

TO: Climate Education Partners – San Diego Region

FROM: David Metz and Miranda Everitt
Fairbank, Maslin, Maullin, Metz & Associates

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RE: Key Countywide Survey Findings on San Diego County Residents’ Knowledge of and Attitudes Toward Climate Change

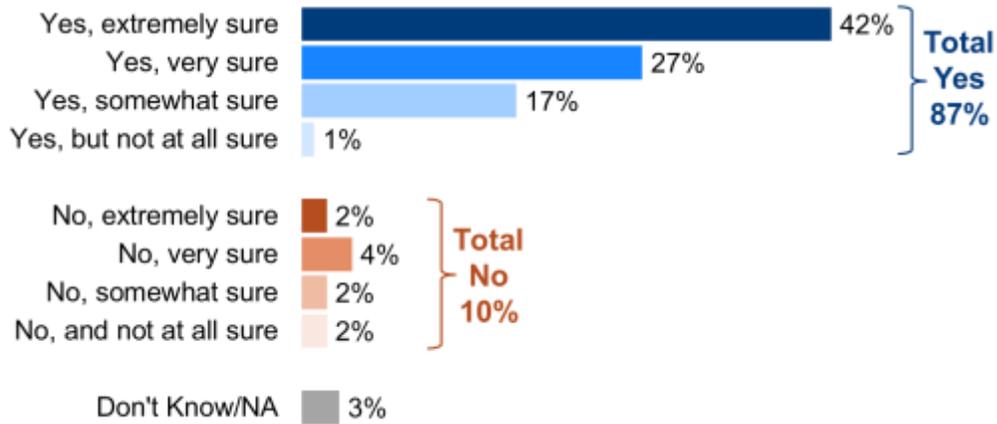
DATE: September 20, 2017

The bipartisan research team of Fairbank, Maslin, Maullin, Metz & Associates (FM3) and Public Opinion Strategies (POS) recently conducted a telephone survey of 634 residents in San Diego County to assess their views on issues related to climate change and public policies designed to address it.ⁱ The results show that **County residents continue to express a high degree of confidence that climate change is happening, are confident that they can take action to address it, and increasingly consider themselves a part of the community concerned about climate change.** While some effects of climate change are not yet clear to San Diegans, the causes are well understood. Taken together, these factors contribute to a broadly shared belief among San Diegans that their own actions can contribute to slowing global climate change, and they possess a shared willingness to take action.

This is the fourth biennial survey of San Diego residents conducted by the two firms, and part of an ongoing project to understand the views, values and perspectives of San Diego County residents. This research builds upon a variety of surveys, opinion leader interviews, and focus groups beginning in 2011. The following are some of the key specific findings to emerge from the survey:

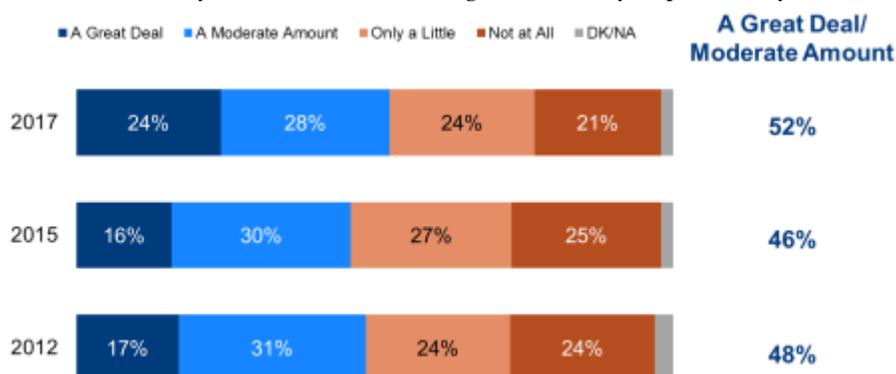
- **San Diego County residents believe climate change is happening.** As shown on the following page in **Figure 1**, more than four in five San Diegans (87 percent) say they believe climate change is happening. The share has increased three points compared with 2015, when 84 percent said they believe it is happening. Notably, nearly half of those – 42 percent – are “extremely sure” climate change is happening, an eight-point increase over 2015, and a ten-point increase over the first year of surveying, 2011. Latinos are slightly *more* likely to believe that climate change is happening (90%) than are white San Diegans.

Figure 1:
Perception of Whether Climate Change is Happening, 2017
Do you think climate change is happening?



- San Diego County residents are increasingly confident that climate change is caused by human activities.** Nearly two-thirds of San Diego County residents (64%) say that climate change is “caused mostly by human activities,” while a smaller subgroup (25%) sees it as mostly the result of “natural changes in the environment.” This represents a marked increase from 2015, when just 55 percent believed human activity was at the root of climate change. As with belief in climate change generally, Latinos are slightly more likely than white San Diegans to identify the cause as human activity (70%).
- A majority of San Diego County residents thinks that climate change will harm them personally.** As detailed below in **Figure 2**, nearly half of all San Diegans (52%) believe that climate change will cause them at least “moderate” harm, the first time that a majority has taken that position. More than three-quarters expect at least some negative impact, saying that it will hurt them at least “a little” (76%). More than three in five Latinos (62%) say they think climate change will do them at last “moderate” harm, and fully 81 percent say it will harm them at least “a little.”

