



# **PUBLIC OPINION AND POLLUTION: AN INTERPRETIVE SURVEY**

**By Morris P. Fiorina**

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AN INTERPRETIVE SURVEY

by

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## Preface

The Environmental Quality Laboratory has disseminated the results of its work in a series of detailed formal reports that are widely circulated. In many cases, however, it is more important that the information be disseminated quickly but to a smaller group. To facilitate the circulation of this second kind of information a different form of report, which we will term an EQL Memorandum, has been established. The recipients for each note will be selected on an ad hoc basis but the notes will be available to anyone on request.

Lester Lees  
Director  
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## Introduction

Proposals to improve environmental quality must be feasible if they are to have any chance of implementation. A simple truism? Yes, but the several dimensions of feasibility make the truism less obvious in substance than it first appears. Typically, questions of technological feasibility and economic feasibility are examined. Far too often, however, questions of political feasibility are glossed over or ignored altogether. What discussion of political feasibility that does occur tends to be based less on good information than on the political predispositions of the discussants. The reasonably objective observer recognizes that on the one hand the most ardent proponents of environmental reform project their intense concern on to the bulk of the population, while on the other hand those with a stake in the status quo similarly project their opposition to changes in the prevailing policies.

Clearly, questions of political feasibility must be addressed. Solutions to environmental problems, particularly the larger ones, appear to require governmental involvement. And many of those who occupy government policy-making positions are politicians also. For them, each election is a gamble with their public career, a gamble few of them take lightly. Should they heed the intense opinions of environmental activists, or does prudence demand that they opt for the bountiful resources of the proponents of business as usual? One factor in their decision is the potential of the activist minorities to influence the great mass of votes from whence comes electoral majorities. Public opinion -- latent, uncrystallized, uncertain though it may be -- looms large

in the calculations of politicians. And it is this public opinion that sets the bounds of political feasibility. The general location of these bounds is our concern in this report.

In social science one frequently must choose between two types of imperfect data. On the one hand there is comparatively "hard" demographic (e. g., census) data. Unfortunately, such data typically bears a rather tenuous relationship to political preferences. On the other hand, one can rely on the "softer" but more relevant survey data obtained by interviewing representative samples of citizens. I have chosen to work with the latter type of data. While far from perfect, survey data does give some indication of the opinion environment in which public policy makers read and react to our technical reports. I believe that by carefully organizing and interpreting poll data one can construct a reasonable first approximation of the opinion constraints facing those who wish to implement environmental improvement programs. To effect that end, I have examined recent public opinion surveys which deal with environmental topics. And, while exercising appropriate caution, I have attempted to draw out the implications of available data beyond the simple demographic breakdowns we all have seen. In carrying out this survey I have been limited by the questions asked by polling organizations and by the level of analysis presented in their reports. Thus, not all the data are equally interesting, nor is the level of analysis as fine as I would prefer. Obviously, both these limitations would yield to the application of greater resources (i. e., money).

Before presenting the data, let me say a few things about the sources. The data come mainly from surveys by national polling organizations such as Gallup, Harris, and Roper.<sup>1</sup> A few state polls (e. g., the California poll) also are utilized. The national polls typically are based on samples of approximately 1500. Sample estimates for such surveys are accurate to approximately  $\pm 3\%$  (95% confidence level). Polls based on smaller samples (e. g., Field) are less accurate,  $\pm 5\%$  being a reasonable estimate of the confidence limits. Generally in comparing survey results I don't put much credence into differences smaller than 8% unless part of a clear pattern.<sup>2</sup>

In addition to sampling error, poll results are quite subject to nuances in question wording. To illustrate this fact consider the following two poll questions: "Do you support the present policy in Viet Nam?" "Do you support the President's policy in Viet Nam?" Although ostensibly asking about the same policy these two questions elicit a significantly different distribution of opinion at roughly the same point in time.<sup>3</sup> Thus, one must always be on guard against responses that are artifacts of question wording. There are possible examples of such effects in the data which follow.

Finally, bear in mind that the polls tell us little about the strength of opinion holding. Are opinions deeply held, or are they hastily thought out first reactions to an interviewer's questions? Are opinions relatively impervious to change or can objective events or the pronouncements of respected leaders cause widespread shifts? These

are important questions, but for the most part the polls shed little light on them. To reiterate, the polls provide useful information, but they do not present a complete picture.

## Public Concern Over Environmental Degradation

There may have been significant public concern over the environment prior to 1965, but the polls never asked about it. Consequentially time series data are abbreviated. Figure 1 shows the percent responding to a repeated Harris poll question about the seriousness of air and water pollution in their area.<sup>4</sup>

Two facts are evident from the graph. First, a quite impressive rise in public concern over air and water pollution has occurred. In 1965 approximately one-third of the public expressed the opinion that these two forms of pollution constituted a very serious or somewhat serious problem. This proportion rose to over two-thirds by 1970. Because pollution itself probably did not worsen significantly between 1965 and 1970, the change would seem to reflect increased awareness and knowledge on the part of the public.

The second implication of Figure 1 recurs constantly in the data: concern is where pollution is. The residents of large cities are much more prone to consider air and water pollution as a problem than is the national sample. Indeed, big city residents reach near unanimity by 1970. If they were removed from the national sample, the bottom two lines of Figure 1 would drop considerably, thus illustrating the gap between metropolitan and non-metropolitan America.

