# Chesapeake Bay Attitudes Survey



**Chesapeake Bay Program** 

# Chesapeake Bay Attitudes Survey



# Chesapeake Bay Program Communications Subcommittee

Printed by the U.S. Environmental Protection Agency for the Chesapeake Bay Program

Final Report April 28, 1994 OMB Clearance # 2040-0165

# The Chesapeake Bay Attitudes Survey

Submitted by the Survey Research Center University of Maryland

Project Manager Johnny Blair

Project Coordinator Gregory Slater

Research Assistant Amy McLaughlin

# Table of Contents

Executive Summary	1
1. Overall results	3
Perception of Water Quality and Recreational Use	3
Causes of Pollution	7
Opinions About Clean-Up Efforts	9
2. Analysis by States	12
Pennsylvania	12
All States	13
3. Opinions by Distance from the Bay	24
4. Differences by Demographic Characteristics	29
Gender	29
Race	30
Age	31
Income	34
5. Survey Methods	36
Sample	36
Questionnaire and Data Collection	36
Survey Rates and Results	39
Sample Weights	40
6. Appendices	42

# **Executive Summary**

The Survey Research Center at the University of Maryland at College Park conducted a survey of residents of counties in the watershed of the Chesapeake Bay. The counties are located in the Commonwealths of Virginia and Pennsylvania, the state of Maryland, and the District of Columbia. The survey was sponsored by the Alliance for the Chesapeake Bay and conducted for the Chesapeake Bay Program in conjunction with the United States Environmental Protection Agency.

The target population for this telephone survey was adults age 18 or older residing in telephone households in the watershed of the Chesapeake Bay. The goal of the study was to provide baseline data on the attitudes, behaviors and opinions of the residents about pollution, water quality, funding, and clean-up efforts for the Bay and its tributaries. Therefore, the data represents both the entire Chesapeake Bay watershed and the individual jurisdictions. The survey was conducted from October 6, 1993 through January 27, 1994 and 2,004 respondents were interviewed. The margin of error for the overall data is between 2 and 3 percent.

The study found that 85% of all respondents were either very concerned or somewhat concerned with pollution in the Bay. This level of concern for pollution in the Bay varied by distance from the Bay. Approximately 90% of those living less than 50 miles from the Bay, 84% of those living 50 to 100 miles from the Bay and 80% of those living over 100 miles from the Bay said that they were either very concerned or somewhat concerned with pollution in the Bay.

Overall about a third of respondents thought that business and industry was the main

cause of pollution in the Bay, 7% thought individuals were the main cause of pollution, and 3% thought farmers were the main cause of pollution in the Bay. When respondents were asked if they knew whether their state government was working with the federal government to help reduce pollution in the Bay about half said yes. But when those who said yes were asked if they knew the name of this group of governments working together only 12% said they did. Out of the 2,004 respondents, 4 correctly identified the name of the group as the Chesapeake Bay Program.

About half of the respondents thought the Bay was more polluted today compared to ten years ago, 20% thought it was less polluted, 18% thought the Bay pollution was about the same, and 16% said they didn't know.

Approximately half of all respondents said that the Bay clean-up was one of the most important problems relative to other social, economic, and environmental problems that governments must resolve, 40% said the Bay clean-up was important, but not the most important problem, and 8% thought that the Bay clean-up was one of the least important problems.

## 1. Overall results

# Perception of Water Quality and Recreational Use

This section presents the results aggregated across all respondents. All respondents were asked to rate their familiarity with the Chesapeake Bay and to rate their level of concern with pollution in the Bay as well. Only those respondents who reported that they were either very or somewhat familiar with the Bay or the Susquehanna<sup>1</sup> and either very or somewhat concerned with pollution in the Bay or Susquehanna, were asked subsequent questions on water quality and recreational use. As Table 1 shows, 14% of all respondents said they were very familiar with Chesapeake Bay, 38% were somewhat familiar, 22% were not very familiar, and 26% were not at all familiar with the Bay<sup>2</sup>.

Pennsylvania residents were also asked to rate their familiarity with the Susquehanna river. The results are also included in Table 1. Two-thirds of those sampled in Pennsylvania said they were either very familiar (21%) or somewhat familiar (44%) with the Susquehanna, while 20% said they were not very familiar and 15% said they were not at all familiar with the Susquehanna.

<sup>&</sup>lt;sup>1</sup> Questions about the Susquehanna River were asked only of Pennsylvania residents.

<sup>&</sup>lt;sup>2</sup> The "don't know" and "refused" responses were excluded this analysis.

Table 1\*
Overall Familiarity with
Bay/Susquehanna
(Percent of all respondents)

	Chesapeake Bay n=1996	Susquehanna n=478
Very familiar	14%	21%
Somewhat familiar	38	44
Not very familiar	22	20
Not at all familiar	26	15
	100%	100%

<sup>\*</sup> Weighted sample used'; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

All respondents were also asked how concerned they were with pollution in the Bay. In addition, Pennsylvania residents were asked about their concern with pollution in the Susquehanna. Table 2 shows that half of all respondents were very concerned with pollution in the Bay, 37% were somewhat concerned, 7% were not very concerned, and only 6% said they were not at all concerned with pollution in the Bay.

Similarly, eight out of ten Pennsylvania respondents said they were either very concerned (42%) or somewhat concerned (43%) with pollution in the Susquehanna. Only 7% said they were not very concerned and 8% said they were not at all concerned about pollution in the Susquehanna. These results are also presented in Table 2.

<sup>&</sup>lt;sup>3</sup> The weighting procedures are fully explained in the methods section.

Table 2\*
Overall Concern with Pollution
in Bay/Susquehanna
(Percent of all respondents)

	Chesapeake Bay n=1958	Susquehanna n=472
Very concerned	50%	42%
Somewhat concerned	37	43
Not very concerned	. 7	7
Not at all concerned	6	8
		•
	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Respondents who reported being familiar with the Bay were asked if pollution in the Bay caused them to do less of, or stop doing, any recreational activities. Nearly eight out of ten respondents (78%) said that pollution in the Bay had not caused them to do less of, or stop doing, any of the things they used to do for recreation, 20% of respondents said it had.

Pennsylvania respondents familiar with the Susquehanna were also asked about changes in their recreational activities. Again, eight out of ten (79%) said pollution had not caused them to do less of, or stop doing, any of the things they used to do for recreation on the Susquehanna, 21% said it had.

We also examined differences between respondents on issues of safe water quality. Only those who were either very or somewhat familiar with the Bay were asked questions about safety. Of the respondents who were asked how safe the water quality in the Bay was, 68% thought the water quality was unsafe

for swimming, and 53% thought the water quality made eating seafood unsafe.

If a respondent said that the current water quality was not very safe in at least two ways, they were asked which should have the highest safety priority. Sixty-seven percent thought the highest safety priority should be for aquatic life, 20% thought all had equally high priority, 12% thought that being able to eat the seafood was the highest priority, and 1% thought swimming should be the highest safety priority.

Pennsylvania residents were also asked about water quality safety priorities for the Susquehanna. The results were similar to those about the Bay, 71% reported that the highest safety priority should be for aquatic life, 22% reported all had equally high priority, 5% reported that being able to eat the seafood was the highest priority, and 2% reported swimming safety should be the highest safety priority.

Table 3\*
Highest Safety Priority
(Percent of all respondents)

	Chesapeake Bay n=998	Susquehanna n=282
Safe for swimming	1%	2%
Safe to eat seafood	12	5
Safe for aquatic life	67	71
All equal	20	22
	<del></del>	
	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Finally, all respondents were asked if they thought that there was more pollution in the Bay, less, or about the same as ten years ago. About half (46%) said that they thought the Bay was more polluted, 20% thought it was less polluted and 18% thought pollution was about the same as it was ten years ago.

# Causes of Pollution

All respondents were asked which of nine sources they saw as the main causes of pollution in the Bay (sewage treatment plants, landfills, farming, commercial shipping spills, construction, other business and industry, population growth, recreational boating, and things that individuals do). The answers ranged from 74% for other business and industry, 70% for commercial shipping spills, and 67% for recreational boating, to 54% for landfills, 45% for construction, and 36% for farming.

Respondents who identified more than one source as being a main cause of pollution in

the Bay were asked which one was the most serious (see Table 4). The source identified most often as being the most serious cause of pollution in the Bay was business and industry (32%), followed by sewage treatment plants (16%) and spills from commercial shipping (15%). Other sources identified were farming and population growth, with 8% and 9% respectively, individuals with 7%, landfills were cited 6% of the time, and recreational boating was cited 4% of the time. Construction was cited as being the main cause of pollution 2% of the time.

Respondents also were asked to identify which one source was the <u>least</u> serious cause from among those sources that were identified as not being a main cause of pollution. The source identified as being the least serious cause of pollution in the Bay was farming (34%), followed by recreational boating (14%) and individuals (14%). Population growth was cited 11% of the time and construction 11% of the time. Landfills were cited 6% of the time and sewage treatment plants were cited 5% of the time. Spills from commercial shipping was cited 4% of the time. Finally business and industry was cited as being the least serious cause of pollution in the Bay 1% of the time (see Table 4).

Table 4\*
Most & Least Serious Causes of Pollution
(Percent of all respondents)

	Percent Most Serious n=1,805	Percent Least Serious n=1232
Sewage Treatment	16%	5%
Landfills	6	6
Farming	8	34
Commercial Shipping	15	4
Construction	2	11
Business/Industry	32	1
Population Growth	9	11
Recreational Boating	4	14
Individuals	7	14
	00%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

# Opinions About Clean-Up Efforts

All respondents were asked if the current Bay clean-up efforts were too much, about right or too little. Only 4% said the current effort to reduce pollution in the Bay was too much. Another 35% of respondents said the efforts were just right and six in ten (61%) said the efforts to clean-up the Bay were too little.

Respondents were also asked if they or anyone in their household had ever participated in any Bay pollution reduction activities. Seventy-eight percent reported they had not, 21%

reporting that they had, and 2% said they didn't know. When respondents were asked to describe how active they were in reducing pollution in general, 17% said they were very active. Just over half (51%) of all respondents described themselves as somewhat active and 32% said they were not very active.

Respondents were then asked to identify whether new funding for improving the Bay environment should be spent mostly on prevention of additional pollution or on repairing damage already caused by pollution (see Table 5). Slightly less than half (47%) said that most of the new funding should be spent on preventing more pollution, 41% said most of the new funding should be spent on repairing damage already done, and 12% said both should be funded equally.

Table 5 **Funding to Prevent Pollution or** to Repair Damage\* (Percent of all respondents)

n = 1.915

Prevention 47%

Repair 41

Other 12

100%

Those who said funding should be spent for preventing additional pollution were asked how the funds should be spent (see Table 6). Enforcement of regulations was the number one choice with 40% of the responses, followed by education (30%), scientific research (10%), technical assistance to volunteer groups (12%), with 8% suggesting something else.

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Table 6
How to spend Pollution
Prevention Funds

(Percent of all respondents)

n	_	257	,
n	=	X57	

Education	30%
Scientific Research	10
Enforcement	40
Technical Assistance to Volunteer Groups	12
Other	8
	<del></del>
	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Those who said funding should be spent on repairing damage already caused by pollution were asked where those funds should be spent (see Table 7). More than half (54%) said the funding should be spent on reducing water pollution, 19% said restoring wildlife areas, and 8% said encouraging public participation. Replenishing the fish population was cited by 9% and something else mentioned 10% of the time.

Table 7
How to Spend Pollution
Repair Funds

(Percent of all respondents)

n = 763

Restore	wildlife	19%

Replenish fish 9

Public participation 8

Reduce water poll. 54

Other 10

100%

# 2. Analysis by States

Analysis was done by geopolitical unit.

# <u>Pennsylvania</u>

Of the signatory jurisdictions to the Chesapeake Bay agreement, Pennsylvania is the only jurisdiction that does not physically touch the Bay. However, because Pennsylvania is home to 444 miles of the Susquehanna River which supplies 50% of the fresh water to the Bay, it plays a major role in the health of the Bay.

Because most Pennsylvanians live hundreds of miles from the Chesapeake Bay, the Bay Attitudes Survey also asked Pennsylvania respondents questions relating specifically to the Susquehanna River, as well as to the Bay. Pennsylvanians had a greater familiarity and concern with the Susquehanna River than with the Chesapeake Bay. However, their overall concern for the Susquehanna River resembled the other jurisdiction's overall concern for the Bay, with 87%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

of the respondents in Pennsylvania indicating that they were very concerned or somewhat concerned about pollution in the Susquehanna.

Sixty-three percent of the Pennsylvania respondents said that they were either very familiar or somewhat familiar with the Susquehanna River compared to 52 percent of the other jurisdictions who said they were very familiar or somewhat familiar with the Chesapeake Bay.

All States

When collapsing the categories very familiar and somewhat familiar Marylanders rank first in familiarity with the Bay among the four regions. More than six out of ten respondents in Maryland (67%) had some familiarity with the Bay. Virginia followed closely with 56% of respondents reporting at least some familiarity with the Bay. In the District of Columbia, 43% reported some familiarity with the Bay, and in Pennsylvania about one in three reported being at least somewhat familiar with the Bay. In Table 8, the four areas are shown individually with the overall results. Overall, the differences reported by state in this section are statistically significant unless otherwise noted<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Runs are reported as significant if the P value for the Chi Square statistic is .05 or less. This means that the chance of a relationship as strong as the observed one being attributable to sampling error alone is no more than 5 in 100.

