

Public Perceptions of Harmful Algal Blooms in Florida

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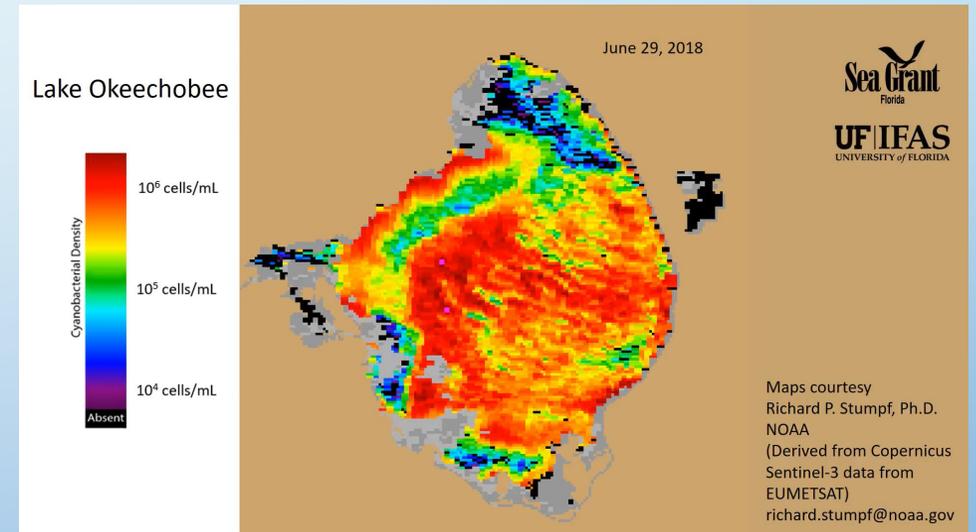
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Background

- Simultaneous Harmful Algal Blooms (HAB) in Lake Okeechobee and the Gulf of Mexico in 2018
 - Cyanobacteria in Lake Okeechobee
 - *Karenia brevis* in Gulf of Mexico
- Environmental and public health risks due to hypoxia and toxins
- Major regional economic impacts on tourism, real estate, and fisheries



Background

- HABs in Florida coincided with 2018 US Midterm Election Cycle
 - Both the Governor and Senate races in Florida were influenced by the HABs
- Eutrophication is a wicked problem
 - Almost impossible to solve without either a central authority or consensus-building amongst stakeholders



Lloyd Dunkelberger, Bill Nelson and Rick Scott, 2018, accessed 12 February 2020, <https://www.orlandoweekly.com/Blogs/archives/2018/11/05/bill-nelson-rick-scott-locked-in-most-expensive-senate-race-in-florida-history>

Bloomberg

Politics

Florida's Algae Blame Sticks to 'Red-Tide Rick' in Senate Race

By [Christopher Flavelle](#) and [Anna Edgerton](#)
October 29, 2018, 4:00 AM EDT

Problem

What **attitudes** and **perceptions** were held by **Floridians** about **harmful algal blooms** during the 2018 General Election cycle, following the occurrence of both of fresh- and saltwater blooms?

