

To: Members of NES Board of Overseers
From: John Zaller
Re: Report on 1991 Pilot items on environment

February 2, 1992

OPINIONS TOWARD THE ENVIRONMENT

The 1991 Pilot carried two series of items measuring attitudes toward environmental issues. The first involved experimental variation of alternative forms of a feeling thermometer on environmentalists; the second involved the performance of three new policy items on environmental issues.

Analysis of results from the Pilot study suggests the following:

- 1) The traditional feeling thermometer on environmentalists, although not a powerhouse measure, performs about as well as alternative possibilities and should probably be retained on grounds of simplicity and historical continuity.
- 2) People's attitudes toward environmental issues -- at least when assessed in the context of a foreign policy crisis -- carry relatively little political punch, in that they add little or nothing to our ability to explain important dependent variables, such as presidential evaluation. However, no clear conclusion follows from this. There is apparently some sentiment on the Board that the environment is an "issue of the future" for which we will someday wish to have baseline measures of public sentiment. If so, 1992, a recession year in which environmental attitudes are likely to remain non-salient, may be a good time to lay down baseline measures in a regular NES study. The idea would be to ask on a one-time basis a few extra questions on the environment, and then sit back and wait until the environment heats up, politically or otherwise.

Part I: Test of Alternative Forms of Feeling Thermometers

Some of the Ann Arbor interviewers who pre-tested the 1990 NES survey felt that the standard feeling thermometer on environmentalists was difficult for many respondents to understand. The Board, worried that the word "environment" might be obscure to many people but still reluctant to drop all reference to this important symbol, revised the environmentalist thermometer but kept it on the survey.

In the 1991 Pilot, the traditional feeling thermometer on environmentalists, the Board's 1990 revision, and one other attempt to capture the sentiments of Greens were experimentally varied across the three forms of the survey. The three feeling thermometer stimuli were:

- ... Environmentalists (traditional form)
- ... People working to protect the environment (1990 revision)
- ... People who oppose the use of nuclear power (new to Pilot)

To evaluate the performance of these alternative forms, I relied on the following three criterion variables, all of which were carried on all three forms:

I'm going to read a list of possible foreign policy goals that the United States might have. For each one, please say whether you think that it should be a very important foreign goal, a somewhat important goal, or not an important foreign policy goal at all?

... preventing the spread of nuclear weapons

... reducing environmental pollution around the world

An item from the 1990 survey on anti-pollution regulation.

Each of the three criterion variables was regressed on a set of variables containing one of the three alternative forms of the feeling thermometer. The resulting nine regressions are shown in Table 1. As can be seen, the traditional feeling thermometer on environmentalists and the Board's 1990 substitute do about equally good jobs of explaining support for anti-pollution regulations and for reducing world pollution. The feeling thermometer on people who oppose nuclear power, meanwhile, works poorly in predicting attitudes toward regulation of polluters and reduction of world pollution, but it is not measuring nothing: it does correlate with concern about nuclear weapons.

These results do not demonstrate that interviewers' concern about the traditional item on environmentalists is misplaced; they show only that neither of the alternative forms used on the Pilot does better than the traditional form as a predictor of concern about the environment. If the alternative items are also dubious, as they may be, their failure to outperform the traditional form may represent a very lukewarm endorsement of the traditional form. But, at the same time, the standard item did outperform two questions that were attempts at improvement, which suggests some validity.

The interviewers' basic point was that "environment" is an obscure word that many respondents fail to understand. If the interviewers are right about this, the two forms of the feeling thermometer that use the word environment should do especially badly among poorly informed respondents. But as Table 2 shows, this was not the case. Bivariate correlations between the three feelings thermometers, on one side, and a pollution item, on the other, are lower among low information respondents than among high information respondents -- but not to a suspicious degree. Such correlations are often lower among less informed respondents, and the fall-off in this case is not so large as to arouse suspicion that the environment thermometer is unusually weak.

Additional evidence that the traditional feeling thermometer on environmentalists is within the range of normal performance is provided by the following comparisons with other feeling thermometers. As can be seen, the traditional feeling thermometer on environmentalists produces fewer don't know ratings than the feeling thermometers on liberals, conservatives, Democrats and Republicans; it also produces fewer ratings of 50 degrees (which is sometimes taken as the moral equivalent of don't know) than do the comparison thermometers.

