



PUBLIC OPINION SURVEY REPORT 2009

PRESENTED BY

A STONE

JANUARY 2010

TABLE OF CONTENTS

Table of Contents	i
Table of Figures	ii
A. Executive Summary	1
B. Introduction	9
Purpose	11
Method	11
Sample	12
Frequencies and Cross Tabulations	13
C. Significant Findings	14
Perceptions of the Seriousness and Impacts of Pollution	14
Understanding of Major Contributors to Water Pollution	17
Perceived Responsibility for Solving Water Pollution Problems	19
Use Patterns and Disposal Practices of Pollution Related Products	21
Awareness of the Storm Drain System	29
Perceptions of Stormwater Pollution	34
Willingness to Participate in Pollution Prevention Practices	35
Awareness of City and County Stormwater Programs	37
Exposure to Stormwater Information	39
Appendix A: Demographic Summary	
Appendix B: Questionnaire & Frequencies	
Appendix C: Verbatim Responses on "Only Rain down the Drain"	
Appendix D: Cross Tabulation Tables	

TABLE OF FIGURES

Figure 1: Most Serious Environmental Issue	14
Figure 2: Existence of Nearby Body of Water	15
Figure 3: Perceived Condition of Nearest Body of Water	16
Figure 4: Main Impacts of Water Pollution	17
Figure 5: Top-of-Mind Contributors to Water Pollution	18
Figure 6: Mean Ranking of Contributors to Water Pollution	19
Figure 7: Responsibility for Solving Water Pollution Problems	20
Figure 8: Reported Behaviors within the Last Year	21
Figure 9: Disposal Methods for Pesticides	22
Figure 9a: Pest Control Product Applications per Year	23
Figure 10: Decision Making Related to Pest Control Product Use	24
Figure 11: Pest Control Product Stored in Home	25
Figure 12: Oldest Pest Control Product	25
Figure 13: Place of Purchase for Pest Control Products	26
Figure 14: Disposal of Yard Waste	27
Figure 15: Disposal of Pet Waste	28
Figure 16: Disposal of Used Motor Oil	28
Figure 17: Presence of Storm Drains in Neighborhood	29
Figure 18: Familiarity with the Storm Drain System	30
Figure 19: Assessment of the Storm Drain System	31
Figure 20: Knowledge of Where Stormwater Goes	32
Figure 21: Concept Check: Storm Drain System vs. Sewer System	33
Figure 22: Concept Check: Treatment of Stormwater	34
Figure 23: First Response to Causes of Stormwater Pollution	35
Figure 24: Those Very Willing to Help Reduce Stormwater Pollution	36
Figure 25: Responsible Agency for Stormwater Management	37
Figure 26: Willingness to Pay an Extra Fee for Stormwater Pollution Prevention	38
Figure 27: Awareness of News Reports or Advertising on Stormwater Issues	39
Figure 28: Source of Stormwater Information	40
Figure 27: Top-of-Mind Perceptions of "Only rain down the drain"	41

EXECUTIVE SUMMARY

FOLLOW-UP PUBLIC OPINION SURVEY 2009

A follow-up public opinion survey was conducted in November and December 2009 for the City of Stockton, Municipal Utilities Department, Stormwater Management Program (City) and the County of San Joaquin, Department of Public Works (County) to assess changes in public perceptions and behaviors related to stormwater quality management as compared to the survey data from the spring of 2007, 2005 and 2003. The study was designed and implemented as a part of the public education and outreach program mandated by the National Pollutant Discharge Elimination System (NPDES) Permit issued by the California Regional Water Quality Control Board, Central Valley Region.

This study was implemented through a telephone survey of 400 heads of household in the Stockton Urbanized Area (Stockton Area) to quantitatively evaluate how residents perceive and relate to environmental issues associated with stormwater. Comparative data about public attitudes, perceptions and behaviors that will be helpful in the strategic development and implementation of the City's and County's public awareness campaign is identified. The survey provided information about the following issues:

- ◆ Perceptions of the seriousness and impacts of pollution
- ◆ Understanding of major contributors to water pollution
- ◆ Use patterns and disposal practices of pollution related products
- ◆ Awareness of storm drains and the storm drain system
- ◆ Willingness to participate in pollution prevention practices
- ◆ Awareness of city and county stormwater programs
- ◆ Exposure to storm water information

New questions (Questions 11 – 14) were added to the survey to gain insight into residential application and purchasing preferences and practices related to pest control products. The bar graph charts developed for the main narrative include a comparison of the 2009 and 2007 studies. Charts for other studies are available for review in past reports and upon request.

The principal findings of the survey are listed on the following five pages.

Perceptions of the Seriousness and Impacts of Pollution

1. Water pollution (2009: 29%, 2007: 26%, 2005: 26%, 2003: 39%) replaced air pollution as the most serious concern among a list of six environmental issues. Air pollution fell significantly from its 2007 high ranking among the same environmental issues (2009: 22%, 2007: 40%, 2005: 35%, 2003: 29%). Perceptions of the seriousness of the impacts of urban growth increased during the same period (2009: 21%, 2007: 14%, 2005: 22%, 2003: 14%).
2. Over three quarters (2009: 78%, 2007: 73%, 2005: 71%) of the respondents continued to affirm the existence of a nearby body of water, a 12 percent increase since 2003 (66%). Those aware of a water body tended to be those who were 35 – 49 and 55+ years residing in ZIP codes 95202, 95203, 95204, 95207, and 95219.
3. Stockton Area residents expressed significantly less intense concerns when asked about the condition of their waterways. In the 2009 study, only 35% perceived waterways as "very dirty," as compared to the previous studies (2007: 47%, 2005: 45%, 2003: 48%). In comparing responses for "somewhat dirty," more respondents selected this moderate response in 2009 as compared to past studies (2009: 35%, 2007: 29%, 2005: 31%; 2003: 30%).
4. The top two impacts of water pollution identified by respondents were harming the natural environment (2009: 32%, 2007: 30%, 2005: 33%, 2003: 32%) and causing human health problems (2009: 22%, 2007: 27%, 2005: 23%, 2003: 27%).

Understanding of Major Contributors to Water Pollution

5. When asked an open-ended question about the causes of water pollution, more respondents (2009: 41%, 2007: 34%, 2005: 41%, 2003: 30%) first mentioned "people, everyone or residents in general" in 2009 as compared to 2007, enough so to reflect a response level similar to the 2005 study. The number of respondents mentioning "improper disposal of trash

in city streets” fell significantly between the last two studies (2009: 7%, 2007: 14%). The number of respondents pointing the blame at industrial plants continued a decline pattern when comparing all four studies (2009: 7%, 2007: 9%, 2005: 10%, 2003: 19%).

6. Using a four-point scale, respondents were asked to rate how much they believed industry, business, residents, agriculture, and transportation contribute to water pollution. Average ratings were calculated and industry continued to be seen as the main contributor (2009: 3.34, 2007: 3.36, 2005: 3.37, 2003: 3.47) while agriculture (2009: 2.98, 2007: 2.94, 2005: 2.76, 2003: 3.03) replaced residents (2009: 2.90, 2007: 3.05, 2005: 2.95, 2003: 3.03) as the second biggest contributor. Businesses (2009: 2.73, 2007: 2.85, 2005: 2.82, 2003: 3.07) and transportation (2009: 2.74, 2007: 2.85, 2005: 2.82, 2003: 3.07) followed.
7. There was a significant increase in the number of respondents who identified “everyone” as having responsibility for solving water pollution problems (2009: 39%, 2007: 34%, 2005: 36%, 2003: 32%). The number of respondents who singled out residents decreased between the last two studies (2009: 10%, 2007: 17%, 2005: 8%), returning close to the 2005 level. The number of respondents mentioning industry as responsible for solving water pollution problems was similar between the last three studies (2009: 2%, 2007: 2%, 2005: 1%, 2003: 7%).

Use Patterns and Disposal Practices of Pollution Related Products

Pesticides

8. The number of respondents reporting the use of pesticides or weed killers within the last year increased significantly (2009: 47%, 2007: 38%, 2005: 40%, 2003: 39%). These respondents tended to be homeowners with annual incomes of \$75+K. Those reporting no use of pesticides and weed killers tended to be renters and reside in ZIP code 95204.
9. Of those respondents who reported using pesticides, significantly fewer (2009: 33%, 2007: 41%, 2005: 51%, 2003: 38%) reported using it all up. Significantly more respondents (2009: 42%, 2007: 27%, 2005: 29%, 2003: 23%) reported taking the leftovers to a household hazardous waste collection event. This increase is a significant finding of this study. Fewer

respondents reported that they threw leftovers in the trash in the current study (2009: 6%, 2007: 12%, 2005: 10%, 2003: 21%) and fewer reported storing leftovers for future use (2009: 7%, 2007: 9%, 2005: 4%).

10. A majority of respondents indicated they use pest control products 1 to 3 times per year (2009: 53%). This question has not been asked in prior studies.
11. When asked how they decide how much of the product to use, the vast majority indicated that they "read and follow all directions on the container" (2009: 69%) with additional respondents answering that they "read directions on the container and use them as guidelines" (2009: 7%).
12. When asked how many different pest control products are stored in their home, the vast majority of respondent answers fell into the 1 to 5 category (2009: 74%).
13. Many respondents indicated that the oldest pesticide product they have is "older than 1 year," (2009: 45%). Respondents indicated "Don't know" as the second most frequently selected response (2009: 40%).
14. When asked where pest control products are purchased, most frequent responses included Home Depot (2009: 46%), Orchard Hardware (2009: 15%), grocery store (2009: 11%) and Wal-Mart (2009: 5%).

Pet Waste

15. More respondents (2009: 43%, 2007: 37%, 2005: 34%, 2003: 36%) report regularly taking a pet on walks. These respondents tend to be homeowners, Caucasian or Hispanic, 35-54 years old, and have annual incomes over \$75K.
16. These respondents were asked to identify their method of pet waste disposal. Consistent numbers of respondents (2009: 78%, 2007: 78%, 2005: 80%, 2003: 70%) reported bagging it and putting it in the trash in the last three studies.

Yard Waste

17. The number of respondents reporting that they take care of their own yard has increased significantly over time (2009: 76%, 2007: 66%, 2005: 66%, 2003: 62%). These respondents tended to be homeowners, male, Hispanic, residents of ZIP codes 95205/15, 95204, 95206 and 95209/10/12 with annual incomes 50 - 75K and more than 75K.
18. Of those who answered "no" to the previous question, 72% indicated that they use a yard care service for their yard.
19. Residents reporting putting yard waste in their green waste bin remained consistent with the last study (2009: 76%, 2007: 75 %, 2005: 70%) with an additional 10% reporting that they are putting yard waste in a compost pile. A significant finding of this study is the continuing high participation levels in the green waste bin program.

Used Motor Oil

20. Respondents who reported changing their motor oil at home within the last year has slightly decreased between studies and overtime (2009: 17%, 2007: 21%, 2005: 18%, 2003: 26%).
21. Of those who change their motor oil at home, the vast majority of respondents (2009: 91%, 2007: 80%, 2005: 93%, 2003: 75%) report taking the used oil to a household hazardous waste center. In addition, 6% mentioned that they recycled their oil through curbside collection (2009: 6%, 2007: 11%). Progress in proper disposal practices related to motor oil continues to be a significant milestone for the Program.

Awareness of the Storm Drain System

22. The number of respondents reporting the existence of storm drains in their neighborhoods continues to remain significantly high and constant between studies (2009: 85%, 2007: 84%, 2005: 84%, 2003: 83%). Persons of African American ethnicity, those living in zip codes 95202/95203, 95204, 95206, 95207/95219, 95209/95210/95212 tended to say that storm drain

did exist in their neighborhoods. Respondents living in ZIP codes 95205/15 tended to say that storm drains did not exist.

23. More respondents (2009: 28%, 2007: 24%, 2005: 25%, 2003: 25%) reported they were “very familiar” with the storm drain system. These respondents tended to be male, Caucasians, and aged 55+. Females in zip codes 95202, 95203, 95205, 95215, and 95206 tended to report a lack of familiarity with storm drains.
24. When compared with the last study, fewer respondents (2009: 43%, 2007: 47%, 2005: 40%, 2003: 34%) reported “very well,” when asked a question about how well the storm drain system works during the rainy season. These respondents tended to be male, those 55 years of age or older and those living in zip code 95206.
25. When asked to identify where stormwater goes after it flows into the storm drain, more respondents mentioned the Delta (2009: 39%, 2007: 32%, 2005: 34%, 2003: 29%) while fewer mentioned a river (2009: 25%, 2007: 28%, 2005: 22%, 2003: 28%). A similar number of respondents (2009: 10%, 2007: 8%, 2005: 13%, 2003: 8%) believed the water went to a treatment plant.
26. When respondents were asked to agree or disagree with the statement about the storm drain system and the sewer system sharing the same underground pipes, fewer respondents (2009: 28% 2007: 33%, 2005: 31%, 2003: 40%) incorrectly agreed and fewer respondents (2009: 22%, 2007: 33%, 2005: 28%, 2003: 21%) were unable to decide. It is significant that a majority of the respondents correctly disagreed with the statement for the first time (2009: 51%). There is still work to be done to clarify the differences between the storm drain system and the sewer system, but the Program has made significant progress in improving the public's understanding of the system. When respondents were asked to agree or disagree with the statement about stormwater being routed to a treatment plant, significantly more respondents correctly disagreed (2009: 45%, 2007: 31%) fewer incorrectly agreed (2009: 40%, 2007: 43%, 2005: 51%, 2003: 49%) and significantly fewer (2009: 15%, 2007: 27%, 2005: 21%, 2003:13%) were unable to decide.

27. When asked an open ended question about how the water that flows into storm drains can get polluted, first responses were significantly different than in past studies. While "illegal dumping by individuals" continued as the top mention (2009: 24%, 2007: 40%, 2005: 42%, 2003: 43%), it closely tied with "litter and trash in the streets" (2009: 23%, 2007: 16%). Leaking vehicles (2009: 16%, 2007: 10%, 2005: 14%, 2003: 8%) also reflected a significant increase in first mentions.

Willingness to Participate in Pollution Prevention Practices

28. The vast majority of the respondents continue to indicate they are "very willing" to engage in eight pollution prevention practices: proper disposing of litter (2009: 98%, 2007: 98%, 2005: 95%, 2003: 95%), avoid dumping in storm drains (2009: 96%, 2007: 95%, 2005: 94%, 2003: 94%), recycling glass, plastics, etc. (2009: 96%, 2007: 95%, 2005: 92%, 2003: 88%), keep vehicle tuned and leak free (2009: 96%, 2007: 95%, 2005: 91%, 2003: 95%), take HHW to a disposal center (2009: 91%, 2007: 93%, 2005: 90%, 2003: 88%), dispose of pet waste properly (2009: 94%, 2007: 93%, 2005: 87%, 2003: 87%), use less toxic products (2009: 79%, 2007: 88%, 2005: 82%, 2003: 83%) and report illegal dumping (2009: 79%, 2007: 84%, 2005: 81%, 2003: 79%).

Awareness of the City and County Stormwater Programs

29. When asked to identify the agency responsible for operating and managing the storm drain system, fewer respondents identified the City of Stockton (2009: 51%, 2007: 55%, 2005: 56%, 2003: 61%) and significantly fewer identified San Joaquin County (2009: 9%, 2007: 22%, 2005: 10%, 2003: 16%). More respondents identified "water company" (2009: 15, 2007: 2%, 2005: 5 %, 2003: 2%) as the agency responsible for operating and managing the storm drain system.