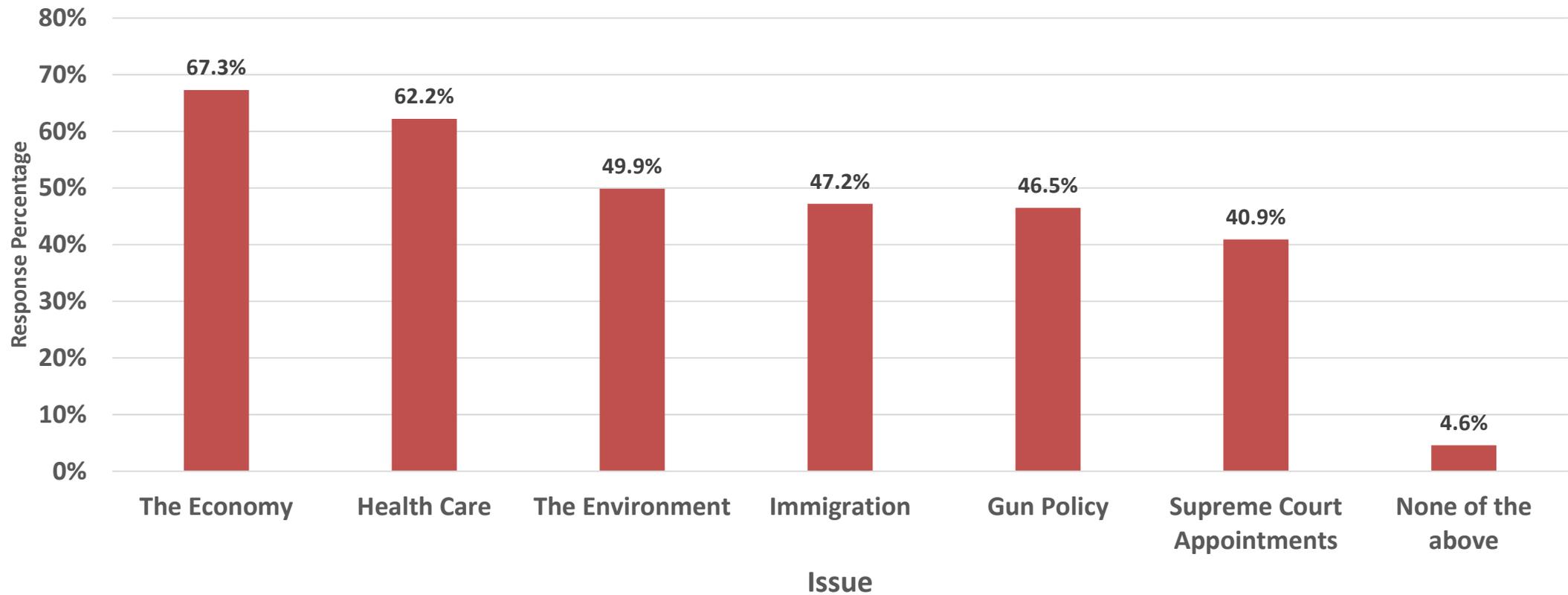
Methodology

- Collaborated with UF Bureau of Economic and Business Research
- Collected phone survey data from 421 Floridians in 2019
- Survey does not distinguish between cyanobacteria and dinoflagellate-related blooms



