

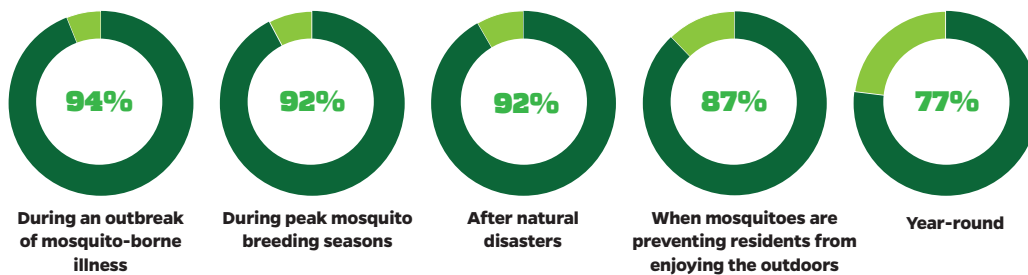
# WHAT FLORIDIANS THINK ABOUT MOSQUITO PREVENTION

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) recently created materials designed to educate the public and local elected officials about mosquito control. This project was a continuation of the Prevent & Protect campaign, and was created to gather more information on how the materials may be used among different audiences to promote communication and education on mosquito control topics. Components of this project include surveys and focus groups conducted with the Florida public.

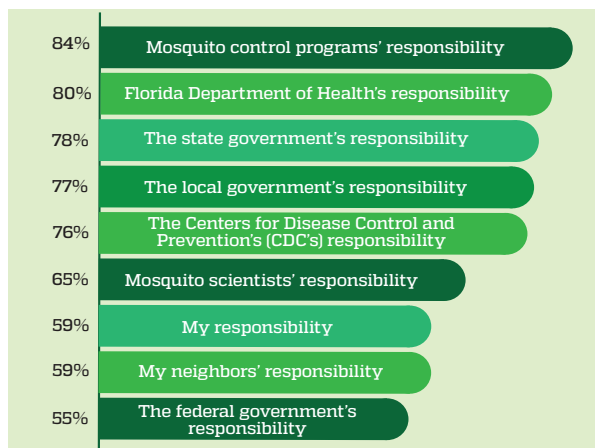
## FLORIDA RESIDENTS' PERCEPTION ON MOSQUITO CONTROL

In focus groups and surveys conducted by the UF/IFAS PIE Center, Florida residents agreed that controlling the mosquito population is important because it protects residents from mosquito-borne illnesses. While they had not actively searched for mosquito control information, focus group participants suggested that their interest and concern with mosquito control would intensify if there was a disease outbreak in their community. After viewing Prevent & Protect campaign materials, survey participants demonstrated significant increases in knowledge of mosquito control topics, including more positive attitudes towards aerial and truck-mounted spraying applications. Participants were also more likely to use at-home methods of mosquito control. Based on survey results, it is recommended that Prevent & Protect materials be used to supplement larger education efforts to facilitate mosquito control education among the Florida public.

**“Controlling the mosquito population in Florida is important...”**



When surveyed, Florida residents agreed or strongly agreed that mosquito control is:



### SOURCES OF MOSQUITO CONTROL INFORMATION SEEN AS TRUSTWORTHY BY FLORIDA RESIDENTS



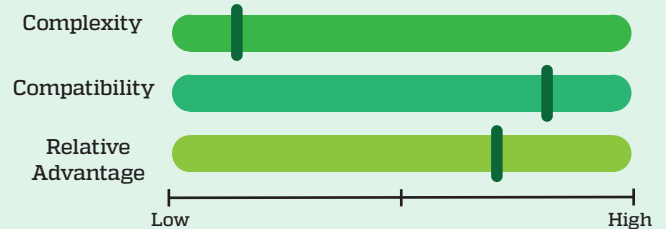
# WHAT PROFESSIONALS THINK ABOUT PREVENT & PROTECT MATERIALS

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) recently created materials designed to educate the public and local elected officials about mosquito control. This project was a continuation of the Prevent & Protect campaign, and was created to gather more information on how the materials may be used among different audiences to promote communication and education on mosquito control topics. These materials were also presented to Florida Department of Health and Florida mosquito control district professionals, who were then surveyed on their overall impression of the materials' effectiveness and design.

## PROFESSIONALS USING PREVENT & PROTECT MATERIALS

In a survey conducted by UF/IFAS PIE Center, Department of Health (DOH) and Florida mosquito control district (MCD) professionals who reviewed Prevent & Protect materials reported that they were easy to use and relatively more advantageous than the materials they were currently using to communicate mosquito topics to the public. While DOH professionals expressed that the Prevent & Protect materials were not compatible with their current job practices, MCD professionals perceived the materials to align with their current job practices and activities. Of the professionals who had used at least one of the Prevent & Protect materials, most reported using the print materials and the website. The website was also given high marks for graphic, structural, and content design by MCD and DOH professionals.

### Complexity, Compatibility, and Relative Advantage of Prevent & Protect Materials



\* Complexity refers to the degree to which an individual perceives an innovation as being difficult to use or understand, and was measured on a five-point scale.

\* Compatibility is the degree to which the professionals perceived the materials as being consistent with their values, experiences, and needs. Measured on a five-point scale.

\* Relative advantage is defined as the degree to which the materials are perceived as being better than what is currently being used by the individual. Measured on a five-point scale.

## HOW DO PROFESSIONALS COMMUNICATE MOSQUITO-RELATED TOPICS WITH THE PUBLIC?

### Department of Health professionals



Local Department of Health websites



Florida Department of Health websites

### Mosquito control district professionals



Community events



Print materials



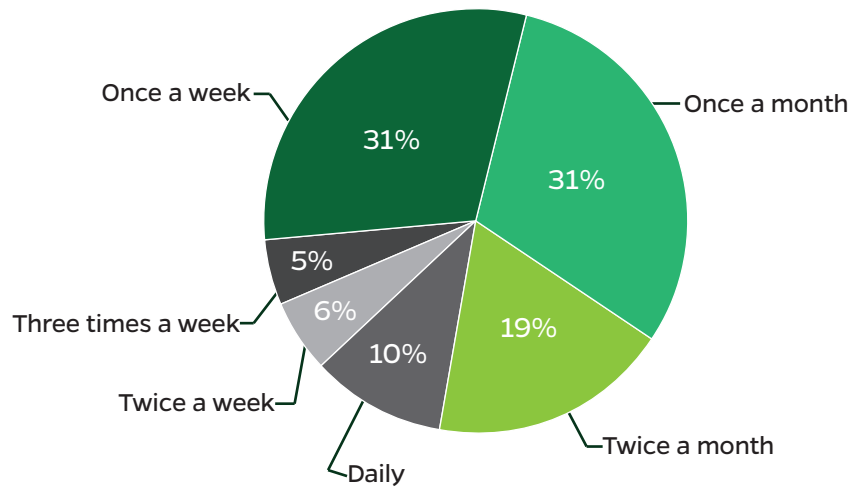
# WHAT AGRICULTURAL ORGANIZATIONS THINK ABOUT COMMUNICATING AGRICULTURAL ISSUES

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) conducts research and educates on how people form and act on opinions regarding complex agricultural and natural resources issues. The PIE Center recently surveyed members of agricultural organizations in Florida to learn more about how members (n=439) want to be communicated with, and what motivates them to contact elected officials. Members from the following organizations were included in the survey: Florida Farm Bureau, Florida Cattlemen’s Association, Florida Nursery, Growers and Landscape Association, Florida Fruit and Vegetable Association, and Wedgworth Leadership Institute.

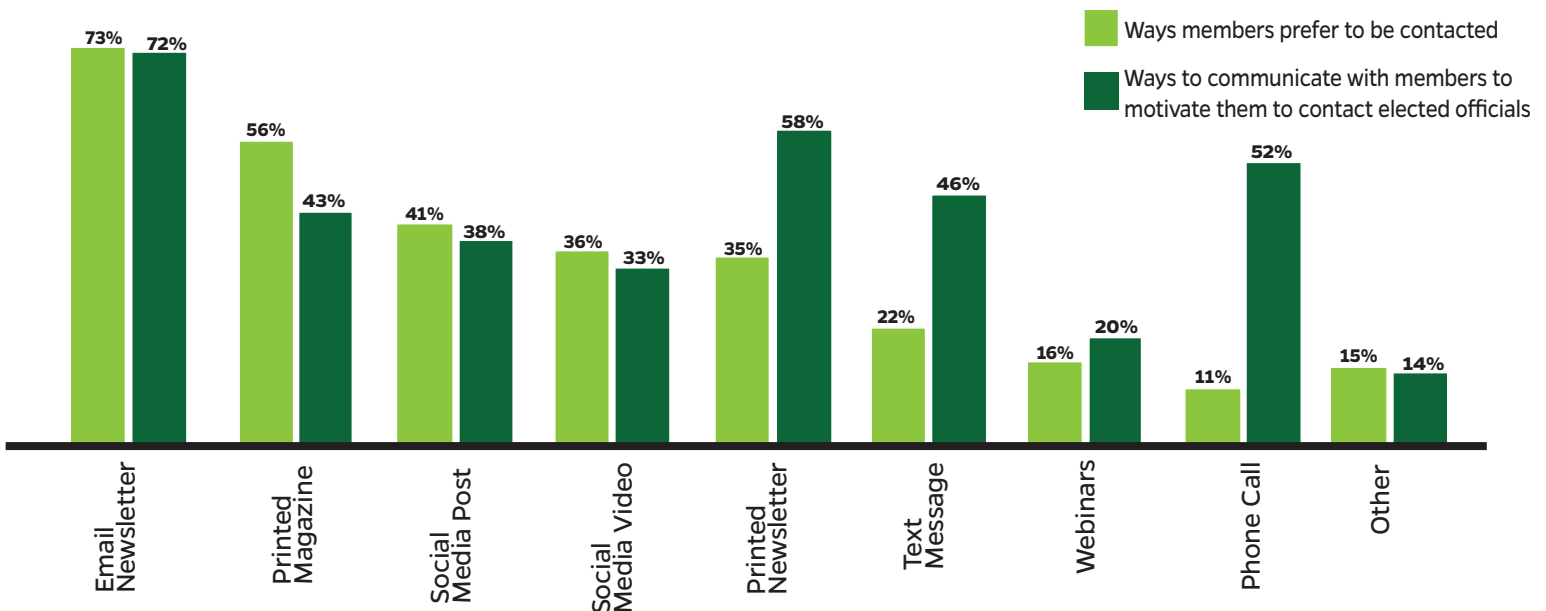
## HOW MEMBERS OF ORGANIZATIONS FEEL ABOUT RECEIVING INFORMATION

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) recently surveyed members of Florida’s agricultural organizations to learn about their responses to communication about agricultural and natural resource issues and communication with elected officials. The survey found that the majority of members like to be contacted from their organizations about agricultural and natural resource issues once a month or once a week. When members were asked how they preferred to be contacted by their organization, 73 percent responded that email newsletters are very or extremely preferred. These members also indicated that email newsletters were the best way to motivate them to contact elected officials.

Frequency Agricultural Organization Members like to Receive Agricultural and Natural Resources Information from their Organizations

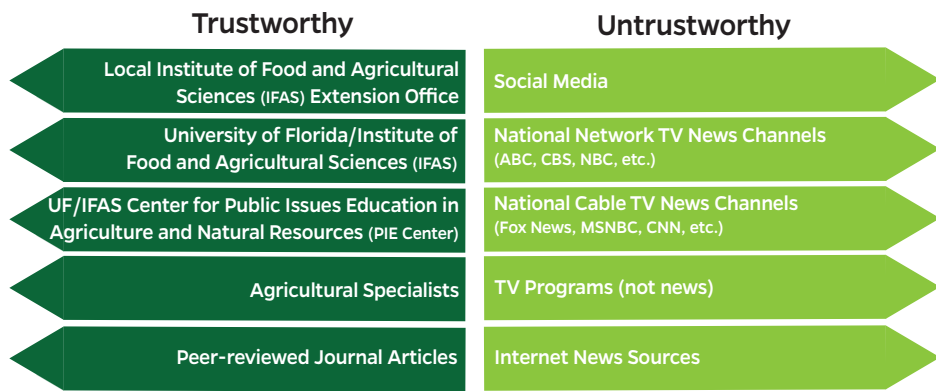


## Communicating with Members of Agricultural Organization

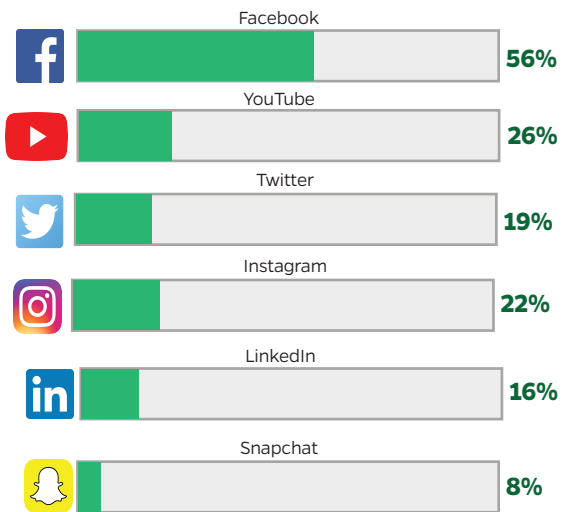


\*NOTE: THESE PERCENTAGES ARE “VERY PREFERRED” AND “EXTREMELY PREFERRED.”

## How Members Rated the Trustworthiness of These Sources



## Preference to Receiving Information from Their Agricultural Organization via Social Media Channels

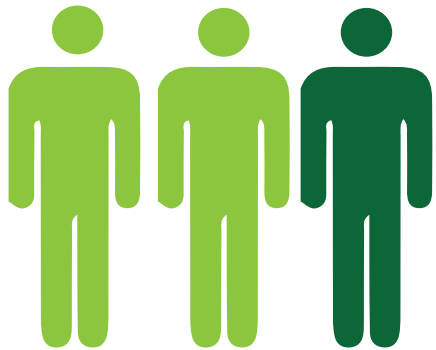


\*NOTE: 64% OF RESPONDENTS INDICATED SOME DEGREE OF PREFERENCE TO RECEIVE INFORMATION VIA SOCIAL MEDIA.

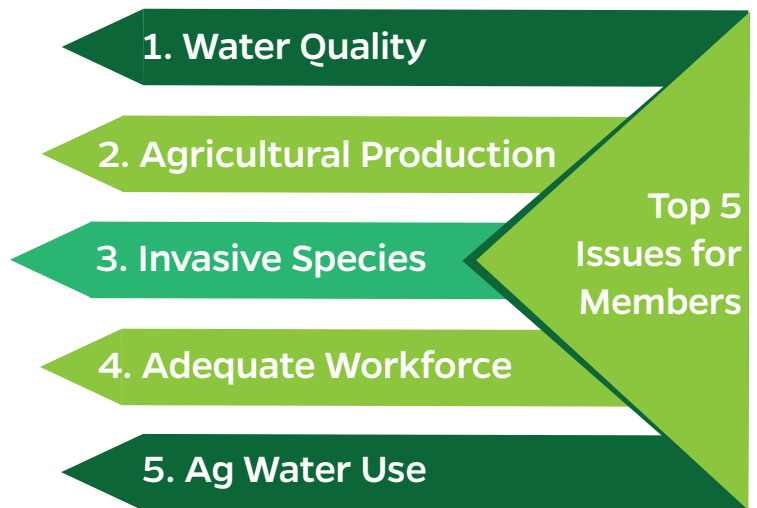
## HOW MEMBERS FEEL ABOUT COMMUNICATION

Among a selection of sources members responded that the most trustworthy sources for agriculture and natural resource information are local IFAS Extension Offices, the UF/Institute of Food and Agricultural Sciences and the Center for Public Issues Education. Members rated social media and network and cable TV as the most untrustworthy sources. Nearly 64 percent of respondents indicated some degree of preference (extremely preferred, very preferred, moderately preferred, slightly preferred) to receive information via social media, with Facebook being the most preferred. Members indicated that the top five issues are water quality, agricultural production, management of invasive species, adequate workforce and agricultural water use. Ninety-one percent believe that contacting elected officials about issues affecting Florida agriculture is the responsible thing to do. Ninety-three percent of members said that they would contact elected officials about legislation that has a direct negative effect on them.

Two out of every three respondents



indicated some degree of preference to receive information via social media



**91%** BELIEVE THAT CONTACTING ELECTED OFFICIALS ABOUT ISSUES AFFECTING FLORIDA AGRICULTURE IS THE **RESPONSIBLE** THING TO DO.

# WHAT AGRICULTURAL ORGANIZATIONS AND LOCAL LEADERS THINK ABOUT SOURCES OF AGRICULTURAL-RELATED INFORMATION

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) conducts research and educates on how people form and act on opinions regarding complex agricultural and natural resources issues. The PIE Center recently conducted a survey of county commissioners (n=45) to evaluate the sources they use for information on agriculture, food, water and natural resources. The PIE Center also recently surveyed members (n=439) of agricultural organizations in Florida to learn more about which sources they find to be the most trusted for information on agriculture, food, water and natural resources.

