**Water pollution & the news**

*From Dock Creek (1739) to the Anti-Pollution League (1922)*

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**Discussion paper / Work in progress**

**April 4, 2024 / SEJ Philadelphia**

**Introduction**

Conservation, public health, and concern about the environment are routine features of public life, not only in our own era, but also in history at nearly any time or place (Neuzil, 1996). A classic example is the 1739 controversy over water pollution in Dock Creek, a small stream that once flowed through downtown Philadelphia.

The Dock Creek controversy was America’s first recorded environmental controversy, although there were probably others beforehand. It’s also interesting because it involved two feuding newspaper editors -- Benjamin Franklin of the *Pennsylvania Gazette* and Andrew Bradford of the *American Weekly Mercury* – who took different sides on the issue.  And it is also an example of the way the media record can be a source of information about little-known environmental and public health controversies (Kovarik, 1993).

Bradford was the first printer in Pennsylvania and among the first in the US. His Philadelphia operation opened in 1713 and he published the first edition of the weekly Mercury on Dec. 22, 1719 (Willard, 1938).The newspaper, he said, “shall contain an Impartial account of Transactions, in the Several States of Europe, America, etc.”

Franklin had become editor of the Gazette when he purchased Bradford’s failing competitor called the Pennsylvania Gazette.  He published his first edition on October 2, I729 (Clark, 1989).  "The Author of a Gazette," he wrote, ought to have "a Great Easiness and Command of Writing and Relating Things cleanly and intelligibly, and in few Words; he should be able to speak of War both by Land and Sea; be well acquainted with Geography, with the History of the Time, with the several Interests of Princes and States, the Secrets of Courts, and the Manners and Customs of all Nations."

**A great publishing rivalry**

The two publishers were a generation apart – Bradford was born in 1686 in York, England, and Franklin in 1706 in Boston. Like Franklin, Bradford was a reformer and was often critical of government. Bradford also published the "[Busy-Body](https://en.wikipedia.org/wiki/The_Busy-Body_(pen_name))" essays, written by Franklin and Joseph Breintnall, before Franklin purchased the Gazette.

Franklin did not think much of Bradford. He was “poorly qualified for their business… and was very illiterate,” Franklin said in his 1771 autobiography. The Mercury was “a paltry thing, wretchedly manag'd, (and in) no way entertaining.” The feeling was mutual, and over time, the two became great rivals.

Franklin was a shrewd and competitive businessman. Around 1736, he got Bradford fired for doing a poor job printing an important Pennsylvania House document. As Franklin said, it was printed in “a coarse, blundering manner.” Franklin took it on himself to reprint it “elegantly and correctly,” and then sent a copy to every member of the House.  “They were sensible of the difference: it strengthened the hands of our friends … and they voted us their printers for the year ensuing.”

Bradford also lost his job as postmaster to Franklin. While serving in the position from 1728 to 1737, Bradford apparently served some of his own interests, and meanwhile was unkind enough to forbid his riders from carrying Franklin’s *Gazette,* although the riders would often carry Franklin’s mail privately.  Franklin did not retaliate when, in 1737, Bradford was removed from the office and Franklin was appointed as his replacement.

And so the 1739 controversy over Dock Creek took place against a backdrop of rivalry, and at a time when Bradford’s fortunes were declining and Franklin’s were on the rise. Although his experiments with electricity and his involvement in revolutionary diplomacy were still ahead of him, his civic leadership at the city and state levels had become widely admired in the 1730s. He created a civic group (the Junto) that established Philadelphia’s first lending library in 1730, the first volunteer firefighting company in 1736, and would go on to help found the first Pennsylvania university in 1743 and the first state hospital in 1751.

Franklin thought about Dock Creek pollution as one of the “small matters” that ought to concern civic leaders. Laws about dumping trash were on the books in Philadelphia and other cities in the American colonies. As early as 1657, for example, New Amsterdam (New York) had a law making each resident responsible for his own trash (Melosi, 1981). In Boston, between 1692 and 1708, trades that were considered a nuisance, like tanneries and slaughterhouses, were removed from the city limits.  In 1711, the legislative body in colonial Boston placed fines on those who used “the old Dock” to dispose of dirt or trash. (Christopher, 2020)

At the time of the Dock Creek controversy, Philadelphia was the second largest British city in the North American colonies, with a population around 13,000.  Boston was first, with 16,400 and New York was third, with 11,000 (Lydon, 1967). The city was dominated by Quakers, a Protestant denomination, and William Penn’s heirs, who controlled the colony and its politics as proprietors.  As a result, reforms that should have taken place did not, and this may have been a particular problem with water pollution in Dock Creek.

