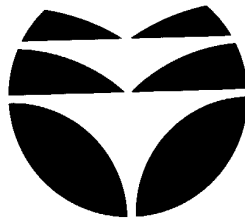


# STATE OF CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

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GRASSCYCLING FOLLOW-UP SURVEY

**FINAL DRAFT REPORT**



JD FRANZ RESEARCH, INC.  
**Public Opinion and Marketing Research**

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February, 2000

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# **I. INTRODUCTION**

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The research findings presented in this report derive from a telephone survey of residents of Contra Costa, Los Angeles, Napa, Riverside, San Bernardino, and Solano Counties that was commissioned by the California Integrated Waste Management Board (CIWMB) and conducted by JD Franz Research, Inc., of Sacramento.

Encompassing 1,247 completed interviews, it was implemented on the following dates at the request of the individual counties:

	Dates
<i>Los Angeles</i>	September 7-19, 1999
<i>Napa</i>	September 16-27, 1999
<i>Contra Costa</i>	October 3-24, 1999
<i>Riverside</i>	November 9-29, 1999
<i>San Bernardino</i>	November 17-29, 1999
<i>Solano</i>	November 26 - December 2, 1999

The primary purposes of the survey were to follow up on a baseline survey and thereby to evaluate the effectiveness of three campaigns to promote grasscycling: one in Contra Costa, Napa, and Solano Counties (the Bay Area); one in Los Angeles County; and one in Riverside and San Bernardino Counties (the Inland Empire). Specific areas of inquiry, which were identical to those in the baseline survey, were as follows:

- Whether respondents or others mow respondents' lawns
- The kinds of lawnmowers those who mow their own lawns have
- How often lawns are mowed in both the drier and wetter months
- What is done with the lawn clippings
- Lawn square footages
- Awareness of the word "grasscycling"
- Ability to define grasscycling correctly
- Reasons those who do not grasscycle do not do so
- Sources of information about grasscycling
- Impact of the information about grasscycling

- Completeness of the information about grasscycling
- Aspects of the information about grasscycling that were particularly interesting, impressive, or informative
- Levels of concern about reducing waste at home
- Levels of concern about recycling at home
- Recycling behavior at home
- In Riverside and San Bernardino Counties, awareness of information about waste prevention or recycling
- In Contra Costa, Napa, and Solano Counties, awareness of and participation in composting classes or workshops
- In Solano County, composting behavior
- Respondent demographics, including home ownership status, age, educational attainment, ethnicity, household income, gender, and county of residence

The goal for the survey was to interview 384 respondents in each of the participating program areas. Within the Contra Costa/Napa/Solano area, 184 interviews were to be conducted in Contra Costa County, 100 were to be conducted in Napa County, and 100 were to be conducted in Solano County. In the Riverside/San Bernardino area, the sample was to be selected in proportion to population.

Because all of the samples were fully called out, more interviews were completed than planned in every area. Actual sample sizes and their respective margins of error at the 95 percent confidence level are displayed in Table 1.

<b>Table 1</b>		
<b>SAMPLE SIZES AND MARGIN OF ERROR</b>		
	Sample Size	Margin of Error
Contra Costa	204	6.86
Los Angeles	450	4.62
Napa	102	9.70
Riverside	200	6.93
San Bernardino	187	7.17
Solano	102	9.70
Refused (San Bernardino/Riverside)	2	

The methods used in conducting the survey were the same as the methods used in conducting the baseline, with one exception. This exception was that every effort was made to use the codebooks for open-ended questions developed for the baseline before adding new codes for the follow-up.

Following this Introduction, the report is divided into two additional sections. **Section II** presents and discusses the **Findings**, while **Section III** contains the research firm’s **Conclusions and Recommendations**.

For reference, there are also four appendices. **Appendix A** contains a copy of the **Survey Instrument**. **Appendix B** presents **Detailed Data Tabulations for the Bay Area**, **Appendix C** includes **Detailed Data Tabulations for the Inland Empire**, and **Appendix D** contains **Detailed Data Tabulations for Los Angeles County**. Data tabulations by county within the Bay Area have been sent to the respective counties.

## **II. FINDINGS**

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Findings from the survey are presented here in the same order in which the questions were posed to respondents. Readers who are interested in the precise phrasing of the

inquiries are invited to consult the copy of the survey instrument that is included in Appendix A.

Throughout, comparisons are made between the pre-campaign survey and the post-campaign research. Where there are statistically significant differences ( $p < .05$ ), these are noted in the text.

### **Lawn Mowing**

Figures 1 through 3 display the extent to which respondents said they mow their own lawns. Affirmative answers represented about two-thirds of those in the Bay Area and the Inland Empire (68 and 65 percent, respectively) and about two-fifths (38 percent) of those in Los Angeles County.



**EXTENT TO WHICH RESPONDENTS  
MOW THEIR OWN LAWNS  
Bay Area**

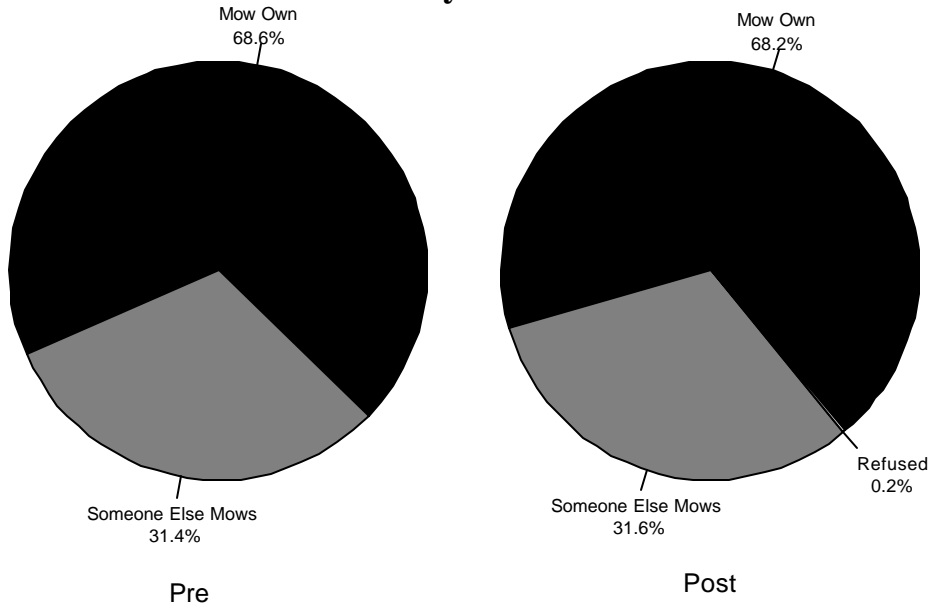


Figure 1

**EXTENT TO WHICH RESPONDENTS  
MOW THEIR OWN LAWNS  
Inland Empire**

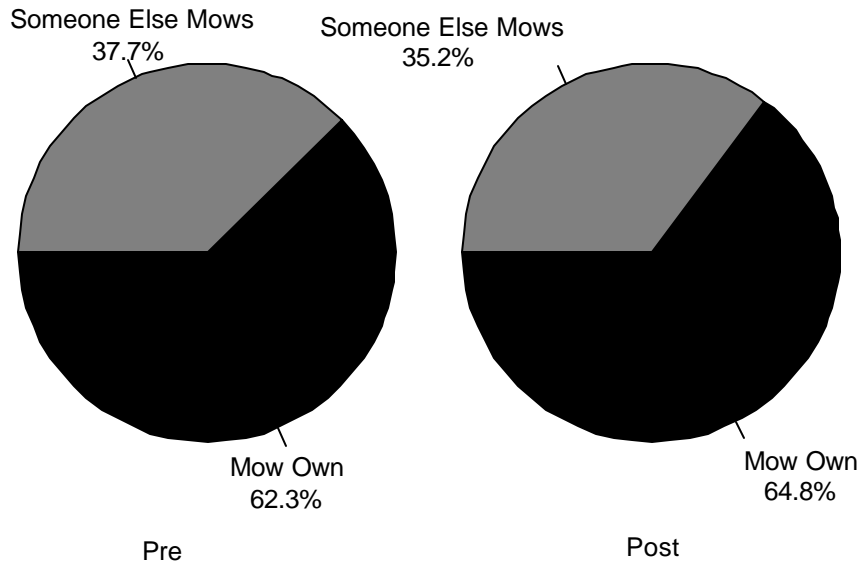


Figure 2

**EXTENT TO WHICH RESPONDENTS  
MOW THEIR OWN LAWNS  
Los Angeles County**

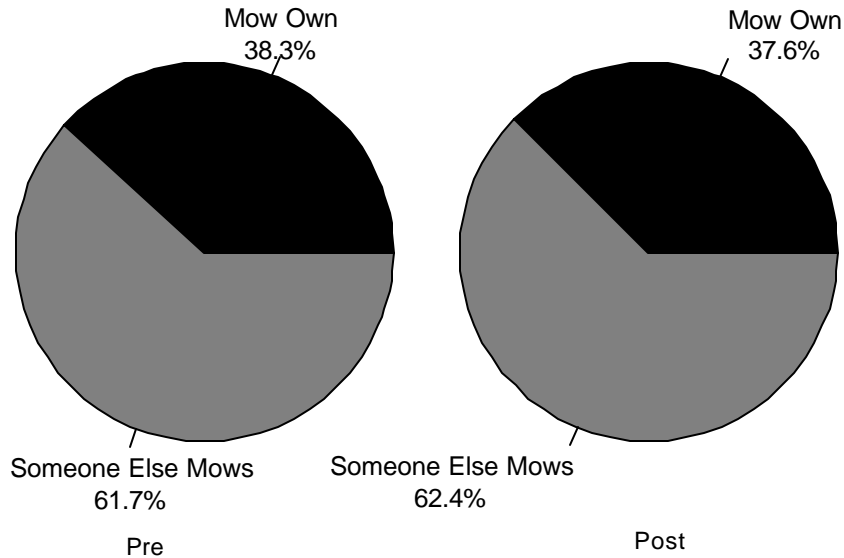


Figure 3

As shown in Tables 1, 2, and 3 by far the majority of those who mow their own lawns said they use gas-powered push mowers. The proportions range from a low of 81 percent in the Bay Area and Los Angeles County to a high of 88 percent in the Inland Empire.

Table 1		
TYPES OF MOWERS RESPONDENTS USE		
Bay Area		
	Pre	Post
	Percent	
Non-Powered Push Mower (Human Power Only)	4.2	8.3
Gas-Powered Push Mower	82.5	81.3
Electric-Powered Plug-In Push Mower (With Cord)	9.1	6.8

Electric-Powered/Battery-Powered Cordless Push Mower	2.1	2.5
Riding Mower	1.0	.4
Other	.3	.7
Don't Own One	.3	-
Refused	.3	-

<b>Table 2</b>		
<b>TYPES OF MOWERS RESPONDENTS USE</b>		
<b>Inland Empire</b>		
	Pre	Post
	Percent	
Non-Powered Push Mower (Human Power Only)	5.3	2.4
Gas-Powered Push Mower	84.8	88.1
Electric-Powered Plug-In Push Mower (With Cord)	6.4	4.8
Electric-Powered/Battery-Powered Cordless Push Mower	.8	2.4
Riding Mower	1.9	1.6
Other	.4	.4
Don't Own One	.4	-
Refused	-	.4

<b>Table 3</b>		
<b>TYPES OF MOWERS RESPONDENTS USE</b>		
<b>Los Angeles County</b>		
	Pre	Post
	Percent	
Non-Powered Push Mower (Human Power Only)	9.5	9.5
Gas-Powered Push Mower	81.0	80.5
Electric-Powered Plug-In Push Mower (With Cord)	5.4	5.9
Electric-Powered/Battery-Powered Cordless Push Mower	3.4	1.8
Riding Mower	-	.6
Other	.7	.6
Don't Know	-	1.2

Table 4 through 6 illustrate that majorities of respondents in all three areas said they mow their lawns once a week during the drier months. The respective figures are 59 percent for the Bay Area, 67 percent for the Inland Empire, and 57 percent for Los Angeles County.

