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Floods and Climate Change in Broome County

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Floods and Climate Change in Broome County

By Maya Wolf

INTRODUCTION

Deadly floods are becoming more common due to climate change.^{1, 2} The Chenango and Susquehanna River confluence puts Broome at an elevated risk, as demonstrated by the devastating 2006 and 2011 floods. Broome has enacted some flood and climate change mitigation in response to this issue, including the Climate Smart Communities initiative.^{3, 4} My research aimed to uncover the experiences and views of Broome County constituents on flooding, climate change, and CSC. This should help recognize trends in the needs and incentives of the county and how they compare to the actions taken by local legislators.

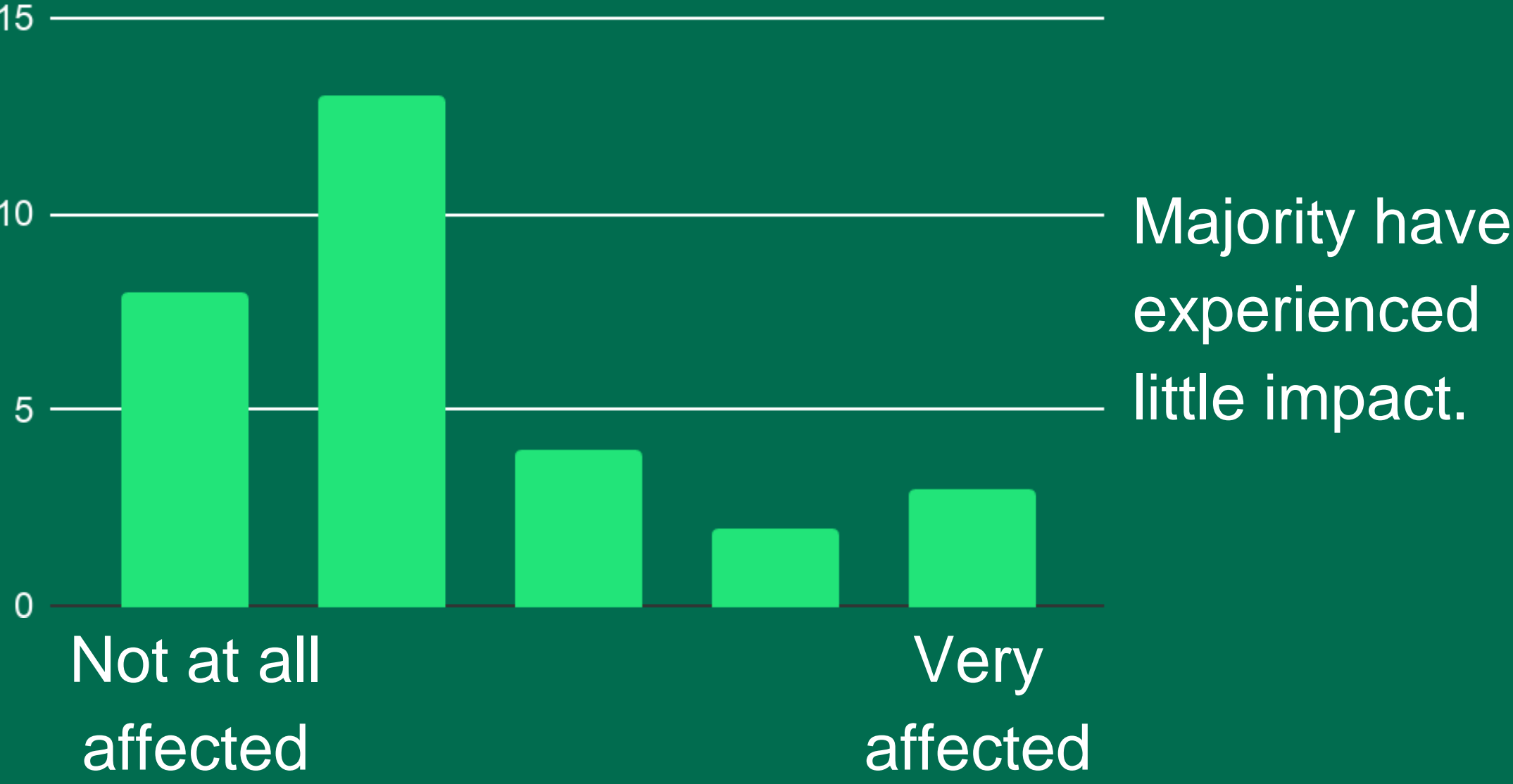
METHODOLOGY

I created a short survey and used snowball sampling to distribute it to local community-members. I analyzed survey results and compared data to an interview I conducted with Suzy Ryan as well as information from Broome County Government’s and Climate Smart Communities’ websites.