## IFAS AS A TRUSTED SOURCE FOR LEADERS

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) recently surveyed agricultural organizations and county commissioners about their most frequently used information sources for agriculture, food, water and natural resources. The survey found that 100 percent of county commissioners use the University of Florida/Institute of Food and Agricultural Sciences (IFAS) as a source of information about food and agriculture, and 95 percent use IFAS as a source of information about water and natural resources. County commissioners responded that their most frequently used information sources for agriculture, food, water and natural resources are IFAS and local Extension offices. Members of agricultural organizations responded that their most trusted sources of information are local IFAS Extension Offices, IFAS and the PIE Center.

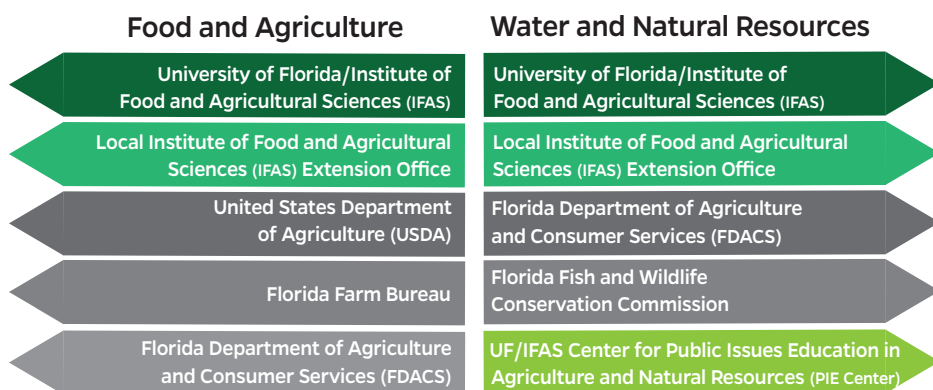


of county commissioners use **IFAS** as a source for information about **food and agriculture**.

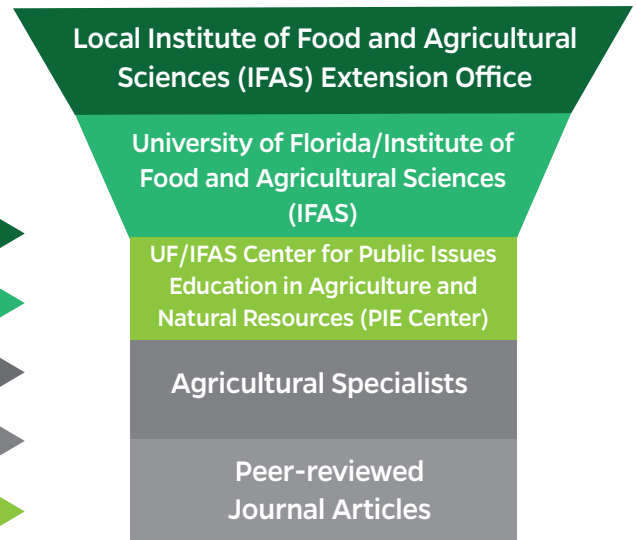


of county commissioners use **IFAS** as a source for information about **water and natural resources**.

### County Commissioners' Most Frequently Used Sources of Information for...



### Agricultural Organizations' Most Trusted Information Sources



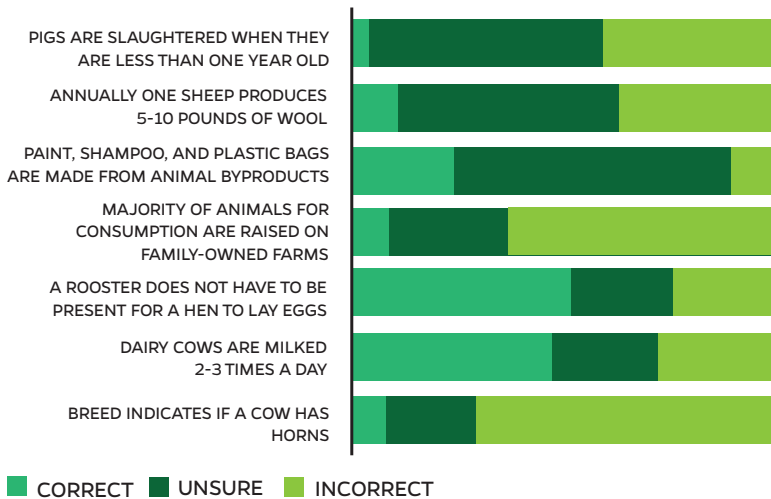
# WHAT FLORIDIANS THINK ABOUT LIVESTOCK CARE AND USE

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) conducts research and educates on how people form and act on opinions regarding complex agricultural and natural resources issues. The PIE Center encourages informed decision-making in three important areas, including exploring emerging issues impacting food and agriculture, advancing the responsible use of water and conservation of natural resources, and helping communities and organizations understand and adapt to changing agricultural and natural resources issues.

## WHAT FLORIDIANS THINK ABOUT THE CARE AND USE OF LIVESTOCK

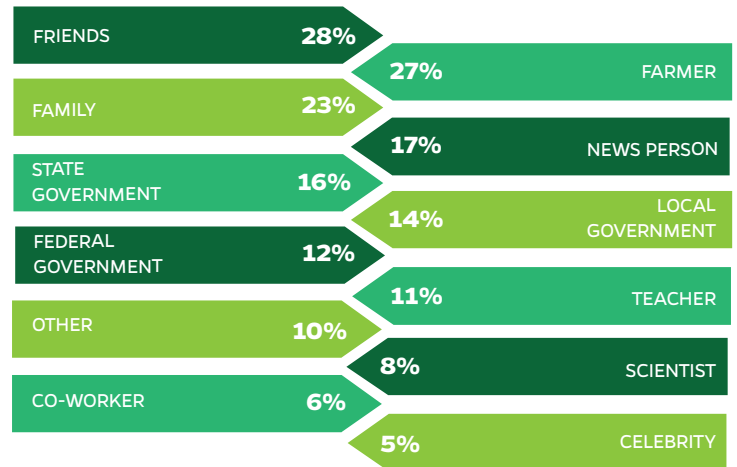
The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) recently surveyed Floridians about the care and use of livestock and found that majority of Floridians are unsure of livestock practices, however it is important for Floridians to be educated on these practices so that they can make more informed decisions. When Floridians were asked who they learned from about livestock practices, 28 percent said they learned from their friends. Floridians generally favor or somewhat favor most livestock practices, such as feeding livestock a nutritionally balanced diet, using livestock for edible byproducts, and vaccinating livestock against disease. Sixty-five percent of Floridians are concerned about the care and handling of livestock for human consumption in the United States.

### FLORIDIANS' KNOWLEDGE OF LIVESTOCK PRACTICES



NOTE: STATEMENTS ABOVE DISPLAY THE CORRECT ANSWERS TO QUESTIONS ASKED IN THE SURVEY.

### WHO FLORIDIANS LEARN FROM ABOUT LIVESTOCK PRACTICES



### FLORIDIANS' FAVORABILITY TOWARD LIVESTOCK PRACTICES



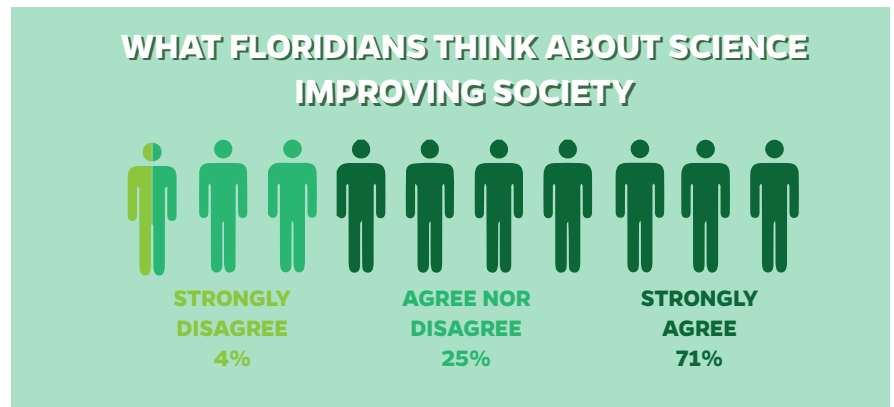
# WHAT FLORIDIANS THINK ABOUT SCIENCE COMMUNICATION

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) conducts research and educates on how people form and act on opinions regarding complex agricultural and natural resources issues. The PIE Center encourages informed decision-making in three important areas, including exploring emerging issues impacting food and agriculture, advancing the responsible use of water and conservation of natural resources, and helping communities and organizations understand and adapt to changing agricultural and natural resources issues.

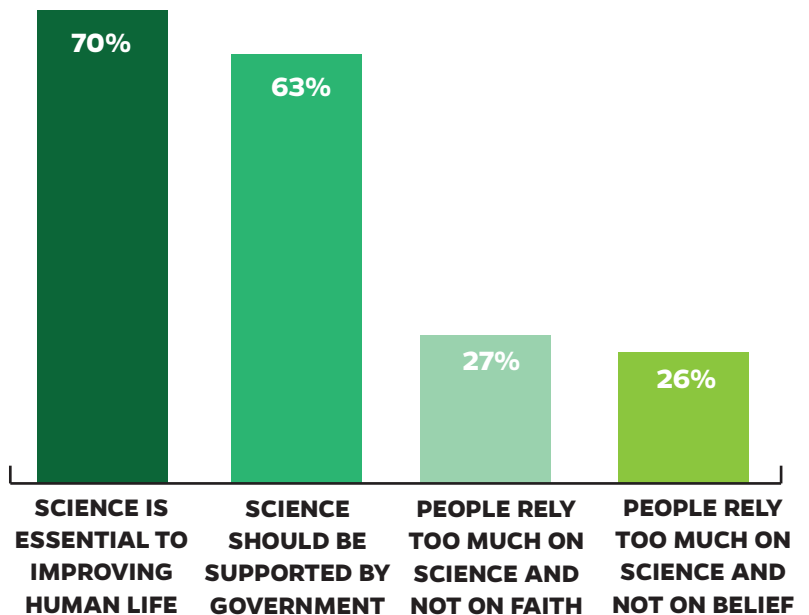
## WHAT FLORIDIANS THINK ABOUT TRUSTING SCIENCE

The public generally trusts science, however people can be selective on the scientific information they choose to trust. When asked about their overall trust in science, almost 71 percent of Floridians responded that developments in science improve society overall. More than 56 percent of Internet users create media content daily. With media that can reach masses within seconds, this can make it harder for consumers to identify true scientific information. People do not make decisions on fact alone, but often emotion, belief, and faith play a role in decision making.

**56%**  
**OF INTERNET**  
**USERS CREATE**  
**MEDIA CONTENT**  
**DAILY**



### OVERALL TRUST IN SCIENCE IN FLORIDA





# WHAT FLORIDIANS THINK ABOUT COMMUNITY PREPAREDNESS

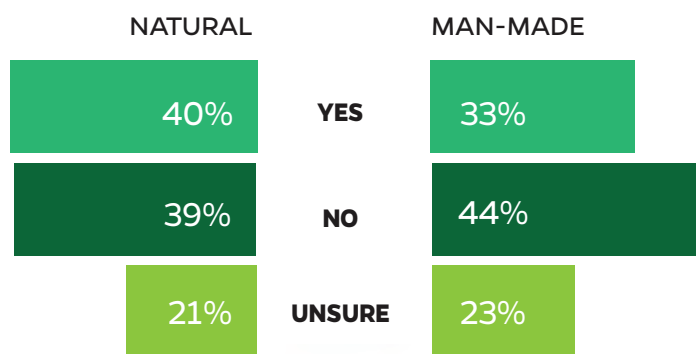
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## FLORIDA RESIDENTS DOUBT COMMUNITY DISASTER READINESS

According to a recent survey by the Center for Public Issues Education in Agriculture and Natural Resources, the majority of Florida residents either do not believe their communities are ready for a disaster or are unsure of their readiness.

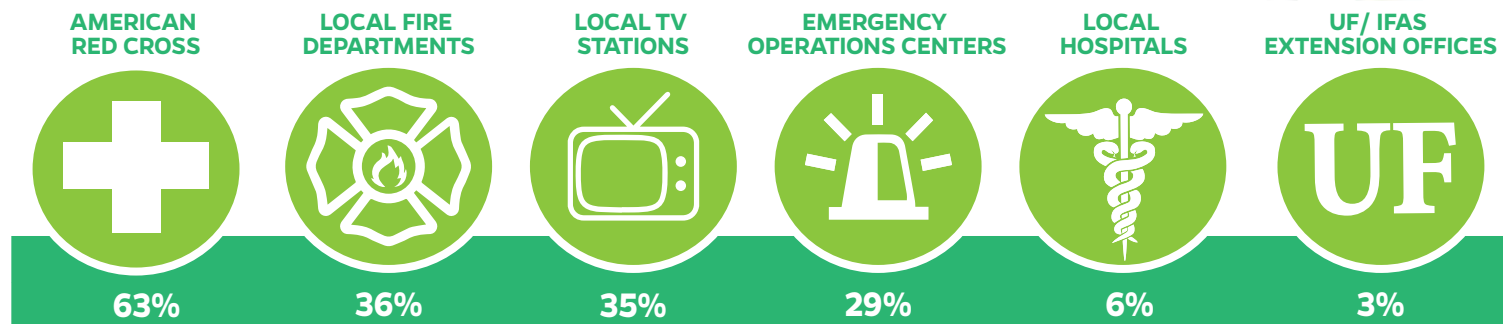
Floridians were also asked to gauge their thoughts on the likelihood of disasters occurring in their communities. Twice as many respondents thought a natural disaster was likely to occur than a man-made one. Forty-two percent of respondents said it was very or somewhat likely that a natural disaster would happen in their community in the next year.

### IS YOUR COMMUNITY READY FOR A DISASTER?



**55%** of Floridians said that **disaster preparedness** should be a high priority among local officials

### RESOURCES RESIDENTS USED IN DEVELOPING DISASTER PREPARATION PLANS







# WHAT PEOPLE THINK ABOUT FOOD & AGRICULTURE

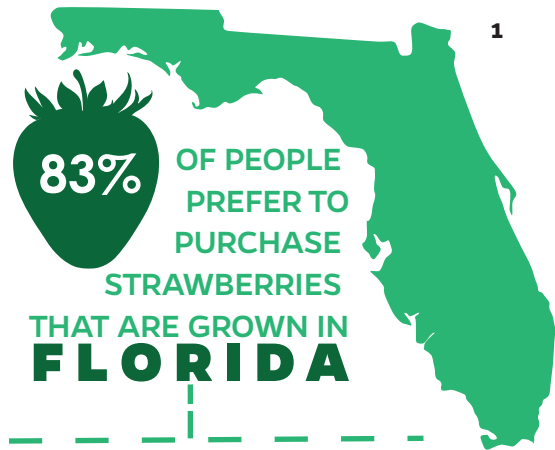
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## VALUABLE CHARACTERISTICS OF FLORIDA STRAWBERRIES

When asked about purchasing preferences of Florida strawberries, 83 percent of respondents preferred to purchase strawberries that are grown in Florida, in comparison to Mexico and California. The reasoning for purchasing Florida strawberries was also investigated. Ninety-one percent of consumers purchase Florida strawberries because of their freshness, and 83 percent purchase them to support Florida's economy.

### ATTRIBUTES CONSIDERED EXTREMELY IMPORTANT WHEN PURCHASING STRAWBERRIES

1. FRESHNESS	73%
2. TASTE	70%
3. NUTRITION	38%
4. IN SEASON	34%
5. PRICE	27%



PURCHASE THEM BECAUSE OF THEIR **FRESHNESS**



PURCHASE THEM TO SUPPORT FLORIDA'S **ECONOMY**

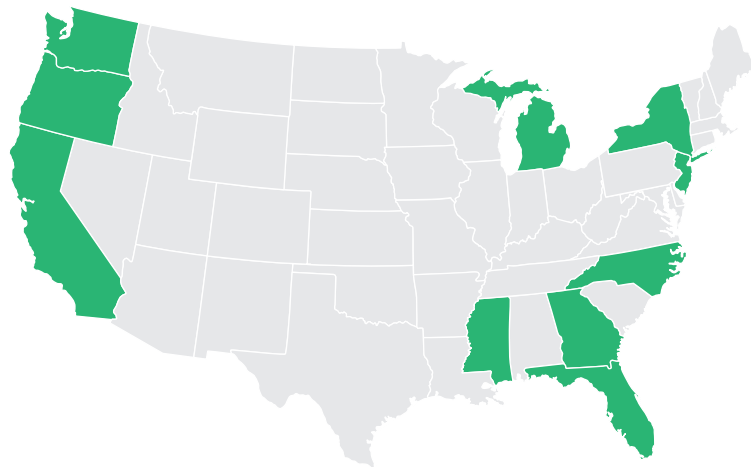


PURCHASE THEM BECAUSE OF THEIR **TASTE**

## CORRECTLY PERCEIVED HEALTH BENEFITS OF BLUEBERRIES



### TOP STATES CONSUMERS PREFER TO PURCHASE BLUEBERRIES FROM



1. FLORIDA
2. CALIFORNIA
3. GEORGIA
4. NORTH CAROLINA
5. NEW JERSEY
6. MICHIGAN
7. NEW YORK
8. MISSISSIPPI
9. OREGON
10. WASHINGTON

## CONSUMERS' PREFERENCES FOR FLORIDA BLUEBERRIES

The UF/ IFAS Center for Public Issues Education surveyed consumers to better understand national purchasing preferences and awareness of Florida's blueberries. Research revealed most consumers want to purchase Florida blueberries. Respondents were also asked about the health benefits from eating blueberries and correctly identified most benefits offered by blueberries, including strengthening eyesight, improving memory, and lowering the risk of cancer.



