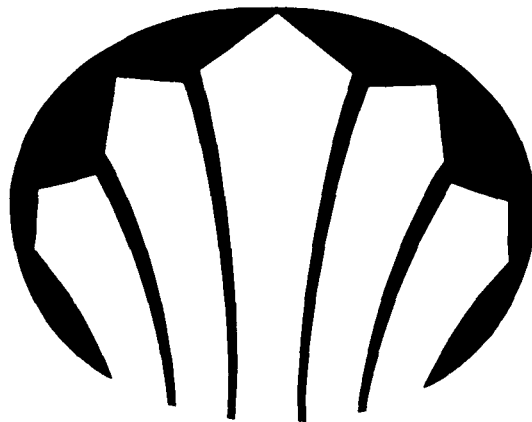


**AWARENESS OF  
FLASH FLOODING  
AMONG  
CLARK COUNTY RESIDENTS**

Prepared For:

**REGIONAL FLOOD CONTROL DISTRICT**



**THE SOURCE**  
**for marketing guidance**

October, 1999

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## **I. INTRODUCTION**

### **A. Background and Objectives**

For the past two years, THE MERICA AGENCY has executed an advertising campaign for the CLARK COUNTY REGIONAL FLOOD CONTROL DISTRICT. District management is interested in ascertaining to what degree the advertising is reaching the market and whether any specific groups of residents are being missed. Based on the information from this survey, possible adjustments can be made by redirecting portions of the advertising budget toward lower incidence communities or demographic groups.

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.
- > from which sources they obtained information about flash flooding.
- > to what degree they were affected by the July 8, 1999 flooding.

## **B. Methods and Procedures**

To meet the stated objectives, a telephone survey was conducted with 500 Clark County residents who are 18 years or older between Wednesday, October 6, 1999 and Tuesday, October 19, 1999.

One of the largest and most respected suppliers of scientific samples was employed to provide a representative sample of all 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 backs were made on different days and at different times of the day before the number was replaced with a number from a replicate sample.

Based on the final sample distribution proportions across the county, we believe this sample accurately represents both listed and unlisted telephone households and is projectable to all of Clark County.

The maximum margin of error for the 500 sample is plus or minus 4.4% at the 95% level of confidence. Where appropriate, statistically significant differences are indicated on the tables.

Each interview took approximately 5 minutes to complete.

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 can be found in the Appendix.

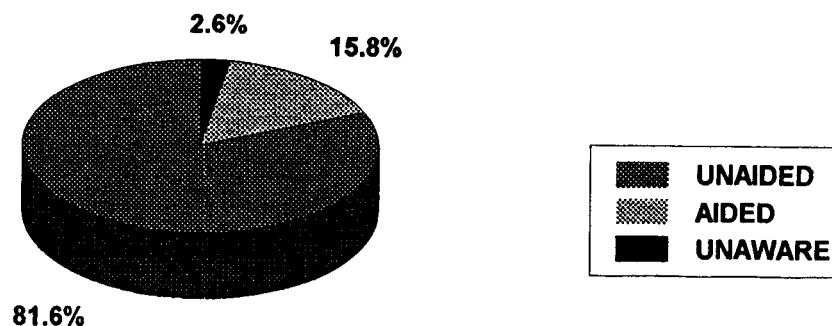
## II. EXECUTIVE SUMMARY

Five hundred respondents, composing a representative sample of Clark County adult residents, were interviewed by telephone during the first half of October, 1999. Fifty-nine percent were women and 41% were men. Their median age is 49.4 years, they've lived in Clark County an average of 9.8 years, and there are 2.3 household members.

When asked if they could name the types of natural disasters that can be a danger to Clark County residents, 81.6% said "Flash Flooding/Flooding," significantly more than all other mentions, which included earthquakes (37.2%), wind/dust/sand storms (14.0%), fires (11.0%), tornados (6.0%), and several other natural and non-natural dangers. By sub-sample, "Flash Flooding/Flooding" was named more frequently by those under 50 years old and households with three or more members. There were no significant differences in flooding mentions by years lived in Clark County, gender, or area of Clark County lived in.

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, 15.8% said they were, thus providing a total awareness of 97.4% (unaided 81.6% + aided 15.8%).

### Awareness of Dangers of Flash Floods

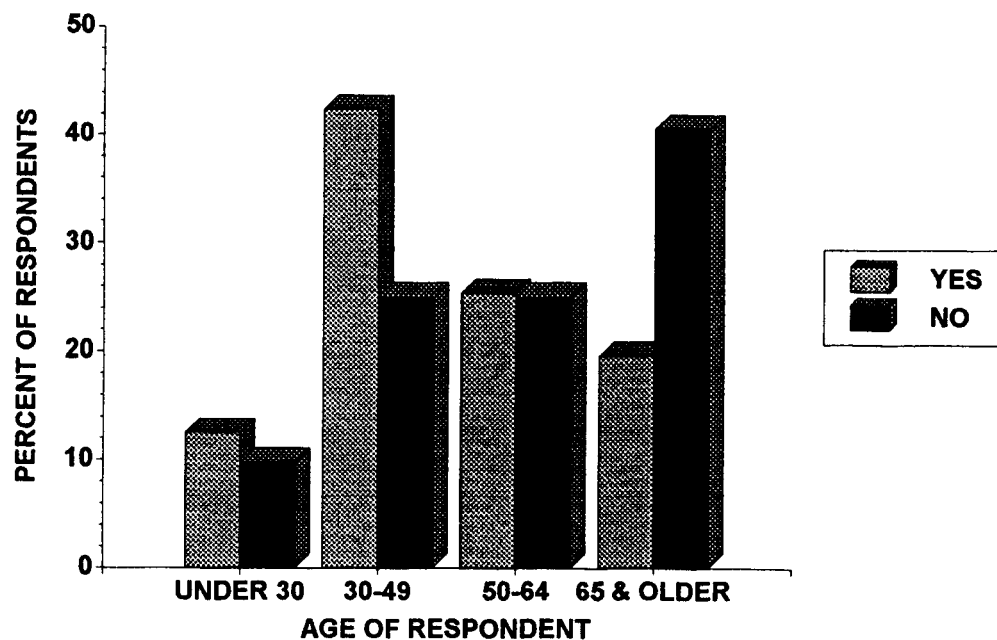


Although total awareness numbers are at a very high level overall, women (99.0%) are significantly more aware of flooding dangers than men (95.1%). There are no other significant differences by sub-sample.

Because of the very high level of total awareness, differences were looked at within the category of unaided awareness - those who had "top of mind," unprompted awareness compared to those who did not say flooding when probed for natural disaster dangers in Clark County.

Interestingly, those who did not at first say flooding are significantly older (58.5 years) than those who did say flooding (47.9 years). More specifically, a significantly greater proportion of those who did not initially say flooding are 65 years or older while a greater proportion of those who did say flooding are between 30 and 49 years old. This can be observed in the following chart by looking at the differences within each age group. The higher the "Yes" (said "flooding"), the better.

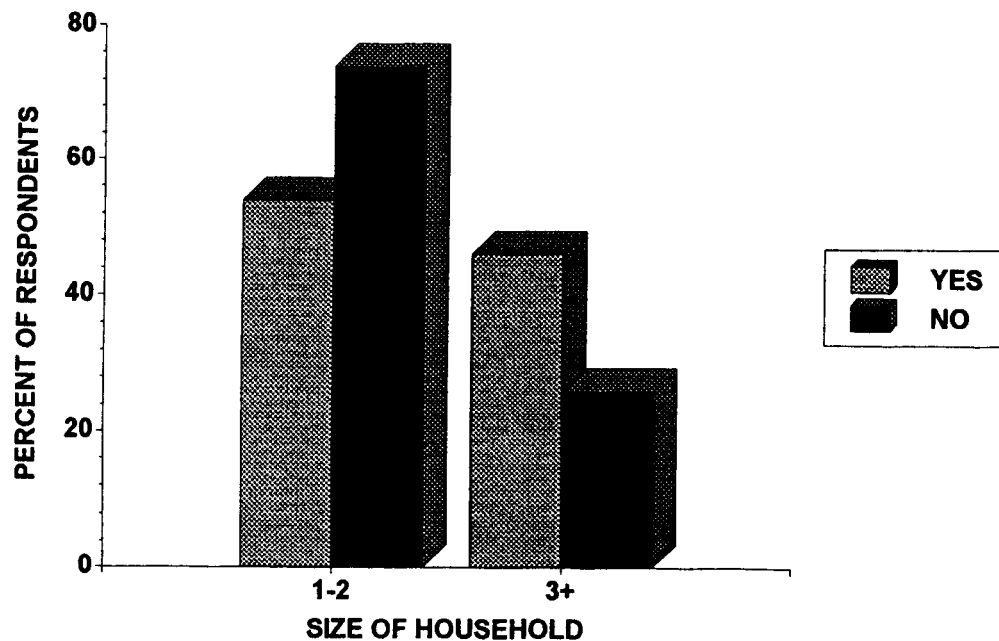
### Unaided Awareness



Correlated with age is household size. Generally, older households tend to be one or two person households. A difference in unaided awareness was also discovered in the household size variable. Those who did not initially say flooding have smaller households (1.9 members), while those who did say flooding have larger households (2.4 members).

More specifically, a significantly greater proportion of those who did not say flooding are in one or two person households, while those who did say flooding are in three or larger person households.

### Unaided Awareness



When those who are aware of flooding dangers were asked how they learned about the dangers of flash flooding in Clark County, by far the most frequent response (67.4%) was that they learned about it "by living here/seeing it happen/through personal experience." Other mentions, in

rank order, were TV (14.0%), news-unspecified (11.3%) TV news (9.4%), newspaper (6.4%), family/parents/friends (3.3%), radio (2.3%), and many others which are all less than 2% of the sample.

Respondents were then asked whether they had heard or read about flash flooding dangers from eleven specified sources, which were read to them one at a time. In this aided situation, TV News (96.9%) was cited significantly more than all other sources. And although the Flood Control District does not, to our knowledge, do much in the way of TV advertising, TV Advertising was selected as the second most frequent source (74.9%). This may be due to a "halo effect," wherein people get so much information from TV they may have considered any type of flood warning on television as a form of advertising. Following is the complete list of sources in rank order.

96.9%	TV News
74.9%	TV Advertising
74.5%	Newspaper or Magazine Story
65.1%	Radio News
53.2%	Newspaper or Magazine Ad
50.7%	Radio Advertising
46.6%	Friends or Relatives
39.4%	Billboard
20.1%	Brochure
16.0%	Children
12.3%	Bus Stop Shelter Ad

There are some interesting sub-sample differences for these flood information sources. Younger (under 50) residents are significantly more likely than older residents to cite TV News, TV Advertising, Radio News, Radio Advertising, Friends or Relatives, Billboard, Children and Bus Stop Shelter Ad. Larger (3+) households are significantly more likely than smaller households to cite Newspaper or Magazine Ad, Radio Advertising, Friends or Relatives, Billboard and Children. And those living in Clark



County 6 or more years are significantly more likely than newer residents to cite Newspaper or Magazine Ad, Brochure and Children.

