

**SAN MATEO COUNTYWIDE  
STORMWATER POLLUTION  
PREVENTION PROGRAM**

**2001 RESIDENTIAL  
PUBLIC OPINION SURVEY  
(SAMPLE SIZE N=400)**

**FINAL SUMMARY REPORT**

**JUNE 2001**

***FAIRBANK, MASLIN, MAULLIN & ASSOCIATES***

# TABLE OF CONTENTS

---

---

Introduction

**EXECUTIVE SUMMARY**.....

**ANALYSIS OF SURVEY RESULTS** .....

- A. Knowledge of Pollution Sources.....
- B. Perceptions of Water Treatment and Disposal.....
- C. Assessment of Parties Responsible for Improving Water Quality.....
- D. Resident Actions to Reduce Pollution.....
- E. Sources of Information on the Proper Disposal of Pollutants.....
- F. Effect of Messages Regarding the Proper Disposal of Pollutants .....
- G. Observation of Storm Drain Stencils .....
- H. Awareness and Use of Toll-Free Numbers and Websites.....
- I. Use of Products Containing Mercury and Understanding of Their Dangers.....

**APPENDIX A: TARGETING TABLE**.....

**APPENDIX B: TOPLINE SURVEY RESULTS**.....

# **SAN MATEO COUNTYWIDE STORMWATER POLLUTION PREVENTION PROGRAM**

## **2001 RESIDENTIAL PUBLIC OPINION SURVEY**

### **FINAL SUMMARY REPORT**

June 2001

#### ***Introduction***

Fairbank, Maslin, Maullin & Associates (FMM&A) recently conducted a public opinion survey of 400 randomly-selected adult San Mateo County residents to assess their understanding of issues related to stormwater pollution in the county. The survey followed a 1996 study, conducted by another research firm, which established county residents' baseline attitudes and awareness on issues relating to stormwater pollution. The primary goal of the 2001 survey was to detect any changes in public perceptions over the past five years as a result of public education efforts undertaken by the County, as well as by other agencies concerned with stormwater pollution). This report summarizes the results of the survey, and presents conclusions and recommendations based on those results.

The margin of sampling error for the sample as a whole is  $\pm 4.9$  percent at a 95 percent confidence level. Margins of error for subgroups within the survey sample will be higher; for example, the margin of error for male respondents (who make up 45 percent of the survey sample) would be  $\pm 7.3$  percent.

The survey was conducted by telephone between March 27 and 31, 2001, and took approximately ten minutes for the average respondent to complete. In order to maintain the comparability of survey results, the language and sequence of most survey questions were kept identical to those asked in the 1996 survey. Several new questions were added to the survey, but were ordered to minimize the potential bias resulting from the introduction of new information into the existing sequence of the survey. A Spanish-language version of the questionnaire was administered to those residents who preferred to respond in Spanish (about 11 percent of all respondents).

The survey data were weighted slightly to conform with Census data on the demographic composition of the county's population. The data were cross-tabulated and analyzed to identify any significant differences in attitudes and awareness among various subgroups of the sample.

The following sections contain an executive summary and a more detailed analysis of survey results, with recommendations. Topline survey results are presented in Appendix B. Complete print-outs of cross-tabulated data have already been submitted to the County.

## EXECUTIVE SUMMARY

---

---

1. While county residents continue to rate “chemical waste from factories” as the most serious threat to the county’s waterways, **residents see “individuals dumping pollutants into storm drains” as somewhat less of a serious problem than was the case in 1996.** In 1996, 54 percent of those polled viewed such dumping by individuals as a “very serious threat” to county waterways, a proportion which fell to 37 percent in this year’s survey.
2. More than six out of ten respondents continue to understand that water from their kitchens and baths gets treated at a sewage treatment plant before running into creeks, the Bay and the ocean. On the other hand, a bare 51-percent majority of county residents understand that storm drains flow directly into creeks, the Bay and the ocean; this proportion remains unchanged from 1996. **Thus, while most residents understand how the County’s water is disposed of, there remain many residents who are unsure or have false impressions (particularly when it comes to the destination of water that flows through area storm drains).**
3. A 43-percent plurality of San Mateo County residents view “the government” as primarily responsible for improving water quality in San Mateo county waterways, while **just one in five residents (21 percent) say that “every resident” has responsibility for water quality.** Sixteen percent of those polled say that “business and industry” have most responsibility for improving water quality.
4. At the same time, **County residents do believe that there are actions that individuals can take to improve water quality.** As was the case in 1996, a plurality say that “disposing of materials properly” is the best way for individuals to reduce pollution of area waterways. An increased number of respondents in this year’s survey suggested that being more aware and more conscientious was the best way that residents could reduce water pollution.
5. As in 1996, **a plurality of respondents (31 percent) indicated that they would be most likely to turn to the garbage company for information on how to properly use and dispose of paint, household chemicals, and motor oil.** Local government agencies and the phone book were the next-most frequent responses. There was a significant increase in the proportion of respondents in this year’s survey who said they would visit a recycling center or a disposal site or consult the Internet to obtain such information.
6. **While most county residents say they have “seen, read or heard” something about proper use and disposal of household chemicals or motor oil, the proportion has dropped slightly since the study was conducted five years ago.** Just 64 percent of those polled remembered receiving such messages, down from 72 percent in 1996. As was the case in the baseline survey, garbage company fliers, television, and newspapers were the most

frequent sources of such messages; garbage company fliers were cited as sources somewhat more frequently than in the past, and newspapers somewhat less frequently.

7. **Approximately two-thirds of those respondents who received a message about the proper disposal of household chemicals or motor oil indicated that they had changed their behavior as a result.** A total of 18 percent said they had disposed of those materials properly as a result of the message they had heard and, an additional eleven percent said they were “more careful” after hearing the message. However, many respondents who had received messages about the proper disposal of household chemicals and motor oil reported that the messages had little effect on their behavior. Fully 33 percent of those who had received such messages said there was “no change” in the way they used and disposed of these products upon hearing the message.
8. **Nearly three-quarters of those polled said they had seen the “No Dumping, Flows to Bay” message stenciled above storm drains across the county, a proportion virtually identical to that observed in 1996.** Respondents who had seen the stencil were significantly more likely to understand that storm drains flow into area waterways.
9. **Only five percent of respondents said that they had called the 1-800-CLEANUP toll-free number, and only one in one hundred said they had called 1-800-BAYWISE or visited the [www.STOPPP.net](http://www.STOPPP.net) website.** These proportions have not changed significantly since 1996.
10. County residents purchase a variety of products that contain mercury, but the most frequently-purchased products include batteries (purchased within the last five years by 66 percent of those polled) and fluorescent lamps (bought by 32 percent of county residents). **Nearly all residents understand that thermometers contain mercury, and three out of five realize that thermostats and batteries do, but just one in three know that there is mercury in fluorescent lamps.**
11. **A clear plurality of residents say they dispose of products containing mercury by throwing them away, but when it was suggested that in the future they could recycle them curbside or dispose of them through a household hazardous waste program, the vast majority of respondents indicated that they would do so.**

12. While the survey results suggest that all residents of the County could benefit from further education regarding the dangers of stormwater pollution, the following demographic groups appear to be the most suitable targets for outreach (based on their current understanding of the storm drain system and their awareness of messages regarding the safe disposal of household chemicals and motor oil):

2 **Residents with relatively low levels of education or income**

2 **Women under age 45**

2 **Seniors (residents over age 65)**

2 **Renters**

2 **Latinos** (especially those who prefer to speak Spanish)

## ANALYSIS OF SURVEY RESULTS

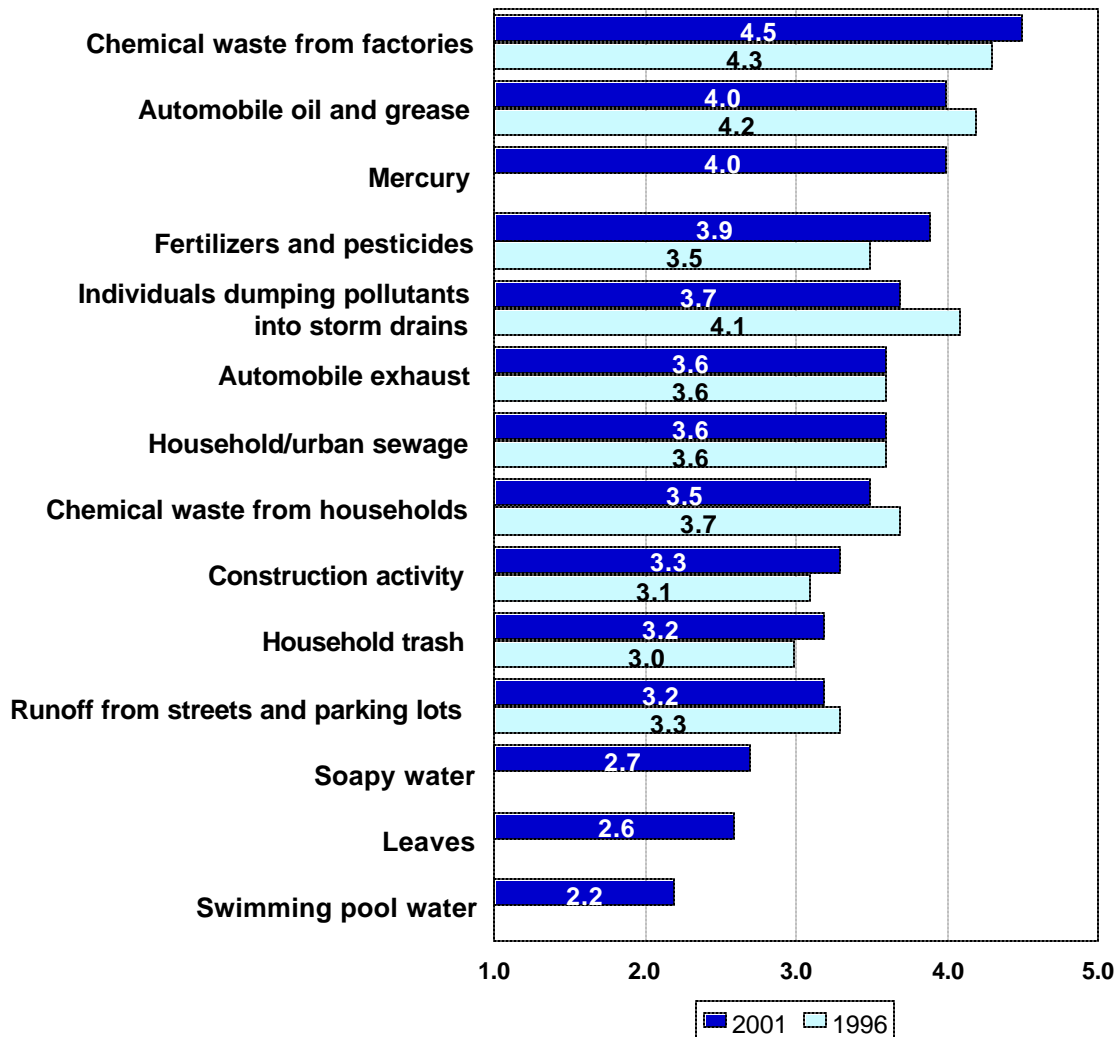
---

---

### A. KNOWLEDGE OF POLLUTION SOURCES

As was the case in 1996, survey respondents were asked to rate the seriousness of a variety of threats to water quality in San Mateo County. Respondents were asked to rate each on a scale from one to five, where a rating of one represented “no threat” and a rating of five represented “a very serious threat.” The mean score that each item received in both 1996 and 2001 is presented below in **Figure 1**.

**FIGURE 1:**  
**EVALUATION OF THREATS TO SAN MATEO COUNTY WATERWAYS, 1996 AND 2001**  
**(Mean Score on a Scale Where 1 = “No Threat” and 5 = “Very Serious Threat”)**



Overall, as was the case in 1996, residents rate “chemical waste from factories” as the most serious threat to the County’s waterways. Factory waste received a mean score of 4.5 on the five-point scale, up from 4.3 in 1996. In fact, almost 6 out of 10 respondents gave “chemical waste from factories” the maximum score of five, a percentage that overshadows every item on the list. “Automobile oil and grease” was rated the second-most serious source of pollution (as it was in 1996), with a mean score of 4.0 and 44 percent of respondents assigning it a score of five. “Mercury,” an item added to the list for this year’s survey, also received a mean score of 4.0.

Overall, *women, Latinos and residents with relatively low levels of education and income* are most likely to view “chemical waste from factories” as a very serious threat to local waterways. Fully 77 percent of respondents in the lowest income bracket (\$25K and under) cite such waste as posing the most serious threat to San Mateo’s waterways while 65 percent of respondents with an income of \$25-50K believe this is the case. Fully 76 percent of the county’s Latino residents also share this view. Women, particularly those over 45, are also much more inclined than men to point to chemical waste from factories as a very serious threat, with 68 percent of all women and 72 percent of women over 45



responding in this way. Finally, 72 percent of respondents with a high school degree or less shared this perception.