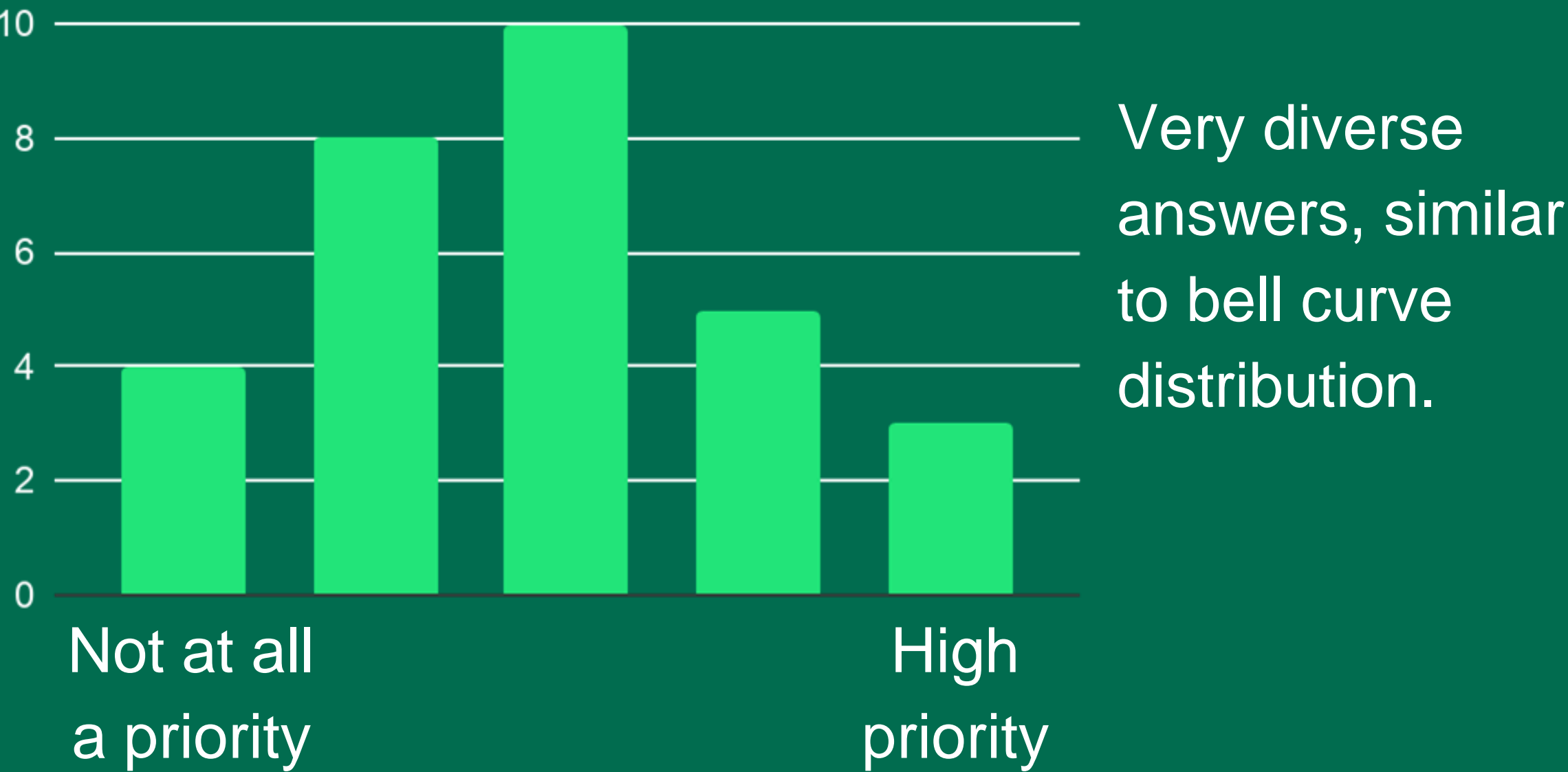
SURVEY QUESTIONS AND RESULTS

1. What part of Broome County do you live in and how long have you lived there? Be as specific as you are comfortable with.

