



# 2018 Districtwide Perceptions Final Survey Results

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This report represents data collected  
between March 5 and April 2, 2018

Submitted to the District on April 23, 2018 by  
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# Executive Summary

## Introduction & Background

This study reviews the 2018 Districtwide Perceptions conducted by The Taproot Agency with individuals residing in the Southwest Florida Water Management District (the District). Counties under the District's jurisdiction were grouped into four regions for the purposes of analysis:

North	Tampa Bay	Heartland	South
Citrus	Hillsborough	Polk	Charlotte
Hernando	Pasco	Hardee	DeSoto
Lake	Pinellas	Highlands	Manatee
Levy			Sarasota
Marion			
Sumter			

## Project Goals

The goal of this study was to help the District better understand public opinion, knowledge, attitudes and behaviors regarding water conservation, water quality protection, septic system maintenance and District perception.

The District intends to use the completed research to:

- 1) Design and refine messages and educational programs that are more likely to result in an educated public;
- 2) Design messages and educational programs that are likely to lead to the conservation and protection of regional water resources; and
- 3) Track the public's perception of the District.

## Methods of Data Collection and Analysis

From March 5 to April 2, 2018, Taproot conducted telephone interviews with 1,536 adult residents of the study area in the North (n=384), Tampa Bay (n=384), Heartland (n=384) and South (n=384) regions. Each region's sample resulted in a theoretical margin of error of +/-5% at the 95% confidence level. The overall margin of error for the entire sample is +/- 2.5% at the 95% confidence level.

Throughout the report, Taproot references results from the 2015 Districtwide Perceptions survey for comparison purposes. Additionally, Taproot statistically analyzed the differences between the regions, allowing for better understandings of the differences between regions served by the District.

To that point, the reader will notice that the phrase "Statistical Differences Between Regions in 2018" will accompany some of the tables in this report. Taproot used the Pearson's Chi Square test to determine differences between counties. The Chi Square allows the researcher to determine if a distribution of categorical variables (Likert-type measures) is different from one another. We use the Chi Square test to understand if two or more groups (in this case, regions) are statistically different from each other. When the phrase "Statistical Differences Between Regions in 2018" is noted under a graph, it means that the groups are statistically different from one another. If there is no statistic, one can assume the regions are statistically the same.

This report includes tables of every question fielded in the survey which include total and regional number comparisons from 2015, when applicable. Taproot provides a brief introduction to each section of the report with pertinent information gleaned from the results.

## Survey Sample Description

The typical person participating in this survey can be described as:

- Slightly more likely to be female
- Most likely to be “Caucasian or White”
- Making between \$25,000 and \$74,999 annually
- Living in Florida full-time
- Likely between “55 to 70 years old”
- Gaining much of their news from TV news outlets and using Facebook often

## Key Findings: Awareness and Perceptions of the District

When asked which agency is most responsible for managing and protecting natural water resources in their region, 52.1% (+18.1% from 2015) responded “don’t know.” The District was the second most common response to the question with 14.6% of the sample responding that way, representing a 16.4% decrease from 2015.

Nearly half of the sample (49.9%) said it was unfamiliar with the District, an increase of 10.9% from 2015. 41.3% of the sample reported having heard of the District, a decrease of 15.7% from 2015.

With lower levels of familiarity with the District reported by our sample, the findings of this report represent an opportunity to learn from more individuals who are unfamiliar with the District.

Of those familiar with the District, nearly (52%) also reported being familiar with the District’s practice of purchasing and managing undeveloped lands for conservation purposes, up 14% from 2015.

Respondents familiar with the District were also asked to rate its performance. Between 2015 and 2018, responses for both “excellent” (8.0%, -7.0% from 2015) and “terrible” (0.9%, -2.1% from 2015) dropped, while responses of “good” (38.0%, +1% from 2015) increased slightly and “OK” jumped from 27% to 34.2%.

When asked about whether the District was doing *too much*, *enough* or *too little* to protect various water resources, the percentage of respondents saying *too little* dropped while the percentage of *enough* responses stayed mostly consistent between 2015 and 2018, though responses of *enough* dropped for “groundwater or water from the Aquifer” (-4.5% from 2015).

Of those aware of the District’s practice of buying and managing undeveloped land to help protect water supplies, water quality and natural environments, almost nine in 10 respondents (88.2%) expressed support, an increase of 13% from 2015. The percentage of respondents opposing such moves decreased by 6% and the percent unsure decreased by about 7%. The response patterns were similar across regions.

Put simply, this year’s sample is less familiar with the District, and those who knew of the District had overall less extreme opinions of its performance. Those familiar with District’s land-purchasing practices were highly supportive of the practice.

## Key Findings: Health of Natural Water Resources

44.1% of respondents rated the health of the natural water resources in their region as excellent or good (-11.9% from 2015). The percent of respondents rating the health of the natural water resources in their region as OK increased from 30% to 37.6%. Similar response patterns were seen across the regions.

Responses to questions asking respondents to rate the health of various water resources were varied. Trends in the rating of the health of rivers, lakes, wetlands or swamps, groundwater or water from the aquifer and bays and estuaries each matched what was seen in responses to the question regarding the overall health of natural water resources; ratings of excellent or good decreased while ratings of OK increased. Ratings of the health of springs did not follow this

pattern, however, with ratings of excellent (15%) of the sample staying the same and ratings of good increasing (37.2%, +3.2% from 2015).

### Key Findings: Reclaimed and Purified Water

Overall the percentage of respondents willing to use reclaimed water for various purposes decreased from 2015, with willingness to use reclaimed water for watering a lawn, an exception, increasing slightly (+3.4% from 2015). Levels of willingness to use reclaimed water to raise lake levels, increase river flows and raise groundwater levels dropped below the 50% mark.

Willingness to use reclaimed water for washing a car or in agricultural irrigation each stayed above the 50% mark, despite decreases, at 68.2% (-3.8% from 2015) and 59.3% (-5.7% from 2015).

But, rather than these willing responses moving to the unwilling category, the percentage of “not sure” responses increased for most statements. So, rather than having to be persuaded away from not using reclaimed water for these purposes, respondents need to be educated on the practice’s value and safety.

Two new statements tested this year with mixed results. 60.5% of respondents said they would be willing to use reclaimed water to restore local wetlands with a quarter of respondents (24.7%) saying they were not sure. When asked about using reclaimed water to recharge the local aquifers, only 31% said they would be willing to use reclaimed water to recharge the local aquifers with most respondents answering “not sure” (37.0%).

Willingness to use purified water stayed above 60% for each of the purposes tested. Notably, willingness to use purified water to add to existing water supplies like local lakes and rivers increased 11% from 2015 to 70%. Levels of willingness were lowest for the purpose of drinking the purified water, though the willing responses did increase slightly from 2015 (51.4%, +1.4% from 2015).

Several new statements were tested to measure how willingness to use purified and reclaimed water might differ. As would likely be expected, overall levels of willingness to use purified water were between 20 and 30 percentage points higher than willingness to use reclaimed water.

Less than 13% of the sample reported being unwilling to use purified water for any of the purposes tested. This pattern mirrors what was seen in the responses for reclaimed water use; rather than being unwilling, people may just not know enough about the practice.

### Key Findings: Lawn Irrigation

Percentages of respondents who have a lawn were similar to the 2015 sample with 86.1% of 2018 respondents reporting having a lawn compared to 85% who reported having one in 2015. Nearly 60% of the sample reported having an in-ground irrigation system, an increase of 9% from 2015.

Respondents were most likely to get water for their outdoor irrigation from a water utility (42.9%, +6.9% from 2015) or from reclaimed water (27.8%, +10.8% from 2015). Fewer respondents reported getting their outdoor irrigation water from a well compared to 2015 (18.3% vs. 34%).

Frequency of winter lawn watering increased with the percentage of respondents reporting that they never water their lawn dropping from 36% in the 2015 survey to 18.2%, and the percent of respondents who reported watering their lawn twice a week jumping from 17% in 2015 to 32.1%. The number of respondents watering their lawns once a week stayed the same at 42%. As would likely be expected, the frequency of lawn watering during the summer was higher than what was reported for the winter with 59% of the sample saying they water their lawn twice a week or more, an increase of 9.7% over 2015.

## Key Findings: Septic Systems

Only about one-in-three respondents (31%) reported having a home with its own septic system. Nearly half (46.6%) of respondents from the North region reported having a home with its own septic system compared to 35.2% of Heartland residents, 22.4% of South residents, and 19.0% of Tampa Bay residents. This was the only statistical difference between the regions when questioned about septic systems. Otherwise, there were no statistical differences in the treatment of or attitudes towards septic systems between the regions.

Of the respondents who said they have a septic system, 44.2% reported having a septic system that is 15 years or younger, and 22.6% were unsure of the age of their system. These results indicate that our sample overall owns septic systems that were put in fairly recently, a key point to keep in mind when considering the results of questions regarding willingness to invest in improvements in systems.

27.1% of the sample responded that they have their septic system pumped every 1-3 years making it the most common response with every 4-6 years a close second at 24.4% of the sample. Nearly as many respondents said they did not know how often they have their septic tank pumped at 23.3%. Only 11.2% of the sample said they never have their septic system pumped.

However, while over half of respondents say they have their systems pumped at least every six years, 63% of the sample said they either never have their septic system inspected or don't know if they have. This frequency of pumping vs. inspection provides an interesting opportunity for action. Inspections could either be made a part of the pumping process or homeowners need to be made aware if it is already a part of the process.

A little less than half (41.8%) of the overall sample said it would pay \$50-\$100 to have a septic system inspection once every three years if it would help protect the water quality of the springs. The second most common response was \$0 with 30.3% of the sample reporting that way. Simply put, respondents are willing to pay some money to do their part to protect the water quality of the springs but not much.

Over half of the total sample (56.1%) reported it would be willing to pay for a septic system with better treatment technology to improve the water quality of the springs. 34.3% of respondents said they were not sure about such an investment. So, rather than the sample being unwilling, it could just be unsure about what that investment looks like.

The rubber meets the road with the question about how much an individual would be willing to pay to have the improved septic system installed if it would help protect the water quality of the springs. A majority of the sample (65.8%) said it would be willing to pay between \$50-\$2,500 to have the system installed, results that were largely mirrored across the regions. Less than 10% of each sample said they would be unwilling to pay anything to install the system indicating a sample that may be willing to do its part to help protect the health of the springs. Of course, sentiment does not always equate to action.

When asked about connecting to a central utility, a greater share of the sample (77.2%) said it would be willing to connect to a central sewer system to help protect the water quality of the local springs, well over the 56.1% who said they would be willing to pay for enhancements to their septic system.

While a majority of the sample (58.6%) again said it would be willing to pay between \$50-\$2,500 to connect to a central sewer system, a greater share of the total sample said it would be unwilling to pay anything to do so than did when asked about paying for enhancements to their septic system (23.6% vs. 6.0%).

While the causes of these differences in willingness cannot be fully fleshed out using these results, one reason might be perceptions of ownership. Owners of septic systems might be more willing to "take care of their own house" and expect local government to handle matters related to the central sewer system, a public entity.

## Key Findings: Sources of Information and Their Trustworthiness

With a 7.77 mean trustworthiness score, the District was the second-most trusted source of information about water resources behind the US Geological Survey which received a mean score of 7.86, indicating little difference in perceived levels of trustworthiness between the two entities. For this type of question, an average score of seven or more represents a strong perception. The District's score of 7.77 indicates high levels of trust, but there is always room for improvement to a score of eight or higher. These results mirror what has been observed in previous surveys; respondents tend to trust federal government entities, agencies with “environmental” in their name and universities at higher levels.

Notable in these results is the fact that less than 10% of respondents trust the information they receive about water resources through social media. As it has done in the past, the District must be explicit that it is the source of information it shares through social media.

## Recommendations

In conclusion, Taproot recommends that the District incorporate the three following insights into future messaging efforts.

- While overall familiarity with the District appeared to decrease, those familiar with the organization approved of its efforts to buy and manage land. More people just need to be made aware of its efforts.
- Rather than seeing increases in unwillingness to use reclaimed and purified water, we saw an increase in responses of not sure. This finding indicates the opportunity to educate citizens on the value and safety of using these types of water resources.
- Most respondents reported being willing to pay for inspections of their septic system or to pay for upgrades. An avenue for inciting action could be to encourage residents to have their septic systems tested while they are being pumped.

The remainder of the report will present more detailed explanations of the results with statistically-different responses by region and results from the 2015 survey referenced as necessary.





# Awareness and Perceptions of the District

Respondents' levels of awareness and perceptions of the District were measured with the following questions:

- The term “natural water resources” refers to rivers, lakes, springs, wetlands, groundwater, bays and estuaries. To the best of your knowledge, which agency is most responsible for managing and protecting natural water resources in your region?
- Have you ever heard of the Southwest Florida Water Management District, sometimes called Swiftmud?
- Based on what you may know or have heard, how would you rate the Southwest Florida Water Management District (Swiftmud)?
- In your opinion, how is the Southwest Florida Water Management District (Swiftmud) doing to protect each of the following water resources? For each water resource, tell us if the District is doing too much, enough or too little to protect each of the resources.
  - Rivers
  - Lakes
  - Springs
  - Wetlands or swamps
  - Groundwater or water from the aquifer
  - Bays and estuaries
- Are you aware that the Southwest Florida Water Management District purchases and manages undeveloped lands for conservation purposes?
- The Southwest Florida Water Management District purchases and manages undeveloped lands for conservation purposes to help protect water supplies, water quality and natural environments. The land also provides nature-based recreation areas in Florida. Do you support or oppose the District buying and managing undeveloped lands for these purposes?

The number of “don’t know” responses to the question “to your knowledge, which agency is most responsible for managing and protecting natural water resources in your region” increased from 34% of the total sample in 2015 to 52% of the total sample in 2018. Choices of other entities decreased across the board, with only 14.6% of respondents choosing the District compared to 31% in 2015.

These decreases in recognition were also observed in the questions asking whether or not the respondents had heard of the District. In the overall sample, fewer respondents reported having heard of the District in 2018 (41.3%) than did respondents in 2015 (57%). Responses from each of the regions were statistically different from each other but each region also showed lower levels of familiarity with the District. Familiarity in the North region dropped the most from 58% for “yes” responses in 2015 to 35.3% in 2018, a decrease of 22.8%.

Respondents who said they were familiar with the District were asked to rate the District’s performance. Between 2015 and 2018, responses for both “excellent” (8.0%, -7.0% from 2015) and “terrible” (0.9%, -2.1% from 2015) dropped, while responses of “good” (38.0%, +1% from 2015) increased slightly and “OK” jumped from 27% to 34.2%. These results mirror the lower levels of familiarity with the District as a whole; respondents appear to be moving from having a firm opinion (i.e., “excellent” or “terrible”) to a middling or unsure response of “OK” or “don’t know.” Regional results were statistically different from each other but largely mirrored the same trend seen at the total sample level.

When asked about whether or not the District was doing too much, too little or enough to protect various bodies of water in the region, the proportion of respondents who said the District is doing “too much” to protect rivers, lakes, springs, wetlands or swamps, groundwater or water from the aquifer and bays and estuaries decreased between 2015 and 2018.

Percentages of residents who feel the District is doing *too little* to protect those bodies of water were as follows. The difference between 2015 and 2018 results for each statement is included in parenthesis:

- Rivers: 27.6% (-2.4%)
- Lakes: 26.5% (-5.5%)
- Springs: 26.6% (-4.4%)
- Wetlands or swamps: 28.7% (-3.3%)
- Groundwater or water from the aquifer: 33.5% (-1.5%)
- Bays and estuaries: 28.7% (+0.7%)

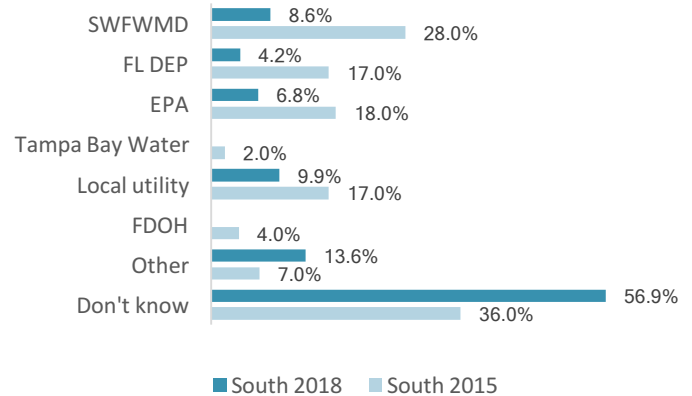
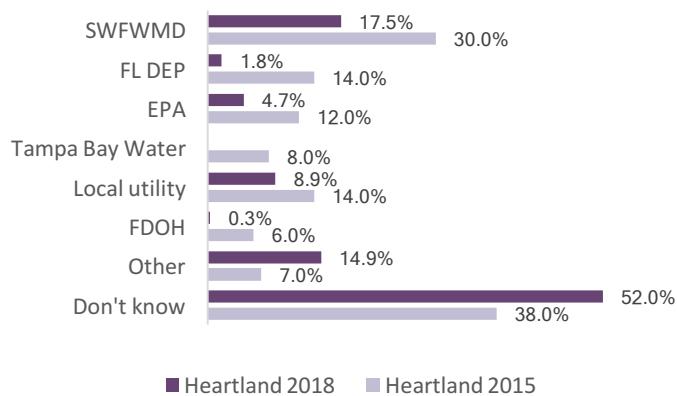
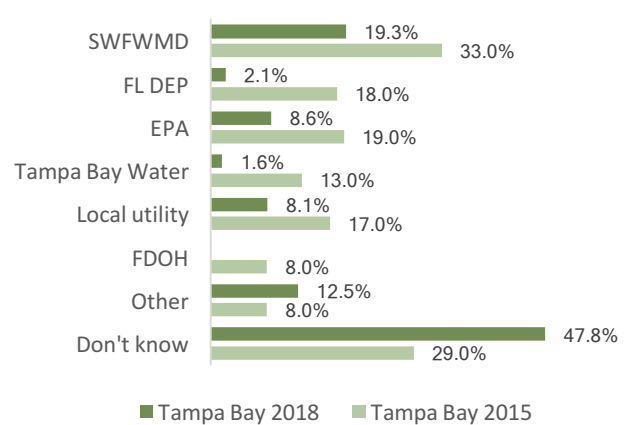
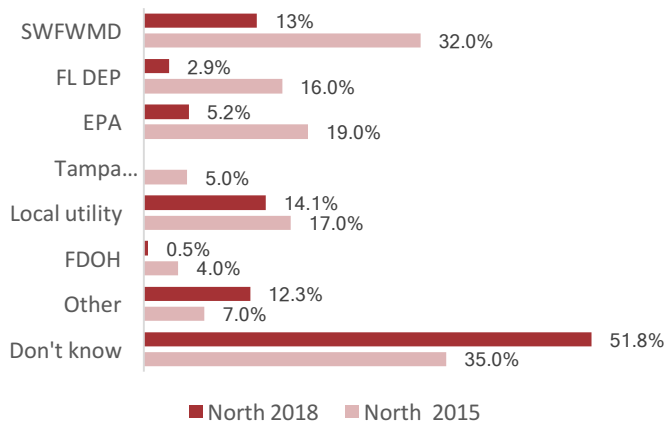
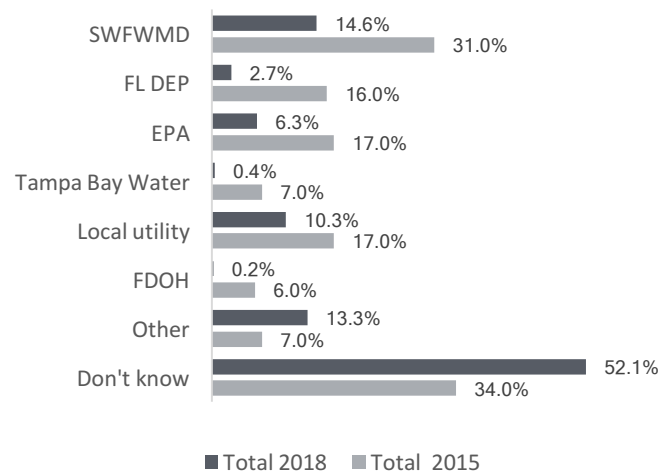
However, levels of “not sure” responses increased for each body of water between 2015 and 2018 as follows:

- Rivers: 27.5%, (+8.5%)
- Lakes: 26.6% (+9.6%)
- Springs: 29.0%, (+7.0%)
- Wetlands or swamps: 26.3% (+8.3%)
- Groundwater or water from the aquifer: 27.6% (+7.6%)
- Bays and estuaries: 28.5% (+6.5%)

More than half of respondents (52%) who said they were familiar with the District reported being aware that the District manages underdeveloped lands for conservation purposes, a 12% increase from 2015. Only 41.3% of those respondents said that they were unaware, a nearly 13% decrease from 2015. These results are interesting given earlier findings that fewer respondents were aware of the District compared to the 2015 survey; they indicate that those who know of the District are increasingly familiar with what it does.

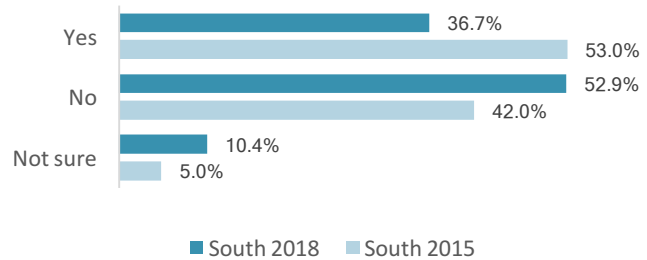
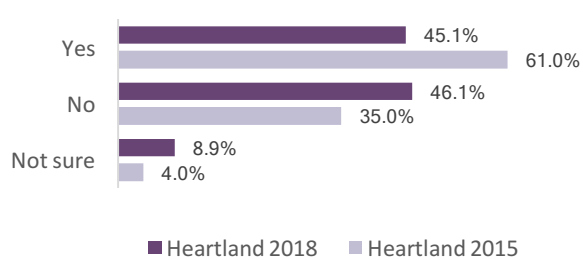
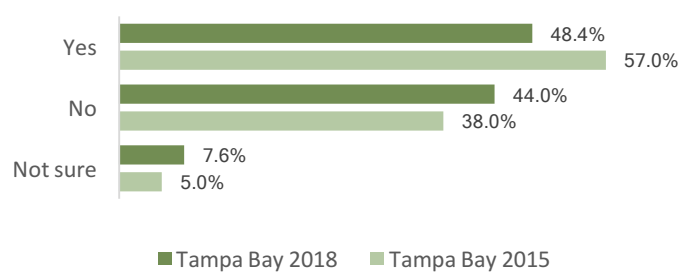
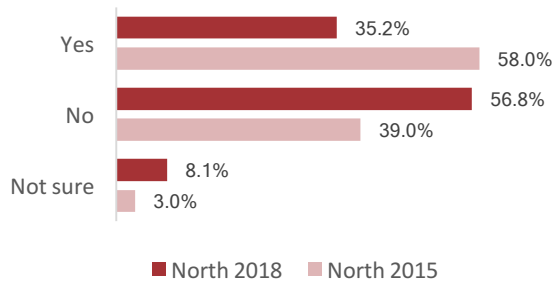
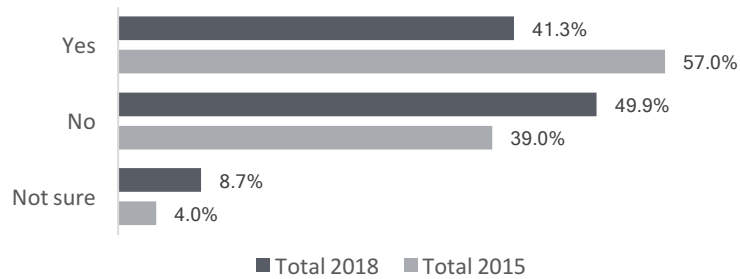
Almost nine in 10 respondents (88.2%) support the District buying and managing undeveloped land to help protect water supplies, water quality and natural environments, an increase of 13% from 2015. The percentage of respondents opposing such moves decreased by 6% and the percent unsure decreased by about 7%. The response patterns were similar across regions.

**The term “natural water resources” refers to rivers, lakes, springs, wetlands, groundwater, bays and estuaries. To the best of your knowledge, which agency is most responsible for managing and protecting natural water resources in your region?**



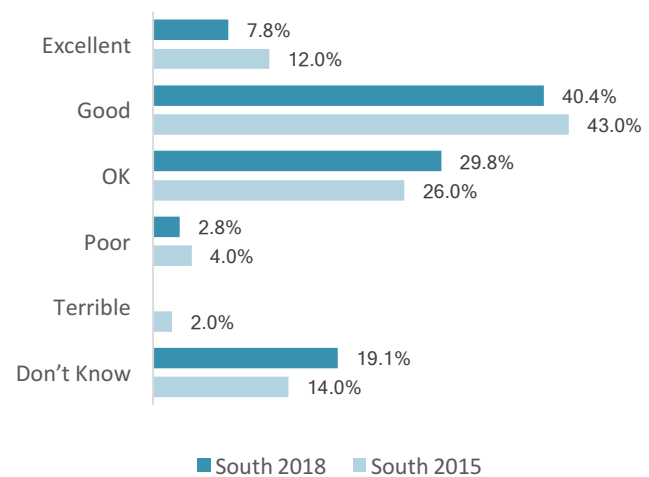
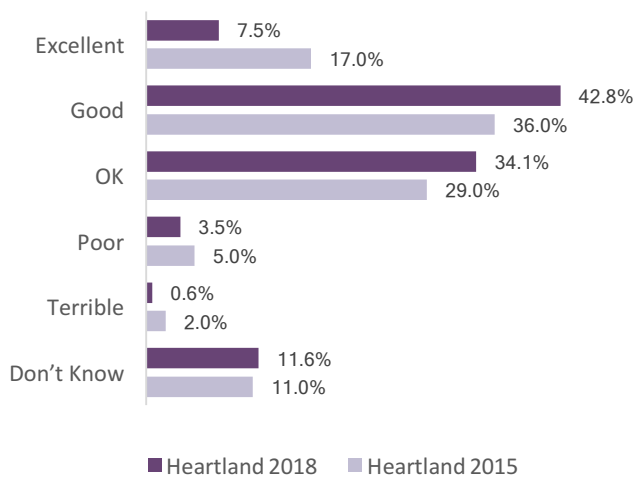
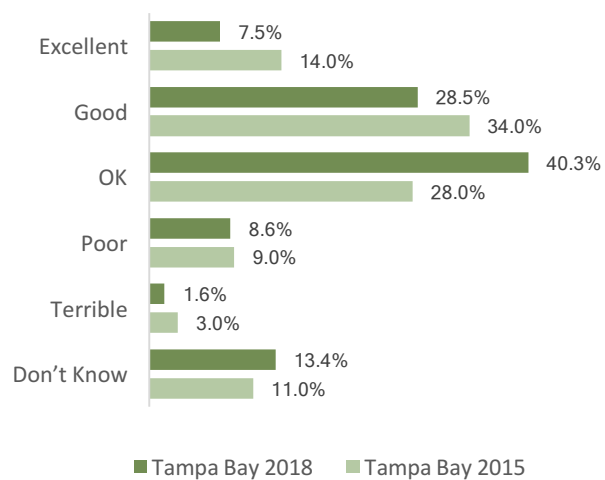
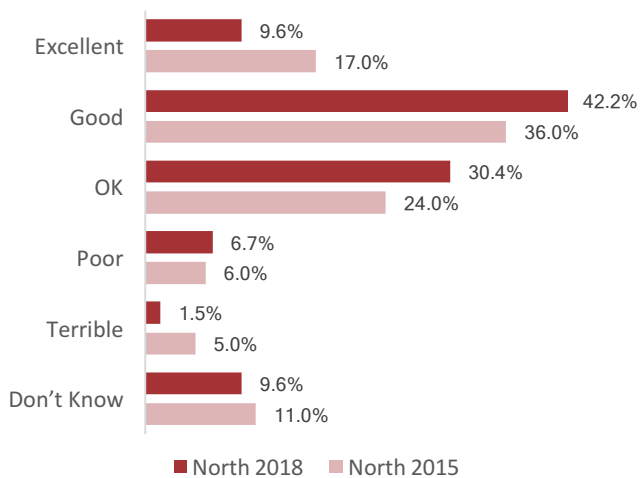
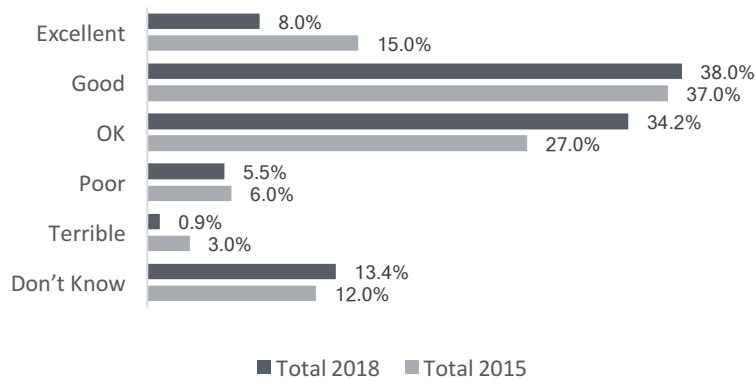
## Have you ever heard of the Southwest Florida Water Management District, sometimes called Swiftmud?

*\*Statistical Differences Between Counties*



**Based on what you may know or have heard, how would you rate the Southwest Florida Water Management District (Swiftmud)?** *(Only asked to respondents who had heard of the District)*

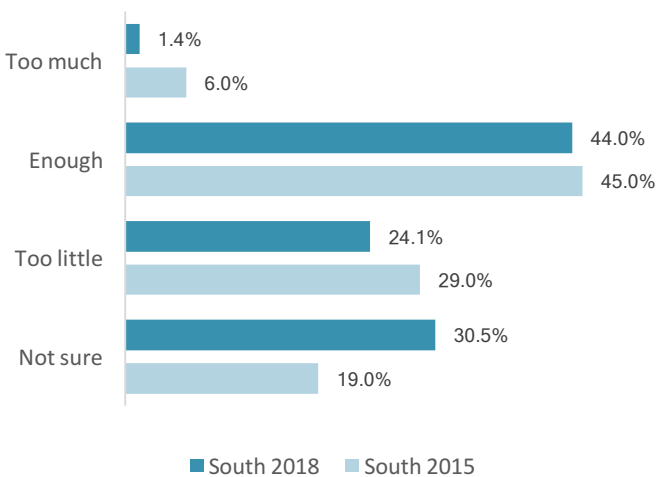
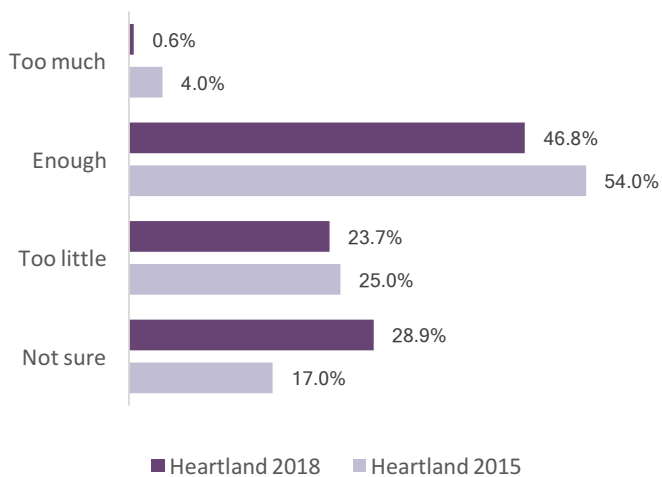
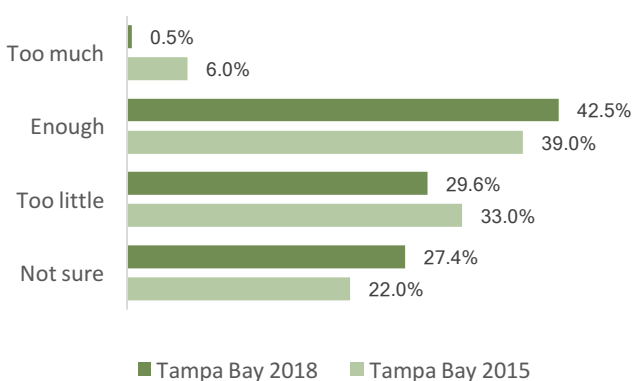
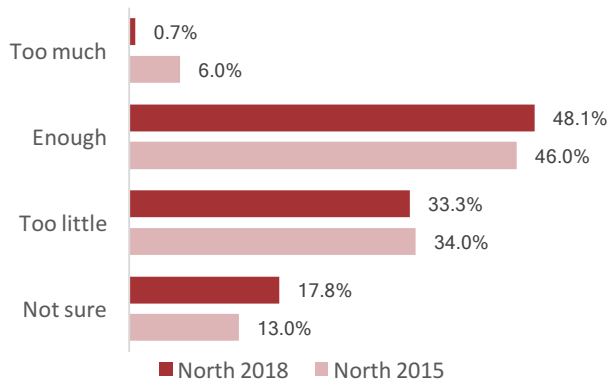
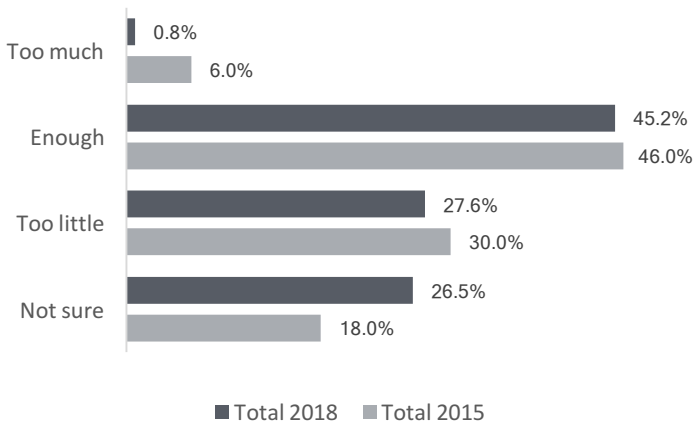
\*Statistical Differences Between Regions in 2018



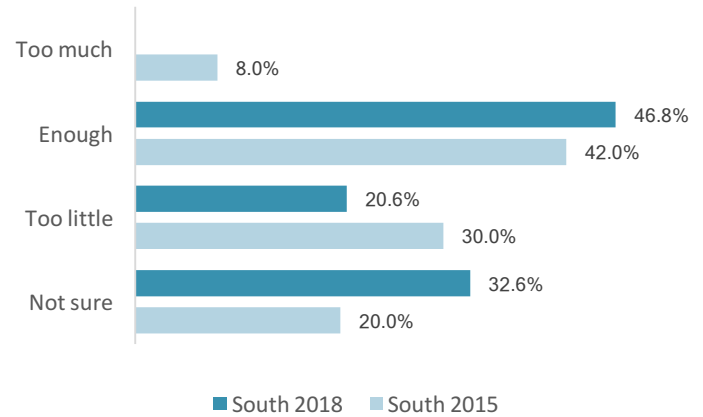
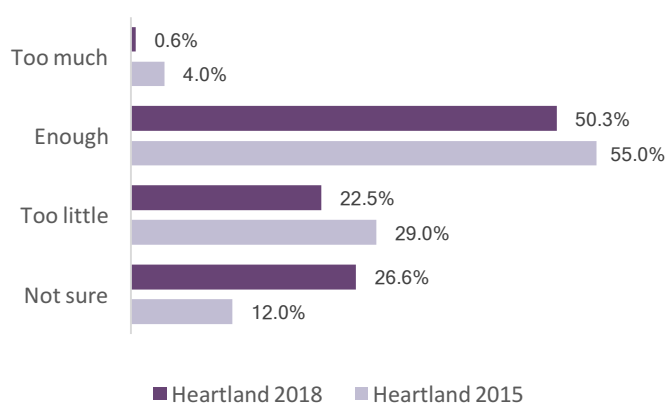
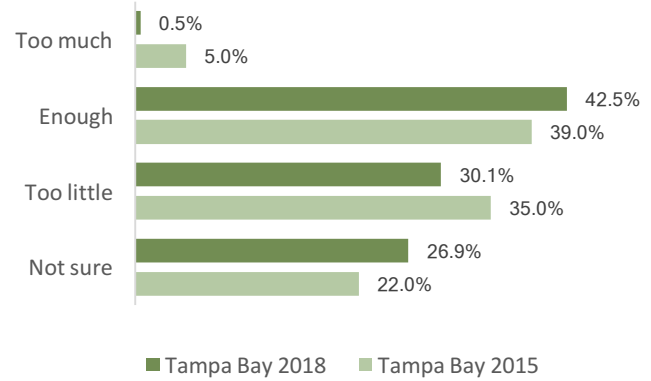
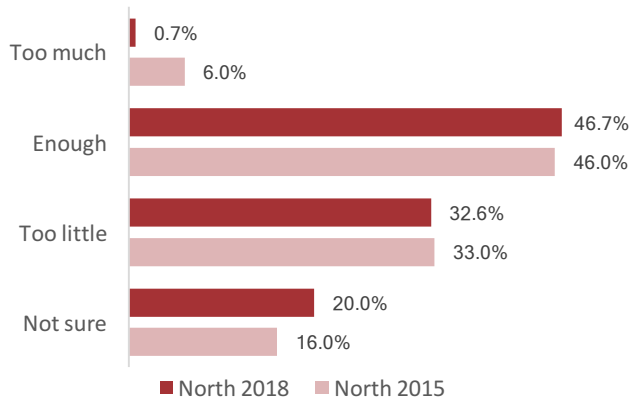
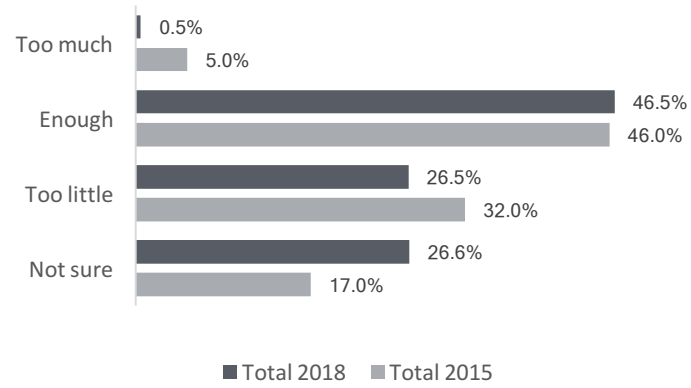
**In your opinion, how is the Southwest Florida Water Management District (Swiftmud) doing to protect each of the following water resources? For each water resource, tell us if the District is doing too much, enough or too little to protect each of the resources. (Only asked to respondents who had heard of the District)**

### Rivers

*(Only asked to respondents who had heard of the District)*

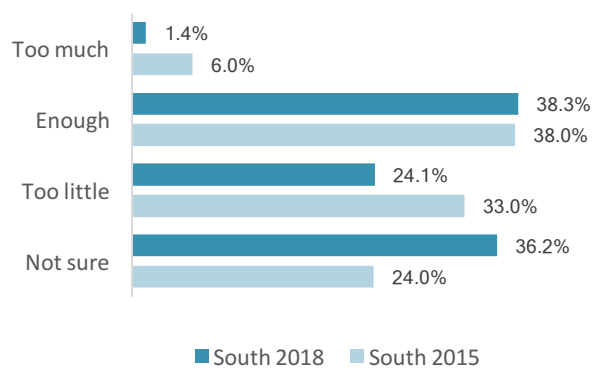
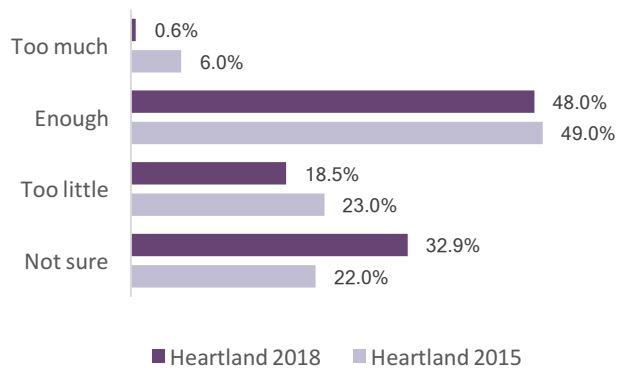
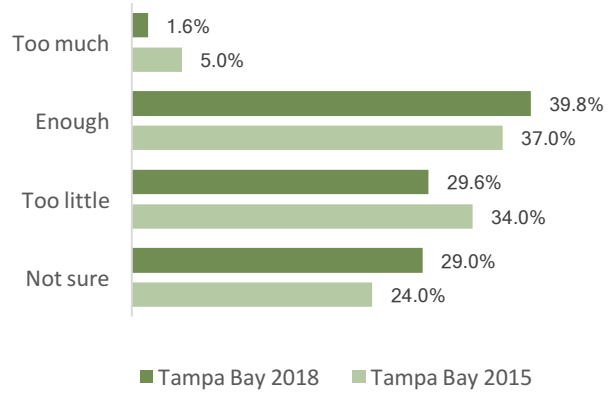
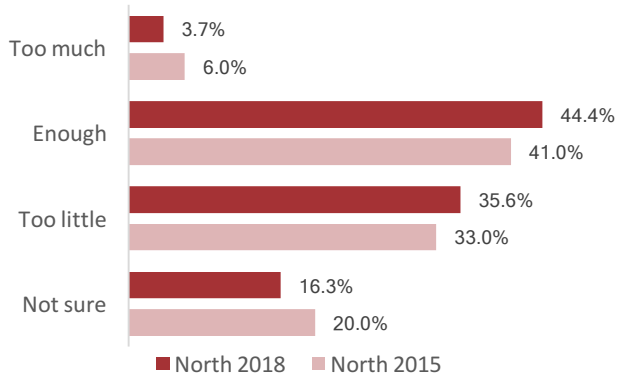
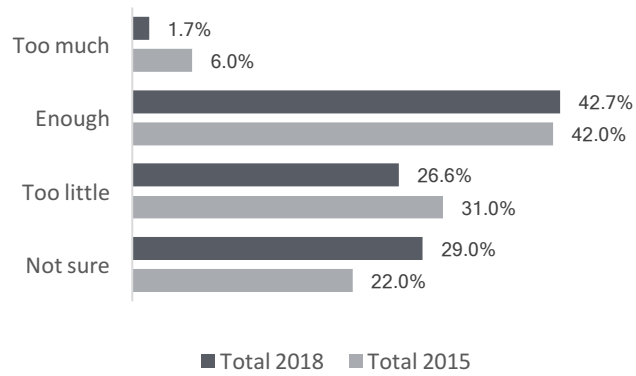