Usually, household garbage, horse manure and sewage accumulated in the streets until it was swept away by the next rainstorm. In small communities this was not an enormous problem, but as towns became the focus of increasing commercial activity in the 18th and 19th centuries, the urban environment became a focus of greater concern. In a growing town like Philadelphia, pollution was an important issue; in a great city like London, it was a public health disaster.

**The petition and the protest**

 The water pollution issue that was joined in Philadelphia might be counted as America's first recorded environmental controversy.  On May 15, 1739, a group of Philadelphia citizens presented a petition to the Pennsylvania Assembly to stop water pollution in the city's commercial district.  Leather tanneries, slaughterhouses and breweries were dumping their wastes into a small tributary of the Delaware River called Dock Creek that ran through the city.  Franklin probably signed it, but even if he did not, it is clear from his reporting in the *Gazette* that he was in favor of cleaning up Dock Creek. The petition asked the Assembly to declare the tanneries a nuisance and asked that they be "removed in such Time as might be tho't reasonable."

Describing the problem, Franklin noted that "many offensive and unwholesome smells do arise from the Tan-Yards, much to the great Annoyance of the Neighborhood." In an article in his newspaper, the *Pennsylvania Gazette*, Franklin said the Tanners "...choaked the Dock -- which was formerly navigable as high as Third Street -- with the Tan, Horns, &c.:” (Franklin, 1739).

Franklin was no disinterested protester, said historian A. Michael McMahon. "His residences and business properties in the area involved him personally, and as an affluent citizen desiring to protect his investments... Perhaps more than his fellow citizens, [he] saw the problems as inherent in unchecked growth…” (McMahon, 1992; Double, 2013).

Franklin and the petitioners noted that the smells affected property values and that the waste choking the creek limited its use in fighting fires. They also said if the creek were not polluted it would be "of great use" for delivering supplies to the city. The Dock had been created "for publick Service." Franklin's argument was for "public rights," and the restraints on the liberty of the tanners would be "but a trifle" compared to the "damage done to others, and the city, by remaining where they are." Franklin also noted a compromise position: "If the tanners could be so regulated to become inoffensive, the Petitioners declar'd that they should be therewith satisfied."

 The tanners responded with their own petition, proposing to wash the pavement once a day, build a fence around the tan yards, and release the waste into Dock Creek only at high tide. They also found a champion in Franklin's rival, Andrew Bradford, whose *American Mercury* defended the liberty and property rights of the tanners.

 On August 27, 1739, a committee of the Assembly heard the petition. Sometime before the hearing, perhaps that day, the tanners staged a parade through town, carrying their grievances to the people and insisting on their rights. The Assembly heard both sides, but what happened next is unclear. Apparently, Bradford's *Mercury* carried an article falsely stating that the environmentalists' petition had been rejected. Its headline was: "A Daring Attempt on the Liberties of the Tradesmen of Philadelphia."

Franklin's temper boiled at this misinformation, and he printed the full text of the Assembly resolution, which supported the environmentalists. The resolution declared that the water pollution was indeed a nuisance and that regulations should be drawn up. "It is hard to imagine what could induce the tanners to publish a relation [account] so partial and so false," Franklin wrote. "In Prudence they ought not to have triumphed before the victory." It wasn't a question of the liberties of the tradesmen but rather "only a modest Attempt to deliver a great Number of Tradesmen from being poisoned by a few, and restore to them the Liberty of Breathing freely in their own Houses."

One reason why reform proposals ran into so much opposition was that the slaughterhouses, tanneries, and breweries were owned by leading Quaker citizens of Philadelphia. Six of the ten tanneries were the property of William Hudson, a Philadelphia resident from a family of tanners in York, England. Hudson was a mayor, alderman and judge – as well as a businessman – and was also the owner of Hudson’s Square, a city park that is now the site of the Liberty Bell exhibit. The list of prominent polluters would be incomplete without the most important brewers in Philadelphia — Anthony Morris and his son, Quaker leaders from a family of brewers in Stepney, England. They also served as mayors in 1704 and 1738.