# WHAT PEOPLE THINK ABOUT WATER & NATURAL RESOURCES

The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources (PIE Center) conducts research and educates on how people form and act on opinions regarding complex agricultural and natural resources issues. The PIE Center encourages informed decision-making in three important areas, including exploring emerging issues impacting food and agriculture, advancing the responsible use of water and conservation of natural resources, and helping communities and organizations understand and adapt to changing agricultural and natural resources issues.

## PERCEPTION OF CHANGE IN WATER QUALITY IN OCEANS <sup>1</sup>

- BETTER- 15%
- NO CHANGE- 35%
- WORSE- 34%
- UNSURE- 17%



## PERCEPTION OF CHANGE IN WATER QUALITY IN RIVERS

- BETTER- 15%
- NO CHANGE- 36%
- WORSE- 32%
- UNSURE- 17%



## PERCEPTION OF CHANGE IN WATER QUALITY IN SPRINGS

- BETTER- 18%
- NO CHANGE- 43%
- WORSE- 19%
- UNSURE- 21%



## FLORIDIANS' PERCEPTIONS OF CHANGE IN WATER QUALITY

The UF/IFAS Center for Public Issues Education surveyed 496 Florida residents to understand residents' perceptions of water quality issues. Respondents were asked whether or not they believed the quality of various water sources was getting better, worsening, had no change, or if they were unsure.

Overall, respondents believed the water quality had not changed in the following water sources: springs, estuaries, groundwater, lakes, rivers, oceans and bays. Forty-three percent of respondents believed the water quality of springs had not changed, yet 34 percent of respondents believed the water quality of oceans had become worse.

## OFFICIAL BALLOT <sup>2</sup>



**69% OF PEOPLE ARE LIKELY OR VERY LIKELY TO VOTE FOR A CANDIDATE WHO SUPPORTS WATER CONSERVATION.**

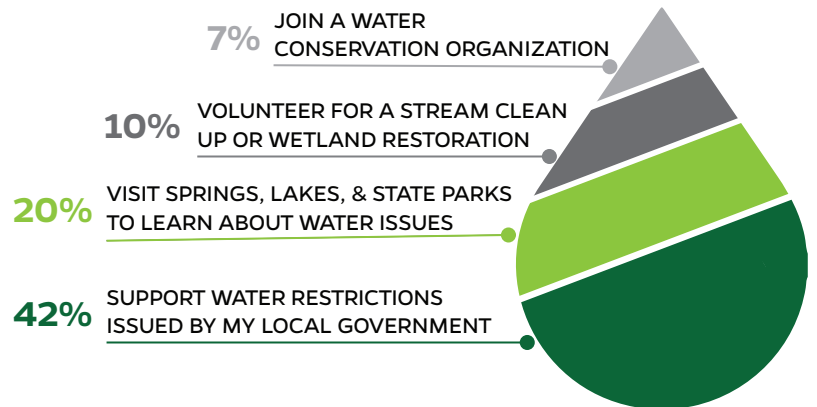


**79% OF PEOPLE ARE LIKELY OR VERY LIKELY TO VOTE TO SUPPORT WATER CONSERVATION PROGRAMS.**



**98% OF FLORIDIANS CONSIDER IT HIGHLY OR EXTREMELY IMPORTANT TO HAVE CLEAN DRINKING WATER**

## FLORIDIANS' LIKELIHOOD TO HELP PROTECT THE ENVIRONMENT <sup>4</sup>



# WHAT AMERICANS THINK ABOUT WATER QUALITY & QUANTITY

Most Americans value water usage as an important issue the nation currently faces, among others like the economy, health care and public education. Researchers with the UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources asked 1,137 citizens about their perceptions concerning the quantity and quality of the United States' water supply in a nationwide public opinion survey.

## WATER A TOP ISSUE FOR MANY AMERICANS

According to the Environmental Protection Agency, the typical American family of four uses 400 gallons of water per day, most of which are used for indoor activities like showering, flushing toilets, and washing clothes. It should come as no surprise then that the PIE Center's most recent national public opinion survey revealed water to be a top issue to United States citizens. Water was the third ranked highly or extremely important issue, only following the economy and the health care system.

While Americans identify water as a significant concern for them, 73 percent are willing to vote in support of water conservation programs and 67 percent are willing to vote for the candidates that support them.

Most respondents indicated having a plentiful water supply is essential for cities, agriculture, and commerce/ industry. Thirty-nine percent of those surveyed believed it is important for household landscapes to have plentiful water, signaling an opportunity to educate

### HIGHLY OR EXTREMELY IMPORTANT ISSUES

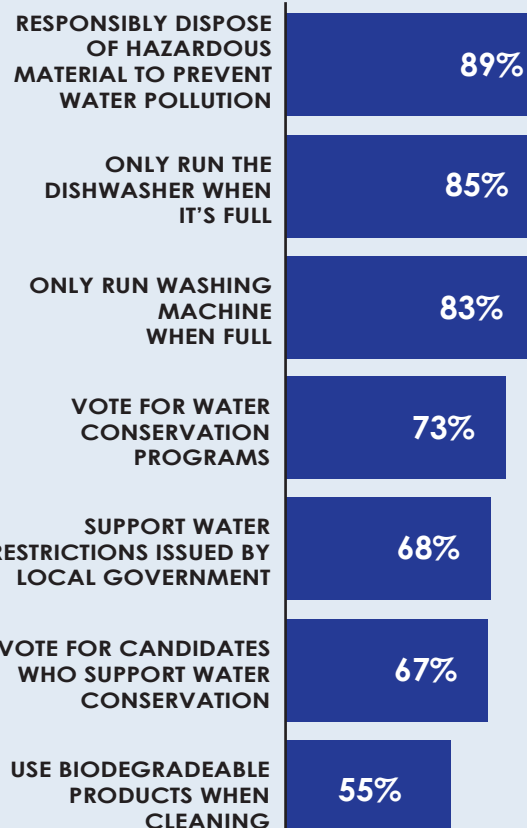
1. THE ECONOMY	91%
2. HEALTH CARE	90%
3. WATER	84%
4. PUBLIC EDUCATION	78%
5. FOOD PRODUCTION	77%
6. TAXES	71%
7. IMMIGRATION	68%
8. CONSERVATION	67%
9. CLIMATE CHANGE	54%
10. HOUSING FORECLOSURE	52%

homeowners on how to conserve water outdoors and support water restrictions issued by local government so it can be delegated to more valued purposes.

Americans are cognizant of indoor water usage, with a large percent indicating that they only run their dishwashers and washing machines when they are full.

Eighty-nine percent of Americans stated they are likely to dispose of their hazardous material in the proper locations. However, only 55 percent were likely to use biodegradable cleaning products in order to prevent water pollution.

### "I AM LIKELY TO..."



# NORTHEAST CONFIDENT IN WATER SECURITY

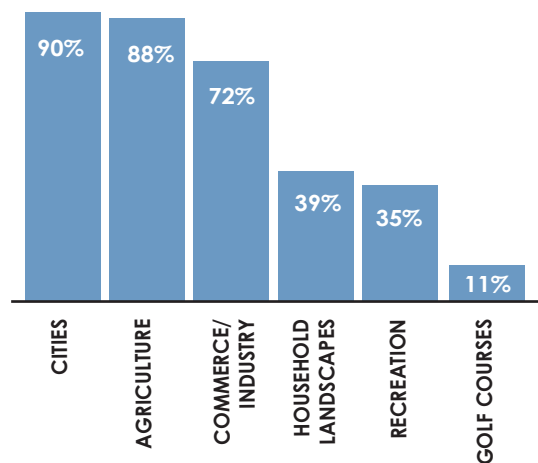
Throughout the United States, opinions of the quantity and quality of respondents' water varied regionally, with the Northeast indicating the highest levels of confidence in both water quantity and quality over the next 10 years.

The western US, including New Mexico, California and Washington, was the least unified in its confidence of water quantity. While 32 percent of westerners were highly or extremely confident, an equal 32 percent were not at all or only slightly confident that there would be enough water to sustain their community's needs. Interestingly, they were highly confident in their tap water quality, despite their quantity concerns.

Contrastingly, respondents from the Midwest were confident in water quantity; however, a quarter were not at all or only slightly confident in their tap water quality.

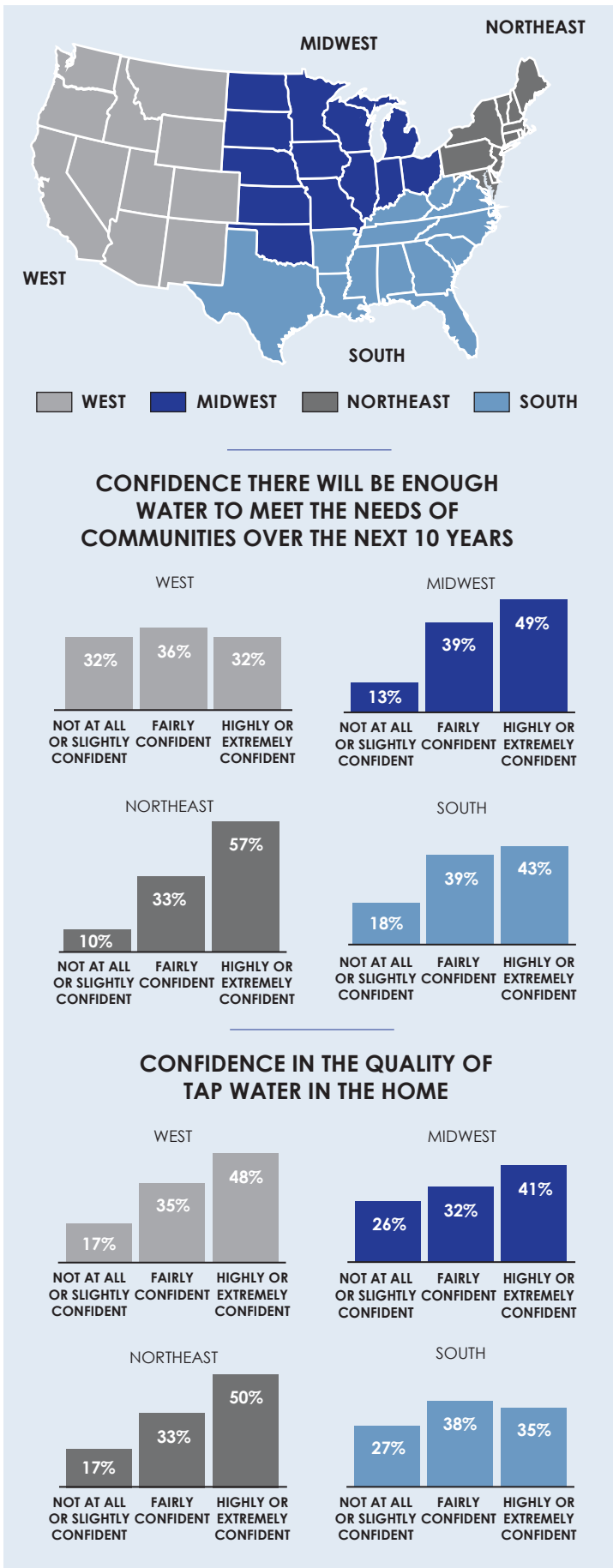
Respondents from the South are mostly confident of water quantity in their communities over the next decade. Yet, the South was the region that was the least confident in the quality of its tap water.

## "I THINK IT IS IMPORTANT TO HAVE A PLENTIFUL SUPPLY OF WATER FOR..."



## ABOUT OUR RESEARCH

The PIE Center is expanding its research portfolio by conducting four national surveys this year. The surveys explore what Americans think about water quality and quantity, food safety and security, animal welfare and community disaster preparedness.



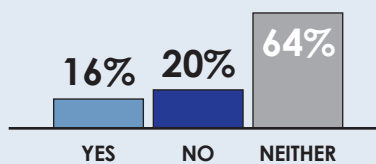
# WHAT FLORIDIANS THINK ABOUT LANDSCAPE IRRIGATION

Many Floridians are confused about the effects landscape irrigation and lawn care can have on the quantity and quality of the state's water supply. Researchers with the UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources asked residents for their perceptions of turfgrass lawns in its annual statewide public opinion survey on water use. Two other surveys gauged opinions of high-water users in central, southwest and southeast Florida.

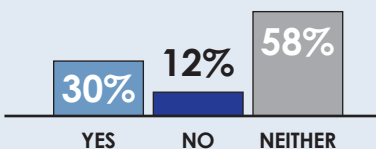
## FLORIDIANS SAY TURFGRASS IS GREENER BUT UNSURE ABOUT IMPACTS ON WATER

### TURFGRASS LAWNS...

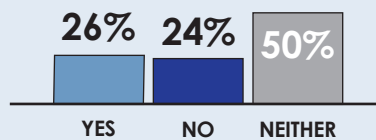
#### HAVE AN OVERALL NEGATIVE IMPACT ON WATER QUALITY



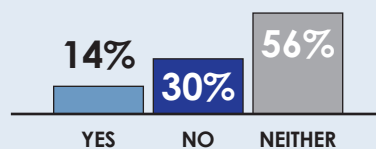
#### HAVE A POSITIVE EFFECT ON THE ENVIRONMENT



#### ARE UNNATURAL



#### REQUIRE TOO MUCH WATER TO MAINTAIN



Most respondents remained neutral when asked for their opinions about turfgrass, signaling an opportunity to educate and inform residents how to conserve water when caring for their lawn.

Fourteen percent of Floridians thought that turfgrass lawns needed too much water to maintain, though 56 percent neither agreed nor disagreed.

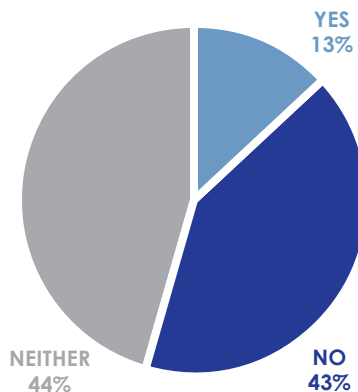
Floridians largely rejected native plants as substitutes for turfgrass, with only 13 percent saying they preferred natives. More than 40 percent wanted turfgrass, and 45 percent were unsure. Nearly two-thirds of residents said they appreciated when

homes have well-maintained yards, and 54 percent believed that having a healthy turfgrass lawn is important for maintaining a property's economic value.

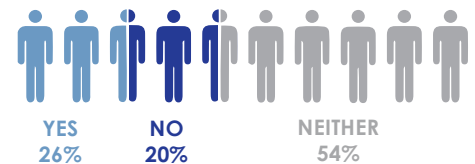
Thirty percent of residents believed turfgrass had a positive effect on the environment, compared to 58 percent who were unsure. More than 60 percent did not know if turfgrass negatively affected the quality of nearby water bodies.

More than half of Floridians neither agreed nor disagreed that too many people have turfgrass lawns or that people put too many resources into managing their turfgrass.

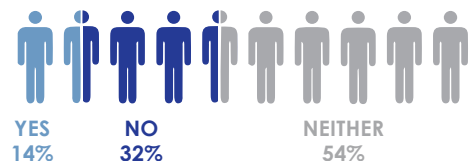
#### "I PREFER NATIVE PLANTS TO TURFGRASS."