**Lakes**  
*(Only asked to respondents who had heard of the District)*

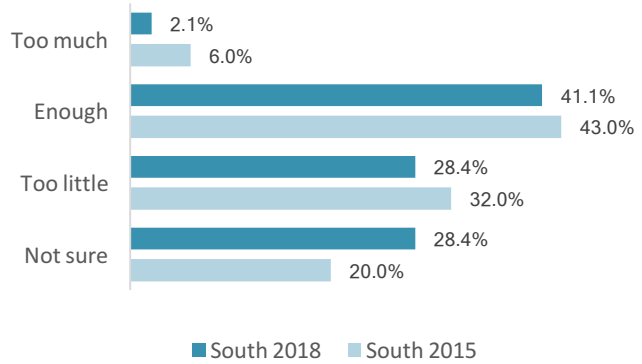
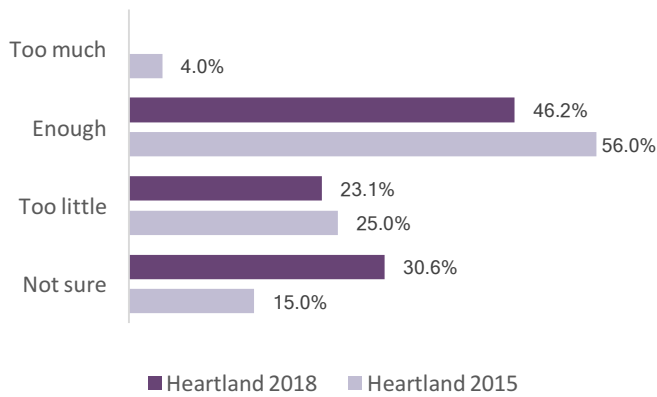
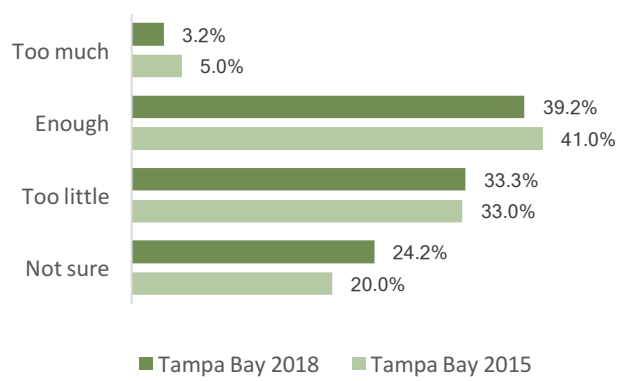
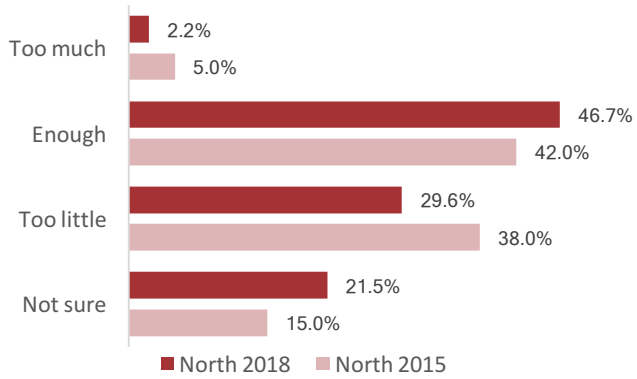
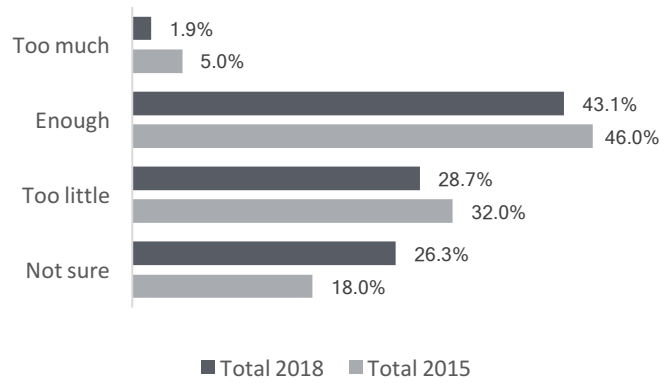




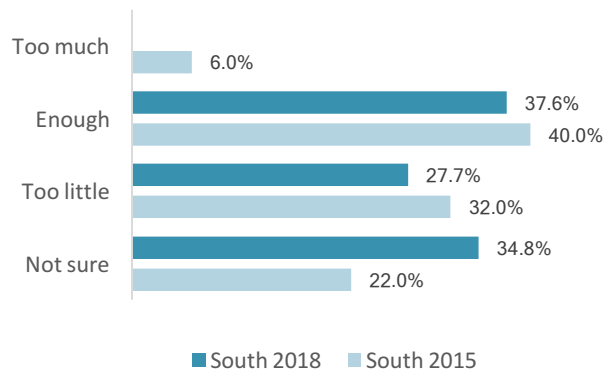
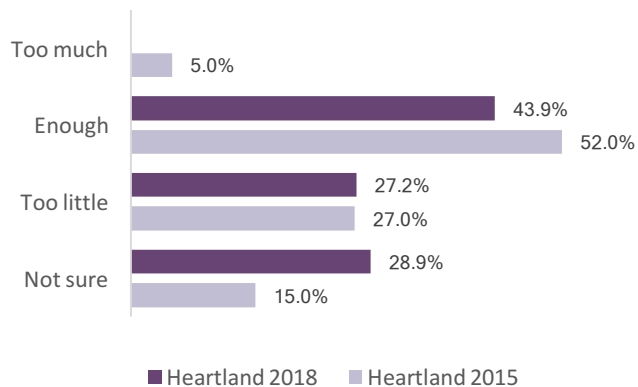
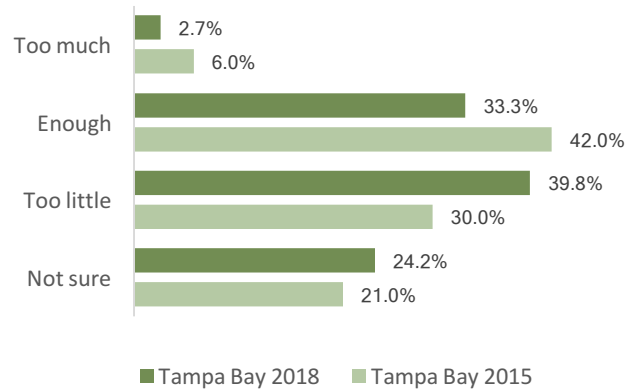
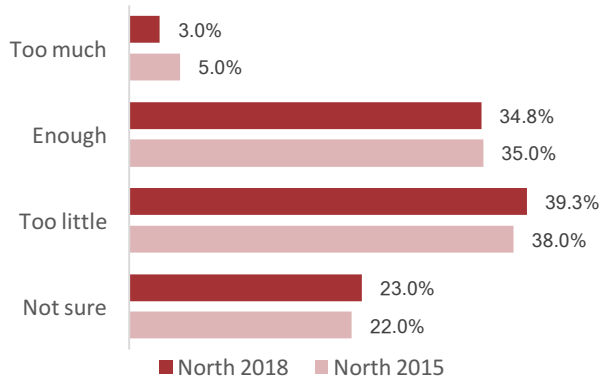
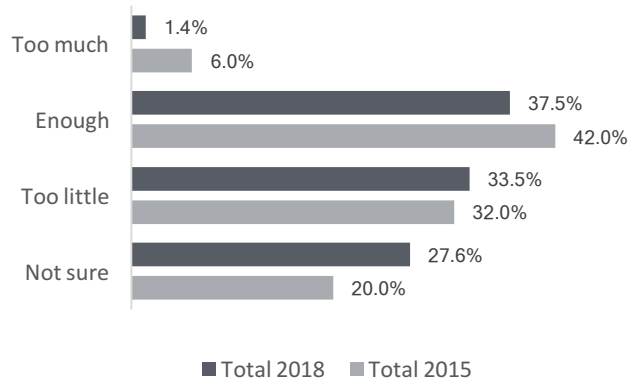
**Springs**  
(Only asked to respondents who had heard of the District)



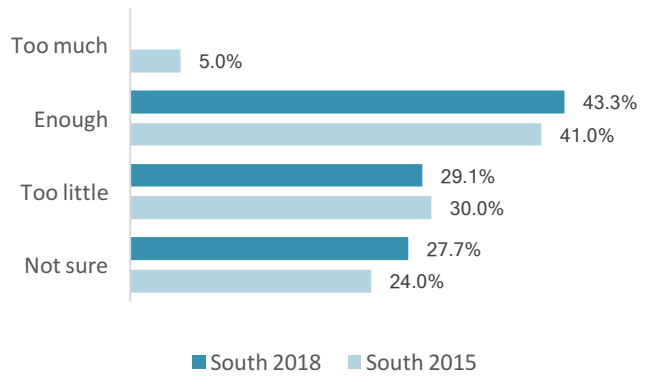
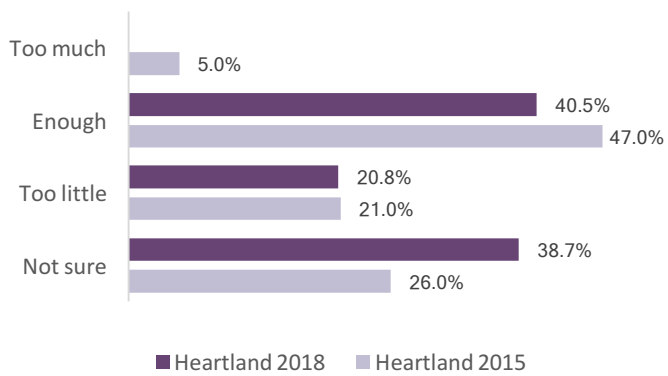
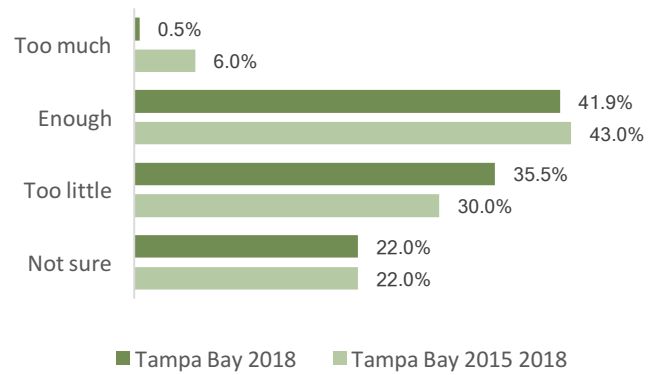
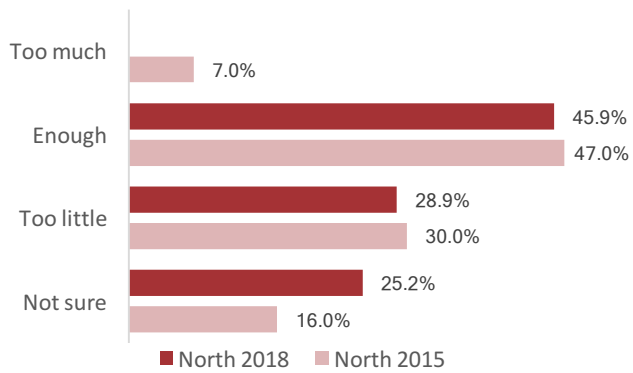
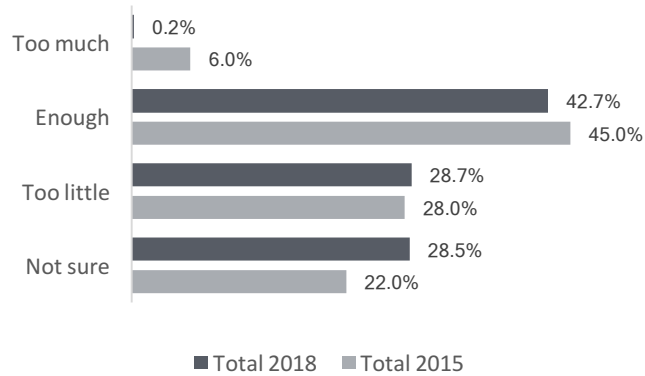
**Wetlands or swamps**  
*(Only asked to respondents who had heard of the District)*



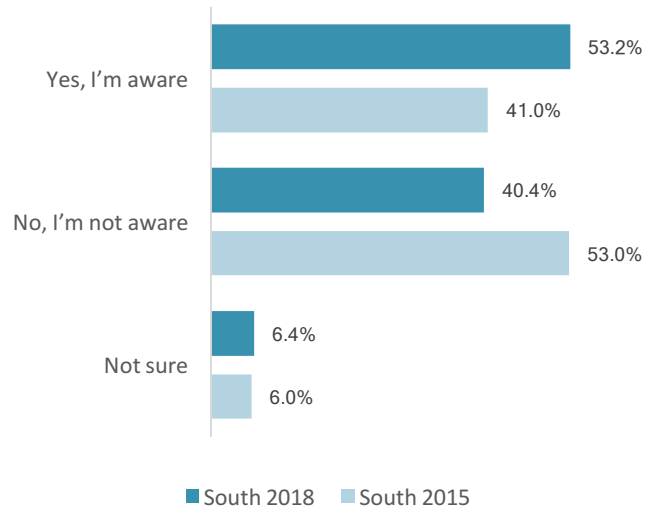
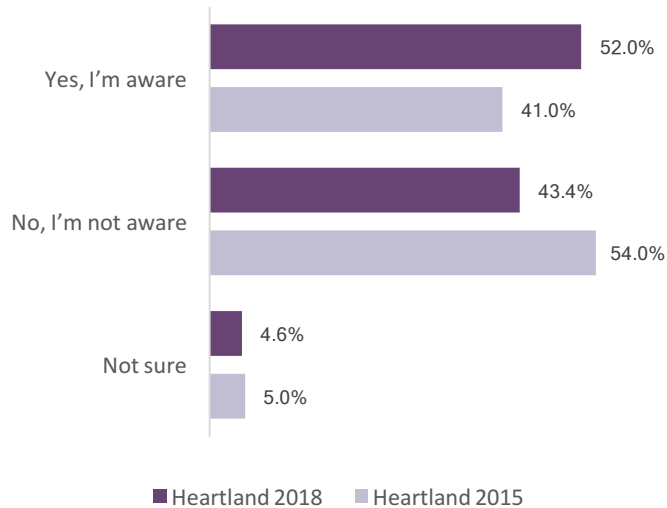
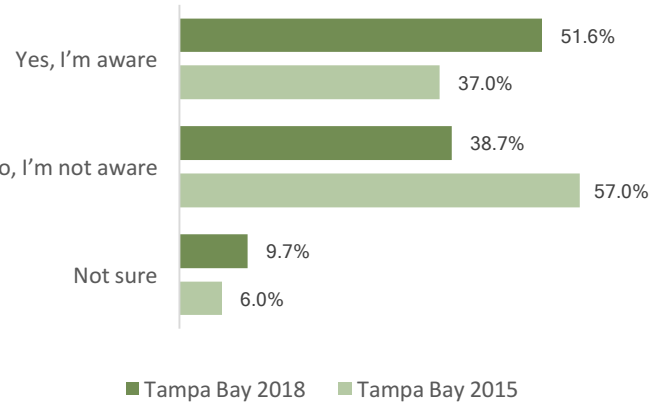
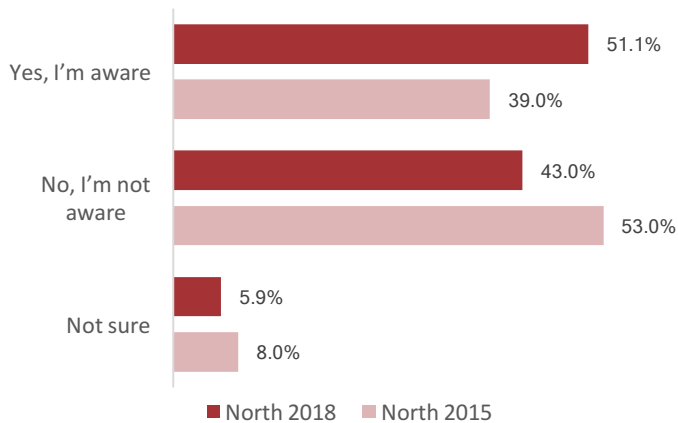
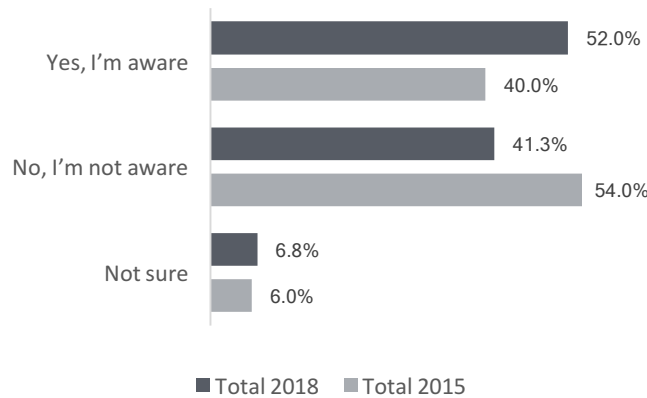
**Groundwater or water from the aquifer**  
*(Only asked to respondents who had heard of the District)*



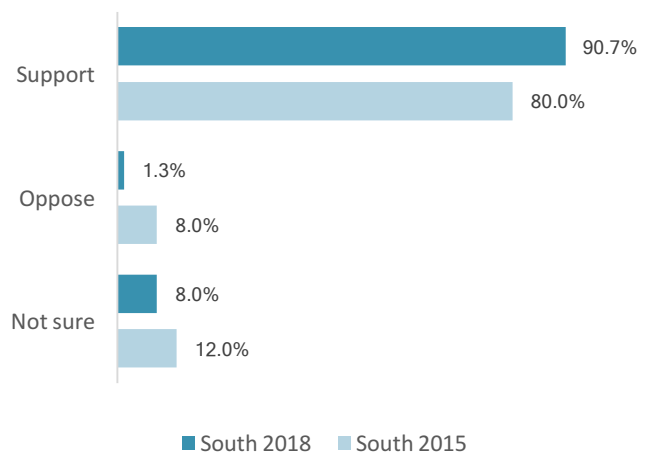
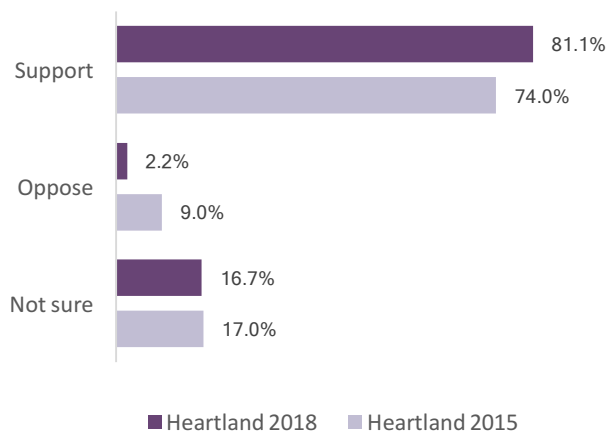
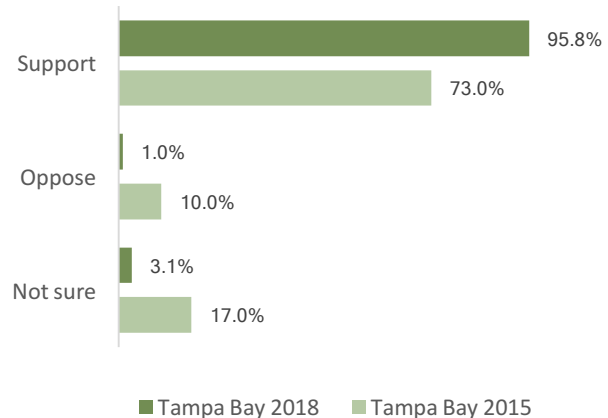
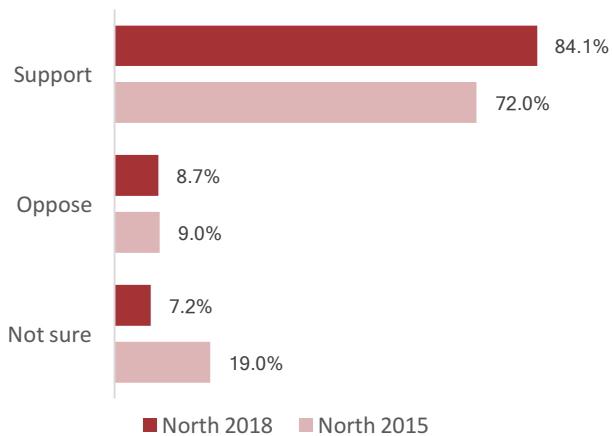
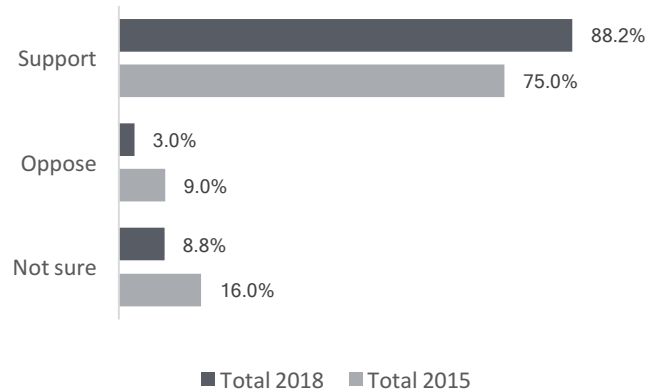
**Bays and estuaries**  
*(Only asked to respondents who had heard of the District)*



**Are you aware that the Southwest Florida Water Management District purchases and manages undeveloped lands for conservation purposes? (Only asked to respondents who had heard of the District)**



**The Southwest Florida Water Management District purchases and manages undeveloped lands for conservation purposes to help protect water supplies, water quality and natural environments. The land also provides nature-based recreation areas in Florida. Do you support or oppose the District buying and managing undeveloped lands for these purposes?**





# Health of Natural Water Resources

Respondents' opinions of the health of natural water resources were measured with the following questions:

- How would you rate the health of natural water resources in your region?
- Using the same scale, how would you rate the health of each of these water resources in your region?
  - Rivers
  - Lakes
  - Springs
  - Wetlands or swamps
  - Groundwater or water from the aquifer
  - Bays and estuaries

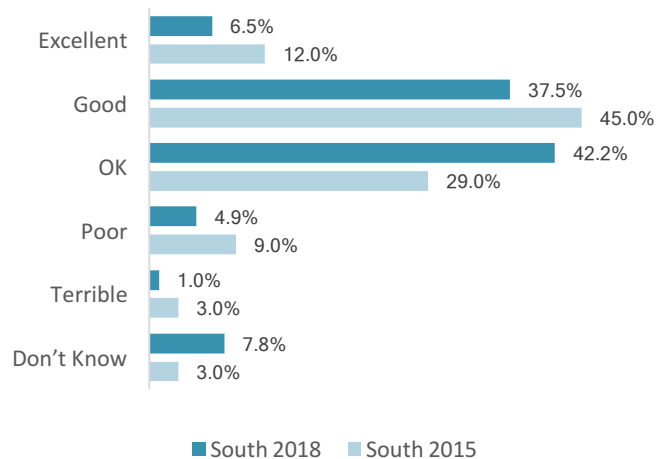
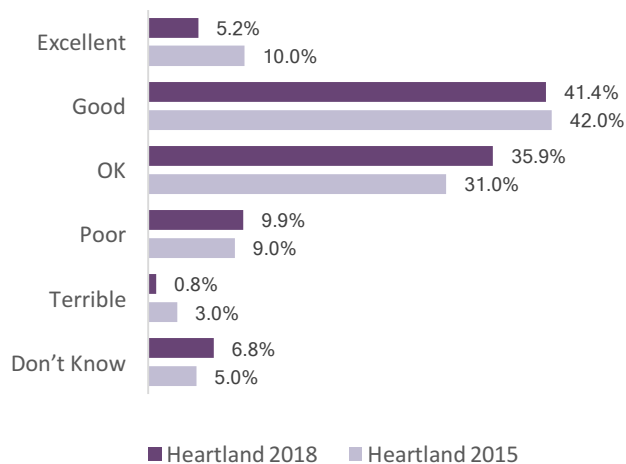
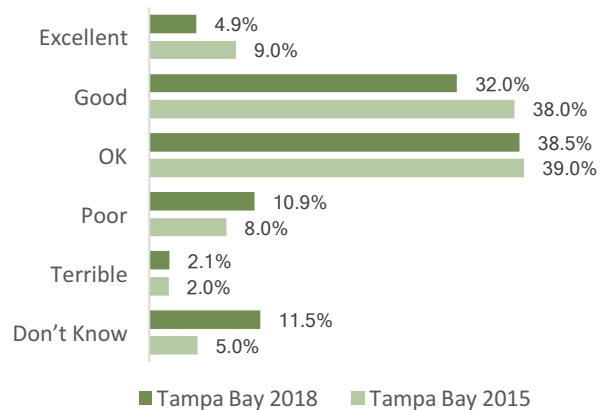
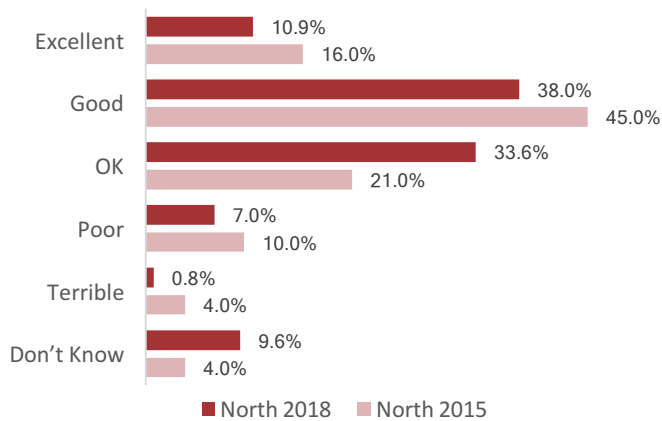
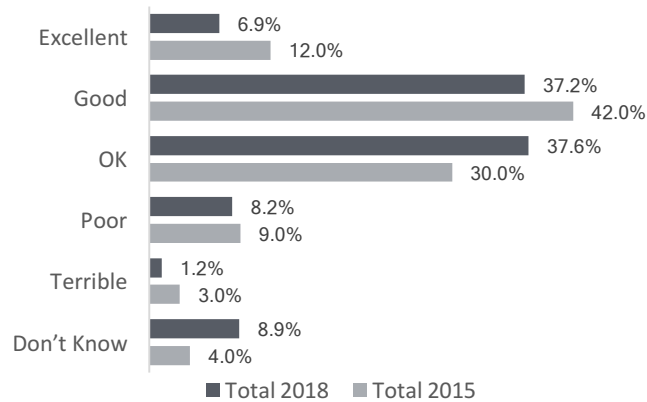
44.1% of respondents rated the health of the natural water resources in their region as excellent or good (-11.9% from 2015). The percent of respondents rating the health of the natural water resources in their region as OK increased from 30% to 37.6%. Similar response patterns were seen across the regions.

Responses to questions asking respondents to rate the health of various water resources were varied. Trends in the rating of the health of rivers, lakes, wetlands or swamps, groundwater or water from the aquifer and bays and estuaries each matched what was seen in responses to the question regarding the overall health of natural water resources; ratings of excellent or good decreased while ratings of OK increased. Ratings of the health of springs did not follow this pattern, however, with ratings of excellent (15%) of the sample staying the same and ratings of good increasing (37.2%, +3.2% from 2015).

Responses by region were statistically different from each other for most of the water resources tested. For example, Tampa Bay respondents were most likely to rate the health of the rivers in their area as poor with 14.6% responding that way compared to 10% overall. Similarly, Tampa Bay respondents were least likely to rate the health of lakes in their area as excellent or good with 33.4% of its sample compared to 38.5% overall. When it came to rating the health of the springs and groundwater or water from the aquifer in their area, North region respondents had the highest responses for excellent at 21.9% compared to 15.0% overall and 11.5% compared to 6.4% overall. South region respondents were most likely to rate the health of bays and estuaries as good at 38.3% compared to 30.9% overall.



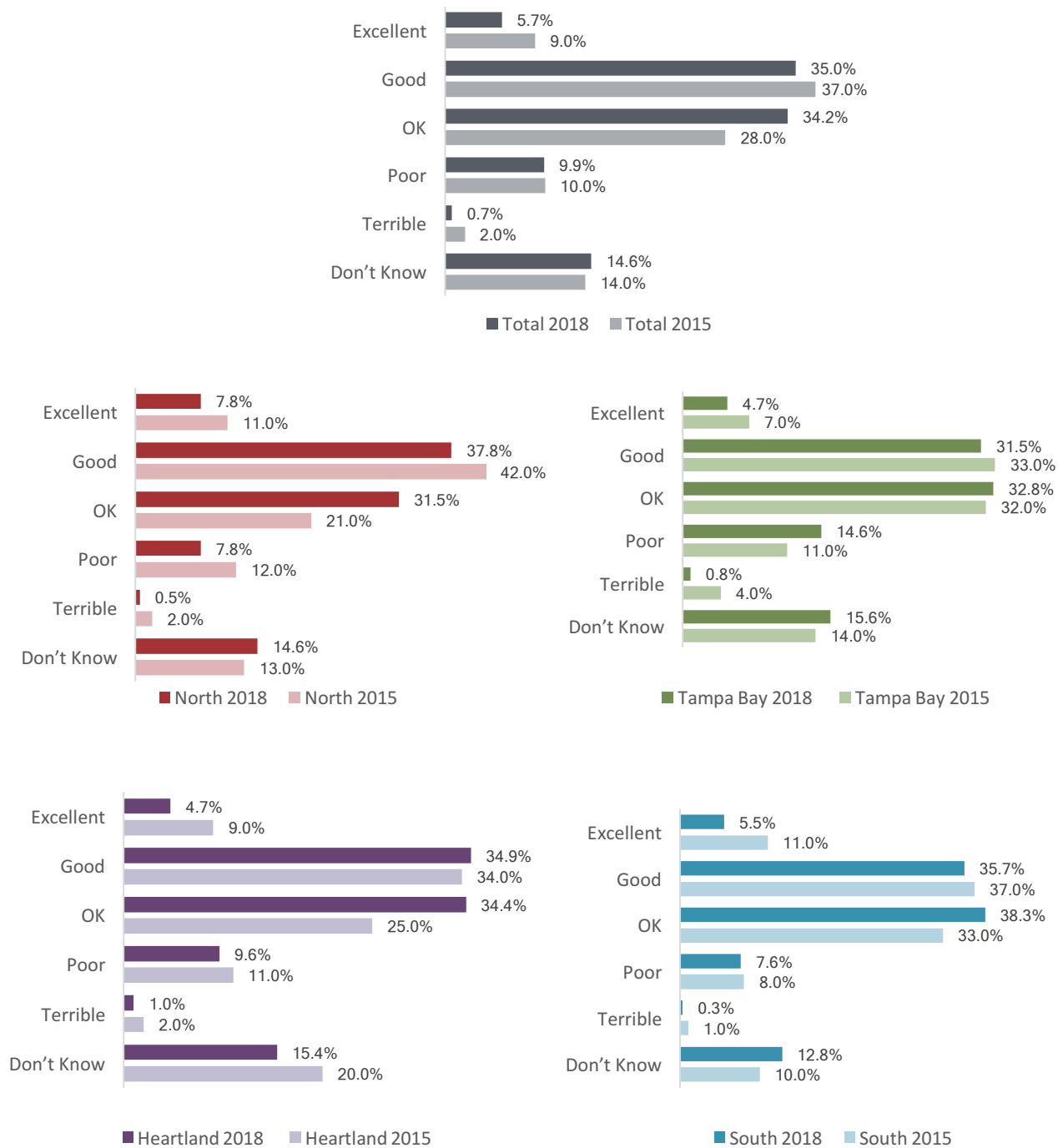
## How would you rate the health of natural water resources in your region?



Using the same scale, how would you rate the health of each of these water resources in your region?

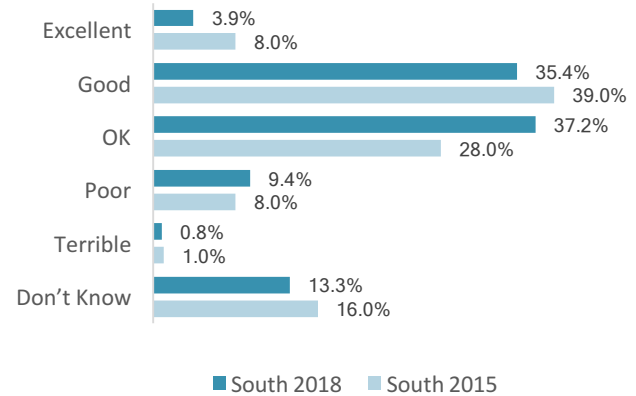
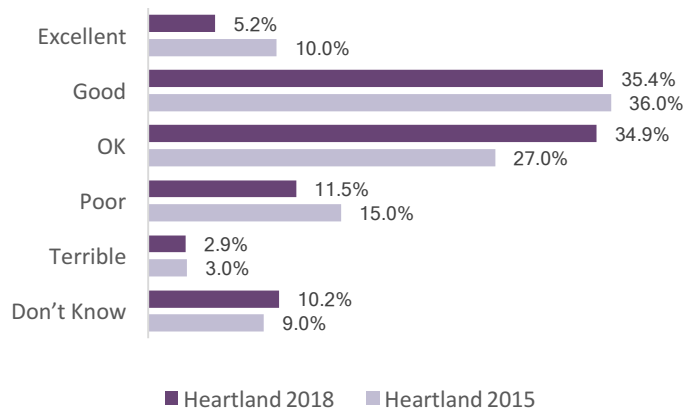
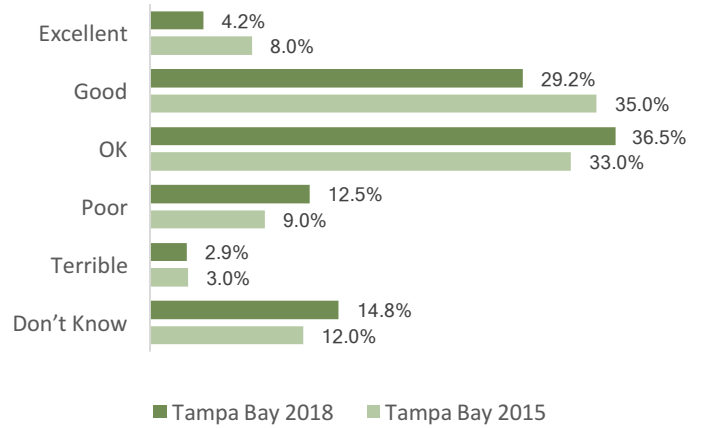
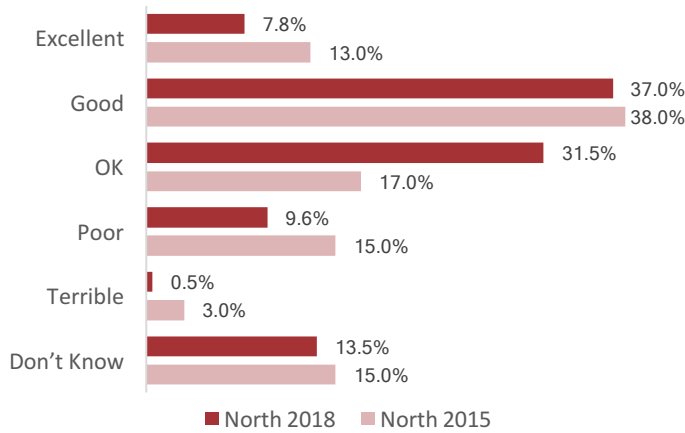
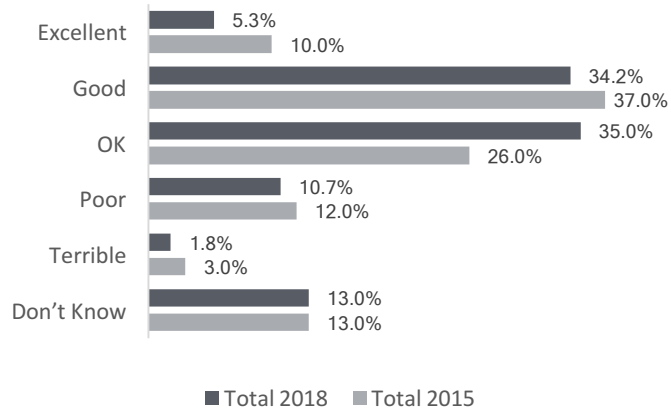
## Rivers

\*Statistical Differences Between Regions in 2018



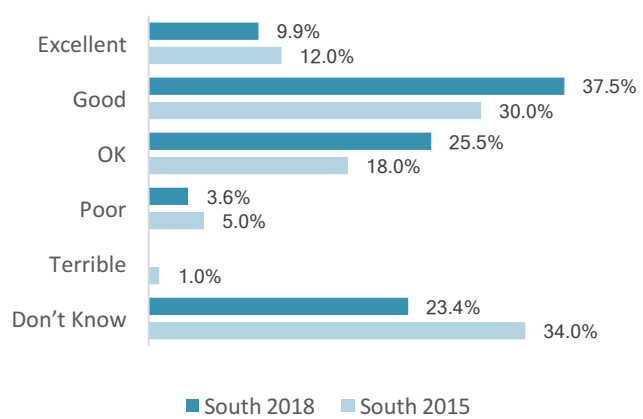
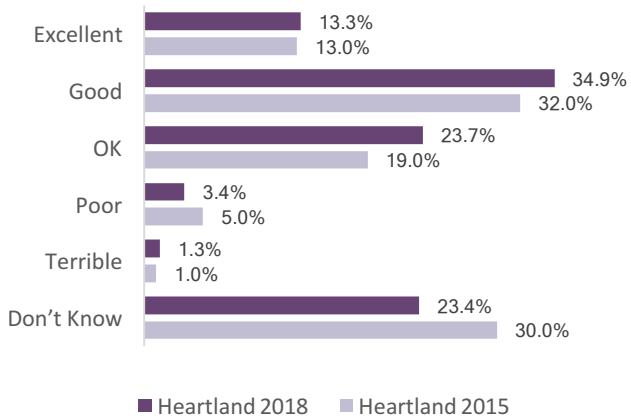
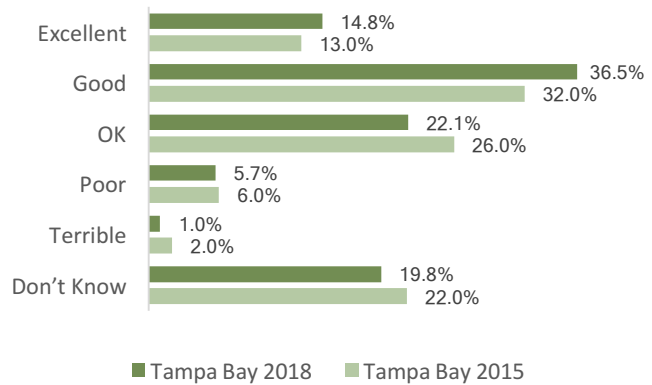
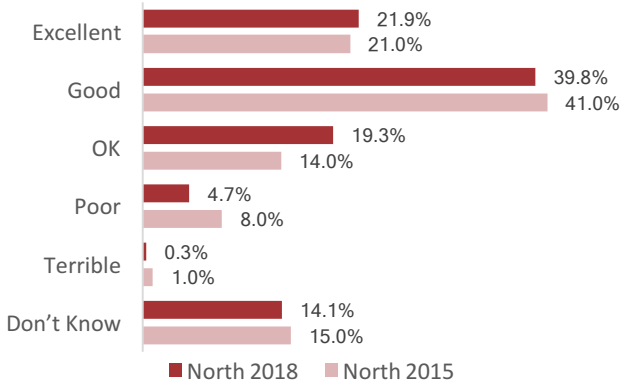
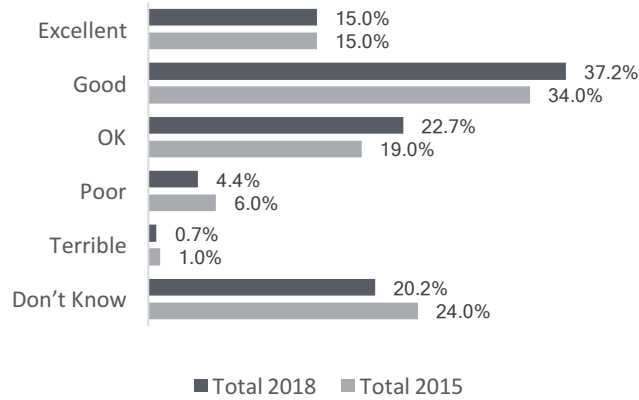
## Lakes