30. The number of respondents reporting that they would be willing to support an annual tax increase of \$5 to aid the operation of the storm drain system in preventing stormwater pollution remained consistent (2009: 60%, 2007: 57%, 2005: 53%, 2003: 59%).

Exposure to Stormwater Information

31. More respondents (2009: 33%, 2007: 28%, 2005: 30%, 2003: 37%) reported seeing or hearing television or radio spots, advertisements, or other forms of information about stormwater pollution in the past year.

32. Of those respondents who reported some form of exposure to stormwater pollution prevention information, fewer (2009: 54%, 2007: 63%, 2005: 56%, 2003: 67%) reported seeing something on television. And, fewer respondents reported seeing something in the newspaper (2009: 15% 2007: 19%, 2005: 16%).

B. Introduction

As reported two years ago in the 2007 Public Opinion Survey Report, the City of Stockton and County of San Joaquin's County Service Area 54 (Permittees) submitted a Report of Waste Discharge Report (RWD, August 1999) requesting re-issuance of waste discharge requirements. The National Pollutant Discharge Elimination System (NPDES) Permit was issued on October 18, 2002, for the area-wide Municipal Separate Storm Sewer System (MS4) to discharge stormwater runoff from storm drains within their jurisdictions and to implement a Stormwater Management Program (SWMP).

The City of Stockton, Municipal Utilities Department, Stormwater Management Program (City) and the County of San Joaquin, Department of Public Works (County) developed a Stormwater Management Program (SWMP, February 1995) specifying pollution prevention and control measures to protect water quality and the environment in the Stockton Urbanized Area (Stockton Area). Implementation of the SWMP is required by the National Pollutant Discharge Elimination System (NPDES) Permit to discharge stormwater, issued by the California Regional Water Quality Control Board, Central Valley Region (CRWCB).

In August 1999, the City and County submitted a Report of Waste Discharge requesting re-issuance of waste discharge requirements. The NPDES Permit was issued on October 18, 2002, for the area-wide Municipal Separate Storm Sewer System to discharge stormwater runoff from storm drains within their jurisdictions and to implement the SWMP. The City and County identified the following high priority pollutants for the updated SWMP:

- ◆ Heavy metals
- ◆ Sediments
- ◆ Petroleum hydrocarbons from sources such as used motor oil
- ◆ Microbial pathogens
- ◆ Pesticides
- ◆ Sources of acute and chronic aquatic toxicity

- ◆ Nutrients that cause or contribute to the depletion of dissolved oxygen and/or toxic conditions in the receiving water

Knowledge of the possible common sources for these high priority pollutants in the Stockton Area is significant to the success of the public outreach effort. They were found to be:

- ◆ Construction sites
- ◆ Industrial/Commercial operations
- ◆ Automobile repair and maintenance
- ◆ Automobile washing
- ◆ Automobile parking
- ◆ Home and garden care activities and product use
- ◆ Disposal of pet waste
- ◆ Disposal of green waste

These high priority pollutants and their sources provided a foundation to the City and County as they established the Public Outreach and Education Program (collectively Public Outreach Program).

The Public Outreach Program is an essential component of the SWMP. Public participation and cooperation is central to the prevention of urban storm water pollution. The objectives of the Public Outreach Program are to:

- ◆ Measurably increase the knowledge of target communities regarding the storm drain system, impacts of urban runoff on receiving waters, and potential best management practice (BMP) solutions for each of the communities
- ◆ Change the behavior of target communities and thereby reduce pollutant releases to the storm drain system and the environment

The current permit requires public opinion surveys to be conducted during the first, third and fifth years of the Permit to measure the effectiveness of the Public Outreach Program. This 2009

follow-up study will be used to gauge progress from the 2007 and 2005 follow-up surveys and from baseline data collected during the 2003 study. The findings also serve to inform the strategic planning process for implementing the public outreach component of the SWMP.

Purpose

The follow-up public opinion survey was conducted in November and December 2009 to obtain a comprehensive and statistically reliable look at the attitudes, perceptions and behaviors related to knowledge of the storm drain system, high priority pollutants, environmental responsibility, public outreach messages and pollution prevention.

The purpose of this study is to provide the City and County with information about public attitudes, perceptions and behaviors that will be helpful in the evaluation, development and implementation of its outreach effort. The objectives of the study are to measure progress from both follow-up and baseline data for the following content areas:

- ◆ Perceptions of the seriousness and impacts of pollution
- ◆ Understanding of major contributors to water pollution
- ◆ Use patterns and disposal practices of pollution related products
- ◆ Awareness of storm drains and the storm drain system
- ◆ Willingness to participate in pollution prevention practices
- ◆ Awareness of the city and county stormwater programs
- ◆ Exposure to storm water information

New questions (Questions 11 – 14) were added to the 2009 survey to gain insight into residential application and purchasing preferences and practices related to pest control products.

Method

ASTONE, a DBA of Panagraph, Inc., collaborated with City and County staff in 2003 to design a baseline survey plan and prepare an interview questionnaire. Follow-up surveys were completed in 2005 and 2007 utilizing the same questionnaire. Most questions for this 2009 survey were not changed to allow for tracking changes in perceptions and behaviors of Stockton Area residents. As

stated earlier, new questions (Questions 11 – 14) were added to the 2009 survey to gain insight into residential application and purchasing preferences and practices related to pest control products. A copy of the questionnaire with frequencies can be found in Appendix B.

The services of AIS Market Research, a computer-assisted telephone interviewing (CATI) facility, were retained to implement the actual telephone interviews. The random digit dialing and computer-based tabulation system assured that residents with unlisted phone numbers could be included in the sample.

Four hundred 12- to 15-minute telephone interviews were conducted throughout the Stockton Area in November and early December 2009. Participant responses were entered directly into the computer while the interview was being conducted. The use of CATI software as a research tool significantly reduces sampling error as skips or branching in the questionnaire are automated or PC-prompted as opposed to being manually processed by the interviewer. All interviewers were trained by an experienced data collection supervisor and were monitored by an on-site supervisor during the entire course of the study. Bilingual interviewers were used to provide Spanish-speaking respondents an opportunity to participate in the survey.

Sample

Four hundred heads of household residing in the Stockton Area for at least the past six months were interviewed via telephone on a series of issues dealing with storm water management and pollution prevention. A quota sampling procedure was employed to ensure a representative population distribution, according to the 2000 Census.

Demographic factors are presented in this report when they vary from the total survey trends to the degree that they influence the implementation of the outreach effort. Sample demographics are presented in Appendix A. The sample yields reliability, in the most conservative case, of +/- 5% at a 95% level of confidence. That is, the data will not vary by more than +/- 5% in 95 out of 100 replications of the study.

Frequencies and Cross Tabulations

Frequencies represent the exact number of times each response was given and the percentage of all responses to a particular question represented by that number. The survey questionnaire with frequencies is included in Appendix B.

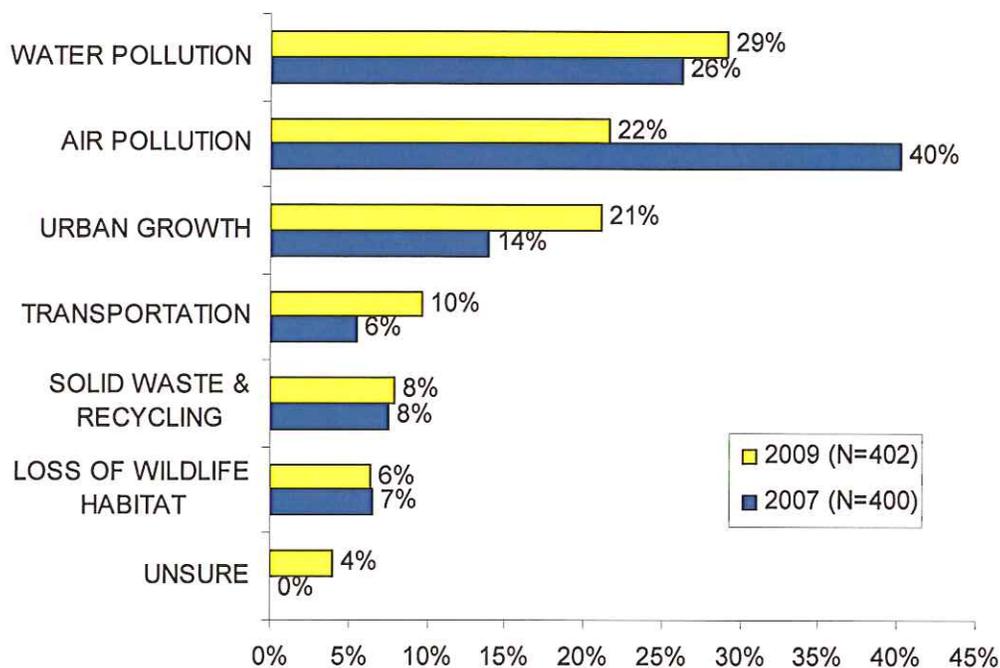
Cross tabulation tables represent how many times, and in what percentage of the time, a particular group gave specific responses. Fluctuations in cross tabulation analyses that are at the 95% confidence level are considered significant. Only those groups that have a different opinion at the highest level indicated by capital letters are mentioned in this report. A set of cross tabulation tables is included in Appendix D.

C. Significant Findings

Perceptions of the Seriousness and Impacts of Pollution

Respondents were read a short list of environmental issues and asked to select the one they felt was the most serious. Concerns over water pollution rose to 29% in the 2009 study out ranking air pollution which plummeted to 22% from a high of 40 percent in the 2007, 35 percent in 2005 and 29 percent in 2003 studies. Concerns over urban growth rose to its highest point in 2009 with 21% responding that it was the most significant environmental concern as compared to only 14% in 2003.

Figure 1: Most Serious Environmental Issue



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Water Pollution

- ◆ Ages 55+
- ◆ Zip codes: 95205, 95215, 95209, 95210, 95212

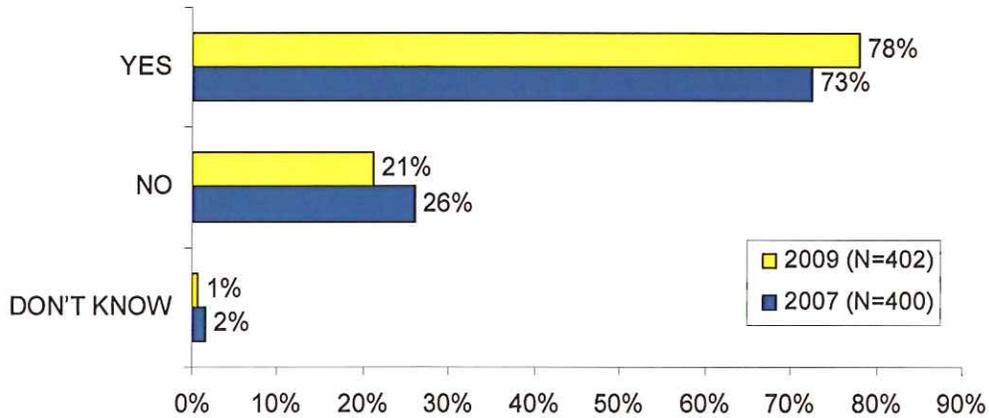
Urban Growth

- ◆ Caucasians
- ◆ 75K+
- ◆ Some college education
- ◆ Zip codes: 95207, 95219

Existence of Body of Water

A significant and growing majority of respondents (2009: 78%; 2007: 73%, 2005: 71%, 2003: 66%) continue to be able to affirm the existence of a body of water in close proximity to their home.

Figure 2: Existence of Nearby Body of Water



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Yes

- ◆ Caucasians
- ◆ College school education
- ◆ Ages 35 – 49 and 55+
- ◆ Income 75K+
- ◆ ZIP codes 95202/03, 95204, 95207/19

No

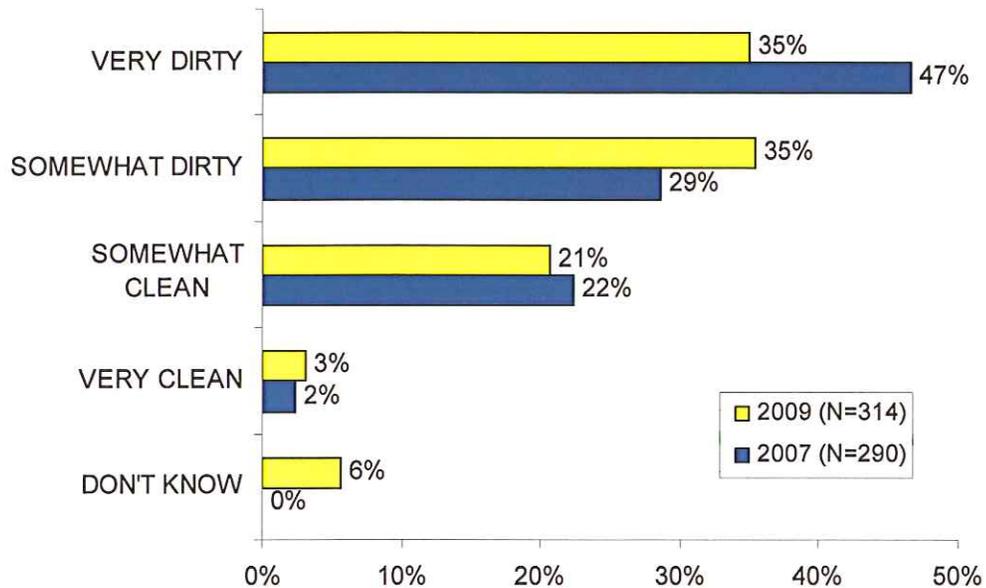
- ◆ High school education
- ◆ ZIP codes 95205/15, 95206, 95209/10/12

Perceived Condition of Water Body

Of those respondents who affirmed the existence of a nearby body of water, significantly fewer (2009: 35%, 2007: 47%, 2005: 45%, 2003: 48%) identified the said body of water as “very dirty.” More respondents identified the said body of water as “somewhat dirty” (2009: 35%, 2007: 29%

2005: 31%, 2003: 31%). Responses identifying the said body of water as “somewhat clean” (2009: 21%, 2007: 22%, 2005: 16%, 2003: 18%) remained relatively constant. Overall, Stockton Area residents continue to realize that waterways are at risk, but feel less intense about the issue than in past studies.

