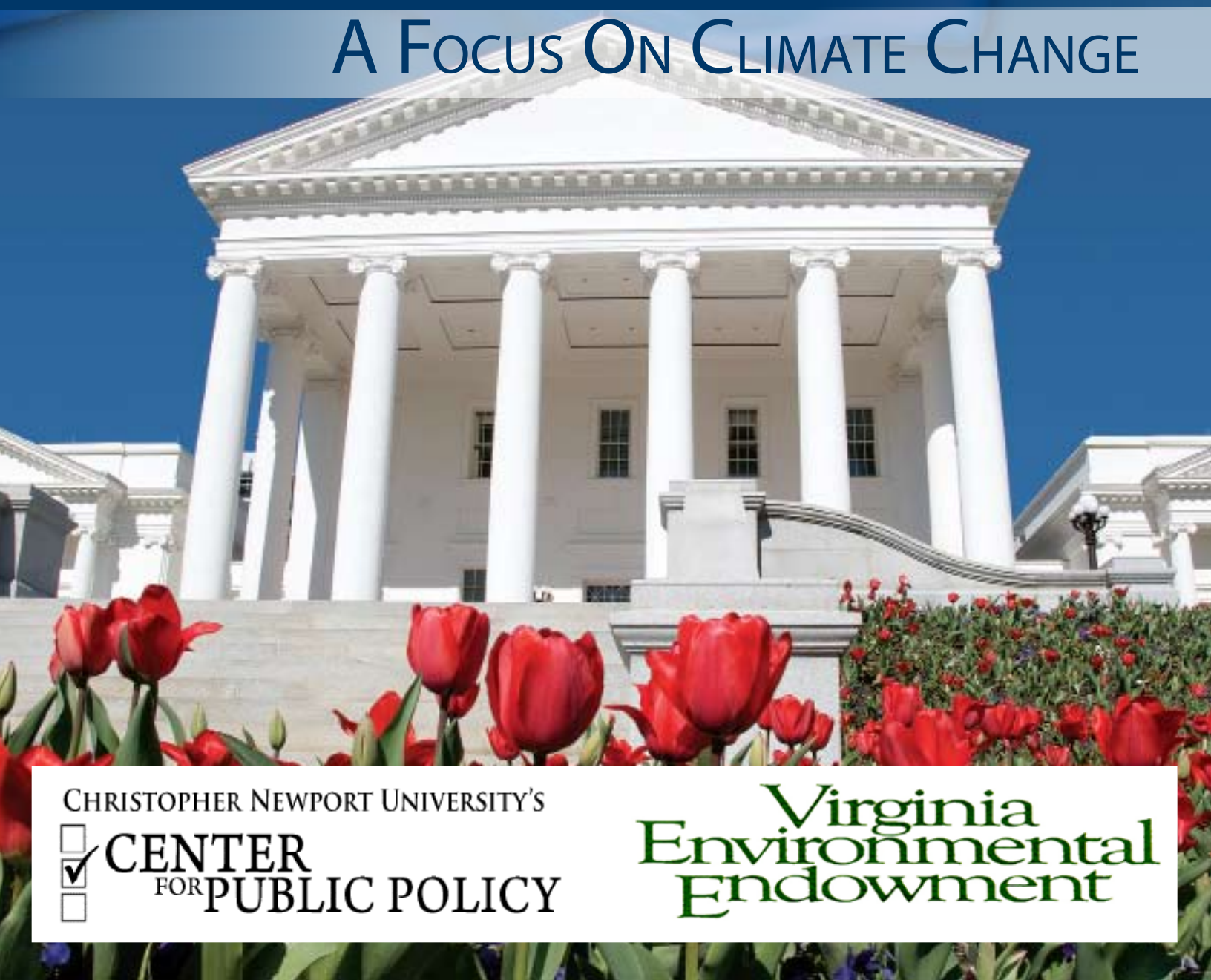




2009

Virginia Environmental Attitudes Survey

A FOCUS ON CLIMATE CHANGE



CHRISTOPHER NEWPORT UNIVERSITY'S

☐ ☒ ☐ **CENTER**
FOR PUBLIC POLICY

Virginia
Environmental
Endowment

INTRODUCTION

This is the first of three planned statewide surveys on the public's perception of the natural environment in Virginia. This first study focuses on climate change and examines what Virginians know about it, their personal environmental behavior, and their views on public policy related to climate change.