\*Statistical Differences Between Regions in 2018

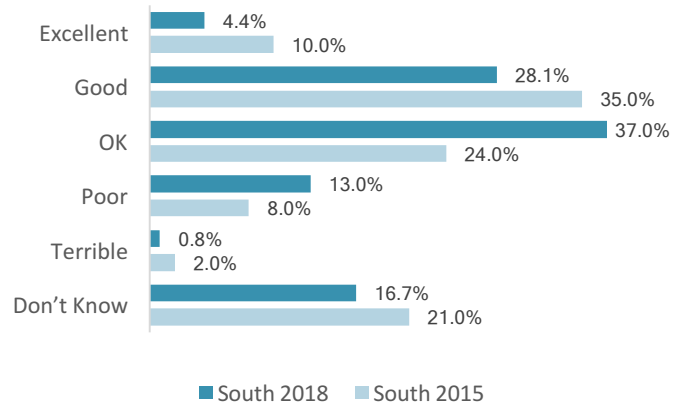
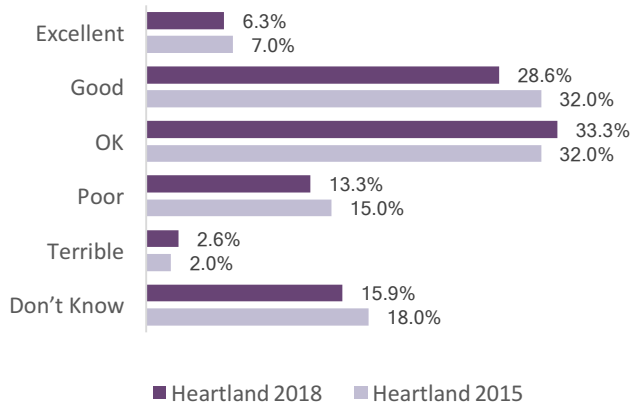
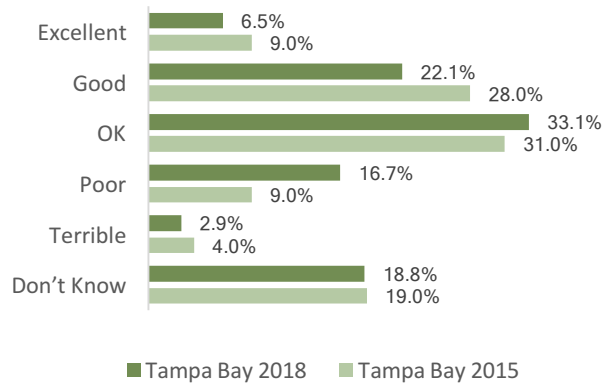
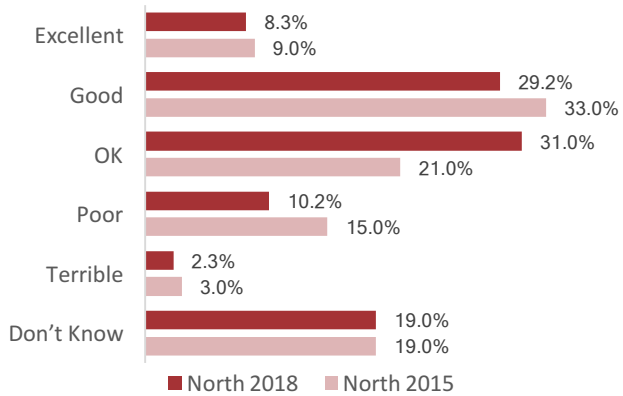
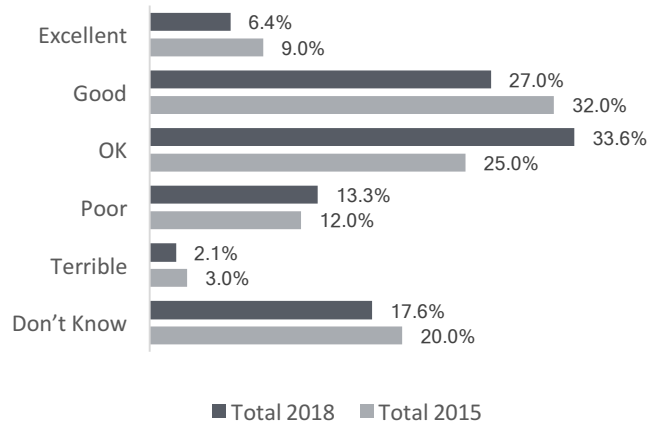


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\*Statistical Differences Between Regions in 2018

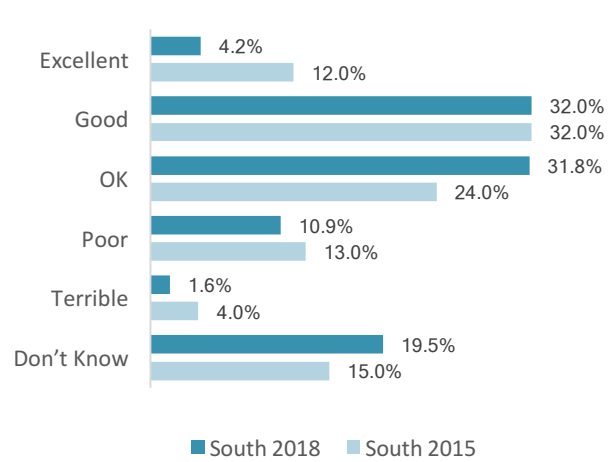
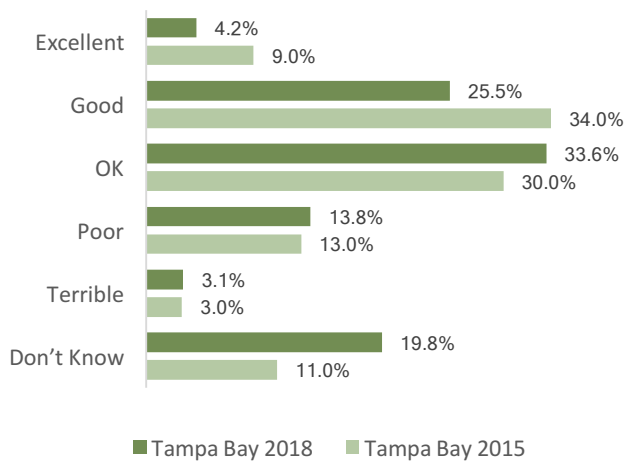
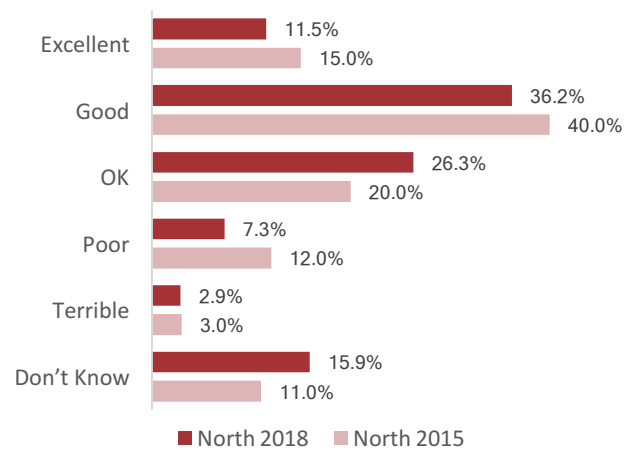
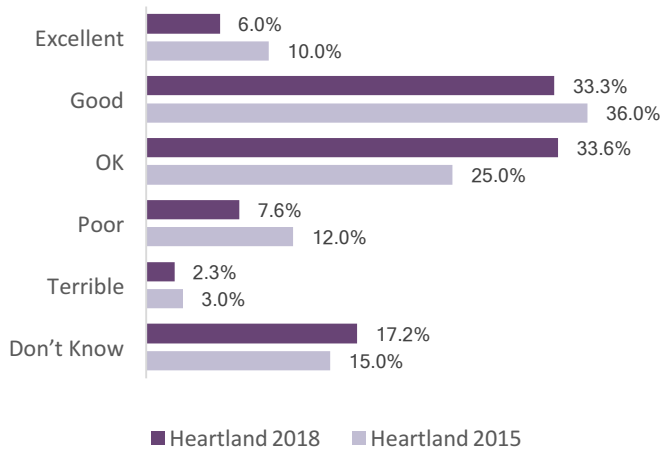
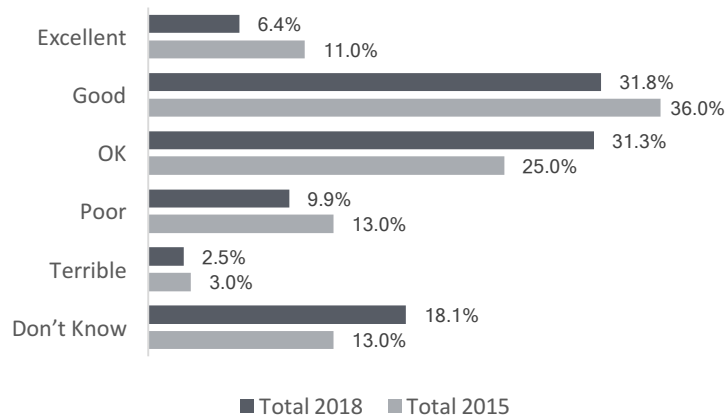


## Wetlands or swamps



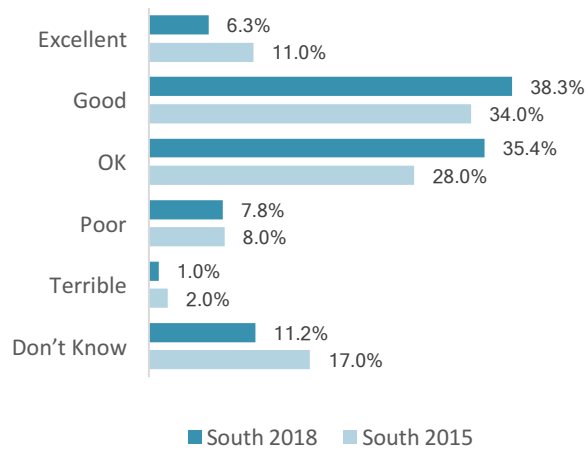
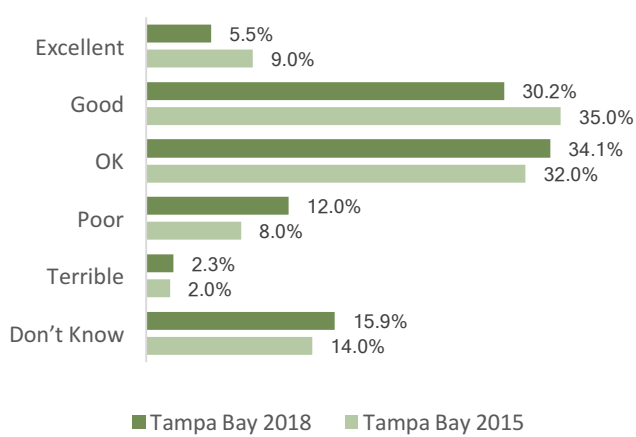
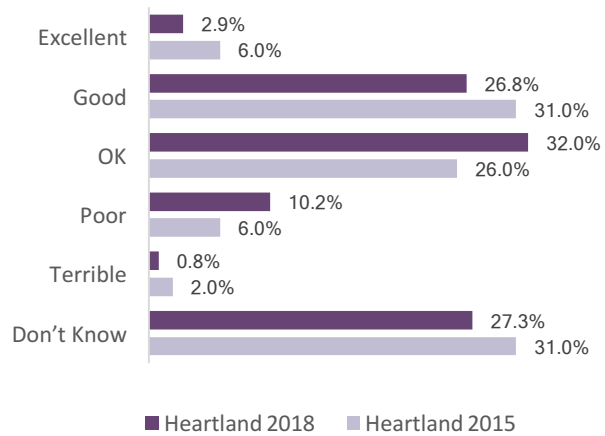
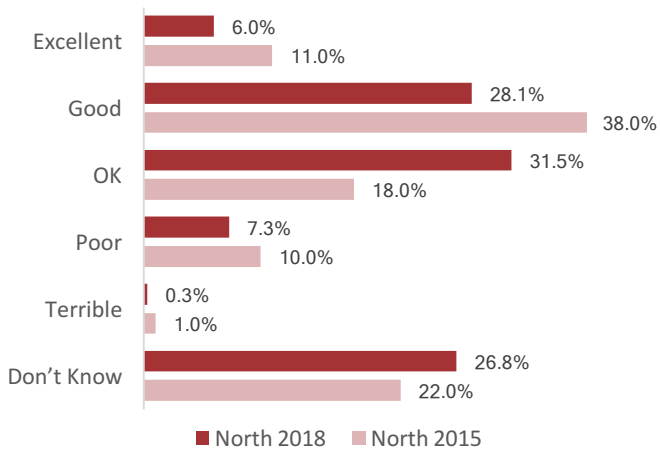
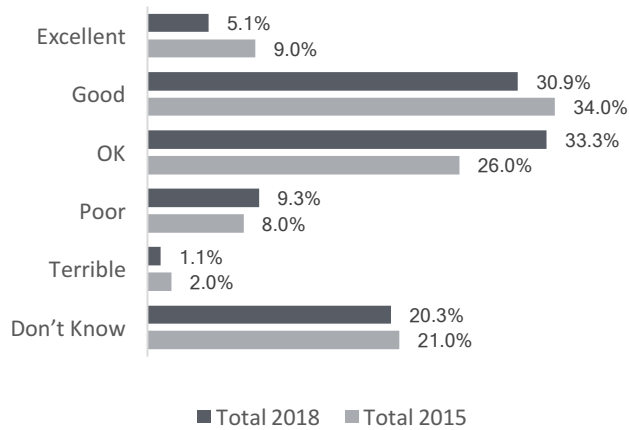
## Groundwater or water from the aquifer

\*Statistical Differences Between Regions in 2018



## Bays and estuaries

\*Statistical Differences Between Regions in 2018







# Reclaimed and Purified Water

Respondents' willingness to use reclaimed and purified water for various purposes were measured with the following questions:

- Wastewater can receive different levels of treatment that make it safe for different uses. One level of treatment produces reclaimed water that is determined safe for certain non-drinking purposes by the Florida Department of Environmental Protection. Please tell us if you are willing, unwilling or not certain about using reclaimed water for the following purposes:
  - To water your lawn
  - To wash your car
  - In agricultural irrigation
  - To raise lake levels
  - To increase river flows
  - To raise groundwater levels
  - To restore local wetlands
  - To recharge local aquifers
- A second level of wastewater treatment produces purified water that is determined to be better than drinking water standards by the Florida Department of Environmental Protection. Please tell me if you are willing, unwilling or not certain about using purified water for the following purposes:
  - To water vegetables in your garden
  - To take a shower or bath
  - To drink
  - To swim in
  - To add to existing water supplies like local lakes and rivers
  - To restore local wetlands
  - To recharge local aquifers
  - To raise lake levels
  - To increase river flows
  - To raise groundwater levels

## Reclaimed Water

82.4% of respondents reported being willing to use reclaimed water to water their lawn, a slight increase of 3.4% from the 2015. Response patterns were similar across the regions.

Overall, the percentage of respondents who reported a willingness to use reclaimed water for the other purposes tested decreased between 2015 and 2018, with some levels of agreement dropping below half of the sample. The difference between 2015 and 2018 results for each statement is included in parenthesis:

- To wash your car: 68.2% (-3.8%)
- In agricultural irrigation: 59.3% (-5.7%)
- To raise lake levels: 43.5% (-3%)
- To increase river flows: 45.6% (-11.4%)
- To raise groundwater levels: 42.0% (-11.0%)

It is worth noting that, for each of these purposes, the percent of respondents unwilling to use groundwater for these purposes dropped but the percent who reported being not sure increased.

Two new uses for reclaimed water were tested this year, and responses were mixed. 60.5% of respondents were willing to use reclaimed water to restore local wetlands, though nearly a quarter of respondents (24.7%) responded not sure. Similar response patterns were seen across the regions.

Only 31% of respondents said they would be willing to use reclaimed water to recharge the local aquifers, with a majority of respondents reporting that they were not sure (37.0%). Response patterns were similar across the regions, though a majority of respondents from the North (36.7%) were unwilling to use reclaimed water for those purposes – the highest level of unwillingness across the groups.

## **Purified Water**

Levels of willingness to use purified water were highest for the following purposes. The difference between 2015 and 2018 results for each statement is included in parenthesis:

- To water vegetables in their garden: 74.6% (+3.4%)
- To add to existing water supplies like local lakes and rivers\*: 71.0% (+11%)
- To take a shower or bath: 67.8% (-2.2%)
- To swim in: 62.3% (-3.7%)

*\*This was phrased “Are you willing, unwilling or not certain about using purified water to add to existing water supplies?” in 2015*

Levels of willingness were lower for the purpose of drinking the purified water, though the willing responses increased slightly from 2015 by 1.4% to 51.4%.

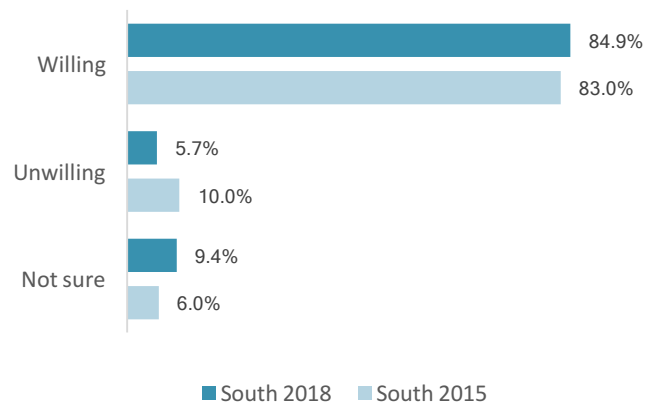
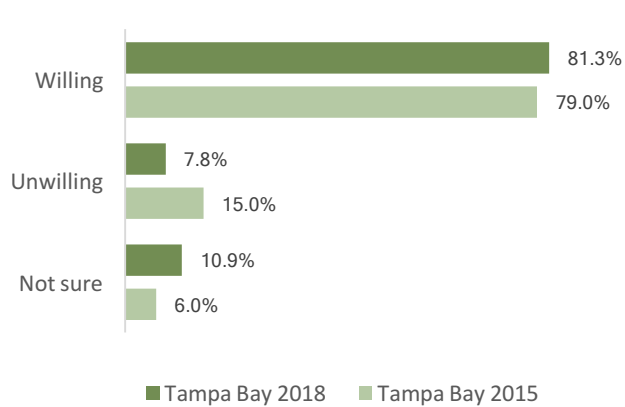
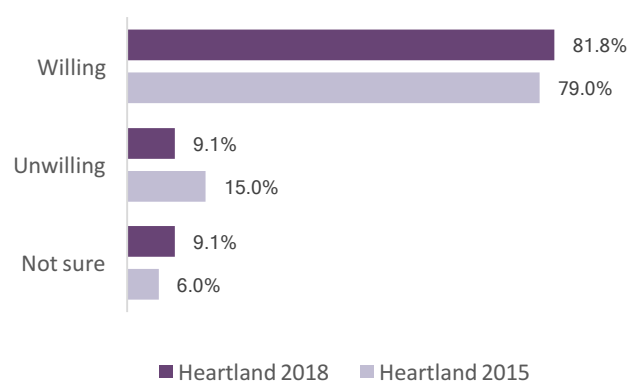
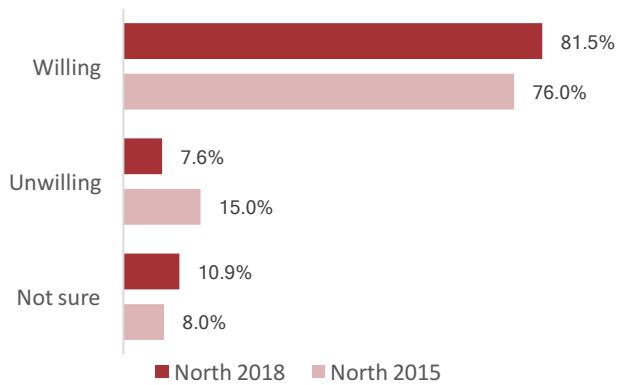
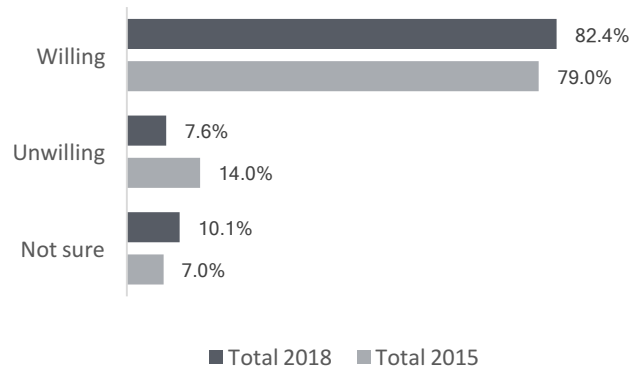
Several new uses for purified water were tested in this survey to see how levels of willingness to use purified water instead of reclaimed water would vary. These new purpose statements received similar levels of willingness compared to other purified water uses and were higher than what was seen when these uses were tested for reclaimed water.

- To restore local wetlands: 71.4%
- To raise lake levels: 70.9%
- To increase river flows: 70.4%
- To raise groundwater levels: 68.6%
- To recharge local aquifers: 65.4%

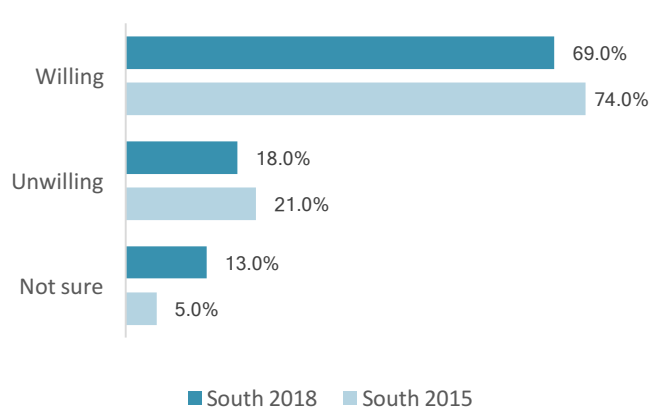
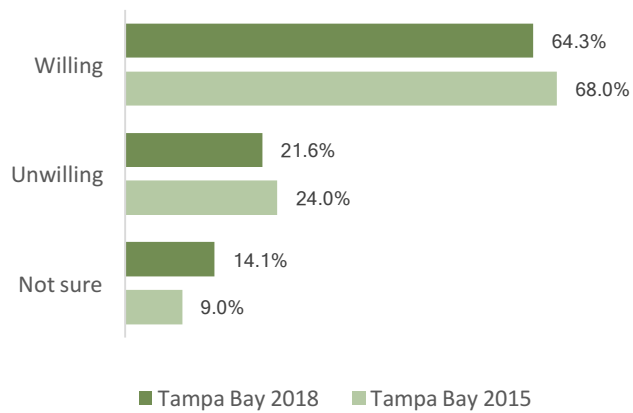
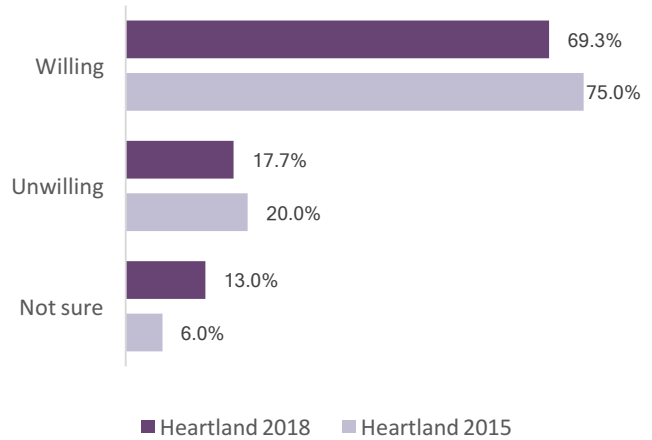
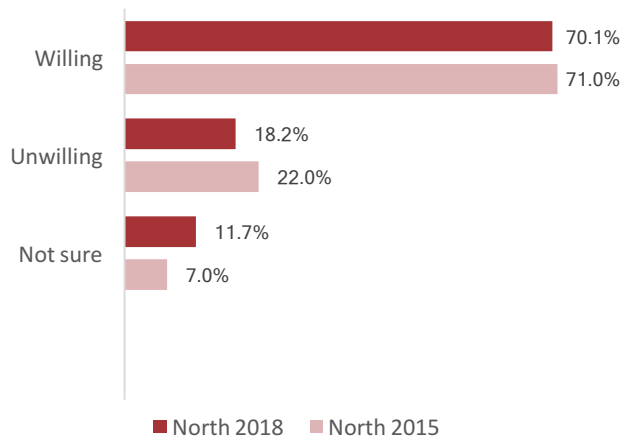
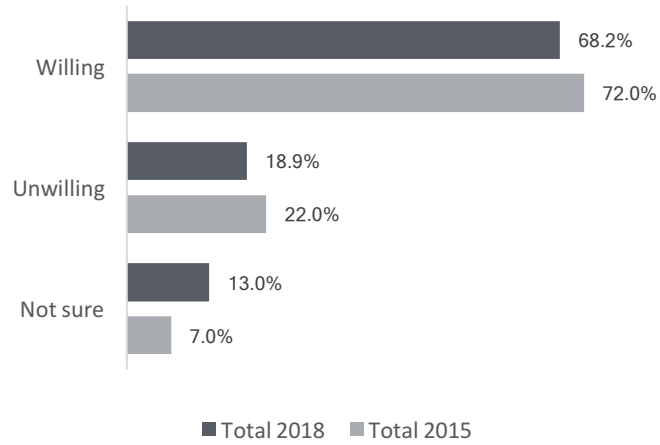
Less than 13% of the sample reported being unwilling to use purified water for any of the purposes just listed. So, for those who did not report being willing to use purified water for these purposes, the sentiment is not one of reluctance but simply not knowing. Response patterns were similar across the regions tested.

**Wastewater can receive different levels of treatment that make it safe for different uses. One level of treatment produces reclaimed water that is determined safe for certain non-drinking purposes by the Florida Department of Environmental Protection. Please tell us if you are willing, unwilling or not certain about using reclaimed water for the following purposes:**

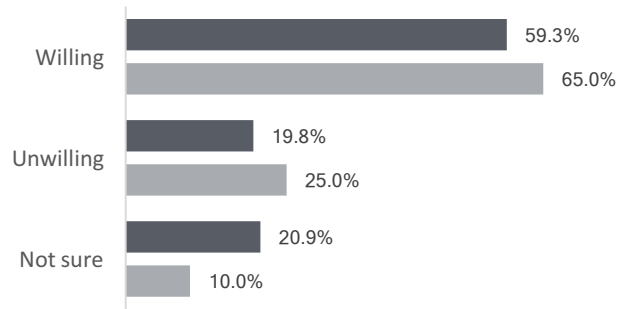
### To water your lawn



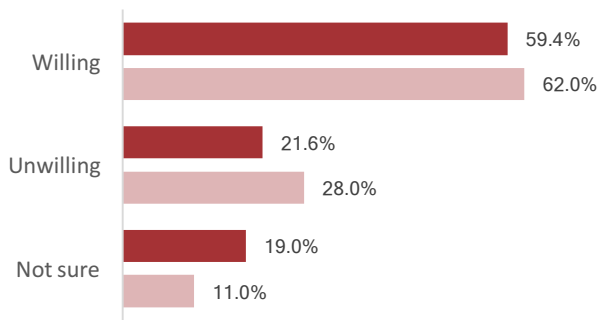
### To wash your car



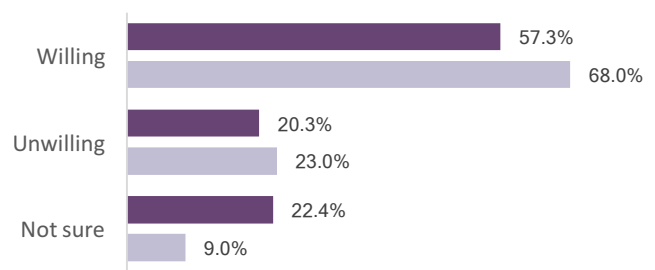
### In agricultural irrigation



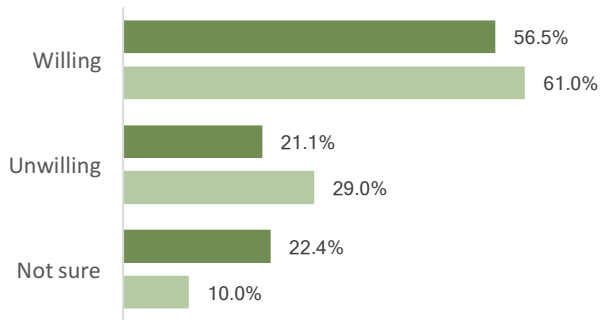
■ Total 2018 ■ Total 2015



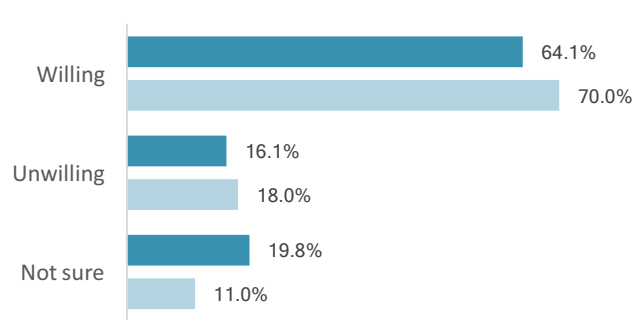
■ North 2018 ■ North 2015



■ Heartland 2018 ■ Heartland 2015

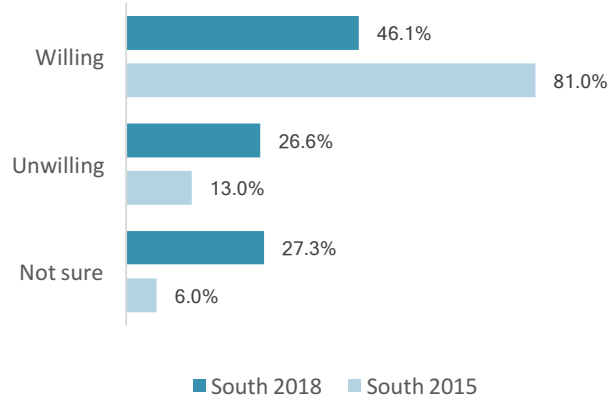
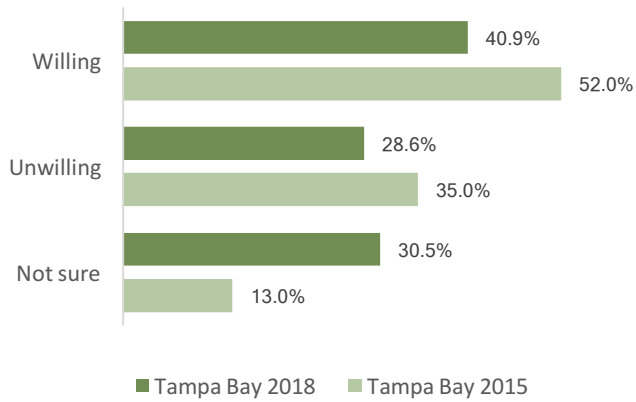
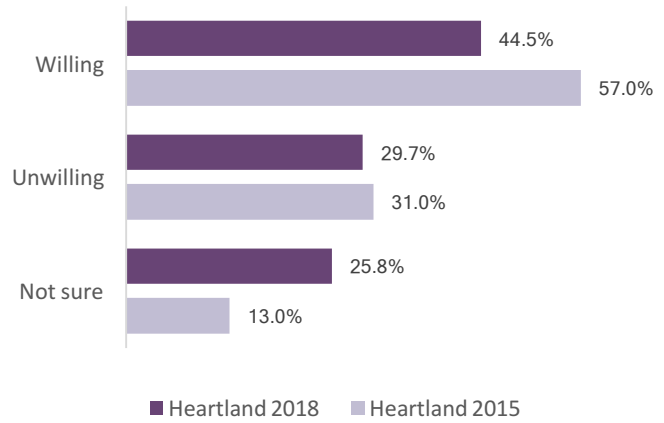
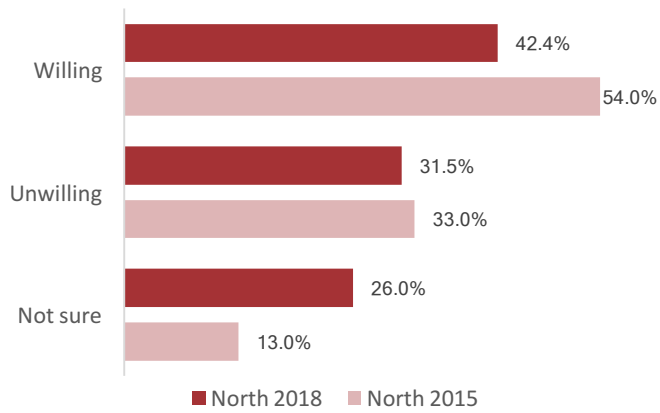
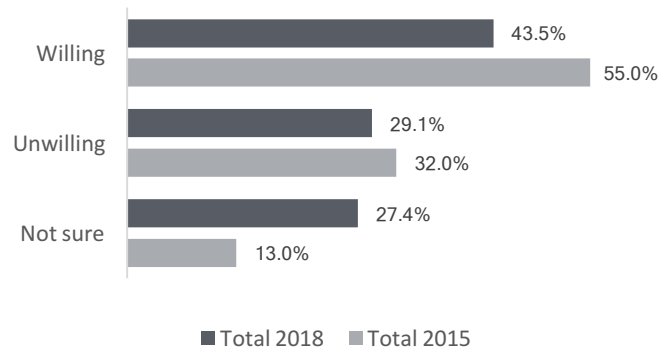


■ Tampa Bay 2018 ■ Tampa Bay 2015

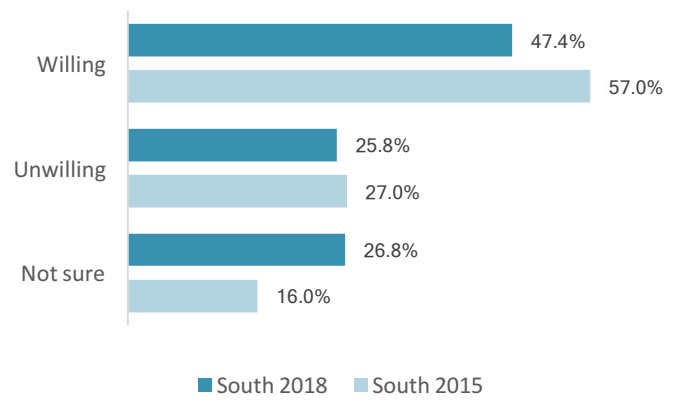
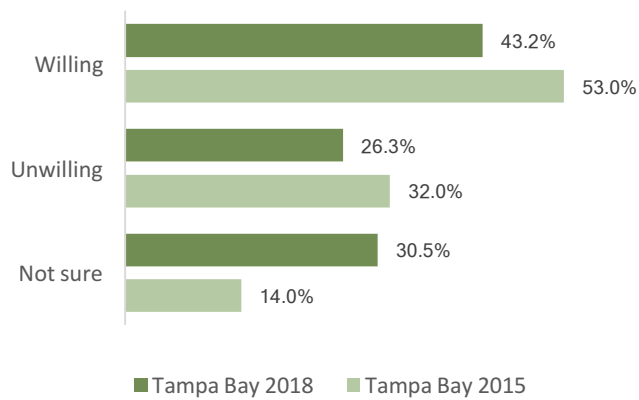
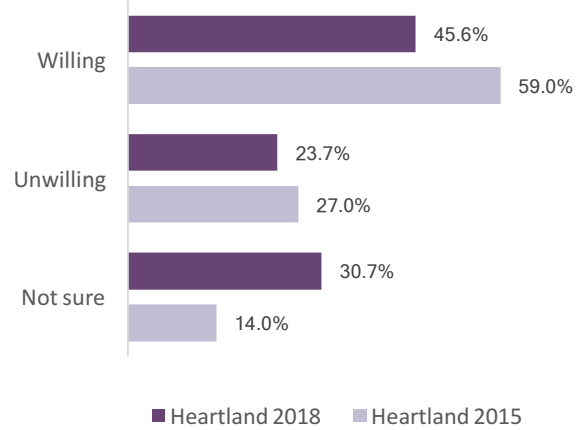
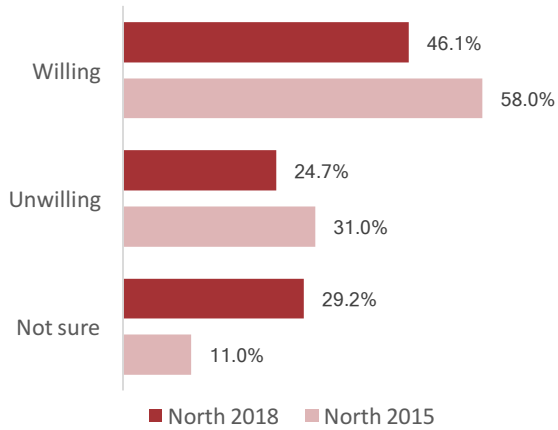
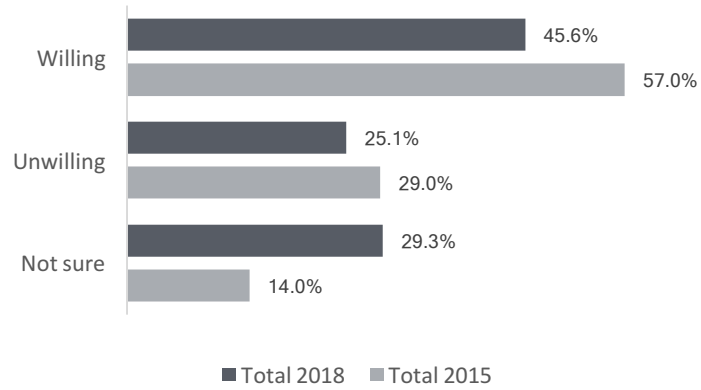


■ South 2018 ■ South 2015

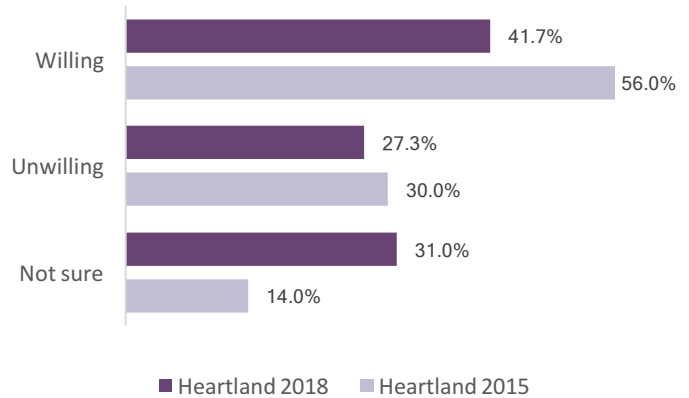
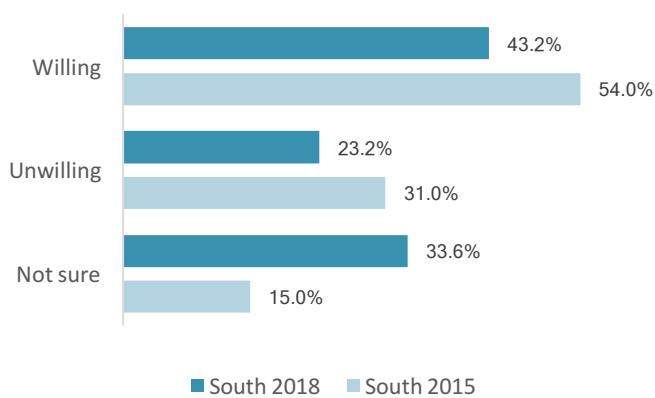
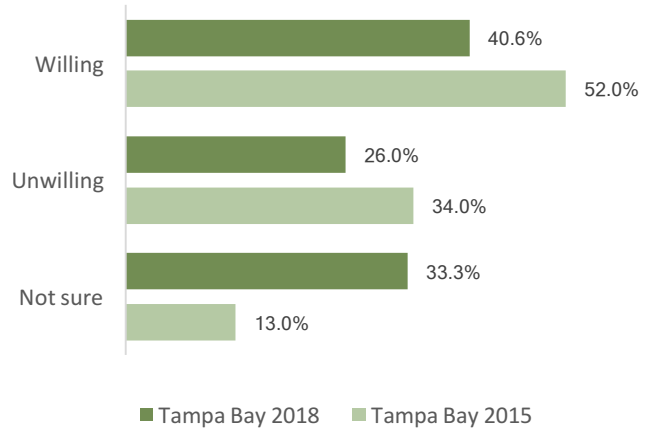
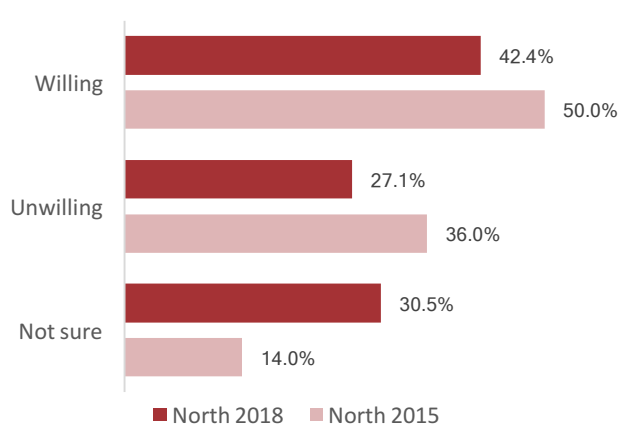
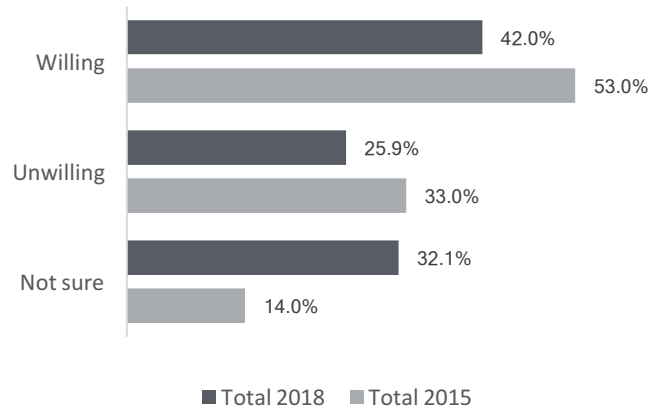
### To raise lake levels



