

Appendix 2-E

Water Questionnaire Results

**Tahoe-Sierra IRWM Plan
Water Questionnaire
Results**

April 28, 2014

Produced by
Vaca Consulting

For questions and comments please contact Emilio Vaca at
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I. Executive Summary

The objective was to get input and insight on what DAC relationship is with water. Our target communities were:

- Kings Beach, Placer County
- Truckee, Nevada County
- South Lake Tahoe, El Dorado County
- Markleeville, Alpine County

Part of the approach was to conduct one-on-one interviews through a detailed questionnaire. The questionnaire was bi-lingual and was conducted in both English and Spanish. The questionnaires were administered by hard copies. The results from our effort overwhelmingly show that DAC have zero to no relationship with their water source. Furthermore, the results lead us to believe that more education and awareness to DAC around water should be a top priority moving forward.

Utilizing the Disadvantaged Communities Mapping Tool and MyBestSegments Zip Code Look Up Tool by Nielsen. We conducted 600 questionnaires, of which 400 meet the DAC definition. Of the 400 DAC questionnaires, 92% (368) of the respondents reported their annual household income to be below \$40,000.00.

As a result of our efforts several items emerged into specific recommendations.

1. Education and Awareness on the following topics
 - Water Conservation and Preservation
 - Origin of water source
 - Quality and maintenance of existing water
2. Connecting how this questionnaire could better serve future infrastructure improvements. As an example, conducting basic awareness on how infrastructure improvements are needed.
3. Linking State or Local resources to DAC on accessing programs and services that help with conservation, preservation and testing of existing water usage.

II. Background

In coordination with the Tahoe Sierra IRWMP, Vaca Consulting worked on capturing the voice of disadvantaged and hard to reach community members. Although there is a vision on how this voice will be able to make impacts in the process, Vaca Consulting's primary purpose is to make sure representatives are engaged and involved in the Tahoe Sierra IRWMP. The engagement of the representatives will revolve around identifying Environmental Justice Considerations and to align specific water benefits to critical water issues within the DAC communities and others.

Our definition of DAC was based on Communities with less than the California State average for Median Household Income (MHI) of \$48,706.00. Household implies all individuals who live in the same dwelling. The data collected is based on respondents self-identifying their MHI, our team did not request for any proof of their MHI.

Lastly, considering the length of the questionnaire, it served as vehicle to have a more causal and intimate conversation about the responses. These causal and intimate conversations generated some concrete recommendations moving forward.

III. Outreach Efforts

Outreach consisted of administering the questionnaire.

Efforts Included:

Conducting Questionnaire: DAC members were asked to answer the following questions:

- a) Demographics such as: ethnicity, education, income, age and gender
- b) Where wastewater is treated and discharged
- c) Source of drinking water
- d) Source of drinking water provider
- e) Ever experience water outage
- f) Safety of drinking water in home
- g) Waterborne diseases
- h) Knowledge of drinking water being exposed to contaminations
- l) Confidence of water supply being available
- j) Efficiency of water devices
- k) Insulation to reduce energy consumption
- l) Adequacy of flood controls
- m) Identifying existing or past floods in the community
- n) Adequacy of protection of river or lake
- o) Pollution of storm water
- p) Protection of native species
- q) Protection of native landscape, streams, and rivers
- r) Protection of wild life including fisheries
- s) Desirability of being part of city utilities such as water and sewer
- t) Necessity of recreational parks
- u) Maintenance of community parks
- v) Access to nutritional food
- w) Maintenance of septic tank
- x) Desire for testing water well and septic tank
- y) Local government response to water concerns
- z) Priority of importance

IV. Results of Outreach

Below are the results of our efforts:

1. Questionnaire:

# of Households	
800	Target Goal
600	Households Contacted with Questionnaire
400	DAC Households Responding to Questionnaire

Outlined below are community profiles based on the responses to the questionnaires.

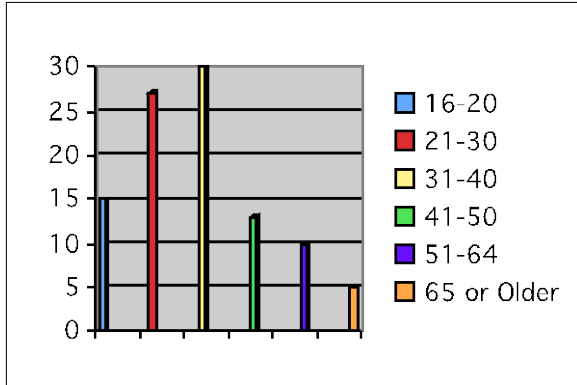
Community Profile

Truckee, Nevada County

We targeted the mobile/trailer parks.

