

New York City Parks & Recreation



Bioheat at NYC Parks

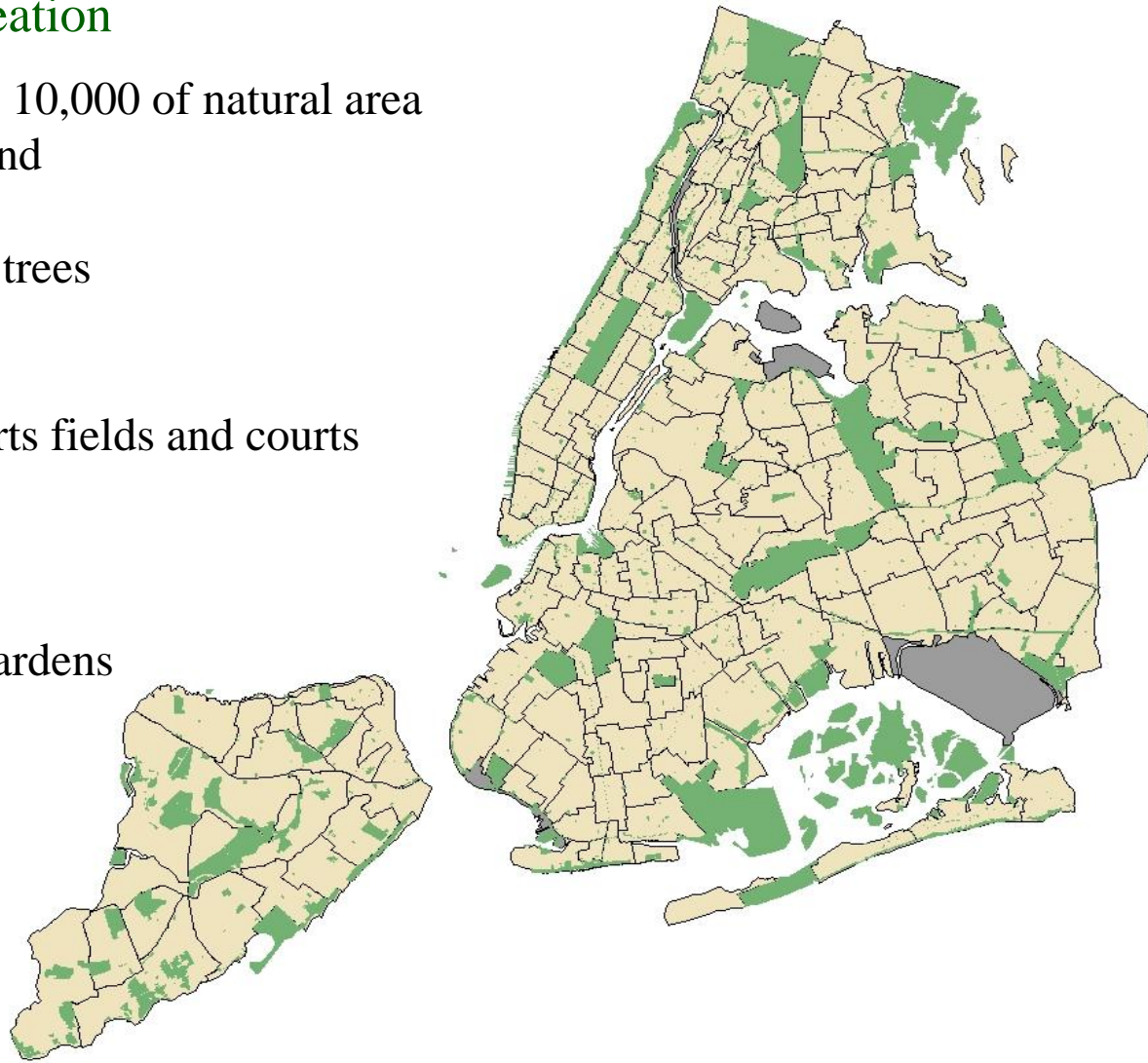
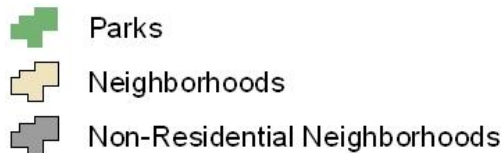
September 20, 2011