### To increase river flows

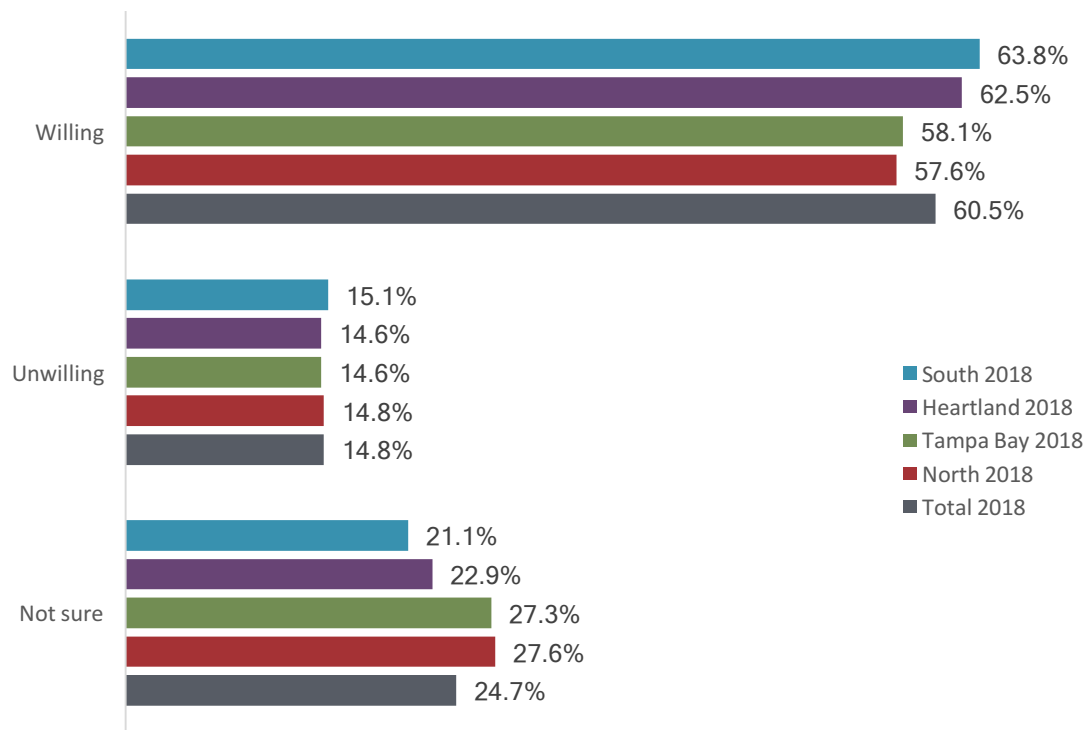


### To raise groundwater levels

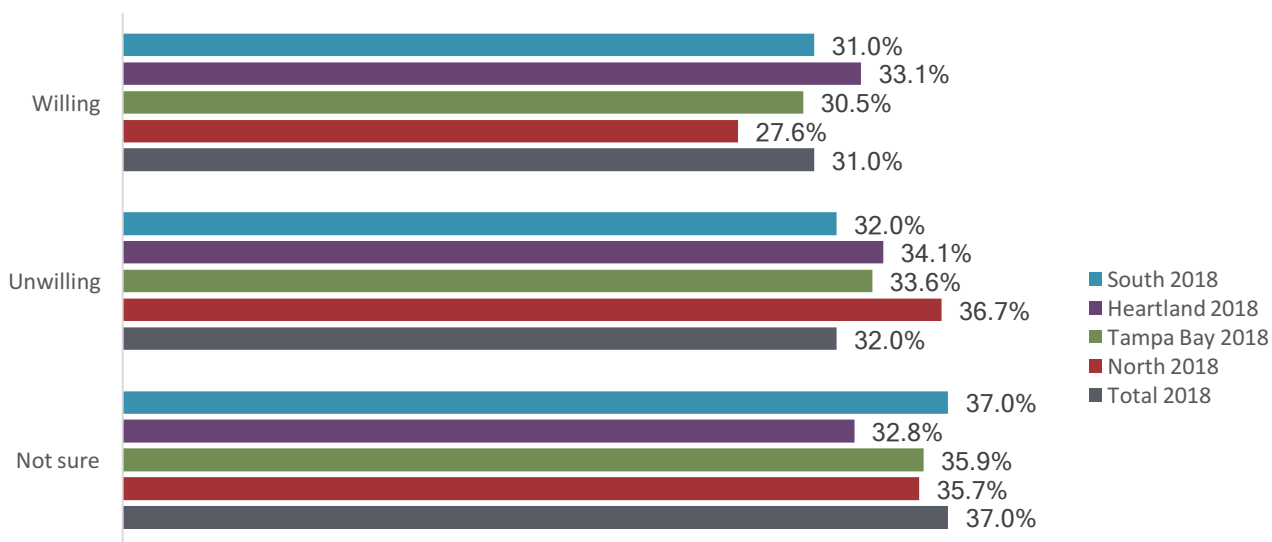




**To restore local wetlands (New question in 2018)**

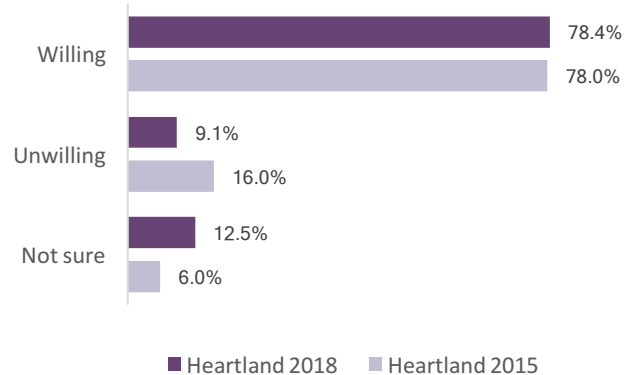
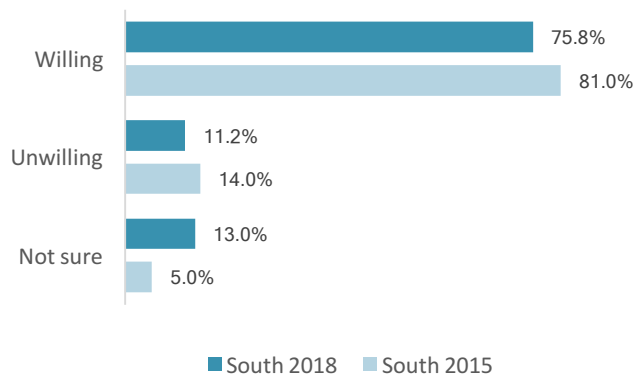
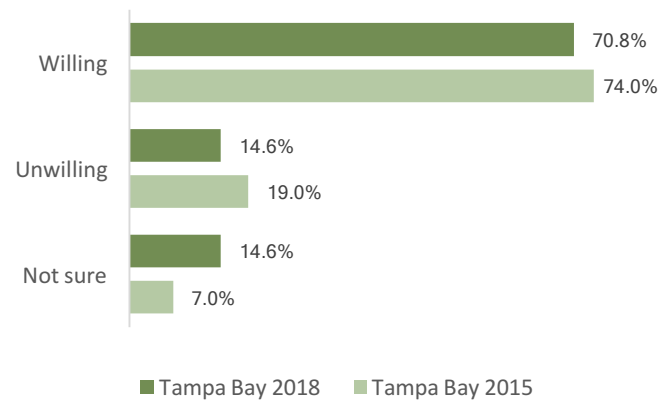
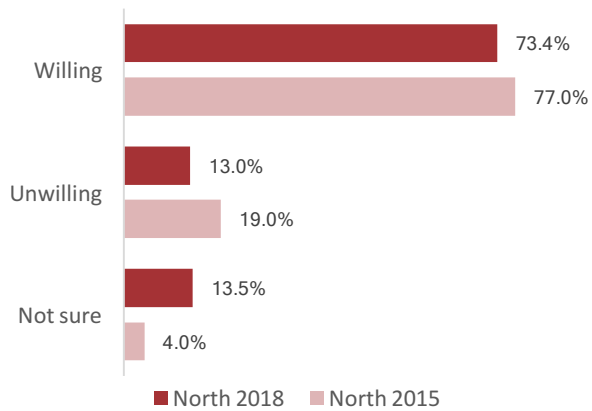
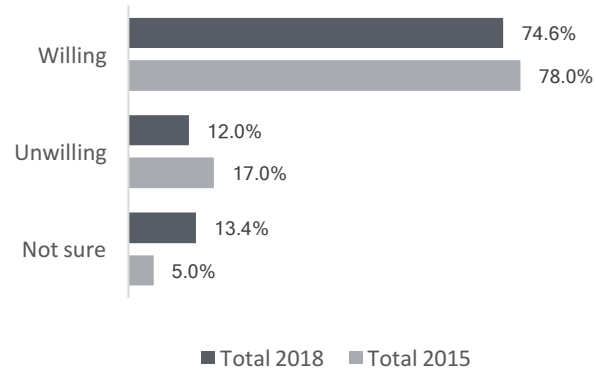


**To recharge local aquifers (New question in 2018)**

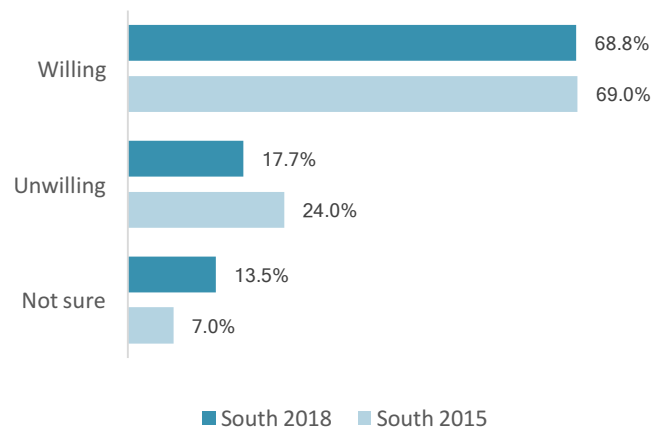
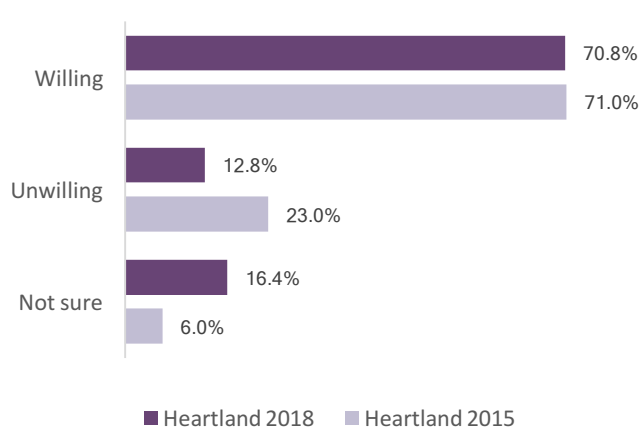
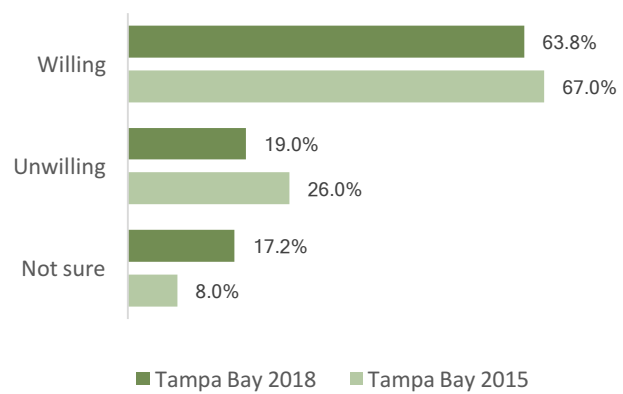
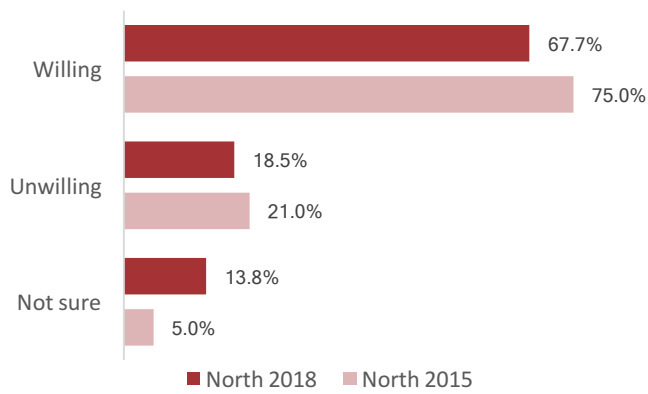
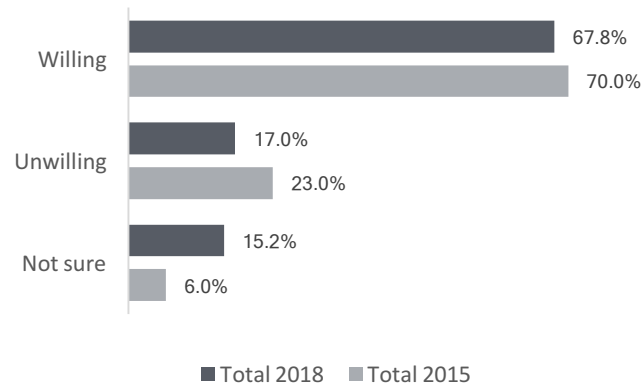


**A second level of wastewater treatment produces purified water that is determined to be better than drinking water standards by the Florida Department of Environmental Protection. Please tell me if you are willing, unwilling or not certain about using purified water for the following purposes:**

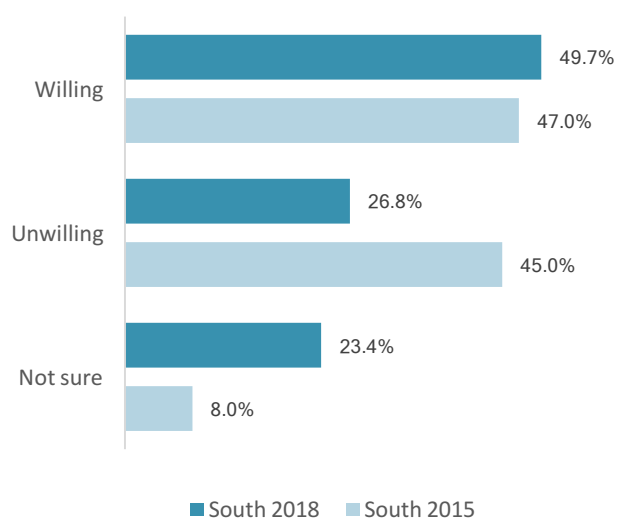
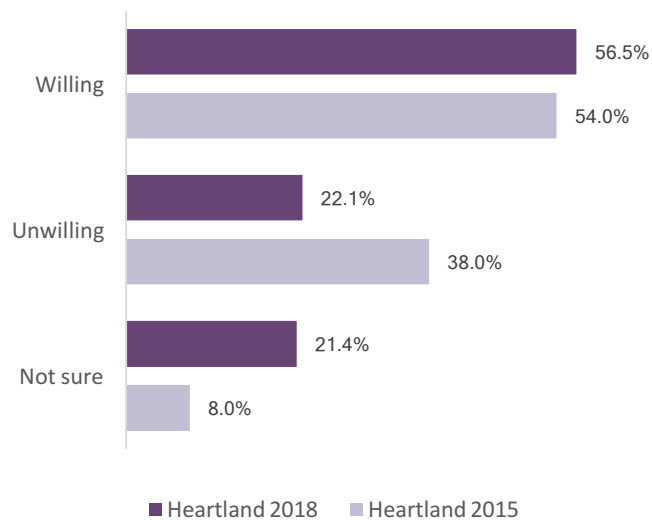
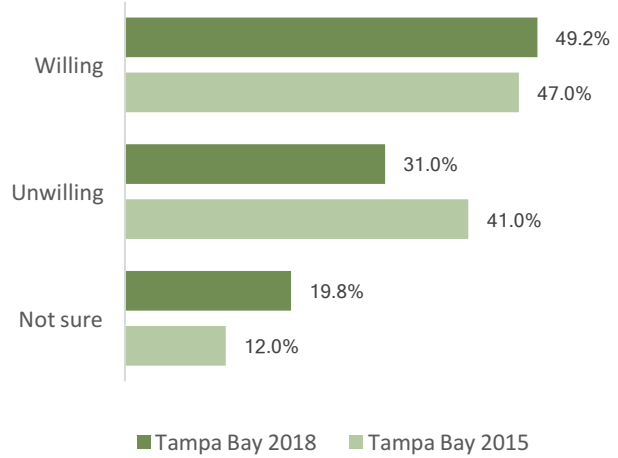
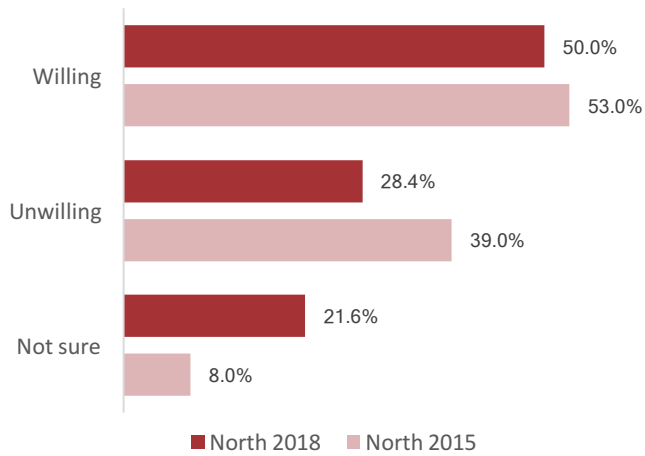
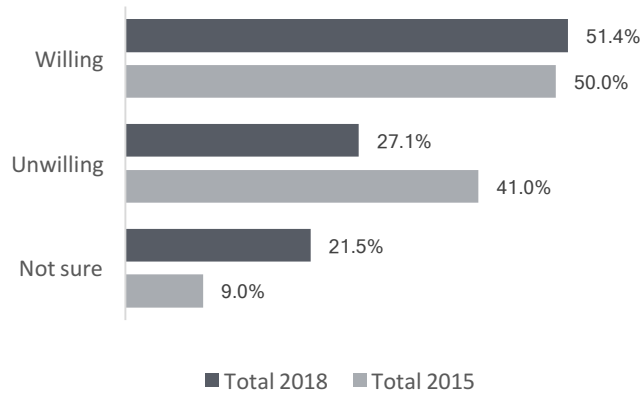
**To water vegetables in your garden**



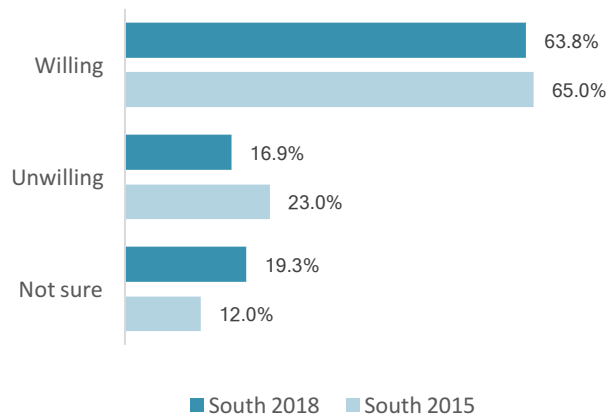
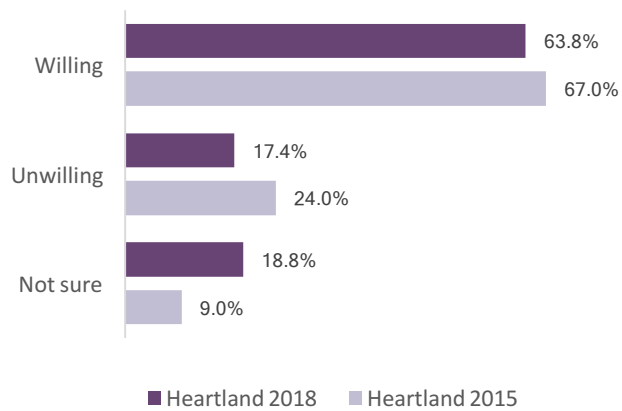
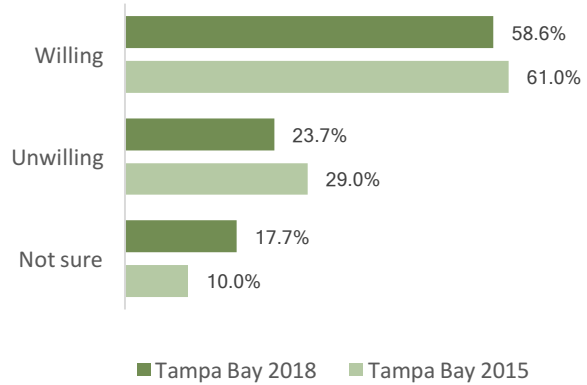
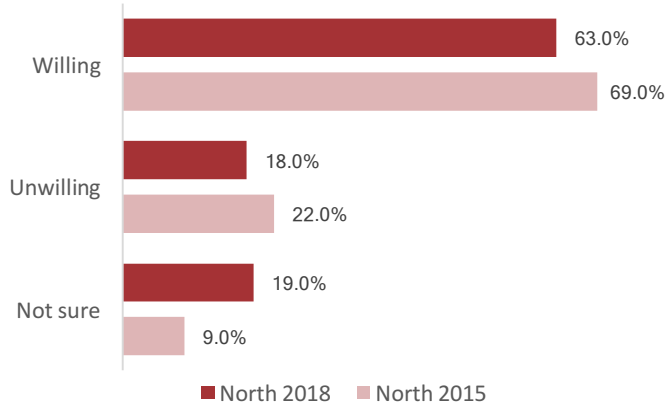
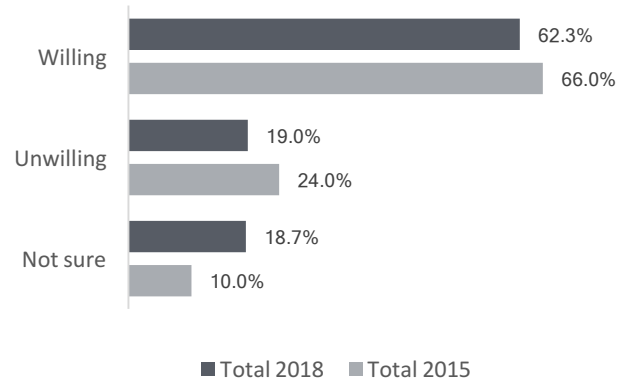
### To take a shower or bath



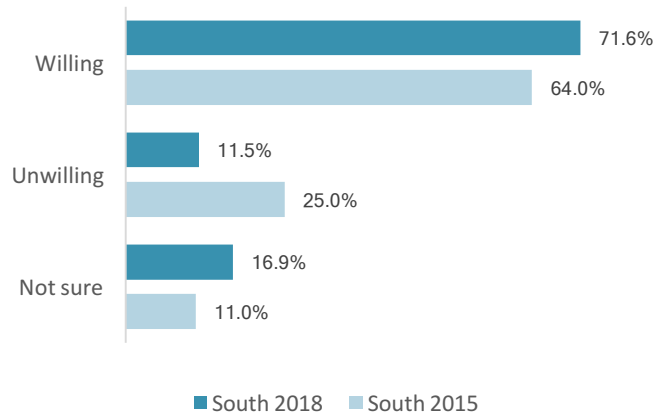
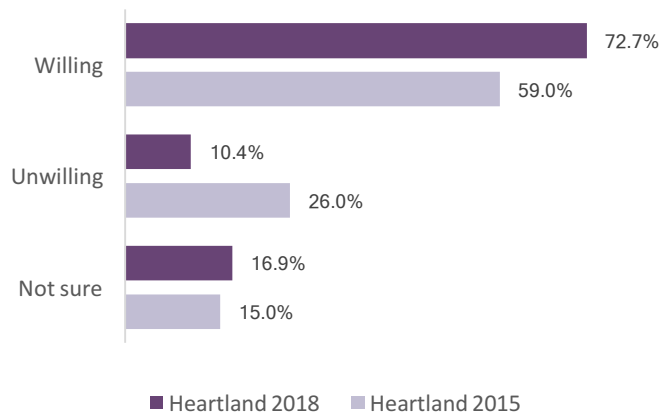
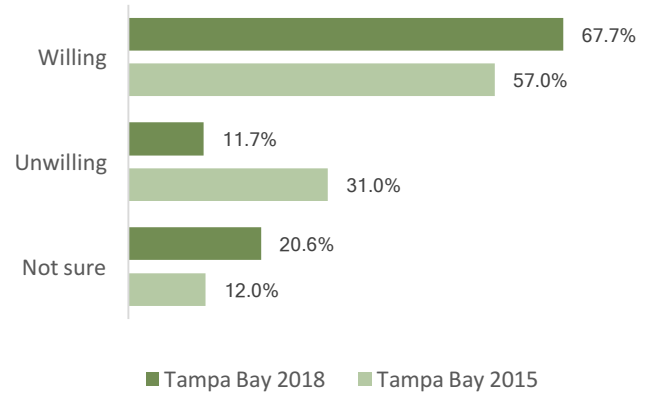
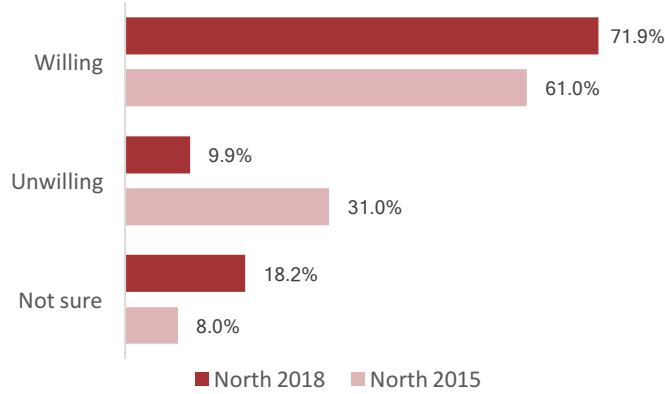
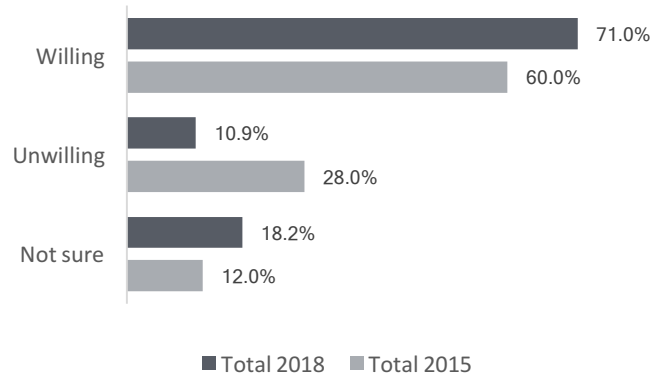
### To drink



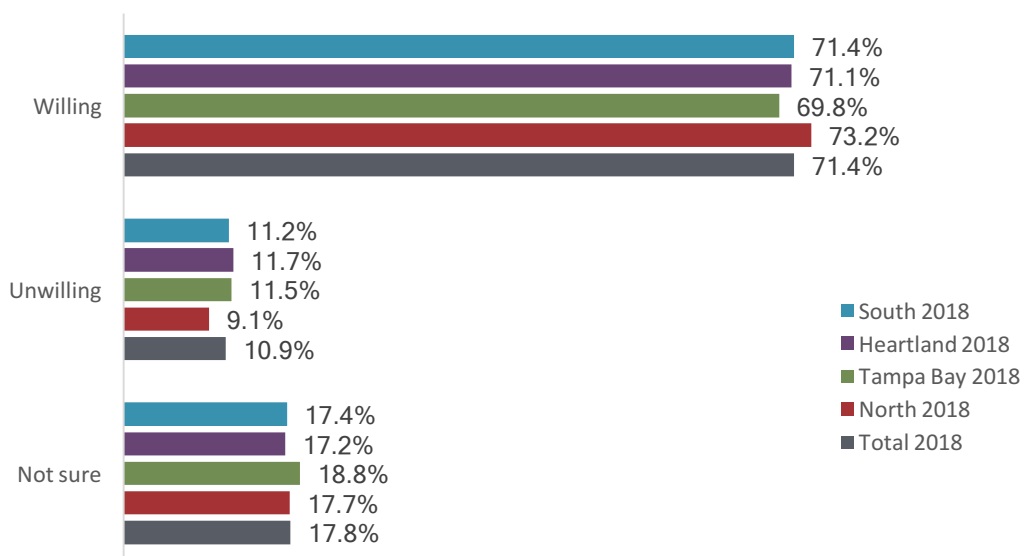
### To swim in



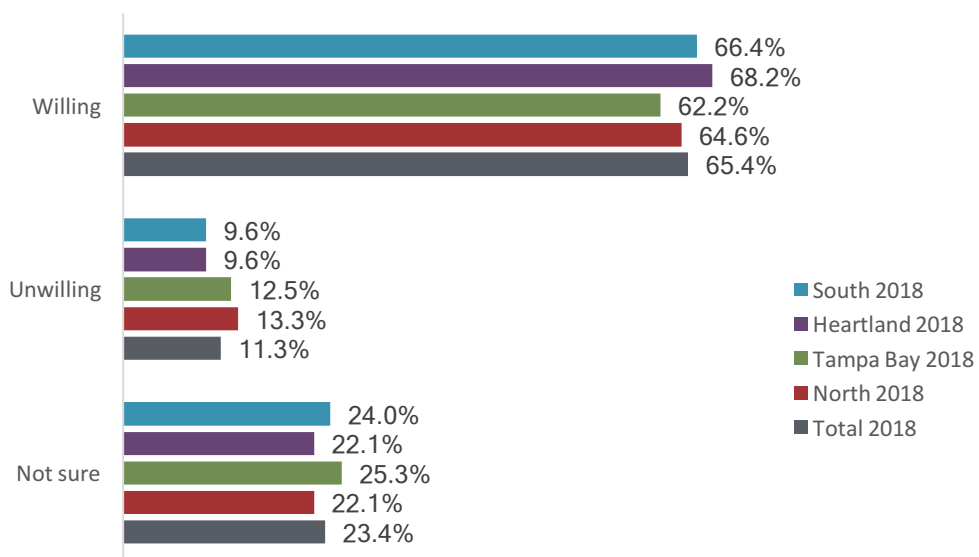
## To add to existing water supplies like local lakes and rivers



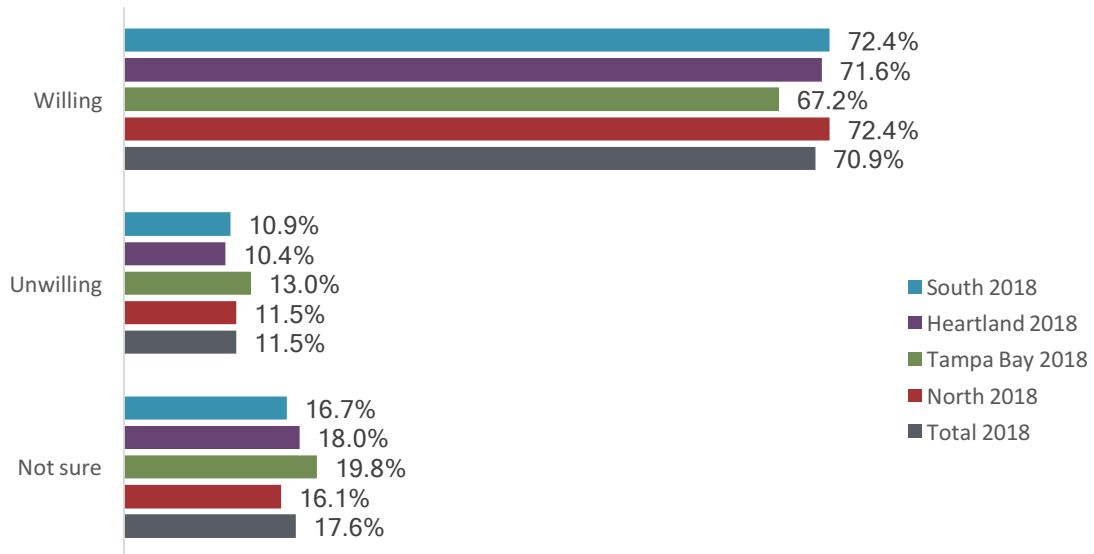
### To restore local wetlands *(New question in 2018)*



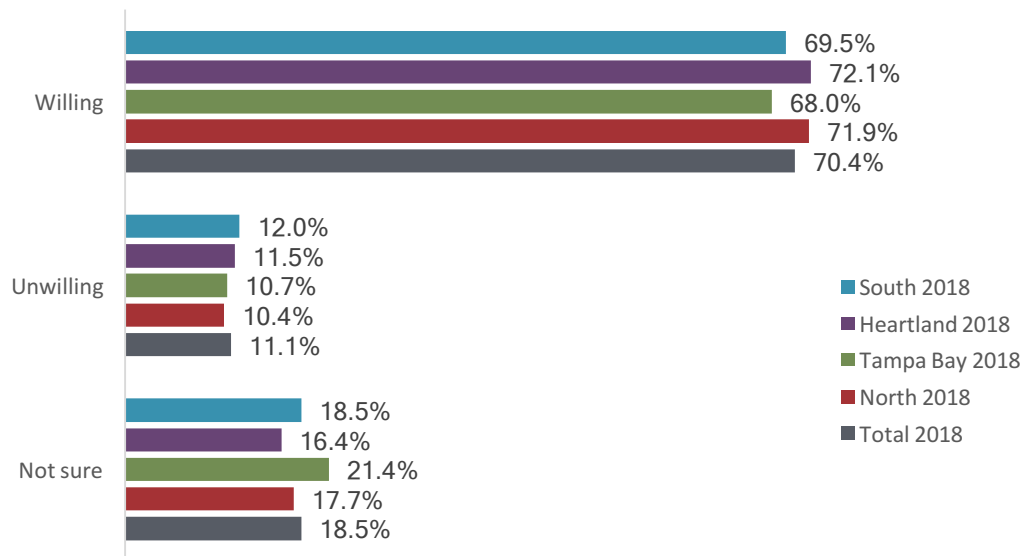
### To recharge local aquifers *(New question in 2018)*



**To raise lake levels (New question in 2018)**

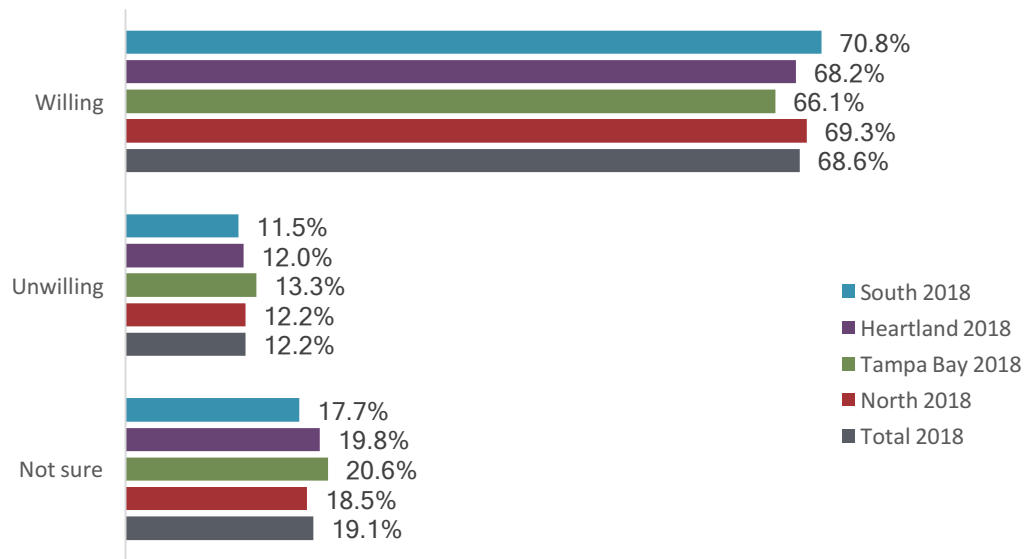


**To increase river flows (New question in 2018)**





**To raise groundwater levels** *(New question in 2018)*





# Lawn Irrigation

Questions regarding respondents' uses of lawn irrigation were measured with the following questions:

- Do you have a lawn?
- Do you have an in-ground irrigation system for your landscape?
- What is the water source for your outdoor irrigation?
- How often do you water your lawn in the winter?
- How often do you water your lawn in the summer?

The percent of respondents who have a lawn were similar to the 2015 sample with 86.1% of 2018 respondents reporting having a lawn compared to 85% who had one in 2015. Differences in responses to the question of whether or not a respondent has a lawn were significant across the regions with respondents from the North region being most likely to have a lawn (90%) and respondents from the South and Tampa Bay regions being least likely to have a lawn at 82.3% and 82.8%, respectively. For this sample, 6.8% more of Tampa Bay respondents reported having a lawn compared to the 76% that reported doing so in 2015.

Nearly 60% of the sample reported having an in-ground irrigation system, an increase over the 51% that reported having one in 2015. Each region surveyed also had higher percentages of respondents with lawns compared to 2015.

Respondents were most likely to get water for their outdoor irrigation from a water utility (42.9%, +6.9% from 2015) or from reclaimed water (27.8%, +10.8%). Fewer respondents reported getting their outdoor irrigation water from a well compared to 2015 (18.3% vs. 34%). The regions were statistically different from each other with respondents from the South region most likely to use reclaimed water as their water source for outdoor irrigation (34.4% +13.4% from 2015). The other regions matched the overall sample and were most likely to use a water utility as their water source.

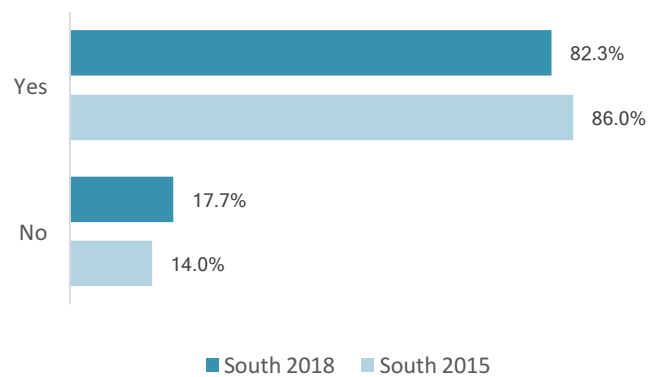
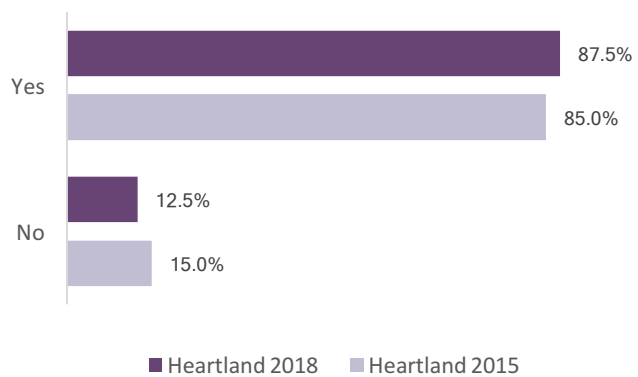
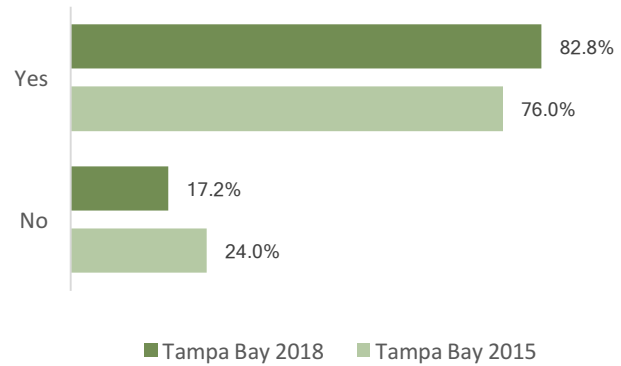
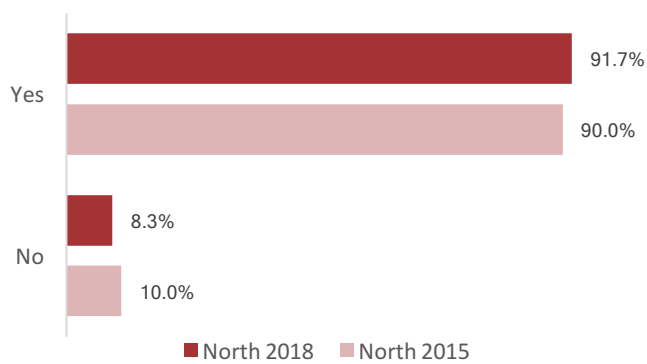
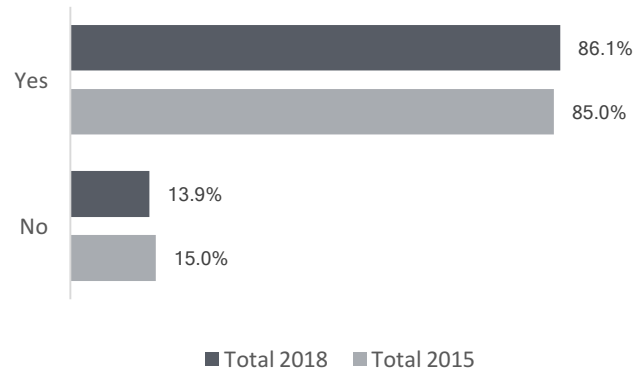
Interestingly, the percentage of respondents reporting that they never water their lawn during the winter dropped from 36% in the 2015 survey to 18.2%, and the percent of respondents who reported watering their lawn twice a week jumped from 17% in 2015 to 32.1%. The number of respondents watering their lawns once a week stayed the same at 42%.

