

Attitudes and Opinions About Environmental Issues in Arizona

2020 Survey Results

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Executive Summary

A representative sample of 800 Arizona registered voters was surveyed in March 2017 and again in January 2020 (separate samples) to gauge Arizona voters' attitudes toward and beliefs about the environment and environmental protection. Morrison Institute for Public Policy at ASU designed the questionnaire, compiled the data and conducted the analysis for Nina Mason Pulliam Charitable Trust. When a statistical significance comparison was appropriate, and the change in response rate from 2017 to 2020 was found statistically significant at a 95% confidence level, the figures are highlighted in gold.

Two broad-based findings are notable.

First, in general terms, Arizona voters are as interested or more interested in and concerned about the environment in 2020 as they were in 2017. This includes attitudes toward and opinions about wildlife, land use, rivers and streams, global warming, preservation of water, air and water quality, and government spending on and attention to the environment.

Second, Arizona voters use print newspapers and television less and less as their primary sources for information about the environment. Electronic sources and social media are more and more critical to information distribution, a pattern that has been

apparent for nearly two decades. Further, this pattern is persistent among 18- to 64-year-olds, with many of those 65 and older still relying on television and, to a lesser degree, newspapers, although they also tap into online sources.

The 2020 survey found that education (33%; 43% in 2017), health care (20%) and the environment (16%; 10% in 2017) ranked, in that order, as the top trio of priorities for Arizonans (of the choices provided). Among Arizonans most likely to cite the environment as their top concern are voters over age 65 (20%) as well as Democrats (20%) and Independents (19%).

About two-thirds of Arizona voters (64%) believe the state will suffer a water shortage at some point in the next 50 years whereas only one in five (19%) believe Arizona has enough water to cover all its needs for the next 50 years. In contrast, in 2017, one-third of respondents (34%) said they believe Arizona has "enough water to cover all its needs into the foreseeable future." Republicans are more positive about the state's water future (30% believe there will be enough water; 45% in 2017) than are Democrats (9%; 29% in 2017), although neither group is optimistic. Statistical significance relating to these responses could not be calculated because the language of the question changed from 2017 to 2020. The 2017 survey asked, "Do you believe Arizona has enough water to cover all its needs into the foreseeable future?" The 2020 survey asked, "Do you believe Arizona has enough water to cover all its needs for the next 50 years?"

The findings about water availability are consistent with the findings related to perceptions of drought. About four in 10 (38%) believe Arizona is in a "long-term" drought, slightly less than one-third (33%) view the drought as "short-term," and 20% do not believe the state is experiencing a drought. It seems likely that the one-in-five respondents who believe there is sufficient water for the next 50 years are the same respondents who do not believe the state is experiencing a drought.

Water pollution ranks as Arizonans' top environmental concern; 61% of voters surveyed said they are "very concerned" about pollution in the state's rivers, lakes and reservoirs.

When respondents were given the choice between protecting the natural environment and economic growth, 64% said they believe "protecting the environment should be given priority, even at the risk of slowing economic growth." Just 11% sided with the reverse statement: "Economic growth should be given priority, even at the risk of damaging the environment." Twenty-five percent said "neither" or "don't know."



The percentage of Democrats (84%) who selected the environment over economic growth in the survey was substantially higher than the percentage of Republicans (42%). Independents, as they do on most of the issues measured in the survey, fall between the two major political parties (68%).

Meanwhile, the climate change debate in Arizona largely remains a partisan one, although Independents overwhelming side with Democrats. Seventy-seven percent of Democrats and 58% of Independents "strongly agree" the federal government needs to do more to combat climate change. Just 19% of Republicans "strongly agree" with that statement.

Thirty-six percent of Republicans either "strongly agree" or "agree" that "climate change is a made-up problem" compared with 6% of Democrats and 16% of Independents.

Regardless, more than nine in 10 voters (92%) have made "personal changes to help the environment."

As was true in 2017, TV is the most frequently cited source for environmental news and information. It was mentioned as a source by 47% (54% in 2017) of respondents. However, print newspapers, the fifth most cited source in in 2017 (35%), dropped to seventh place – cited by only 22% of respondents. A local online news site was used by 39% of respondents, and social media measured at 35%. (Note: On this question, survey respondents could select as many choices as applicable.)

Methodology

A representative sample of 800 Arizona registered voters was interviewed by telephone to determine their opinions and attitudes about environmental issues in Arizona. Interviews were conducted in January 2020. The sample was quota-selected from 72 strata based on political party affiliation, age, gender and race to match the political and demographic characteristics of Arizona according to the most recent voter data. The sampling frame included both landline and mobile telephones. Interviews were conducted in English or Spanish (as requested by the respondent).