National figures sometimes hide as much as they reveal. A regional disaggregation of part of Figure 1 appears in Table 1.<sup>5</sup>

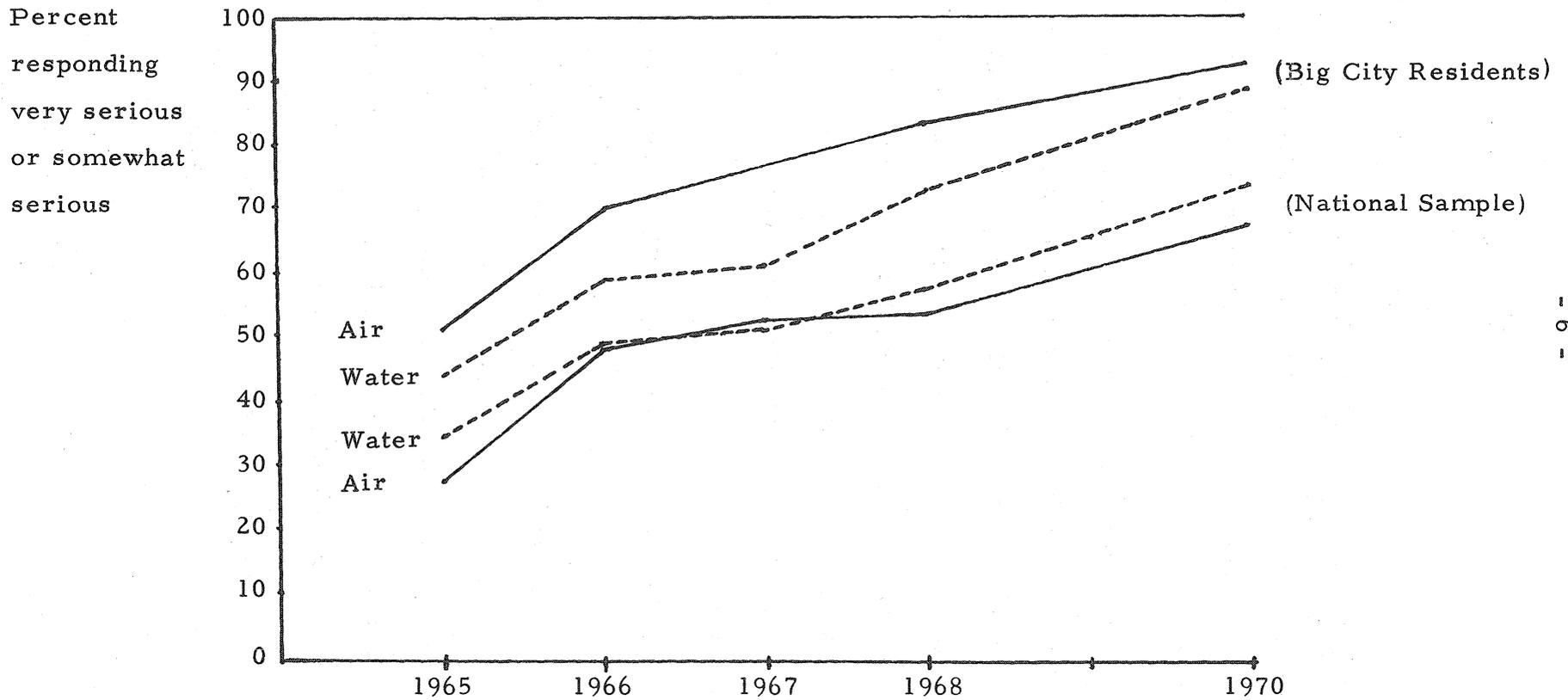


Figure 1: Time Trends in Concern over Air and Water Pollution

(Compared to other parts of the country, how serious, in your opinion, do you think the problem of air/water pollution is in this area -- very serious, somewhat serious, or not very serious?). (ORC)

Table 1: Percent regarding air/water pollution in their area as very serious.

	Air	Water
Northeast		
1965	20	21
1967	29	30
1968	34	35
1970	51	53
Midwest		
1965	8	14
1967	29	28
1968	26	35
1970	33	41
South		
1965	3	9
1967	14	18
1968	12	18
1970	20	27
West		
1965	13	6
1967	42	17
1968	37	22
1970	42	28

The regional variations shown in Table 1 are not terribly surprising. Concern over air and water pollution is highest in the Northeast and lowest in the South with the Midwest and West falling in between. Concern over both types of pollution is the same in the Northeast; concern over water pollution has a very slight edge over concern with air

pollution in the South; in the West, concern over air pollution considerably outweighs concern over water pollution, while in the Midwest the converse is true.

Table 2 confuses the picture somewhat.<sup>6</sup>

Table 2. You may have heard or read claims that our natural surroundings are being spoiled by air pollution, water pollution, soil erosion, destruction of wildlife, and so forth. How concerned are you about this--deeply concerned, somewhat concerned, or not very concerned?

1969: February (Gallup)

	Deeply Concerned	Somewhat Concerned	Not Very Concerned	No Opinion
National total	51%	35%	12%	2%
By geographic region:				
East	46	38	12	4
Midwest	56	34	9	1
South	44	36	16	4
West	59	31	10	*

\* Less than half of one percent

From Table 2 one draws the conclusion that Easterners and Southerners are equally concerned about pollution, while Midwesterners and Westerners are significantly more concerned. This contradicts Table 1.

Are Harris and Gallup respondents different? Probably not, but Harris and Gallup questions are. The Gallup question adds "soil erosion, destruction of wildlife and so forth" to air and water pollution. Perhaps these aspects of environmental deterioration are more dear to the hearts of Southerners, Westerners and Midwesterners than to Easterners. More importantly, I suspect, is the focus of the questions. The Harris question (Table 1) asks about pollution in this area, a very specific focus. But the Gallup question (Table 2) allows an Arizona resident to express concern over smog in Los Angeles or leopard shooting in Africa. But why Easterners should drop far below Westerners and Midwesterners remains puzzling (unless for Easterners "this area" is the world).

Finally, consider Table 3 which asks specifically about water pollution.<sup>7</sup>

Table 3. How serious a problem do you feel water pollution--the pollution of the rivers, streams, lakes, and water supply--is around here: very serious, somewhat serious, or not very serious at all?

