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# AWARENESS OF FLASH FLOODING AMONG CLARK COUNTY RESIDENTS - YEAR 2002 -

Prepared For:

**REGIONAL FLOOD CONTROL DISTRICT** 



November, 2002

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# I. INTRODUCTION

### A. Background and Objectives

In October of 1999, THE SOURCE conducted an awareness survey among Clark County residents for the REGIONAL FLOOD CONTROL DISTRICT. Awareness levels of the dangers of flooding were high. The survey was repeated in October of 2000 and October of 2001 with some minor changes in the non-awareness questions.

The purpose of this current study was to replicate the previous surveys.

The specific objectives of this study were to determine, among Clark County residents . . .

- -> unaided and aided awareness of the dangers of flash flooding in Clark County, and how they compare to the previous years.
- -> from which sources they obtained information about flash flooding.
- -> their recall of the billboard advertising and how effective they believe it is.
- -> their experience and behavior with flooding.
- -> their opinion about whether violators of flood barriers should have to reimburse the County if they need to be rescued.
- -> their perceptions of Flood Control District progress in controlling flash flooding in Clark County.

## B. Methods and Procedures

To be able to statistically compare the 1999, 2000, 2001 and 2002 survey results in a valid and reliable manner, the methods and procedures used in this current study were identical to those used in the previous studies. Thus, a telephone survey was conducted with 510 Clark County residents who are 18 years or older between Sunday, October 6, 2002 and Saturday, October 19, 2002.

One of the largest and most respected suppliers of scientific samples was employed to provide a representative sample of all (both listed and unlisted) working residential telephone numbers in Clark County.

During the call attempts, when a no answer, busy signal or answering machine was reached, at least four call back were made on different days and at different times of the day before the number was replaced with a number from a replicate sample. Each interview took 5 to 6 minutes to complete.

Based on the final sample distribution proportions across the county and comparing them to Clark County Comprehensive Planning Division population estimates, we believe this sample accurately represents telephone households and is projectable to all of Clark County.

The maximum margin of error for the 510 sample is plus or minus 4.3% at the 95% level of confidence. Where appropriate, statistically significant differences are indicated on the tables.

The flow of the interview and the exact wording of the questions can be discerned by examining the questionnaire in the Appendix.

For analytical purposes, the Las Vegas valley was divided into quadrants. A map showing the quadrant zip code boundaries and the number of interviews conducted in each zip code can be found in the Appendix. The proportion of interviews conducted in each quadrant closely match the population estimates from the Comprehensive Planning Division.

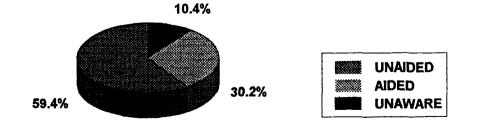
## **II. EXECUTIVE SUMMARY**

This is the fourth year of measuring flash flooding awareness for the CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT. For comparative purposes, this current project replicates the 1999, 2000 and 2001 studies, with some minor changes in the non-awareness questions.

Five hundred and ten respondents, composing a representative sample of Clark County adult residents, were interviewed by telephone during October, 2002. Fiftythree percent are women and 47% are men. Their median age is 48.2 years, they've lived in Clark County an average of 8.3 years (down significantly from 11.4 years last year), and their households average 2.4 members.

When asked without any prompting if they could name the types of natural disasters that can be a danger to Clark County residents, 59.4% said "Flash Flooding/ Flooding," significantly higher than all other mentions, which included earthquakes (22.0%), wind/dust/sand storms (11.6%), and several other natural and non-natural dangers. Interestingly, there was a significantly higher mention of "Yucca Mountain/ nuclear waste or spills" than in previous years.

Those who did not spontaneously say flooding were asked if they were aware of the dangers of flash flooding in Clark County. In this aided or prompted situation, 30.2% said they were, thus producing a total awareness of 89.6% (unaided 59.48% + aided 30.2%).



# **Awareness of Flash Floods - 2002**

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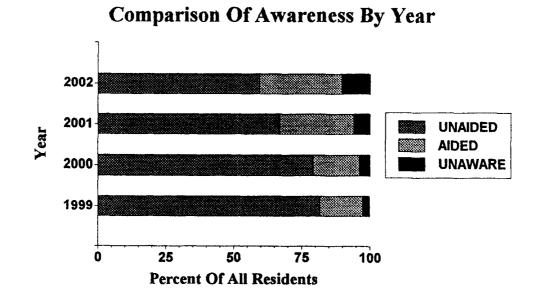
Looking at awareness by sub-samples discloses an important finding. Virtually all (98.4%) residents who've lived in Clark County for six or more years are aware of the dangers of flash flooding in Clark County. (Just 5 of 316 respondents said they are not aware.)

However, looking at shorter term residents, three-quarters (75.3%) of residents who have lived in Clark County for five years or less are aware of the dangers of flash flooding. (48 of 194 are not aware.) An additional breakout of this group indicates that residents who've been in Clark County for two years or less have an unaided awareness of 25.9% and total awareness of 63%. (40 of 108 are not aware.)

		Years Liv	ved in Clar	k County
<u>Awareness</u>	<u>Total</u>	<u>6+</u>		
Unaided	59.4%	70.9%	40.7%	25.9%
Aided	30.2%	27.5%	34.6%	37.1%
Trada 1	00 60	0.0 401	75.201	62.007
Total	89.6%	98.4%	75.3%	63.0%
N =	(510)	(316)	(194)	(108)

Unaided flooding awareness for 2002 (59.4%) is down significantly from 2001 (66.8%), which was down significantly from 2000 (79%). And although aided awareness was up somewhat for the past two years, it was not up enough to compensate for the drop in unaided awareness. As a result, the 2002 total awareness level of 89.6% was down significantly from 2001 (94.1%). We believe this is most likely due to the combination of little rain and no flooding over the past three years with the continuing growth of new residents, many of whom have not experienced flash flooding and who have not been made aware of it.

The chart on the following page illustrates the awareness level differences over the past four years.



When asked without any prompting how they learned about the dangers of flash flooding in Clark County, in all four survey years respondents by far said "by living here/seeing it happen/through personal experience" (49.2% in 2002). Other sources were given, similar in each year, which included television, newspaper, radio, billboard, family/friends, and several others. It should be noted that this is the first year that the flood program run on channels 4 and 2 was mentioned (2.2% of all aware respondents.)

Respondents were next asked if they had heard or read about flash flooding dangers from a list of nine specified sources. Following is a comparison of this year's responses to last year's, in this year's rank order. The spaces <u>between sources</u> indicate statistically significant differences between sources for 2002. The arrows <u>between percentages</u> indicate statistically significant differences for the source between years.

Because there has been no recent flooding, there was a significant decrease in two news sources which report flooding when it happens - Newspaper and Radio. The ubiquitous Television, along with Billboard and Friend or Relative stayed at the same level as the previous year. There were also significant decreases in the lower level sources.

Television	<u>2002</u> 91.0%	<u>2001</u> 93.7%
Newspaper	53.8% <>	64.7%
Billboard	49.2%	47.7%
Friend or Relative	48.4%	49.4%
Radio	38.9% <>	69.1%
Brochure	15.8% <>	242%
	10.070 < 2	2 1.2 /0
Bus Stop Shelter Ad	13.8% <>	
Bus Stop Shelter Ad Children		20.2%

The 49.2% of respondents who this year said they had seen Billboards about flooding dangers were asked if they recalled any specific billboards. Six in ten (57.3%) said they could recall specific billboards, which is down from 80% last year.

For a billboard observation, when a person is driving by and has one or two seconds at the most to absorb the message, graphics usually communicate stronger than the words. This was true last year and is again true this year in the case of the Flood Billboards, where over three-fourths of the respondents who could recall specific billboards described cars in deep water: "car half covered with water," "car covered with water," and "car floating." There was also some recall of the copy - both from this year's signage and previous years' signage. This year, 36.4% of those who said they could recall specific billboards gave correct mentions of billboard copy. The two most frequently mentioned were "Not To Be Used As A Flotation Device" (12.4%) and "Boats Float. Cars Don't" (10.1%), both of which had more frequent mentions than last year.

Also, many respondents gave copy statements that were incorrect, BUT they did get the message about flooding. Almost a third (31.8%) said the signs said something like "Don't Try This," "Don't Take A Chance," "Warning - Danger," etc.

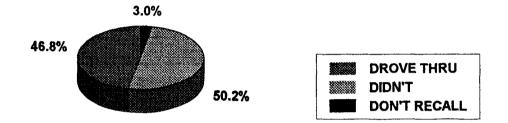
Almost six in ten (58.9%) of those who recalled something about the billboards felt that they are "Very Effective" in communicating the dangers of flash flooding. Another 37.2% said the billboards are "Somewhat Effective" and just 3.9% felt that they are "Not At All Effective." These proportions are comparable to last year.

The vast majority (90%) of these residents drive a vehicle. Of those who do drive, 70.4% usually drive a regular passenger car and 29.4% usually drive an SUV, van or truck.

All drivers were asked if they had ever encountered a flooded street or road while driving. Two-thirds (65.1%) said that they had. A significantly higher proportion (83.6%) of those who have lived here six or more years said they had. On average, those who've encountered a flooded street have had it happen 4.4 times, while those living in Clark County six or more years have encountered a flooded street 5.4 times.

Those who had encountered a flooded street while driving were asked which of four statements best describes their experience the first time they came to a flooded street. One statement pertained to avoiding the flooded street, the three other statements pertained to driving through experiences. The pie chart on the following page summarizes those who drove through versus those who did not drive through.

# **First Time Encountered Flooded Street**



The above breakdown is close to last year's proportions with no significant differences.

Those driving into the flooded street the first time (46.8%) also indicated their experience:

20.7% "Drove Into It - No Problem" 19.7% "Drove Into It - Made It But Scary" 6.4% "Drove Into It And Got Stuck" ------46.8%

Those who had multiple experiences with flooding were asked which of five statements best describes their behavior over all of their flooded street encounters. Compared to last year, although there are no significant differences, there does appear to be a subtle shift taking place in a positive direction. The following table summarizes the two most recent years of respondent behavior each time they encountered a flooded street.

#### SUMMARY OF BEHAVIOR EACH TIME ENCOUNTERED A FLOODED STREET

	<u>2002</u>	<u>2001</u>
Went back/waited all times	44.7%	37.5%
Sometimes drove thru sometimes went back	34.1%	40.7%
Drove into first time/ back other times	13.8%	11.8%
Drove into/thru all times	6.5%	8.9%
Went back first time/ into other times	.8%	1.1%
TOTAL SAMPLE	100.0%	100.0%

Looking at sub-sample differences this year, women are more likely to have driven into a flooded street the first time but gone back all later times whereas men are more likely to drive into it every time. Those who've lived here six or more years are more likely to have driven into a flooded street the first time but gone back all later times. Passenger car drivers are more likely to have gone back all times while SUV/van/ truck drivers are more likely to sometimes drive through and sometimes go back.

Respondents were asked "If a person drives around a posted County flood barricade and then needs to be rescued, should that person have to reimburse the County for the costs of the rescue?" For the third year in a row, a sizeable majority (75.9%) said that they should.

Finally, respondents were asked to indicate how much progress they believe the Flood Control District is making in controlling flash flooding in Clark County. Over a third (36.5%) said "A Lot Of Progress" and over a fourth (28%) said "Some Progress." On the five-point scale, the average score was 3.88 out of a possible 5.00. By sub-sample, higher progress ratings were given by men (4.00), those living in Clark County six or more years (4.12), those 50 or older (4.05) and SUV/van/truck drivers (4.10).

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

Due to the light levels of rainfall and lack of flooding in the past two years, overall awareness has declined significantly, although it is still at a relatively high level.

As we saw in the findings, awareness is still extremely high among residents who've lived in Clark County for six or more years. Overall awareness is dragged down by residents living in Clark County for five years or less, and especially by those living here for two years or less. These newcomers have not experienced a flash flood, and as we've seen in questions about how people learned about the dangers of flash flooding, experience is by far the most frequent mention. Without experience - the most powerful teacher - it is vital to reach new residents about the dangers of flash flooding and to prepare them for the next inevitable flooding.

The findings show that Billboards are the highest non-news source of knowledge about flash flooding dangers and they should be continued as a reminder campaign to residents. However, in addition to Billboards, other sources are needed to more thoroughly educate new residents. One way is to utilize the captive nature of the DMV, where new residents have to register their vehicles and apply for their Nevada driver's license. Given the two plus hours spent there, residents can be reached by signage, pamphlets and perhaps even a film. Other ways of reaching newcomers, such as welcoming services, should also be explored. The primary objective of the 2003 advertising/promotion campaign should be to increase awareness of flash flooding among new residents.

The results from the last three years' surveys indicate a mandate to charge people who violate flood barriers and who then need to be rescued; however this can be effective only if people are made aware of the policy once it is implemented. In a way, this is also an educational tool.