Table 8
Familiarity with Bay by State\*
(Percent of all respondents)

	<u>DC</u> n=471	MD n=506	<u>PA</u> n=516	<u>VA</u> n=519	<u>Total</u> ** n=1996
Very familiar	10%	19%	4%	15%	14%
Somewhat familiar	33	46	24	41	38
Not very familiar	26	21	24	22	22
Not at all familiar	31	14	47	21	26
_					
	100%	100%	100%	100%	100%

Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

When asked how concerned they were with pollution in the Bay, overwhelmingly respondents in all regions had a high level of concern (see Table 9). About nine in ten respondents in both Maryland and Virginia, 92% and 88% respectively, expressed being either very concerned or somewhat concerned with pollution in the Bay. About eight in ten respondents from the District of Columbia and Pennsylvania, 83% and 77% respectively, said they were either very concerned or somewhat concerned.

<sup>\*\*</sup>For the following tables in this section, the total column is not the sum of the four regions. It is based on a weight that adjusts for the different proportion of the population of the watershed in each of the four regions. See the Methods section for a complete explanation of the different weights used.

Table 9
Concern with Pollution in Bay
by State
(Percent of all respondents)

	$\frac{DC}{n=454}$	$\frac{MD}{n=501}$	$\frac{PA}{n=493}$	$\frac{VA}{n=513}$	<u>Total</u> n=1958
Very concerned	49%	57%	34%	. 53%	50%
Somewhat concerned	34	35	43	35	37
Not very concerned	9	4	11	7	7
Not at all concerned	· 7	4	12	4	6
	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

We also examined opinion differences on safe water quality by state, though these differences were not statistically significant. Nearly 70% each in the District of Columbia, Maryland and Virginia said the highest water quality safety priority should be for aquatic life. In Pennsylvania 60% reported that making the water safe for aquatic life should be the highest priority (see Table 10).

Table 10
Highest Safety Priority
by State\*
(Percent of respondents meeting criteria)

	<u>DC</u> n=197	$\frac{MD}{n=315}$	<u>PA</u> n=139	$\frac{VA}{n=282}$	<u>Total</u> n=998
Swimming	2%	1%	2%	1%	1%
Eat seafood	14	10	17	12	12
Aquatic life	67	67	60	70	67
All equal	16	22	21	17	20
	100%	100%	100%	100%	100%
	20070	20070	10070	10070	10070

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

When asked what the most serious cause of pollution was in the Bay, respondents in Maryland (33%), Pennsylvania (37%), and Virginia (29%) were more likely to cite business and industry over all other sources (see Table 11). Respondents in the District of Columbia cited sewage treatment plants (23%) as the most serious cause, however that was followed closely by business and industry (22%). Commercial shipping spills was cited 19% of the time by Virginia respondents, 14% of the time by Maryland respondents, 14% of the time by District of Columbia respondents, and farming was cited 11% of the time by Pennsylvania respondents. Sewage treatment was cited third most often as the most serious cause of pollution in the Bay by Marylanders (16%), Pennsylvanians (15%) and Virginians (15%) (see Table 11).

Table 11
Most Serious Cause of Pollution by State\*

	<u>DC</u> n=423	MD n=469	<u>PA</u> n=453	<u>VA</u> n=466	<u>Total</u> n=1805
Sewage Treatment	23%	16%	15%	15%	16%
Landfills	6	7	10	4	6
Farming	4	8	11	8	8
Commercial Ship. Spills	14	14	10	19	15
Construction	3	3	3	2	2
Business/Industry	22	33	37	29	32
Population Growth	8	8	7	11	9
Rec. Boating	8	4	3	6	4
Individuals	11	8	5	7	7
-	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Respondents were asked how important restoration of the Bay was compared to other social, economic and environmental problems which federal, state, and local governments must resolve. About 60% of Maryland respondents thought that the Bay restoration was one of the most important problems governments must resolve. About 50% of Virginia and District of Columbia respondents thought it was one of the most important problems and about 40% of Pennsylvania respondents thought so. (see Table 12).

Table 12
Importance of Bay Restoration
by State\*

(Percent of all respondents)

	$\frac{DC}{n=441}$	MD n=499	<u>PA</u> n=488	$\frac{VA}{n=503}$	<u>Total</u> n=1933
One of the most important	48%	57%	42%	49%	50%
Important, but not the most	37	35	48	43	41
One of the least important	11	7	8	.7	7
Not important at all	3	1	2	1	1
-					<del></del>
	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

When respondents were asked if the current effort to reduce pollution in the Bay was too much, about right, or too little, about six in ten respondents in Maryland, Pennsylvania, Virginia, and the District of Columbia thought that the current efforts to reduce pollution in the Bay were too little (see Table 13), though these differences between states are not statistically significant.

Table 13
Effort to Reduce Bay Pollution
by State\*
(percent of respondents answering)

	<u>DC</u> n=374	MD n=436	$\frac{PA}{n=377}$	$\frac{VA}{n=432}$	<u>Total</u> n=1631
Too much	7%	5%	5%	3%	4%
About right	29	35	37	34	35
Too little	64	60	58	62	61
	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Respondents in each of the four areas were asked their perceptions on how much their state government has helped manage pollution reduction in the Bay. Maryland respondents were more likely to say that their government had helped a great deal (18%) than respondents in the other states reported. Respondents in the District of Columbia were more likely to say that their government helped little (45%) or none (15%) than respondents in the other states. Nearly eight out of ten respondents in both Virginia (78%) and Maryland (78%) thought that their governments had either helped a great deal or some in reducing pollution in the Bay. About seven out of ten respondents in Pennsylvania thought their government had helped some or a great deal (see Table 14).

Table 14
Has State Government Helped Manage
Bay Pollution Reduction By State\*
(Percent of all respondents)

	$\frac{DC}{n=362}$	MD n=431	<u>PA</u> n=368	$\frac{VA}{n=419}$
Great deal	11%	18%	13%	9%
Some	30	60	60	67
Little	45	18	23	19
None	15	4	4	4
	400 %	100%	100%	100~
	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Respondents were asked if they or anyone in their household had participated in any Bay pollution reduction activities. Nearly nine out of ten in the District of Columbia said neither they nor anyone else in the household had participated in any pollution reduction activities, as did nine out of ten in Pennsylvania, and eight out of ten in Virginia. In Maryland nearly seven out of ten said neither they nor anyone in their household had participated in any Bay pollution reduction activities (see Table 15).

Table 15
Participated in Bay Cleanup
by State\*
(Percent of all respondents)

	<u>DC</u> n=467	$\frac{MD}{n=503}$	$\frac{PA}{n=500}$	$\frac{VA}{n=512}$	<u>Total</u> n=1967
Yes	14%	34%	7%	18%	21%
No	86	66	93	82	79
	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100 due to rounding.

Overall, respondents describing their level of pollution reduction activity in the environment in general as very active was 17% (see Table 16). Approximately half of respondents in all areas said they were somewhat active, and about a third of respondents in all areas said they were not very active in helping to reduce pollution in general in the environment. The differences between the states are not statistically significant.

Table 16
Level of Pollution Reduction Activity
by State\*
(Percent of all respondents)

	<u>DC</u> n=465	MD n=504	<u>PA</u> n=506	<u>VA</u> n=518	<u>Total</u> n=1982
Very active	17%	17%	17%	17%	17%
Somewhat active	46	51	50	54	51
Not very active	37	32	33	29	32
	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100% due to rounding.

We also examined the differences between the total sample and individual states on funding issues. We asked respondents whether new funding for improving the Bay environment should be spent mostly on prevention of additional pollution or on repairing damage already caused by pollution. Similar to the overall sample results, Virginia and Pennsylvania respondents were more likely to cite prevention over repair and District of Columbia respondents more likely to cite repair. Marylanders were evenly split on this issue (see Table 17).

Those who said funding should be spent on preventing additional pollution were asked where the funds should be spent. There was little difference between state results and the overall sample. Overall, 40% of respondents said funding should be spent on enforcement. However, in District of Columbia 32% said enforcement. The differences between the states are not statistically significant.

Overall results on repairing the damage already caused by pollution issue were similar to the state results with the exception of District of Columbia. Overall, 19% thought funding for repair should be spent on restoring wildlife areas, while 10% of DC respondents thought that should be the priority. Overall, 54% thought funding for repair should be spent on reducing water pollution, while 63% in DC thought so (see Table 19).

Table 17
Funding to Prevent Pollution or to Repair Damage by State\*

(Percent of all respondents)

	<u>DC</u> n=445	MD n=496	$\frac{PA}{n=485}$	<u>VA</u> n=494	<u>Total</u> n=1916
Prevention	44%	43%	51%	48%	47%
Repair	48	43	38	40	41
Other	8	13	11	12	12
	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100% due to rounding.

Table 18
How to spend Pollution
Prevention Funds by State\*
(Percent of all respondents)

	<u>DC</u> n=189	$\frac{MD}{n=208}$	$\frac{PA}{n=232}$	$\frac{VA}{n=228}$	<u>Total</u> n=859
Education	31%	33%	28%	27%	30%
Scientific Research	16	9	11	10	10
Enforcement	32	39	42	42	40
Tech Assistance to Volunteer Groups	11	8	14	13	12
Other	10	10	5	8	8
· .	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100% due to rounding.

Table 19
How to Spend Pollution
Repair Funds by State
(Percent of all respondents)

	<u>DC</u> n=207	MD n=206	<u>PA</u> n=175	$\frac{VA}{n=195}$	$\frac{\text{Total}}{n = 764}$
Restore wildlife	10%	18%	21%	20%	19%
Replenish fish	8	9	5	10	9
Public par.	10	8	10	8	8
Reduce water poll.	63	54.	50	56	54
Other	9	11	14	6	10
	100%	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100% due to rounding.

# 3. Opinions by Distance from the Bay

In this section the data are analyzed by the distance between where the respondent lives and the Chesapeake Bay. Respondents were grouped into three categories: less than fifty miles from the Bay, between fifty to one hundred miles from the Bay, and over one hundred miles from the Bay. Sixty percent of the respondents lived less than fifty miles, 21% lived between fifty to one hundred miles from the Bay, and 19% lived over one hundred miles from the Bay.

Familiarity with the Chesapeake Bay was correlated with distance. Of those respondents who lived less than 50 miles, 61% were very or somewhat familiar with the Chesapeake Bay. Of the respondents who lived between fifty and one hundred miles from the Bay 43% were very or somewhat familiar with it. The respondents who lived over 100 miles from the Bay were the

least familiar; 34% were very or somewhat familiar. Unless otherwise noted, the differences by distance reported in this section are statistically significant at the .05 level.

Concern with the pollution in the Chesapeake Bay is also correlated with distance. Ninety percent of those respondents who live within fifty miles are either very much or somewhat concerned about the amount of pollution in the Bay. Eighty-four percent of those who live within fifty to one hundred miles from the Bay are either very much or somewhat concerned about pollution in the Bay. Similarly, 80% of those who live over 100 miles from the Bay who are very much or somewhat concerned.

Respondents who live closer to the Bay are also more likely to feel that the restoration of the Bay is one of the most important problems which state and district governments must solve. Fifty-four percent of those respondents who live less than 50 miles of the Bay felt restoration of the Chesapeake Bay to be one of the most important issues compared to 44% of those respondents who live between fifty and one hundred miles, and 45% of those who live over one hundred miles from the Bay (see Table 20).

Table 20
Distance from the Chesapeake Bay
by Importance of Bay Restoration
(Percent of all respondents)

	Within 50 Miles n=1199	Between 50- 100 Miles n=423	Over 100 Miles n=381
One of the Most Important	54%	44%	45%
Important, but not the most	37	48	47
One of the least important	8	6	6
Not important at all	1	2	1
		·	<del></del>
	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; rows may not add to 100% due to rounding.

Distance from the Bay is strongly correlated with the respondent or a member of the respondent's household having participated in Chesapeake Bay pollution reduction activities. Twenty-eight percent of those respondents who lived within fifty miles have either participated or had a household member participate, while 14% of those who lived between fifty and one hundred miles and 6% of those who lived over one hundred miles from the Bay have participated or had a household member participate in Bay pollution reduction activities.

Sixty-three percent of those respondents who live within fifty miles of the Bay reported that the current effort to reduce Bay pollution is too little. Similarly, 58% percent of the respondents who live fifty to one hundred miles away and 55% of those who live over one

hundred miles away feel current efforts are too little. Few respondents felt current efforts were too much: 5% of those less than fifty miles, 5% fifty to one hundred, and 3% living over one hundred miles away.

Of those respondents who live less than fifty miles from the Bay, 49% reported that they or a household member had stopped using a household product because of concern that it was polluting the waterways. Forty-six percent of those who live between fifty and one hundred miles of the Bay have stopped using such products and 42% of those respondents who live over one hundred miles from the Bay have stopped using a product because of concern about pollution.

The following table illustrates use of the Chesapeake Bay for recreational purposes over the past year by distance from the Bay. Those respondents who live over one hundred miles from the Bay are less likely than those living closer to have used the Bay at all during the past year. Also, 9% of those respondents who live within 50 miles use the Bay weekly for recreation.

Table 21
Distance from the Chesapeake Bay by
How Often Use Bay for Recreation
(Percent of all respondents)

	Within 50 Miles n=1199	Between 50- 100 Miles n=423	Over 100 Miles n=381
Weekly	9%	2%	1%
Monthly	8	8	1
A Few Times A Year	42	41	31
Not at all	41	49	67
	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; rows may not add to 100% due to rounding.

Pollution in the Chesapeake Bay had the greatest impact on the recreation of those respondents who live within fifty miles of the Bay. Twenty-six percent of these respondents indicated that the pollution in the Chesapeake Bay caused them to stop doing, or do less of, things they used to do for recreation. This figure is 14% for both those who live between fifty and one hundred miles and those who live further than one hundred miles from the Bay.