This study is a follow-up to a 2017 study. It deployed many of the same questions, for tracking and comparison purposes, but included some additional questions. The primary purpose of the study is to determine whether attitudes toward environmental issues changed during the three-year period and, if so, in what way. Another goal of the study



is to determine if Arizona voters perceived an increase in environmental coverage in the local media.

As the data below indicate, interest in and concern about the state's natural environment, while already high in the 2017 study, has grown. In addition, four in 10 voters (42%) believe that during the past few years local media coverage of environmental issues has increased. Most of the remainder, 41%, believe it has stayed about the same. Only 5% believe it has decreased.

Importance of Issues

In an effort to determine how important Arizona residents consider environmental issues relative to other pressing issues in the state they were asked, "Which one of the following do you believe should be the top priority for the governor and the Legislature?" Predictably, "improving the education system" rose to the top of the list as the most important issue, cited by 33% of Arizona adults as the state's top priority (among the issues listed). However, this represents a 10-percentage-point decline from three years ago.

Health care is the second most frequently cited at 20% while 16% of Arizona voters rank "protecting the state's air and water quality, land use and wildlife" (the measure used for environmental issues) as the most important issue, up from 10% in 2017.

The following table illustrates voter priorities and shows comparisons to the 2017 study findings.

| "Which one of the following do you believe should be the top priority for the | | | | | |
|-------------------------------------------------------------------------------|------|------|--|--|--|
| governor and the Legislature?" | | | | | |
| | 2020 | 2017 | | | |
| Improving the public education system | 33% | 43% | | | |
| Making health care more accessible and affordable | 20% | 17% | | | |
| Protecting the state's air and water quality, land use and wildlife | 16% | 10% | | | |
| Reforming the state's immigration policies | 12% | 8% | | | |
| Lowering taxes | 7% | 5% | | | |
| Attracting and retaining businesses and jobs | 7% | 13% | | | |
| Improving public safety | 5% | 4% | | | |
| Addressing the state's gun policies | N/A | 1% | | | |



The gains in prioritization for environmental concerns between 2017 and 2020 are not the result of changes in priority among any particular demographic group. There are gains in all age categories and among members of both political parties and non-affiliated voters (Independents). As was true in 2017, registered Democrats (20%) and Independents (19%) are more likely to rank "protecting the state's air and water quality, land use and wildlife" as their number one concern than are Republicans (11%). The following table shows the change from 2017 to 2020 among those ranking "protecting the state's air and water quality, land use and wildlife" as the state's top priority.

| Percent Who Said the Environment Should | | | | | | | |
|---------------------------------------------|-----|-----|--|--|--|--|--|
| Be Arizona's Top Priority in 2020 and 2017, | | | | | | | |
| By Age Group and Political Affiliation | | | | | | | |
| 2020 2017 | | | | | | | |
| 18- to 35-year-olds | | | | | | | |
| 36- to 64-year-olds 16% 9% | | | | | | | |
| 65 and older | 20% | 11% | | | | | |
| Democrats | 20% | 14% | | | | | |
| Republicans 11% 5% | | | | | | | |
| Independents | 19% | 10% | | | | | |

There are few notable changes between 2017 and 2020 among the other topics measured. Further, the order of the issues – from those chosen most frequently to those chosen least frequently – changed only slightly. "Attracting and retaining business and jobs" slid lower on the list, dropping from 13% to 7% and, somewhat predictably, "reforming the state's immigration policies" rose from 8% in 2017 to 12% in 2020. With the Trump administration's three-year focus on immigration issues and Arizona's status as a border state, it might be expected immigration issues would have risen even higher on the list.

The following table shows the 2020 ranking of the issues measured by age and political affiliation.



| Percentage of Respondents Who Rank Each Statement as Their Top Issue, | | | | | | |
|-----------------------------------------------------------------------|-------|-------|-----|---------|-----------|--------|
| By Age Group and Political Affiliation | | | | | | |
| | | Age | | Politic | cal Affil | iation |
| | 18-35 | 36-64 | 65+ | Dem. | Ind. | Rep. |
| Improving the public education | 40% | 33% | 26% | 40% | 37% | 22% |
| system | | | | | | |
| Making health care more | 25% | 19% | 20% | 27% | 23% | 13% |
| accessible and affordable | | | | | | |
| Protecting the state's air and | 14% | 16% | 20% | 20% | 19% | 11% |
| water quality, land use and | | | | | | |
| wildlife | | | | | | |
| Reforming the state's | 9% | 13% | 12% | 7% | 7% | 21% |
| immigration policies | | | | | | |
| Lowering taxes | 5% | 6% | 10% | 3% | 6% | 11% |
| Attracting and retaining | 4% | 8% | 8% | 1% | 5% | 14% |
| businesses and jobs | | | | | | |
| Improving public safety | 4% | 6% | 5% | 4% | 4% | 8% |

As the percentages in the preceding table indicate, preferences follow a predictable path. "Improving the public education system" is ranked higher by young voters than older voters; "making health care more accessible and affordable" attracts more Democrats and Independents than Republicans; and "attracting and retaining businesses and jobs" is mentioned more often as the top priority by Republicans than by Democrats and Independents.