1970: April 20 (Harris)

	Very Serious	Somewhat Serious	Not Serious	Not Sure
National Total	47%	22%	26%	5%
By size of community:				
Cities	55	23	17	5
Suburbs	66	20	11	3
Towns	38	23	33	6
Rural	30	23	42	5

The breakdown in Table 3 is by size of community rather than region. Three facts are of particular interest. First, we again see indications that concern is where pollution is. City and suburban dwellers are in substantial agreement that water pollution around here is a problem. Only tiny minorities deny that a problem exists. On the other hand opinion in towns is divided, with fully one-third of town dwellers not believing they have any water pollution. In rural areas opinion takes the classis "U" shape that is the bane of democratic theorists. Not only is the rural community deeply split, the modal position is that no serious problem exists.

The second and third implications of Table 3 deserve considerable discussion, but I will only mention them here, delaying the discussion until more data has been presented. Notice that from all of Tables 1, 2, and 3, one can argue the (political) case for non-uniform air and water standards. City dwellers and Northeasterners might tolerate programs that Southerners and rural residents would abhor. Why should a rural Congressman vote to impose New York City's standards on his district's lumber mills? There's very little in it for him. Additionally, we see in Table 3 the first evidence of what one might call the "class bias" of the environmental movement. For some reason suburbanites are significantly more worried about water pollution than central city dwellers.

## The Place of the Environment in America's Priorities

No doubt most people would regard survey data like that presented in the previous section as rather encouraging for the cause of environmental reform. Comfortable majorities of national samples view air and water pollution as a problem. But in and of itself, such a fact tells us little. Perhaps even larger majorities regard five, ten, or fifty other phenomena as problems. Perhaps when queried by Gallup interviewers, Americans obligingly cluck their tongues and say, "Yes, that's a serious problem." Moreover, are Americans concerned enough over environmental deterioration that they are willing to bear the burden of stopping it, or do they regard it as a problem one must live with? In this section I will focus on the first question: How do Americans rank environmental problems in comparison to other problem areas? In the next section I focus on the question of public willingness to bear the costs of clean-up.

Frankly, I was rather surprised at how high environmental concerns rank in comparison to others. Consider Table 4,<sup>8</sup> on Page 12. At the beginning of 1971 more people ranked control of air and water pollution as a top problem than ranked the war in Viet Nam, race relations, and law and order. Still, note several other facts. First, the responses for some other issues overlap; e.g., crime, drugs, student unrest and racial problems probably should be considered part of one large "social issue." Yet this would only drop air and water pollution one notch at most.<sup>9</sup> Much more important is that air and water pollution rank behind one other issue (and by a large margin): the economy.

Table 4: What are the two or three top problems facing people such as yourself that you would like to see the new Congress do something about? Anything else?

1971: January 4 (Harris)

State of the economy	63%
*Control of air and water pollution	41
War in Vietnam	31
Taxes and spending	31
Crime	28
Drugs	18
Student unrest	15
Education	11
Increase Social Security	9
Racial problems	8
National health insurance	7
Housing	6
Farm problems	4
Cut foreign aid	4
Abolish the draft	4

I ask the reader to file this fact away for now. We will take it up again later.

The Harris poll has asked a series of questions which are very useful for placing the environment in America's priorities. The data from these appear in Table 5.<sup>10</sup>

Table 5: I want to give you this list of government programs. If one program had to be reduced, which one would you cut first? Which one of these government programs would you most like to see kept or even increased, if you had to choose one?

	January 29, 1968		February 18, 1969	
	Keep, Increase	Cut First	Keep, Increase	Cut First
Anti-crime law enforcement programs	15%	1%	22%	1%
Aid to education	20	1	19	1
Anti-poverty program	15	1	17	6
Medicaid	7	2	9	2
*Air and water pollution programs	4	2	8	2
Welfare and relief	6	10	8	10
Aid to cities	3	6	5	5
Subsidies to farmers	5	6	4	7
Financing Vietnam war	23	5	4	18
Building more highways	1	13	2	9
Space program	3	32	2	39

Here is a card which lists areas of federal spending. Which three or four would you like to see cut first in federal government spending: Now which three or four would you least like to see cut?

	March 26, 1970	
	Cut Least	Cut First
Federal aid to education	56%	3%
*Pollution control	55	3
Federal poverty program	35	15
Federal aid to cities	24	13
Federal highway financing	25	12
Farm subsidies	16	23
Non-Vietnam defense spending	15	27
Federal Welfare spending	26	28
Space program	14	56
Vietnam spending	12	59
Foreign aid	3	66

Here is a list of various areas in which the federal government now is spending money. If you had to choose, on which two or three would you like to see spending cut first? From the same list, which two or three areas of government spending would you like to see cut least?

	Cut Least	Cut First
*Pollution control	57%	3%
Aid to education	66	4
Aid to cities	30	9
Poverty programs	34	13
Highway financing	19	14
Farm subsidies	17	20
Other defense spending	16	30
Welfare spending	21	37
Space program	13	50
Foreign aid	3	61
Vietnam spending	8	64

Note that the questions asked differ in a small but very important way: the number of judgments solicited. For example, in February 1969

less than 10% of the population felt that air and water pollution programs were the number one federal priority although only a tiny group felt that such programs were last on the list. A year later federal aid to education and pollution control led the list when respondents were asked to name the three or four areas most and least deserving of federal largesse. Similar results held a year later when two or three judgments were requested, although interestingly, aid to education appeared to have a slight edge. I might point out as an aside that federal highway financing ranked rather high on a fifth or more of the citizenry's preference schedules.

Tables 4 and 5 justify the conclusion that control of environmental degradation ranks very high in American priorities--higher for example, than aid to cities, defense, poverty programs, farm subsidies, welfare and the space program. To be sure, one must remember that little money was being spent by the federal government when these questions were asked. Perhaps if environmental programs ate up as much as defense programs, many people would favor cutting them. Furthermore, the environmental issue thus far is a God and motherhood issue. To be concerned at all is to be for it. The situation may change if and when many toes really get stepped on. Nevertheless, as of mid-1971 a comfortable majority of Americans opposed any cut in federal spending for pollution control.