There are also some differences in flood information sources by geographic area. Residents in the Northeast and Southeast valley are significantly more likely to say Newspaper or Magazine Story and Friends and Relatives than residents in the Northwest valley. Residents in the Southwest valley are significantly more likely to say Billboard than residents in the Northeast or Southeast. Residents in the Hispanic area are significantly more likely to say Newspaper or Magazine Ad than Green Valley residents, while Green Valley residents are more likely to say Billboard than Hispanic area residents.

A great majority (95.4%) of these residents remember the July 8th flooding. Of those who recalled it, 29.4% said they were affected by it. Younger (under 50) residents were more likely to have been affected by it than older residents. The most frequent way they were affected was "driving delay/getting around" (31.4%). Other mentions, in rank order, were "car/truck damage" (15.0%), "home water damage" (14.3%), "couldn't get home" (10.0%), "couldn't get out of home" (8.6%), "couldn't get to work" (7.1%), "our street flooded" (5.7%), and several other mentions, all less than 3%.

Finally, residents were asked if they believed that other household members are aware of the dangers of flooding. These respondents felt that virtually all of the other adults in the household were aware (99.5%), virtually all of the teen-agers (98.6%) and three-fourths (74.5%) of the younger children were aware of flash flooding dangers.

### III. CONCLUSIONS AND RECOMMENDATIONS

There is a very high level of awareness of the dangers of flash flooding throughout Clark County. This may be due in part to the July 8th "100 Year Flood," which is still fresh in many residents' minds.

Based on the high awareness level, flood danger advertising is in the third, or retentive, stage of advertising. As time passes and should there not be any serious flooding for a while, it is advisable that a retentive advertising campaign be run to remind old residents and educate new residents about the dangers of flash flooding.

Other than experiencing flash flooding first hand, TV news is the primary source of information about flash flooding, *when it happens*. Based on this study, it would appear that radio and billboards are effective advertising ways to remind residents about flash flooding, and if it can be afforded - TV advertising. Bus stop shelter ads do not appear to reach a large audience because most residents may not see them, and those who do see them may not register them.

Based on this study, it would appear that an effective allocation of increased advertising dollars be directed toward older residents, those primarily 65 years and older. This can be accomplished by advertising in senior publications, radio stations that target seniors, and any other media outlets that appeal to seniors.

#### **IV. DETAILED FINDINGS**

Five hundred respondents, constituting a representative sample of Clark County adult residents, were interviewed by telephone during the first half of October, 1999.

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, quadrant of the valley lived in, three specific areas, and by whether or not they said "flash flooding/flooding" when asked to name types of natural disasters that 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, 81.6% of all residents said "Flash Flooding" or "Flooding," significantly higher than all other mentions. The second most frequent mention was earthquakes (37.2%), followed by wind/dust/sand storms (14.0%), fires (11.0%), tornados (6.0%), and several other natural and non-natural dangers - such as the Nuclear Test Site/Yucca Mountain. Ten percent of respondents could not name any natural disasters that can be a danger to Clark County residents.

By sub-sample, "Flash Flooding/Flooding" was significantly more likely to be mentioned by under 50 year old residents (87.5%) than by 50 and older residents (75.3%); and by households with three or more people (88.7%) than by one or two member households (76.4%). There was no significant difference in mentions of "Flash Flooding/Flooding" by years lived in Clark County, gender, or area of Clark County lived in.

(See Tables 1a & 1b)

The 92 residents who did not spontaneously mention "Flash Flooding/ Flooding" were then asked if they were aware of the dangers of flash flooding here in Clark County. In this aided situation, 85.9% of these residents (15.8% of all respondents) said they were aware of the dangers of flooding.

The only sub-sample difference in aided awareness is that women (93.8%) were more likely to be aware of the dangers of flooding than men (77.3%).

(See Tables 2a & 2b)

Total awareness was derived by combining the previous unaided and aided responses. Across the total sample, 97.4% of these residents are aware of the dangers of flash flooding. Just 2.6% (13 of the 500 respondents) are not aware of this danger. By sub-sample, women (99.0%) are significantly more aware than men (95.1%). There are no other significant sub-sample differences.

(See Tables 3a & 3b)

#### **B. Sources of Information**

The residents who were aware of the dangers of flooding were asked questions about how they obtained information about flooding before their awareness and experience with the July 8th flood and their demographic characteristics were obtained; while those not aware of the dangers of flooding were skipped ahead to the July 8th questioning.

The 487 residents who were aware of the flooding dangers were asked how they learned about the dangers of flash flooding in Clark County.

Close to two-thirds (62.4%) of these residents in this unaided situation said they learned about flash flooding "by living here/seeing it happen/through personal experience." This response was significantly far above all other answers. Because of the way some responses were given and recorded, especially regarding TV and News, responses were tabulated as given and no assumptions were made. Thus, "TV" was the second most frequent mention (14.0%), followed by "News - unspecified" (11.3%) and "TV News" (9.4%). Continuing on, the fifth mention is "newspaper" (6.4%), then "family/parents/friends" (3.3%), "radio" (2.3%), "media" (1.6%), "billboard" (1.2%), "in school" (1.2%), "work for city/county/government" (1.2%), and several other mentions, all less than 1%. The reader may wish to inspect the sub-sample frequencies for any useful patterns.

(See Tables 4a & 4b)

Respondents were then read a list of eleven possible sources and asked to indicate whether they heard or read about flash flooding dangers from each source. In this aided situation, TV News (96.9%) was cited significantly more than all other sources. Next, TV Advertising (74.9%) and Newspaper or Magazine Story (74.5%) were chosen significantly more than the remaining sources. Radio News (65.1%) is in fourth place, significantly higher than the remaining sources. Newspaper or Magazine Ad (53.2%) is significantly higher than all others except Radio Advertising (50.7%), which is significantly higher than all others except Friends or Relatives (46.6%). Friends or Relatives is significantly higher than the remaining four sources, and each of the four - Billboard (39.4%), Brochure (20.1%), Children (16.0%), Bus Stop Shelter Ad ((12.3%) - is significantly higher than those below it.

By sub-sample, compared to those who've lived in Clark County 5 years or less, those who've lived in Clark County 6 years or more were significantly more likely to cite Newspaper or Magazine Ad, Brochure and Children. Compared to women, men were significantly more likely to say Brochure.

Compared to those 50 and older, those under 50 were significantly more likely to say TV News, TV Advertising, Radio News, Radio Advertising, Friends or Relatives, Billboard, Children and Bus Stop Shelter Ad. Compared to one or two person households, those with three or more in the home were significantly more likely to say Newspaper or Magazine Ad, Radio Advertising, Friends or Relatives, Billboard and Children.

(See Table 5a)

Continuing with sub-sample differences in information sources, residents in the Northeast and Southeast valley are significantly more likely to cite Newspaper or Magazine Story and Friends or Relatives than residents in the Northwest valley. Residents in the Southwest are significantly more likely to state Billboard than residents in the Northeast or Southeast. And residents in the Southeast are significantly more likely to say Children than residents in the Northwest. Finally, residents in the Hispanic area are significantly more likely to say Newspaper or Magazine Ad than Green Valley residents, while Green Valley residents are more likely to say Billboard than Hispanic area residents.

(See Table 5b)

Respondents were also asked if they could think of any other ways they may have heard or say information about flash flooding. The vast majority said they couldn't. The few responses offered (25) included "word of mouth/talking to people," "through school/classes," "online/Internet," "posted signs on the road," "Girl Scouts," "Red Rock Canyon tour," "the Weather Channel," "poster at work" and "parents taught me."

(See Tables 6a & 6b)

### **C. July 8th, 1999 Flooding**

All respondents, whether they said they were aware of the dangers of flash flooding or not, were asked if they recall the flash flooding last July 8th. As would be expected, a preponderance (95.4%) said they did recall the flooding. There was just one significant difference in sub-sample comparisons. Compared to one and two person household (94.1%), those with three or more household members are more likely to recall the flooding (97.2%). It should be noted that residents in Clark County areas outside of the valley (such as Laughlin, Moapa Valley, Searchlight, etc.) were at a lower 86.7%, but statistical significance was not calculated because of a small sample size.

(See Tables 7a & 7b)

Those who recalled the July 8th flooding were asked if they were affected in any way by that flooding and 29.4% said that they were. The only sub-sample significant difference is that those under 50 years old were more likely to be affected by the flood (37.1%) than those 50 and older (21.2%). Again, note that the outlying areas were less affected (7.7%), but that statistical significance was not calculated.

(See Tables 8a & 8b)

The residents who said they were affected were asked how they were affected. The most frequent response was "driving delay/getting around" (31.4%). This was followed by "car/truck damage" (15.0%), "home water damage" (14.3%), "couldn't get home" (10.0%), "couldn't get out of home" (8.6%), "couldn't get to work" (7.1%), "our street flooded" (5.7%), "trapped in car" (2.9%), "getting children from school" (2.1%), "waded in water to cross the street" (2.1%) and several other mentions, all under 2%. An inspection of the tables will indicate sub-sample differences.

(See Tables 9a & 9b)

#### **D. 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 40.6% of the total sample being men and 59.4% being women. A significantly greater proportion of those who've lived in Clark County 6 or more years were men and a significantly greater proportion of those who've lived in Clark County 5 years or less were women. A significantly greater proportion of one or two member households were men while a significantly greater proportion of three or more member households were women.

(See Tables 10a & 10b)

For the most part, one of the heads of household were interviewed (92.8%). When an other member of the household was interviewed, that person was significantly more likely to be female, under 50 years old, and from a household with three or more members.

(See Tables 11a & 11b)

The median age of these residents is 49.4 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 (45.1). Residents from one or two member households are significantly older (58.7) than those from three or more member households (41.4). There are no statistically significant differences in age by area lived in, although the trends in the data indicate that older residents live in the Southeast and Northwest and



younger residents live in the Northeast and Southwest. Additionally, although not statistically significant, Summerlin residents are older than Green Valley residents, who are older than Hispanic residents.

(See Tables 12a & 12b)

The median time these residents have lived in Clark County is 9.8 years. Residents who are 50 or older have lived in Clark County significantly longer (12.6 years) than those under 50 (8.9 years). Residents who live in the Southeast have lived in Clark County significantly longer (12.3 years) than residents in the Southwest (7.7 years). And although not statistically significant, on trend residents in the Northeast have lived in Clark County longer (12.6 years) while residents in the Northwest have lived in Clark County a shorter time (8.9 years). Additionally, Hispanic area residents have lived in Clark County significantly longer (15.5 years) than Green Valley residents (7.8 years) and, although not statistically significant because of sample size, longer than Summerlin residents (7.1 years).

(See Tables 13a & 13b)

The median number of household members is 2.3. Female respondent households are significantly larger (2.4) than male respondent households (2.2). Under 50 year old households are significantly larger (3.1) than 50 and older households (1.9). Hispanic area households are significantly larger (2.5) than Green Valley households (2.3) and, again although not statistically significant, larger than Summerlin households (2.2).

