

Storm Water Public Education Program Resident Population – Tracking Evaluation –

Prepared for:



**Los Angeles County Department of Public Works
and
Ogilvy Public Relations Worldwide**

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Background and Objectives



Background

- As part of its ongoing efforts to combat the problem of storm water pollution in Los Angeles County and improve the environment of the region's coastal and inland communities, the Department of Public Works, in conjunction with various contractors including Ogilvy Public Relations Worldwide, developed a public education campaign designed to reduce County residents' contribution to harmful items and substances in storm water runoff.
- From its initial launch in January 1998, the outreach campaign has encouraged Los Angeles County residents to take ownership of their communities, help reduce storm water pollution from the local landscape and be part of the "pollution solution" by adopting simple, everyday actions, including:
 - Throwing trash in a trash can or recycling container (as appropriate), not on the ground or into a storm drain.
 - Cleaning up pet waste.
 - Always putting cigarette butts in an ashtray.
- Separate ongoing campaigns regarding used oil and household hazardous waste/e-waste disposal, green waste, as well as school education programs are coordinated concurrently with the Storm Water education efforts.
- The campaign's current communications center on the "Don't Trash California" ads and Project Pollution Prevention, which encourage residents to reduce trash and pollution as a way of keeping neighborhoods clean and children and the environment safe.
- The campaign utilizes a strategic mix of multi-media advertising, including English and Spanish television, radio, print and billboards, community outreach, media relations, corporate and non-profit partnerships, special events and community, school and business outreach.

Objectives

- To help evaluate the effectiveness of the campaign, research was needed to identify current attitudes, beliefs and behaviors related to storm water pollution prevention among Los Angeles County residents.
- The specific goals of this 2006 evaluation are to:
 - Determine the level to which the Storm Water Public Education Campaign has penetrated public consciousness and influenced intentions and/or behavior.
 - Evaluate the effectiveness of the campaign in reaching residents.
 - Provide insights based on key learnings that will maximize the potential for success of future pollution-reduction efforts in Los Angeles County.
- This report provides the findings from the most recent (2006) campaign evaluation survey and also includes data from the 1997 baseline, 2001 and 2005 tracking studies for comparative purposes.



Survey Methodology 1997-2006



Survey Methodology: Baseline and Evaluation Studies

- In 1997, prior to the 1998 public education campaign, baseline data regarding residents' storm water-related attitudes and behavior was collected to establish a starting point for measurement of the campaign's impact.
- Subsequently, changes in awareness and attitudes associated with the public education campaign have been evaluated in a series of tracking studies. The next countywide segmentation study was conducted in June 2001, then again in December/January of 2005/2006 and leading to the current segmentation study of 600 County residents with data collection occurring between November 6 and December 4, 2006.
- For each of these studies, participants were drawn from a representative sample of random-digit phone numbers in the Los Angeles County.
- Participants were:
 - 16+ years of age.
 - Permanent residents of Los Angeles County.
 - Residents of Los Angeles County for six months or more.
- Interviews were conducted in either English or Spanish, at the preference of the interviewee.
- All data reported are unweighted.
- Statistical significance testing is based on a 90% confidence level, with green cell backgrounds signifying a statistically significant increase in 2006 relative to the 1997 time period and yellow cell backgrounds signifying a significant decrease from 1997 to 2006.

Methodology: Telephone Depth Interviews

- To provide further insight into the quantitative findings, follow-up telephone interviews were conducted with survey participants who had indicated some level of recall of the Storm Water public education campaign.
- Fifteen (15) interviews were conducted.
- Each interview lasted approximately 10 minutes and focused on:
 - Residents' recall of specific elements and messages in the ads.
 - The feelings and impressions residents had of the ads.
 - The degree to which the ads impacted residents' own littering or polluting behavior.
 - Residents' willingness to take part in additional pollution reduction actions, beyond not throwing trash.



Executive Summary and Conclusions



Executive Summary

Attitudes and Awareness

- Concern with water pollution and littering remains at fairly high levels among County residents.
 - Reflecting this level of concern, most consider themselves knowledgeable about water pollution and its effects on the environment.
- Increased knowledge about pollution has accompanied a recent increase in recall of water pollution messages, suggesting that the Storm Water public education campaign is gaining notice among its intended audience.
 - Television remains the most recalled medium for these messages, while an increase in recall of billboards indicates that this medium is also attracting residents' attention.
- The campaign's specific messages and themes appear to be connecting with consumers, with many of those who are aware of the ads citing the "Don't Trash California" theme or details of the "house-trashing" commercials.
- While residents recall and approve of the messages in the ads, most appear to feel that their own behavior is not at fault in regards to littering and see the ads as aimed at changing the behavior of others rather than themselves.
 - In this regard, the ads appear to produce a somewhat self-congratulatory response in some residents rather than a dedication to behavior change.

"I like the ads. It's a great way to present it. It's good to get this message out there."

"The ad with the guys throwing trash really gets your attention, it takes hold."

"I think this issue is important. But for me personally, I don't litter anyway, so it's preaching to the choir."

Executive Summary

Behavior Change Intentions and Actions

- As in previous years, most residents find the campaign messages meaningful and thought-provoking, about half find them informative, but less than half agree that the messages prompt them to change their polluting behavior.
 - The relatively lower success at informing and motivating residents may stem from their belief that they are already doing their part and from the high degree of familiarity with anti-littering messages.
- While virtually all residents express willingness to change their water-polluting and littering behavior, many feel they have made a change in the past few years. Actual rates of most polluting behaviors have experienced only modest declines and, for a few specific behaviors, have actually increased.
 - In consequence, population growth threatens to swamp the modest behavioral improvements, possibly preventing any decrease of overall County pollutant volume.
- The mismatch between residents' polluting behaviors and their apparent willingness and interest in changing seems to be due to:
 - A sense that they themselves are not littering and, therefore, are not the target of the anti-littering messages.
 - A lack of connection between some specific polluting behaviors and water pollution (e.g., hosing driveways).
 - An unwillingness to change certain behaviors (e.g., pesticide use) due to a perceived lack of easily available alternatives.

"I don't litter and my kids don't litter. When we go to the park, we pick up litter we see."

"Water does run off from my yard. I would have to re-grade the whole place to stop it."

"I'm not sure how I would grow my yard without fertilizer or pesticides."