Clearly, County residents continue to view point-source pollution as the most serious threat to local waterways. **On the other hand, the percentage of County residents who view “individuals dumping pollutants into storm drains” as a serious threat has dropped notably in the past five years.** This year the item received a mean score of 3.7 on the five-point scale, down from 4.1 in 1996. While more than half of those polled (54%) considered dumping in storm drains a “very serious threat” in 1996, only 37 percent shared that view this year. No other item on the list showed such a large drop in its score between surveys.

Those least likely to see “individuals dumping pollutants into storm drains” as a very serious threat include **men** (particularly non-white men and those under 45), **homeowners**, and **residents with a post-graduate education or annual household income over \$75,000.** The fact that relatively well-educated respondents are less likely than others to view individuals dumping pollutants in storm drains as a very serious threat is somewhat surprising, as is the finding (illustrated below in **Figure 2**) that those respondents who understand that storm drains flow directly to the Bay are no more likely than others to view dumping in storm drains as a very serious threat.

**FIGURE 2:  
EVALUATION OF THE THREAT TO SAN MATEO COUNTY WATERWAYS POSED BY “INDIVIDUALS  
DUMPING POLLUTANTS INTO STORM DRAINS,” BY AWARENESS OF THE DESTINATION OF STORM  
DRAIN FLOWS**

Threat Posed by Dumping (On 5-Point Scale)	Respondents Who Believe Storm Drain Water is Treated (N=76)	Respondents Who Know Storm Drain Water Flows to the Bay (N=206)	Others (N=118)
Very Serious Threat (code 5)	35%	39%	33%
Less Serious (codes 1 through 4)	57%	59%	52%
DK/NA	8%	2%	5%

Several new items were added to this year’s survey in order to gauge resident perceptions of their seriousness as threats to the area’s water quality: these included “soapy water,” “leaves,” and “swimming pool water.” These three items received the three lowest mean scores, indicating that residents perceive them as less of a threat to water quality than any other item tested.

When asked to name another source of pollution to San Mateo County’s waterways, only a handful of residents offered other responses. In fact, no other single additional source of pollution was mentioned by more than one in twenty respondents. Some of these responses included “airports and planes,” “oil spills and ships” and “boating.”

***Conclusions and Recommendations***

These results suggest that San Mateo County residents feel slightly less concerned about their own role in polluting area waterways than they did at the time of the 1996 survey. There are two possible explanations for this finding. First, respondents may be substantially less aware of the dangers posed by dumping in storm drains than they were five years ago. Given other findings of the survey (which suggest a fairly constant level of understanding of the mechanics of the storm drain system since 1996, and show that those who understand that storm drains flow to the Bay are no more likely than others to view “individuals dumping pollutants in storm drains” as a serious problem), this explanation seems unlikely.

A second possible explanation is that respondents believe that actual instances of dumping in storm drains are far less frequent than they were in 1996, and as a result dumping in storm drains poses less of an overall threat to area waterways than it did in previous years. **In either case, however, the results suggest decreasing concern among San Mateo County residents about the threat to water quality posed by individuals dumping materials in storm drains.**

In addition, residents continue to see pollution from large, fixed sources (such as chemical waste from factories) as posing the most serious threat to local water quality, while they see the dangers from more common pollutants (such as soapy water, leaves, and swimming pool water) as much less of a threat.

Together, these findings point to a continued need for the County to emphasize the sources of stormwater pollution and the critical role individuals play in polluting the county's waterways. Education efforts should explain the ways in which seemingly benign items (like grass clippings) can impact local water quality when washed into storm drains. Outreach should also focus on explaining to respondents the relative impacts of large industrial polluters and stormwater pollution on local water quality.

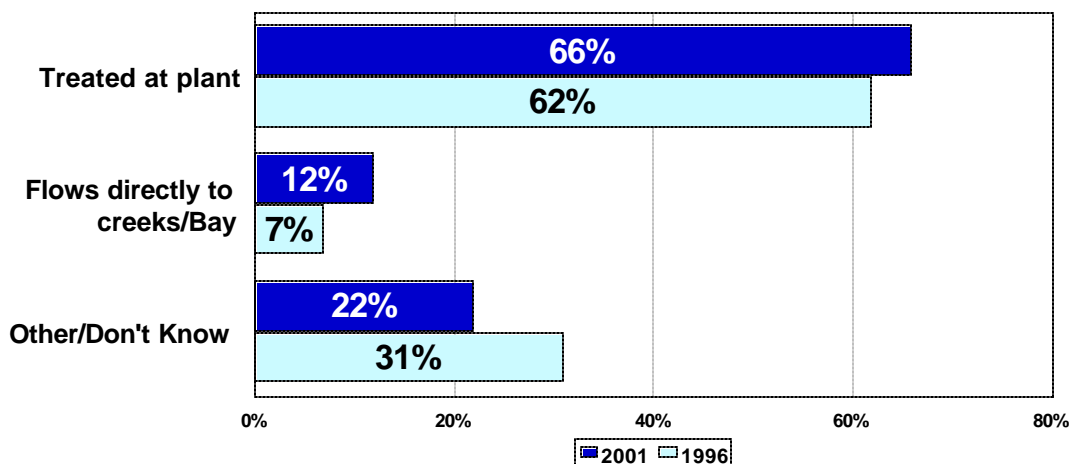
## B. PERCEPTIONS OF WATER TREATMENT AND DISPOSAL

As was the case in 1996, survey respondents were asked a series of questions to measure their understanding of the treatment of wastewater and stormwater in San Mateo County. Residents were first asked the following question about how wastewater is handled:

*Now, thinking specifically about water in your area, water from your kitchen and bath run through pipes into the sewer -- can you tell me if that sewage gets treated at a sewage treatment plant, or does it run directly into creeks, the Bay and the ocean?*

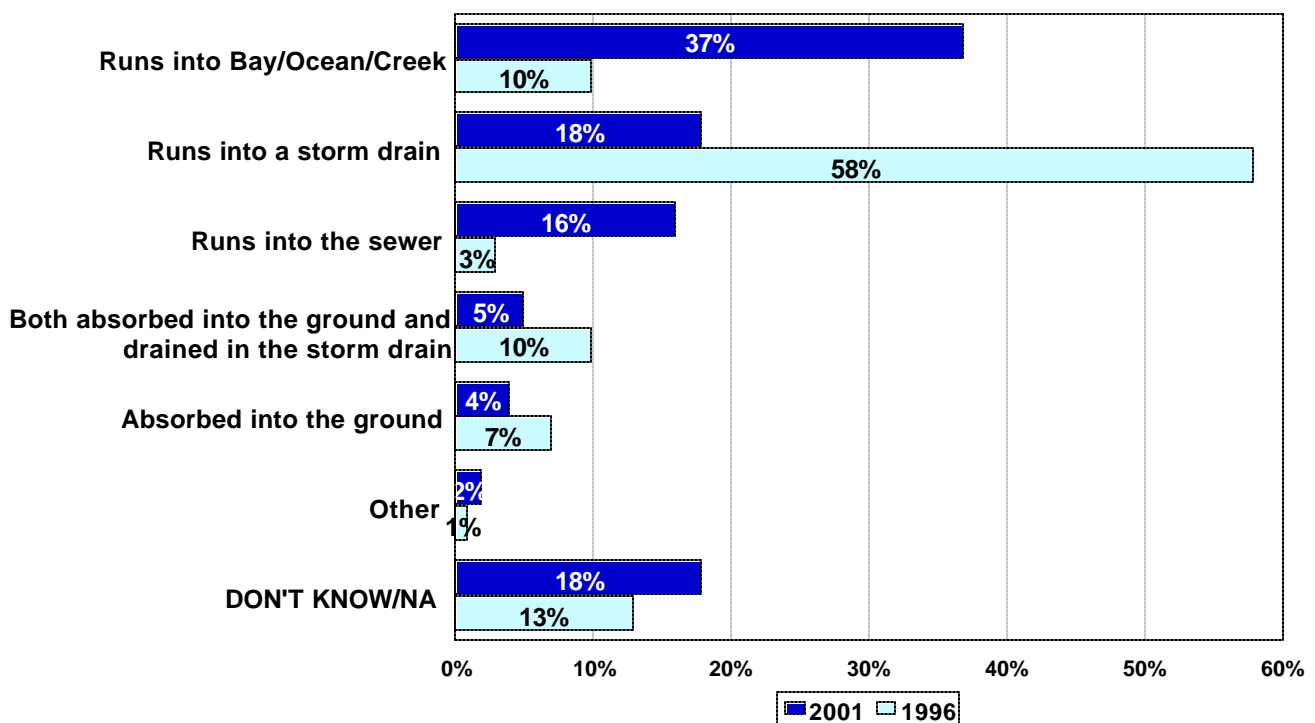
As shown in **Figure 3** below, **two-thirds of those polled understand that wastewater is treated, while only about one resident in ten believes that it flows directly to creeks and the Bay.** These proportions are not significantly different from those observed in the 1996 survey. Those with *higher levels of education* are more likely to be aware that water gets treated at a sewage plant before entering local waterways, as were individuals *aged 45-64, whites, men* and respondents with relatively *high annual household incomes*.

**FIGURE 3:  
PERCEPTION OF WHAT HAPPENS TO WASTEWATER, 1996 AND 2001**



When asked about what happens to runoff from over-watered lawns and gardens, more than one-third of respondents in this year's poll believed that it runs directly into creeks, the Bay and the ocean, as compared to only ten percent who believed this to be the case five years ago (as illustrated in **Figure 4** below). At the same time, only 18 percent of respondents said that this runoff goes directly into the storm drain, while 58 percent offered this response in 1996. A dramatically higher number of respondents (16 percent) indicated that they believe this water flows into the sewer than was the case in 1996 (three percent).

**FIGURE 4:  
PERCEPTIONS OF DESTINATION OF LAWN/GARDEN RUNOFF, 1996 AND 2001  
(Open-End)**



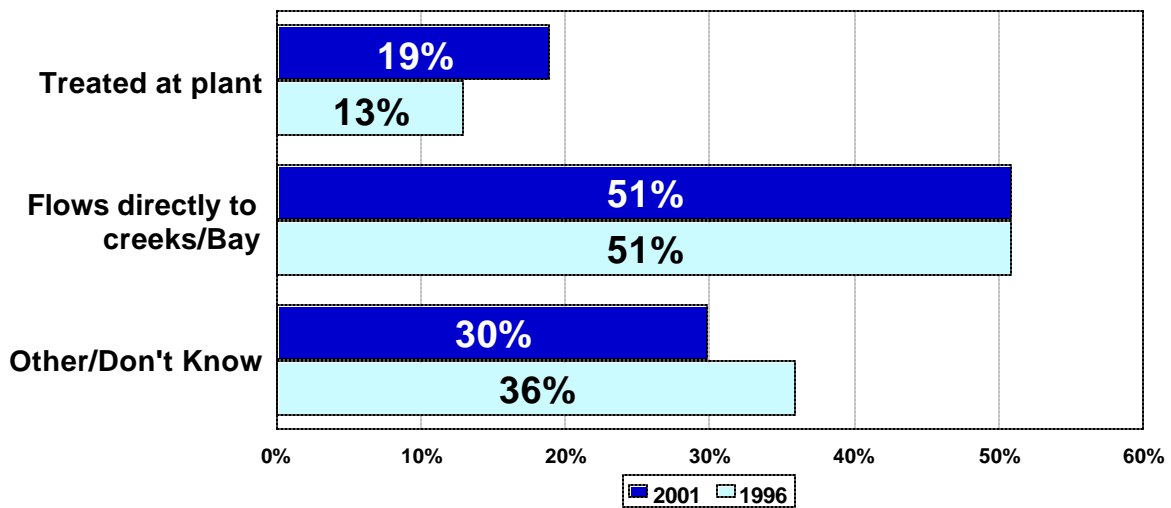
Taken together, these findings appear to illustrate two countervailing trends. First, the total proportion of residents who believe that runoff flows into storm drains or the Bay has declined significantly (from a total of 78 percent in 1996 to just 60 percent in this year's survey), while the proportion of respondents who believe it flows into the sewer has increased. **This suggests an decrease in understanding about whether or not runoff is treated.**

At the same time, nearly four times as many respondents said that runoff flows directly to the Bay, ocean, or creeks than was the case in 1996 (with a corresponding decrease in the proportion who said it runs into storm drains). **This finding suggests a sharp increase in the number of residents with a clear understanding that materials placed in storm drains end up in local waterways.** *Women, Latinos* (particularly those who prefer to communicate in Spanish), and *residents with*

relatively low levels of education or income are less likely than others to say that runoff ends up in creeks, the ocean, or the Bay.

Finally, as shown in **Figure 5** below, residents were asked whether water that runs into storm drains gets treated at a sewage treatment plant or runs directly into creeks, the Bay and the ocean. Again, the results were virtually unchanged from 1996; a bare majority of those polled understand that water in storm drains flows directly into area waterways, while about one in five believe that it is treated and approximately one-third acknowledge that they do not know.