Responses by region were statistically different from each other with respondents from the North region being least likely to water their lawn more than twice a week during the winter at 21.7%. Respondents from the South and Heartland regions were most likely to water their lawns more than twice a week with 47.4% and 41.3% reporting that frequency respectively.

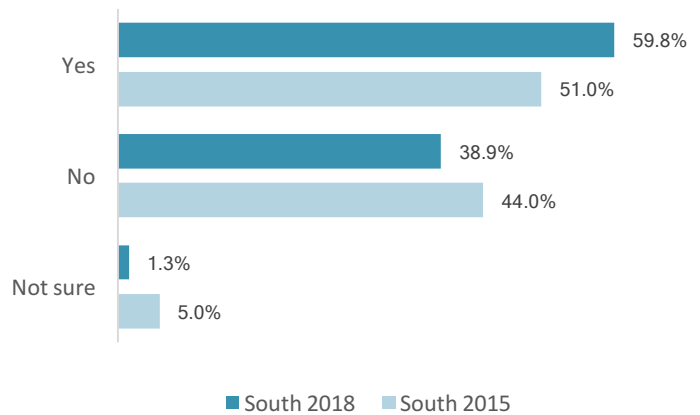
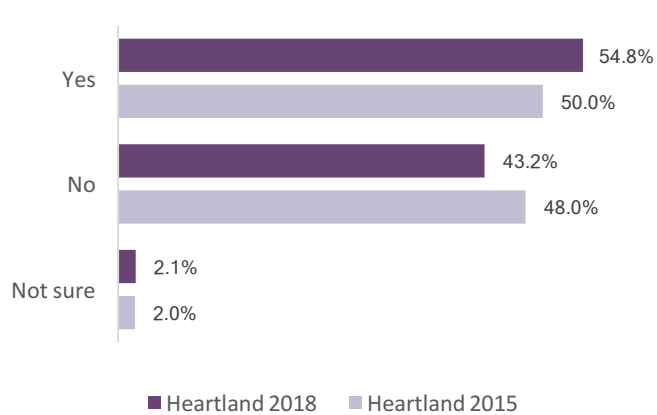
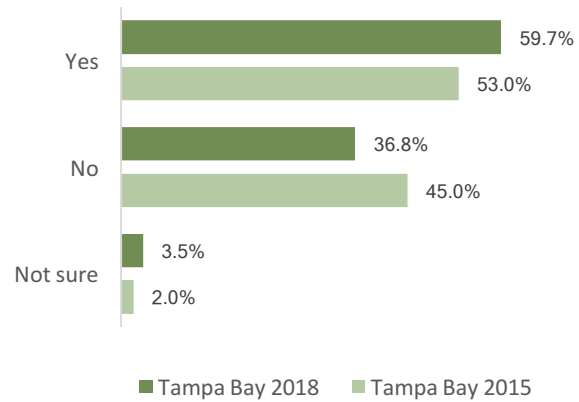
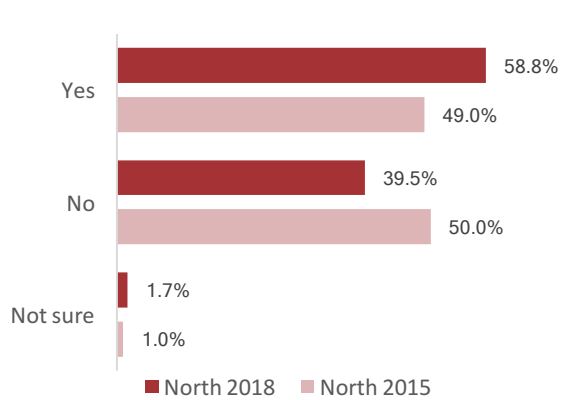
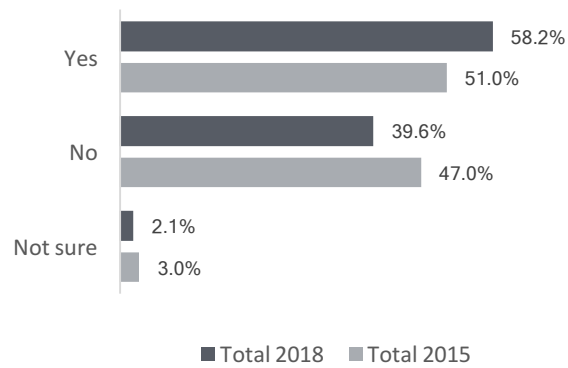
As would likely be expected, the frequency of lawn watering during the summer was higher than what was reported for the winter with 59.7% of the sample saying they water their lawn twice a week or more than twice a week, up 9.7% from 2015. For this question, respondents from the North region were most likely to water their lawn twice a week or more with 66.8% answering that way (up from 26.8% in 2015).

## Do you have a lawn?

\*Statistical Differences Between Regions in 2018

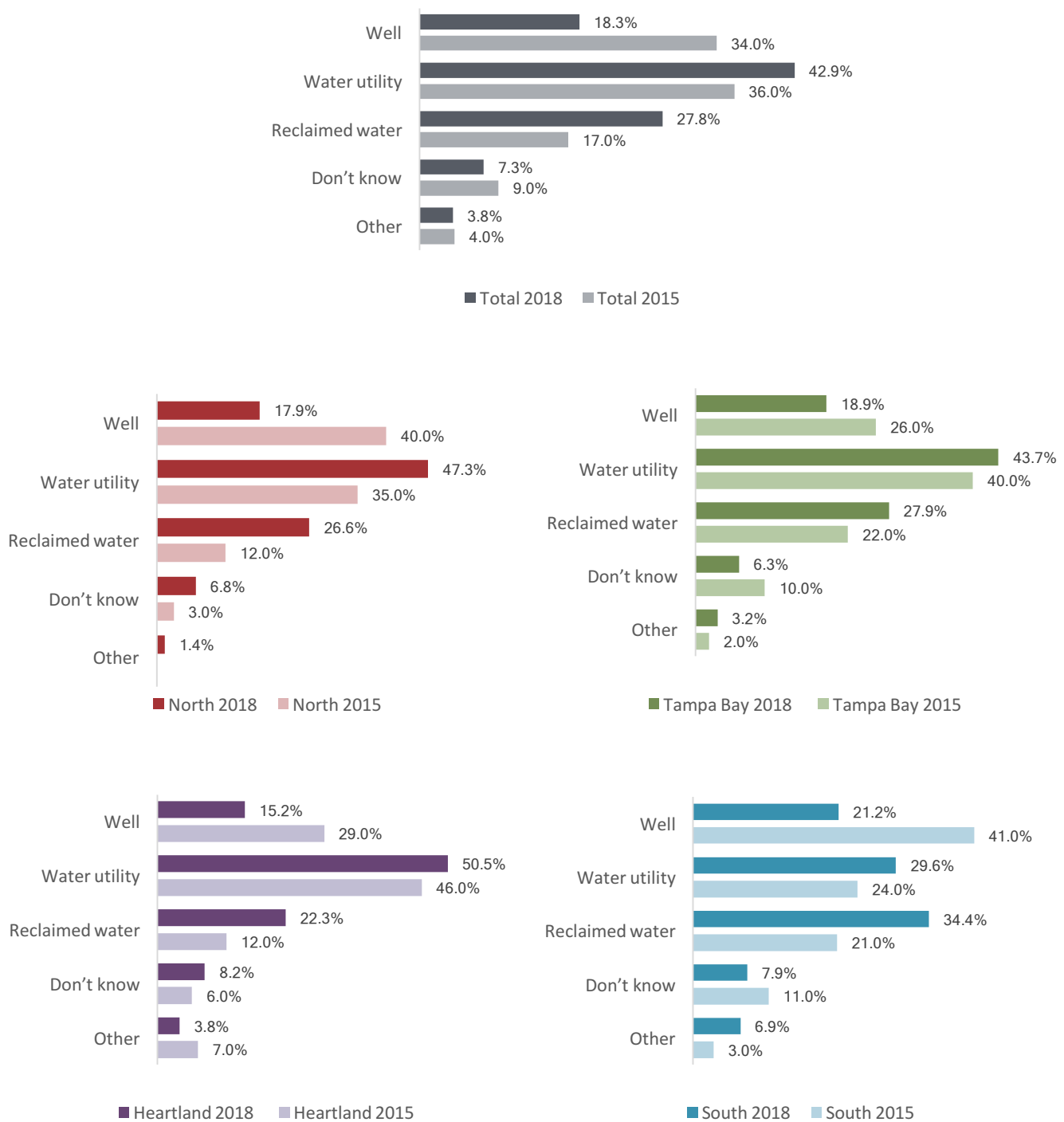


## Do you have an in-ground irrigation system for your landscape?



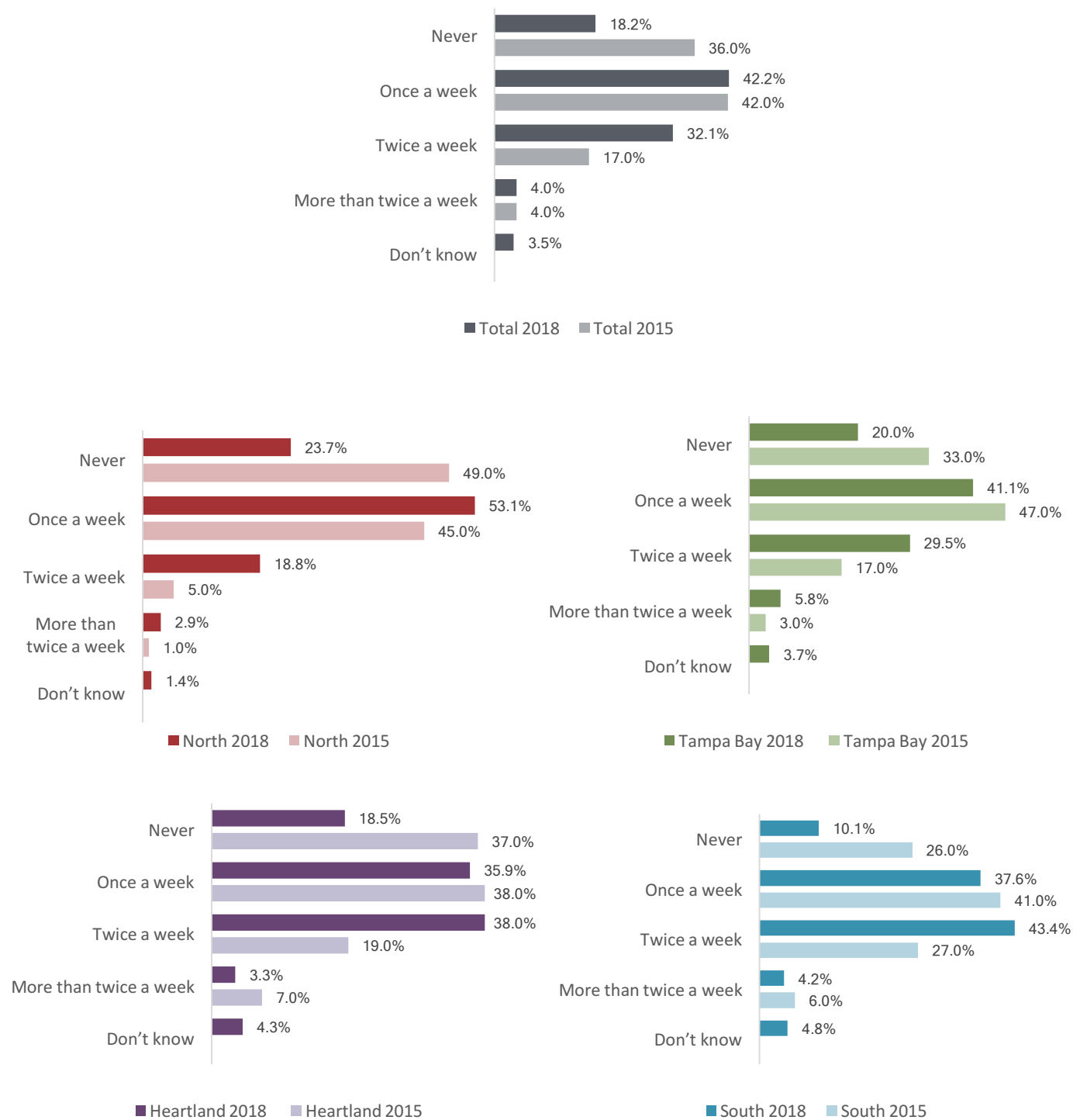
**What is the water source for your outdoor irrigation?** (Only asked to those who reported having an in-ground irrigation system in 2015)

\*Statistical Differences Between Regions in 2018



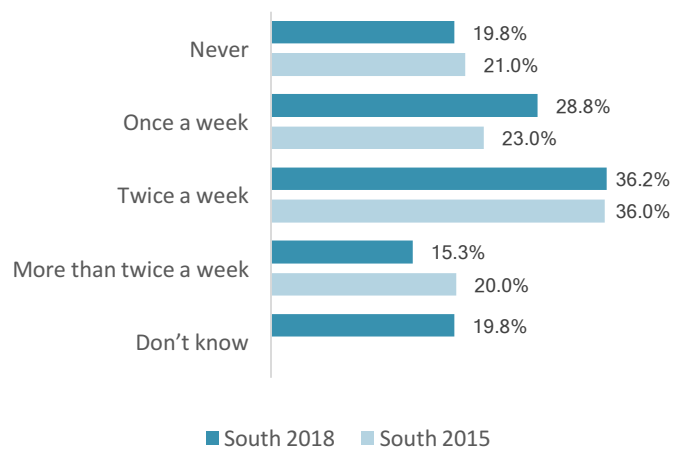
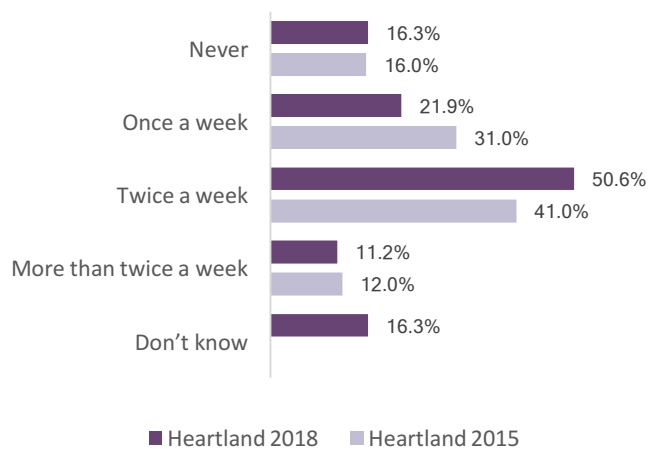
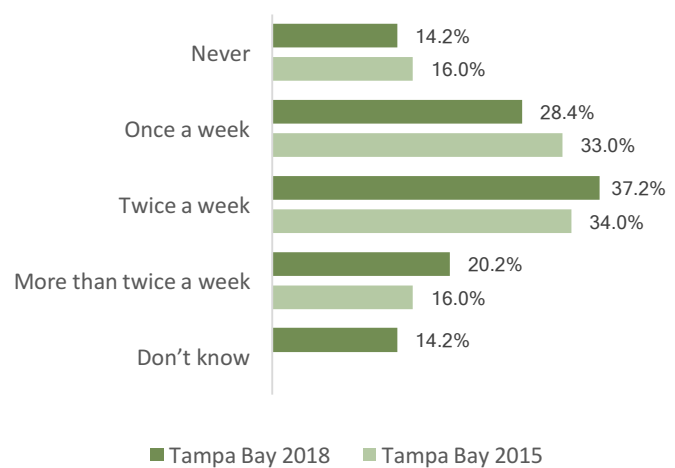
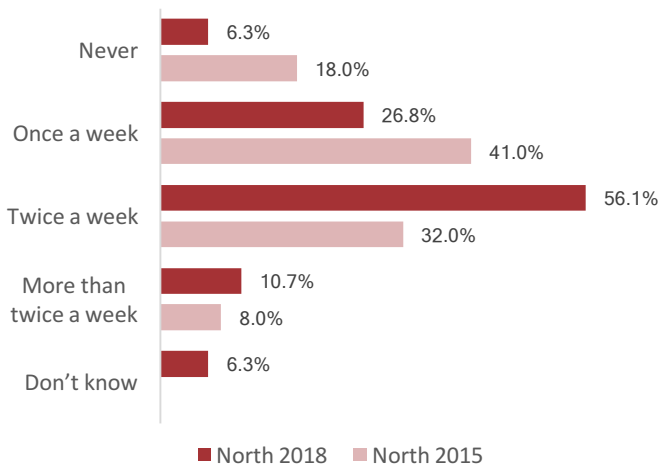
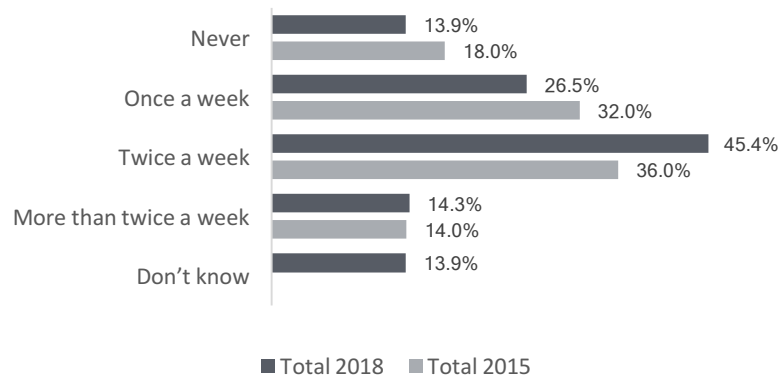
**How often do you water your lawn in the winter?** *(Only asked to those who reported having an in-ground irrigation system)*

**\*Statistical Differences Between Regions in 2018**



**How often do you water your lawn in the summer?** *(Only asked to those who reported having an in-ground irrigation system)*

**\*Statistical Differences Between Regions in 2018**







# Septic Systems

Respondents' opinions and willingness to take action regarding their septic systems were measured with the following questions:

New questions in 2018

- Does your home have its own septic system?
- How many years old is your septic system?
- How often do you have your septic system tank pumped?
- How often do you have your septic system tank inspected? This is when an inspector comes to your home to see if the system is working properly using a dye test or an open pit test.
- How much would you be willing to pay to have your septic system inspected once every three years if you knew it would help protect the water quality of the springs?
- If you were putting in a new septic system or enhancing the existing system, would you be willing to pay for a system with better treatment technology resulting in improved water quality in the springs?
- How much would you be willing to pay to have this improved septic system installed if you knew it would help protect the water quality in local springs?
- Would you be willing to connect to a central sewer system if you knew it would help protect the water quality of the local springs?
- How much would you be willing to pay to connect to a central sewer system if you knew it would help protect the water quality of the local springs?

Only 31% of the overall sample reported that their home does have its own septic system, resulting in a margin of error +/-4.64% at the 95% confidence level for questions related to septic systems. Responses by region were statistically different, and respondents from the North region were most likely to have a septic system at 46.6% compared to Tampa Bay's 19%, Heartland's 35.2% and the South region's 22.4%.

A slight majority of those surveyed had a septic system between 1-10 years-old (26.0%). The second most common response was 'don't know' at 22.6% followed by 18.2% of respondents reporting a septic system 11-15 years-old (18.2%). This break down was largely mirrored in the results by region. 14.3% of the sample reported having a septic system that is 26 years or older.

With 44.2% of the sample having a septic system that is 15 years or younger, these results indicate that our sample overall owns septic systems that were put in fairly recently, a key point to keep in mind when considering the results of questions regarding willingness to invest in improvements in systems. Another key insight from this question is that nearly quarter of respondents (22.6%) were unsure of how old their system is. Responses by region were not statistically different.

The most common response to the question of "how often do you have your septic system tank pumped" was every 1-3 years at 27.1% of respondents, slightly greater than the second most common response of every 4-6 years at 24.4%. Interestingly, nearly as many respondents said they did not know how often they have their septic tank pumped at 23.3%. Only 11.2% of the sample said they never have their septic system pumped.

The results of the question "how often do you have your septic system tank inspected," when considered against the question regarding frequency of septic system pumping, are striking; 63% of the total sample said they either never have their septic system inspected or don't know if they have. So, even if over half of the sample (51.5%) is having their septic system pumped at least every 6 years, respondents are unlikely to have it inspected at the same time or are unsure whether it is a part of the pumping process.

A little less than half (41.8%) of the overall sample said it would pay \$50-\$100 to have a septic system inspection once every three years if it would help protect the water quality of the springs. The second most common response was \$0

with 30.3% of the sample reporting that way. Simply put, respondents are willing to pay some money to do their part to protect the water quality of the springs but not much. Response patterns were similar across the counties though Tampa Bay respondents were most willing to pay \$101-\$200 for an inspection with 19.6% of respondents reporting that way.

Over half of the total sample (56.1%) reported it would be willing to pay for a system with better treatment technology to improve the water quality of the springs. 34.3% of respondents said they were not sure about such an investment. So, rather than the sample being unwilling, it could just be unsure about what that investment looks like. Response patterns were similar across the counties.

The rubber meets the road with the question about how much an individual would be willing to pay to have the improved septic system installed if it would help protect the water quality of the springs. A majority of the sample (65.8%) said it would be willing to pay between \$50-\$2,500 to have the system installed, results that were largely mirrored across the regions. Less than 10% of each sample said they would be unwilling to pay anything to install the system indicating a sample that may be willing to do its part to help protect the health of the springs. Of course, sentiment does not always equate to action.

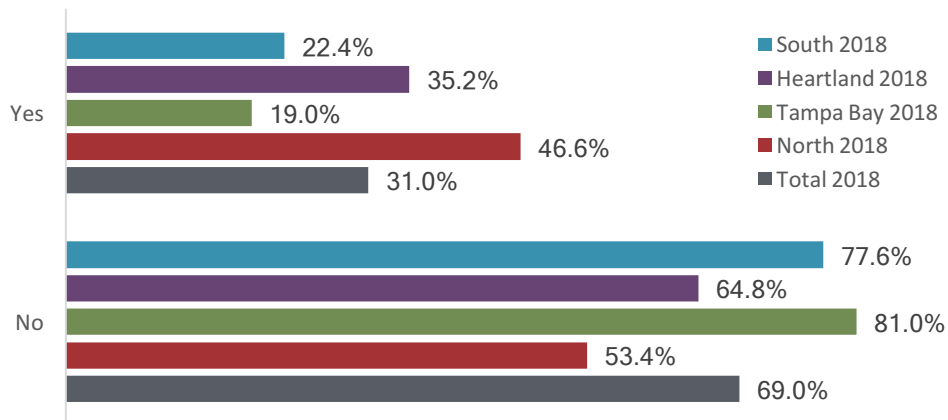
When asked about connecting to a central utility, a greater share of the sample (77.2%) said it would be willing to connect to a central sewer system to help protect the water quality of the local springs, well over the 56.1% who said they would be willing to pay for enhancements to their septic system.

While a majority of the sample (58.6%) again said it would be willing to pay between \$50-\$2,500 to connect to a central sewer system, a greater share of the total sample said it would be unwilling to pay anything to do so than did when asked about paying for enhancements to their septic system (23.6% vs. 6.0%).

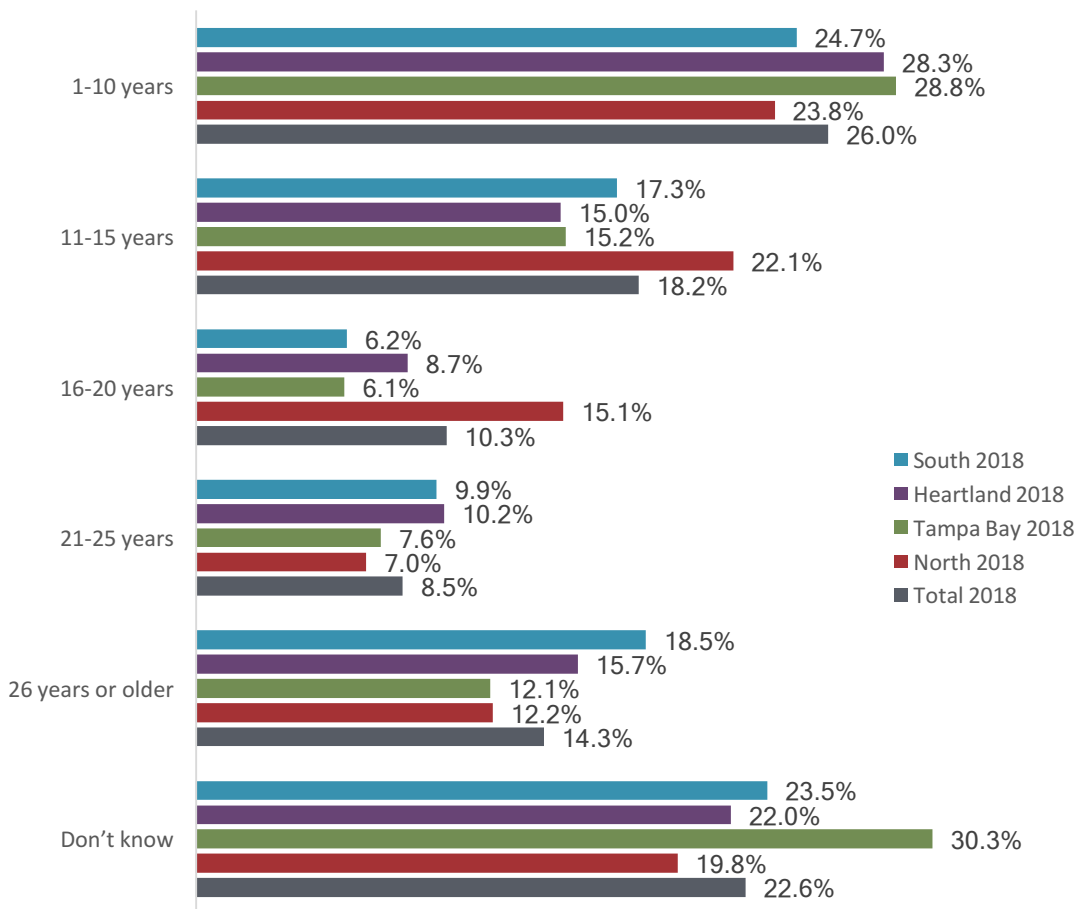
While the causes of these differences in willingness cannot be fully fleshed out using these results, one reason might be perceptions of ownership. Owners of septic systems might be more willing to “take care of their own house” and expect local government to handle matters related to the central sewer system, a public entity.

## Does your home have its own septic system?

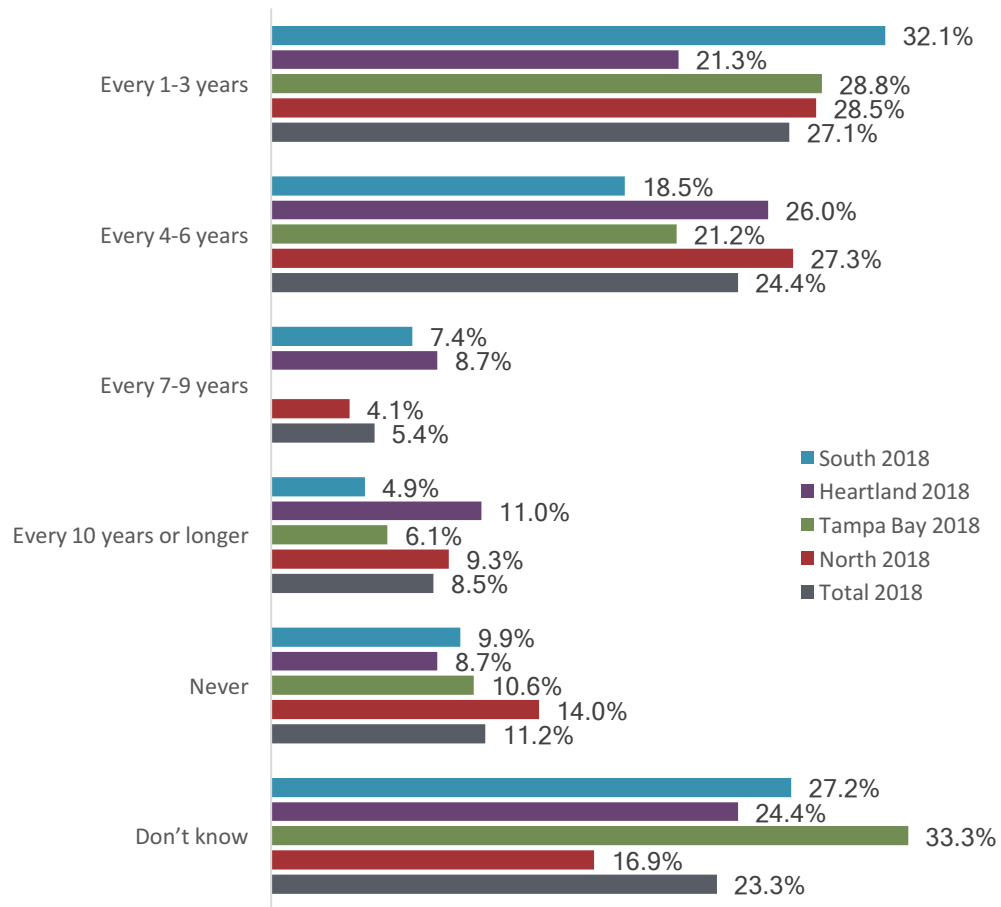
\*Statistical Differences Between Regions in 2018



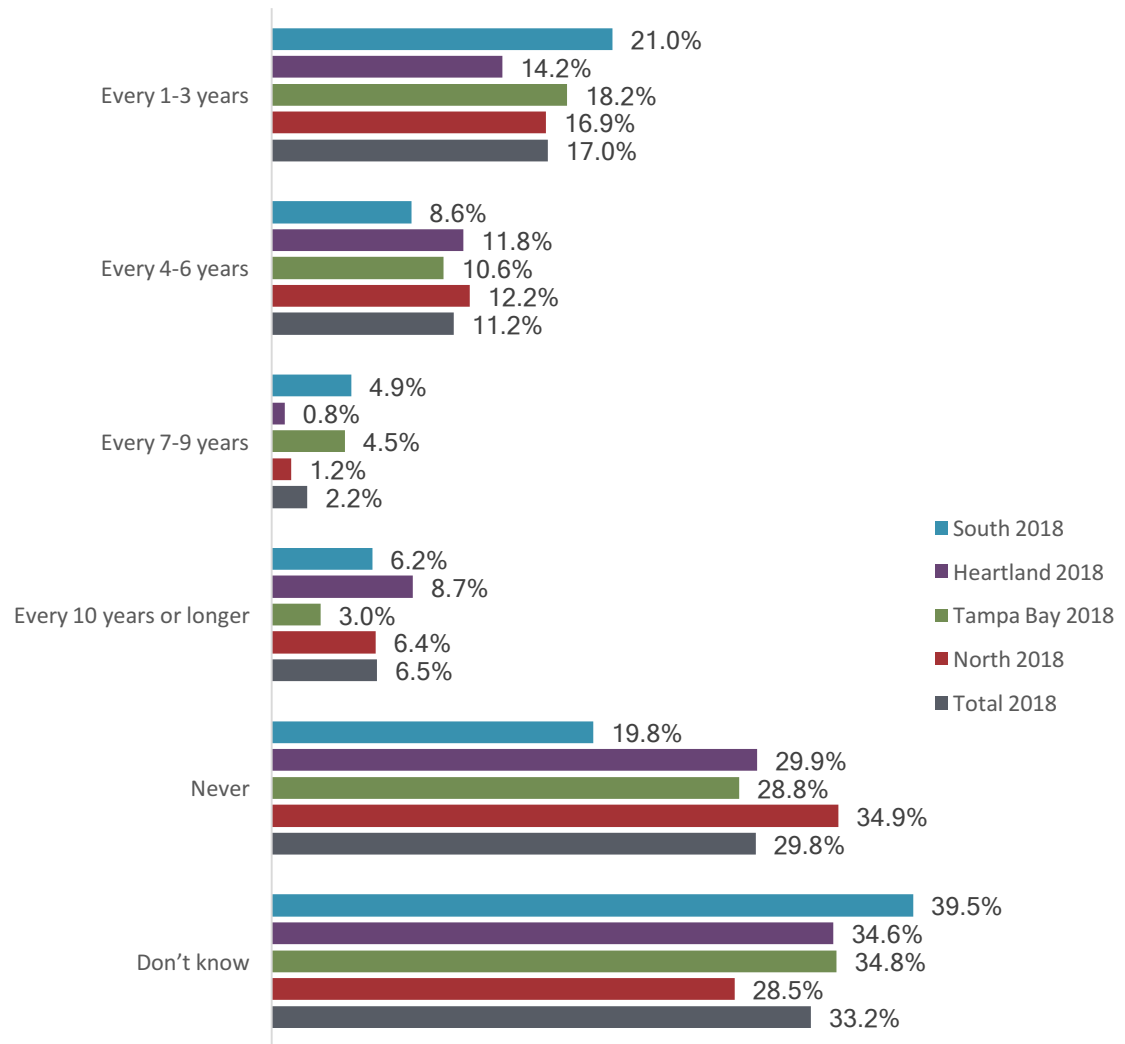
## How many years old is your septic system? *(Only asked to those who reported having septic system)*



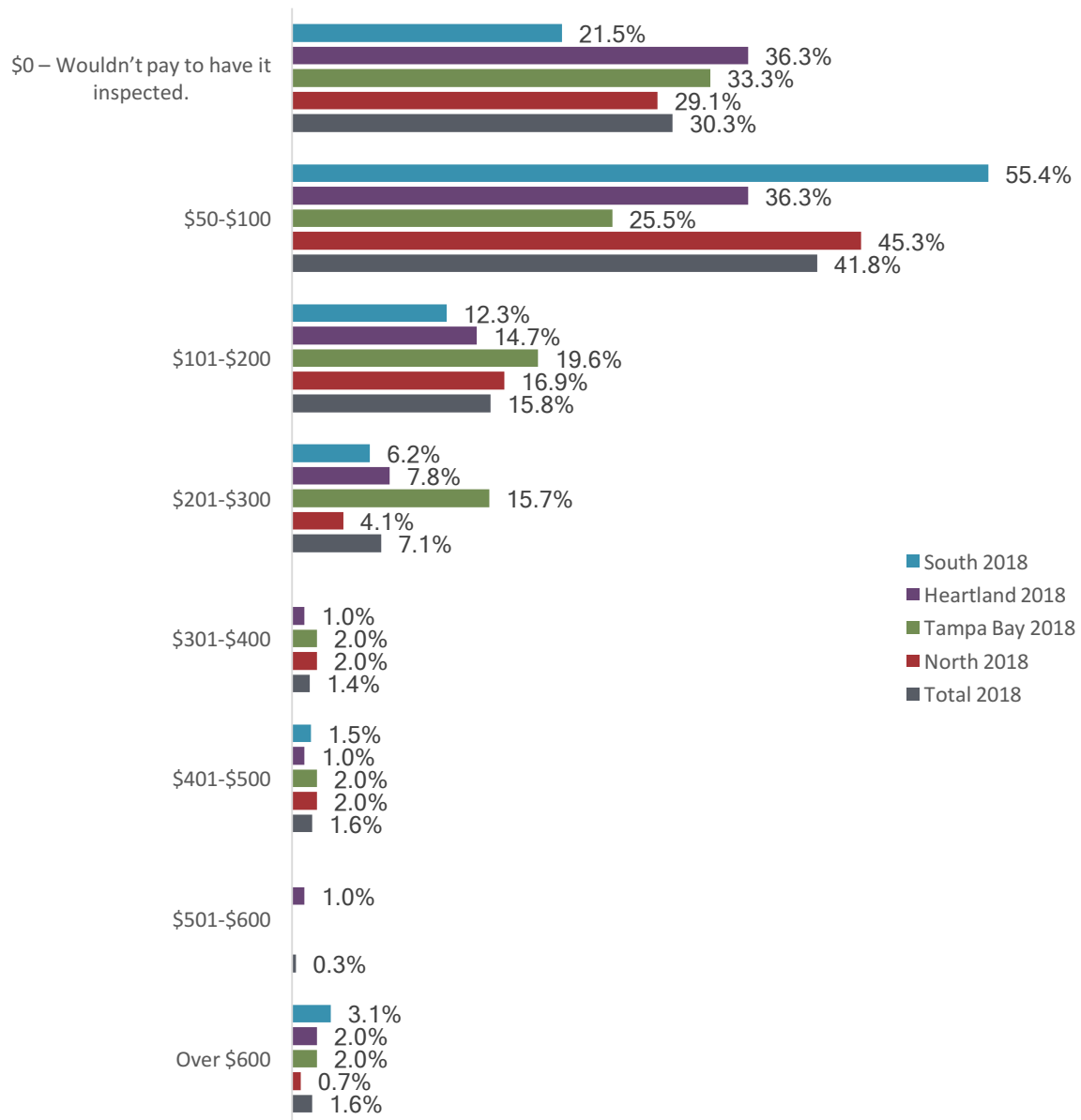
**How often do you have your septic system tank pumped?** *(Only asked to those who reported having septic system)*



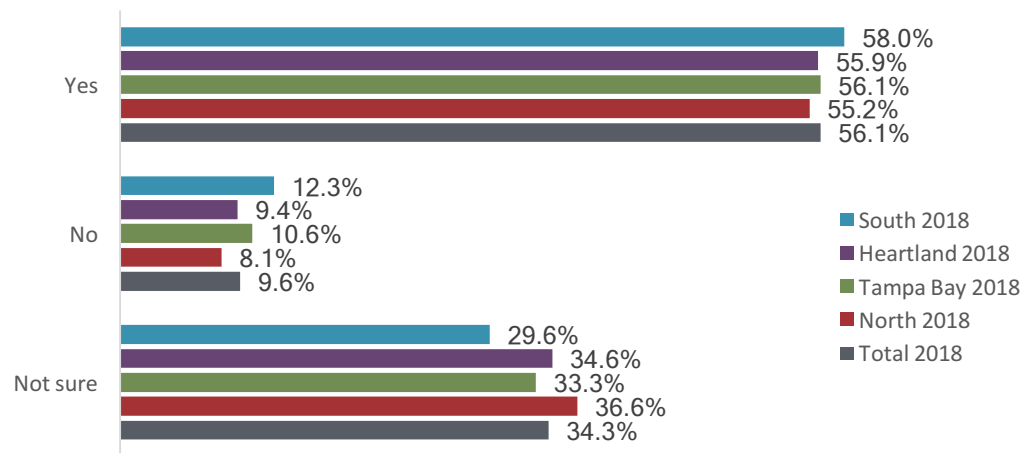
**How often do you have your septic system tank inspected? This is when an inspector comes to your home to see if the system is working properly using a dye test or an open pit test. (Only asked to those who reported having septic system)**



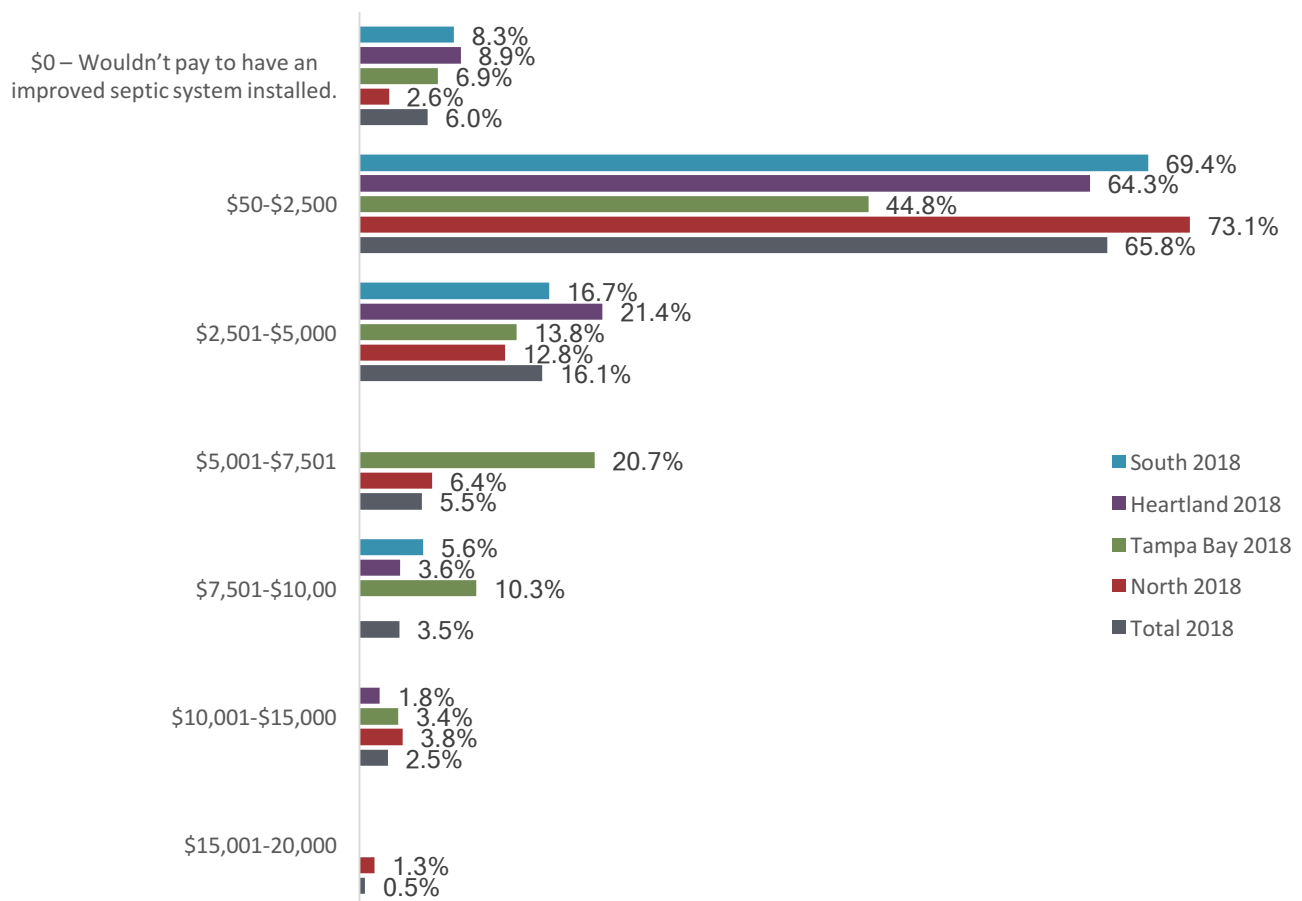
**How much would you be willing to pay to have your septic system inspected once every three years if you knew it would help protect the water quality of the springs? (Only asked to those who reported having septic system)**