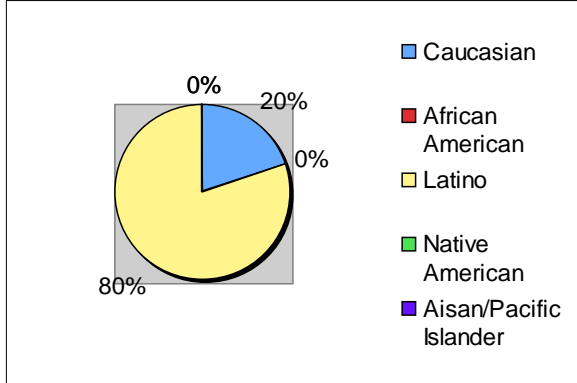
Age

The average age of the 100 participants was 31-40 years old.



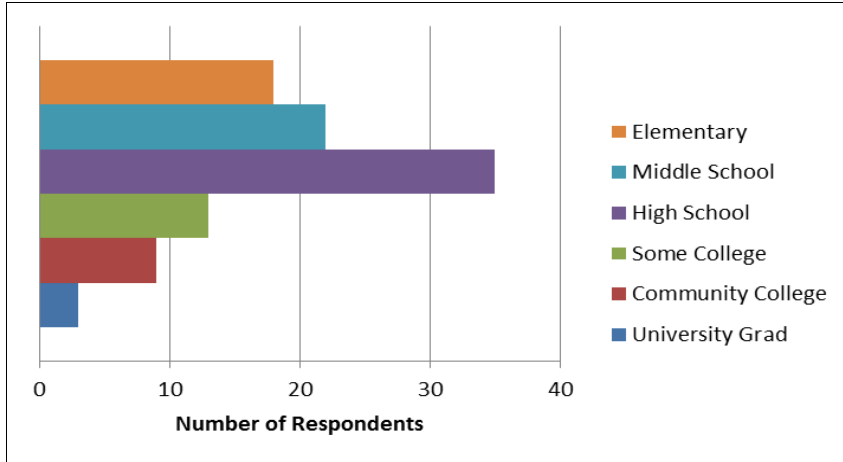
Ethnicity

The majority of the respondents were of Latino decent.



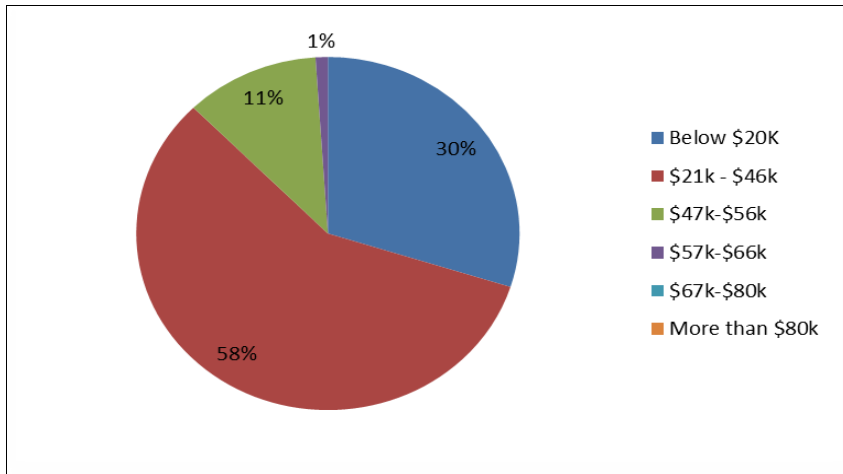
Education Level

The average educational background of the questionnaire participants is Middle-High School. One major highlight is that there were more participants with an elementary background then that of the combination of Community College and University Graduates.



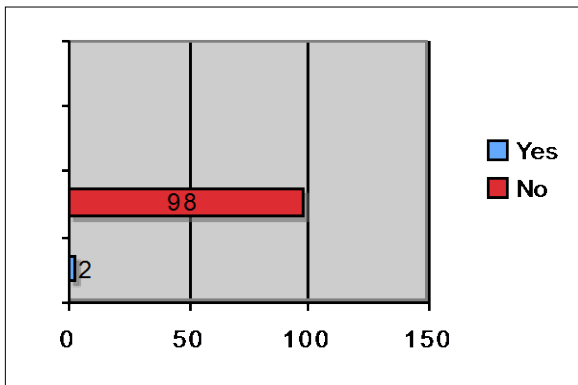
Household Income

Over 50% of the participants household income was \$21k-\$46k, there were 29 participants that disclosed making below \$20,000.00.