The goal of these studies is relatively straight forward: to provide an assessment of public opinion on the natural environment that will contribute to public dialog on the topic. This study is organized so that our understanding of public opinion becomes more acute as we move through it. We begin by asking for a general assessment of the state's natural environment and use a novel question format - the letter grade - as an assessment tool. We also ask

respondents to look into the future and assess in what state they think the natural environment will be in ten years. We then ask respondents about their personal views on the issue of climate change and to describe ways in which their own behavior has changed as a result of concern about the environment. We conclude with a detailed assessment of specific environmental issues facing Virginia and with a set of questions designed to gauge support for specific policy options.

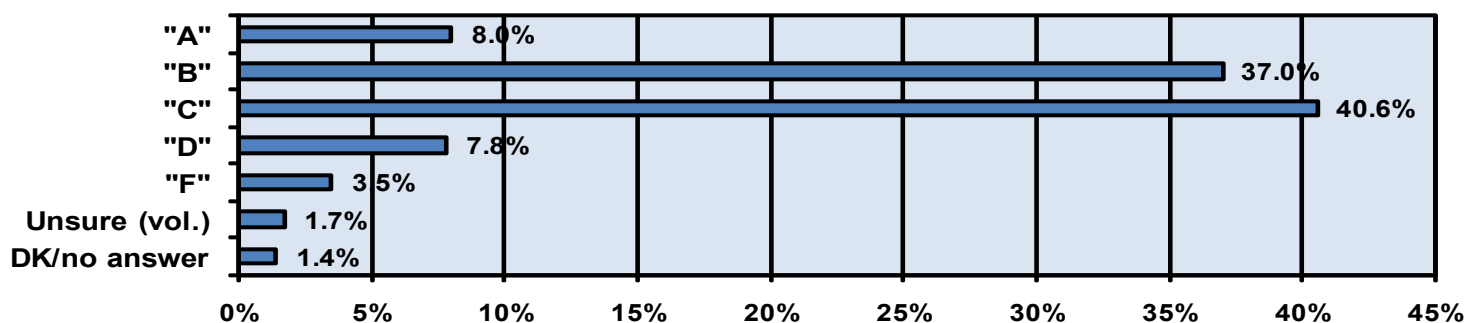
The study's results show widespread pessimism about the natural environment in Virginia, a significant amount of change in personal shopping and living habits, and a limited willingness to do more to help the environment.

CURRENT ASSESSMENT

Virginians are relatively pessimistic about the Commonwealth's natural environment, and most residents of the Old Dominion think the state's environment will stay about the same or get worse in the future. Virginians give the state's natural environment a grade of C which is equivalent to an average grade of 2.6 on the typical 4-point scale. Fewer than one in ten Virginians give the natural

environment an excellent grade (A), and just over one in ten give it a less than average (D) or failing (F) grade. These grades are also relatively consistent across gender and racial-ethnic categories, but younger Virginians between the ages of 18-24 and those who live in Northern Virginia and Hampton Roads give the Commonwealth's natural environment slightly lower grades on