**FIGURE 5:  
PERCEPTION OF WHAT HAPPENS TO WATER IN STORM DRAINS, 1996 AND 2001**



Understanding of the storm drain system tends to increase with age (although seniors have relatively low levels of understanding; just 39 percent residents over age 65 realize that storm drains flow directly into area waterways). Others who are particularly likely to say that storm drains flow directly into creeks and the Bay include *men* (particularly whites and those age 45 and over), *college graduates*, and *residents with annual household incomes over \$75,000*. Those most likely to believe that water in storm drains is treated include residents with a *high school education or less*, those in the *north area of the county*, residents *under age 25*, those with *annual household incomes under \$25,000*.

### ***Conclusions and Recommendations***

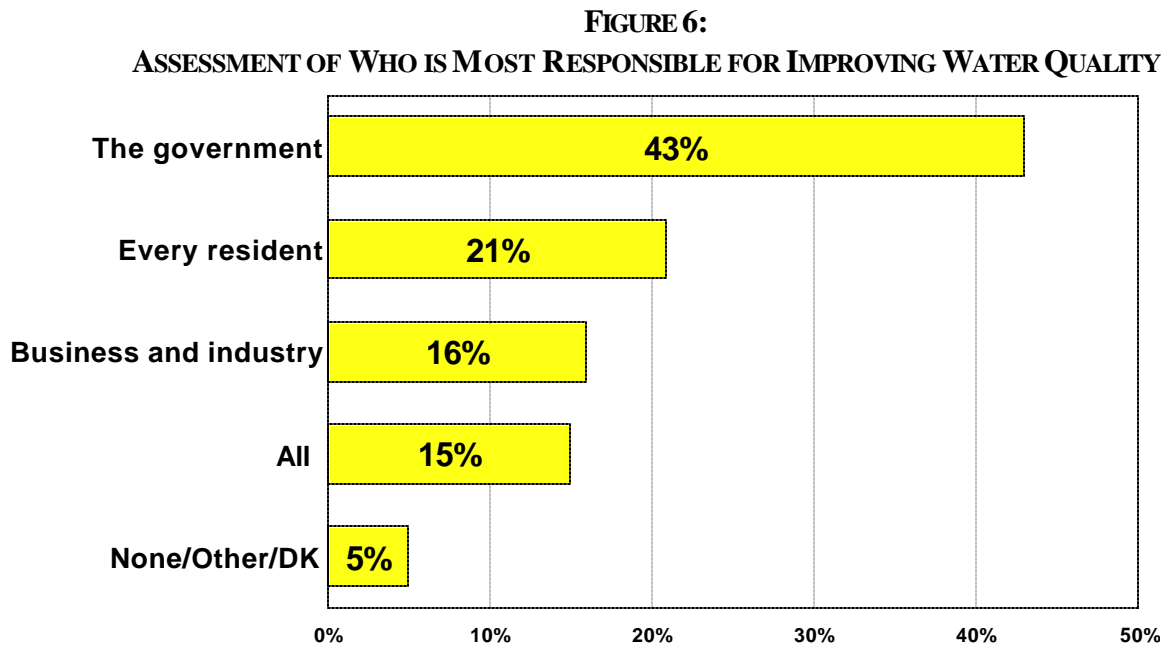
Most residents continue to understand what happens to wastewater and runoff in San Mateo County: nearly two-thirds know that wastewater is treated, 60 percent know that water from lawns and gardens runs into storm drains and/or local waterways and 51 percent know that storm drains flow directly to local bodies of water. Unfortunately, most of these indicators have shown no significant improvement (and in some cases, an actual decline) since 1996. And as was the case in 1996, there are still substantial numbers of county residents who simply do not understand how the storm drain system works.

These results highlight the continuing need for the County to educate local residents regarding the basic facts of how the storm drain system works. In a highly-populated region like the Bay Area, it takes prolonged and repetitive communication to educate the public in ways that will create a lasting change in their attitudes and behavior. The County should continue to undertake education efforts, coordinating themes and messages with other Bay Area agencies who are conducting similar outreach in order to obtain maximum repetition and effectiveness.

In particular, the County should focus its education efforts on *residents with a high school education or less, those under age 45* (particularly women and non-white residents) or *over age 65*, and *residents with households incomes under \$25,000*, who indicate some of the lowest levels of understanding of how the storm drain system works.

**C. ASSESSMENT OF PARTIES RESPONSIBLE FOR IMPROVING WATER QUALITY**

**San Mateo County residents clearly believe that government, and not individual residents, should bear most responsibility for maintaining water quality in the county.** Respondents were asked whom they felt was “most responsible” for improving water quality in San Mateo County, and were presented with three choices; as shown in **Figure 6** below, a 43-percent plurality of County residents believe that “the government” is most responsible for improving water quality. Just one in five respondents indicated that “every resident” should bear responsibility, and only 16 percent said the same for “business and industry.”



This assignment of primary responsibility to government cuts across demographic lines. Residents *under age 25, Spanish-speakers*, and residents with *household incomes under \$25,000 per year* are all somewhat more likely than other voters to say “every resident” should bear primary responsibility for improving water quality. **However, there is no major demographic or geographic group among**

**which even one-third of those surveyed say that individual residents should be most responsible.**

### *Conclusions and Recommendations*

Residents appear to perceive improving water quality as a problem of such scope that the government is best positioned to take responsibility for it. This belief may stem from several facts noted in earlier sections. First, residents see chemical waste from factories as the most serious threat to water quality in the county; clearly, government is better equipped than individual residents to deal with this type of pollution. Second, many residents continue to have misconceptions about how the storm drain system works, and about the threats to water quality posed by such seemingly innocuous substances as swimming pool water or leaves. If residents see large industrial polluters as the main threat to water quality, and do not understand the role played by stormwater pollution, they are unlikely to see water quality as something that individual residents can do anything about.

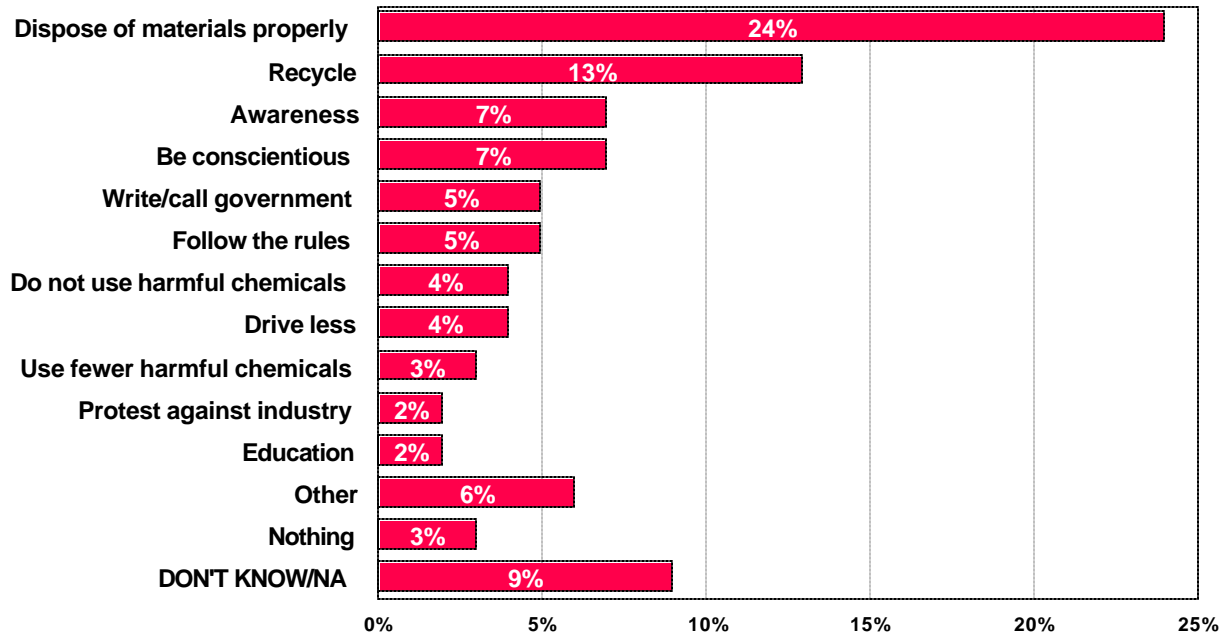
San Mateo County residents need to understand how their own behavior contributes to water pollution before they can be persuaded that improving water quality requires them to change their behavior. The County must continue to devote considerable resources to highlighting the ways that common household activities can introduce contaminants into storm drains, which eventually carry them to San Mateo's waterways. Such messages should be framed with calls to action that emphasize how changes in individual behavior can make a difference.

#### **D. RESIDENT ACTIONS TO REDUCE POLLUTION**

When asked, in an open-ended question, what "people like yourself" can do to reduce water pollution, the most frequently offered response was to "dispose of materials" properly, with 24 percent of respondents citing this as their first choice. The second-most common response was to "recycle" (13%). "Raising awareness" and "being conscientious" were the third-most mentioned responses, each cited by 7 percent of those polled. Finally, "contacting the government" and "following the rules," were the next most popular responses. These results are presented in **Figure 7** below.

**FIGURE 7:  
ACTIONS RESIDENTS CAN TAKE TO REDUCE WATER POLLUTION**

(Open-End)



Those with a *post-graduate education* were most likely to respond that disposing of materials properly was the most effective way to reduce pollution in San Mateo’s waterways; *whites* and *women under age 45* were also more likely than other residents to share this view.

When the results of this question are compared with those obtained in 1996, it appears **residents have grown less focused on specific means of reducing water pollution and have become more focused on being conscientious and aware of how their actions might affect water quality in the Bay Area.** In 1996, 45 percent of those polled responded to this question by saying that people could “dispose of materials properly” while 20 percent said they could “recycle;” no other response was cited by more than four percent of those surveyed. In contrast, in this year’s survey there were fewer respondents who mentioned recycling or the proper disposal of materials, and significantly more who mentioned concepts like “be conscientious” or “follow the rules.”

### ***Conclusions and Recommendations***

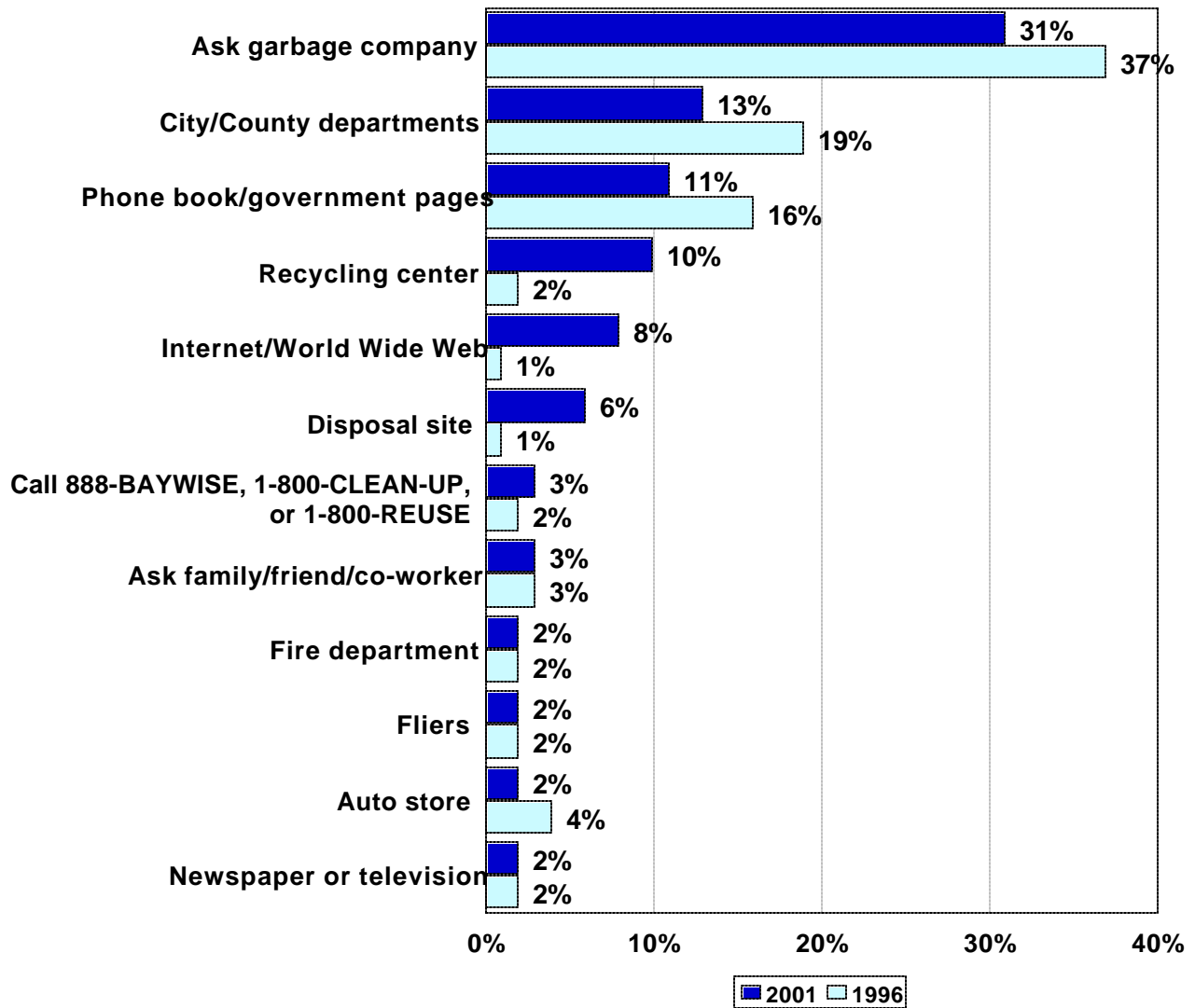
While residents express concern about disposing of materials properly and recycling, and while they place great importance on being conscientious and aware of how their actions could affect water quality, residents did not name many specific, concrete actions that individuals could take to reduce water pollution. To the extent that the County’s outreach efforts can feature calls to action for specific behavioral changes, they may help to convert residents’ generalized desire to be “conscientious” into reductions in potentially harmful behavior.