Conclusions

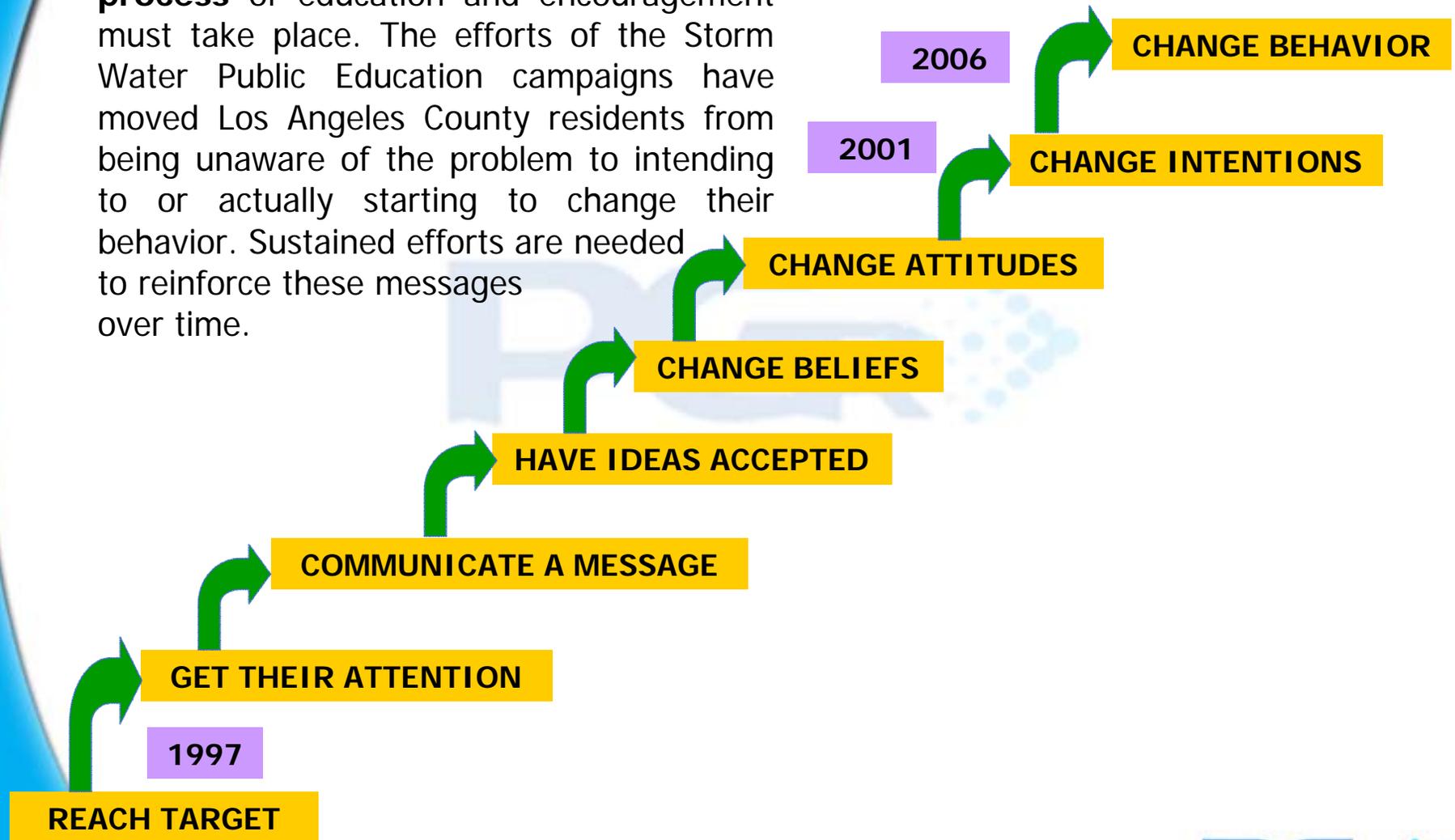
- The current Storm Water public education campaign is well-aligned with residents' concerns and appears to be successfully conveying its anti-water pollution and, to a lesser extent, its anti-littering messages.
- However, modest rates of behavioral change indicate that the County may need to increase the campaign's visibility and impact in order to achieve its desired reduction in pollutant volumes.
- While awareness of the campaign and its messages has increased in the past year, a substantial group of residents – about one-third – are not aware of the campaign at all, suggesting that the media exposure may not be sufficient to reach all County residents.
 - This finding underlines the important role of consistent media flighting in accomplishing the County's goals.
- The familiarity of the anti-littering message, along with residents' unwillingness to see themselves as polluters, enables many of them to respond to the messages with self-congratulation rather than with action.
- Expanding campaign elements and messages (e.g., specific polluting behaviors and specific anti-pollution actions) that enable residents to see themselves as change agents, either of their own behavior or in their communities, might increase the behavioral effectiveness of the campaign.
 - Additionally, there is substantial support among residents for both increased awareness efforts and for punishment of litterers, suggesting that vigorous action by the County on both these fronts would be welcomed.

Overview of Social Change Process



Social Change Process

To create behavior change related to societal, rather than individual needs, a **process** of education and encouragement must take place. The efforts of the Storm Water Public Education campaigns have moved Los Angeles County residents from being unaware of the problem to intending to or actually starting to change their behavior. Sustained efforts are needed to reinforce these messages over time.



Attitudes and Awareness



Attitudes and Awareness

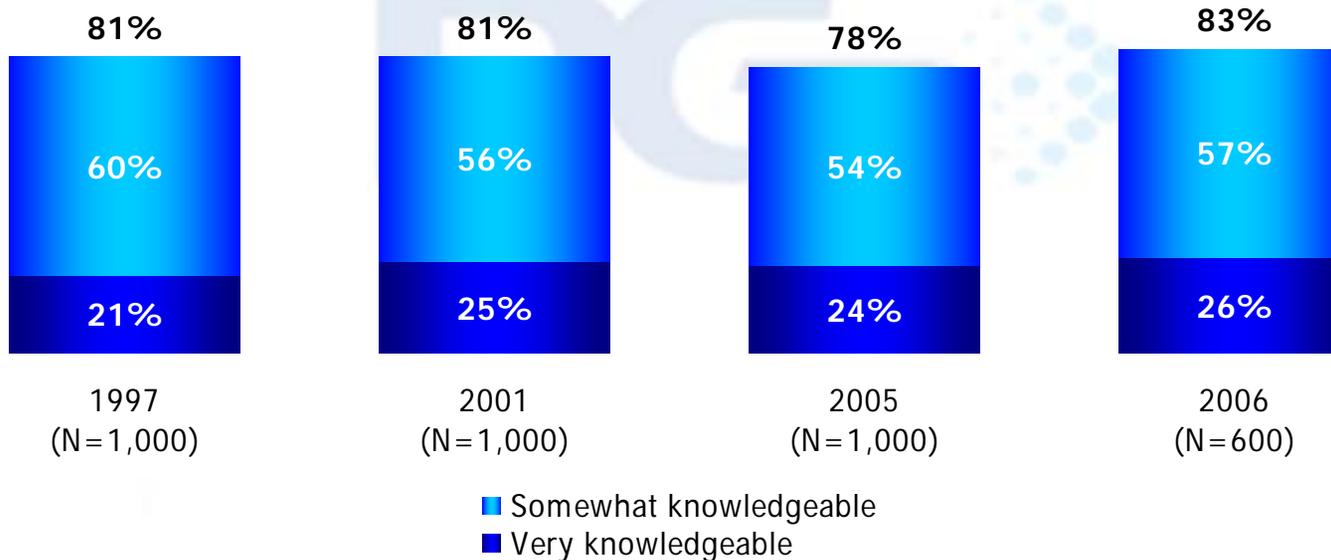
- Over the duration of the Storm Water public education campaign, Los Angeles County residents have maintained levels of concern with water pollution and littering that match or exceed their concern with many other quality of life and security problems.
 - While traffic congestion has risen to match crime as the issue of greatest concern to residents (69% very concerned), concern with the quality of drinking water sources is nearly as great (66%).
 - Littering matches terrorism as an issue of concern to L.A. County residents (50% very concerned).
 - Additionally one-third of residents (35%) are concerned with beach closures.
- A large majority of residents (83%) consider themselves knowledgeable regarding causes of ocean, river and beach pollution, a perception that is supported by a substantial recent increase in the number who recall hearing messages about water pollution (65% in 2006, up from 55% in 2005, although still below the baseline level of 73% in 1997).
- Specific recognition of the campaign's focus on littering remains near the 2005 level, with about one-third of County residents saying they have seen or heard messages on this topic.
 - Television, newspapers, billboards and radio are the primary media sources where residents have encountered the anti-littering messages.