(See Tables 14a & 14b)

Excluding single person households, virtually all households interviewed (98.8%) had another adult in addition to the respondent. Thus, 1.2% were homes with just one adult and one or more children. Across the total sample, 18.5% of the households had children between 13 and 17 years old. A third (34.2%) had children under 13 years old. By sub-sample, as would be expected, younger households and those with 3 or more household members are more likely to have children in the household.

(See Tables 15a & 15b)

When the respondent was asked if he or she believed that other people in the household in the different age groups are aware of the dangers of flash flooding, the respondents felt that virtually all of the adults (99.5%), virtually all of the teen-agers (98.6%), and three-fourths (74.5%) of the younger children were aware of flash flooding dangers. This lower proportion is logical because some of the children are very young or infants. There were no sub-sample significant differences in awareness by age group.

(See Tables 16a - 19b)

#### **E. Comparison by Unaided Awareness**

In this section, differences in demographic and other 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 the previous data from a different perspective. All of the differences cited below are statistically significant.

Looking at unprompted awareness of flooding by area of Clark County, proportionately more Northwest valley residents said flooding (24.3% vs. 16.3% Northwest residents not initially saying flooding).

And proportionately more outlying area residents did not initially say flooding (8.7% vs. 1.7% outlying residents initially saying flooding).

A greater proportion of those who initially said flooding were aware of the July 8th flash flooding while a greater proportion of those who did not initially say flooding were not aware of the July 8th flash flooding.

A greater proportion of those who initially said flooding were affected by the July 8th flash flooding while a greater proportion of those who did not initially say flooding were not affected by the July 8th flash flooding.

A greater proportion of those who did not initially say flooding are 65 years or older while a greater proportion of those who did initially say flooding are between 30 and 49 years old. Across the entire distribution, those who did not initially say flooding are significantly older (58.5 years) than those who did initially say flooding (47.9 years).

A greater proportion of those who did not initially say flooding are one person households while a greater proportion of those who did initially say flooding are in three member households. Across the entire distribution, those who initially said flooding have larger households (2.4 members) than those who did not initially say flooding (1.9 members).

Looking at unaided awareness by household composition, proportionately more households with children under 13 said flooding (36.0% vs. 24.2% of under 13 households not saying flooding).

(See Tables 20 - 33)

For those readers interested in inspecting unaided awareness by individual Zip Code, this data can be found in Table 22.

## **V. SUPPORTING TABLES**

Table 1a

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

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
No, Can't Name Any	52 10.4%	14 9.9	38 10.6	29 14.3	23 7.7	15 5.9	37 15.2	40 13.9	12 5.7
Flash Flooding/ Flooding	408 81.6%	117 83.0	291 81.1	159 78.3	249 83.8	224 87.5	183 75.3	220 76.4	188 88.7
Earthquakes	186 37.2%	48 34.0	138 38.4	68 33.5	118 39.7	87 34.0	98 40.3	112 38.9	74 34.9
Wind/Dust/Sand Storms	70 14.0%	19 13.5	51 14.2	30 14.8	40 13.5	42 16.4	28 11.5	36 12.5	34 16.0
Fires	55 11.0%	16 11.3	39 10.9	19 9.4	36 12.1	24 9.4	30 12.3	34 11.8	21 9.9
Tornados	30 6.0%	8 5.7	22 6.1	14 6.9	16 5.4	16 6.3	14 5.8	18 6.3	12 5.7
Nuclear Test Site/ Yucca Mountain	24 4.8%	5 3.5	19 5.3	7 3.4	17 5.7	11 4.3	13 5.3	17 5.9	7 3.3
Lightning	18 3.6%	6 4.3	12 3.3	9 4.4	9 3.0	9 3.5	9 3.7	12 4.2	6 2.8
Pollution/Smog	8 1.6%	3 2.1	5 1.4	2 1.0	6 2.0	4 1.6	4 1.6	4 1.4	4 1.9
Storms (unspecified)	8 1.6%	1 0.7	7 1.9	4 2.0	4 1.3	4 1.6	4 1.6	6 2.1	2 0.9
Nuclear/Chemical Spills	6 1.2%	1 0.7	5 1.4	3 1.5	3 1.0	2 0.8	4 1.6	4 1.4	2 0.9
High Temperature/ Heat	6 1.2%	1 0.7	5 1.4	1 0.5	5 1.7	4 1.6	2 0.8	3 1.0	3 1.4
Hail Storms	4 0.8%	1 0.7	3 0.8	1 0.5	3 1.0	1 0.4	3 1.2	3 1.0	1 0.5
Natural Gases	2 0.4%	1 0.7	1 0.3	1 0.5	1 0.3	0	2 0.8	1 0.3	1 0.5
All Other Single Mentions	12 2.4%	1 0.7	11 3.1	8 3.9	4 1.3	7 2.7	5 2.1	7 2.4	5 2.4

Continued...

(Table Continued)

TOTAL RESPONSES	889	242	647	355	534	450	436	517	372
BASE=NET RESPONDENTS	177.8%	171.6	180.2	174.9	179.8	175.8	179.4	179.5	175.5
NET RESPONDENTS	500	141	359	203	297	256	243	288	212

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.

Table 1b

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

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
No, Can't Name Any	52 10.4%	13 12.3	9 7.9	19 9.7	6 8.6	5 33.3	4 11.1	2 6.3	2 8.7
Flash Flooding/ Flooding	408 81.6%	87 82.1	99 86.8	159 81.5	56 80.0	7 46.7	30 83.3	27 84.4	20 87.0
Earthquakes	186 37.2%	35 33.0	53 46.5	65 33.3	28 40.0	5 33.3	12 33.3	11 34.4	12 52.2
Wind/Dust/Sand Storms	70 14.0%	15 14.2	20 17.5	24 12.3	8 11.4	3 20.0	7 19.4	4 12.5	5 21.7
Fires	55 11.0%	12 11.3	13 11.4	18 9.2	9 12.9	3 20.0	3 8.3	3 9.4	3 13.0
Tornados	30 6.0%	7 6.6	6 5.3	16 8.2	1 1.4	0	4 11.1	3 9.4	2 8.7
Nuclear Test Site/ Yucca Mountain	24 4.8%	3 2.8	4 3.5	15 7.7	2 2.9	0	1 2.8	3 9.4	0
Lightning	18 3.6%	4 3.8	5 4.4	5 2.6	4 5.7	0	2 5.6	2 6.3	0
Pollution/Smog	8 1.6%	3 2.8	1 0.9	3 1.5	1 1.4	0	1 2.8	1 3.1	0
Storms (unspecified)	8 1.6%	2 1.9	2 1.8	3 1.5	1 1.4	0	0	0	1 4.3
Nuclear/Chemical Spills	6 1.2%	0	4 3.5	1 0.5	1 1.4	0	0	1 3.1	2 8.7
High Temperature/ Heat	6 1.2%	1 0.9	1 0.9	4 2.1	0	0	0	0	0
Hail Storms	4 0.8%	1 0.9	2 1.8	1 0.5	0	0	0	0	0
Natural Gases	2 0.4%	1 0.9	0	1 0.5	0	0	0	1 3.1	0
All Other Single Mentions	12 2.4%	5 4.7	1 0.9	3 1.5	2 2.9	1 6.7	2 5.6	0	0

Continued...

(Table Continued)

TOTAL RESPONSES	889	189	220	337	119	24	66	58	47
BASE=NET RESPONDENTS	177.8%	178.3	193.0	172.8	170.0	160.0	183.3	181.3	204.3
NET RESPONDENTS	500	106	114	195	70	15	36	32	23

NOTE: For the "Flash Flooding/Flooding" row, there are no statistically significant differences between sub-samples at the 95% level of confidence.

Significance not calculated for samples below 30 respondents.



Table 2a

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

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	79 85.9%	19 79.2	60 88.2	34 77.3%	45 93.8	27 84.4	52 86.7	58 85.3	21 87.5
No	13 14.1%	5 20.8	8 11.8	10 22.7%	3 6.3	5 15.6	8 13.3	10 14.7	3 12.5
TOTAL RESPONSES	92	24	68	44	48	32	60	68	24
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 2b

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

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Yes	79 85.9%	17 89.5	12 80.0	33 91.7	12 85.7	5 62.5	5 83.3	4 80.0	3 100.0
No	13 14.1%	2 10.5	3 20.0	3 8.3	2 14.3	3 37.5	1 16.7	1 20.0	0
TOTAL RESPONSES	92	19	15	36	14	8	6	5	3
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Significance not calculated for samples below 30 respondents.

Table 3a

TOTAL AWARENESS:  
UNAIDED AND AIDED AWARENESS OF FLASH FLOODING DANGERS

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	5 YRS. TOTAL	6 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Aware Of Flash Flooding	487 97.4%	136 96.5	351 97.8	193 95.1	294 99.0	251 98.0	235 96.7	278 96.5	209 98.6
Not Aware Of Flash Flooding	13 2.6%	5 3.5	8 2.2	10 4.9	3 1.0	5 2.0	8 3.3	10 3.5	3 1.4
TOTAL RESPONDENTS	500	141	359	203	297	256	243	288	212
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 3b

TOTAL AWARENESS:  
UNAIDED AND AIDED AWARENESS OF FLASH FLOODING DANGERS

	QUADRANT OF VALLEY					SPECIFIC AREAS			
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Aware Of Flash Flooding	487 97.4%	104 98.1	111 97.4	192 98.5	68 97.1	12 80.0	35 97.2	31 96.9	23 100.0
Not Aware Of Flash Flooding	13 2.6%	2 1.9	3 2.6	3 1.5	2 2.9	3 20.0	1 2.8	1 3.1	0
TOTAL RESPONDENTS	500	106	114	195	70	15	36	32	23
BASE-NET RESPONDENTS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Significance not calculated for samples below 30 respondents.