Regardless of distance, the majority of respondents in each area indicated they believe that Bay pollution is much worse today than ten years ago, and that business and industry were the most serious cause of pollution. Farming was considered to be the least serious cause of pollution in the Chesapeake Bay by all respondents with no differences by distance from the Bay.

# 4. Differences by other Demographic Characteristics

#### Gender

In this section the relationship of demographic characteristics to attitude, behavior, and knowledge are analyzed. When we examined familiarity (both very familiar and somewhat familiar) by gender, males were found to more familiar (58%) with the Bay than females (46%). This difference is statistically significant as are all the differences reported in this section unless otherwise noted (see Table 22). However, when the level of concern (both very concerned and somewhat concerned) was compared by gender that gap closed to just two percent which is not a statistically significant difference.

About 75% of males and 80% of females said they had not participated in any Bay pollution reduction activities. Only 17% of both males and females said they were very active in helping to reduce pollution in the environment in general, about half of both said they were somewhat active, and about a third of each were not very active.

Table 22
Familiarity with the Bay
Gender\*
(Percent of all respondents)

	Male n=970	Female $n=1033$	Total n=2004
Very familiar	18%	10%	14%
Somewhat familiar	40	36	38
Not very familiar	23	22	22
Not at all familiar	19	32	26
	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100% due to rounding.

#### Race

With regard to familiarity, 55% of whites, 43% of blacks and 42% of other races were either very or somewhat familiar with the Bay (see Table 23). However, 88% of whites, 82% of blacks and 89% of other races were either very or somewhat concerned with pollution in the Bay. About 70% of whites, 50% of blacks and 75% of other races thought the highest safety priority for water quality should be for aquatic life. A third of blacks, 18% of whites and 13% of other races thought all had equal priority. When asked about the current effort to reduce pollution in the Bay, about half of both whites and blacks thought the effort was too little, while somewhat more than half (56%) of other races thought the effort was too little. About a third of whites, a quarter of blacks and 20% of other races thought the effort was about right.

About two-thirds of all racial groups thought chemicals were more harmful to aquatic life

than was animal waste or sewage. When asked if they or household members had participated in any Bay pollution reduction activities, 76% of whites, 86% of blacks and 73% of other races said they had not participated. Less than one in five of the respondents in any racial category (19% blacks, 16% whites, 15% other races) said they were very active in reducing pollution in the environment in general.

Table 23
Familiarity with the Bay
by Race
(Percent of all respondents)

	White n = 1531	Black n=358	Other n=94	Overall n=1983
Very familiar	15%	8%	12%	14%
Somewhat familiar	40	35	30	38
Not very familiar	21	28	28	22
Not at all familiar	24	29	29	26
•	<del> </del>			
	100%	100%	100%	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; columns may not add to 100% due to rounding.

## Age

Respondents' answers were analyzed by age group. Respondents were grouped into the following categories: 18-24 years of age (11%), 25-34 (21%), 35-44 (23%), 45-54 (19%), 55-64 (12%), and 65 and over (14%).

Respondents were asked how much pollution in the Bay concerned them. Table 24 shows the breakdown by age. Ninety-two percent of those respondents aged 35-44 rated themselves either very much concerned or somewhat concerned. The group that rated lowest on concern

was respondents aged 65 and over.

Table 24
Concern about Chesapeake Bay Pollution by Age
(Percent of all respondents)

	Very Much Concerned	Somewhat Concerned	Not very Concerned	Not at all Concerned	
18-24 (n=225)	44%	42%	12%	2%	100%
25-34 (n=394)	48%	40	6	5	100%
35-44 (n=454)	56%	36	5	2	100%
45-54 (n=367)	52%	35	7	7	100%
55-64 (n=221)	52%	33	7	8	100%
65+ (n=255)	42%	33	10	15	100%
Total (n=1915)	50%	37	7	6	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; rows may not add to 100% due to rounding.

Regardless of age group, a majority of respondents indicated that they believe the highest safety priority for water quality in the Chesapeake Bay should be to make the Bay safe for aquatic life. Also a majority of respondents, regardless of age group, believe that chemicals are more harmful to aquatic life than animal waste and sewage.

For age groups from 18-64, approximately 20% indicate that they or someone in their household has participated in a Chesapeake Bay pollution reduction activity. This contrasts with

10% of the respondents over 65 years old.

Respondents age 55-64 were most likely to rate themselves as very active in helping to reduce pollution in the environment (see Table 25). This was followed by the groups from 35-44 and 45-54 at 17% each. The group which had the smallest percentage of respondents rate themselves as very active was those 18-24 (12%).

Table 25
Level of Pollution Reduction
Activity by Age
(Percent of all respondents)

	Very Active	Somewhat Active	Not Very Active	
18-24 (n=225)	12%	58%	30%	100%
25-45 (n=394)	17%	58	25	100%
35-44 (n=454)	17%	58	25	100%
45-55 (n=367)	17%	51	32	100%
55-64 (n=221)	25%	40	35	100%
65+ (n=255)	14%	34	51	100%
Total (n=1915)	17%	52	32	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; rows may not add to 100% due to rounding.

### **Income**

Respondents' answers were also analyzed by reported household income: 5% of the respondents reported an income of \$12,000 or less, 11% reported \$12,000 - \$20,000, 18% reported \$20,000 - \$30,000, 32% reported \$30,000 - \$50,000, 20% reported \$50,000 - \$75,000, and 14% reported \$75,000 - \$100,000.

Twenty-two percent of the respondents in the \$12,000 - \$20,000 income range rate themselves as very active in helping to reduce pollution in the environment generally compared to only 13% of the respondents in the \$75,000 - \$100,000 (See Table 26). Of the respondents who reported income of \$12,000 or less, 46% rate themselves as not very active in helping to reduce pollution.

Table 26
Level of Pollution Reduction
Activity by Income
(Percent of all respondents)

	Very Active	Somewhat Active	Not very Active	
\$12,000 or less (n=76)	16%	38%	46%	100%
12,000-20,000 (n=163)	22	40	38	100%
20,000-30,000 (n=287)	18	49	34	100%
30,000-50,000 (n=514)	15	60	24	100%
50,000-75,000 (n=329)	20	51	29	100%
75,000-100,000 (n=237)	13	59	29	100%
Total $n=1605$	17	53	30	100%

<sup>\*</sup> Weighted sample used; "don't know" and "refused" responses were excluded; rows may not add to 100% due to rounding.

In every income group, the majority of respondents felt that chemicals are more harmful to fish and other aquatic life than animal waste and sewage. A majority of respondents in every income category who felt that current efforts to reduce pollution in the Chesapeake Bay are too little.

Thirty percent of the respondents with incomes between \$50,000 - \$100,000 reported that either they or a member of their household had participated in a Bay pollution reduction activity.

In contrast, 19% of those with incomes of \$30,000 - \$50,000, 15% of those with incomes of

\$20,000 - \$30,000, 12% of those with incomes of \$12,000 - \$20,000, and 15% of those with incomes of \$12,000 or less said that they or a household member had participated in a Chesapeake Bay pollution reduction activity.

#### 5. Survey Methods

### <u>Sample</u>

The random digit dial (RDD) sample was selected using a standard two-stage, Waksberg-Mitofsky design. This design gives all households an equal chance of inclusion in the survey, regardless of whether or not their phone number is listed. The target population for this telephone survey was adults age 18 or older, residing in telephone households in the watershed counties of the Chesapeake Bay. The average cluster size, defined as identified working residential telephone numbers, was approximately 7.5

Within each sample household, the target respondent was selected at random from among all adults residing there. The Next Birthday selection method was used. In this procedure, the interviewer asks to interview the adult, 18 or older, who will have the next birthday. This method avoids the bias of selecting whoever answers the phone or happens to be home at the time of the call. It provides a random respondent without having to ask intrusive questions about household composition.

## Questionnaire and Data Collection

Preceding the pretest, interviewers went through a structured training session. There was

<sup>&</sup>lt;sup>5</sup> The sample frame was the Bellcore list of all working area codes - prefix combinations.

a mix of experienced and newly recruited interviewers. Experienced interviewers are best able to identify characteristics of the study which could potentially pose problems. However, less experienced interviewers are often more likely to notice additional problems that may have been naturally compensated for, or dealt with, by the more experienced interviewers.

In the pretest training session, interviewers were given an outline of standard pretest procedures and specific items to be aware of such as:

- Respondent reaction to the survey introduction
- Any issues regarding selecting the random respondent
- Identifying question wording which is ambiguous or awkward to read
- Inconsistencies in question logic
- Respondents' comments about questions (to be recorded verbatim)
- Inconsistencies in skip patterns

Following the pretest, a debriefing was held in which interviewers and supervisors reviewed any problems encountered and made suggestions for improvements in the questionnaire. Based on the pretest results, the final version of the questionnaire was developed.

Prior to main data collection, a group training session was conducted. The training session provided information on the background and goals of the study. This included:

- Purpose of the study
- Sponsor and project director
- Eligible respondent
- Goals of the study
- Target cooperation rate
- Schedule
- Refusal conversion plans

The interviewers were trained in procedures used in identifying the correct respondent.

This entailed problem solving exercises in addition to written instructions. The supervisors

coached each interviewer by asking questions that a respondent might ask.

A major part of the training involved persuading reluctant respondents to cooperate. The training manual contained suggested responses to a number of questions frequently asked by reluctant respondents. The supervisors assumed the role of respondent in this exercise. This practice continued until all interviewers could handle these situations comfortably and correctly.

The next stage of the training required interviewers to go through the questionnaire noting the question-by-question instructions and skip patterns. Interviewers read the survey instrument repeatedly to supervisors in order to familiarize themselves with the questionnaire and to learn how to correctly pace the interview. Finally, interviewers worked in pairs, with one interviewer acting as the respondent. Then, the pair switched roles, providing an opportunity for both to act as the interviewer.

During data collection, interviewers were monitored from the onset of the study to its completion. Supervisors regularly monitored each interviewer's calls and rated them on:

- Introduction and respondent selection
- Properly administering the questionnaire (reading the questions verbatim, probing, keeping respondents on track)
- Correctly recording the respondents' answers
- Refraining from personal comments

In addition to monitoring, the Field Manager received daily reports on each interviewer's response rate and refusal rate. Interviewers who experienced difficulties were retrained by a supervisor. If there was no improvement by the interviewer after the retraining, the interviewer was removed from the study.

An experienced telephone supervisor was on duty at all times to monitor quality and

handle any problems. Shifts were scheduled both during the day, in the evenings, and on weekends. All telephone numbers in the sample were tried up to 20 times. Respondents who initially refused were recontacted by a specialist in refusal conversion.

Interviewing for the study occurred from October 6, 1993 to January 27, 1994. All interviewing was conducted from the SRC Telephone Facility on the College Park campus.

# Survey Rates and Results

A sample of 5144 telephone numbers were generated from the RDD design. Of these, 2812 were identified as households. Of these households, 71% agreed to the interview, 17% refused, 8% were non-contacts, and the remaining 4% were miscellaneous problems such as respondent illness and non-English language. A total of 2,004 interviews were completed. The refusal conversion effort was successful. Of the households that initially refused the interview, 51% agreed when re-contacted.

The sample results are summarized in Table 27.

Table 27
Final Sample Disposition

Total Sample	5144					
Non-households	2161					
Households status (unknown)	171		<u>DC</u>	<u>MD</u>	<u>VA</u>	<u>PA</u>
Households	2812	100%	696 100%	670 100%	711 100%	735 100%
interviews refusals non-contacts problems	2004 463 244 101	71% 17% 8% 4%	472 68% 121 17% 73 11% 30 4%	502 75% 96 15% 56 8% 16 2%	513 72% 123 17% 50 7% 25 4%	517 70% 123 17% 65 9% 30 4%

### Sample Weights

Two design-level sample weights are necessary for the correct analysis of each sample region. First, since every telephone number had an equal probability of selection into the sample, those households with more than one telephone number had higher chances of inclusion. A question was asked to determine how many non-business telephone numbers each household had. This item was used to construct the first weight. Secondly, since only one adult was selected from among all adults in the household, a weight is necessary to adjust for household size.

In addition to the design weights, we felt it advisable to post-stratify on one demographic variable, education, for all four regions and one other variable, gender, for the District of Columbia. Education corrects for under-representation of people with less than a high school education and over-representation of those with a college degree. Gender corrects for an under-representation of males. These under-representations are due mainly to varying

cooperation rates. The effect of weighting by education and gender is to adjust the sample distribution to match population proportions based on census data.

For user convenience, the two design weights and the post-stratification weights have been combined into one overall region weight called **REGWT**. This weight is used when the regions are analyzed individually, for example, when only the opinions of Pennsylvania residents are examined.

Because the sample allocated to each region was not proportional to that region's percentage of the total survey area population, an additional weight adjustment is necessary when regions are combined. The use of this weight realigns the sample distribution to match the population proportions. This weight is call **WEIGHT** and is used when the sample from all regions is analyzed together.

All frequencies provided in this report and appendices are appropriately weighted. Both the region weight (REGWT) and the combined weight (WEIGHT) are included in the data set. For any further analysis the proper weight variable should be assigned.

6. Appendices

# The questionnaire

>int2< Hello, I'm calling from the University of Maryland. My name is We are conducting a study for the U.S. Environmental Protection Agency about people's views on the environment, water pollution, and its effect on recreational activities. For this study I need to speak with the adult in your household, who is 18 or older and will have the NEXT birthday. Who would that be?