These business leaders would have worked together, since the supply chains for beer, meat and leather are interconnected. Brewers sell leftover grain “slops” to feed  cattle, which are kept until slaughtered for meat. Afterward, the cattle hides are used to make leather. All of these activities create a tremendous amount of waste water.

When the tanneries were subsequently cleaned up is unclear, but they were not moved, to Franklin's chagrin. The 1739 environmental victory, in the end, was merely symbolic, although it had many of the elements that would emerge in later environmental controversies: battling editors, inaccurate articles, petitions, demonstrations, legislative hearings and ambiguous victories.

**Dock Creek and yellow fever, 1740s**

Two years later, an epidemic of yellow fever that killed 500 Philadelphia residents was blamed on the pollution from Dock Creek. Philadelphia's leading physician, Franklin's friend Thomas Bond, said in a 1741 article that the creek was linked to malaria and other diseases and that not so much "bark" (quinine) would be needed if the waterway would be filled in (McMahon, 1992).

The epidemic led to a new round of concern about Dock Creek, and by 1747, Franklin was appointed to a committee to consider what to do about restoring it. The committee recommended an extensive sewer system, and a rebuilt dock that could accommodate various sizes of boats. However, the proposal was defeated due to its high costs. Over the years, a few private attempts to deal with garbage removal and build sewers could not keep pace with the expanding tanneries and distilleries along the creek and nearby river. Philadelphia's environment deteriorated, and more pressing political priorities in London took Franklin's attention.

In 1763, however, Franklin returned briefly to Philadelphia and was involved in a new effort to finance and organize street cleaning and storm water drainage. Twenty five years after the original Dock Creek petition, a new proposal to clean and maintain the creek was considered, but a committee found the area totally polluted and "in great measure useless." Soon, workers began to cover Dock Creek.

Around the same time, Franklin served on other committees that took a comprehensive approach to municipal planning, street lighting, waste disposal, police work and firefighting. He could not have been fully satisfied with the outcome of his work, according to McMahon. Although the 1760s ordinances looked like progress, "for those who fought to save the Dock and to reclaim the center of the city for residences and small-scale crafts and retail shops, those acts capitulated to manufacturing interests and uncontrolled growth." (McMahon, 1992).

Franklin saw Dock Creek as a valuable part of the city because it allowed small boats hauling fuel and building materials from nearby farms to reach the commercial district. "Franklin envisioned a benign balance between city and country, with each supplying the economic and social needs of the other," said McMahon. He disliked the domination of manufacturing interests in the city. Like Thomas Jefferson and other agrarians of the era, he strongly believed that the country instilled moral virtues and that the city tended to drain them. At one point Franklin wrote that he was glad that many ages would pass before Americans would be forced into the cities as they had been in England. (Franklin, 1751).

**Franklin’s will**

 In the political turmoil of the next three decades, the 1760s ordinances were ignored. When Franklin arrived in Paris in 1767, beginning an ambassadorship that would culminate in French support for the American revolution, one of the first things he noticed was that Paris had a system of sewers that was "much more modern" than that of London, as well as a filtration system for drinking water (Fay, 1939).

After the revolution, when he returned to Philadelphia, he worried about the continued epidemics of yellow fever in his home city, which he attributed to the poor quality of water from old wells and contaminated springs. The water, Franklin wrote, would "gradually grow worse" and "in time be unfit for use, as I find has happened in all old cities."

In his final year, 1789, Franklin wrote a codicil to his will leaving money for Philadelphia to build a conduit to bring clean water from Wissahickon Creek into the town. The project was not carried out as he intended, but a devastating yellow fever epidemic, which killed a quarter of Philadelphia's population in the mid-1790s, led to the formation of the Watering Committee of Philadelphia to build the water line. However, to save money, a shorter fresh water line to the Schuylkill River was built in 1801.

Building the shorter water line was short sighted. Hundreds of industries crowded the Schuylkill River and polluted the water intakes by the mid- to late-19th century. Repeated complaints about the factories and their impact on drinking water were made, but to no avail. The dye works, the oil refineries, the mills and the breweries continued to pollute the river, and their destruction of it amounted to a "wanton outrage on common decency," in the view of one engineer.

But the public outrage was insufficient to overcome the resistance of manufacturers to paying for a sewer line, and in 1867, the Pennsylvania legislature rejected a proposal to regulate water pollution.  "Makeshift engineering" and corruption dominated the city's water and sewer development later in the 19th century, and prominent engineers bitterly complained that the "vile waters" of the Schuylkill flowed directly into Philadelphia's homes (McMahon, 1988).