Table 4a

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

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
By Living Here/Saw It Happen/Experience	304 62.4%	84 61.8	220 62.7	132 68.4	172 58.5	156 62.2	147 62.6	168 60.4	136 65.1
TV	68 14.0%	20 14.7	48 13.7	20 10.4	48 16.3	23 9.2	45 19.1	44 15.8	24 11.5
News (unspecified)	55 11.3%	21 15.4	34 9.7	19 9.8	36 12.2	40 15.9	15 6.4	31 11.2	24 11.5
TV News	46 9.4%	7 5.1	39 11.1	15 7.8	31 10.5	27 10.8	19 8.1	25 9.0	21 10.0
Newspaper	31 6.4%	6 4.4	25 7.1	13 6.7	18 6.1	8 3.2	23 9.8	23 8.3	8 3.8
Family/Parents/ Friends	16 3.3%	8 5.9	8 2.3	4 2.1	12 4.1	12 4.8	4 1.7	8 2.9	8 3.8
Radio	11 2.3%	2 1.5	9 2.6	6 3.1	5 1.7	7 2.8	4 1.7	5 1.8	6 2.9
Media	8 1.6%	4 2.9	4 1.1	2 1.0	6 2.0	5 2.0	3 1.3	4 1.4	4 1.9
Billboard	6 1.2%	1 0.7	5 1.4	1 0.5	5 1.7	6 2.4	0	2 0.7	4 1.9
In School	6 1.2%	2 1.5	4 1.1	1 0.5	5 1.7	6 2.4	0	0	6 2.9
Work For City/County /Government	6 1.2%	1 0.7	5 1.4	3 1.6	3 1.0	2 0.8	4 1.7	4 1.4	2 1.0
Signs/Road Signs	3 0.6%	1 0.7	2 0.6	0	3 1.0	2 0.8	1 0.4	1 0.4	2 1.0
Flood Insurance	3 0.6%	0	3 0.9	0	3 1.0	2 0.8	1 0.4	1 0.4	2 1.0
Told About Flood Zones	3 0.6%	1 0.7	2 0.6	0	3 1.0	2 0.8	1 0.4	1 0.4	2 1.0
TV Ad/Commercial	2 0.4%	0	2 0.6	1 0.5	1 0.3	2 0.8	0	0	2 1.0

Continued...

(Table Continued)

Public Service	2	0	2	1	1	2	0	0	2
Announcements	0.4%		0.6	0.5	0.3	0.8			1.0
Reading	2	1	1	0	2	1	1	2	0
	0.4%	0.7	0.3		0.7	0.4	0.4	0.7	
All Other Single	6	1	5	4	2	3	3	4	2
Mentions	1.2%	0.7	1.4	2.1	0.7	1.2	1.3	1.4	1.0
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TOTAL RESPONSES	578	160	418	222	356	306	271	323	255
BASE=NET RESPONDENTS	118.7%	117.6	119.1	115.0	121.1	121.9	115.3	116.2	122.0
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NET RESPONDENTS	487	136	351	193	294	251	235	278	209

Table 4b

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

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
By Living Here/Saw It Happen/Experience	304 62.4%	65 62.5	65 58.6	122 63.5	44 64.7	8 66.7	20 57.1	18 58.1	16 69.6
TV	68 14.0%	13 12.5	16 14.4	26 13.5	13 19.1	0	6 17.1	5 16.1	6 26.1
News (unspecified)	55 11.3%	17 16.3	9 8.1	16 8.3	12 17.6	1 8.3	5 14.3	7 22.6	0
TV News	46 9.4%	8 7.7	17 15.3	16 8.3	2 2.9	3 25.0	3 8.6	1 3.2	2 8.7
Newspaper	31 6.4%	4 3.8	12 10.8	12 6.3	1 1.5	2 16.7	3 8.6	1 3.2	5 21.7
Family/Parents/ Friends	16 3.3%	4 3.8	0	10 5.2	2 2.9	0	1 2.9	1 3.2	0
Radio	11 2.3%	3 2.9	4 3.6	3 1.6	0	1 8.3	3 8.6	0	0
Media	8 1.6%	3 2.9	5 4.5	0	0	0	3 8.6	0	1 4.3
Billboard	6 1.2%	0	1 0.9	3 1.6	2 2.9	0	0	2 6.5	0
In School	6 1.2%	1 1.0	0	4 2.1	1 1.5	0	1 2.9	1 3.2	0
Work For City/County /Government	6 1.2%	2 1.9	1 0.9	3 1.6	0	0	0	1 3.2	0
Signs/Road Signs	3 0.6%	0	0	2 1.0	1 1.5	0	0	1 3.2	0
Flood Insurance	3 0.6%	0	0	2 1.0	1 1.5	0	0	1 3.2	0
Told About Flood Zones	3 0.6%	0	1 0.9	1 0.5	1 1.5	0	0	0	0
TV Ad/Commercial	2 0.4%	0	0	2 1.0	0	0	0	1 3.2	0

Continued...

(Table Continued)

Public Service	2	0	0	2	0	0	0	1	0
Announcements	0.4%			1.0				3.2	
Reading	2	0	1	0	1	0	0	0	0
	0.4%		0.9		1.5				
All Other Single	6	3	2	1	0	0	1	0	0
Mentions	1.2%	2.9	1.8	0.5			2.9		
<hr/>									
TOTAL RESPONSES	578	123	134	225	81	15	46	41	30
BASE=NET RESPONDENTS	118.7%	118.3	120.7	117.2	119.1	125.0	131.4	132.3	130.4
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NET RESPONDENTS	487	104	111	192	68	12	35	31	23



Table 5a

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

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
TV News	472 96.9%	129 94.9	343 97.7	184 95.3	288 98.0	247 98.4	224 →95.3	268 96.4	204 97.6
TV Advertising	365 74.9%	97 71.3	268 76.4	141 73.1	224 76.2	201 80.1	163 →69.4	203 73.0	162 77.5
Newspaper or Magazine Story	363 74.5%	99 72.8	264 75.2	137 71.0	226 76.9	181 72.1	181 77.0	209 75.2	154 73.7
Radio News	317 65.1%	92 67.6	225 64.1	124 64.2	193 65.6	185 73.7	131 →55.7	174 62.6	143 68.4
Newspaper or Magazine Ad	259 53.2%	63 46.3	196 ←55.8	107 55.4	152 51.7	142 56.6	116 49.4	135 48.6	124 ←59.3
Radio Advertising	247 50.7%	69 50.7	178 50.7	104 53.9	143 48.6	156 62.2	90 →38.3	125 45.0	122 ←58.4
Friends or Relatives	227 46.6%	67 49.3	160 45.6	83 43.0	144 49.0	145 57.8	82 →34.9	116 41.7	111 ←53.1
Billboard	192 39.4%	51 37.5	141 40.2	82 42.5	110 37.4	136 54.2	55 →23.4	99 35.6	93 ←44.5
Brochure	98 20.1%	14 10.3	84 ←23.9	48 24.9	50 →17.0	47 18.7	50 21.3	50 18.0	48 23.0
Children	78 16.0%	16 11.8	62 ←17.7	32 16.6	46 15.6	57 22.7	21 →8.9	24 8.6	54 ←25.8
Bus Stop Shelter Ad	60 12.3%	14 10.3	46 13.1	24 12.4	36 12.2	37 14.7	23 →9.8	33 11.9	27 12.9
TOTAL RESPONDENTS	487	136	351	193	294	251	235	278	209
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## NOTE:

For the Total Sample, each percentage is significantly higher (at the 95% level of confidence) than the percentages below it - except for the differences between TV Advertising and Newspaper or Magazine Story, Newspaper or Magazine Ad and Radio Advertising, and Radio Advertising and Family or Relatives.

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

Table 5b

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

	TOTAL	QUADRANT OF VALLEY				SPECIFIC AREAS			
		NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
TV News	472 96.9%	103 99.0	106 95.5	184 95.8	68 100.0	11 91.7	35 100.0	30 96.8	21 91.3
TV Advertising	365 74.9%	74 71.2	86 77.5	143 74.5	55 80.9	7 58.3	27 77.1	24 77.4	13 56.5
Newspaper or Magazine Story	363 74.5%	83 79.8	76 68.5	149 77.6	47 69.1	8 66.7	32 91.4	26 83.9	18 78.3
Radio News	317 65.1%	69 66.3	77 69.4	122 63.5	43 63.2	6 50.0	25 71.4	23 74.2	17 73.9
Newspaper or Magazine Ad	259 53.2%	59 56.7	55 49.5	103 53.6	34 50.0	8 66.7	22 62.9	11 35.5	11 47.8
Radio Advertising	247 50.7%	59 56.7	57 51.4	95 49.5	33 48.5	3 25.0	21 60.0	17 54.8	10 43.5
Friends or Relatives	227 46.6%	56 53.8	39 35.1	97 50.5	31 45.6	4 33.3	17 48.6	19 61.3	8 34.8
Billboard	192 39.4%	36 34.6	48 43.2	70 36.5	35 51.5	3 25.0	9 25.7	14 45.2	7 30.4
Brochure	98 20.1%	21 20.2	17 15.3	42 21.9	17 25.0	1 8.3	5 14.3	9 29.0	3 13.0
Children	78 16.0%	16 15.4	12 10.8	36 18.8	13 19.1	1 8.3	5 14.3	4 12.9	1 4.3
Bus Stop Shelter Ad	60 12.3%	13 12.5	15 13.5	21 10.9	10 14.7	1 8.3	7 20.0	7 22.6	2 8.7
TOTAL RESPONSES	487	104	111	192	68	12	35	31	23
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## NOTE:

For the Total Sample, each percentage is significantly higher (at the 95% level of confidence) than the percentages below it - except for those noted on the previous table.

Arrows indicate differences between sub-samples which were found to be statistically significant at the 95 % level of confidence. Significance not calculated for samples below 30 respondents.

Table 6a

## ANY OTHER WAYS HEARD OR SAW INFORMATION ABOUT FLASH FLOODING

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Word of Mouth/ Talking to People	12 2.4%	4 2.8	8 2.2	5 2.5	7 2.4	7 2.7	5 2.1	8 2.8	4 1.9
Through School/ Classes	3 0.6%	1 0.7	2 0.6	1 0.5	2 0.7	1 0.4	2 0.8	2 0.7	1 0.5
Online/Internet	3 0.6%	1 0.7	2 0.6	1 0.5	2 0.7	0	3 1.2	2 0.7	1 0.5
Posted Signs on Road	2 0.4%	1 0.7	1 0.3	2 1.0	0	2 0.8	0	1 0.3	1 0.5
Girl Scouts	1 0.2%	1 0.7	0	0	1 0.3	0	1 0.4	0	1 0.5
Red Rock Canyon Tour	1 0.2%	1 0.7	0	0	1 0.3	0	1 0.4	0	1 0.5
Weather Channel	1 0.2%	0	1 0.3	0	1 0.3	0	1 0.4	1 0.3	0
Poster at Work	1 0.2%	0	1 0.3	0	1 0.3	1 0.4	0	0	1 0.5
Parents Taught Me	1 0.2%	0	1 0.3	1 0.5	0	1 0.4	0	1 0.3	0
TOTAL RESPONSES BASE=ALL RESPONDENTS	25 5.0%	9 6.4	16 4.5	10 4.9	15 5.1	12 4.7	13 5.3	15 5.2	10 4.7
NET RESPONDENTS ALL RESPONDENTS	25 500	9 141	16 359	10 203	15 297	12 256	13 243	15 288	10 211

Table 6b

## ANY OTHER WAYS HEARD OR SAW INFORMATION ABOUT FLASH FLOODING

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Word of Mouth/ Talking to People	12 2.4%	4 3.8	0	6 3.1	1 1.4	1 6.7	2 5.6	1 3.1	0
Through School/ Classes	3 0.6%	0	1 0.9	2 1.0	0	0	0	0	0
Online/Internet	3 0.6%	0	1 0.9	0	2 2.9	0	0	0	0
Posted Signs on Road	2 0.4%	0	0	2 1.0	0	0	0	1 3.1	0
Girl Scouts	1 0.2%	0	0	1 0.5	0	0	0	0	0
Red Rock Canyon Tour	1 0.2%	0	1 0.9	0	0	0	0	0	0
Weather Channel	1 0.2%	0	1 0.9	0	0	0	0	0	0
Poster at Work	1 0.2%	1 0.9	0	0	0	0	0	0	0
Parents Taught Me	1 0.2%	0	1 0.9	0	0	0	0	0	0
TOTAL RESPONSES	25	5	5	11	3	1	2	2	0
BASE=ALL RESPONDENTS	500	106	114	195	70	15	36	32	23

Table 7a

## RECALL JULY 8TH FLASH FLOODING

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	477 95.4%	131 92.9	346 96.4	194 95.6	283 95.3	245 95.7	231 95.1	271 94.1	206 97.2
No	23 4.6%	10 7.1	13 3.6	9 4.4	14 4.7	11 4.3	12 4.9	17 5.9	6 2.8
TOTAL RESPONSES	500	141	359	203	297	256	243	288	212
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 7b

## RECALL JULY 8TH FLASH FLOODING

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Yes	477 95.4%	105 99.1	107 93.9	185 94.9	67 95.7	13 86.7	36 100.0	31 96.9	22 95.7
No	23 4.6%	1 0.9	7 6.1	10 5.1	3 4.3	2 13.3	0	1 3.1	1 4.3
TOTAL RESPONSES	500	106	114	195	70	15	36	32	23
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Significance not calculated for samples below 30 respondents.