\*\* IF INFORMANT DOES NOT KNOW ALL THE BIRTHDAYS ASK: [equiv int1] Of the ones you do know who will have the NEXT birthday?

- <1> INFORMANT HAS NEXT BIRTHDAY (BEGIN SURVEY) [goto sw1]
- <2> SOMEONE ELSE HAS NEXT BIRTHDAY
- <7> RESPONDENT PROBLEM (LANGUAGE, HEALTH, AGE, OTHER) [goto lang]
- <8> NON HOUSEHOLD BUSINESS, GROUP HOME, PAY OR CAR PHONE, HOSPITAL [goto Res1]
- <9> IF CALL BACK OR REFUSAL [goto RES1]
- <n> \*\* NO ANSWER / TROUBLE WITH LINES [goto resl]
- <h> \*\* HOME RECORDER / ANSWERING SERVICE [goto rrss]

===>

>int3< I need to speak with that person please.

Hello, I'm calling from the University of Maryland. My name is We are conducting a study for the U.S. Environmental Protection Agency about people's views on the environment, water pollution, and its effect on recreational activities.

- <1> TO CONTINUE WITH INTERVIEW [goto sw1]
- <7> RESPONDENT PROBLEM (LANGUAGE, HEALTH, AGE, OTHER) [goto lang]
- <9> IF CALL BACK OR REFUSAL [goto RES1]

===>

>int4< May I speak with [fill cont]?

Hello, I'm calling from the University of Maryland. My name is We are conducting a study for the U.S. Environmental Protection Agency about people's views on the environment, water pollution, and its effect on recreational activities.

- <1> TO CONTINUE WITH INTERVIEW [goto swl]
- <7> RESPONDENT PROBLEM (LANGUAGE, HEALTH, AGE, OTHER) [goto lang]
- <9> IF CALL BACK OR REFUSAL [goto RES1]
- <n> \*\* NO ANSWER / TROUBLE WITH LINES {goto res1}
- <h> \*\* HOME RECORDER / ANSWERING SERVICE [goto rrss]
- <x> IF [fill cont] IS NOT CORRECT RESPONDENT (GO BACK TO FIRST INTRO) ===>
- >Q1< How familiar are you with the SUSQUEHANNA RIVER? Are you:
  - <1> very familiar
  - <2> somewhat familiar
  - <3> not very familiar
  - <4> not at all familiar.
  - <8> DK
  - <x> IF INTERVIEW TERMED OR NEVER BEGUN [goto nono]

CLIENT.Q

===>

```
>Q2<
        How familiar are you with the CHESAPEAKE BAY? Are you:
        <1> very familiar
        <2> somewhat familiar
        <3> not very familiar
        <4> not at all familiar.
        <8> DK
        <x> IF INTERVIEW TERMED OR NEVER BEGUN [goto nono]
        What kinds of things indicate to YOU that a body of water is polluted?
>03<
>cpa2< [if AREA eq <PA> goto Q4] [store <9> in Q4] [goto Q5]
        Would you say that pollution in the Susquehanna concerns you
>Q4<
        very much, somewhat, not very much or not at all?
        <1>
                VERY MUCH
        <2>
                SOMEWHAT
                NOT VERY MUCH
        <3>
        <4>
                NOT AT ALL
        <8>
                DK
        ===>
        Why is that?
>Q4a<
        ===>
        Would you say that pollution in the CHESAPEAKE BAY concerns you
>Q5<
        very much, somewhat, not very much or not at all?
        <1>
                VERY MUCH
        <2>
                SOMEWHAT
        <3>
                NOT VERY MUCH
        <4>
                NOT AT ALL
        <8>
                DK [goto chk1]
        ===>
        Why is that?
>Q5a<
        ===>
>chk1< [if Q1 ge <3> goto chk2]
        In the last year, that is since [fill mon] 1992, on the average have
>Q6<
        YOU used the Susquehanna River for recreation weekly, monthly, a few
        times a year, or not at all?
        <1>
               WEEKLY
        <2>
               MONTHLY
        <3>
               A FEW TIMES A YEAR
        <4>
               NOT AT ALL [goto Q8]
        <8>
               DK [goto Q8]
        ===>
>Q7a<
        In the last year, have you used the Susquehanna for FISHING?
        (CRABBING, CLAMMING ARE INCLUDED)
        <0>
               NO
        <1>
               YES
        <8>
               DK
        ===>
>Q7b<
        In the last year, have you used the Susquehanna for
        SWIMMING or BOATING?
        <0>
               NO
        <1>
               YES
        <8>
               DK
```

very unsafe?

```
In the last year, have you been sightseeing along the Susquehanna?
>Q7c<
        <0>
        <1>
               YES
       <8>
               DK
        ===>
>Q8<
        Has pollution in the Susquehanna River caused you to stop doing, or do
        less of, ANY of the things you used to do for recreation?
        <0>
                NO
        <1>
                YES [goto Q8a]
        <8>
                DK
        ===>[goto chk2]
>Q8a<
        Why is that?
        ===>
       [if Q2 ge <3> goto chk3]
>chk2<
        In the last year, that is since [fill mon] 1992, on the average have
>Q9<
        you used the CHESAPEAKE BAY for recreation weekly, monthly, a few times
        a year, or not at all?
        <1>
               WEEKLY
        <2>
               MONTHLY
        <3>
               A FEW TIMES A YEAR
        <4>
               NOT AT ALL [goto Q10]
        <8>
               DK [goto Q10]
        ===>
        In the last year, have you used the Chesapeake Bay for FISHING?
>09a<
        (CRABBING, CLAMMING ARE INCLUDED)
        <0>
               NO
        <1>
               YES
        <8>
               DK
        ===>
>Q9b<
        (In the last year, have you used the Chesapeake Bay) for
        SWIMMING or BOATING?
        <0>
               NO
        <1>
               YES
        <8>
               DK
>Q9c<
        In the last year, have you been sightseeing in the CHESAPEAKE BAY
        region?
        <0>
               NO
        <1>
               YES
        <8>
               DK
        Has pollution in the CHESAPEAKE BAY caused you to stop doing, or do
>Q10<
        less of, ANY of the things you used to do for recreation?
        <0>
                NO
        <1>
                YES [goto Q10a]
        <8>
                DK
        ===>[goto chk3]
>Q10a< Why is that?
        ===>
>chk3<
       [if Q1 ge <3> goto chk4]
>Q11a< Do you think that the current water quality in the Susquehanna River
        makes it very safe for swimming, somewhat safe, somewhat unsafe, or
```

```
<1>
        VERY SAFE
        SOMEWHAT SAFE
<2>
       SOMEWHAT UNSAFE
<3>
<4>
        VERY UNSAFE
<5>
        DEPENDS WHERE (VOLUNTEERED)
<8>
        DK
===>
```

>chk4< [if Q2 ge <3> goto chk5]

>Q11b< Do you think that the current water quality in the Chesapeake Bay makes it very safe for swimming, somewhat safe, somewhat unsafe, or very unsafe?

Page 1-4

<1> VERY SAFE SOMEWHAT SAFE <2> <3> SOMEWHAT UNSAFE <4> VERY UNSAFE <5> DEPENDS WHERE (VOLUNTEERED) <8> DK ===>

>chk5< [if Q1 ge <3> goto chk6]

>Q12a< Do you think that the current water quality in the Susquehanna River makes it very safe to eat fish and other seafood from the Susquehanna River, somewhat safe, somewhat unsafe, or very unsafe?

<1> VERY SAFE <2> SOMEWHAT SAFE <3> SOMEWHAT UNSAFE <4> VERY UNSAFE <8> DK

===>

>chk6< [if Q2 ge <3> goto chk7]

>Q12b< Do you think that the current water quality in the Chesapeake Bay makes it very safe to eat fish and other seafood from the Chesapeake Bay, somewhat safe, somewhat unsafe, or very unsafe?

> <1> VERY SAFE <2> SOMEWHAT SAFE <3> SOMEWHAT UNSAFE <4> VERY UNSAFE <8> DK

===>

>chk7< [if Q1 ge <3> goto chk8]

>Q13a< Do you think that the current water quality in the Susquehanna River makes it very safe for fish and other aquatic life that live in the Susquehanna River, somewhat safe, somewhat unsafe, or very unsafe?

<1> VERY SAFE <2> SOMEWHAT SAFE SOMEWHAT UNSAFE <3> <4> VERY UNSAFE <8> DK ===>

>chk8< [if Q2 ge <3> goto ncks]

>Q13b< Do you think that the current water quality in the Chesapeake Bay makes it very safe for fish and other aquatic life that live in the Bay, somewhat safe, somewhat unsafe, or very unsafe?

<2> SOMEWHAT SAFE <3> SOMEWHAT UNSAFE

<4> **VERY UNSAFE** 

<8> DK

===>

>Q14a< Now, just considering the Susquehanna River, do you think that the highest priority should be to make it

[fill those that were not answered 'very safe']

- <1> SAFE FOR SWIMMING
- <2> SAFE TO EAT SEAFOOD FROM
- <3> SAFE FOR FISH AND OTHER AQUATIC LIFE
- <4> EQUALLY HIGH PRIORITIES (VOLUNTEER)
- <8> DK

===>

>Q14b< Just considering the Chesapeake Bay, do you think that the highest priority should be to make it

[fill those that were not answered 'very safe']

- <1> SAFE FOR SWIMMING
- <2> SAFE TO EAT SEAFOOD FROM
- <3> SAFE FOR FISH AND OTHER AQUATIC LIFE
- <4> EQUALLY HIGH PRIORITIES (VOLUNTEER)
- <8> DK

===>

>chk9< [if Q1 ge <3> goto ck10]

>Q15< Compared to ten years ago, would you say that the Susquehanna River is more polluted than it was, less polluted, or about the same?

- <1> MORE POLLUTED [goto Q15a]
- <2> LESS POLLUTED [goto Q15b]
- <3> ABOUT THE SAME [goto ck10]
- <8> DK [goto ck10]

>Q15a< Why do you think that it is more polluted?

===> [goto ck10]

>Q15b< Why do you think that it is less polluted?

===>

>ck10< [if Q2 ge <3> goto cpa8]

>Q16< Compared to ten years ago, would you say that the Chesapeake Bay is more polluted than it was, less polluted, or about the same?

- <1> MORE POLLUTED [goto Q16a]
- LESS POLLUTED [goto Q16b] <2>
- <3> ABOUT THE SAME [goto cpa8]
- <8> DK [goto cpa8]

>Q16a< Why do you think that it is more polluted? ===> [goto cpa8]

>Q16b< Why do you think that it is less polluted?

>cpa8< [if AREA ne <PA> goto chkp][if Q15 eq <1> goto Q17a][if Q16 eq <1> goto Q17a]

>Q17< I'm going to name some possible causes of pollution in the Chesapeake Bay or its connecting rivers like the Susquehanna River. Please tell me which ones you think are the MAIN causes of pollution. TYPE <g> TO CONTINUE

===> [goto 1ro1]

>Q17a< I'm going to name some other possible causes of pollution in the Chesapeake Bay or its connecting rivers like the Susquehanna River including some you may have already mentioned. Please tell me which ones you think are the MAIN causes of pollution.

TYPE <q> TO CONTINUE

===> [equiv Q17]

>chkp< [if Q16 eq <1> goto Q17c]

>Q17b< I'm going to name some possible causes of pollution in the Chesapeake Bay or its connecting rivers. Please tell me which ones you think are the MAIN causes of pollution.

TYPE <g> TO CONTINUE

===>

>Q17c< I'm going to name some other possible causes of pollution in the Chesapeake Bay or its connecting rivers including some you may have already mentioned. Please tell me which ones you think are the MAIN causes of pollution.

TYPE <g> TO CONTINUE

===> [equiv Q17b]

QUESTIONS 18 TO 20b ASKED IN RANDOM ORDER

>Q18< How about municipal sewage treatment plants?

(Do you think municipal sewage treatment plants are one of the MAIN causes of pollution in the Chesapeake Bay or its connecting rivers?)

<0> NO [goto f1]

<1> YES [goto f2]

<8> DK [goto b1]

===>

>Q18a< How about landfills?

(Do you think landfills are one of the MAIN causes of pollution in the Chesapeake Bay or its connecting rivers?)

<0> NO [goto f3]

<1> YES [goto f4]

<8> DK [goto b2]

===>

>Q19< How about farming?

(Do you think farming is one of the MAIN causes of pollution in the Chesapeake Bay or its connecting rivers?)

<0> NO [goto f5]

<1> YES [goto f6]

<8> DK [goto b3]

===>

>Q19a< How about accidental spills from commercial shipping?
 (Do you think accidental spills from commercial shipping are one of
 the MAIN causes of pollution in the Chesapeake Bay or its connecting
 rivers?)</pre>

>Q20<

<1>

<8> ===>

```
April 28, 1994
                                                Page 1-7
        <0> NO [goto f7]
        <1> YES [goto f8]
        <8> DK [goto b4]
        ===>
>Q19b< Construction of roads, houses, and shopping centers?
        (Do you think construction of roads, houses, and shopping centers is
        one of the MAIN causes of pollution in the Chesapeake Bay or its
        connecting rivers?)
        <0> NO [goto f9]
        <1> YES [goto f10]
        <8> DK [goto b5]
        ===>
>Q19c< Other businesses and industry?
        (Do you think other business and industry are one of the MAIN causes
        of pollution in the Chesapeake Bay or its connecting rivers?)
        <0> NO [goto f11]
        <1> YES [goto f12]
        <8> DK [goto b6]
        ===>
>Q19d< How about population growth?
        (Do you think population growth is one of the MAIN causes of pollution
        in the Chesapeake Bay or its connecting rivers?)
        <0> NO [goto f13]
        <1> YES [goto f14]
        <8> DK [goto b7]
        ===>
        How about the disposal of garbage and sewage from recreational boats?
        (Do you think the disposal of garbage and sewage from recreational
        boats is one of the MAIN causes of pollution in the Chesapeake Bay or
        its connecting rivers?)
        <0> NO [goto f15]
        <1> YES [goto f16]
        <8> DK [goto b8]
>Q20b< How about things that individuals do that harm the bay?
        (Do you think that things individuals do that harm the bay are one
        of the MAIN causes of pollution in the Chesapeake Bay or its
        connecting rivers?)
        <0> NO [goto f17]
        <1> YES [goto f18]
        <8> DK [goto b9]
>Q20c< Are there any things I haven't mentioned that you think are
       MAIN causes of pollution in the Chesapeake Bay or its connecting
       rivers?
        <0>
                NO
```

>q21< I'm going to read to you the things you identified as serious causes of pollution.

