Findings from Opinion Research

2013 SAN DIEGO CITY STORM WATER SURVEY

Conducted for Think Blue San Diego

Goodwin Simon Strategic Research

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METHODOLOGY

Think Blue San Diego, a program of the San Diego Storm Water Pollution Prevention Division, asked Goodwin Simon Strategic Research (GSSR) to conduct a telephone survey of adult residents living in San Diego. This is the seventh survey that GSSR has conducted for Think Blue San Diego since 2007.

As in past years, the survey had the following objectives:

- To assess awareness of the Think Blue program and its outreach activities, including its website, hotline, and social media efforts.
- To assess the impact of Think Blue outreach efforts on interest in, and attitudes about, pollution of water in storm drains.
- To assess the impact of Think Blue outreach efforts on awareness of the causes of storm water pollution and knowledge that the storm drain and sewage systems are separate.
- To assess the impact of Think Blue outreach efforts on reducing potential pollution-causing behaviors.
- To assess awareness of pollutants where residents live.
- To assess the impact of various potential motivations for behavioral change.

Additionally, this year the survey asked some new questions about:

- How concerned residents are about pollution of the city's waterways and beaches.
- Whether the City should be doing more to address this pollution.
- Whether residents believe various steps the City might take to reduce pollution would be effective.

The average questionnaire length was 22 minutes.

Population and Sample Frame

The population surveyed was adults living in residential non-group housing in the city of San Diego. The sampling frame consisted of households that had either landline telephone service, or cellular telephone service, or both.

The sample, supplied by Scientific Telephone Samples, consisted of two separate random selections of landline and wireless telephone numbers, created in representative replicates.

- The landline sample was selected from among working banks of 100 contiguous numbers in exclusively landline exchanges that contained three or more residential listings in the city of San Diego. The sample was pre-screened to eliminate disconnects, businesses, and ported cell phone numbers.
- The wireless sample was selected randomly from among all wireless customers with billing zip codes within the city San Diego.

Sampling

Eight hundred and two adult residents of San Diego were interviewed by telephone between February 10 and February 16, 2013. Eligibility for participation was determined through the use of screening questions:

- Landline interviews were randomized among household adults through the use of the "last birthday" method.
- Wireless numbers were hand-dialed and participants were screened for safety.
- All participants were screened for adult status, city of residence, and nonbusiness use of the phone number.

Both samples were released in representative replicates to ensure an appropriate regional distribution and multiple attempts were made to contact each number. Refusal conversions were attempted. Data collection was carried out by McGuire Research. The questionnaire was translated and interviews were conducted, upon participant request, in either English (n=786) or Spanish (n=19). The full questionnaire and marginal results are included as an appendix to this report.

Landline and Wireless Phone Service

Three hundred and ninety-eight interviews were conducted on a wireless phone, and 404 on a landline phone, roughly 50% each. These figures were later weighted to 48% wireless and 52% landline. Among landline participants, 80% could also have been reached on a cell phone, while 20% have only a landline number or refused to share that information.

As no precise figures are available at this time for how many households in the City of San Diego have only a landline phone, only a cell phone, or both, the samples were combined by using the best available estimate for San Diego County of landline and cell phone households (from the National Health Statistics Report, issued in October 2012 and derived from data collected in 2010 and 2011). This data shows the following distribution of landline/wireless status:

Table 1:
Landline and Wireless Telephone Status Estimates for San Diego County

Wireless	Wireless	Dual	Landline	Landline	No
only	Mostly	Use	Mostly	Only	phone
23%	23%	33%	11%	9%	1%

Results were weighted to these proportions (excluding no-phones). Once combined, the sample was adjusted to match the latest American Community Survey census estimates for race and ethnicity, age, and educational attainment.

Survey Error and Response Rates

The best estimate of sampling error for citywide results for the combined sample of 802 is plus or minus 3.4% at a 95% confidence level. No precise estimate is available of the contribution to sampling error which may arise from combining landline and wireless samples. The margin of sampling error (MOSE) for some analyzed subgroups will be higher.

While every precaution was taken to avoid error and increase accuracy, surveys such as this one may be subject to errors other than those attributable to sampling techniques, for which precise estimates cannot be calculated. These could include undetected differences between those who agreed to participate and those who did not, bias resulting from the wording or order of the questions, or influence from outside events that take place during the study period. Such errors are the result of the various practical difficulties associated with taking any survey of public opinion.

Analysis and Comparisons with Previous Research

This is the seventh year that Goodwin Simon Strategic Research has conducted an annual survey of San Diego residents for Think Blue San Diego. It is important to note that since 2009, the sampling frame has included both landline and wireless telephone samples. In previous years, sampling was of landline exchanges only. Note also that this 2013 survey asks residents to report actions they took in 2012. Thus the 2013 survey generally refers to 2012 actions, while the 2012 survey refers to 2011 actions, and so forth.

This report presents results broken out by subgroups of adult residents (e.g., by men versus women) only if the differences are both statistically significant using standard significance testing and are relevant.

EXECUTIVE SUMMARY

Think Blue San Diego, a program of the San Diego Storm Water Pollution Prevention Division, asked Goodwin Simon Strategic Research (GSSR) to conduct a telephone survey of adult residents living in the city of San Diego. This is the seventh survey that GSSR has conducted for Think Blue San Diego since 2007.

This study was conducted between February 10 and February 16, 2013. Eight hundred and two telephone interviews were conducted with adult residents randomly identified from across the city of San Diego using a random-digit-dial methodology, in which random lists of landline and cell phone telephone numbers served as the sample. Results were weighted to avoid double counting those who could have been reached on both a cell and a landline and to match the latest American Community Survey census estimates for race and ethnicity, age, and educational attainment.

The margin of error for citywide results is plus or minus 3.4% at a 95% confidence level. That is, if this survey were to be repeated exactly as it was originally conducted, then 95 out of 100 times the responses from the sample (expressed as proportions) would be within 3.4 percentage points of the actual population proportions.

Key Findings

Despite cutbacks in funding for Think Blue San Diego, as well as other City services in recent years, awareness of the Think Blue slogan remains at the highest level we have recorded since we began this survey in 2007 and awareness of Think Blue communications vehicles such as TV commercials, radio commercials, brochures, stencils, and its website remain at levels that are similar to, or in some cases higher, (for seeing a Think Blue sign or booth) than in the past.

We also find a steady level of awareness of its Hotline (and a tripling from 2% to 6% of those who say they actually called it, a significant difference) and awareness about communication from Think Blue on pollution caused by litter and oil leaking from cars, a slight increase in awareness of information from Think Blue on pollution caused by dog waste, and no change in awareness of information from Think Blue on how to prepare for and prevent flooding from rainstorms.

However, we see a continuation of a trend first noted in the 2012 survey: that after a steady rise from 2008 to 2011 of awareness that storm water in San Diego is untreated, we now see for two years in a row a sizable decline in awareness and a boost in the proportion who are not sure.

However, we continue to see correlation between awareness of the Think Blue slogan and communication activities, and higher reported levels of pollutionfighting behavior and awareness that storm water is not treated. So exposure to Think Blue continues to facilitate behavioral change and desired knowledge.

As seen in past years, awareness of the Think Blue San Diego slogan is lower among Black and Asian residents and newcomers to the city (five years or less). In addition, comparing the 2012 and 2013 survey results for awareness that storm water is not treated, we find a sizable drop among men compared to women, those under age 50, and non-Hispanic whites. We will want to monitor these groups closely in future years to see if awareness continues to fall among them.

Key survey findings include the following:

Awareness of the Think Blue San Diego Program and its Communications

- Just over half (53%) of respondents have seen or heard the Think Blue San Diego slogan. This is up slightly from 51% in 2012 and equals the highest level we have previously recorded, in 2011.
- Awareness of the slogan has climbed steadily since 2007 among all age groups, but awareness among seniors remains lower than for younger residents (although it has climbed steadily with this group for the past two years). As we have seen in the past, awareness is higher overall among those ages 35 to 64.
- Awareness of Think Blue continues to be lower among Black and Asian residents compared to non-Hispanic whites, with Latinos having achieved parity with non-Hispanic whites in recent years. We found no difference in awareness this year by college degree/no college degree, although this has varied from year to year.
- Length of residency continues to be a strong factor in awareness of the slogan, with those living in the city for five years or less being much less aware of it. Newcomers tend to be more educated than those who have lived in the city longer, much younger than those who have lived in the city 20 or more years, more likely to live in an apartment building or other multi-family housing unit, and are less likely to be Latino than longer-term residents.

- Very high proportions of those who report having seen a Think Blue radio or television ad, the website, a brochure, a booth or sign at an event, or a stencil on a sidewalk recall the slogan. This shows that the slogan is memorable to those who had exposure to program communications.
- Television continues to be the most effective way of reaching residents. The highest proportion of those familiar with the slogan volunteered that they heard or saw it on television whether on the news, an advertisement, or some other television source. Nine percent of those who had heard or seen the Think Blue San Diego slogan said they had heard or seen it on television news or some other television coverage and 46% said they heard or saw it on a television ad. The proportion volunteering a television ad is down from the 2011 study when 58% gave this response, but up from the 18% who mentioned TV ads in last year's survey.
- The proportion who had seen the slogan on the bus, at a bus stop, or on a bus-stop bench rose from 4% in the 2011 survey to 11% last year but is now at just 6%. Other sources for seeing or hearing the slogan varied little from previous years, including radio ads (13%), billboards (13%), storm drain stencils (3%), newspapers (5%), or posters (1%).
- All respondents were asked directly if they had encountered a number of Think Blue communication channels – regardless of whether they recalled the slogan. Television remains the most-recalled source of information about the Think Blue program among all respondents, with 50% reporting they had seen a television commercial in the past year – including 22% who had not initially recalled the slogan.
- Forty-six percent had seen a stencil painted on sidewalks in front of storm drain openings – a proportion (like in the 2012 survey) near equal to the number who had seen a television ad. In fact, 30% of those who had not initially recalled the slogan remembered seeing a stencil when asked about it.
- Compared to TV ads and stencils, there is less awareness overall of radio commercials (29%, down from 35% in 2011, but similar to the 2012 survey results), brochures (20%, up from 15% in 2012), booths or signs at events (23%, up substantially from 14% in the 2012 survey), the website (7%, about the same as the 5% in 2012), or Think Blue emails (5%, up from 2% last year).
- There is limited, but perhaps growing, awareness of the Think Blue San Diego Hotline where, respondents are told, you can call to report people or businesses that are causing pollution in storm drains, with 27% having heard about it, up

from 23% in the 2012 survey. In the current study, 6% said they had called the Hotline – up from 2% in the 2012 survey, but similar to the 4% recorded in the 2011 survey.

