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ABOUT THE SURVEY

In July 2020, the California Water Institute at Fresno State partnered with the Institute for Leadership and Public Policy to conduct a survey to gauge public opinion about water issues and economic conditions facing the San Joaquin Valley and to measure support for potential solutions to address water concerns. The survey was fielded between July and August, 2020. All surveys were collected using live phone calls and the sample of likely voters was drawn from the 8 counties making up the San Joaquin Valley (Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare). The results of the survey are presented here.

The survey explores issues such as the impact of the COVID-19 on households, public opinion on issues concerning the San Joaquin Valley (SJV), attitudes about the current economy and employment, followed by an assessment of whether or not agriculture plays a large role in the success of the economy in the SJV.

The survey then examines attitudes towards water sustainability and supply for the future and how that may impact employment and the economy. Finally, the survey examines existing knowledge about water management in California, support for a regional organization charged with developing solutions to develop, build and manage water storage and infrastructure improvements, as well as questions gauging support for taxes or surcharges that would be used to fund water projects.

For more information on the survey methodology, please see page 16. The frequency results for all survey questions are available on page 17 and the survey instrument begins on page 22.

COVID-19 AND SURVEY RESPONDENTS

It is worth noting that this survey was fielded during the middle of the COVID-19 Pandemic or COVID-19 outbreak. Several questions in the survey asked about attitudes toward economic conditions and a support for tax increases to support increased infrastructure in the SJV. If the sample was highly impacted by COVID-19, that could play a role in how willing respondents were to support increased spending through taxes or potentially influence who they thought should be responsible for paying for updates to infrastructure.

We asked two questions to measure the impact of COVID-19 and the policies implemented by states and counties on survey respondents. We first asked if someone in the respondents’ household had their work hours reduces or lost their job as a result of COVID-19. We also asked if respondents had experienced difficulty being tested if they requested a test.

Nearly half of the respondents in the sample or someone in their home either had their hours reduced, lost their job or both. Just over 13% of respondents reporting losing their job, while nearly 20% reported that they had their hours reduced. About one in ten respondents (10.7%) reported that their household had experienced both. Despite the widespread effects of COVID-19, 56% of the sample reported that their employment had not been impacted by the pandemic.

According to the data, access to testing was not a problem for those in the San Joaquin Valley, with only 5% reporting being denied testing and 95% reporting they had not been denied testing.

We were curious if those who had employment conditions impacted by COVID-19 were more likely to have a negative outlook on the economy. Overall, in the survey approximately 62% of respondents said the economy was “not so good” or “poor”, while 38% reported that it was “excellent” or “good”. These have been combined into “Good” and “Not so good”. Table 1 shows that those who lost their job or had a combination of a lost job and reduced hours in their household were slightly more likely to report that the economy was bad than those who had not been impacted by the virus or who had only had a reduction in hours.

<table>
<thead>
<tr>
<th>Economy</th>
<th>Lost Job</th>
<th>Reduced Hours</th>
<th>Both</th>
<th>Neither</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>31.4</td>
<td>42.9</td>
<td>35.3</td>
<td>38.7</td>
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<tr>
<td>Not Good</td>
<td>68.7</td>
<td>57.1</td>
<td>64.7</td>
<td>61.3</td>
</tr>
</tbody>
</table>

Table 1. Economic Outlook by COVID Impact on Employment
POLICY PRIORITY AND IMPORTANT ISSUES

Water is the Most Important Issue for the Valley

The San Joaquin Valley has a unique set of issues that are always on the minds of voters. This survey was designed to explore attitudes about water policy and the introduction to the survey informed respondents that the survey was about water infrastructure in the SJV. One of the first questions in the survey was, “Aside from the COVID-19, what do you think is the most important issue facing the San Joaquin Valley today?”, so it is no surprise that water ranked highest among issues listed. In fact, 27.8% of respondents listed water as the most important issue facing the Valley today. This is not inconsistent with past research conducted by the Institute for Leadership and Public Policy (ILPP), however. In 2017, the ILPP conducted a survey of SJV residents and 31% listed water infrastructure in the SJV. One of the first questions work in ag related jobs. Having a job related to agriculture was a self-reported identification and more information on the types of jobs people reported is on page 8 of this report.

Jobs and the Economy Are Top Concerns

Following closely behind water, jobs and the economy was the second most important issue with 21.5% of respondents naming that as their top concern. These two issues dominated the policy areas. Figure 1 shows that homelessness (8.0), crime (4.5), education (4.2), the environment (3.8), and healthcare (3.7) are all among top issues for voters in the SJV, however, all of these had far fewer responses than the top two issues listed. It is also important to note that nearly 19.7% of respondents listed some other issue and 7.8% of respondents simply reported they “didn’t know” what the most important issue was.