YES - what are they?

You mentioned: [fill appropriate reasons]

Of these causes, which ONE do you think is the most serious cause of pollution in the Chesapeake Bay or its connecting rivers?

<1><2> fill <3> appropriate <4> response <5> categories <6> <7> <8> <9> <88> DK

===>

>q21a< You mentioned: [fill appropriate reasons] as NOT being serious causes of pollution.

Which ONE of these do you think contributes the least amount of pollution in the Chesapeake Bay or its connecting rivers?

<1> <2> fill <3> appropriate <4> response <5> categories <6> <7> <8> <9> <88> <-->

>Q22< Two types of pollution harm fish and other aquatic life in the Chesapeake Bay system. One comes from chemicals which directly harm the fish and other aquatic life. The other comes from animal waste and sewage which reduce the food supply for fish and other aquatic life.

Which of these do you think is most harmful to the aquatic life in the Chesapeake Bay system?

<1> CHEMICALS WHICH ARE DIRECTLY HARMFUL
<2> ANIMAL WASTE AND SEWAGE WHICH REDUCE FOOD SUPPLY
<8> DK
===>

>dist< [if AREA eq <DC> goto D22A]

<4> not important at all?

'>Q22A< As you know, there are many problems which federal, state, and local governments must resolve.

Compared to other social, economic, and environmental problems in [fill st], do you think the restoration of the Chesapeake Bay and its connecting rivers is:

<1> one of the most important <2> important but not one of the most important <3> one of the less important or

```
<8> DK
```

===> [goto q22]

>D22A< As you know, there are many environmental problems which federal and local governments must resolve.

> Compared to other social, economic, and environmental problems in the District, do you think the restoration of the Chesapeake Bay and its connecting rivers is:

- <1> one of the most important
- <2> important but not one of the most important
- <3> one of the less important or
- <4> not important at all?
- <8> DK

===>[equiv Q22A]

- Do you think that the current efforts to reduce pollution in the >q22< Chesapeake Bay are
  - <1> too much
  - <2> about right
  - <3> or too little [goto Q22a]
  - <8> DK

===> [goto Q23]

- >Q22a< What do you think is the MAIN problem which hampers the Bay pollution reduction effort?
- How much do you think the following groups have helped manage >Q23< pollution reduction in the Chesapeake Bay and its connecting rivers?

Do you think the [fill GOVT] government has helped a great deal, some, little, or none, to manage pollution reduction in the Chesapeake Bay system?

- <1> GREAT DEAL
- <2> SOME
- <3> LITTLE
- <4> NONE
- <8> DK [goto Q24]

===>

>Q23a< Can you tell me why you think that?

>Q24<

- The federal government? Do you think it has helped a great deal, some, little, or none to manage the pollution reduction in the Chesapeake Bay and its connecting rivers?
  - <1> GREAT DEAL
  - <2> SOME
  - <3> LITTLE
  - <4> NONE
  - <8> DK [goto Q25]

===>

- >Q24a< Can you tell me why you think that?
- Local governments? (Do you think they have helped a great deal, >Q25< some, little, or none to manage the pollution reduction in the Chesapeake Bay and its connecting rivers?)

```
April 28, 1994 Page 1-10
```

CLIENT.Q

<0>

<1>

NO

YES [goto Q28b]

```
<1>
               GREAT - DEAL
               SOME
        <2>
        <3>
               LITTLE
               NONE
        <4>
        <8>
               DK [goto q25]
        ===>
>Q25a< Can you tell me why you think that?
       Farming? (Do you think it has helped a great deal, some, little,
>q25<
       or none to manage the pollution reduction in the Chesapeake Bay and
        its connecting rivers?)
        <1>
               GREAT DEAL
        <2>
               SOME
        <3>
               LITTLE
        <4>
               NONE
        <8>
               DK [goto Q26]
>q25a< Can you tell me why you think that?
        Business and industry? (Do you think they have helped a great deal,
>Q26<
        some, little, or none to manage the pollution reduction in the
        Chesapeake Bay and its connecting rivers?)
        <1>
               GREAT DEAL
        <2>
               SOME
        <3>
               LITTLE
        <4>
               NONE
        <8>
               DK [goto Q27]
        ===>
>Q26a< Can you tell me why you think that?
        ===>
        Private citizens or organizations? (Do you think they have helped a
>Q27<
        great deal, some, little, or none to manage the pollution reduction in
        the Chesapeake Bay and its connecting rivers?)
        <1>
               GREAT DEAL
               SOME
        <2>
               LITTLE
        <3>
        <4>
               NONE
        <8>
               DK [goto Q28]
>Q27a< Can you tell me why you think that?
        As far as you know, Is the [fill GOVT] government
>Q28<
        working with other STATE governments to reduce pollution in the
        Chesapeake Bay and its connecting rivers?
        <0>
                NO
        <1>
                YES
        <8>
                DK
>Q28a< As far as you know, Is the [fill GOVT] government
        working with the FEDERAL government to reduce pollution in the
        Chesapeake Bay and its connecting rivers?
```

```
CLIENT.Q
```

```
<8>
                 DK
         ===>[goto Q29]
 >Q28b< Do you know what this group of governments working together is called?
         <0>
                 NO [goto Q29]
         <1>
                 YES
         ===>
 >Q28c< What is its name?
         <1>
                 CHESAPEAKE BAY PROGRAM
         <2>
                 ALLIANCE FOR THE CHESAPEAKE BAY
         <3>
                 CHESAPEAKE BAY FOUNDATION
         <4>
                 THE SAVE THE BAY FOUNDATION
         <5>
                 OTHER - SPECIFY
         <8>
                 DK
 >Q29<
        Have you or anyone in your household participated in any
        Chesapeake Bay pollution reduction activities?
                NO
         <1>
                YES
        <8>
                DK
        ===>
>Q30<
        Would you describe yourself as very active, somewhat active,
        or not very active in helping to reduce pollution in the environment
        generally?
        <1>
               VERY ACTIVE
        <2>
               SOMEWHAT ACTIVE
        <3>
               NOT VERY ACTIVE [goto Q30a]
        <8>
        ===> [goto Q31]
>Q30a< Is there something that would cause you to become more active
        in helping to reduce pollution in the environment?
        <0> NO
        <1> YES - SPECIFY
        <8> DK
        ===>
>Q31<
        Do you or any member of your household belong to an environmental
        group?
        <0>
               NO
        <1>
               YES -- Which ones (SPECIFY)
        <8>
        ===>
>Q32<
        Have you or anyone else in your household ever stopped using a
        product because you were concerned that it was polluting
        the waterways?
        <0>
                NO
        <1>
                YES -- What product was that?
        <8>
                DK
        Suppose some new funding became available for improving the environment
```

>Q33< of the Chesapeake Bay System. Some of this money would go to repair damage already done by pollution and some to prevent additional damage. Would you like to see most of the new money go to:

```
CLIENT.O
                         April 28, 1994
                                                 Page 1-12
                preventing additional damage by pollution or [goto 33a]
        <1>
                repairing damage already done by pollution [goto 33b]
        <2>
        <3>
                OTHER (SPECIFY)
        <8>
                DK
        ===> [goto Q34]
>33a<
        Should most of that money be spent on:
        <1>
                education
```

<2> scientific research

<3> enforcement of existing regulations

or technical assistance to volunteer groups? <4>

<5> OTHER (SPECIFY)

<8> DK

===> [goto Q34]

>33b< Should most of that money be spent on:

> restoring wildlife areas <1>

<2> replenishing the fish population

encouraging public participation <3>

<4> or reducing water pollution?

<5> OTHER (SPECIFY)

<8> DK

===>

Have you seen or heard any reports about reducing pollution in the >Q34< Chesapeake Bay?

<0> NO

<1> YES [goto Q34a]

<8> DK

===> [goto Q35]

>Q34a< Where was that?

===>

If you wanted more specific information on improving the Chesapeake Bay >Q35< environment where would you be MOST likely to get it?

>D2< Finally, I'd like to ask you some background questions. Including yourself, how many adults 18 years of age or older

> live in this household? <01-10> RECORD ACTUAL NUMBER

<11> MORE THAN 10

<99> NA-REF

How many children younger than 18 live in this household? >D3<

> <0> NONE

<1-7> RECORD ACTUAL NUMBER

<8> 8 OR MORE

<9> NA-REF

===>

>D5< In what year were you born?

> BEFORE 1900 <00>

<01-75> 19

<99> NA-REF

===>

Are you currently: >06<

> <1> Employed full time

> Employed part time <2>

or not employed at all? [goto D6a] <3>

<4> EMPLOYED BOTH FULL AND PART-TIME

```
CLIENT.Q
```

```
<9>
                 REF
         ===>
                 [goto D7]
 >D6a<
         Is that mainly because you are:
         <1>
                retired
         <2>
                 keeping house
         <3>
                temporarily unemployed
         <4>
                 a student
                 disabled
         <5>
         <6>
                 or something else: (SPECIFY)
        <9>
        ===>
>D7<
        What is the last grade or year of school you completed?
        <0>
                NONE
        <1-7>
                SOME ELEMENTARY
        <8>
                ELEMENTARY GRAD
        <9-11> SOME HIGH SCHOOL
        <12> HIGH SCHOOL GRAD
        <13-15> SOME COLLEGE
        <16>
                COLLEGE GRAD
        <17>
                SOME GRADUATE SCHOOL
        <18>
                GRADUATE OR PROFESSIONAL DEGREE
        <99>
                NA-REF
>D8<
        Are you of Spanish or Hispanic origin
        or descent?
        <0>
                NO
        <1>
                YES
        <8>
                DK
        <9>
                REF
        ===>
>D8a<
        Are you:
        <1>
                White
        <2>
                Black
        <3>
                Asian
        <4>
                or another race (SPECIFY)
        <5>
                HISPANIC (VOLUNTEER)
        <9>
                REF
        ===>
>D9<
        Are you currently:
        <1>
                married
        <2>
                separated
        <3>
                divorced
        <4>
                widowed
        <5>
                or have you never been married
        <9>
                NA-REF
        ===>
>D10< Do you own your home or rent it?
        <1>
                OWN
        <2>
              RENT
        <3>
                OTHER (SPECIFY)
        <9>
                REF
        ===>
>D11<
       Do you ever go sailing or boating for recreation?
        <0>
               NO
        <1>
               YES
        <9>
               REF
```

```
===>
          If you added together all the yearly incomes, before taxes, of
>D12<
          all the members of your household for last year, 1992, would
          the total be more than $30,000?
          <0>
                    NO
          <1>
                   YES [goto D12c]
          <9>
                    NA-REF [goto hinc]
          ===>
>D12a< Was it more than $20,000?
          <0>
                   NO
                   YES [goto hinc]
          <1>
                   NA-REF [goto hinc]
          <9>
          ===>
>D12b< Was it more than $12,000?
          <0>
                   NO
          <1>
                   YES
          <9>
                   NA-REF
          ===> [goto hinc]
>D12c< Was it more than $50,000?
          <0>
                   NO [goto hinc]
          <1>
                   YES
          <9>
                   NA-REF [goto hinc]
          ===>
>D12d< Was it more than $75,000?
          <0>
                   NO
          <1>
                   YES
          <9>
                   NA-REF
          ===>
>cntm< In what county do you live?
                                      <09> CHARLES
                                                              <17> PG COUNTY
          <01> ALLEGANY
          <02> ANNE ARUNDEL
                                     <10> DORCHESTER <18> QUEEN ANNE
                                      <11> FREDERICK <19> SOMERSET
          <03> BALTIMORE
                                     <12> GARRETT
                                                               <20> ST. MARY'S
          <04> BALT CITY

      <12> GARRETT
      <20> ST. MART S

      <13> HARFORD
      <21> TALBOT

      <14> HOWARD
      <22> WASHINGTON

      <15> KENT
      <23> WICOMICO

      <16> MONTGOMERY
      <24> WORCESTER

          <05> CALVERT
                                      <13> HARFORD
                                     <14> HOWARD
<15> KENT
          <06> CAROLINE
         <07> CARROLL
          <08> CECIL
          <99> DK/REF
          <0> OTHER - SPECIFY
          ===>[goto zip]
>cntp< In what county do you live?
                                                                    <23> NORTHHUMBERLAND
          <01> ADAMS
                                       <12> FRANKLIN
                                       <13> FULTON
                                                                    <24> PERRY
          <02> BEDFORD
                                  <14> HUNTINGDON
<15> JUNIATA
                                                                    <25> POTTER <26> SCHUYLKILL
          <03> BLAIR .
          <04> BRADFORD
                                                                    <27> SNYDER
                                      <16> LACKAWANNA
          <05> CAMERON
          <06> CENTRE
                                      <17> LANCASTER
                                                                    <28> SULLIVAN

      <18> LEBANON
      <29> SUSQUEHANNA

      <19> LUZERNE
      <30> TIOGA

      <20> LYCOMING
      <31> UNION

      <21> MIFFLIN
      <32> WYOMING

      <22> MONTOUR
      <33> YORK

          <07> CLEARFIELD
          <08> CLINTON
          <09> COLUMBIA
          <10> CUMBERLAND
          <11> DAUPHIN
```