Table 8a

WERE YOU AFFECTED IN ANY WAY BY THAT FLOODING  
(AMONG THOSE RECALLING THE JULY 8TH FLOODING)

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Yes	140 29.4%	40 30.5	100 28.9	54 27.8	86 30.4	91 37.1	49 21.2	76 28.0	64 31.1
No	337 70.6%	91 69.5	246 71.1	140 72.2	197 69.6	154 62.9	182 78.8	195 72.0	142 68.9
TOTAL RESPONSES	477	131	346	194	283	245	231	271	206
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 8b

WERE YOU AFFECTED IN ANY WAY BY THAT FLOODING  
(AMONG THOSE RECALLING THE JULY 8TH FLOODING)

	QUADRANT OF VALLEY					SPECIFIC AREAS			
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Yes	140 29.4%	35 33.3	28 26.2	55 29.7	21 31.3	1 7.7	12 33.3	9 29.0	7 31.8
No	337 70.6%	70 66.7	79 73.8	130 70.3	46 68.7	12 92.3	24 66.7	22 71.0	15 68.2
TOTAL RESPONSES	477	105	107	185	67	13	36	31	22
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Significance not calculated for samples below 30 respondents.



Table 9a

## HOW AFFECTED BY THAT FLOODING

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Driving Delay/ Getting Around	44 31.4%	14 35.0	30 30.0	20 37.0	24 27.9	27 29.7	17 34.7	23 30.3	21 32.8
Car/Truck Damage	21 15.0%	4 10.0	17 17.0	7 13.0	14 16.3	14 15.4	7 14.3	14 18.4	7 10.9
Home Water Damage	20 14.3%	6 15.0	14 14.0	9 16.7	11 12.8	14 15.4	6 12.2	11 14.5	9 14.1
Couldn't Get Home	14 10.0%	7 17.5	7 7.0	3 5.6	11 12.8	12 13.2	2 4.1	6 7.9	8 12.5
Couldn't Get Out Of Home	12 8.6%	3 7.5	9 9.0	4 7.4	8 9.3	6 6.6	6 12.2	6 7.9	6 9.4
Couldn't Get To Work	10 7.1%	3 7.5	7 7.0	5 9.3	5 5.8	7 7.7	3 6.1	7 9.2	3 4.7
Our Street Flooded	8 5.7%	3 7.5	5 5.0	3 5.6	5 5.8	6 6.6	2 4.1	3 3.9	5 7.8
Trapped In Car	4 2.9%	1 2.5	3 3.0	1 1.9	3 3.5	2 2.2	2 4.1	4 5.3	0
Getting Children From School	3 2.1%	1 2.5	2 2.0	2 3.7	1 1.2	2 2.2	1 2.0	2 2.6	1 1.6
Waded In Water To Cross Street	3 2.1%	0	3 3.0	2 3.7	1 1.2	0	3 6.1	2 2.6	1 1.6
Office/Store Lost Business	2 1.4%	0	2 2.0	0	2 2.3	2 2.2	0	1 1.3	1 1.6
Property Owned Flooded	2 1.4%	1 2.5	1 1.0	1 1.9	1 1.2	1 1.1	1 2.0	1 1.3	1 1.6
Flooded At Work	2 1.4%	1 2.5	1 1.0	0	2 2.3	2 2.2	0	0	2 3.1
All Other Single Mentions	12 8.6%	4 10.0	8 8.0	2 3.7	10 11.6	9 9.9	3 6.1	5 6.6	7 10.9

Continued...

(Table Continued)

TOTAL RESPONSES	157	48	109	59	98	104	53	85	72
BASE=NET RESPONDENTS	112.1%	120.0	109.0	109.3	114.0	114.3	108.2	111.8	112.5
NET RESPONDENTS	140	40	100	54	86	91	49	76	64

Table 9b

## HOW AFFECTED BY THAT FLOODING

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Driving Delay/ Getting Around	44 31.4%	10 28.6	8 28.6	16 29.1	10 47.6	0	4 33.3	3 33.3	1 14.3
Car/Truck Damage	21 15.0%	11 31.4	4 14.3	5 9.1	1 4.8	0	4 33.3	0	0
Home Water Damage	20 14.3%	5 14.3	4 14.3	6 10.9	5 23.8	0	3 25.0	0	1 14.3
Couldn't Get Home	14 10.0%	1 2.9	1 3.6	9 16.4	3 14.3	0	0	1 11.1	0
Couldn't Get Out Of Home	12 8.6%	4 11.4	2 7.1	6 10.9	0	0	1 8.3	0	1 14.3
Couldn't Get To Work	10 7.1%	4 11.4	1 3.6	3 5.5	2 9.5	0	1 8.3	2 22.2	0
Our Street Flooded	8 5.7%	2 5.7	2 7.1	4 7.3	0	0	0	0	0
Trapped In Car	4 2.9%	2 5.7	0	2 3.6	0	0	0	1 11.1	0
Getting Children From School	3 2.1%	1 2.9	0	2 3.6	0	0	0	0	0
Waded In Water To Cross Street	3 2.1%	0	1 3.6	1 1.8	1 4.8	0	0	0	1 14.3
Office/Store Lost Business	2 1.4%	0	1 3.6	0	1 4.8	0	0	0	0
Property Owned Flooded	2 1.4%	0	0	2 3.6	0	0	0	0	0
Flooded At Work	2 1.4%	1 2.9	1 3.6	0	0	0	0	0	1 14.3
All Other Single Mentions	12 8.6%	2 5.7	5 17.9	3 5.5	1 4.8	1 100.0	2 16.7	2 22.2	2 28.6

Continued...

(Table Continued)

TOTAL RESPONSES	157	43	30	59	24	1	15	9	7
BASE-NET RESPONDENTS	112.1%	122.9	107.1	107.3	114.3	100.0	125.0	100.0	100.0
NET RESPONDENTS	140	35	28	55	21	1	12	9	7

Table 10a

## RESPONDENT GENDER

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Male	203 40.6%	48 34.0%	155 43.2%	203 100.0	0	102 39.8	100 41.2	130 45.1	73 34.4
Female	297 59.4%	93 66.0	204 56.8	0	297 100.0	154 60.2	143 58.8	158 54.9	139 65.6
TOTAL RESPONSES	500	141	359	203	297	256	243	288	212
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 10b

## RESPONDENT GENDER

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Male	203 40.6%	48 45.3	40 35.1	83 42.6	26 37.1	6 40.0	15 41.7	13 40.6	8 34.8
Female	297 59.4%	58 54.7	74 64.9	112 57.4	44 62.9	9 60.0	21 58.3	19 59.4	15 65.2
TOTAL RESPONSES	500	106	114	195	70	15	36	32	23
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Significance not calculated for samples below 30 respondents.

Table 11a

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

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Head of Household	464 92.8%	129 91.5	335 93.3	194 95.6	270 90.9	226 88.3	237 97.5	282 97.9	182 85.8
Other Household Member	36 7.2%	12 8.5	24 6.7	9 4.4	27 9.1	30 11.7	6 2.5	6 2.1	30 14.2
TOTAL RESPONSES	500	141	359	203	297	256	243	288	212
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 11b

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

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Head of Household	464	97	103	183	69	12	34	31	21
	92.8%	91.5	90.4	93.8	98.6	80.0	94.4	96.9	91.3
Other Household Member	36	9	11	12	1	3	2	1	2
	7.2%	8.5	9.6	6.2	1.4	20.0	5.6	3.1	8.7
TOTAL RESPONSES	500	106	114	195	70	15	36	32	23
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Significance not calculated for samples below 30 respondents.



Table 12a

## AGE OF RESPONDENT

		YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
(19)	18 to 20	15 3.0%	6 4.3	9 2.5	6 3.0	9 3.0	15 5.9	0	6 2.1	9 4.2
(25)	21 to 29	45 9.0%	22 15.6	23 6.4	14 6.9	31 10.4	45 17.6	0	22 7.6	23 10.8
(35)	30 to 39	83 16.6%	24 17.0	59 16.4	37 18.2	46 15.5	83 32.4	0	19 6.6	64 30.2
(45)	40 to 49	113 22.6%	36 25.5	77 21.4	45 22.2	68 22.9	113 44.1	0	43 14.9	70 33.0
(55)	50 to 59	89 17.8%	28 19.9	61 17.0	32 15.8	57 19.2	0	89 36.6	62 21.5	27 12.7
(62)	60 to 64	37 7.4%	7 5.0	30 8.4	18 8.9	19 6.4	0	37 15.2	27 9.4	10 4.7
(70)	65 or Older	117 23.4%	18 12.8	99 27.6	50 24.6	67 22.6	0	117 48.1	109 37.8	8 3.8
Refused		1 0.2%	0	1 0.3	1 0.5	0	0	0	0	1 0.5
TOTAL RESPONSES		500	141	359	203	297	256	243	288	212
BASE=NET RESPONDENTS		100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN		49.42	45.14	51.80	49.78	49.19	38.19	64.65	58.71	41.36
T-Value			-4.27			0.77	-38.27		11.39	

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

Table 12b

## AGE OF RESPONDENT

		QUADRANT OF VALLEY					SPECIFIC AREAS		
		TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC VALLEY	GREEN SUMMER VALLEY LIN
(19)	18 to 20	15 3.0%	3 2.8	3 2.6	9 4.6	0	0	0	0
(25)	21 to 29	45 9.0%	4 3.8	8 7.0	19 9.7	12 17.1	2 13.3	3 8.3	8 25.0
(35)	30 to 39	83 16.6%	26 24.5	22 19.3	24 12.3	8 11.4	3 20.0	9 25.0	4 12.5
(45)	40 to 49	113 22.6%	29 27.4	24 21.1	40 20.5	18 25.7	2 13.3	9 25.0	3 9.4
(55)	50 to 59	89 17.8%	17 16.0	23 20.2	31 15.9	15 21.4	3 20.0	6 16.7	6 18.8
(62)	60 to 64	37 7.4%	9 8.5	5 4.4	18 9.2	5 7.1	0	2 5.6	2 6.3
(70)	65 or Older	117 23.4%	18 17.0	29 25.4	54 27.7	11 15.7	5 33.3	7 19.4	9 28.1
Refused		1 0.2%	0	0	0	1 1.4	0	0	0
TOTAL RESPONSES		500	106	114	195	70	15	36	32
BASE-NET RESPONDENTS		100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN		49.42	46.90	50.00	51.77	48.06	51.67	46.67	51.67
T-Value				-0.89	-0.32	1.39			-0.11

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

Significance not calculated for samples below 30 respondents.

