

Environmental Pollution and Crisis in New York City: 1965 and Now



Maine Senator Ed Muskie and New York Mayor Robert Wagner examine photographs of smoggy Manhattan, New York City Hall, February 1964 (Photo Credit: Bettmann via Getty Images).

Overview: [A recent EdWeek Research Center survey](#) found that around thirty seven percent of American teens surveyed experienced some form of anxiety around climate change. But how did highschoolers think and feel about environmental crises or harm in 1965? In this lesson students will analyze essays written by highschool students in 1965 that include discussion of air and water pollution in New York City. Students will learn about urban smog, thermal inversion, and—most importantly—compare and contrast how students experienced and thought about environmental crises in New York City then (1965) and now. Notably, the essay writers of 1965 wrote one year prior to the deadly 1966 New York City smog event. This lesson provides a basic timeline of environmental history in the United States as context for the discussion.

Focus questions:

- ★ What environmental risks or crises did students in New York City face in 1965?

- ★ How did students in 1965 think or feel about the role of pollution in New York and its future?

Lesson objective:

- Students will analyze essays to identify the environmental concerns of students in 1965 in New York.
- Students will cultivate historical empathy and critical thinking through comparing and contrasting New York's environmental crises of the 1960s and today.

Resources and materials:

- Primary Sources: 1965 Student Essays
 - (1) <https://doi.org/10.7916/xrhf-1a45>: Thorough description of contemporary air pollution and causes.
 - (2) <https://doi.org/10.7916/9avx-ja18>: All about pollution, names industry and automobiles as causes; grounds in specific issues and facts.
 - (3) <https://doi.org/10.7916/x9wx-yg10>: Describes 1963 smog incident, very helpful for this reason!
 - (4) <https://doi.org/10.7916/9dcp-hv42>: First half is about air and water pollution. Mentions LA and London thermal inversion events, but doesn't elaborate on them – it may be in the teacher's best interest to incorporate some minimal secondary literature in the lesson prior so students have the needed context.
- Primary Sources: Photos and Videos
 - Photos of 1953 smog:
<https://gothamist.com/news/photos/flashback-the-citys-killer-smog>

- Photo of Muskie and Wagner (featured above) presenting on air pollution in 1964:
<https://cafe.imgix.net/wp-content/uploads/2021/09/GettyImages-1198095218.jpg?q=65&w=800&ar=16:9&fit=crop>.
- 1966 temperature inversion educational video:
<https://www.youtube.com/watch?v=s6kceYFOj4w>
- Secondary Sources
 - VIDEO: “Smog almost killed New York City, Here’s How,” Seeker (2017):
<https://youtu.be/cTQDJy0opaM?si=8O79NHv-I7DHS--h>.
 - TIMELINE of the modern environmental movement:
<https://www.pbs.org/wgbh/americanexperience/features/earth-days-modern-environmental-movement/>.

1. Introduce Unit / Motivate Students

Ask students to write down a few ideas on how they imagine New York’s future. After a couple of minutes, choose a few volunteers to share their predictions with the class. Then show students the call for submissions from 1965 (“New York’s Future As I View It”), as a way of showing them that New Yorkers their age 60 years ago had to confront the same question they just did.

Ask students:

- How do you imagine those New Yorkers from 60 years ago would have responded?
- How was their world different from ours? Do you think this affected their predictions?

After a few volunteers have shared their answers, tell the class that today we will learn about one of the things that defined the city in the 1960s: **air and water pollution**.

2. Model / Teach

- Introduce key concepts that are central to this topic:

Urban smog: The [Encyclopedia Britannica describes smog](#) as “community-wide polluted air. Its composition is variable. The term is derived from the words smoke and fog, but it is commonly used to describe the pall of automotive or industrial origin that lies over many cities.”

The Michigan in the World Environmental Justice History Lab elaborates that: “Smog occurs when the compounds that vehicles, power plants, and factories emit interact with sunlight in the atmosphere to create ground-level ozone which can exacerbate respiratory diseases including asthma, bronchitis, and emphysema. Smog production depends on weather conditions but affects those living in cities most severely because of the high density of vehicles and industries found there.” <https://michiganintheworld.history.lsa.umich.edu/environmentalism/>.

Discussion questions:

- Do you have experiences with urban smog?
- Do you think smog is a problem in New York today?

Thermal inversion:

VIDEO:  Temperature Inversions Trap Air Pollution 1966 US Senate Committee on Public Works...

Discussion questions:

- Have you heard of “temperature inversion” before?

What was air and water pollution like in 1965 New York City?

- VIDEO: “Smog Almost killed New York City, Here’s How,” Seeker (2017):
 Smog Almost Killed New York City, Here’s How

In 1953, New York City experienced its first deadly smog event—by aggravating pre-existing pulmonary and other medical conditions, it is estimated this episode of severe smog killed between 170-260 people. Without sufficient air pollution controls in place, the urban metropolis would experience two more extreme smog events in 1962 and 1966. As industrial pollution and air pollution from public and private incinerators ballooned in postwar New York, the air quality in New York declined, becoming a hazard to the regular New Yorkers who played, stayed, and worked in the City. By 1966, a Mayoral Task Force on Air Pollution reported that every New Yorker was inhaling “730 pounds of dirt and poison” per year. New York City’s environmental public health woes played a significant role in the development of local and national environmental policy in the late 1960s. For example, an early public indication of support for the [Air Quality Act of 1967](#), in January 1967 by Lyndon B. Johnson reflected on the 1966 New York City smog event: “Two months ago, a mass of heavily polluted air—filled with poisons from incinerators, industrial furnaces, power plants, car, bus and truck engines—settled down upon the sixteen million people of Greater New York...Polluted air corrodes machinery. It defaces buildings. It may shorten the life of whatever it touches—and it touches everything.” Johnson would sign the bill into law in November of 1967, but movement for clean air and water in New York City continues.