FIGURE 1: GRADING THE NATURAL ENVIRONMENT IN VIRGINIA

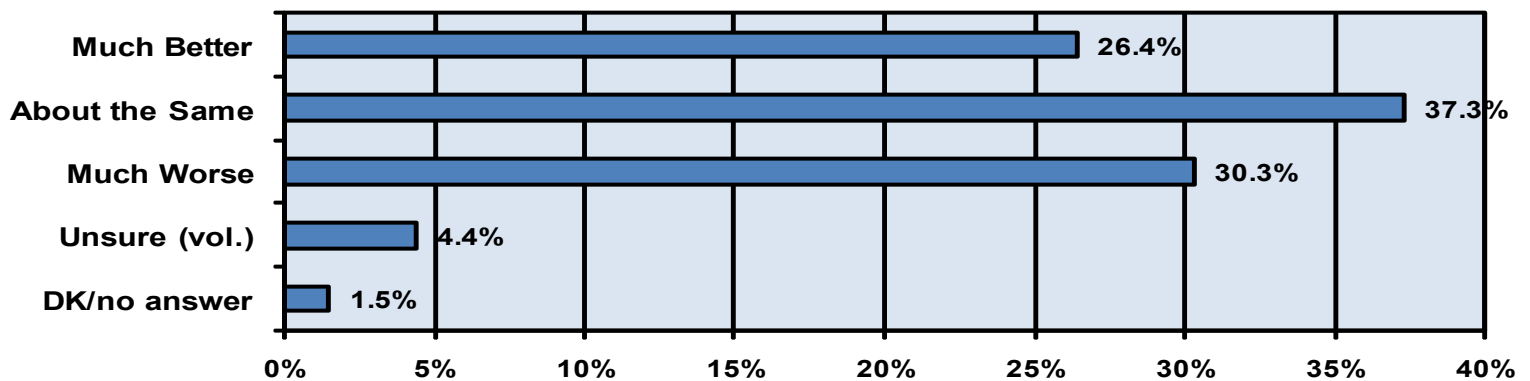


average than older Virginians and those in Central, Western and Southwestern Virginia.

When asked how they think the Commonwealth's natural environment will look ten years into the future, Virginians continue to be overwhelmingly pessimistic. A strong

majority of respondents say the state's natural environment will be about the same or much worse than it is currently. About a quarter have more decidedly optimistic views, saying they think the natural environment will be much better than it is today, and about 6% are unsure either way.

FIGURE 2: IN 10 YEARS, THE ENVIRONMENT IN VIRGINIA WILL BE...



PERSONAL VIEWS

Virginians clearly hear the debate about global warming, but largely reject arguments that it is not happening. Nearly nine in ten respondents feel that they understand the issue of global warming very well or fairly well, and nearly eight in ten of them think that global warming is probably happening. In contrast, about 19% say that global warming is probably not happening. These strong views on

global warming differ markedly with how residents of the Old Dominion think the experts view global warming. Only half of respondents think climate scientists mostly agree that the earth's temperature is slowly rising and that human activities such as burning coal or oil are major causes of global warming. Just over four in ten think climate scientists disagree on climate change and the causes of it.

QUESTION: Leaving aside your personal views for a moment, do you think most climate scientists agree that the earth's temperature is slowly rising, or do you think there is a lot of disagreement among climate scientists about this?

53.7% Most agree 41.2% A lot of disagreement 5.1% Unsure/DK/no answer

QUESTION: Again, leaving aside your personal views, do you think most climate scientists agree that human activities, such as burning coal or oil, are a major cause of global warming, or do you think there is a lot of disagreement among climate scientists about this?

53.5% Most agree 42.7% A lot of disagreement 3.8% Unsure/DK/no answer

QUESTION: How well do you personally feel you understand the issue of global warming, would you say you understand it very well, fairly well, not very well, or not at all?

26.2% Very well 63.3% Fairly well 9.2% Not very well 1.4% Not at all

QUESTION: Regardless of what the climate scientists think, which best describes your personal view about global warming? Do you think global warming is probably happening, or do you think it probably is not happening?

76.1% Probably happening 18.7% Probably not happening 5.2% Unsure/DK/no answer

PERSONAL BEHAVIOR

The vast majority of Virginians have changed their personal behavior to help protect the state's natural environment. Nearly a third of respondents say they have made major changes to their shopping and living habits while six in ten say they have made minor changes. About ten percent of Virginians have made no changes at all.