- Of those with a Facebook page they look at regularly, 10% say they have seen information about Think Blue on Facebook. Of these, 44% say they actually visited the Think Blue Facebook page (this is just 2% of all respondents). The question was asked differently in the 2012 survey, but the results seem consistent with what we found last year. There is the strongest interest in using a Think Blue Facebook page to learn ways to prevent pollution, to report pollution, and to get information about what the City is doing to reduce pollution.
- After hearing that it provides information about cleanup and volunteer opportunities, pollution prevention, and upcoming community events, 34% (of all respondents, including those who do not have a Facebook page) said they would be very or somewhat likely to join or like the Think Blue Facebook page in 2013 to see this information. This includes 58% of those who actually have Facebook accounts and 14% of those who do not.
- While 53% remember the Think Blue San Diego slogan and half (50%) remember seeing a TV ad from Think Blue, we also find that nearly half (49%) recall seeing something about pollution caused by vehicles leaking oil and the same proportion (49%) that recall seeing something from Think Blue on pollution caused by litter. Nearly as many, 41%, recall something from Think Blue on pollution from dog waste, with lower proportions recalling a Think Blue message about preparing for flooding (34%). Recollection of the dog waste and oil messages are very similar to what we found in the 2012 survey and in both cases remain down substantially (14 points and 8 points respectively) from the levels seen in 2011. Recollection of the litter and flooding messages were first asked in 2012, and the results this year are nearly identical to what we found last year.

Behavioral Changes

Very high proportions of residents say they have made behavioral changes as a direct result of seeing any information about how polluted water in storm drains affects local creeks, the beaches, and the ocean. While it is possible that many of these people were not motivated entirely, or perhaps at all, to take action specifically to reduce storm drain pollution, the key thing is that many San Diegans are already engaging in the pollution-reducing behaviors that Think Blue is encouraging. By helping them make a link between what they are already doing and how it helps reduce pollution, Think Blue can cement its relationship with residents and help them understand how their behavior can really make a difference.

- We found that 72% said they took their car to a car wash to keep runoff water out of the gutter, 69% said they picked up litter to keep it out of storm drains, and 67% of single-family home dwellers said they swept their driveways or sidewalks, rather than using a hose, to keep dirt from the storm drains.
- At slightly lower levels, we found that 53% of single-family home dwellers removed leaves and grass from the gutter to keep them out of storm drains and 51% of them reduced the use of garden chemicals to keep them out of the storm drains.
- Finally, 44% said they picked up dog waste to keep it out of the storm drains.
- There is a strong correlation between having seen Think Blue information and taking appropriate action. For example:
 - Those who say they saw information from Think Blue on dog waste are 18 points more likely than average (62% compared to 44%) to say they picked up dog waste.
 - Those who say they saw Think Blue information on how to prevent flooding during rainstorms are 19 points more likely than average to say they remove leaves and grass from the gutter (72% compared to 53%).
 - Those who say they saw Think Blue information on pollution from litter are 10 points more likely than average (76% compared to 69%) to say they picked up litter.
 - Those who say they saw a TV commercial from Think Blue are 28 points more likely than average to say they pick up dog waste (72% compared to 44% of all). Those who say they visited a Think Blue booth at an event are 10 to nearly 20 points more likely than average to have taken these actions, with the largest gain seen for picking up dog waste (19 points).
- Other indicators of likelihood to engage in these pollution-fighting behaviors include:
 - Newcomers to the city (five years or less) were far less likely than longerterm residents to say they sweep their driveways or remove leaves, and slightly less likely to say they pick up dog waste, use a car wash, and pick up litter – suggesting the impact of cumulative exposure to the Think Blue message.
 - Non-Hispanic white residents were more likely than Latinos to remove leaves from the gutter and sweep the driveway.

- Spanish speakers were far more likely to say they engage in these pollution-fighting behaviors than English-speaking Latinos.
- Single family home dwellers were more likely than those living in multifamily homes to engage in most of these behaviors.
- 50+ residents were more likely than younger ones to pick up litter, sweep the driveway, and remove leaves and gross from the gutter.
- More educated residents were more likely to take most of these actions compared to residents with no college experience.

Awareness of and Concern About Storm Water Pollution

- Forty-six percent of respondents know that water that goes into storm drains is not treated before it is released into creeks or the ocean. We now see two years in a row a decline in the proportion who understand that storm water is not treated, down from a high of 57% in 2011. However, only 17% erroneously believe that it is treated – the decline is largely due to an increase in the proportion who are unsure, reaching 36% this year from 28% in 2011 and 34% in 2012.
- Those familiar with the Think Blue program are far more likely to know that storm water is not treated.
 - Fifty-eight percent of those who had heard the Think Blue San Diego slogan know that storm water is not treated (down significantly .
 - from 65% in the 2012 survey), compared to 33% of those who had not heard the slogan.
 - Those who have seen a television or radio ad, brochure, booth, or stencil from Think Blue are slightly more likely than others to know that storm water is not treated, with between 51% and 57% of those who have seen these communications giving this response.
 - Higher proportions who have received specific communications about the Hotline; pollution caused by litter, dog waste, or leaking oil; and how to prepare for and prevent flooding know that storm water is not treated compared to those who had not received these Think Blue communications (52% to 58%).
 - Newcomers to the city (five years or less), those under age 39, those with lower education levels, and Latinos are all least likely to know that the water is not treated.

- The 2013 survey suggests that concern about sources of storm drain pollution generally seems to be higher than it was a year ago, with the proportion rating each of the items we tested as serious (an 8 to 10 rating on a 1 to 10 scale) rising to as high as 9 points on some items, and rising significantly on several others.
 - There was an increase from 47% to 56% in the proportion who said that dog waste is a serious source of pollution of water in storm drains.
 - There was an increase from 58% to 66% in the proportion who said that cigarette butts are a serious source of pollution.
 - There was an increase from 77% to 82% in the proportion who said that motor oil is a serious source of pollution and this remains the pollutant of most concern to residents.
 - There was an increase in concern from 66% to 71% in the proportion who said that pesticides and weed killers are serious sources of pollution.
 - There were smaller increases in concern about litter (58% to 61%), runoff from cars being washed in the street (36% to 40%), and washing down sidewalks or driveways (31% to 33%).
 - Concern fell slightly for food and drink that gets tossed in the street (from 44% to 43%) and for leaves and grass clippings (from 29% to 26%).

Those who were familiar with Think Blue communications were more likely to consider many, if not all, of these items to be serious sources of pollution of water in storm drains.

In the 2012 and 2013 surveys, respondents were asked to name which of four outcomes concerned them most about pollution of local beaches and the ocean. As was the case in 2012, concern about the health and well-being of people and marine life far outweighs concern about economic impacts. The highest proportion, 31%, named *that it causes harm to marine life in the ocean like seals, dolphins, and whales* as what concerns them most. A close second was *that it can make people sick if they swim at our local beaches,* with 25% giving this response. A far lower 18% named one of two economic reasons: that *cleaning it up costs San Diego taxpayers a lot of money* (9%) and *that when beaches get polluted, that drives away tourists and hurts San Diego's economy* (9%). One in four (25%) consider all four to be equal concerns. These numbers are nearly identical to what we found in the 2012 survey.

Concern About Pollution of Storm Drain Water

We asked residents if they believe that the city's creeks, beaches, and ocean are very polluted, somewhat polluted, not too polluted, or not polluted at all. We found that while 68% say the water is polluted, only 15% say it is very polluted.

Latinos, less educated residents, and those who have been exposed to Think Blue outreach are all more likely to say the water is polluted. Newcomers are less likely than those who have been in San Diego more than five years to say the water is polluted.

While more than two in three (68%) believe local waters to be at least somewhat polluted, only 22% say the problem is getting worse, with about the same proportion (23%) who say it is getting better, and the balance who say it is staying the same or they are not sure. Again, newcomers to the city are less likely to believe the problem is getting worse and more likely to say it is getting better.

City Actions to Reduce Pollution

Forty-three percent say the City does too little to prevent pollution of local waters, with 41% who say it does the right amount, 13% who are not sure, and just 4% who say it does too much. Those familiar with the Think Blue slogan and those who have visited at Think Blue booth at an event are more likely to say the City is doing too little. Newcomers to the city are less likely to say the city is doing too little.

When we asked residents to evaluate six different actions the City could take to stop pollution of storm drains, they said the actions most likely to be effective are pet waste bags in city parks, screens over storm drains, and community cleanup events. Slightly lower proportions felt that more radio and TV ads, more frequent street sweeping, and letting storm water seep into the ground would be effective ways to reduce pollution.

Conclusions

The survey suggests that, despite cuts in funding for outreach, the Think Blue program continues to be effective at increasing awareness of how the storm drain system works, at raising awareness of storm water pollution, and at encouraging residents to take actions to reduce pollution.

The two-year decline in understanding that the water is not treated suggests that there is an effect of the reduced funding for public education. However, there are such high levels of overall concern about storm water pollution that positive behaviors may continue for a while even without full understanding of how the system works. The lower level of participation in pollution-reducing activities among newcomers (five years or less) to the city, plus their lower levels of awareness of and concern about pollution and lower awareness of Think Blue communication activities, does suggest the potential for this momentum to fail as new arrivals who have less exposure to the Think Blue message replace longerterm residents.

There is certainly a strong sense among many residents that storm water pollution is a serious problem, and that the City should be doing more to prevent it. Making the public aware of actions that the City takes already, such as pet waste bags, stenciling, storm drain covers, and community cleanup events may help build public support for additional Think Blue activities.

Messages on storm water pollution should continue to focus on human and marine life, rather than economic issues. We have seen this finding now over many years and across many different types of questions. Residents of San Diego continue to see their beaches as a focus of personal recreation, or perhaps even personal identity, and less as an economic resource.

DETAILED FINDINGS

I. Familiarity With the Think Blue San Diego Slogan

Awareness of the Think Blue San Diego slogan has held fairly steady over the last three years, at 53% in the 2011 survey, 51% in 2012, and 53% in the 2013 survey – differences that are not significant. The finding that awareness remained steady from 2011 is a positive indicator for the program given the smaller media and event budget in recent years, indicating how deeply ingrained Think Blue continues to be in San Diego civic culture.

Figure 1 illustrates the proportion of San Diego city residents who had heard the slogan based on Think Blue surveys going back to 2001. The findings from before 2007 are included for comparison purposes only; the results from earlier surveys should be viewed with some caution due to differences in question wording and survey methodology.





Results by Demographic and Behavioral Groups

• **Age**: Awareness of the slogan is highest among those ages 50 to 64 (at 62%), which is a considerable (10 point) increase in awareness among those in this age group compared to past years. As shown in Figure 2, we also continue to see a boost in awareness of Think Blue among seniors, continuing a trend we saw in the 2012 survey.





• **Race/ethnicity**: As shown in Figure 3, awareness of Think Blue continues to be much lower among African American and Asian Americans compared to non-Hispanic white residents. However, as shown below, awareness of Think Blue among Latinos rebounded to levels similar to non-Hispanic whites, which we have seen in past years. So we now find that 55% of non-Hispanic white respondents had heard the slogan along with 53% of Latinos. Just 39% of Asian Americans and 34% of Black respondents had heard of the Think Blue San Diego slogan.