### **E. SOURCES OF INFORMATION ON THE PROPER DISPOSAL OF POLLUTANTS**



When asked, in an open-ended question, where they would get information describing how to properly use and dispose of “paint, household chemicals, and motor oil,” San Mateo County residents responded much as they did in 1996 (as shown in **Figure 8**). Similar to the 1996 results, the top three responses were the garbage company (31 percent), city/county departments (13 percent) and the phone book/government pages (11 percent).

**FIGURE 8:  
SOURCES OF INFORMATION ON THE PROPER DISPOSAL OF POLLUTANTS, 1996 AND 2001  
(Open-End, Top Responses Only)**



Each of these top three items, however, was mentioned by somewhat fewer respondents than in 1996. Accordingly, there were also three items that were named by substantially larger proportions of respondents than in the baseline survey: recycling centers (named by ten percent of those polled, up from two percent), the Internet (named by eight percent of those polled, up from one percent), and disposal sites (named by six percent of those polled, up from one percent).

***Conclusions and Recommendations***

The County should make sure that information about the proper disposal of hazardous wastes is available in the places that residents say they are most likely to seek it out: from the garbage company, relevant local government agencies, and the government pages of the phone book. Another alternative

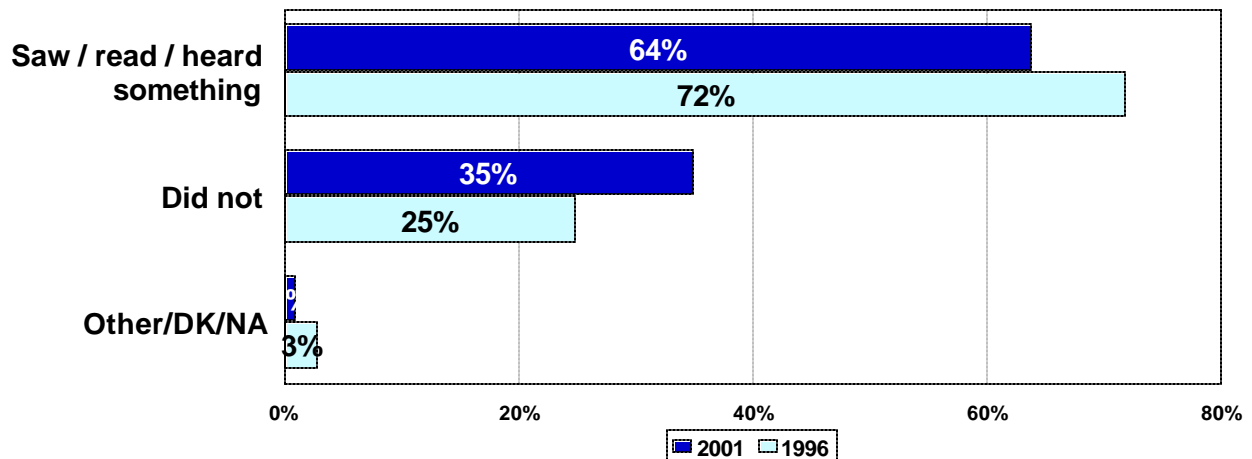
may be disposal or recycling centers, as residents also indicate an increasing likelihood to turn to them as sources of information.

In addition, given the increasing prominence of the Internet as a source of information on a wide range of topics, it will be important to make sure that directions on the proper techniques for disposing of hazardous materials are available on the websites of all of the entities mentioned above, from the garbage company to local government agencies.

#### F. EFFECT OF MESSAGES REGARDING THE PROPER DISPOSAL OF POLLUTANTS

As illustrated in **Figure 9**, approximately two-thirds of survey respondents said that they had “seen, read or heard” something about the proper use and disposal of household chemicals and motor oil. While the vast majority of county residents have received such messages, the proportion is down from 72 percent in 1996.

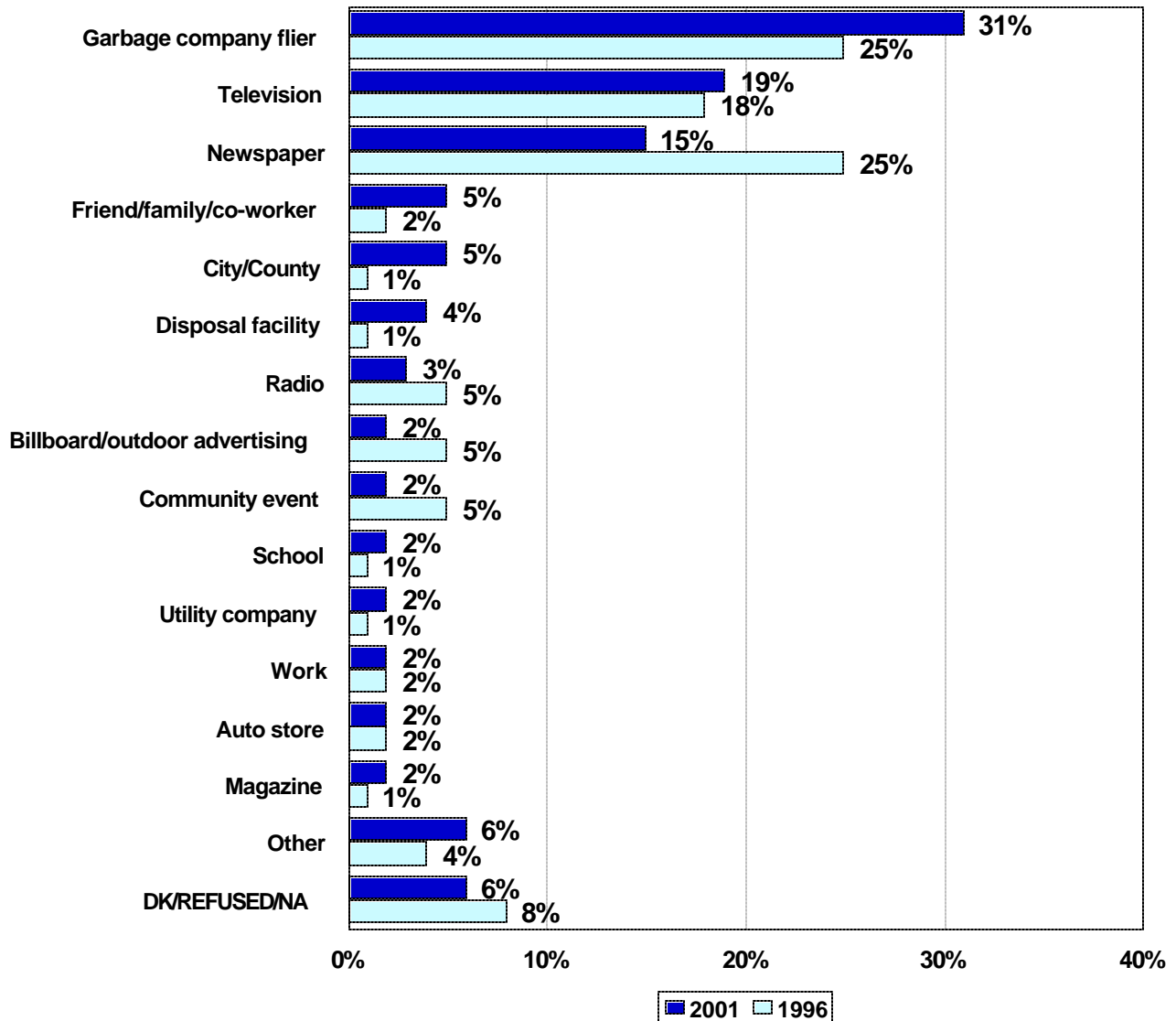
**FIGURE 9:  
RECEPTION OF PROPER DISPOSAL MESSAGES, 1996 AND 2001**



Those most likely to have received such messages include *well-educated residents* and those *age 45 or over*. By a large margin, *whites* were also much more likely than non-whites to have heard about proper use and disposal of household chemicals, by a large margin. Nearly four out of five whites say they have heard something about the issue, while only about one-third of Latinos have.

Respondents who said they had seen or heard something about proper use and disposal of household chemicals were then asked where they had gotten this message. As was the case in 1996, **the top three sources for proper disposal messages were garbage company fliers, television, and newspapers** (As shown in **Figure 10** below). Receipt of such messages from newspapers has declined since 1996 (just 15 percent of those polled got messages from the newspaper in 2001, compared to 25 percent in 1996) while garbage company fliers appear to have become a more frequent source (named by 31 percent in 2001, up from 25 percent in 1996).

**FIGURE 10:  
SOURCE OF PROPER DISPOSAL MESSAGE, 1996 AND 2001**



While these three sources of information were the three most frequently named by every major demographic group, there was some variation in the degree to which demographic groups said they had received these messages from one source or the other. Garbage company fliers were most frequently cited by *women* (particularly those who are 45 or over, employed, or white), residents of the *central area* of the county, and residents with household *incomes over \$75,000 per year*. Television was most frequently named by those with a *high school education or less*, those *under age 45* (especially men and non-whites), *renters*, and residents with household *incomes under \$50,000 per year*. Newspapers were a particularly frequent source of messages for *retirees*, those with a *post-graduate education*, *seniors*, and *residents of the central area*.

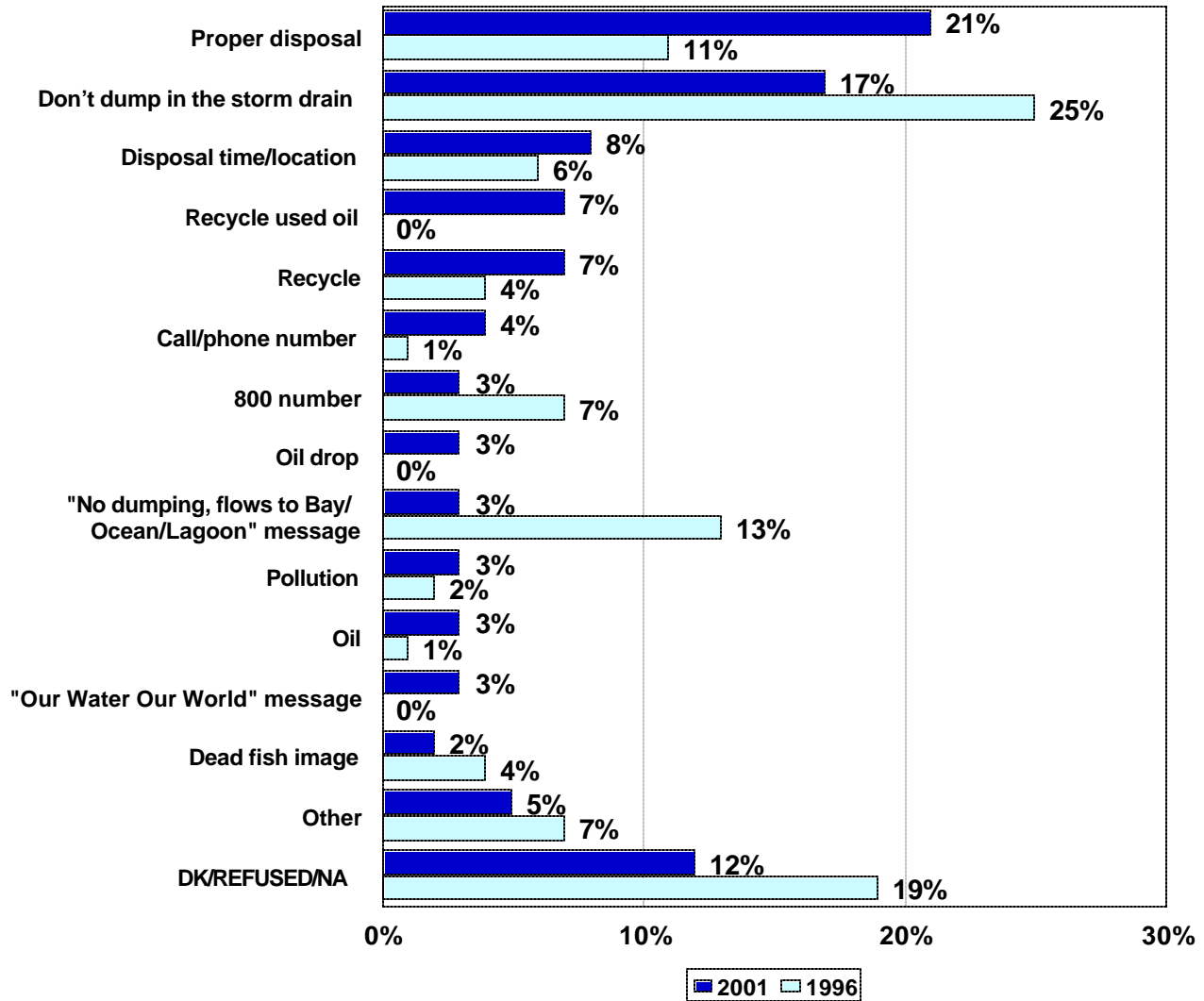
Among the 19 percent of respondents who said they had heard a “proper disposal” message on television, nearly half (47 percent) said that they could not remember on which station they had seen it. Among those who did remember, Channel 14 (KDTV) was the most frequently mentioned — by 14 percent of residents. Channel 2 (KTVU) and Channel 5 (KPIX) were the next-most frequently mentioned television stations, with 12 percent and 11 percent respectively. Only nine percent of these residents said they had seen something on Channel 7 (KGO) and a mere five percent said they had seen something on Channel 4 (KRON).