Concern About Issues Facing Los Angeles County - Very Concerned -

	1997	2001	2005	2006
Issues Facing Los Angeles County				
Traffic congestion	50%	63%	68%	69%
Crime	79%	68%	67%	69%
Pollution of water sources that provide drinking water	N/A	N/A	N/A	66%
Quality of the public schools	66%	61%	64%	65%
Air pollution or smog	58%	59%	59%	61%
Pollution of the ocean, rivers and beaches	57%	61%	60%	60%
Terrorism	N/A	N/A	48%	50%
Litter	44%	48%	48%	50%
Unemployment	47%	42%	45%	40%
Race relations	46%	36%	37%	39%
Beach closures	N/A	N/A	N/A	35%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)

Question: Q.1: How concerned are you about each of the following issues?

Knowledge of Pollution Causes of Ocean, Rivers and Beaches



Base: Total Los Angeles County Residents (see base sizes above)

Question: Q.4: Compared to most people, how knowledgeable are you about what causes pollution of the ocean, rivers and beaches?

Storm Water Residential 2006 Report

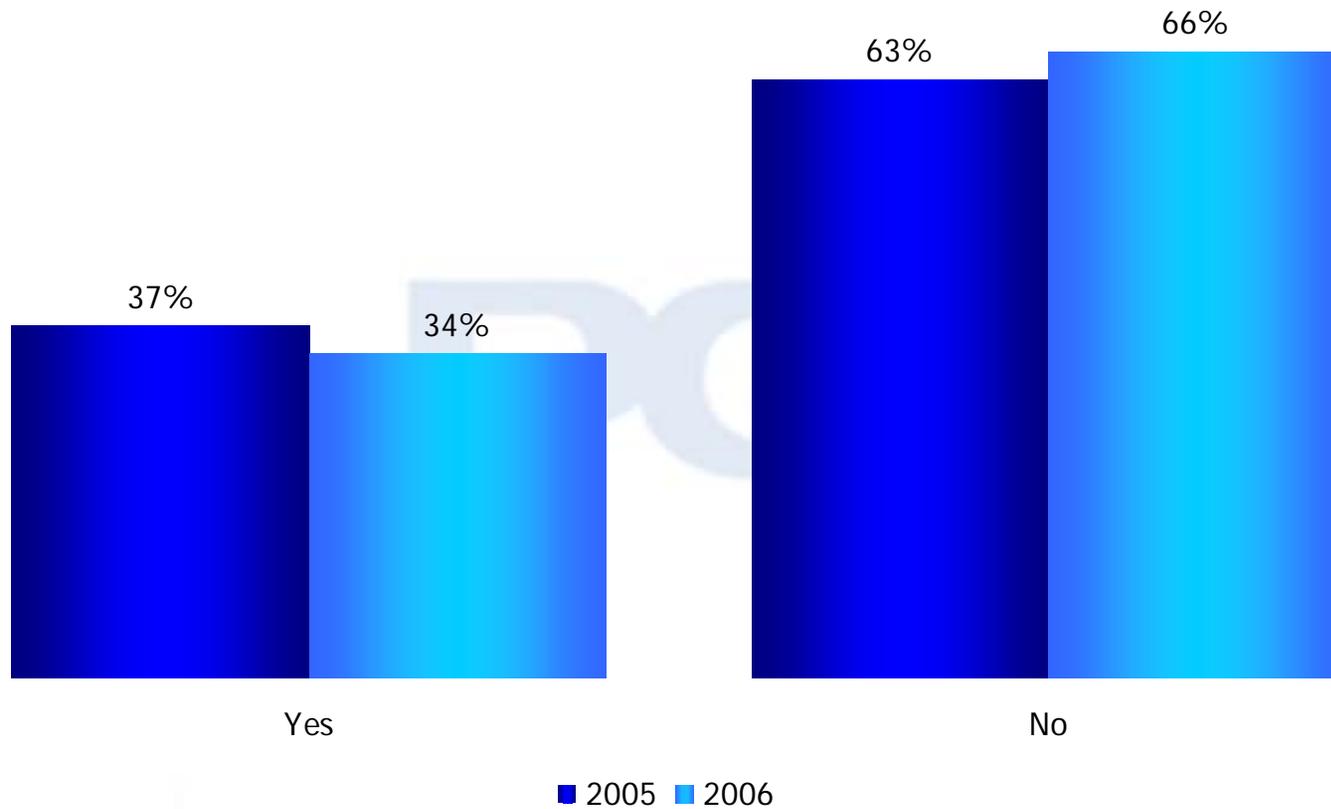
Recall Seeing/Hearing Information About Pollution of Waters

	1997	2001	2005	2006
Recall				
Yes	73%	58%	55%	65%
No	27%	42%	45%	35%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)



Question: Q.6: In the past few months, do you recall seeing or hearing anything about pollution of the oceans, rivers and lakes/beaches?

Recall Seeing/Hearing Anything About Litter



Base: Total Los Angeles County Residents 2005 (N=1,000)/2006 (N=600)
Question: Q.9: In the past few months, do you recall seeing or hearing anything about litter?

Sources of Neighborhood Litter/Pollution Information – Unaided

	2005	2006
Sources of Neighborhood Litter/Pollution Information		
Television	48%	56%
Newspaper	17%	23%
Billboard	13%	16%
Radio	12%	11%
School	5%	5%
Work	5%	1%
Friends/family	4%	3%
On sidewalk/storm drain	3%	7%
Magazine	3%	8%
Brochure/pamphlet	2%	5%
Internet/E-mail	1%	2%
Meeting	N/A	0%
Base: Total Los Angeles County Residents Who Are Aware of Neighborhood Litter/Pollution Advertising	(370)	(203)

Question: Q.11: Where have you seen or heard something about litter?