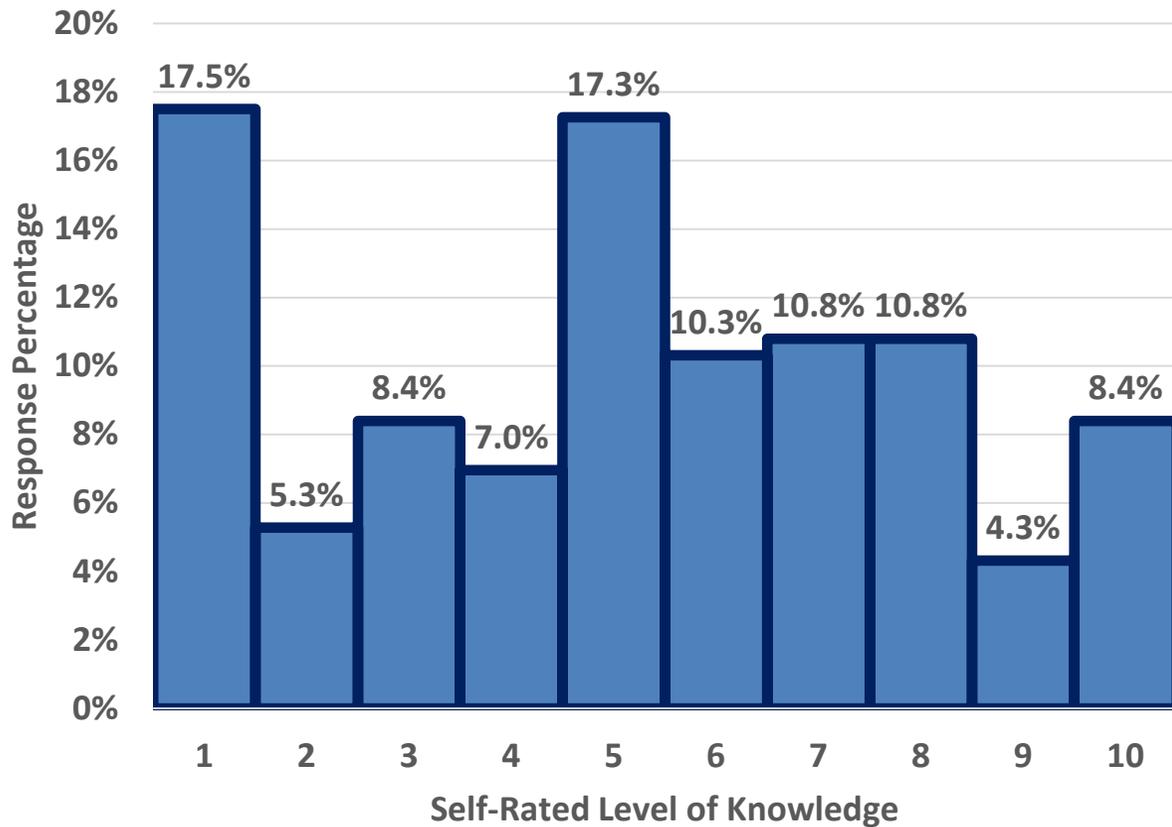
Results

Most Important Major Election Issues

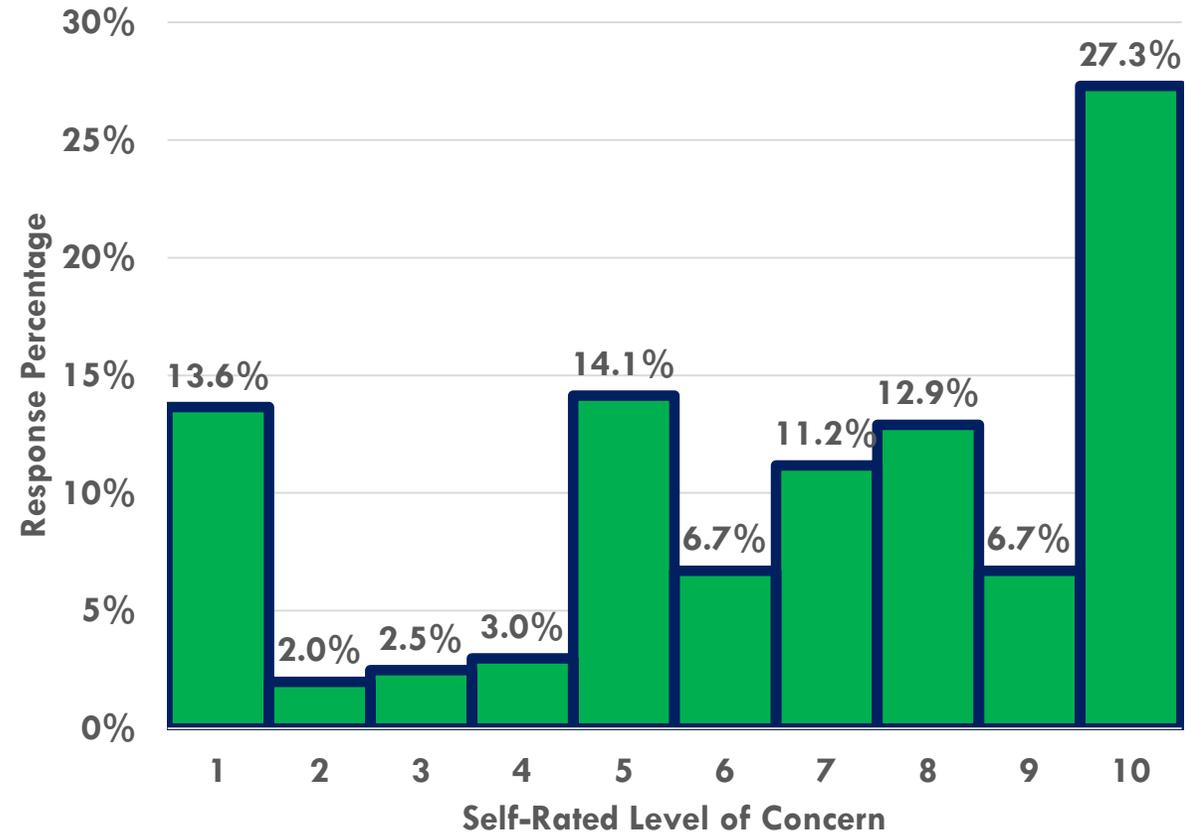


Results

Level of Knowledge about Algal Blooms