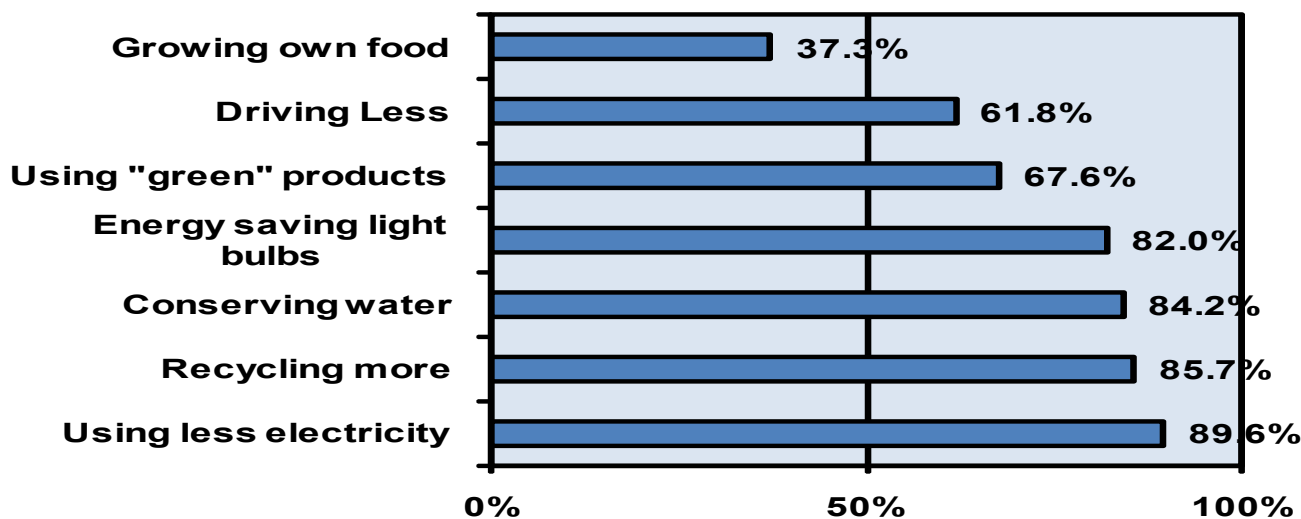
How specifically have Virginians changed

their shopping and living habits? Over eight in ten residents of the Old Dominion say they are using energy saving light bulbs, trying to conserve water, recycling more, and trying to use less electricity. Two-thirds of Virginians are using more "green" products, and just over six in ten are driving less. On the low end, only a third of Virginians say they are growing some of their own food.

Question: Thinking about your own shopping and living habits, would you say you have generally made major changes, minor changes, or no changes to help protect the environment?

29.6% Major changes 59.8% Minor changes 10.1% No changes .8% Unsure/no answer

FIGURE 3: CHANGES TO SHOPPING AND LIVING HABITS



POLICY OPTIONS

How severe are the specific environmental issues facing the Old Dominion? To better understand the public's views on this question respondents were asked to rate the severity of several environmental issues facing Virginia using a 1 to 5 scale, where 1 represented the view that the issue is not a problem at all and where 5 represented the view that the issue is a very serious problem. For each environmental issue, the average severity rating is reported in Figure 4.

Virginians are generally and widely worried about environmental issues across the board, with no single issue receiving a severity rating below 3.09. However, it should not be surprising given the state's bountiful natural environment that Virginians are also clearly more worried about environmental issues that impact the natural beauty and natural environment of the Old Dominion than they are about environmental issues that might impact their own health and welfare. Concerns

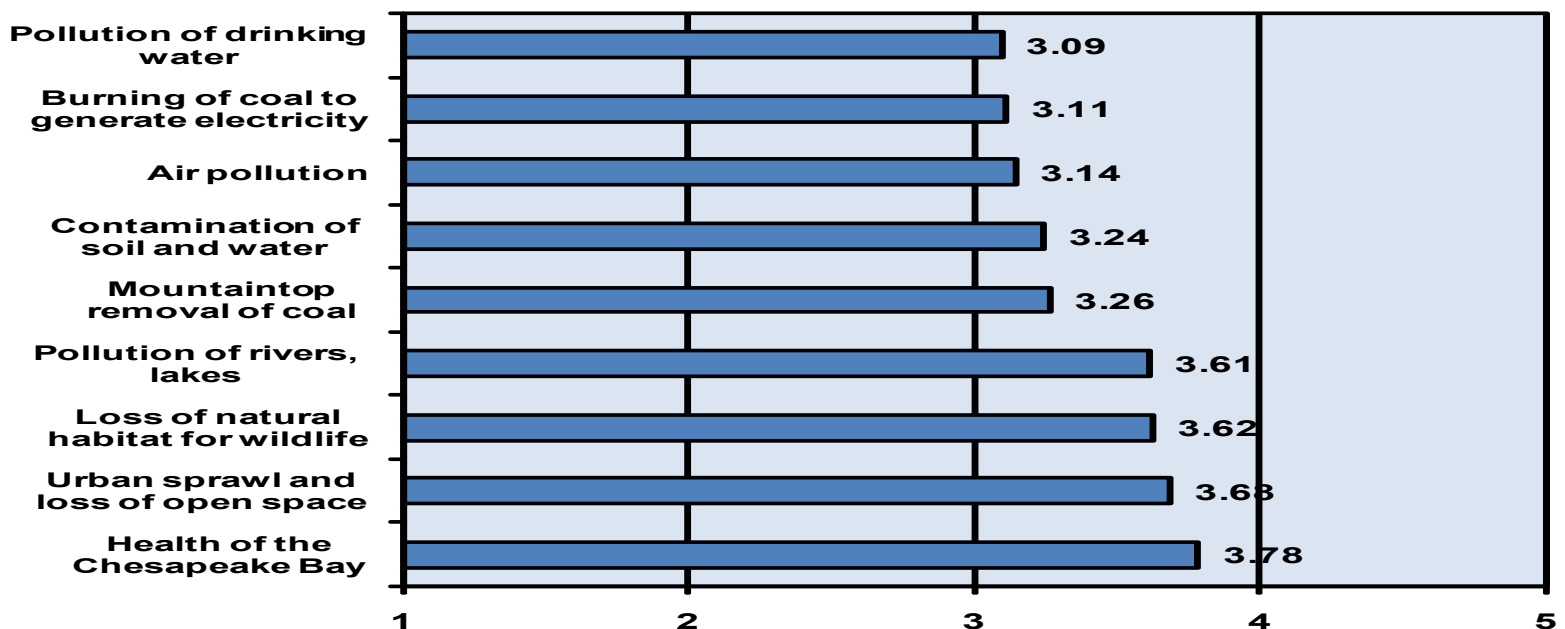
break down into two groupings, with one group of five issues receiving severity ratings in the lower 3-range and another group of four issues receiving severity ratings in the upper 3-range.