Figure 3: Change in Awareness of Slogan Over Time by Race/Ethnicity: 2007 to 2013

• **Gender**: As shown in Figure 4, awareness of the slogan by gender changed substantially in the 2013 survey compared to past years, with recognition among men reaching the highest level we have recorded (at 56%), while recognition among women dropped from 53% to 49%, continuing a trend among women we have seen for the last three surveys. The big increase is found among men over age 50, with awareness among them rising from 44% to 56%.



Figure 4: Change in Awareness of Slogan Over Time by Gender: 2007 to 2013

• **Education**: As shown in Figure 5, awareness of the Think Blue slogan does not vary by college degree/no college degree. This returns the results to the pattern we have found most years, although in 2012 the results found higher awareness among college graduates.

Figure 5: Change in Awareness of Slogan by Educational Attainment: 2009 to 2013



22009 **2**010 **2**011 **2**012 **2**013

- Length of residency: As we have consistently seen, newer San Diego residents are less likely to be familiar with the slogan than longer-term residents. While 33% of residents of five years or less are familiar with the Think Blue San Diego slogan, 55% of residents of six to 19 years and 56% of those residing in San Diego 20 years or more are familiar. These figures are nearly unchanged from what we found in 2012.
- **Exposure to Think Blue Outreach**: As seen in past surveys, familiarity with the Think Blue slogan is higher among those with exposure to the City's antipollution efforts and with Think Blue program communications. This suggests that messaging efforts have been effective.
 - Very high proportions of residents who had seen a Think Blue television commercial (80%), heard an ad on the radio (77%), read a brochure (83%), seen or heard about the Think Blue website (83%), or seen a sign or booth at an event (83%) are familiar with the slogan. More than two of three (69%) of those who had seen a stencil painted on sidewalks in front of storm drain openings also gave this response. Among the very few (4%) who report getting an email about Think Blue, 73% were familiar with the slogan. These numbers are all very similar to what we found in the 2012 survey. We also found that 80% of those who say they actually visited the Think Blue website were familiar with the slogan.

- Also more familiar with the program were those who had heard about the Hotline where one can report people or businesses that cause pollution (77% familiar), those who had heard from Think Blue about how to prepare for and prevent flooding during a rainstorm, (70%), or those who had heard from Think Blue about pollution caused by dog waste (75%), litter (75%), or vehicles leaking oil (72%). Again, these numbers are very similar to what we found in 2012.
- As also seen in previous surveys, those aware that water that goes into the storm drains is untreated are far more familiar with the Think Blue San Diego slogan than those who are not aware or unsure suggesting a correlation between receiving Think Blue San Diego communications and awareness of the storm drain system. While 67% of those who said storm water is not treated had heard of the slogan, the 44% of those who erroneously believe it is treated and 39% of those who are unsure were aware of the Think Blue slogan.
- Further, we found much higher awareness of the slogan among those who said they had taken actions after hearing about how polluted water affects local waterways: 59% among those who picked up litter, 62% among those who picked up dog waste, 57% among those who took their car to a car wash, 59% among those who swept their driveway, 62% among those who reduced pesticide use, and 62% among those who removed leaves and grass from the gutter to keep them out of storm drains. In fact, among the 20% of all residents who are homeowners and did all of the above actions (swept rather than washed down driveways, reduced pesticide use, and removed leaves and grass from the gutter), 67% were familiar with Think Blue.

Where Did You See or Hear the Think Blue San Diego Slogan?

Those who had seen or heard the Think Blue San Diego slogan were most likely to have encountered it on television. Of the 53% of respondents who had seen or heard the Think Blue San Diego slogan (n=422), the highest proportion had heard or seen it on a TV ad (35%) and another 7% said they saw it on TV news or other television coverage.

As shown in Table 2 below, the proportion reporting hearing about Think Blue from TV ads versus TV news has varied widely from year to year, which may be due to both changes in the program media budget and response coding decisions.

Other sources for hearing or seeing the slogan were mentioned much less frequently and the proportions varied by only a few points or more from

previous surveys. These volunteered mentions, and their proportions in 2013, were:

- Billboards (13%)
- Radio ads (13%)
- Bus benches (6%)
- Newspapers (5%)
- Streets/sidewalks (5%)

Table 2: Where Heard or Seen Slogan Over Time: 2008 to 2013

(Open-ended question; no response options given; multiple responses allowed)

	2008 (n=415)	2009 (n=315)	2010 (n=378)	2011 (n=427)	2012 (n=413)	2013 (n=422)
TV news/other TV	4%	0%	41% ¹	1%	38%	7%
TV ad	52%	58%	11%	58%	18%	46%
Billboard	7%	13%	10%	10%	10%	13%
Radio	13%	8%	11%	14%	12%	13%
Buses/bus stop/bench		2%	5%	4%	11%	6%
Storm drain stencil	7%2	5% ³	8%4	5%	7%	3%
Newspaper	8%	3%	3%	5%	3%	5%
Poster				1%	3%	1%
Utility bill	2%	0	3%		2%	0%
Internet/website	0	2%	1%	1%	2%	3%
At work		0	1%	05	2%	1%
Poster				1%	3%	1%
Utility bill	2%	0	3%		2%	2%
Internet/website	0	2%	1%	1%	2%	2%

¹4% mentioned TV news and 37% mentioned a non-specific television source.

² Verbatim responses coded as "on the street (sewers/wall/storm drains/curb)."

³ Verbatim responses coded as "on the street/curb."

⁴ Verbatim responses were coded as "storm drains/gutters."

 $^{5^{&}quot;}0$ " indicates less than .5%. " – " indicates no mention.

	2008 (n=415)	2009 (n=315)	2010 (n=378)	2011 (n=427)	2012 (n=413)	2013 (n=422)
At work		0	1%	06	2%	1%
Movie theater				2%	2%	1%
Brochure	1%	0	1%	1%	1%	3%
Event/at a booth	1%	0	1%	1%	1%	2%
Side of a truck	4%	0	0	1%	1%	1%
Friends/family	2%	1%	1%	1%	1%	1%
School		2%	3%	2%	1%	
Everywhere		0	2%	2%	1%	2%
Streets/sidewalks						5%
Bumper sticker						2%
Other	3%	5%	7%	9%	3%	4%
Not sure	9%	12%	9%	7%	9%	7%

Results by Demographic and Behavioral Groups

- Those under 40 years of age were more likely to have heard the slogan on a television ad (53%) than seniors (38%). They were also more likely to have heard about Think Blue on radio ads (17%) compared to seniors (6%) and also more likely to have seen a billboard about it (17% compared to 5% of seniors). Seniors, in contrast, were more likely to say they heard about Think Blue on a TV news show (17%) compared to those under age 35 (6%).
- Latinos were much more likely than others to have seen something about Think Blue in a TV ad (58% compared to 43% for non-Latinos).
- Those with no college degree were more likely to have seen the Think Blue slogan in a TV ad (51%) compared to those with a college degree (40%).

II. Think Blue San Diego Communications

Awareness of Think Blue San Diego Communication Channels

As in previous years, survey respondents were read a list of ways that information about Think Blue San Diego has been communicated and were

^{6 &}quot;0" indicates less than .5%. "-" indicates no mention.

asked if they had heard or seen anything about the program from each of these communication sources.

While 46% of the respondents had previously said that they had not heard of the Think Blue San Diego slogan, all respondents were then told that the Think Blue San Diego is *the City of San Diego's program to reduce pollution of the water in the city's storm drains, creeks, beaches, and the ocean.* While some respondents may not have remembered the slogan specifically, hearing the brief explanation of the program may have jogged their memory of the communications they had indeed received from Think Blue.

- As shown in Figure 6 below, half (50%) of respondents said they had seen a TV commercial from Think Blue the program when asked directly about it. This figure has been relatively consistent since 2010 (the first time the question was asked in the current manner),⁷ moving in a narrow range between 46% and 52% over that time period.
- For the second time this year, respondents were asked if they had seen a stencil painted on sidewalks in front of storm drain openings and a high 46% reported they had second only to television commercials. This was slightly higher than the 42% who reported seeing stencils in the 2012 survey.
- Over one in four respondents (29%) had heard a radio commercial about the program, up slightly from the 2012 numbers, but still down from 35% in the 2011 survey.
- Twenty percent claim to have seen a brochure from Think Blue, up from 15% last year and in previous years.
- Twenty-three percent said they saw a Think Blue booth or a sign at a local event, up substantially from 14% in the 2012 survey and 18% in previous years.
- Seven percent had seen the Think Blue website, a proportion that is statistically unchanged from previous surveys.
- Just five percent had seen an email from Think Blue, up from 2% in the 2012 survey and 3% in the 2011 survey (the item was not asked in 2010).

⁷ We cannot make direct comparisons with studies prior to 2010 due to differences in question wording and in the base of respondents who were asked the question.



Figure 6: Seen or Heard Think Blue Communications Over Time: 2010 to 2013

Results by Demographic and Behavioral Groups

- As we have seen in past years, those 70 years of age or older are less likely than younger residents to have seen or heard most communications, including television commercials, stencils, radio commercials, and brochures.
- As was the case in the 2012 survey, those with a college degree were less likely to have seen a TV commercial from Think Blue (44% compared to 54% of those with no college degree). However, college graduates were more likely to have seen a stencil on the street (51% to 42%).
- There were a number of notable differences by ethnic/racial groups:
 - Latinos were more likely than others to have seen a TV commercial from Think Blue (57% compared to 49% of non-Hispanic whites, 40% of Blacks, and 46% of Asians).
 - Non-Hispanic whites were much more likely (at 50%) than non-whites (39%) to have seen a stencil, including just 24% of Blacks and 29% of

Asians. However, there was little difference between Latinos (at 46%) and whites.

- Residents of more than five years in San Diego are much more likely to recall a television ad than recent arrivals (59% to 24%). They are also more likely to recall hearing a radio commercial (approximately 32%) than newer arrivals (18%) and to have seen a stencil (about 48% to 29%). They are also more likely to have seen a Think Blue brochure (21% to 10%).
- As seen in previous surveys, those residents who have made a behavioral change in response to hearing more about pollution are more likely to have recalled Think Blue TV and radio commercials and to have visited a Think Blue booth or event. Also similar to last year, residents who had heard the slogan, saw a television commercial, heard a radio ad, read a brochure, visited the website, saw a stencil, or saw a booth at an event are significantly more likely to have encountered the other Think Blue communications as well. And those who had heard about the Hotline, or had heard from Think Blue about pollution caused by dog waste, leaking oil, and litter, as well as how to prepare for and prevent flooding, are also more likely to have received Think Blue information through all the communication channels.
- Those who said they did not recall the Think Blue San Diego slogan initially are more likely to recall the stencils on the sidewalk near the storm drains than any other source, with 30% giving this response. Another 22% remembered the television commercial and 14% a radio commercial. Among those able to recall the slogan, the highest proportion recalled a television commercial (75%), followed by the stencil (60%), and the radio commercial (43%).