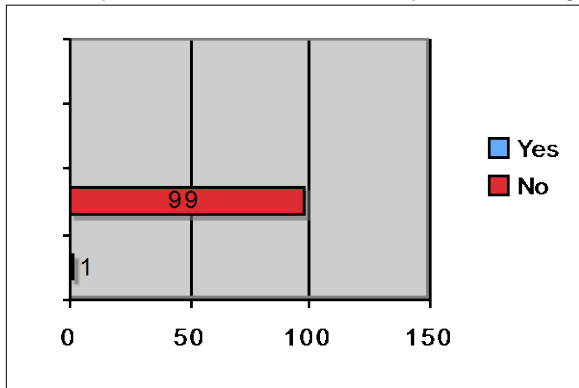


Questionnaire Response

Q. Do you know where your wastewater is treated and discharged?



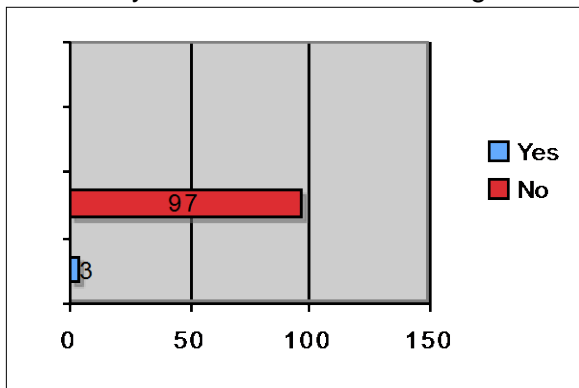
Q. Do you know the source of your drinking water?



Q. Who is the provider of your drinking water?

Common response was, "I do not know." 98% of the participants shared that they drink water from a plastic water bottle. 2% indicated that they use some sort of filter.

Q. Have you ever had a water outage?



Q. Water in my home is not safe for drinking

***25 strongly agree
35 strongly disagree
40 neither agree nor disagree***

Q. I have never gotten sick from a waterborne disease in this community

***66 strongly agree
7 strongly disagree
27 neither agree nor disagree***

Q. The drinking water in my community has never had any fecal, E. Coli or total coliform contamination?

***49 strongly agree
3 strongly disagree
48 neither agree nor disagree***

- Q. The drinking water has never been contaminated with chemical or radiological contaminants
52 strongly agree
5 strongly disagree
43 neither agree nor disagree
- Q. I am confident that the water supply in my community will always be available
45 strongly agree
4 strongly disagree
51 neither agree nor disagree
- Q. My home is very water efficient because it has low flow toilets and low flow showers heads
12 strongly agree
35 strongly disagree
53 neither agree nor disagree
- Q. My house is so well insulated that it reduces energy consumption
15 strongly agree
33 strongly disagree
52 neither agree nor disagree
- Q. Flood controls in my community is
52 adequate
48 not adequate
- Q. Where does the flooding occur in your community?
By the river
- Q. Local river and lake protection is
61 adequate
39 not adequate
- Q. The storm water in my community shows signs of pollution (trash, sediment or oil)
13 strongly agree
40 strongly disagree
47 neither agree nor disagree
- Q. Native species are very well protected from none-native species
35 strongly agree
3 strongly disagree
62 neither agree nor disagree
- Q. Native landscapes, streams, and river not very well protected
47 strongly agree
6 strongly disagree
47 neither agree nor disagree

- Q. All wild life including fisheries are
67 well protected
33 not well protected
- Q. Being part of city utilities such as sewer and water can be
54 very desirable
46 not desirable
- Q. Recreational parks are
67 indispensable
33 unnecessary
- Q. The parks in my community are
65 well maintained
35 not maintained
- Q. Access to nutritional food in my community is
53 difficult
47 easy
- Q. My septic tank is
45 well maintained
55 never maintained
- Q. I would like my water well tested and septic tank checked
53 strongly agree
9 strongly disagree
38 neither agree nor disagree
- Q. To our concerns with water our local government
51 do not listen
49 listen very well
- Q. Local city/agency officials maintain
20 high quality water
80 low quality water
- Q. Utilizing a 100 points value, what would you rate as most important to you and your family.
29 clean drinking water
43 access to nutritional food
28 preserving water