The four most severe environmental problems facing Virginia according to respondents are the health of the Chesapeake Bay, urban sprawl and loss of open space, loss of natural habitat for wildlife, and pollution of rivers, lakes, and reservoirs. Over half of all respondents gave the health of the Chesapeake Bay a rating of 4 or 5, indicating acute concern.

Five issues - mountaintop removal of coal, contamination of soil and water by toxic waste, air pollution, the burning of coal to generate electricity, and pollution of drinking water - received severity ratings between 3.26 and 3.09.

Does the widely shared concern about environmental issues and about global warming generally translate into support for policies designed to better protect

FIGURE 4: SEVERITY OF ENVIRONMENTAL ISSUES FACING VIRGINIA



POLICY TRADE-OFFS

Policy: Increasing the fuel efficiency standards so that new cars sold in Virginia use less gas

Trade-off: Price of new car goes up by an average of \$500

Worth the trade-off 79.3%
Not worth the trade-off 16.8%
Depends/DK/no answer 3.8%

Policy: Requiring new homes and other buildings to be more energy efficient so that it costs significantly less to heat and cool them.

Trade-off: Price of a new home or building goes up by an average of \$5,000

Worth the trade-off 78.8%
Not worth the trade-off 17.4%
Depends/DK/no answer 3.8%

Policy: Providing increased funding for rail, transit, and other alternatives to driving cars

Trade-off: Reducing funding for new highway construction

Worth the trade-off 54.4%
Not worth the trade-off 38.9%
Depends/DK/no answer 7.1%

POLICY INCENTIVES

Policy: Making existing homes and other buildings more energy efficient

Incentive: Tax credit of up to \$500

Incentive would encourage action 69.8%
Incentive would not encourage action 24.2%
Depends/DK/no answer 6.0%

Policy: Encouraging the purchase of hybrid vehicles that burn fewer fossil fuels.

Incentive: Tax credit of up to \$500 for purchasing a hybrid vehicle

Incentive would encourage action 51.9%
Incentive would not encourage action 43.0%
Depends/DK/no answer 5.1%

Virginia's natural environment? To assess this, respondents were asked a set of questions about the costs and benefits of specific policy proposals. The questions asked respondents to consider whether the cost of a policy was worth the benefit, or whether an incentive would cause the respondent to support the policy.