<99> REF

<0> OTHER - SPECIFY

===>[goto zip] >cntv< In what county do you live? <01> ACCOMACK <18> CULPEPER <35> KING WILLIAM <52> ORANGE <02> ALBENARLE <19> CUMBERLAND <36> KING & QUEEN <53> PAGE <03> ALLEGHANY <04> AMELIA <22> FAUQUIER <23> FLUVANNA <05> AMHERST <56> PRINCE GEORGE <13> CHARLES CITY <30> HANOVER <47> NEWPORT NEWS <64> SPOTSYLVANIA <48> NORFOLK <65> STAFFORD <14> CHESTERFIELD <31> HENRICO <32> HIGHLAND <15> CLARKE <49> NORTHHAMPTON <66> SUFFOLK <16> COLONIAL HGHTS <33> ISLE OF WGHT <50> NRTHHMBRLAN <67> WARREN <17> CRAIG <34> JAMES CITY <51> NOTTOWAY <68> YORK <99> REF <0> OTHER - SPECIFY ===> >zip< What is your zipcode? [loc 7/76] <15000-25000> ENTER ZIPCODE <99999> NA-REF ===> >fone< All together, how many different phone NUMBERS does your household have for non-business use? <1-6> RECORD <7> 7 OR MORE <8> DK <9> REF ===> >VERF< And, your number is [fill racd] [fill tel1]-[fill tel2:0]? <0> NO - What number have I reached? (SPECIFY) <1> YES <9> REF ===> >Rsex< Those are all the questions I have. Thank you for your time and \*\* TYPE (f) IF SEX IS ALREADY RECORDED CORRECTLY \*\* RECORD RESPONDENT'S SEX <1> MALE <2> FEMALE ===> AL HGHTS <33> ISLE OF WGHT <50> NRTHHMBRLAN <67> WARREN <17> CRAIG <34> JAMES CITY <51> NOTTOWAY <68> YORK <99> REF <0> OTHER - SPECIFY [specify] ===> >zip< What is your zipcode? [loc 7/76] <15000-25000> ENTER ZIPCODE <99999> NA-REF >fone< All together, how many different phone NUMBERS does your

household have for non-business use?

<1-6> RECORD

```
<7> 7 OR MORE
<8> DK
<9> REF
===> [loc 1/21]
```

>VERF< And, your number is [fill racd] [fill tell]-[fill tel2:0]? <0> NO - What number have I reached? (SPECIFY) [specify]

<1> YES

<9> REF

===> [loc 7/33]

>Rsex< Those are all the questions I have. Thank you for your time and help.

\*\* TYPE (f) IF SEX IS ALREADY RECORDED CORRECTLY

```
** RECORD RESPONDENT'S SEX
```

<1> MALE

<2> FEMALE

===> [loc 1/19]

# Frequencies for the Entire Watershed

STUDY	SAMPT.	TNG	APEA

Value Label	Value	Frequency	Valid Percent
DISTRICT OF COLUMBIA	9	108	5.4
MARYLAND	21	729	36.4
PENNSYLVANIA	39	480	24.0
VIRGINIA	49	687	34.3
	TOTAL	2004	100.0

### RESPONDENT GENDER

Value Label	Value	Frequency	Valid Percent
MALE	1	970	48.4
FEMALE	2	1033	51.6
	TOTAL	2004	100.0

### REGION OF THE COUNTRY

Value Label	Value	Frequency	Valid Percent
NORTHEAST	1	480	24.0
SOUTH	3	1524	76.0
	TOTAL	2004	100.0

#### NUMBER OF PHONE LINES

			Valid
Value Label	Value	Frequency	Percent
•	1	1866	93.9
	2	106	5.3
	3	8	. 4
	4	. 1	.0
	5	1	.1
	-7	· 2	.1
	8	5	. 2
REFUSED	9	16	MISSING
	TOTAL	2004	100.0

Q1 FAMILIARITY WITH SUSQUEHANNA RIVER

Value Label	Value	Frequency	Valid Percent
VERY FAMILIAR	1	98	20.4
SOMEWHAT FAMILIAR	2	211	44.0
NOT VERY FAMILIAR	3	98	20.4
NOT AT ALL FAMILIAR	4	71	14.7
DON'T KNOW	8	2	.4
NOT ASKED	9	1524	MISSING
	TOTAL	2004	100.0

### Q2 FAMILIARITY WITH CHESAPEAKE BAY

Value Label	Value	Frequency	Valid Percent
VERY FAMILIAR	1	273	13.6
SOMEWHAT FAMILIAR	2	767	38.3
NOT VERY FAMILIAR	3	448	22.3
NOT AT ALL FAMILIAR	4	509	25.4
DON'T KNOW	8	8	. 4
•	TOTAL	2004	100.0

Q4 HOW CONCERNED W/POLLUTION IN SUSQUEHANNA

Value Label	Value	Frequency	Valid Percent
VERY MUCH	1	197	41.0
SOMEWHAT	2	204	42.5
NOT VERY MUCH	3	33	6.9
NOT AT ALL	4	38	8.0
DON'T KNOW	8	8	1.6
NOT ASKED	9	1524	MISSING
	TOTAL	2004	100.0

HOW CONCERNED W/POLLUTION IN CHESAPEAKE

Value Label	Value	Frequency	Valid Percent
VERY MUCH	1	974	48.6
SOMEWHAT	2	721	36.0
NOT VERY MUCH	3	142	7.1
NOT AT ALL	4	120	6.0
DON'T KNOW	8	46	2.3
	TOTAL	2004	100.0

HOW OFTEN PAST YR RECREATE ON SUSQUEHNNA

Value Label	Value	Frequency	Valid Percent
WEEKLY	1	20	6.5
MONTHLY	2	23	7.3
A FEW TIMES A YEAR	3	96	31.0
NOT AT ALL	4	171	55.2
NOT ASKED	9	1694	MISSING
	TOTAL	2004	100.0

Q7A USED SUSQUEHANNA FOR FISHING PAST YEAR

Value Label	Value	Frequency	Valid Percent
NO	. 0	65	47.3
YES	1	72	52.7
NOT ASKED	9	1866	MISSING
	TOTAL	2004	100.0

Q7B USED SUSQUEHANNA SWIM/BOATING PAST YEAR

Valid Value Frequency Percent

Value Label

CLIENT.FRQ	April 28, 1	994	Page	2_2	
CDIENT: ray	APITI 20, I	.554	rage	J-Z	
NO	0	56	40.8		
YES	1	. 81			
NOT ASKED	9		MISSING		
NOI ASKED	,			•	
	TOTAL	2004	100.0		
			- <i></i>		
Q7C BEEN SIGHTS	EEING ON SUSQU	EHANNA PA	ST YR		
			Valid		
Value Label	Value	Frequency			
Value Basel	V 41244 5				•
ИО	0	30	21.8		
YES	1		77.3		
DON'T KNOW	. 8		.9		•
NOT ASKED	9	1866	MISSING		
	TOTAL	2004	100.0		
Q8 SUSQUEHANNA	POLLUTION IMP	EDED RECRI	EATION		
		•	Valid		
***************************************	Value.	Pusanosar			
Value Label	value	Frequency	Percent		
NO	0	243	78.5		
YES	. 1	64	20.5		
DON'T KNOW	8	3	.9		
NOT ASKED	9		MISSING		
NOT ASKED	,				
	TOTAL	2004	100.0		
Q9 HOW OFTEN PA	AST YR RECREAT	E ON CHES	APEAKE		
			Valid		
Value Label	Value	Frequency			
value Laber	value	rrequency	rercent		
WEEKLY	1	75	7.9		
MONTHLY	2		7.4		
A FEW TIMES A YEAR		416			
NOT AT ALL	4	471			
NOT ASKED	9		MISSING		
	TOTAL	2004	100.0		
Q9A USED CHESAPI	EAKE FOR FISHI	NG PAST Y	EAR		
		•	Valid		
Value Label	Value	Frequency			
Agine Tanei	value	rrequency	rerectif	•	
NO	0	270	47.5		
YES	1		52.5		
NOT ASKED	9		MISSING		
	•				

NOT ASKED

CLIENT.FRQ	April 28, 19	94 Page	3-3
	TOTAL	2004 100.0	
3 USED CHE	SAPEAKE SWIM/BOATI	NG PAST YEAR	
		Valid	
Value Label	Value F	requency Percent	
0	, O	138 24.3	
ES	1	430 75.7	
T ASKED	9	1435 MISSING	
	TOTAL	2004 100.0	
	TSEEING ON CHESAP	Valid	
Value Label	Value F	requency Percent	
		151 26.5	
5	1	418 73.5	
r ASKED	9	1435 MISSING	
	TOTAL	2004 100.0	
O CHESAPEAK	E POLLUTION IMPEDI	ED RECREATION	
		Valid	
Value Label	Value Fr	equency Percent	
	0	804 77.4	
ES	1	230 22.1	
N'T KNOW	8	5 .5	

TOTAL

964 MISSING

2004 100.0

Q11A SUSQUEHANNA WATER QUALITY: SWIMMING

•		Valid
Value	Frequency	Percent
1	19	6.2
2	106	34.4
-3	88	28.4
4	50	16.0
5	9	2.8
8	38	12.2
9	1694	MISSING
	•	
TOTAL	2004	100.0
	1 2 3 4 5 8	1 19 2 106 3 88 4 50 5 9 8 38 9 1694

CHESAPEAKE WATER QUALITY: SWIMMING

			Valid
Value Label	Value	Frequency	Percent
VERY SAFE	1	43	4.1
SOMEWHAT SAFE	2	303	29.1
SOMEWHAT UNSAFE	3	389	37.5
VERY UNSAFE	4	139	13.3
DEPENDS WHERE	5	25	2.4
DON'T KNOW	8	141	13.5
NOT ASKED	9	964	MISSING
·			
	TOTAL	2004	100.0

SUSQUEHANNA WATER QUALITY: EAT SEAFOOD Q12A

Value Label	Value	Frequency	Valid Percent
VERY SAFE	1	20	6.5
SOMEWHAT SAFE	2	106	34.2
SOMEWHAT UNSAFE	3	110	35.5
VERY UNSAFE	4	55	17.9
DON'T KNOW	8	18	6.0
NOT ASKED	9	1694	MISSING
	ŢOTAL	2004	100.0

Q12B CHESAPEAKE WATER QUALITY: EAT SEAFOOD

Value Label	Value	Frequency	Valid Percent
VERY SAFE	1	56	5.4
SOMEWHAT SAFE	2	397	38.2
SOMEWHAT UNSAFE	3	405	38.9
VERY UNSAFE	4	116	11.2

	•		
CLIENT.FRQ	April 28,	1994	Page 4
DON'T KNOW	8	66	6.4
NOT ASKED	9	964	MISSING
	TOTAL	2004	100.0
Q13A SUSQUEHANN	A WATER QUALIT	ry: AQUATIC	LIFE
			Valid
Value Label	Value	Frequency	Percent
VERY SAFE	1	25	8.0
SOMEWHAT SAFE	2	107	34.6
SOMEWHAT UNSAFE	3	109	35.3
VERY UNSAFE	4	50	16.0
DON'T KNOW	8		6.0
NOT ASKED	9		MISSING
	TOTAL	2004	100.0
	WATER OUALITY		 .TPE
	William South	· ngomic .	
Malus Tabal		_	Valid
Value Label	Value	Frequency	Percent
VERY SAFE	_ 1	27	
SOMEWHAT SAFE	2	280	
SOMEWHAT UNSAFE	3	443	42.6
VERY UNSAFE	4	228	
DON'T KNOW	8	61	5.9
NOT ASKED	9	964	MISSING

NOT ASKED TOTAL 2004 100.0

# HIGHEST PRIORITY W/SUSQUEHANNA

Value Label	Value	Frequency	Valid Percent
SAFE FOR SWIMMING	1	5	1.8
EAT SAFE SEAFOOD FROM	2	14	4.9
SAFE FOR AQUATIC LIFE	3	200	68.9
EQUALY HIGH PRIORITY .	4	62	21.3
DON'T KNOW	. 8	9	3.1
NOT ASKED	9	1713	MISSING
	TOTAL	2004	100.0