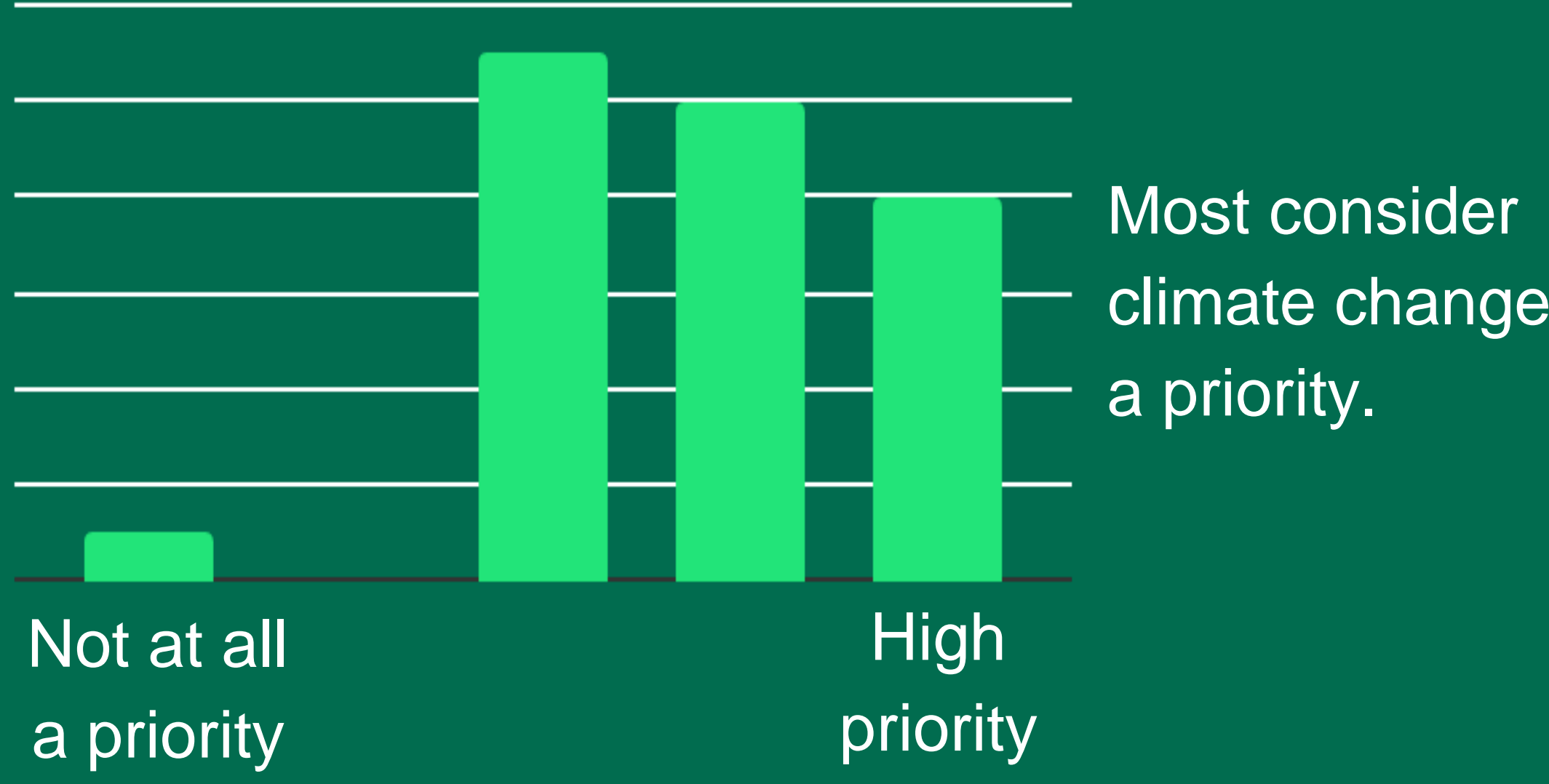
2. How much have you been impacted by the floods of 2006 and/or 2011?