**If you were putting in a new septic system or enhancing the existing system, would you be willing to pay for a system with better treatment technology resulting in improved water quality in the springs? (Only asked to those who reported having septic system)**

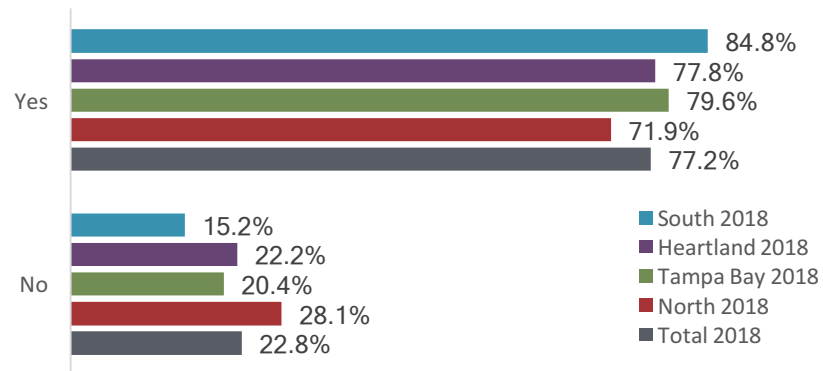


**How much would you be willing to pay to have this improved septic system installed if you knew it would help protect the water quality in local springs? (Only asked to those who reported having septic system)**

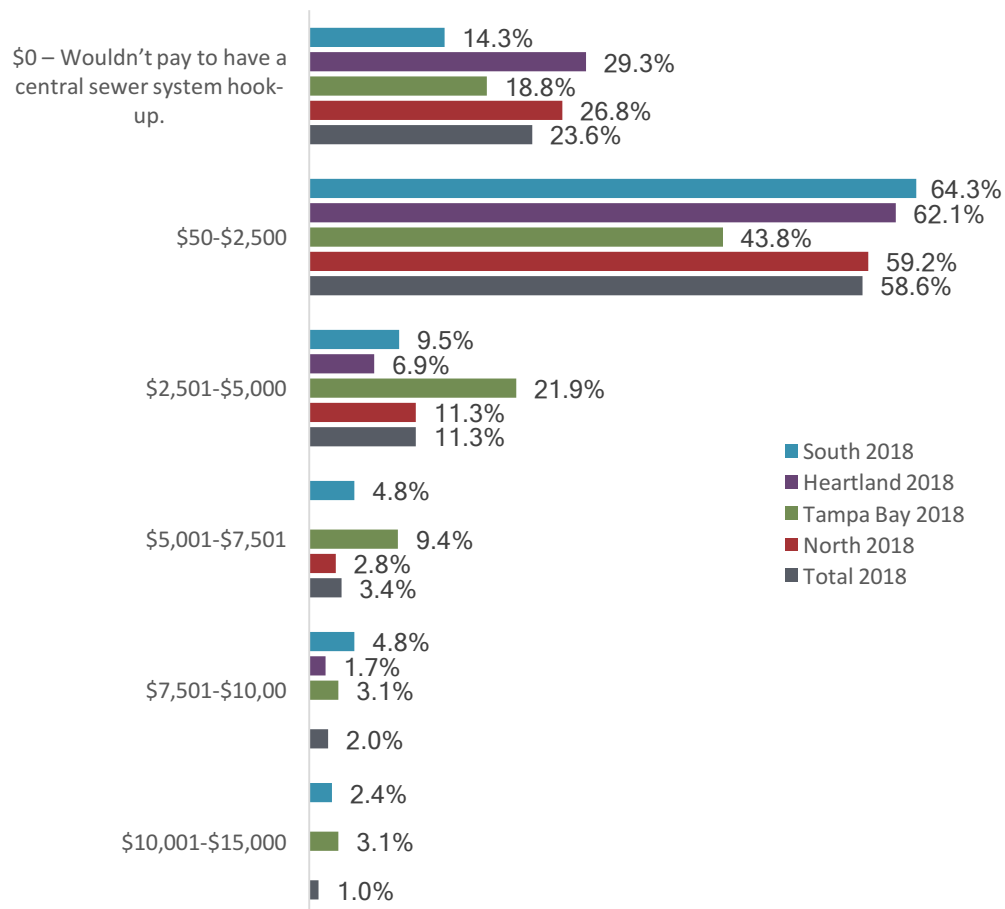




**Would you be willing to connect to a central sewer system if you knew it would help protect the water quality of the local springs? (Only asked to those who reported having septic system)**



**How much would you be willing to pay to connect to a central sewer system if you knew it would help protect the water quality of the local springs? (Only asked to those who reported having septic system)**





# Sources of Information and Their Trustworthiness

Respondents were also asked to name their sources of news and rate the trustworthiness of several entities. Questions for these purposes included the following:

- Where do you get most of your news?
- How often do you use the following social media?
  - Facebook
  - Twitter
  - YouTube
  - Pinterest
  - Google+ (not Google)
  - Snapchat
  - Tumblr
  - Instagram
  - LinkedIn
- How trustworthy are the following sources of information about water resources?
  - Traditional media such as radio, TV, newspapers
  - Social media such as the Internet, Facebook, Twitter
  - Southwest Florida Water Management District
  - Department of Environmental Protection
  - Local environmental group
  - Local utility company
  - Universities
  - US Geological Survey

While half of survey respondents still reported getting most of their news from TV news outlets, the figure dropped 26% from 2015, a trend seen across regions. Fewer respondents reported getting their news from social media (8.6%, -5.4% from 2015) and from friends/family/word of mouth (2.8%, -8.2% from 2015).

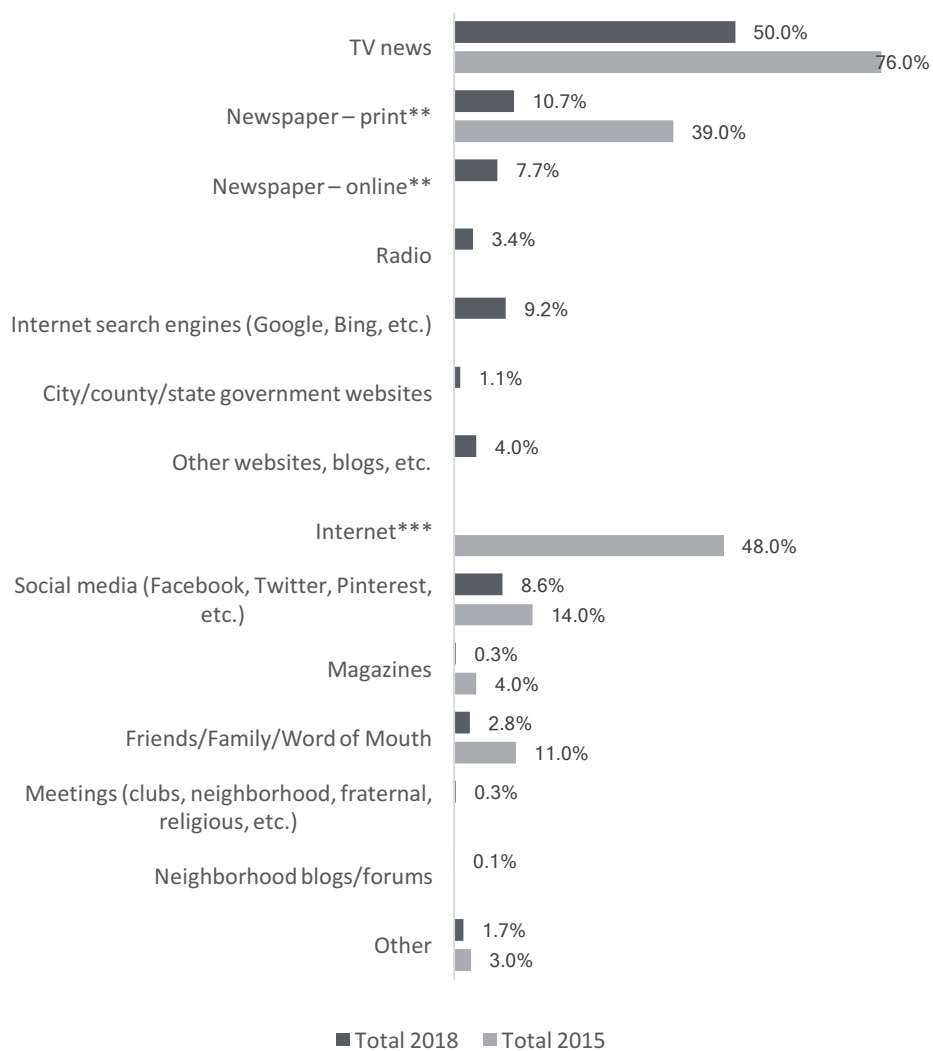
A trend towards using Facebook more often was seen across regions with the share of respondents saying they use Facebook daily or several times a day increasing to 59.4% from 43% in 2015. YouTube was the second most used social media site with 22.8% of the sample reporting using it once or twice a month. A majority of respondents reported never using Twitter (69.2%), Pinterest (50.7%), Google+ (51.2%), Snapchat (79.8%) (this replaced Flickr), Tumblr (94.8%), Instagram (67.4%) and LinkedIn (64.8%). If the District would like to reach its residents by way of social media, Facebook is its best bet.

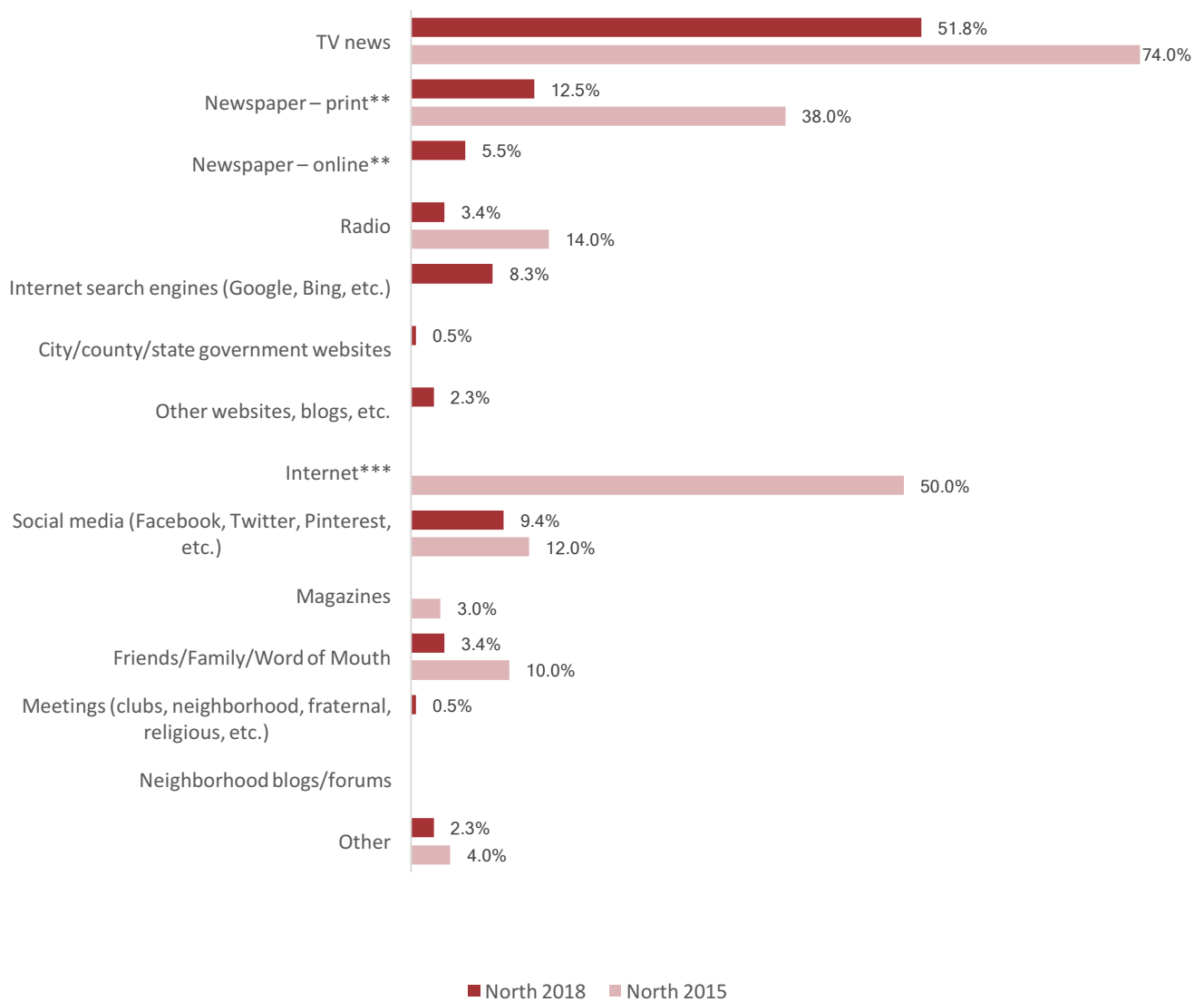
### Where do you get most of your news? \*

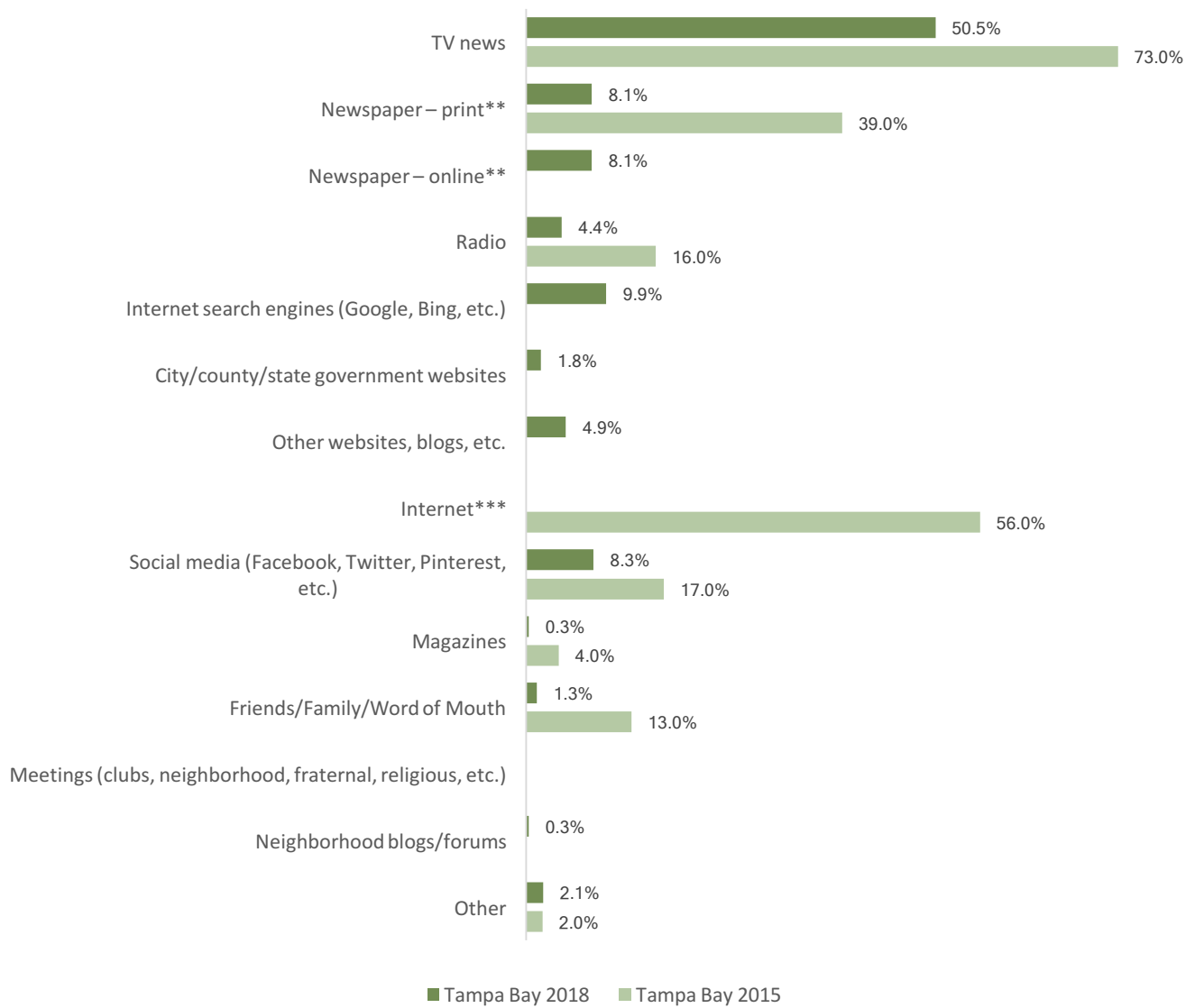
\* Multiple responses were permitted in 2015

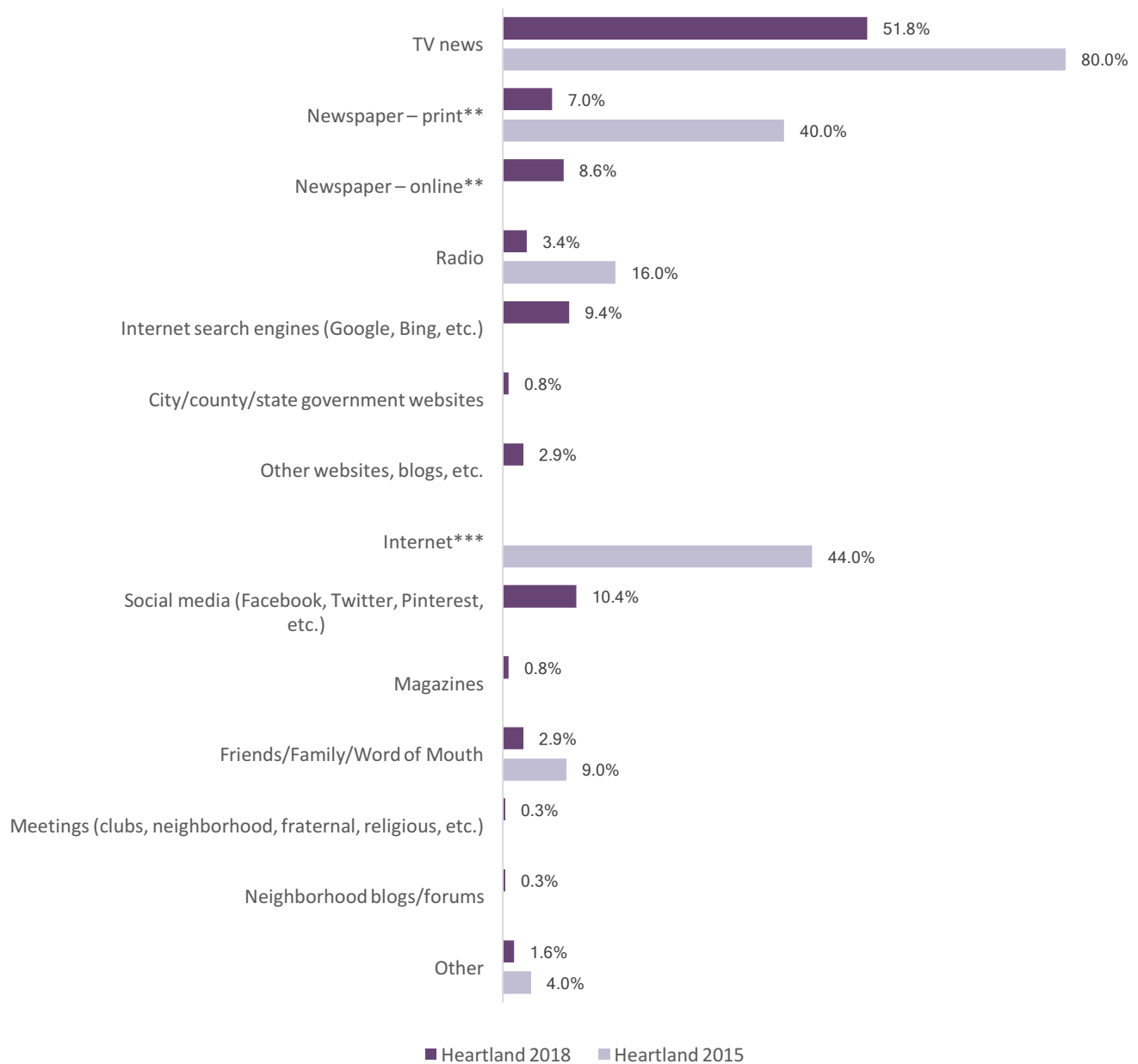
\*\* The 2015 survey did not differentiate between print and online newspapers

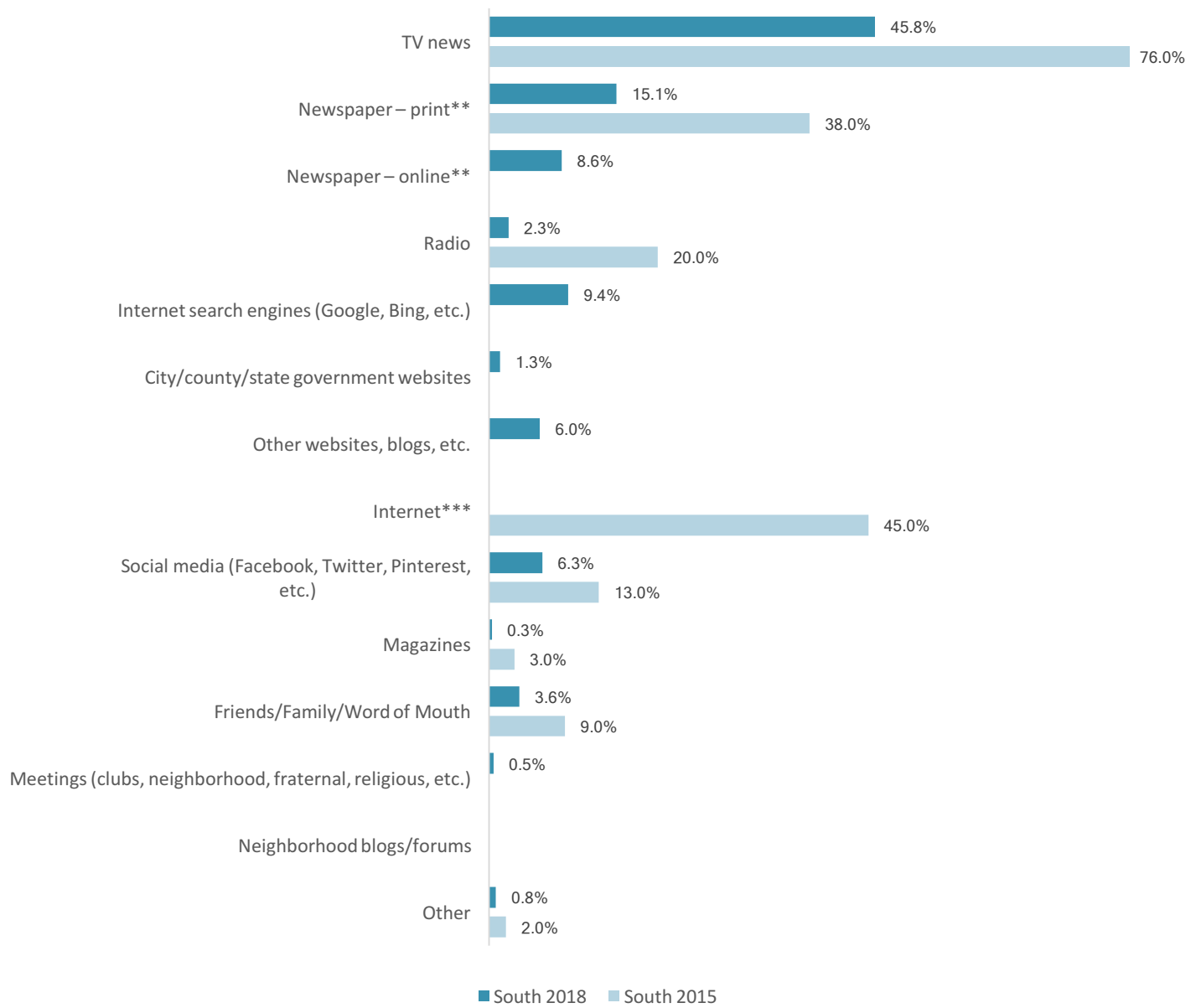
\*\*\*The 2015 survey only asked respondents about the Internet as a whole







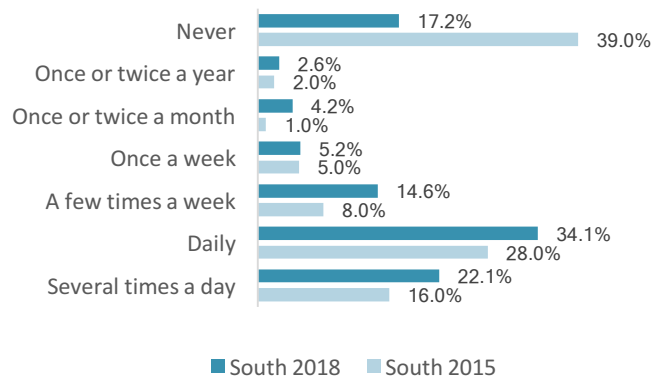
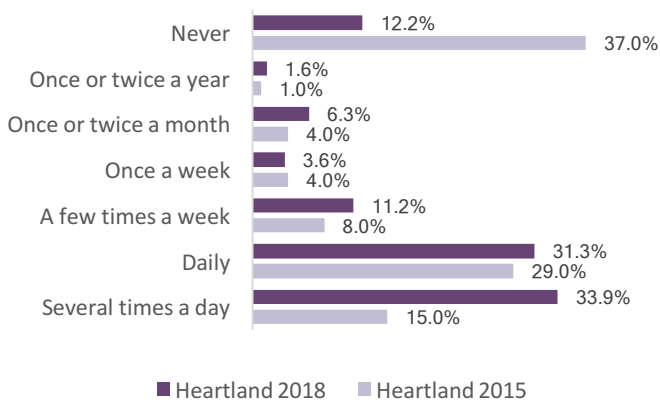
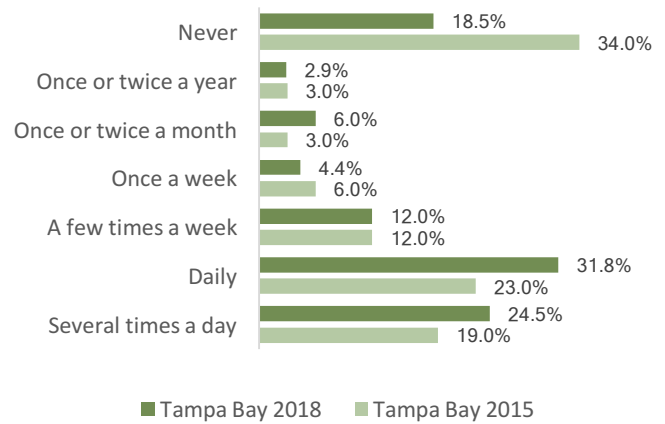
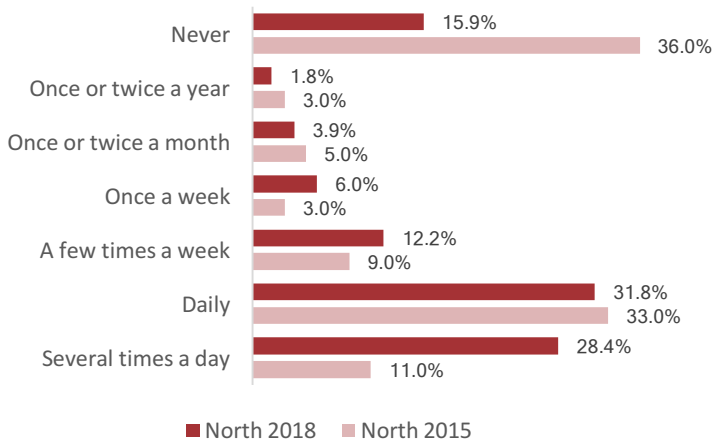
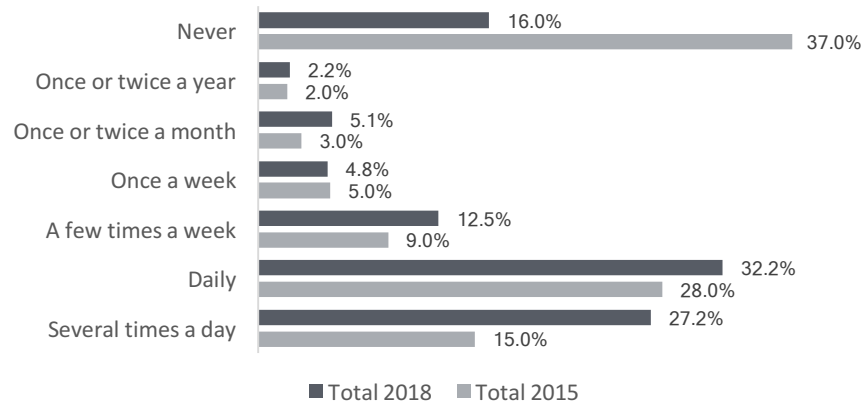




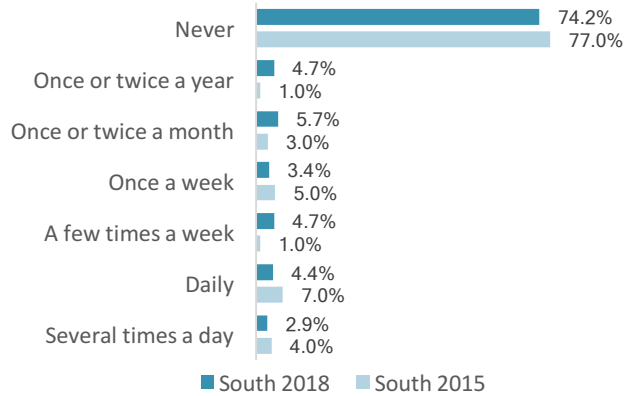
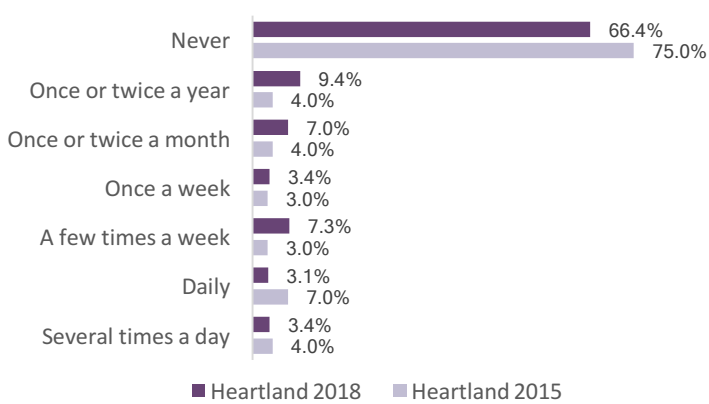
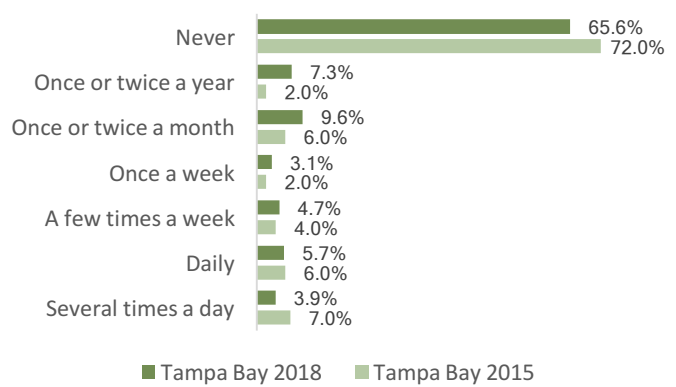
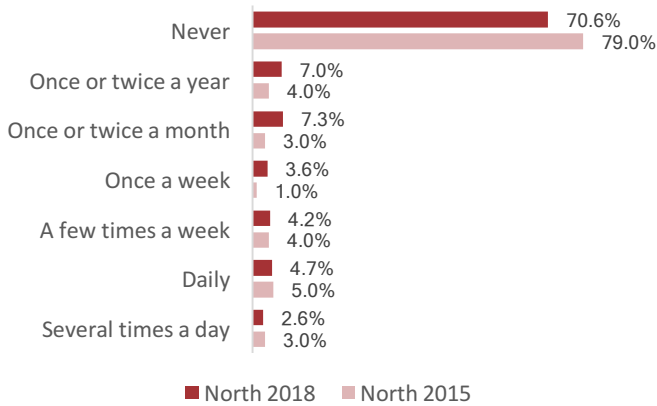
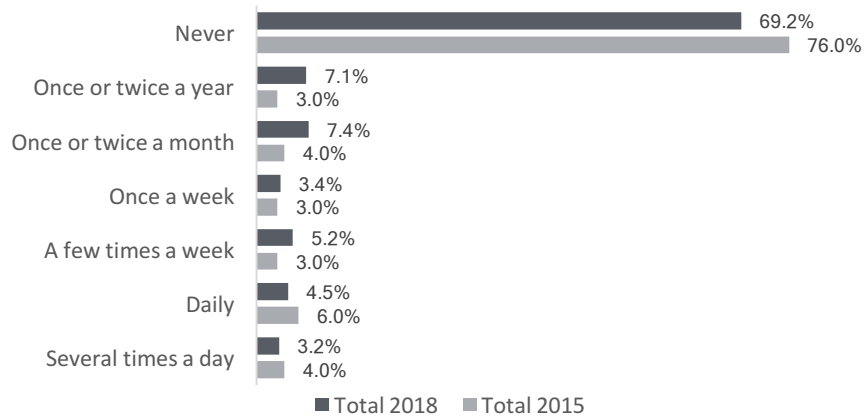


**How often do you use the following social media? (A “don’t know” response was provided in the 2015 survey)**

**Facebook**

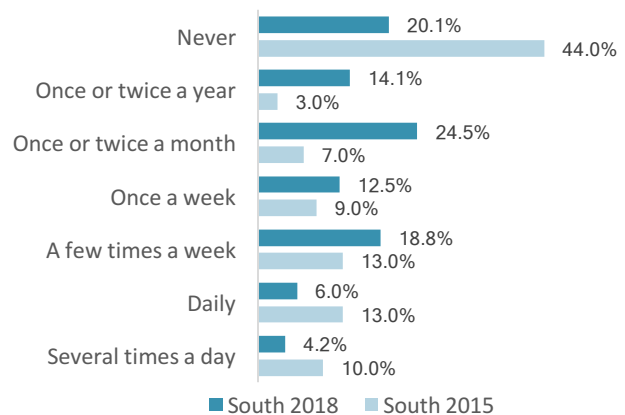
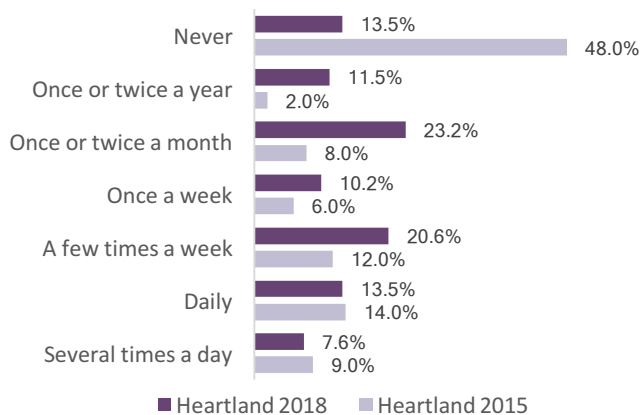
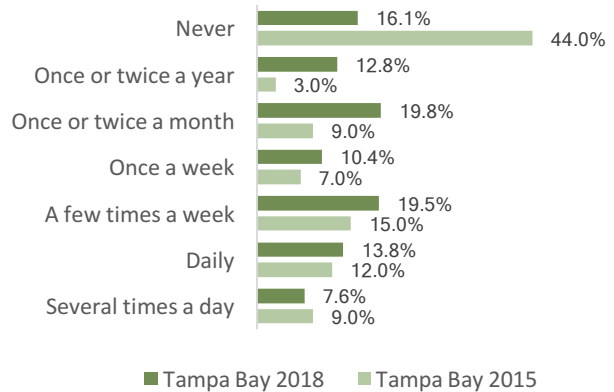
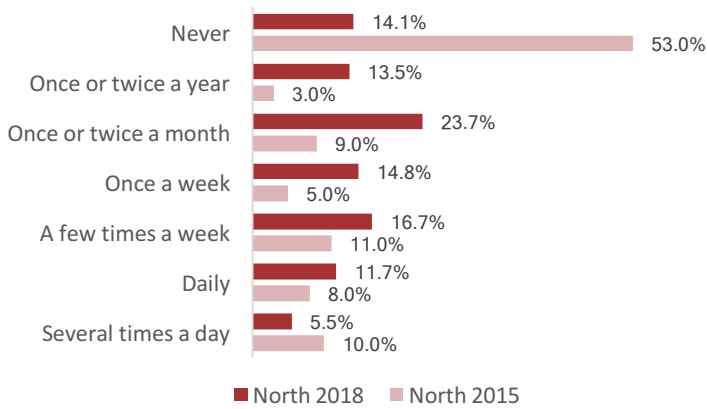
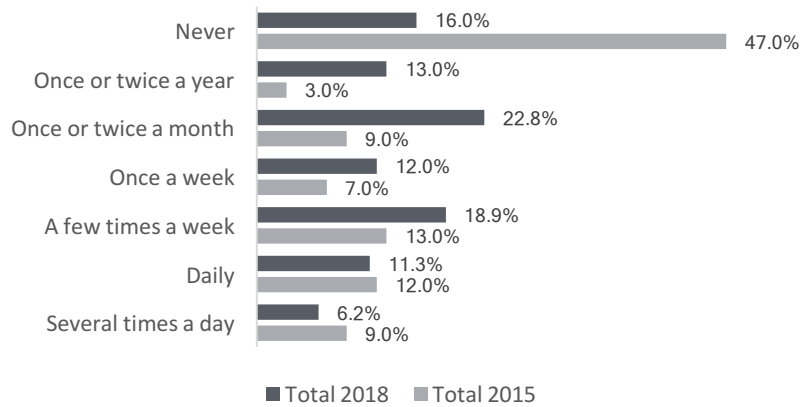