Figure 3: Perceived Condition of Nearest Body of Water



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Very Dirty

- ◆ Caucasians and Hispanics
- ◆ Income 75K+
- ◆ ZIP codes 95202/03, 95204

Somewhat Dirty

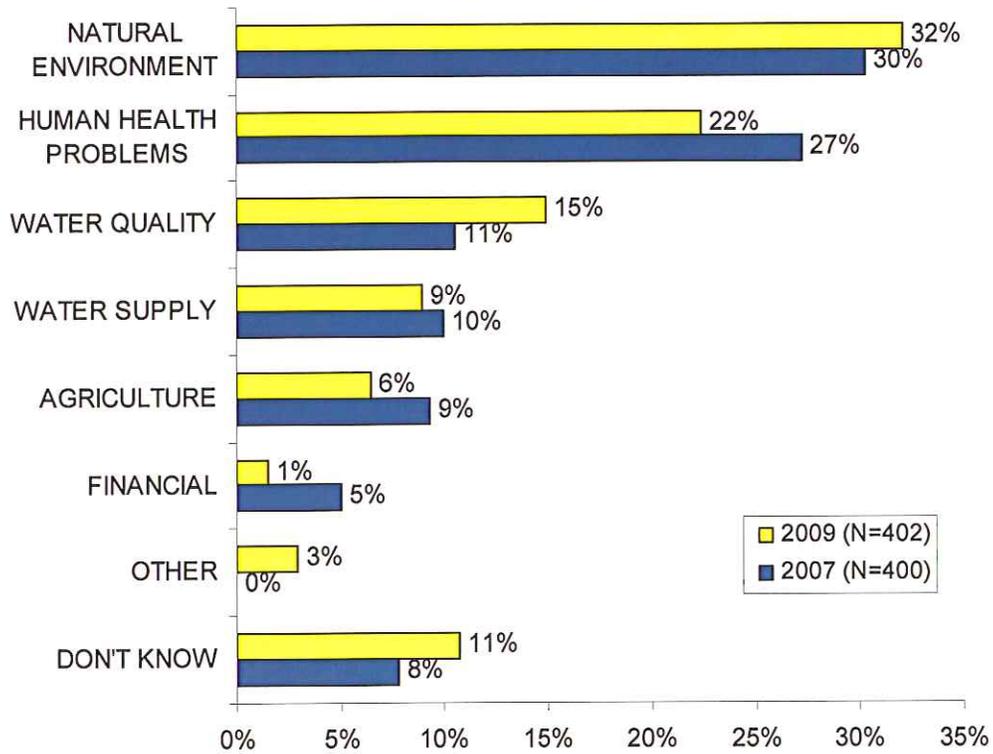
- ◆ Caucasians and Hispanics
- ◆ College graduates

Main Impacts of Water Pollution

When asked to identify the main impacts of water pollution, about a third of the respondents continued to identify (2009: 32%, 2007: 30%, 2005: 33%, 2003: 32%) identify environmental problems. This response continued to be closely followed by human health problems (2009: 22%

2007: 27%, 2005: 23%, 2003: 27%). Regularly communicating campaign messages that relate to these two fundamental concerns will enhance the effectiveness of the public outreach effort.

Figure 4: Main Impacts of Water Pollution



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Natural Environment

- ◆ Caucasians and Hispanics
- ◆ Ages 55+
- ◆ Some college education
- ◆ Zip codes 95207/95219

Human Health

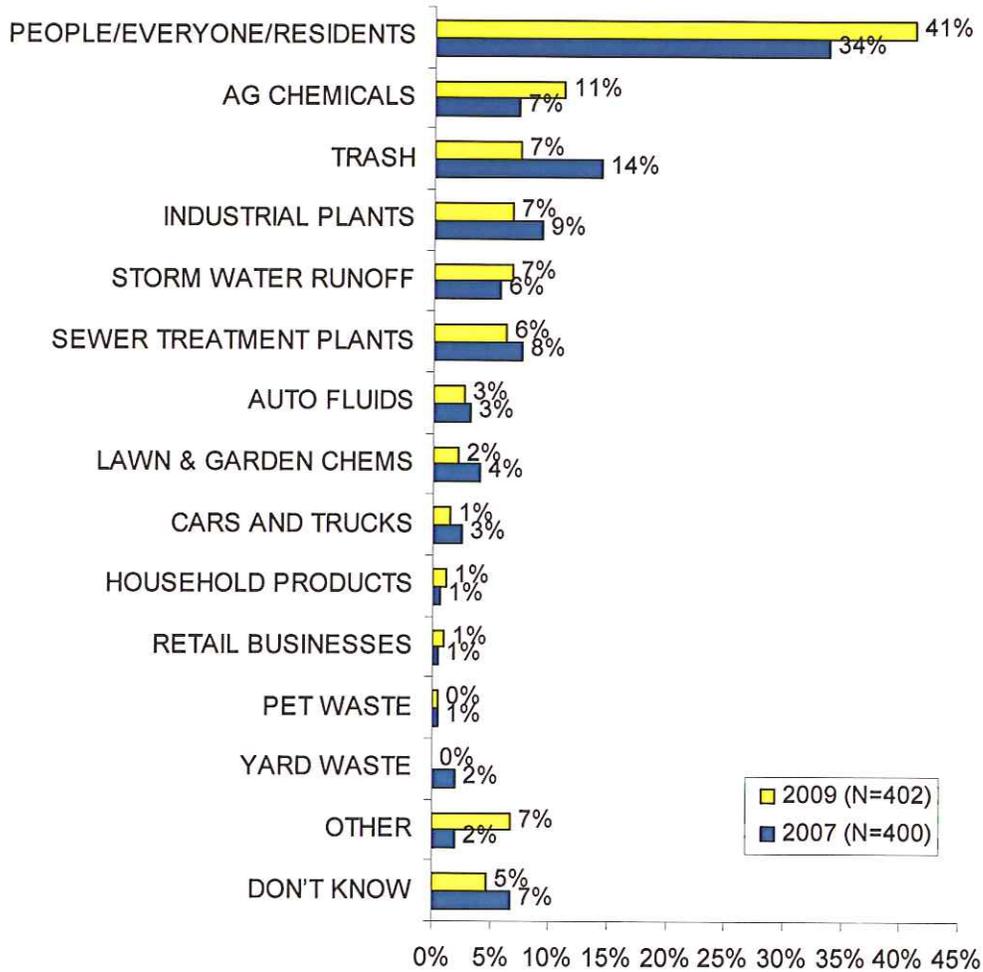
- ◆ Females

Understanding of Major Contributors to Water Pollution

When asked an open-ended question about the causes of water pollution, more respondents (2009: 41%, 2007: 34%, 2005: 41%, 2003: 30%) first mentioned people, everyone or residents as major contributors to water pollution, returning to the same level as 2005. Trash was cited

significantly less often (2009: 7%, 2007: 14%, 2005: 11%, 2003: 8%) and industrial plants continued its decline pattern over time (2009: 7%, 2007: 9%, 2005: 10%, 2003: 19%).

Figure 5: Top-of-Mind Contributors to Water Pollution



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

People/Residents/Everyone

- ◆ Females
- ◆ African Americans

Trash

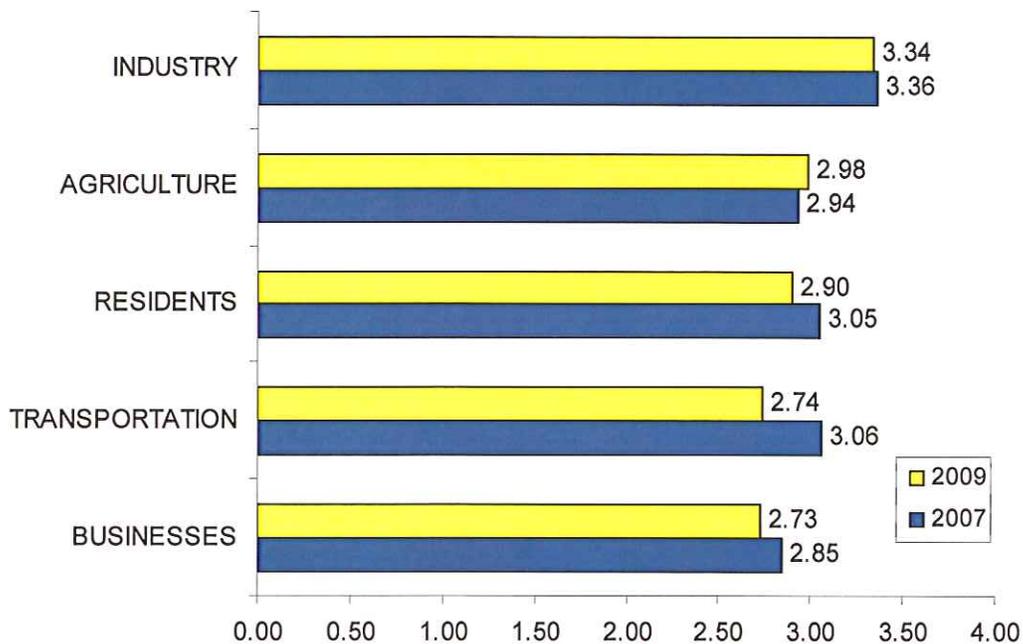
- ◆ Females

Respondents were asked to rate various classes of contributors to water pollution. A mean rating was calculated for each contributor by establishing a four-point scale:

- 4 = contributes A LOT to water pollution
- 3 = contributes SOME to water pollution
- 2 = contributes A LITTLE to water pollution
- 1 = DOESN'T contribute AT ALL to water pollution

Average ratings were calculated and industry continued to be seen as the main contributor (2009: 3.38, 2007: 3.36, 2005: 3.37, 2003: 3.47) while agriculture (2009: 3.02, 2007: 2.94, 2005: 2.76, 2003: 3.03) replaced residents (2009: 2.93, 2007: 3.05, 2005: 2.95, 2003: 3.03) as the second biggest contributor. Businesses (2009: 2.77, 2007: 2.85, 2005: 2.82, 2003: 3.07) and transportation (2009: 2.87, 2007: 2.85, 2005: 2.82, 2003: 3.07) followed.

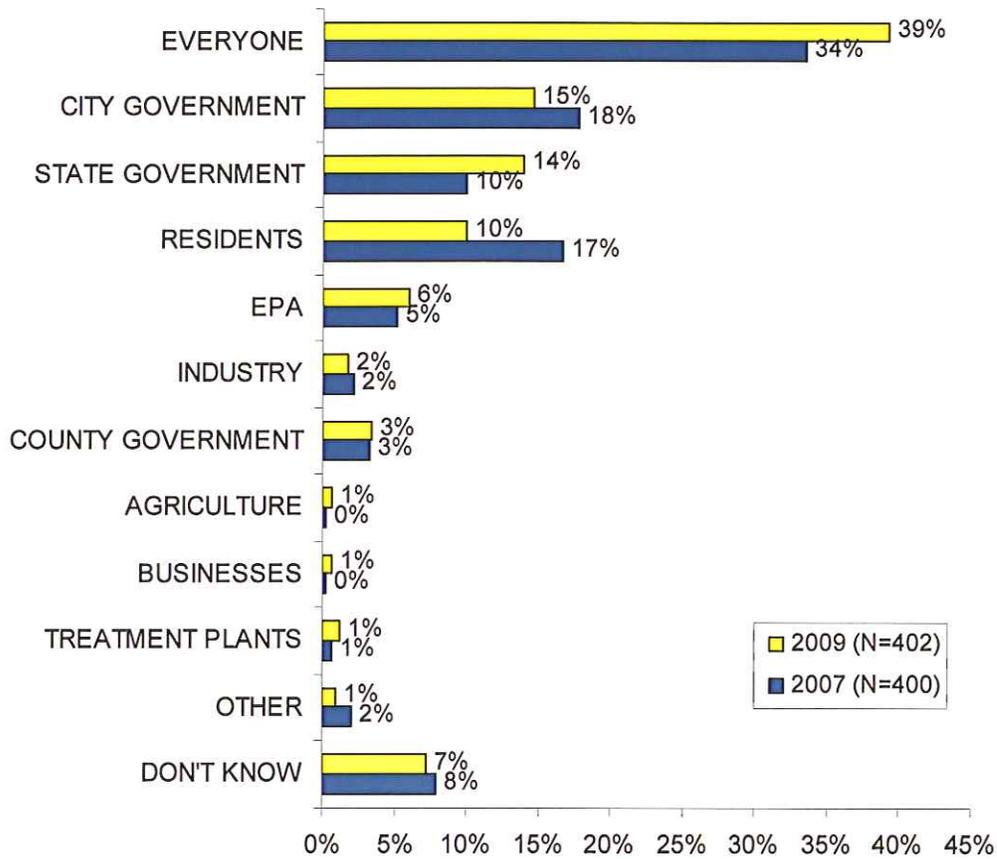
Figure 6: Mean Ranking of Contributors to Water Pollution



Perceived Responsibility for Solving Water Pollution Problems

Respondents were asked to identify the party they believed to be responsible for solving water pollution problems. The number of respondents (2009: 39%, 2007: 34%, 2005: 26%, 2003: 32%) identifying “everyone” as responsible is growing overtime. Residents were identified less often than during some periods in the past (2009: 10%, 2007: 17%, 2005: 8%, 2003: 11%). City, state and county governments were mentioned at consistent levels over the study period.

Figure 7: Responsibility for Solving Water Pollution Problems



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Everyone

- ◆ Ages 35-49, 50-54, 55+
- ◆ Annual income: 25K-35K,
- ◆ Asians

Residents

- ◆ Zip codes: 95209/10/12

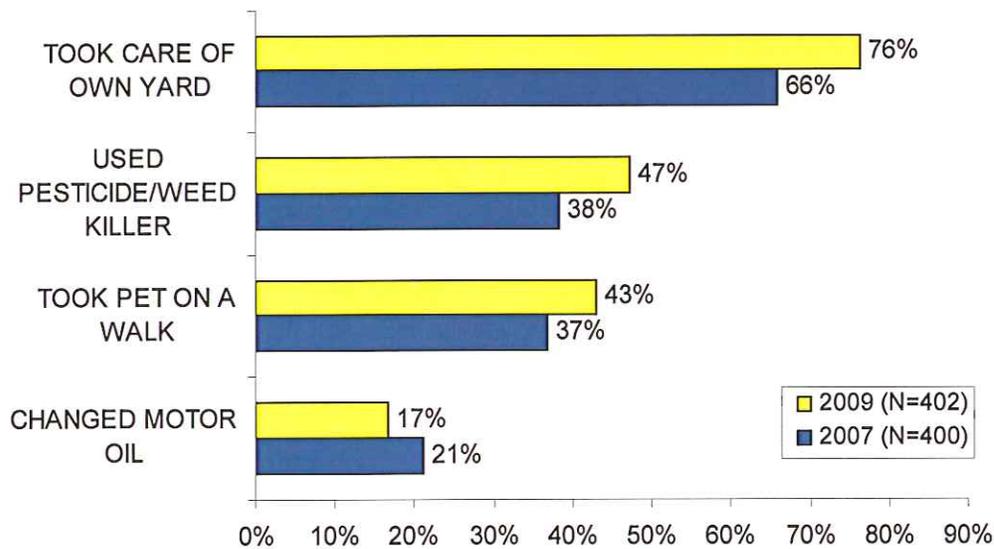
State Government

- ◆ Homeowners
- ◆ Male
- ◆ Ages 55+
- ◆ Income level: 75K+ ;
- ◆ Zip codes: 95207/19, 95209/10/12

Use Patterns and Disposal Practices of Pollution Related Products

Respondents were asked a series of questions regarding their use patterns and disposal practices of substances identified as contributing to pollution. Pesticide usage increased significantly (2009: 47%, 2007: 38%, 2005: 40%, 2003: 39%). Another significant increase occurred in the number of respondents who report taking care of their own yard (2009: 76%, 2007: 66%, 2005: 66%, 2003: 62%). In addition, more respondents are regularly taking their pets on a walk (2009: 43%, 2007: 37%, 2005: 34% and 2003: 36%). Respondents reporting changing their motor oil continued its downward trend over the period of the study (2009: 17%, 2007: 21%, 2005: 18%, 2003: 26%).