The following table shows the 2020 ranking of the issues measured by ethnicity, white and Hispanic voters (the only two ethnicities with a large enough sample to provide accurate analysis).



| Percentage of Respondents Who Rank Each | | | | | | | |
|--------------------------------------------|-----|-----|--|--|--|--|--|
| Statement as Their Top Issue, By Ethnicity | | | | | | | |
| White Hispanic | | | | | | | |
| Improving the public | 33% | 32% | | | | | |
| education system | | | | | | | |
| Making health care more | 18% | 30% | | | | | |
| accessible and affordable | | | | | | | |
| Protecting the state's air | 17% | 15% | | | | | |
| and water quality, land use | | | | | | | |
| and wildlife | | | | | | | |
| Reforming the state's | 12% | 10% | | | | | |
| immigration policies | | | | | | | |
| Lowering taxes | 7% | 6% | | | | | |
| Attracting and retaining | 9% | 1% | | | | | |
| businesses and jobs | | | | | | | |
| Improving public safety | 5% | 6% | | | | | |

The following table compares Maricopa County to the rest of the counties in Arizona and additionally breaks down the data by ethnicity. Thirty-two percent of registered voters in Maricopa County feel that improving the public education system should be the number one priority, compared to 35% of voters in the rest of the state. There is a statistically significant difference in the opinions of Maricopa County voters and the voters of all other counties combined with respect to two categories: making healthcare more accessible and affordable and reforming the state's immigration policies.



| Percentage of Respondents Who Rank Each Statement as | | | | | |
|------------------------------------------------------|-------------|-----------|--|--|--|
| Their Top Issue, Maricopa County | Compared to | All Other | | | |
| Arizona Counties, with White/Hispanic Breakdown | | | | | |
| | Maricona | All Other | | | |

| | Maricopa | All Other |
|--------------------------------|----------|-----------|
| | County | Counties |
| Improving the public education | 32% | 35% |
| system (All Respondents) | | |
| White | 32% | 31% |
| Hispanic | 30% | 49% |
| Making health care more | 22% | 13% |
| accessible and affordable (All | | |
| Respondents) | | |
| White | 20% | 11% |
| Hispanic | 30% | 19% |
| Protecting the state's air and | 16% | 18% |
| water quality, land use and | | |
| wildlife (All Respondents) | | |
| White | 16% | 22% |
| Hispanic | 17% | 5% |
| Reforming the state's | 11% | 17% |
| immigration policies (All | | |
| Respondents) | | |
| White | 11% | 17% |
| Hispanic | 9% | 16% |
| Lowering taxes (All | 7% | 7% |
| Respondents) | | |
| White | 8% | 7% |
| Hispanic | 7% | 7% |
| Attracting and retaining | 7% | 4% |
| businesses and jobs (All | | |
| Respondents) | | |
| White | 9% | 6% |
| Hispanic | 1% | 0% |
| Improving public safety (All | 5% | 6% |
| Respondents) | | |
| White | 5% | 6% |
| Hispanic | 6% | 5% |



Survey respondents were also asked which of the issues they considered to be the second most important. The following table lists the issues in the order of most frequent mentions for first choice or second choice combined.

| Issues Identified as First or Second Priority | |
|---------------------------------------------------------------------|-----|
| Improving the public education system | 54% |
| Making health care more accessible and affordable | 39% |
| Protecting the state's air and water quality, land use and wildlife | 37% |
| Reforming the state's immigration policies | 24% |
| Attracting and retaining businesses and jobs | 18% |
| Lowering taxes | 15% |
| Improving public safety | 13% |

It is important to note that voters are not indicating any of these issues are unimportant; they were simply asked which should be the top/second priority for the governor and Legislature. It would be inaccurate to conclude that lowering taxes or improving public safety are unimportant to voters; these topics are simply selected by fewer respondents as the highest or second-highest priority.

Attitudes Toward Environmental Concerns

Arizona registered voters view the environmental issues facing the state as a serious problem. When asked whether environmental issues are "very serious and need to be addressed immediately," "serious but not critical," or "not very serious," 41% indicate the issues are "very serious" while 46% rate the issues as "serious." Only 11% responded "not very serious." In Maricopa County, 40% of respondents believe that environmental issues are very serious compared to 44% in all other Arizona counties.