Table 4		
FREQUENCY OF MOWING DURING THE DRIER MONTHS		
Bay Area		
	Pre	Post
	Percent	
More Than Once a Week	1.9	2.9
Once a Week	57.3	59.3
Once Every Two Weeks	28.5	29.9
Once Every Three Weeks	2.2	2.0
Once a Month	3.1	3.9
Less Than Once a Month	2.2	.7
Never	.2	-
Don't Know	4.6	1.2

Table 5		
FREQUENCY OF MOWING DURING THE DRIER MONTHS		
Inland Empire		
	Pre	Post
	Percent	
More Than Once a Week	2.6	4.6
Once a Week	63.7	67.4
Once Every Two Weeks	21.5	20.3
Once Every Three Weeks	1.7	2.1
Once a Month	4.2	3.1
Less Than Once a Month	2.1	1.0
Never	.5	-
Don't Know	3.8	1.5

Table 6		
FREQUENCY OF MOWING DURING THE DRIER MONTHS		
Los Angeles County		
	Pre	Post
	Percent	
More Than Once a Week	1.3	2.2
Once a Week	58.9	57.1
Once Every Two Weeks	27.6	31.8
Once Every Three Weeks	1.6	2.7
Once a Month	5.5	4.4
Less Than Once a Month	1.6	.2
Don't Know	3.6	1.6

As Tables 7, 8, and 9 indicate, the largest groups of respondents in the Bay Area and the Inland Empire said they mow their lawns once every two weeks during the wetter months (30 and 37 percent, respectively). In Los Angeles County, the largest group (37 percent) said they mow once a week during these months. Responses of once a week and once every two weeks total the majority in the Inland Empire (64 percent) and Los Angeles County (66 percent) and close to half (47 percent) in the Bay Area.

Table 7		
FREQUENCY OF MOWING DURING THE WETTER MONTHS		
Bay Area		
	Pre	Post
	Percent	
More Than Once a Week	.2	-
Once a Week	10.3	16.4
Once Every Two Weeks	16.5	30.4
Once Every Three Weeks	4.3	11.3
Once a Month	28.8	24.3
Less Than Once a Month	19.4	7.6
Never	12.5	3.9
Don't Know	7.9	6.1

Table 8		
FREQUENCY OF MOWING DURING THE WETTER MONTHS		
Inland Empire		
	Pre	Post
	Percent	
More Than Once a Week	1.2	2.1
Once a Week	25.5	26.5
Once Every Two Weeks	23.1	37.0
Once Every Three Weeks	6.1	8.0
Once a Month	21.2	13.4
Less Than Once a Month	7.3	5.7
Never	9.0	2.1
Don't Know	6.6	5.4

Table 9		
FREQUENCY OF MOWING DURING THE WETTER MONTHS		
Los Angeles County		
	Pre	Post
	Percent	
More Than Once a Week	.3	.7
Once a Week	34.6	36.7
Once Every Two Weeks	25.5	29.8
Once Every Three Weeks	4.7	5.1
Once a Month	18.8	19.3
Less Than Once a Month	6.0	2.4
Never	2.6	1.1
Don't Know	7.6	4.9

Differences on this measure in the Bay Area are statistically significant. Those interviewed during the post-campaign survey were more likely to report mowing every two weeks during the wetter months and less likely to report mowing less than once a month.



## Disposal of the Lawn Clippings

Tables 10 through 12 display respondents' answers when they were asked what they do with their lawn clippings. As these figures indicate, the largest groups in every area said they put them out for green waste recycling (40 percent in the Bay Area, 38 percent in the Inland Empire, and 48 percent in Los Angeles County). Also in every area, the second largest groups said they put the clippings in the trash (20 percent, 26 percent, and 28 percent, respectively).

Table 10		
WHAT IS DONE WITH THE LAWN CLIPPINGS		
Bay Area		
	Pre	Post
	Percent	
Throw in Trash/Garbage	24.0	20.3
Taken Away by Gardener/Lawn Service	9.1	8.8
Put in Recycle Yard Waste Can/Bin/ Cart/Container - Put Out for Recycling	37.2	40.4
Put in Compost Pile/Use as Mulch	16.5	15.9
Leave on Lawn	8.6	11.3
Take to Compost Facility	2.4	1.2
Take to Landfill/Transfer Station	.7	1.0
Other	4.3	2.7
Don't Know	1.9	1.7

Table 11		
WHAT IS DONE WITH THE LAWN CLIPPINGS		
Inland Empire		
	Pre	Post
	Percent	
Throw in Trash/Garbage	32.1	26.2
Taken Away by Gardener/Lawn Service	12.3	11.1
Put in Recycle Yard Waste Can/Bin/ Cart/Container - Put Out for Recycling	36.1	38.0
Put in Compost Pile/Use as Mulch	7.5	8.7
Leave on Lawn	8.5	9.8
Take to Compost Facility	1.4	.8
Take to Landfill/Transfer Station	.2	.5
Other	3.3	5.9
Don't Know	3.3	.3

Table 12		
WHAT IS DONE WITH THE LAWN CLIPPINGS		
Los Angeles County		
	Pre	Post
	Percent	
Throw in Trash/Garbage	35.2	27.8
Taken Away by Gardener/Lawn Service	11.5	10.2
Put in Recycle Yard Waste Can/Bin/ Cart/Container - Put Out for Recycling	40.6	47.6
Put in Compost Pile/Use as Mulch	6.3	6.4
Leave on Lawn	5.5	6.2
Take to Compost Facility	-	.7
Take to Landfill/Transfer Station	-	.7
Other	2.1	.7
Don't Know	2.6	3.1

## Lawn Sizes

As shown in Figures 4, 5, and 6, most respondents in all three areas said they do not know the sizes of their lawns. The respective figures are 58 percent in the Bay Area, 66 percent in the Inland Empire, and 67 percent in Los Angeles County.

### EXTENT TO WHICH RESPONDENTS KNOW THE SIZES OF THEIR LAWNS Bay Area

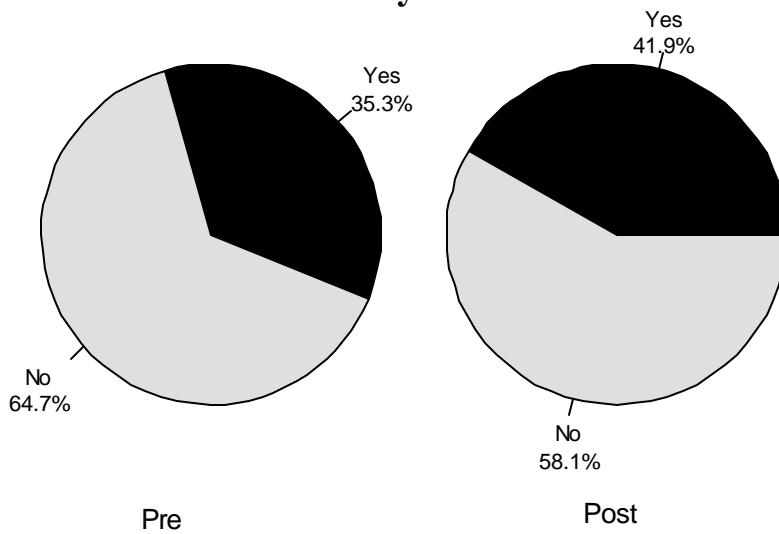


Figure 4

**EXTENT TO WHICH RESPONDENTS KNOW  
THE SIZES OF THEIR LAWNS  
Inland Empire**

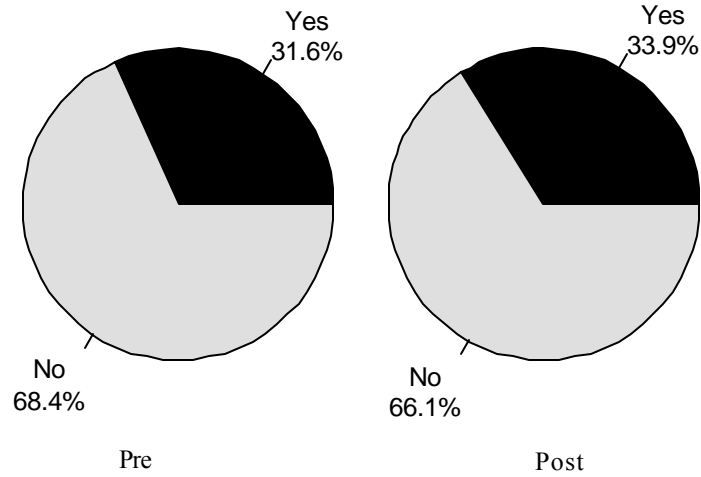


Figure 5

**EXTENT TO WHICH RESPONDENTS KNOW  
THE SIZES OF THEIR LAWNS  
Los Angeles County**

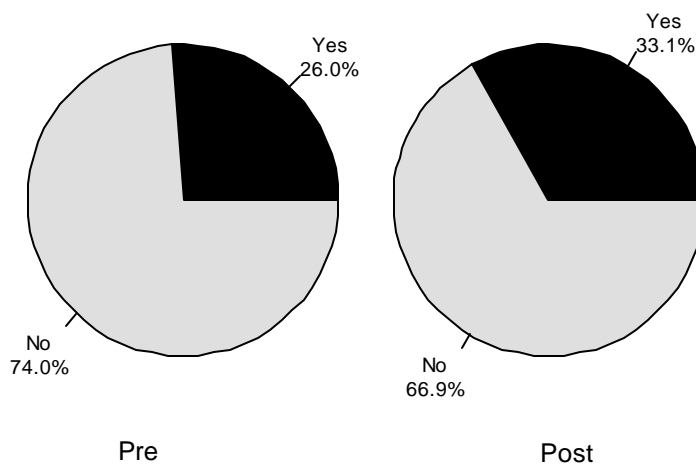


Figure 6

Known and estimated lawn sizes are displayed in Figures 7 through 9. Large lawns (more than 20 by 50 feet) predominated in all three areas: 36 percent in the Bay Area, 42 percent in the Inland Empire, and 35 percent in Los Angeles County.

### KNOWN AND ESTIMATED SIZES OF LAWNS Bay Area

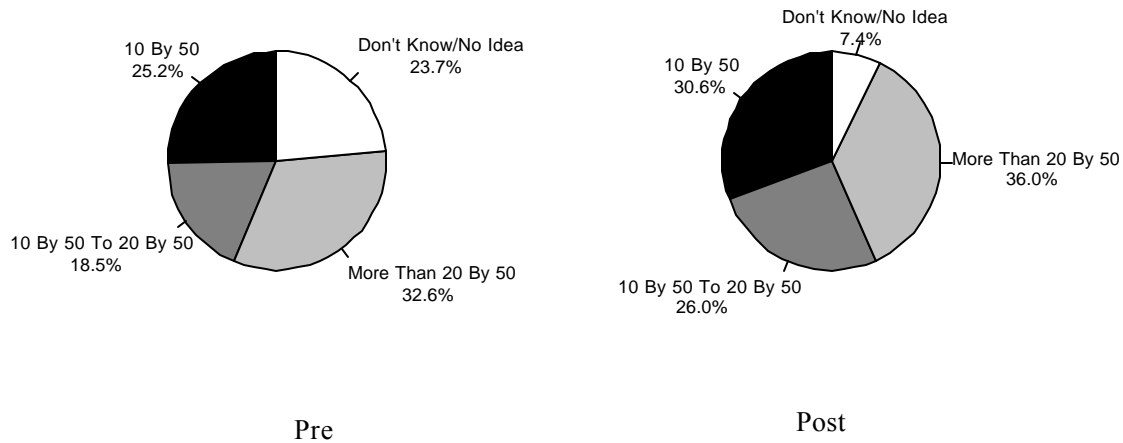


Figure 7

**KNOWN AND ESTIMATED SIZES OF LAWNS  
Inland Empire**

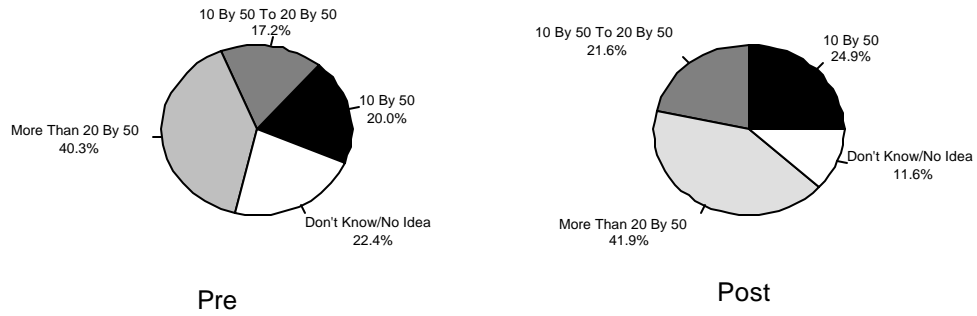


Figure 8

**KNOWN AND ESTIMATED SIZES OF LAWNS  
Los Angeles County**

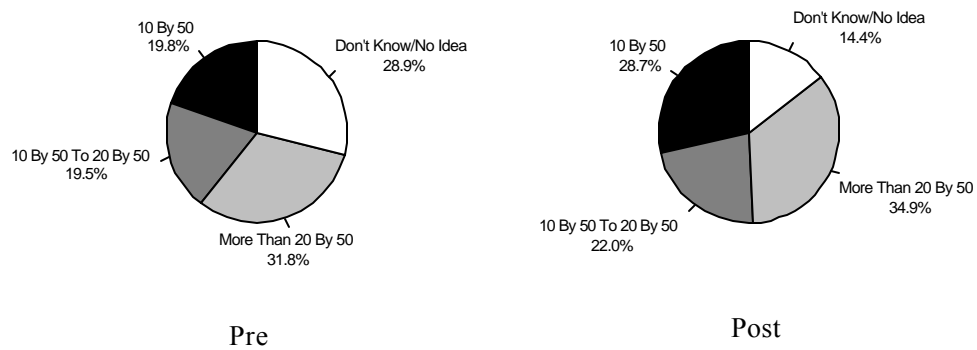


Figure 9

Across all three areas, there were statistically significant decreases in the proportions of respondents who said they did not know and could not estimate their lawn size. The amounts of the decrease were 17 percent in the Bay Area, 11 percent in the Inland Empire, and 15 percent in Los Angeles County.