**The American experience with water pollution**

 Philadelphia's Dock Creek controversy and the inability to clean up the Schuylkill River illustrates the conflict between the *laissez faire* libertarianism that often motivated manufacturers and the concepts of public health, public rights and social responsibilities emerging in the 18th and 19th century.

America, France, Germany and Britain each took different approaches to public health and each was affected by ideas and progress in the other nations. Meanwhile, all were in a state of transition as the industrial revolution created difficult new problems.

In America, Benjamin Franklin and Thomas Jefferson's ideals of liberty were closely linked to agrarianism, a philosophy that placed farming at the center of economics and social organization. Finding solutions to urban problems was not a priority. Even in discussing the epidemics that had plagued the cities around the turn of the 19th century, Jefferson noted that the dark clouds had silver linings: "The yellow fever will discourage the growth of great cities in our nation, and I view great cities as pestilential to the morals, the health and the liberties of man" (Jefferson, 1800).

As many Americans were farmers in the 19th century, it is not surprising that agrarian views were dominant. In 1837, a celebrated essay by Benjamin McCready detailing slum conditions in New York concluded that the best course for America might be to remain primarily agricultural rather than allowing the growth of industry (Sigerist, 1945).

Despite the prominence of agrarian philosophy, American industrial growth outstripped the dreams of even the most optimistic manufacturers by the mid-19th century, and the "American system" of efficient manufacturing was admired even in Europe. Yet the rural character of American society and the lack of a scientific infrastructure slowed much of the "environmental" reaction to the industrial revolution until after the Civil War. France, Germany, and Britain, without frontiers to absorb urban pressures, began facing up to the problem many decades before America.

In pre-revolutionary France, as Enlightenment philosophers reconsidered the social contract and the role of the state, problems of the wretchedly poor classes weighed heavily. In 1765, Baudeau declared that "the true poor have a real right to demand basic necessities." The Baron de Montyon in 1778 argued that poverty was "a slow poison" and that malnutrition, high infant mortality and injuries from dangerous trades were all problems of the poor which the government must address. The French revolutionaries attempted, after 1789, to turn lofty sentiments into practical programs. "The right of property," said the revolutionary Robespierre, "is limited like all others by the obligation to respect the rights of others. It must not impair either the safety or the liberty or the existence or the property of our fellowmen,” (Rosen, 1974). Health became among the most important individual rights, and the state was bound to protect it in the same way that it was bound to protect liberty. The French revolutionaries saw public health policy as part of a new kind of political system that served the people, and they attempted to create the world's first national system of social assistance and free medical care. Their ideas and institutions did not achieve the ideal, but the system of free medical care for the poor and open hospitals profoundly influenced the rest of Europe in the 19th century (Ayers, 1971).

In sharp contrast to the French approach, German public health policy took the form of "enlightened" despotism. German health pioneer Johann Peter Frank (1748-1821) advocated clean water, sewage systems, garbage disposal, food inspection and other health measures, including supervision of worker safety and occupational disease as part of an authoritarian system of "medical police." This idea went beyond a simple health service or system of welfare to envision a bureaucracy with broad powers of medical policy and regulation. Problems of poverty, diet, morals, housing, recreation, child welfare, encouraging marriage and families, dealing with medical quacks, improving working conditions and fighting epidemics would all be in the province of a single regulatory system. Both curative and preventive medicine was considered in its perview, according to Frank, whose 1779 book, *A Complete System of Medical Policy*, set the pace for two generations of reformers in Germany and central Europe. Although Frank and his contemporary Franz Anton Mai proposed various laws in German states, most of their proposals were not directly put into practice due to political upheavals. However, their ideas had broad impact and, in several countries, a type of medical police system was established.

The authoritarian approach did not sit well with the French, British or Americans. Public health historian George Rosen said that because citizens of these nations had a degree of individual freedom and a scope of business initiative that far surpassed the Germans, direct government controls developed only in areas of specific problems such as communicable disease and sanitation. Yet the challenges posed by the industrial revolution ran deepest in Britain, and British historian Ruth Hodgkinson saw it as the transformation of a political, economic, and social system to meet a new age that "took on an urgency the world has never known." (Hodgkinson, 1973).

**American Sanitation and Water Supply**

Until the late 19th century, water sanitation usually involved little more than the search for clean drinking water sources, and the question was whether to spend more money and go further away from the city or to spend less money and have a greater chance of disease in the city. Philadelphia, for example, took the cheap route and ended up with one of the highest typhoid fever rates in the U.S.

