

Delaware Residents' Opinions on Climate Change and Sea Level Rise

2019 Survey

Summary Report of Results

Prepared by

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for the

Delaware Department of Natural Resources and Environmental Control
Division of Climate, Coastal, & Energy



ABOUT THE DIVISION OF CLIMATE, COASTAL, & ENERGY

The Division of Climate, Coastal, & Energy, housed within the Delaware Department of Natural Resources and Environmental Control, uses an integrated approach of applied science, education, policy development, and incentives to address Delaware’s climate, energy, and coastal challenges. With a mission of providing leadership towards sustainable communities and environments now and for future generations, the Division works towards fostering clean energy, sustainable coasts, and a livable climate for all Delawareans.

ABOUT THE UNIVERSITY OF DELAWARE’S CENTER FOR POLITICAL COMMUNICATION

The University of Delaware’s (UD) Center for Political Communication (CPC) is a nonpartisan, interdisciplinary initiative that is committed to the emerging field of political communication.

- The CPC supports collaborative, interdisciplinary teams of social scientists, who examine issues related to voting, civil rights and liberties, media effects, and intergroup relations.
- The CPC’s events and programs inspire public participation in politics, engaging the next generation of public service leaders, in the United States and abroad.
- University of Delaware students expand their knowledge about political communication by minoring in political communication as undergraduates.
- The CPC supports University of Delaware students and UD departments who conduct their own initiatives to support political communication, especially research and public events.

PROJECT TEAM

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INTRODUCTION

Attitudes, perceptions, and knowledge about climate change and sea level rise are rapidly evolving. Climate change stories are in the headlines almost daily, politicians are increasingly discussing the need to act, and events like sunny-day flooding have brought the impacts of climate change home to many here in Delaware. Given this changing landscape, it is important for decision-makers, educators, and others to have locally based and up-to-date information on public attitudes and perceptions about climate change so that plans, projects, and decisions can be specific and tailored for Delaware.

Recognizing the need to understand the public's attitudes about climate change, the Delaware Department of Natural Resources and Environmental Control (DNREC) Division of Climate, Coastal, & Energy commissioned a 2019 survey aimed at gauging how Delawareans perceive climate change and sea level rise and how strongly they support implementing actions to reduce climate change and address sea level rise in Delaware. The survey was supervised by Dr. Paul Brewer, Research Director for the University of Delaware's Center for Political Communication.

The 2019 survey is the third of its kind. In 2009, DNREC's Delaware Coastal Programs section conducted a baseline survey, drawing on phone interviews of 1,505 Delaware residents, to test respondents' knowledge of the causes and consequences of climate change (with a particular focus on sea level rise) and their support for taking climate action. A five-year update was conducted in 2014 by Delaware Coastal Programs, the then-DNREC Division of Energy & Climate, and Delaware Sea Grant. The 2014 survey used the same methodology as the 2009 survey and was largely based upon the same set of questions; 1,508 residents were surveyed by telephone (including cell phones). Results from these two surveys can be found on DNREC's website at de.gov/climatesurvey.

In the last five years, conversations surrounding climate change have expanded in the public sphere, particularly as extreme storms have become more common and states across the nation have made commitments towards reducing their greenhouse gas emissions. Moreover, the way people communicate with each other has changed, with online and mobile communications on the rise. As such, DNREC determined a need to update both the survey methodology and content for the third iteration (and second five-year update) of its statewide climate perceptions survey.

Notably, in terms of methodology, the 2019 survey introduced a mixed mode survey technique, eliciting responses from 1,126 registered Delaware voters using both phone interviews (including cell phones) and an online platform (including online survey recruitment via phone). In terms of content, while many of the questions on the 2019 survey were carried over from the 2014 survey, new questions examined respondent support for specific actions to reduce climate change and support for increased research on how climate change will impact

Delaware's economy, health, and communities. The 2019 survey also looked at respondents' views on the effectiveness of actions to reduce climate change and address sea level rise.

This report is a summary of the 2019 survey results. Overall, the results indicate that most Delawareans believe climate change and sea level rise are happening. Majorities also say that the state should act now to reduce the impacts of climate change and sea level rise. Furthermore, Delaware residents support a range of key strategies to reduce climate change and address sea level rise.

A more comprehensive discussion of the survey methodology and findings from the survey — including results by respondent gender, age group, education level, and county of residence — will be available in a Final Report of Results, to be released in March 2020.

METHODOLOGY

This survey was conducted by Standage Market Research from November 17 to December 1, 2019, under a sub-contract agreement with the University of Delaware's Center for Political Communication. A representative sample of 1,126 registered Delaware voters were interviewed for the study either by telephone (601 respondents) or online (525 respondents). Interviewees were selected through random sampling. Statistical results are weighted by demographic factors to reflect the general population of Delaware. The margin of sampling error for the complete set of weighted data is ± 2.9 percentage points.