Figure 8: Reported Behaviors within the Last Year



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Yard Care

- ◆ Males
- ◆ Hispanics
- ◆ Homeowners
- ◆ Ages 25-34, 50-54
- ◆ Annual incomes: 50-75K and 75K+
- ◆ ZIP codes 95205/15, 95204, 95206, 95209/10/12

Pesticides/Weed Killers

- ◆ Homeowners
- ◆ Annual income: \$75k+
- ◆ ZIP codes 95205/15, 95206, 95207/19, 95209/10/12

Pet Walking

- ◆ Caucasians and Hispanics
- ◆ Homeowners
- ◆ Ages 50 – 54

- ◆ Annual incomes 75K+

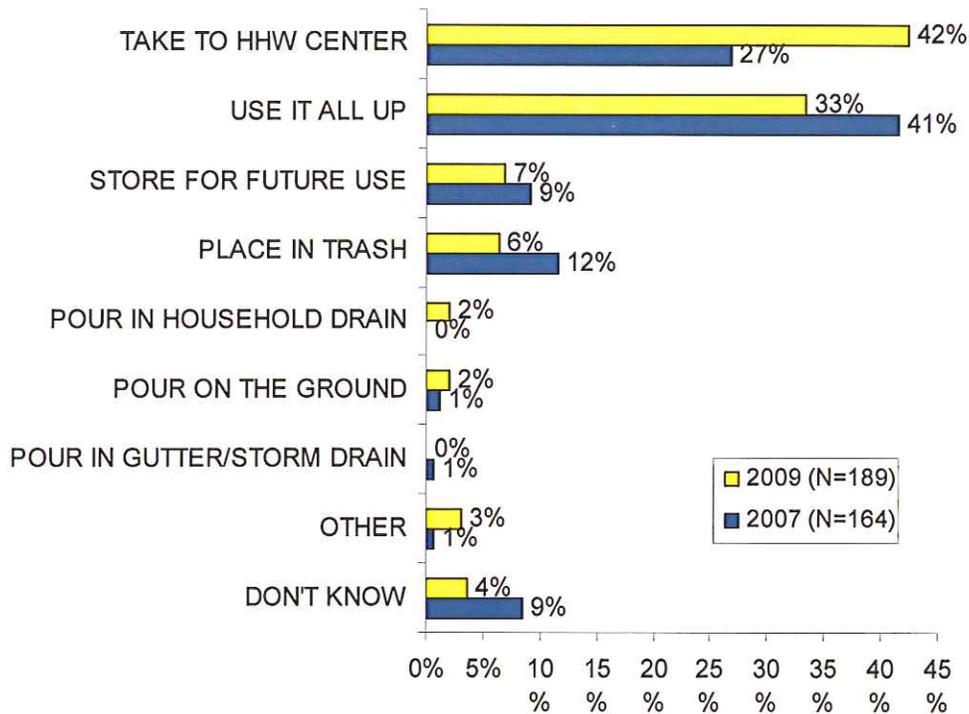
Changing Motor Oil

- ◆ Caucasians, Hispanics, Asian
- ◆ Ages 25-34
- ◆ Some college education
- ◆ Annual incomes: 35K – 50K, 50K – 75K
- ◆ Zip codes 95205/15

Pesticides and Weed Killers

Of the respondents who reported using pesticides or weed killers during the last year, there continued to be fluctuations in those who reported using it all up over the study period (2009: 33%; 2007: 41%, 2005: 51%, 2003: 38%). The number of those reporting taking the leftovers to a household hazardous waste collection event increased significantly (2009: 42%, 2007: 27%, 2005: 29%, 2003: 23%). And, significantly fewer respondents report placing the chemicals in the trash (2009: 6%, 2007: 12%, 2005: 10%, 2003: 21%) over the study period. Responses for storing it for future use continue to fluctuate (2009: 7%, 2007: 9%, 2005: 4%, 2003: 10%). Only four respondents reported pouring leftover pesticides “on the dirt/ground” and no one reported pouring it down a storm drain in this year’s study.

Figure 9: Disposal Methods for Pesticides



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Take it to HHW Collection Event/Center

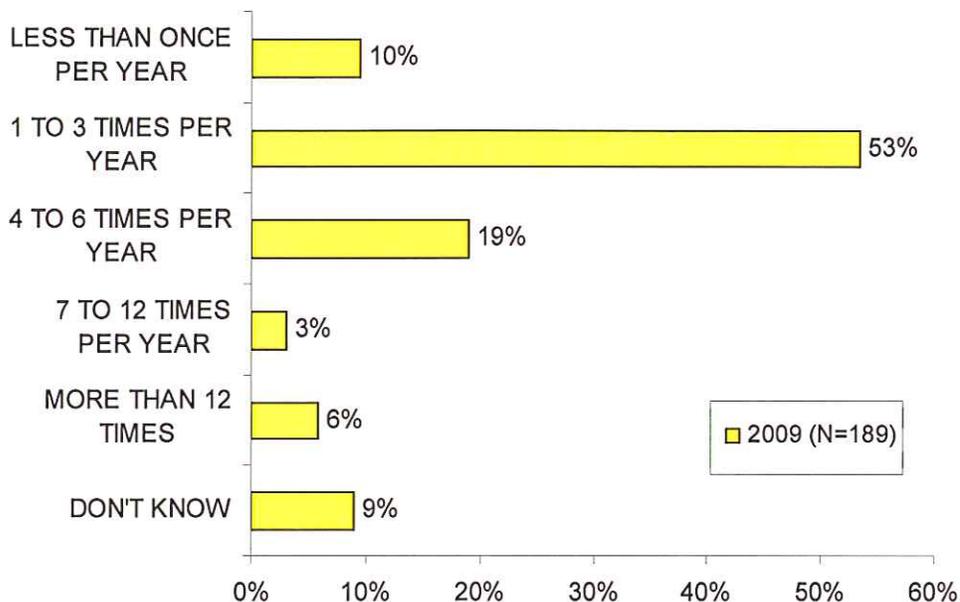
- ◆ Females
- ◆ Caucasians

Number of Applications of Outdoor Pest Control Products

New questions were added to the 2009 survey to gain insight into residential application and purchasing preferences and practices related to pest control products.

Those respondents (N=189) who had earlier identified using pesticides during the past year were asked to identify the total number of times they had applied pest control products over the last year. A majority of respondents (53%) indicated using pesticides 1 – 3 times per year. Fewer individuals responded to the other categories which included: less than 1 time per year (10%), 4 – 6 times per year (19%), 7 – 12 times per year (3%), and more than 12 times per year (6%).

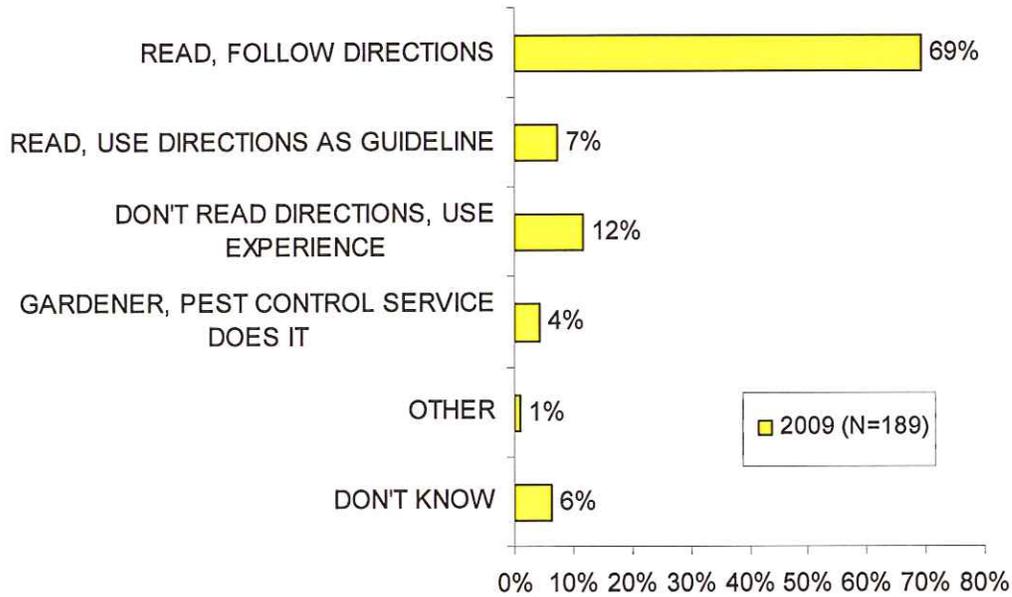
Figure 9a: Pest Control Product Applications Per Year



Decision Making About How Much Pesticides to Use

Respondents were asked how they decided how much of the product to use when applying pest control products. Possible responses were read to the respondents so they could select the one that best reflected their answer.

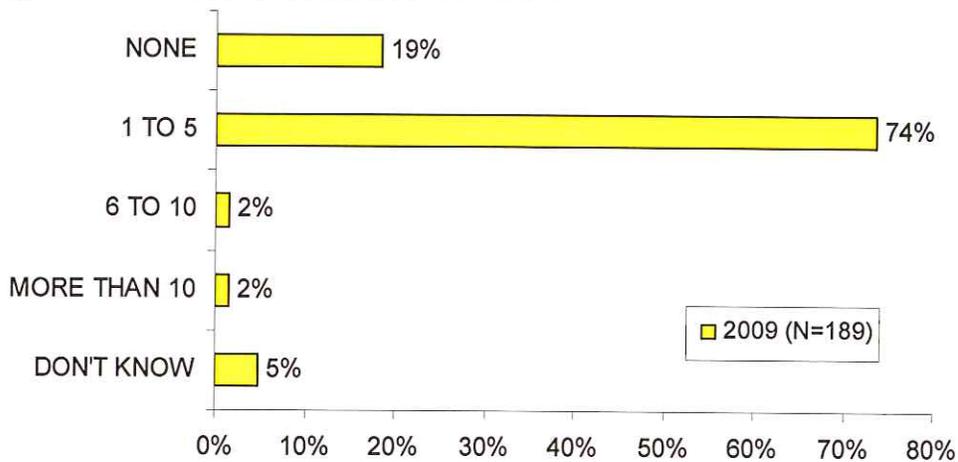
Figure 10: Decision Making Related to Pest Control Product Use



Number of Pest Control Products Stored in Home

When asked how many different pest control products were stored in their homes, the vast majority of respondents (74%) provided an answer between 1 and 5. These respondents tended to be 35 years of age or older, and reside in zip codes 95202/03, 95204, 95207/19 and 95209/10/12.

Figure 11: Pest Control Products Stored in Home

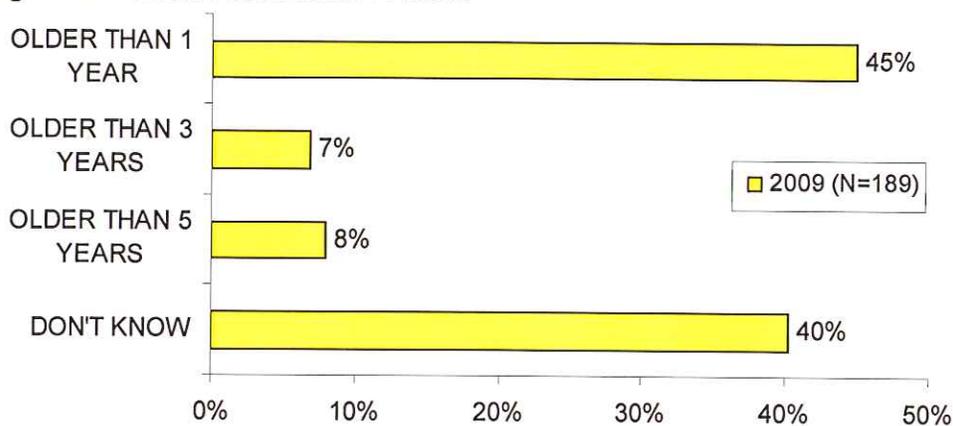


Those individuals indicating none when referring to pest control products stored in their homes tended to reside in zip codes 95205/15.

Pest Control Product Age Information

Respondents were then asked how old the oldest pest control product stored in their home was. The following chart summarizes the information gained from respondents about the age of their oldest product.

Figure 12: Oldest Pest Control Product

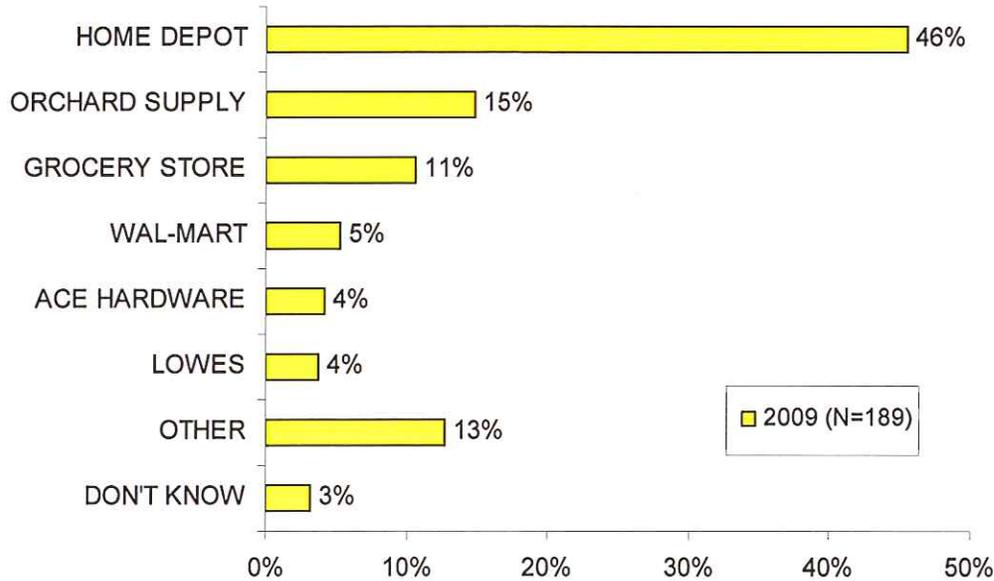


Purchasing of Pest Control Products

The last new question about pest control products that was asked on this 2009 survey asked the respondent where they purchased pest control products. Home Depot and Orchard Supply

Hardware were the most frequently mentioned stores. Below is a chart that summarizes the responses to the question on place of purchase.