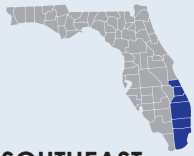


#### "I BELIEVE TOO MANY PEOPLE HAVE TURFGRASS LAWNS."



#### "I BELIEVE MOST PEOPLE PUT TOO MANY RESOURCES INTO MANAGING TURFGRASS."





**SOUTHEAST**  
BROWARD, INDIAN RIVER, MARTIN, MIAMI-DADE, PALM BEACH & ST. LUCIE COUNTIES

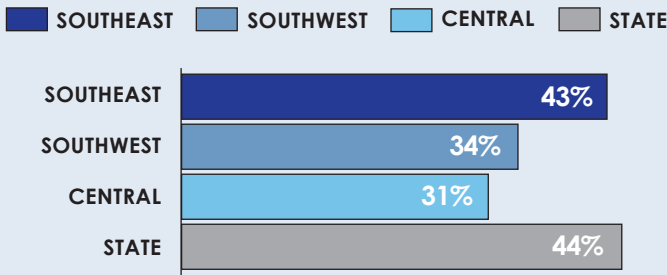


**SOUTHWEST**  
CITRUS, COLLIER, HARDEE, HERNANDO, HIGHLANDS, HILLSBOROUGH, MANATEE, PASCO, PINELLAS, POLK, SARASOTA & SUMTER COUNTIES

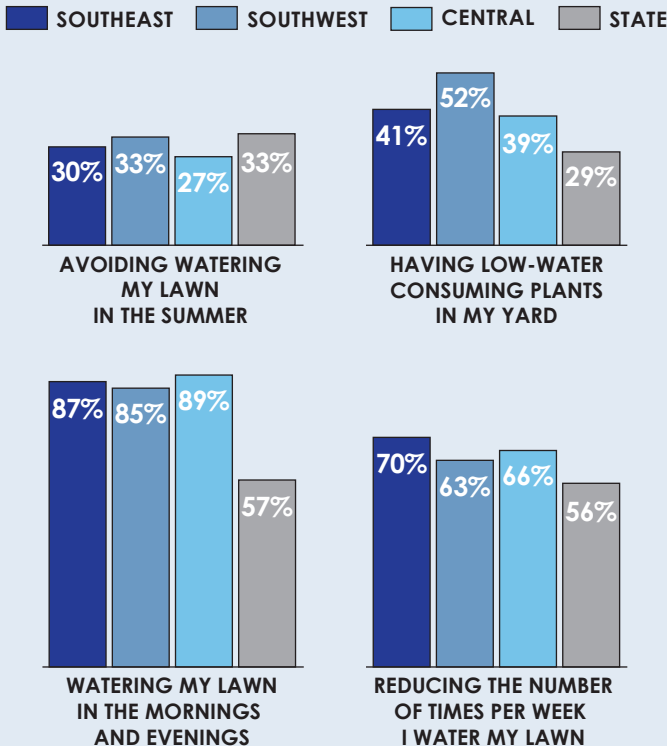


**CENTRAL**  
OSCEOLA, LAKE, ORANGE & SEMINOLE COUNTIES

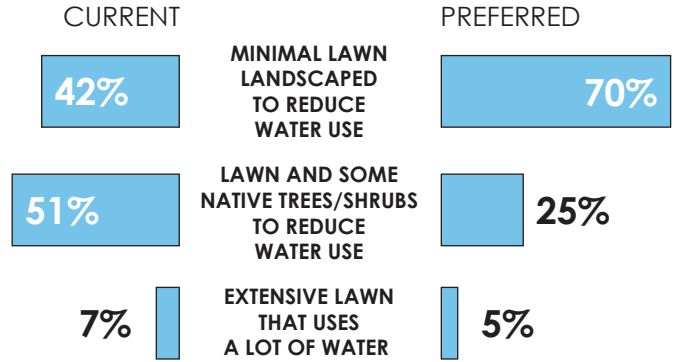
**HIGHLY OR EXTREMELY IMPORTANT TO HAVE PLENTIFUL WATER FOR HOUSEHOLD LANDSCAPES**



**“I CONSERVE WATER BY...”**



**CENTRAL FLORIDIANS’ LANDSCAPES**



**HIGH-WATER USERS MORE LIKELY TO TRY TO SAVE WATER**

Even though they currently use more resources, high-water users throughout central and southern Florida are more inclined to conserve water than the average Floridian.

**CENTRAL FLORIDIANS’ BARRIERS TO GETTING PREFERRED LANDSCAPE**

1. COST	78%
2. TIME	77%
3. HOMEOWNERS’ ASSOCIATION	76%
4. LACK OF INFORMATION	75%

Residents in central and southern Florida were more likely to conserve water by reducing how often they watered their lawn and by watering only in the mornings and evenings.

According to the statewide survey, 72 percent of Floridians are responsible for maintaining a lawn. Of those residents, 52 percent have turfgrass and 46 percent owned irrigation systems. Roughly half of the high-water users reported monthly water bills between \$50 and \$100.

Researchers asked residents of central Florida about their current and preferred landscapes. Seven percent of residents wanted to have a lawn designed to minimize water consumption — but only 42 percent indicated they currently have that style of lawn. Central Floridians attributed cost, time, homeowners’ association rules and lack of information as reasons they could not have their desired style of lawn.

**ABOUT OUR RESEARCH**

In addition to the annual public opinions of water quantity and quality survey administered statewide, PIE Center researchers surveyed high-water users in various regions of the state in partnership with the UF/IFAS Center for Landscape Conservation and Ecology. High-water users were primarily defined by income, being responsible for a landscape and paying for professional lawncare services.

# WHAT FLORIDIANS THINK ABOUT COMMUNITY PREPAREDNESS

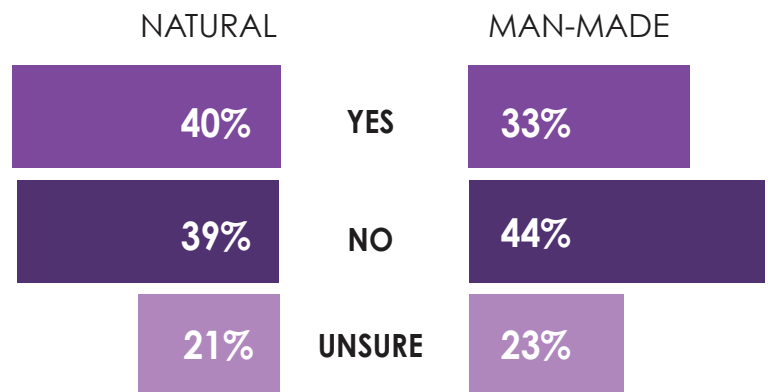
A growing concern throughout the country is preparedness for both individuals and communities. Residents must be prepared for both natural and man-made disasters in order to ensure the sustainability of Florida's economy and communities. The UF/ IFAS Center for Public Issues Education in Agriculture and Natural Resources surveyed more than 500 Floridians in January 2016 to examine how prepared respondents felt when facing possible future disasters.

## FLORIDA RESIDENTS DOUBT COMMUNITY DISASTER READINESS

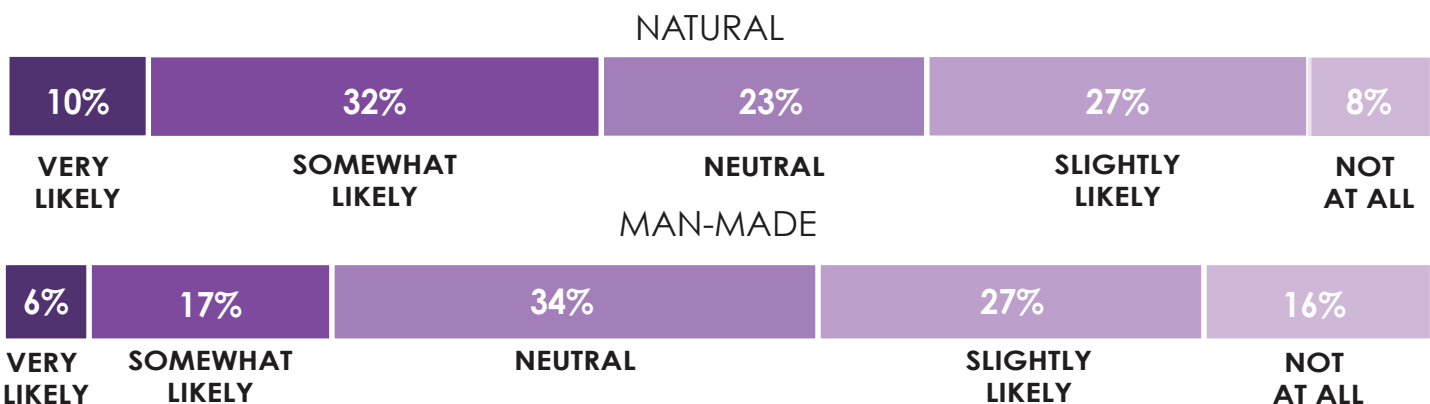
According to a recent survey by the Center for Public Issues Education in Agriculture and Natural Resources, the majority of Florida residents either do not believe their communities are ready for a disaster or are unsure of their readiness.

Floridians were also asked to gauge their thoughts on the likelihood of disasters occurring in their communities. Twice as many respondents thought a natural disaster was likely to occur than a man-made one. Forty-two percent of respondents said it was very or somewhat likely that a natural disaster would happen in their community in the next year.

### IS YOUR COMMUNITY READY FOR A DISASTER?



### LIKELIHOOD OF DISASTERS HAPPENING IN YOUR COMMUNITY IN THE NEXT YEAR



# FLORIDIANS UNDERUTILIZING RESOURCES THAT AID DISASTER PREPARATION

A little over half of Floridians reported having disaster or emergency plans they could utilize if necessary. Of the respondents who had developed plans, the organization or resource that was referenced most in their plans' development was the American Red Cross at 63 percent. Local fire departments, emergency operations centers and UF/IFAS Extension offices are also resources for families developing disaster plans, yet the majority of respondents did not take advantage or were unaware of these resources.

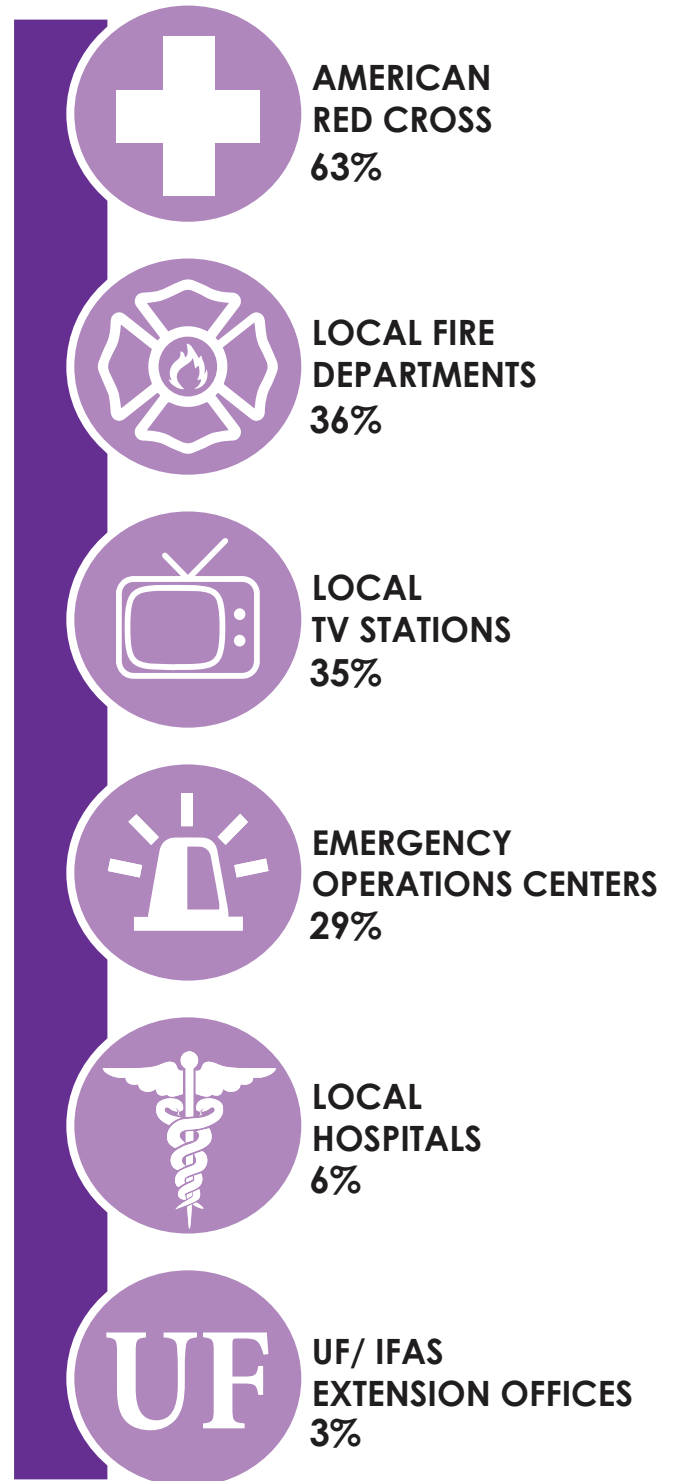
Regardless of whether they had disaster plans prepared in advance, the majority of Floridians were somewhat or very confident that local law enforcement and their families would be prepared to handle disasters and emergencies, should they occur. More than half of respondents said they would be able to evacuate if necessary and would still be able to obtain news and emergency information from local officials.

Sixty-two percent of respondents agreed or strongly agreed that their communities need additional disaster recovery programs.

## ABOUT OUR SURVEYS

The PIE Center conducts at least four public opinion surveys every year that focus on issues of key significance to Floridians. The surveys explore what Floridians think about the rights, responsibilities, attitudes and behaviors associated with critical issues such as food production, water quantity and quality, community resilience and preparedness, as well as endangered and invasive species.

## RESOURCES RESIDENTS USED IN DEVELOPING DISASTER PREPARATION PLANS

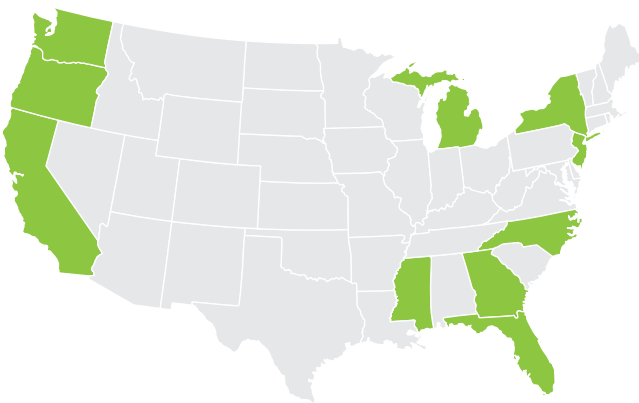




# WHAT CONSUMERS THINK ABOUT FLORIDA BLUEBERRIES

The Florida blueberry industry is valued at more than \$47 million and ranks seventh in the nation. However, global competition and a short harvest window continually threaten the industry's sustainability. National consumers seem ready to accept Florida blueberries but are unaware of when the blueberries are available and some of the health benefits associated with the crop, according to research from the UF/IFAS Center for Public Issues Education.

## TOP STATES CONSUMERS PREFER TO PURCHASE BLUEBERRIES FROM



1. FLORIDA
2. CALIFORNIA
3. GEORGIA
4. NORTH CAROLINA
5. NEW JERSEY
6. MICHIGAN
7. NEW YORK
8. MISSISSIPPI
9. OREGON
10. WASHINGTON

## AVAILABILITY, PRICE MOST IMPORTANT

Consumers strongly identified Florida as a state from where they would purchase blueberries.

When presented a list of the top 10 blueberry producing states, consumers identified Florida and California as their top choices — even though the states are seventh and eighth, respectively in production rates. Michigan, the state boasting the most acres of blueberry fields, was only the sixth most likely state consumers would purchase blueberries from.

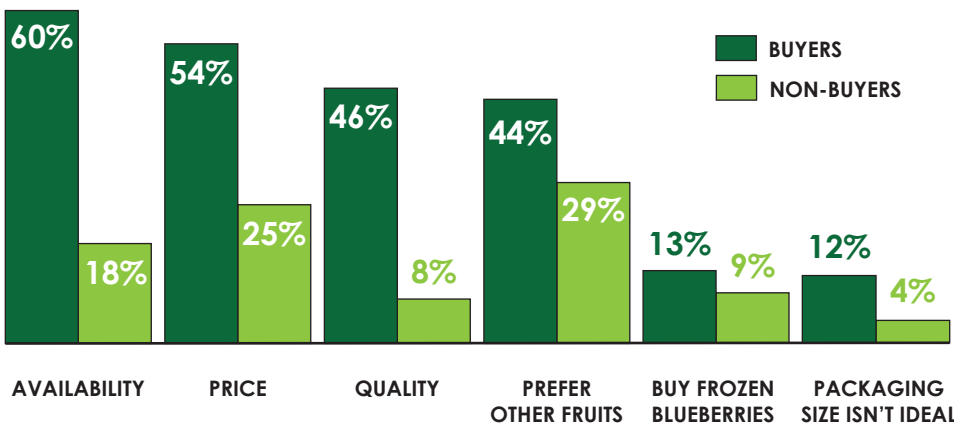
Overall, the 2,100 consumers surveyed strongly preferred blueberries grown in the U.S. to imported berries from Chile.

The 1,574 consumers who said they have bought blueberries within the past year identified availability, price and quality as reasons they do not buy more.

The 526 consumers who have not purchased blueberries within the last year simply prefer other fruits and don't like blueberries.

Frozen blueberries, packaging sizes and time of year do not seem to be major factors in purchasing habits.

## WHY CONSUMERS DON'T BUY MORE OR DON'T BUY AT ALL



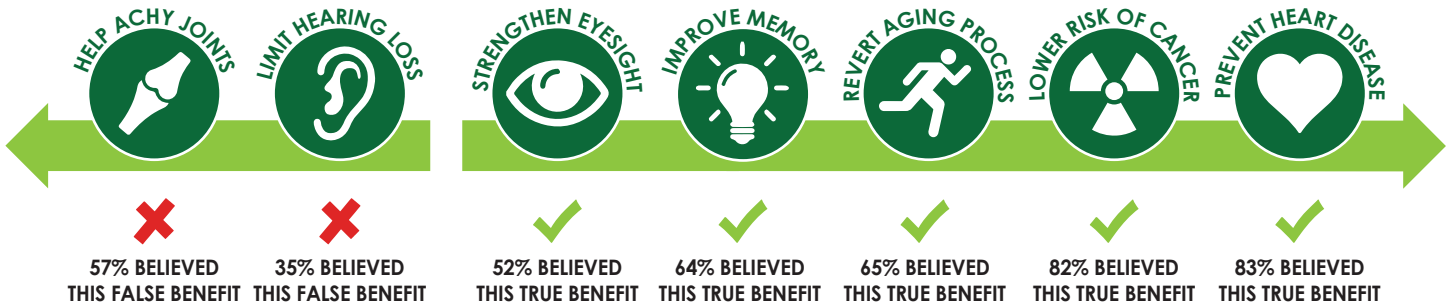
**17%** OF CONSUMERS ONLY EAT BLUEBERRIES DURING CERTAIN TIMES OF THE YEAR

**25%** OF CONSUMERS DO NOT LIKE BLUEBERRIES

**12%** OF CONSUMERS ONLY BUY BLUEBERRIES WHEN MAKING A SPECIFIC MEAL OR DISH

**15%** OF CONSUMERS DO NOT KNOW HOW TO PREPARE MEALS OR DISHES WITH BLUEBERRIES

## PERCEIVED HEALTH BENEFITS OF BLUEBERRIES



## CONSUMERS AWARE OF BENEFITS OF BLUEBERRIES, NOT SURE OF SEASON

For the most part, consumers seemed aware of the health benefits to eating blueberries: strengthened eyesight, improved memory and more. More than 80 percent correctly believed that blueberries both lower the risk of cancer and help prevent heart disease. More than half, however, incorrectly believed that blueberries help soothe achy joints.