That means nearly nine in 10 voters (87%) believe the environmental issues facing Arizona are either "very serious" or "serious," up from 81% in 2017. The youngest voter group, those 18 to 35 years of age, overwhelmingly indicate the problem is "very serious" (46%) or "serious" (47%). While 22% of Republicans (the group least likely to see the issue as "very serious") view environmental issues as "not very serious," 77% view the issue as either "very serious" or "serious."

There is no question that voters view Arizona's environmental issues as important.



Water

Respondents were asked whether they believe Arizona has enough water to "cover all its needs for the next 50 years." The majority are not confident Arizona has sufficient water resources to support the state into the future. Less than one in five Arizona voters (19%) believe Arizona has sufficient water to support the state for the next 50 years, representing a decline of 15 percentage points since 2017 when 34% believed Arizona had sufficient water to "cover all its needs into the foreseeable future." Twenty percent of registered voters who live in Maricopa County believe that Arizona has enough water to "cover all its needs for the next 50 years," compared to 15% of registered voters in all other counties in Arizona.

Including the two most optimistic groups, Republicans (30% believe Arizona has sufficient water reserves) and men (24%), all groups analyzed for this study believe, overwhelmingly, there will be a water shortage. Women (only 14% believe there are sufficient reserves) and Democrats (9%) are particularly pessimistic.

Notably, 17% admit they don't know or have no opinion on the issue.

When asked, "Assuming that having enough water for home use is the highest priority, which of the following do you consider to be the second highest priority – water for landscaping, swimming pools and non-essential home uses; water to support new industries in the state; water for further development and new homes; water to support agriculture; or sustaining flows for rivers and wildlife?" about four in 10 Arizona voters (42%) cite "water for agriculture" while 40% cite "sustaining flows for rivers and wildlife." When this question was asked in 2017, the choice "sustaining flows for rivers and wildlife" was not offered. Consequently, 77% of respondents cited "water for agriculture" as their choice. Because the environmental choice was added for the 2020 study we can be sure that concern for "rivers and wildlife" is prominent among Arizona voters.

Voters 65 and older were more likely to favor "water to support agriculture," chosen by 52%, while those 18 to 35 were more likely to select "sustaining flows for rivers and wildlife," selected by 47%. Again, political party affiliation appears related to respondents' selections. While 47% of Democrats selected "sustaining flows for rivers and wildlife" (compared with 31% of Republicans), Republicans are more likely to select "water to support agriculture," (48%, compared with 37% of Democrats). As is true throughout this study, Independents tend to be in the middle, between the choices selected by the Democrats and those selected by the Republicans.



None of the other choices was cited by even as many as 10% of respondents. "Water for further development and new homes" was a distant third, at 9%.

The Verde River

In an effort to better understand voters' knowledge of the Verde River and its contribution to Maricopa County's water supply, respondents in Maricopa County were asked to determine the accuracy – very accurate, somewhat accurate or inaccurate – of three statements

Only 15% said they believe the statement, "Water from the Verde River is used to support agriculture in the Verde Valley" is "very accurate." The plurality, 41%, consider the statement "somewhat accurate." Eight percent consider the statement "inaccurate." Notably, more than one-third (36%) said they don't know.

Respondents were more definitive on the second statement, "Water from the Verde River is a key component of the water supply for Phoenix and Maricopa County." One quarter (25%) view the statement as "very accurate," 33% view it as "somewhat accurate," and 13% believe the statement is "inaccurate." Again, nearly one-third of Maricopa County voters (29%) said they don't know. Young adults, those 18 to 35, are the group most likely (34%) the see the statement as "very accurate."

Approximately three in 10 (29%) Maricopa County residents find "very accurate" the following statement: "The Verde River is commonly used for recreational purposes." Additionally, 31% view the statement as "somewhat accurate" and 11% view it as "inaccurate." Nearly three in 10 (29%) responded they do not know. These percentages are relatively consistent across the subgroups analyzed.

Concern About Environmental Issues

Respondents were asked how concerned they are about Arizona's overall natural environment – very concerned, somewhat concerned or not too concerned.

Nearly half (47%) responded they are "very concerned" and 39% indicate they are "somewhat concerned." The remainder, 14% are "not too concerned." Highest levels of concern emanate from Democrats (62% are "very concerned"), those 65 and older (57%) and, to a lesser extent, women (51%). The lowest level of concern is among Republicans (only 32% are "very concerned") while 24% are "not too concerned." Even so, 76% of Republicans are either "very" or "somewhat concerned."



In short, the vast majority of voters show real concern for the state's natural environment.