# **IV. DETAILED FINDINGS**

Five hundred and ten respondents, constituting a representative sample of Clark County adult residents, were interviewed by telephone during October, 2002.

In addition to reporting information by total respondents, data was cross-tabulated by years lived in Clark County, gender, age, number of people in the household, whether there are children in the household, type of vehicle driven, quadrant of the valley lived in, and by whether or not they said "flash flooding/flooding" when asked to name the types of natural disasters than can be a danger to residents.

#### A. Awareness of Flooding

After first verifying their Zip Code and asking how long they have lived in Clark County, respondents were asked if they could name the types of natural disasters that can be a danger to residents of Clark County. In this unaided situation, 59.4% of all residents said "Flash Flooding" or "Flooding," significantly higher than all other mentions. The second most frequent mention was earthquakes (22.0%), followed by wind/dust/sand storms (11.6%). Although not a "natural" danger, 8.2% said "Yucca Mountain/nuclear waste or spills," a significantly higher mention than in previous years. Twenty-six percent of respondents could not name any natural disasters that could be a danger to Clark County residents.

By sub-sample, "Flash Flooding/Flooding" was significantly more likely to be mentioned by those who've lived in Clark County six or more years (70.9%) than those who've lived in Clark County for five years or less (40.7%); and by those who drive an SUV, van or truck (69.6%) compared to those who drive a regular passenger car (56.7%).

(See Tables 1a & 1b)

The 207 residents who did not spontaneously mention "Flash Flooding/Flooding" were then asked if they were aware of the dangers of flash flooding in Clark County. In this aided situation, 74.4% of these residents (30.2% of all respondents) said they were aware of the dangers of flooding.

By sub-sample, aided awareness was significantly higher for those who've lived in Clark County six or more years (94.6%) than for those who've lived in Clark County five years or less (58.3%); by those 50 years or older (83.3%) than by those under 50 years old (67.5%); by those living in the Northwest area of the valley (89.1%) compared to those living in the Southwest (70.7%) or the Southeast (68.9%) areas; and by those who drive an SUV, van or truck (85.4%) compared to those who drive a regular passenger car (72.1%).

(See Tables 2a & 2b)

Total awareness was derived by combining the previous unaided and aided responses. Across the total sample, 89.6% of these residents are aware of the dangers of flash flooding. Fifty-three of the 510 respondents are not aware of this danger. By subsample, total awareness was significantly higher for those who've lived in Clark County six or more years (98.4%) than for those who've lived in Clark County five years or less (75.3%); by those 50 years or older (93.6%) than by those under 50 years old (86.3%); by residents living in the Northwest (95.9%) compared to those living in the Southeast (87.8%) or the Southwest (87.0%); and by those who drive an SUV, van or truck (95.6%) compared to those who drive a regular passenger car (87.9%).

(See Tables 3a & 3b)

#### B. Awareness Comparisons to Previous Years

Unaided awareness of flash flooding for 2002 (59.4%) is significantly lower than 2001 (66.8%), 2000 (79%) and 1999 (81.6%). And those not being able to name any type of disaster is much higher this year (25.7%) than in any of the previous years. This is most likely due to very little rain and no flooding for the past two years.

Although aided awareness was up for the past two years compared to the previous two years, it was not up enough to compensate for the drop in unaided awareness. Therefore, total awareness, combining unaided and aided, for this year is at 89.6%; significantly lower than last year (94.1%), 2000 (96.0%) and 1999 (97.4%), the year of the 100 Year Flood.

(See Tables 4a & 4b)

#### C. Sources of Information

The residents who were aware of the dangers of flooding were next asked questions about how they obtained information about flooding. The 53 residents who were not aware of flooding dangers were skipped ahead to the next series of questions.

The 457 residents who were aware of flooding dangers were asked, without any clues, how they learned about the dangers of flash flooding in Clark County. About half (49.2%) of these residents in this unaided situation said they learned about it "by living here/seeing it happen/through personal experience." This response was significantly far above all other answers. The second most frequent mention was "TV News" (27.8%), followed by "TV" (14.2%). Specific channel news programs and public stations were also mentioned, giving television a total of 45.3%. Continuing on, the fourth most frequent mention is Family/Parents/Friends,Co-workers (9.4%), then Newspaper (6.6%), Billboards (2.8%), Channel 2 or 4 flood program (2.2%), Radio (2.0%), and several other mentions, all less than 1%. The reader may wish to inspect the sub-sample frequencies for any useful patterns.

(See Tables 5a & 5b)

Respondents were then read a list of nine possible sources and asked to indicate whether they heard or read about flash flooding dangers from each source. In this aided situation, Television (91.0%) was cited significantly more than all other sources. Next, Newspaper (53.8%), Billboard (49.2%) and Friends/Relatives (48.4%) were chosen significantly more than the remaining sources. Radio (38.9%) is significantly higher than the remaining four sources - Brochure (15.8%), Bus Stop Shelter Ad (13.8%), Children (10.7%) and Magazine (7.2%). By sub-sample, compared to those who've lived in Clark County 5 years or less, those who've lived in Clark County 6 or more years were significantly more likely to say Billboard, Radio and Bus Stop Shelter Ad. Those 50 and older were more likely to say Newspaper, while those under 50 years were more likely to say Children. Compared to one or two person households, those with three or more in the home were significantly more likely to say Bus Stop Shelter Ad and Children.

(See Table 6a)

Continuing with sub-sample differences in information sources, households with children are significantly more likely to say Bus Stop Shelter Ad and Children than adult only households. SUV/van/truck drivers are more likely to say Bus Stop Shelter Ad than passenger car drivers.

(See Table 6b)

#### D. Billboard Recall and Effectiveness

The 225 respondents who said they had seen Billboards about flooding dangers were asked if they recall any specific billboards. Almost six in ten (57.3%) said they did, with those under 50 years old significantly more likely to say they did (66.4%) compared to those 50 years or older (45.4%).

(See Tables 7a & 7b)

Those who said they did recall specific billboards were then asked to describe any of the words or pictures on the billboards.

Over three-fourths (78.4%) of these respondents described cars in deep water: "car covered with water," "car half covered with water," and "car floating."

Almost a third (31.8%) could not describe anything specific but they did get the message because they said the billboards said it was dangerous and not to try driving into floods or that they were a warning not to attempt it.

There was good recall of the copy used, not only this year's but previous years' also: "Not To Be Used As A Flotation Device" (12,4%), "Boats Float. Cars Don't." (10.1%), "Look Mom, No Brains" (5.4%), "Farfromfloatin' (3.1%), "Raindrops Keep Fallin. Use Your Head" (2.3%), "No Se Pudo" (2.3%) and "Up The Creek. Without Paddle" (.8%).

(See Tables 8a & 8b)

Those who said they recalled billboards about flooding dangers were asked to indicate, on a three-point scale, how effective they thought the billboards are in communicating the dangers of flash flooding. Overall, 58.9% said the signs are "Very Effective" (compared to 54.8% last year); 37.2% said "Somewhat Effective" (compared to 40.3% last year) and 3.9% said "Not At All Effective" (compared to 4.3% last year).

The current year ratings equal a 2.55 average score out of a possible 3.00. This is not significantly different than the 2.51 average score last year. By sub-sample this year, there are no statistically significant differences.

(See Tables 9a & 9b)

#### E. Experience with Flooding

Although there are other ways to experience flooding, this area of questioning concentrated on flooding encounters while driving. When asked if they drive a vehicle, 90.0% said that they did. Those who didn't were skipped on to the next area of questioning. A significantly greater proportion of under 50 year old residents (92.8%) drive a vehicle than older residents (86.7%); a significantly greater proportion of Northwest residents (95.1%) drive a vehicle than Southeast residents (88.9%); and a significantly greater proportion of households with children drive a vehicle (93.3%) than adult only households (88.0%).

(See Tables 10a & 10b)

Of those who do drive a vehicle, 70.4% usually drive a regular passenger car and 29.4% usually drive an SUV, van or truck. Women (76.9%) are significantly more likely than men (63.1%) to drive a car; and conversely, men (36.4%) are significantly more likely than women (23.1%) to drive an SUV, van or truck.

(See Tables 11a & 11b)

The 459 residents who are aware of flooding dangers and who drive a vehicle were asked if they had ever encountered a flooded street or road while driving. Sixty-five percent of them said that they had encountered a flooded street sometime while driving in Clark County. (This is down from 70% last year.) By sub-sample, those who've lived here 6 or more years (83.6%) are significantly more likely to have encountered a flooded street than shorter term residents (34.3%). Those over 50 years old are significantly more likely to have encountered a flooded street (71.8%) than younger residents (59.9%). And SUV/van/truck drivers (78.5%) are significantly more likely to have encountered a flooded street than passenger car drivers (59.4%).

(See Tables 12a & 12b)

When asked how many times they have encountered a flooded street, overall these drivers averaged 4.36 times. Those who've lived here 6 years or more have encountered more flooded streets (5.79) than shorter term residents (2.27) and those from three or larger households have encountered more flooded streets (5.76) than one or two person households (3.46).

(See Tables 13a & 13b)

Respondents were asked which of four categories best describes their first time flooded street encounter. Half (50.2%) said that they "turned back/went a different way/waited for the water to go down," with 46.8% saying they drove into it or through it. This is close to the same proportions as last year. Those driving into it further segmented as follows: "drove into it - no problem" (20.7%), "drove into it - made it but scary" (19.7%), and "drove into it and got stuck" (6.4%). Of the various sub-samples, three or more person household drivers (25.2%) were significantly more likely to say they drove into it and found it scary than one or two person households (15.2%). SUV/van/truck drivers (28.3%) were significantly more like to say they drove into it with no problem than passenger car drivers (16.1%). And women (9.4%) were significantly more likely to say they drove likely to say they drove into it and got stuck than men (3.3%).

(See Tables 14a & 14b)

Among the people who encountered flooded streets more than once, some changed their behavior after their first experience and some did not. Respondents were asked which of five categories best describes their behavior over all of their flooded street encounters.

Compared to the previous year, there appears that a subtle shift has taken place in a positive direction. Last year, the largest of the five categories was those who sometimes drove through a flooded street and sometimes did not (40.7%). This year this category dropped to second place with 34.1%.

Last year the second largest category (37.5%) was the safest, they avoided the flooded street every time they came to one by going back, going a different way or waiting for the water to go down. This category moved to first place this year (44.7%).

The third largest category both this year (13.8%) and last year (11.8%) are those who learned a lesson from their initial experience: they drove through it the first time but went back on subsequent encounters.

The fourth category both this year (6.5%) and last year (8.9%) are those who drove into or through a flooded street every time they came to one.

The fifth category both this year (.8%) and last year (1.1%) are a small but curious group who went back the first time but drove into or through the flooded street on subsequent encounters.

By sub-sample, women are significantly more likely to have driven into a flooded street the first time but go back all later times whereas men are significantly more likely to drive into it every time. Those who've lived here six or more years are more likely to have driven into a flooded street the first time but go back all later times. One or two person household drivers are significantly more likely to have gone back all times while larger household drivers are more likely to sometimes drive through and sometimes go back. Northeast and Southeast drivers are more likely to go back all times drive through and sometimes go back compared to Northeast and Southeast drivers. Adult only household drivers are more likely to go back all times while drivers with children are more likely to sometimes drive through and sometimes go back. Passenger car drivers are more likely to go back all times while SUV/van/truck drivers are more likely to sometimes drive through and sometimes go back.

(See Tables 15a & 15b)

#### F. Should County Be Reimbursed For Rescue

All respondents were read the question "If a person drives around a posted County flood barricade and then needs to be rescued, do you think that person should have to reimburse the County for the costs of the rescue?"

Three-fourths (75.9%) of all respondents said that the County should be reimbursed. By sub-sample, 50 and older residents (82.8%) are more likely to agree than younger residents (70.0%), and those from one or two person households (80.1%) are more likely to agree than those from three or more person households (70.7%).

(See Tables 16a & 16b)

## G. Perceived Amount of Progress by Flood Control District

All respondents were asked to indicate, on a five-point scale, how much progress they believe the Flood Control District is making in controlling flash flooding in Clark County. Overall, 36.5% said "A Lot Of Progress," 28% said "Some Progress," 25.1% "Didn't Know," 8.2% said "Little Progress," and 2.2% said "No Progress." This equals a 3.88 average score out of a possible 5.00. By sub-sample, men (4.00) rated the progress significantly higher than women (3.79); those living in Clark County six years or more years (4.12) rated progress higher than shorter term residents (3.49); 50 and older residents (4.05) rated progress higher than younger residents (3.74); and SUV/van/truck drivers (4.10) rated progress higher than passenger car drivers (3.84).

(See Tables 17a & 17b)

#### H. Characteristics of the Sample

In our sampling procedure we asked to speak to either the male or female head of the household. If neither was available, the interview was conducted with a permanent resident of the household who is 18 years or older.

There was a good sampling by gender, with 46.9% of the total sample being men and 53.1% being women. The only significant sub-sample differences by gender are that a greater proportion of adult only household respondents were men while a greater proportion of households with children respondents were women and a greater proportion of SUV/van/truck driver respondents are men and a greater proportion of car driver respondents are women.