Only 16 percent of consumers said they knew when Florida blueberry season was. But many of those consumers

incorrectly believed blueberries were available over the summer months, instead of spring. Between 10 and 15 percent of consumers believed that Florida blueberries were in season between October and February.

The majority of consumers identified a pint container as the ideal amount of blueberries to purchase. About a quarter of consumers said a 2-pound package was ideal, compared to 16 percent who said 6 ounces was preferred.

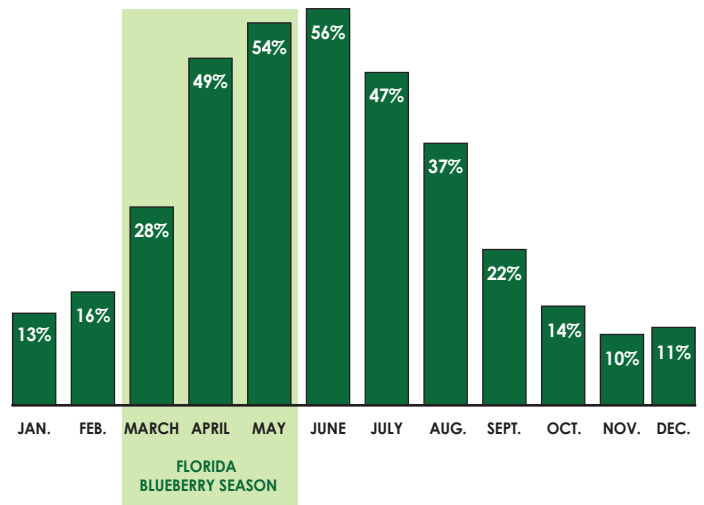
### ABOUT OUR RESEARCH

The PIE Center partnered with the Florida Specialty Crop Foundation to explore consumers' perceptions and barriers to purchasing Florida blueberries. PIE Center researchers surveyed 2,100 U.S. residents at least 18 years old who lived in states that received Florida blueberries, and will also survey blueberry growers to identify the barriers to marketing their crop. The research is funded through a specialty crop block grant administered by the USDA and Florida Department of Agriculture and Consumer Services.

ONLY  
**16%**

OF CONSUMERS SAID THEY KNEW WHEN FLORIDA BLUEBERRIES WERE IN SEASON.

WE ASKED THOSE PEOPLE WHAT MONTHS THEY THOUGHT FLORIDA BLUEBERRIES WERE IN SEASON:



### IDEAL PACKAGE SIZES CONSUMERS WANT TO BUY



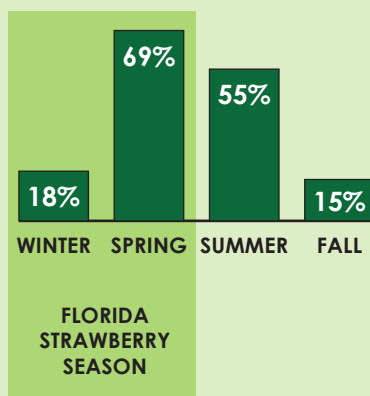
\* 8% SELECTED 'OTHER' OR 'MAKES NO DIFFERENCE'

# WHAT CONSUMERS THINK ABOUT FLORIDA STRAWBERRIES

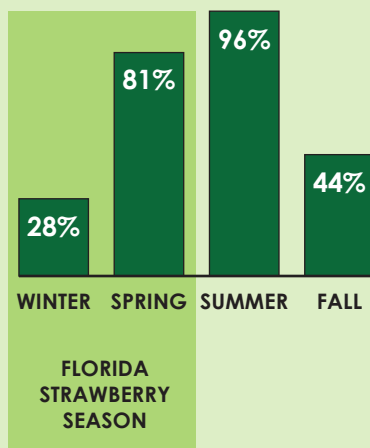
Florida is the country's second-leading strawberry producer and highest producer during the winter. The state's strawberry industry contributes \$300 million to Florida's economy annually but faces growing challenges from strawberries imported from Mexico. Consumers value Florida strawberries for the crop's freshness, taste, price and quality, but seem unaware of when the strawberries are available, according to research from the UF/IFAS Center for Public Issues Education.

**40%** OF CONSUMERS SAID THEY KNOW WHEN FLORIDA STRAWBERRIES ARE IN SEASON.

WE ASKED THOSE PEOPLE WHAT MONTHS THEY THOUGHT FLORIDA STRAWBERRIES WERE IN SEASON:



WHEN CONSUMERS BUY STRAWBERRIES



## SURVEY: RESIDENTS UNAWARE OF WINTER STRAWBERRY SEASON

Consumers most frequently buy strawberries in the summer — after Florida's strawberry season has ended.

Ninety-six percent of U.S. residents living east of the Mississippi River said they typically purchase strawberries in June, July or August. Although 81 percent of shoppers said they typically purchase strawberries in the spring, or very end of the Florida strawberry season, only 28 percent bought strawberries in the winter.

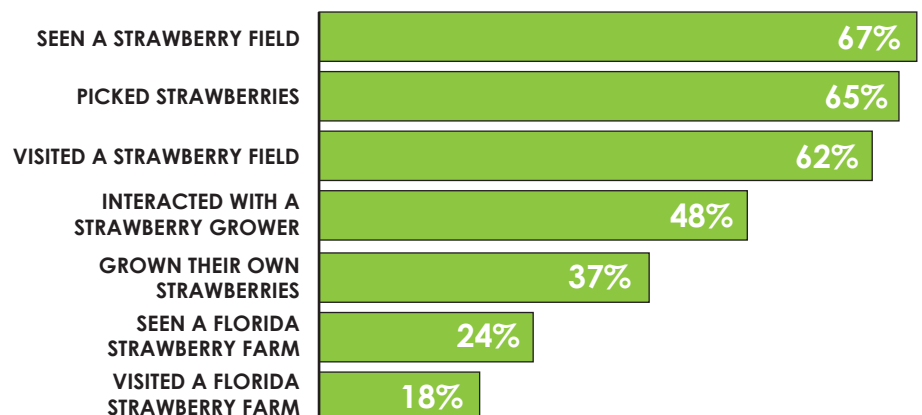
Sixty percent of consumers did not know when Florida strawberries were in season. Of the 40 percent who said they did, more than half mistakenly believed Florida strawberries were

available during summer months. Only 18 percent believed Florida strawberries to be in season during the winter.

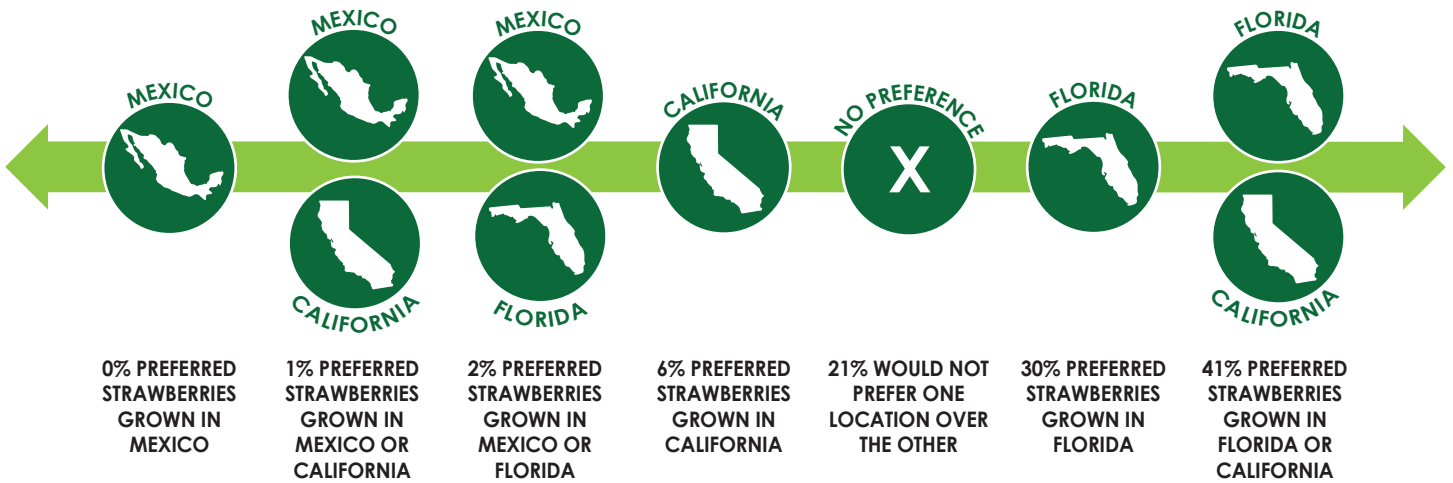
About two-thirds of consumers reported having seen a strawberry field in person or picked strawberries by hand. Sixty-two percent had visited a strawberry field and nearly half said they had interacted with a strawberry grower at a farm or farmers markets.

However, consumers' experiences with strawberries does not always happen in Florida. Less than a quarter of eastern U.S. residents said they had seen a Florida strawberry farm and even fewer reported visiting one.

### CONSUMERS' EXPERIENCES WITH STRAWBERRIES



## PREFERRED GROWING LOCATION



## FLORIDA PRIME SPOT FOR STRAWBERRIES

Despite not knowing when Florida strawberries are in season, national consumers recognize the state for producing high-quality and delicious strawberries.

When given the choice of purchasing strawberries from a variety of locations, 30 percent of consumers

who live east of the Mississippi River said they would prefer strawberries grown in Florida. About 40 percent said they would buy strawberries grown in either Florida or California.

Consumers valued Florida and California strawberries for their perceived

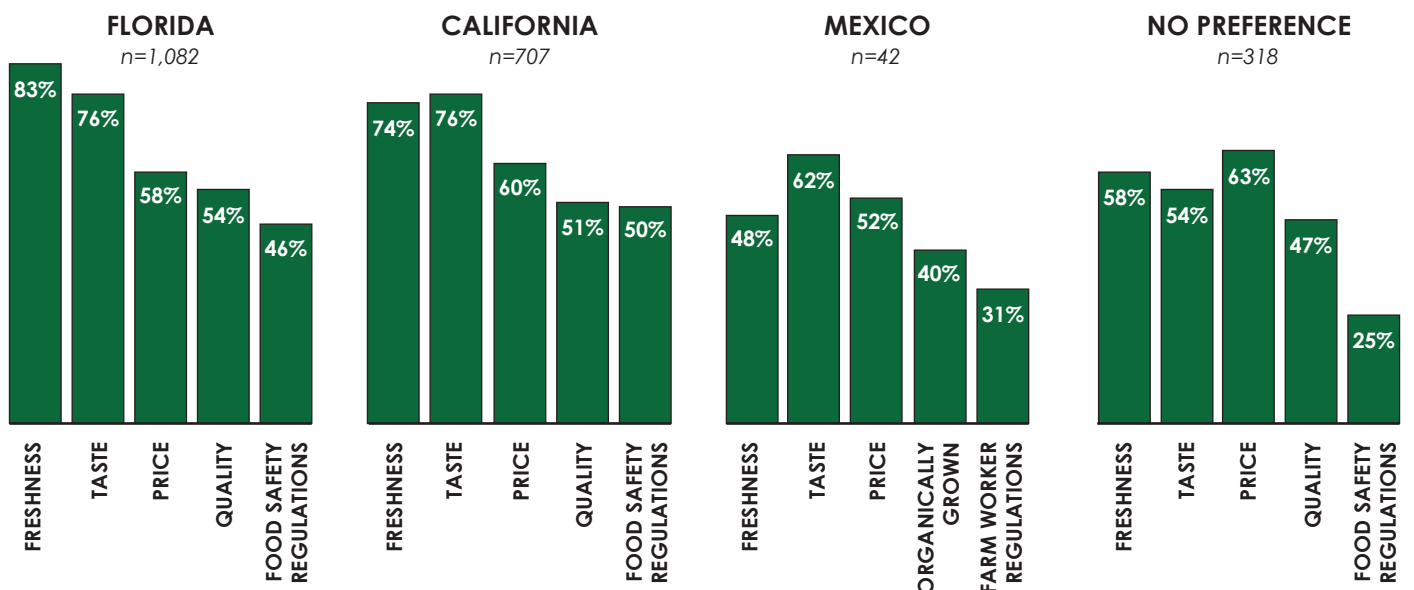
freshness, taste, price, quality and food safety regulations.

Beyond freshness, taste and price, the few who preferred strawberries imported from Mexico said they believed the crop to be grown organically and with better farm worker regulations.

## ABOUT OUR RESEARCH

The PIE Center partnered with the Florida Strawberry Growers Association to explore consumers' strawberry-buying habits and perceptions. PIE Center researchers surveyed 1,500 U.S. residents at least 18 years old who lived east of the Mississippi River.

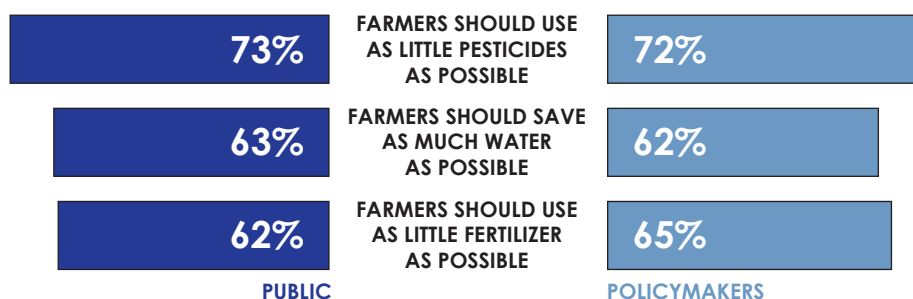
## TOP 5 REASONS TO PURCHASE FROM EACH GROWING LOCATION



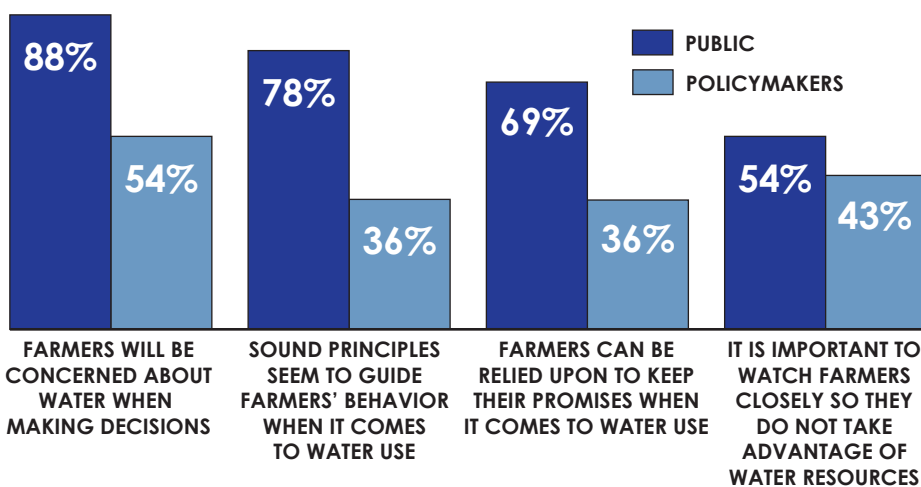
# PUBLIC VS. POLICYMAKER BELIEFS ABOUT AGRICULTURAL WATER USE

Floridians strongly believe that farmers protect the state's environment and water resources, according to research from the UF/IFAS Center for Public Issues Education that compared public perceptions to those of local government officials. The public and policymakers agreed that farmers should save water as much as possible and limit their use of fertilizers and pesticides to only what is necessary.

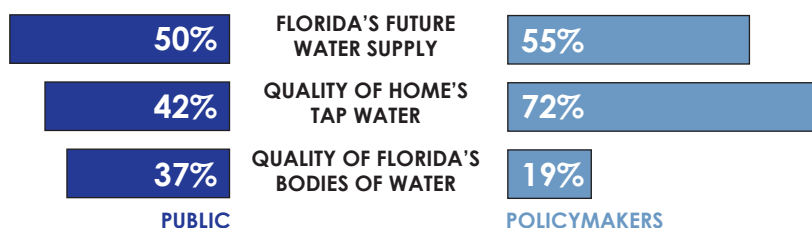
## PUBLIC & POLICYMAKERS AGREE OR STRONGLY AGREE THAT...