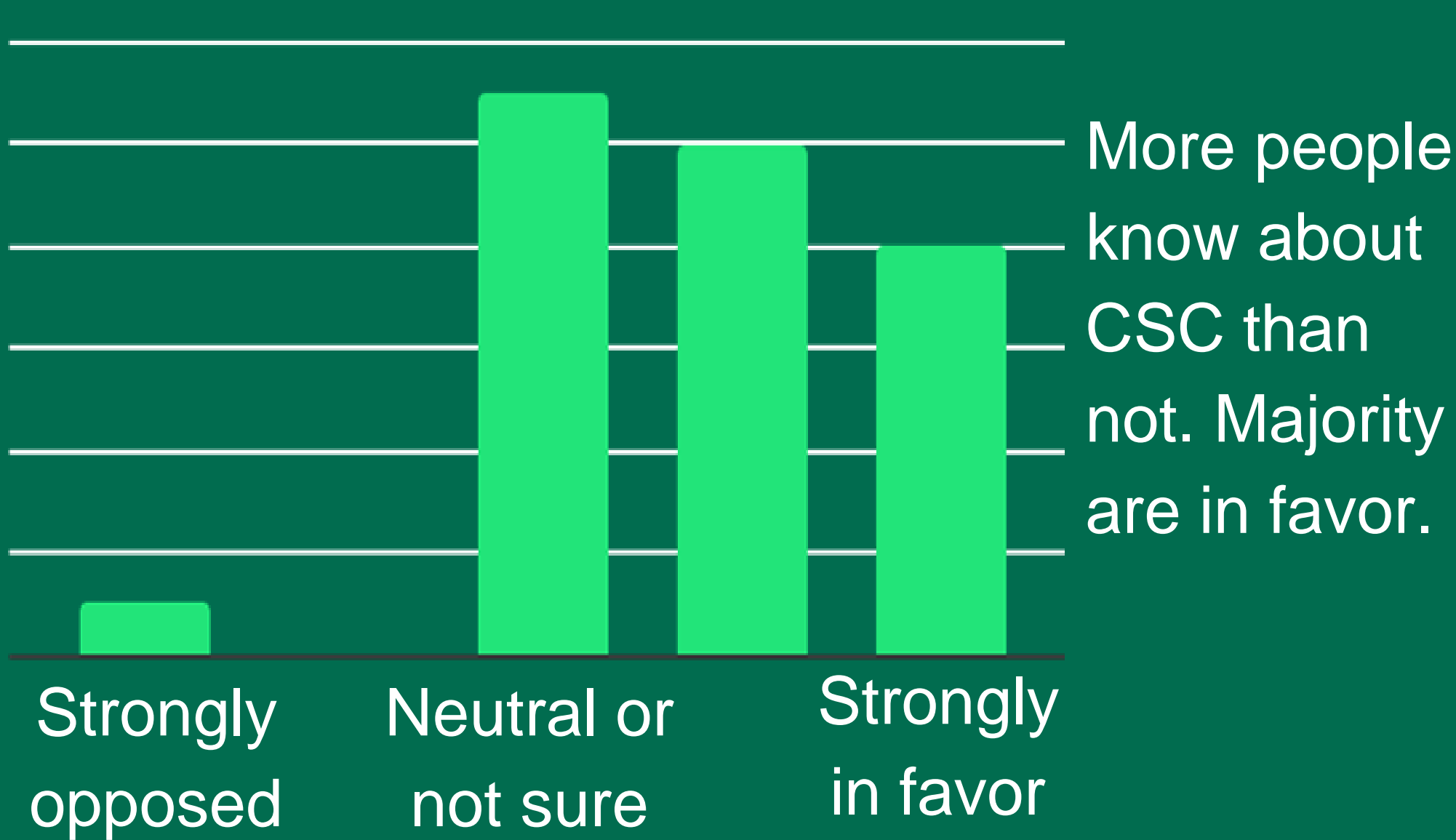
3. How much of a priority issue is flooding for you?



4. How much of a priority issue is climate change for you?



5. How do you feel about CSC?



NOTE on potential skews in data due to the use of snowball sampling

- A large portion of respondents were likely young people around high school or college age.
 - They may not remember the effects of recent major floods as well as older generations and thus answered question 2 as having being impacted less.
 - Generation Z is more liberal than older generations and will be most affected by climate change in our lifetime. Therefore, young respondents may have prioritized climate change more than older people.
 - Some may be either too young to vote, or in college and registered in a different part of the country. Young people are also generally less likely to vote. Their opinions do not influence lawmakers’ actions as much as those of older people.
- The respondents are likely more liberal on average than Broome County actually is. Therefore, they may prioritize climate change more than average.

FINDINGS

- Comparing responses between questions 1 and 2 was not enough to create a conclusive understanding of whether certain areas in the county experienced worse effects from the floods and which areas those would be.
- 87% of respondents answered questions 2 and 3 either the same or within one degree on the likert scale. Those least affected by floods saw floods as a lower priority, and those most affected saw it as a higher priority. The other 13% were on the lower end of being affected but the middle or upper end of prioritizing flooding.
- 60% of respondents answered questions 3 and 4 either the same or within one degree on the likert scale. There may be a correlation between prioritizing flooding and climate change, but it is not strong enough to be clearly displayed on the graphs or to start making conclusions based off of.
- People that saw climate change as a higher priority were split, with some feeling neutral or unsure about CSC and the rest being in favor of the initiative.
- There was one outlier who saw climate change as a high priority but was strongly opposed to CSC.
- I was surprised to see that so many people knew what CSC was and had a stance on it. Normally, people do not pay much attention to local government very much, so I figured the majority would not know what this resolution and program was.

CONCLUSION

Because I had such a small and likely biased sample, my data is not yet sufficient to make conclusions based off of. With further research, I hope more reliable trends arise.

CLIMATE SMART COMMUNITIES

CSC is a statewide initiative that works to fight climate change at the local level. Local governments must pass a resolution which recognizes that climate change is caused by humans, and which agrees to take action to mitigate climate change, such as by reducing carbon emissions. Once they demonstrate meeting these goals, they can become certified communities and receive state funding.³

THE SOURCE PROJECT
ENVI 205: Research in People and Place



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