When comparing Arizona voters' concern for the natural environment against their desire for economic growth, the environment is clearly favored. Survey participants were asked which of the following two statements is closest to their own position:

- "Protecting the environment should be given priority, even at the risk of slowing economic growth."
- "Economic growth should be given priority, even at the risk of damaging the environment."

Sixty-four percent selected "protecting the environment should be given priority." Only 11% selected the second choice – favoring economic growth – while 25% said "neither" or "don't know."

While there are no meaningful differences by age or ethnicity, women (71%) are more likely to make the environmental choice over the economic choice than are men (57%). Further, the percentage of Democrats (84%) who selected the environment over economic growth is much higher than the percentage of Republicans (42%). Independents (68%) fall in between members of the two parties. Although fewer Republicans than Democrats chose the environment over economic growth, only 18% of Republicans actually chose economic growth over protecting the environment. More than one-third of Republicans (36%) selected neither option.

As nearly every measure in this study indicates, Arizona voters show real concern for protecting the natural environment.

Regardless of age, sex or political affiliation, Arizona voters (on an "excellent," "good," "fair" or "poor" scale) generally believe "the air quality in cities and large towns" is "good" (30%) or "fair" (43%). Few said air quality is "excellent" (3%) while nearly one-quarter (24%) rate it as "poor." Democrats (74% rate the air quality as either "fair" or "poor") and Independents (71%) express a more negative opinion of Arizona's air quality than do Republicans (54% rate air quality as "fair" or "poor").



Arizona Government Report Card

As was true in 2017, the governor and Legislature receive mediocre reviews for their "care of the state's natural resources" – 4% rate it as "excellent," 27% "good," 41% "fair," and 19% "poor.

These opinions are similar when comparing Maricopa County to the rest of the counties in the state.

| The governor and state Legislature's care for the state's | | | | | | | |
|-----------------------------------------------------------|--------------------------------|--|--|--|--|--|--|
| natural resources, by geography | | | | | | | |
| Excellent Good Fair Poor | | | | | | | |
| Maricopa County | Maricopa County 2% 29% 44% 24% | | | | | | |
| All Other 4% 31% 40% 21% | | | | | | | |
| Counties | | | | | | | |

Like most issues measured in this research, there is a political divide about the governor and Legislature's care of the environment with 49% of Republicans rating the governor and Legislature as either "excellent" (8%) or "good" (41%), while registered Democrats rate them at 1% and 16%, respectively. On the other end of the scale, 76% of Democrats rate the governor and Legislature either as "fair" (43%) or "poor" (33%) in "their care for the state's natural resources," compared with 44% of Republicans (37% saying "fair" and 7% saying "poor"). Little has changed in voters' perception of the state government's performance during the three years separating the two studies.

Registered voters in Maricopa County have similar viewpoints as the state as a whole. For example, 8% of Republicans in Maricopa County rank the governor and Legislature as excellent, which is the same as the state as a whole.

| The governor and state Legislature's care for the | | | | | | | |
|---------------------------------------------------|--------------------------|-----|-----|----|--|--|--|
| state's natural resources, Maricopa County | | | | | | | |
| | ents only by | | | | | | |
| | Excellent Good Fair Poor | | | | | | |
| Democratic | Democratic 1% 16% 44% | | | | | | |
| Independent 2% 19% 43% 22 | | | | | | | |
| Republican | 8% | 41% | 38% | 7% | | | |

Nearly seven in 10 Arizona registered voters (66%; 60% in 2017) believe "the governor and Legislature should require further regulation to reduce greenhouse gases,"



including 76% of 18- to 35-year-olds; 72% of women (64% in 2017); 89% of Democrats (81% in 2017); and 73% of Independents. Republicans are the only subgroup analyzed with fewer than half (39%) favoring additional regulation. Arizona voters are becoming increasingly concerned with greenhouse gases. While the majority felt more should be done to control greenhouse gases in 2017, that majority was larger in 2020. Maricopa County registered voters have similar views as the rest of the state. Sixty-six percent believe that there should be further regulation by Arizona government to reduce greenhouse gases compared to 63% in all other counties combined.

Arizona voters are nearly evenly split in their opinion of how well the state government manages the "protection of the state's wildlife." Forty-four percent of voters rate the government's protection of wildlife either "excellent" (7%) or "good" (37%) while 49% rate it "fair" (34%) or "poor" (15%). Differences among subgroups are modest: men (50% "excellent" or "good" rating) are slightly more favorable to the state government's protection of wildlife than are women (38%) and voters 65 and older are more favorable to state government (48%) than are their younger counterparts (42% among 36- to 64-year-olds and 40% among 18- to 35-year-olds). The only notable difference, again, is between registered Democrats (31% "excellent" or "good" rating) and Republicans (59%). The opinions of Independents, as has been the pattern throughout the research findings, fit between the opinions of members of the two major political parties (39%).

