilet paper is converted to become the first paper towels
- 1909 By this year, 102 of the 180 incinerators that were built since 1885 have been abandoned or dismantled. America’s abundant land and widely spaced population generally made dumping garbage less expensive.
- 1918 U.S. cities began switching from horse-drawn to motorized refuse collection equipment.
- 1924 Kleenex® tissue is introduced
- 1928 Cellophane is invented by the DuPont™ Cellophane Company
- 1929 Aluminum foil is invented
- 1932 Austrian inventor Jacob Ochsner and French inventor Ferrnand Rey began building hydraulic rear loading compactor trucks in Europe.
- 1937 The first American mass-production, hydraulic rear-load refuse packer compacting truck was introduced. It was called the “Load Packer” and patented in 1938 by Garfield Wood. Because of WW II , it was not widely used until the late 1940’s.
- 1940 The aluminum beverage can is developed
- 1942 Americans collect rubber, paper, glass, metals, and fats to help the war effort.
- 1944 Styrofoam® is invented by Dow Chemical Company
- 1953 Keep America Beautiful (KAB) was founded.
- 1954 Olympia, Washington pays for return of aluminum cans
- 1959 The American Society of Civil Engineers published the standard guide to sanitary landfilling. To guard against rodents and odors, the guide suggested compacting the refuse and covering it with a layer of soil each day.
- 1960 The first disposable razors are sold.
- 1965 The Federal Govt realizes that garbage has become a major problem and enacts the Solid Waste Disposal Act that calls for the nation to find better ways of dealing with trash.
- 1970 1). The first Earth Day– April 22; the U.S. Environmental Protection Agency (EPA) is created;  
2). Resource Recovery Act provided funds to construct waste/disposal facilities and was the first federal legislation to encourage recycling.  
3). The creation of the recycling symbol was created by Gary Dean Anderson, a grad student.
- 1973 PET soda bottles are introduced to replace glass bottles. The plastic was first developed in England in 1941
- 1974 The first city-wide use of curbside recycling bins occurs in University City, Missouri for collecting newspapers.
- 1975 All 50 U.S. states have some solid waste regulations, although content varies widely.
- 1976 Resource Conservation and Recovery Act empowers the EPA to regulate the disposal and treatment of municipal solid and hazardous waste. It mandated that all open “dumps” close by

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- 1983 and that EPA was to draw up guidelines for “sanitary landfills”, develop waste reduction strategies, and identify hazardous wastes.
- 1979 EPA issues landfill criteria to prohibit open dumping.
- 1986 Rhode Island enacted the nation’s first statewide mandatory recycling law that included aluminum cans, steel cans, glass, newspapers and #1 & #2 plastic. Citizens and businesses were required to separate recyclables from the trash
- 1987 A Long Island garbage barge, the MOBRO, searched for a place to dump its trash, symbolizing the nation’s waste problems
- 1988 The Plastic Pollution Research and Control Act banned ocean dumping of plastic materials.
- 1990 Researchers worked to reduce, reuse, and recycle waste from the Skylab Space Station to avoid the \$50,000 per pound cost of bringing it back to Earth and the problem of creating free-floating waste in space.
- 1993 Municipal solid waste landfill criteria become effective for most landfills in the US.
- 1996 U.S. reaches its goal of recycling 25% of its waste
- 2000 Cities in California are required to recycle 50% of its waste; the “pay-as-you-throw” idea begins in about 5,000 U.S. cities. Citizens pay for garbage disposal based on how many bags are being disposed (the less trash you have the less money you pay).
- 2008 South Wake Landfill in Wake County, NC opens and expected to remain in use for 30+ years**
- 2009 North Carolina bans disposal of plastic food/beverage bottles in landfills.
- 2011 North Carolina bans disposal of electronics (e.g. computers & TV’s) in landfills.
- 2013 18-year old inventor, Boyan Slat, comes up with technology to clean up plastic debris from the Great Pacific Garbage Patch.

## Sources:

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N.C. Dept. of Environmental Quality—<https://deq.nc.gov/conservation/recycling>

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