Figure 2:
Perception of the Personal Effect of Climate Change, 2012-2017
How much do you think climate change will harm you personally?



- **San Diego County residents believe many key facts about climate change science are true.** San Diegans’ expressed concern about climate change rests upon a firm scientific foundation. During the survey, respondents were read a list of statements about climate science and climate change and, based on their personal knowledge, were asked to rate each statement on a scale from one (“not true”) to six (“absolutely true”).

San Diego County residents broadly accept many facts that inform the scientific understanding of climate change – and reject evidence that runs counter to scientific evidence. Those statements shaded in green in the table are factually true, and those shaded in red are false. As **Figure 3** makes clear, there were no *untrue* statements that San Diego County residents rated as being accurate, and only one *true* statement that fewer than half of San Diego County residents recognized as such.

Many of the true statements inspired particularly broad agreement, with a majority of San Diego County residents recognizing them as accurate – including the statement that both gasoline engines and electric generation are sources of carbon dioxide; the assertion that climate change will lead to San Diego water shortages; and the fact that there is a strong scientific consensus about climate change. San Diego County residents have the least understanding about the impacts of climate change on Santa Ana winds and higher nighttime temperatures.

Figure 3:
Perceptions of Facts About Climate Science

Next, I am going to read you some statements about climate change in the San Diego region. Based on your personal knowledge, tell me how true you think each of the following statements is. Please rate each statement on a scale from one to six, where one means you believe it is NOT true at all and six means you believe the statement to be ABSOLUTELY true. You can use any number between one and six.

Statement <i>Those highlighted in red are untrue</i>	% Believing that the Statement is True (Rated 4-6)
Both gasoline engines and the generation of electricity emit carbon dioxide into the atmosphere	79%
Projected San Diego regional climate change in the next 40 years will result in severe water shortages	66%
There is a strong scientific consensus about climate change, and any minor disagreements about the details is part of the scientific process	66%
Sea level rose a few inches over the last century, but will rise several feet in the next century	57%
In the next 40 years, large rainstorms will damage beaches and coastal habitats	57%
In 40 years, Santa Ana winds will be rarer, but hotter and drier	46%
Humid heat waves in the summer are no more frequent than they were decades ago	38%
Higher nighttime temperatures have harmed San Diegans’ health	33%
Projected climate change in the next 40 years will have no impact on the frequency or intensity of wildfires	32%

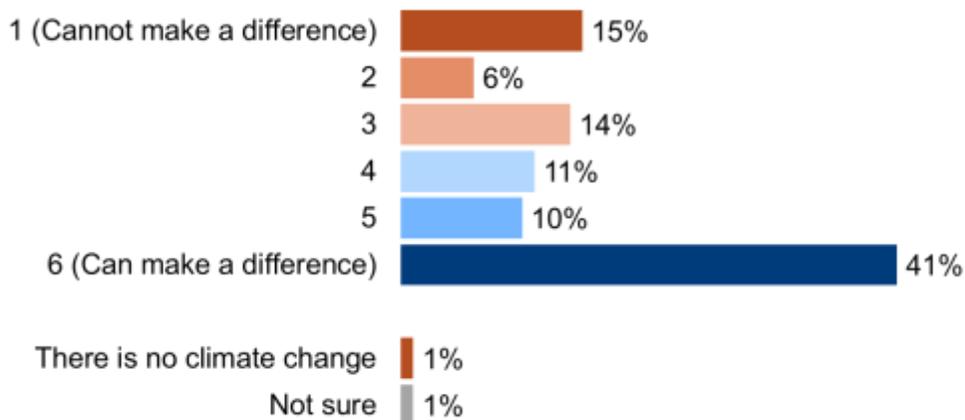
- **While most San Diego County residents consider themselves “part of the community concerned about climate change,” fewer believe their neighbors care about the issue.** More than two-thirds of San Diego County residents identify themselves as members of a community that cares about climate change. On a scale from one (“absolutely not part of that community”) to six (“absolutely part of that community”), 46 percent ranked their connection a five or six. However, when asked to what extent their neighbors care about climate change on the same scale, only 18 percent perceived their neighbors had an equivalent level of concern. When asked about the San Diego region more broadly, a slightly higher proportion (26 percent) said residents of the region are highly concerned.
- **A clear majority of San Diego County residents believes personal actions can make a difference to address climate change.** On a scale from one to six, where one means their personal actions *cannot* make a difference, and six means it *does* make a difference, 62 percent of San Diego County residents indicate (with a rating of a four or more) a belief their personal actions can reduce the negative outcomes associated with climate change in the next forty years. A similar share (65%) of Latinos feels empowered in this way.

