



# Getting the City on the Hill to Shine

## D.C.'s Environmental Priorities

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Through interviews with residents and stakeholders, RFF has ranked the District of Columbia's leading environmental problems and made some recommendations on how to solve them. While the city's institutional difficulties are unique, recommendations emerging from the study may help not only D.C. but also other municipalities to become better places to live and work.

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**A**t a time when the nation's capital is in dire straits, the city's environmental problems might at first seem beside the point. Yet when the Summit Fund, a private foundation, asked the Center for Risk Management to catalogue and rank the District of Columbia's environmental problems, RFF quickly contributed half the funding for the study, so intertwined do we see the city's environmental health with its other crises in finance, management, education, and public safety.

The city's aging and decrepit aqueduct system and its sometimes significant air pollution are but two indicators of the District's deteriorating environmental health. Some of the stakeholders we consulted for this study believe the city's drinking water system is susceptible to an outbreak of cryptosporidium similar to the one in Milwaukee, Wisconsin in 1993 that killed 100 people and made 400,000 others sick. As for air quality, D.C.'s ground-level ozone is a problem, even though the city is home to little industry.

In addition to the environmental problems that affect public health are those that relate to the city's quality of life. The ecological health of the District's creeks and rivers is threatened, and the accumulation

of trash is a problem. While some may argue that these types of issues are not as pressing as some others that affect public health, they are extremely important in terms of attracting and keeping both businesses and residents in the District, which in turn directly affects the District's tax base and financial health.

As the Summit Fund requested, we queried the public for their perceptions of environmental problems through interviews with residents and stakeholders. The stakeholders included environmental experts familiar with the District, representatives of federal and local government, the White House, and the U.S. Environmental Protection Agency. We then developed a very rough ranking of the city's environmental problems.

In no way "scientific," our ranking is intended to provoke some thought and raise some relevant questions. In addition, we made a few recommendations aimed at improving the environmental policy process in the District. These recommendations may also be helpful to other cities because, although the District's institutional problems are uniquely difficult, some of the recommendations could be usefully adopted in other localities.

### Identifying the Problems

In conducting our assessment, we divided the District’s environmental problems into eight categories: air pollution, drinking water quality, water pollution in the Anacostia River, water pollution in the Potomac River, lead poisoning, hazardous waste, trash, and parks. Our task of explaining the District’s environmental problems was a complex one, since these categories blur. For example, lead exposure comes from drinking water and air pollution, as well as from lead paint.

In subsequently ranking D.C.’s environmental priorities, we characterized the problems we analyzed in terms of four categories: severity of health effects, number of people affected, ecological and welfare effects, and public perception (see table on this page). Because we used only four categories, the level of priority assigned to each category reflects different kinds of considerations. For example, ecological and welfare effects are rated high for unsafe drinking water because of the cost to District residents of buying bottled water, the nuisance of having to boil water or take other precautions, and the general anxiety connected with the problem. Ecological and welfare effects are rated high for parks because of their importance for wildlife and for recreation.

Using just four categories also means that a number of criteria, especially those related to social values, are not separated out. Our hope is that most of these values are captured in the public ranking. We also limited the number of problem categories. When asked to identify the universe of environmental problems in the District, stakeholders named over thirty. We think, however, that the eight named here capture most of the concerns of D.C. residents.

Finally, our overall ranking implicitly weights each of the four categories of characteristics equally. In other words, we counted the importance of public opinion the same as ecological and welfare effects. We did give health effects, however, twice the weight of ecological effects by counting both the severity of the health effect and the number of people affected as two separate categories. Others are free to assign different weights to our categories, since there is no “right” way to determine them. We hope our report provides enough information to allow those who would use a different weighting scheme to draw their own conclusions.