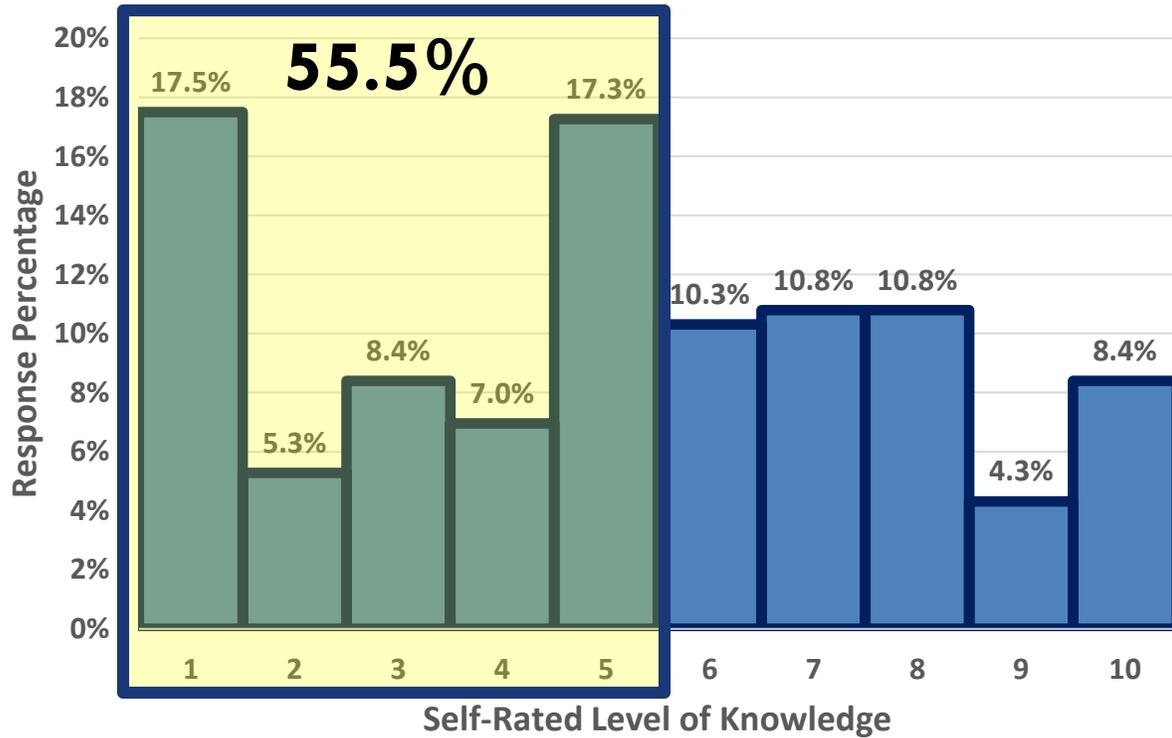


Level of Concern about Algal Blooms

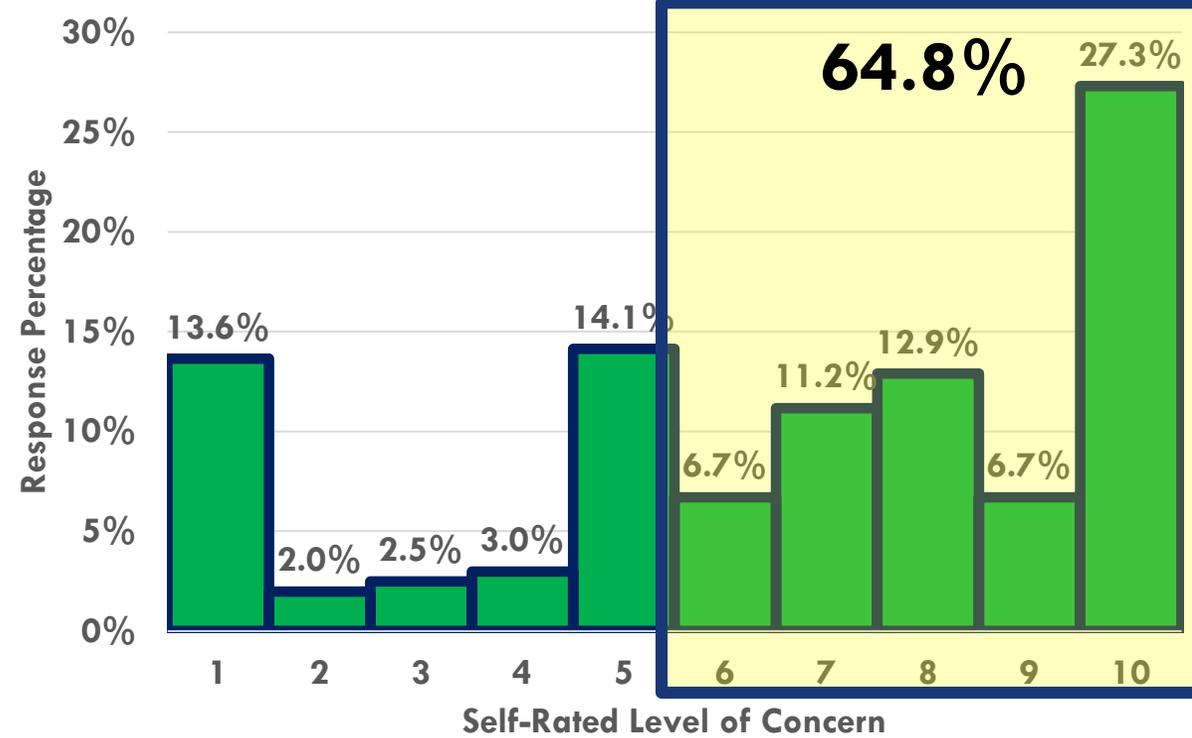


Results

Level of Knowledge about Algal Blooms



Level of Concern about Algal Blooms

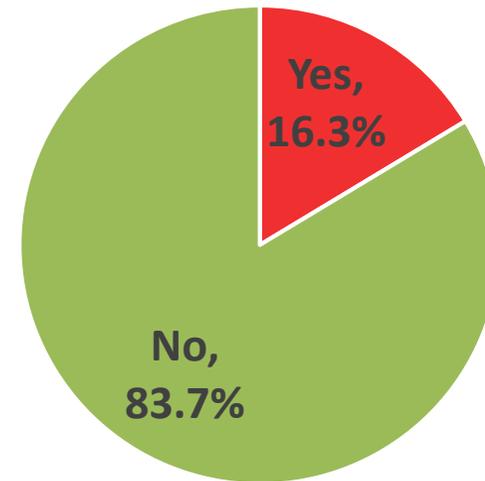


- There is a statistically significant difference in sample means ($p=0.001$) and variance ($p=0.05$) between the LOK and LOC.