(See Tables 18a & 18b)

For the most part, one of the heads of household was interviewed (88.6%). When an other adult member of the household was interviewed, that person was significantly more likely to have lived in Clark County 5 years or less, be under 50 years old, and from a household with three or more members.

(See Tables 19a & 19b)

The median age of these residents is 48.2 years. Residents who have lived in Clark County 6 or more years are significantly older (51.8) than those who have lived in Clark County 5 years or less (41.5). Residents from one or two member households are significantly older (56.4) than those from three or more member households (40.4). This correlates with household composition - respondents in adult only households are significantly older (55.9) than respondents in households with children (40.5). Residents in the Northwest (48.7), Southeast (50.4) and Southwest (49.5) are significantly older than residents in the Northeast (44.1).

(See Tables 20a & 20b)

The median time these residents have lived in Clark County is 8.3 years, down significantly from last year (11.4 years). This reflects the increase in new residents moving to the area. Respondents in this year's sample who are 50 or older have lived in Clark County significantly longer (10 years) than those under 50 (6.5 years).

(See Tables 21a & 21b)

The median number of household members is 2.4. Under 50 year old households are significantly larger (3.2) than 50 and older households (2.0). This correlates with household composition - households with children are significantly larger (4.0) than adult only households (1.9).

(See Tables 22a & 22b)

Over six in ten (61.9%) of these households do not have children; 18.0% are single person households and 43.9% are two or more adults with no children. About a fifth (19.4%) are households with only pre-teens, 10.2% are households with teen-agers only, and 8.4% have both pre-teens and teen-agers. Most of the sub-sample significant differences are what would be expected for the categories. The reader can inspect the tables for these. A noteworthy significant difference is that single person households are more likely to be car drivers rather than SUV/van/truck drivers.

(See Tables 23a & 23b)

#### I. Comparison by Unaided Awareness

In this section, differences in demographic characteristics are noted between those residents who initially named "Flash Flooding/Flooding as a natural disaster danger in Clark County and those who did not spontaneously mention flooding as a danger. These comparisons look at some of the previous data from a different perspective. All of the differences cited below are statistically significant

A greater proportion of those who initially said flooding have lived in Clark County longer than those who did not say flooding.

A greater proportion of those who initially said flooding have more people living in their household than those who did not say flooding.

(See Tables 24 - 29)

For those readers interested in inspecting unaided awareness by individual Zip Code, this data can be found in Table 25.

# **V. SUPPORTING TABLES**

## Table 1a

		gendi Respo	er of Sindent	YEARS IN CLA			OF NDENT	NUMBER IN HOUSEHOLD		
	TOTAL	NALE	FENALE	5 YRS. & LESS			50 & OLDER	1 OR 2	3 OR MORE	
No, Can't Name Any	131 25.7%	56 23.4	75 27.7		44 13.9		50 21.5	78 27.8	53 23.1	
Flash Flooding/	303	145	158	79	224		143	158	145	
Flooding	59.48	60.7	58.3	40.7€			61.4	56.2	63.3	
Earthquakes	112	50	62	29	83	53	59	64	48	
	22.0%	20.9	22.9	14.9	26.3	19.1	25.3	22.8	21.0	
Wind/Dust/Sand	59	22	37	20	39		29	25	34	
Stor <b>m</b> s	11.6%	9.2	13.7	10.3	12.3		12.4	8.9	14.8	
Yucca Mountain/	42	20	22	11	31		21	25	17	
Nuclear Waste/Spills	8.28	8.4	8.1	5.7	9.8		9.0	8.9	7.4	
Fires/Wild Fires	39	19	20	7	32	17	22	24	15	
	7.6%	7.9	7.4	3.6	10.1	6.1	9.4	8.5	6.6	
High Temperature/	23	11	12	12	11	15	8	11	12	
Heat	4.5%	4.6	4.4	6.2	3.5	5.4	3.4	3.9	5.2	
Dam Break	16 3.1 <b>%</b>	6 2.5	10 3.7	0	16 5.1	3 1.1	13 5.6	10 3.6	6 2.6	
Tornados/T <b>wister</b> s/	9	5	<b>4</b>	3	6	7	2	4	5	
Microbursts	1.8%	2.1	1.5	1.5	1.9	2.5	0.9	1.4	2.2	
Drought	8	3	5	3	5	3	5	7	1	
	1.6%	1.3	1.8	1.5	1.6	1.1	2.1	2 <b>.</b> 5	0.4	
Lightning	7 1.48	3 1.3			7 2.2	3 1.1				
Rain	6 1.2	1 0.4	5 1.8		5 1.6	4 1.4		2 0.7	4 1.7	
Hurricane	2 0.48	2 0.8	0	1 0.5	1 0.3	0	2 0.9		0	
All Other Mentions	12 2.48						5 2.1		6 2.6	

#### UNAIDED AWARENESS: NAME TYPES OF NATURAL DISASTERS THAT CAN BE A DANGER TO RESIDENTS OF CLARK COUNTY

Continued...

(Table Continued)

									*****
TOTAL RESPONSES	769	347	422	260	509	404	365	420	349
BASE=NET RESPONDENTS	150.8	145.2	155.7	134.0	161.1	145.8	156.7	149.5	152.4
		******							******
NET RESPONDENTS	510	239	271	194	316	277	233	281	22 <del>9</del>

NOTE: For the "Flash Flooding/Flooding" row, arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence. Outlying area sample size is too small to calculate.

#### Table 1b

#### UNAIDED AWARENESS: NAME TYPES OF NATURAL DISASTERS THAT CAN BE A DANGER TO RESIDENTS OF CLARK COUNTY

			QUADRA	NT OF V	ALLEY			EHOLD SITION	TYPE VEHI	
	TOTAL	NORTH EAST	NORTH WEST	South East	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
No, Can't Name Any	131	21	25	51	28	6	86	45	86	24
	25.7 <b>%</b>	23.6	20.5	27.0	30.4	33.3	27.2	23.2	26.6	17.8
Flash Flooding/	303	53	76	115	51	8	180	123	183	94
Flooding	59.4%	59.6	62.3	60.8	55.4	44.4	57.0	63.4	56.7	₩69.6
Earthquakes	112	15	27	43	22	5	70	42	75	28
	22.0%	16.9	22.1	22.8	23.9	27.8	22.2	21.6	23.2	20.7
Wind/Dust/Sand	59	8	11	20	15	5	32	27	37	16
Storms	11.6%	9.0	9.0	10.6	16.3	27.8	10.1	13.9	11.5	11.9
Yucca Mountain/	42	9	13	12	7	1	27	15	28	12
Nuclear Waste/Spills	8.28	10.1	10.7	6.3	7.6	5.6	8.5	7.7	8.7	8.9
Fires/Wild Fires	39 7.6 <b>%</b>	4 4.5	9 7.4	16 8.5	10 10.9	0	29 9.2	10 5.2	25 7.7	10 7.4
High Temperature/	23	7	4	5	3	4	13	10	15	7
Heat	4.5%	7.9	3.3	2.6	3.3	22.2	4.1	5.2	4.6	5.2
Dam Break	16 3.1%	4 4.5	4 3.3	5 2.6	3 3.3	0	13 4.1	3 1.5	14 4.3	2 1.5
Tornados/Twisters/	9	1	2	5	1	0	4	5	7	1
Microbursts	1.8%	1.1	1.6	2.6	1.1		1.3	2.6	2.2	0.7
Drought	8 1.6%	1 1.1	1 0.8	3 1.6	3 3.3	0	7 2.2	1 0.5	5 1.5	2 1.5
Lightning	7 1.4%	1 1.1	1 0.8	4 2.1	1 1.1	0	4 1.3	3 1.5	4 1.2	2 1.5
Rain	6 1.2 <b>%</b>	3 3.4	1 0.8	1 0.5	1 1.1	0	3 0.9		3 0.9	0
Hurricane	2 0.48	0	1 0.8	1 0.5	0	0	2 0.6	0	1 0.3	0
All Other Mentions	12	2	2	5	2	1	9	3	6	5
	2.4%	2.2	1.6	2.6	2.2	5.6	2.8	1.5	1.9	3.7

Continued...

(Table Continued)

*******			***		 				
TOTAL RESPONSES BASE=NET RESPONDENTS				151.3	166.7				
NET RESPONDENTS	510	89	122	189	18	316	194	323	135

NOTE: For the "Flash Flooding/Flooding" row, arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence. Outlying area sample size is too small to calculate.

#### Table 2a

			GENDER OF RESPONDENT		LIVED ARK CO		e of Ondent	NUNBER IN HOUSEHOLD		
	TOTAL	NALE	FENALE			UNDER 50 YRS		1 OR 2	3 OR NORE	
Yes	154 74.4%	72 76.6				79 67.5	75 ← 83.3	93 75.6	61 72.6	
No	53 25.6¥	22 23.4		48 41.7	-	38 32.5	15 16.7	30 24.4	23 27.4	
TOTAL RESPONSES BASE=NET RESPONDENT	207 S 100.0%	94 100.0	113 100.0	115 100.0			90 100.0	123 100.0	84 100.0	

#### AIDED AWARENESS: (AMONG THOSE NOT SAYING "FLOODING" IN PREVIOUS QUESTION) AWARE OF DANGERS OF FLASH FLOODING HERE IN CLARK COUNTY

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Table 2b

			QUADRA	NT OF V	ALLEY		HOUSI	EHOLD SITION	TYPE VEHI	
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
Yes	154	26	41	51	29	7	104	50	101	35
	74.48	72.2	89.1	68.9	70.7	70.0	76.5	70.4	72.1	85.4
No	53	10	5	23	12	3	32	21	39	6
	25.6 <b>%</b>	27.8	10.9	31.1	29.3	30.0	23.5	29.6	27.9	14.6
TOTAL RESPONSES	207	36	46	74	41	10		71	140	41
BASE=NET RESPONDENTS	100.0 <b></b>	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0

#### AIDED AWARENESS: (AMONG THOSE NOT SAYING "FLOODING" IN PREVIOUS QUESTION) AWARE OF DANGERS OF FLASH FLOODING IN CLARK COUNTY

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 3a

			GENDER OF RESPONDENT		YEARS LIVED IN CLARK CO				3 OF MDENT	NUMBER IN HOUSEHOLD		
	TOTAL	NALE	FENALE	-	YRS. LESS	-	• • • •	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE	
Aware of Flash Flooding	457 89.6 <b>\$</b>	217 90.8	240 88.6	-	146 75.3		311 -98.4	239 86.3	218 ←93.6	251 89.3	206 90.0	
Not Aware of Flash Flooding	53 10.4	22 9.2			48 24.7		5 1.6		15 6.4	30 10.7	23 10.0	
TOTAL RESPONSES BASE=NET RESPONDENTS	510 510.0	239 100.0			194 100.0		316 100.0		233 100.0	281 100.0	229 100.0	

#### TOTAL AWARENESS: UNAIDED AND AIDED AWARENESS OF FLASH FLOODING DANGERS

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 3b

			QUADRA	NT OF V	ALLEY	Hous) Compos	EHOLD SITION	TYPE OF VEHICLE		
	TOTAL	NORTH EAST	NORTH WEST	South East	South West	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
Aware of Flash	457	79	117	166	80	15	284	173	284	129
Flooding	89.6¥	88.8	95.9	87.8	87.0	83.3	89.9	89.2	87.94	95.6
Not Aware of Flash	53	10	5	23	12	3	32	21	39	6
Flooding	10.4 <b>%</b>	11.2	4.1	12.2	13.0	16.7	10.1	10.8	12.1	4.4
TOTAL RESPONSES	510	89	122	189	92	18	316	194	323	135
BASE=NET RESPONDENTS	100.0\$	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### TOTAL AWARENESS: UNAIDED AND AIDED AWARENESS OF FLASH FLOODING DANGERS

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculate.