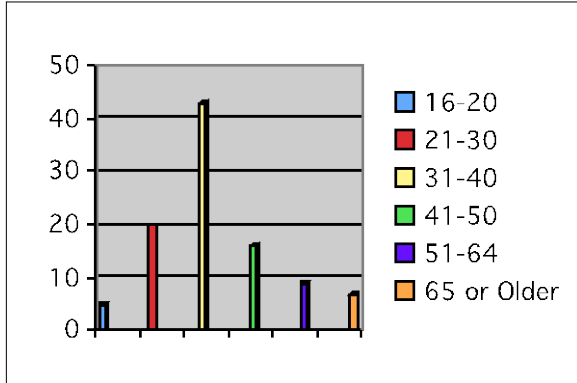
Community Profile

Kings Beach, Placer County

We targeted residential and mobile/trailer parks.

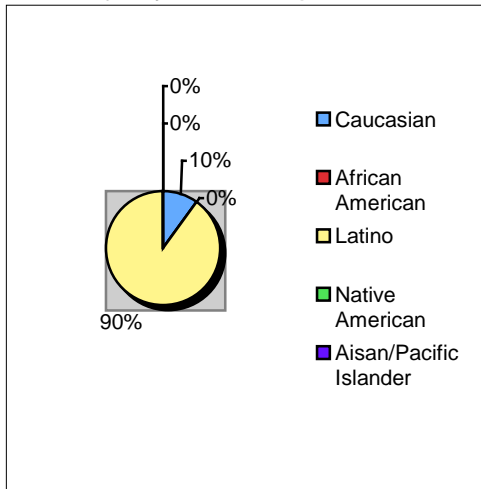
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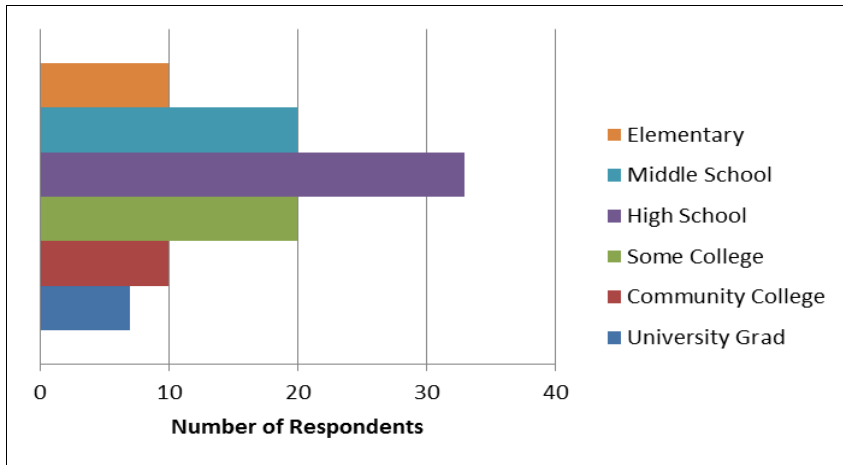
Ethnicity

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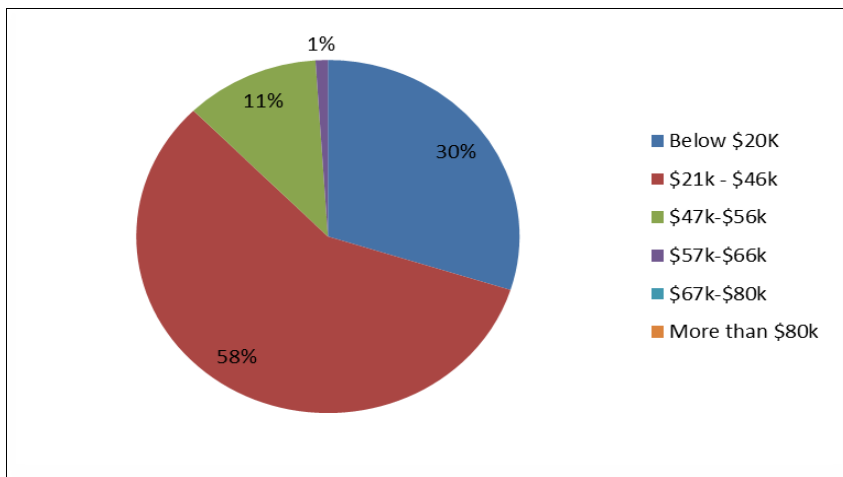
Education Level

The average educational background of the questionnaire participants is High School. There were equal amounts of participants that attended Middle School to those that attended Some College.



