REPORT:

Maryland Department of Natural Resources State Parkgoer Survey

This survey was designed by Danielle Rockmann, Hannah Chan, and Ela Dhankhar with Dr. Shanna Pearson-Merkowitz and the Maryland Department of Natural Resources as part of PLCY400 Undergraduate Public Policy Capstone Course. The survey was collected by Dr. Shanna Pearson-Merkowitz, Noor Taffali, and the students in PLCY 306 in 16 Maryland State Parks. The survey was analyzed and presented by Dr. Shanna Pearson-Merkowitz, Kasey Vangelov, and Sydney Frost.

Field Dates October 21, 2023 and October 29, 2023. N= 447, Southern N= 30, Western N= 155, Eastern N= 76, Central N= 186

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Note: While the survey collected detailed demographic identification for respondents and information about which park they were in, given low response rates in different groups, for this report we have collapsed demographic groups into general categories (e.g. white/nonwhite and lower/higher income) and to regional park designations.

All figures present response rates in percentage format and are rounded to the nearest whole number.

1 More land purchases, tree planting, and educational opportunities are a priority for MD parkgoers.

The average parkgoer across all regions ranked the purchasing of more land for parks and open spaces and planting more trees for increased shade as their two highest-priorities for DNR investment. The third-priority option was 'educational opportunities' with "improved parking' being a a close fourth in some regions.

However, preferences for investment were different depending on the race of the respondent. Figure 1 shows the distribution of investment preferences for white vs. non-white respondents. For non-white respondents, planting trees was most important, followed by educational opportunities. Purchasing more land was the third most important investment area for non-whites but improved parking was a close fourth. For whites, however, purchasing more land was

prioritized by just under 30% of respondents and planting trees a close second. All other investments were chosen by far fewer people and generally responses were fairly well distributed across the remaining categories.

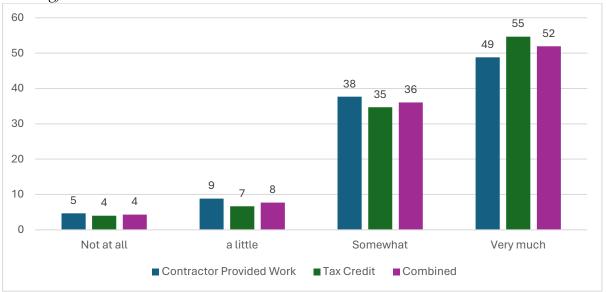
35 30 25 20 15 10 5 Removal of Update More bike Purchase Improved Educational Increased Plant trees buildings and for shade paths/hiking invasive more land parking opportunities staff trails species facilities presence ■ Non-White
■ White
■ All Races

Figure 1. Which of the following investment opportunities would you like to see the Department of Natural Resources fund in Maryland State Parks? (By Race)

2 Programs to Protect Maryland Homeowners from Extreme Weather Events Receives Strong Support.

The survey included an experimental question evaluating parkgoer support for a program to help homeowners upgrade their homes to deal with climate effects. Approximately half the respondents received a question framing the policy as one in which the town would provide residents with a contractor to perform upgrades at no cost to the homeowner, whereas the other half of respondents received a question asking about support for a program that would "provide participating residents with a state income tax credit equal to the cost of the upgrade when they file their state income tax return." Parkgoers across all regions supported a program that would help homeowners upgrade their homes to protect against severe weather and climate change. Almost 90% of respondents supported the program either "somewhat" or "very much", with over 50% in the "very much" category.

Figure 2. Imagine your local government was considering a program to help homeowners upgrade their homes to make the property less likely to be damaged by floods, intense heat, or storms. The program will provide residents of your town with a contractor to perform the upgrade at no cost to the homeowner [The program will provide participating residents with a state income tax credit equal to the cost of the upgrade when they file their state income tax return]. How much would you support a program like this in your community? (By Question Wording)



However, there was stronger support among wealthy respondents for a tax credit whereas for lower income respondents, support was the same regardless of if the policy was framed as a tax rebate program or a program that provided direct support to households. This is critical to understand given tax rebates are generally much more helpful for higher income households who can afford to pay for an upgrade up front and wait for reimbursement in their taxes compared to lower income households.

Figure 3. Support for Climate Mitigation Program by Income.