While Standage Market Research fielded the survey and weighted the results, the University of Delaware's Center for Political Communication prepared all written summaries of the survey results in this report.

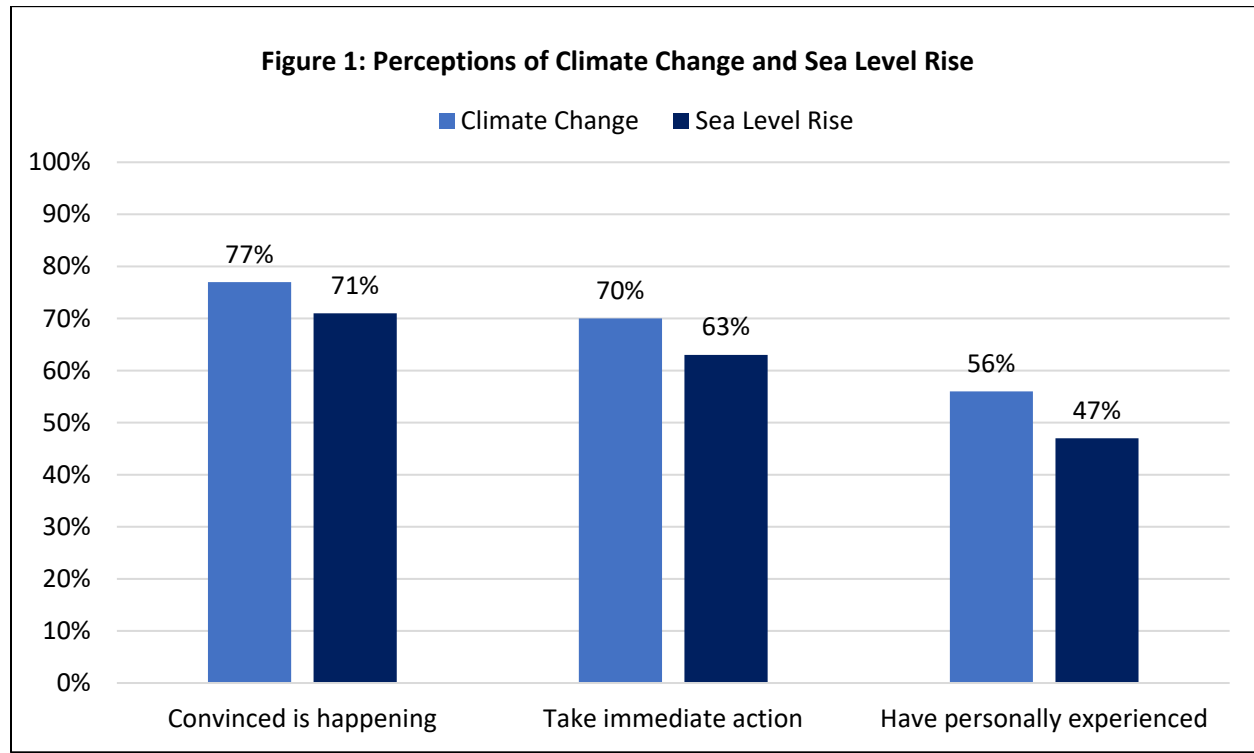
RESULTS

PERCEPTIONS OF CLIMATE CHANGE AND SEA LEVEL RISE

The survey found that about three-fourths (77%) of Delawareans are completely or mostly convinced that climate change is happening, and almost as many (71%) are completely or mostly convinced that sea level rise is happening. Fully 70% agree that we should take immediate action to reduce the impacts of climate change, and 64% say they can personally take action to do so. Almost two-thirds (63%) also say that we should take immediate action to reduce the impacts of sea level rise.

A majority (56%) of Delawareans say they have personally experienced or observed local impacts of climate change. This figure is close to the one found in the 2014 survey sponsored by DNREC (53%). However, a growing proportion of Delawareans now say they have personally