Before moving on let us examine briefly some data from a state poll that will be of interest to many: The California poll. This data appears in Table 6. <sup>11</sup>

Table 6: I am going to read some government programs or efforts which require large expenditures of money. As I read each one I would like you to tell me which of the statements on this card comes closest to your opinion of where this program would fit in our governmental spending.

1. More money should be put into this effort, should have top priority in our government spending programs.
2. While this effort should not have priority, it is an important program which should be given adequate government funds so that it can make as much progress as possible.
3. This program should not be given a top priority position and should be given funds only after more important programs have been taken care of.
4. This effort should have very low priority. The whole idea should be reviewed and eliminated entirely if possible.

1970: August 29

California opinion:	(1)	(2)	(3)	(4)	No Opinion
*Air and water pollution	72%	18%	4%	3%	3%
Anti-crime, law enforcement	70	21	4	2	3
Federal aid to cities	32	33	19	11	5
Welfare, relief, poverty	26	38	18	15	3
Defense programs other than Vietnam	25	37	21	11	6
Vietnam war	21	26	12	36	5
Space program	11	39	29	19	2
*Supersonic transport development (SST)	5	12	31	42	10

Clearly, environmental problems rank highly among Californians. Only law and order is accorded comparable priority. One interesting side-light of the table is the lack of interest in Boeing's SST, while defense spending in general receives comfortable support.

If You Want to Give a Party, You've Got to Pay the Band

Americans are famous for simultaneously supporting increased levels of public service and opposing increased levels of spending. We have already seen that Americans are concerned over environmental deterioration, and that pollution control programs rank below the economy and even with education at the top of the public's priorities. But when it comes time to put-up or shut-up, how will Americans react? In cold cash how much is it worth to them to actualize their concern? Consider Table 7.<sup>12</sup>

Table 7: How much would you be willing to pay each year in additional taxes earmarked to improve our natural surroundings -- a small amount such as \$10 or less, a moderate amount such as \$50, or a large amount such as \$100 or more?

1969: February (Gallup)

	Large	Moderate	Small	None	Don't Know
National total	4%	18%	51%	9%	18%
By size of community					
1, 000, 000 and over	5	19	52	4	20
250, 000-999, 999	6	28	43	8	15
50, 000-249, 999	2	16	53	12	17
2, 500-49, 999	4	18	49	12	17
Under 2, 500	2	13	56	9	20
By geographic area:					
East	6	17	49	9	19
Midwest	3	19	56	11	11
South	3	15	51	6	25
West	3	24	47	9	17

In all regions and sizes of community, two-thirds or more of the population is willing to pay a little in the way of extra taxes for environmental improvement. But to go up as high as \$50 takes one out of the ballpark. A quarter or less of the population is willing to pay \$50 or more, atleast in 1969. Additional 1969 data appear in Table 8.<sup>13</sup>

Table 8: You are already sharing in the costs brought to us all by air and water pollution. In order to solve our national problems of air and water pollution, the public may have to pay higher taxes and higher prices for some products. To get real clean-up in your natural environment, would you be willing to accept a per-year increase in your family's total expenses of \$200/\$100/\$50/\$20?

1969: July 10 (Harris)

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	Willing	Unwilling	Not Sure
\$200 increase	22%	65%	13%
\$100 increase	32	56	12
\$ 50 increase	42	47	11
\$ 20 increase	55	35	10

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Evidently, Americans are none too keen on a \$200 a year increase in taxes and living expenses. Consistent with Table 7 a plurality even rejects a \$50 increase. At the \$20 level a majority feels comfortable.

Although Tables 7 and 8 appear to show little public support for a massive program of environmental clean-up, we must not lose sight of the time dimension. As the short time series in Table 9 shows,

willingness to pay is increasing, although the increases could almost be accounted for by inflation.<sup>14</sup>

Table 9: Would you be willing to pay \$15 a year more in taxes to finance a federal program to control air pollution?

(Harris)

	Willing	Unwilling	Not Sure
1967: July 24	44%	46%	10%
1970: April 23	54	34	12
1971: June 9-15	59	34	7

Moreover, additional data paint a picture far more favorable to the environmental movement than that contained in Tables 7, 8, and 9. It may be that Americans do not begrudge the money for environmental improvement so much as they are quite particular about the method of payment. For example, consider the results of a Gallup "referendum" question asked in November 1970.<sup>15</sup>

Table 10: (a) "I favor having all new automobiles equipped with an anti-pollution device which would add approximately \$100 to the price of the automobile."

or

(b) "I oppose..."

	Favor	Oppose
National	79%	21%
East	83	17
Midwest	74	26
South	78	22
West	83	17

Four-fifths of the nation favors a proposal which would add \$100 to the purchase price of a new car, but a year previously a comfortable majority rejected the idea of a \$100 increase in taxes and higher prices for the sake of the environment. Perhaps there is a large segment of the population which never buys new cars, and therefore can blithely vote to increase their cost. But perhaps the answer is deeper. Consider Table 11.<sup>16</sup>

Table 11: A good many products in one way or another are contributing to the pollution of our air and water--and it will probably cost quite a lot to develop methods to prevent the pollution effects. Would you be willing to pay 10% more for (each proposition below) or do you think the problem is not that serious?

1971: October (Roper)

	Willing	Not Serious	Undecided
Detergents if it turns out to be the only way to eliminate their pollution of water supplies?	69%	17%	13%
Gasoline if it turns out to be the only way to eliminate the pollution caused by automobile exhausts?	68	16	15
An automobile if it turns out to be the only way to eliminate the pollution caused by the exhausts?	67	17	17
Electricity if it turns out to be the only way to eliminate the pollution caused by power plants?	64	22	14
Magazines and newspapers if it turns out to be the only way to eliminate pollution caused by paper mills?	60	20	20
Airplane tickets if it turns out to be the only way to eliminate pollution caused by their exhausts?	59	18	22

Two-thirds of the population will accept a 4¢/gallon increase in the price of gasoline, a \$300-400 increase in the price of a new car, and a 10% jump in the cost of Tide and Rinso! Did opinion abruptly change between 1969 and 1971? Did willingness to pay increase dramatically during this period? Perhaps the passage of time accounts for some increase in willingness to pay, but I suspect no great change took place. Rather the explanation for the differences between Tables 7 & 8, on the one hand and 10 and 11 on the other may lie in Table 12.<sup>17</sup>

Table 12: How do you think government should raise the money it needs to help clean up pollution?