Awareness of the Think Blue San Diego Facebook Page

For the second time, the survey explored attitudes about the use of Facebook by the Think Blue program.

Profile of Facebook Users

Nearly half (46%) of survey respondents have a Facebook page that they look at regularly, while 54% do not. These figures were identical in 2012 and 2013. Younger, more educated respondents are more likely to be active Facebook users:

- Six in ten (60%) of those under the age of 40 have a Facebook page they look at regularly, compared to 39% of those 40 to 64 years of age, and just 19% of seniors.
- Just 36% of those with a high school education or less have a Facebook page they look at regularly, compared to 50% of those with some college or with a college degree.
- Among non-Hispanic whites, 48% have a Facebook page, while only 39% of Blacks and 41% of Asians have one. Among Latinos, 48% have a Facebook page, which is the same figure as for non-Hispanic whites.
- Those living in San Diego for less than 20 years are more likely to have an active Facebook page than longer-term San Diego residents (50% to 43%). This most likely reflects their younger age.

Awareness of and Interest in the Think Blue Facebook Page Among Those with Active Pages

Of those with a Facebook page they look at regularly, 10% say they have seen information about Think Blue on Facebook. Of these, 44% say they actually visited the Think Blue Facebook page (this is just 2% of all respondents). The question was asked differently in the 2012 survey, but the results seem consistent, with roughly two percent of respondents who said they had seen the Think Blue Facebook page.

After hearing that it provides information about cleanup and volunteer opportunities, pollution prevention, and upcoming community events, 34% (of all respondents, including those who do not have a Facebook page) said they would be very or somewhat likely to join or like the Think Blue Facebook page in 2013 to see this information. This includes 58% of those who actually have Facebook accounts and 14% of those who do not. Fifty-seven percent overall, and 36% of those who have a Facebook account, would be unlikely to join or like the Think Blue Facebook page.



Figure 7: Interest in Joining or Liking the Think Blue San Diego Facebook Page

Results by Demographic and Behavioral Groups

Very/SW Likely

• Those 18 to 39 years of age are more likely to join the Think Blue Facebook page than those in older age groups (42% to 31% of those age 40 to 64 and just 16% of seniors). Women under 50 were especially likely (42%) to say they would do this.

Not too/Not at all Likely

Using the Think Blue San Diego Facebook Page

We asked respondents to rate their interest in four possible uses of the Think Blue Facebook page. As shown below, three uses earned similar levels of interest:

- 57% were very or somewhat interested in using the Think Blue Facebook page to *learn what you can do to prevent pollution*.
- 54% were very or somewhat interested in using the Facebook page to *report activities that might be polluting our creeks, beaches, and the ocean, so the City can stop it.*
- 52% were very or somewhat interested in using the Facebook *page to get news and information about what the City is doing to reduce pollution in your neighborhood and around the city.*

A lower 35% were very or somewhat interested in using the Facebook page *to sign up as a volunteer for beach cleanup or other events.*

Figure 8: Interest in Use of the Think Blue San Diego Facebook Page for Each Purpose



Results by Demographic and Behavioral Groups

- Those under 50, and especially those under 40, are much more interested in using the Think Blue Facebook page for all of these purposes compared to those who are older. Women under 50, in particular, are more interested than men under 50 in using the Facebook page to sign up for events.
- Those familiar with the Think Blue slogan are much more likely than others to say they would be interested in the program's Facebook page. It is also the case that those who say they have taken various actions after hearing from the Think Blue program are more interested in using its Facebook page.

Awareness of the Think Blue San Diego Telephone Hotline

Twenty-seven percent said they had heard about *a telephone Hotline which you can call to report people or businesses that are causing pollution in storm* drains. The 2011 and 2012 surveys yielded similar results, as shown in Figure 9.

Figure 9: Seen or Heard Information About the Think Blue San Diego Telephone Hotline



Results by Demographic and Behavioral Groups

- As we have seen in past years, Hispanic respondents are slightly more likely than non-Hispanics to have heard about the Hotline, at 33% compared to 25% of other respondents. Asian-American respondents are again the least likely to be familiar with the Hotline (21%).
- Residents of 20 or more years are more likely to be familiar with the Hotline (29%) than shorter-term residents (12%).
- Single-family home dwellers are more familiar with it than those who live in multi-family housing (30% to 23%).
- Those familiar with the Think Blue San Diego slogan are more likely to have heard of the Hotline than those who are not (40% to 13%).
- Those who made various changes in their behavior as a direct result of hearing about pollution are more likely to be familiar with the Hotline than those who did not.
- Awareness of the Hotline is also higher among those who have received other Think Blue communications:

- Seen the Think Blue website (68%).
- Seen a Think Blue brochure (50%).
- Seen a Think Blue sign or booth at an event (49%).
- Heard a Think Blue radio ad (42%).
- Seen a Think Blue television commercial (41%).
- Seen a Think Blue stencil (37%).
- Gotten a Think Blue email (66%).

Respondents were later asked if they had ever called the Hotline. Six percent of respondents said they had, including 8% of those who said earlier that they had heard *a great deal* or *some* about it. As shown in Figure 10, this figure represents an increase over the 2% who said in 2012 that they called the hotline.

Figure 10: Have You Called the Think Blue San Diego Telephone Hotline?



Among those who say they visited the Think Blue website, 35% say they also called the Hotline. Eleven percent of Latinos compared to 5% of non-Latinos say they called the Hotline.

Awareness of Specific Think Blue San Diego Communications

Awareness of specific sources of pollution and other relevant information communicated by the Think Blue program has stayed fairly constant in the last year.

- Forty-nine percent had heard a Think Blue communication about pollution caused by litter, which is very similar to the 52% response to this question in the 2012 survey. Black (39%) and Asian (36%) respondents were much less likely than Latino (53%) and non-Hispanic white (51%) respondents to have heard from Think Blue about pollution caused by litter. Those who have lived in San Diego for five years or less are much less likely to have heard from Think Blue on this topic, at 35% compared to about 53% of others.
- Another 49% say they have heard from Think Blue about pollution caused by vehicles leaking oil. This is again nearly identical to what we found in 2012, but continues to be far below the results from the 2011 survey when 63% had heard about this source of pollution from the Think Blue program. Those over age 50 seem more likely to report hearing this communication, at 56% compared to 46% of younger residents. We also find that those with graduate degrees are less likely (39%) than less educated residents (about 51%) to have heard about pollution from vehicles leaking oil from the Think Blue program. Again, Black (38%) and Asian (33%) residents are much less likely than Latino (57%) and non-Hispanic whites (50%) to have heard about this. Those who have lived in San Diego for five years or less are again less likely to have heard from Think Blue on this topic, at 40% compared to 51% of others.
- Forty-one percent have heard from the Think Blue program about pollution caused by dog waste. This again is similar to what we found in the 2012 survey and is well below the 49% response in the 2011 survey. Among dog owners, 53% say they have heard from Think Blue on this topic. Again we find that 50+ residents are more likely to report having heard from Think Blue on dog waste, at 50% compared to 37% of younger residents. Among Latinos, 47% have heard about dog waste from Think Blue, compared to 44% of non-Hispanic whites, 32% of Blacks, and 21% of Asians. Twenty-seven percent of newcomers to San Diego, compared to about 44% of others, have heard about dog waste from Think Blue. Forty-four percent of single-family home dwellers compared to 36% of those in multi-family units have heard about dog waste from Think Blue.
- Just 34% say they have seen information from the Think Blue program about how to prepare for and prevent flooding during rainstorms. This is identical to the results from the 2012 survey.

Communication	Survey Year	Total Yes
About pollution	2013	49 %
About pollution caused by vehicles	2012	48%
leaking oil	2011	63%
About pollution caused by dog waste	2013	41%
	2012	37%
	2011	49%
About pollution caused by litter	2013	49 %
	2012	52%
About how to prepare for and prevent flooding	2013	34%
	2012	34%
during rainstorms		

Table 3: Awareness of Specific Think Blue Communications Over Time:2011 to 2013

- Those who had heard of the Think Blue San Diego slogan are more familiar with each communication about sources of pollution from Think Blue than those who had not heard the slogan.
- Those who had seen any communication channel used by Think Blue, including a television commercial, website, radio commercial, brochure, booth or sign at an event, or stencil, are significantly more likely to have seen or heard about each form of pollution or flooding tested in the survey.

III. Changes in Behavior to Reduce Pollution

Survey respondents were read the following statement:

Anything that goes into storm drains can end up in local creeks, rivers, or the ocean, without any filtering or treatment. Motor oil, leaves and grass, dirt, litter, and pesticides are all examples of pollution that goes into storm drains in San Diego. They end up untreated in our creeks, on our beaches, or in the ocean.

This is very similar to (although not exactly the same as) the statements read to respondents in previous surveys.

In past surveys, we then asked respondents if in they had made any changes in their behavior in the past year *that was the direct result of seeing any information*

about what polluted water in storm drains does to local creeks, the beaches, and the ocean. That figure ranged from a high of 32% in the 2010 and 2011 surveys to a low of 26% in the 2012 survey.

This year, for the first time, we asked a different question battery: we read respondents descriptions of these specific actions and asked them if they had taken any of them *as a direct result of seeing any information about what polluted water in storm drains does to local creeks, the beaches, and the ocean.*

As shown in Figure 11, nearly three in four (72%) car owners (with 84% of respondents reporting that they own or lease a car or other vehicle) claim to have taken their car to the car wash rather than wash it at home to avoid getting water into the gutter as a result of something they heard about storm water pollution. Almost seven in ten (69%) said they picked up litter in the past year to prevent it from going in the gutter, and 67% of single family home dwellers said they swept their driveway rather than used a hose to keep dirt out of the storm drains. Just over half of single-family home dwellers, 53%, removed leaves and grass from the gutter and 51% reduced the use of chemicals on their lawns to keep them out of storm drains. A slightly lower 44% of all respondents said they picked up dog waste to keep it out of the storm drains.

Figure 11: Percentage Who Changed Behavior in Past Year From Hearing About Storm Water Pollution



We recognize that some of the people reporting these behaviors may not have been motivated entirely, or perhaps in any way, by the desire to keep these pollutants out of the storm drain. But the key thing here is that these results demonstrate that many people are already engaging in the pollution-reducing behaviors that Think Blue is encouraging. By helping them make a link between what they are already doing and how it helps reduce pollution, Think Blue is cementing a relationship with residents and helping them understand how their behavior really can make a difference.