#### Table 4a

#### COMPARISON OF AWARENESS 1999 - 2002

				LIVRD RK CO	AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
TOTAL	MALE	PENALE	5 YRS. & LESS	6 YRS. & NORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR NORE
Unaided Awareness								
	<sup>78.3</sup>	۲ <sup>83.8</sup>	۲ <sup>83.0</sup>	٢ 81.1	87.5	۲ <sup>75.3</sup>	F <sup>76.4</sup>	٢ <sup>88.7</sup>
2000 - 79.0	L- 84.7	+74.2	→ 72.1	- 82.6	<b>→</b> 81.3	- 75.8	- 76.3	F#81.7
2001 ┌ → 66.8	69.5	<b>→</b> +64.8	<b>┌</b> → 63.4	<b>→68.1</b>		+ 57.8	<b>→</b> 61.1	<b>→</b> 72.9
2002 59.4	<b>60.7</b>	<b>4-</b> 58.3	40.7	<b>₽</b> 70.9	\$ \$ 57.8	<b>61.4</b>	→56.2	<b>4</b> ,63.3
Aided Awareness								
1999 م 15.8	<sup>16.8</sup>	<b>*</b> 15.2	▶ 13.5	▶16.7	10.5	▶21.4	▶20.1	9.9 م
2000 >17.0	+ +11.4	P 21.7	19.8 - م	+15.6	14.4	⇒ 20.5	→20.7	+13.1
2001 - 27.3	- 26.7	27.7	- 26.9	-27.5	+- 19.3	- 36.5	- 32.7	-21.4
2002 30.2	L 30.1	[[ <sub>30.3</sub>	LL 34.6	L <sub>27.5</sub>	LL 28.5	L 32.2	L <sub>33.1</sub>	L 26.7
Total Awareness								
1999 97.4	95.1	۲99.0	۲ <sup>96.5</sup>	97.8	۲ <sup>98.0</sup>	96.7	F 96.5	۲ <sup>98.6</sup>
2000 T 96.0	F <sup>96.1</sup>	<b>→</b> 95.9	<b>→</b> 91.9	۲ <sup>98.2</sup>	₽\$95.7	96.3	- 97.0	<b>→</b> 94.8
2001 - +94.1	- 96.2	<b>→</b> 92.5	<b>→</b> 90.3	<b>*</b> 95.6	-→93.8	94.3	93.8	<b>&gt;94.</b> 3
2002 +89.6	490.8	\$88.6	\$ 75.3	L98.4	L, L, 86.3	93.6	489.3	<b>→</b> 90.0
TOTAL RESPONDENTS			****					****
1999 50		297	141	359	256	243	288	212
2000 50 2001 50		271 293	172 145	327 361	278 274	219 230	266 257	230 247
2001 50		271	194	316	274	230	281	229

NOTE: Arrows indicate differences between years which were found to be statistically significant at the 95% level of confidence.

#### Table 4b

#### COMPARISON OF AWARENESS 1999 - 2002

			QUADRANT OF VALLEY					old Tion	TYPE OF VEHICLE	
	TOTAL	North East	NORTH WEST	SOUTH EAST	South West	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
Unaided Awareness		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
1999	<b>₽</b> <sup>81.6</sup> ≹	<b><sup>82.1</sup></b>	<sup>86.8</sup>	۲ <sup>81.5</sup>	۲ <sup>80.0</sup>	46.7	*	*	*	*
2000	- 79.08	<b>-</b> →73.1	F 82.1	- 82.1	- 82.6	45.0	۲ <sup>78.7</sup>	۲ <sup>79.1</sup>	۲ <sup>76.9</sup>	۲ <sup>84.7</sup>
2001	┍ →66.8	<b>→</b> 63.0	+++++75.7	→ 65.1	<b>⇒</b> 57.6	90.5	⇒62.7	- 73.7	F→ 66.3	<b>→72.</b> 7
2002	L, L, 59.48	44 59.6	L, L, 62.3	L, 60.8	<b>↓</b> 55.4	44.4	\$ 57.0	L 63.4	L, L, 56.7	L 69.6
Aided Awareness										
1999	P15.8	16.0	<sup>10.6</sup>	17.0 م	17.1م	33.3	*	*	*	*
2000	⇒17.08	19.4	14.5	→15.2	13.9 جام	45.0	<b>↓</b> 17.8	<b>P</b> <sup>16.0</sup>	18.7 م	<b>12.2</b>
2001	- 27.3	-30.5	-20.8	- 31.1	L 28.3	9.5	- 30.3	22.1	- 28.9	-23.5
2002	L 30.28	L <sub>29.2</sub>	LL 33.6	27.0	L <sub>31.6</sub>	38.9	$L_{32.9}$	L 25.8	L 31.2	L <sub>26.0</sub>
<u>Total Awareness</u>										
1999	۲ <sup>97.4</sup>	٢ <sup>98.1</sup>	97.4	۲ <sup>98.5</sup>	<sup>97.1</sup>	80.0	*	*	*	*
2000	F 96.08	<b>*</b> 93.5	96.6	- 97.3	- 96.5	90.0	۲ <sup>96,5</sup>	<sup>95.1</sup>	<sup>95.6</sup>	96.9
2001	- +94.18	+93.5	96.5	- 96.2	•85.9	100.0	<b>→</b> 93.0	- 95.8	- 95.2	96.3
2002	489.68	\$88.8	95.9	\$87.8	₩87.0	83.3	L <sub>89.9</sub>	L 89.2	\$87.9	95.6
TOTAL RESPONDENTS		<b>485</b> -64 <b>0</b> \$44			188 <del>6 8 6 8</del> 6 8 8 8 8				~~*******	*******
1999 2000	500 500	106 93	114 117	195 184	70 86	15# 20#	* 314	* 182	* 295	* 163
2000	506	93	115	186	92	21	314	190	270	183
2002	510	89	122	189	92	18#	316	194	323	135

\* Not all cross-tabulated categories are shown because specific area sub-samples in 1999 were replaced with household composition and type of vehicle sub-samples in 2000.

NOTE: Arrows indicate differences between years which were found to be statistically significant at the 95% level of confidence.

# Significance not calculated for samples below 30 respondents.

#### HOW LEARN ABOUT DANGERS OF FLASH FLOODING IN CLARK COUNTY (UNAIDED - AMONG ALL WHO ARE AWARE OF DANGERS OF FLASH FLOODING)

		GENDER OF RESPONDENT		YEARS IN CLA		AGE RESPO		NUMBER IN HOUSEHOLD	
	TOTAL	MALE	FEMALE	5 YRS. & LESS			50 & OLDER	1 OR 2	3 OR MORE
By Living Here/Saw	225	106	119	43	182	97	128	126	99
It Happen/Experience	49.2	48.8	49.6	29.5	58.5	40.6	58.7	50.2	48.1
TV News (channel	127	59	68	39	88	76	51	64	63
not specified)	27.8%	27.2	28.3	26.7	28.3	31.8	23.4	25.5	30.6
TV (unspecified)	65	33	32	23	42	33	32	41	24
	14.2	15.2	13.3	15.8	13.5	13.8	14.7	16.3	11.7
Family/Parents/	43	19	24	29	14	29	14	18	25
Friends/Co-Workers	9.48	8.8	10.0	19.9	4.5	12.1	6.4	7.2	12.1
Newspaper	30	17	13	8	22	10	20	18	12
	6.6%	7.8	5.4	5.5	7.1	4.2	9.2	7.2	5.8
Billboards	13	8	5	1	12	11	2	6	7
	2.88	3.7	2.1	0.7	3.9	4.6	0.9	2.4	3.4
Channel 2/4 flood	10	4	6	4	6	5	5	7	3
program	2.2%	1.8	2.5	2.7	1.9	2.1	2.3	2.8	1.5
Radio	9	6	3	<b>4</b>	5	7	2	5	4
	2.08	2.8	1.3	2.7	1.6	2.9	0.9	2.0	1.9
Channel 8 News	3	1	2	1	2	2	1	2	1
	0.7 <b>%</b>	0.5	0.8	0.7	0.6	0.8	0.5	0.8	0.5
Signs/Road Signs	3	2	1	1	2	2	1	1	2
	0.78	0.9	0.4	0.7	0.6	0.8	0.5	0.4	1.0
Channel 3 News	2 0.4%	2 0.9		0	2 0.6	2 0.8	0	1 0.4	1 0.5
From my Realtor	2 0.48	1 0.5		1 0.7	1 0.3	0	2 0.9	2 0.8	0
All Other Single Mentions	15 3.3	5 2.3			4 1.3		6 2.8	8 3.2	7 3.4
Don't Know/Don't Remember	1 0.2%	1 0.5		0	1 0.3	1 0.4	0	0	1 0.5

Continued...

(Table Continued)

					*****					
TOTAL RESPONSES	548	264	284	165	383	284	264	299	249	
BASE=NET RESPONDENTS	119.9%	121.7	118.3	113.0	123.2	118.8	121.1	119.1	120.9	
					*****					
NET RESPONDENTS	457	217	240	146	311	239	218	251	206	

## Table 5b

## HOW LEARN ABOUT DANGERS OF FLASH FLOODING IN CLARK COUNTY (UNAIDED - AMONG ALL WHO ARE AWARE OF DANGERS OF FLASH FLOODING)

			QUADRA	NT OF V	ALLEY			EHOLD SITION	TYPE VEHI	
	TOTAL	NORTH EAST	NORTH WEST	South East	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
By Living Here/Saw	225	30	59	90	40	6	144	81	140	73
It Happen/Experience	49.28	38.0	50.4	54.2	50.0	40.0	50.7	46.8	49.3	56.6
TV News (channel	127	24	36	41	20	6	71	56	77	34
not specified)	27.88	30.4	30.8	24.7	25.0	40.0	25.0	32.4	27.1	26.4
TV (unspecified)	65	10	15	30	10	0		19	34	20
	14.2	12.7	12.8	18.1	12.5		16.2	11.0	12.0	15.5
Family/Parents/	43	11	10	15	5	2	23	20	28	10
Friends/Co-Workers	9.48	13.9	8.5	9.0	6.3	13.3	8.1	11.6	9.9	7.8
Newspaper	30	6	6	12	4	2	22	8	19	6
	6.68	7.6	5.1	7.2	5.0	13.3	7.7	4.6	6.7	4.7
Billboards	13	1	4	6	2	0	6	7	6	7
	2.88	1.3	3.4	3.6	2.5		2.1	4.0	2.1	5.4
Channel 2/4 flood	10	1	1	3	5	0	7	3	9	1
program	2.28	1.3	0.9	1.8	6.3		2.5	1.7	3.2	0.8
Radio	9	1	5	1	1	1	5	4	7	1
	2.08	1.3	4.3	0.6	1.3	6.7	1.8	2.3	2.5	0.8
Channel 8 News	3	0	0	2	1	0	2	1	3	0
	0.78			1.2	1.3		0.7	0.6	1.1	
Signs/Road Signs	3	2	1	0	0	0	2	1	1	2
	0.78	2.5	0.9				0.7	0.6	0.4	1.6
Channel 3 News	2	1	0	1	0	0	2	0	1	0
	0.4%	1.3		0.6			0.7		0.4	
From my Realtor	2	0	1	1	0	0	2	0	2	0
-	0.48		0.9	0.6			0.7		0.7	
All Other Single	15	1	7	3	3	1	9	6	12	3
Nentions	3.38	1.3	6.0	1.8	3.8	6.7	3.2	3.5	4.2	2.3
Don't Know/Don't	1	1	0	0	0	0	0	1	1	0
Remember	0.28	1.3						0.6	0.4	

Continued...

(Table Continued)

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TOTAL RESPONSES	548	89	145	205	91	18	341	207	340	157
BASE=NET RESPONDENTS	119.98	112.7	123.9	123.5	113.8	120.0	120.1	119.7	119.7	121.7
***							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		~~~~~~	
NET RESPONDENTS	457	79	117	166	80	15	284	173	284	129

#### Table 6a

#### HEARD OR READ ABOUT FLOODING DANGERS FROM SPECIFIED SOURCES (AMONG THOSE AWARE OF FLASH FLOODING)

			r of Ndent			AGE RESPO		NUMBE HOUSE	
	TOTAL			& LESS	& MORE	UNDER 50 YRS	OLDER	2	
	416 91.08	194	222	123	293	213 89.1	203	232	184
<b>∼  →</b> Newspaper	246 53.88					116 48.5€		138 55.0	
- → Billboard	225 49.2%				175 ←56.3	128 53.6	97 44.5	120 47.8	105 51.0
Friends/Relatives Told You About It	221 48.4%	103 47.5	118 49.2	74 50.7	147 47.3	118 49.4	103 47.2	114 45.4	107 51.9
<b>⊢</b> → Radio	178 38.9%					97 40.6			
→-→Brochure				22 15.1		38 15.9		40 15.9	
→→Bus Stop Shelter Ad						39 16.3			
Children Told You About It	49 10.78	18 8.3	31 12.9	14 9.6	35 11.3	33 13.8	16 <b>→</b> 7.3	10 4.0	39 ⊷18.9
L,L,L, Magazine	33 7.28	16 7.4	17 7.1	11 7.5	22 7.1	17 7.1	16 7.3	18 7.2	15 7.3
None of Them	8 1.8%	1.8	1.7		2.3	0.8		-	3 1.5
TOTAL RESPONSES BASE=NET RESPONDENTS	1511	715	796	423	1088	801	710	792	719
NET RESPONDENTS	457	217	240	146	311	239	218	251	206