### **Awareness of Grasscycling**

As Figures 10, 11, and 12, illustrate, somewhat less than a fifth of respondents in each area said they are aware of the word “grasscycling.” The highest level of awareness was in the Inland Empire (20 percent). This was followed by Los Angeles County (17 percent) and by the Bay Area (16 percent).

**AWARENESS OF THE WORD  
"GRASSCYCLING"  
Bay Area**

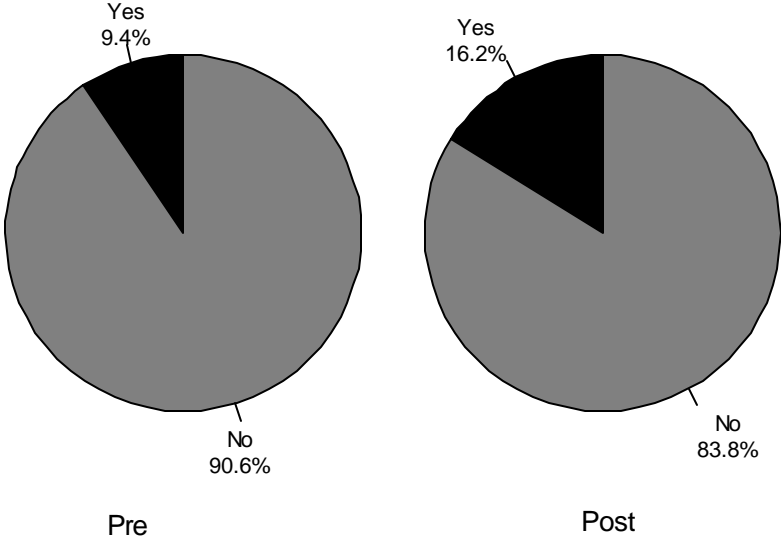


Figure 10

**AWARENESS OF THE WORD  
"GRASSCYCLING"  
Inland Empire**

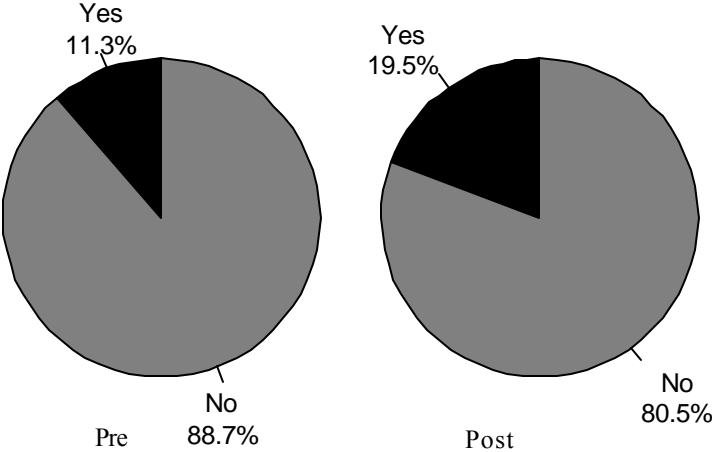


Figure 11



**AWARENESS OF THE WORD  
"GRASSCYCLING"  
Los Angeles County**

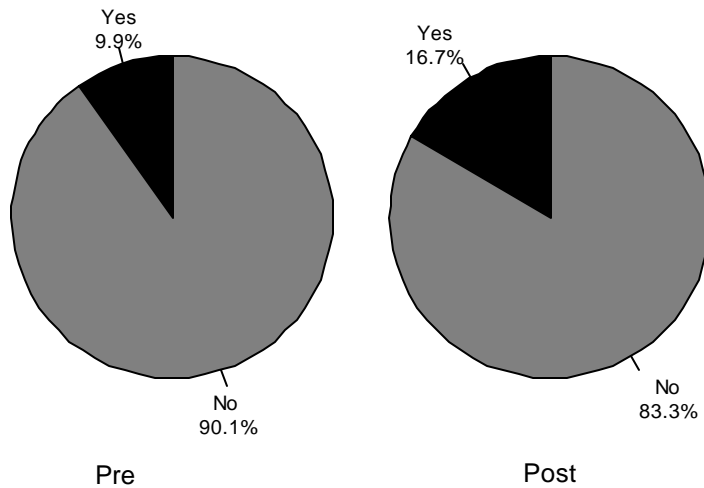


Figure 12

In every area, familiarity with “grasscycling” increased. The increases were not quite large enough to achieve statistical significance, however.

**Meaning of the Word “Grasscycling”**

Figures 13 through 15 display the extent to which respondents who said they are aware of the term “grasscycling” were able to define it correctly. Correct answers ranged from a high of 38 percent in the Bay Area to a low of 25 percent in Los Angeles County, with the Inland Empire in between at 30 percent.

# MEANING OF THE WORD "GRASSCYCLING" Bay Area

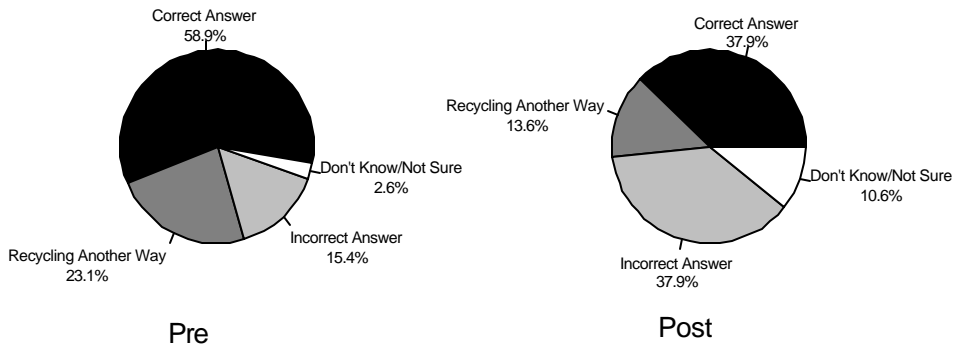


Figure 13

**MEANING OF THE WORD  
"GRASSCYCLING"  
Inland Empire**

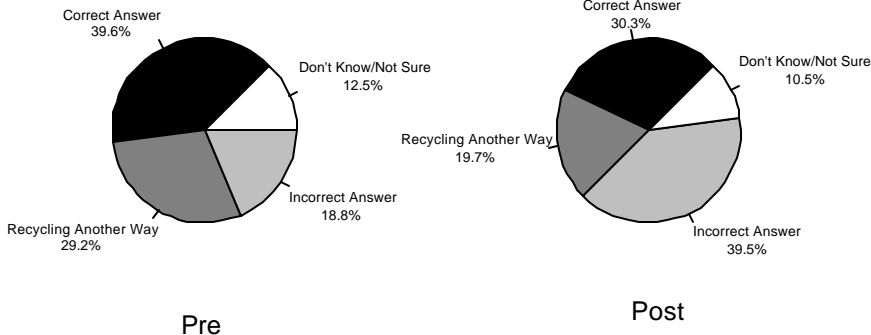


Figure 14

**MEANING OF THE WORD  
"GRASSCYCLING"  
Los Angeles County**

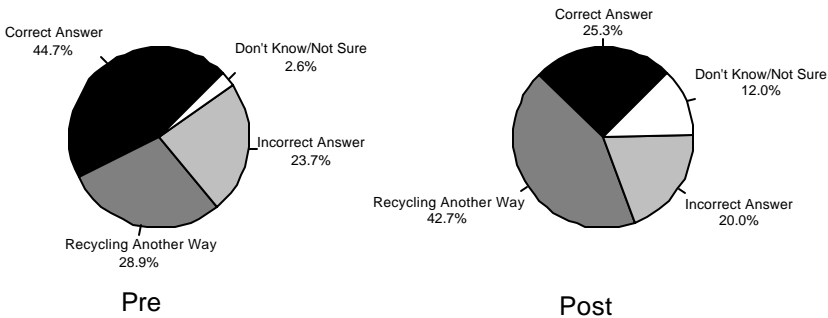


Figure 15

In the Bay Area and Los Angeles County, there were statistically significant decreases in the percentage of correct answers between the pre-campaign measurement and the post-campaign survey. (The decrease in the Inland Empire was noticeable but not statistically significant.) In the Bay Area and the Inland Empire, incorrect answers increased significantly, while in Los Angeles answers reflecting a different type of recycling exhibited a significant increase.

### **Reasons for Not Grasscycling**

Tables 13, 14, and 15 portray the reasons respondents who do not grasscycle gave for not doing so. In all three areas, the most prevalent reason was a concern that the lawn would not look good (26 percent in the Bay Area, 20 percent in the Inland Empire, and 31 percent in Los Angeles County. Universally in second place was not being aware of or not considering it (13, 19, and 11 percent, respectively).

**Table 13**

**REASONS FOR NOT GRASSCYCLING  
Bay Area**

	Pre	Post
	Percent	
Never Heard of It/Didn't Even Consider It	13.4	13.0
Lawn Would Not Look Good	19.2	25.5
Lawn Would be Less Healthy	15.7	11.6
Lawn Service Said Lawn Would be Harmed	.5	.8
Lawn Would Develop Thatch	2.6	5.3
Clippings Would be Tracked into House	3.1	3.9
Don't Have Mulching Mower	4.2	5.0
Do It - Just Call It Something Else	9.2	3.3
Gardener/Lawn Service/Someone Else Takes Care of It	6.6	6.9
Use as Compost Elsewhere/For Gardening/For Fertilizer	3.4	8.9
No Reason/Just Don't Want To/Don't Feel Like It	2.4	1.7
Mower has Clipping/Grass Catcher/Easier to Just Dump into Recycle Bin/Trash	1.8	3.9
Less Messy/It Blows All Over/Away	1.0	7.2
Have Nowhere Else to Put It/Do With It	.8	-
Use It for Other Reasons Other Than Mulch/Fertilizer/Compost	.3	.8
Do It Unless Grass is Too Long	3.1	.8
Just Do What I'm Told To Do	.8	1.7
Always Done It That Way/Habit	2.1	1.1
Going to As Soon As Get Right Equipment	.5	.3
Other	3.4	6.9
Don't Know/Don't Recall	11.5	5.0
Refused	-	-

**Table 14**

**REASONS FOR NOT GRASSCYCLING  
Inland Empire**

	Pre	Post
	Percent	
Never Heard of It/Didn't Even Consider It	10.3	18.6
Lawn Would Not Look Good	30.2	20.3
Lawn Would be Less Healthy	10.6	5.6
Lawn Service Said Lawn Would be Harmed	.3	.6
Lawn Would Develop Thatch	1.3	4.5
Clippings Would be Tracked into House	5.7	4.5
Don't Have Mulching Mower	3.1	5.1
Do It - Just Call It Something Else	6.2	5.4
Gardener/Lawn Service/Someone Else Takes Care of It	10.8	8.8
Use as Compost Elsewhere/For Gardening/For Fertilizer	4.1	4.2
No Reason/Just Don't Want To/Don't Feel Like It	.8	1.4
Mower has Clipping/Grass Catcher/Easier to Just Dump into Recycle Bin/Trash	1.3	7.9
Less Messy/It Blows All Over/Away	1.8	7.1
Use It for Other Reasons Other Than Mulch/Fertilizer/Compost	.5	.8
Do It Unless Grass is Too Long	1.5	.6
Just Do What I'm Told To Do	1.3	2.8
Going to As Soon As Get Right Equipment	-	.6
Always Done It That Way/Habit	3.4	4.0
Other	5.2	5.6
Don't Know/Don't Recall	10.8	3.7
Refused	-	-