There are patterns in the data that help reveal which demographic and behavioral groups are most likely to say they are engaging in these activities to help reduce pollution. These include:

Spanish speakers: While the number of Spanish speakers in our sample is low (at just 19), their responses to these questions are 20 to 40 points higher than those for English-speaking Latinos.

50+ Latinos compared to younger Latinos: We find older Latinos more likely than younger ones to use a car wash (17 points), sweep the driveway (14 points), remove leaves and grass from the gutter (15 points), reduce pesticide use (28 points), and pick up dog waste (14 points).

50+ non-Latinos compared to younger non-Latinos: We find older non-Latinos more likely than younger ones to pick up litter (16 points), sweep the driveway (14 points), and remove leaves and grass from the gutter (13 points).

Visitors to the Think Blue website: We find those who have visited the website are ten points more likely to take their car to a car wash and 28 points more likely to pick up dog waste.

Those who have heard about Think Blue: Those who were familiar with the Think Blue slogan were 6 or 8 points more likely than average to have taken all of these actions.

Those who have seen Think Blue information on the topic: Those who say they saw information from Think Blue on dog waste are 18 points more likely than average (62% compared to 44%) to say they picked up dog waste. Those who say they saw Think Blue information on how to prevent flooding during rainstorms are 19 points more likely than average to say they remove leaves and grass from the gutter (72% compared to 53%). Those who say they saw Think Blue information on pollution from litter are 10 points more likely than average (76% compared to 69%) to say they picked up litter. Those who say they saw a TV commercial from Think Blue are 28 points more likely than average to say
they pick up dog waste (72% compared to 44% of all). Those who say they visited a Think Blue booth at an event are 10 to nearly 20 points more likely than average to have taken these actions, with the largest gain seen for picking up dog waste (19 points).

Dog owners: 84% of dog owners, compared to 22% of non-dog owners, say they picked up dog waste to reduce pollution. Thirty-six percent of respondents say they own a dog.

More educated residents: Those with a high school education only are less likely than others to take their car to a car wash (63% compared to 71% with a college degree), pick up litter (60% compared to 73% with a college degree), and remove leaves and grass from the gutter (44% compared to 57% with a college degree).

Long-time residents: Those who are new to the city are less likely in particular to report sweeping instead of hosing and removing leaves from the gutter compared to longer-term residents.

Non-Hispanic whites: Latinos are less likely than non-Hispanic whites to report sweeping instead of hosing and removing leaves from the gutter compared to longer-term residents.

Single-family home dwellers: Those living in single-family homes are more likely than those living in multi-family homes to report taking all these actions except using a car wash.

Thus these results suggests that less educated, less affluent, and younger residents are less likely to take part in the pollution-fighting behaviors promoted by Think Blue.

IV. Knowledge of Storm Drain System

Respondents were told that *storm drains are the gutters, pipes, and concrete channels that collect water from streets.* They were then asked "When water goes into the storm *drains, does it go to a sewage treatment plant before it is released, or is it released into creeks or the ocean without treatment?*"

An identical question has been asked in every survey we have conducted, that is since 2007. As shown in Figure 12, the proportion correctly aware that storm water in San Diego is not treated has fallen from its peak in 2011 at 57% and has declined now for two years in a row – to the current 46%. The proportion who

believes the water to be treated has not moved much, but the proportion of residents who are not sure has grown to 36%.



Figure 12: Knowledge of Storm Water Treated or Untreated Over Time: 2007 to 2012

Results by Demographic and Behavioral Groups

Differences among demographic groups include the following:

- As was the case in the 2012 survey, men are more likely than women to know that storm water is not treated, but the difference is much smaller this time at 48% to 43% (last year it was 56% to 46%), with women again more uncertain (39% to 32%) rather than believing it is treated. This same trend was seen in the 2011 and 2010 surveys. Looking at gender by age breaks, we see that men over age 50 are by far the most likely to know that the water is not treated, at 61%, compared to roughly 44% of younger men and women of all ages.
- By age, we see that only 39% of those under age 39 know that the water is not treated and 22% think it is treated. In contrast, among older voters roughly half (52%) know the water is not treated and about 15% think it is treated.
- Those with a college degree are more likely to know that storm water is not treated than those who are less educated (57% to 38%). Again, this repeats the trend seen in the last few years.

- Latinos continue to be much less informed on this topic than non-Hispanic whites, at 36% of Latinos compared to 52% of non-Hispanic whites, who know the water is not treated. While Black residents appear to be about as well informed as whites, Asian residents are much less informed, with only 31% who know the water is not treated and 51% who are not sure.
- Among those who are familiar with the Think Blue slogan, 58% know that storm water is not treated, compared to 33% of those who have not heard of the slogan. Those who have seen a television or radio ad, brochure, booth, or stencil from Think Blue are slightly more likely than others to know that storm water is not treated, with between 51% and 57% of those who have seen these communications giving this response. And higher proportions who have received specific communications about the Hotline; pollution caused by litter, dog waste, or leaking oil; and how to prepare for and prevent flooding know that storm water is not treated than those who had not received these Think Blue communications (52% to 58%).
- Among newcomers to the city (five years or less), only 29% knew that the water is not treated, compared to 47% of those who have been in San Diego 6 to 19 years and 51% of those who have lived in the city 20 years or longer.
- Among those in single-family homes, 49% know the water is not treated, compared to 41% of those in multi-family homes.

Table 4 shows the percentage who answered this question correctly over the years by key demographic groups. We note that most of the decline in the past year is seen among men compared to women, those under age 50, less educated residents, and whites. We also note the substantial variation from year to year in results for Black and Asian voters, reflecting the very small cell sizes.

		% Knowing Storm Water Is Not Treated					Change in Percentage Points		
	2007	2008	2009	2010	2011	2012	2013	From 2007	From 2012
All	46	39	44	52	57	51	46	0	-5
Men	52	46	45	55	63	56	48	-4	-8
Women	41	32	42	49	50	46	43	+2	-3
Ages 18-49	46	35	37	50	56	51	43	-3	-8
Ages 50+	47	47	58	55	58	51	52	+5	+1

Table 4: Percentage Who Knew Storm Water Is Not Treated Over Time:2008 to 2013

		% Knowing Storm Water Is Not Treated					Change in Percentage Points		
No College degree	38	30	40	48	51	46	38	0	-8
College Grad	57	51	51	59	67	60	57	0	-3
Non-Hispanic white	51	53	49	60	61	62	52	+1	-10
Hispanic	32	25	40	44	48	39	36	+4	-3
Asian	51	14	26	38	60	31	31	-20	0
African American	29	42	26	29	44	34	47	+18	+13
Single-Family Homes	49	45	46	57	58	54	49	0	-5
Multi-Family Homes	44	37	41	41	54	46	41	-3	-4

V. Seriousness of Storm Drain Pollutants

Respondents were asked to rate the seriousness of a list of items that may pollute water in storm drains in San Diego, using a 10-point scale, where a "1" indicated that they feel the item is not a serious source of pollution and a "10" indicated they consider it to be a very serious source of pollution. For this analysis, ratings of eight or higher indicate an overall serious rating. Different items from this question were asked dating back to 2008. However, the question placement in the survey may impact the results, and comparisons should be viewed with this caution.

- As has been the case in the past, the highest proportion recognize *motor oil* as a source of pollution to storm drains, with a mean score of 8.8. In fact, motor oil receives a score of "8" or higher from 82% of respondents. As shown below in Table 5, these ratings have been increasing over the past two years and have regained the levels seen in the previous decade.
- *Pesticides and weed killers that people use on their lawns or gardens* was the second most mentioned concern, with a mean score of 8.2 and 71% giving it a score of "8" or higher. Again these findings are slightly higher than what was seen in the 2012 survey.
- *Litter* earned a mean rating of 7.7, with 61% who rated it an 8, 9, or 10. These ratings are slightly higher than we saw in 2011 and 2012.

- Two in three (66%) gave an "8" or higher rating to pollution from *cigarette butts*, showing a strong level of concern. It receives a mean rating of 7.9 as well, and is at its highest level of concern since 2009.
- Fifty-six percent gave a rating of "8" or higher to *dog waste that is not picked up*, and it received a mean rating is 7.5, suggesting a modest level of concern overall.
- Slightly lower numbers on average consider *food and drink that gets tossed into the street* to be a serious source of pollution (mean rating of 6.5, 43% "8" rating or higher). Concern about *food and drink that gets tossed in the street* is the one item measured in this battery that did not grow in the past year.
- *Runoff water from washing cars in the driveway or street* is considered a serious source of pollution to 40% of respondents (generating a mean rating of 6.4).
- Concern is even lower in regard to *washing down sidewalks or driveways* or *leaves and grass clippings*. Just 33% gave the former and 26% the latter an "8" rating or higher (mean scores of 6.0 and 5.5, respectively).

Table 5 shows the average seriousness rating for items asked in the current study in comparison to the years each item was asked previously. As mentioned earlier, this chart should be viewed with caution due to differences in placement of the question in the questionnaire in various years and different items included in the battery.

Communication	Survey Year	Mean score	Serious 8-10	Not serious 1-3
	2013	8.8	82%	5%
	2012	8.3	77%	10%
Motor oil	2011	8.0	69%	8%
	2010	8.7	81%	8%
	2009	8.8	81%	3%
	2008	8.6	79%	6%
Pesticides and weed	2013	8.2	71%	7%
killers that people use on their lawns or gardens	2012	7.9	66%	10%
	2011	N/A	N/A	N/A
Surveite	2010	N/A	N/A	N/A

 Table 5: Seriousness of Storm Water Pollutants Over Time: 2008 to 2013

Communication	Survey Year	Mean score	Serious 8-10	Not serious 1-3
	2009	N/A	N/A	N/A
	2008	N/A	N/A	N/A
	2013	7.7	61%	7%
	2012	7.5	58%	9%
Litter	2011	7.3	53%	10%
Litter	2010	7.7	64%	8%
	2009	8.4	74%	2%
	2008	7.9	65%	7%
	2013	7.9	66%	10%
	2012	7.4	58%	11%
Cigarette butts	2011	N/A	N/A	N/A
Cigarette Dutis	2010	7.6	61%	9%
	2009	7.9	64%	8%
	2008	8.0	68%	8%
	2013	7.5	56%	10%
	2012	6.9	47%	14%
Dog waste that is not	2011	6.7	46%	17%
picked up	2010	N/A	N/A	N/A
	20098	7.9	63%	7%
	2008	6.9	50%	14%

Communication	Survey Year	Mean score	Serious 8-10	Not serious 1-3
Food and drink that gets tossed into the street	2013	6.5	43%	19%
	2012	6.6	44%	16%
	2011	N/A	N/A	N/A
	2010	N/A	N/A	N/A
	2009	7.5	61%	11%

 8 The question wording was different in 2009 and 2008, saying "dog droppings."

Communication	Survey Year	Mean score	Serious 8-10	Not serious 1-3
	2008	6.8	46%	14%
	2013	6.4	40%	18%
	2012	6.2	36%	18%
Runoff water from washing cars in the	2011	N/A	N/A	N/A
driveway or street	2010	6.5	43%	17%
	2009	N/A	N/A	N/A
	2008	6.4	35%	15%
	2013	6.0	33%	22%
	2012	5.8	31%	23%
Washing down sidewalks or	2011	N/A	N/A	N/A
driveways	2010	6.2	40%	24%
	2009	6.8	48%	14%
	2008	6.0	33%	21%
	2013	5.5	26%	28%
	2012	5.5	29%	30%
Leaves or grass	2011	N/A	N/A	N/A
clippings	2010	5.0	24%	35%
	2009	6.3	40%	20%
	2008	5.6	30%	27%

Results by Demographic and Behavioral Groups

- As seen in past years, women gave ratings of "8" or greater to each source of pollution in higher numbers than men. However gender differences were greater among white non-Hispanic residents than among non-white residents.
- Residents under 50 were more likely than older residents to rate motor oil and litter as serious pollutants, while older residents were more likely than younger ones to rate dog waste and leaves/grass clippings as serious.
- As seen last year and in years prior, Hispanic respondents are more likely to consider each source of pollution to be serious (based on an "8" or greater

rating) than non-Hispanic respondents. However, the items were ranked similarly. Those who speak Spanish at home are more likely than English speakers to consider dog waste, food and drink, car wash runoff, and leaves/grass clippings to be serious sources of pollution.