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 6b

## HEARD OR READ ABOUT FLOODING DANGERS FROM SPECIFIED SOURCES (AMONG THOSE AWARE OF FLASH FLOODING)

							QUADRA	NT OF V	ALLEY		HOUSI COMPOS	HOLD SITION	TYPE VEHI	
					TOTAL	NORTH EAST	NORTH WEST	South East	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
			Γ	Television	416 91.0%	73 92.4	107 91.5	149 89.8	75 93.8	12 80.0	260 91.5	156 90.2	260 91.5	118 91.5
	1	Γ	>	Newspaper	246 53.88	<b>44</b> 55.7	66 56.4	85 51.2	45 56.3	6 40.0	160 56.3	86 49.7	151 53.2	70 54.3
		-	+	Billboard	225 49.28	44 55.7		77 46.4	36 45.0	2 13.3	133 46.8	92 53.2	142 50.0	73 56.6
		-	->	Friends/Relatives Told You About It	221 48.48	41 51.9	54 46.2	79 47.6	41 51.3	6 40.0	136 47.9	85 49.1	136 47.9	60 46.5
1	Γ	•	>	Radio	178 38.9%	33 41.8	50 42.7	63 38.0	26 32.5	6 40.0	107 37.7	71 41.0	107 37.7	59 45.7
Γ	->	<b>→</b>	•	Brochure	72 15.88	11 13.9	21 17.9	30 18.1	10 12.5	0	43 15.1	29 16.8	46 16.2	23 17.8
	<b>~</b>	>	-	Bus Stop Shelter Ad	63 13.8	14 17.7	20 17.1	21 12.7	5 6.3	3 20.0	31 10.94	32 ⊷18.5	36 12.7∢	26 ⊷20.2
<b>-</b>	Ļ	-	<b> </b>	Children Told You About It	49 10.7 <b>%</b>	11 13.9	11 9.4	18 10.8	6 7.5	3 20.0	16 5.6	33 ←19.1	31 10.9	13 10.1
Ļ	Ļ	L,	4	Magazine	33 7.28	6 7.6	6 5.1	16 9.6	4 5.0	1 6.7	21 7.4	12 6.9	17 6.0	13 10.1
				None of Them	8 1.8%	3 3.8	1 0.9	1 0.6	3 3.8	0	6 2.1	2 1.2	6 2.1	1 0.8
				TOTAL RESPONSES BASE=NET RESPONDENTS	1511 330.6 <b>1</b>	280 354.4	402 343.6	539 324.7	251 313.8	39 260.0	913 321.5	598 345.7	932 328.2	456 353.5
				NET RESPONDENTS	457	79	117	166	80	15	284	173	284	129

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 7a

## RECALL ANY SPECIFIC BILLBOARDS (AMONG THOSE SEEING BILLBOARDS)

			er of Ondent		LIVED ARK CO		e of Ondent	NUMBE HOUSE	
	TOTAL	NALE	FEMALE			UNDER 50 YRS		1 OR 2	3 OR HORE
Yes	129 57.3	58 56.9	71 57.7	24 48.0	105 60.0		44 →45.4	65 54.2	64 61.0
No	96 42.7\$	44 43.1	52 42.3	26 52.0	70 40.0		53 54.6	55 45.8	41 39.0
TOTAL RESPONSES BASE=NET RESPONDENTS	225 5 100.0%	102 100.0	123 100.0	50 100.0		128 100.0	97 100.0	120 100.0	105 100.0

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

#### Table 7b

## RECALL ANY SPECIFIC BILLBOARDS (AMONG THOSE SEEING BILLBOARDS)

TOTAL RESPONSES BASE=NET RESPONDENTS	225 100.0 <b></b>	44 100.0	66 100.0	77 100.0	36 100.0	2 100.0		92 100.0	142 100.0	73 100.0
No	96 42.78	21 47.7	32 48.5	29 37.7	14 38.9	0	59 44.4	37 40.2	62 43.7	27 37.0
Yes	129 57.38	23 52.3	34 51.5	48 62.3	22 61.1	2 100.0	74 55.6	55 59.8	80 56.3	<b>4</b> 6 63.0
	TOTAL	North East	NORTH WEST	South East	South West	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
			QUADRA	NT OF V	ALLEY			EHOLD SITION	TYPE VEHJ	

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### Table 8a

## RECALL WORDS OR PICTURES ON BILLBOARDS

		gendi Respo	ONDENT		IRK CO		of Ndent	NUMBE HOUSE	
	TOTAL	MALE		5 yrs.	6 YRS.	UNDER 50 yrs	50 <b>&amp;</b>	1 OR 2	3 OR MORE
Car half covered with water	58 45.01	25 43.1	33 46.5	11 45.8	47 44.8	37 43.5	21 47.7		26 40.6
Mention that conveys danger/warning	41	17	24	45.0 6 25.0	35	25	16 36.4	16	25
Car floating	22		14	6	16	13	9	11	11
Car covered with	21	9	12	3	18	16	5	9	12
water *Not To Be Used As A		15.5 10	16.9 6				11.4		
Flotation Device		17.2		<b>4</b> 16.7		10 11.8			4 6.3
*Boats Float. Cars Don't	13 10.1 <b></b>	8 13.8		2 8.3	11 10.5			5 7.7	8 12.5
*Look Mom, No Brains	7 5.48		3 4.2	0	7 6.7				4 6.3
*Farfromfloatin'	4 3.18	3 5.2	1 1.4	1 4.2	3 2.9	2 2.4	2 4.5	3 4.6	1 1.6
Something in Spanish	4 3.1\$	1 1.7	3 4.2	2 8.3	2 1.9	4 4.7	0	2 3.1	2 3.1
*Raindrops Keep Fallin,Use Your Head			1 1.4	1 4,2	2 1.9	3 3.5	0	2 3.1	1 1.6
*No Se Pudo	3 2.38					3 3.5		0	3 4.7
*Up The Creek. Without Paddle.	1 0.8 <b>%</b>	0	1 1.4	0	1 1.0	1 1.2	0	0	1 1.6
Miscellaneous comments	3 2.3 <b>8</b>	1 1.7	2 2.8	1 4.2	2 1.9	2 2.4	1 2.3	2 3.1	1 1.6
TOTAL RESPONSES BASE=NET RESPONDENTS	196 151.9 <b>%</b>	91 156.9	105 147.9	39 162.5	149.5	150.6	154.5	149.2	154.7
NET RESPONDENTS									

\* Indicates actual billboard copy currently or previously used.

## Table 8b

### RECALL WORDS OR PICTURES ON BILLBOARDS

			QUADRA	NT OF V	ALLEY		HOUSI COMPOS	SITION	TYPE VEHI	
	TOTAL	North East	WEST	EAST	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD-	CAR	SUV/ VAN/ TRUCK
Car half covered with water	58 45.08	9 39.1	13 38.2	21	14 63.6	1	37	21 38.2	34 42.5	22 47.8
Mention that conveys danger/warning	41 31.8\$	9 39.1	10 29.4	13 27.1	9 40.9		24 32.4	17 30.9	26 32.5	13 28.3
Car floating	22 17.1 <b>%</b>	3 13.0	5 14.7		4 18.2			9 16.4		6 13.0
Car covered with water	21 16.3	4 17.4		8 16.7	0	0	9 12.2		15 18.8	5 10.9
*Not To Be Used As A Flotation Device		4 17.4	3 8.8	6 12.5		1 50.0		5 9.1	9 11.3	7 15.2
*Boats Float. Cars Don't	13 10.1 <b>\$</b>	3 13.0	3 8.8	5 10.4	2 9.1	0	6 8.1	7 12.7		7 15.2
*Look Mom, No Brains	7 5.48	1 4.3	1 2.9	3 6.3	2 9.1	0	4 5.4	3 5.5	5 6.3	2 4.3
*Farfromfloatin'	4 3.18	0	1 2.9	2 4.2	1 4.5	0	3 4.1	1 1.8	1 1.3	3 6.5
Something in Spanish	4 3.1\$	2 8.7	1 2.9	1 2.1	0	0	2 2.7	2 3.6	1 1.3	3 6.5
*Raindrops Keep Fallin,Use Your Head		1 4.3	1 2.9		0	0	3 4.1	0	2 2.5	0
*No Se Pudo	3 2.3≹		1 2.9		1 4.5	0	1 1.4		2 2.5	
*Up The Creek. Without Paddle.	1 0.8%	0	0	1 2.1	0	0	0	1 1.8	1 1.3	0
Miscellaneous comments	3 2.3 <b>%</b>	1 4.3	1 2.9	1 2.1	0	0	2 2.7		2 2.5	
TOTAL RESPONSES BASE=NET RESPONDENTS	151.9	165.2	144.1	147.9	159.1	150.0	155.4	147.3	150.0	152.2
NET RESPONDENTS										46

\* Indicates actual billboard copy currently or previously used.

#### Table 9a

							AGI RESPO			
		TOTAL	NALE	FENALE			UNDER 50 yrs			3 OR NORE
(3)	Very Effective			39 54.9					35 53.8	
(2)	Somewhat Effective	48 37.28							26 40.0	22 34.4
(1)	Not At All Effective		2 3.4	3 4.2	1 4.2		4 4.7		4 6.2	
	al responses R=net respondents	129 100.0%		71 100.0			85 100.0			64 100.0
MEAN STD. T-Va	DEV.	2.55 0.57		2.51 0.58 0.96	0.58	2.56 0.57 -0.48		2.57 0.54 0.26	0.61	2.63 0.52 1.49

## EFFECTIVENESS OF BILLBOARDS IN COMMUNICATING DANGERS OF FLASH FLOODING (AMONG THOSE WHO RECALLED SPECIFIC BILLBOARDS)

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### Table 9b

				QUADRI	ant of v	ALLEY			ZHOLD SITION	TYPE VEHI	
		TOTAL	NORTH EAST	NORTH WEST	EAST	SOUTH WEST	LYING		HOME	CAR	SUV/ VAN/ TRUCK
(3)	Very Effective	76 58.98	14		27 56.3	14	1	41 55.4		46 57.5	28 60.9
(2)	Somewhat Effective	48 37.28	7 30.4		19 39.6			30 40.5		31 38.8	16 34.8
(1)		5 3.98		1 2.9	2 4.2		0	3 4.1		3 3.8	2 4.3
	L RESPONSES =NET RESPONDENTS	129 100.0%	23 100.0	34 100.0	48 100.0			74 100.0		80 100.0	46 100.0
MEAN STD. T-Va	DEV.	2.55 0.57	2.52 0.65		2.52 0.58 0.30	0.48	0.50	0.58	2.60 0.56 -0.86	2.54 0.57	2.57 0.58 0.26

## EFFECTIVENESS OF BILLBOARDS IN COMMUNICATING DANGERS OF FLASH FLOODS (AMONG THOSE WHO RECALLED SPECIFIC BILLBOARDS)

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### Table 10a

## DOES RESPONDENT DRIVE & VEHICLE

			er of Ondent	-	EARS	_			of Ndent	NUMBE HOUSE	
	TOTAL	MALE	FEMALE	-		-	YRS. MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	459 90.08	217 90.8	242 89.3		172 88.7		287 90.8	257 92.8-	202 	249 88.6	210 91.7
No	51 10.0 <b>\$</b>	22 9.2	29 10.7		22 11.3		29 9.2	20 7.2	31 13.3	32 11.4	19 8.3
TOTAL RESPONSES BASE=NET RESPONDENTS	510 100.0	239 100.0	271 100.0	1	194 00.0		316 100.0		233 100.0	281 100.0	229 100.0

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

## Table 10b

			QUADRA	NT OF V	ALLEY		HOUSI COMPOS		TYPE VEHI	
	TOTAL	North East	NORTH WEST	South East	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
Yes	459 90.08	78 87.6	116 95.1-	168 	82 89.1	15 83.3	278 88.0	181 ←93.3	323 100.0	135 100.0
No	51 10.0 <b>%</b>	11 12.4	6 4.9	21 11.1	10 10.9	3 16.7	38 12.0	13 6.7	0	0
TOTAL RESPONSES BASE=NET RESPONDENTS	510 100.0 <b>%</b>	89 100.0	122 100.0	189 100.0	92 100.0	18 100.0	316 100.0	194 100.0	323 100.0	135 100.0

## DOES RESPONDENT DRIVE & VEHICLE

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

## Table 11a

## TYPE OF VEHICLE USUALLY DRIVEN

		GENDE RESPO	R OF NDENT	YEARS IN CLA			of Ndent	NUMBER IN HOUSEHOLD		
	TOTAL	MALE	PENALE	5 YRS. & LESS			50 & OLDER	1 OR 2	3 OR MORE	
Passenger car	323	137	186	129	194	176	147	182	141	
	70.4 <b>\$</b>	63.1		75.0	67.6	68.5	72.8	73.1	67.1	
SUV, van or truck	135	79	56	43	92	81	54	66	69	
	29.4%	36 <b>.4</b> -	→23.1	25.0	32.1	31.5	26.7	26.5	32.9	
Both	1 0.2	1 0.5	0	0	1 0.3	0	1 0.5	1 0.4	0	
TOTAL RESPONSES	459	217	242	172	287	257	202	249	210	
BASE=NET RESPONDENTS	5 100.0 <b>\$</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 11b