**Table 15**

**REASONS FOR NOT GRASSCYCLING  
Los Angeles County**

	Pre	Post
	Percent	
Never Heard of It/Didn't Even Consider It	8.5	11.0
Lawn Would Not Look Good	36.4	31.4
Lawn Would be Less Healthy	9.9	8.8
Lawn Service Said Lawn Would be Harmed	.8	.7
Lawn Would Develop Thatch	1.1	2.1
Clippings Would be Tracked into House	4.4	6.9
Don't Have Mulching Mower	1.1	2.1
Do It - Just Call It Something Else	4.7	4.5
Gardener/Lawn Service/Someone Else Takes Care of It	10.2	7.6
Use as Compost Elsewhere/For Gardening/For Fertilizer	1.4	1.7
No Reason/Just Don't Want To/Don't Feel Like It	.8	-
Mower has Clipping/Grass Catcher/Easier to Just Dump into Recycle Bin/Trash	.6	2.4
Less Messy/It Blows All Over/Away	1.4	1.9
Use It for Other Reasons Other Than Mulch/Fertilizer/Compost	.3	-
Do It Unless Grass is Too Long	.8	-
Just Do What I'm Told To Do	1.4	1.2
Always Done It That Way/Habit	2.5	.5
Other	2.5	2.6
Don't Know/Don't Recall	20.1	22.9
Refused	.3	-

## Sources of Grasscycling Information

Displayed in Tables 16 through 18 are aware respondents' answers when they were asked where they had heard about grasscycling in the five months preceding the survey. As these figures indicate, the most frequent answer in all three areas was that they had not seen anything in the preceding five months (44 percent in the Bay Area, 35 percent in the Inland Empire, and 26 percent Los Angeles County). These figures represent statistically significant changes from the pre-campaign survey, with increases in the Bay Area and the Inland Empire and a decrease in Los Angeles County.

Table 16		
WHERE RESPONDENTS HAVE HEARD ABOUT GRASSCYCLING IN THE PAST FIVE MONTHS Bay Area		
	Pre	Post
	Percent	
Newspaper Article	17.4	12.0
Newsletter Article	-	-
Television News Report	4.3	12.0
Newspaper Ad	-	4.0
Radio Ad	-	4.0
Broadcast Television Ad	-	-
Cable Television Ad	-	-
Utility Bill Insert	4.3	-
Brochure/Flyer in a Store	4.3	4.0
Brochure/Flyer in Public Place	-	4.0
Poster in a Store	-	-
Web Site	-	-
Lawnmower Tag	-	-
Child's School/Schoolwork	4.3	-
Friends/Relatives/Colleagues/Word of Mouth	4.3	8.0
Composting Class/Workshop	-	-
Other	17.4	16.0
Nothing in Past Five Months	13.0	44.0
Don't Know/Don't Recall	34.8	8.0



**Table 17**

**WHERE RESPONDENTS HAVE HEARD ABOUT GRASSCYCLING  
IN THE PAST FIVE MONTHS  
Inland Empire**

	Pre	Post
	Percent	
Newspaper Article	-	21.7
Newsletter Article	-	4.3
Radio News Report	-	4.3
Television News Report	-	4.3
Newspaper Ad	-	-
Broadcast Television Ad	-	-
Cable Television Ad	-	-
Utility Bill Insert	10.5	4.3
Brochure/Flyer in a Store	-	4.3
Poster in a Store	5.3	-
Web Site	5.3	-
Lawnmower Tag	5.3	4.3
Child's School/Schoolwork	-	4.3
Friends/Relatives/Colleagues/Word of Mouth	26.3	8.7
Recycling Bin/Garbage Can Hanger	-	4.3
Composting Class/Workshop	-	4.3
Other	31.6	13.0
Nothing in Past Five Months	15.8	34.8
Don't Know/Don't Recall	10.5	8.7

Table 18

**WHERE RESPONDENTS HAVE HEARD ABOUT GRASSCYCLING  
IN THE PAST FIVE MONTHS  
Los Angeles County**

	Pre	Post
	Percent	
Newspaper Article	11.8	21.1
Newsletter Article	5.9	-
Television News Report	5.9	5.3
Newspaper Ad	5.9	5.3
Broadcast Television Ad	5.9	5.3
Cable Television Ad	5.9	-
Utility Bill Insert	-	-
Brochure/Flyer in a Store	-	5.3
Poster in a Store	-	-
Web Site	-	-
Lawnmower Tag	-	-
Child's School/Schoolwork	-	-
Friends/Relatives/Colleagues/Word of Mouth	-	5.3
Composting Class/Workshop	-	5.3
Other	11.8	10.5
Nothing in Past Five Months	52.9	26.3
Don't Know/Don't Recall	23.5	15.8

Other prevalent answers in the Bay Area included a newspaper article (12 percent) and a television news report (12 percent). Responses of “don’t know” experienced a statistically significant decrease, while several new answers appeared and other answers disappeared.

In the Inland Empire, the second most prominent answer was a newspaper article (22 percent). This is a statistically significant change from zero in the pre-campaign survey. In addition, several other answers of lesser magnitude did not appear at all in the pre-

campaign survey. The other statistically significant changes beyond “nothing” included a decrease in answers of friends, relatives, or colleagues.

Finally, the second most prevalent answer in Los Angeles County was also a newspaper article. This increase is not statistically significant, however.

### **Responses to Information About Grasscycling**

Figures 16 through 18 display aware respondents’ answers when they were asked how they reached to the information about grasscycling. In the Bay Area, the most likely response was seriously considering it (29 percent). In the Inland Empire and Los Angeles County, on the other hand, respondents were most likely to say they would give it some thought (33 percent and 21 percent, respectively).

## RESPONSES TO THE INFORMATION ABOUT GRASSCYCLING Bay Area

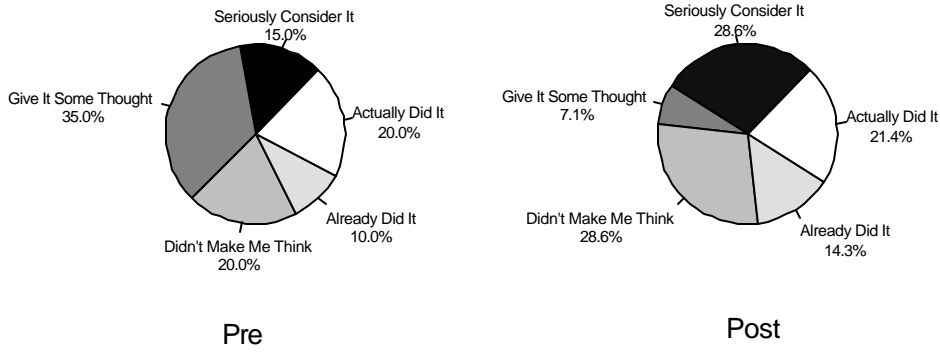


Figure 16

## RESPONSES TO THE INFORMATION ABOUT GRASSCYCLING Inland Empire

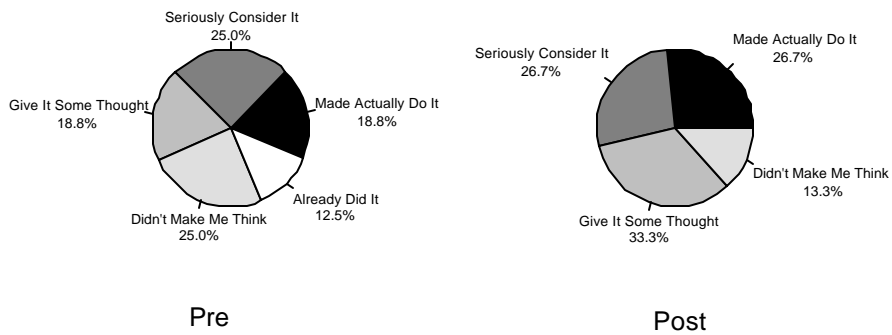


Figure 17

## RESPONSES TO THE INFORMATION ABOUT GRASSCYCLING Los Angeles County

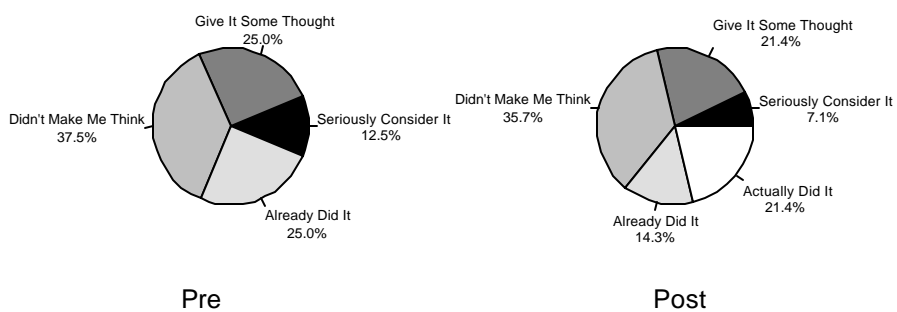


Figure 18

In the Bay Area, giving grasscycling some thought experienced a statistically significant decrease, while seriously considering it increased significantly. In the Inland Empire, both already grasscycling and giving it some thought also increased significantly, while not being made to think about it decreased significantly. Finally, in Los Angeles County, actually grasscycling increased significantly while already having done it decreased significantly.

Combined answers of giving it some thought, seriously considering it, and making one actually grasscycle totaled 57 percent in the Bay Area, 87 percent in the Inland Empire, and 50 percent in Los Angeles County. All three of these figures represent increases

over the pre-campaign findings; the changes in the Inland Empire and Los Angeles County are statistically significant.

## Assessments of the Information Provided

As shown in Figures 19, 20, and 21, majorities of respondents in all areas said that the information they received provided them with everything they needed (79 percent in the Bay Area, 60 percent in the Inland Empire, and 71 percent in Los Angeles County).

The Los Angeles County response of needing more information represents a statistically significant decrease from the pre-campaign survey.