- Residents of 20+ years were more likely to consider food and drink tossed into the street, washing down sidewalks or driveways, and leaves or grass clippings to be serious sources of pollution than more recent arrivals.
- Familiarity with Think Blue outreach efforts is in some cases positively correlated with higher awareness of serious pollutants. Specifically:
 - Those who saw a Think Blue television commercial were significantly more likely to rate dog waste, food and drink in the street, leaves and grass, and car wash runoff as a serious problem compared to the average resident.
 - Those who saw a Think Blue brochure were more likely to rate motor oil and washing down sidewalks as a serious pollutant compared to the average resident.
 - Residents who saw a Think Blue booth or sign were more likely to rate nearly all of these items as serious compared to the average resident.
 - Those who heard the Think Blue slogan were more likely to consider all of these pollutants as serious compared to those who had not seen the slogan.
 - Those who had heard from Think Blue about pollution caused by dog waste, vehicles leaking oil, and litter were more likely to consider nearly all these items to be serious. This is also true of those who had heard from Think Blue about how to prevent and prepare for flooding during a storm and those who had heard of the Hotline.
 - Those who swept their driveways, reducing garden chemical use, or took leaves out of the gutter last year to reduce pollution rated each one of the pollutants as more serious than those who didn't take these acts.

VI. Strongest Concern About Pollution

Adapted and slightly modifying a question asked for the first time in 2012, we asked respondents to identify one of four potential impacts of ocean pollution that concerns them the most. The results this year used shorter phrases to describe the four impacts, but the results were quite similar to those from 2012, as shown in Figure 13 below.

As was the case last year, the results show that health and marine life concerns top economic concerns, with 56% choosing a health and marine life concern and 18% an economic concern. The highest proportion, 31%, chose as their top concern *that it causes harm to marine life in the ocean like seals, dolphins, and whales.* A slightly lower 25% chose *that can make people sick if they swim at our local beaches.* Nine percent said they are most concerned *that cleaning it up costs San Diego taxpayers a lot of money* and another 9% chose *that when our beaches get polluted, that drives away tourists and hurts San Diego's economy.* One in four (25%) said all reasons were equal to them.

We have asked similar questions, albeit in different formats, repeatedly since 2007 and we consistently find that human health and marine life are more important to more people than economic issues. The order in which marine health versus human health rank has changed slightly over the years depending on question wording and perhaps other circumstances, but they have generally been close in the past, as they are this year and last.

Figure 13: Strongest Concern Among Four Impacts of Pollution on Beaches and Ocean Over Time: 2012 to 2013



Results by Demographic and Behavioral Groups

• The proportion considering the harm to marine life the most concerning reason of the four presented declines with rising age, from 38% of those under 30 to 21% of those 70 years of age or older. This matched what we found in the 2012 survey. So messages aimed at younger audiences should

focus more on marine life, while for older audiences both marine and human health issues appear to be of roughly equal concern.

• A bigger divide is seen by education level, with the most educated residents far more concerned about marine life than human health (36% to 21% for those with a college degree), while less-educated residents divide evenly. This is especially true for non-Hispanic whites with a college degree.

VII. Concern about Water Pollution

Respondents were asked this year to voice their views on how polluted the city's waterways are and whether that pollution is improving. We have asked similar questions in years past, although not recently. So, for example:

In 2007 we found that 77% said that *pollution of the city's ocean, bays, and beaches* was a very important issue for the city. Sixty-three percent said that *pollution of San Diego's creeks and streams* was a very important issue. Using a split sample methodology (i.e. half the sample was asked about pollution of storm water and half were asked about pollution of storm drains), we found that 61% said that *pollution of storm water in San Diego* was a very important issue and 72% said that *pollution of storm drains in San Diego* was very important. For contrast, only 53% said that traffic congestion was a very important issue facing San Diego. Perhaps more surprising is that is that concern about water pollution was just as high as concern about the *quality of public schools*, also at 77% very important.

In 2008, we found similar results, with 76% who said that *pollution of San Diego's ocean, bays, and beaches* was a very important issue and 77% said that *polluted water entering storm drains in San Diego* was very important, compared to 82% who said *the quality of public schools* was very important.

In 2009, an identical question battery found that 76% said that *pollution of San Diego's ocean, bays, and beaches* was a very important issue and 73% said that *polluted water entering storm drains in San Diego* was very important, compared to 80% who said *the quality of public schools* was very important.

This is summarized in Figure 14.

Figure 14: Percentage Saying Each is Very Important Issue Over Time: 2007 to 2009



In the 2013 survey, we returned to this type of question but in a more direct way. We simply asked residents if they believe that the city's *creeks, beaches, and ocean are very polluted, somewhat polluted, not too polluted, or not polluted at all.*

As shown in Figure 15, only 15% say that these waterways are very polluted, but 68% say they are very or somewhat polluted. This is obviously a different response than we found in the earlier polling. Two possible explanations: first, it might be that views have changed about the urgency of water pollution over time. Second, it might be that while they continue to find water pollution a very important issue, they don't think the actual level of pollution is that bad. It might be seen, in other words, as a potentially very serious issue but not one with immediate impact.



Figure 15: How Polluted are San Diego's Creeks, Beaches, and Ocean?

Results by Demographic and Behavioral Groups

By gender: Women are somewhat more likely than men to say that the city's water is polluted (very or somewhat), at 71% compared to 64% of men. Men age 50+ are much less likely than younger men or women to say the water is polluted, at 59%. A significant difference by gender is found only among non-Hispanic whites and not among non-whites or Latinos.

By education level: Concern about water pollution declines with education level, from 71% of those with no college to 61% of college graduates. This is found among whites as well as minorities.

By race/ethnicity: Among Latinos, 74% believe local waters to be at least somewhat polluted, compared to 66% of non-Hispanic whites and 64% of non-Hispanic non-whites. Spanish-speaking Latinos are even more likely to consider local waters to be polluted (91%) compared to English-speaking Latinos (72%).

By exposure to Think Blue: Among those who have heard the Think Blue slogan, 71% say local waters are polluted compared to 63% who have not heard the slogan. Among those who took actions after seeing Think Blue information, we found higher levels of concern about water pollution among those who picked up litter (7%), picked up dog waste (73%), took their car to a car wash (70%), swept their driveway (75%), reduced pesticide use (75%), and removed leaves and grass from the gutter (74%). In all cases, concern about pollution was higher among those who took these actions compared to those who did not.

By length of residency: As we see in response to many questions in the survey, newcomers to the city (five years or less) are less aware of issues addressed by Think Blue. In response to this question, only 52% of newcomers say local water is at least very polluted, compared to about 70% of those who have lived in the city longer.

Is Water Pollution Getting Better or Worse?

Residents are fairly evenly divided about the direction of water pollution in San Diego, with 23% who say it is getting better, 22% who say it is getting worse, and the balance who are not sure or say it is staying the same. This is shown in Figure 16.

There are only a few significant differences in response to this question by demographic group, including:

By gender: Among men, 26% say that water pollution is getting better, a figure that is at 19% among women. Women over age 50 are especially likely to say the pollution is getting worse, at 28% compared to 22% of younger women. The gender gap is greatest among Latino men and women, with 31% of Latino men compared to 20% of Latino women who say the pollution is getting better.

By length of residency: Among newcomers, 28% say the pollution is getting better and 12% say it is getting worse. Among those who have been in the city longer, about twice as many say the pollution is getting worse, at 24%.

Figure 16: Is Pollution of San Diego's Creeks, Beaches, and Ocean Getting Better or Worse, or Same?



VIII. City Government Actions to Address Water Pollution

We asked a new question this year to assess how residents feel about City efforts to reduce pollution. We found that a sizable plurality of 43% say the City *does too little* to prevent pollution of creeks, beaches, and the ocean. We found that just 4% says it does too much. Forty-one percent says it does about the right amount, with 13% who are not sure.



Figure 17: Does the City Do Too Much, Too Little, or Right Amount to Prevent Water Pollution?

Those more likely to say the government does too little include:

- Single-family home dwellers (46%) compared to multi-family home dwellers (38%).
- Those familiar with the Think Blue slogan (46%) compared to those who are not (40%).
- Those who take actions after hearing from Think Blue including picking up litter (48%), picking up dog waste (48%), sweeping the driveway (50%), and reducing pesticide use (50%).
- Those who think local water is very or somewhat polluted (about 55%) compared to those who do not think the water is polluted (23%).
- Those who think the pollution is getting worse (72%) compared to those who think it is staying the same (37%) or getting better (34%).
- Newcomers to the city (36% who says the city does too little) compared to longer-term residents (46%).

We also asked respondents to evaluate six different actions the City is taking or might take *to help stop pollution from getting into storm drains and, from there, going into creeks, beaches, and the ocean.* We asked them to rate the effectiveness of each one.

Figure 18: Percentage Rating Each Action As Very Effective in Stopping Pollution from Getting Into Storm Drains



We note that three items were rated as very effective by more than half the respondents: pet waste bags in parks, screens over storm drains, and community cleanup events. Forty-five percent thought that TV and radio ads offering tips on how to stop pollution would be effective and the same proportion said that more frequent street sweeping would be effective in keeping pollution out of storm drains. A slightly lower 39% said that more seepage of storm drain water into the ground would be effective.

Results by Demographic and Behavioral Groups

By gender: Women were more likely than men to find all of these items to be very effective and this is true across all ethnic groups except among Latinos.