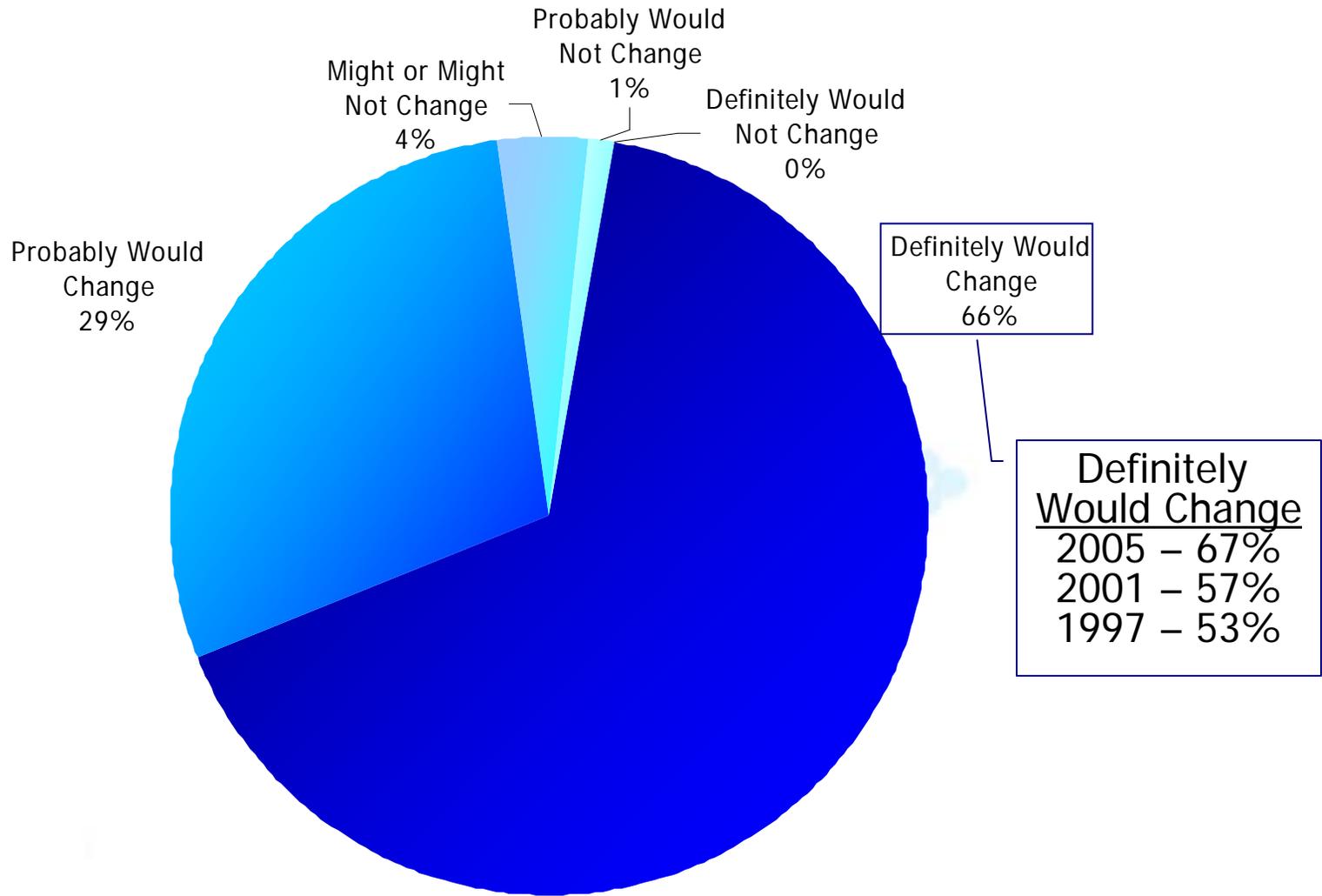
Attitudes Toward Pollution Clean-up



Attitudes Toward Water Pollution Clean-up

- Virtually all County residents claim to be willing to change their water pollution-causing behaviors if they learned that their activities were contributing to pollution (95%).
- Residents are also very willing to change their littering behavior if they learned that something they were doing was causing problems associated with litter (98% probably/definitely would change).
- The campaign's focus on littering is well-aligned with the behaviors residents are most willing to change, but is also an area where many residents feel their behavior is already quite good.
 - While welcoming the reminders about littering and agreeing that this is an important topic, most residents also feel they are already disposing of their trash properly and do not feel they need to make much additional change in this regard.
 - Many do, however, feel they are impacted by littering and view the anti-littering message as something that others need to hear.
- Willingness to change behaviors that require a greater commitment of time, effort, or money, such as participating in clean-up efforts, patronizing restaurants with litter reduction programs or paying more to improve water quality, is lower than interest in taking simple everyday polluting actions.
- Residents are broadly supportive of littering awareness programs and many also favor stern penalties for littering, including community service (63%) and large fines (49%).
- Awareness of 1(888)CLEAN LA is unchanged at about one-fourth of residents (28%), although somewhat more residents have actually called the number (15%) than in 2005 (8%).
 - One-fifth of residents are aware of Project Pollution Prevention.

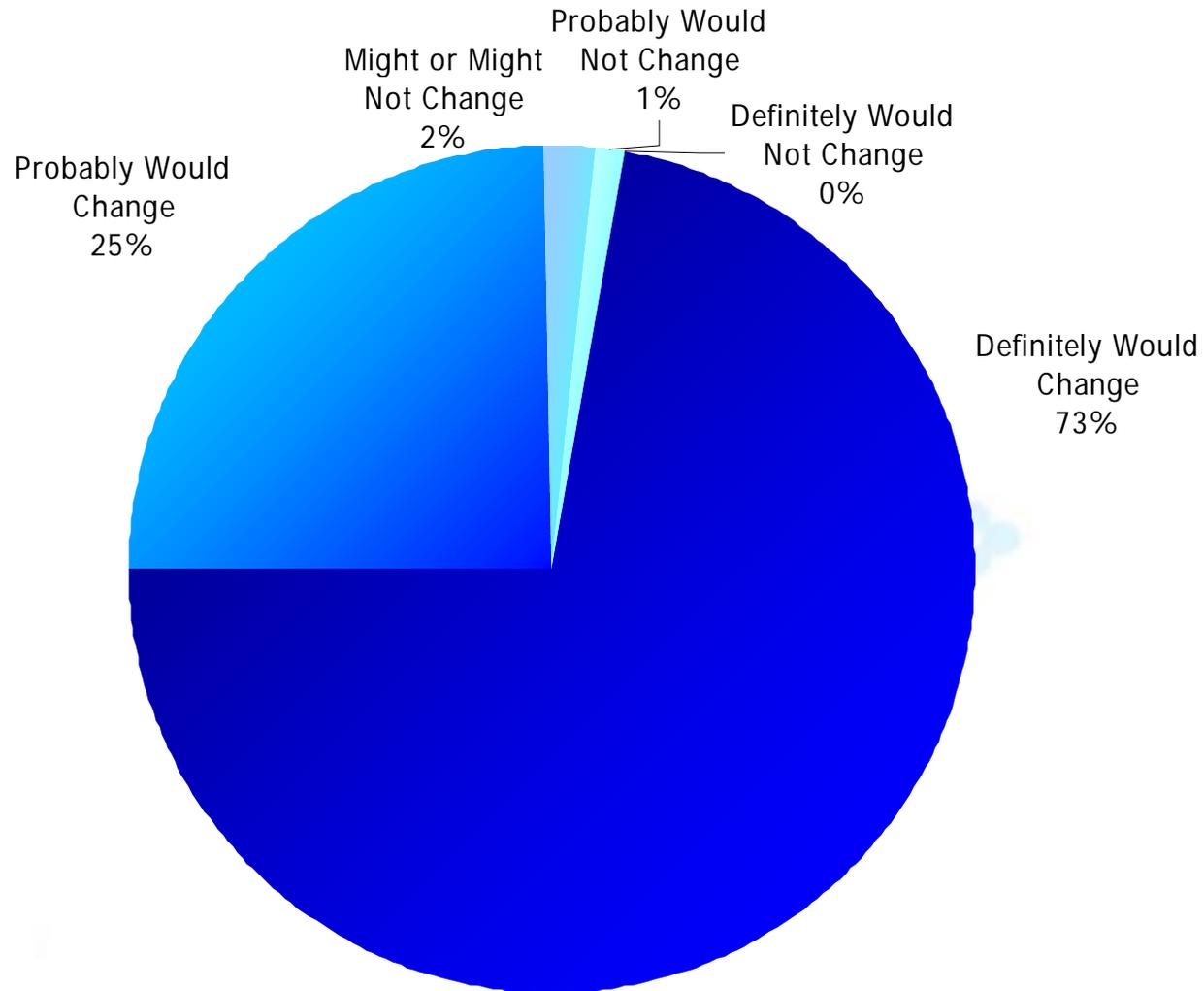
Willingness To Change Water Pollution-Causing Behaviors



Base: Total Los Angeles County Residents (N=600)
 Question: Q.5: If you learned that something you were doing could contribute to pollution of the ocean, rivers and beaches, how willing would you be to change your behavior? Would you say you...?