### EXTENT TO WHICH THE INFORMATION PROVIDED EVERYTHING NEEDED Bay Area

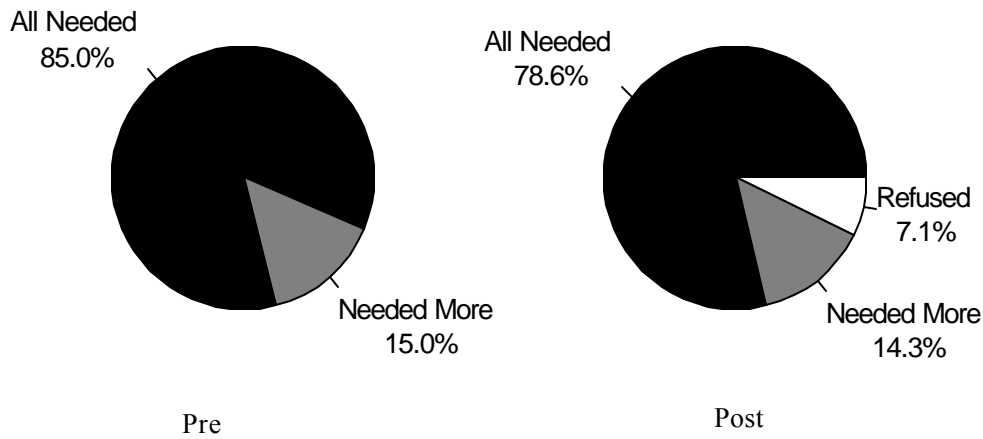


Figure 19

**EXTENT TO WHICH THE INFORMATION PROVIDED  
EVERYTHING NEEDED**

**Inland Empire**

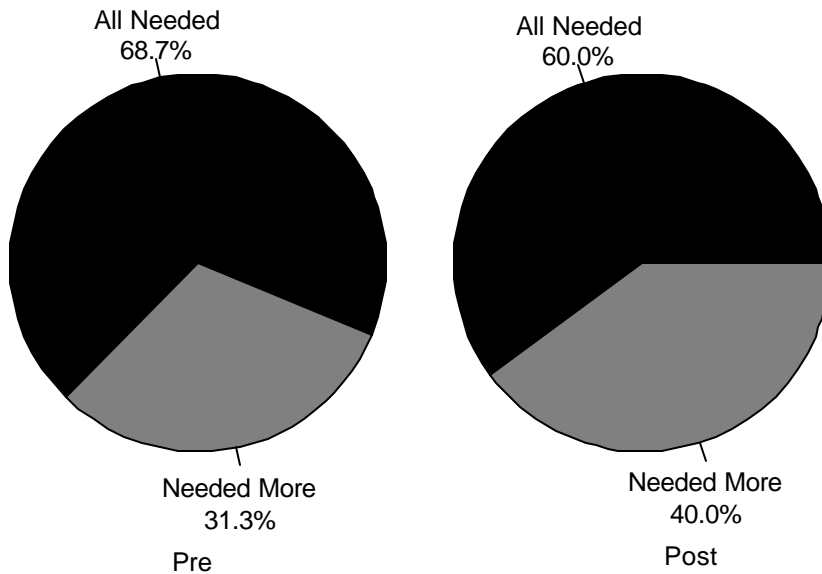


Figure 20

**EXTENT TO WHICH THE INFORMATION PROVIDED  
EVERYTHING NEEDED**

**Los Angeles County**

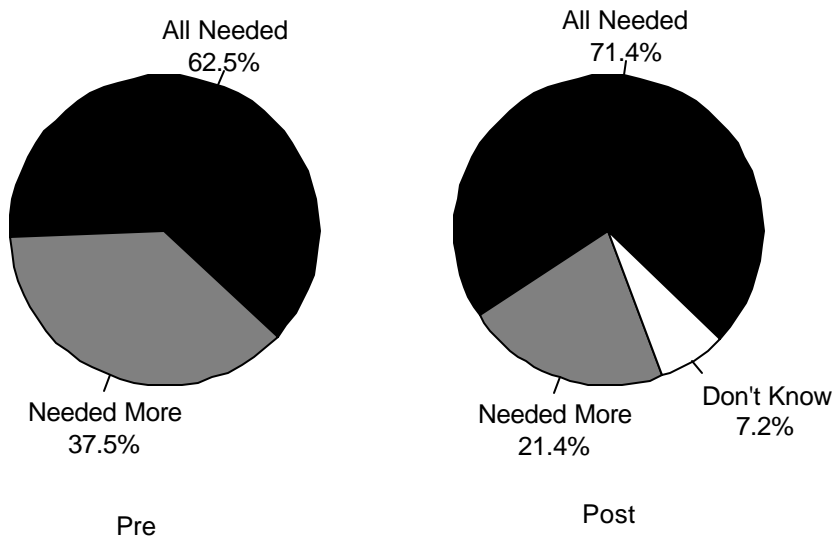


Figure 21



Aspects of the information respondents found particularly impressive or informative are displayed in Tables 19 through 21. Most likely to be mentioned in all three areas (although tied with something else in the Inland Empire) were that grasscycling is good for the grass (36 percent in the Bay Area, 20 percent in the Inland Empire, and 21 percent in Los Angeles County). In second place in the Bay Area was less waste (21 percent), in second place in the Inland Empire was not having to clean up (tied with grasscycling being good for the grass at 20 percent), and in second place in Los Angeles County was a tie between less waste and the fact that the grass is being recycled (13 percent each)

<b>Table 19</b>		
<b>PARTICULARLY INTERESTING, IMPRESSIVE, OR INFORMATIVE ASPECTS OF THE INFORMATION</b>		
<b>Bay Area</b>		
	Pre	Post
	Percent	
For Conserving Grass That Goes Into Landfills/Less Bio-Waste	4.3	21.4
Don't Have to Clean Up/Don't Have to Rake/Easier to Clean Up/Don't Have to Pick Up the Grass	13.0	14.3
Good for the Grass/Gives Back Nutrients/Actually Helps the Lawn/That It's Healthier for the Lawn	21.7	35.7
Have Been Grasscycling/Recycling/Already Knew All Information	4.3	7.1
The Fact That the Grass Can Be Recycled/The Fact That the Grass Is Being Recycled	8.7	7.1
It's Better to Leave on Grass/Leaving It on the Grass/Better to Leave Grass on Lawn/The Part When You Told Me to Leave It on the Lawn	4.3	-
It Didn't Make Me Interested At All/It Didn't Impress Me/It Wasn't Really That Impressive or Unimpressive	-	-
You Could Benefit the Grass By Using It as Fertilizer Instead of Throwing It Away/ I Thought It Was Neat That You Could Turn It Into Mulch and Use It Later/Fact That It Acts as Its Own Fertilizer	8.7	14.3
Nothing	21.7	14.3
Other	8.7	7.1

Don't Know	21.7	-
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<p align="center"><b>Table 20</b></p> <p align="center"><b>PARTICULARLY INTERESTING, IMPRESSIVE, OR INFORMATIVE</b></p> <p align="center"><b>ASPECTS OF THE INFORMATION</b></p> <p align="center"><b>Inland Empire</b></p>		
	Pre	Post
	Percent	
For Conserving Grass That Goes Into Landfills/Less Bio-Waste	-	13.3
Don't Have to Clean Up/Don't Have to Rake/Easier to Clean Up/Don't Have to Pick Up the Grass	10.5	20.0
Good for the Grass/Gives Back Nutrients/Actually Helps the Lawn/That It's Healthier for the Lawn	5.3	20.0
Have Been Grasscycling/Recycling/Already Knew All Information	15.8	-
The Fact That the Grass Can Be Recycled/The Fact That the Grass Is Being Recycled	-	6.7
It's Better to Leave on Grass/Leaving It on the Grass/Better to Leave Grass on Lawn/The Part When You Told Me to Leave It on the Lawn	-	-
It Didn't Make Me Interested At All/It Didn't Impress Me/It Wasn't Really That Impressive or Unimpressive	10.5	-
You Could Benefit the Grass By Using It as Fertilizer Instead of Throwing It Away/ I Thought It Was Neat That You Could Turn It Into Mulch and Use It Later/Fact That It Acts as Its Own Fertilizer	10.5	13.3
Environmentally Safe/Cleaner Environment	5.3	-
Nothing	-	6.7
Other	31.6	6.7
Don't Know	15.8	26.7

Table 21		
PARTICULARLY INTERESTING, IMPRESSIVE, OR INFORMATIVE ASPECTS OF THE INFORMATION Los Angeles County		
	Pre	Post
	Percent	
For Conserving Grass That Goes Into Landfills/Less Bio-Waste	5.9	14.3
Don't Have to Clean Up/Don't Have to Rake/Easier to Clean Up/Don't Have to Pick Up the Grass	-	7.1
Good for the Grass/Gives Back Nutrients/Actually Helps the Lawn/That It's Healthier for the Lawn	35.3	21.4
Have Been Grasscycling/Recycling/Already Knew All Information	5.9	7.1
The Fact That the Grass Can Be Recycled/The Fact That the Grass Is Being Recycled	-	14.3
It's Better to Leave on Grass/Leaving It on the Grass/Better to Leave Grass on Lawn/The Part When You Told Me to Leave It on the Lawn	11.8	-
It Didn't Make Me Interested At All/It Didn't Impress Me/It Wasn't Really That Impressive or Unimpressive	35.3	21.4
You Could Benefit the Grass By Using It as Fertilizer Instead of Throwing It Away/ I Thought It Was Neat That You Could Turn It Into Mulch and Use It Later/Fact That It Acts as Its Own Fertilizer	-	7.1
Nothing	-	-
Other	5.9	-
Don't Know	5.9	21.4

## Waste Reduction and Recycling: Attitudes and Behavior

As illustrated in Figures 22, 23, and 24, the largest groups of respondents in two areas said they are somewhat concerned about reducing waste at home: 46 percent in the Bay Area and 42 percent in the Inland Empire. In Los Angeles County, the largest group (51 percent) said they are very concerned about this issue. Combined very and somewhat concerned responses totaled 89 percent in the Bay Area, 83 percent in the Inland Empire, and 84 percent in Los Angeles County.

### LEVELS OF CONCERN ABOUT REDUCING WASTE AT HOME Bay Area

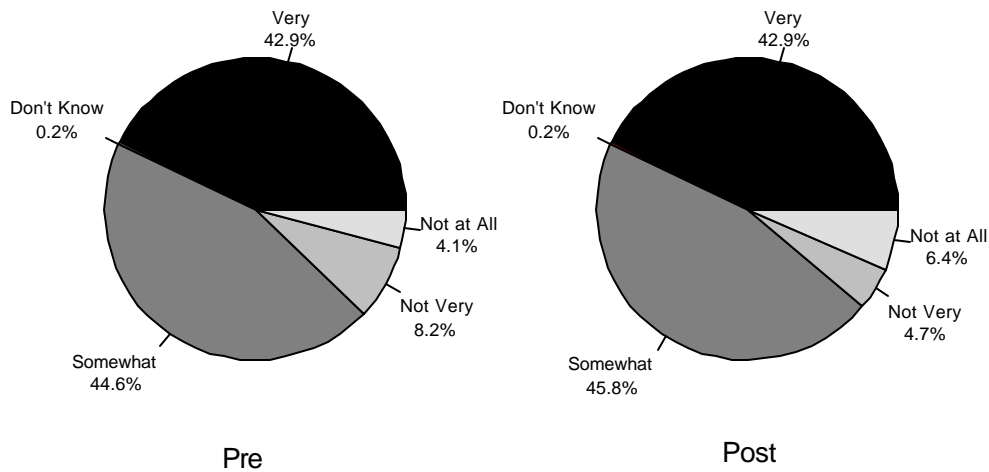


Figure 22

**LEVELS OF CONCERN ABOUT REDUCING WASTE AT HOME  
Inland Empire**

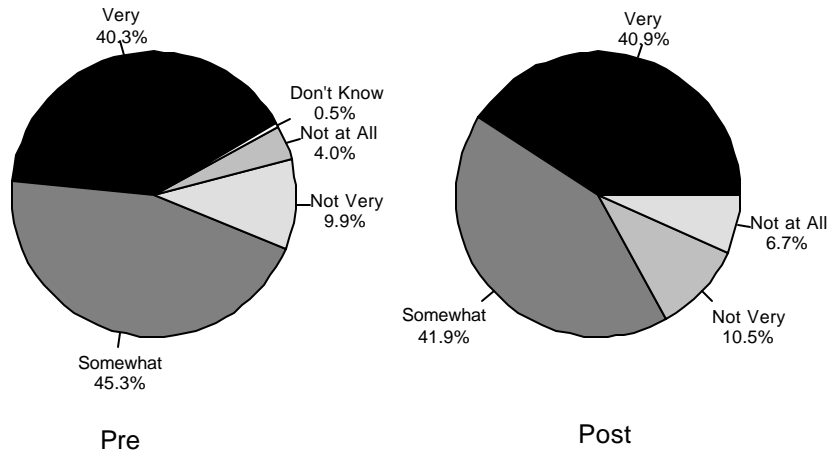


Figure 23

**LEVELS OF CONCERN ABOUT REDUCING WASTE AT HOME  
Los Angeles County**

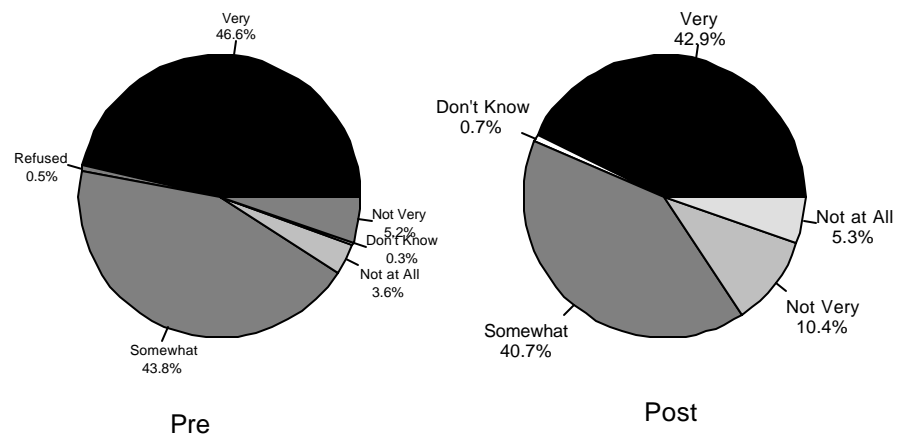


Figure 24

Figures 25 through 27 indicate that most respondents are very concerned about recycling at home (62 percent in the Bay Area, 60 percent in the Inland Empire, and 51 percent in Los Angeles County). Combined very and somewhat concerned responses totaled 91 percent in the Bay Area, 90 percent in the Inland Empire, and 87 percent in Los Angeles County. The decrease in responses of somewhat concerned in the Inland Empire was statistically significant.