			QUADRA	NT OF V	ALLEY		HOUSI COMPOS	EHOLD SITION	TYPE OF VEHICLE		
	TOTAL	NORTH EAST	North West	SOUTH EAST	South West	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK	
Passenger car	323 70.4	58 74.4	82 70.7	114 67.9	58 70.7	11 73.3	202 72.7	121 66.9	323 100.0	0	
SUV, van or truck	135 29.48	20 25.6	34 29.3	53 31.5	24 29.3	4 26.7	75 27.0	60 33.1	0	135 100.0	
Both	1 0.2%	0	0	1 0.6	0	0	1 0.4	0	0	0	
TOTAL RESPONSES BASE=NET RESPONDENTS	459 100.0\$	78 100.0	116 100.0	168 100.0	82 100.0	15 100.0	278 100.0	181 100.0	323 100.0	135 100.0	

## TYPE OF VEHICLE USUALLY DRIVEN

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### Table 12a

<b></b>			GENDER OF RESPONDENT		LIVED		e of Indent	NUMBER IN HOUSEHOLD		
	TOTAL	MYTE	PENALE			UNDER 50 YRS		1 OR 2	3 OR MORE	
Yes	299 65.1 <b>%</b>	150 69.1	149 61.6	59 34.3		154 59.9	145 ←71.8	164 65.9	135 64.3	
No	160 34.9%	67 30.9	93 38.4	113 65.7	47 16.4		57 28.2	85 34.1	75 35.7	
TOTAL RESPONSES BASE=NET RESPONDENTS	459 100.0	217 100.0	242 100.0	172 100.(			202 100.0	249 100.0	210 100.0	

#### EVER ENCOUNTERED & FLOODED STREET OR ROAD WHILE DRIVING

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 12b

			QUADRA	NT OF V	ATTRA		Housi Compos	CHOLD SITION	TYPE OF VEHICLE		
	TOTAL	North East	North West	SOUTH EAST	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK	
Yes	299	51	79	110	53	6	187	112	192	106	
	65.1 <b>%</b>	65.4	68.1	65.5	64.6	40.0	67.3	61.9	59.4	←78.5	
No	160	27	37	58	29	9	91	69	131	29	
	34.9%	34.6	31.9	34.5	35.4	60.0	32.7	38.1	40.6	21.5	
TOTAL RESPONSES	459	78	116	168	82	15	278	181	323	135	
BASE=NET RESPONDENTS	100.08	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

## EVER ENCOUNTERED & FLOODED STREET OR ROAD WHILE DRIVING

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

#### Table 13a

#### NUMBER OF TIMES ENCOUNTERED & FLOODED STREET

							λgi Respo	-	NUMBER IN HOUSEHOLD		
		TOTAL			& LESS	& MORE		OLDER	OR 2	MORE	
(1)	Once		22	31	18	35	30	23	32	21	
(2)	Twice						18 11.7				
(3)	Three times	41 13.78					23 14.9				
(4)	Four times						11 7.1				
	Five or more times										
	L RESPONSES =NET RESPONDENTS									135 100.0	
MEDI T-Va	AN lue	4.36	5.65	3.85 1.29	2.27 £	5.79 -5.22 1	4.05	5.60 -0.73	3.46 £	5.76 2.06	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 13b

				QUADR	ANT OF	VALLEY		HOUSEHOLD COMPOSITION		VEHICLE	
					east	SOUTH WEST	LYING	ONLY	HOME	CAR	VAN/ TRUCK
	Once	53	13	13	19		1	35	18	36	17
(2)	Twice					9 17.0					
(3)	Three times	41 13.78	6 11.8	6 7.6	19 17.3	10 18.9	0	26 13.9	15 13.4	27 14.1	13 12.3
(4)	Four times	18 6.0 <b>%</b>	3 5.9	4 5.1	6 5.5	4 7.5	1 16.7	9 4.8	9 8.0	10 5.2	8 7.5
	Five or more times										
	AL RESPONSES S=NET RESPONDENTS										
MEDI T-Va	AN hlue	4.36	3.67	6.03 1.76	3.67 1.81	3.63 0.01 -	5.50 -0.27	3.78	5.70 •1.47	4.00	5.66 1.08

## NUMBER OF TIMES ENCOUNTERED & FLOODED STREET

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### Table 14a

#### FIRST TIME ENCOUNTERED & FLOODED STREET BEHAVIOR

			er of Ondent			AGI RESPO			
	total			& LESS	& MORE	UNDER 50 YRS	OLDER	2	More
Turned back/Went a		75	75	33	117	69	81	90	<del>6</del> 0
different way	50.2%	50.0	50.3	55.9	48.8	44.8	55.9	54.9	44.4
Drove into it - no	62	37	25	9	53	37	25	32	30
problem	20.7	24.7	16.8	15.3	22.1	24.0	17.2	19.5	22.2
Drove into it - made	59	26	33	13	46	36	23	25	34
it but scary	19.7%	17.3	22.1	22.0	19.2	23.4	15.9	15.24	€-25.2
Drove into it and	19	5	14	3	16	8	11	11	8
got stuck	6.4%	3.3	← 9.4	5.1	6.7	5.2	7.6	6.7	5.9
Don't remember	9	7	2	1	8	4	5	6	3
	3.08	4.7	1.3	1.7	3.3	2.6	3.4	3.7	2.2
TOTAL RESPONSES	299	150	149	59	240	154	145	164	135
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 14b

			QUADRA	NT OF V			HOUSI	SITION		
	TOTAL	NORTH EAST		EAST	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN	CAR	SUV/ VAN/ TRUCK
Turned back/Went a	150	26	44	56	21					49
different way	50.28	51.0	55.7	50.9	39.6	50.0	55.1	42.0	52.6	46.2
	62								31	30
problem	20.7	27.5	16.5	18.2	24.5	33.3	19.3	23.2	16.14	-28.3
Drove into it - made	59	7	18	22	12	0	27	32	38	21
it but scary	19.78	13.7	22.8	20.0	22.6		14.4	28.6	19.8	19.8
Drove into it and	19	2	4	9	4	0	13	6	15	4
got stuck	6.48	3.9	5.1	8.2	7.5		7.0	5.4	7.8	3.8
Don't remember	9	2	0	3	3	1	8	1	7	2
***	3.08				5.7					
TOTAL RESPONSES	299		79						192	
BASE=NET RESPONDENTS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### FIRST TIME ENCOUNTERED & FLOODED STREET BEHAVIOR

NOTE: Arrow indicates a difference between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 15a

## BEHAVIOR EACH TIME ENCOUNTERED & FLOODED STREET

			er of Ondent			λGE RESPO				
				& LESS	& NORE	UNDER 50 YRS	OLDER	OR 2	MORE	
Went back/waited all times	110	57	53	22	88		60	67	43	
Sometimes drove thru sometimes went back										
Drove into 1st time/ back all other times	34 13.8%	12 9.4	22 18.6-	2 <b>4.</b> 9	32 ←15.6	16 12.9	18 14.8	19 14.4	15 13.2	
Drove into/thru all times	16 6.5%	13 10.2	3 →2.5	2 4.9	14 6.8	11 8.9	5 4.1	11 8.3	5 4.4	
Went back 1st time/ into all other times							0	2 1.5	0	
TOTAL RESPONSES BASE=NET RESPONDENTS								132 100.0		

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 15b

#### BEHAVIOR EACH TIME ENCOUNTERED & FLOODED STREET

			QUADRA	NT OF V	ALLEY		HOUSE COMPOS	CHOLD SITION		
	TOTAL	NORTH EAST	North West	EAST		LYING	ADULTS ONLY		CAR	
Went back/waited all times	110	22		47	14	0	77		81	29
Sometimes drove thru sometimes went back								44 ⊷46.8		
Drove into 1st time/ back all other times							21 13.8			
Drove into/thru all times	16 6.5 <b>}</b>	3 7.9	3 4.5			0				8 9.0
Went back 1st time/ into all other times				0	0	0	2 1.3	0	0	2 2.2
TOTAL RESPONSES BASE=NET RESPONDENTS					46 100.0			94 100.0		89 100.0

# NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

## Table 16a

#### SHOULD PEOPLE WHO DRIVE AROUND POSTED BARRICADES AND THEN NEED TO BE RESCUED HAVE TO REIMBURSE THE COUNTY FOR THE COST OF THE RESCUE

			er of Indent	YEARS IN CLA			of Ndent	NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FENALE	5 YRS. & LESS		UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE	
Yes	387	173	214	138	249	194	193	225	162	
	75.9\$	72.4	79.0	71.1	78.8	70.0	←82.8	80.1-	→70.7	
No	118	63	55	55	63	80	38	54	64	
	23.1\$	26.4	20.3	28.4	19.9	28.9	16.3	19.2	27.9	
Don't Know	5	3	2	1	4	3	2	2	3	
	1.0	1.3	0.7	0.5	1.3	1.1	0.9	0.7	1.3	
TOTAL RESPONSES	510	239	271	194	316	277	233	281	229	
BASE=NET RESPONDENTS	100.0\$	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 16b

			QUADRA	NT OF V	ALLEY		HOUSI COMPOS	EHOLD SITION	TYPE OF VEHICLE		
	TOTAL	North East	NORTH WEST	South East	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK	
Yes	387	66	99	146	67	9	246	141	245	104	
	75.9 <b>%</b>	74.2	81.1	77.2	72.8	50.0	77.8	72.7	75.9	77.0	
No	118	22	21	41	25	9	68	50	75	29	
	23.18	24.7	17.2	21.7	27.2	50.0	21.5	25.8	23 <b>.</b> 2	21.5	
Don't Know	5 1.0%	1 1.1	2 1.6	2 1.1	0	0	2 0.6	3 1.5	3 0.9	2 1.5	
TOTAL RESPONSES	510	89	122	189	92	18	316	194	323	135	
BASE=NET RESPONDENTS	100.0\$	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

#### SHOULD PEOPLE WHO DRIVE AROUND POSTED BARRICADES AND THEN NEED TO BE RESCUED HAVE TO REIMBURSE THE COUNTY FOR THE COST OF THE RESCUE

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### Table 17a

	GENDER OF YEARS LIVED AGE OF RESPONDENT IN CLARK CO RESPONDENT			
E FEMAL	5 YRS. 6 YRS. UNDER 50 & TOTAL MALE FEMALE & LESS & MORE 50 YRS OLDER			
	186 94 92 42 144 83 103 36.5% 39.3 33.9 21.6 45.6 30.0 44.2			
	s 143 69 74 37 106 75 68 28.0% 28.9 27.3 19.1 33.5 27.1 29.2			
	128 58 70 94 34 92 36 25.1% 24.3 25.8 48.5 10.8 33.2 15.5			
7 2 1 9.	ess     42     17     25     17     25     19     23       8.2%     7.1     9.2     8.8     7.9     6.9     9.9	29 10.3	13 5.7	
1 1( 4 3.)	11 1 10 4 7 8 3   2.28 0.4 3.7 2.1 2.2 2.9 1.3	5 1.8	6 2.6	
	510 239 271 194 316 277 233 NTS 100.0% 100.0 100.0 100.0 100.0 100.0 100.0	281 100.0	229 100.0	
8 1.1 2.26		1.09	3.81 1.02 1.48	
8 1 2.2	1.06 0.98 1 2.2	1.12 0.99 1.03 1.05 1.05	1.12 0.99 1.03 1.05 1.05 1.09 26 -6.85 -3.30	

#### HOW NUCH PROGRESS BELIEVE FLOOD CONTROL DISTRICT IS MAKING IN CONTROLLING FLASH FLOODING IN CLARK COUNTY

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 17b

				QUADR	ANT OF	/ALLEY				Type of Vehicle			
		TOTAL	NORTH EAST	NORTH WEST	South East	SOUTH WEST	OUT- LYING	ADULTS	CHILD- REN IN	CAR	•		
(5)	A lot of progress	186 36.5 <b></b>	29 32.6	51 41.8	69 36.5	33 35.9	4 22.2	120 38.0	66 34.0	107 33.1	66 48.9		
(4)	Some progress	143 28.0%							57 29.4				
(3)	Not Sure or Don't Know						6 33.3			84 26.0	25 18.5		
(2)	Little progress	42 8.28	8 9.0	9 7.4	18 9.5	7 7.6	0	33 10.4	9 4.6	24 7.4	11 8.1		
(1)	No progress	11 2.28	0	2 1.6	6 3.2	1 1.1	2 11.1	5 1.6	6 3.1	9 2.8			
	al responses R=net respondents	510 100.0 <b>%</b>								323 100.0	135 100.0		
	I DEV. llue		0.97		1.10	1.04	1.17	1.08		1.06	1.06 2.37		

## HOW NUCH PROGRESS BELIEVE FLOOD CONTROL DISTRICT IS WAKING IN CONTROLLING FLASH FLOODING IN CLARK COUNTY

NOTE: Arrow indicates a difference between sub-samples which were found to be statistically significant at the 95% level of confidence.