Arizona state government receives a similar response for its "long-term plan to protect and preserve its water supply." Only 3% rate the plan as "excellent" while 19% rate it as "poor." Which means nearly two-thirds of voters (61%) rate it as either "fair" (35%) or "good" (26%). While Republicans (40% said "excellent" or "good") are a more satisfied than are Democrats (24%) and Independents (24%), every subgroup, including Republicans, are lukewarm about the state's "long-term plan to protect and preserve its water supply."

Arizona voters are not particularly enamored of the "Arizona state government's plan to ensure a high level of water quality for residential use and consumption." Only 4% give the state government an "excellent" rating while 12% rate the state's plan as "poor." The vast majority rate the water plan as either "good" (33%) or "fair" (36%). Fourteen percent of the respondents indicate they "don't know." Once again, Republicans are more likely to give state government programs a higher rating (52% "excellent" or "good") than are either Democrats (27%) or Independents (32%). Women (32% "excellent" or "good") are more critical of the state's plan to ensure a high level of water quality than are men (43%). The oldest age group, those 65 and older, give the state a



higher rating (43% "excellent" or "good') than the youngest voters, those 18 to 35 years of age (32%).

The table below breaks down the responses to these environmental questions by geography.

| "How do you rate the state government's ?" | | | | | | |
|------------------------------------------------------------|----|-----|-----|-----|--|--|
| Excellent Good Fair | | | | | | |
| Protection of the state's wildlife | 7% | 37% | 34% | 15% | | |
| Maricopa County | 7% | 36% | 36% | 14% | | |
| All Other Counties | 7% | 41% | 29% | 16% | | |
| Long-term plan to protect and preserve its | 3% | 26% | 35% | 19% | | |
| water supply | | | | | | |
| Maricopa County | 4% | 27% | 35% | 18% | | |
| All Other Counties | 2% | 23% | 36% | 19% | | |
| Plan to ensure a high level of water quality 4% 33% 36% 12 | | | | | | |
| for residential use and consumption | | | | | | |
| Maricopa County | 5% | 33% | 35% | 13% | | |
| All Other Counties | 2% | 29% | 41% | 11% | | |

Arizona voters appear to revere the state's "parks, preserves, forests and open spaces." Three-quarters (75%) indicate they are "very important" to them and 23% say they are "somewhat important." Only 2% say they are "not very important." Virtually every subgroup considers the state's "parks, preserves, forests and open spaces" important. These results are almost identical in Maricopa County and all other counties combined.

Slightly more than half (52%) believe Arizona should do more to "develop alternative energy sources such as solar and wind power," down from 65% in 2017. And, while Republicans (51%) are more likely than Democrats (43%) and Independents (43%) to believe the state is "doing enough," differences of opinion on this issue are split relatively evenly among all groups analyzed. These opinions are consistent across Maricopa County and all other counties combined.

Climate Change

The climate change divide persists although, as the data indicate, the vast majority of Arizona voters believe climate change is real and that the federal and state governments need to do more to combat it. The overall findings have changed little from



2017 in terms of federal and state involvement; the percent who agreed that the government should do more to battle climate change is consistent from 2017 to 2020. But more voters feel strongly now that government action is needed. In 2020, 51% of voters said they strongly agree that the federal government needs to do more to combat climate change versus 38% in 2017. In 2020, 45% said the state government needs to do more versus 33% in 2017.

The chart below demonstrates the entrenchment of beliefs about climate change. Respondents were asked whether they "strongly agree," "agree," "disagree," or "strongly disagree" with each of the following statements:

| Percent in Agreement with Statements about Climate Change, by Political | | | | | | | | |
|-------------------------------------------------------------------------|-------|---------|--------|------|----------|----------|---------|------|
| Affiliation | | | | | | | | |
| | Stro | ngly Ag | ree/Ao | gree | Strongly | | | |
| | | | | | Dis | sagree/l | Disagre | ee |
| | Total | Dem. | Ind. | Rep. | Total | Dem. | Ind. | Rep. |
| The federal government | 71% | 95% | 80% | 41% | 27% | 4% | 18% | 55% |
| needs to do more to | | | | | | | | |
| combat climate change | | | | | | | | |
| 2017 | 71% | 94% | 75% | 48% | 29% | 6% | 25% | 53% |
| The state government | 70% | 93% | 79% | 40% | 28% | 4% | 19% | 58% |
| needs to do more to | | | | | | | | |
| combat climate change | | | | | | | | |
| 2017 | 70% | 94% | 74% | 44% | 30% | 7% | 26% | 56% |
| Climate change is a | 20% | 6% | 16% | 36% | 77% | 93% | 82% | 58% |
| made-up problem and | | | | | | | | |
| does not need to be | | | | | | | | |
| addressed | | | | | | | | |
| 2017 | 20% | 9% | 19% | 32% | 80% | 91% | 81% | 68% |
| Climate change is one of | 69% | 98% | 74% | 36% | 31% | 2% | 25% | 62% |
| the most serious | | | | | | | | |
| problems facing the world | | | | | | | | |
| today | | | | | | | | |
| 2017 | 65% | 91% | 70% | 38% | 35% | 9% | 30% | 62% |