### LEVELS OF CONCERN ABOUT RECYCLING AT HOME Bay Area

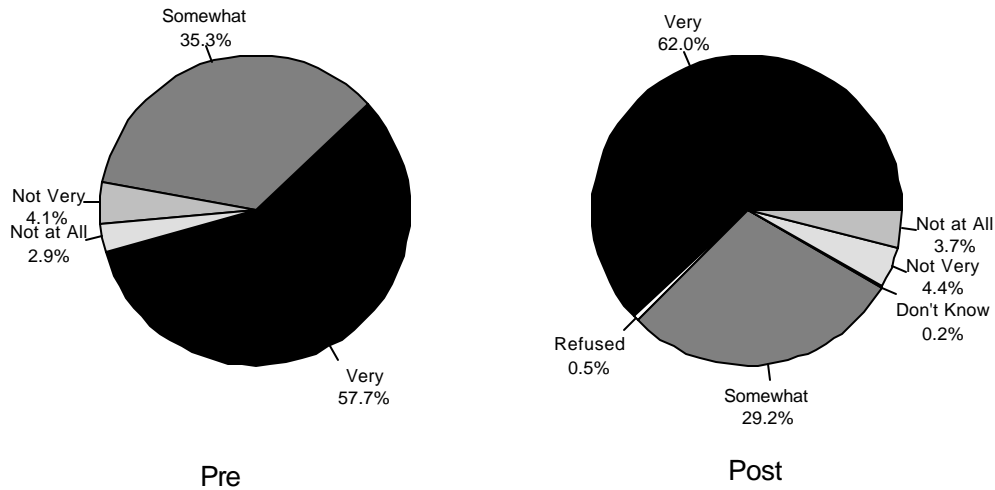


Figure 25

**LEVELS OF CONCERN ABOUT RECYCLING AT HOME  
Inland Empire**

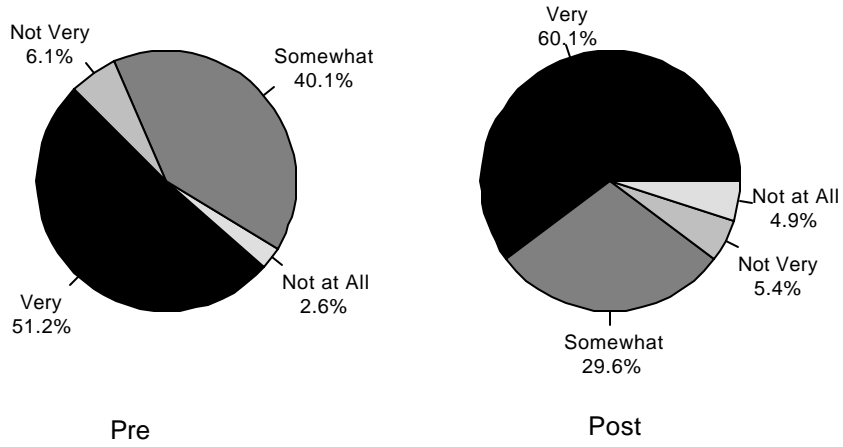


Figure 26

**LEVELS OF CONCERN ABOUT RECYCLING AT HOME  
Los Angeles County**

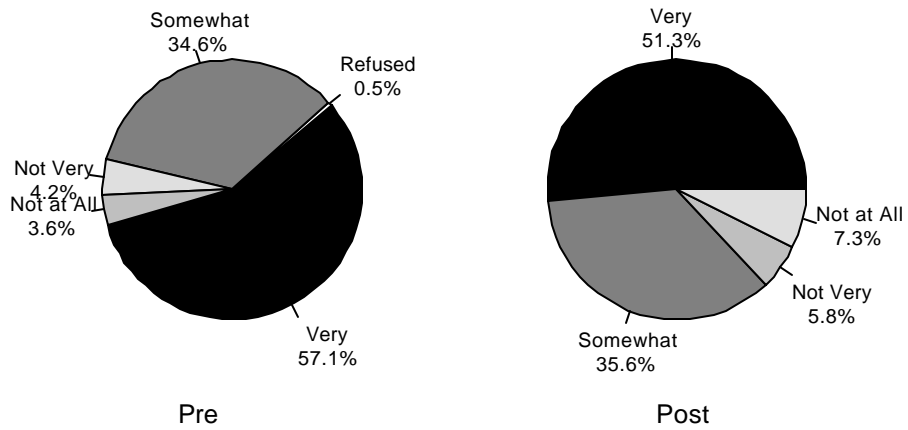


Figure 27

Figures 28, 29, and 30 show that by far the majority of respondents said they recycle things other than grass at home. The figures are 93 percent in the Bay Area, 91 percent in the Inland Empire, and 90 percent in Los Angeles County.

**EXTENT TO WHICH RESPONDENTS CURRENTLY  
RECYCLE THINGS OTHER THAN GRASS AT HOME  
Bay Area**

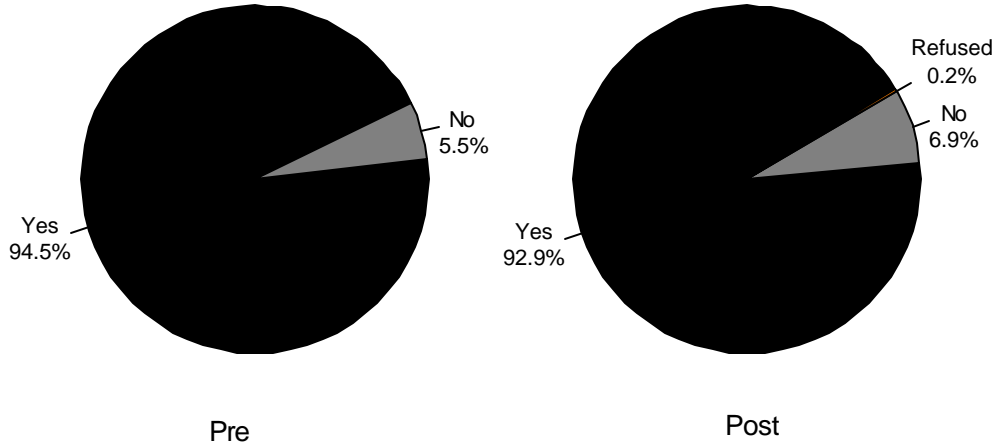


Figure 28



**EXTENT TO WHICH RESPONDENTS CURRENTLY  
RECYCLE THINGS OTHER THAN GRASS AT HOME  
Inland Empire**

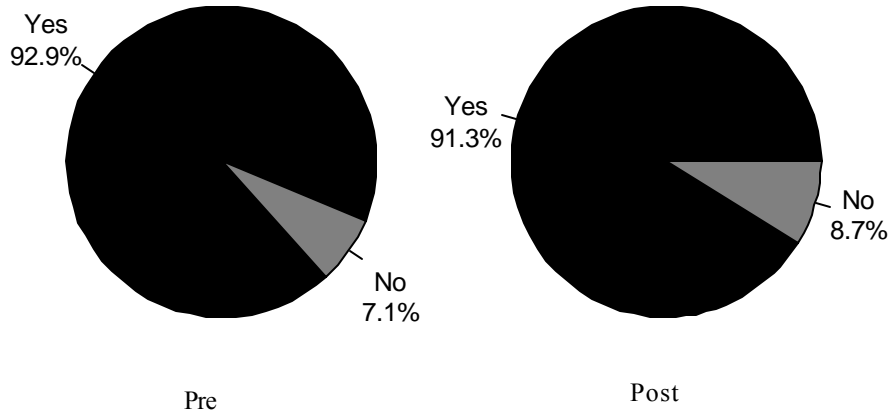


Figure 29

**EXTENT TO WHICH RESPONDENTS CURRENTLY  
RECYCLE THINGS OTHER THAN GRASS AT HOME  
Los Angeles County**

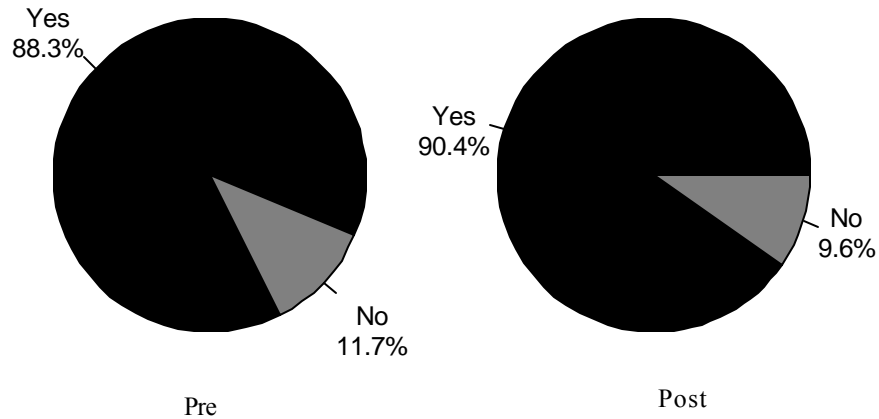


Figure 30

The things respondents recycle are portrayed in Tables 22 through 24. Most likely to be recycled in the Bay Area and the Inland Empire was aluminum (86 percent and 85 percent, respectively); most likely to be recycled in Los Angeles County was plastic (81 percent). Second most likely to be recycled in the Bay Area and the Inland Empire was plastic (78 percent and 80 percent, respectively); second most likely to be recycled in Los Angeles County was aluminum (80 percent). In all areas, newspaper was in third place (71 percent in the Bay Area, 58 percent in the Inland Empire, and 64 percent in Los Angeles County).

<b>Table 22</b>		
<b>THINGS RESPONDENTS RECYCLE</b>		
<b>Bay Area</b>		
	Pre	Post
	Percent	
Glass	52.3	61.9
Plastic	72.6	77.8
Newspaper	49.0	70.6
Cardboard	22.8	39.7
Mixed Paper	32.5	38.4
Used Oil	5.3	5.0
Aluminum Cans/Foil/Other Aluminum	68.0	86.0
Other	10.2	13.8
Refused	-	.3

Table 23		
THINGS RESPONDENTS RECYCLE		
Inland Empire		
	Pre	Post
	Percent	
Glass	52.8	56.7
Plastic	73.1	80.1
Newspaper	45.2	57.6
Cardboard	20.8	28.7
Mixed Paper	26.1	28.7
Used Oil	1.8	4.8
Aluminum Cans/Foil/Other Aluminum	75.6	85.1
Other	6.1	10.4
Refused	-	-

Table 24		
THINGS RESPONDENTS RECYCLE		
Los Angeles County		
	Pre	Post
	Percent	
Glass	50.4	59.7
Plastic	74.3	81.1
Newspaper	46.0	64.1
Cardboard	13.6	27.8
Mixed Paper	22.7	35.1
Used Oil	.9	3.7
Aluminum Cans/Foil/Other Aluminum	74.3	80.3
Other	6.5	8.8
Refused	.3	-

In the Bay Area, the increases relative to newspaper, aluminum, and cardboard are all statistically significant. This is also true of the increase for newspaper in the Inland Empire and the increases with respect to newspaper, cardboard, and mixed paper in Los Angeles County.

## Composting Classes and Workshops in the Bay Area

As shown in Figure 31, two-fifths of respondents in the Bay Area (40 percent) said they had heard something about composting classes or workshops in their area. Figure 32 illustrates that about a quarter of these respondents (24 percent) compost at home.