1971: January 27-February 20 (ORC)

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Charge people and industries a fee based on the amount of pollution each one is causing.	44%
Add a special tax on the prices of products that can cause pollution, such as autos, detergents, and nonreturnable bottles.	28
Increase general taxes, such as sales and income taxes.	8
Increase taxes on property, such as homes and businesses.	2
Other answers.	12
No opinion.	12

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Table 12 reveals that Americans simply do not support tax increases as a method of paying for environmental improvement. Only 10% advocate paying the costs of clean-up by raising sales, income or

property taxes. Rather, a large plurality (44%) favors imposing costs directly on the polluters, and 28% favor the related proposal of charging those who use polluting products.

Looking back, Table 7 and 8 specifically mention higher taxes in order to clean up pollution, whereas Tables 10 and 11 involve price increases which stem from increasing costs of production. Combine these facts with Table 12 and I think we have the explanation for the differing conclusions of the two sets of tables. Americans are willing to pay large amounts to improve the environment, but not in generally increased taxes. Rather, they apparently believe that emissions taxes and higher prices for consumers of polluting products are preferable means of paying the costs of clean-up. This strikes me as perhaps the politically most valuable conclusion to be drawn from this report.

To sum up this section, one can draw very different conclusions about the American citizen's willingness to pay for a clean environment depending on the survey questions one examines. Americans are unwilling to pay much in the way of higher personal taxes. But they appear willing to pay far more in the form of higher prices resulting from pollution penalties. The American citizen seems to be saying "Let those who manufacture and use polluting products bear the costs of clean-up." Thus, in addition to any economic advantages of a system of user taxes, it enjoys the political advantage of widespread potential popular support. 18

### Some Political Implications of Public Opinion Data

In the first four sections of this report I have confined myself primarily to reporting, although here and there I have suggested ways to reconcile apparently contradictory data. In this section I will engage in some data-informed speculation--a dangerous but potentially fruitful activity.

#### A. Trends.

The existing trends in public opinion data favor the environmental movement. Concern over the environment has risen greatly (Figure 1, Table 1), and willingness to pay has risen somewhat. (Table 9). Whether these trends continue is a crucial question.

When the environmental movement began it was treated as another fad in many quarters. Clearly that judgment was wrong. The trends we have examined probably will not reverse in the near future because of declining interest in the environment, but trends in support for environmental programs might bend over as the full social and economic costs of a clean environment become known. The decision of the California Supreme Court on environmental impact statements created a backlash in state government. The EPA's gasoline rationing plan has a high backlash potential. So does the energy crunch. Shifts in public opinion over the next year or two might signal a new and far more difficult stage for the environmental movement.

#### B. Subpopulation Variations and Non-uniform Standards.

During the course of the year I have heard various technical

and economic arguments in favor of non-uniform standards for environmental quality. From the public opinion data presented, it seems clear to me that fixed, uniform standards have political, as well as economic and technological disadvantages. We have seen for example that concern over air and water pollution varies significantly among regions and among urban-rural categories. Willingness to pay higher taxes shows similar variations.<sup>19</sup> To some degree these variations fit objective circumstances. Big city dwellers worry more about air and water pollution than town and rural dwellers; rural dwellers worry more about pesticides, wildlife preservation and soil erosion than urban dwellers.<sup>20</sup> For Easterners and Westerners air pollution seems more serious than water pollution; for Midwesterners and Southerners the converse is true.<sup>21</sup> All of these patterns are plausible enough.

As we have remarked, concern is where pollution is. The significance of this proposition lies in chaining it to another: support for environmental programs is where concern is. Consider some interesting data from the Iowa Poll presented in Table 13<sup>22</sup>, on Page 24.

Two-thirds of Iowa citizens believe throw-away cans and bottles constitute a problem, and a similar number favor prohibiting such containers. On the other hand, only one-third of the Iowa citizenry believes residential trash burning is a problem, and a healthy majority oppose a ban on such burning.

One may reasonably assume that strict, uniform national standards for environmental quality will be fought by politicians

Table 13: "Each of the following contributes some form of pollution to our environment. Please indicate how serious you think each of the following is in polluting your local community or area. Is it very serious, fairly serious, or not too serious?"

(March, 1971, Iowa Poll).

a. Throw-away cans and bottles.

Very serious	31%
Fairly serious	36
Not too serious	29
Don't know	4

b. Residential trash burning.

Very serious	11%
Fairly serious	22
Not too serious	64
Don't know	3

"Would you favor or oppose prohibiting the use of throw-away cans and bottles in Iowa?"

Favor	63%
Oppose	28
No opinion	9

"Would you favor or oppose prohibiting all residential burning of trash and leaves in your local area or community?"

Favor	38%
Oppose	55
No opinion	7

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representing areas where little or no concern over pollution exists.

From this fact one might expect at least two effects. First, passing and implementing environmental legislation will be a harder and longer process than it need be. Second, what proposals finally become law will be weaker than they could be.

Moreover, uniform standards decrease the likelihood of log-rolling an environmental package more acceptable to all than a fixed standard package. For years in the United States Senate some western Senators traded their votes on Civil Rights and other national measures of little concern to their states for public power or reclamation projects which were of great concern.<sup>23</sup> Nonuniform standards allow the possibility of giving a rural legislator or Southern Congressman something he'd really like in return for his vote for a tough standard for Los Angeles or New York which has no effect on his district.