## Twitter



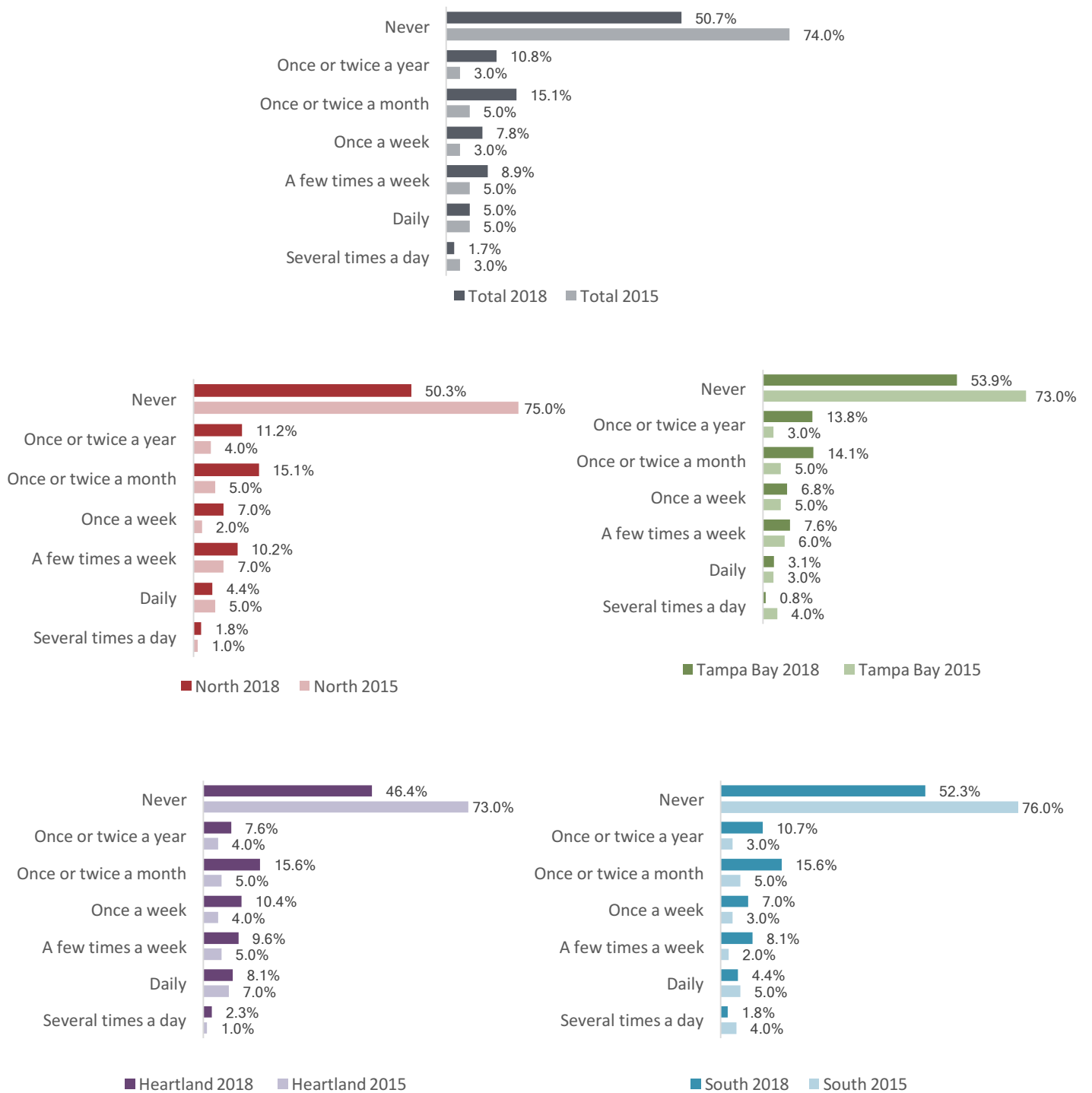
## YouTube

### \*Statistical Differences Between Regions in 2018



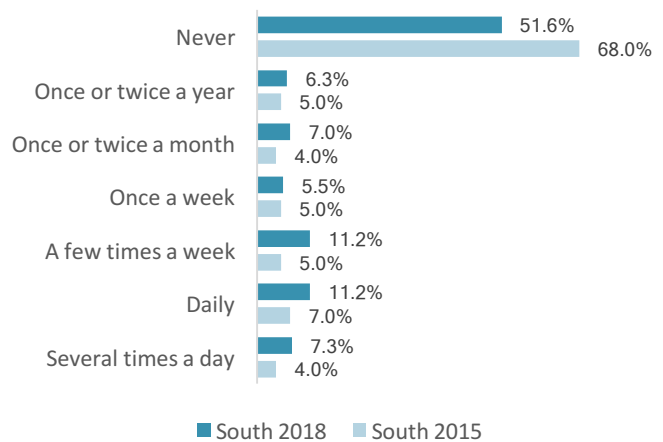
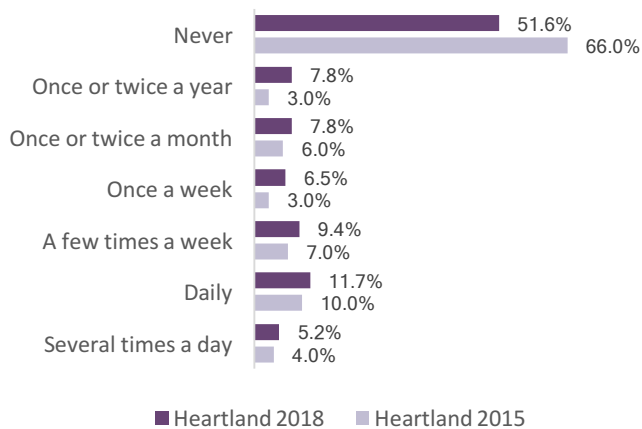
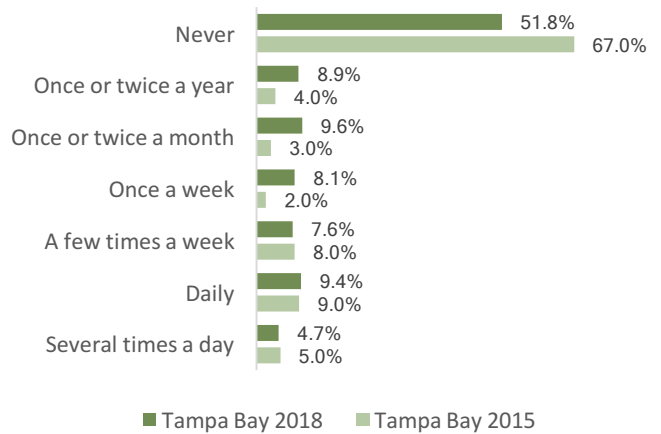
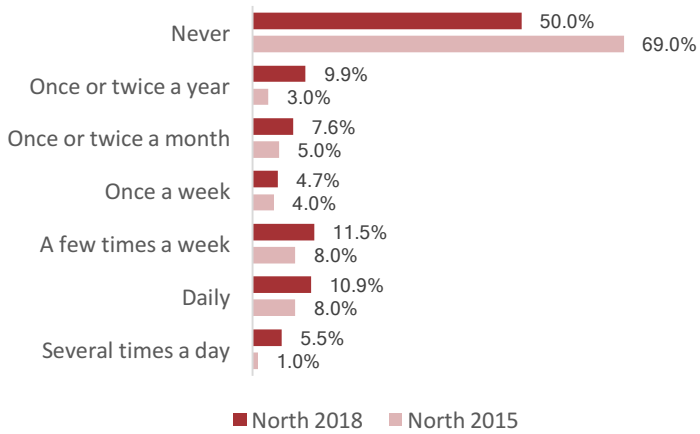
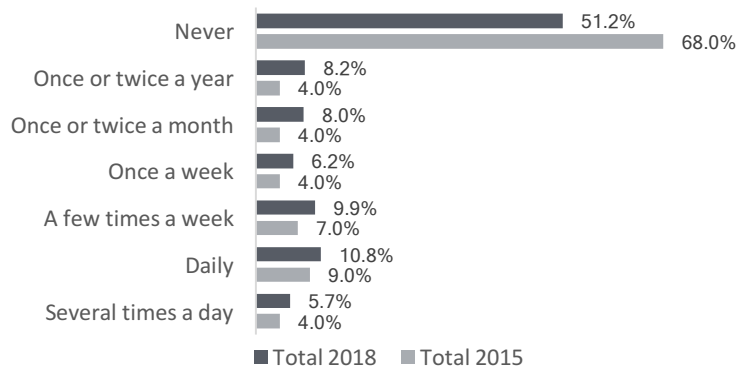
## Pinterest

### \*Statistical Differences Between Regions in 2018

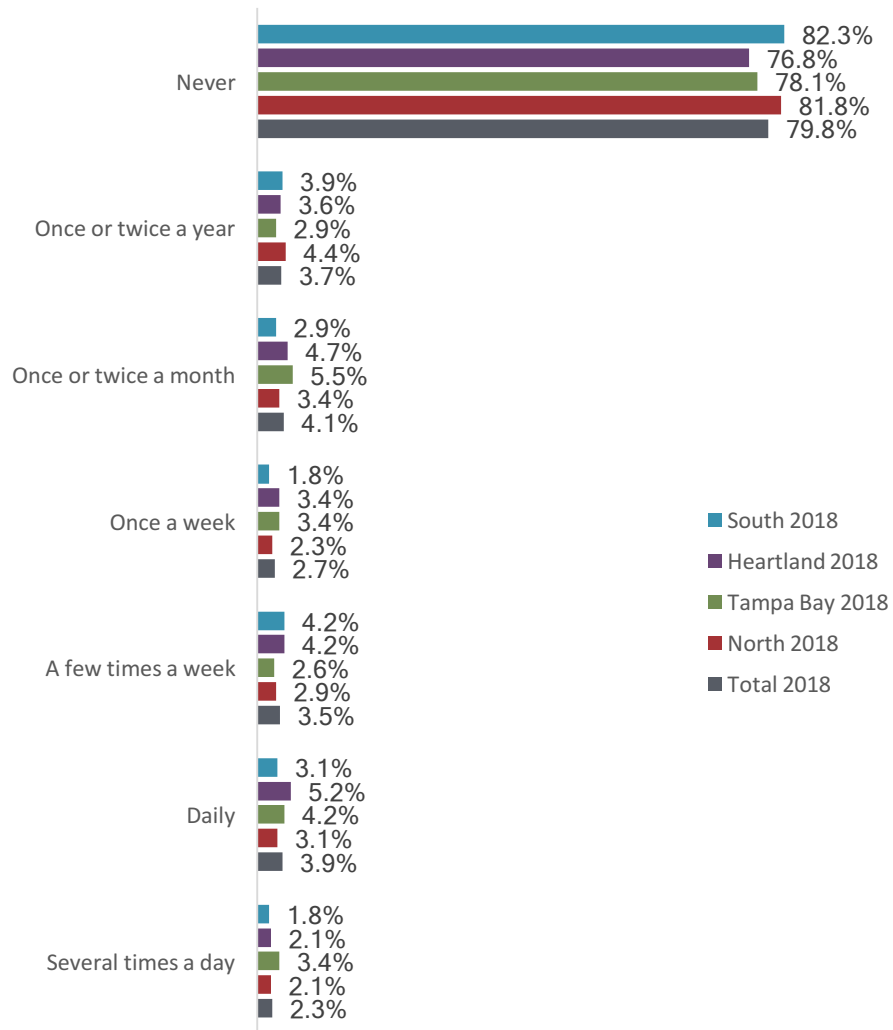


### Google+ (not Google)

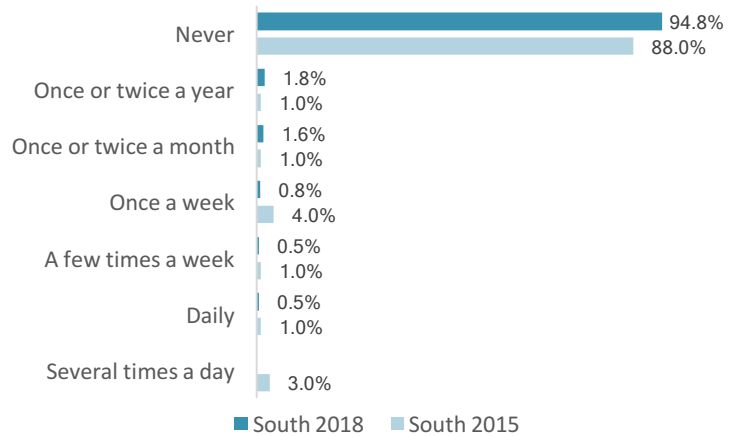
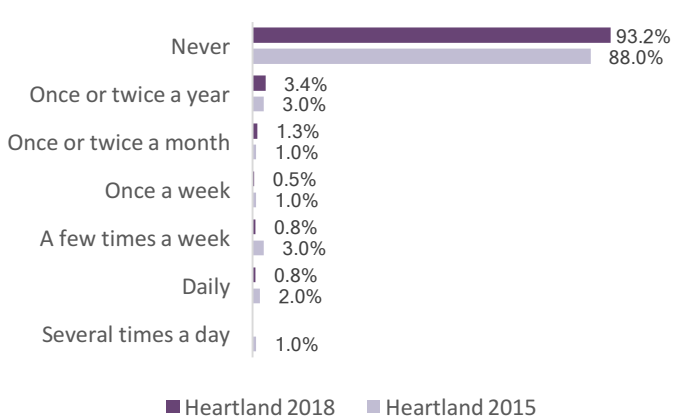
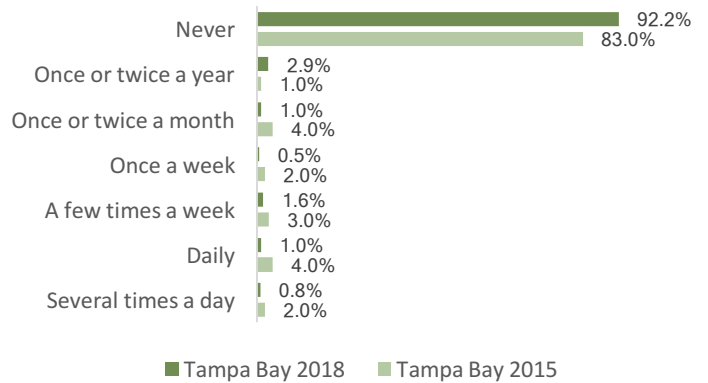
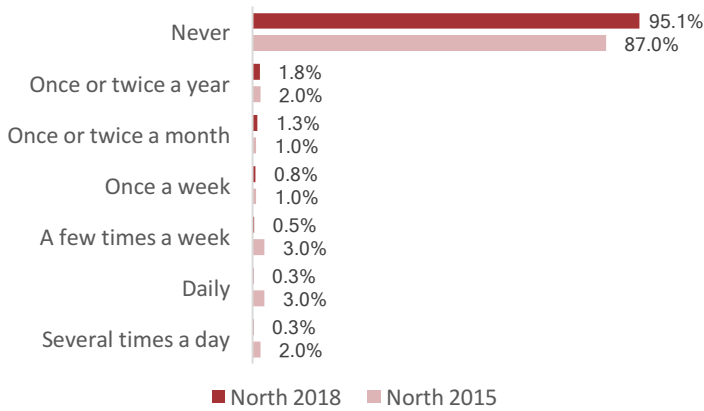
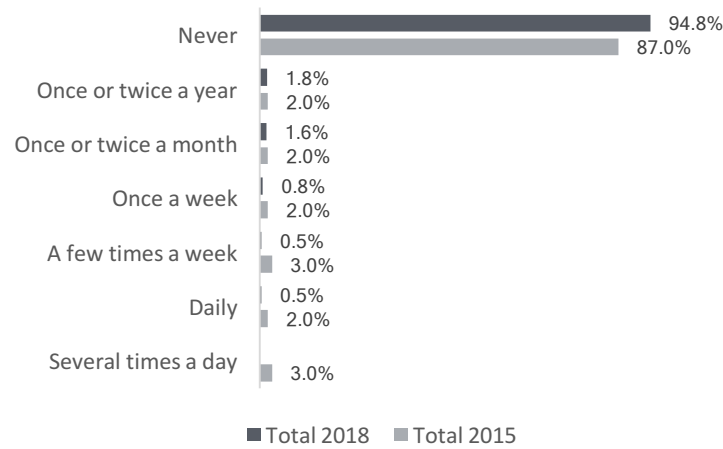
(This was presented as “Google+” in 2015 potentially causing some confusion)



**Snapchat**  
*(This replaced Flickr from the 2015 survey)*

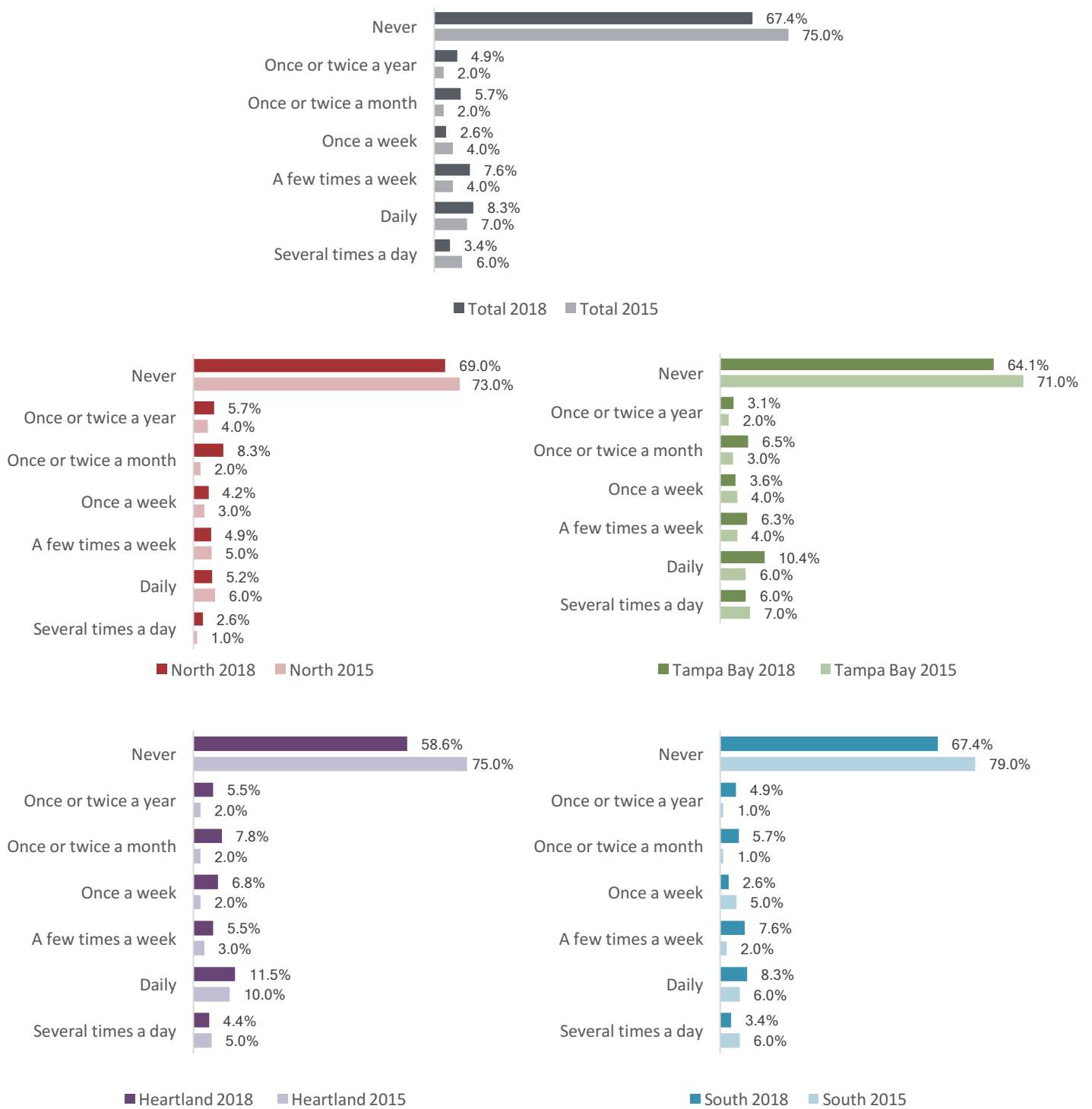


## Tumblr



## Instagram

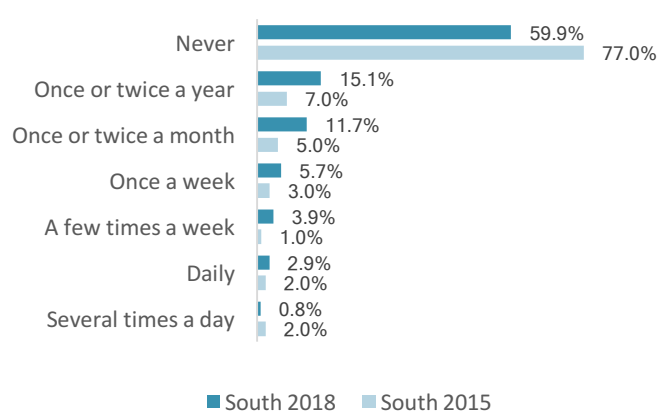
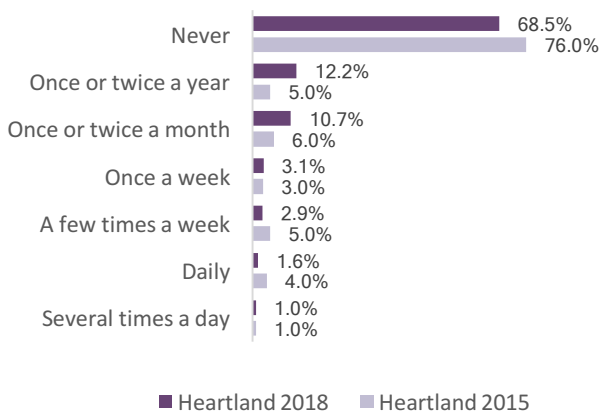
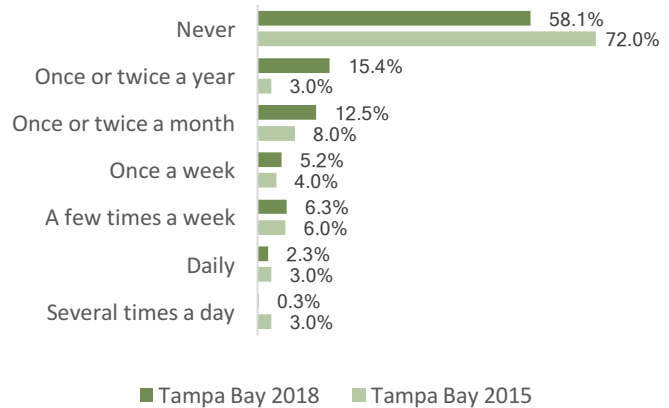
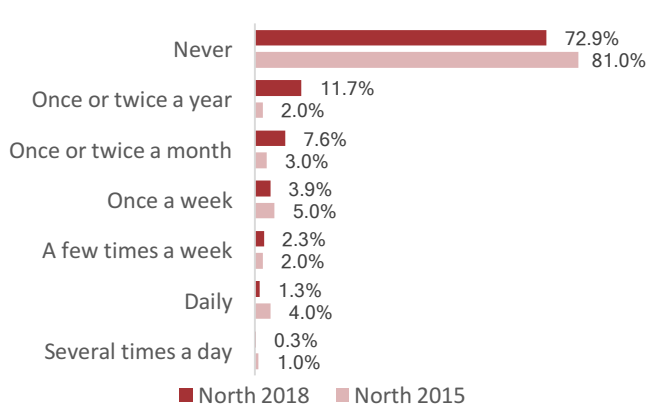
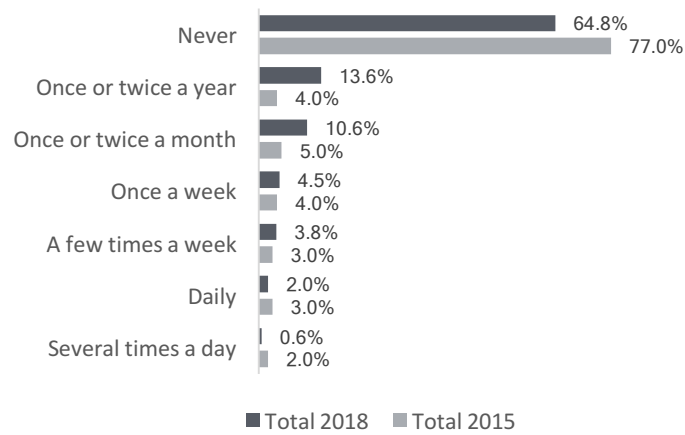
### \*Statistical Differences Between Regions in 2018





## LinkedIn

### \*Statistical Differences Between Regions in 2018



### How trustworthy are the following sources of information about water resources?

The District (mean – 7.77) was the second-most trusted source of information about water resources behind the US Geological Survey (mean – 7.89). These findings indicate little difference in perceived levels of trustworthiness between the two entities. For this type of question, an average score of seven or more represents a strong perception. The District's score of 7.77 indicates high levels of trust, but there is always room for improvement to a score of eight or higher.

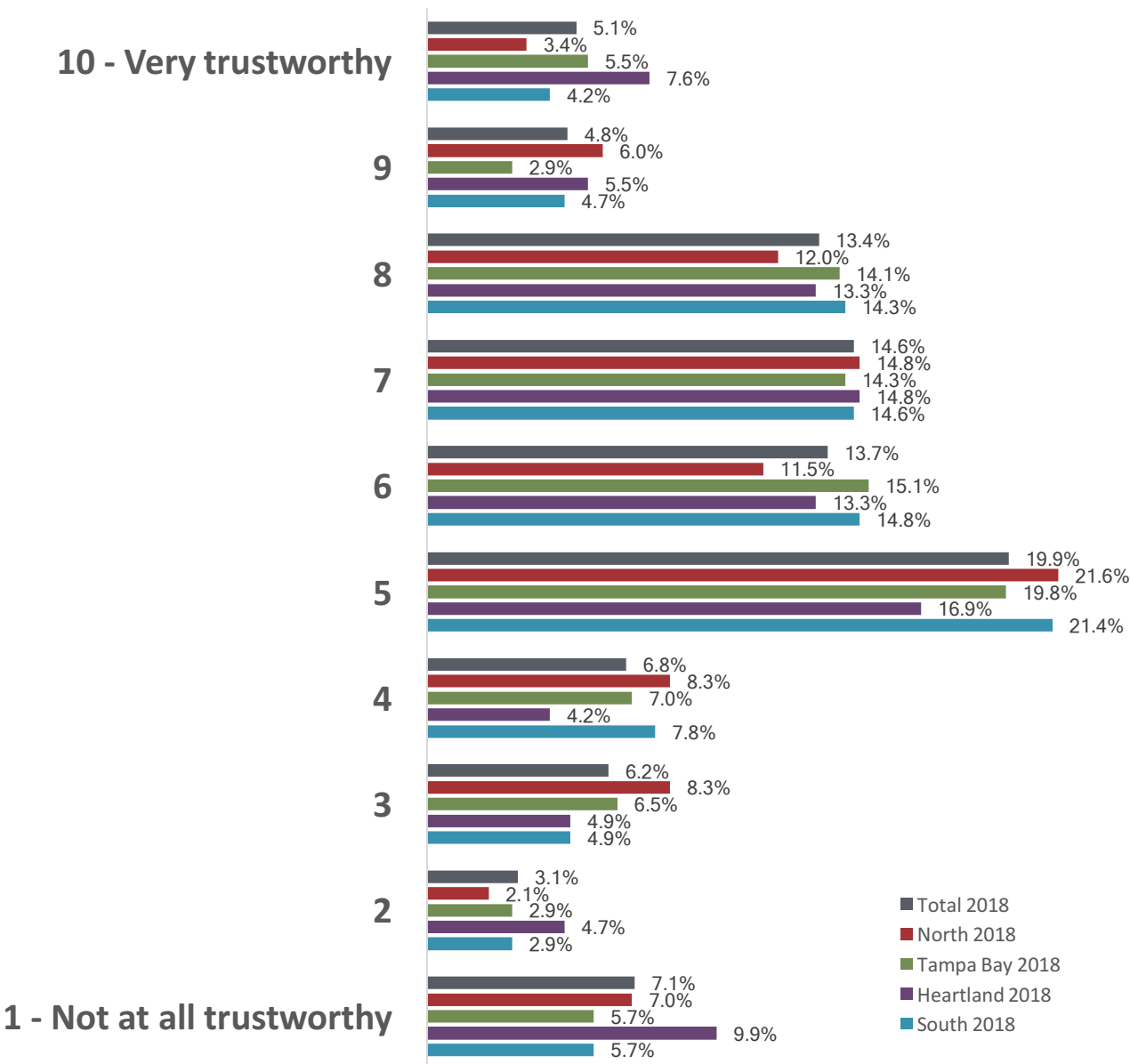
Entity	Average
US Geological Survey	7.86
Southwest Florida Water Management District	7.77
Department of Environmental Protection	7.31
Universities	7.20
Local environmental group	7.02
Local utility company	6.38
Traditional media such as radio, TV, newspapers	6.02
Social media such as the Internet, Facebook, Twitter	4.51

These results mirror what has been observed in previous surveys; respondents tend to trust federal government entities, agencies with “environmental” in their name and universities at higher levels.

Notable in these results is the fact that less than 10% of respondents trust the information they receive about water resources through social media. As it has done in the past, the District must be explicit that it is the source of information it shares through social media.

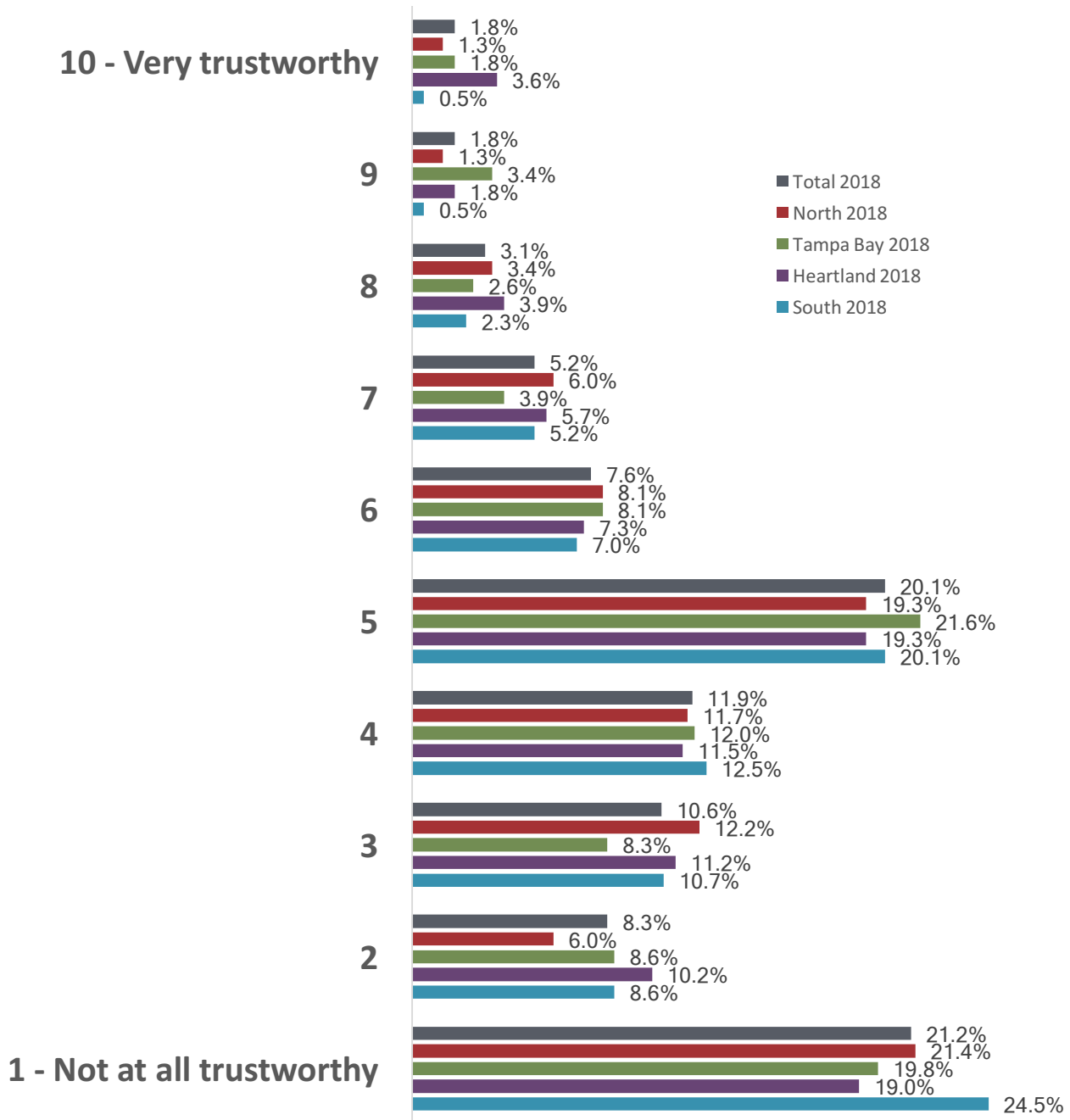
In 2015, trustworthiness was measured by the scale: Very Trustworthy, Trustworthy, Somewhat Trustworthy, Not at all Trustworthy and Don't Know. The District and Taproot teams determined that the previous scale choices were difficult to differentiate between (e.g., “Isn’t something that is somewhat trustworthy also trustworthy?”) so we decided to move to a more definitive measure using a scale of 1 equaling “Not at all trustworthy” to 10 being “Very trustworthy.”

**Traditional media such as radio, TV, newspapers**



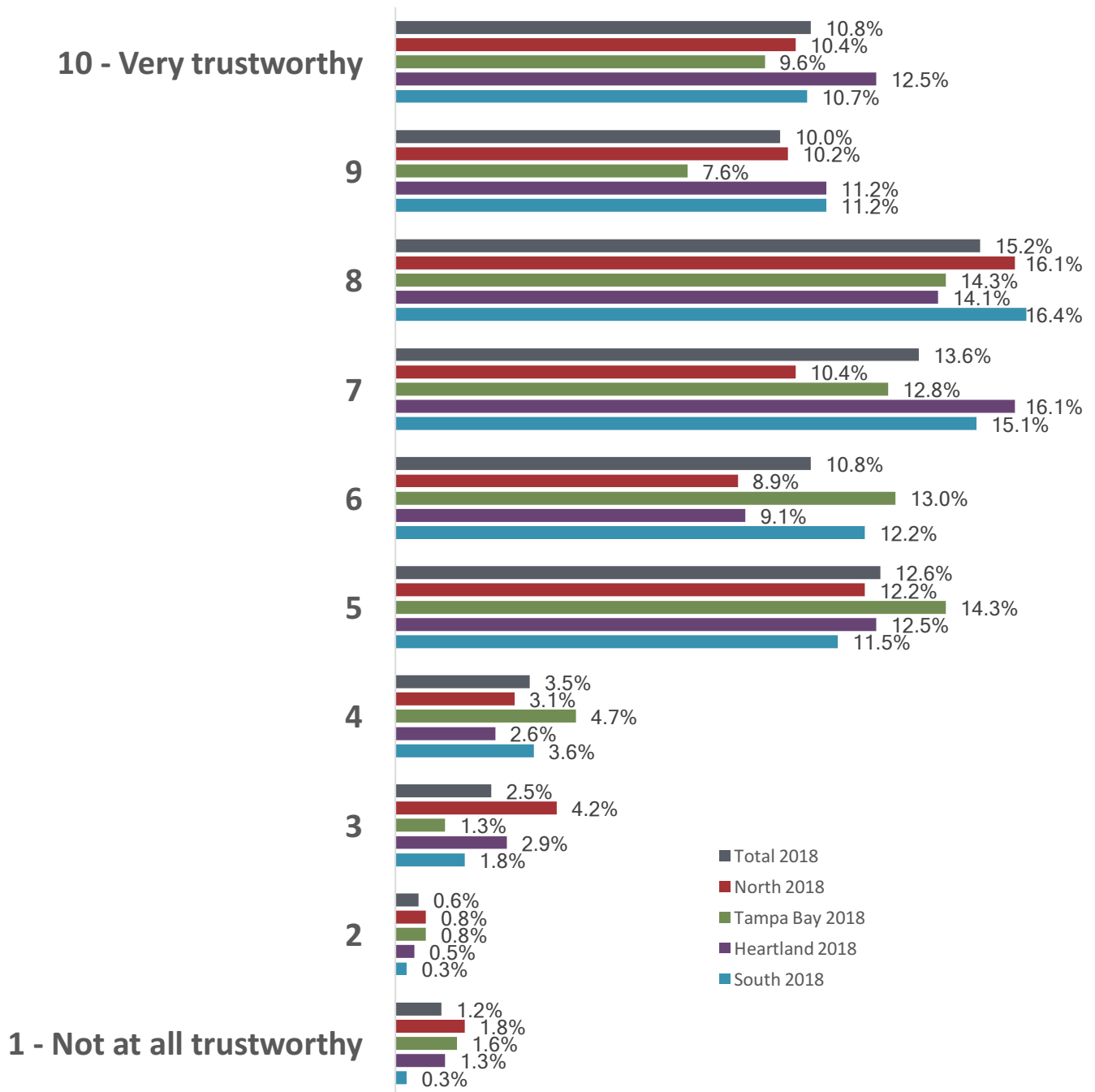
	Don't know	Average Score
South 2018	4.70%	6.05
Heartland 2018	4.90%	6.04
Tampa Bay 2018	6.30%	6.11
North 2018	4.90%	5.88
Total 2018	5.20%	6.02

## Social media such as the Internet, Facebook, Twitter



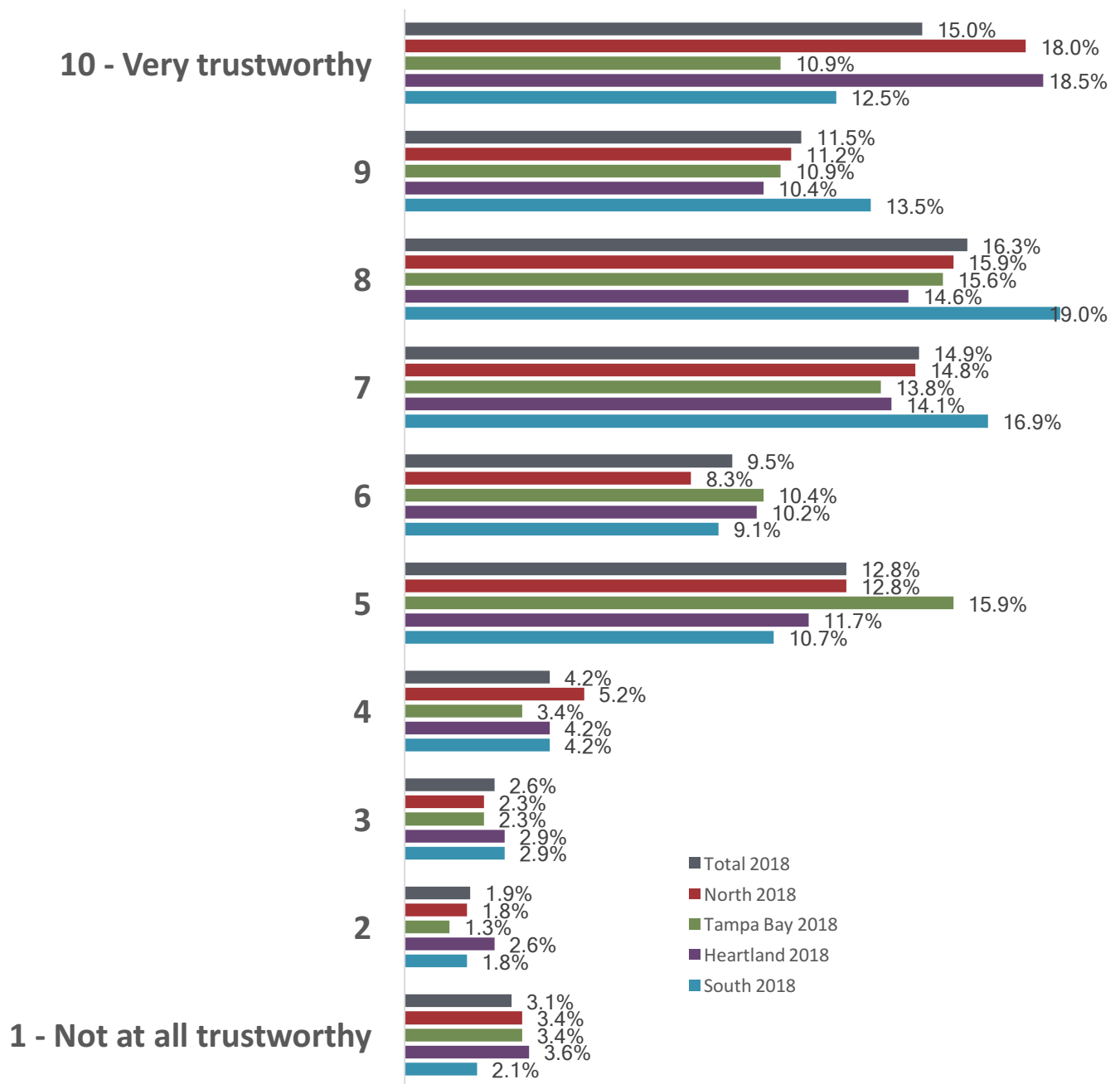
	Don't know	Average Score
South 2018	8.10%	4.2
Heartland 2018	6.50%	4.55
Tampa Bay 2018	9.90%	4.72
North 2018	9.40%	4.59
Total 2018	8.50%	4.51

## Southwest Florida Water Management District



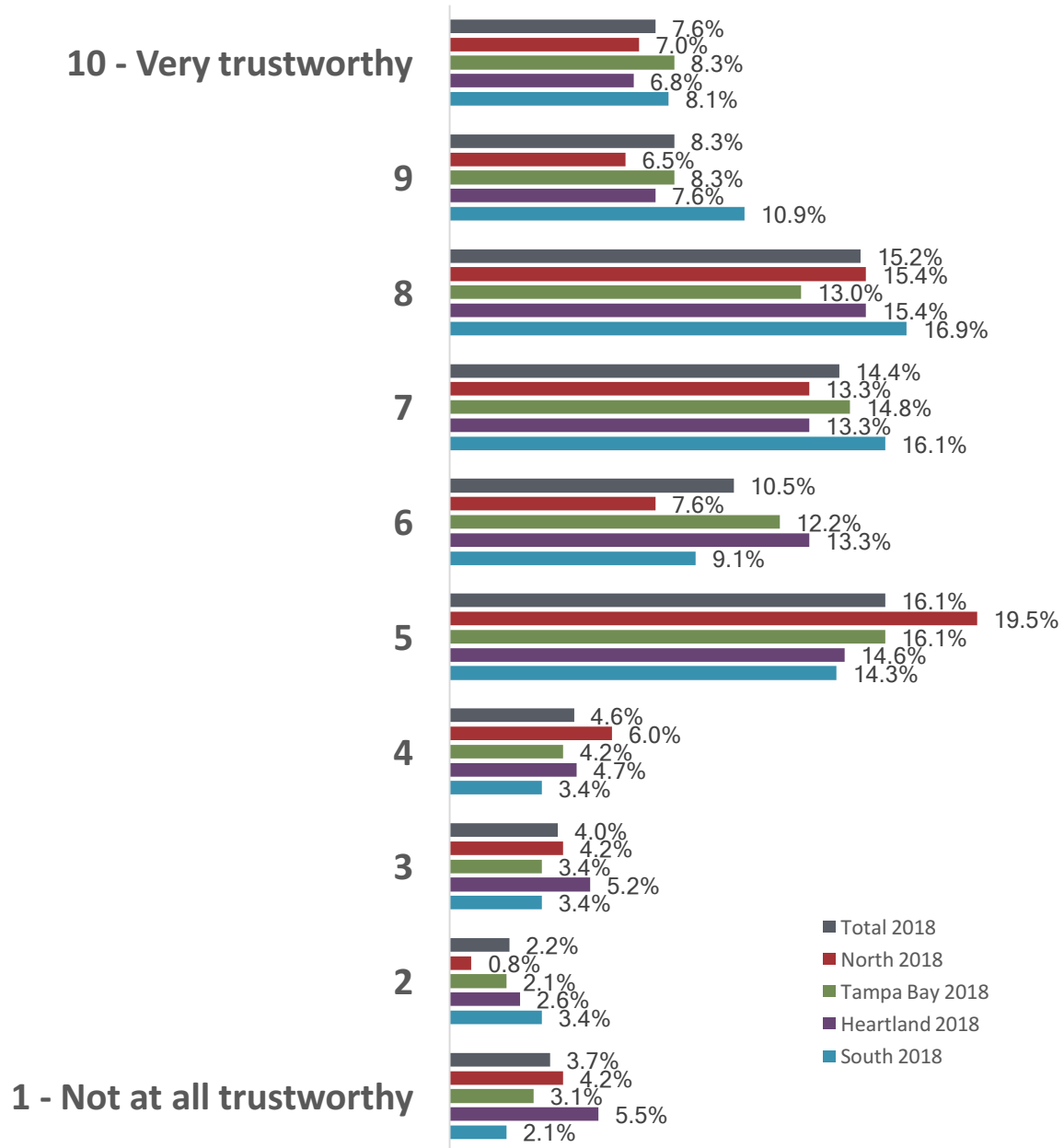
	Don't know	Average Score
South 2018	16.90%	7.82
Heartland 2018	17.20%	7.79
Tampa Bay 2018	20.10%	7.64
North 2018	21.90%	7.81
Total 2018	19.00%	7.77