Among the 15 percent of those who received messages who said that they had gotten the information from the newspaper, the San Mateo County Times, the San Francisco Chronicle and the local neighborhood newspaper were each mentioned by 17 percent as the source of the message. When asked in what form the information had been delivered, more than one-third said that this information was provided in a general newspaper article, while only 13 percent said that the information came from an advertisement and seven percent said it came from an insert in the newspaper.

In 1996, the newspaper was cited more frequently than any other source of information about the proper use and disposal of household chemicals. In fact, about one in four respondents claimed to have read about the issue in the newspaper. One-third of these respondents said that they had read about it in the San Mateo Times, and 23 percent said they read about proper use and disposal in the San Francisco Chronicle.

When asked to name the one or two things they remembered most about the message, a 21-percent plurality generically said “proper disposal” (as shown in **Figure 11** below). The next-most frequently remembered items were the message “don’t dump in the storm drain” (mentioned by 17 percent of those polled), followed by messages about specific disposal times or locations (received by eight percent of those polled) and messages about recycling used oil (mentioned by seven percent of those surveyed). No other single message component was mentioned by even five percent of those who had received such messages.

**FIGURE 11:  
RECALL OF CONTENT OF PROPER DISPOSAL MESSAGES, 1996 AND 2001  
(Open-End, Among Those Who Remembered Receiving Messages)**

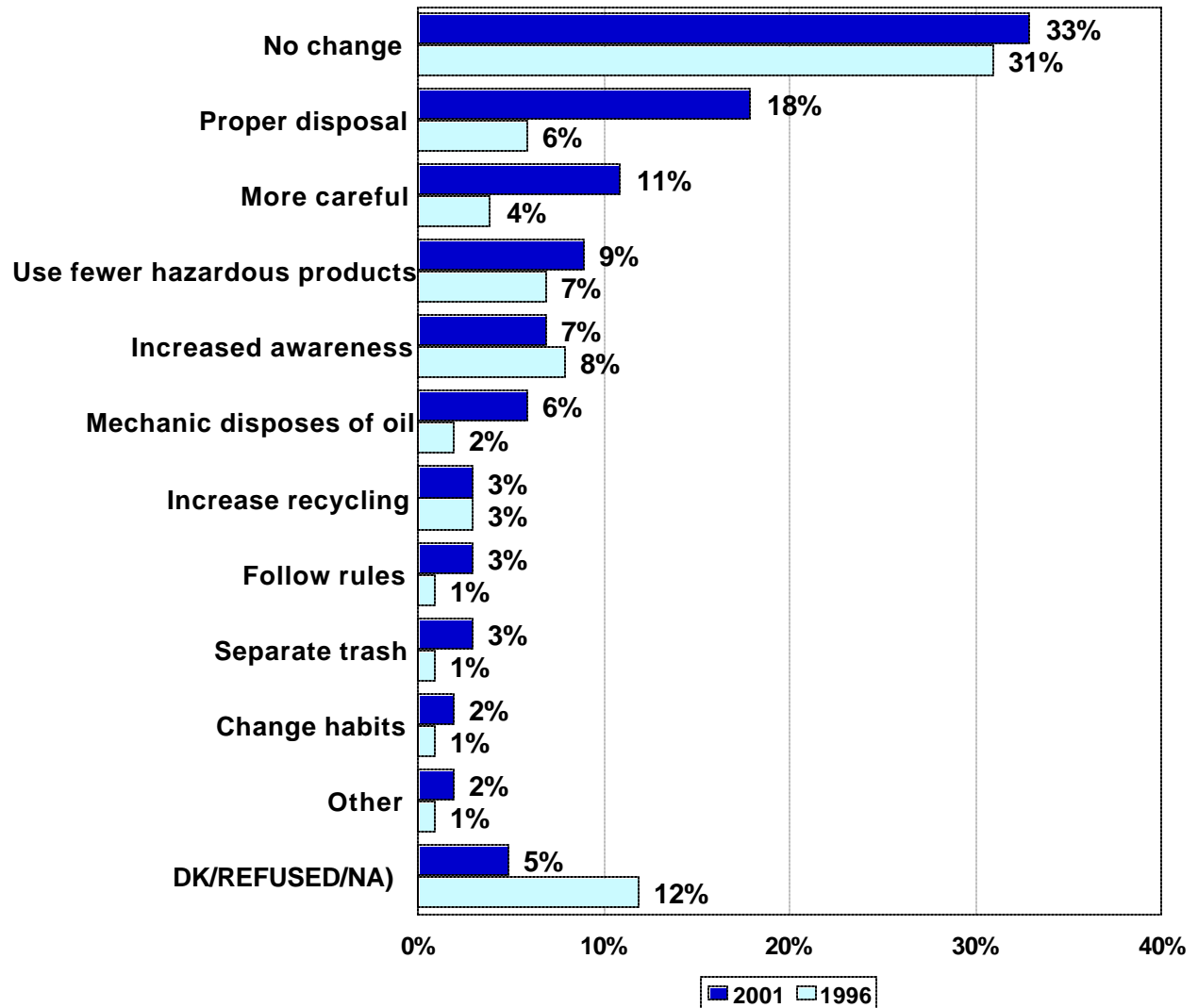


In 1996, the message components that respondents remembered most clearly were those saying “don’t dump in the storm drain” or “no dumping, flows to Bay/Ocean/lagoon.” These messages were mentioned less frequently this year, which may help to explain the fact that respondents seem somewhat less aware of the dangers of storm drain pollution in this year’s survey.

**More than three out of five respondents reported that they had modified their behavior as a result of the message they received.** A total of 18 percent said they had, in fact, disposed of these materials properly as a result and an additional 11 percent of them said they were “more careful” after hearing the message. However, as was the case in 1996, a significant number of respondents who had received messages about the proper disposal of household chemicals reported that the messages had no

effect on their behavior. As shown in **Figure 12** below, one-third of county residents said there was “no change” in the way they used and disposed of these products upon hearing the message.

**FIGURE 12:  
EFFECT OF PROPER DISPOSAL MESSAGES ON RESPONDENT BEHAVIOR, 1996 AND 2001  
(Open-End, Among Those Who Remembered Receiving Messages)**



***Conclusions and Recommendations***

**More residents could recall messages on the proper use and disposal of household chemicals in 1996 than was the case in this year’s survey.** While this may reflect a decrease in the frequency with which such messages are available to the public, it may also just reflect a greater elapsed period of time between a specific outreach effort and the administration of this year’s survey.

Garbage company fliers, television, and newspapers were the most frequent sources by which these messages were received (as was the case in 1996). The messages received regarding the disposal of household chemicals were notably less focused on storm drains than they were in 1996. Five years ago, a clear plurality of respondents' recollections or "proper disposal" messages focused on admonitions not to dump pollutants in storm drains; this year, respondents best remembered messages that focused more generically on "proper disposal."

Those most likely to have received messages about the proper disposal of household chemicals or motor oil tended to be those *age 45 and over* or those with *high levels of educational attainment*. Additionally, there were significant racial and ethnic disparities in receipt of information about the disposal of household chemicals: *whites* were more likely to have received such messages than were Latinos.

These findings suggest that future outreach should focus on reaching younger, less well-educated residents and non-whites. In addition, messages with a specific focus on not disposing of household chemicals in storm drains might elevate awareness of the dangers of storm drain pollution.

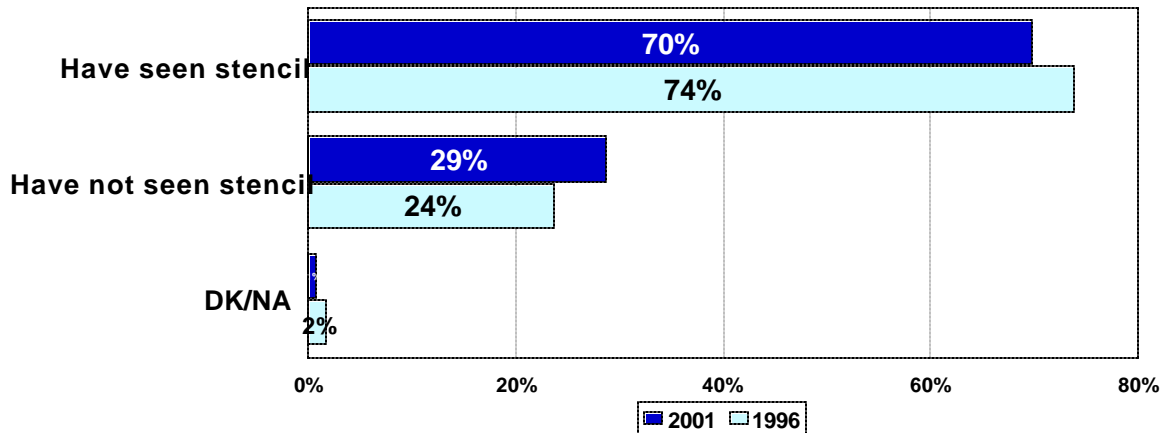
As was the case in 1996, many of those who had received messages about the proper disposal of household chemicals said they had not modified their behavior as a result. In addition, many of those who said that their behavior did change were unable to mention any very specific modifications. As a result, the County should consider outreach efforts that call for specific behavioral changes and also promote those changes as having both a storm drain pollution reduction benefit and a personal benefit. Communications promoting a specific behavior change should emphasize the minimal effort required and personal benefits accruing from the action, in conjunction with the substantial benefit of reducing pollution that flows through the storm drains into local waterways and the Bay.



**G. OBSERVATION OF STORM DRAIN STENCILS**

As illustrated in **Figure 13**, seven out of ten San Mateo County residents report that they have seen stencils over area storm drains that say “No Dumping, Flows to Bay/Ocean/Lagoon;” this proportion is statistically identical to that observed in the 1996 survey (74 percent).

**FIGURE 13:  
OBSERVATION OF STORM DRAIN STENCILS, 1996 AND 2001**



Those most likely to have seen the stencil included *residents aged 35-64*, those with annual household *incomes over \$75,000*, and *whites* (especially those under age 45). Those least likely to have seen the stencils include *seniors*, *Latinos*, and those with annual household *incomes under \$25,000*. While there was a large gender gap in observation of the stencils in 1996, that gender gap was not apparent in this year’s survey.

**The stencils appear to have been fairly effective in raising awareness of the fact that storm drains flow directly into local waterways.** As shown in **Figure 14** below, a far greater proportion of respondents who have seen the stencils know where storm drain flows end up (58 percent) than is the case among those who have not seen the stencils (37 percent).

**FIGURE 14:  
RELATIONSHIP BETWEEN OBSERVATION OF STENCILS AND  
UNDERSTANDING OF STORM DRAINS**

Perception of Destination of Storm Drain Flows	Among Respondents Who Have Seen Stencils (N=281)	Among Respondents Who Have Not Seen Stencils (N=119)
Treated at plant	16%	26%
Flow to creeks/bay	58%	37%

Other/Don't Know	26%	37%
------------------	-----	-----

**Conclusions and Recommendations**

As was the case in 1996, the stencils appear to have been very effective in drawing public attention. The vast majority of those polled remember having seen the stencils, and those who have seen them have a better understanding of the fact that storm drains empty into the Bay.

**H. AWARENESS AND USE OF TOLL-FREE NUMBERS AND WEBSITES**

As was the case in 1996, **only a very small number of County residents have taken advantage of toll-free numbers and websites that provide information about the proper disposal of hazardous chemicals.** As shown in **Figure 15** below, only five percent of those polled have called 1-800-CLEANUP (a proportion unchanged from 1996). Just one percent have called 1-800-BAYWISE, a proportion statistically identical to that observed in 1996. Only one percent have visited [www.STOPPP.net](http://www.STOPPP.net), the website established by the San Mateo County Stormwater Pollution Prevention Program.