	Mean	SD	DK	Percent who rate at 50 ^o
Environmentalists	65	22	3.6%	20%
People working to protect the environment	76	20	1.9%	10%
People who oppose the use of nuclear power	58	25	3.6%	29%
Blacks	69	23	2.9%	21%
Women's movement	66	25	4.1%	18%
Liberals	55	22	10.2%	28%
Conservatives	60	21	10.4%	24%
Democrats	62	23	5.4%	22%
Republicans	55	23	5.3%	23%

Note that the thermometer on "people working to protect the environment" does generate slightly fewer don't knows than the environmentalists item, and a 10 percentage point reduction in respondents whose feelings fall at the neutral midpoint. However the first difference is trivial and the second may be a spurious consequence of the fact that the mean on the "environmentalists" item is closer to fifty degrees.

Altogether, these results are largely reassuring to the traditional measure. However there is one other set of results that raises some question. Table 3 shows the correlation between each of the feeling thermometers in the previous table and a relevant criterion variable. Thus, the environmentalists thermometer is paired with anti-pollution regulation, the women's thermometer is paired with the women's role item, and so on. The most relevant comparisons are among the environmentalism, black and women's movement thermometers, since in each of these cases, a thermometer is paired with a directly related criterion variable. The environmentalism thermometers clearly fare poorly in these comparisons. One explanation for the poor showing by the environmentalism is that the interviewers are, in the end, correct in their claim that many respondents fail to understand what the environmentalism thermometers refer to. Alternatively, one might argue that people understand who environmentalists are but, owing to the low saliency of environmental policies in the U.S., have not linked their feelings toward environmentalists with issues like government regulations to combat pollution.

Part II: New Items on Environmental Policy

The Pilot study also carried three items intended to measure respondents' preferences for different environmental policies. The items, shown along with their marginals in Table 4, asked citizens about use of nuclear power, the tradeoff between jobs and pollution, and the tradeoff between jobs and endangered species.

To test the capacity of these items to improve our ability to understand basic political preferences, I included them in relatively fully-specified regression models of Bush evaluations and party attachment. None of the new environment items achieved coefficients in these models that were either statistically or substantively significant (see Table 5). Note that, although the new policy items on the environment had little political punch, the feeling thermometer (on people working to protect the environment) did have some importance.

These results suggest that the NES, in carrying a feeling thermometer on environmentalists but otherwise paying little attention to environmental issues in recent years, has not been overlooking an issue of great national political importance.

This conclusion, however, requires two qualifications. First, the salience of environmental concerns in national political debate in mid-1991 was relatively low, so that these results may underestimate the normal importance of this issue. Second, my analysis is still quite preliminary; there are some tests that I have not yet had time to make that seem to me likely to produce more interesting results. I expect to have results from these tests in time for the 1992 planning committee.

Table 1

Multiple Regressions for Effects of Alternative Thermometers

(cell entries are beta coefficients)

Dependent Variable: POLLUTION VS. BUSINESS

	<u>Form 1</u>	<u>Form 2</u>	<u>Form 3</u>
"Environmentalists"	.15*		
"People working to protect..."		.21*	
"People ...oppose... nuclear..."			.11*
Ideology (liberal = high)	.08	.00	.09*
Education	.02	.08	.00
White	-.04	.05	.12
Male	.00	-.05	.05
Age	.00	.07	.02
n=	448	454	431

Dependent Variable: REDUCING WORLD POLLUTION

	<u>Form 1</u>	<u>Form 2</u>	<u>Form 3</u>
"Environmentalists"	.33*		
"People working to protect..."		.27*	
"People ...oppose... nuclear..."			.12*
Ideology (liberal = high)	.05	.10*	.07
Education	-.02	-.04	-.01
White	.06	-.05	.12*
Male	.01	-.02	.04
Age	-.04	.05	-.04
n=	449	457	431

Dependent Variable: SPREAD OF NUCLEAR WEAPONS

	<u>Form 1</u>	<u>Form 2</u>	<u>Form 3</u>
"Environmentalists"	.14*		
"People working to protect..."		.04	
"People ...oppose... nuclear..."			.24*
Ideology (liberal = high)	.02	.10*	-.02
Education	.13*	.16*	.12*
White	.12*	.02	.19*
Male	-.07	.03	.16*
Age	.06	-.09	-.06
n=	449	456	431

* Statistically significant at .05 level, two-tailed.
scored in the liberal direction.