Results

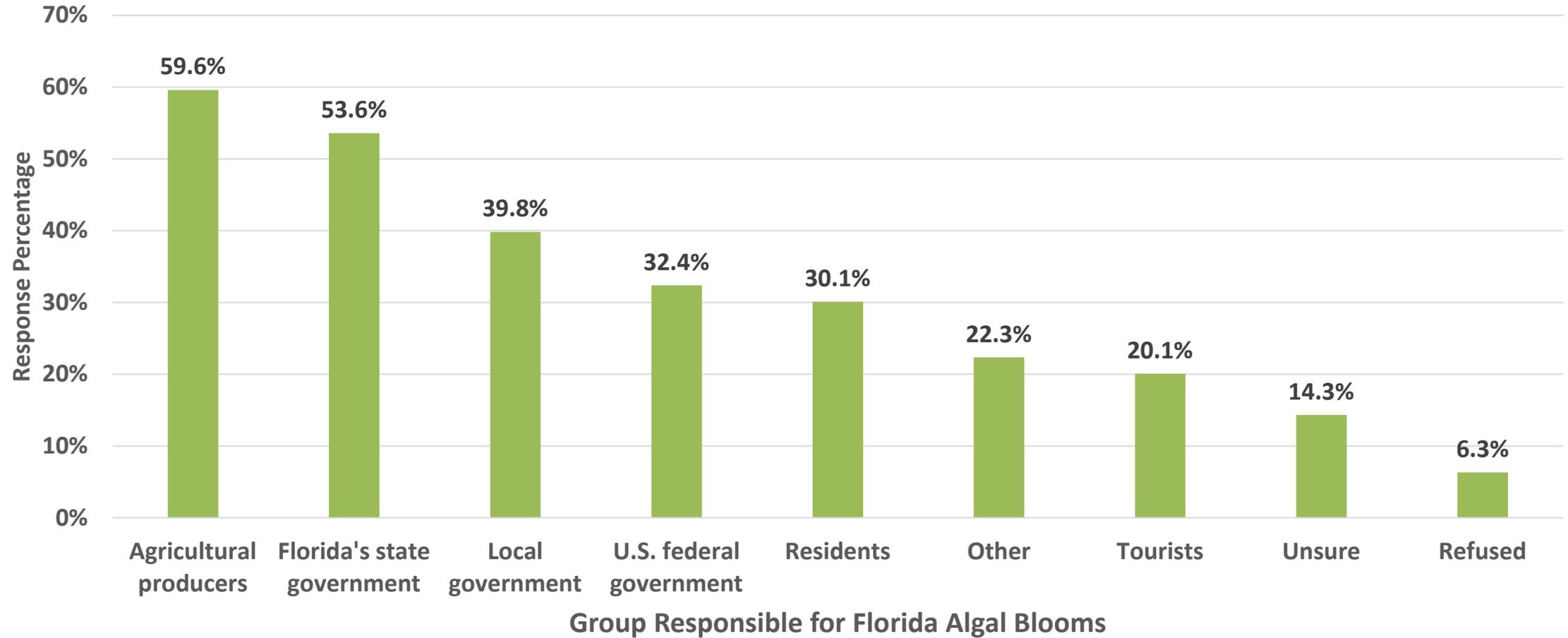
- LOC is high among respondents despite few participants reporting that they were directly impacted by HABs
- No substantial difference in LOC in sample participants based on whether they lived in a coastal county

Directly Impacted by Algal Blooms?