HIGHEST PRIORITY W/CHESAPEAKE

Value Label

Valid Value Frequency Percent

CLIENT.FRQ	April 28,	1994	Page	4-3
SAFE FOR SWIMMING	1	11	1.1	
EAT SAFE SEAFOOD FROM		. 121		
SAFE FOR AQUATIC LIFE			66.5	
	4		19.3	
EQUALY HIGH PRIORITY	-		1.1	
DON'T KNOW	8			
NOT ASKED	9		MISSING	
	TOTAL	2004	100.0	
Q15 SUSQUEHANNA	POLLUTION CO	MPARED 10	YRS AG	
			Valid	
Value Label	Value	Frequency	Percent	:
MORE POLLUTED	1	131	42.5	
LESS POLLUTED	2	61		
ABOUT THE SAME	3		23.8	
DON'T KNOW	8	43		
NOT ASKED	9		MISSING	
	TOTAL	2004	100.0	-
	TOTAL	2004	100.0	
Q16 CHESAPEAKE F	COLLUTION COM	PARED 10 Y		<b></b>
			Valid	<b></b>
Q16 CHESAPEAKE F		PARED 10 Y	Valid	- <b></b>
		Frequency	Valid	
Value Label	Value	Frequency	Valid Percent	<b></b>
Value Label MORE POLLUTED LESS POLLUTED	Value 1	Frequency	Valid Percent	- <b></b>
Value Label  MORE POLLUTED  LESS POLLUTED  ABOUT THE SAME	Value 1 2	Frequency 475 204	Valid Percent 45.7 19.6 18.4	- <b></b>
Value Label MORE POLLUTED LESS POLLUTED	Value 1 2 3	Frequency 475 204 191 170	Valid Percent 45.7 19.6 18.4	- <b></b>
Value Label  MORE POLLUTED  LESS POLLUTED  ABOUT THE SAME  DON'T KNOW	Value 1 2 3 8	Frequency 475 204 191 170 964	Valid Percent 45.7 19.6 18.4 16.4	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL	Frequency  475 204 191 170 964 2004	Valid Percent 45.7 19.6 18.4 16.4 MISSING  100.0	
Value Label  MORE POLLUTED  LESS POLLUTED  ABOUT THE SAME  DON'T KNOW	Value  1 2 3 8 9 TOTAL	Frequency  475 204 191 170 964 2004	Valid Percent 45.7 19.6 18.4 16.4 MISSING  100.0	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL	Frequency  475 204 191 170 964 2004	Valid Percent 45.7 19.6 18.4 16.4 MISSING 100.0  CAUSE Valid	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL	Frequency  475 204 191 170 964 2004	Valid Percent 45.7 19.6 18.4 16.4 MISSING 100.0  CAUSE Valid	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL	Frequency  475 204 191 170 964 2004	Valid Percent  45.7 19.6 18.4 16.4 MISSING 100.0  CAUSE  Valid Percent	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL C PLANTS MAIN	Frequency  475 204 191 170 964 2004  POLLUTION  Frequency	Valid Percent  45.7 19.6 18.4 16.4 MISSING 100.0  CAUSE  Valid Percent	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL PLANTS MAIN Value 0	Frequency  475 204 191 170 964 2004  Frequency 438	Valid Percent  45.7 19.6 18.4 16.4 MISSING 100.0  CAUSE  Valid Percent	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL  C PLANTS MAIN  Value  0 1 8	Frequency  475 204 191 170 964 2004  Frequency 438 1140 426	Valid Percent 45.7 19.6 18.4 16.4 MISSING	
Value Label  MORE POLLUTED LESS POLLUTED ABOUT THE SAME DON'T KNOW NOT ASKED	Value  1 2 3 8 9 TOTAL  X PLANTS MAIN  Value  0 1	Frequency  475 204 191 170 964 2004  Frequency 438 1140 426	Valid Percent  45.7 19.6 18.4 16.4 MISSING 100.0  CAUSE  Valid Percent  21.9 56.9	

LANDFILLS ONE OF MAIN POLLUTION CAUSES

CLIENT. FRQ	April 28,	1994	Page 4-4
Value Label	Value	Frequency	Percent
NO YES DON'T KNOW	0 1 8	. 524 1087 393	26.1 54.3 19.6
	TOTAL	2004	100.0

# Q19 FARMING ONE OF MAIN POLLUTION CAUSES

Value Label	Value	Frequency	Valid Percent
NO	0	1006	50.2
YES	1	714	35.6
DON'T KNOW	8	283	14.1
	TOTAL	2004	100.0

Q19A COMMERCIAL SHIPPING SPILLS CAUSE POLLUTE

			Valid
Value Label	Value	Frequency	Percent
NO	0	445	22.2
YES	1	1400	69.9
DON'T KNOW	8	159	7.9
•			
	TOTAL	2004	100.0

#### Q19B ROAD/ETC CONSTRUCTION MAIN CAUSE POLLUTE

Value Label	Value	Frequency	Valid Percent
NO	0	840	41.9
YES	1	897	44.8
DON'T KNOW	8	267	13.3
	TOTAL	2004	100.0

Q19C OTHER BUSINESS/INDUSTRY CAUSE POLLUTION

Value Label	Value	Frequency	Valid Percent
ИО	0	317	15.8
YES	1	1480	73.8
DON'T KNOW	8	207	10.3
•	TOTAL	2004	100.0

Q19D POPULATION GROWTH MAIN POLLUTION CAUSE

Value Label	Value	Frequency	Valid Percent
ИО	0.	595	29.7
YES	1	1239	61.8
DON'T KNOW	8	170	8.5
	TOTAL	2004	100.0

Q20 REC BOAT GARBAGE/SEWAGE CAUSE POLLUTION

Value Label	Value	Frequency	Valid Percent
NO	0	493	24.6
YES	1	1353	67.5
DON'T KNOW	8	157	7.8
	TOTAL.	2004	100 0

Q20B INDIVIDUAL ACTION MAIN POLLUTION CAUSE

Value Label	Value	Frequency	Valid Percent
NO	0	551	27.5
YES	1	1235	61.6
DON'T KNOW	8	218	10.9
•			
	TOTAL	2004	100.0

Q20C OTHER THINGS MAIN CAUSES OF POLLUTION

Value Label	Value	Frequency	Valid Percent
NO	. 0	1635	81.6
YES	1	315	15.7
DON'T KNOW	8	54	2.7
	TOTAL	2004	100.0

MOST SERIOUS CAUSE OF POLLUTION IN BAY

		Valid
Value	Frequency	Percent
1	282	14.8
2	116	6.1
3	151	8.0
4	267	14.0
5	43	2.3
6	578	30.4
7	128	6.7
8	159	8.3
9	81	4.3
88	96	5.1
99	103	MISSING
TOTAL	2004	100.0
	1 2 3 4 5 6 7 8 9 88 99	1 282 2 116 3 151 4 267 5 43 6 578 7 128 8 159 9 81 88 96 99 103

Q21A LEAST SERIOUS CAUSE OF POLLUTON IN BAY

Value Label	Value	Frequency	Valid Percent
SEWAGE TREATMT PLANT	1	58	4.4
GRBAGE DUMP-LANDFILL	2	79	6.0
FARMING	3	423	32.1
COMMRCAL SHIP SPILLS	4	49	3.7
CONSTRUCTION	5	133	10.1
BUSINESS-INDUSTRY	6	12	.9
GENERAL PUBLIC	7	168	12.8
POP GROWTH	8	130	9.9
REC BOATING	9	179	13.6
DON'T KNOW	88	84	6.4
NOT ASKED	99	688	MISSING
	•		
	TOTAL	2004	100.0

### Q22 CHEMICALS OR ANIMAL WASTE HARM FISH MORE

Value Label	Value	Frequency	Valid Percent
CHEMICAL DIRECT HARM	1	1332	66.5
WASTE CAUSE OVERGROW	2	502	25.1
DON'T KNOW	8	170	8.5
	TOTAL	2004	100.0

#### Q22A RELATIVE IMPORT OF BAY RESTORATION

Value Label	Value	Frequency	Valid Percent
ONE OF MOST IMPORTNT	1	978	48.8
IMPRINT, BUT NOT MOST	2	792	39.5
ONE OF LEAST IMPRINT	3	140	7.0
NOT IMPORTANT AT ALL	4	23	1.1
DON'T KNOW	8	70	3.5
	TOTAL	2004	100.0

QQ22 CURRENT EFFORT TO REDUCE BAY POLLUTION

Value Label	Value	·. Frequency	Valid Percent
TOO MUCH	1	71	3.5
ABOUT RIGHT	2	571	28.5
TOO LITTLE	3	989	49.4
DON'T KNOW	8	373	18.6
	TOTAL	2004	100.0

# Q23 STATE GOVT HAS HELP MANAGE BAY POLLUTION

Value Label	Value	Frequency	Valid Percent
GREAT DEAL	1	213	10.7
SOME	2	973	48.6
LITTLE	3	331	16.5
NONE	4	78	3.9
DON'T KNOW	8	408	20.4
•	TOTAL	2004	100.0

# Q24 FED GOVT HAS HELPED MANAGE BAY POLLUTION

Value Label	Value	Frequency	Valid Percent
GREAT DEAL	1	117	5.9
SOME	2	719	35.9
LITTLE	3	534	26.6
NONE	4	123	6.2
DON'T KNOW	8	510	25.5
	TOTAL	2004	100.0

Q25 LOCAL GOVT HAS HELP MANAGE BAY POLLUTION

Value Label	Value	Frequency	Valid Percent
GREAT DEAL	1	180	9.0
SOME	2	845	42.2
LITTLE	3	373	18.6
NONE	4	157	7.8
DON'T KNOW	8	447	22.3
	TOTAL	2004	100.0

QQ25 FARMERS HAVE HELP MANAGE BAY POLLUTION

Value Label	Value	Frequency	Valid Percent
GREAT DEAL	. 1	145	7.2
SOME	2	549	27.4
LITTLE	3	404	20.2
NONE	4	235	11.7
DON'T KNOW	8	670	33.5
	TOTAL	2004	100.0

Q26 BUSINESS HAS HELPED MANAGE BAY POLLUTION

Value Label	Value	Frequency	Valid Percent
GREAT DEAL	1	104	5.2
SOME	2	667	33.3
LITTLE	3	571	28.5
NONE	4	281	14.0
DON'T KNOW	8	380	19.0
·	TOTAL	2004	100.0

Q27 CITIZENS/ORGANIZATIONS HELP W/POLLUTION

Value Label	Value	Frequency	Valid Percent
GREAT DEAL	1	540	27.0
SOME	2	852	42.5
LITTLE	3	207	10.3
NONE	4	84	4.2
DON'T KNOW	8	320	16.0
	TOTAL	2004	100.0

Q28 STATE GOVT WORKING W/OTHER STATE GOVTS

Value Label	Value	Frequency	Valid Percent
NO	0	163	8.2
YES	1	958	47.8
DON'T KNOW	8	882	44.0
	TOTAL	2004	100.0

Q28A STATE GOVT WORKING W/FEDERAL GOVT

Value Label	Value	Frequency	Valid Percent
NO	0	173	8.6
YES	1	881	44.0
DON'T KNOW	. 8	949	47.4
	TOTAL	2004	100.0

Q28B KNOW WHAT GOVT POLLUTION GROUP IS CALLED

Value Label	Value	Frequency	Valid Percent
NO	0	777	88.2
YES	1	104	11.8
NOT ASKED	9	1122	MISSING
	TOTAL	2004	100.0

Q28C NAME OF GOVT POLLUTION GROUP

Value Label	Value	Proguencia	Valid	
value habel	value	Frequency	Percent	
CHESPEAKE BAY PROGRM	1	4.	4.1	
ALLIANCE FOR CPK BAY	2	1	1.0	
CPK BAY FOUNDATION	3	3	3.3	
SAVE BAY FOUNDATION	4	. 11	10.3	
OTHER-SPECIFY	5	68	65.3	
DON'T KNOW	8	17	15.9	
NOT ASKED	9	1900	MISSING	
	TOTAL	2004	100.0	100.0

Q29 R/HH MEMBER PARTICIPATED IN BAY CLEANUP

Value Label	Value	Frequency	Valid Percent
ИО	0	1555	77.6
YES	1	412	20.6
DON'T KNOW	8	37	1.8
	TOTAL	2004	100.0

Q30 DESCRIBE SELF HELPING REDUCE POLLUTION

Value Label	Value	Frequency	Valid Percent
VERY ACTIVE	1	337	16.8
SOMEWHAT ACTIVE	2	1019	50.9
NOT VERY ACTIVE	3	626	31.3
DON'T KNOW	8	21	1.0
	TOTAL	2004	100.0

Value Label	Value	Frequency	Valid Percent
NO	0	242	38.6
YES-OTHER	1	264	42.1
DON'T KNOW	8	121	19.4
NOT ASKED	9	1377	MISSING
	TOTAL	2004	100.0

O31 R/HH MEMBER BELONG TO ENVIRONMNTAL G	31	ENVIRONMNTAL GROUP
--	----	--------------------

Value Label	Value	Frequency	Valid Percent
NO	0	1774	88.6
YES-WHICH GROUPS	1	211	10.5
DON'T KNOW	8	18	.9
	TOTAL	2004	100.0

#### Q32 R/HH MEMBER STOP PRODUCT USE IF IT POLLU

Value Label	Value	Frequency	Valid Percent
NO	0	1021	51.0
YES-WHICH PRODUCT	1	912	45.5
DON'T KNOW	8	71	3.5
	TOTAL	2004	100.0

### Q33 NEW FUNDS TO PREVENT OR REPAIR DAMAGE

Value Label	Value	Frequency	Valid Percent
PREVENT MORE DAMAGE	1	894	44.6
REPAIR DAMAGE DONE	2	792	39.5
OTHER-SPECIFY	3	230	11.5
DON'T KNOW	8	88	4.4
	TOTAL '	2004	100.0

## Q33A HOW TO SPEND POLLUTION PREVENTION FUNDS

Value Label	Value	Frequency	Valid Percent
EDUCATION	1	256	28.6
SCIENTIFIC RESEARCH	2	88	9.8
ENFORCE REGULATION	3	347	38.8
TECH ASSIS-VOLUNTEER	4	99	11.0
OTHER-SPECIFY	5	69	7.7
DON'T KNOW	8	36	4.1
NOT ASKED	9	1110	MISSING
	TOTAL	2004	100.0