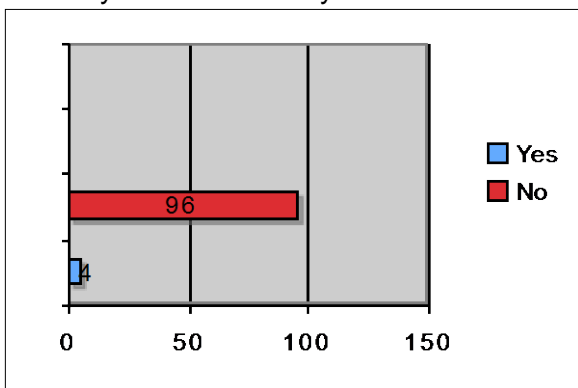
Household Income

Majority of the participants' household income was \$21k-\$46k, there were 28 participants that disclosed making below \$20,000.00.

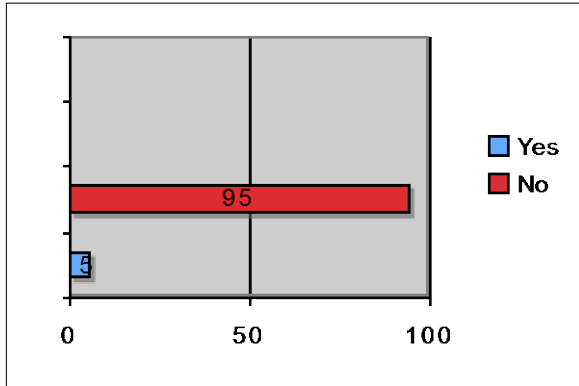


Questionnaire Responses

Q. Do you know where your wastewater is treated and discharged?



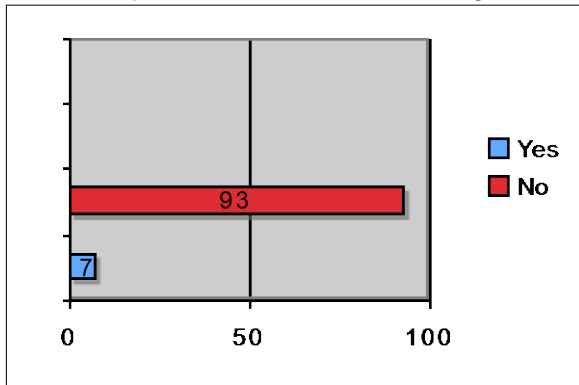
Q. Do you know the source of your drinking water?



Q. Who is the provider of your drinking water?

Common response was, "The one in Tahoe Vista (NTPUD)." 65% of the participants shared that they drink water from a plastic water bottle. 1% indicated that they use some sort of filter. 44% expressed that they drink the tap water

Q. Have you ever had a water outage?



Q. Water in my home is not safe for drinking

25 strongly agree
42 strongly disagree
33 neither agree nor disagree

Q. I have never gotten sick from a waterborne disease in this community

63 strongly agree
7 strongly disagree
30 neither agree nor disagree

Q. The drinking water in my community has never had any fecal, E. Coli or total coliform contamination?

49 strongly agree
51 neither agree nor disagree

- Q. The drinking water has never been contaminated with chemical or radiological contaminants
52 strongly agree
48 neither agree nor disagree
- Q. I am confident that the water supply in my community will always be available
47 strongly agree
53 neither agree nor disagree
- Q. My home is very water efficient because it has low flow toilets and low flow showers heads
13 strongly agree
45 strongly disagree
42 neither agree nor disagree
- Q. My house is so well insulated that it reduces energy consumption
10 strongly agree
40 strongly disagree
50 neither agree nor disagree
- Q. Flood controls in my community is
54 adequate
46 not adequate
- Q. Where does the flooding occur in your community?
Back streets
- Q. Local river and lake protection is
70 adequate
30 not adequate
- Q. The storm water in my community shows signs of pollution (trash, sediment or oil)
30 strongly agree
40 strongly disagree
30 neither agree nor disagree
- Q. Native species are very well protected from none-native species
14 strongly agree
86 neither agree nor disagree
- Q. Native landscapes, streams, and river not very well protected
42 strongly agree
8 strongly disagree
50 neither agree nor disagree