## PUBLIC & POLICYMAKERS DIFFER THAT...



## PUBLIC & POLICYMAKERS HIGHLY OR EXTREMELY CONFIDENT IN...



## FLORIDIANS FAVORABLE OF FARMERS

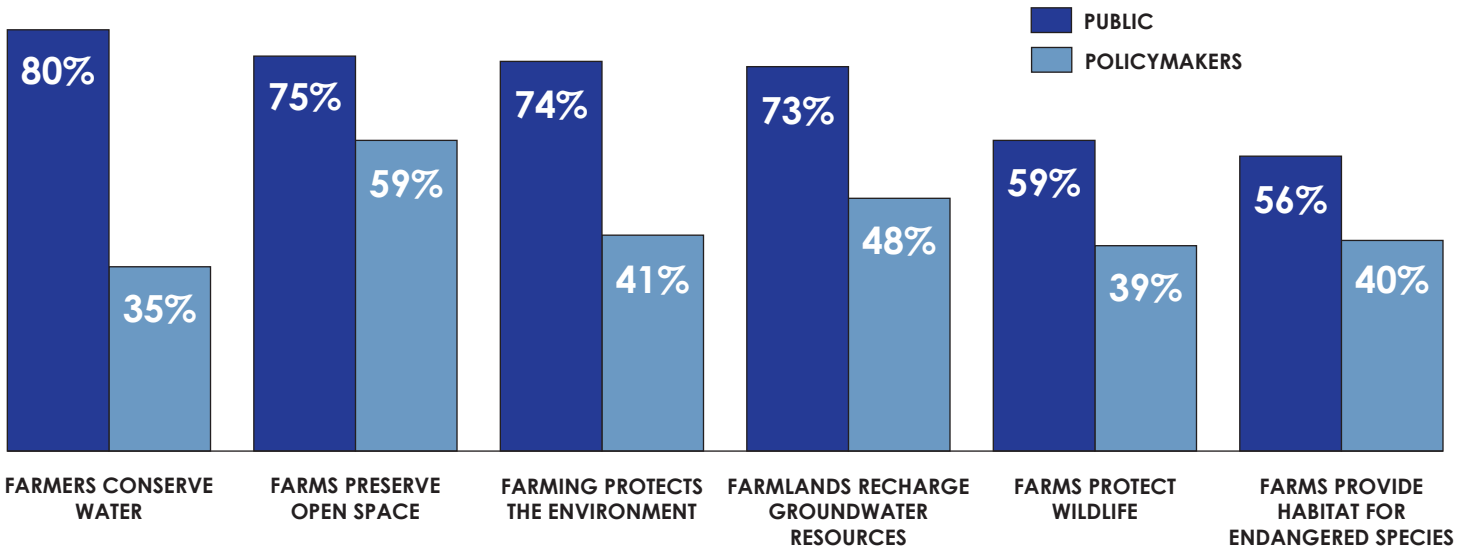
Nearly 90 percent of state residents agreed or strongly agreed that farmers are concerned about water when making decisions, and almost 80 percent thought farmers used sound reasoning when making decisions about water.

Local government officials, however, weren't quite as trustful. Only 36 percent of policymakers said valid principles guided farmers' behaviors with water use, and 54 percent agreed or strongly agreed that farmers felt concerned about water when making decisions.

Overall, local government officials were more confident in the quantity and quality of Florida's water supplies. More than 70 percent of policymakers were highly or extremely confident in the quality of tap water in their home, compared to 42 percent of the public. The public, however, felt stronger about the quality of Florida's lakes, rivers and wetlands.

Even though 69 percent of residents agreed that farmers can be relied upon to keep their promises when it comes to water, more than half said that farmers should be watched closely so they don't take advantage of water resources.

## PUBLIC & POLICYMAKER DISAGREE ABOUT IMPACTS OF FARMING



## PUBLIC POSITIVELY PERCEIVES IMPACTS OF AGRICULTURE

The public felt strongly about the environmental benefits of farming but were unsure about how agriculture affects water runoff and soil erosion.

At least 70 percent of Florida residents agreed or strongly agreed that farms conserved water, protected the environment and preserve open spaces.

Policymakers were more uncertain about the impacts of farming, with only 35 percent agreeing or strongly agreeing that farmers conserve water.

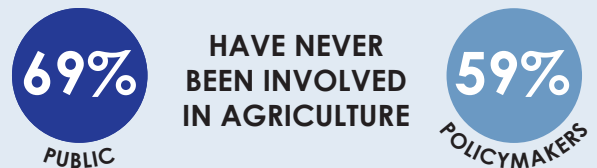
Only 19 percent of Floridians were aware of best management practices, or processes that protect water sources, compared to 40 percent of policymakers.

Once residents learned about best management practices, however, 93 percent said they would be more likely to buy products that were created with best management practices.

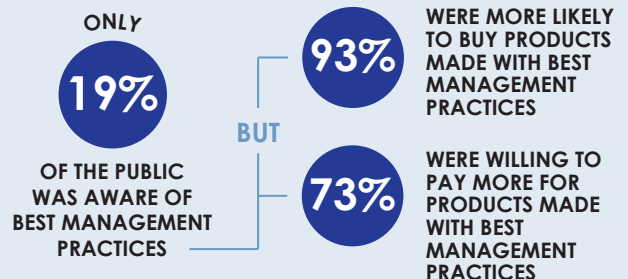
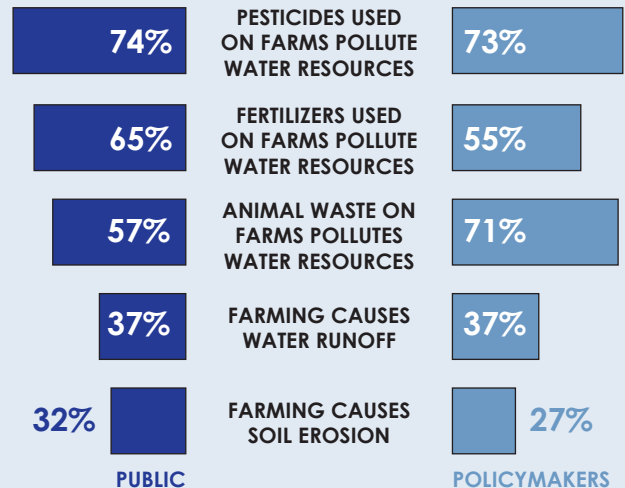
Almost three-quarters of the public said they would even be willing to pay more for products grown or raised under the encouraged processes.

### ABOUT OUR RESEARCH

The PIE Center partnered with the Florida Department of Agriculture and Consumer Services, Florida Farm Bureau and Florida Dairy Farmers to explore residents' perceptions of agricultural water use and how the organizations could best communicate with the public. PIE Center researchers distributed an online survey to Floridians at least 18 years old and older, as well as local government officials such as city and county commissioners and managers, mayors and city clerks.



### IMPACTS OF AGRICULTURE



# WHAT FLORIDIANS THINK ABOUT WATER QUALITY & QUANTITY

Protecting ecosystems while maintaining an abundant water supply for human use is a delicate balance in Florida. For this reason, many Floridians view water as a very important issue. Floridians value a plentiful water supply for use in both cities and agriculture. Researchers with the UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources surveyed 524 residents for their opinions on water conservation, quality and policy in its annual statewide public opinion survey on water use.

## HIGHLY OR EXTREMELY IMPORTANT ISSUES

1. WATER	83%
2. HEALTH CARE	82%
3. PUBLIC EDUCATION	79%
4. TAXES	74%
5. IMMIGRATION	67%

## FLORIDIANS SUPPORT WATER POLICY BUT LACK FAMILIARITY

A survey from the Center for Public Issues Education in Agriculture and Natural Resources revealed 83 percent of respondents rank water as a highly or extremely important issue, the highest rank out of 10 issues. The majority of Floridians also feel a plentiful water supply is highly or extremely important for cities and agriculture.

Seventy-nine percent of Floridians are likely or very likely to vote to support water conservation programs. Furthermore, 74 percent of respondents are likely or very likely to vote for a candidate who supports water conservation, but less than half of respondents indicated they were extremely or moderately familiar with water policy.

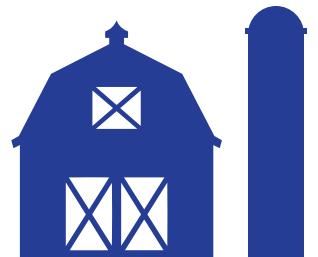


“I THINK IT IS HIGHLY OR EXTREMELY IMPORTANT TO HAVE A PLENTIFUL WATER SUPPLY FOR...”

**89%**  
CITIES

&

**88%**  
AGRICULTURE



**74% OF PEOPLE ARE LIKELY OR VERY LIKELY TO VOTE FOR A CANDIDATE WHO SUPPORTS WATER CONSERVATION.**



**79% OF PEOPLE ARE LIKELY OR VERY LIKELY TO VOTE TO SUPPORT WATER CONSERVATION PROGRAMS.**

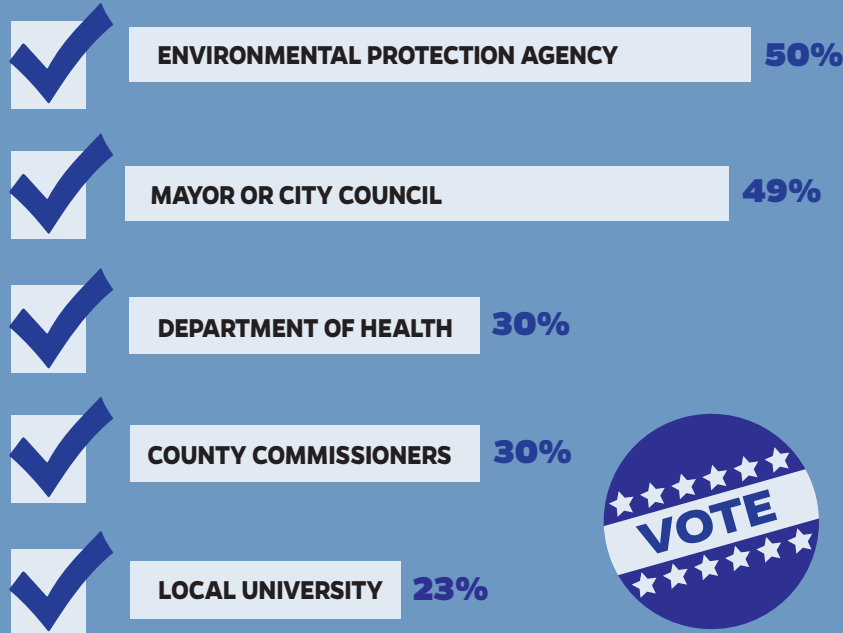
## FLORIDIANS EXTREMELY OR MODERATELY FAMILIAR WITH WATER POLICY

CLEAN WATER ACT	44%
WATER POLLUTION & CONTROL ACT	41%
FLORIDA SAFE DRINKING WATER ACT	40%
EVERGLADES RESTORATION PLAN	40%
WATER QUALITY ASSURANCE ACT	39%

[PIECENTER.COM/WATER](http://PIECENTER.COM/WATER)

## OFFICIAL BALLOT

FLORIDIANS SEEK FACTUAL INFORMATION FROM THE FOLLOWING SOURCES WHEN PREPARING TO VOTE:



\*55% OF RESPONDENTS SEEK INFORMATION FROM MULTIPLE SOURCES LISTED ABOVE.

## FLORIDIANS SEEK INFORMATION ABOUT WATER

Fifty-five percent of people said they seek factual information about water from multiple sources when preparing to vote. Fifty percent of respondents seek information from the Environmental Protection Agency. Thirty percent of respondents said they seek information from the department of health and their county commissioners.

Thirty-nine percent of people said they had seen news coverage related to water in the last month. Forty-eight percent of the respondents, however, said they had not. The data also showed that 76 percent of Floridians would be likely to pay attention to a news story reporting on issues related to water.

Sixty-two percent get information about water via the internet. This is followed by newspapers at 48 percent, social media at 43 percent, and both television and family or friends at 38 percent.

### ABOUT OUR SURVEYS

PIE Center surveys explore what Floridians think about the rights, responsibilities, attitudes and behaviors associated with critical issues such as food production, community preparedness, and endangered and invasive species.

“I HAVE SEEN NEWS COVERAGE RELATED TO WATER IN THE LAST MONTH.”

NO - 48%

YES - 39%

NOT SURE - 13%



“I AM LIKELY TO PAY ATTENTION TO A NEWS STORY DEALING WITH ISSUES RELATED TO WATER.”

VERY UNLIKELY OR UNLIKELY - 12%

VERY LIKELY OR LIKELY - 76%

UNDECIDED - 12%



“I GET MY INFORMATION ABOUT WATER VIA...”



INTERNET  
62%



NEWSPAPER  
48%



SOCIAL MEDIA  
43%



TELEVISION  
38%



FAMILY/FRIENDS  
38%



RADIO  
13%

Data from this survey was collected in July 2016 and this issue guide was published in May 2017.



# WHAT FLORIDIANS THINK ABOUT ENDANGERED SPECIES

Floridians value the importance of environmental conservation. The Center for Public Issues Education in Agriculture and Natural Resources recently surveyed 539 residents throughout Florida. A majority of Floridians agreed to having too little influence on government policy related to endangered species. The majority of Floridians also agreed the need to have stronger regulations that promote endangered species protection.

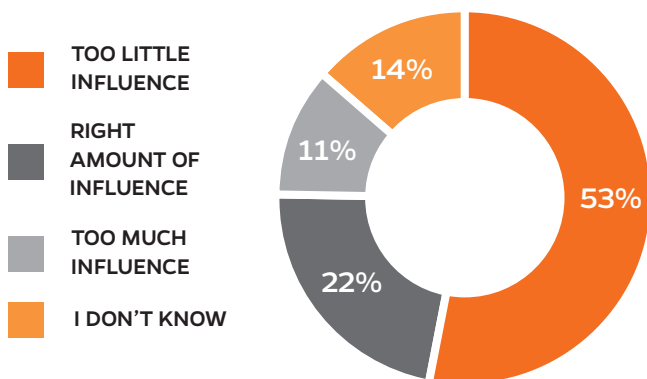
## FLORIDIANS UNSATISFIED WITH INFLUENCE ON ENDANGERED SPECIES POLICY

According to a recent survey by the Center for Public Issues Education in Agriculture and Natural Resources, over half of Floridians believe they have too little influence on protective public policy of endangered species.

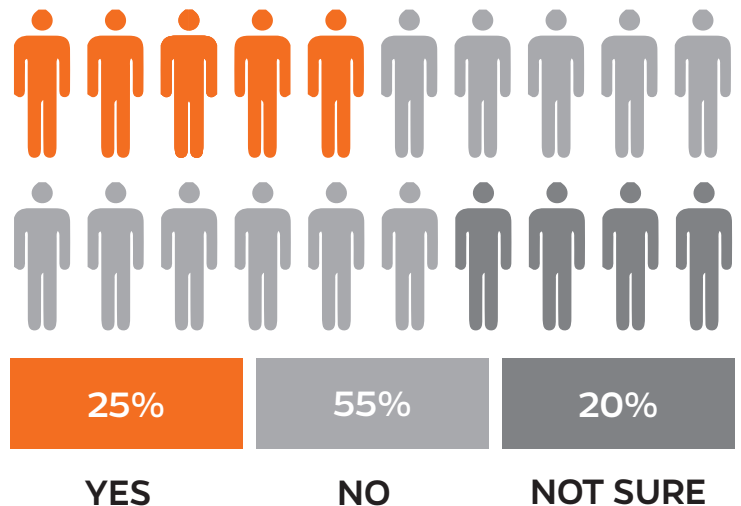
Out of 10 issues, Floridians ranked environmental conservation as the sixth most important issue that the state is facing today. The issue of environmental conservation was ranked below health care, the economy, water, public education and taxes.

Floridians were asked what learning opportunities they would be most likely to take advantage of. Visiting a website is the only method that the majority of Floridians agreed they would take advantage of. Only 16 percent of respondents said they would take advantage of attending a workshop to learn more about endangered species.

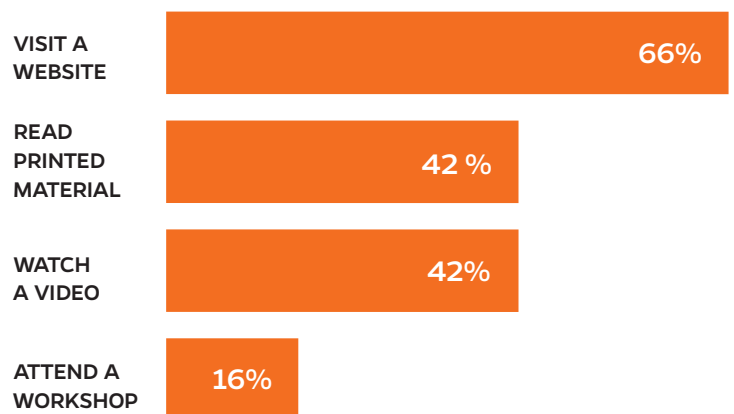
### HOW MUCH INFLUENCE DO FLORIDIANS HAVE ON PUBLIC POLICY REGARDING ENDANGERED SPECIES?