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City of New York, Parks & Recreation

- 29,000 acres of parkland, including 10,000 of natural area
- 14% of the city is municipal parkland
- 1,862 parks, 990 playgrounds
- 600,000 street trees, 2 million park trees
- 14 miles of beaches
- 65 indoor and outdoor pools
- 30 recreation centers, over 800 sports fields and courts
- Golf courses, marinas, restaurants
- Historic houses, monuments
- Stadia, ice skating rinks, tracks
- 3,000 Greenstreets, Greenthumb Gardens
- Botanical gardens, zoos
- Over 600 public bathrooms



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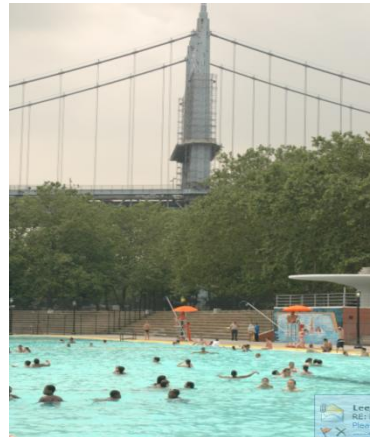
Parks operates over 140 major facilities and hundreds of additional smaller ones. We utilize 186 underground heating oil tanks.



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Parks Facilities

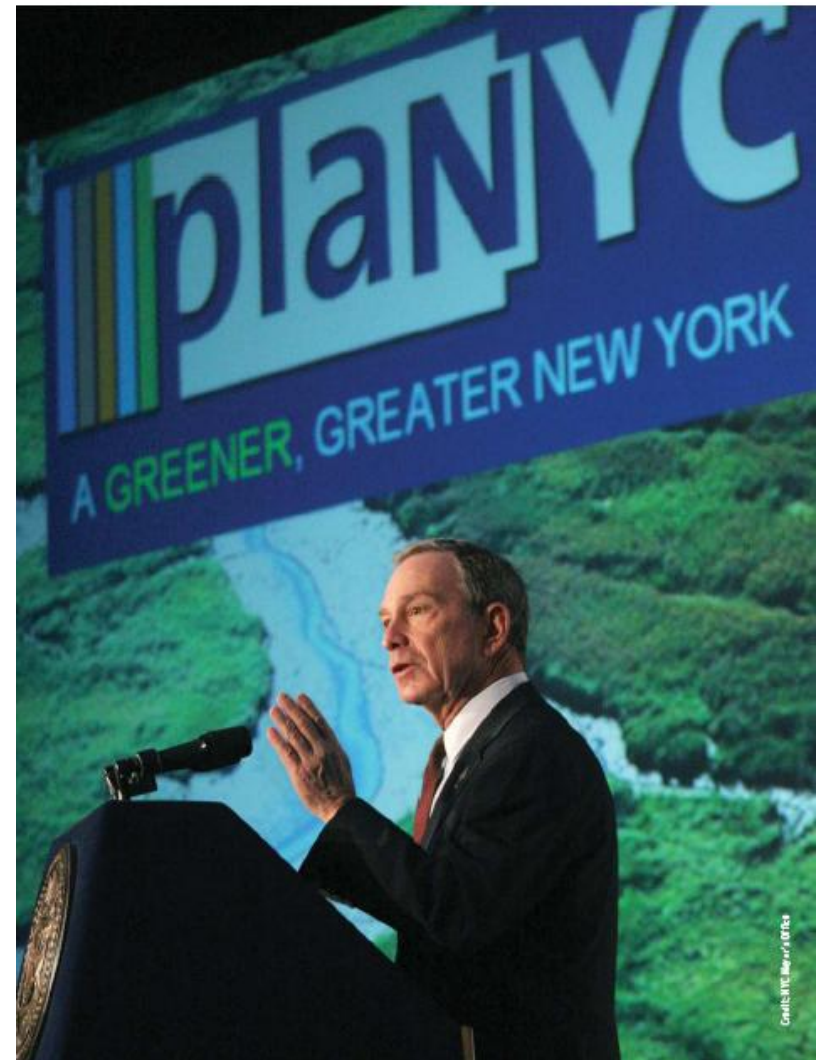


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Through PlaNYC, Mayor Bloomberg has challenged New York City to reduce carbon emissions by 30% in total by 2030 and 30% for municipal government by 2017.