RESPO	NDENT	GENDER

		gend Resp	YEARS LIVED IN CLARK CO					) of Ndent	NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FENALE	•			YRS. NORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Nale	239 46.98	239 100.0	0		94 48.5		145 45.9	127 45.8	112 48.1	133 47.3	106 46.3
Female	271 53.1 <b>%</b>	0	271 100.0		100 51.5		171 54.1	150 54.2	121 51.9	148 52.7	123 53.7
TOTAL RESPONSES BASE=NET RESPONDENTS	510 100.0\$	239 100.0	271 100.0		194 .00.0		316 100.0	277 100.0	233 100.0	281 100.0	229 100.0

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### Table 18b

## RESPONDENT GENDER

			QUADRA	NT OF V	ALLEY		HOUSI COMPOS		TYPE OF VEHICLE		
	TOTAL	North East	North West	South East	SOUTH WEST	OUT- Lying	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK	
Nale	239 46.9\$	45 50.6	51 41.8	94 49.7	43 46.7	6 33.3	159 50.3	80 →41.2	137 42.4	79 ←58.5	
Female	271 53.18	44 49.4	71 58.2	95 50.3	49 53.3	12 66.7	157 49.7	114 ← 58.8	186 57.6-	56 →41.5	
TOTAL RESPONSES BASE=NET RESPONDENTS	510 100.0\$	89 100.0	122 100.0	189 100.0	92 100.0	18 100.0	316 100.0	194 100.0	323 100.0	135 100.0	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 19a

			er of Ondent	YEARS IN CL			OF NDENT	NUMBER IN HOUSEHOLD		
	TOTAL	MALE	FEMALE	• • • • • • •	6 YRS. & MORE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE	
Head of Household	452	217	235	162	290	231	221	265	187	
	88.68	90.8	86.7	83.5	← 91.8	83.4	←94.8	94.3-	→81.7	
Other Household	58	22	36	32	26	46	12	16	42	
Member	11.4%	9.2	13.3	16.5	8.2	16.6	5.2	5.7	18.3	
TOTAL RESPONSES	510	239	271	194	316	277	233	281	229	
BλSE=NET RESPONDENTS	100.0 <b>%</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

## RESPONDENT IS MALE OR FEMALE HEAD OF HOUSEHOLD OR OTHER HOUSEHOLD NEMBER

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 19b

			QUADRA	NT OF V	YLLEY		HOUSI COMPOS		TYPE OF VEHICLE		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	South West	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK		
Head of Household	452	76	113	169	85	9	286	166	296	118	
	88.68	85.4	92.6	89.4	92.4	50.0	90.5	85.6	91.6	87.4	
Other Household	58	13	9	20	7	9	30	28	27	17	
Nember	11.4%	14.6	7.4	10.6	7.6	50.0	9.5	14.4	8.4	12.6	
TOTAL RESPONSES	510	89	122	189	92	18	316	194	323	135	
BASE=NET RESPONDENTS	100.0 <b>%</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

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## RESPONDENT IS MALE OR FEMALE HEAD OF HOUSEHOLD OR OTHER HOUSEHOLD MEMBER

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### AGE OF RESPONDENT

			RESP	ondent	IN CL	ARK CO	RESPO	ONDENT	NUMBER IN HOUSEHOLD		
		TOTAL	MALE	FENALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 yrs	50 & OLDER	1 OR 2	3 OR MORE	
(19)	18 to 20		5	8	10	3	13	0	3	10	
(25)	21 to 29	50 9.88	26 10.9	24 8.9	33 17.0	17 5.4	50 18.1	0	21 7.5	29 12.7	
(35)	30 to 39						95 34.3				
(45)	40 to 49						119 43.0		54 19.2		
(55)	50 to 59	97 19.0%	41 17.2	56 20.7	25 12.9	72 22.8	0	97 41.6	63 22.4	34 14.8	
(62)	60 to 64						0				
(70)	65 or Older	89 17.5\$	45 18.8	44 16.2	25 12.9	64 20.3	0	89 38.2	83 29.5	6 2.6	
BASE=	RESPONSES		239	271	194	316	277	233	281	229	
	N Ne	48.15				-6.02	37.95 -3	8.08	1	1.19	

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 20b

#### AGE OF RESPONDENT

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				QUADRA	NT OF V			COMPOS	SITION	TYPE OF VEHICLE		
		TOTAL		WEST	EAST	South West	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK	
	18 to 20		2	2	6	2	1	5	8	9	3	
(25)	21 to 29	50 9.8%	14 15.7	6 4.9	17 9.0	7 7.6	6 33.3	32 10.1	18 9.3	31 9.6	13 9.6	
(35)	30 to 39	95 18.6%	19 21.3	27 22.1	29 15.3	17 18.5	3 16.7	27 8.5	68 35.1	61 18.9	27 20.0	
(45)	40 to 49	119 23.3 <b>%</b>	23 25.8	30 24.6	41 21.7	21 22.8	4 22.2	53 16.8	66 34.0	75 23.2	38 28.1	
(55)	50 to 59	97 19.0 <b>%</b>	16 18.0	20 16.4	38 20.1	20 21.7	3 16.7	70 22.2	27 13.9	66 20.4	27 20.0	
(62)	60 to 64	47 9.28	5 5.6	9 7.4	24 12.7	9 9.8	0	43 13.6	4 2.1	29 9.0	13 9.6	
(70)	65 or Older	89 17.58	10 11.2	28 23.0	34 18.0	16 17.4	1 5.6	86 27.2	3 1.5	52 16.1	14 10.4	
BASE=	RESPONSES NET RESPONDENT	510 S 100.0 <b>%</b>	89	122	189	92	18	316	194	323	135	
	n ue	48.15							40.45 10.87			

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 21a

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## YEARS LIVED IN CLARK COUNTY

		RESP	ONDENT	IN CL	ARK CO	RESPO	NDENT	NUMBER IN HOUSKHOLD		
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE	UNDER 50 yrs	50 & OLDER	1 OR 2	3 Or More	
(1) 2 Years or Less	108	51	57	108	0	80 28.9	28	59	49	
(4) 3 to 5 Years	86 16.9%	43 18.0	43 15.9	86 44.3	0	52 18.8	34 14.6	43 15.3	43 18.8	
(8) 6 to 10 Years	106 20.8\$	59 24.7	47 17.3	0	106 33.5	51 18.4	55 23.6	60 21.4	46 20.1	
(13) 11 to 15 Years	69 13.5%	27 11.3	42 15.5	0		36 13.0				
(18) 16 to 20 Years			20 7.4			18 6.5				
(25) 21 to 30 Years	48 9.48	23 9.6	25 9.2	0	48 15.2	22 7.9	26 11.2	32 11.4	16 7.0	
(35) 31 or More Years	58 11.4	21 4 8.8	37 13.7	0	58 18.4	18 6.5	40 17.2	34 12.1	24 10.5	
TOTAL RESPONSES BASE=NET RESPONDENTS	100.0	239 100.0	271 100.0	194 100.0	316 100.0	277 100.0	233 100.0	281 100.0	229 100.0	
MEDIAN T-Value		7.73	9.02	1.40	14.27	6.51	9.96	8.57	7.96	

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

#### Table 21b

## YEARS LIVED IN CLARK COUNTY

			QUADRA	NT OF V			COMPOS	ZHOLD SITION	VEHI	CLE
	TOTAL	North East	WEST	EAST	SOUTH WEST	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
(1) 2 Years or Less	108	22	23	34	24	5	67		79	15
(4) 3 to 5 Years	86 16.9%	10 11.2	22 18.0	36 19.0	10 10.9	8 44.4	48 15.2	38 19.6	50 15.5	28 20.7
(8) 6 to 10 Years	106 20.8 <b>%</b>	23 25.8	24 19.7	37 19.6	22 23.9	0	65 20.6	41 21.1		27 20.0
(13) 11 to 15 Years		13 14.6						25 12.9		24 17.8
(18) 16 to 20 Years	35 6.9%	3 3.4	8 6.6	17 9.0	7 7.6	0	21 6.6		19 5.9	
(25) 21 to 30 Years	48 9.4 <b>%</b>	7 7.9						17 8.8		13 9.6
(35) 31 or More Years										
TOTAL RESPONSES BASE=NET RESPONDENTS	510	89	122	189	92	18	316 100.0		323 100.0	135 100.0
MEDIAN T-Value	8.30	8.17	8.67 0.81	8.65 0.29	8.18 1.26	4.00 2.49	8.65		7.86	9.63

# NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

#### NUMBER OF PEOPLE LIVING IN HOUSEHOLD

		RESP	ONDENT	IN CL	ARK CO	AGE RESPO	ONDENT			
	TOTAL	MALE	FEMALE	5 YRS. & LESS	6 YRS. & MORE		50 & OLDER	OR 2	MORE	
	92 18.08	37	55	35	57		64	92	0	
(2)						72 26.0			0	
(3)						58 20.9			85 37.1	
(4)						65 23.5			77 33.6	
(5)	39 7.6%					31 11.2			39 17.0	
(7) 6 or More	28 5.5¥	12 5.0	16 5.9	10 5.2	18 5.7	23 8.3	5 2.1	0	28 12.2	
TOTAL RESPONSES BASE=NET RESPONDENT:	5 100.0%	239 100.0	100.0	194 100.0	100.0	100.0	100.0	100.0		
MEDIAN T-Value		2.36	2.37		2.33		1.95	1.76	3.88	

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

#### Table 22b

#### NUMBER OF PEOPLE LIVING IN HOUSEHOLD

		QUADRANT OF VALLEY							VEHICLE	
	TOTAL	NORTH EAST	North West					CHILD-		SUV/
(1)	92 18.0\$								60 18.6	
(2)	189 37.1 <b>%</b>	27 30.3	48 39.3	72 38.1	35 38.0	7 38.9	177 56.0	12 6.2	122 37.8	54 40.0
(3)					17 18.5					
(4)	77 15.18				15 16.3					
(5)	39 7.6%	8 9.0	14 11.5	11 5.8	5 5.4	1 5.6	0	39 20.1	26 8.0	11 8.1
(7) 6 or More	28 5.5%	9 10.1	7 5.7	9 4.8	2 2.2	1 5.6	0	28 14.4	18 5.6	8 5.9
TOTAL RESPONSES BASE=NET RESPONDENT	S 100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0
MEDIAN 2.36 T-Value		2.71	2.42	2.24		2.50	1.87	4.01 21.20	2.33	2.57

# NOTE: Arrow indicates a difference between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 23a

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#### HOUSEHOLD COMPOSITION

			er of Ondent			AGE RESPO		NUMBE HOUSE	
				& LESS	& MORE	UNDER 50 yrs	OLDER		3 OR MORE
Single person household		37	55	35	57		64		0
Two or more adults, no children						89 32.1 <del>&lt;</del>			
Adult or adults with only pre-teens									
Adult or adults with only teen-agers						37 13.4 -			
Adult(s) with both pre-teens & teens						33 11.9 -			43 18.8
TOTAL RESPONSES BASE=NET RESPONDENTS	100.08		100.0		190.0	277 100.0	233 100.0	281 100.0	229 100.0

NOTE: Arrows indicate differences between sub-samples which were found to be statistically significant at the 95% level of confidence.

#### Table 23b

#### HOUSEHOLD COMPOSITION

			QUADRA	NT OF V	ALLEY		HOUSI		TYPE VEHI	
	TOTAL	NORTH EAST	North West	South East	South West	OUT- LYING	ADULTS ONLY	CHILD- REN IN HOME	CAR	SUV/ VAN/ TRUCK
Single person household	92 18.0%	14 15.7	17 13.9	41 21.7	18 19.6	2 11.1		0	60 18.6	12 →8.9
Two or more adults, no children	224 43.98		53 43.4	87 46.0	44 47.8	9 50.0	224 70.9	0	142 44.0	63 <b>4</b> 6.7
Adult or adults with only pre-teens	99 19 <b>.4</b> 8	25 28.1	26 21.3	30 15.9	16 17.4	2 11.1	0	99 51.0	64 19.8	29 21.5
Adult or adults with only teen-agers		10 11.2	14 11.5	16 8.5	8 8.7			52 26.8	32 9.9	20 14.8
Adult(s) with both pre-teens & teens		9 10.1		15 7.9				43 22.2	25 7.7	11 8.1
TOTAL RESPONSES BASE=NET RESPONDENTS	510 100.0%	89 100.0	122 100.0	189 100.0	92 100.0	18 100.0	316 100.0	194 100.0	323 100.0	135 100.0

NOTE: Arrow indicates a difference between sub-samples which were found to be statistically significant at the 95% level of confidence.

Outlying area sample size is too small to calculte.