Figure 3A. Lower Income Respondents (Under 80k in Reported Household Income)

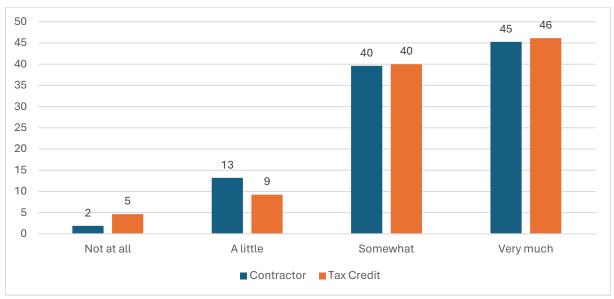
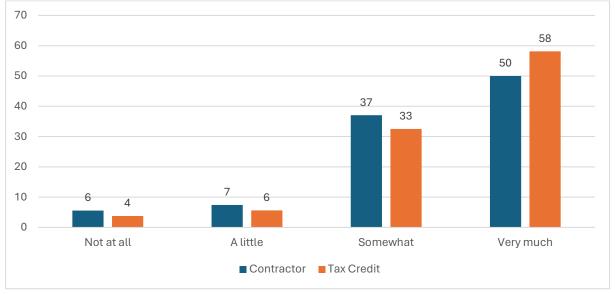


Figure 3B. Upper Income Respnodents (Over 80k in Reported Household Income)



3 Most Parkgoers Report Knowing about Climate Change, but Many are Anxious About Climate Change

Overall, a relatively low percentage of parkgoers report knowing "a lot" about climate change. Only 17% of all respondents say they know a lot, though 52% report knowing "a fair amount" so

that almost 70% of respondents say they know either a lot or a fair amount. However, only 53% of lower income respondents report knowing either a lot or a fair amount. Importantly, 68% of lower income respondents said they were interested in learning more about climate change.

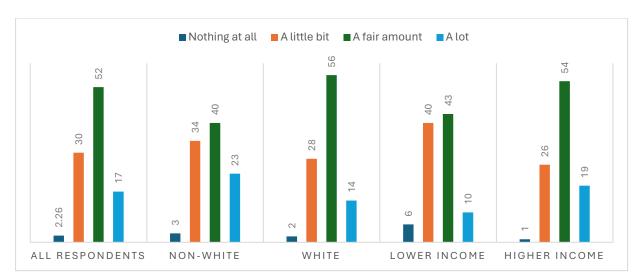


Figure 4. How much would you say you know about climate change?

While knowing about climate change is an important indicator of people's willingness to take action, several commentators have noted that climate change has increased anxiety and feelings of hopelessness. This seems to be the case among Maryland parkgoers. Almost half of respondents reported feeling anxious and over a quarter report feeling powerless when they hear about climate change. Very few respondents felt optimistic or empowered.

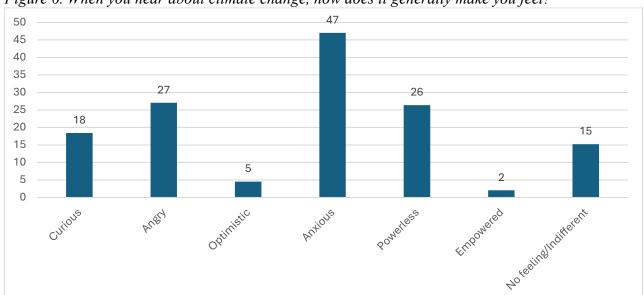
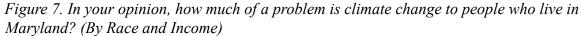
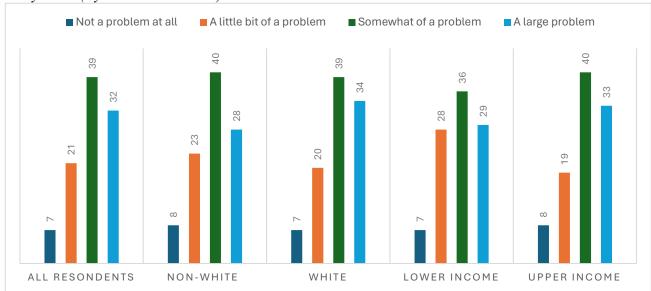


Figure 6. When you hear about climate change, how does it generally make you feel?

4 People are Concerned About the Impact of Climate Change on Maryland and on Them Personally

Only a small percentage of respondents did not think climate change is a problem for Maryland. Across all groups, about 7% of respondents felt climate change was not a problem at all. However, between a fifth and a quarter of respondents thought it was only a little bit of a problem. White respondents and those reporting higher incomes were the most likely to say that climate change was either "somewhat" or "a large" problem.





About a third of respondents reported feeling "very concerned" that climate change would affect them personally. That said, lower income respondents were much less concerned that climate change will impact them personally despite the fact that climate change is more likely to impact lower income populations more than higher income populations. However, this difference may be due to the differences seen in Figure 7 and the lower probability of lower income respondents to think climate change is a large problem.