The political divide on climate change is glaringly apparent. For example, only 19% of Arizona Republicans "strongly agree" that "the federal government needs to do more to combat climate change," compared with 77% of Democrats and 58% of Independents.



The differences are even more striking on the issue of greater state government involvement in combating climate change – only 15% of Republicans "strongly agree" the state government should increase its involvement, compared with 73% of Democrats and 49% of Independents.

Only 15% of Republicans "strongly agree" that "climate change is one of the most serious problems facing the world today," compared with 73% of Democrats and 50% of Independents. The bottom line on climate change, at least from a political perspective: Democrats are alarmed by the seriousness of climate change and its consequences, Independents are concerned, and Republicans are unconvinced.

Three-quarters of Arizona voters (77%) believe the earth's average temperature is rising, including 86% of 18- to 35-year-olds; 80% of women; 97% of Democrats; and 85% of Independents. Among those least likely to believe the earth's average temperature is rising are Republicans, with 50% believing the average temperature is rising and, to a lesser degree, those 65 years of age and older (72%).

Among those voters who believe the earth's average temperature is rising, 74% believe "climate change is primarily the result of human activity." The only subgroup analyzed where less than 60% believe "climate change is primarily the result of human behavior" is Republicans (55%).

Drought

As was true in 2017, there is divided opinion about Arizona's drought. About four in 10 (38%) believe Arizona is in a "long-term" drought, slightly less than one-third (33%) view the drought as "short-term," and 20% do not believe the state is experiencing a drought. There are no meaningful differences by age category or gender, but the political divide persists. Democrats (49%) are more likely than Republicans (27%) to view Arizona's drought as "long-term," while Republicans (30%) are more likely than Democrats (12%) to believe no drought exists.

Among those who believe Arizona is experiencing either a long-term or short-term drought, 54% believe it is "the result of climate change," including 79% of Democrats and 61% of women. Only 31% of Republicans said the drought is the result of climate change.



Concern About Environmental Issues

Respondents were asked to indicate their level of concern – "very concerned," "somewhat concerned" or "not at all concerned – about each of the issues listed below. As the findings indicate, and as was true in 2017, highest levels of concern are for "pollution in the rivers, lakes and reservoirs," "the protection of the state's wildlife," and "air quality in the state's cities and large towns."

In 2020, among all the environmental issues listed below, there is a large difference in level of concern between Democrats and Republicans, with Independents' level of concern falling between the two major parties. For example, while 78% of Democrats are "very concerned" about "pollution in the rivers, lakes and reservoirs," only 42% of Republicans show the same level of concern. Two-thirds of Democrats (65%) are "very concerned" about "vehicle emissions," compared with 24% of Republicans and 46% of Independents.

Concern for each of the environmental issues tested has crept up since 2017. The six issues tested in both 2017 and 2020 gained an average of five percentage points in the "very concerned" category. As other findings in this study indicate, concern for protecting the environment continues to grow.



| Level of Concern about Environmental Issues, 2020 | and 2017 | |
|-------------------------------------------------------|----------|------|
| | 2020 | 2017 |
| Pollution in the rivers, lakes and reservoirs | | |
| Very concerned | 61% | 55% |
| Somewhat concerned | 30% | 36% |
| Not at all concerned | 8% | 9% |
| Don't know | 1% | N/A |
| Air quality in the state's cities and large towns | | |
| Very concerned | 49% | 45% |
| Somewhat concerned | 40% | 44% |
| Not at all concerned | 10% | 11% |
| Don't know | 1% | N/A |
| Vehicle emissions | | |
| Very concerned | 45% | N/A |
| Somewhat concerned | 39% | N/A |
| Not at all concerned | 16% | N/A |
| Don't know | 1% | N/A |
| The protection of the state's wildlife | | |
| Very concerned | 51% | 46% |
| Somewhat concerned | 35% | 42% |
| Not at all concerned | 13% | 13% |
| Don't know | 1% | N/A |
| Greenhouse gas emissions from coal-fired power plants | | |
| Very concerned | 45% | 37% |
| Somewhat concerned | 28% | 39% |
| Not at all concerned | 24% | 24% |
| Don't know | 3% | N/A |
| Land use policies | | |
| Very concerned | 32% | 31% |
| Somewhat concerned | 43% | 48% |
| Not at all concerned | 19% | 22% |
| Don't know | 7% | N/A |
| Pollution from concentrated animal-feeding operations | | |
| Very concerned | 27% | 24% |
| Somewhat concerned | 37% | 38% |
| Not at all concerned | 28% | 38% |
| Don't know | 8% | N/A |