Storm Water Residential 2006 Report

Willingness To Change Littering Behaviors

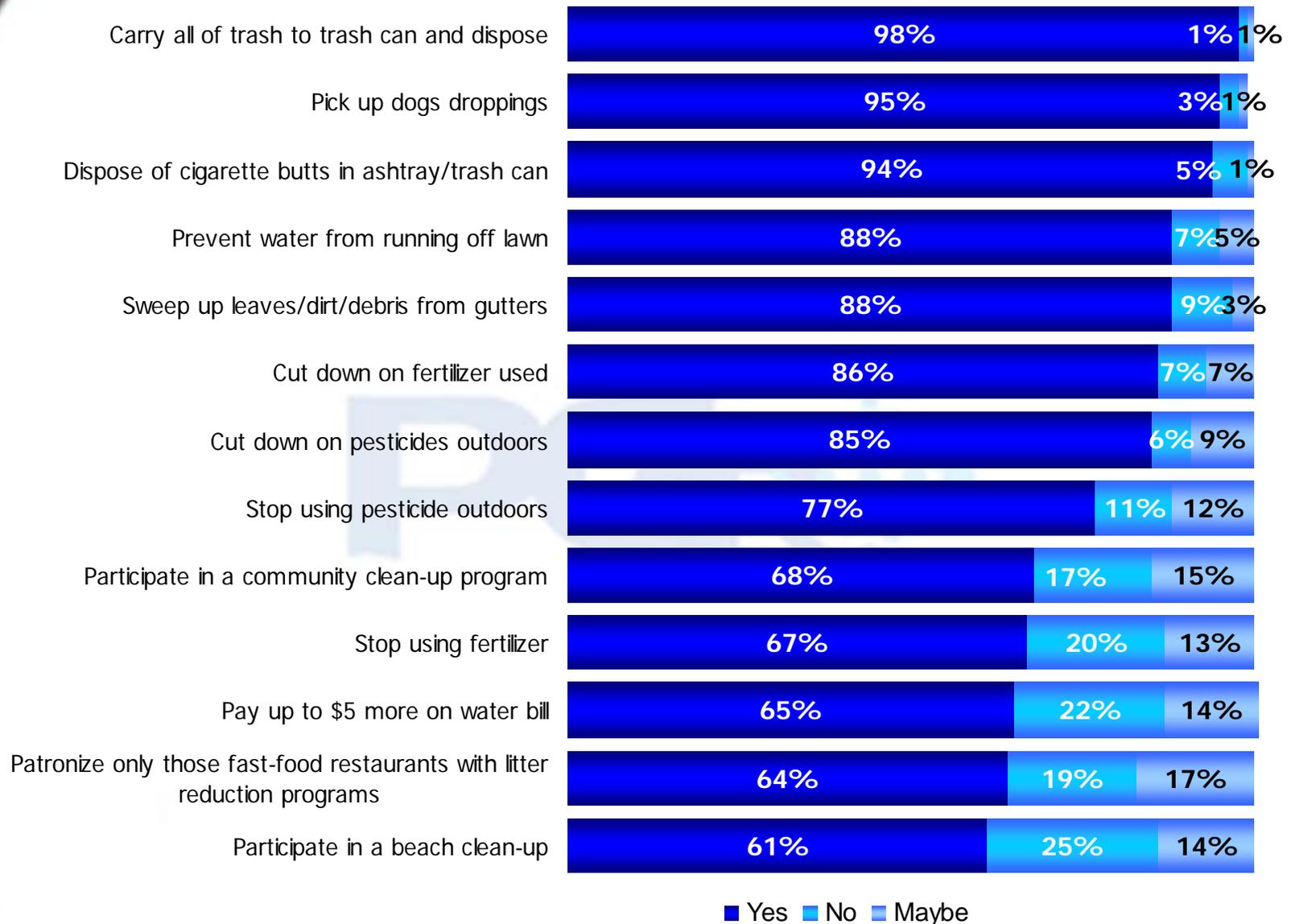


Base: Total Los Angeles County Residents (N=600)

Question: Q.8: If you learned that something you were doing could contribute to problems associated with litter, how willing would you be to change your behavior? Would you say you...?

Storm Water Residential 2006 Report

Willingness to Change Pollution Causing Habits



Base: Total Los Angeles County Residents (N=600)

Question: Q.20: Which of the following would you be willing to do if you learned that there was a good reason for doing so? Would you be willing to...?

Storm Water Residential 2006 Report



Public Programs

	2005	2006
Feelings about Potential Public Programs		
Awareness programs to help people understand that litter and debris can flow directly to the local beaches where children swim	N/A	75%
Court-ordered community service for littering	N/A	63%
Publicly-sponsored programs to develop neighborhood pride	N/A	57%
Having neighborhoods receive a financial or other rewards for being the "Cleanest Neighborhood"	N/A	51%
A fine of up to \$1,000 per littering occurrence	N/A	49%
A program to publicize the name, license plate number, home or business address of individuals or business who litter in newspapers or on a public Web site	N/A	38%
Heard of/Seen Project Pollution Prevention		
Yes	N/A	19%
No	N/A	81%
Heard of 1(888) CLEAN-LA		
Yes	28%	28%
No	72%	72%
Base: Total Los Angeles County Residents		
	(1,000)	(600)
Called 1(888) CLEAN-LA		
Yes	8%	15%
No	92%	85%
Base: Heard of 1(888) CLEAN-LA		
	(278)	(165)

Questions: Q.22: How do you feel about each of the following potential actions designed to help change people's behaviors or habits that might contribute to pollution or littering? How do you feel about...? Q.25: Have you heard or seen the name Project Pollution Prevention? Q.23: Have you seen or heard the phone number 1(888) CLEAN-LA? Q.24: Have you called the phone number 1(888) CLEAN-LA?