**FIGURE 15:  
USE OF TOLL-FREE NUMBERS AND WEBSITES, 1996 AND 2001**

Phone Number/ Website	Proportion Using, 1996	Proportion Using, 2001
1-800-CLEANUP	5%	5%
1-800-RE USE	9%	<i>(Not Asked)</i>
1-800-BAYWISE	2%	1%
www.STOPPP.net	<i>(Not Asked)</i>	1%

Given the small numbers of respondents that made use these numbers and websites, the results of questions regarding the places respondents found out about them cannot be evaluated with any reliability.

**Conclusions and Recommendations**

While use of the toll-free numbers and websites remains small, they offer convenient sources of additional information for residents who want to find out more about preventing stormwater pollution or about the safe disposal of household chemicals. Public education materials should continue to publicize these resources. Given the increasing number of residents who say they would turn to the Internet to find out about the proper disposal of household chemicals, the website may become a particularly important way of disseminating information to interested county residents.

## I. USE OF PRODUCTS CONTAINING MERCURY AND UNDERSTANDING OF THEIR DANGERS

A series of new questions in the 2001 survey asked residents about their use of various products that contain mercury, and their understanding of the dangers created by the improper disposal of those products. **Figure 16** below shows the proportion of respondents who understand that each of the listed products contains mercury, as well as the proportion of respondents who have purchased each product during the past five years. The table also shows the proportion of the respondents who purchased each item who are aware that it contains mercury.

**FIGURE 16:  
AWARENESS OF THE PRESENCE OF MERCURY IN CONSUMER PRODUCTS**

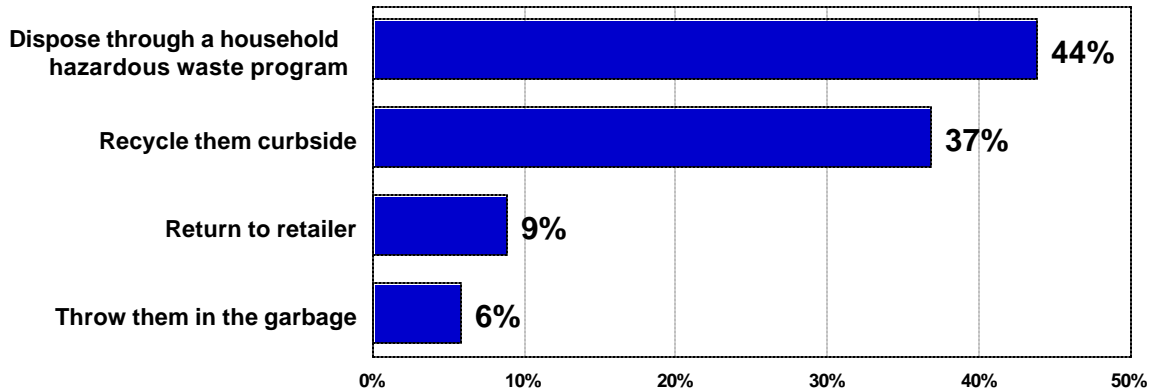
<b>Product</b>	<b>Aware That Product Contains Mercury (All Residents)</b>	<b>Have Purchased Product in Past Five Years</b>	<b>Percent of Purchasers Aware That Product Contains Mercury</b>
Thermometers	<b>90%</b>	18%	92%
Thermostats	<b>61%</b>	28%	76%
Batteries	<b>59%</b>	66%	60%
Fluorescent lamps	<b>32%</b>	32%	33%

The vast majority of residents (nine out of ten) understand that thermometers have mercury, but somewhat smaller majorities (about six out of ten) understand that thermostats and batteries contain the chemical. Only about one in three respondents realizes that fluorescent lamps contain mercury.

At least one out of five residents has purchased each of these items in the past five years; batteries (purchased by two-thirds of those surveyed) and fluorescent lamps (purchased by one-third of those polled) are particularly frequently-used products. Interestingly, **residents who have purchased these items are generally no more aware than others that they contain mercury.** The lone exception is thermostats; more than three-quarters of those who have purchased thermostats know that they contain mercury, as compared to just 61 percent of county residents in general.

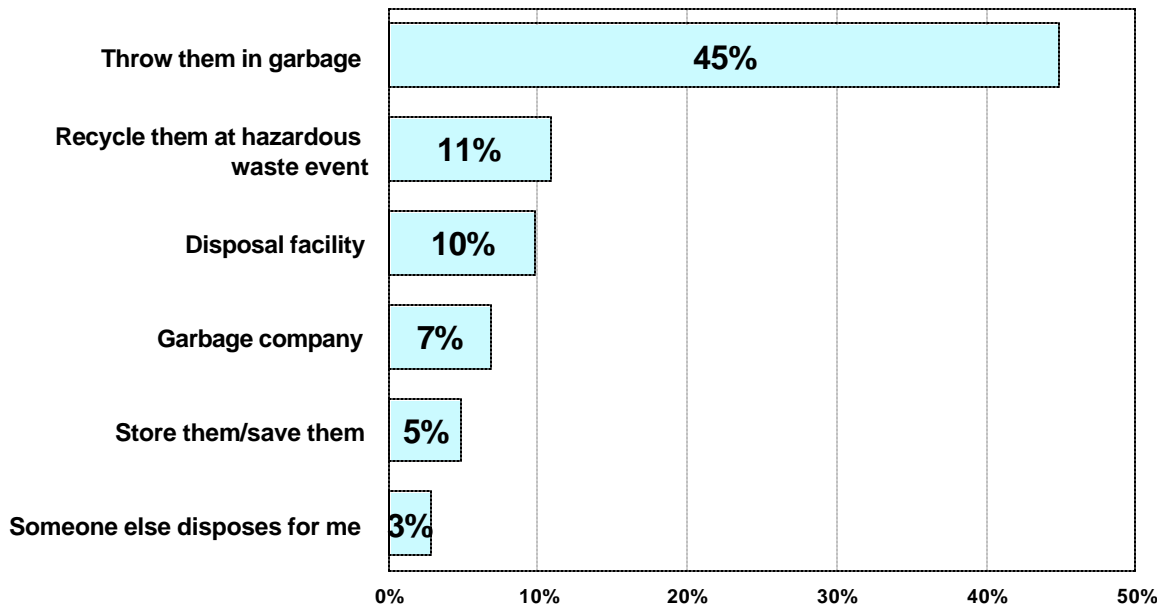
Survey respondents were also asked how they would go about disposing of products that contain mercury. **An overwhelming plurality of those polled, as shown in Figure 17 below, say that they would simply throw such products in the garbage.** Only about one in ten say they would recycle them at a hazardous waste event, while an equivalent number say they would take them to a disposal facility. Generally speaking, the likelihood of throwing products with mercury in the garbage cuts across demographic groups; however, residents age 45 or over are somewhat less likely to do so than residents under age 45. **Those residents who say they have purchased products containing mercury are no less likely to throw them in the garbage than are other residents.**

**FIGURE 17:  
CURRENT METHOD OF DISPOSING OF PRODUCTS THAT CONTAIN MERCURY  
(Open-End, Top Responses Only)**



When offered the choice of a variety of ways of disposing of mercury-containing products, however, respondents express great willingness to dispose of them properly (as shown in **Figure 18** below). When given the choice, 44 percent say they would dispose of the products through a household hazardous waste program, and 37 percent say that they would recycle them curbside. Just six percent of those polled continue to insist that they would throw the products in the garbage. These findings suggest that if residents are educated about the dangers of products containing mercury, and are made aware of safe methods of disposing of those products, they are likely to modify their behavior.

**FIGURE 18:  
PREFERRED FUTURE METHOD OF DISPOSING OF PRODUCTS THAT CONTAIN MERCURY**



### ***Conclusions and Recommendations***

Many County residents buy products containing mercury, with batteries and fluorescent lamps being among the most frequent purchases. However, while nearly all residents are aware that thermometers contain mercury, four out of ten residents do not know that thermostats or batteries contain the chemical, and fully two-thirds are not aware that fluorescent lamps contain mercury. Perhaps as a result, a clear plurality of residents say they dispose of these types of products by throwing them into the garbage.

When offered a choice of ways to dispose of such products in the future, most residents say they would like to dispose of them through a household hazardous waste program, or by recycling them curbside. These results suggest that the County could reduce the unsafe disposal of mercury-containing products by 1) educating the public about which products contain mercury (particularly batteries and fluorescent lamps, which are frequently purchased), 2) explaining the harm that can result from disposing of these types of products by throwing them in the garbage, and 3) making residents aware of the safest ways to dispose of such products.

## APPENDIX A: TARGETING TABLE

---

---

The following table shows the responses of major demographic and geographic subgroups of San Mateo County's population to some of the key survey questions designed to gauge awareness and understanding of the storm drain system and the sources of storm drain pollution. The table makes it possible to identify some of the demographic groups that have the lowest levels of understanding of key aspects of storm drain pollution, and who, as a result, will make suitable targets for outreach from County officials.

While all county residents are in need of additional outreach on stormwater pollution, the groups that emerge as the most optimal targets are the following:

- 2 **Residents with relatively low levels of education or income:** Residents with no more than a high school education, or with annual household incomes of no more than \$25,000, were far less likely than other respondents to understand that storm drains flow into area waterways, or to say they had recently received messages about the proper disposal of household chemicals and motor oil.
- 2 **Women under age 45** – Women under 45 had comparatively low levels of understanding of storm drain flows, and reported receiving messages about the proper disposal of household chemicals and motor oil far less frequently than other voters.
- 2 **Seniors (residents over age 65)** – Seniors were far less likely than other residents to have seen storm drain stencils, or to understand that storm drains flow into area waterways.
- 2 **Renters** – Renters are far less likely than homeowners to have received messages about the proper disposal of household chemicals and motor oil.
- 2 **Latinos** – Latino residents, and particularly those who chose to take the survey in Spanish, were less likely to have seen storm drain stencils or to have received messages about the proper disposal of household chemicals and motor oil.

Group	Q1: "Every Resident" Responsible for Water Quality	Q2g: Mean Score for Threat of "Household Trash"	Q2i: Mean Score for Threat of "Individuals Dumping..."	Q2l: Mean Score for Threat of "Street/Pkng. Lot Runoff"	Q8: Storm Drains Run to Bay/Ocean	Q10: Seen/Heard/Read About Proper Disposal of Chems.	Q18: Seen Storm Drain Stencil
<b>ALL RESIDENTS</b>	<b>21%</b>	<b>3.2</b>	<b>3.7</b>	<b>3.2</b>	<b>51%</b>	<b>64%</b>	<b>70%</b>
High school ed. or less	23%	3.4	4.0	3.7	44%	45%	71%
Some college education	21%	3.3	3.7	3.0	55%	67%	72%
College graduates	19%	3.1	3.6	3.1	60%	72%	70%
Post-graduate education	21%	2.8	3.3	2.9	44%	78%	66%
Under age 45	18%	3.3	3.6	3.2	48%	51%	71%
Age 45+	22%	2.0	3.7	3.2	54%	76%	70%
Age 65+	22%	2.9	3.8	3.4	39%	73%	57%
Central Area	19%	3.1	3.6	2.9	48%	67%	67%
North Area	22%	3.3	3.6	3.4	49%	61%	72%
South Area	22%	3.0	3.7	3.1	52%	68%	71%
Homeowners	19%	2.9	3.5	3.1	53%	71%	71%
Renters	23%	3.6	4.0	3.4	48%	52%	69%
HH income under \$25,000	32%	3.5	4.2	3.7	42%	36%	65%
\$25,000 to \$50,000	20%	3.6	3.8	3.5	55%	74%	72%
\$50,000 - \$75,000	25%	3.0	3.6	3.1	51%	61%	66%
\$75,000+	15%	2.9	3.4	2.8	61%	71%	76%
White	20%	2.9	3.6	3.1	54%	49%	75%
Latino	22%	3.9	4.4	3.8	49%	36%	60%
Total Non-White	22%	3.4	3.8	3.4	48%	50%	68%
Male	21%	2.9	3.5	3.1	56%	67%	71%
Female	21%	3.4	3.8	3.4	48%	62%	69%
Interview in English	21%	3.1	3.6	3.2	52%	68%	71%
Interview in Spanish	27%	3.9	4.5	3.8	49%	33%	66%
Men age 18-44	21%	3.1	3.5	3.2	52%	60%	69%
Men age 45+	22%	2.7	3.5	3.0	59%	72%	73%
Women age 18-44	15%	3.6	3.8	3.2	45%	44%	73%
Women age 45+	23%	3.3	3.8	3.4	50%	78%	67%





3. Can you think of any other source of pollution to the County's waterways? **(IF YES, ASK: What is it?)**  
**(OPEN-END, DO NOT READ CHOICES, ACCEPT ONLY ONE RESPONSE)**