Thus, both by disarming opponents and buying friends non-uniform standards increase the possibility of passing and implementing environmental legislation where the need is most pressing.<sup>24</sup> After this is accomplished one may then go back and attempt to tighten standards in areas not covered by earlier legislation.

In the interest of even-handed research I conclude this section by noting that opponents of environmental legislation should advocate fixed, very strict, uniform standards. This would alienate many policy makers who might support more selective measures. Of late, Southerners in Congress have followed such a strategy in the area of Civil Rights by seeking to extend the scope of various measures nationwide. Judging by the ensuing squeals of protest, the strategy has some worth.

### C. The Economy and the Environment

Much of the controversy which surrounds the environmental movement stems from what many perceive as a built-in conflict between

environmental and economic considerations. For centuries industry has used freely such public goods as air and water. The propriety of its doing so seldom was questioned. Today, however, many are calling for a day of reckoning. They demand that industry pay the cost of using public resources and redress the past consequences of doing so. Industry retorts that to change its traditional practice of appropriating public goods will produce severe economic dislocations and will necessitate large changes in life-style. No doubt there is some truth in the argument, although the industries probably overstate their case, and environmentalists, in turn, ignore economic, political, social and psychological realities when they talk blithely of changing priorities, converting industries and retraining workers.

At any rate the opposition to environmental programs typically makes use of economic clubs in their fight. Do we want clean air or jobs? More housing or muskrats? Clean beaches or inexpensive energy? If such are in fact the choices, many believe the environment will lose. They believe the unions will crawl into bed with the industries and only the most dedicated of the citizenry will retain their environmental fervor. We have seen (Table 4) that many more people spontaneously mention the economy as a top problem that Congress should do something about than mention pollution. Are we to assume, then, that in a head to head conflict the economy dominates the environment? There exists some interesting data on this question. First, consider Table 14.<sup>25</sup>

Table 14: It has been argued that if industry is to provide jobs in an area it is likely to cause some air pollution; (therefore some air pollution has to be put up with\*). Do you agree with this point of view?

	Agree	Disagree	Not Sure
1967: July 24 (Harris)	63%	25%	12%
1970: February "	64	23	13
1971: June 9-15 "	64	27	9
By geographic region:			
East	65	22	13
Midwest	67	23	10
South	65	18	17
West	59	32	9
By size of community:			
Cities	61	24	15
Suburbs	60	31	9
Towns	68	22	10
Rural	70	16	14

\*Clause in parentheses was asked in 1967 only.

Evidently, a large and unchanging majority of Americans believe air pollution is a natural concomitant of industry. At least in 1967 there is the further implication that they accept that fact. So far as subpopulations go, Westerners are a bit less accepting, town and rural dwellers a little more so. But the overall picture is one of acceptance of dirty air which naturally accompanies economic benefits. Table 15, though, offers a different situation.<sup>26</sup>

Table 15: If a factory or plant continually violates laws regulating pollution, would you be for or against forcing it to close down until the problem can be solved?

	For	Against	No Opinion
1967 November	71%	15%	14%
1968 November	67	17	16
1970 May	77	15	8

Table 15's question carries the implication that the industry is not doing what it could to end pollution, and that it will not be forced to achieve zero pollution, only to meet (presumably sensible) existing regulations. In this situation, the public shows little tolerance for the polluter. If this data generalizes, the actions of the EPA in Birmingham, Alabama, probably had widespread support.

Finally, consider Table 16 while relates the answers to a question that touches almost all bases.<sup>27</sup>

Table 16: Suppose that a plant in your neighborhood was causing severe pollution and it could not be fixed. Also, suppose that many of your neighbors worked in that plant. Would you be in favor of closing down the plant to stop the pollution, or not?  
1971: February (ORG)

	Close Down	Put Up with Pollution	Should Not Have to Choose*	No Opinion
National total	45%	22%	21%	12%
By geographic region:				
East	36	26	24	14
Midwest	41	28	19	12
South	44	18	23	15
West	66	14	16	4

\*Volunteered.

In a situation where neighbors' jobs are at stake and where no less painful alternative exists, a plurality of the national sample would bite the bullet and close down the plant. So far as subpopulations go, Westerners are particularly ferocious about the matter, and Easterners least so. Interestingly, though, a fifth of those interviewed volunteered the opinion that such choices should not be necessary. Between 45% who would shut industry down and 21% who reject jobs vs. environmental choices, those who pit economics against the environment appear to face a rather unsympathetic audience. The main qualm I have about Table 16 is the focus of the question on "neighbors' jobs." I think the results might be significantly different if the question asked about "your job." I would assume that most of us are more willing to sacrifice our neighbors for the collective good than ourselves.

To sum up, then, the evidence for the primacy of the economy over the environment is mixed. A majority of Americans believes that air pollution just naturally goes with industry, and perhaps always will. At the same time, there is little sympathy for the industry which doesn't do what it can to decrease pollution by making a good-faith effort to meet enacted standards. Even where the only alternative to pollution is loss of jobs, a surprising proportion of the population opts for it although that proportion might diminish if their involvement in job loss was more personal. Finally, a significant proportion of the population rejects the necessity of environment vs. jobs choices. The latter may reflect the low credibility of industrial efforts at pollution control.<sup>28</sup>

The implication of these findings for the environmental movement appears relatively clear. Head-on conflicts between the environment and jobs should be avoided if possible. But the public probably will not abandon environmental considerations at the first claim that such a conflict is coming. Many believe such conflicts need not exist. Even more say they will opt for environmental considerations when such conflicts do come about. What we need now is some significant test cases to see how well words translate into actions.

#### D. The Class Bias of the Environmental Movement

Some of the conclusions of the Louis Harris survey for the National Wildlife Federation read as follows:

The data are consistent in revealing greater concern and greater willingness to do something about the natural environment among the more educated and more affluent segments of the public, among those who live in the suburbs surrounding the large metropolitan centers, and among younger adults. These articulate segments of the public could be characterized as having high expectations and demand for a livable environment, and as having a greater than average intellectual awareness of environmental conditions.