Many other cities grappled with the question and spent more, not only to avoid economic damages from poor health but also to avoid getting a reputation as unhealthy. As a result, business groups were frequently involved, and often led, the drive for clean water and sewer systems in the Progressive era.

Stuart Gallishoff's history of the Newark, New Jersey, water pollution controversy is representative of many American cities. Around the end of the Civil War, when the city's wells were proving inadequate, the city turned to the Passaic River. Although the city used sand filtration to reduce bacteria, the Passaic River became hopelessly polluted by new industries and development. An investigation by the Newark *Daily Advertiser* in 1872 uncovered sewage, animal carcasses, dead human bodies and industrial poisons. Chemical tests revealed, in the words of one consultant, "a shocking degree of contamination." (Galishoff, 1980).

But how distant might a source of drinking water need to be? This question was partly resolved by a British scientist's 1885 discovery that slow filtration through sand reduced bacteria in drinking water by 98 percent. Around the same time, an American laboratory found that slow sand filters could remove typhoid germs in river water supplies. By 1900, twenty cities had such filters. New developments included mechanical filters that were quicker and better suited to removing dirt and clay began to be widely used.

The experience of the city of Newark in attempting to prevent pollution at its sources was typical. In 1880, city inspectors found that wastes from a paper mill two miles above the city's water intake were polluting the river. An indictment was brought against the mill for creating a public nuisance, and the company was forced to stop discharging its wastes into the river. Encouraged by this success, Newark and Jersey City formed a joint inspection board for pollution of the Passaic and its tributaries. The inspectors managed to keep the river free of dead animals and garbage and persuaded smaller communities upstream to treat their sewage before dumping it. Yet upstream industries and communities found it easier to use the river as a sewer than to build treatment plants or find other alternatives, and by 1887 the inspector said that legal notices and warnings were "unheeded" and that it was a "useless task for me to try to stop them until legal action is instituted against them."

Meanwhile, the owners of polluting factories organized against the city, and by 1889, the city gave up on the Passaic and contracted with a private company to deliver water from an upstream tributary. Within the first year of the new line's operation, the death rate in Newark from typhoid dropped from 80 to 30 per 100,000 and was cut by two thirds in Jersey City. When Newark abandoned the Passaic River as a source of drinking water, and stopped nuisance lawsuits against polluters upstream, no other authority existed to slow down the pollution. By 1894 the river had become little more than an open sewer (Galishoff, 1980).

“The pollution of streams and the water supply of cities is a matter which is now generally discussed,” said a March, 1899 Baltimore Sun editorial. “Philadelphia is suffering from an epidemic of typhoid fever which is attributed to the pollution of the Schuylkill (river)… It is absolutely essential to the public safety that water supplies should be kept uncontaminated … It is probable that the epidemic of fever in Philadelphia costs more in money, apart from the loss of human life, than all the factories on the Schuylkill can repay.”

Meanwhile, cities on the Mississippi River “are in a state of alarm at the approaching discharge of the sewage of Chicago.” That controversy boiled over into a Supreme Court case:  Missouri v. Illinois and the Sanitary District of Chicago.

By 1905, long distance aqueducts were not needed for pure water, since scientists found that copper sulfate, chlorine and ozone treatments could kill typhoid and cholera bacteria (Scientific American, 1905). In 1908 the first continuous chlorination system in the U.S. began operation in Jersey City (Galishoff, 1980). Ordinary river water, even if somewhat polluted, could now be made relatively safe for human consumption at no great cost.

Even as new technology brought cleaner drinking water to cities, and greatly reduced cholera and typhoid, new sources of pollution made rivers and shorelines far dirtier. Swimmers and fishermen still faced the risk of typhoid (deParsons, 1911).

In reaction to the growing pollution problem, on March 3, 1899, Congress passed the Rivers and Harbors Act, also called the Refuse Act. The law was primarily aimed at preservation of navigable waters and made states and localities seek federal approval for obstructions to navigation such as bridges and levies. Under section 13 it became unlawful to throw garbage and refuse into navigable waters except with a Corps of Engineers permit. One exception was for liquid sewage from streets and sewers. Violators would be fined up to $2,500 and imprisoned up to one year. The new law consolidated four previous laws and had far-reaching implications. Dumping of oil, acids or other chemicals into streams was now prohibited insofar as navigation was obstructed, and in several cases the Supreme Court interpreted obstruction in a broad rather than narrow sense. (Tarbet, 1922).