**EXTENT TO WHICH RESPONDENTS IN CONTRA COSTA  
NAPA, AND SOLANO COUNTIES HAVE HEARD ANYTHIN  
ABOUT COMPOSTING CLASSES OR WORKSHOPS  
IN THEIR AREA**  
Bay Area

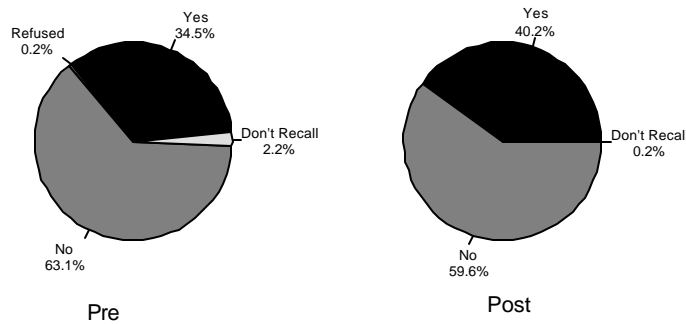


Figure 31

**EXTENT TO WHICH RESPONDENTS IN  
SOLANO COUNTY COMPOST AT HOME**  
Bay Area

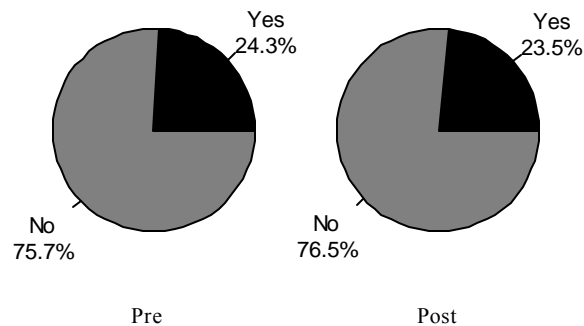


Figure 32

## Awareness of Recycling Programs in the Inland Empire

As Figure 33 indicates, close to half of Inland Empire respondents (45 percent) said they had seen or received information about waste prevention or recycling programs in their counties. Essentially as many (45 percent also, with rounding), however, have not.

### EXTENT TO WHICH RESPONDENTS IN RIVERSIDE AND SAN BERNARDINO COUNTIES HAVE SEEN OR RECEIVED INFORMATION ABOUT WASTE PREVENTION OR RECYCLING PROGRAMS IN THEIR COUNTIES Inland Empire

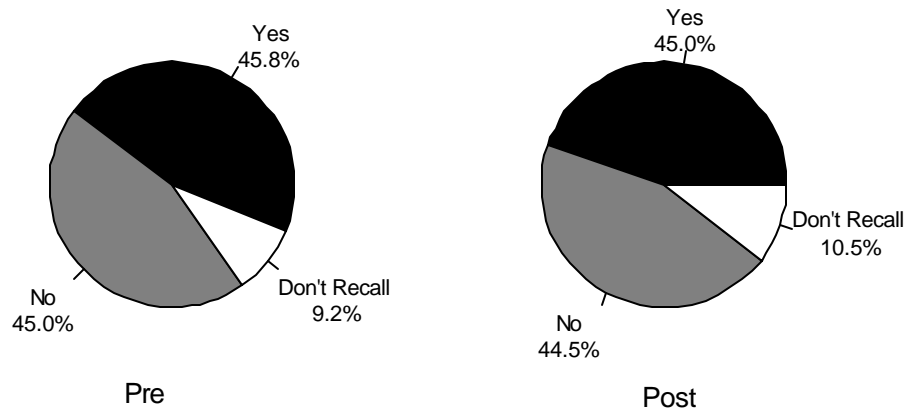


Figure 33

## Respondent Demographics

Figures 34 through 42 and Tables 25 through 36 portray the demographics of the responding sample. These illustrations indicate the following:

Most respondents in all three areas are homeowners, with the lowest proportion being in the Inland Empire (79 percent) and the highest proportion being in Los Angeles County (92 percent).

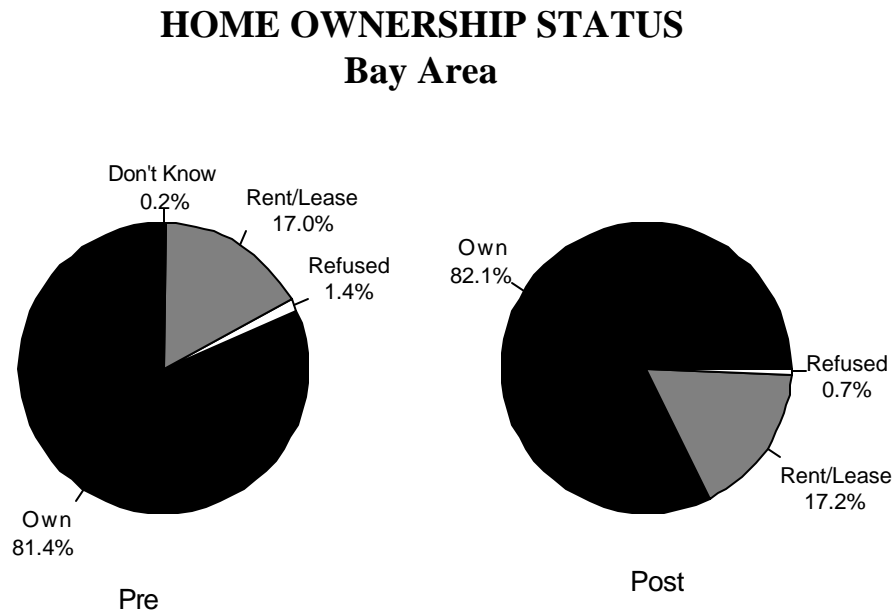


Figure 34

## HOME OWNERSHIP STATUS Inland Empire

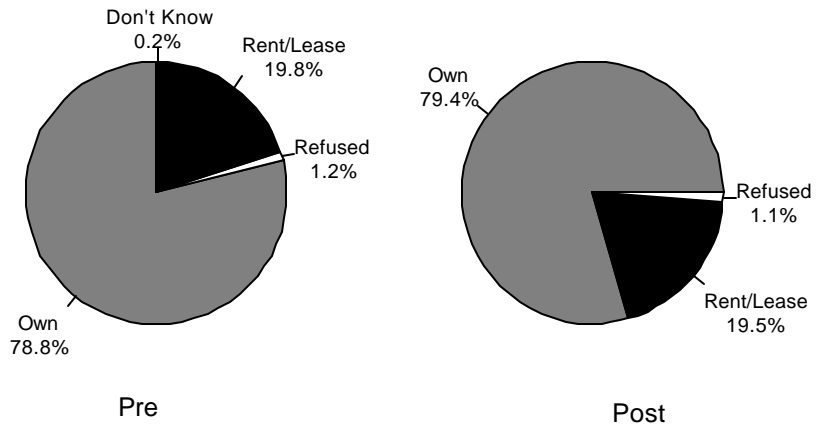


Figure 35

## HOME OWNERSHIP STATUS Los Angeles

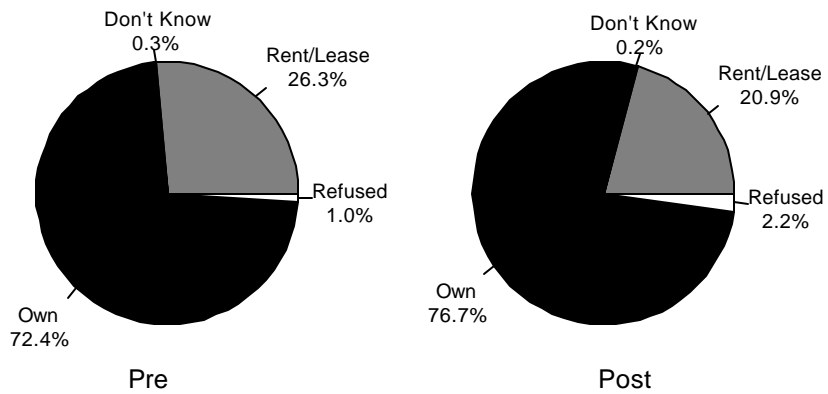


Figure 36

By far the majority of respondents in Napa County (92 percent) have garbage collection service.

**EXTENT TO WHICH RESPONDENTS IN NAPA COUNTY  
HAVE GARBAGE COLLECTION SERVICE  
Bay Area**

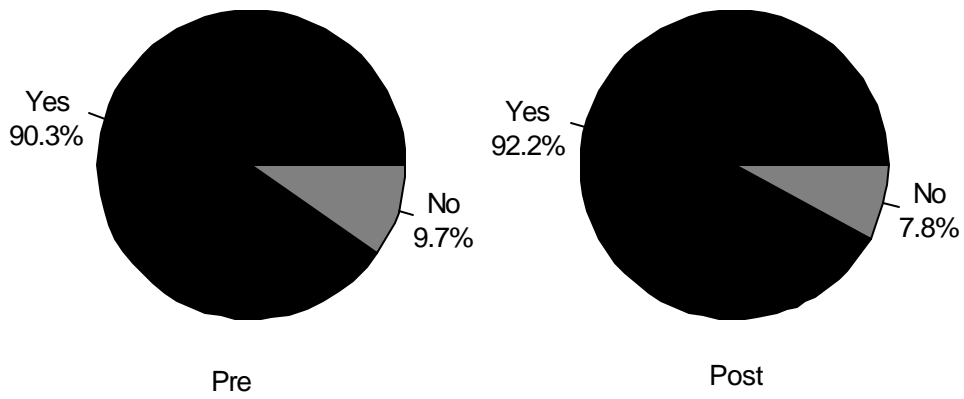


Figure 37



The Bay Area sample is divided as follows: 50 percent in Contra Costa County, 25 percent in Napa County, and 25 percent in Solano County.

### COUNTY Bay Area

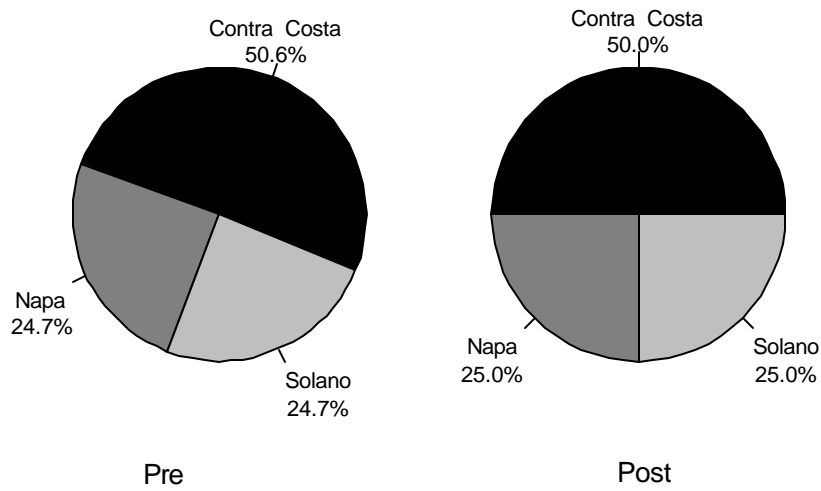


Figure 38

The Inland Empire sample is almost evenly divided between Riverside County (51 percent) and San Bernardino County (48 percent).

**EXTENT TO WHICH RESPONDENTS  
LIVE IN RIVERSIDE COUNTY OR  
SAN BERNARDINO COUNTY**

**Inland Empire**

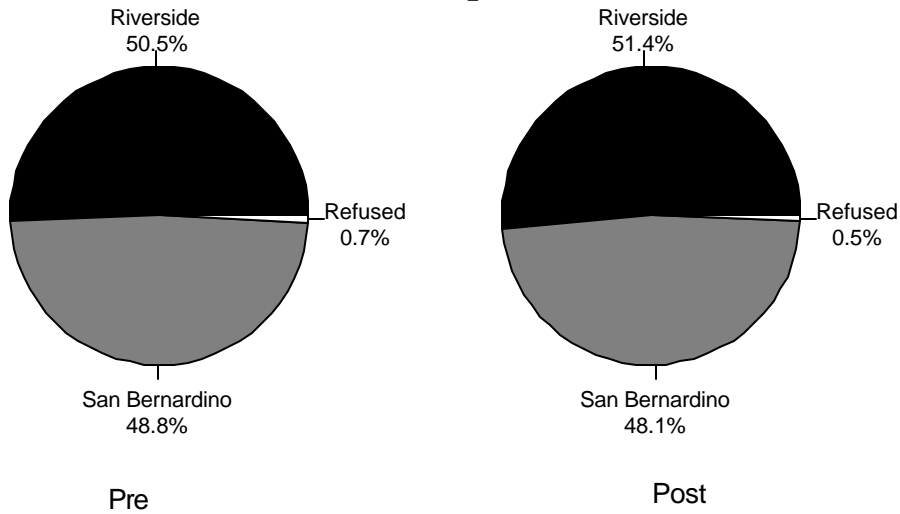


Figure 39

Most respondents are between the ages of 25 and 54 (58 percent in the Bay Area, 57 percent in the Inland Empire, and 49 percent in Los Angeles County).