### HAVE YOU SEEN NEWS COVERAGE ON ENDANGERED SPECIES IN THE LAST MONTH?



### FLORIDIANS MOST LIKELY USE THE FOLLOWING OPPORTUNITIES TO LEARN ABOUT ENDANGERED SPECIES



# 63% OF FLORIDIANS BELIEVE THE ENDANGERED SPECIES ACT SHOULD BE STRENGTHENED

## FLORIDIANS ARE LIKELY OR VERY LIKELY TO TAKE ADVANTAGE OF THE FOLLOWING OPPORTUNITIES

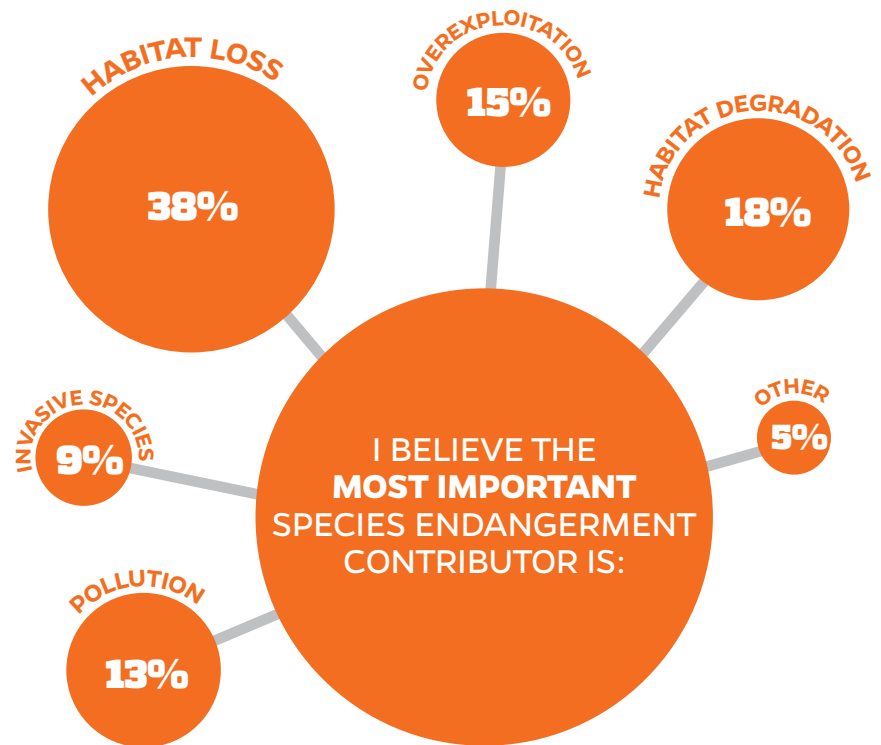


## FLORIDIANS FOCUS ON HABITAT LOSS AS LEADING CONTRIBUTOR TO SPECIES ENDANGERMENT

When asked what actions they were willing to take to protect endangered species, over 82 percent of Floridians said that they were likely or very likely to vote to support land conservation programs. Thirty-eight percent of Floridians said they were likely or very likely to join a conservation organization.

Given several options of contributors to species endangerment, Floridians were asked which is the most important. Nearly 40 percent agreed that habitat loss was the most important contributor.

Floridians were asked to rate the importance of conservation for eight different native species. Fish were found to be the most important among the eight options.



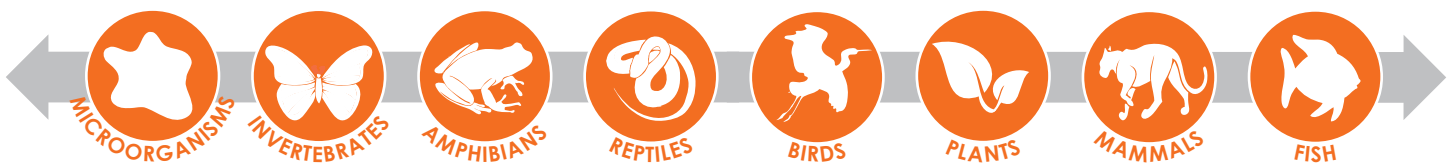
### ABOUT OUR SURVEYS

PIE Center surveys explore what Floridians think about the rights, responsibilities, attitudes and behaviors associated with critical issues such as food production, water quantity and quality, community preparedness, and endangered and invasive species.

### FLORIDIANS RATE THE IMPORTANCE OF CONSERVATION FOR EIGHT NATIVE SPECIES

LEAST IMPORTANT TO CONSERVE

MOST IMPORTANT TO CONSERVE



Data from this survey was collected July 2016 and this issue guide was published September 2016.

# WHAT FLORIDIANS THINK ABOUT INVASIVE SPECIES

Florida is the home to over 500 nonnative plants and animals that may present a threat to the state's native plants and animals and become invasive, creating many implications for Floridians. The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources recently surveyed 539 Floridians to explore what they think about invasive species in Florida. This study revealed that Floridians are concerned about invasive species but admit to lacking knowledge on types of invasive species in Florida or what government efforts are put in place to control invasive species.

## FLORIDIANS INTERESTED IN SEEING MORE NEWS COVERAGE

A recent survey by the Center for Public Issues Education in Agriculture and Natural Resources revealed Floridians lack knowledge on invasive species despite being concerned about the issues surrounding invasive species.

Over half of Floridians reported not seeing news coverage related to invasive species in the past month, but 75 percent of respondents say they are likely or very likely to pay attention to this type of news coverage.

Only 23 percent of respondents reported seeing news coverage on invasive species in the past month. When asked what

specific type of news coverage the respondents had seen, 24 percent of respondents reported seeing coverage related to pythons, and 16 percent reported coverage related to lionfish.

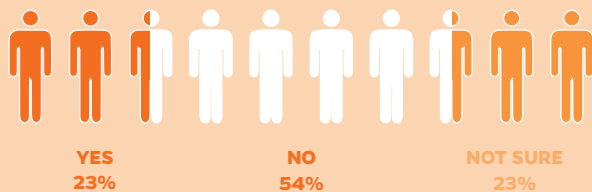
Survey participants were also asked about their knowledge related to invasive species, including types of invasive species, government control and prevention efforts, and personal prevention.

Sixty percent of respondents indicated their knowledge level about invasives as "not at all" or "slightly knowledgeable," with 20 percent saying "not at all knowledgeable."

**1/5**  
OF FLORIDIANS SAY THEY ARE NOT KNOWLEDGEABLE OF INVASIVE SPECIES



### "I HAVE SEEN NEWS COVERAGE RELATED TO INVASIVE SPECIES IN THE LAST MONTH?"



### HOW LIKELY ARE FLORIDIANS TO PAY ATTENTION TO A NEWS STORY DEALING WITH ISSUES RELATED TO INVASIVE SPECIES?

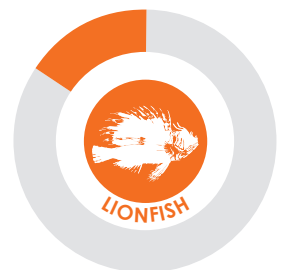


### OF THE 23 PERCENT OF FLORIDIANS WHO HAD SEEN NEWS COVERAGE ON INVASIVE SPECIES:

**24%** REPORTED SEEING NEWS COVERAGE RELATED TO PYTHONS IN THE LAST MONTH.



**16%** REPORTED SEEING NEWS COVERAGE RELATED TO LIONFISH IN THE LAST MONTH.



# RESIDENTS CONCERNED ABOUT INVASIVES

Eighty percent of Floridians say the harm to native species is an important factor to be considered by government agencies when prioritizing efforts to control invasive species.

Invasive species cost the United States \$120 billion in damages each year<sup>1</sup>. Sixty-four percent of Floridians say the people who introduced the invasive species should have to pay for managing the invasives and repairing damage, while 58 percent believe the state government should cover the cost. Only 22 percent of respondents say that citizens should have to pay.

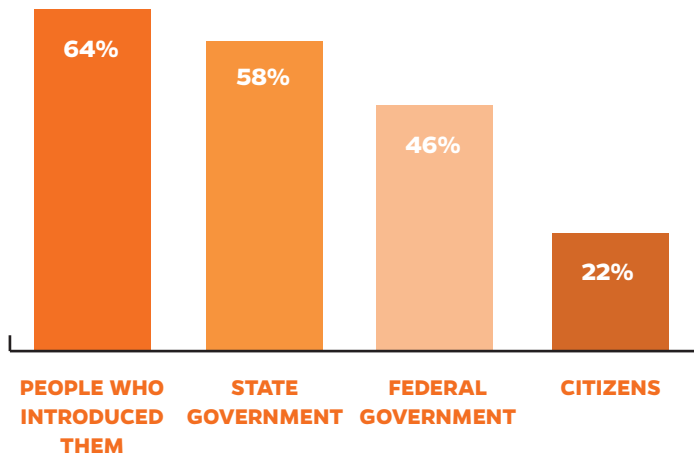
When Floridians were asked to rank their concern for invasive species with 10 representing “extremely concerned,” 20 percent selected 10. Over 70 percent of respondents ranked their concern at a 7 or higher.

<sup>1</sup>Pimentel, D., Zuniga, R., & Morrison, D. (2005). Update on the environmental and economic costs associated with alien-invasive species in the United States. *Ecological Economics*, 52(3), 273-288. doi:10.1016/j.ecolecon.2004.10.002

# 72% OF FLORIDIANS RATED THEIR CONCERN FOR INVASIVE SPECIES AT A 7 OR HIGHER

SCALE WAS FROM 1 - 10, 1 BEING NOT CONCERNED AND 10 BEING EXTREMELY CONCERNED.

## WHO SHOULD PAY THE FINANCIAL COST FOR MANAGING INVASIVE SPECIES AND REPAIR?

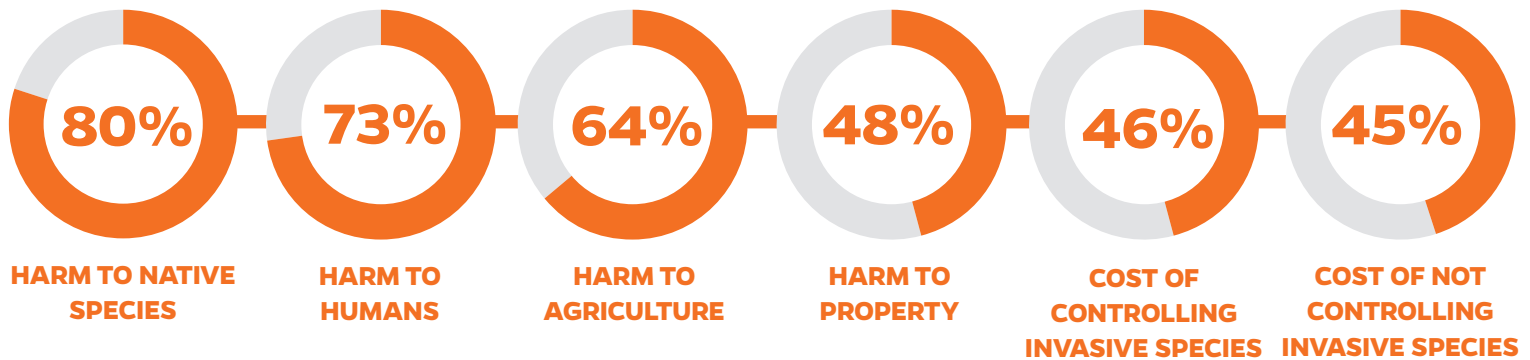


## ABOUT OUR SURVEYS

PIE Center surveys explore what Floridians think about the rights, responsibilities, attitudes and behaviors associated with critical issues such as food production, water quantity and quality, community preparedness, and endangered and invasive species.



## WHAT FACTORS SHOULD BE CONSIDERED BY GOVERNMENT AGENCIES WHEN PRIORITIZING EFFORTS TO CONTROL INVASIVE SPECIES?



Data from this survey was collected in July 2016 and this issue guide was published in December 2016.

# WHAT FLORIDIANS THINK ABOUT GENETICALLY MODIFIED FOOD

Consumers are largely unaware of the genetically modified ingredients found in many of the foods they eat. Although many Floridians would prefer to not purchase genetically modified food, UF/IFAS Center for Public Issues Education survey results show many residents don't know what foods might contain genetically modified ingredients.

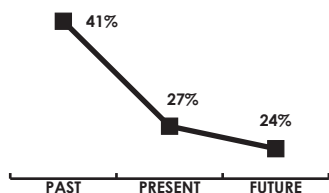
## FLORIDIANS UNLIKELY TO PURCHASE GM FOOD

Fewer than half of state residents say they would purchase genetically modified food or clothing, even if it cost less or was their favorite food.

When asked about their buying habits, more than 40 percent agreed or strongly agreed they've purchased genetically modified food in the past.

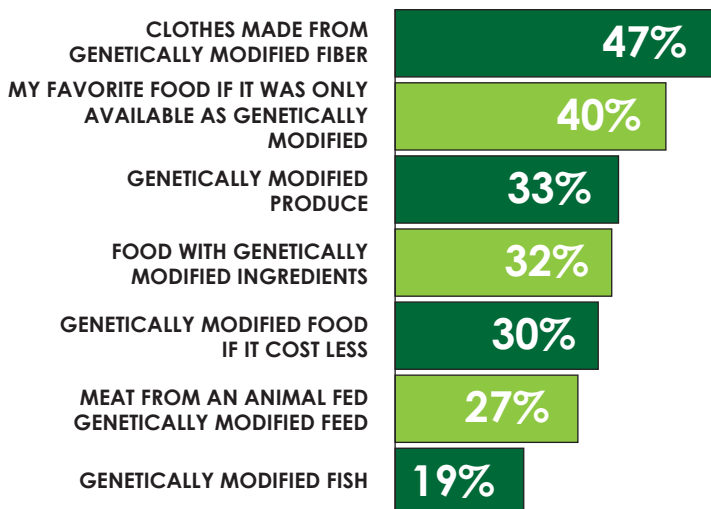
Only 27 percent believe they currently purchase genetically modified food, and 24 percent agreed or strongly agreed they would purchase genetically modified food in the future.

SELF-REPORTED PURCHASING OF GENETICALLY MODIFIED FOOD

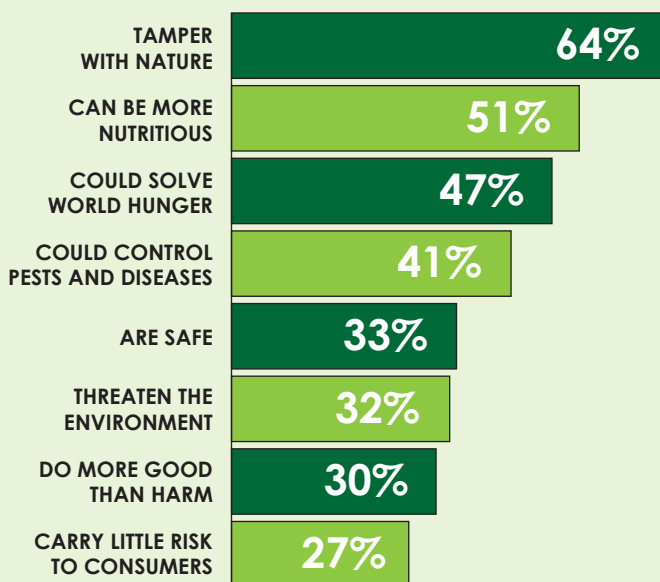


Floridians were largely unsure about the potential benefits of genetically modified food, with more than 40 percent neither agreeing nor disagreeing that food technology allows people to live longer or better lives.

"I WOULD PURCHASE..."



"I THINK GENETICALLY MODIFIED FOODS..."