Not at all concerned A little concerned Somewhat concerned Very concerned

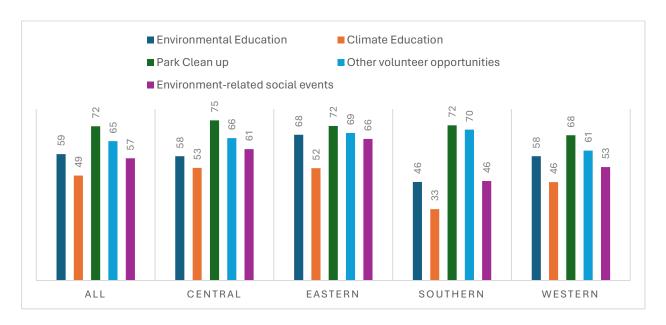
ALL RESONDENTS NON-WHITE WHITE LOWER INCOME UPPER INCOME

Figure 8. How concerned are you that climate change will affect you personally? (By Race and Income)

5 Park Clean-Ups, Environment-Related Social Events, and Other Volunteer Opportunities Intrigue MD Parkgoers But Interest in Volunteering Depends on how Events are Packaged

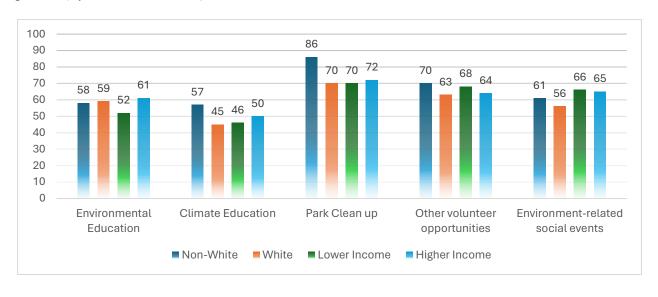
The park attendees surveyed for this project expressed strong interest in participating in programs offered by the Department of Natural Resources. The most popular activity was Park Clean Up events: In every park region, a supermajority of respondents expressed interest in these events. However, educational activities received a more mixed reception. Overall, just under half of respondents expressed support in climate education activities, while almost 60% expressed support in "environmental" education activities. This difference in how these activities might be advertised was fairly consistent across regions but the differences were least consistent in the Central region and most consistent in the Eastern region. Both types of activities were much less popular than other activities in the Southern region. In the Southern region, volunteering activities were, by far, the more popular than education and social activities.

Figure 10. Would you be interested in participating in any of the following activities in the parks? (By Region)



There were also racial and income differences among interest in park volunteering and educational activities. Among non-white respondents, 86% said they would be interested in volunteering to help clean up the park, while only 70% of White respondents said they would be interested in clean ups. While widely popular across both subpopulations, it indicates that litter may be of more concern at some parks than others as nonwhite respondents were not evenly distributed across parks (almost half of all nonwhite respondents were in just three parks and over half were in the Central region).

Figure 11. Would you be interested in participating in any of the following activities in the parks? (By Race and Income)



6 Parkgoers lack confidence in the state's ability to combat climate change.

A majority of parkgoers report little or no confidence in the state's ability to combat climate change. Sixty-seven percent of all respondents said they had either only a little or no confidence in the state's ability to combat climate change. Among white respondents, almost three-quarters (72%) reported little to no confidence in the state. Likewise, higher income respondents also had lower confidence with 70% reporting little or no confidence. While this may be due to an understanding of the international scope of the climate change issue, it also may be indicative of a low-level of trust and confidence in state government. Which explanation (if either) is the cause of such low level of confidence, should be studied further.

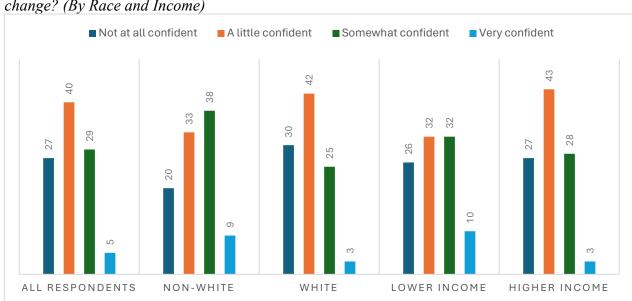


Figure 12. How confident are you in the Maryland State government's ability to combat climate change? (By Race and Income)

Conclusion

In October of 2023, 447 parkgoers across 16 Maryland State Parks were surveyed about their opinions, views, and priorities for the Department of Natural Resources. For funding opportunities, parkgoers prioritize land preservation, increased tree planting for shade, and educational opportunities. However, priorities were different for different demographic groups and regions. Parkgoers also overwhelmingly support programs to protect Maryland homeowners from extreme weather events, but *how* the program should be administered highlights the challenges of meeting the needs of those most in need through traditional tax rebate strategies.

Climate change is scary, and many Maryland parkgoers report anxiety and feelings of hopelessness when thinking about climate change. They are also concerned about the impact of

climate change on Maryland and on their personal outcomes, with those of higher income more likely to be more concerned about climate change's impact on them personally despite greater risks to lower income individuals.

However, parkgoers, overall, report having moderate levels of knowledge about climate change and are not only interested in learning more through educational opportunities. However, they are more interested in participating in park cleanups and other volunteer activities than educational activities. One thought might be to embed educational activities in volunteer activities to draw the largest participation. In addition, parkgoers reported low levels of confidence in the state's ability to combat climate change. As a result, greater education around what the state can and is doing to combat climate change might benefit parkgoers.

Overall, the findings of the survey indicate that opinions differ across demographic groups. As a result, further surveying could be useful to target programming and learn from affected populations.