By race/ethnicity: Latinos were more likely than non-Hispanic whites to find screens effective (60% very effective compared to 53% among non-Hispanic whites), cleanup events (57% to 48%), more street sweeping (52% to 43%), and TV/radio tips (51% to 43%).

Awareness of Think Blue: Those familiar with the Think Blue slogan were more likely than others to find all of the items effective except for more frequent street sweeping. Those who took action after hearing information from Think Blue were more likely than others to find all the steps to be very effective. Those who had heard from the various forms of Think Blue communication (e.g. radio, TV, booths, etc.) were more inclined to find all of these steps to be very effective.

IX. Sample Demographics

This survey was conducted on both landlines and cell phones, in Spanish and in English. Responses were weighted to account for overlap in households that have both landlines and cell phones and to adjust for sample non-response. Unless otherwise indicated, all frequencies and percentages reflect the proportions after weights were applied.

Hispanic and Race

In Table 7 are the self-described racial categories of the respondents in this survey. These categories include those who identify as Latino or Hispanic, which is determined by a separate question.

	%
White or Caucasian	60
Asian or Asian-American	11
Black or African-American	5
Native American	1
Mixed Ethnicity	5
Other	16
Refused	2

Table 6: Racial Categories (including Hispanic/Latino)

Table 7 shows the proportion of San Diego residents who said they consider themselves Latino or Hispanic, and breaks down the non-Hispanic category into racial categories, corresponding to categories used in the analysis of this report.

Table 7: Hispanic/Non-Hispanic and Non-Hispanic Racial CategoriesReferenced in the Report

0/
%
23
76
57
19

In this survey, 19% of those who said they were Latino or Hispanic categorized themselves racially as white, 14% said mixed ethnicity, 64% said they were some other race, and 3% of Hispanics refused to give a racial category.

Table 8 shows the level of educational attainment of the respondents and the combined categories used for analysis in this report.

Table 8: Categories of Educational Attainment Referenced in the Report

	%
No B.A. Degree (net) includes:	59
No High School Diploma	5
High School Graduate	23
Some College	21
Associate Degree	10

	%
B.A. Degree + (net) includes:	40
Four Year Degree	27
Graduate Degree or more	13
Refused	1

Age

Table 9 shows the breakdown by age of the survey respondents, aggregated into categories used in this analysis.

Table 9: Categories of Resident Age Referenced in the Report

	%
18 to 49 includes:	65
18 to 29	27
30 to 39	20
40 to 49	18
50 or older includes:	36
50 or older includes: 50 to 59	36 15
50 to 59	15

Type of Residence

In the analysis of this report we referred to residents living in single-family dwellings (SFD) and multi-family dwellings (MFD). Six in ten (60%) survey respondents live in SFDs and 39% live in an apartment, condo, duplex, triplex, or any other dwelling which is not a single-family home, as shown in Table 10.

Table 10: Type of Residence Referenced in the Report

	%
Single Family Homes (SFD)	59
Multi-Family Homes (MFD) includes:	38
Condo or Apartment	29
Duplex, Triplex	4
Townhouse	5
Other	3

	%
Don't know/NA	0

Length of Residency in San Diego

The mean length of residency in the city is 23 years, with a median of 20 years. Only 13% have lived in the city for five or fewer years and 50% have lived in San Diego for 20 or more years.

Table 11: Length of Residency in San Diego

	%
0-5 Years	13
6-10 Years	13
11-19 Years	19
20 to 29 Years	22
30+ Years	28
Refused	4
Mean	23
Median	20

Language of Interview

Nineteen of the 802 interviews in this survey were conducted in Spanish, and the rest (783) were in English. Spanish language interviews account for 2% of the weighted sample.

Gender

Fifty-two percent of respondents were male and 48% female.

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Hello, I'm ______ from G-S-S Research, a public opinion research firm. We've been asked by the City of San Diego to conduct a survey of local residents, and your telephone number was selected at random. We are not trying to sell you anything, and we are only interested in your opinions.

CELL PHONE RESPONDENTS SKIP TO Q.A

LAND LINE SAMPLE ONLY READ (N = 419)

According to the research procedure, may I speak to the person in the house who is 18 or older who had the most recent birthday? [IF RESPONDENT SAYS NO OR NOT NOW, ASK TO MAKE AN APPOINTMENT FOR LATER].

[REPEAT INTRODUCTION IF RESPONDENT IS NOT PERSON WHO FIRST ANSWERED PHONE]

LAND LINE RESPONDENTS SKIP TO Q.E

CELL PHONE SAMPLE ONLY ASK Q.A: (N = 383)

A. This sounds like a cell phone. Are you in a place where you can safely talk on your cell phone?

Yes safe place (SKIP TO QC)------ 1 No not safe ------ TERMINATE No not cell phone (ASK Q.B) ------ 2 (DON'T READ) DK/NA------ TERMINATE

IF RESPONDENT SAYS NOT IN SAFE PLACE, TELL THEM YOU WILL CALL BACK AND TRY TO REACH THEM WHEN THEY CAN TALK SAFELY. THEN THANK AND HANG UP AND CALL BACK LATER

ASK Q.B ONLY IF NOT CELL PHONE (PUNCH 2) ON Q.A

B. You said this was not a cell phone I reached you on. Did you forward your cell phone number to this phone, or was this not a cell phone number that I called you on?

Forwarded (ASK Q.C) ------ 1 Not cell phone ------ TERMINATE (DON'T READ) Other ----- TERMINATE (DON'T READ) DK/NA ------ TERMINATE

C. According to the research procedure, I need to speak to someone who is age 18 or older. Are you age 18 or older?

Yes (ASK Q.D)	1
No	
(DON'T READ) DK/NA	TERMINATE

D. Do you generally use your cell phone for personal calls, for business calls or a mixture of both?

Personal	42%
Business	
Mixture	
(DON'T READ) REFUSED	*

E. Now, do you live in the City of San Diego, or do you live in some other city outside of San Diego?

Yes San Diego (SKIP TO Q.1)------ 94% No, other city (ASK Q.F)------ 6 (DON'T READ) DK/NA ------ TERMINATE

ASK Q.F IF OTHER CITY ON Q.E

F. What city do you live in?

(DON'T READ) San Diego 56% Carmel Valley 8 Del Mar Mesa 3 Encanto 7 Jamacha 2 La Jolla Ila HOY- ah] 5
La Jolla [la HOY- ah]5
Mira Mesa 10 Mission Beach 2
Otay/Otay Mesa2 Point Loma2
Sabre Springs3 University City2
Any other response TERMINATE Not Sure/Refused TERMINATE

1. Now, in the past year, have you seen or heard the slogan "Think Blue San Diego?"

	YES	NO	DK/NA
Think Blue	53%	46%	1%

IF NO OR DK ON Q1, SKIP TO Q.3.

2. Where did you see or hear this? (RECORD VERBATIM, THEN SUPERVISOR CODE. ACCEPT MULTIPLE RESPONSES) (n=422)

(DON'T READ)

TV adRadio	46%
Radio	13
Billboard	
TV news/Other TV	
Buses	
Street/Sidewalk	
Newspaper	5
Brochure	
Signs-general	2
Mailer/Flyer/Utility Bill	2
Event/at a booth at an event	2
Storm drain stencil	
Internet/web site	
Side of truck	
Friends/family/word of mouth	1
At work	
Movie theater	
Poster	
Beach	1

School	*
Bumper sticker	2
Everywhere	2
Other	
Not Sure	7

3. Do you live in a single family home, a duplex or triplex, a townhouse, or an apartment or condominium?

Single family	59%
Duplex/triplex	4
Townhouse	
Apartment/Condo	29
(DON'T READ) Other	3
(DON'T READ) DK/NA	

4. Do you have a dog where you live?

Yes	36%
No	64
(DON'T READ)	1

5. Do you own or lease a car or other type of vehicle?

Yes	84%
No	16
(DON'T READ)	1

6. Next, I want to ask you some questions about storm drains. As you probably know, storm drains are the gutters, pipes, and concrete channels that collect water from streets.

Now, when water goes into the storm drains in San Diego, does it go to a sewage treatment plant before it is released? Or is it released into creeks or the ocean without treatment? If you are not sure, just say so.

Is treated	17%
Is not treated	46
Not sure	36
(DON'T READ) NA	1

7. As you might know, anything that goes into storm drains can end up in local creeks, rivers, or the ocean, without any filtering or treatment. Motor oil, leaves and grass, dirt, litter, and pesticides are all examples of pollution that goes into storm drains in San Diego. They end up untreated in our creeks, on our beaches, or in the ocean.

Last year, that is in 2012, did you do any of the following as a direct result of seeing any information about how polluted water in storm drains affects local creeks, the beaches, and the ocean? (READ - ROTATE):

		YES	NO	NOT APPL	DK/NA
[]a.	Pick up litter to prevent it from going in the storm drain?	69%	26%	4%	1%
[]b.	Pick up dog waste to prevent it from				
	going in the storm drain?	44	34	21	*
ASK	Q.C IF Q.5 = YES (n=672)				

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	YE	S	NO	NOT APPL	DK/NA
[]c.	Deliberately take your car to a car wash rather than wash it				
	at home to reduce runoff of water into the gutter? 72		25	3	1
ASK	D AND E AND F IF Q3=1,2, OR 3 (n=543)				
[]d.	Sweep your driveway or your sidewalk rather than use a hose				
	to keep dirt from washing into the storm drains? 67		24	8	1
[]e	Deliberately reduce the use of pesticides or fertilizers on your				
	lawn or garden to keep them out of the storm drains? 51		29	19	1
[]f.	Deliberately remove leaves or grass clippings from the gutter				
	to keep them out of the storm drains? 53		38	9	*

ASK EVERYONE

8. Overall, would you say that San Diego's creeks, beaches, and ocean are very polluted, somewhat polluted, not too polluted, or not polluted at all?

Very	15%
Somewhat	53
Not very	23
Not polluted at all	4
(DON'T READ) Other/depends	
(DON'T READ) DK/NA	

9. Would you say that pollution of San Diego's creeks, beaches, and ocean is getting better, getting worse or staying about the same?

Better	
Worse	22
Same	44
(DON'T READ) DK/NA	11

10. In general, would you say that the city government in San Diego does too <u>little</u> to prevent pollution of its creeks, beaches and ocean? Would you say that it does too <u>much</u>? Or would you say that it does about the right amount?