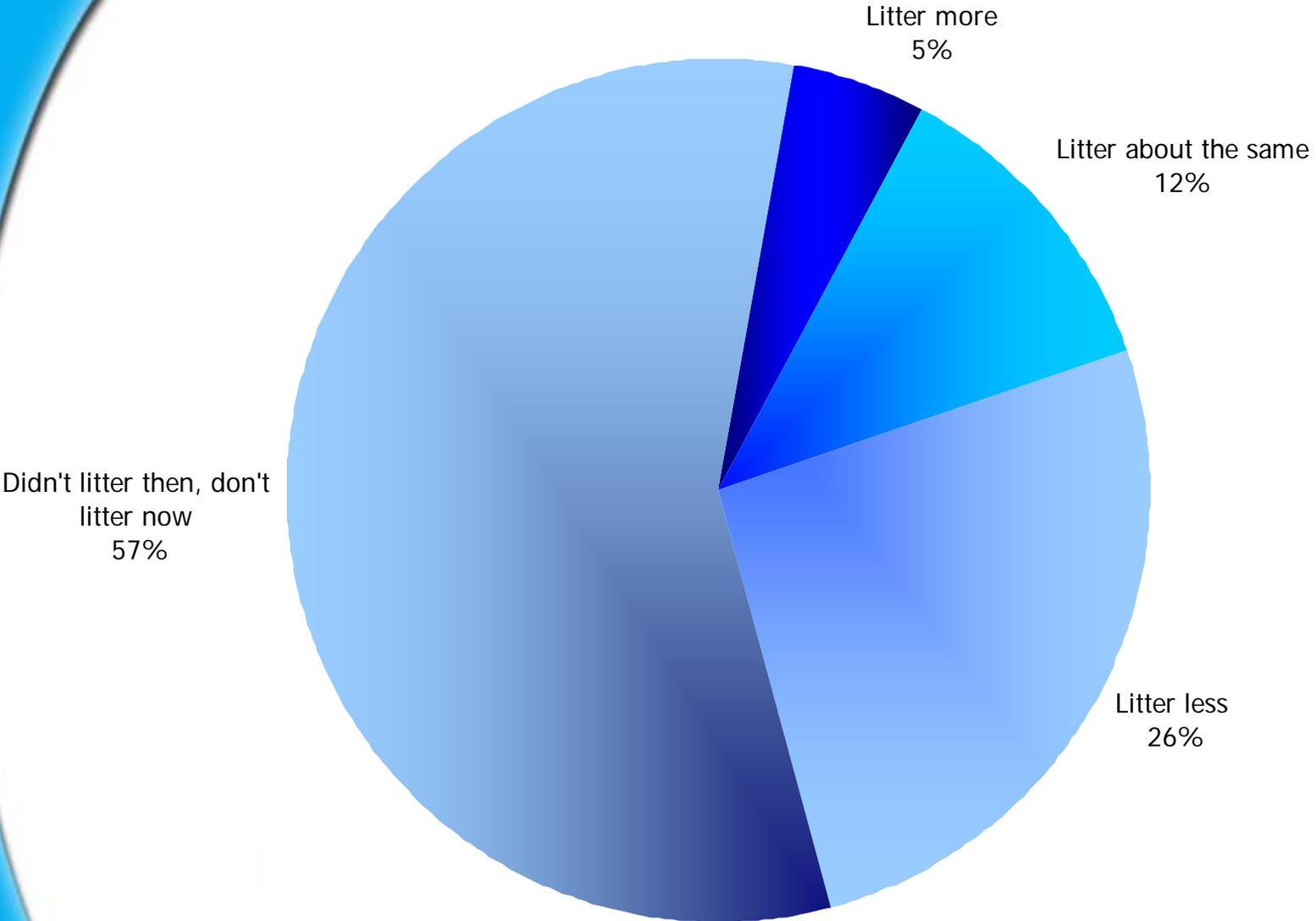
Behaviors Related to Water Pollution



Behaviors Related to Water Polluting

- Most residents consider themselves long-term, non-litterers (58%) who have not made a change in this regard over the past five years.
 - In contrast, about one-fourth of residents believe they have reduced their littering behavior.
- The Storm Water public education campaign appears to have encouraged some reduction in littering behaviors, especially dropping litter from cars, but some other storm drain related polluting behaviors are at or above their 1997 levels.
 - Dropping cigarette butts has shown the most improvement, probably due to the combined effects of public education and lower rates of smoking in the population.
- Household polluting behaviors have generally rebounded to their original levels after declining in the early years of the education campaign.
 - Letting water run into the street and hosing yard debris into storm drains are above their 1997 levels and, in combination with population growth, have added substantial pollutant volume.

Changed Littering Behavior in the Past Five Years



Base: Total Los Angeles County Residents (N=600)
Question: Q.21: In the past five years, have you changed any of your habits related to reducing any littering/pollution activities?



Prevalence of Polluting/Potentially Polluting Behaviors

	1997	2001	2005	2006
Individual Pollution-Causing Behaviors in Past Month				
Drop a cigarette butt on the ground	16%	13%	10%	8%
Drop litter on the ground or out a car window	13%	12%	8%	7%
Allow paper or trash to blow into the street	10%	12%	8%	9%
Throw something in the gutter or down a storm drain	5%	4%	3%	3%
Empty the car ashtray into the street	3%	1%	1%	1%
Throw fast food wrappers in the street or gutters	N/A	N/A	3%	3%
Walk a dog without picking up the droppings	4%	3%	2%	3%
Household Pollution-Causing Behaviors in Past Month				
Water the lawn or garden and let the water run into the street	13%	12%	12%	16%
Hose leaves or dirt off a driveway or sidewalk into the street	12%	14%	12%	15%
Wash off paint brushes under an outdoor faucet	6%	4%	6%	5%
Spray the garden or lawn with pesticides	5%	7%	6%	7%
Use too much manure or fertilizer	1%	1%	2%	2%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)

Pollution Volumetrics – Occurrences Per Month 2006

	1997	2001	2005	2006
Individual Pollution-Causing Behaviors*				
Drop a cigarette butt on the ground	1,053,746	914,824	728,287	594,520
Drop litter on the ground or out a car window	856,169	838,007	601,952	520,205
Allow paper or trash to blow into the street	658,591	803,090	616,815	668,835
Throw something in the gutter or down a storm drain	329,296	279,336	193,219	222,945
Throw fast food wrappers in the street or gutters	N/A	N/A	185,788	222,945
Empty a car ashtray into the street	197,577	41,900	81,747	74,315
Base: LA County Population 16+				
Household Pollution-Causing Behaviors**				
Water the lawn or garden and let the water run into the street	368,100	391,898	385,451	501,399
Hose leaves or dirt off a driveway or sidewalk into the street	339,785	419,453	360,381	470,061
Wash off paint brushes under an outdoor faucet	169,893	134,715	197,426	156,687
Spray the garden or lawn with pesticide	141,577	211,257	188,025	219,362
Walk a dog without picking up the droppings	113,262	82,666	62,675	94,012
Use too much manure or fertilizer	42,473	36,740	53,274	62,675
Base: LA County Households				

Note: All estimates assume one occurrence per month.

*1997 based on 6,585,912 individuals age 16+ in Los Angeles County, 2001 on 6,983,391 and 2005 and 2006 based on 7,431,500.

**1997 based on 2,831,542 households in Los Angeles County, 2001 on 3,061,702 and 2005 and 2006 on 3,133,744 households. All estimates assume one occurrence per month.

Advertising Message Recall/Impact



Advertising Message Recall/Impact

- Among those who recall hearing about water pollution or neighborhood litter, two-fifths recall messages about water pollution, over one-fourth (27%) recall messages about littering and nearly one-in-six (17%) recall messages about storm drains.
- Recall of specific ad elements suggests that the television and radio ads are driving anti-littering awareness, with two-thirds of those who recall messages specifically aware of the “trashing California is like trashing your home” theme and nearly half (44%) recognizing the “two guys throwing litter in houses” storyline.
- The messages have enabled at least some residents to connect the littering behavior to storm drains, with one-third (34%) linking littering to water pollution.
 - Substantial numbers also connect these behaviors to clogging gutters/drains (16%), harming marine life (13%), poisoning beaches (11%), health problems (12%) and beach closures (12%).
- The pollutants mentioned in the ads are apparent to residents, who cite litter/trash (33%), cigarette butts (16%) and food wrappers (7%) as key sources of litter or pollution in neighborhoods.
 - The County’s used oil recycling education campaign also appears to be reaching residents, with one-quarter (24%) of message-aware Los Angeles County residents citing motor oil as a pollution source.
- Overall, most residents find the campaign meaningful (61%) and thought-provoking (59%), while somewhat fewer feel they learned something new (51%) or that they had changed their behavior as a result of seeing the ads (44%).