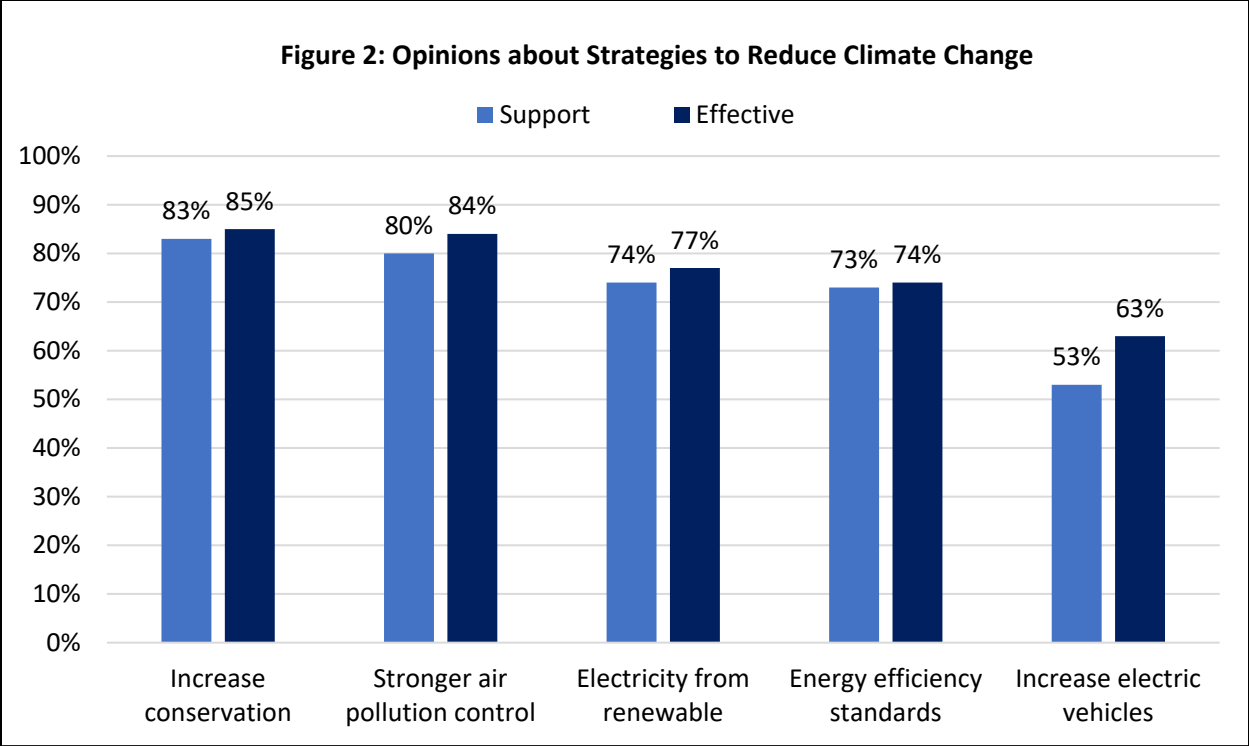
experienced sea level rise. The percentage reporting such experiences is 47% in the 2019 survey, a 19-point increase from 2014 (28%) and a 25-point increase from 2009 (22%).



OPINIONS ABOUT STRATEGIES FOR RESPONDING TO CLIMATE CHANGE AND SEA LEVEL RISE

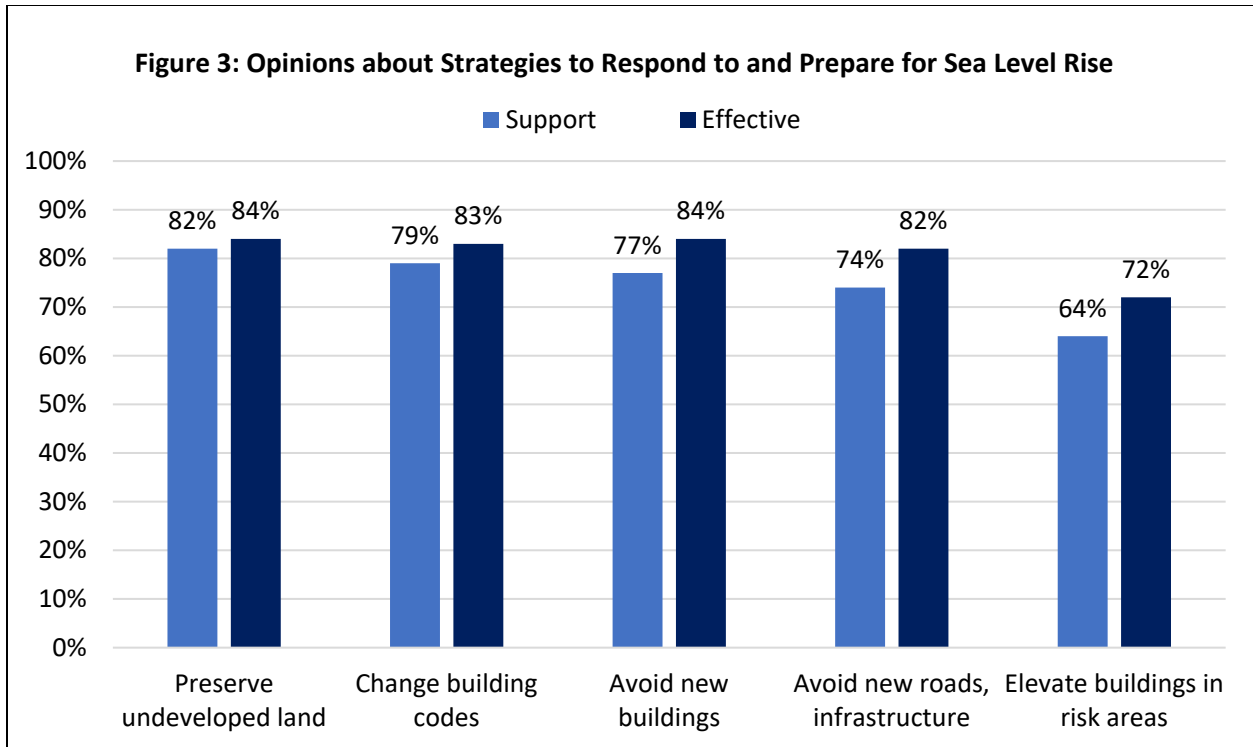
Delawareans support multiple strategies for reducing climate change. More than four-fifths (83%) favor increasing conservation of forested and agricultural lands. Large majorities also support requiring stronger air pollution controls on business and industry (80%), requiring that an increasing percentage of electricity used in Delaware come from renewable sources (74%), and requiring stronger energy efficiency standards on household appliances (73%). Fewer Delawareans favor requiring that an increasing percentage of vehicles sold in Delaware be powered by electricity, but a majority still support this strategy (53%).