People who live in cities, blacks, and persons with lower incomes and education levels show less concern about environmental conditions. At first glance, this appears paradoxical since it is the lesser privileged segments of our society, especially in the inner cities, that one would suspect have greater contact with at least certain forms of environmental pollution and deterioration. However, it appears that some combination of apathy, low expectation levels as regards the natural environment, lack of awareness of its effects on the quality of their own life, and the perception of other problems as being even more severe and pressing produce an apparent low level of concern.

Thus proponents of a greater emphasis on natural resources and environmental cleanup will find their natural allied, at present, among the educated and the affluent.

. . .

Any immediate broadening of the base of support for environmental improvement will require public education to increase awareness of the problem among the lesser educated, lower income portions of our society. 29

The socio-economic variations cited stand out clearly in public opinion data. Tables 17, 18, and 19 show patterns that appear repeatedly in the data. 30

Table 17: Thinking about air and water pollution, improvement of land and water, forests, fish and wildlife, recreation and park areas--do you think programs for improvement of the natural environment now receive too little attention and financial support from the Government, now receive too much attention and financial support, or just the right amount?

July 1969: (Harris)

	Too Little	Too Much	Right Amount	Not Sure
National	52%	5%	22%	21%
Eighth Grade	36	6	18	40
High School	55	4	24	17
College	65	4	21	10
White	54	5	22	19
Black	33	6	18	43
Cities	58	4	16	22
Suburbs	66	2	21	11
Towns	42	7	24	27
Rural	42	6	27	25
Under \$5,000	36	6	22	36
\$5,000-\$9,999	56	5	21	18
\$10,000 plus	64	4	23	9

Table 18: Have air and water pollution affected your personal enjoyment of your surroundings and your life in any way?

July 1969: (Harris)

	Yes	No	Not Sure
National	29%	68%	3%
Eighth Grade	15	81	4
High School	30	67	3
College	42	55	3
White	30	68	2
Black	21	69	10
Cities	31	64	5
Suburbs	43	55	2
Towns	25	73	2
Rural	18	79	3
Under \$5,000	15	82	3
\$5,000-\$9,999	29	67	4
\$10,000 plus	43	56	1

Table 19: Would you be willing to accept a \$20 per year increase in your family's total expenses for the clean up of the natural environment?

July 1969: (Harris)

	Willing	Not Willing	Not Sure
National	55%	35%	10%
Eighth Grade	32	50	18
High School	58	33	9
College	69	25	6
White	56	34	10
Black	42	38	20
Cities	54	34	12
Suburbs	66	26	8
Towns	47	39	14
Rural	50	41	9
Under \$5,000	31	53	16
\$5,000-\$9,999	58	33	9
\$10,000 plus	74	19	7

Education, race and income are intercorrelated, of course. And it is impossible with only the present data to establish which socio-economic factor is most important. Nevertheless, these variations are well worth considering at some length.

One would expect the more affluent to be more willing to accept increased expenses for pollution control, and to the extent that race, education, and suburban residence correlate with income, Table 19 offers no surprise. Tables 17 and 18 are a bit more provocative, however. The poor, the Black, the city dwellers and the poorly educated are much less likely to believe environmental programs receive too little government attention than the affluent, White, well-educated suburbanites. The former are much more likely to give a "not sure" answer than the latter. This would seem to support Harris' suggestion of apathy, low expectations, and lack of awareness as possible explanations for socio-economic variations in his data. And yet Table 18 makes me believe such variables are less important than the other variable he suggests: the presence of even more severe problems.

Table 18 reveals only one significant difference among the proportion of "not sure" answers given by various demographic groups: that between White and Black. Otherwise, the table gives the clear implication that the affluent, well-educated, White living in San Marino or Scarsdale suffers more from pollution than the poorly educated, poor Black, living in Hough, Watts, or Bedford-Stuyvesant. Of course, personal enjoyment is a completely subjective matter not legitimately

subject to interpersonal comparisons. Still, we are left with the seemingly clear finding that the upper middle-class suburbanite finds himself more diminished by environmental degradation than the lower income Blacks.

Some have attempted to explain the greater sensitivity of suburban America. Erskine, for example, suggests the explanation may partially be that ". . . many of the suburbanites are commuters or refugees from smog."<sup>31</sup> I doubt it. Harris' "more severe and pressing problems" is the prime candidate for the root variable.

To put it simply, the middle class can afford the luxury of concern for environmental improvement. For them the questions of decent housing, adequate diet and good schooling are relatively minor. But if rats run over the children's feet and one's fellow tenants urinate in the hall, one's sensitivity to dirty air may be low. To this argument the middle class environmentalist replies patronizingly that pollution affects all of us equally and in the long run will kill us all. But only those whose short-run needs are satisfied bother to worry about the long run. Few in the upper middle class would worry about energy needs in 1990 if food needs for next week were unmet. And certainly, the poor are not irrational if they would rather have a shorter comfortable life than a longer miserable one.

The disproportionately middle class mass support for environmental improvement represents only one aspect of the problem. Sociologists long have known that groups and organizations in the United

States are populated by middle and upper-class individuals. The stereotype of the American as a "joiner" does not extend to working and lower class America. This generalization probably holds with even greater force for the environmental movement. Thus, we have a situation in which organizations composed of middle-class activists appeal to a disproportionately middle-class base of support. What are the potential political consequences?

One possibility is that the environmental movement could lose credibility and effectiveness through failure to recognize other legitimate interests of ordinary Americans. The environmentalists could themselves become perceived as a vested interest. Just as the pronouncements of many U.S. Senators (including Muskie and McGovern) on busing rang hollow after it was learned that they sent their own children to private schools, so the working class could turn on the environmentalists when it becomes widely understood that foregoing jobs for environmental reasons invariably means blue-collar jobs, not the nice, non-polluting professional jobs of the environmentalists. Similarly, retraining and relocating workers and industries does not seem to affect those in professional occupations to nearly the same extent as those not so blessed.