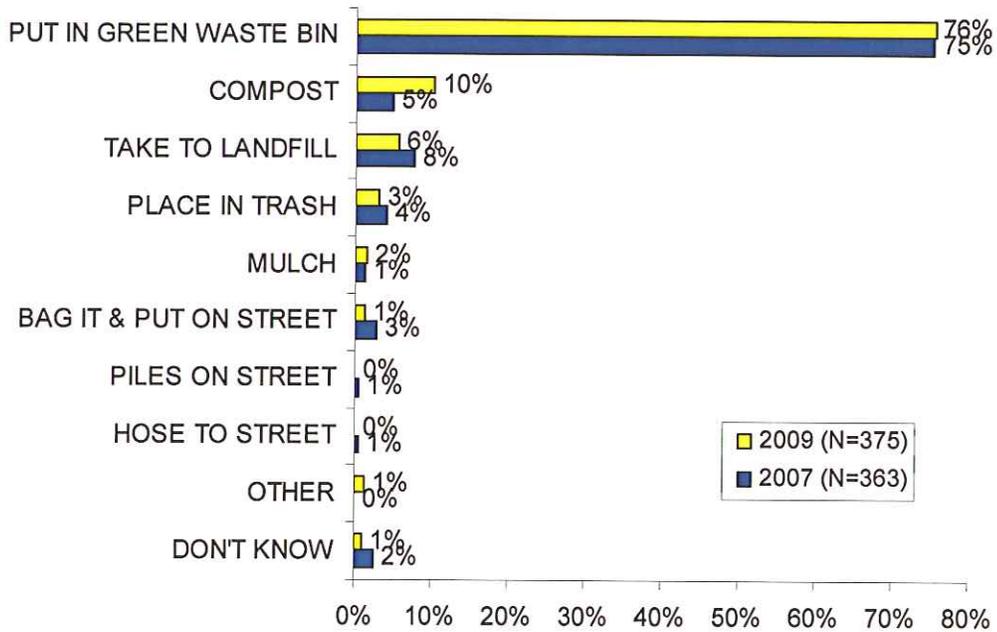
Figure 13: Place of Purchase for Pest Control Products



Yard Waste

Those respondents who reported either taking care of their own yard or using a yard care service were asked to report the typical method by which they dispose of their yard waste. The number of respondents indicating they use the green waste bin continued to be a vast majority (2009: 76%, 2007: 78%, 2005: 70%). Only a very small number place it in the trash (2009: 3%, 2007: 4%; 2005: 6%, 2003: 11%) while more respondents indicate they put it in a compost pile (2009: 10%, 2007: 5%, 2005: 6%, 2003: 7%). Some respondents continue to indicate they take it to the landfill (2009: 6%, 2007: 8%; 2005: 5%, 2003: 14%) Not even one respondent in this 2009 study indicated putting yard waste in piles on the street or hosing to the street or gutter. This is a significant change from 2003.

Figure 14: Disposal of Yard Waste



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

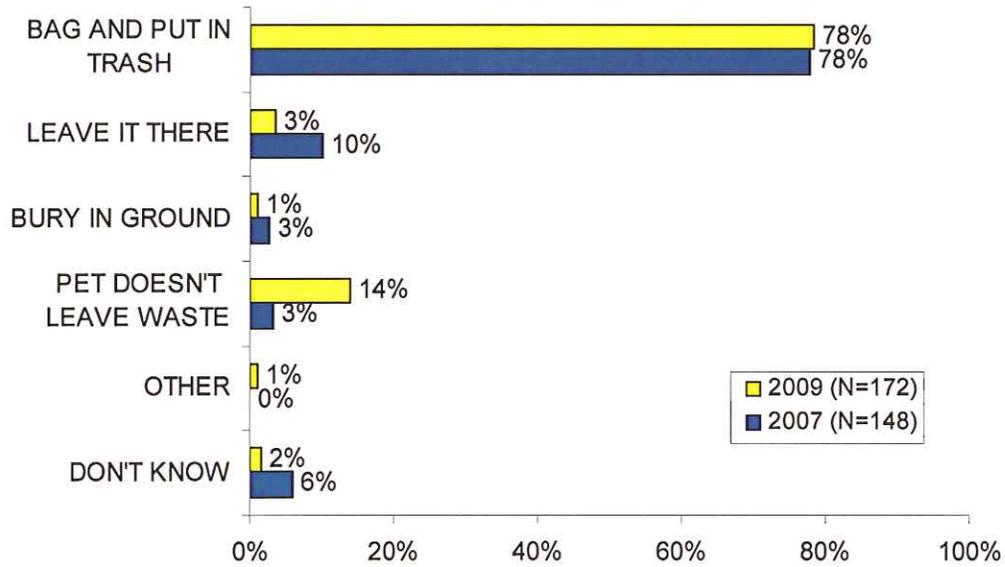
Green Waste Bin

- ◆ African Americans
- ◆ Annual income of \$35k - \$50k
- ◆ ZIP codes 95202/03, 95204, 95206, 95207/19, 95209/10/12

Pet Waste

Of those respondents who indicated that they had a pet at home that was regularly taken for walks, the vast majority continue to report (2009: 78%, 2007: 78%, 2005: 80%, 2003: 70%) that they are in the habit of bagging their pet's waste on walks.

Figure 15: Disposal of Pet Waste

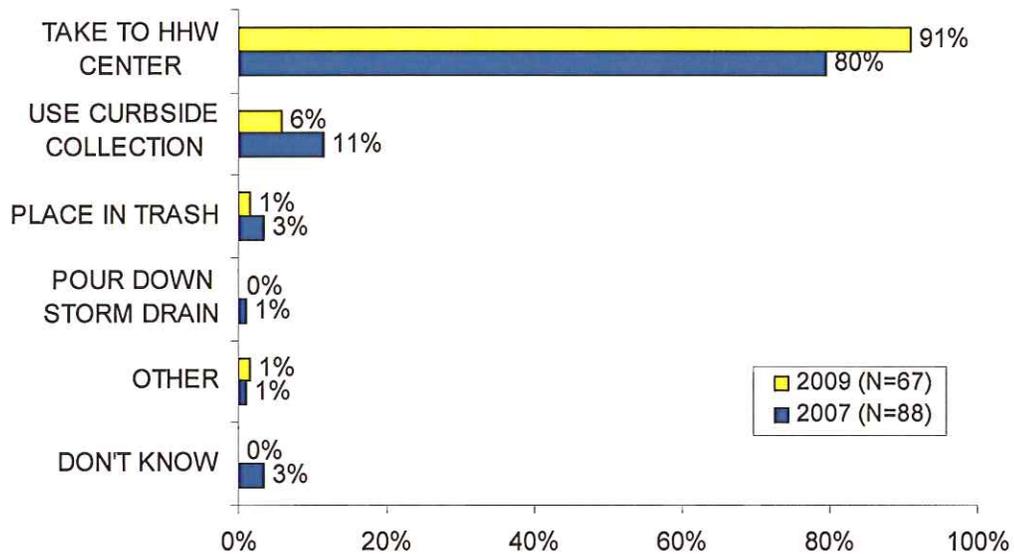


Cross-tabulation analysis showed no significant differences in trends among demographic groups in the 2009 data.

Automotive Fluids

Of the 67 respondents who reported changing their motor oil in the last year, 61 respondents reported taking their used motor oil to a hazardous waste collection center (2009: 91%, 2007: 82%, 2005: 93%, 2003: 75%). Of the remaining 6 respondents, 4 reported use of curbside collection (2009: 6%, 2007: 12%, 2005: 0%, 2003: 9%), 1 reported putting it in the trash, and 1 responded "Other."

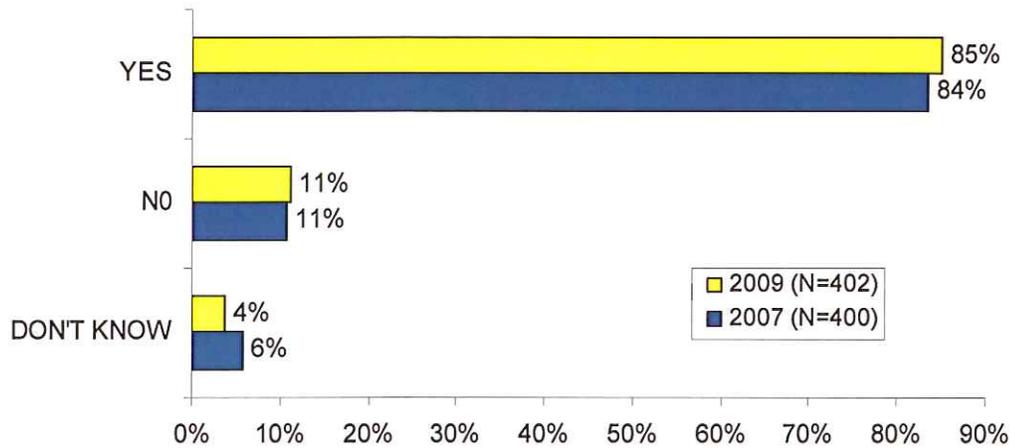
Figure 16: Disposal of Used Motor Oil



Awareness of the Storm Drain System

The vast majority of respondents (2009: 85%. 2007: 84%, 2005: 84%, 2003: 83%) continued to report that they are aware of the presence of storm drains in their neighborhood. Many of those who were not aware of storm drains tended to live in the county areas where there are road side ditches instead of storm drains.

Figure 17: Presence of Storm Drains in Neighborhood



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

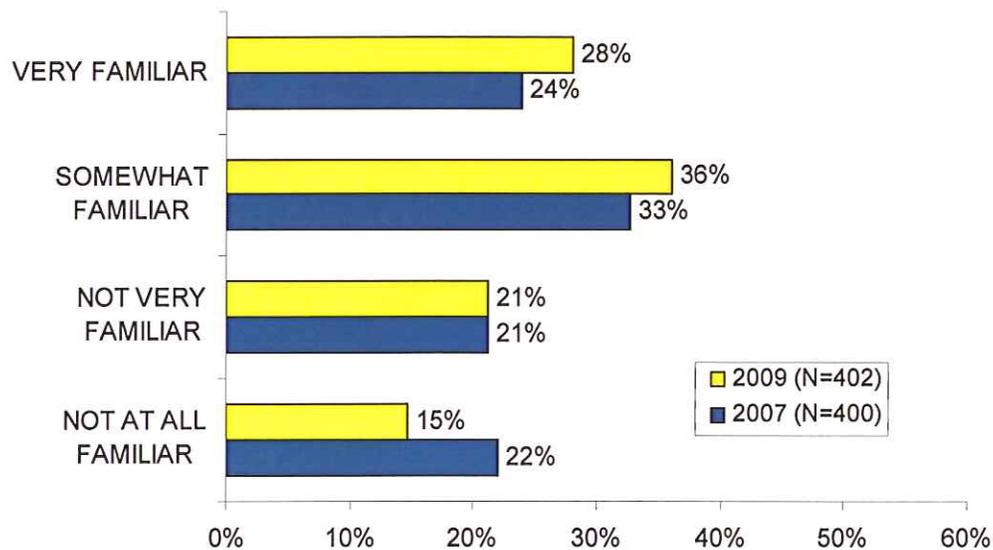
Yes

- ◆ ZIP codes 95202/03, 95204, 95206, 95207/19, 95209/10/12
- ◆ African Americans

No

- ◆ Incomes over 75K
- ◆ ZIP codes 95205/15

Figure 18: Familiarity with the Storm Drain System



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Storm Drain System Familiarity

Very Familiar

- ◆ Caucasians
- ◆ Males
- ◆ Aged 55 and over
- ◆ College and graduate education

Not Very Familiar

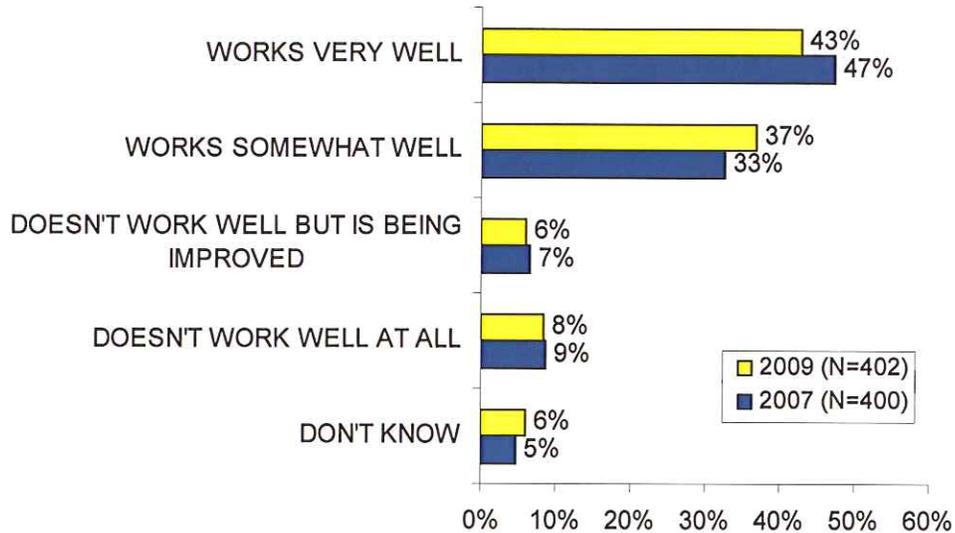
- ◆ Females
- ◆ Zip codes 95202/03

Not At All Familiar

- ◆ Females
- ◆ Hispanics
- ◆ ZIP codes 95205/15, 95206, 95209/10/12

Respondents were then asked to rate how well they believe the storm drain system works during the rainy season. Slightly fewer respondents indicated that the storm drain system works very well (2009: 43%, 2007: 47%, 2005: 40%, 2003: 34%) when compared to the 2007 study alone. A similar level of respondents reported that it doesn't work well at all (2009: 9%, 2007: 9%).

Figure 19: Assessment of the Storm Drain System



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Works Very Well

- ◆ Male
- ◆ African Americans
- ◆ Aged 55 and over
- ◆ ZIP codes 95206

Works Somewhat Well

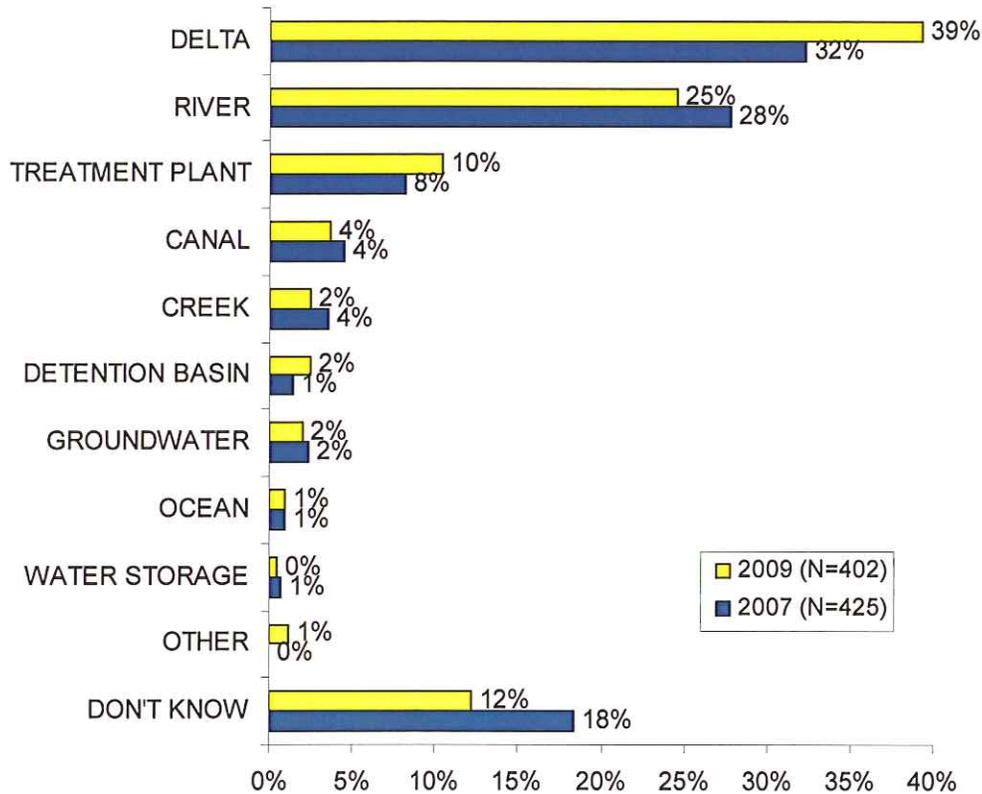
- ◆ Ages 35-49
- ◆ Incomes \$50 – 75K
- ◆ ZIP codes 95207/19, 95209/10/12

Doesn't Work Well At All

- ◆ ZIP codes 95204

When asked to identify where stormwater goes after it flows into the storm drains, the vast majority of the respondents were able to cite a correct answer mentioning one of Stockton Area's waterways. The most frequent responses were the Delta (2009: 39%, 2007: 34%, 2005: 34%, 2003: 29%) and a river (2009: 25%, 2007: 30%, 2005: 22%, 2003: 28%). The number of respondents identifying "treatment plant" has remained relatively constant over the period of the study (2009: 10%, 2007: 9%; 2005: 13%, 2003: 8%). Those indicated they didn't know or were unable to answer decreased in the last study (2009: 12%, 2007: 20%, 2005: 20%, 2003: 16%).