To better understand differences in perceptions of issues facing the Valley based on political and demographic characteristics, the question was examined by having a job related to or dependent on agriculture, political party membership, race/ethnicity, gender, and age. The results of this analysis can be seen in Table 2, which shows that those who have jobs in agriculture or related to agriculture are significantly more likely to list water as the most important issue facing the Valley, nearly 40% compared to only 21% of those who do not work in ag related jobs. Having a job related to agriculture was a self-reported identification and more information on the types of jobs people reported is on page 8 of this report.

Looking at other important issues, Latinos were the most likely to list jobs and the economy as the most important issue, with 27.9% saying that was their primary concern. Only 18.6% of whites listed jobs and the economy as the most important issue. Interestingly, the differences across political parties were fairly small, with 30.6% of Democrats, 28% of Republicans and almost 30% of those who identify as Independent or Decline to State all listing water as the most important issue. Looking at race and ethnicity, 33% of whites listed water as the most important issue, followed by non-Latino, non-white respondents with 27.8% (this group includes Asian American, Black, American Indian, etc.), while only 19.4% of Latinos listed this as the most important issue.

Looking at other important issues, Latinos were the most likely to list jobs and the economy as the most important issue, with 27.9% saying that was their primary concern. Only 18.6% of whites listed jobs and the economy as the most important issue. Interestingly, the differences across political parties were fairly small, with 30.6% of Democrats, 28% of Republicans and almost 30% of those who identify as Independent or Decline to State all listing water as the most important issue. Looking at race and ethnicity, 33% of whites listed water as the most important issue, followed by non-Latino, non-white respondents with 27.8% (this group includes Asian American, Black, American Indian, etc.), while only 19.4% of Latinos listed this as the most important issue.

Table 2. Most Important Issue facing San Joaquin Valley by Demographics

<table>
<thead>
<tr>
<th>Job</th>
<th>Political Party</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag</td>
<td>Non-Ag</td>
<td>Dem.</td>
</tr>
<tr>
<td>Water</td>
<td>39.7</td>
<td>21.3</td>
</tr>
<tr>
<td>Jobs/Economy</td>
<td>27.4</td>
<td>23.7</td>
</tr>
<tr>
<td>Homelessness/Housing</td>
<td>2.2</td>
<td>10.1</td>
</tr>
<tr>
<td>Crime</td>
<td>1.9</td>
<td>6.1</td>
</tr>
<tr>
<td>Education</td>
<td>5.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Environment</td>
<td>4.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Healthcare</td>
<td>0.0</td>
<td>5.3</td>
</tr>
</tbody>
</table>


Figure 1. Most Important Issue Facing the San Joaquin Valley

Note: Don’t know responses were removed for analysis presented in the table.

1 Decline to State is the official designation for those who do not want to register with a political party. Individuals will often refer to this as being independent. This is not the same as the American Independent Party, which is an official third party in California. Those registered with third parties were not included with DTS voters, but there were too few to include in the analysis.
most likely to list homelessness or housing as an issue, with nearly 14% listing this as the most important issue facing the Valley while on 7.7% of whites and 10% of Latinos named that as the top issue. A similar, though slightly smaller, difference can be seen among partisans for those who listed the environment as the most important issue. Those who are Decline to State are more likely to list the environment as the most important issue facing the Valley than Democrats or Republicans. Because the relationship between climate change, the environment, and water are interrelated, this is a difference worth studying.

ECONOMIC OUTLOOK

As previously noted, this survey was conducted in the summer of 2020, during the COVID-19 pandemic. Unemployment was high across the state, including in the San Joaquin Valley. This study was designed to measure attitudes about improvements to infrastructure and support for possible increases in water surcharges or special taxes to pay for those improvements. In order to fully understand support for those issues, we asked respondents about their outlook on the economy. The question, “How would you rate the San Joaquin Valley’s current economy?” was measured using a four-point scale of Excellent (1.7%), Good (35.3%), Fair (42.7%), and Poor (17%). Respondents could also volunteer, “Don’t know”, though only 3% did so. These responses were collapsed into two categories, “Good” and “Not Good”.

Overall, 38.3% of respondents reported the current economy was Good and 61.7% reported that was not good. Responses were then examined by employment category, partisan identification, age, gender and race/ethnicity. While those of different ages, party ID, and racial or ethnic groups had some slight differences in their attitudes, the greatest divides were among those who work in ag and those who do not or between men and women.

Ag Jobs and the Views on the Economy

Figure 2 shows that those who work in agriculture may have been less impacted by layoffs and were much more likely to view the economy as good (48.4%) than those employed in non-ag related businesses (38.7%). This is a statistically significant difference of 9.7 percentage points (p<.05). Considering the retail and food industries were among the hardest hit by closures and layoffs in the state, this is not surprising.