## Department of Environmental Protection

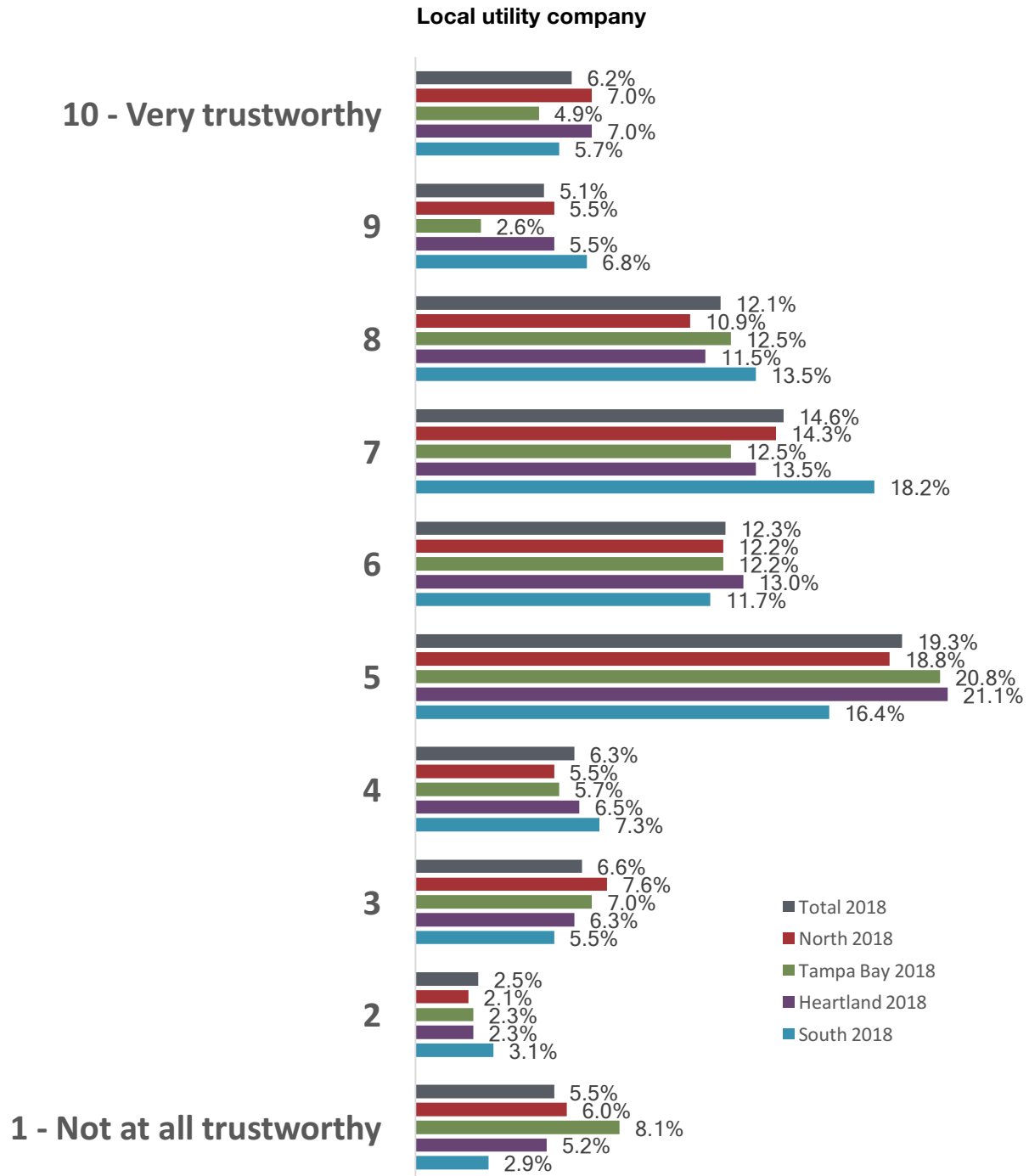


	Don't know	Average Score
South 2018	7.30%	7.37
Heartland 2018	7.30%	7.28
Tampa Bay 2018	12.00%	7.3
North 2018	6.30%	7.29
Total 2018	8.20%	7.31

### Local environmental group

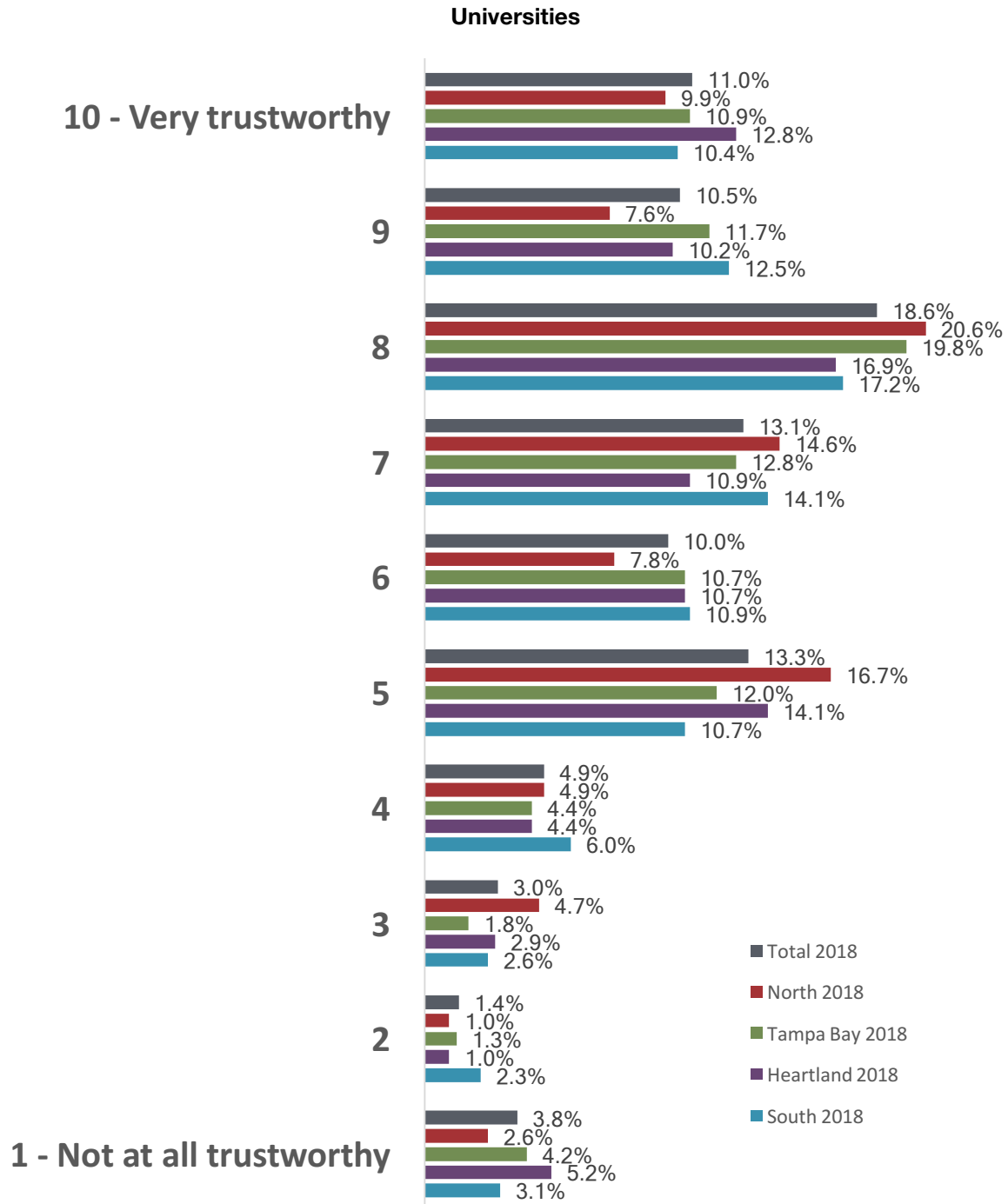


	Don't know	Average Score
South 2018	12.20%	7.21
Heartland 2018	11.20%	6.72
Tampa Bay 2018	14.30%	7.12
North 2018	15.60%	7.02
Total 2018	13.30%	7.02



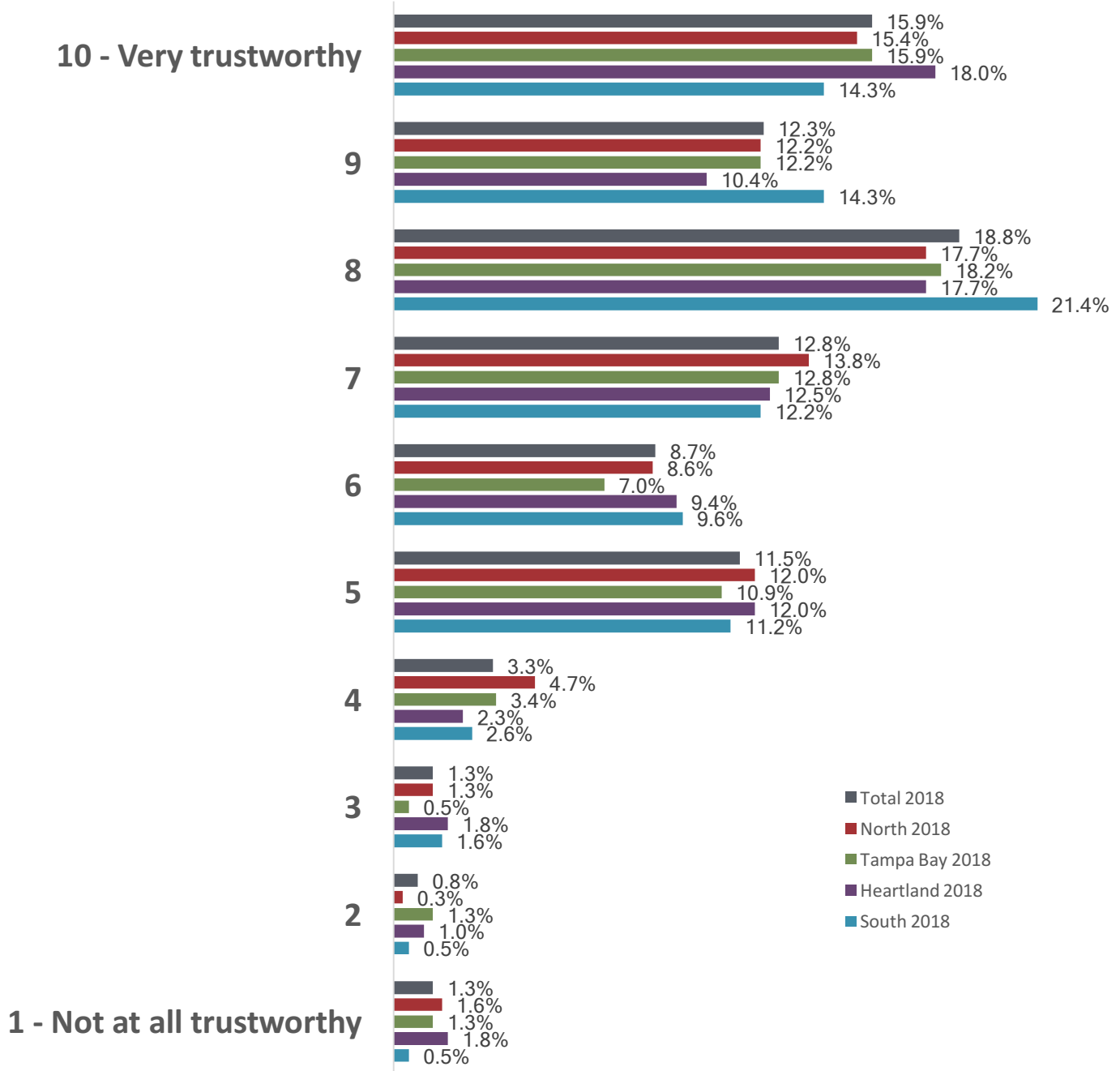
	Don't know	Average Score
South 2018	8.90%	6.59
Heartland 2018	8.10%	6.33
Tampa Bay 2018	11.20%	6.18
North 2018	10.20%	6.41
Total 2018	9.60%	6.38





	Don't know	Average Score
South 2018	10.20%	7.23
Heartland 2018	10.90%	7.19
Tampa Bay 2018	10.40%	7.31
North 2018	9.60%	7.08
Total 2018	10.30%	7.2

## US Geological Survey



	Don't know	Average Score
South 2018	11.70%	7.88
Heartland 2018	13.00%	7.81
Tampa Bay 2018	16.40%	8.01
North 2018	12.50%	7.76
Total 2018	13.40%	7.86



# 2018 Survey Sample Description

Demographic questions included the following:

- Which category best fits your age?
- Are you female or male?
- Do you live fulltime or part-time in Florida?
- How long have you lived in your current home?
- Which of the following best represents your formal education?
- Which of the following best represents your total household income in 2016 from all sources?
- Which ethnic or race category best fits you?

A majority of the sample (58.7%) reported being between 55 and 70 years-old with the Heartland region representing the largest share of respondents aged 25 to 35 at 18.5%. The South region sample was the oldest with 72.7% of respondents from that region aged 55 to 70 years-old.

The sample was majority female at 65.9% with 92.4% of the them living in Florida fulltime.

Rather than asking how long a respondent had lived in Florida and their county as the survey did in 2015, this year's survey asked respondents how long they had lived in their current home. This measure allows for a more thorough understanding of opinions regarding septic systems. The most common response was 1-4 years with 34.4% of the overall sample. In all, 65% of the sample reported living in their current home for less than 9 years. The responses by region mirrored these results though 19.5% of the respondents from the Tampa Bay region reported living in their current homes for more than 20 years, nearly double the other regions.

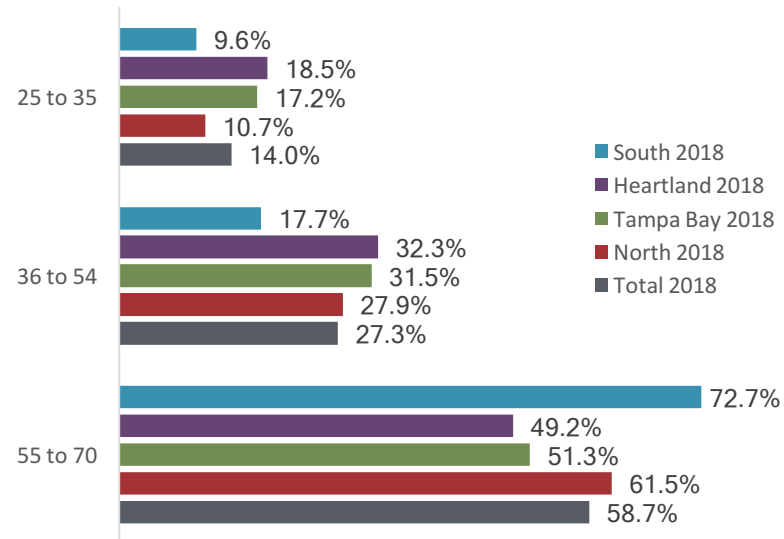
The most commonly reported level of formal education was college graduate (45%). Responses by region were statistically different with the North region reporting the lowest share of college graduates with 38% reporting that way.

Nearly half of the overall sample reported making between \$25,000 to \$74,999 a year (45.5%). Respondents from the South region were most likely to reporting making more than \$100,000 a year at 21.6%. North region respondents were most likely to report making less than \$25,000 at 16.7% of the sample.

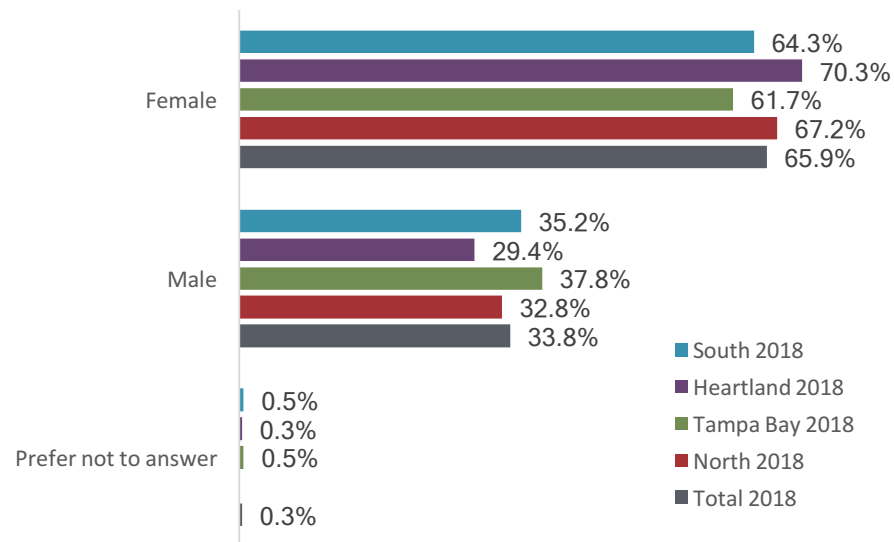
Respondents across regions were most likely to report being Caucasian or White. The Heartland region had the highest share of African American or Black respondents and Hispanic or Latino respondents.

## Which category best fits your age?

\*Statistical Differences Between Regions in 2018

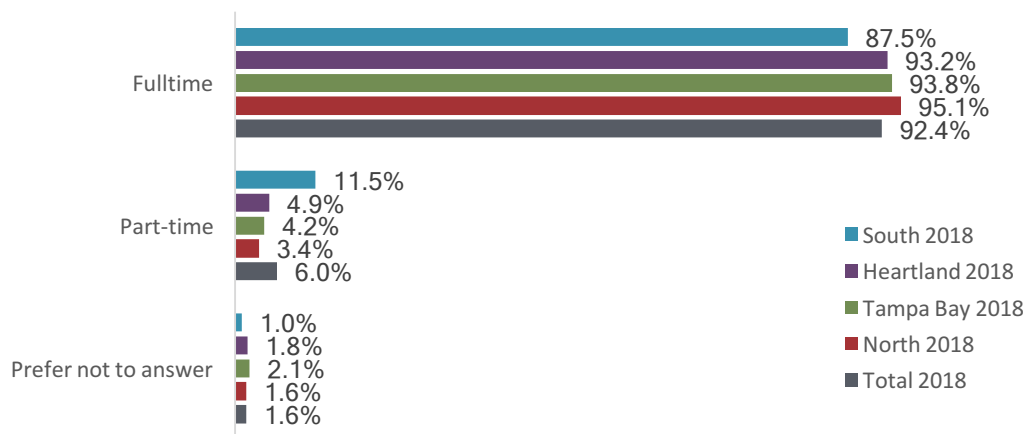


## Are you female or male?



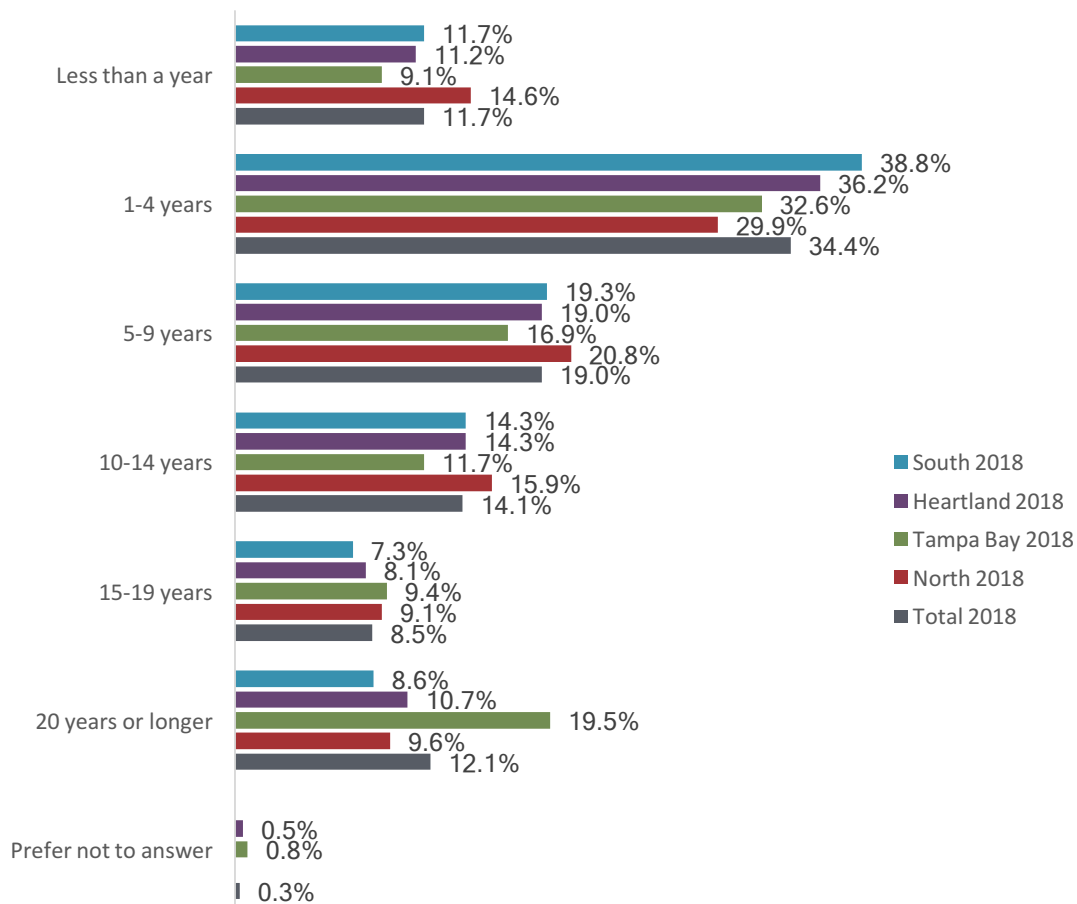
## Do you live fulltime or part-time in Florida?

\*Statistical Differences Between Regions in 2018



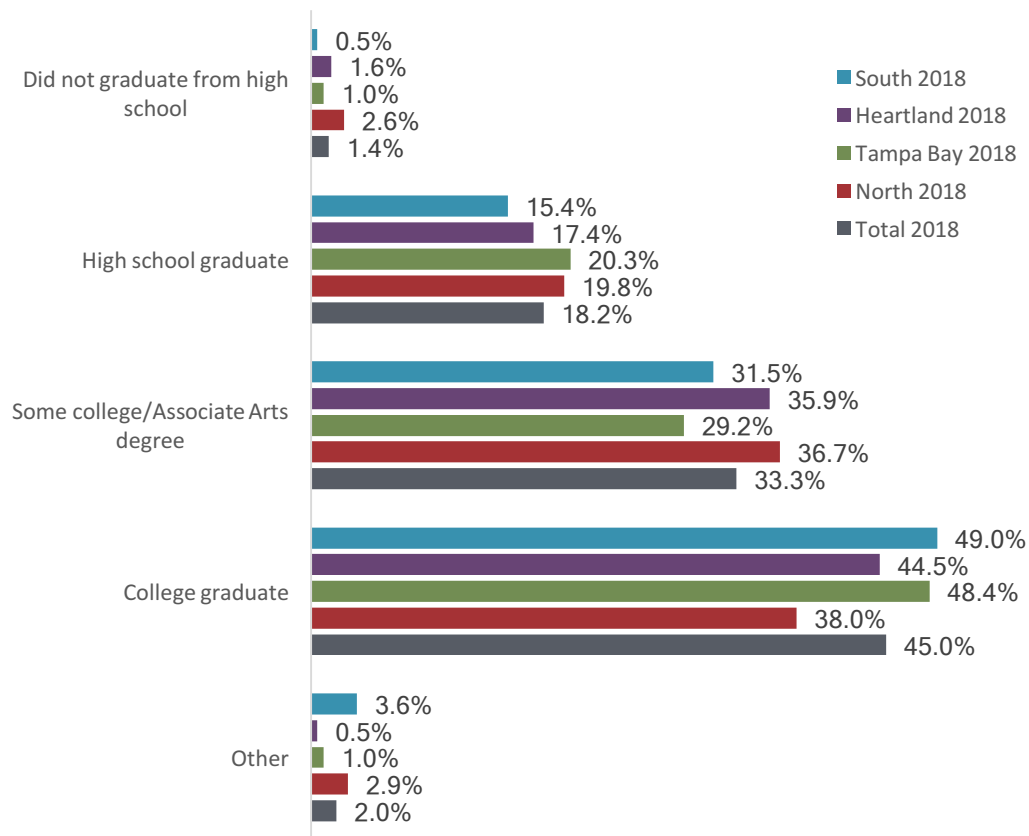
## How long have you lived in your current home?

\*Statistical Differences Between Regions in 2018



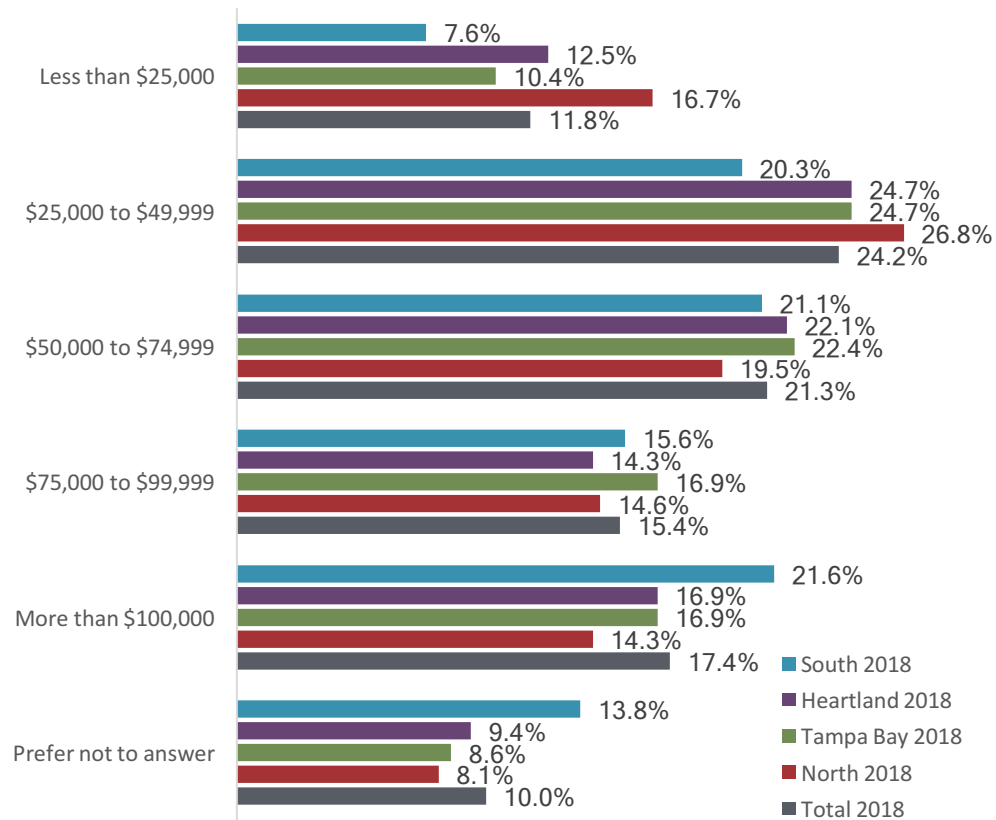
## Which of the following best represents your formal education?

\*Statistical Differences Between Regions in 2018



**Which of the following best represents your total household income in 2016 from all sources? (Prefer not to answer was not given as an option in 2015)**

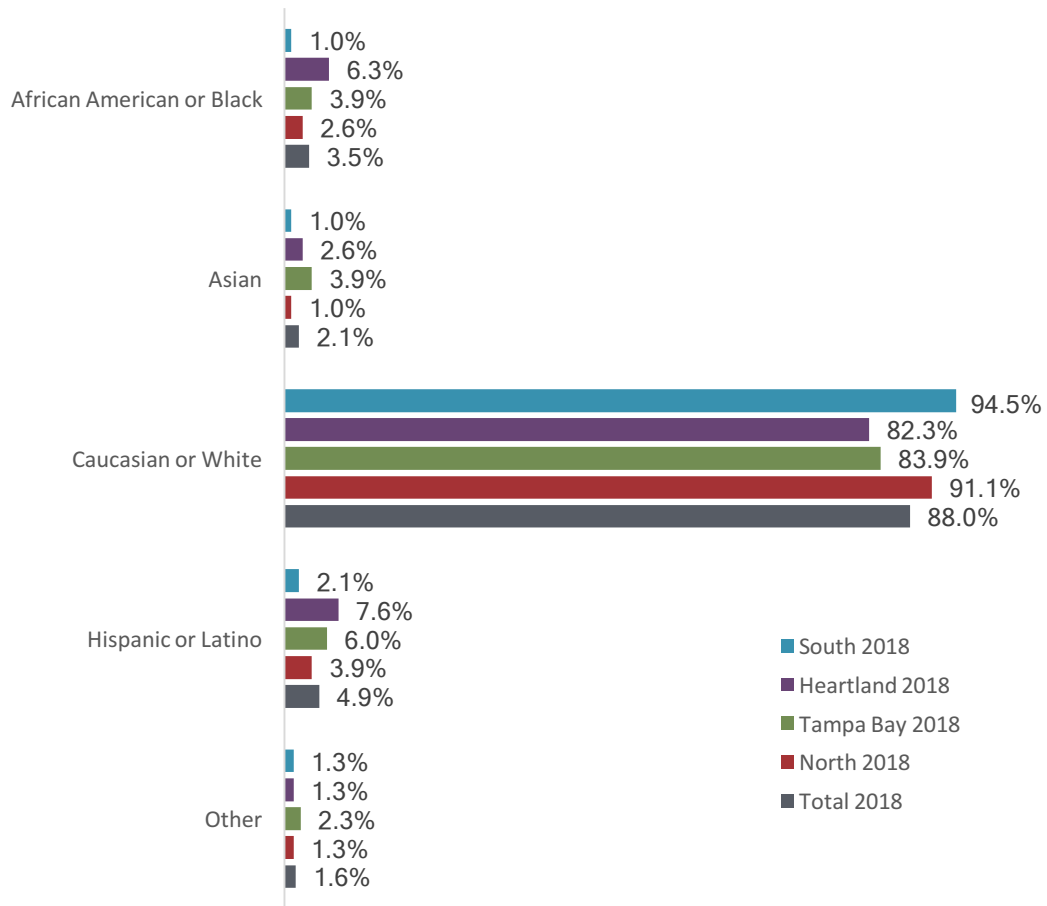
*\*Statistical Differences Between Regions in 2018*





## Which ethnic or race category best fits you?

\*Statistical Differences Between Regions in 2018





# Appendix

## 2018 Districtwide Perception Survey Instrument

Final 3/1/2018

1. In which county do you live?
 

a. Charlotte - S	g. Hillsborough – TB	m. Pinellas - TB
b. Citrus - N	h. Lake - N	n. Polk - Heartland
c. DeSoto - S	i. Levy – N	o. Sarasota - S
d. Hardee - Heartland	j. Manatee - S	p. Sumter - N
e. Hernando - N	k. Marion - N	q. Other [Terminate]
f. Highlands - Heartland	l. Pasco – Tampa Bay	
  
2. The term “natural water resources” refers to rivers, lakes, springs, wetlands, groundwater, bays and estuaries. To the best of your knowledge, which agency is most responsible for managing and protecting natural water resources in your region? **Unaided Recall - DO NOT READ. PROBE – Any others? ACCEPT UP TO 3 ANSWERS**
  - a. Southwest Florida Water Management District or Swiftmud
  - b. Florida Department of Environment Protection (DEP)
  - c. Environmental Protection Agency (EPA)
  - d. Tampa Bay Water
  - e. Local utility (may name city or county)
  - f. Florida Department of Health
  - g. Other [Record]
  - h. Don't know
  
3. How would you rate the health of natural water resources in your region? Use a scale of **READ**

a. Excellent	d. Poor
b. Good	e. Terrible
c. OK	f. Don't know <b>DO NOT READ</b>
  
4. Using the same scale, how would you rate the health of **READ & ROTATE** in your region?

	Rivers	Lakes	Springs	Wetlands or swamps	Groundwater or water from the Aquifer	Bays and estuaries
Excellent						
Good						
OK						
Poor						
Terrible						
Don't know						

**ROTATE ORDER OF #4 & #5**

5. Wastewater can receive different levels of treatment that make it safe for different uses. One level of treatment produces reclaimed water that is determined safe for certain non-drinking purposes by the Florida Department of Environmental Protection. Please tell me if you are willing, unwilling or not certain about using reclaimed water for the following purposes: **READ & ROTATE**

	Willing	Unwilling	Not sure
To water your lawn			
To wash your car			
In agricultural irrigation			
To raise lake levels			
To increase river flows			
To raise groundwater levels			
To restore local wetlands			
To recharge local aquifers			

6. A second level of wastewater treatment produces purified water that is determined to be better than drinking water standards by the Florida Department of Environmental Protection. Please tell me if you are willing, unwilling or not certain about using purified water for the following purposes: **READ & ROTATE**

	Willing	Unwilling	Not sure
To water vegetables in your garden			
To take a shower or bath			
To drink			
To swim in			
To add to existing water supplies like local lakes and rivers			
To restore local wetlands			
To recharge local aquifers			
To raise lake levels			
To increase river flows			
To raise groundwater levels			

7. Have you ever heard of the Southwest Florida Water Management District, sometimes called Swiftmud.
- Yes
  - No **SKIP TO 11**
  - Not sure **SKIP TO 11**
8. Based on what you may know or have heard, how would you rate Swiftmud or the Southwest Florida Water Management District? **READ**
- Excellent
  - Good
  - OK
  - Poor
  - Terrible
  - Don't know **DO NOT READ**

9. Is the Southwest Florida Water Management District (Swiftmud) doing too much, enough or too little to protect **READ & ROTATE**

	Rivers	Lakes	Springs	Wetlands or swamps	Groundwater or water from the Aquifer	Bays and estuaries
Too much						
Enough						
Too little						
Not sure						

10. Are you aware that the Southwest Florida Water Management District purchases and manages undeveloped lands for conservation purposes?

- Yes, aware
- No, not aware
- Not sure

11. (As you may know), the District purchases and manages undeveloped lands for conservation purposes to help protect water supplies, water quality, and natural environments. The land also provides nature-based recreation areas in Florida.

Do you support or oppose the District buying and managing undeveloped lands for these purposes?

- Support
- Oppose
- Not sure

12. Where do you get your news? **DO NOT READ PROBE**

- TV news
- Newspaper – print
- Newspaper - online
- Radio
- Internet search engines (Google, Bing, etc.)
- City/county/state government websites
- Other websites, blogs, etc.
- Social media (Facebook, Twitter, Pinterest, etc.)
- Magazines
- Friends/Family/Word of Mouth
- Meetings (clubs, neighborhood, fraternal, religious, etc.)
- Neighborhood blogs/forums
- Other [Record]

13. How often do you use the following social media? **READ & ROTATE**

	Facebook	Twitter	You Tube	Pinterest	Google+ (not Google)	Snapchat	Tumblr	Instagram	LinkedIn
Never									
Once or twice a year									
Once or twice a month									
Once a week									
A few times a week									
Daily									
Several times a day									

14. How trustworthy are the following sources of information about water resources? Using a scale of 1 to 10 where 1 is “Not at all trustworthy” and 10 is “Very trustworthy,” please rate each of the following. If you don’t know, tell me that too. **READ & ROTATE**

- |   |   |
|---|---|
| a. Traditional media such as radio, TV, newspapers      | d. Department of Environmental Protection |
| b. Social media such as the Internet, Facebook, Twitter | e. Local environmental group              |
| c. Southwest Florida Water Management District          | f. Local utility company                  |
|   | g. Universities                           |
|   | h. US Geological Survey                   |

15. Do you have a lawn?

- a. Yes
- b. No **SKIP TO Q20**

16. Do you have an in-ground irrigation system for your landscape?

- a. Yes
- b. No **SKIP to Q20**
- c. Not sure **SKIP to Q20**

17. What is the water source for your outdoor irrigation?

- a. Well
- b. Water utility
- c. Reclaimed water
- d. Don’t know
- e. Other

18. How often do you water your lawn in the winter?

- a. Never
- b. Once a week
- c. Twice a week
- d. More than twice a week

19. How often do you water your lawn in the summer?

- a. Never
- b. Once a week
- c. Twice a week
- d. More than twice a week

#### **Septic Questions – Only northern counties**

20. Does your home have its own septic system?

- a. Yes
- b. No **SKIP to Q29**
- c. Don’t know **SKIP to Q29**

21. How many years old is your septic system?

- |                |                      |
|----------------|----------------------|
| a. 1–10 years  | d. 21–25 years       |
| b. 11–15 years | e. 26 years or older |
| c. 16–20 years | f. Don’t know        |

22. How often do you have your septic system tank pumped?
- a. Every 1–3 years
  - b. Every 4–6 years
  - c. Every 7–9 years
  - d. Every 10 years or longer
  - e. Never
  - f. Don't know
23. How often do you have your septic system tank inspected? This is when an inspector comes to your home to see if the system is working properly using a dye test or an open pit test.
- a. Every 1–3 years
  - b. Every 4–6 years
  - c. Every 7–9 years
  - d. Every 10 years or longer
  - e. Never
  - f. Don't know
24. How much would you be willing to pay to have your septic system inspected once every three years if you knew it would help protect the water quality of the springs? (open ended)
- a. \$0 – Wouldn't pay to have it inspected.
  - b. \$50–\$100
  - c. \$101–\$200
  - d. \$201–\$300
  - e. \$301–\$400
  - f. \$401–\$500
  - g. \$501–\$600
25. If you were putting in a new septic system or enhancing the existing system, would you be willing to pay for a system with better treatment technology resulting in improved water quality in the springs?
- a. Yes
  - b. No
  - c. Not sure
26. How much would you be willing to pay to have this improved septic system installed if you knew it would help protect the water quality in local springs? (use dollar amount thresholds up to \$20,000+)
- a. \$0 – Wouldn't pay to have an improved septic system installed.
  - b. \$50–\$2,500
  - c. \$2,501–\$5,000
  - d. \$5,001–\$7,501
  - e. \$7,501–\$10,000
  - f. \$10,001–\$15,000
  - g. \$15,001 – \$20,000
  - h. More than \$20,000
27. Would you be willing to connect to a central sewer system if you knew it would help protect the water quality of the local springs?
- a. Yes
  - b. No **SKIP to Q29**
28. How much would you be willing to pay? (Note: dollar amount threshold should go up to +\$15,000)
- a. \$0 – Wouldn't pay to have it a central sewer system hook-up.
  - b. \$50–\$2,500
  - c. \$2,501–\$5,000
  - d. \$5,001–\$7,501
  - e. \$7,501–\$10,000
  - f. \$10,001–\$15,000
  - g. More than \$15,000

These last few questions are to ensure that we are talking to a wide range of people. Your answers will remain anonymous.

29. Which category best fits your age? **READ**

- a. 35 or under
- b. 35 to 64
- c. 65 or older
- d. Refused **DO NOT READ**

30. Are you female or male?

- a. Female
- b. Male

31. Do you live fulltime or part-time in Florida?

- a. Fulltime
- b. Part-time

32. New Q: How long have you lived in your current home?

- a. Less than a year
- b. 1-4 years
- c. 5-9 years
- d. 10-14 years
- e. 15-19 years
- f. 20 years or longer

33. Which of the following best represents your formal education? **READ**

- a. Did not graduate from high school
- b. High school graduate
- c. Some college/Associate Arts degree
- d. College graduate
- e. Other

34. Which of the following best represents your total household income in 2014 from all sources? **READ**

- a. Less than \$25,000
- b. \$25,000 to \$49,999
- c. \$50,000 to \$74,999
- d. \$75,000 to \$99,999
- e. More than \$100,000
- f. Refused **DO NOT READ**

35. Which ethnic or race category best fits you?

- a. African American or black
- b. Asian
- c. Caucasian or white
- d. Hispanic or Latino
- e. Other [Record]