Geography does not seem to play a meaningful role in voters' level of concern about greenhouse gas emissions from coal-fired power plants.

| Greenhouse gas emissions from coal-fired power plants | | | | | |
|-------------------------------------------------------|-----------|-----------|------------|--|--|
| | Very | Somewhat | Not at All | | |
| | Concerned | Concerned | Concerned | | |
| Maricopa County | 44% | 30% | 24% | | |
| All Other Counties | 45% | 26% | 25% | | |

Voters in all other Arizona counties combined seem less concerned about concentrated animal-feeding operations compared to voters in Maricopa County in 2020.

| Pollution from concentrated animal-feeding operations | | | | | |
|-------------------------------------------------------|-----------|-----------|------------|--|--|
| | Very | Somewhat | Not at All | | |
| | Concerned | Concerned | Concerned | | |
| Maricopa County | 28% | 37% | 28% | | |
| All Other Counties | 27% | 32% | 35% | | |

The overwhelming majority, 92%, have made personal changes to help protect the environment, such as recycling, using LED lighting, volunteering or using low-flow faucets. That means the vast majority of every subgroup analyzed in this research has made personal changes to help the environment.

Environmental Organizations

Respondents were asked, "Overall, would you say that environmental organizations are "very effective," "somewhat effective," or "not very effective." Two-thirds (66%) said "somewhat effective" while 20% said "not very effective." Only 9% said they believe these organizations are "very effective." Fully one-third of Republicans (33%) believe environmental organizations are "not very effective" compared with 13% of Democrats and 14% of Independents.

Maricopa County residents were more likely to rank environmental organizations as very effective or somewhat effective and less likely to rank them not effective compared to the rest of the state, but the percentage differences are relatively small.



| Effectiveness of environmental organizations, by | | | | | |
|--------------------------------------------------|-----------|-----------|-----------|--|--|
| geography | | | | | |
| | Very | Somewhat | Not Very | | |
| | Effective | Effective | Effective | | |
| Maricopa County | 10% | 68% | 19% | | |
| All Other Counties | 7% | 66% | 23% | | |

Information Gathering

Respondents were asked, "From which of the following sources do you get your information about the state's environmental issues and problems?" The following list of choices was presented to the respondents (read in a different order to each respondent). The table below shows the percentage of respondents who selected each of the choices (respondents could select as many choices as applicable).

| Sources of Information about Environmental | | | | |
|--------------------------------------------|------|-----------|--|--|
| Issues and Problems, 2020 and 2017 | | | | |
| | 2020 | 2017 | | |
| TV | 47% | 54% | | |
| A local online news site | 39% | 44% | | |
| Social media | 35% | 36% | | |
| Radio | 29% | 36% | | |
| Friends and family | | 33% | | |
| A non-news online site | 24% | 25% | | |
| A printed local newspaper | 22% | 35% | | |
| Advocacy groups | 19% | 21% | | |
| Or some other source | 24% | 7% | | |

Predictably, there are differences by age. For example, as age increases, the likelihood of selecting a printed local newspaper increases (32% of those 65 and older, compared with 21% of those age 18 to 35 and 16% among 36- to 64-year-olds). Only 28% of 18-to 34-year-olds cite television as a source of environmental information while 65% of those 65 and older and 47% of those 35 to 64 use TV as a source. When broken out by county of residence, a notable difference is that radio use appears higher in all other counties combined (38%) than in Maricopa County (28%).



Of note is the large decline of printed local newspapers as a source of information about the state's environmental issues and problems. In 2017, printed newspapers ranked fifth as a source of environmental information, selected by 35% of respondents. In 2020, they ranked seventh, with only 22% of respondents citing them as a source for environmental information. Other than the decline for printed newspapers as a source for environmental information, most other sources stayed relatively flat with TV, local online news sites, and radio declining slightly.

Slightly more than four in 10 Arizona voters (42%) believe local media have increased their environmental coverage "over the past few years." A nearly equal number (41%) believe environmental coverage has "stayed about the same" while only 5% believe it has decreased. These findings are consistent by both age groups and gender. Forty-one percent of Maricopa County residents believe the local media have increased their environmental coverage compared to 47% of respondents from all other counties in Arizona combined.