Furthermore, Delawareans see all these strategies as effective at reducing climate change. Fully 85% say that increased conservation of forested and agricultural lands will be very or somewhat effective. Majorities say the same for requiring stronger air pollution controls on business and industry (84%), requiring that an increasing percentage of electricity used in Delaware come from renewable sources (77%), requiring stronger energy efficiency standards on household appliances (74%), and requiring that an increasing percentage of vehicles sold in Delaware be powered by electricity (63%).



Most Delaware residents also support key strategies for addressing sea level rise. These include preserving undeveloped land and natural features to allow for sea level rise to occur (favored by 82%), changing building codes and regulations to reduce risk in flood prone areas (79%), avoiding building new structures in areas at risk from sea level rise (77%), avoiding construction of new roads and infrastructure in areas at risk from sea level rise (74%), and elevating buildings in areas of risk using private funds (64%).

As with the climate change reduction strategies, Delawareans perceive the sea level rise response strategies as effective. Large majorities see these approaches as very or somewhat effective: 84% for preserving undeveloped land and natural features to allow for sea level rise to occur, 83% for changing building codes and regulations to reduce risk in flood prone areas, 84% for avoiding building new structures in areas at risk from sea level rise, 82% for avoiding construction of new roads and infrastructure in areas at risk from sea level rise, and 72% for elevating buildings in areas of risk using private funds.



OPINIONS ABOUT RESEARCH ON THE IMPACT OF CLIMATE CHANGE AND SEA LEVEL RISE

The survey found that Delawareans support increasing research on the implications of climate change and sea level rise for the state and its residents. Fully 79% favor more research on how climate change will impact agriculture in Delaware. Almost as many (76%) support more research on how climate change will impact the health of Delawareans, and an identical percentage support additional research on how it will impact the Delaware economy. Similarly, 73% favor increasing research on how climate change will impact vulnerable communities, such as the elderly and low-income residents, and 71% support research on how sea level rise will impact property values in coastal Delaware.

OTHER OPINIONS ABOUT CLIMATE CHANGE

Most Delawareans (77%) see climate change as a very or somewhat serious threat. Moreover, most are worried about climate change (64%) and see it as an important issue (69%).

A majority (55%) of Delaware residents say that most scientists think climate change is happening. An almost identical percentage (54%) say that climate change is mostly caused by human activities. For reference, the National Climate Assessment released by the federal government in 2018 concluded that “human activities, especially emissions of greenhouse

gases from fossil fuel combustion, deforestation, and land-use change, are primarily responsible for the climate changes observed in the industrial era, especially over the last six decades.”

A combined 56% of Delawareans think climate change will personally harm them a great deal (21%) or a moderate amount (35%). A larger combined percentage of Delawareans (77%), however, think climate change will harm future generations a great deal (61%) or a moderate amount (16%).

Around a quarter of Delawareans (23%) follow news about climate change very closely, and half (50%) follow it somewhat closely. Only 16% say they know a great deal about climate change, while 55% say they know a moderate amount; the rest say they know a little or nothing.

FOR MORE INFORMATION

Data and results from the 2009 and 2014 Delaware Residents' Opinions on Climate Change and Sea Level Rise surveys are available on DNREC's website at de.gov/climatesurvey.

A more comprehensive discussion of the survey methodology and findings from the survey — including results by respondent gender, age group, education level, and county of residence — will be available in a Final Report of Results, to be released in March 2020.

For additional questions or comments, please contact:

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