Gender and the Views on the Economy

The biggest gap among any group was between men and women. Over two-thirds of women in the sample replied that the economy was not good (67.7%) while only 55% of men reported the same. This 12 percentage-point difference is statistically significant (p<.05) may be a product of the type of employment men and women are likely to have. Service sector industries, such as food service, travel-related services, and beauty services, along with healthcare and education are among some of the industries most impacted by shutdowns and are contain a large number of women in their workforces. Additional, numerous studies have shown that when education was moved online and childcare centers closes, mothers were more likely to reduce their hours or leave their jobs to stay at home with children. All of these factors could contribute to the large difference between women and men in terms of their economic outlook.

SAN JOAQUIN VALLEY DEPENDENCE ON AGRICULTURE AND FUTURE WATER SUPPLIES

My Job Depends on Ag

“My Job Depends on Ag” is a common expression throughout the San Joaquin Valley. Economic dependence on agriculture is very likely to shape attitudes about water, agricultural and economic sustainability in the Valley. In our sample, of those
who were currently employed, 29% (N=85) reported having a job directly or indirectly related to agriculture or farming. When asked what type of employment they were in, the most common responses were food distribution (27%), sales and services for the agricultural industry (such as construction, well-drilling, etc.) (24%), food production (12%) and farming (10%) were among the most common.

The San Joaquin Valley’s Economy Depends on Ag

The overwhelming majority of survey respondents strongly agree (63%) that the San Joaquin Valley’s economy depends on agricultural production more so than any other part of the state. Based on these results, there is little doubt that the people of the Valley know the importance of the agricultural industry. Less than 5% of survey respondents disagree with the statement.

When examined by key characteristics of interest, presented in Table 3, there are some small, but interesting differences, though no differences reached the threshold needed for statistical significance. Not surprisingly, those working in jobs related to the agricultural industry are more likely to strongly agree than those in who work in non-ag related fields. It is interesting to note those in ag related jobs are also more likely to somewhat disagree with the statement that the SJV depends on ag more than other parts of the state. This is likely because they are more aware of how prevalent agriculture is statewide. Finally, we consider how household income influences attitudes towards economic dependence on agriculture. Approximately 60% of those making less than $40,000 per year strongly agree that the SJV’s economy depends on ag more than other parts of the state while 63% of those making between $40,000 and $80,000 per year and nearly 69% of those making over $80,000 per year strongly agree. This level of agreement by those in the top income bracket is the highest among any of the relationships examined for this question. Again, when somewhat and strongly agree are combined, the responses are similar, however, those in the lowest income bracket are slightly less likely to disagree (3.4%) than those in the remaining two categories, which both average around 6.5% disagreement.

Enough Water for Agriculture and Residents?

Survey respondents were asked if they thought the San Joaquin Valley had enough water for future water supplies. Two questions were asked with regard to the future. Is there enough water supply for future agricultural needs and is there enough water for future residential needs? Survey respondents showed some clear differences in their responses to these two questions, as is shown in Figure 3.

Overall, respondents do not believe that there are adequate water supplies to meet either agricultural needs or residential needs, however, 65.5% of respondents do not believe the future water supply will be adequate to agricultural needs while a slight majority (51.1%) thought there would not be enough water for residential needs. This is a statistically significant difference (p<.01). A fair number of respondents reported that they do not know if the supplies are adequate to meet future needs and interestingly, this was slightly higher for residential needs than for agriculture. This may be a product of media coverage and advertisements throughout the SJV stressing the agricultural need for water, while future residential needs are discussed less frequently.

Turning to other variables of interest, Democrats are less likely to strongly agree (61%) compared to Republicans (67%) and Decline to State (66%), however taken in total with those who somewhat agree, the differences by partisan identification are fairly small. Overall, Republicans are most likely to strongly or somewhat agree (96.8%) that the economy of the San Joaquin Valley depends on agriculture more than other parts of the state.

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**Table 3. San Joaquin Valley Economic Dependence on Agriculture by Demographics. Note: Don’t know responses were removed for analysis presented in the table. Source: SJV Water Infrastructure Survey, 2020.**

<table>
<thead>
<tr>
<th>Job</th>
<th>Political Party</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag</td>
<td>Non-Ag</td>
<td>Dem.</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>64.4</td>
<td>56.1</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>29.3</td>
<td>37.2</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>8.9</td>
<td>13.3</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1.4</td>
<td>1.4</td>
</tr>
</tbody>
</table>

**Figure 3. Is there Adequate Water in the San Joaquin Valley for Future Needs? Source: SJV Water Infrastructure Survey, 2020.**
Looking at this variable by demographics, there is only major difference that stands out and that is differences in attitudes by age. Young people are significantly more likely to say that the water supplies are adequate for the future residential needs of the Valley. Among 18-34-year old’s, 54% say they believe water supplies are adequate for residential use, while only 33% of 35-54-year-olds and 37% of those 55+ agree. The difference between young people and other groups is statistically significant (p<.01).