### Characteristics of D.C. Environmental Problems

Problem	Severity of Health Effects	# People Affected	Ecological and Welfare Effects	Public Ranking	Overall Ranking
1. Drinking Water	H	H	H	H	H
2. Air Pollution	H	H	L	H	H
3. Water-Anacostia	M	H	H	M	M+
4. Lead	H	H	L	M	M+
5. Trash	L	H	M	M	M
6. Water-Potomac	L	M	M	M	M
7. Hazardous Waste	L	M	L	M	M–
8. Parks	L	L	H	L	L+

Level of priority: H = High; M = Medium; L = Low

### Priorities: How High and Why

Based on our analysis, District drinking water and air pollution clearly rank at the top of the priority list. In the middle range are lead poisoning and the surface water pollution of the Anacostia River, which runs through the southeastern part of the city and drains into the Potomac River. In the third category of importance are trash, the high algae concentrations in the Potomac, hazardous waste, and the declining condition of the city’s parks because of such problems as deforestation and loss of wildlife.

Air pollution and impure drinking water each present both a health threat and a nuisance to all residents of the District. Periodic exceedance of the national air quality standards for ozone and carbon monoxide mean the District is classified by the EPA as a nonattainment area for both pollutants, although ground-level ozone is the area’s primary air pollution problem. However, the District is exceeding the national standards less often than it used to and, in a typical recent year, exceeded them by a small margin only three or four times. The District’s drinking water, whose source is the Potomac River, probably poses the more serious threat in terms of health. Since 1993, the city has issued several “boil water alerts” because officials detected unsafe levels of coliform bacteria in the drinking water system. This year, the city failed EPA inspections three months in a row when unhealthy levels of bacteria continued to be detected in the public drinking water supply. The District’s drinking water also suffers from turbidity, or cloudiness, as a result of ineffective water filtration.

Yet it is probably easier for the city to ensure clean drinking water than clean air. Finding ways to battle the pollution produced by the many vehicles driven in the metropolitan area is harder than modernizing the city's drinking water system. Given political commitment and managerial competence, drinking water should not be a concern a decade from now; while air quality has improved significantly in the past decade, it is likely to continue to be a problem.

Surface water pollution in the Anacostia River and lead poisoning in homes are both serious health problems, but we deem them somewhat lesser concerns because they affect only a portion of the District's population. Lead is probably the more serious human health problem and, because it does not decay or biodegrade, will remain in soil for many years. Lead is also found in the District's drinking water. In 1993, the District announced that 25 percent of the water taps it tested contained lead amounts greater than the EPA standard. To reduce the public's exposure to lead, the city began in 1987 to replace some 28,000 lead-containing service lines that connect the city's water mains with private property. As of 1992, the Natural Resources Defense Council reports, 882 lines had been replaced with nonlead-containing materials.

Pollution of the Anacostia River poses a threat in terms of aesthetics, ecology, and health (because of the consumption of contaminated fish). As a result of the city's topography, rain water flows southward and thus the Anacostia River is the recipient of considerable storm water runoff. It is also a large recipient of the overflow from the District's combined sewers. After rainfall, the Anacostia regularly exceeds public health standards for coliform bacteria, typically associated with raw sewage. Meanwhile, EPA is seeking to include the entire river on its Superfund cleanup list because Washington's Naval Shipyard site abuts the river and contributes significantly to toxic contamination of the Anacostia.

The lower ranking we assigned to trash, the condition of the Potomac, hazardous waste, and the decline in the quality of city parks should not be interpreted to mean that these are not important. It simply means that, by our criteria, they are less critical than some other problems.

Our list did not include some broad categories like land use or transportation, in part because the public usually does not think of environmental problems in

broad terms. In addition, broader categories often combine many issues, such as air and water quality, and we tried to avoid overlap. However, underlying causes and the interrelatedness of problems are important when considering solutions.

### Recommendations

Because our report had to be ready for the Summit Fund's board meeting in early September, we completed it in four months and within our relatively small budget. We doubt that additional time or effort would have made any significant difference in our ranking of the District's environmental problems. The same cannot be said with regard to policy recommendations, and the ones we make are largely byproducts of our primary effort to analyze priorities.