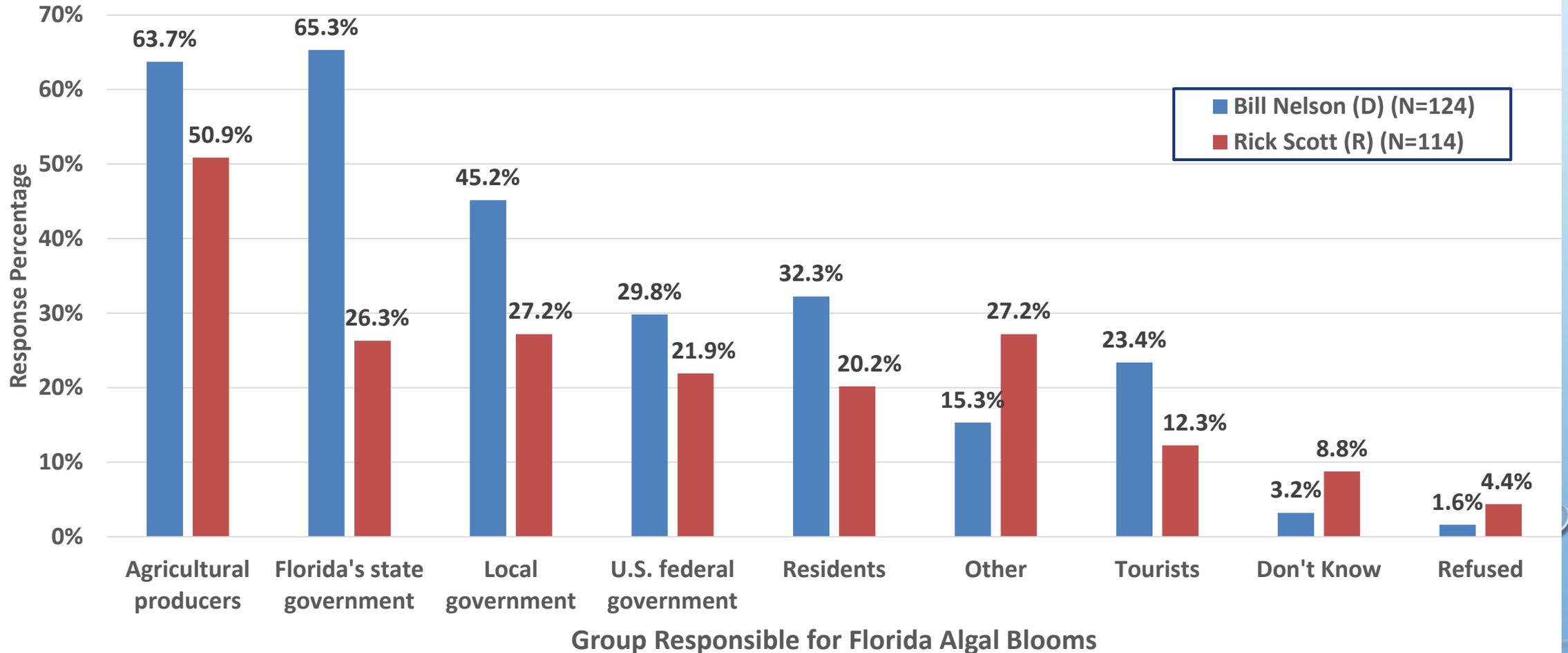
Results

Group Responsibility Assessment



Results

Group Responsibility Assessment by Senator Vote



Discussion

- Floridians across all demographic groups are concerned about the wellbeing of Florida's natural environment
 - Major opportunity for bipartisanship on water quality issues
- Discrepancy between concern and knowledge about HABs can be addressed through public education efforts
- Partisanship affects the general public's perceptions of responsibility for HABs
 - Consensus-building and a focus on solutions (rather than blame) is needed to unite these groups



Florida Governor's Press Office, *Thomas K. Frazer, at podium, 2019*, accessed 18 February 2020,
<https://www.miamiherald.com/news/local/environment/article229727399.html>

Future Research

- How have actions by Florida's current administration affected public perceptions?
- What role will HABs and other environmental issues play in the 2020 US election cycle?
- How can Florida learn from the bipartisan efforts of other states and regions to solve HABs?

The image shows two news article screenshots. The top one is from The Verge, with a black navigation bar containing 'THE VERGE' and categories like 'TECH', 'REVIEWS', 'SCIENCE', 'CREATORS', 'ENTERTAINMENT', 'VIDEO', and 'MORE'. Below the navigation bar, there are tags for 'SCIENCE', 'ENVIRONMENT', and '2020 ELECTION'. The main headline reads 'As the 2020 election heats up, climate change becomes a bigger priority'. A sub-headline says 'Health care still dominates, but the environment was a high priority in Iowa'. The author is 'By Justine Calma | @justcalma' and the date is 'Feb 6, 2020, 8:05am EST'. The bottom screenshot is from the Miami Herald, featuring a search icon and the 'Miami Herald' logo. It has an 'ENVIRONMENT' tag and a headline 'Is Ron DeSantis really Florida's green governor? We're about to find out.' The authors are 'BY DAVID SMILEY AND ADRIANA BRASILEIRO' and the date is 'MAY 08, 2019 06:00 AM'. Social media sharing icons for Twitter, Facebook, Email, and a general share icon are visible at the bottom right of the article.

THE VERGE TECH ▾ REVIEWS ▾ SCIENCE ▾ CREATORS ▾ ENTERTAINMENT ▾ VIDEO ▾ MORE ▾ f

SCIENCE ENVIRONMENT 2020 ELECTION

As the 2020 election heats up, climate change becomes a bigger priority

Health care still dominates, but the environment was a high priority in Iowa

By [Justine Calma](#) | [@justcalma](#) | Feb 6, 2020, 8:05am EST

🔍

Miami Herald

ENVIRONMENT

Is Ron DeSantis really Florida's green governor? We're about to find out.

BY DAVID SMILEY AND ADRIANA BRASILEIRO

MAY 08, 2019 06:00 AM

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