SCIENTISTS DEVELOPING GENETICALLY MODIFIED FOOD CONTRIBUTE TO THE WELL-BEING OF SOCIETY



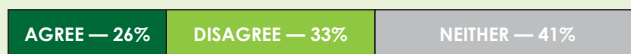
DEVELOPMENTS IN GENETICALLY MODIFIED FOOD MAKE SOCIETY BETTER



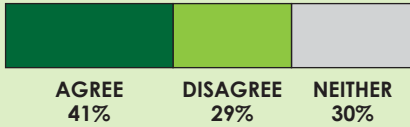
NEW TECHNOLOGY IN GENETICALLY MODIFIED FOOD ALLOWS PEOPLE TO LIVE LONGER



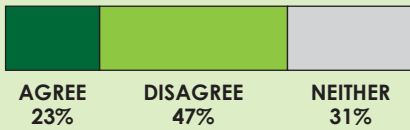
TECHNOLOGY IN GENETICALLY MODIFIED FOOD ALLOWS PEOPLE TO LIVE BETTER LIVES



**"I UNDERSTAND THE SCIENCE OF GENETICALLY MODIFIED FOOD."**



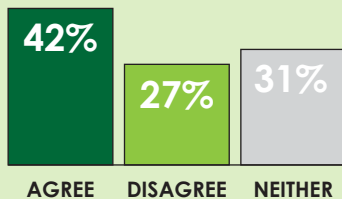
**"I KNOW WHAT FOODS CONTAIN GENETICALLY MODIFIED INGREDIENTS."**



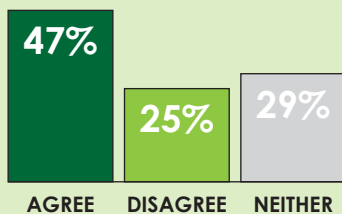
ONLY **22%** OF FLORIDIANS RECEIVED INFORMATION ABOUT GENETICALLY MODIFIED FOOD FROM **A SCIENTIST**

BUT **59%** WOULD LIKE TO LEARN MORE FROM **UNIVERSITIES**

**"RESEARCH ON GENETICALLY MODIFIED FOOD IS ESSENTIAL FOR IMPROVING THE QUALITY OF HUMAN LIVES."**



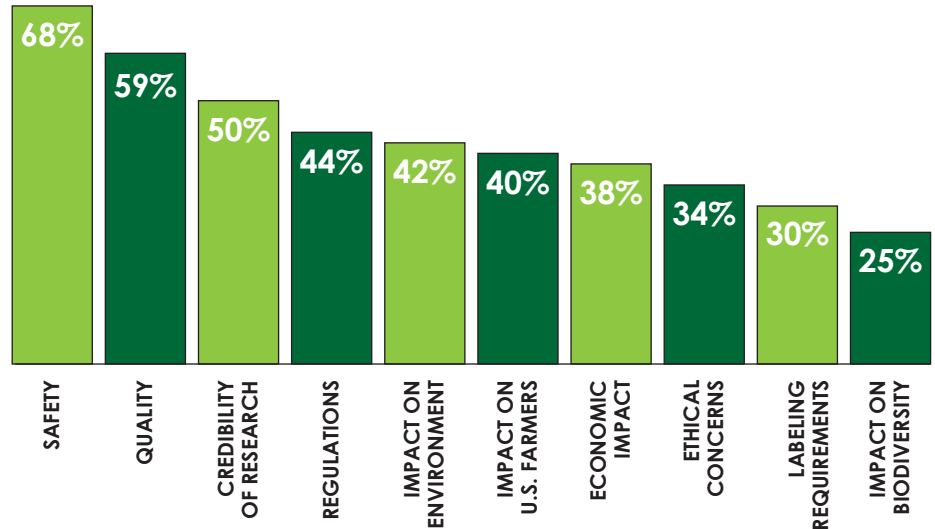
**"RESEARCH ON GENETICALLY MODIFIED FOOD SHOULD BE SUPPORTED BY THE FEDERAL GOVERNMENT."**



**64%**

**OF FLORIDIANS WOULD LIKE TO LEARN MORE ABOUT GENETICALLY MODIFIED FOOD**

**FLORIDIANS WANT TO LEARN ABOUT:**



## RESIDENTS HUNGER FOR MORE INFORMATION ABOUT FOOD

Even though 41 percent of Floridians agree or strongly agree that they understand the science of food technology, roughly half don't know what foods contain genetically modified ingredients.

However, residents seem eager to learn more, with 64 percent interested in more information and 59 percent wanting to hear specifically from universities.

Floridians are most interested in learning about the safety and quality of genetically modified food, as well as the credibility of research on genetically modified food. They are less interested in learning about the impact on biodiversity, labeling requirements, ethical concerns or economic impacts.

Only 22 percent of Floridians agreed or strongly agreed that they received information about genetically modified food from a scientist. Many were favorable toward supporting research, with 42 percent agreeing that studies about genetically modified food are essential for improving the quality of life. Almost half agreed that research should be supported by the federal government.

Floridians' responses were more mixed about food technology's societal impacts, such as if scientists developing genetically modified food contribute to the well-being of society or if developments in food technology makes society better.

### ABOUT OUR SURVEYS

The PIE Center conducts several public opinion surveys each year that focus on issues of key significance to Floridians. The surveys explore what Floridians think about the rights, responsibilities, attitudes and behaviors associated with critical issues such as food production, water quantity and quality, community resilience and preparedness, as well as endangered and invasive species.

# WHAT FLORIDIANS THINK ABOUT FOOD WASTE & SAFETY

Foodborne illness is a common, but largely preventable, public health problem. Survey results from the UF/IFAS Center for Public Issues Education survey show that many Floridians are concerned about the safety of the food they consume, both in and out of their own kitchen.

## SURVEY: RESIDENTS MEASURE CONCERN FOR FOOD WASTE

In a Center for Public Issues Education food waste survey, 60 percent of Floridians indicated that they were concerned or extremely concerned about food waste in their household.

Often without much thought, Americans discard between 30 and 40 percent of all food grown in the United States each year. Yet, the majority of Floridians tout food waste as a top concern. Food waste includes food that is discarded, lost or uneaten.

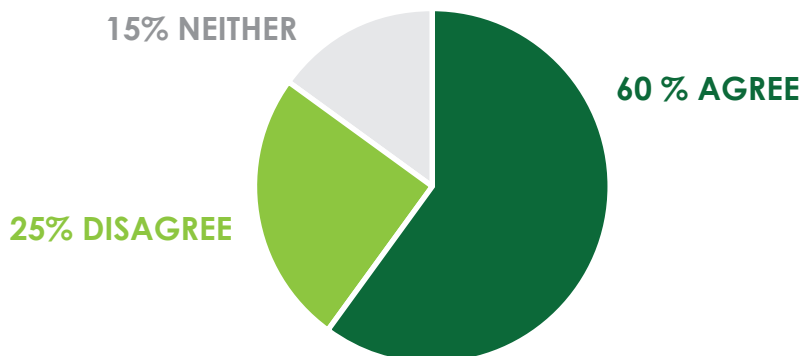
Foods that most often go to waste are fresh fruits, vegetables and dairy products. Forty-eight percent of survey respondents said that fruit is an item in their household that is often wasted. Closely following that, 47 percent of Floridians discarded fresh vegetables frequently.

Beverages, spices and seafood are the food items that go to waste least. Only 6 percent of respondents discarded beverages often.

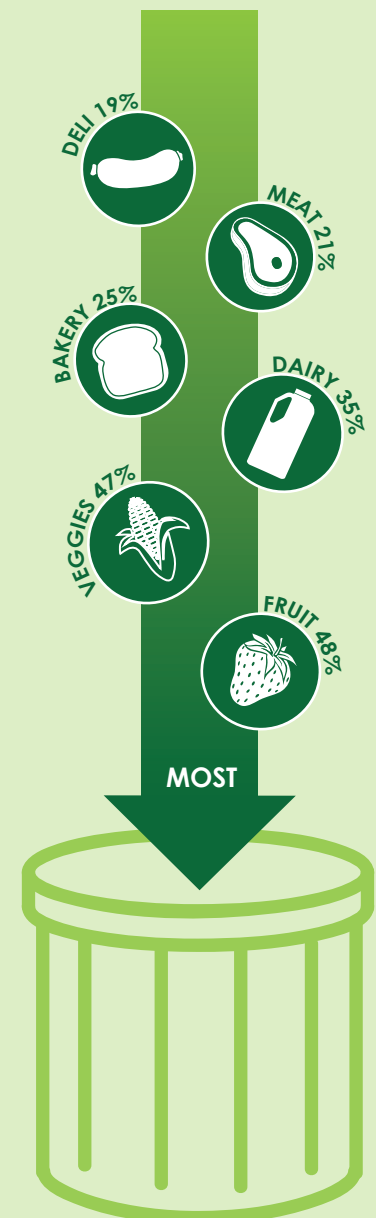
According to the Environmental Protection Agency, the US disposed of more than 35 million tons of food waste in 2013. When food is discarded into landfills, the rotting material releases methane, a greenhouse gas 21 times more harmful to the ozone than carbon dioxide.

In order to reduce household waste, individuals can adopt more conservative food purchasing habits, learn to store fruits and vegetables so that they stay fresh longer, and donate uneaten produce and dry goods to local food banks. For more information visit [piecenter.com](http://piecenter.com).

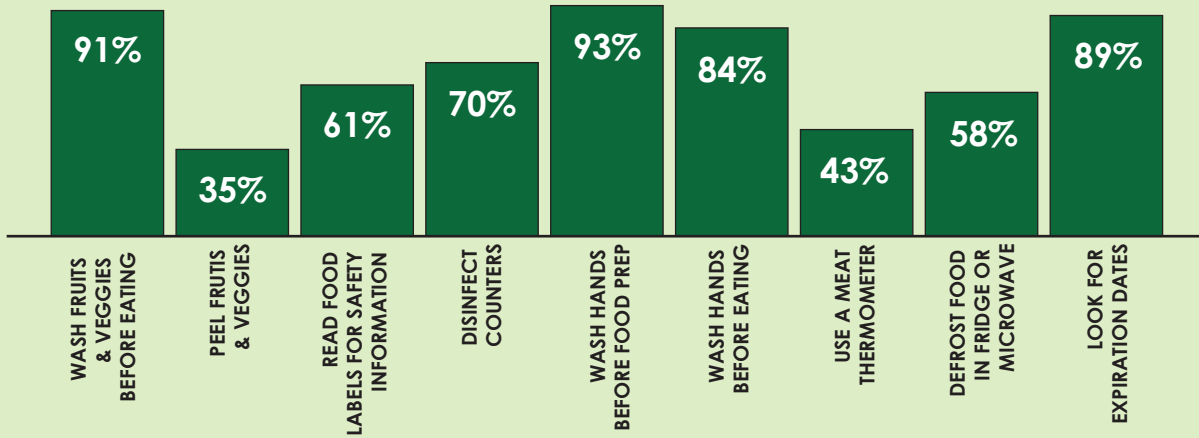
### "I AM CONCERNED ABOUT FOOD WASTE..."



### PERCENTAGE OF FLORIDIANS WHO TYPICALLY WASTE THESE FOODS



**"TO ENSURE FOOD SAFETY, I OFTEN OR ALWAYS..."**



# FLORIDIANS HUNGER FOR FOOD SAFETY

According to the Centers for Disease Control and Prevention, 1-in-6 Americans, about 48 million people, get sick from foodborne illnesses annually, yet only 42 percent of Floridians consider food safety a major concern of theirs.

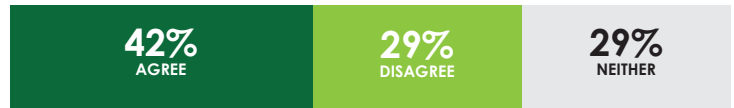
Floridians take a number of measures to prevent foodborne illness in their households and do a good job keeping themselves and their food clean during food preparation, according to the latest PIE Center survey. Ninety-three percent of residents reported washing their hands before cooking dinner, and 91 percent said that they regularly wash fruits and vegetables before eating them. However, Floridians are less likely to take some preventative measures,

like defrosting food in the fridge or microwave as opposed to on the countertop at room-temperature. Residents also reported being unlikely to peel fruits and vegetables before eating them.

Sixteen percent of Floridians are worried about food prepared in their kitchen, compared to 49 percent who are concerned about the safety of food when eating out. While CDC data indicates about half of outbreaks occur at restaurants or delis, most foodborne illnesses go undiagnosed or unreported.

More than 100,000 Americans are hospitalized each year with a food-related illness caused by bacteria, viruses, mold or parasites.

**"FOOD SAFETY IS A MAJOR CONCERN OF MINE"**



**"I AM RESPONSIBLE FOR MY OWN FOOD SAFETY"**



OF PEOPLE LEARNED ABOUT PROPER SAFE HANDLING OF FOOD FROM **THEIR PARENTS**



OF PEOPLE LEARNED ABOUT PROPER SAFE HANDLING OF FOOD FROM **SCIENTISTS**



ARE WORRIED ABOUT FOOD PREPARED IN THEIR KITCHEN



ARE WORRIED ABOUT FOOD WHEN EATING OUT

**ABOUT OUR SURVEYS**

The PIE Center conducts at least four public opinion surveys every year that focus on issues of key significance to Floridians.

The surveys explore what Floridians think about the rights, responsibilities, attitudes and behaviors associated with critical issues such as food production, water quantity and quality, community resilience and preparedness, as well as endangered and invasive species.

**PIECENTER.COM**



# THE CONNECTION BETWEEN FOOD SAFETY & GENERATIONS

The purpose of this study was to investigate the generational differences among Florida residents with regards to food safety knowledge and food safety behaviors. The UF/IFAS Center for Public Issues Education in Agriculture and Natural Resources surveyed 510 Florida residents and found a significant association between some food safety behaviors and generation. This study also revealed that regardless of generation, Floridians are highly knowledgeable about food safety.

## A GENERATIONAL COMPARISON OF FOOD SAFETY BEHAVIORS

The UF/IFAS Center for Public Issues Education surveyed Florida residents to learn how food safety practices differed among generations. The study revealed the Millennials and Younger, Generation X, and Old Baby Boomers learned more about food safety from their parents. On the contrary, the Young Baby Boomers and Silent and Older generations reported learning more about food safety from television.

Further, 29.7 percent of Millennials, 29.2 percent of Generation X, and 29.5 percent of Young Baby Boomers said they learned about food safety from their parents, while 28.7 percent of the Silent and Older generation said they learned the most about food safety from television.

While the sources of food safety information varied by generation, six of the 10 food safety behaviors tested were not associated with generation. These behaviors included washing fruits and vegetables before eating, peeling edible skins of fruits and vegetables, and reading food labels for food safety information.



## GENERATION BREAKDOWN

**MILLENNIALS AND YOUNGER**  
1977-1996

**GENERATION X**  
1965-1976

**YOUNG BABY BOOMERS**  
1955-1964

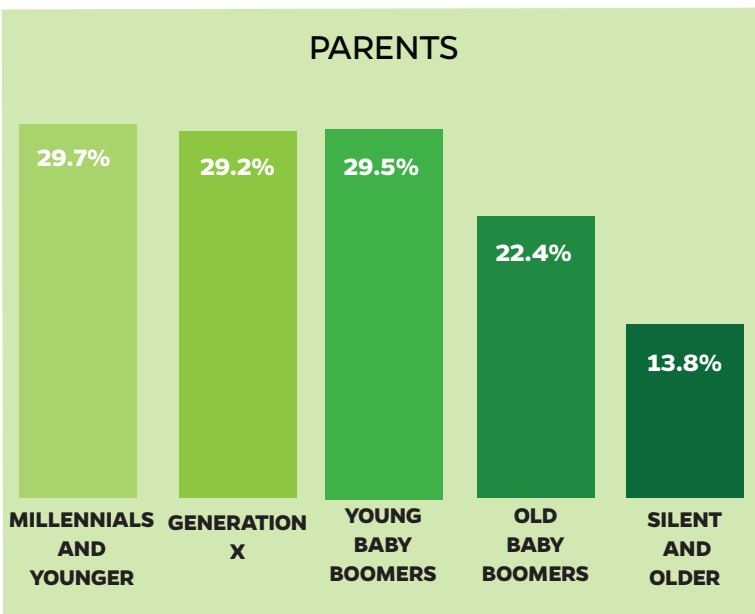
**OLD BABY BOOMERS**  
1946-1954

**SILENT AND OLDER**  
1945 AND EARLIER

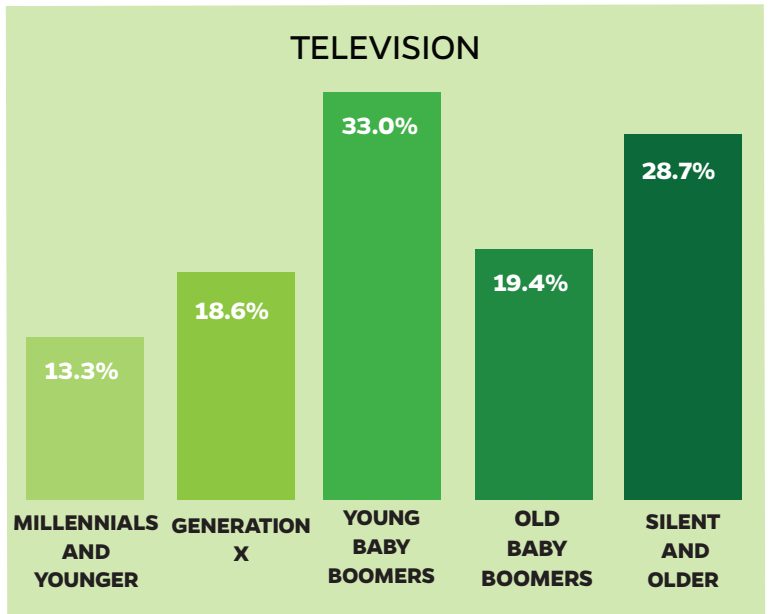


## SOURCES OF FOOD SAFETY KNOWLEDGE

### PARENTS



### TELEVISION



## FOOD SAFETY KNOWLEDGE

GENERATION	SCORE
1. MILLENNIALS	9.67
2. GENERATION X	10.35
3. YOUNG BABY BOOMERS	10.28
4. OLD BABY BOOMERS	10.28
5. SILENT AND OLDER	9.97

\*FOOD SAFETY KNOWLEDGE WAS BASED ON A 12-POINT SCALE.

## GENERATIONAL DIFFERENCES IN FOOD SAFETY PRACTICES

A significant association was identified with four food safety behaviors between generations. Seventy-nine percent of the Silent and Older generation defrost frozen foods in the refrigerator or microwave often or always; however, only 41 percent of Millennials and Younger participate in this food safety practice.

The results also confirmed a difference in the practice of separating raw meat from ready-to-eat products. Ninety-one percent of Young Baby Boomers often or always implement this practice, in comparison to 74 percent of the Silent and Older generation who participate in this food safety practice. Please visit the citation at the bottom of the page to read the full article and learn more information.

## ACTIONS TO ENSURE FOOD SAFETY

NOTE: ADDITIONAL GENERATIONS WERE SURVEYED FOR THIS PROJECT BUT ARE NOT LISTED DUE TO INSIGNIFICANT DIFFERENCES.

**OFTEN/ALWAYS** **SOMETIMES** **NEVER/RARELY**



Data from this survey were collected in Fall 2014 and this issue guide was published in March 2017.