Yes, oil spills and ships ----- 3%  
 Yes, acid rain ----- 1%  
 Yes, airports and planes ----- 5%  
 Yes, industrial ----- 3%  
 Yes, automotive ----- 3%  
 Yes, boating ----- 3%  
 Yes, agriculture ----- 1%  
 Yes, household waste ----- 2%  
 Yes, sewage ----- 2%  
 Yes, other **(SPECIFY)** ----- 6%  
 No ----- **(SKIP TO Q5)** --69%  
**(DON'T KNOW/NA)** ----- **(SKIP TO Q5)** --3%

**(ASK Q4 ONLY IF "YES" IN Q3)**

4. On the same scale of one to five, how serious of a threat is this source? **(ROTATE)**

								<b>NO THREAT</b>	<b>VERY SERIOUS THREAT</b>
Oil spills and ships -----	0%	0%	18%	56%	26%	0%			
Acid rain -----	0%	0%	65%	0%	35%	0%			
Airports and planes -----	0%	13%	11%	53%	23%	0%			
Industrial -----	0%	8%	19%	13%	60%	0%			
Automotive -----	0%	0%	0%	40%	60%	0%			
Boating -----	8%	25%	60%	0%	7%	0%			
Agriculture -----	27%	15%	27%	0%	12%	19%			
Household waste -----	11%	0%	37%	32%	20%	0%			
Sewage -----	0%	12%	8%	16%	64%	0%			

**(RESUME ASKING ALL RESPONDENTS)**

5. In your opinion, what can people like yourself do to reduce pollution in the San Francisco Bay, the Pacific Ocean, and local streams and tributaries? **(IF RESPONSE OFFERED, ASK: Can you think of anything else?) (OPEN-END, DO NOT READ CHOICES)**

**1<sup>st</sup> MENTION    2<sup>nd</sup> MENTION**

Dispose of materials properly -----	24%	-----	15%
Recycle-----	13%	-----	9%
Do not use harmful chemicals -----	4%	-----	3%
Use fewer harmful chemicals -----	3%	-----	3%
Avoid over-watering-----	0%	-----	0%
Protest against industry-----	2%	-----	1%
Join environmental groups -----	1%	-----	1%
Write/call government-----	5%	-----	3%
Drive less -----	4%	-----	1%
Proper car maintenance-----	1%	-----	2%
Education -----	2%	-----	2%
Awareness-----	7%	-----	3%
Follow the rules -----	5%	-----	2%
Legal means -----	1%	-----	1%
Disposal centers -----	1%	-----	3%
Sewers -----	1%	-----	1%
Be conscientious-----	7%	-----	8%
Other <b>(SPECIFY)</b> _____	6%	_____	4%
Nothing -----	3%	-----	12%
<b>(DON'T KNOW/NA)</b> -----	9%	-----	24%

6. Now, thinking specifically about water in your area, water from your kitchen and bath run through pipes into the sewer. Can you tell me if that sewage gets treated at a sewage treatment plant, or does it run directly into creeks, the Bay and the ocean?

Treated at plant -----	66%
Runs directly into creeks/bay/ocean ----	12%
<b>(OTHER-SPECIFY)</b> _____	1%
<b>(DON'T READ) DK/NA</b> -----	22%

7. And about the water outside of your place of residence, runoff from overwatered lawns and gardens – can you tell me where that drains to? **(OPEN-END, DO NOT READ CHOICES)**

Absorbed into the ground -----	4%
Runs into a storm drain -----	18%
Both absorbed into the ground and drained in the storm drain -----	5%
Runs into Bay -----	22%
Runs into Ocean-----	12%
Runs into the sewer-----	16%
Runs into creek -----	3%
Other <b>(SPECIFY)</b> _____	2%
<b>(DON'T KNOW/NA)</b> -----	18%

8. And can you tell me if the water that runs into the storm drains in your neighborhood gets treated at a sewage treatment plant, or does it run directly into creeks, the Bay and the Ocean?

Treated at plant----- 19%  
 Runs directly into creeks/bay/ocean----- 51%  
**(OTHER-SPECIFY)** \_\_\_\_\_ 1%  
**(DON'T READ) DK/NA**----- 29%

9. Suppose you wanted to properly dispose of paint, household chemicals, or motor oil. How would you find information about where and how you could properly use and dispose of these products? **(OPEN-END, DO NOT READ CHOICES)**

Ask garbage company ----- 31%  
 City/County departments ----- 13%  
 Phone book/government pages ----- 11%  
 Call 888-BAYWISE, 1-800-CLEAN-UP, or 1-800-REUSE ----- 3%  
 Schools/community college----- 0%  
 Fire department----- 2%  
 Ask nursery/garden/hardware stores ----- 0%  
 Ask family/friend/co-worker ----- 3%  
 Fliers ----- 2%  
 Auto store ----- 2%  
 Recycling center----- 10%  
 Newspaper or television ----- 2%  
 Landlord ----- 1%  
 Disposal site----- 6%  
 Scavenger ----- 1%  
 Internet/World Wide Web----- 8%  
 Label ----- 0%  
 Other **(SPECIFY)** \_\_\_\_\_ 3%  
**(DON'T KNOW/REFUSED/NA)**----- 5%

10. Have you seen, read or heard anything about properly using or disposing of household chemicals or motor oil?

Yes ----- **(ASK Q11)**--64%  
 No----- **(SKIP TO Q18)**--35%  
**(DON'T KNOW/NA)**----- **(SKIP TO Q18)**--1%

**(ASK Q11 ONLY IF "YES" IN Q10)**

11. Do you recall where you saw or heard that? **(OPEN-END, DO NOT READ CHOICES)**

Television-----	<b>(ASK Q12)</b> --	19%
Radio-----	<b>(ASK Q13)</b> --	3%
Newspaper-----	<b>(ASK Q14-Q15)</b> --	15%
Billboard/outdoor advertising-----		2%
Friend/family/co-worker-----		5%
Store promotion-----		1%
Community event-----		2%
Internet-----		0%
School-----		2%
Garbage company flier-----		31%
Utility company-----		2%
City/County-----		5%
Work-----		2%
Disposal facility-----		4%
Auto store-----		2%
Magazine-----		2%
Other <b>(SPECIFY)</b> _____		6%
<b>(DON'T KNOW/REFUSED/NA)</b> -----		6%

**(ASK Q12 ONLY IF "TELEVISION" IN Q11)**

12. On what television station did you see it? **(OPEN-END, DO NOT READ CHOICES)**

Channel 2, KTVU-----	12%
Channel 4, (NBC)-----	5%
Channel 5 (CBS)-----	11%
Channel 7 (ABC)-----	9%
Channel 14, KDTV (Spanish)-----	14%
Channel 48-----	0%
Cable-----	7%
Other <b>(SPECIFY)</b> _____	8%
<b>(DON'T KNOW/REFUSED/NA)</b> -----	47%

**(ASK Q13 ONLY IF "RADIO" IN Q11)**

13. On what radio station did you hear it? **(OPEN-END, DO NOT READ CHOICES)**

KFOX, 98.5 FM-----	8%
KOIT, 96.5 FM-----	0%
KRTY, 95.3 FM-----	0%
Other <b>(SPECIFY)</b> _____	74%
<b>(DON'T KNOW/REFUSED/NA)</b> -----	19%

**(ASK Q14-Q15 ONLY IF “NEWSPAPER” IN Q11)**

14. In what newspaper did you read it? **(OPEN-END, DO NOT READ CHOICES)**

San Mateo County Times	21%
San Francisco Chronicle	20%
San Francisco Examiner	0%
San José Mercury News	2%
Independent News	5%
Country Almanac	2%
Pacifica Tribune	6%
Half Moon Bay Review	2%
Local neighborhood paper (SPECIFY)	21%
Other (SPECIFY)	9%
(DON'T KNOW/REFUSED/NA)	20%

15. Was that a general newspaper article, an advertisement, or an insert?

General	36%
Advertisement	13%
Insert	7%
(OTHER-SPECIFY)	0%
(DON'T KNOW/NA)	44%

**(RESUME ASKING ALL RESPONDENTS WHO ANSWERED “YES” IN Q10)**

16. Thinking specifically about that pollution prevention message, what one or two things do you remember most? **(IF RESPONSE OFFERED, ASK: Can you think of anything else?) (OPEN-END, DO NOT READ CHOICES)**

	<u>FIRST MENTION</u>	<u>SECOND MENTION</u>
800 number	3%	4%
Oil drop	3%	3%
Recycle used oil	7%	3%
Dead fish image	2%	1%
“No dumping, flows to Bay/Ocean/Lagoon” message	3%	2%
Don't dump in the storm drain	17%	7%
Disposal time/location	8%	1%
Proper disposal	21%	11%
Recycle	7%	7%
Pollution	3%	1%
Oil	3%	2%
Carpooling	0%	0%
Call/phone number	4%	3%
“Our Water Our World” message	3%	0%
Used oil calendar	0%	0%
Integrated pest management/less toxic pest control	0%	1%
Other (SPECIFY)	5%	7%
(DON'T KNOW/REFUSED/NA)	12%	46%

17. How has that message about properly using household chemicals and motor oil products changed the way you personally use these products? **(OPEN-END, DO NOT READ CHOICES)**

Apply less fertilizer, pesticide -----	0%
Apply fertilizer, pesticide less frequently -----	0%
Water less-----	0%
No longer dump oil into storm drain-----	1%
No longer wash car with regular detergent-----	0%
No longer rinse auto product into drain-----	1%
Proper disposal -----	18%
Increased awareness-----	7%
Use fewer hazardous products-----	9%
More careful-----	11%
Increase recycling -----	3%
Mechanic disposes of oil-----	6%
Read labels -----	0%
Follow rules -----	3%
Separate trash-----	3%
Change habits -----	2%
Call for information -----	1%
Stop using pesticides -----	0%
Take car to car wash -----	1%
No change-----	33%
Other ( <b>SPECIFY</b> ) -----	2%
<b>(DON'T KNOW/REFUSED/NA)</b> -----	5%

**(RESUME ASKING ALL RESPONDENTS)**

18. Have you seen the “No Dumping, Flows to Bay (or Ocean or Lagoon)” message stenciled above storm drains in the County?

Yes -----	70%
No-----	29%
<b>(DON'T KNOW/NA)</b> -----	1%

19. Have you called the toll-free number 1-800-CLEANUP?

Yes -----	<b>(ASK Q20)</b> --5%
No-----	<b>(SKIP TO Q27)</b> --95%
<b>(DON'T KNOW/NA)</b> -----	<b>(SKIP TO Q27)</b> --0%

**(ASK Q20 ONLY IF "YES" IN Q19)**

20. How did you learn about this number? **(OPEN-END, DO NOT READ CHOICES)**

Television -----	<b>(ASK Q21-Q22)</b> --18%
Radio-----	<b>(ASK Q23-Q24)</b> --0%
Newspaper -----	<b>(ASK Q25-Q26)</b> --0%
Billboard/outdoor advertising-----	0%
Friend/family/co-worker-----	31%
Store promotion -----	0%
Community event -----	0%
Internet-----	0%
School -----	0%
Garbage company -----	11%
Flier/notice-----	5%
Other <b>(SPECIFY)</b> _____	14%
<b>(DON'T KNOW/REFUSED/NA)</b> -----	21%

**(ASK Q21-Q22 ONLY IF "TELEVISION" IN Q20)**

21. On what television station did you see it? **(OPEN-END, DO NOT READ CHOICES)**

Channel 2, KTVU-----	0%
Channel 4, (NBC) -----	0%
Channel 5 (CBS)-----	0%
Channel 7 (ABC)-----	0%
Channel 14, KDTV (Spanish)-----	39%
Channel 48 -----	0%
Cable-----	29%
Other <b>(SPECIFY)</b> _____	10%
<b>(DON'T KNOW/REFUSED/NA)</b> -----	22%

22. Was that general television, a news program, or a commercial?

General -----	0%
News program -----	39%
Commercial -----	32%
<b>(OTHER-SPECIFY)</b> _____	29%
<b>(DON'T KNOW/NA)</b> -----	0%

**(ASK Q23-Q24 ONLY IF "RADIO" IN Q20)**

23. On what radio station did you hear it? **(OPEN-END, DO NOT READ CHOICES)**

KFOX, 98.5 FM-----	0%
KOIT, 96.5 FM -----	0%
KRTY, 95.3 FM -----	0%
Other <b>(SPECIFY)</b> _____	0%
<b>(DON'T KNOW/REFUSED/NA)</b> -----	0%

24. Was that general radio, a news program, or a commercial?

General ----- 0%  
News program ----- 0%  
Commercial ----- 0%  
**(OTHER-SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/NA)** ----- 0%

**(ASK Q25-Q26 ONLY IF "NEWSPAPER" IN Q20)**

25. In what newspaper did you read it? **(OPEN-END, DO NOT READ CHOICES)**

San Mateo County Times ----- 0%  
San Francisco Chronicle ----- 0%  
San Francisco Examiner ----- 0%  
San José Mercury News ----- 0%  
Independent News ----- 0%  
Country Almanac ----- 0%  
Pacifica Tribune ----- 0%  
Half Moon Bay Review ----- 0%  
Local neighborhood paper **(SPECIFY)** \_\_\_\_\_ 0%  
Flier ----- 0%  
Garbage company ----- 0%  
Other **(SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/REFUSED/NA)** ----- 0%