- Q. All wild life including fisheries are
60 well protected
40 not well protected
- Q. Recreational parks are
80 indispensable
20 unnecessary
- Q. The parks in my community are
85 well maintained
15 not maintained
- Q. Access to nutritional food in my community is
55 difficult
45 easy
- Q. I would like my water well tested and septic tank checked
55 strongly agree
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- Q. Local city/agency officials maintain
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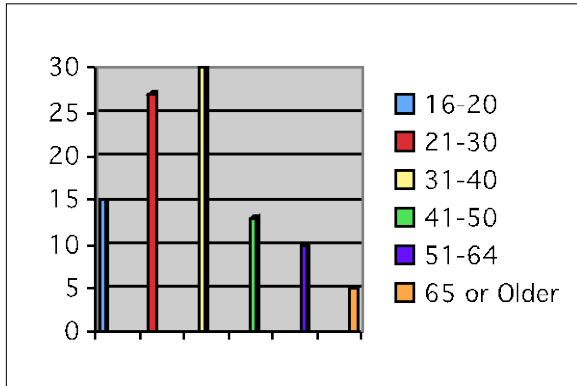
Community Profile

South Lake Tahoe, El Dorado County

We targeted residential, downtown and in specific pockets of the community.

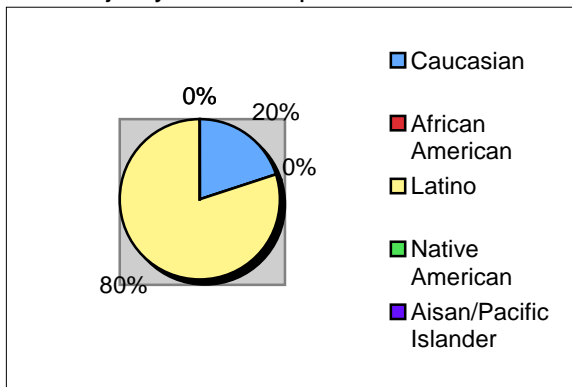
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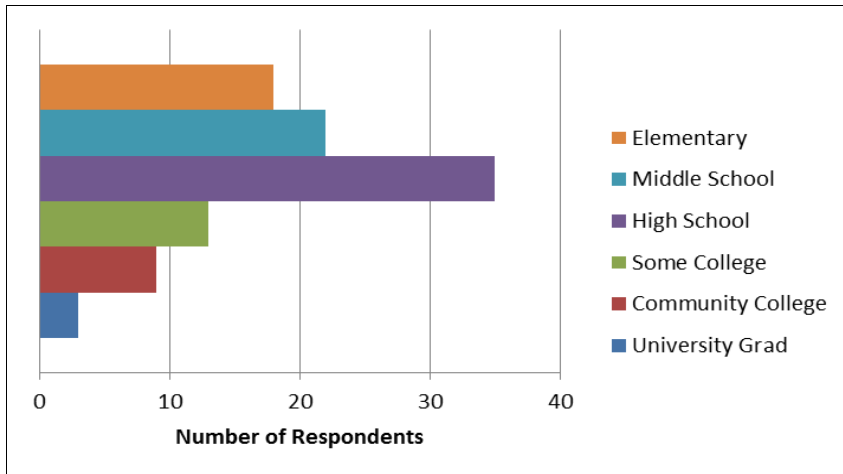
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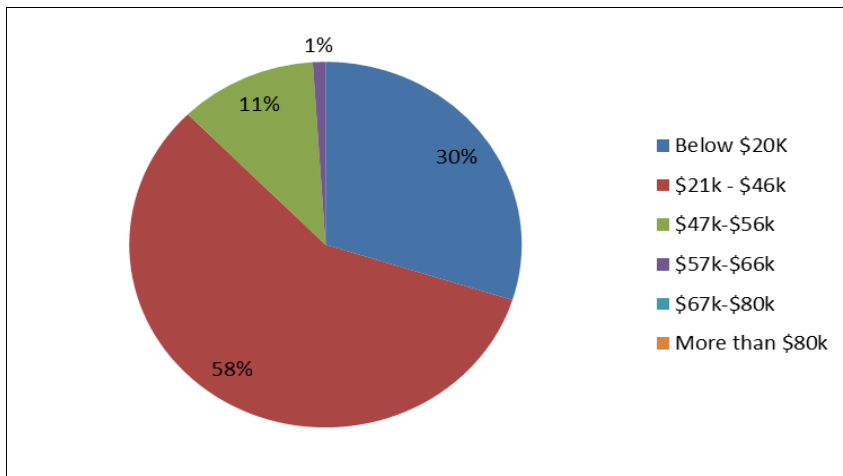
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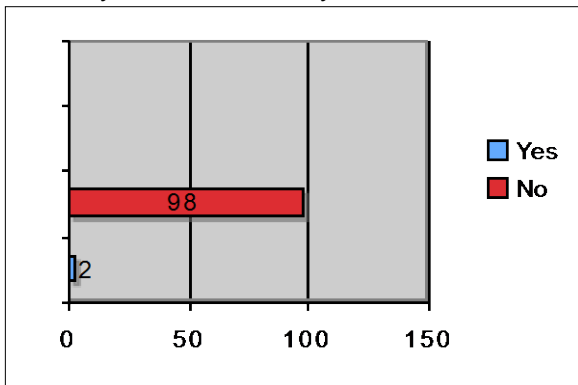
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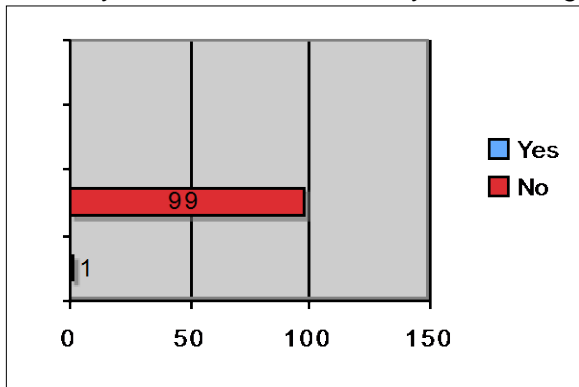