Sewage treatment was also undergoing technological improvements. Although the first sewer system was begun in Chicago in 1855 using brick and mortar, by the turn of the century, new materials like reinforced concrete pipe had been introduced. By 1915, all major cities had a system that took raw sewage out of the population center, and about one-sixth were being treated with new aeration and bacterial systems (Babbitt, 1922).By another count, the number of municipal sewage plants reached 900 in 1914 and 1,300, by 1922 (Tarbet, 1922).

Water pollution and its connection to disease was the subject of many newspaper and magazine articles during the Progressive era. One of the most interesting was a series of articles in William Randolph Hearst's *Journal* newspaper of New York in 1906. Hearst hired Lederle Laboratory, one of the new bacteriological labs, to test Hudson River ice houses and Jamaica Bay oyster farms for typhoid and other diseases. When the results came back from the lab, Hearst used them as the basis of a personal crusade for public health in New York (NAL, 1961).

Water pollution was also a problem in international relations, and in 1913, a joint commission on water pollution in the boundary waters between the U.S. and Canada was established. Following an initial report, Congress considered a bill to prevent dumping of sewage into the Great Lakes and its tributaries, but the Public Health Service objected on the basis that the bill would be enforced by localities with questionable jurisdiction. In addition, the bill required filtration of any type, rather than specifically approved types (NARA, 1916).

Public health was not the only reason for concern about the condition of the nation's rivers. In 1914, the Corps of Engineers began an extensive investigation of acid mine run-off in the Ohio River basin at the request of West Virginia Congressman Benjamin Rosenbloom. Some 250 public officials and industry executives were consulted about their use of water and the remedies for acid deposition from working or abandoned mines. One of the problems with increasing stream acidity was the great additional expense in filtering drinking water and corrosion and scaling of city water pipes. Railroads and factories were also complaining about additional expenses. Untreated water from the Monongahela River ruined a locomotive's boiler in less than three months, a Pittsburgh & Lake Erie Railroad manager told government investigators.

Altogether, in Allegheny County alone, some $10 to $14 million per year was lost to corrosion. One remedy suggested by the researchers was identifying the worst cases of acid mine run-off and then building holding ponds or sealing off the mines. Research into apparent commercial uses for some of the acid deposition, including its use in paint and fertilizer, was also proposed. The investigation lagged in the fall and winter of 1915-1916, as "quiet preparations were being made for a possible war with Germany” (Roberts, 1922). An editorial in the *Pittsburgh Dispatch* said that the PHS was smart to consider financial losses from pollution:

"The mistake made by most of those who have tried to obtain relief from stream pollution was that instead of emphasizing these losses they harped on the killing of the fish and the interference with recreation. The Legislature has never been much impressed with these pleas. Owners of the mines and mills which have polluted the streams urged with good reason that it was more important that they be unhampered in their business than that the fishing should be good in Pennsylvania Rivers. This industrial loss, however... is a different matter." (Pittsburgh Dispatch, 1922).

A similar investigation, detailing points of pollution in the Ohio River between Pittsburgh and Cincinnati, was also underway at the time by the Marine Hospital Service, a branch of the Public Health Service. Oil refineries, paper mills, wood pulp plants, coal washers, acid manufacturers and municipal sewage outlets were mapped out for the first time (Roberts, 1922).

The water pollution issue was put aside during World War One, but in the post-war boom years, river and harbor pollution again became a major subject of news coverage. Acid mine runoff in the Ohio basin was on the Corps agenda, and engineers met with concerned congressmen in 1921 to suggest legislation that would allow the Corps to force mine owners to create settling and neutralizing basins. However, the crisis over oil pollution put such plans on the back burner.

**Oil Pollution and the National Coast Anti-Pollution League**

In February 1921, the New York harbor district engineer of the Army Corps of Engineers informed headquarters that "large quantities of oil" were being discharged from city sewers. Since the oil was in a "liquid" form, it was not apparently a violation of the River and Harbor Act of 1899 (Smith, 1921). However, the National Board of Fire Underwriters was very worried, he said, and they would be suggesting amendments to the 1899 act.