Information Recalled From 2006 "Project Pollution Prevention" Campaign

	2001	2005	2006
Specific Information Recalled			
Polluting the Storm Drain Pollutes the Water/Ocean (Net)	40%	24%	17%
Trash/oil clogs storm drains	N/A	12%	6%
Storm drains go straight to the ocean/whatever goes in drains goes into the ocean	20%	15%	10%
Don't put anything in storm drains	5%	9%	2%
Water Pollution (Net)	30%	19%	38%
Unsafe/contaminated beaches	8%	7%	11%
People pollute/litter our beaches	N/A	5%	10%
Ocean/bay is polluted	13%	4%	8%
Beach closures	3%	4%	13%
Fish/wildlife dying	7%	4%	8%
Oil spills/oil in the ocean	4%	2%	1%
Pollution in Neighborhoods (Net)	N/A	22%	27%
Neighborhood pollution/litter is unhealthy	N/A	16%	25%
Making neighborhoods look ugly/dirty	N/A	7%	2%
Organized clean up	N/A	3%	2%
Big companies pollute/dump waste	N/A	2%	2%
Need to recycle	N/A	2%	0%
Proper disposal of animal waste	N/A	1%	0%
Wouldn't trash your home	N/A	2%	1%
Don't know	12%	19%	4%
Base: Recall Seeing, Hearing or Reading About Pollution of the Ocean, Rivers, Beaches or About Litter or Pollution in Neighborhoods	(654)	(678)	(390)

Question: Q.7: What information have you seen, heard or read about pollution of the ocean, rivers and beaches?

Recall of Specific Advertising Messages – Aided

	2005	2006
Recall of Specific Advertising Messages		
Litter or pollution in the street ends up in the ocean	70%	78%
Throwing trash in California's streets is like throwing trash in own home	69%	67%
Keep our neighborhoods and beaches clean	N/A	60%
Pick up after your pet	64%	58%
Dispose of fast food wrappers properly	53%	49%
Dispose of cigarettes properly	55%	48%
Throw trash in cans, not in the street	N/A	45%
Two guys going into house and throwing trash	N/A	44%
Billboard showing trash in the street or gutter	N/A	26%
People using street trash to provide directions	N/A	15%
Base: Total Los Angeles County Residents Who Recall Advertising About Things Getting into Streets/Storm Drains and Causing Problems	(509)	(339)

Question: Q.18: Do you recall the ads mentioning any of the following messages?

Recall of Consequences of Storm Drain Pollution – Unaided

	2001	2005	2006
Consequences of Litter/Pollution in Neighborhoods			
Polluting the ocean	45%	39%	34%
Killing/threatening marine life	29%	21%	13%
Poisoning beaches	13%	15%	11%
Clogging gutters/storm drains	11%	13%	16%
Causing health problems	11%	11%	12%
Closing beaches	6%	10%	12%
Flooding	5%	8%	7%
Spoiling/contaminating neighborhoods	6%	5%	4%
Making neighborhoods ugly/dirty	1%	4%	2%
Spreading disease	3%	4%	3%
Kids swim in pollution	2%	1%	2%
Don't know/don't remember	23%	19%	23%
Base: Total Los Angeles County Residents Who Recall Advertising About Things Getting into Streets/Storm Drains and Causing Problems			
	(404)	(509)	(339)

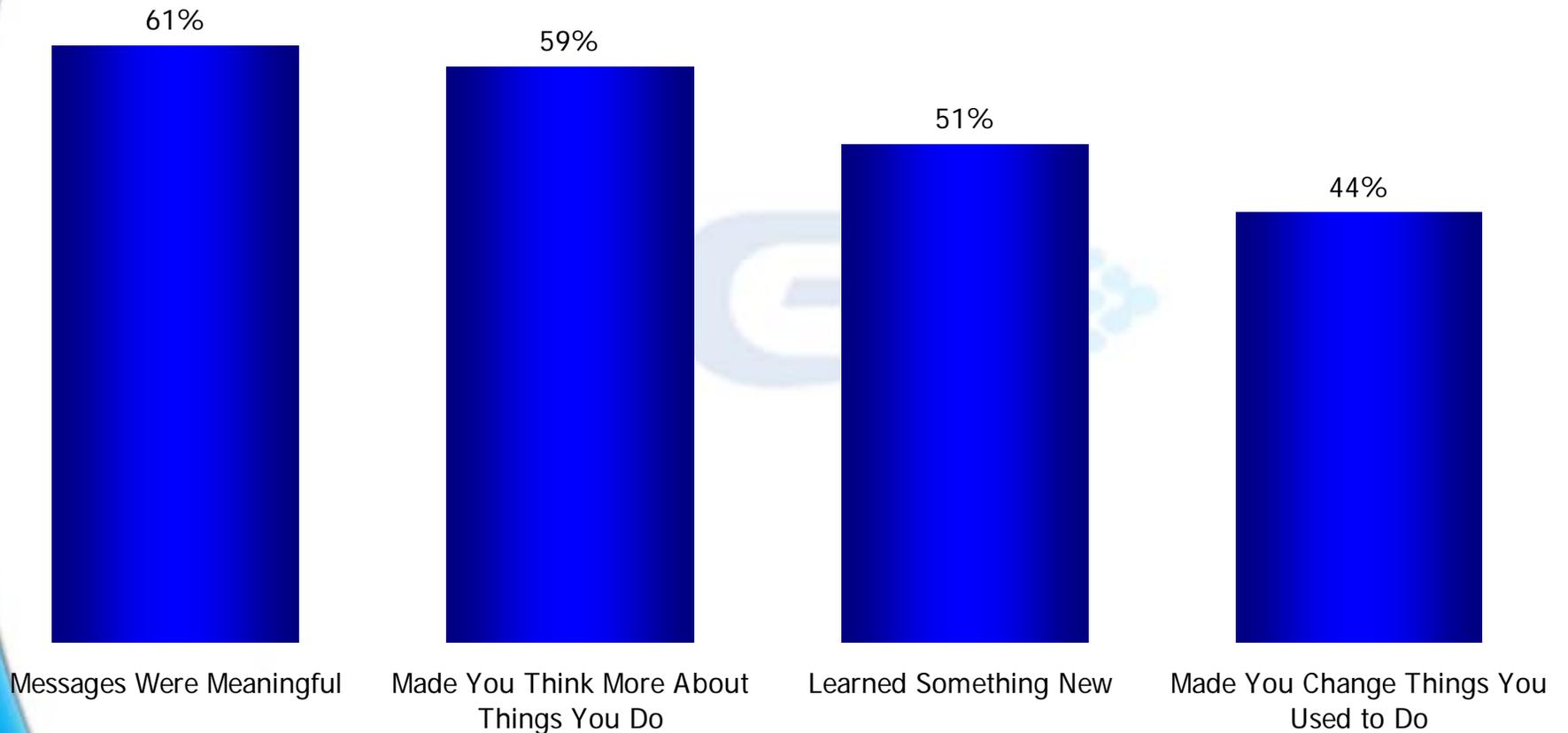
Question: Q.17: What kinds of problems did the ads say are being caused by the things that are getting into the street or storm drains?