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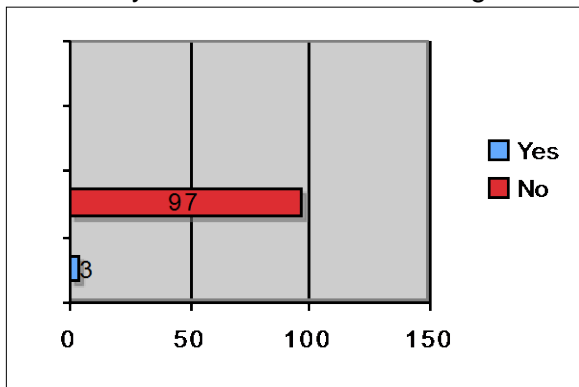
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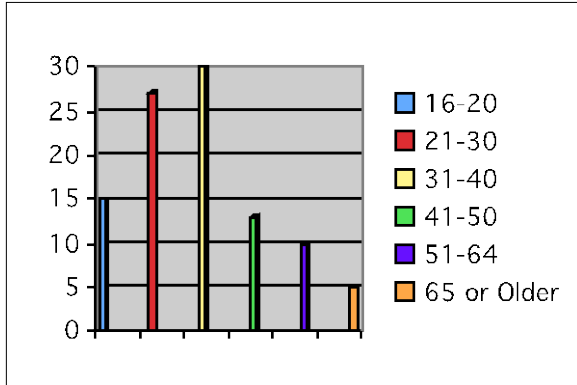
Community Profile