Q33B HOW TO SPEND POLLUTION REPAIR FUNDS

		•	Valid
Value Label	Value	Frequency	Percent
RESTORE WILDLIF AREA	1	144	18.1
REPLENISH FISH POP	2	65	8.3
ENCOURAGE PUB PARTCP	3	64	8.0
REDUCE WATER POLLT	4	416	52.5
OTHER-SPECIFY	5	75	9.4
DON'T KNOW	8	29	3.6
NOT ASKED	9	1212	MISSING
	TOTAL	2004	100.0

Q34 EVER SEEN/HEARD REPORT ON REDUCE POLLUTE

*** 1 * = 1 1	W=1	Eugguaga	Valid
Value Label	Value	Frequency	Percent
NO	0	1144	57.1
YES	. 1	844	42.1
DON'T KNOW	8	16	.8
•	TOTAL	2004	100.0

D2 NUMBER OF HH ADULTS 18 OR OLDER

·	•		Valid
Value Label	Value	Frequency	Percent
	1	248	12.4
•	2	1066	53.5
	3	429	21.5
	4	172	8.6
	5	39	1.9
	6	10	. 5
	7	9	.4
	8	2	.1
	9	3	.2
	10	5	.3
MORE THAN 10	11	9	.4
REFUSED	99	12	MISSING
	TOTAL	2004	100.0
	TOTAT	2004	100.0

### D3 NUMBER OF HH CHILDREN YOUNGER THAN 18

Value Label	Value	Frequency	Valid Percent
NONE	0	1119	56.2
	1	375	18.9
	2	285	14.3
	3	138	6.9
	4	56	2.8
	_ 5	10	. 5
	6	7	.3
	7	1	.0
8 OR MORE	8	0	.0
REFUSED	9	12	MISSING
	TOTAL	2004	100.0

D5 IN WHAT YEAR WAS RESPONDENT BORN

			Valid
Value Label	Value	Frequency	Percent
	1	1	.1
	2	0	.0
	3	1	.0
	4	۰ ,	.0
	5	1	.0
	6	2	.1
	7	2	.1
	8	13	.6
	9	7	. 4
	10	5	.2
	11	3	.2
	12	6	.3
	13	8	. 4
	14	9	.4
	15	16	.8
	16	8	. 4
	17	. 11	.6
	18	16	.8
	19	31	1.6
	20	8	. 4
	21	11	.5
	22	21	1.1
	23	15	.8
	24	13	.7
	25	12	.6
	26	12	.6
	27	17	.9
	28	21	1.1
	29	11	.6
	30	31	1.6
	31	18	.9
	32	31	1.6
	33	16	.8
	34	32	1.7
	35	15	.8
	36	23	1.2
	37	23	1.2
	38	30	1.5
	39	41	2.1
	40	21	1.1
	41	29	1.5
	42	35	1.8
	43	23	1.2
	44	44	2.2
	45	32	1.7
	46	53	2.7
	47	50	2.5
	48	43	2.2
	49	45	2.3
	50	53	2.7
		44	2.7
	51	44	۷.۷

D5 IN WHAT YEAR WAS RESPONDENT BORN (Continued)

Value Label	Value	Frequency	Valid Percent
	52	40	2.1
	53	49	2.5
	54	46	2.4
	55	54	2.8
	56	40	2.0
	57	44	2.3
	58	40	2.0
	59	41	2.1
	60	37	1.9
	61	. 49	2.5
	62	54	2.7
	63	41	2.1
	64	54	2.8
	65	31	1.6
	66	38	1.9
	67	33	1.7
	68	. 29	1.5
	, 69	50	2.6
	70	38	1.9
	71	24	1.3
	72	25	1.3
	73	15	8
	74	42	2.1
	75	30	1.5
REFUSED	99	48	MISSING
	TOTAL	2004	100.0

D6 CURRENT EMPLOYMENT STATUS

Value Label	Value	Frequency	Valid Percent
EMPLOYED FULL-TIME	1	1139	57.3
EMPLOYED PART-TIME	2	201	10.1
NOT EMPLOED AT ALL	3	635	31.9
EMPLOYED BOTH PT-FT	4	13	.7
REFUSED	9	16	ISSING
	•		
	TOTAL	2004	100.0

D6A REASON WHY RESPONDENT IS UNEMPLOYED

Value Label	Value	Frequency	Valid Percent
RETIRED	1	268	42.7
KEEPING HOUSE	2	147	23.3
TEMP UNEMPLOYED	3	49	7.8
STUDENT	4	60	9.5
DISABLED	5	61	9.7
SOMETHE ELSE-SPECIFY	6	44	7.0
REFUSED	9	1375	MISSING
	TOTAL	2004	100.0

D7 LAST GRADE OR YEAR OF SCHOOL COMPLETED

			Valid
Value Label	Value	Frequency	Percent
NONE	0	5	.2
SOME ELEMENTARY	1	1	.0
	3	5	.3
	4	2	.1
	5	12	. 6
	6	17	.9
·	7	21	1.1
ELEMENTARY GRAD	8	90	4.5
SOME HIGH SCHOOL	9	78	3.9
	10	85	4.3
	11	146	7.4
HIGH SCHOOL GRAD	12	603	30.4
SOME COLLEGE	13	171	8.6
,	14	220	11.1
	15	90	4.5
COLLEGE GRAD	16	275	13.8
SOME GRAD SCHOOL	17	30	1.5
GRAD OR PROF DEGREE	18	135	6.8
REFUSED	99	18	MISSING
	TOTAL	2004	100.0

D8 IS R OF SPANISH OR HISPANIC ORIGIN

Value Label	Value	Frequency	Valid Percent
NO	0	1942	97.6
YES	1	46	2.3
DON'T KNOW	8	1	.0
REFUSED	9	14	MISSING
	TOTAL	2004	100.0

D8A WHAT RACE/ENTHICITY IS RESPONDENT

Value Label	Value	Frequency	Valid Percent
WHITE	1	1531	77.2
BLACK	2	358	18.0
ASIAN	3	31	1.5
OTHER RACE-SPECIFY	4	40	2.0
HISPANIC	5	23	1.2
REF	9	21	MISSING
	TOTAL	2004	100.0

CURRENT MARITAL STATUS

Value Label	Value	Frequency	Valid Percent
MARRIED	1	1237	62.5
SEPARATED	2	48	2.4
DIVORCED	3	156	7.9
WIDOWED	4	139	7.0
NEVER MARRIED	5	399	20.2
REFUSED	9	25	MISSING
	TOTAL	2004	100.0

D10 DOES RESPONDENT OWN OR RENT HOME

Value Label	Value	Frequency	Valid Percent
OWN	1	1307	66.4
RENT	2	549	27.9
OTHER-SPECIFY	3	114	5.8
REFUSED	9	34	MISSING
•	•		
	TOTAL	2004	100.0

D11 EVER GO RECREATIONAL SAILING OR BOATING

Value Label	Value	Frequency	Valid Percent
NO	0	1028	51.4
YES	1	971	48.6
REFUSED	9	5	MISSING
	TOTAL.	2004	100.0

HINC COMPUTED HOUSEHOLD INCOME

Value	Label	Value	Frequency	Valid Percent
\$12,000	OR LESS	1	79	4.4
\$20,000	OR LESS	2	18	1.0
\$30,000	OR LESS	3	38	2.2
\$12,000	- 20,000	4	172	9.7
\$20,000	- 30,000	5	293	16.5
\$30,000	- 50,000	6	521	29.4
\$50,000	- 75,000	7	334	18.9
\$30,000	OR MORE	8	55	3.1
\$50,000	OR MORE	9	26	1.5
\$75,000	- 100,000	10	237	13.4
REFUSED		99	231	MISSING
		TOTAL	2004	100.0

CNTM MARYLAND COUNTY RESPONDENT LIVES IN

Value Label	Value	Frequency	Valid Percent
ALLEGANY	. 1	12	1.6
ANNE ARUNDEL	2	83	11.4
BALTIMORE	3	162	22.2
BALT CITY	4	104	14.3
CALVERT	5	4	.6
CARROLL	7	12	1.7
CECIL	8	17	2.3
CHARLES	9	22	3.0
DORCHESTER	10	2	.3
FREDERICK	11	33	4.6
HARFORD	13	18	2.5
HOWARD	14	39	5.3
MONTGOMERY	16	75	10.3
PG CNTY	17	99	13.6
QUEEN ANNE	18	4	.6
SOMERSET	19	6	.9
TALBOT	21	4	. 5
WASHINGTON	22	25	3.4
WICOMICO	23	7	.9
WORCESTER	24	1	.1
DON'T KNOW/REFUSED	99	1274	MISSING
	TOTAL	2004	100.0

CNTP PENNSYLVANIA COUNTY RESPONDENT LIVES IN

•			Valid
Value Label	Value	Frequency	Percent
ADAMS	1	3	.5
BEDFORD	2	1	.1
BLAIR	3	24	4.9
BRADFORD	4	8	1.8
CENTRE	6	8	1.7
CLEARFIELD	7	4	.8
COLUMBIA	9	13	2.8
CUMBERLAND	10	36	7.5
DAUPHIN	11	37	7.8
FRANKLIN	12	7	1.5
HUNTINGDON	14	4	.9
JUNIATA	15	12	2.5
LACKAWANNA	16	29	6.0
LANCASTER	17	72	15.1
LEBANON	18	28	5.8
LUZERNE	19	35	7.4
LYCOMING	20	• 15	3.1
MIFFLIN	21	4	.9
MONTOUR	22	6	1.2
NORTHHUMBERLAND	23	16	3.4
PERRY	24	15	3.0
SCHUYLKILL	26	16	3.3
SNYDER	27	9	1.8
SUSQUEHANNA	29	3	. 7
TIOGA	30	6	1.3
WYOMING	32	9	1.8
YORK	33	59	12.4
DON'T KNOW/REFUSED	99	1524	MISSING
	TOTAL	2004	100.0

CNTV VIRGINIA COUNTY RESPONDENT LIVES IN

			Valid
Value Label	Value	Frequency	Percent
ACCOMACK	1	5	.7
ALBENARLE	2	25	3.7
ALLEGHANY	3	6	.9
APPOMATTOX	6	32	4.6
ARLINGTON	7	19	2.7
AUGUSTA	8	9	1.3
BOTETOURT	10	2	.3
BUCKINGHAM	11	3	. 4
CAROLINE	12	<b>11</b>	1.6
CHESTERFIELD	14	42	6.1
CRAIG	17	10	1.4
CUMBERLAND	19	1	. 1
FAIRFAX	21	88	12.9
FAUQUIER	22	18	2.6
FLUVANNA	23	5	.7
FREDERICK	24	18	2.6
GLOUCESTER	26	3	.5
GOOCHLAND	27	6	.9
HAMPTON	29	20	2.9
HANOVER	30	9	1.2
HENRICO	31	19	2.8
HIGHLAND	32	6	.9
ISLE OF WIGHT	33	8	1.1
LANCASTER	38	1	.2
LOUDOUN	39	5	.8
LOUISA	40	-13	1.9
NEWPORT NEWS	47	20	2.8
NORFOLK	48	37	5.3
NORTHHAMPTON	49	4	.6
ORANGE	52	4	. 5
PAGE	53	. 6	.8
PORTSMOUTH	55	21	3.1
PRINCE GEORGE	56	3	. 4
PRINCE WILLIAM	57	27	4.0
PRINCE EDWARD	58	1	.1
RICHMOND CITY	60	25	3.7
ROCKINGHAM	62	26	3.8
SHENANDOAH	63	16	2.4
SPOTSYLVANIA	64	8	1.2
STAFFORD	65	10	1.5
SUFFOLK	66	6	.9
WARREN .	67	7	1.0
YORK	68	16	2.3
ALEXANDRIA	69	6	.8
STAUTON CITY	70	1	.2
CHESAPEAKE	71	9	1.3
VIRGINIA BEACH	72	35	5.1
PETERSBURG	73	7	1.0
CHARLOTTESVILLE	74	1	.2
LYNCHBURG	75	8	1.2
WILLIAMSBURG	76	1	.1

Ar	ri 1	L 28	. 1	99	14
71.	<i>'</i>		, ,		<i>,</i> 7

CLIENT.FRQ

Page 24

CNTV	VTRGINIA	COUNTY	RESPONDENT	LIVES	ΤN	(Continued)

	Value	Frequency	Valid Percent
DON'T KNOW/REFUSED	99	1317	MISSING
	TOTAL	2004	100.0

#### DIST DISTANCE FROM CHESAPEAKE

Value Label	Value	Frequency	Valid Percent
WITHIN 50 MILES	1	1199	59.8
WITHIN 100 MILES	2	423	21.1
OVER 100 MILES	3	381	19.0
	TOTAL	2004	100.0

\_\_\_\_\_\_

### REDUC RECODED EDUCATION

			Valid.
Value Label	Value	Frequency	Percent
LT HIGH SCHOOL	1	461	23.2
HIGH SCHOOL GRAD	2	603	30.4
SOME COLLEGE	3	481	24.2
COLLEGE GRAD	4	275	13.8
POST GRAD	5	166	8.3
REFUSED	9	18	MISSING
	TOTAL	2004	100.0

RAGE RESPONDENT AGE GROUPS

Value Label	Value	Frequency .	Valid Percent
18-24	1	225	11.5
25-34	2	406	20.8
35-44	3	456	23.3
45-54	4	370	18.9
55-64	5	230	11.8
65+	6	269	13.7
REFUSED	9	48	MISSING
•			
	TOTAL	2004	100.0