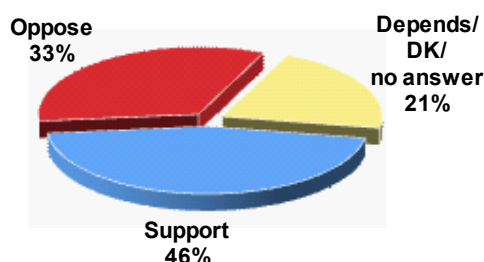
Virginians are generally willing to pay more to protect the state's environment and natural resources. However, this support is variable and is highest when it comes to paying a little more for higher mileage cars and more energy efficient homes and less when it comes to reducing funding for highways or purchasing hybrid cars. Specifically, nearly 8 in 10 Virginians think it would be worth paying an average of \$500 more for a car if the fuel efficiency standards were increased. Nearly 8 in 10 Virginians also think it would be worth paying an average of \$5,000 more for a new home or building if the increased cost was due to requirements designed to make new buildings more energy efficient so that they cost less to heat and cool. And, nearly 7 in 10 Virginians think a \$500 tax credit would be enough of an incentive to make existing homes and other buildings more energy efficient.

On the lower end, just over half of Virginians say that increased funding for rail, transit, and other alternatives to driving cars would be worth reducing funding for new highway construction. In addition, just over half of Virginians say that a \$500 tax credit would be enough to cause them to purchase a hybrid vehicle.

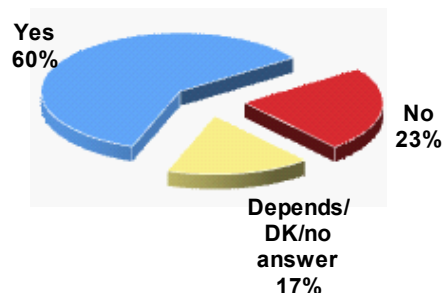
The most ambitious proposal for dealing with the greenhouse gases that are the primary cause of global warming is a market-based system called 'cap and trade,' whereby the government would sell permits for companies to emit greenhouse gases. Virginians are split on the issue of 'cap and trade' as a general rule, with just under half of respondents supporting the proposal in principle and just over half either opposing it or uncertain about it. However, 6 in 10 Virginians say they would be more likely to support the proposal if the revenue that would be generated from a 'cap and trade' system was given back to people to invest in environmentally friendly products and services. A quarter of respondents say they would not support it even if the proceeds were given to people.

FIGURES 5 & 6: VIEWS ON 'CAP AND TRADE'

Question: There is a proposed system called 'cap and trade.' The government would issue permits limiting the amount of greenhouse gases companies could put out. Companies that did not use all their permits could sell them to other companies that needed more permits. The idea is that many companies would find ways to put out less greenhouse gases, because that would be cheaper than buying permits. Would you support or oppose this system?



Question: Would you be more likely to support this system if the revenue from the permitting was used to provide tax cuts to average Americans to invest in more environmentally friendly products and services?



CONCLUSION

Taken as a whole this study says several important things about the public's perception of the natural environment in Virginia. First, Virginians are largely pessimistic about the state's natural environment, giving it only an average grade overall. Second, Virginians have made changes to their own living and shopping habits

in an effort to help better protect the environment. Third, Virginians are more concerned about the natural environment and the natural beauty than their own health. Finally, Virginians respond positively to many, but not all, policy proposals designed to change their behavior in ways that would be beneficial to the state's environment.

METHODOLOGY

The Virginia Environmental Attitudes Survey is a public opinion survey of 659 randomly selected registered Virginia voters conducted by telephone between March 18-27, 2009. The data reported here are weighted on sex, age, and region of residence to reflect as closely as possible the demographic composition of Virginia adults 18 and older. Percentages may not equal 100 due to rounding. Results for the full sample have a margin of error of plus or minus 3.8% at the 95% confidence level. This means for the full sample we can be 95% confident that the error attributable to sampling and other random effects is plus or minus 3.8%. In addition to sampling error, the other potential sources of error include non-response, question wording, and interviewer error. Where percentages for subgroups are reported, the margin of error would be higher. The poll was designed by Quentin Kidd of the Center for Public Policy at CNU and conducted for CNU by the Institute of Public Opinion at Muhlenberg College. For information or requests call (757) 594-8033 or e-mail qkidd@cnu.edu. Full topline and cross-tabs can be found at <http://cpp.cnu.edu>. Funding for the VEAS is provided in part by a grant from the Virginia Environmental Endowment. Special thanks to Grace Bowles for research assistance and Caitlin Dana for design assistance.



Center for Public Policy

Christopher Newport University

Ratcliffe Hall 110

1 University Place

Newport News, VA 23606-2998

phone: (757) 594-8033 · e-mail: cpp@cnu.edu

<http://cpp.cnu.edu>