- Sources:
 - “The Modern Environmental Movement,” PBS,
<https://www.pbs.org/wgbh/americanexperience/features/earth-days-modern-environmental-movement/>.

- David Kurlander, “‘Every New Yorker is an Expert on Pollution’: The Big Apple’s 1960s Smog Inferno,” *CAFE* (September 23, 2021).
<https://cafe.com/article/every-new-yorker-is-an-expert-on-pollution-the-big-apples-1960s-smog-inferno/>.
- “‘Environmental Crisis’ in the Late 1960s, Michigan in the World
Environmental Justice History Lab.
https://michiganintheworld.history.lsa.umich.edu/environmentalism/exhibits/show/main_exhibit/origins/-environmental-crisis--in-the-

OPTIONAL: The Donora Smog Event

October 30-31, 1948

Summary from PBS: “In Donora, PA, 20 people die and over 600 go to the hospital after sulfur dioxide emissions from a nearby steel and wire plant descend in the form of smog, made worse by a temperature inversion that trapped the sulfuric poison in the valley of the town. The incident will lead to the first U.S. conference on air pollution in 1950, sponsored by the Public Health Service.” [PBS]

Summary from NIH: “At the end of October 1948, the communities of Donora and Webster in Pennsylvania were visited by a smog that changed the face of environmental protection in the United States. Conservative estimates showed that 20 individuals died, while an additional 5900—43% of the population of Donora—were affected by the smog. This event led to the first large-scale epidemiological investigation of an environmental health disaster in the United States. Questions remain about the long-term effects of the smog, because higher rates of cardiovascular disease and cancer than were expected were observed in the region in the decade following the smog.”

● Sources:

- “The Modern Environmental Movement,” PBS,
<https://www.pbs.org/wgbh/americalexperience/features/earth-days-modern-environmental-movement/>.
- Jacobs, Elizabeth T et al. “The Donora Smog Revisited: 70 Years After the Event That Inspired the Clean Air Act.” *American Journal of Public Health* vol. 108,S2 (2018): S85-S88. doi:10.2105/AJPH.2017.304219.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC5922205/#:~:text=At%20the%20end%20of%20October,were%20affected%20by%20the%20smog.>

Discussion question:

- What does the Donora Smog of 1948 have to do with the smog in New York in 1960s?

3. Group Work

Divide the class into groups and distribute an essay to each group (ideally, one copy per student, so each can read individually). Give them time to read the essay.

Once they are done reading, ask each group to discuss the worries and predictions of the author of their essay, making a list.

After they have had some time to talk about that, ask each group how these worries and predictions are connected to the Harlem Riot of 1964, if at all, and to make special note of any specific events or themes mentioned in their essays.

Potential discussion questions:

- What environmental concerns did young New Yorkers have in 1964?
- What was/is urban smog? Based on the essays, what do you think caused New York City's rising air and water pollution?
- How did students in 1965 think and feel about environmental problems in New York City? Compare and contrast to how you and your peers may think or feel about environmental issues here today.

4. Assessment

Ask the groups to choose one or two spokespeople, who will share with the rest of the class how their assigned essay discuss air and water pollution in 1965.

Optional homework assignment

- ★ Investigate a present day environmental problem in New York City. Describe the problem and write from your perspective as a student in 2025 about the environmental future of New York City.
- ★ Students may also want to test out the Air Quality Index for the day:
<https://www.airnow.gov/?city=New%20York&state=NY&country=USA>.

Extra Resource: Environmental history timeline

Date	Event	Source
1948	Donora smog.	Jacobs, E. T., Burgess, J. L., & Abbott, M. B. (2018). The Donora Smog Revisited: 70 Years After the Event That Inspired the Clean Air Act. American journal of public health, 108(S2), S85–S88. https://doi.org/10.2105/AJPH.2017.304219 .
1953	Severe smog event in New York City.	https://gothamist.com/news/flashback-the-citys-killer-smog
1963	Severe smog event in New York City.	https://gothamist.com/news/flashback-the-citys-killer-smog https://academic.schafferlibrarycollections.org/s/american-environmental-history-hst-225-fall-2021/item/6853
1965	Clear Air Act of 1965.	https://www.boem.gov/sites/default/files/documents/The%20Clean%20Air%20Act%20of%201963.pdf#:~:text=It%20was%20first%20amended%20in.beginning%20with%20the%201968%20models .
May 1966	New York City passes Local Law No. 14—an anti-pollution act to reduce the air contaminants produced by burning refuse and fuel (non-motor fuel).	https://www.resources.org/archives/smognew-york-city/
November 1966	Severe smog event in New York City: a mix of sulfur dioxide and carbon monoxide engulfed the city. The toxic air caused approximately 200 recorded deaths. New York City's first air pollution alert!	Dougherty, Richard. "N.Y. SMOG ALERT: WARNING 1ST IN CITY'S HISTORY NEW JERSEY, CONNECTICUT ALSO STIFLED." Los Angeles Times (1923-1995), Nov 26, 1966. http://ezproxy.cul.columbia.edu/login?url=https://www.proquest.com/historical-newspapers/n-y-smog-alert/docv

		iew/155588247/se-2
1967	Air Quality Act of 1967	https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act
1970	Clean Air Act of 1970	https://www.epa.gov/clean-air-act-overview/evolution-clean-air-act
1970	Creation of the Environmental Protection Agency.	https://www.epa.gov/history/origins-epa#:~:text=Administrator%20Ruckelshaus%20was%20confirmed%20by,of%20EPA%20in%20July%201970.