Figure 20: Knowledge of Where Stormwater Goes



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Delta

- ◆ Caucasians
- ◆ Ages 35-49
- ◆ College educated
- ◆ Annual incomes: 50-75K and over \$75k
- ◆ 95202/03, 95205/15, 95204, 95207/19, 95209/10/12

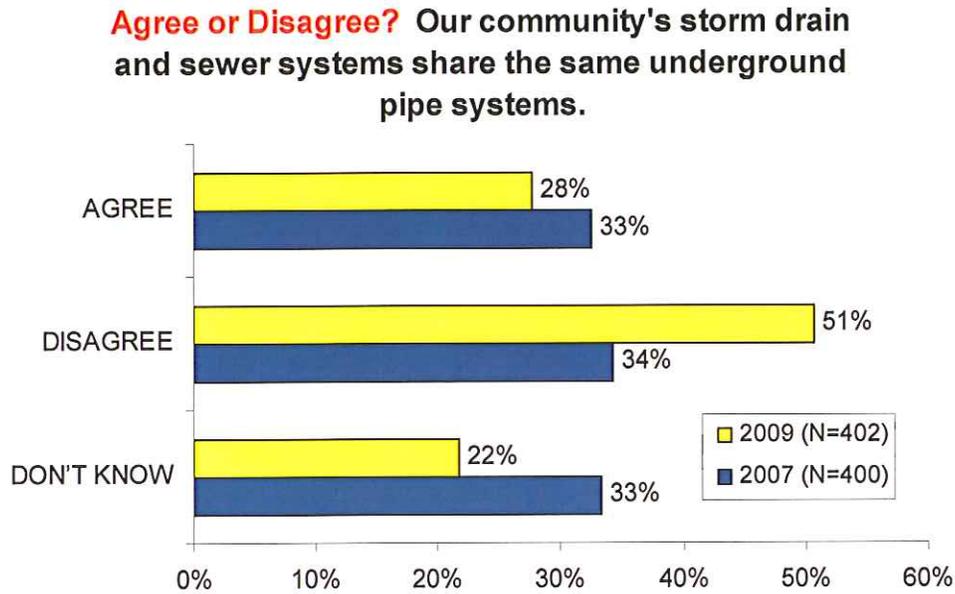
Unable to Answer/Don't Know

- ◆ Females
- ◆ High school educated
- ◆ ZIP codes 95206, 95207/19

In order to probe further into their knowledge of the storm drain system, all respondents were asked to agree or disagree with the following statement: *Our community's storm drain and sewer systems share the same underground pipe system.* The number of respondents that incorrectly agreed with this statement continued to decrease over the period of the studies (2009: 28%, 2007: 33%, 2005: 31%, 2003: 40%), while, at the same time, significantly more respondents

correctly disagreed (2009: 51%; 2007: 34%, 2005: 40%, 2003: 39%). This is a major, significant finding of this 2009 study.

Figure 21: Concept Check: Storm Drain System vs. Sewer System



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Incorrectly Agreed

- ◆ Hispanics and African Americans
- ◆ Zip code 95206
- ◆ Ages 35-49
- ◆ Annual incomes \$35k – 50k

Correctly Disagreed

- ◆ Males
- ◆ Caucasians
- ◆ Homeowners
- ◆ Some graduate education
- ◆ Annual income \$75k and over
- ◆ ZIP codes 95202/03, 95204, 95207/19, 95209/10/12

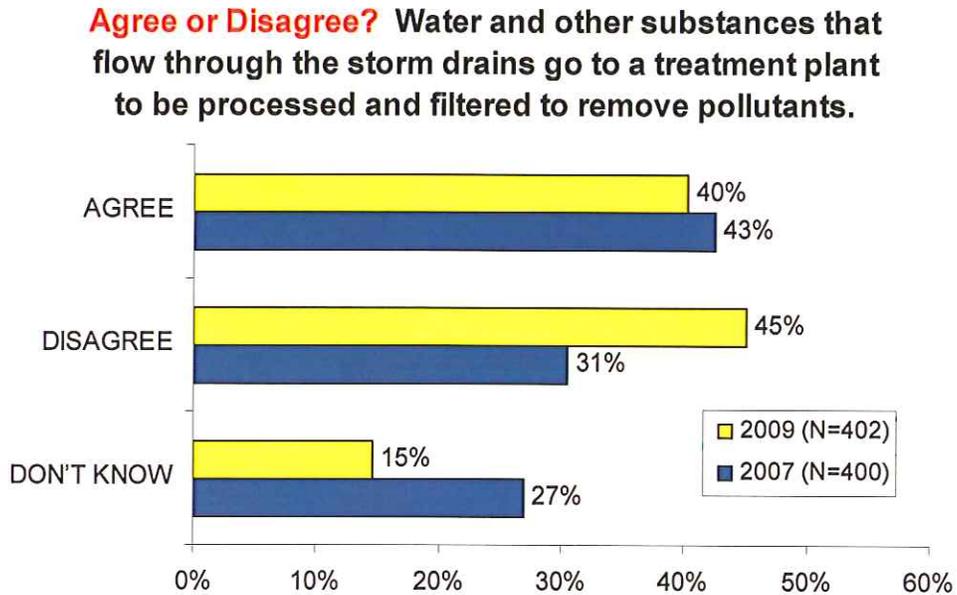
Don't Know

- ◆ Females
- ◆ Ages 55+
- ◆ Zip codes 95205/15

Respondents were then asked to agree or disagree with a statement designed to probe into the treatment issue: Water and other substances that flow through the storm drains go to a treatment

plant to be processed and filtered to remove pollutants. The largest group of respondents in this study correctly disagreed (2009: 45%, 2007: 31%, 2005: 28%, 2003: 38%). The number of those who incorrectly agreed decreased (2009: 40%, 2007: 43%, 2005: 51%, 2003: 49%) and significantly fewer didn't know (2009: 14.9%, 2007: 27%, 2005: 21%, 2003: 13%).

Figure 22: Concept Check: Treatment of Stormwater



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Incorrectly Agreed

- ◆ Zip code 95206

Correctly Disagreed

- ◆ Males
- ◆ Caucasians
- ◆ Some graduate education
- ◆ Annual income \$75k and over

Don't Know

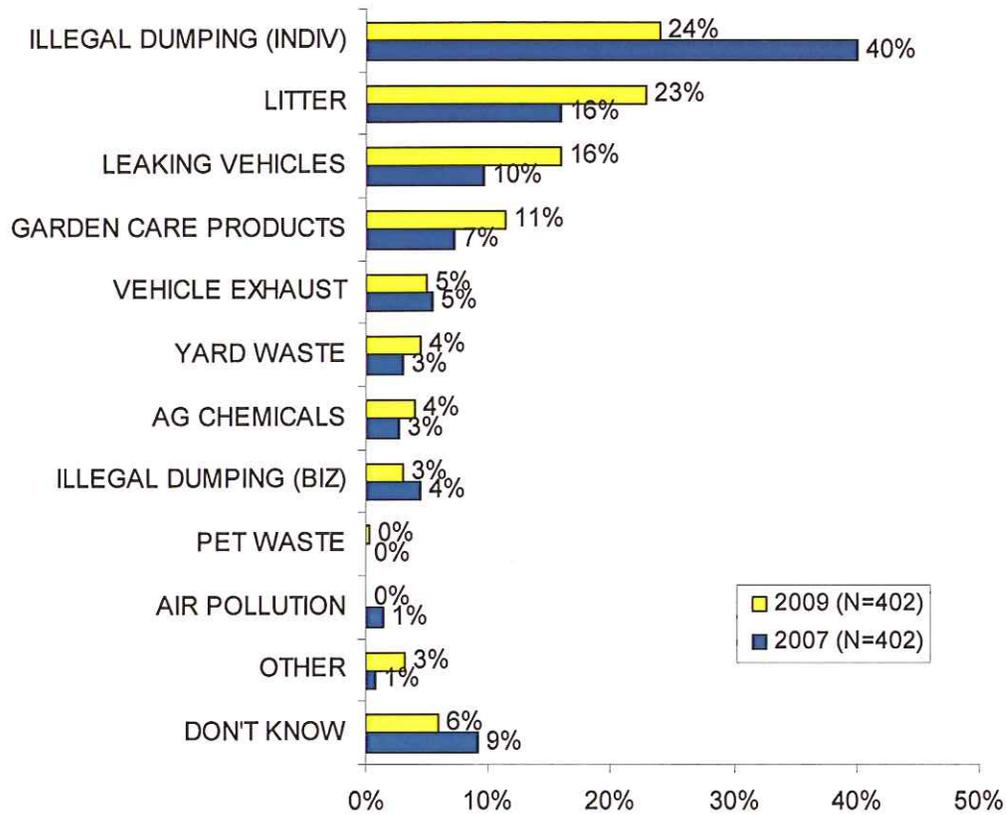
- ◆ Females
- ◆ Aged 50 - 54

Perceptions of Stormwater Pollution

When asked specifically how the water that flows into storm drains can get polluted, fewer respondents mention illegal dumping by individuals (2009: 24%, 2007: 40%, 2005: 42%, 2003: 43%). At the same time, there was a significant increase in those who mentioned litter/trash in the

streets (2009: 23%, 2007: 16%, 2005: 0%, 2003: 16%). More respondents also mentioned leaking vehicles (2009: 16%, 2007: 10%, 2005: 14%, 2003: 8%) and home garden care products (2009: 11%, 2007: 7%, 2005: 12%, 2003: 6%).

Figure 23: First Response to Causes of Stormwater Pollution



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Illegal Dumping by Individuals

- ◆ Aged 55+
- ◆ ZIP codes 95205/15

Litter/trash

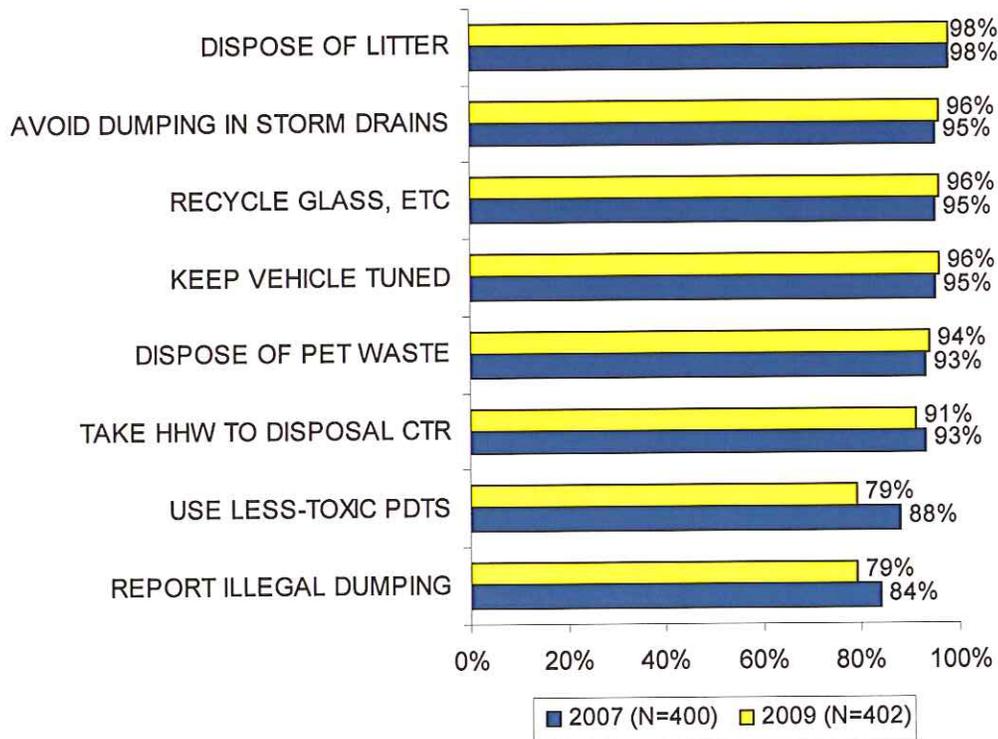
- ◆ Some high school and some college
- ◆ ZIP codes 95202/03

Willingness to Participate in Pollution Prevention Practices

In the continuing need too evaluate the community's readiness to engage in pollution prevention practices, respondents were asked to report their willingness to participate in a list of activities.

Figure 21 summarizes the data for those respondents who indicated that they were “very willing” to employ such pollution prevention practices.

Figure 24: Those Very Willing to Help Reduce Stormwater Pollution



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Avoid Dumping

- ◆ Graduate education
- ◆ African Americans

Use Less-Toxic Pesticides

- ◆ Ages 50 - 54
- ◆ Renters
- ◆ African Americans
- ◆ Some high school
- ◆ Less than 25K – 35K, 50 – 75K

Report Illegal Dumping

- ◆ Ages 25 – 55+

Keep Vehicle Tuned

- ◆ Ages 25- 34
- ◆ Some high school
- ◆ Annual Income 25 – 35K

Properly Dispose of Litter

- ◆ Some high school
- ◆ Some graduate school
- ◆ Zip codes 95207/19

Utilize HHW Center

- ◆ Some high school

Properly Dispose of Pet Waste

- ◆ Some high school
- ◆ Some graduate school

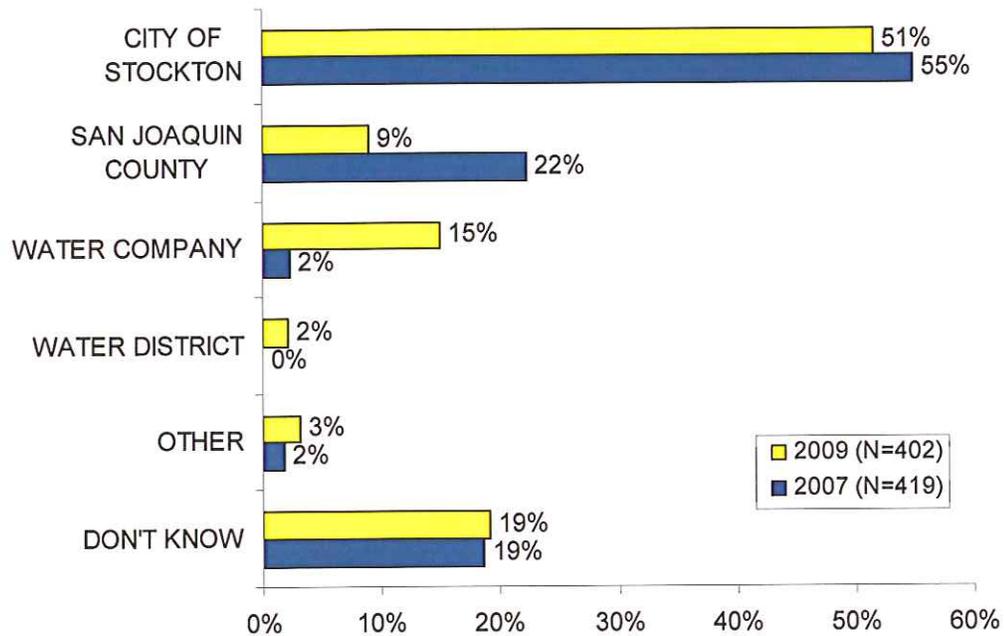
Recycle

- ◆ Ages 18 – 34
- ◆ Some high school

Awareness of City and County Stormwater Programs

A majority of respondents correctly reported over the study period that they believed the City of Stockton (2009: 51%, 2007: 55%, 2005: 56%, 2003: 61%) was one of the agencies responsible for the operations and management of the stormwater system. There was a significant decrease in mentions of San Joaquin County (2009: 9%, 2007: 22%, 2005: 11%, 2003: 16%) while a significant increase in the number of respondents who mentioned "water company" (2009: 15%, 2007: 2%, 2005: 5%, 2003: 2%). Some respondents continued to indicate that they don't know (2009: 17.7%, 2007: 20%, 2005: 25%, 2003: 17%).