The underwriters had lost thousands of dollars in harbor fires in New Orleans, Baltimore and Mobile, Alabama, they said.  The New Orleans fire was sparked by a red-hot rivet that dropped on an oily mass of floating harbor debris and spread quickly through the dockyard. Other fires had similarly tragic origins and spread quickly with harbor oil. The underwriters group proposed that local ordinances against pumping out bilge tanks be adopted in harbor towns.

In early March, Secretary of War Newton Baker wrote to the Chief of Engineers, saying: "The discharge of oil into navigable waters has increased to a dangerous extent in recent years, creating a fire menace of serious character." The secretary asked the corps to back legislation being introduced by Senator Joseph Frelinghuysen to amend the 1899 act to clarify oil dumping as illegal (Baker, 1921).

Secretary of Commerce Herbert Hoover called a conference on June 16, 1921 to consider "the subject of water pollution and its relation to the fisheries." The discussion between state and federal officials and industry representatives "revealed a general failure of the states to cope with many important problems," particularly oil waste, industrial waste and sewage that was threatening some varieties of migratory fish with extinction. "There was indicated a practically unanimous demand on the part of the states for assistance from the federal government," a conference report said. Oil discharge from tankers and refineries was "the most vital problem" affecting fisheries, the conference members said in a final resolution (NCAPL, 1922)

Also in June, 1921, Congressman T. Frank Appleby of New Jersey introduced a bill to limit oil pollution. The bill, which would eventually become the 1924 Oil Pollution Act, attracted opposition from petroleum and manufacturing interests when hearings opened in January 1922. In its early version, it would have prohibited all kinds of water pollution, both in both harbors and inland navigable waterways. An editorial in the *Ledger* said the Appleby Bill would include sulfur wastes from the mines. "It can be modified and yet prevent the major crimes of pollution against which it is directed," the editorial said. (Philadelphia *Ledger*,1922).

Because much of the oil dumping problem was international in character, and took place outside the three-mile limit, a resolution suggested by the National Coast Anti-Pollution League, asking the State Department to hold an international conference on oil pollution, passed the House and Senate without dissent.

Just how bad was the water pollution? Corps headquarters sent out queries to various harbor stations in the summer of 1922, and the reports were bleak:

• Charleston, South Carolina -- "Local fishermen complain of injury to fishing and say fish have been driven away from harbor and inlets..."

• New Orleans, Louisiana -- "A considerable proportion of the batteries are noticeably polluted with oil. No beach can be considered suitable for recreation. A disastrous fire occurred in the port a year ago, the fire to a considerable extent being spread by oil pollution."

• Portland, Oregon -- "Considerable damage has resulted [from oil spills], especially to floating logs and sawed timbers..."

• Glouster, Massachusetts -- "A thick scum has caused serious damage to fish and sea life. It has also caused much discontent and complaint from tourists."

• Baltimore, Maryland -- "There has been a very detrimental effect on fish, oysters and wildfowl." (NARA, 1921).  Part of the reason for the alarm, as a U.S. Bureau of Mines report said in 1923, was that the tonnage of tankers carrying oil on the East Coast grew by 850 percent between 1914 and 1922. Methods of balancing cargoes and recovering spills simply had not caught up with the new technology, according to historian Joseph A. Pratt, who estimated that the oil pollution of the 1920s was worse than that of any other era in U.S. history (Pratt, 1980).

Clearly, a major problem was being recognized. In January, 1922, the Chief Engineer of the Corps worried in a letter to the president of the American Society of Civil Engineers that legislation should be confined to oil pollution and a study done of other kinds of pollution and the effects of regulations (Haydock, 1922). Meanwhile, Congressman Appleby was busy writing letters gathering support for a conference on oil pollution in the summer of 1922. "Careless oil dumping has become a serious menace," he wrote the president of the Norfolk, Virginia, board of trade. "Not only is oil dumping ruining the bathing beaches, but the depreciation in value of millions of dollars of seashore property from this cause is most alarming” (Appleby, 1921).

The New Jersey State League of Municipalities was also active in correspondence. It wrote the Corps: "Oil pollution is one of the gravest economic questions confronting the Atlantic Coast navigable waterways... we want action this session…” (Gillen, 1922).

The conference was called by the League of Atlantic Seaboard Municipalities and held in Atlantic City on August 10-11, 1922. Attending were representatives from various cities, trade organizations and chambers of commerce from Maine to Florida. The group formed a new kind of environmental organization: The National Coast Anti-Pollution League, and elected as president Gifford Pinchot, Teddy Roosevelt's forester and, at that time, a candidate for Governor of Pennsylvania (New York Times, 1922).