Does too little	43%
Does too much	4
About right amount	41
(DON'T READ) DK/NA	13

11. Earlier, I mentioned the slogan "Think Blue San Diego." Think Blue is the City of San Diego's program to reduce pollution of the water in the city's storm drains, creeks, beaches, and the ocean. Last year, that is in 2012, did you see or hear any of the following from the Think Blue program? **(ROTATE)**

				DK/NA
	a. A TV commercial	50%	48% -	2%
[]	b. The Think Blue website	7	92	1
[]	c. A radio commercial	29	68	3
ĨÌ	d. A brochure from Think Blue	20	76	4
ΪÌ	e. A Think Blue booth or a sign at a local event	23	75	2
	f. An email from Think Blue			
	g. A stencil painted on sidewalks in front of storm drain openings			

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12. And again, have you seen or heard any of the following from the Think Blue Program? You can answer yes or no to each one. (ROTATE) YES NO DK/NA

	YES	NO	DK/NA
[] a. About a hotline you can call to report people or businesses			
that are causing pollution in storm drains	27%	71% -	2%
[] b. About pollution caused by dog waste	41	57	2
[] c. About pollution caused by vehicles leaking oil	49	49	2
[] d. About pollution caused by litter	49	50	1
[] e. About how to prepare for and prevent flooding during rainstorms	34	64	3

13. Next, I want to read you a brief list of actions the city takes to help stop pollution from getting into storm drains, and from there going into creeks, beaches, and the ocean. After you hear each one, please tell me if you think it is a very effective way to stop pollution, somewhat effective, not that effective, or not effective at all. (ROTATE)

			VERY	S.W.	NOT THAT	NOT EFF	DK
			<u>EFF</u>	EFF	<u>EFF</u>	<u>AT ALL</u>	NA
[]	а.	Putting screens over storm drain entrances so litter					
		can not get in	55%	32%	6%	5%	2%
[]	b.	Finding ways to let storm drain water seep into the					
		ground rather than going out to the ocean	39	40	9	7	5
[]	C.	Having more frequent street sweeping	45	40	8	5	2
ĨÌ	d.	Organizing community events to pick up trash and					
		litter	52	39	6	2	1
[]	e.	Having TV and radio announcements to give resider	nts tips on				
		how to stop pollution of storm drains			8	4	2
[]	f.	Providing pet waste bags in city parks					

14. Now, I want to read you a brief list of items that may pollute water in storm drains in San Diego. Please rate each item on a scale of 1 to 10. Use a 1 if you think it is NOT a serious source of pollution, and a 10 if you think it is a VERY SERIOUS source of pollution of water in storm drains. Or you can use any number in between. **(ROTATE)**

	NOI	VERY SER	DK N	1EAN
[] a.	Litter 4% 1% 2%4% 11% 7% -11%	%15%7% -39% ·	1%	7.69
[] b.	Motor oil3 3 3 1 23 3 5	11 962	1	8.74
[] C.	Dog waste that is not picked up 5 3 3 9 9 11 -	12 7 37	1	7.46
[] d.	Cigarette butts8559-	12 7 47	1	7.93
[] e.	Leaves or grass clippings 12 8 8 9 20 8 9	7 2 17	1	5.46
[] f.	Washing down sidewalks or			
	driveways15106615121066	10 4 19	1	6.00
[] g.	Runoff water from washing cars			
	in the driveway or street 7 7 7 7 7 15 10 12	13 423	1	6.41
[] h.	Pesticides and weed killers that people			
••	use on their lawns or gardens 4 1 2 3 7 5 7	12 9 50	2	8.18
[] i.	Food and drink that gets tossed			
	into the street 7 11	12 526	1	6.50
			•	

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15.	Changing subjects, of the following, which one of the following concerns you the most about pollution of	٥f
	our beaches and ocean? (ROTATE) IF ALL EQUAL, TRY TO MAKE RESPONDENT CHOOSE ONE	1

[] A. OR	That cleaning it up costs San Diego taxpayers a lot of money9%	
[] B. OR	That when our beaches get polluted, that drives away tourists and hurts San Diego's economy 9	
[] C. OR	That it can cause harm to marine life in the ocean like seals, dolphins, and whales 31	
[] D.	That it can make people sick if they swim at our local beaches 25 (DON'T READ) None/other 1 (DON'T READ) All Equal 25 (DON'T READ) DK/NA 1	

16. Do you use Facebook? That is, do you have a Facebook account that you use regularly?

Yes (ASK Q.17)----- 46% No (SKIP TO Q.18) ----- 54 (DON'T READ) DK/NA (SKIP TO Q.18)---*

IF YES ON Q.17 ASK: (n=366)

17. You said that you have a Facebook account. Let me ask you a couple of quick questions about that and you can answer yes or no to each one.

	YES	NO	DK/NA
a. Have you seen any information about Think Blue on Facebook?	10%	88% -	2%
IF NO OR DK ON Q.17A, SKIP Q.18B (n=35)			
b. Did you visit the Think Blue page on Facebook?	44	56	

ASK EVERYONE

18. The Think Blue Facebook page provides information about upcoming cleanup and volunteer opportunities, pollution prevention information, and upcoming community events. How likely are you to join or like the Think Blue Facebook page in 2013 to see this information? **(READ):**

Very likely 13	3%
Somewhat likely 2'	1
Not too likely 17	7
Not likely at all 40	
(DON'T READ) Already done so	1
(DON'T READ) Depends	5
(DON'T READ) DK/NA	1

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19. How interested would you be to use the Think Blue Facebook page to do each of the following? Very interested, somewhat interested, not too interested, or not interested at all? (ROTATE)

					NOT	NOT	
			VERY	S.W.	TOO	INT	DK
			INT	INT	INT	<u>AT ALL</u>	NA
[]	а.	To get news and information about what the city is do to reduce pollution in your neighborhood and around	ping				
		the city	- 18%	- 34%	17%	28%	3%
[]	b.	To report activities that might be polluting our creeks,					
		beaches, and the ocean, so the city can stop it	- 22	- 32	14	29	4
[]	C.	To sign up as a volunteer for beach cleanup days					
		or other events	- 10	- 25	24	37	4
[]	d.	To learn what you can do to prevent pollution	- 23	- 34	12	28	3

20. The City of San Diego's Think Blue program has a hotline that can be used to report activities that may be polluting our local beaches and storm drains, or to get information about how to prevent pollution. In 2012, did you call the Think Blue hotline?

Yes	6%
No	
(DON'T READ)	DK/NA1

NOT

NOT

21. The city's Think Blue Program has a website. In 2012, did you look at the Think Blue website for any reason?

Yes ------ 7% No ----- 92 (DON'T READ)------ 1

I HAVE JUST A FEW ADDITIONAL QUESTIONS FOR STATISTICAL PURPOSES ONLY

22. Are you of Hispanic or Latino origin or descent, or do you consider yourself Hispanic or Latino?

Yes	23%
No	76
Refused	1

23. Would you describe your race as Black or African-American; Asian or Asian-American; White or Caucasian; Native American, mixed ethnicity, or something else? (IF RESPONSE IS "LATINO," TRY AGAIN TO GET ONE OF THE RACE RESPONSES LISTED BELOW OR RECORD AS "OTHER").

African-American5
Asian-American 11
Caucasian 60
Native American1
Mixed ethnicity5
Other 16
Refused 2

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#3307

1
1

24. How many years have you lived in the city of San Diego? ____ (IF NOT SURE OR REFUSED, RECORD AS 999)

25.	What was the last level of school you completed? (IF COLLEGE GRAD, CLARIFY IF 2 YEAR ASSOCIATE OR 4 YEAR	LESS THAN GRADE 125% HIGH SCHOOL GRADUATE23 SOME COLLEGE, NO DEGREE21 ASSOCIATE DEGREE10	
	BACHELOR DEGREE)	BACHELOR'S DEGREE/COLLEGE GRAD 27 POST GRADUATE DEGREE/ PROFESSIONAL DEGREE 13 REFUSED 2	

26. What is your age, please? (RECORD IT EXACTLY <u>AND CIRCLE APPROPRIATE CATEGORY BELOW</u>.) AGE: ______ (IF RESPONDENT DECLINES TO STATE AGE, WRITE "999" IN BLANKS ABOVE AND THEN ASK:)

Which of the following categories includes your age? (READ LIST.)

(
18-29	27%
30-39	20
40-49	
50-59	
60-64	-
65-69	•
70 or older	
(DON'T READ) REFUSED	

27. What is the zip code where you live? (DON'T READ)

92067 (San Dieguito River)*
92075 (San Dieguito River)1 92101 (San Diego Bay)6

92102 (San Diego Bay)	6
92103 (San Diego Bay/River)	
92104 (San Diego Bay)	- 1
92105 (San Diego Bay)	- 4
92106 (San Diego Bay)	
92107 (San Diego Bay)	2
92108 (San Diego River)	. 1
92109 (Mission Bay)	- 1
92110 (Mission Bay)	
92111 (San Diego River)	2
92113 (San Diego Bay)	. 3
92114 (San Diego Bay)	. 3
92115 (San Diego Bay and San Diego River)	2
92116 (San Diego Bay)	• 1
92117 (Mission Bay)	. 3
92118 (San Diego Bay)	- 1
92119 (San Diego River)	
92120 (San Diego River)	2
92121 (Penasquitos)	- 1
92122 (Mission Bay)	- 1
92123 (San Diego River)	· 1

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92124 (San Diego River)3
92126 (Penasquitos)3
92127 (San Dieguito River)1
92128 (the Penasquitos and San Dieguito
Rivers)2
92129 (Penasquitos River)3
92130 (Penasquitos River)1
92131 (Penasquitos River)2
92133 (San Diego Bay)*
92134 (San Diego Bay)

92135 (San Diego Bay)*
92136 (San Diego Bay)*
92139 (San Diego Bay) 1
92140 (San Diego Bay)
92145 (Mission Bay and San Diego River)
92152 (San Diego Bay and Tijuana River)
92154 (Tijuana River and San Diego Bay) 2
92173 (Tijuana River) 1
Other5
Not sure/refused2

ASK Q.28 OF CELL PHONE SAMPLE ONLY (N = 383)

28. Do you or does anyone in your household have one or more phones that are not a cell phone?

Yes (ASK Q.30)------ 52% No (END INTERVIEW)------ 48 (DON'T READ) DK/NA (ASK Q.30) ------ 1

ASK Q.29 OF LANDLINE SAMPLE ONLY (N = 419)

29. Do you or does anyone in your household have a working cellular phone?

Yes (ASK Q.30)------ 80% No (END INTERVIEW)------ 17 (DON'T READ) DK/NA (ASK Q.30) ------ 4

ASK Q.30 IF YES OR DK ON Q.28 OR IF YES OR DK ON Q.29 (N=549)

30. Please think of all the telephone calls that are received in your household. Among those, which of the following comes closest to how personal, not business calls are received:

All or almost all personal calls are received on cell phones	35%
Some personal calls are received on cell phones and some on regular phones	45
Very few or no personal calls are received on cell phones	16
(DON'T READ) DK/NA	5

My supervisor may be calling you to confirm that this interview took place. May I have your first name so she can call and ask for you?

That's all the questions I have. Thank you very much for participating in the survey.

English 9	98%
Spanish	-2
opunion	-
Wireless sample	- 1
	~

Land line sample------2

23%
24
34
11
9