As shown in **Figure 4**, more than two in five (41 percent) say that their actions can *definitely* make a difference (as reflected in a rating of six on the scale) – substantially more than the 15 percent who dismiss that assertion with a rating of one (saying their actions will make no difference at all).

Figure 4:

Perception of San Diego County Residents’ Own Efficacy on Climate Change

On a scale from one to six, where one means your personal behavior can NOT make a difference, and six means your personal behavior CAN make a difference, do you feel changes in your personal behavior can reduce the negative outcomes associated with climate change in the next 40 years?



- **San Diego County residents recognize a wide range of ways their actions could help to reduce climate change.** Survey respondents were presented with a list of actions that they could take to help address climate change, and after each item were asked to rate their ability to do the activity using a scale from one to six, where one meant they definitely could *not* do it, and six meant they were definitely *able* to do it. As shown in **Figure 5** on the next page, strong majorities of San Diego County residents are confident in their ability to take a variety

of personal actions to help address climate change – ranging from reducing water and electricity use, and telling interested neighbors how to do the same, to walking or bicycling more and voting in favor of laws to increase renewable energy.

Latinos are even more likely than other San Diego County residents to strongly believe they can *vote in favor of laws that increase energy efficiency or renewable energy* (75%).

Figure 5:

What San Diego County Residents Believe They Can Do to Affect Climate Change

Taking into consideration all the responsibilities you have, where you live and your life circumstances, to what extent do you feel you can do the following? Use a scale from 1 to 6, where 1 means you DEFINITELY CANNOT do this, and 6 means you ABSOLUTELY CAN do this.

Action	% Strongly Believe They Can Do (Rated 5 or 6)
Intentionally reduce electricity used in your yard or in your home	76%
Intentionally reduce water used in your yard or in your home	72%
Vote in favor of laws that increase energy efficiency or renewable energy	68%
Tell a person who asks how they could reduce their electricity, water or gasoline use	67%
Walk or bicycle to places near your home	57%

Taken together, the survey results show that climate change remains a major concern for San Diego County residents. San Diego County residents believe climate change will have a negative impact on their communities; on the County’s environment; and on their own lives. Most San Diego County residents believe their own actions can help mitigate the impact a changing climate will impose on the San Diego region, and perceive they are part of a community that cares about climate change. Accordingly, San Diego County residents express broad interest in a range of activities – from reducing their water use to walking or bicycling more – that will help reduce greenhouse gas emissions in the region.

About the Fairbank, Maslin, Maullin, Metz & Associates / Public Opinion Strategies Partnership

Fairbank, Maslin, Maullin, Metz & Associates (FM3) – a national opinion research firm with offices in Oakland, Los Angeles and Madison, Wisconsin – has specialized in public policy-oriented opinion research since 1981. Over its three-decade history, the firm has conducted thousands of surveys and focus groups. FM3 also provides research and strategic consulting to public agencies, businesses, political campaigns and public interest organizations nationwide.

Public Opinion Strategies is the largest Republican polling firm in the United States. Since the firm's founding in 1991, they have completed more than 10,000 research projects, interviewing more than five million Americans across the United States. Public Opinion Strategies' research is well respected, and prestigious media outlets such as *The Wall Street Journal*, NBC News, CNBC, and National Public Radio rely on Public Opinion Strategies to conduct their polling. The firm conducts polling on behalf of hundreds of political campaigns, as well as trade associations, not-for-profit organizations, government entities and industry coalitions throughout the nation.

FM3 and Public Opinion Strategies have conducted bipartisan research on a wide range of issues over the last several years, in particular on energy and environmental initiatives and policies. Together, the two firms have jointly conducted research on behalf of political campaigns, businesses, not-for-profit organizations and public agencies in 44 states and nationally.

About Climate Education Partners

Climate Education Partners is a collaboration of professors, scientists, researchers, educators, communications professionals, and community leaders who think the San Diego region is a special place and believe future generations deserve to enjoy the San Diego we know and love, with its natural beauty and ideal weather. The partnership consists of representatives from the University of San Diego, The San Diego Foundation, CSU San Marcos, Scripps Institution of Oceanography, The Steve Alexander Group and UC San Francisco. The group works with local civic, business, government, and education leaders to communicate the causes of climate change, its impacts in our region, and options for how to adapt to or prevent those impacts. For more information about this project, visit www.sandiego.edu/climate.

This research was conducted by Fairbank, Maslin, Maullin, Metz & Associates and Public Opinion Strategies by contract for the San Diego Regional Climate Education Partnership, a project funded by National Science Foundation Award # DUE –1239797.

Methodology: From June 10-25, 2017, FM3 and POS completed 634 telephone interviews with adult residents of San Diego County. Interviews were conducted on landline and cellular telephones and in English and Spanish. The margin of sampling error for the full sample is +/-3.9%; margins of error for other subgroups within the sample will be higher. The survey followed similar surveys of San Diego residents conducted in March 2015, December 2012, and October 2011.