Discussions at the National Coast Anti-Pollution League conference centered on the extent of oil damage to property values and beach recreation and the biological aspects of oil pollution. "Millions of birds winter along the coast from Long Island to Florida, but now many million drift ashore dead," said E.W. Nelson, Chief of the U.S. Bureau of the Biological Survey. "It has been found that oil soaks their feathers and irritates their skin, leaving bare spots on their breasts and causing them to die of pneumonia. If something is not done to stop the increased pollution, a very heavy percentage will perish.” The conference speakers also read dozens of letters of support from mayors and governors up and down the East Coast. On the second day, the conference resolved to support the Appleby bill setting fines and jail terms for willful or negligent oil pollution.

Widespread news coverage and broad editorial support for the anti-pollution cause was evident. The *New York Sun* said: "The new league has an important task before it and every town along this coast will back up its efforts” (Sun, 1922). The Newark *Evening News* wrote: "At last the forces working for the ending of the oil nuisance... have concentrated on a program and have created a national organization to carry it out" (Newark, 1922)

The *Philadelphia Ledger* took an historic view. How, the newspaper asked, can any sane person can deliberately go into such black and vile-looking water as is found in the Delaware River? Only 15 or 20 years before, “\the haul of the shad net brings that thrilling moment when the encircled fish break water and the whole surface enclosed in the arc of bobbing corks suddenly bursts into silver flame as a hundred fine big fellows leap and churn in a last desperate effort ... There's a lot more than sentiment in such reminiscences as these... They mean happiness and health in an age when the tendency is to sleep away from the turmoil and the 'twice breathed air' of the city... The lack of such things means millions of dollars in good, hard cash, to say nothing of the less material considerations. Philadelphia, of all cities, should support the Anti-Pollution League." (Ledger, 1922).

Despite the support for the anti-pollution league, legislation was sidetracked in committee for further study. The next year, the National Coast Anti-Pollution League met again in Atlantic City, this time to less fanfare and more detailed political discussions. One hotly contested issue divided the group -- whether to include oil discharged from refineries and other land installations in the bill. At the end of the conference, no agreement was made, and the league fell apart. Both factions lobbied separately for the Oil Pollution Act, and in the end, the industry-oriented faction succeeded in weakening the bill, prohibiting only intentional dumping from ships in U.S. coastal waters rather than the wide array of land-based oil pollution sources. "Official Washington has no knowledge that the American people give a damn about pollution, and until they do care there will be no great advance as to pollution," Hoover said, showing his disappointment in the politics of Washington (Drake, 1973).

The law provided a small victory that stopped the worst forms of harbor pollution and gave authority to the Corps to investigate and correct gross hazards. In the aftermath of the bill, the American Petroleum Institute organized a statistics and research effort that was designed to defend against any additional federal legislation on oil pollution (Pratt, 1980), and the law stayed on the books until 1970, when it was replaced in the wake of the Santa Barbara oil blowout of 1969.

Other forms of beach pollution appeared in the 1920s. Typhoid from washed up sewage had shown up at Coney Island and Brighton Beach, a New York state health survey found in 1925 (New York World, 1922). Beaches were closed on dozens of occasions due to sewage in the 1920s.

**Conclusion**

Water pollution control has been a source of controversy since Benjamin Franklin, using his newspaper, won his symbolic victory trying to get Philadelphia to clean up Dock Creek. Projects that tried to meet the need for clean drinking water in the expanding cities of the early 19th century fell far behind schedule, and the waves of immigration in the mid- and late-19th century contributed to the sense of crisis for the suddenly urbanizing nation.

Americans turned to the European example, especially to the British public health and social reform politics, for inspiration in addressing their own problems. Women's groups often led the way in social reform as part of what was seen -- by the newspapers, particularly -- as their "municipal housekeeping" role.

The new science of bacteriology and the germ theory of disease greatly aided in the elimination of epidemic diseases, but it left an uneven legacy for clean water reformers because the immediate nature of the problem lessened. Oil pollution was a major concern of the 1920s, and ineffective laws and symbolic victories began a slow, irregular process of cleanup in the 1930s and '40s.  Reformers would have preferred something more than symbolic victories. And although the string of symbolic victories tended to build institutional and popular support for environmental and public health causes that would re-emerge in the 1960s, Benjamin Franklin might have found it “a paltry thing, wretchedly manag’d.”

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