26. Was that a general newspaper article, an advertisement, or an insert?

General ----- 0%  
Advertisement ----- 0%  
Insert ----- 0%  
**(OTHER-SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/NA)** ----- 0%

**(RESUME ASKING ALL RESPONDENTS)**

27. Have you ever visited the website "S-T-O-P-P-P-dot-net"?

Yes ----- **(ASK Q28)**--1%  
No ----- **(SKIP TO Q35)**--99%  
**(DON'T KNOW/NA)** ----- **(SKIP TO Q35)**--0%



**(ASK Q28 ONLY IF "YES" IN Q27)**

28. How did you learn about this website? **(OPEN-END, DO NOT READ CHOICES)**

Television -----	<b>(ASK Q29-Q30)</b>	0%
Radio-----	<b>(ASK Q31-Q32)</b>	0%
Newspaper -----	<b>(ASK Q33-Q34)</b>	64%
Billboard/outdoor advertisement -----		0%
Friend/family/co-worker-----		0%
Store promotion -----		0%
Community event -----		0%
Internet-----		36%
School -----		0%
Garbage company -----		0%
Flier/notice-----		0%
Other <b>(SPECIFY)</b> _____		0%
<b>(DON'T KNOW/REFUSED/NA)</b> -----		0%

**(ASK Q29-Q30 ONLY IF "TELEVISION" IN Q28)**

29. On what television station did you see it? **(OPEN-END, DO NOT READ CHOICES)**

Channel 2, KTVU-----		0%
Channel 4, (NBC) -----		0%
Channel 5 (CBS)-----		0%
Channel 7 (ABC)-----		0%
Channel 14, KDTV (Spanish)-----		0%
Channel 48 -----		0%
Cable-----		0%
Other <b>(SPECIFY)</b> _____		0%
<b>(DON'T KNOW/REFUSED/NA)</b> -----		0%

30. Was that general television, a news program, or a commercial?

General -----		0%
News program -----		0%
Commercial -----		0%
<b>(OTHER-SPECIFY)</b> _____		0%
<b>(DON'T KNOW/NA)</b> -----		0%

**(ASK Q31-Q32 ONLY IF "RADIO" IN Q28)**

31. On what radio station did you hear it? **(OPEN-END, DO NOT READ CHOICES)**

KFOX, 98.5 FM-----		0%
KOIT, 96.5 FM -----		0%
KRTY, 95.3 FM -----		0%
Other <b>(SPECIFY)</b> _____		0%
<b>(DON'T KNOW/REFUSED/NA)</b> -----		0%

32. Was that general radio, a news program, or a commercial?

General ----- 0%  
News program ----- 0%  
Commercial ----- 0%  
**(OTHER-SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/NA)** ----- 0%

**(ASK Q33-Q34 ONLY IF "NEWSPAPER" IN Q28)**

33. In what newspaper did you read it? **(OPEN-END, DO NOT READ CHOICES)**

San Mateo County Times ----- 0%  
San Francisco Chronicle ----- 0%  
San Francisco Examiner ----- 0%  
San José Mercury News ----- 0%  
Independent News ----- 0%  
Country Almanac ----- 0%  
Pacifica Tribune ----- 0%  
Half Moon Bay Review ----- 0%  
Local neighborhood paper **(SPECIFY)** \_\_\_\_\_ 0%  
Flier ----- 0%  
Garbage company ----- 0%  
Other **(SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/REFUSED/NA)** ----- 0%

34. Was that a general newspaper article, an advertisement, or an insert?

General ----- 0%  
Advertisement ----- 0%  
Insert ----- 0%  
**(OTHER-SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/NA)** ----- 0%

**(RESUME ASKING ALL RESPONDENTS)**

35. Have you called the toll-free number 1-888-BAYWISE?

Yes ----- **(ASK Q36)**--1%  
No ----- **(SKIP TO Q43)**--98%  
**(DON'T KNOW/NA)** ----- **(SKIP TO Q43)**--1%

**(ASK Q36 ONLY IF "YES" IN Q35)**

36. How did you learn about this number? **(OPEN-END, DO NOT READ CHOICES)**

Television -----	<b>(ASK Q37-Q38)</b>	0%
Radio-----	<b>(ASK Q39-Q40)</b>	0%
Newspaper -----	<b>(ASK Q41-Q42)</b>	76%
Billboard/outdoor advertising-----		0%
Friend/family/co-worker-----		0%
Store promotion -----		0%
Community event -----		0%
Internet-----		0%
School -----		0%
Garbage company -----		0%
Flier/notice-----		0%
Other <b>(SPECIFY)</b> _____		24%
<b>(DON'T KNOW/REFUSED/NA)</b> -----		0%

**(ASK Q37-Q38 ONLY IF "TELEVISION" IN Q36)**

37. On what television station did you see it? **(OPEN-END, DO NOT READ CHOICES)**

Channel 2, KTVU-----		0%
Channel 4, (NBC) -----		0%
Channel 5 (CBS)-----		0%
Channel 7 (ABC)-----		0%
Channel 14, KDTV (Spanish)-----		0%
Channel 48 -----		0%
Cable-----		0%
Other <b>(SPECIFY)</b> _____		0%
<b>(DON'T KNOW/REFUSED/NA)</b> -----		0%

38. Was that general television, a news program, or a commercial?

General -----		0%
News program -----		0%
Commercial -----		0%
<b>(OTHER-SPECIFY)</b> _____		0%
<b>(DON'T KNOW/NA)</b> -----		0%

**(ASK Q39-Q40 ONLY IF "RADIO" IN Q36)**

39. On what radio station did you hear it? **(OPEN-END, DO NOT READ CHOICES)**

KFOX, 98.5 FM-----		0%
KOIT, 96.5 FM -----		0%
KRTY, 95.3 FM -----		0%
Other <b>(SPECIFY)</b> _____		0%
<b>(DON'T KNOW/REFUSED/NA)</b> -----		0%

40. Was that general radio, a news program, or a commercial?

General ----- 0%  
 News program ----- 0%  
 Commercial ----- 0%  
**(OTHER-SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/NA)** ----- 0%

**(ASK Q41-Q42 ONLY IF "NEWSPAPER" IN Q36)**

41. In what newspaper did you read it? **(OPEN-END, DO NOT READ CHOICES)**

San Mateo County Times ----- 0%  
San Francisco Chronicle ----- 0%  
San Francisco Examiner ----- 0%  
San José Mercury News ----- 0%  
Independent News ----- 0%  
Country Almanac ----- 0%  
Pacifica Tribune ----- 0%  
Half Moon Bay Review ----- 0%  
 Local neighborhood paper **(SPECIFY)** \_\_\_\_\_ 0%  
 Flier ----- 0%  
 Garbage company ----- 0%  
 Other **(SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/REFUSED/NA)** ----- 0%

42. Was that a general newspaper article, an advertisement, or an insert?

General ----- 0%  
 Advertisement ----- 0%  
 Insert ----- 0%  
**(OTHER-SPECIFY)** \_\_\_\_\_ 0%  
**(DON'T KNOW/NA)** ----- 0%

**(RESUME ASKING ALL RESPONDENTS)**

43. Now I would like to ask you about a slightly different subject. I am going to read you a list of consumer products. After I read each one please tell me whether, as far as you know, that product contains mercury.

			<b>YES, CONTAINS MERCURY</b>	<b>NO, DOES NOT CONTAIN MERCURY</b>
[ ] a.	Fluorescent lamps -----	32%	31%	38%
[ ] b.	Batteries -----	59%	18%	23%
[ ] c.	Thermometers -----	90%	5%	5%
[ ] d.	Thermostats -----	61%	13%	26%

44. Within the past five years, have you purchased any of the products I just mentioned? **(IF YES, ASK: Which ones?) (ACCEPT MULTIPLE RESPONSES)**

Yes, fluorescent lamps ----- 32%  
 Yes, batteries ----- 66%  
 Yes, thermometers----- 28%  
 Yes, thermostats ----- 18%  
 No----- 20%  
**(DON'T KNOW/NA)** ----- 1%

45. How do you usually dispose of products like these that contain mercury? **(OPEN-END, DO NOT READ CHOICES)**

Store them/save them----- 4%  
 Throw them in garbage----- 45%  
 Recycle them at hazardous waste  
 event----- 11%  
 Disposal facility ----- 10%  
 Garbage company----- 7%  
 Someone else disposes for me----- 3%  
 Other **(SPECIFY)**----- 3%  
 Do not have products with  
 mercury ----- 11%  
**(DON'T KNOW/NA)** ----- 8%

46. Which of the following methods for disposing of products containing mercury would you prefer to use in the future? **(READ LIST, ROTATE)**

Return to retailer----- 9%  
 Recycle them curbside ----- 37%  
 Dispose through a household hazardous  
 waste program ----- 44%  
 Throw them in the garbage----- 6%

**(DON'T READ)**  
**(OTHER - SPECIFY)** ----- 1%  
**(DO NOT HAVE PRODUCTS WITH  
 MERCURY)** ----- 1%  
**(DON'T KNOW/NA)** ----- 2%

**NOW I HAVE JUST A FEW MORE QUESTIONS THAT WILL BE USED FOR STATISTICAL PURPOSES ONLY. WE WANT TO REASSURE YOU THAT YOUR ANSWERS WILL BE HELD IN COMPLETE CONFIDENTIALITY.**

47. What was the last grade of formal education that you completed?

High school graduate or less----- 30%  
 Some college----- 21%  
 College graduate----- 31%  
 Post-graduate ----- 17%  
**(DON'T READ) DK/NA/REFUSED** ----- 1%

48. Are you employed full-time, part-time or something else? **(DO NOT READ LIST)**

Employed full-time-----	<b>(ASK Q49)</b> --57%
Employed part-time-----	<b>(ASK Q49)</b> --7%
Student-----	4%
Retired-----	17%
Homemaker-----	7%
Unemployed/disabled-----	5%
Self-employed-----	<b>(ASK Q49)</b> --2%
Artist-----	0%
Employed (general)-----	<b>(ASK Q49)</b> --0%
<b>(OTHER – SPECIFY)</b> _____	0%
<b>(REFUSED/DK/NA)</b> -----	1%

**(ASK Q49 ONLY IF “EMPLOYED” IN Q48)**

49. What is your present job or position? **(DO NOT READ LIST)**

Professional/technical-----	31%
Manager/executive-----	15%
Sales-----	9%
Skilled labor-----	6%
Unskilled labor/operators-----	7%
Service worker-----	6%
Military-----	0%
Government-----	4%
Unemployed-----	0%
Clerical-----	8%
Self-employed-----	3%
<b>(OTHER – SPECIFY)</b> _____	5%
<b>(REFUSED/DK/NA)</b> -----	4%

**(RESUME ASKING ALL RESPONDENTS)**

50. Please stop me when I reach the category that includes the age you will be on your next birthday.

18-24-----	9%
25-34-----	15%
35-44-----	21%
45-54-----	20%
55-64-----	12%
65 and older-----	21%
<b>(REFUSED/DK/NA)</b> -----	2%

51. What is your ZIP Code? **(RECORD EXACT ZIP CODE BELOW AND THEN CODE AFTERWARD)**

---

Central area ZIP codes ----- 22%  
North area ZIP codes ----- 38%  
Coastside area ZIP codes ----- 2%  
South area ZIP codes ----- 31%  
**(REFUSED/DK/NA)** ----- 6%

52. Do you own or rent your place of residence?

Own ----- 64%  
Rent ----- 33%  
**(OTHER – SPECIFY)** ----- 0%  
**(REFUSED/DK/NA)** ----- 2%

53. Please stop me when I reach a category that includes your total gross household income from last year? **(READ LIST)**

\$15,000 and under ----- 8%  
\$15,001 - \$25,000 ----- 9%  
\$25,001 - \$35,000 ----- 7%  
\$35,001 - \$50,000 ----- 10%  
\$50,001 - \$75,000 ----- 12%  
More than \$75,000 ----- 31%  
**(DON'T READ) Refused** ----- 23%

54. What do you consider to be your ethnic background? **(READ CATEGORIES)**

Caucasian ----- 45%  
Hispanic ----- 18%  
African-American ----- 4%  
Filipino ----- 3%  
Asian ----- 17%  
American Indian/Eskimo ----- 0%  
Multi-racial ----- 5%  
**OTHER(SPECIFY)** ----- 3%  
**(DON'T READ) DK/NA/REFUSED** ----- 5%

**THAT CONCLUDES OUR CONFIDENTIAL SURVEY. THANK YOU FOR YOUR PARTICIPATION.**

**Gender: By observation**

Male-----45%  
Female -----55%

**Language: By observation**

English -----89%  
Spanish -----11%

Name\_\_\_\_\_

Phone# \_\_\_\_\_

Interviewer\_\_\_\_\_

Date\_\_\_\_\_

Verified by \_\_\_\_\_

Zip Code \_\_\_\_\_

Rep # \_\_\_\_\_

Page # \_\_\_\_\_