Figure 25: Responsible Agency for Stormwater Management



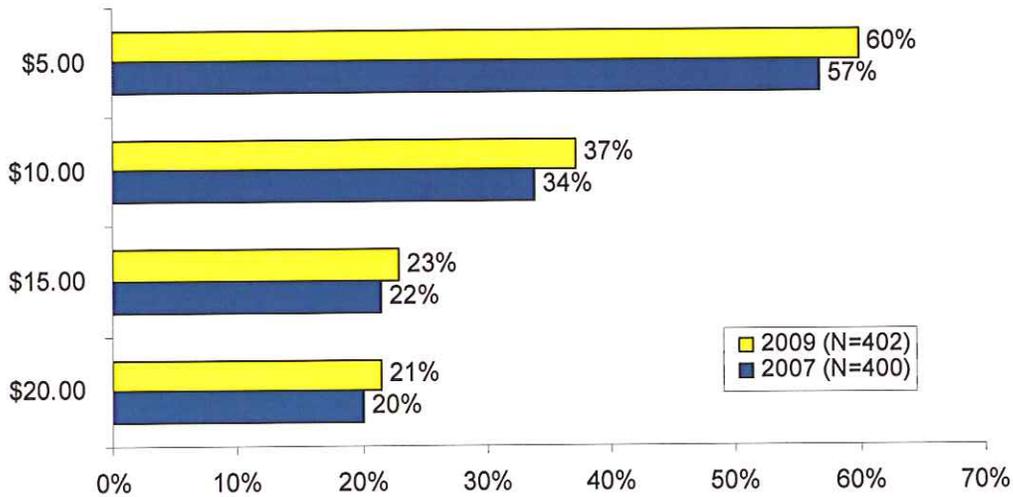
Cross-tabulation analysis revealed the following demographic trends in the 2007 data:

City

- ◆ African Americans

Respondents were next informed in a scripted narrative that the average Stockton Area household currently pays about \$25 annually in taxes for the operation of the storm drain system to prevent storm water pollution. They were then asked to indicate their willingness to pay additional fees to support stormwater pollution prevention. Figure 25 identifies those respondents who indicated they would be willing to pay an additional \$5, \$10, \$15, or \$20 fee.

Figure 26: Willingness to Pay an Extra Fee for Stormwater Pollution Prevention



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

\$5.00

- ◆ Some high school
- ◆ College and graduate education
- ◆ ZIP codes 95207/19, 95209/10/12
- ◆ Income 50 – 75K

\$10.00

- ◆ Ages 25 - 34
- ◆ College and graduate education
- ◆ Annual incomes 50 – 75K and 75K+
- ◆ ZIP codes, 95209/10/12

\$15.00

- ◆ College and graduate education
- ◆ Annual income over \$75k
- ◆ ZIP codes 95204, 95207/19, 95209/10/12

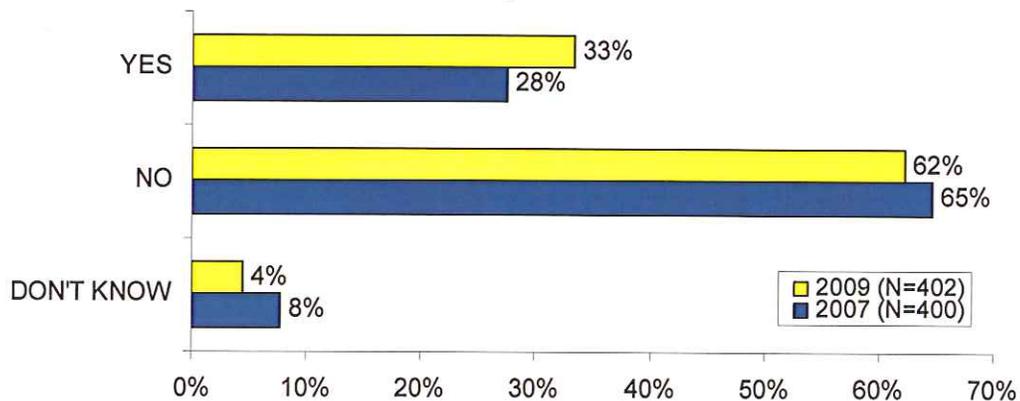
\$20.00

- ◆ College and graduate education
- ◆ Annual income over \$75k
- ◆ ZIP codes 95209/10/12

Exposure to Stormwater Information

More respondents reported hearing or seeing television or radio spots, advertising or other information about stormwater pollution over the study period (2009: 33%, 2007: 28%, 2005: 30%, 2003: 37%). The number of respondents indicating that they had not been exposed to any such information was slightly less than the last study.

Figure 27: Awareness of News Reports or Advertising on Stormwater Issues



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Yes

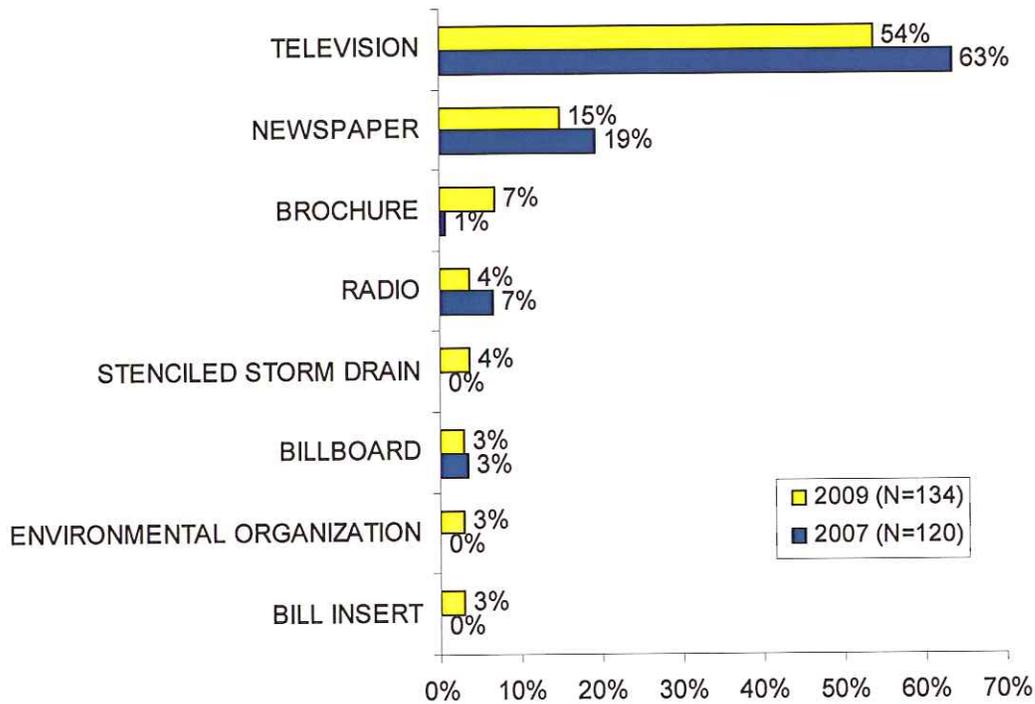
- ◆ ZIP codes 95207/19, 95209/10/12

No

- ◆ Latinos
- ◆ Annual incomes less than \$35K
- ◆ ZIP codes 95204, 95205/15

Those respondents who reported having heard or seen stormwater pollution information were then asked to report where they had been exposed to the information. The number of respondents reporting having seen the information on television decreased (2009: 54%, 2007: 69%; 2005: 56%, 2003: 67%). Newspaper also decreased (2009: 15%, 2007: 19%, 2005: 16%, 2003: 15%) as did radio (2009: 4%, 2007: 7%, 2005: 10%, 2003: 2%).

Figure 28: Source of Stormwater Information



Cross-tabulation analysis revealed the following demographic trends in the 2009 data:

Television

- ◆ Ages 55+

All of the respondents were asked to provide their individual interpretation of the slogan "Only rain down the drain." Their top-of-mind comments were subsequently sorted into 10 categories. The frequencies and percentages of comments are summarized by category in Figure 28. A complete presentation of the verbatim responses can be found in Appendix C.

Figure 29: Top-of-Mind Perceptions of “Only rain down the drain”

Comment Categories	2007		2009	
	Number	Percent	Number	Percent
☐ Avoid polluting storm drains because they directly affect the environment.	0	0%	3	1%
☐ Rain water brings everything down the drain.	0	0%	3	1%
☐ Don't put waste down the drain (oil, trash, pesticides, pet/human/yard waste).	57	15%	160	43%
☐ Only clean water/rain should go down the drain.	156	40%	107	29%
☐ Only water goes down the drain (they are there for the rain).	70	18%	28	7%
☐ Keep the drains clean.	4	1%	4	1%
☐ Don't pollute our water.	57	15%	19	5%
☐ Don't waste water, use it responsibly.	0	0%	0	0%
☐ Don't know, confused	23	6%	12	3%
☐ Refused	0	0%	14	4%
☐ Miscellaneous	26	7%	24	6%
Total	393	100%	374	100%

APPENDIX A: DEMOGRAPHIC SUMMARY

Table 1. Race/Ethnicity

Caucasian	257	63.9%
Latino	54	13.4%
African American	22	5.5%
Asian	12	3%
Native American	6	1.5%
Mixed Race	16	4%
Other Miscellaneous	17	4.2%
Refused	18	4.5%

Table 2. Language of Interview

English	402	100%
Spanish	0	0%

Table 3. Gender

Male	160	39.8%
Female	242	60.2%

Table 4. Age

18 to 24 years	9	2.2%
25 to 34 years	23	5.7%
35 to 49 years	81	20.1%
50 to 54 years	51	12.7%
55 and over	224	55.7%
Refused	14	3.5%

Table 5. Home Ownership

Own	343	85.3%
Rent/Lease	51	12.7%
Other	3	0.7%
Refused	5	1.2%

Table 6. Household Income

Less than \$25,000	45	11.2%
Between \$20,000 and \$34,999	34	8.5%
Between \$35,000 and \$49,999	43	10.7%
Between \$50,000 and \$74,999	62	15.4%
Between \$75,000 and over	134	33.3%
Refused	84	20.9%

Table 7. Level of Education Completed

Some High School or Less (Up to 11 th Grade)	22	5.5%
Completed High School (Grade 12)	75	18.7%
Some College	115	28.6%
College Graduate	109	27.1%
Some Graduate School	10	2.5%
Graduate Degree	62	15.4%
Refused	9	2.2%

Table 8. Zip Code Area of Residence

95202	7	1.7%
95203	28	7%
95204	45	11.2%
95205	25	6.2%
95206	38	9.5%
95207	49	12.2%
95209	70	17.4%
95210	34	8.5%
95212	27	6.7%
95215	28	7%
95219	51	12.7%

APPENDIX B: QUESTIONNAIRE & FREQUENCIES

Introduction:

Hello, I'm calling from AIS MARKET RESEARCH a California-based Market Research Company. We are not a telemarketer and are not trying to sell you anything. We're talking with adults over the age of 18 today concerning some important environmental issues our area will be facing in the future, and we'd like to include your opinions. It will only take a few minutes.

S1. Are you over the age of 18?

(If yes, continue.) If no, ask to speak to any other adult at home. Check quotas and continue.
Terminate and tally if no adult.

S2. And, are you the (male/female) head of your household?

(If yes, continue.) If no, ask to speak to any head of household at home now. Terminate and tally if no h/h.

Yes

402 respondents

S3. Approximately how long have you lived in the Stockton Urbanized Area?

Less than 6 months	1 (terminate)	0	0%
6 to 12 months	2 (continue)	4	1%
1 or more years	3 (continue)	398	99%

S4. What is your ZIP code?

95202		7	1.7%
95203		28	7%
95204		45	11.2%
95205		25	6.2%
95206		38	9.5%
95207		49	12.2%
95209		70	17.4%
95210		34	8.5%
95212		27	6.7%
95215		28	7%
95219		51	12.7%
Other	Terminate	0	0%

Questionnaire:

1. I'm going to read you a short list of environmental issues. After I have read all six, please tell me which one you think is the most serious. **(read each)**

Water pollution	117	29.1%
Air pollution	87	21.6%
Loss of wildlife habitat	26	6.5%
Urban Growth	85	21.1%
Transportation	39	9.7%
Solid waste & recycling	32	8%
Unsure	15	3.7%
Refused	<u>1</u>	<u>0.2%</u>
	402	

2. Are there any bodies of water near your home such as a lake, river, reservoir, or creek?

Yes	1 (continue)	314	78.1%
No	2 (skip to Q4)	85	21.1%
Don't know	3 (skip to Q4)	<u>3</u>	<u>0.7%</u>
		402	

3. Would you say that this body of water is: **(read each)**

Very clean	10	3.2%
Somewhat clean	65	20.7%
Somewhat dirty	111	35.4%
Very dirty	110	35%
Unsure/ Refused	18	5.7%
	<u>314</u>	

4. In your opinion, what causes water pollution? **(open ended - do not read - record first response and total responses)**

	<u>First Response</u>		<u>Total Response</u>	
Industrial and manufacturing plants	27	6.7%	58	9.9%
Sewer/wastewater treatment plants	25	6.2%	38	6.5%
Retail businesses and stores	4	1.0%	9	1.5%
Agricultural chemicals and activities	45	11.2%	72	12.3%
People/everyone/residents	165	40.1%	189	32.3%
Improper disposal of trash in city streets	30	7.5%	56	9.6%
Improper disposal of used automotive fluids like oil and antifreeze	11	2.7%	26	4.4%
Use/improper disposal lawn garden chemicals like pesticides/fertilizers	9	2.2%	21	3.6%
Yard waste	0	0.0%	10	1.7%

Household cleaners used indoor	5	1.2%	6	1%
The operation of cars and trucks	6	1.5%	8	1.4%
Pet waste	2	0.5%	2	0.3%
Stormwater runoff from homes and businesses	27	6.7%	45	7.7%
Other Specify	11	2.7%	11	1.9%
Refused/ unable to answer	19	4.7%	19	3.2%
The water is stagnant/ Not moving	7	1.7%	7	1.2%
Boats pollute/ Waste	2	0.5%	2	0.3%
Lack of care/ Not cleaning	7	1.7%	7	1.2%
	402		586	

5. In your opinion, what do you feel have been the main impacts of water pollution? (open ended - do not read - record first response and total responses)