Parks is leading the way with facilities and fleet. Parks uses bioheat and biodiesel for all buildings and all diesel vehicles



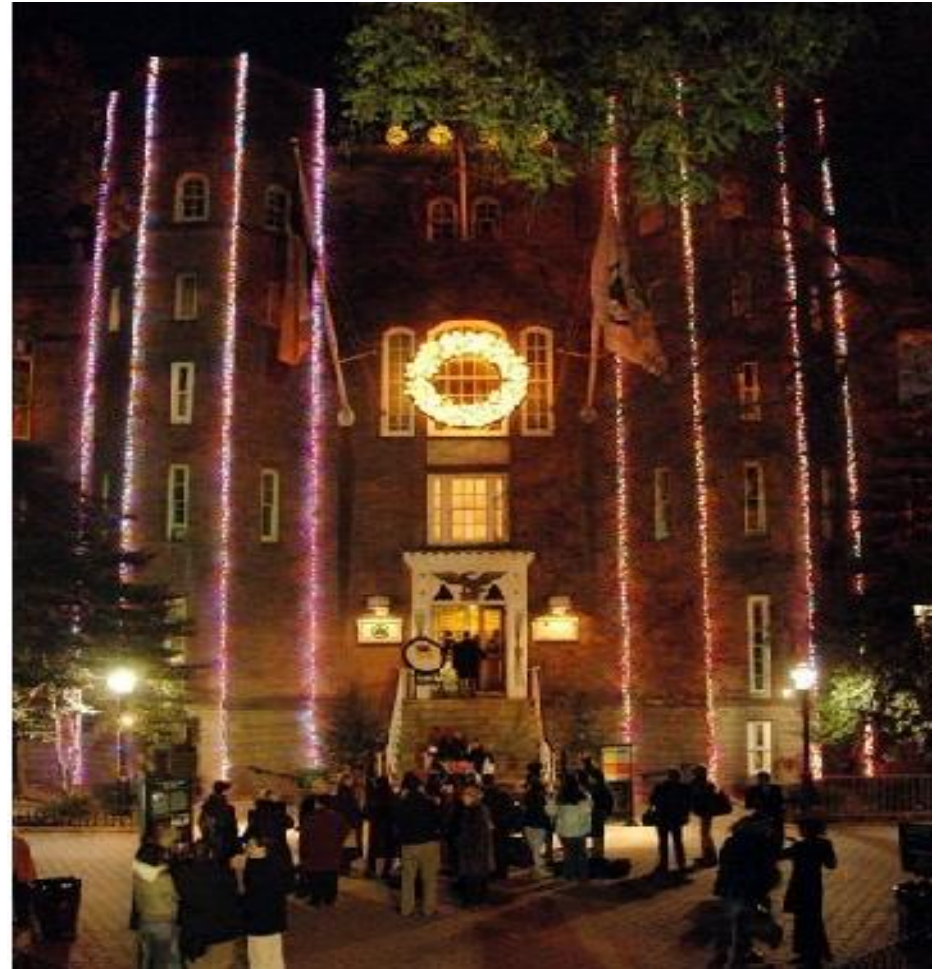
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Since 2009, Parks has used blends of B5 or B20 to operate all its heating oil tanks citywide.

Parks has used so far over 1.3 million gallons of bioheat and spent nearly \$4 million.

For the most part, our use of bioheat has been without issue.



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At a few older buildings, we did have concerns with transfer pumps and filters including at the 175 year old Bartow-Pell Mansion in Pelham Bay Park, Bronx. At Wolfe's Pond Park in Staten Island, we had to pump out a tank and replace a furnace.

At both sites, we likely piloted use of B20 too soon and should have used B5 for a longer period. Burners with low oil flows, less than 1.25 gallons per hour, also had some issues.



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Parks operates its 20 main emergency generators using biodiesel.

Due to an underground electrical outage, we operated the World's Fair Marina in Queens full time, 24 hours a day, for the last two months on biodiesel driven generators.



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NYC Parks leads in many green areas including our Million Tree planting program, Greenstreets, our newly announced Sustainable Design Guidelines, and more. Biodiesel and bioheat have been successful and important initiatives for us.



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