Table 13a

## YEARS LIVED IN CLARK COUNTY

		YEARS LIVED IN CLARK CO		GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
		TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	3 OR 1 OR 2 MORE
(1)	2 Years or Less	51 10.2%	51 36.2	0	18 8.9	33 11.1	31 12.1	20 8.2	33 11.5
(4)	3 to 5 Years	90 18.0%	90 63.8	0	30 14.8	60 20.2	57 22.3	33 13.6	50 17.4
(8)	6 to 10 Years	114 22.8%	0	114 31.8	54 26.6	60 20.2	56 21.9	58 23.9	60 20.8
(13)	11 to 15 Years	53 10.6%	0	53 14.8	24 11.8	29 9.8	28 10.9	25 10.3	35 12.2
(18)	16 to 20 Years	53 10.6%	0	53 14.8	24 11.8	29 9.8	29 11.3	23 9.5	29 10.1
(25)	21 to 30 Years	72 14.4%	0	72 20.1	32 15.8	40 13.5	33 12.9	39 16.0	39 13.5
(35)	31 or More Years	67 13.4%	0	67 18.7	21 10.3	46 15.5	22 8.6	45 18.5	42 14.6
TOTAL RESPONSES		500	141	359	203	297	256	243	288
BASE=NET RESPONDENTS		100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN		9.82	3.15	16.68	9.96	9.70	8.86	12.60	10.64
T-Value			-29.25		-0.32		-3.69		0.32

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

Table 13b

## YEARS LIVED IN CLARK COUNTY

		QUADRANT OF VALLEY						SPECIFIC AREAS		
		TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
(1)	2 Years or Less	51 10.2%	5 4.7	12 10.5	22 11.3	10 14.3	2 13.3	1 2.8	5 15.6	1 4.3
(4)	3 to 5 Years	90 18.0%	18 17.0	20 17.5	31 15.9	18 25.7	3 20.0	5 13.9	7 21.9	8 34.8
(8)	6 to 10 Years	114 22.8%	25 23.6	34 29.8	36 18.5	17 24.3	2 13.3	8 22.2	9 28.1	9 39.1
(13)	11 to 15 Years	53 10.6%	12 11.3	10 8.8	24 12.3	4 5.7	3 20.0	4 11.1	3 9.4	1 4.3
(18)	16 to 20 Years	53 10.6%	14 13.2	5 4.4	24 12.3	9 12.9	1 6.7	3 8.3	2 6.3	0
(25)	21 to 30 Years	72 14.4%	13 12.3	17 14.9	32 16.4	9 12.9	1 6.7	5 13.9	4 12.5	2 8.7
(35)	31 or More Years	67 13.4%	19 17.9	16 14.0	26 13.3	3 4.3	3 20.0	10 27.8	2 6.3	2 8.7
TOTAL RESPONSES		500	106	114	195	70	15	36	32	23
BASE=NET RESPONDENTS		100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN		9.82	12.58	8.94	12.27	7.65	11.33	15.50	7.78	7.11
T-Value				1.34	-0.79	2.89			2.86	
						↑			↑	

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

Significance not calculated for samples below 30 respondents.

Table 14a

## NUMBER OF PEOPLE LIVING IN HOUSEHOLD

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
(1)	99 19.8%	22 15.6	77 21.4	47 23.2	52 17.5	23 9.0	76 31.3	99 34.4	0
(2)	189 37.8%	61 43.3	128 35.7	83 40.9	106 35.7	67 26.2	122 50.2	189 65.6	0
(3)	84 16.8%	33 23.4	51 14.2	28 13.8	56 18.9	60 23.4	24 9.9	0	84 39.6
(4)	68 13.6%	13 9.2	55 15.3	23 11.3	45 15.2	57 22.3	11 4.5	0	68 32.1
(5)	35 7.0%	6 4.3	29 8.1	17 8.4	18 6.1	27 10.5	8 3.3	0	35 16.5
(7) 6 or More	25 5.0%	6 4.3	19 5.3	5 2.5	20 6.7	22 8.6	2 0.8	0	25 11.8
TOTAL RESPONSES	500	141	359	203	297	256	243	288	212
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN	2.30	2.30	2.30	2.16	2.41	3.13	1.87	1.74	3.82
T-Value			-0.98		-2.45		11.00		-26.96
				↑	↑		↑		

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

Table 14b

## NUMBER OF PEOPLE LIVING IN HOUSEHOLD

	QUADRANT OF VALLEY					SPECIFIC AREAS			
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
(1)	99 19.8%	19 17.9	21 18.4	41 21.0	14 20.0	4 26.7	4 11.1	3 9.4	5 21.7
(2)	189 37.8%	41 38.7	42 36.8	72 36.9	27 38.6	7 46.7	14 38.9	17 53.1	9 39.1
(3)	84 16.8%	17 16.0	18 15.8	40 20.5	9 12.9	0	3 8.3	6 18.8	4 17.4
(4)	68 13.6%	14 13.2	17 14.9	23 11.8	12 17.1	2 13.3	7 19.4	3 9.4	2 8.7
(5)	35 7.0%	9 8.5	7 6.1	14 7.2	5 7.1	0	5 13.9	3 9.4	1 4.3
(7) 6 or More	25 5.0%	6 5.7	9 7.9	5 2.6	3 4.3	2 13.3	3 8.3	0	2 8.7
TOTAL RESPONSES	500	106	114	195	70	15	36	32	23
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MEDIAN	2.30	2.33	2.36	2.28	2.28	2.00	2.50	2.26	2.22
T-Value			-0.31	1.51	-0.62			1.85	

↑

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

Significance not calculated for samples below 30 respondents.

Table 15a

HOUSEHOLD COMPOSITION BY AGE GROUP  
(DOES NOT INCLUDE SINGLE PERSON HOUSEHOLDS)

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Other Adult 18 Years or Older	396 98.8%	119 100.0	277 98.2	155 99.4	241 98.4	229 98.3	166 99.4	185 97.9	211 99.5
Children Between 13 to 17 Years Old	74 18.5%	21 17.6	53 18.8	24 15.4	50 20.4	60 25.8	13 →7.8	3 1.6	71 ←33.5
Children Under 13 Years Old	137 34.2%	37 31.1	100 35.5	49 31.4	88 35.9	122 52.4	14 →8.4	4 2.1	133 ←62.7
TOTAL RESPONSES	401	119	282	156	245	233	167	189	212
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 15b

HOUSEHOLD COMPOSITION BY AGE GROUP  
(DOES NOT INCLUDE SINGLE PERSON HOUSEHOLDS)

	QUADRANT OF VALLEY						SPECIFIC AREAS		
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUNNER LIN
Other Adult 18 Years or Older	396 98.8%	86 98.9	92 98.9	151 98.1	56 100.0	11 100.0	32 100.0	29 100.0	18 100.0
Children Between 13 to 17 Years Old	74 18.5%	17 19.5	20 21.5	26 16.9	8 14.3	3 27.3	9 28.1	3 10.3	4 22.2
Children Under 13 Years Old	137 34.2%	31 35.6	32 34.4	51 33.1	20 35.7	3 27.3	15 46.9	8 27.6	6 33.3
TOTAL RESPONSES	401	87	93	154	56	11	32	29	18
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Significance not calculated for samples below 30 respondents.



Table 16a

SUMMARY TABLE  
AWARENESS OF DANGERS OF FLOODING BY OTHER HOUSEHOLD MEMBERS

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	5 YRS. & LESS	6 YRS. & MORE		MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Other Adults 18 Years or Older	99.5%	99.2	99.6	98.7	100.0	100.0	98.8	99.5	99.5
Children Between 13 to 17 Years Old	98.6%	100.0	98.1	95.8	100.0	100.0	92.3	100.0	98.6
Children Under 13 Years Old	74.5%	75.7	74.0	77.6	72.7	73.8	78.6	75.0	74.4

NOTE: Respondent base varies by age group. See following tables for detailed responses.

There are no statistically significant differences in awareness levels between age group sub-samples at the 95% level of confidence.

Significance not calculated for samples below 30 respondents.

Table 16b

SUMMARY TABLE  
AWARENESS OF DANGERS OF FLOODING BY OTHER HOUSEHOLD MEMBERS

	QUADRANT OF VALLEY					SPECIFIC AREAS			
	TOTAL	NORTH EAST	NORTH WEST	SOUTH EAST	SOUTH WEST	OUT- LYING	HIS- PANIC	GREEN VALLEY	SUMMER LIN
Other Adults 18 Years or Older	99.5%	100.0	98.9	98.3	100.0	100.0	100.0	100.0	100.0
Children Between 13 to 17 Years Old	98.6%	100.0	95.0	100.0	100.0	100.0	100.0	100.0	75.3
Children Under 13 Years Old	74.5%	77.4	68.8	76.5	75.0	66.7	93.3	62.5	50.0

NOTE: Respondent base varies by age group. See following tables for detailed responses.

There are no statistically significant differences in awareness levels between age group sub-samples at the 95% level of confidence.

Significance not calculated for samples below 30 respondents.