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#### COMPARISON BY UNAIDED AWARENESS QUADRANT OF THE VALLEY

		NATURAL DISASTERS?	
<del>-</del>			DIDN'T
			SAY
	TOTAL	FLOODS	
North East Valley	89		
-	17.5%	17.5	17.4
North West Valley	122	76	46
•	23.9	25.1	22.2
South East Valley	189	115	74
		38.0	
South West Valley	92	51	41
		16.8	
Outlying Areas	18	8	10
	3.5%	2.6	4.8
TOTAL RESPONSES		303	
BASE=NET RESPONDENTS			
***********	******		

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

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### COMPARISON BY UNAIDED AWARENESS ZIP CODE OF RESPONDENT

	TOTAL	DISAS 	JRAL STERS? DIDN'T SAY FLOODS
89005	5 1.08	4 1.3	
89012	6 1.28	3 1.0	3 1.4
89014	18 3.5%	8 2.6	
89015	27 5.38	19 6.3	
89019	2 0.4%	0	2 1.0
89025	1 0.2	0	1 0.5
89027	4 0.8	1 0.3	
89029	3 0.6 <b>1</b>	1 0.3	
89030	18 3.5%		
89031	16 3.18		
89032	13 2.5	10 3.3	
89046	1 0.2	1 0.3	
89052	9 1.8	7 2.3	2 1.0
89074	14 2.7		
89101	11 2.21	7 2.3	

Continued...

# (Table Continued)

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89102	10	4	6
	2.0%	1.3	2.9
89103	13	9	4
	2.5%	3.0	1.9
89104	13	5	8
	2.58	1.7	3.9
89106	9	4	5
	1.8	1.3	2.4
89107	6	4	2
	1.2%	1.3	1.0
89108	23	14	9
	4.5	4.6	4.3
89109	11	6	5
	2.2%	2.0	2.4
89110		9 3.0	5 2.4
89113		6 2.0	
89115	17 3.3	7 2.3	
89117		11 3.6	
89118		2 0.7	
89119		11 3.6	5 2.4
89120		3 1.0	4 1.9
89121	29	20	9
	5.78	6.6	4.3
89122	19	8	11
	3.7%	2.6	5.3
89123	14	11	3
	2.78	3.6	1.4
89124	2	1	1
	0.4\$	0.3	0.5

Continued...

# (Table Continued)

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89128	10 2.0%	5 1.7	
89129	12 2.48	8 2.6	
89130	12 2.4	10 3.3	
89131	8 1.6%	6 2.0	
89134	13 2.5	3 1.0	
89135	6 1.2	4 1.3	
89142	7 1.48	3 1.0	
89143	1 0.2%		1 0.5
89144	6 1.2¥	3 1.0	-
89145	10 2.08	7 2.3	-
89146	9 1.8≹	6 2.0	-
89147	20 3.98	8 2.6	12 5.8
89148	5 1.0%	2 0.7	3 1.4
89149	3 0.68	3 1.0	0
89156	7 1.48	5 1.7	
TOTAL RESPONSES BASE=NET RESPONDENTS	510	303	207 100.0

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### COMPARISON BY UNAIDED AWARENESS RESPONDENT GENDER

		NATU DISA:	JRAL STERS?
	TOTAL	SAID FLOODS	
Male	239	145	94
	46.9%	47.9	45.4
Female	271	158	113
	53.1%	52.1	54.6
TOTAL RESPONSES	510	303	207
BASE=NET RESPONDENTS	100.0	100.0	100.0

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

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#### COMPARISON BY UNAIDED AWARENESS AGE OF RESPONDENT

			JRAL STERS?
			DIDN'T
	TOTAL	SAID FLOODS	
(19) 18 to 20	13		9
(25) 21 to 29	50 9.88	21 6.9	29 14.0
(35) 30 to 39	95 18.6%	47 15.5	48 23.2
(45) 40 to 49	119 23.38	88 29.0	31 15.0
(55) 50 to 59		68 22.4	
(62) 60 to 64	47 9.28	28 9.2	
(70) 65 or Older	89 17.58	47 15.5	
			******
TOTAL RESPONSES BASE=NET RESPONDENTS			
NEDIAN T-Value	48.15	49.03	45.65 1.90

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

### COMPARISON BY UNAIDED AWARENESS YEARS LIVED IN CLARK COUNTY

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		DISAS	JRAL STERS?
			DIDN'T SAY
	TOTAL	FLOODS	PLOODS
(1) 2 Years or Less			
	21.28	9.2	38.6
(4) 3 to 5 Years	86	51	35
	16.9%	16.8	16.9
(8) 6 to 10 Years	106	74	32
	20.8%	24.4	15.5
(13) 11 to 15 Years	69	49	20
	13.58	16.2	9.7
(18) 16 to 20 Years	35	22	13
	6.9	7.3	6.3
(25) 21 to 30 Years	48	38	10
. ,		12.5	
(35) 31 or More	58	41	17
Years	11.4	13.5	8.2
****			
TOTAL RESPONSES	510	303	207
BASE=NET RESPONDENTS	100.05	100.0	100.0
MEDIAN	8.30		4.51 5.55
T-Value			5.55 

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

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#### COMPARISON BY UNAIDED AWARENESS NUMBER OF PEOPLE LIVING IN HOUSEHOLD

			URAL STERS?
	******	******	DIDN'T
		SAID	SAY
	TOTAL	FLOODS	FLOODS
(1)		47	
	18.0%	15.5	21.7
(2)		111	
	37.18	36.6	37.7
(3)		56	
. ,	16.78	18.5	14.0
(4)		42	
	15.1	13.9	16.9
(5)		27	
	7.68	8.9	5.8
(7) 6 or More	28	20	8
	5.58	6.6	3.9
TOTAL RESPONSES	 510		207
BASE=NET RESPONDENTS			
NEDIAN	2.36	2.44	2.25
T-Value		L	2.02 ↑

NOTE: Arrow indicates a difference between sub-samples which was found to be statistically significant at the 95% level of confidence.

#### COMPARISON BY UNAIDED AWARENESS HOUSEHOLD COMPOSITION

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		NATU DISA	JRAL STERS?
	TOTAL	SAID FLOODS	DIDN'T SAY FLOODS
Single person household	92 18.0%	47 15.5	45 21.7
Two or more adults, no children		133 43.9	
Adult or adults with only pre-teens	99 19.4	61 20.1	
Adult or adults with only teen-agers			
Adult(s) with both pre-teens & teens	43 8.48		
TOTAL RESPONSES BASE=NET RESPONDENTS			

NOTE: There are no statistically significant differences between sub-samples at the 95% level of confidence.

VI. APPENDIX

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Las Vegas Area ZIP Codes KOLE CANYON RO NW MESQUITE HLASUEGASIN 23.9% NE 3810H 89115 17 TOTAL 89129 12 OUTLYING 17.5% AREAS 7 [89156] 89134) AKE NEAD BLY A 1 1 89106 89110 14 3.5% 89145 10 anhunnunnterstittittinnun SE Ē 89122 19 37.1% OTHER OUTLYING SW (89014) TTT I CALLER THE THE q 14 89074 /4 89123 18.0% ATE BOUTE 46 AMAT as BOULDER CITY muhm

FLOOD AWARENESS SURVEY 2002 N = 510

	RE	P-PAGE
EN'	TER PHONE NUMBER FROM CALL LIST	
	lo, my name is and I'm calling on behalf of Clark County Governmental Servic ould like to speak to either the male or female head of the household.	es.
	NEITHER AVAILABLE) Are you 18 years or older and a permanent resident of the h s anyone available who's 18 or older and a permanent resident of the household? (IF "NO"> TERN	
A.	INDICATE: 1 HEAD OF HOUSEHOLD 2 OTHER HOUSEHOLD MEMBER	
We	are conducting a survey among Clark County residents and would like to ask you a few que (IF RESPONDENT ASKS HOW LONG IT WILL TAKE – SAY 4 TO 5 MINUTES)	estions.
B.	INDICATE RESPONDENT GENDER: 1 MALE 2 FEMALE (ASK GENDER IF YOU CAN'T TELL BY THE VOICE)	
C.	I would like to verify your Zip Code. Is it (READ NUMBER FROM CALL LIST)?	
	IF CORRECT, ENTER NUMBER BELOW. IF NOT CORRECT, ENTER CORRECT NUMBER BELOW	
	<u>   8   9                              </u>	
D.	How long have you lived in Clark County? Years.	
1.	Can you name the types of NATURAL disasters that can be a danger to residents of Clark	k Count
	Anything else?	
	Anything else?	
	Anything else?	
	FLOODING/FLASH FLOODING MENTIONED ABOVE> SKIP TO	Q.3)
(IF		
(IF 2.	Are you aware of the dangers of flash flooding here in Clark County?	

3. How did you learn about the dangers of flash flooding in Clark County? (IF THEY SAY "NEWS," ASK WHAT TYPE OF NEWS - TV, RADIO, NEWSPAPER?) (14)

(15)

(16)

(17)

From the list I am going to read, please tell me - with a Yes or No - whether you heard or 4. read about flash flood dangers from that source. (READ ENTIRE LIST)

		<u>YES</u>	<u>NQ</u>	
	BROCHURE	1	0	(18)
	BUS STOP SHELTER AD	2	0	(19)
$\rightarrow$	BILLBOARD	3	0	(20)
	TELEVISION	4	0	(21)
	RADIO	5	0	(22)
	NEWSPAPER	6	0	(23)
	MAGAZINE	7	0	(24)
	CHILDREN TOLD YOU ABOUT IT	8	0	(25)
	FRIENDS/RELATIVES TOLD YOU ABOUT IT	9	0	(26)
v				

# (IF "NO" FOR BILLBOARD --->SKIP TO Q.6)

\_\_\_\_1

You said that you saw billboards about the dangers of flooding. Do you recall any specific 5. billboards?

Would you describe the pictures or words you've seen on the billboards. 5a.

(28)

- (29)
- (30)
- (31)

5b.	How effective would you say the billboards are in communicating the dangers of flash floo Would you say they are					
	1 VERY EFFECTIVE 2 SOMEWHAT EFFECTIVE 3 NOT AT ALL EFFECTIVE	(32)				
6.	Do you drive a vehicle? 1 YES 2 NO -> (SKIP TO Q. 9)	(33)				
	6a. Is the vehicle you <u>usually</u> drive a					
	1 REGULAR PASSENGER CAR or 2 AN SUV, VAN or TRUCK	(34)				
7.	Have you ever encountered a flooded street or road while driving?					
	1 YES 2 NO -> (SKIP TO Q. 9)	(35)				
	7a. How many times have you encountered a flooded street?					
	1 2 3 4 5 OR MORE	(36)				
8.	Thinking back to the FIRST TIME you came to a flooded street, which of the following statements best describes what you did? (READ LIST)					
	1 TURNED BACK/WENT A DIFFERENT WAY/WAITED FOR WATER TO GO DOWN					
	2 DROVE INTO IT AND GOT STUCK					
	3 DROVE INTO IT - MADE IT BUT SCARY	(37)				
	4 DROVE INTO IT - NO PROBLEM					
	5 DON'T REMEMBER					
	(IF ANSWER TO Q. 7a ABOVE IS MORE THAN "1" ASK THIS QUESTION - 8a. OTHERWISE, GO TO NEXT QUESTION - 9)					
	8a. You said you encountered a flooded street more than once. Which of the following statements best describes what you did all times? (READ LIST)					
	1 WENT BACK/WAITED ALL TIMES	(38)				
	2 DROVE INTO/THRU ALL TIMES					
	3 DROVE INTO FIRST TIME/WENT BACK ALL OTHER TIMES					

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- 4 WENT BACK FIRST TIME/INTO IT ALL OTHER TIMES
- 5 SOMETIMES DROVE THRU/SOMETIMES WENT BACK

- 9. If a person drives around a posted County flood barricade and then needs to be rescued, do you think that person should have to reimburse the County for the costs of the rescue?
  - 1 YES 2 NO

(39)

- 10. Overall, how much progress do you believe the Flood Control District is making in controlling flash flooding in Clark County? Do you think they are making ... (READ LIST)
  - 5 A LOT OF PROGRESS, (40)**4 SOME PROGRESS**, 2 LITTLE PROGRESS. 1 NO PROGRESS, or ★ 3 YOU'RE NOT SURE OR DON'T KNOW Including yourself, how many people live in your household? 1 2 3 4 5 6 OR MORE (41) (42) Which of the following categories best describes your household? (READ LIST) **1 SINGLE PERSON HOUSEHOLD** (43) 2 TWO OR MORE ADULTS WITH NO CHILDREN (44) **3 ADULT OR ADULTS WITH ONLY PRE-TEENS 4 ADULT OR ADULTS WITH ONLY TEEN-AGERS** 
    - 5 ADULT OR ADULTS WITH BOTH PRE-TEENS AND TEEN-AGERS

11.

12.

## 13. One final question. Is your age ... (READ LIST)

1 18	TO 20 5	50 TO 59	(45)			
2 21	TO 29 6	60 TO 64				
3 30	TO 39 7	65 OR OLDER	(46)			
4 40	TO 49		(47)			
Thank you so much for your time. Good-bye.						
DATE:	TIME INTER	/IEW COMPLETED:	AM or PM			

I AFFIRM THAT THE ABOVE INFORMATION IS ACCURATELY RECORDED FROM THE RESPONDENT'S STATEMENTS.

INTERVIEWER'S SIGNATURE