Recall of Specific Sources of Litter/Pollution – Unaided

	2001	2005	2006
Pollution Agents Mentioned in Commercials As Sources of Litter/Pollution in Neighborhoods			
Litter/trash	37%	36%	33%
Motor oil	46%	36%	24%
Cigarette butts	14%	17%	16%
Food wrappers	3%	11%	7%
Chemicals	12%	11%	10%
Bottles	8%	9%	13%
Dog waste/droppings	15%	9%	5%
Cans	8%	8%	13%
Recyclable materials	5%	8%	3%
Hazardous waste	7%	6%	8%
Harmful liquids	6%	6%	5%
Coffee cups	5%	6%	5%
Paint	13%	5%	4%
Six-pack rings	5%	4%	4%
Pesticides	10%	4%	3%
Leaves	5%	4%	4%
Fertilizer	6%	2%	2%
Base: Total Los Angeles County Residents Who Recall Advertising About Things Getting into Streets/Storm Drains and Causing Problems			
	(404)	(509)	(339)

Question: Q.16: What things do you recall the commercials or ads mentioning that are getting into the street or storm drains and causing problems?

Persuasion Statement Ratings – Agree Strongly



Base: Total Los Angeles County Residents Who Recall Neighborhood Litter/Pollution Advertising (N=339)
Question: Q.19: How much do you agree with this statement?

Lifestyle Characteristics



Lifestyle Characteristics

- High rates of vehicle ownership suggest that the campaign's billboards are a viable way of reaching residents with a relevant anti-pollution message.
- Ownership of power tools, lawns, gardens and pets is highly prevalent, presenting residents with ample opportunity to engage in, or to avoid, polluting behavior.
- The nationwide decline in cigarette smoking continues to be reflected in the behavior of County residents with only 8% percent now smoking.
- The vast majority of County residents have Internet access (80%) indicating that this medium may be an increasingly effective element of future campaigns.



Incidence of Potential Pollutant Ownership

	1997	2001	2005	2006
Car, Truck or Motorcycle	92%	89%	90%	91%
Power Tools	N/A	57%	53%	63%
Lawn	N/A	56%	51%	60%
Flower Garden	49%	51%	51%	54%
Dog	34%	30%	31%	33%
Fishing Equipment	28%	26%	20%	23%
Vegetable Garden	20%	19%	17%	18%
Water Skis or Surfboard	9%	9%	13%	14%
Boat or Personal Watercraft	7%	6%	5%	7%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)

Question: Q.2a: Which of the following do you, or does someone in your household, have?

Beach Closures - Have Been Impacted in Past Year

	2001	2005	2006
Beach Closure Impact			
Affected	12%	9%	14%
Not affected	88%	91%	86%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(600)



Question: Q.26: *Would you say that in the past year you have or have not been personally impacted by a beach closure?*

Cigarette Usage

	1997	2001	2005	2006
Use Cigarettes				
Yes	N/A	20%	13%	8%
No	N/A	80%	87%	92%
Base: Total Los Angeles County Residents	(N/A)	(1,000)	(1,000)	(600)



Questions: Q.36: Do you personally smoke cigarettes?

Internet Access

	2001	2005	2006
Have Internet Access (Net)	75%	77%	80%
At home	55%	60%	66%
At work	39%	41%	49%
At school	26%	22%	26%
Somewhere else	31%	31%	33%
Do not have Internet access	25%	23%	20%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(600)

Question: Q.27: Do you have access to the Internet?

Demographic Characteristics



Demographic Characteristics

- The tracking study participants reflect the County's general population and economic trends, with the resident population being slightly older, having a higher median income and higher percentage of Hispanic residents than in 1997.



Demographic Characteristics

	1997	2001	2005	2006
Gender				
Male	49%	52%	46%	48%
Female	51%	48%	54%	52%
Age				
16-18	5%	8%	6%	6%
19-24	14%	14%	9%	7%
25-34	22%	21%	15%	15%
35-44	21%	22%	22%	22%
45-54	14%	14%	17%	17%
55-64	11%	9%	15%	17%
65+	13%	12%	16%	17%
Median (years)	38.8	38.4	44.3	46.2
Education				
Grade school or less	7%	5%	9%	5%
Some high school	9%	15%	12%	13%
High school graduate	25%	24%	20%	21%
Trade or technical school	3%	2%	3%	3%
Some college	28%	23%	23%	21%
College graduate	19%	19%	22%	24%
Some post graduate work	3%	3%	3%	4%
Post graduate degree	7%	8%	8%	10%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)

Questions: Q.A: What is your gender? Q.D: Which of the following categories includes your age? Q.34: What is the last grade of formal education you completed?

Demographic Characteristics

	1997	2001	2005	2006
Marital Status				
Married	46%	39%	51%	50%
Single	34%	41%	32%	33%
Divorced	10%	10%	8%	8%
Widowed	7%	6%	6%	6%
Separated	3%	3%	3%	3%
Number of Children Under 18 in Household				
None	53%	56%	43%	49%
One	17%	17%	22%	20%
Two	19%	16%	21%	19%
Three	6%	8%	8%	9%
Four or more	4%	4%	6%	3%
Number of Household Members				
One	15%	18%	16%	18%
Two	27%	26%	23%	28%
Three	18%	18%	20%	18%
Four	20%	18%	20%	18%
Five	11%	11%	11%	12%
Six or more	8%	9%	10%	6%
Mean	3.0	3.0	3.2	3.0
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)

Questions: Q.29: Are you...? Q.31: And how many of those people are under the age of 18? Q.30: Including yourself, how many people are currently living in your household?

Storm Water Residential 2006 Report

Demographic Characteristics

	1997	2001	2005	2006
Residence Type				
Private home/house	64%	57%	61%	64%
Apartment	26%	33%	31%	24%
Condo/townhouse	8%	7%	4%	8%
Other	2%	3%	4%	4%
Annual Household Income*				
Less than \$40,000	59%	60%	50%	42%
\$40,000 to under \$60,000	20%	19%	16%	17%
\$60,000 to under \$80,000	11%	11%	11%	12%
\$80,000 or more	10%	9%	23%	30%
Median (\$'000)	\$38.6	\$38.7	\$39.8	\$49.7
Employment Status				
Employed full-time	50%	51%	51%	49%
Employed part-time	15%	15%	14%	17%
Retired	15%	13%	17%	18%
Not employed	19%	21%	18%	16%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)

*Base: Those 19 years of age or older (N=950/920/940/566)

Questions: Q.28: Is your residence a...? Q.35: Is your total annual household income before taxes...? Q.32: Are you currently...?

Demographic Characteristics

	1997	2001	2005	2006
Ethnicity				
White/Anglo/Caucasian	45%	36%	38%	37%
Hispanic/Latino/Spanish Origin	30%	37%	44%	42%
Black/African American	10%	13%	9%	10%
Asian/Oriental/Pacific Islander	11%	9%	5%	8%
Native American/Indian	1%	1%	1%	0%
Other	2%	1%	3%	3%
Refused	2%	3%	0%	0%
Length of Time Lived in Los Angeles County				
6 months to less than 5 years	6%	10%	7%	8%
5 years to less than 15 years	21%	19%	18%	16%
15 years or longer	73%	71%	75%	75%
Base: Total Los Angeles County Residents	(1,000)	(1,000)	(1,000)	(600)

Questions: Q.38: How would you describe your race or ethnicity? Q.C: How long have you lived in Los Angeles County?

Appendix A: Questionnaire



Appendix B: “Project Pollution Prevention” Advertisements