<b>Table 25</b>		
<b>AGE</b>		
<b>Bay Area</b>		
	Pre	Post
	Percent	
10 to 17	6.2	5.4
18 to 24	5.0	5.6
25 to 34	10.6	13.2
35 to 44	25.2	22.3
45 to 54	19.9	22.1
55 to 64	10.3	12.5
65 and Over	12.7	11.3
Refused	10.1	7.6

<b>Table 26</b>		
<b>AGE</b>		
<b>Inland Empire</b>		
	Pre	Post
	Percent	
10 to 17	6.8	9.3
18 to 24	10.6	7.5
25 to 34	13.2	17.2
35 to 44	26.7	24.9
45 to 54	15.3	15.2
55 to 64	8.4	9.3
65 and Over	11.1	13.1
Refused	6.8	3.6

<b>Table 27</b>		
<b>AGE</b>		
<b>Los Angeles County</b>		
	Pre	Post
	Percent	
10 to 17	9.4	6.0
18 to 24	7.3	9.3
25 to 34	17.4	14.7
35 to 44	19.0	17.8
45 to 54	16.4	16.2
55 to 64	7.8	11.6
65 and Over	14.8	18.0

Refused	7.8	6.4
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The largest groups of respondents in the Bay Area and in Los Angeles County have college degrees (36 percent and 32 percent, respectively). The largest group of respondents in Inland Empire have high school diplomas (27 percent).

<b>Table 28</b>		
<b>EDUCATIONAL ATTAINMENT</b>		
<b>Bay Area</b>		
	Pre	Post
	Percent	
Less Than High School	12.7	8.8
High School Graduate	23.5	25.2
Vocational/Trade Certificate	.7	1.7
Some College	12.0	13.5
Two-Year Degree	16.3	12.5
Four-Year Degree Or Higher	30.9	35.8
Refused	3.8	2.5

<b>Table 29</b>		
<b>EDUCATIONAL ATTAINMENT</b>		
<b>Inland Empire</b>		
	Pre	Post
	Percent	
Less Than High School	16.3	17.5
High School Graduate	31.1	27.2
Vocational/Trade Certificate	-	1.3
Some College	15.6	15.9
Two-Year Degree	14.4	14.9
Four-Year Degree Or Higher	19.8	21.3
Refused	2.8	1.8

<b>Table 30</b>		
<b>EDUCATIONAL ATTAINMENT</b>		
<b>Los Angeles County</b>		
	Pre	Post
	Percent	
Less Than High School	14.3	13.8
High School Graduate	24.5	22.2
Vocational/Trade Certificate	2.1	.7
Some College	12.2	15.8
Two-Year Degree	15.6	12.0
Four-Year Degree Or Higher	25.3	31.8
Refused	6.0	3.8

Most respondents are Caucasian (68 percent in the Bay Area, 57 percent in the Inland Empire, and 51 percent in Los Angeles County). Hispanics played a significant role in the Inland Empire and Los Angeles County (20 and 21 percent, respectively).

<b>Table 31</b>		
<b>ETHNICITY</b>		
<b>Bay Area</b>		
	Pre	Post
	Percent	
Caucasian/White	67.1	68.4
African-American	7.2	7.1
Asian-American	4.6	4.4
Latino/Hispanic	7.2	7.8
Other	6.2	4.9
Refused	7.7	7.4

<b>Table 32</b>		
<b>ETHNICITY</b>		
<b>Inland Empire</b>		
	Pre	Post
	Percent	
Caucasian/White	56.6	57.3
African-American	5.7	8.5
Asian-American	4.0	3.1
Latino/Hispanic	21.9	19.8
Other	5.7	6.4
Refused	6.1	4.9

<b>Table 33</b>		
<b>ETHNICITY</b>		
<b>Los Angeles County</b>		
	Pre	Post
	Percent	
Caucasian/White	45.1	51.3
African-American	9.4	7.6
Asian-American	6.3	6.9
Latino/Hispanic	24.2	20.9
Other	6.0	5.6
Refused	9.1	7.8

The largest groups of respondents in all three areas have household incomes of \$45,000 or more (53 percent in the Bay Area, 40 percent in the Inland Empire, and 45 percent in Los Angeles County).

<b>Table 34</b>		
<b>HOUSEHOLD INCOME</b>		
<b>Bay Area</b>		
	Pre	Post
	Percent	
Under \$15,000	3.8	3.7
\$15,000 to \$29,999	9.1	10.0
\$30,000 to \$44,999	8.9	12.7
\$45,000 or Over	45.6	52.9
Don't Know	9.1	7.1
Refused	23.5	13.5

<b>Table 35</b>		
<b>HOUSEHOLD INCOME</b>		
<b>Inland Empire</b>		
	Pre	Post
	Percent	
Under \$15,000	6.4	7.5
\$15,000 to \$29,999	8.0	13.9
\$30,000 to \$44,999	14.9	15.2
\$45,000 or Over	39.9	40.4
Don't Know	12.7	9.0
Refused	18.2	14.1

<b>Table 36</b>		
<b>HOUSEHOLD INCOME</b>		
<b>Los Angeles County</b>		
	Pre	Post
	Percent	
Under \$15,000	7.6	5.1
\$15,000 to \$29,999	12.0	14.2
\$30,000 to \$44,999	12.5	12.7
\$45,000 or Over	34.6	45.1
Don't Know	10.7	10.0
Refused	22.7	12.9

Most respondents are male in the Bay Area and the Inland Empire (51 percent and 52 percent, respectively). In Los Angeles County, most respondents are female (52 percent).

### GENDER Bay Area

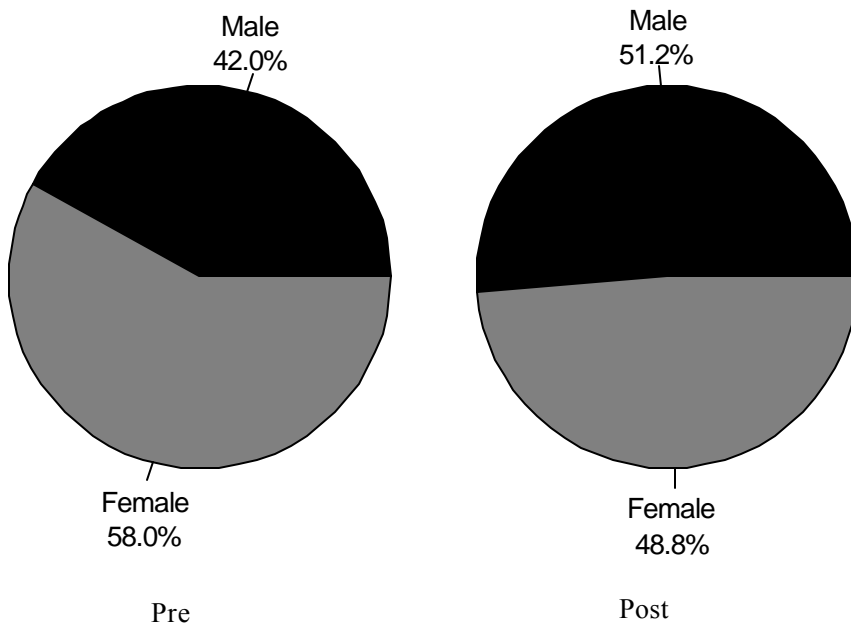


Figure 40



### GENDER Inland Empire

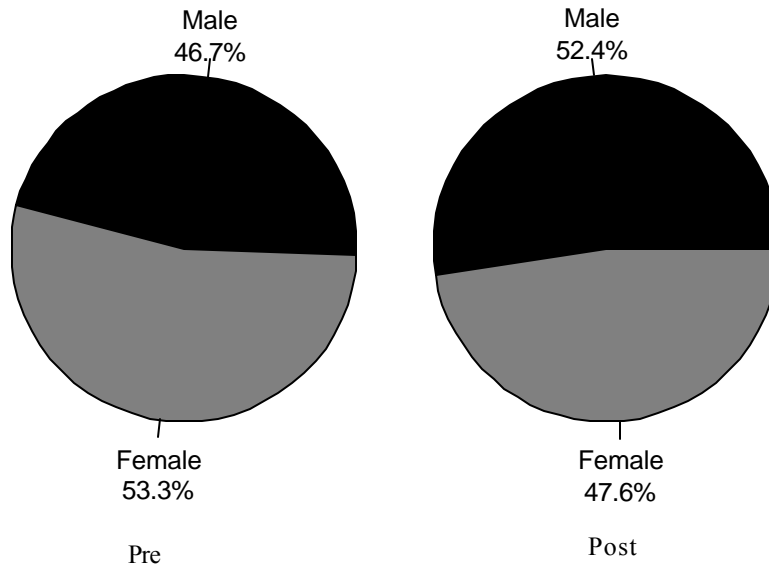


Figure 41

### GENDER Los Angeles County

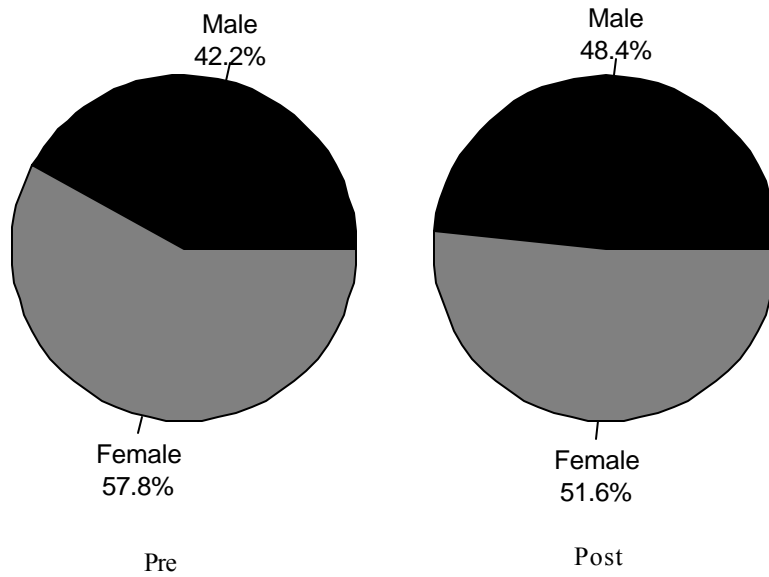


Figure 42

There are only two statistically significant differences in all of the respondent demographics. First, in the Bay Area and Los Angeles County, respondents were less likely to refuse the income question in the post-campaign survey. And second, in Los Angeles County, more respondents reported incomes of \$45,000 or more. The fact that these differences are so few strongly suggests that the comparisons made herein are reflective of actual change rather than of demographic discrepancies.

### **III. CONCLUSIONS AND RECOMMENDATIONS**

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Clearly, the results of this research are mixed. Some indicators increased as one would have hoped, some exhibited no change, and some actually decreased.

On the positive side, awareness of the word “grasscycling” increased in every area surveyed, although the increases were not statistically significant. Also across all areas, there were statistically significant increases in at least some aspects of the effects of the grasscycling message; in the Inland Empire and Los Angeles County, the overall effect

increased significantly. Finally, each area experienced at least one statistically significant increase in the recycling of a particular item.

With respect to specific campaigns, Los Angeles County evidenced a statistically significant decrease in those saying they had heard nothing about grasscycling in the five months preceding the survey and a significant decrease in the need for more information. In the Inland Empire, there was a statistically significant decrease in being somewhat concerned about recycling at home and a corresponding albeit not statistically significant increase in being very concerned.

Finally, there were two statistically significant changes for the worse. Across all areas, correct answers about the meaning of the word grasscycling decreased. In addition, there were significant increases in the Bay Area and the Inland Empire in those who said they had not heard anything about grasscycling in the five months preceding the survey.

In sum, although it would be inappropriate to say that the 1999 grasscycling promotional campaign was an unequivocal success, it would be equally inappropriate to suggest that it did not achieve its objectives. Rather, we believe it would behoove the campaign to assess why their efforts affected different measures in different ways with a view to making adjustments in 2000. We would also note that with the limited

budgets available to the campaigns, major changes cannot realistically be expected in relatively short periods of time.

# **APPENDIX A**

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## ***Survey Instrument***

# **APPENDIX B**

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## ***Detailed Data Tabulations***