Too single-minded a pursuit of environmental purity could even provoke other groups in the society to coalesce in opposition to the environmentalists. Spokesmen for the poor (particularly Blacks) already have blasted the environmental movement. At their most charitable,

they have argued that the environmental movement drains off resources which should go toward fighting poverty and racism. Rather less charitably, they have suggested that the environmental movement offered a nice safe haven to middle class activists when the Civil Rights movement came north. Is it inconceivable that black communities, business and unions could find common cause if pushed hard enough by environmentalists?

Another danger of the class bias of the environmental movement might stem from its style of operation rather than the substance of what it does. Middle-class activists have a regrettable propensity to speak as if they have a hotline to God. I suspect there are a goodly number of Americans cantankerous enough to oppose those who moralize and pontificate irrespective of their substantive positions.

In sum, I do not mean to predict that the environmental movement will founder on the rocks of backlash. I only wish to point out very clearly that certain characteristics of the movement enhance that possibility. As a political scientist I am particularly interested in this aspect of environmental politics and believe it has received far too little attention. Hopefully these speculations constitute a beginning.<sup>32</sup>

## Conclusions

In this paper we have surveyed recent public opinion data relating to environmental concerns. The data justify several conclusions which follow:<sup>33</sup>

1. Concern over environmental degradation is relatively high and increasing. Naturally enough concern appears to be positively correlated with objective pollution.
2. When compared to other issues environmental improvement ranks very high; only a healthy economy and the social issue rank higher. A majority of Americans believes environmental programs receive too little attention and financial support from the federal government; only 5% believes the opposite.
3. Americans are willing to pay a considerable amount for a clean environment, but not through higher personal taxes. Rather, they appear to support raising the cost of production and consumption of polluting products.
4. Politically, there is reason to support non-uniform environmental standards rather than uniform standards.
5. In economy vs. environment collisions opinion will by no means automatically favor economic considerations. A surprising percentage of Americans even will sacrifice jobs for the environment.
6. The decidedly upper middle-class bias of the environmental movement enhances the possibility that other elements in the society will react against it.

Footnotes

1. I relied primarily on four published reports. These are referred to hereafter as Reference A, B, C, or D.

Reference A: "Public Attitudes Regarding Environmental Improvement," Congressional Record Dec. 19, 1969 (Washington, D.C.: U.S. Government Printing Office), pp. 40553-40558. (Harris survey sponsored by National Wildlife Federation, inserted by Rep. Richard Ottinger).

Reference B: "Public Concern for Environmental Protection," Congressional Record Apr. 16, 1969 (Washington, D.C.: U.S. Government Printing Office), pp. 9406-9412. (Gallup Poll sponsored by National Wildlife Federation, inserted by Rep. Richard Ottinger).

Reference C: Erskine, Hazel, "The Polls: Pollution and Its Costs," P.O.Q. 36 (1972), 120-135.

Reference D: Erskine, Hazel, "The Polls: Pollution and Industry," P.O.Q. 36 (1972), 263-280.

2. A non-technical introduction to public opinion polling is Charles Roll and Albert Cantril, Polls: Their Use and Misuse in Politics. (New York: Basic Books, 1972).
3. John Mueller points out this example in War, Presidents and Public Opinion (New York: Wiley, 1973).
4. Reference C, p. 121.

5. Ibid., pp. 121-122.
6. Reference B, p. 9407.
7. Reference C, p. 124.
8. Ibid., p. 125.
9. After writing this I encountered a recent Gallup Poll (Feb. 1973) asking about the country's most important problems. The environment appears to have dropped a notch. The economy (as measured by cost of living and unemployment) outstrips all other issues. And the social issue (drugs, crime, race relations) has clearly leapt ahead of the environment.
10. Reference C, pp. 127, 129, 131.
11. Ibid., p. 130.
12. Reference B, p. 9407.
13. Reference A, p. 40555.
14. Reference C, p. 132.
15. Gallup Opinion Index, No. 65, p. 27.
16. Reference C, p. 135.
17. Ibid., p. 131
18. Interestingly, when high level business executives were asked what they believed to be the most effective and least effective incentives for business to do something about pollution, they came down overwhelmingly on the side of tax credits and overwhelmingly against passing their costs on to consumers. See "What Business Thinks: Fortune 500 - Yankelovich Survey," Fortune (81, 2, Feb. 1970), pp. 91-98, 118-119, 171-182.

19. Reference A, p. 4-555. Reference B, p. 9407.
20. Reference B, p. 9408.
21. Ibid. Strangely enough, the same study shows men to believe air pollution is a more pressing problem than water pollution, while for women the converse holds.
22. Iowa poll.
23. John Jackson, "Statistical Models of Senate Roll Call Voting," APSR, 65 (1971), p. 458.
24. On the other side, Matthew Crenson has noted that the prospect of uniform standards provides an incentive for offending industries to cooperate with more lenient local authorities. See his The Unpolitics of Air Pollution (Baltimore: Johns Hopkins Press, 1971), pp. 72-73. Another interesting fact: The leaders of the 500 large corporations interviewed in the Fortune-Yankelovich survey prefer a single national standard to local standards by a 1.5 to 1 ratio. Presumably they fear the potential confusion of a proliferation of differing local standards.
25. Reference D, p. 279.
26. Ibid., p. 280.
27. Ibid.
28. Ibid., pp. 277-278.
29. Reference A, p. 40558.
30. Ibid., pp. 40554-40555.
31. Reference C, p. 120.

32. Happily, there are signs that the environmentalists themselves are awakening to the dangers suggested in this section. See for example the editorial "Industrial Workers and the Environment" in the Winter 1973 issue of Alternatives.
33. This is not to imply that these conclusions are certainly true ones. Other data might well contradict them. Spoken opinions do not correlate perfectly with actions.
34. I believe the polls overstate the percentage, however.