	<u>First Response</u>		<u>Total Response</u>	
<u>Natural environment is affected</u> – causes harm to nature, the environment, ecology, wildlife, animals and marine life, etc.	129	32.1%	149	28.3%
<u>Human health problems</u> – causes health problems including sickness, cancer, poisoning, toxicity, affects the growth/health/future wellness of children.	90	22.4%	119	22.6%
<u>Agriculture</u> – impacts the production/growing of foods, crops, etc.	26	6.5%	44	8.4%
<u>Water supply</u> – reduces the water supply available for us to use	36	9%	55	10.5%
<u>Water quality</u> – affects the quality of our drinking water, water used for domestic purposes, makes our water unsafe	60	14.9%	88	16.7%
<u>Financial</u> – costs us more to treat the water for drinking or discharging (releasing, disposing) of it, causes increases in water rates, or affects the costs/success of doing business	6	1.5%	13	2.5%
Other (specify)	12	3%	12	2.3%
Refused/unable to answer	43	10.7%	46	8.7%
	402		526	

6. Who do you think is responsible for solving our water pollution problems? (open ended - do not read - record first response and total responses)

	<u>First Response</u>		<u>Total Response</u>	
Industrial and manufacturing plants	7	1.7%	11	2.1%
Sewer/wastewater treatment plants	5	1.2%	7	1.4%
Retail businesses and stores	3	0.7%	3	0.6%
Agriculture	3	0.7%	4	0.8%
Residents	40	10%	50	9.7%
City governments	59	14.7%	73	14.1%
County governments	14	3.5%	43	8.3%
State governments	56	13.9%	92	17.8%
Federal governments /EPA	24	6%	39	7.6%
Everyone	158	39.3%	161	31.2%
Other Specify	4	1%	4	0.8%
Refused/ unable to answer	29	7.2%	29	5.6%
	402		516	

7. Now I'm going to read you a list of things that may be involved in water pollution in our area and ask you to rate how much you think they contribute to water pollution: (read each)

[INSERT CONTRIBUTOR] Would you say it contributes to water pollution a lot, some, a little, or not at all? (FOR NO OPINION, MARK AS SUCH)

	<u>A Lot</u>		<u>Some</u>		<u>A Little</u>		<u>Not At All</u>	
A. Agriculture	143	35.6%	148	36.8%	77	19.2%	29	7.2%
B. Industry	229	57%	104	25.9%	53	13.2%	7	1.7%
C. Business	82	20.4%	179	44.5%	107	26.6%	20	5%
D. Transportation	109	27.1%	137	34.1%	106	26.4%	41	10.2%
E. Residents	118	29.4%	152	37.8%	110	27.4%	18	4.5%

8. In the past year or so, have you or someone in your household used pesticides or weed killers outside?

Yes	1 (continue)	189	47%
No	2 (skip to Q10)	213	53%
		<u>402</u>	

9. (If yes) How do you normally get rid of, or dispose of, leftover pesticides or weed killers? (open ended - do not read)

Use it all up, nothing left	63	33.3%
Bury it in the ground	1	0.5%
Put it in the trash / landfill	12	6.3%
Pour it in the gutter / street (storm) drain	0	0%
Pour it down a sewer/household drain	4	2.1%
Pour it on the dirt / ground	4	2.1%
Store it for future use	13	6.9%
Take it to a household hazardous waste collection event / center	80	42.3%
Other	5	2.6%
Refused / Unable to answer	<u>7</u>	<u>3.7%</u>
	<u>189</u>	

10. Thinking of all OUTDOOR pest control products you use, what is the total number of times you apply them per year? (Open ended - do not read)

Less than 1 time per year	18	9.5%
1 to 3 times per year	101	53.4%
4 to 6 times per year	36	19%
7 to 12 times per year	6	3.2%
More than 12 times per year	11	5.8%
Don't know	16	8.5%
Refused	<u>1</u>	<u>0.5%</u>
	<u>189</u>	

11. When applying pest control products, how do you decide how much of the products to use?
Do you.... (READ LIST AND RECORD ANSWER)

Read and follow all directions on the container	131	69.3%
Read directions on container and use them as guidelines	14	7.4%
Don't read directions, use experience or best estimate	22	11.6%
Other (Specify)	2	1.1%
Don't Know- DO NOT READ	10	5.3%
Refused-DO NOT READ	2	1.1%
Service/ Gardner/ Pest control company does it	<u>8</u>	<u>4.2%</u>
	189	

12. About how many different pest control products are stored in your home? (Open-ended - do not read)

None	35	18.5%
1 to 5	139	73.5%
6 to 10	3	1.6%
More than 10	3	1.6%
Don't know	8	4.2%
Refused	<u>1</u>	<u>0.5%</u>
	189	

13. About how old is the oldest pest control product you have? (Open-ended - do not read)

Older than 1 year	85	45%
Older than 3 years	13	6.9%
Older than 5 years	15	7.9%
Don't know	65	34.4%
Refused	<u>11</u>	<u>5.8%</u>
	189	

14. Where do you or someone in your household purchase your pest control products? (Open-ended - do not read) ACCEPT MULTIPLY ANSWERS

Home Depot	86	45.5%
Home Base	1	0.5%
Ace Hardware	8	4.2%
Orchard Hardware	28	14.8%
Target	1	0.5%
Wal-Mart	10	5.3%
Costco	0	0%
Grocery Store	20	10.6%
Other	22	11.6%
Don't know	5	2.6%
Refused	1	0.5%
Lowes	<u>7</u>	<u>3.7%</u>

15. Do have a pet at home that you or someone in your household likes to take for walks?

Yes	1 (continue)	172	42.8%
No	2 (skip to Q17)	<u>230</u>	<u>57.2%</u>
		402	

16. (If yes) How do you normally get rid of, or dispose of, pet waste while on a walk? (Open-ended - do not read)

Leave it there	6	3.5%
Bag it and put it in the trash	135	78.5%
Bury it in the ground	2	1.2%
Other	2	1.2%
Refused/Unable to answer	3	1.7%
Pet goes at home not on walk	<u>24</u>	<u>14%</u>
	172	

17. Do you take care of your own yard?

Yes	1 (skip to Q17)	305	75.9%
No	2 (continue)	<u>97</u>	<u>24.1%</u>
		402	

18. (If no) Do you use a yard care service?

Yes	1 (SKIP TO 19)	70	72.2%
No	2 (continue)	<u>27</u>	<u>27.8%</u>
		97	

19. How do you dispose of your yard waste, such as leaves and grass clippings? (Open-ended - do not read)

Hose to the street or gutter	0	0%
Place in the trash	12	3.2%
Take it to the dump/landfill	21	5.6%
Bag it and put it on the street near the curb	5	1.3%
Put it in piles on the street near the curb	0	0%
Put in a compost pile	38	10.1%
Put it in a green waste bin	284	75.7%
Other	5	1.3%
Refused/Unable to answer	4	1.1%
Use as a mulch	<u>6</u>	<u>1.6%</u>
	375	

20. Have you or anyone in your household changed the oil in your car, or anyone else's car, while at home in the last year?

Yes	1 (continue)	67	16.7%
No	2 (skip to Q 22)	<u>335</u>	<u>83.3%</u>
		402	

21. How do you normally get rid of, or dispose of, leftover oil? (Open ended - do not read)

Put it in the trash or landfill	1	1.5%
Pour it in the gutter/street (storm) drain	0	0%
Pour it down a sewer/household drain	0	0%
Pour it on the dirt/ground	0	0%
Bury it in the ground	0	0%
Take it to a household hazardous waste collection event/center	61	91%
Curbside collection	4	6%
Other	1	1.5%
Refused/Unable to answer	<u>0</u>	<u>0%</u>
	67	

22. Do you have storm drains in your neighborhood?

Yes	1	342	85.1%
No	2	45	11.2%
Don't know	3	<u>15</u>	<u>3.7%</u>
		402	

23. How familiar are you with the storm drain system in your area? Would you say you are: (read each)

Very familiar	113	28.1%
Somewhat familiar	145	36.1%
Not very familiar	85	21.1%
Not at all familiar	<u>59</u>	<u>14.7%</u>
	402	

24. During the rainy season, how well would you say the storm drain system in our community works? Would you say it: (read each)

Works very well	172	42.8%
Works somewhat well	148	36.8%
Doesn't work well but is being improved	24	6%
Doesn't work well at all	34	8.5%
Refused/Unable to answer	<u>24</u>	<u>6%</u>
	402	

25. As you may know, rainwater flows through streets, along gutters and into underground storm drain pipelines. As far as you know, where does the water go that flows into the storm drain? (Open ended - do not read)

To the Delta	158	39.3%
To a river	99	24.6%
To a creek	10	2.5%
To a canal	15	3.7%
To detention / retention basins	10	2.5%

To groundwater	8	2%
To a sewage plant, wastewater treatment plant	42	10.4%
To some sort of place where it is stored	2	0.5%
Other	5	1.2%
Refused/Unable to answer	49	12.2%
Ocean	<u>4</u>	<u>1%</u>
	402	

26. Now I am going to read to you two statements and ask you to tell me if you agree or disagree with each. Here's the first statement:

A. ***Our community's storm drain and sewer systems share the same underground pipe system.***

Would you say you agree or disagree with that statement?

Agree	111	21.6%
Disagree	204	50.7%
Don't know	87	21.6%

B. Here's the next statement: ***Water and other substances that flow through the storm drains go to a treatment plant to be processed and filtered to remove pollutants.*** Would you say you agree or disagree with that statement?

Agree	162	40.3%
Disagree	181	45%
Don't know	59	14.7%

27. How would you say that the water that flows into storm drains generally gets polluted? (Open ended - do not read - record first response and total responses)

	<u>First Response</u>		<u>Total Response</u>	
Illegal dumping by individuals	96	23.9%	134	19.1%
Illegal dumping by business, industry or shipping	12	3%	30	4.3%
Agriculture chemicals and activity	16	4%	34	4.9%
Litter / trash in the streets	92	22.9%	156	22.3%
Home garden care products / pesticides / fertilizers	46	11.4%	81	11.6%
Yard waste	18	4.5%	44	6.3%
Pet waste	1	0.2%	10	1.4%
Vehicle exhaust	20	5%	54	7.7%
Air pollution / Acid rain	0	0%	18	2.6%
Leaking vehicles	64	15.9%	102	14.6%
Other	13	3.2%	13	1.9%
Refused/Unable to answer	<u>24</u>	<u>6%</u>	<u>24</u>	<u>3.4%</u>
	402		700	

28. I am going to read a list of some possible ways to reduce storm water pollution. Please tell me how willing you would be to do the following. (Read each)

[INSERT BEHAVIOR] Would you be very willing, somewhat willing, not very willing, or not at all willing? (FOR NO OPINION, MARK AS SUCH)

	<u>VW</u>	<u>SMW</u>	<u>NVW</u>	<u>NTAL</u>
A. Avoid dumping pollutants in a storm drain	95.8%	2.5%	0.2%	1.5%
B. Report any illegal dumping you witness	78.9%	15.7%	3.7%	1.7%
C. Keep your vehicle tuned and leak free	95.8%	4%	0.2%	0%
D. Take your household hazardous waste to a disposal center	90.5%	7.2%	1%	1.2%
E. Use less-toxic methods to control pests and weeds	78.6%	16.9%	2.5%	2%
F. Recycle glass, plastic, metal and newspaper	96%	2.2%	1.2%	0.5%
G. Properly dispose of litter	97.5%	2%	0.5%	0%
H. Properly dispose of pet waste	93.8%	3.5%	1%	1.7%

29. As far as you know, which agency is responsible for the operations and management of our storm drain system? (Open ended - do not read)

City of Stockton	207	51.5%
San Joaquin County	36	9%
Other	13	3.2%
Refused / Unable to answer	6	1.5%
Water company	60	14.9%
Not sure Don't know	71	17.7%
Water District	<u>9</u>	<u>2.2%</u>
	402	

30. As you may know, the average household in Stockton pays about \$25 per year in taxes for the operation of the storm drain system and programs to prevent storm water pollution. Would you be willing to pay an additional [INSERT AMOUNT]? (Read each)

	<u>YES</u>		<u>NO</u>		<u>DON'T KNOW</u>	
A. \$5.00 ANNUALLY	240	59.7%	137	34.1%	25	6.2%
B. \$10.00 ANNUALLY	149	37.1%	222	55.2%	31	7.7%
C. \$15.00 ANNUALLY	92	22.9%	279	69.4%	31	7.7%
D. \$20.00 ANNUALLY	86	21.4%	285	70.9%	31	7.7%

31. In the past year, have you heard or seen any reports, television or radio spots, advertising or other information about storm water pollution and what's being done to protect the region's water bodies?

Yes	1 (continue)	134	33.3%
No	2 (skip to Q33)	250	62.2%

Don't know 3 (skip to Q33) 18 4.5%

32. Where did you hear or see this information? (Open ended - do not read)

Television	72	53.7%
Radio	5	3.7%
Newspaper	20	14.9%
Magazines	2	1.5%
Billboards	4	3%
Brochure	9	6.7%
Newsletter	2	1.5%
Internet	0	0%
Stenciled storm drains	5	3.7%
Environmental organizations	4	3%
Friends/relatives/neighbors	0	0%
Children	0	0%
Community event	1	0.7%
Movie theater	0	0%
Other	4	3%
Refused	2	1.5%
Insert Bill/ Flyer	<u>4</u>	<u>3%</u>
	134	

33. What do you think the following slogan means: "Only rain down the drain." (Probe for complete response and record verbatim.)

Demographics:

In order to classify your responses, I need to ask a few questions about you. These are the last few questions I have.

D1. Do you own or rent your current home?

Own	344	85.6%
Rent/lease	52	12.9%
Other (specify)	1	0.2 %
Refused	<u>5</u>	<u>1.2 %</u>
	402	

D2. What is your current age? (Do not read)

18-24	9	2.2%
25-34	23	5.7%
35-49	81	20.1%
50-54	51	12.7%
55+	224	55.7%
Refused	<u>14</u>	<u>3.5%</u>

402

D3. What is the last grade in school you completed? **(Do not read)**

Some high school (up to grade 11)	22	5.5%
Completed high school (grade 12)	75	18.7%
Some college	115	28.6%
College graduate	109	27.1%
Some graduate school	10	2.5%
Graduate degree	62	15.4%
Refused	<u>9</u>	<u>2.2%</u>
	402	

D4. What is your ethnic background? **(Do not read)**

Caucasian/White	264	65.7%
Latino/Hispanic	56	13.9%
African American/Black	22	5.5%
Asian	16	4%
Native American/American Indian	6	1.5%
Mixed Race	17	4.2%
Other	3	0.7%
Refused	<u>18</u>	<u>4.5%</u>
	402	

D5. And finally, which of the following categories best describes your total household income last year, before taxes. Please stop me when I come to your category. **(Read each)**

Less than \$25,000	45	11.2%
\$25,000 - \$34,999	34	8.5%
\$35,000 - \$49,999	43	10.7%
\$50,000 - \$74,999	62	15.4%
\$75,000 and over	134	33.3%
Refused	<u>84</u>	<u>20.9%</u>
	402	

That's all the questions I have. On behalf of AIS Market Research, I'd like to thank you for your participation. Your opinions do have an impact on local issues and participating in market research is an important way for you to contribute.

Record gender: Male	Female
160 39.8%	242 60.2%

Language the interview was conducted in:	
English	Spanish
402 100%	0 0%