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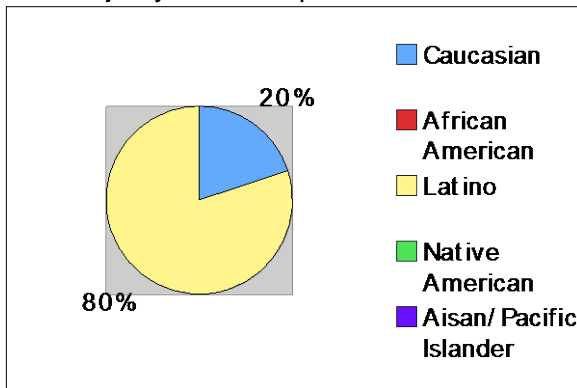
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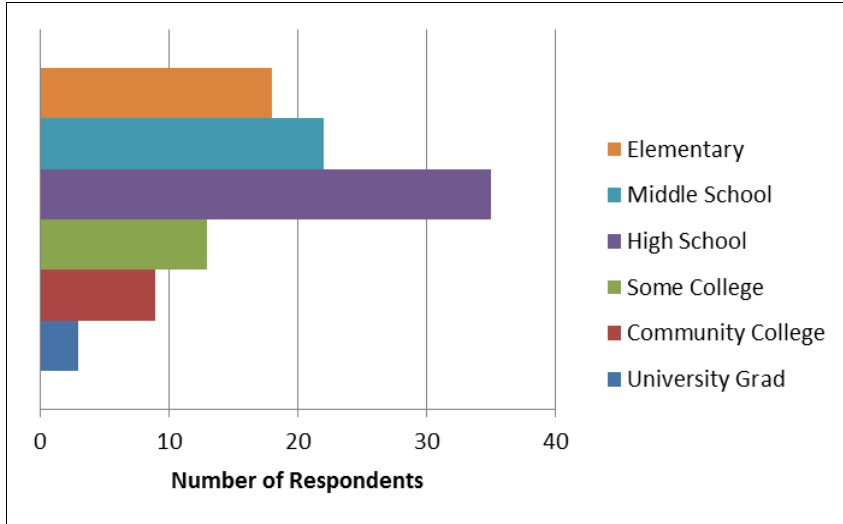
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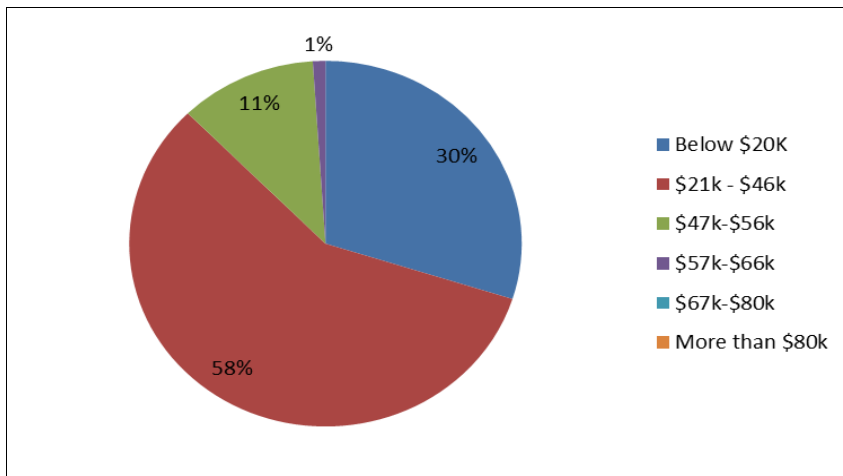
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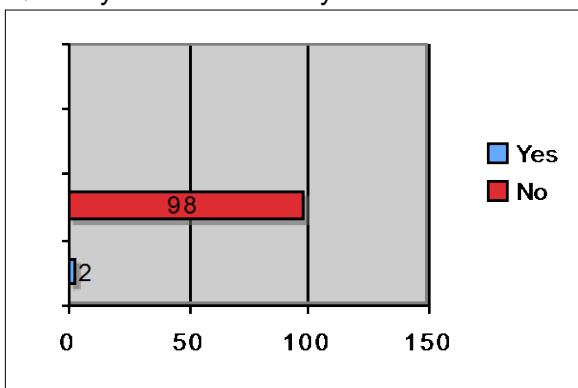
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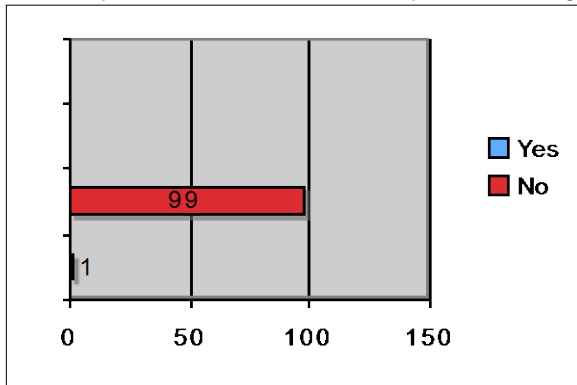


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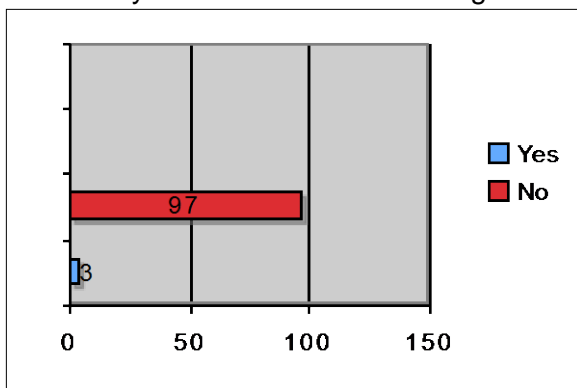
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V. Highlights and Recommendations

Several items emerged as highlights resulting into three specific recommendations.

Recommendations

1. Education and Awareness on the following topics
 - Water Conservation and Preservation
 - Origin of water source
 - Quality and maintenance of existing water
2. Connecting how this questionnaire connects to future infrastructure improvements
3. Linking State or Local resources to DAC on accessing programs and services that help with conservation, preservation and testing of existing water usage.

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