Table 17a

**AWARENESS OF DANGERS OF FLOODING BY OTHER ADULTS IN HOUSEHOLD 18 OR OLDER  
(AMONG HOUSEHOLDS WITH OTHER ADULTS 18 OR OLDER)**

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT	NUMBER IN HOUSEHOLD		
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Aware	394 99.5%	118 99.2	276 99.6	153 98.7	241 100.0	229 100.0	164 98.8	184 99.5	210 99.5
Not Aware	2 0.5%	1 0.8	1 0.4	2 1.3	0	0	2 1.2	1 0.5	1 0.5
TOTAL RESPONSES	396	119	277	155	241	229	166	185	211
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

**AWARENESS OF DANGERS OF FLOODING BY OTHER ADULTS IN HOUSEHOLD 18 OR OLDER  
(AMONG HOUSEHOLDS WITH OTHER ADULTS 18 OR OLDER)**

[illegible]

Table 18a

AWARENESS OF DANGERS OF FLOODING BY CHILDREN IN HOUSEHOLD 13 TO 17 YEARS OLD  
(AMONG HOUSEHOLDS WITH CHILDREN 13 TO 17 YEARS OLD)

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Aware	73 98.6%	21 100.0	52 98.1	23 95.8	50 100.0	60 100.0	12 92.3	3 100.0	70 98.6
Not Sure	1 1.4%	0	1 1.9	1 4.2	0	0	1 7.7	0	1 1.4
TOTAL RESPONSES	74	21	53	24	50	60	13	3	71
BASE=NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

**AWARENESS OF DANGERS OF FLOODING BY CHILDREN IN HOUSEHOLD 13 TO 17 YEARS OLD  
(AMONG HOUSEHOLDS WITH CHILDREN 13 TO 17 YEARS OLD)**

[illegible]

Table 19a

AWARENESS OF DANGERS OF FLOODING BY CHILDREN IN HOUSEHOLD UNDER 13 YEARS OLD  
(AMONG HOUSEHOLDS WITH CHILDREN UNDER 13 YEARS OLD)

	YEARS LIVED IN CLARK CO			GENDER OF RESPONDENT		AGE OF RESPONDENT		NUMBER IN HOUSEHOLD	
	TOTAL	5 YRS. & LESS	6 YRS. & MORE	MALE	FEMALE	UNDER 50 YRS	50 & OLDER	1 OR 2	3 OR MORE
Aware	102 74.5%	28 75.7	74 74.0	38 77.6	64 72.7	90 73.8	11 78.6	3 75.0	99 74.4
Not Aware	27 19.7%	9 24.3	18 18.0	8 16.3	19 21.6	27 22.1	0	1 25.0	26 19.5
Not Sure	8 5.8%	0 ← 8.0	8	3 6.1	5 5.7	5 4.1	3 21.4	0	8 6.0
TOTAL RESPONSES	137	37	100	49	88	122	14	4	133
BASE-NET RESPONDENTS	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

**AWARENESS OF DANGERS OF FLOODING BY CHILDREN IN HOUSEHOLD UNDER 13 YEARS OLD  
(AMONG HOUSEHOLDS WITH CHILDREN UNDER 13 YEARS OLD)**

[illegible]



Table 20

COMPARISON BY UNAIDED AWARENESS  
QUADRANT OF VALLEY

	NATURAL DISASTERS?		
	DIDN'T		
	SAID SAY		
	TOTAL	FLOODS	FLOODS
North East Valley	106 21.2%	87 21.3	19 20.7
North West Valley	114 22.8%	99 24.3	15 →16.3
South East Valley	195 39.0%	159 39.0	36 39.1
South West Valley	70 14.0%	56 13.7	14 15.2
Outlying Areas	15 3.0%	7 1.7	8 ← 8.7
TOTAL RESPONSES	500	408	92
BASE-NET RESPONDENTS	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 21

COMPARISON BY UNAIDED AWARENESS  
SPECIFIC ZIP CODE AREAS

	NATURAL DISASTERS?		
	DIDN'T		
	SAID SAY		
	TOTAL	FLOODS	FLOODS
Hispanic Zip Codes	36	30	6
	39.6%	39.0	42.9
Green Valley Zip Codes	32	27	5
	35.2%	35.1	35.7
Summerlin Zip Codes	23	20	3
	25.3%	26.0	21.4
TOTAL RESPONSES	91	77	14
BASE=NET RESPONDENTS	100.0%	100.0	100.0

NOTE: Significance not calculated when one or more sub-samples being compared are below 30 respondents.

Table 22

COMPARISON BY UNAIDED AWARENESS  
ZIP CODE OF RESPONDENT

	NATURAL DISASTERS?		
	DIDN'T		
	SAID SAY		
	TOTAL	FLOODS	FLOODS
89005	9 1.8%	6 1.5	3 3.3
89006	1 0.2%	1 0.2	0
89007	1 0.2%	1 0.2	0
89012	4 0.8%	4 1.0	0
89014	26 5.2%	22 5.4	4 4.3
89015	47 9.4%	40 9.8	7 7.6
89019	2 0.4%	2 0.5	0
89027	1 0.2%	0	1 1.1
89028	1 0.2%	0	1 1.1
89029	3 0.6%	0	3 3.3
89030	18 3.6%	16 3.9	2 2.2
89031	16 3.2%	13 3.2	3 3.3
89032	6 1.2%	6 1.5	0
89046	2 0.4%	1 0.2	1 1.1
89052	2 0.4%	1 0.2	1 1.1

Continued...

(Table Continued)

89101	10 2.0%	7 1.7	3 3.3
89102	9 1.8%	7 1.7	2 2.2
89103	20 4.0%	16 3.9	4 4.3
89104	20 4.0%	16 3.9	4 4.3
89105	2 0.4%	1 0.2	1 1.1
89106	8 1.6%	7 1.7	1 1.1
89107	17 3.4%	17 4.2	0
89108	33 6.6%	27 6.6	6 6.5
89109	7 1.4%	5 1.2	2 2.2
89110	37 7.4%	32 7.8	5 5.4
89113	2 0.4%	1 0.2	1 1.1
89115	17 3.4%	11 2.7	6 6.5
89117	18 3.6%	16 3.9	2 2.2
89118	3 0.6%	3 0.7	0
89119	9 1.8%	8 2.0	1 1.1
89120	11 2.2%	9 2.2	2 2.2
89121	31 6.2%	22 5.4	9 9.8
89122	13 2.6%	11 2.7	2 2.2

Continued...

## (Table Continued)

89123	10 2.0%	10 2.5	0
89124	1 0.2%	0	1 1.1
89128	12 2.4%	9 2.2	3 3.3
89129	7 1.4%	6 1.5	1 1.1
89130	11 2.2%	10 2.5	1 1.1
89131	1 0.2%	1 0.2	0
89134	10 2.0%	10 2.5	0
89139	1 0.2%	0	1 1.1
89140	1 0.2%	1 0.2	0
89142	6 1.2%	5 1.2	1 1.1
89144	1 0.2%	1 0.2	0
89145	4 0.8%	3 0.7	1 1.1
89146	4 0.8%	3 0.7	1 1.1
89147	13 2.6%	10 2.5	3 3.3
89149	2 0.4%	2 0.5	0
89156	10 2.0%	8 2.0	2 2.2
<hr/>			
TOTAL RESPONSES	500	408	92
BASE-NET RESPONDENTS	100.0%	100.0	100.0
<hr/>			

Table 23

COMPARISON BY UNAIDED AWARENESS  
RECALL JULY 8TH FLASH FLOODING

	NATURAL DISASTERS?		
	DIDN'T		
	SAID SAY		
	TOTAL	FLOODS	FLOODS
Yes	477 95.4%	396 97.1%	81 88.0%
No	23 4.6%	12 2.9%	11 12.0%
TOTAL RESPONSES	500	408	92
BASE-NET RESPONDENTS	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 24

COMPARISON BY UNAIDED AWARENESS  
WERE YOU AFFECTED BY THAT FLOODING

	NATURAL DISASTERS?		
	DIDN'T		
	SAID SAY		
	TOTAL	FLOODS	FLOODS
Yes	140 29.4%	128 32.3	12 →14.8
No	337 70.6%	268 67.7	69 ←85.2
TOTAL RESPONSES	477	396	81
BASE-NET RESPONDENTS	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 25

COMPARISON BY UNAIDED AWARENESS  
RESPONDENT GENDER

		NATURAL DISASTERS?	
		SAY FLOODS	DIDN'T SAY FLOODS
	TOTAL		
Male	203 40.6%	159 39.0	44 47.8
Female	297 59.4%	249 61.0	48 52.2
TOTAL RESPONSES	500	408	92
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.



Table 26

COMPARISON BY UNAIDED AWARENESS  
AGE OF RESPONDENT

		NATURAL DISASTERS?		
		TOTAL	DIDN'T SAID SAY	
			FLOODS	FLOODS
(19)	18 to 20	15 3.0%	14 3.4	1 1.1
(25)	21 to 29	45 9.0%	37 9.1	8 8.7
(35)	30 to 39	83 16.6%	74 18.1	9 →9.8
(45)	40 to 49	113 22.6%	99 24.3	14 →15.2
(55)	50 to 59	89 17.8%	75 18.4	14 15.2
(62)	60 to 64	37 7.4%	28 6.9	9 9.8
(70)	65 or Older	117 23.4%	80 19.6	37 ←40.2
Refused		1 0.2%	1 0.2	0
TOTAL RESPONSES		500	408	92
BASE=NET RESPONDENTS		100.0%	100.0	100.0
MEDIAN		49.42	47.93	58.50
T-Value			-3.83	
			↑	

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

Table 27

COMPARISON BY UNAIDED AWARENESS  
YEARS LIVED IN CLARK COUNTY

			NATURAL DISASTERS?	
			DIDN'T SAID SAY	
			TOTAL	FLOODS FLOODS
(1)	2 Years or Less	51 10.2%	39 9.6	12 13.0
(4)	3 to 5 Years	90 18.0%	78 19.1	12 13.0
(8)	6 to 10 Years	114 22.8%	92 22.5	22 23.9
(13)	11 to 15 Years	53 10.6%	47 11.5	6 6.5
(18)	16 to 20 Years	53 10.6%	46 11.3	7 7.6
(25)	21 to 30 Years	72 14.4%	56 13.7	16 17.4
(35)	31 or More Years	67 13.4%	50 12.3	17 18.5
TOTAL RESPONSES			500	408 92
BASE-NET RESPONDENTS			100.0%	100.0 100.0
MEDIAN			9.82	9.78 10.50
T-Value				-1.24

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

Table 28

COMPARISON BY UNAIDED AWARENESS  
NUMBER OF PEOPLE LIVING IN HOUSEHOLD

		NATURAL DISASTERS?	
		SAID FLOODS	DIDN'T SAY FLOODS
(1)	99 19.8%	69 16.9%	30 ← 32.6
(2)	189 37.8%	151 37.0	38 41.3
(3)	84 16.8%	77 18.9	7 → 7.6
(4)	68 13.6%	58 14.2	10 10.9
(5)	35 7.0%	31 7.6	4 4.3
(7) 6 or More	25 5.0%	22 5.4	3 3.3
<hr/>			
TOTAL RESPONSES	500	408	92
BASE=NET RESPONDENTS	100.0%	100.0	100.0
<hr/>			
MEDIAN	2.30	2.39	1.92
T-Value			3.28 ↑

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

Table 29

COMPARISON BY UNAIDED AWARENESS  
HOUSEHOLD COMPOSITION BY AGE GROUP  
(DOES NOT INCLUDE SINGLE PERSON HH)

	NATURAL DISASTER?		
	DIDN'T		
	SAID	SAID	
	TOTAL	FLOODS	FLOODS
Other Adults 18 Years or Older	396 98.8%	335 98.8	61 98.4
Children Between 13 to 17 Years Old	74 18.5%	64 18.9	10 16.1
Children Under 13 Years Old	137 34.2%	122 36.0	15 24.2
TOTAL RESPONSES	401	339	62
BASE=NET RESPONDENTS	100.0%	100.0	100.0

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

Table 30

COMPARISON BY UNAIDED AWARENESS  
SUMMARY TABLE  
AWARENESS OF DANGERS OF FLOODING  
BY OTHER HOUSEHOLD MEMBERS

		NATURAL DISASTER?	
		DIDN'T	
		SAID	SAY
		FLOODS	FLOODS
		TOTAL	
Other Adults 18 Years or Older		99.5%	100.0 96.7
Children Between 13 to 17 Years Old		98.6%	98.4 100.0
Children Under 13 Years Old		74.5%	73.8 80.0

NOTE: Respondent base varies by age group.  
See following tables for detailed  
responses.