Financial constraints on the District are severe. The District's population has declined from 638,000 in 1980 to an estimated 559,000 in 1995 (Federal Bureau of the Census, 1996), and most of those who moved out were middle-income taxpayers. Combined with other financial troubles, this decrease in the tax base makes it difficult to meet the District's environmental needs. Yet lack of money is not the whole story. As we conducted our study, we repeatedly came across instances where the city had, or could have had, the money to address a problem, but lacked the capability either to obtain or spend it. Until the city's institutional and managerial problems are solved, money problems will remain secondary.

Because of our concern about the District's managerial and institutional problems, our recommendations focus on process. While these recommendations will not by themselves solve the District's environmental problems, they may make it easier to identify and implement solutions. We hope that they also will make the District a better place in which to live and work.

*A D.C. Environmental Agency.* The District of Columbia is unique in that its government functions simultaneously as city, county, and state. In addition to providing traditional municipal services such as mass transit, police protection, and education, the District must develop its own environmental protection programs without state support or expertise.

When examining the city's environmental problems, one of the first questions we asked is "where is the District's environmental agency?" Unlike most

cities and all fifty states, D.C. doesn't have one—not even one tucked under the larger umbrella of health. Most environmental functions are carried out by the city's Department of Consumer and Regulatory Affairs. Some, however, are carried out by the Department of Public Works as well as other city agencies. Such a scattered approach is counterproductive. The District's environmental problems are serious enough to warrant a distinct agency that could provide leadership and be held accountable for dealing with D.C.'s numerous environmental challenges.

**Grant for Ranking Priorities.** We think the District should apply for one of the grants that EPA provides to states and occasionally to localities to fund consideration of their environmental priorities. Such a grant would serve as a catalyst to bring together the political, educational, voluntary, and philanthropic institutions of the city to agree on the most important environmental problems and then to set to work solving them. The District could use this kind of grant to marshal political consensus behind a set of priorities so that action is taken to address the problems identified.

**Institutional Cooperation.** As an example of how an EPA grant could help, our study notes that there are many institutions in D.C. that could play important roles in solving environmental problems, but that generally they do not cooperate or even communicate with each other. While the Summit Fund supports efforts to bring the environmental groups together informally, this effort needs to be strengthened in ways that an EPA grant might make possible. Other groups, especially the District's educational institutions, need to be involved, and the whole concept of a cooperative effort needs to be strengthened and given focus.

Cooperation is necessary in part because the city lacks a formal governmental institution that is accountable for dealing with environmental problems. Cooperation is also desirable because different segments of the population have very different views about environmental issues (and indeed everything else). Working to deal with environmental problems can help to unify communities and could lay the groundwork for cooperation on other issues.

**A D.C. Environmental Report.** When tackling environmental problems, it is always helpful to have factual information about the severity of the problems and about whether the problems are getting better or worse. EPA will soon issue a report, prepared by the

## Assessing Environmental Risk Elsewhere

While many of the problems that the District of Columbia faces are unique, RFF's recent assessment and ranking of its environmental problems is not. The Environmental Protection Agency has assisted in similar assessments through its sponsorship of Comparative Risk Projects.

Like RFF's assessment of the District of Columbia, EPA's Comparative Risk Projects bring together diverse stakeholders to pinpoint and prioritize the risks to human and ecological health and to the quality of life in the areas where they live. Part of the purpose is to promote consensus on an environmental agenda and to encourage public input as environmental priorities are set. As of June 1996, EPA had completed—or was in the process of assisting or planning—a total of forty-eight projects in a range of states, tribes, territories, and localities throughout the country.

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consulting company Versar Inc., that contains baseline information on the District's problems. It would be relatively easy to update the report annually or biannually. Such a report would facilitate the priority-setting effort and foster institutional cooperation.

**Environmental Education.** The fact that 12 percent of those questioned in our survey could not name a single environmental problem suggests that environmental education might also need strengthening. We do not want to further burden the overtaxed D.C. public school system, but some private initiatives could be very useful. Educating both adults and children helps to convey the significance of environmental problems and encourages development of a realistic perspective on the relative importance of one problem vis-à-vis another. ☺

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