All variables except demographics

Table 2

**Bivariate Correlations Between Feeling Thermometers
and Three Criterion Variables**

WITHIN LOWER QUARTILE OF SAMPLE ON POLITICAL INFORMATION

	<u>Pollution vs. Business</u>	<u>Goal of Reducing Pollution</u>	<u>Reducing Spread of Nukes</u>
"Environmentalists"	.17	.26*	.20
"People working to protect..."	.16	.19	-.08
"People ...oppose... nuclear..."	.07	.09	.32*

MIDDLE HALF OF SAMPLE ON POLITICAL INFORMATION

"Environmentalists"	.12	.43*	.19
"People working to protect..."	.22	.34	.11
"People ...oppose... nuclear..."	.05	.00	.14

WITHIN TOP QUARTILE OF SAMPLE ON POLITICAL INFORMATION

"Environmentalists"	.20*	.32*	.05
"People working to protect..."	.19*	.29*	.10
"People ...oppose... nuclear..."	.16*	.20*	.19*

* Statistically significant at .05 level, two-tailed. Cell entries are bivariate correlations.

Table 3

**Bivariate Correlations Between Feeling
Thermometers and Relevant Criterion Item**

Environmentalists <i>with</i> regulation of business to control pollution	.19
People working to protect the environment <i>with</i> regulation of business to control pollution	.19
People who oppose the use of nuclear power <i>with</i> regulation of business to control pollution	.11
Women's movement <i>with</i> Women's role 7-point scale	.39
Blacks <i>with</i> Aid to blacks 7-point scale	.32
Democrats <i>with</i> Government services 7-point scale	.24
Republicans <i>with</i> Government services 7-point scale	-.19
Liberals <i>with</i> Job guarantees 7-point scale	.21
Conservatives <i>with</i> Job guarantees 7-point scale	-.11

Table 4

Test Items on the Environment

Some people say that the nation needs more nuclear energy in order to meet our needs for the future. Other people say that the danger to the environment and the possibility of accidents are too great. What do you think? Are you in favor of building more nuclear energy power plants, would you favor operating only those that are already built, or would you prefer to see all nuclear power plants close down?

Build more plants	16%
Operate only those already built	57
All plants closed down	23
Don't know, depends	3

Some people say the government should force business and industry to stop polluting the environment, even if it means that some companies have to lay off workers or shut down. Others say it is more important to protect workers' jobs, even if it means we have to live with more pollution than we'd like. Which is closer to your opinion: we should stop pollution even if it costs jobs, or we should protect jobs even if it means more pollution.

Stop pollution (strongly)	48
Stop pollution (not so strongly)	17
Protect jobs (not so strongly)	11
Protect jobs (strongly)	16
Don't know, can't choose	8

Some people feel that bird and animal species in danger of dying out must be protected, even if it means that some workers may lose their jobs. Others say protecting jobs is more important. Which is more important to you: protecting endangered species, or protecting jobs?

Protect endangered species (strongly)	26
Protect endangered species (not strongly)	15
Protect jobs (not so strongly)	20
Protect jobs (strongly)	31
Don't know, can't choose	9

Table 5
Multiple Regressions for
Effects of Alternative Items

(cell entries are beta coefficients)

Dependent Variable: BUSH FEELING THERMOMETER

	<u>Run 1</u>	<u>Run 2</u>	<u>Run 3</u>
Nuclear plants	.02		
Jobs vs. pollution		-.01	
Jobs vs. endangered species			-.03
Feeling Therm on Environmentalists	-.11*	-.10*	-.10*
Party attachment	.28*	.26*	.27*
Ideological identification	.12*	.12*	.12*
Other variables
r-square	.26	.24	.25
n=	419	398	396

Dependent Variable: PARTY ATTACHMENT (5-pt scale)

	<u>Run 1</u>	<u>Run 2</u>	<u>Run 3</u>
Nuclear plants	-.05		
Jobs vs. pollution		-.05	
Jobs vs. endangered species			.07
Feeling Therm on Environmentalists	.12*	.16*	.12*
Ideological identification	.33*	.34*	.32*
Other variables
r-square	.24	.25	.24
n=	419	398	396

Other variables included in these regressions were education, age, race, gender, aid to blacks, defense spending, and government job guarantees. All variables except demographics scored in the liberal direction.

* Statistically significant at .05 level, two-tailed.