There are no statistically significant differences in awareness levels between age group sub-samples at the 95% level of confidence.

Significance not calculated for  
samples below 30 respondents.

Table 31

COMPARISON BY UNAIDED AWARENESS  
AWARENESS BY OTHER ADULTS IN HOUSEHOLD

	NATURAL DISASTERS?		
	DIDN'T		
	SAID SAY		
	TOTAL	FLOODS	FLOODS
Aware	394 99.5%	335 100.0	59 96.7
Not Aware	2 0.5%	0	2 3.3
TOTAL RESPONSES	396	335	61
BASE=NET RESPONDENTS	100.0%	100.0	100.0

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

Table 32

COMPARISON BY UNAIDED AWARENESS  
AWARENESS BY CHILDREN 13 TO 17 YEARS OLD

	NATURAL DISASTERS?		
	DIDN'T		
	SAID SAY		
	TOTAL	FLOODS	FLOODS
Aware	73 98.6%	63 98.4	10 100.0
Not Sure	1 1.4%	1 1.6	0
TOTAL RESPONSES	74	64	10
BASE-NET RESPONDENTS	100.0%	100.0	100.0

NOTE: Significance not calculated when one or more sub-samples being compared are below 30 respondents.

Table 33

COMPARISON BY UNAIDED AWARENESS  
 AWARENESS BY CHILDREN UNDER 13 YEARS OLD

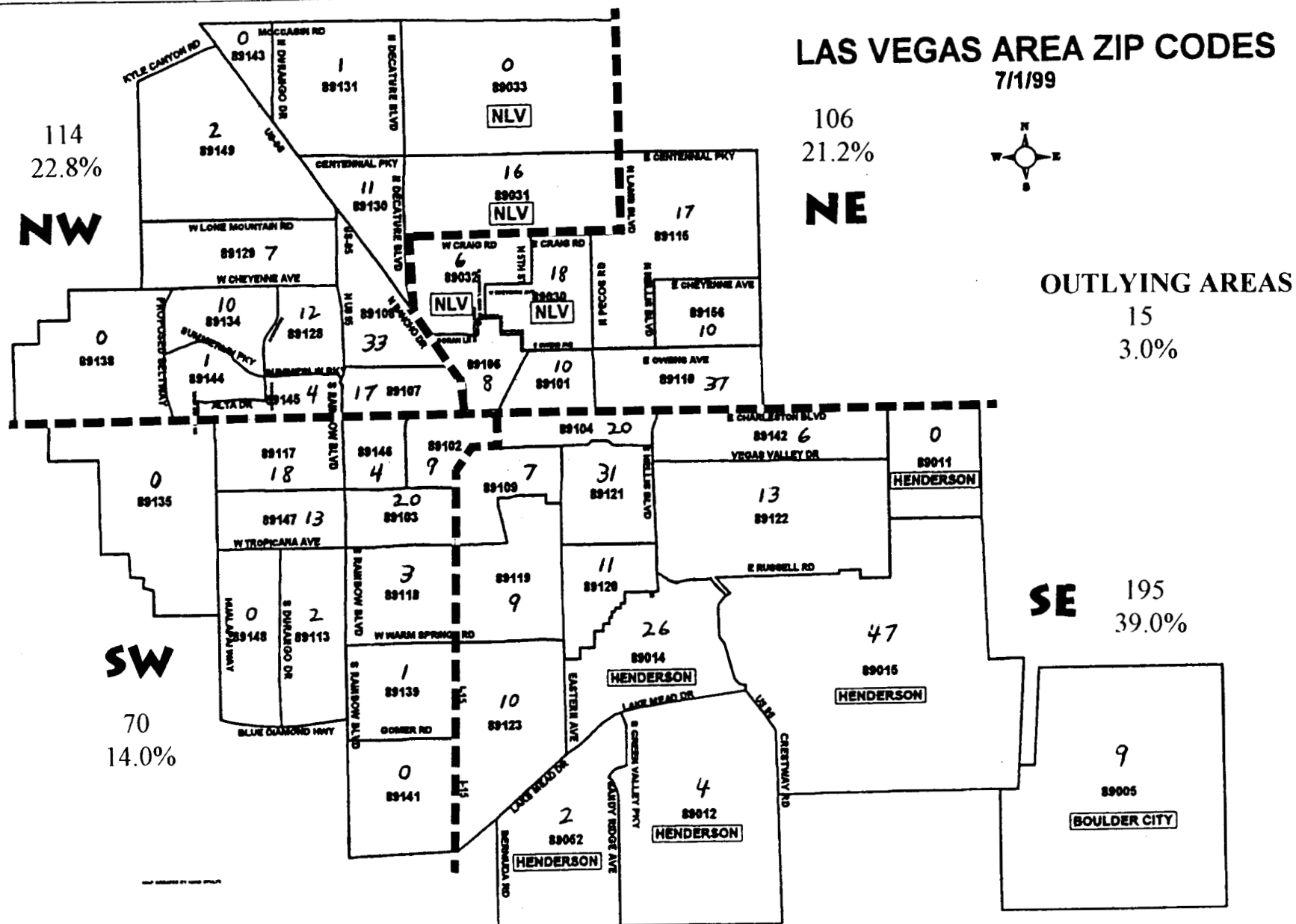
		NATURAL DISASTERS?	
		DIDN'T SAID SAY	
	TOTAL	FLOODS	FLOODS
Aware	102 74.5%	90 73.8	12 80.0
Not Aware	27 19.7%	25 20.5	2 13.3
Not Sure	8 5.8%	7 5.7	1 6.7
TOTAL RESPONSES	137	122	15
BASE-NET RESPONDENTS	100.0%	100.0	100.0

NOTE: Significance not calculated when one or more sub-samples being compared are below 30 respondents.



## **VI. APPENDIX**

# FLOOD AWARENESS SURVEY N = 500



## CLARK COUNTY RESIDENTS SURVEY

---

ENTER PHONE NUMBER FROM CALL LIST \_\_\_\_\_

Hello, my name is \_\_\_\_\_ and I'm calling on behalf of Clark County Governmental Services.  
I would like to speak to either the male or female head of the household.

**(IF NEITHER AVAILABLE)** Are you 18 years or older and a permanent resident of the household, or is anyone available who's 18 or older and a permanent resident of the household?  
**(IF "NO" --> TERMINATE)**

- A. **INDICATE:**    1 HEAD OF HOUSEHOLD (1)  
                      2 OTHER HOUSEHOLD MEMBER

We are conducting a survey among Clark County residents and would like to ask you a few questions. **(IF RESPONDENT ASKS HOW LONG IT WILL TAKE – SAY 4 TO 5 MINUTES)**

- B. **INDICATE RESPONDENT GENDER:**    1 MALE    2 FEMALE (2)  
**(PLEASE 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** (3)

**IF NOT CORRECT, ENTER CORRECT NUMBER.**      8     9                           (4)

(5)

- D. How long have you lived in Clark County? \_\_\_\_\_ Years. (6)

(7)

- 
1. Can you name the types of natural disasters that can be a danger to residents of Clark County?

\_\_\_\_\_ Anything else? (8)

\_\_\_\_\_ Anything else? (9)

\_\_\_\_\_ Anything else? (10)

\_\_\_\_\_ (11)

**(IF FLOODING/FLASH FLOODING MENTIONED ABOVE --> SKIP TO Q.3)**

2. Are you aware of the dangers of flash flooding here in Clark County?

1 YES

2 NO -> (SKIP TO Q. 5)

(12)

(13)

3. How did you learn about the dangers of flash flooding in Clark County?

(14)

(15)

(16)

(17)

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

	<u>YES</u>	<u>NO</u>	
BROCHURE .....	1	2	(18)
BUS STOP SHELTER AD .....	1	2	(19)
BILLBOARD .....	1	2	(20)
TV ADVERTISING .....	1	2	(21)
TV NEWS .....	1	2	(22)
RADIO ADVERTISING .....	1	2	(23)
RADIO NEWS .....	1	2	(24)
NEWSPAPER OR MAGAZINE AD .....	1	2	(25)
NEWSPAPER OR MAGAZINE STORY .....	1	2	(26)
CHILDREN TOLD YOU ABOUT IT .....	1	2	(27)
FRIENDS/RELATIVES TOLD YOU ABOUT IT ...	1	2	(28)

4a. Can you think of any other ways you heard or saw information about flash floods?

(29)

(30)

(31)

5. Do you recall the flash flooding we had last July 8th?

1 YES      2 NO --> **(SKIP TO Q. 6)**

(32)

5a. Were you affected in any way by that flooding?

1 YES      2 NO --> **(SKIP TO Q. 6)**

(33)

5b. In what ways were you affected by that flooding?

(34)

(35)

(36)

(37)

6. Including yourself, how many people live in your household?

1      2      3      4      5      6 OR MORE

(38)

**(IF JUST "1" --> SKIP TO Q. 9)**

(39)

7. Other than yourself, which of the following age groups are represented in your household? **(READ LIST)**

	<u>YES</u>	<u>NO</u>	
ONE OR MORE CHILDREN LESS THAN 13 YEARS OLD	1	2	(40)
ONE OR MORE CHILDREN BETWEEN 13 TO 17 YEARS OLD	1	2	(41)
ONE OR MORE ADULTS 18 YEARS OR OLDER	1	2	(42)

8. **(FOR EACH CATEGORY CIRCLED "YES" ABOVE, ASK)**

Do you believe that the other people in your household who are **(AGE GROUP)** are aware of the dangers of flash flooding?

	<u>AWARE</u>	<u>NOT AWARE</u>	<u>NOT SURE</u>	
LESS THAN 13 YEARS OLD	1	2	3	(43)
13 TO 17 YEARS OLD	1	2	3	(44)
18 YEARS OR OLDER	1	2	3	(45)

9. One final question. Is your age . . . **(READ LIST)**

1 18 TO 20	5 50 TO 59	(46)
2 21 TO 29	6 60 TO 64	
3 30 TO 39	7 65 OR OLDER	(47)
4 40 TO 49		(48)

Thank you so much for your time. Good-bye. (49)

-----

DATE: \_\_\_\_\_ TIME INTERVIEW COMPLETED: \_\_\_\_\_ AM or PM

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

INTERVIEWER'S SIGNATURE \_\_\_\_\_