Other interesting patterns appear as well, though none of these differences reach statistical significance. Republicans are for more likely to report that water supplies are sufficient for future residential use (46%) compared to Democrats (40%) orDecline to State (33%) voters. Latinos (47%) and other minorities (45%) are far more likely to agree there is sufficient water supply for residential use than whites (37%). Men (45%) are more likely to believe their sufficient water than women (37%) and those in ag jobs (46%) are more likely to believe there is sufficient supply for residential use than those who work in non-ag jobs (36%).

Turning attention to water supply for agricultural needs, young people are again significantly (p<.10) more likely to say that water supplies are sufficient for future needs; 36% of 18-34-year-olds say yes compared to 23% of 25-54-year-olds and only 23% of those 55 and over. Similar to the results for residential use, there are also significant difference (p<.10) between racial and ethnic groups. Among Latinos and other minorities, 32.4% report that there is sufficient water supply for future agricultural use, that number is only 23% for whites.

When thinking about public education campaigns or voter outreach campaigns about water supply, storage, and the need for increased storage or infrastructure improvements, it may be necessary to focus attention on younger voters, Latinos and other racial or ethnic minority groups.

After respondents were asked if they thought there was sufficient water for agricultural use, they were asked a question that included more specific information about how they thought future water supplies would impact jobs in the San Joaquin Valley. Forty-seven (47%) percent of respondents said that they do not believe the future water supply is adequate enough to sustain the regional economy and many jobs will be lost. Another 37% responded that water supply was somewhat adequate, however they expect job losses due to water supply issues. Only 11% report that they think water supplies are adequate and there will be no job losses due to water shortages. About 5% of respondents report that they do not know what the future holds or how jobs may be impacted by water conditions. The results from this question are shown in Figure 4.

There are some interesting similarities and differences among groups when looking at this question in more detail. Interestingly, those who work in ag and those in non-ag jobs do not produce any significant differences in response. Almost 51% of those in ag-related jobs and just over 52% of those in non-ag jobs agree that future water supplies are somewhat adequate, but there will be some jobs losses. Women and men are almost identical in their responses to this question, with about 50% responding the supplies are somewhat adequate and 37% reporting supplies are not adequate enough to sustain the regional economy. There are also a few small, but statistically insignificant differences across political parties in response to this question. Over half of Democrats (52%) believe that supplies are somewhat adequate, while 48% of Republicans and 44% of Decline to State feel the same. Nearly
forty-two percent (41.8%) of Republicans feel that supplies are not adequate to sustain the economy, as do 39.8% of Decline to State and 36% of Democrats. About 10% of all partisans feel that supplies are adequate.

Age, race/ethnicity, and income all produced statistically significant differences in attitudes about water supply and sustainability, as is shown in Table 4. Younger voters are significantly more likely to report that they believe the water supply is somewhat adequate to sustain the economy (65%) than those who are 34–55 (45%) or over 55 years of age (42%). This nearly 20 percent gap in attitudes statistically significant at p<.01.

Nearly one in four (22%) voters who are non-white, non-Latino say that there is adequate water supply to sustain the future economy of the San Joaquin Valley without significant job losses. This is a significant difference (p<.05) when compared to others. Only 12% of white voters and 8% of Latino voters agree that is the case. Latino voters overwhelmingly reply that the future water supply is somewhat adequate to sustain the economy, but there will be some job losses. A slight majority (46%) of white voters agree, though 43% feel that future water supplies are not adequate, compared to only 33% of Latino voters and 39% of other minorities.

Finally, there are significant differences (p<.05) based on income. The most noticeable and significant difference is among those who feel that future water supplies are not adequate to sustain the economy and feel there will be job losses. About one-third of those who make under $40,000 per year or between $40,000 and $80,000 per year think that the future supplies are not adequate, while almost half (47%) of those earning over $80,000 feel this way. There is also a ten percent gap between those who think the supply is somewhat adequate with those in the in the middle-income range reporting this at a significantly higher rate (58%) than high-income earners (49%).

<table>
<thead>
<tr>
<th>Age</th>
<th>Race/Ethnicity</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
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<td>Latino</td>
</tr>
<tr>
<td>18-34</td>
<td>34-54</td>
<td>55+</td>
</tr>
<tr>
<td>Adequate</td>
<td>11.1</td>
<td>9.7</td>
</tr>
<tr>
<td>Somewhat Adequate</td>
<td>64.9</td>
<td>44.8</td>
</tr>
<tr>
<td>Not Adequate</td>
<td>24.0</td>
<td>45.5</td>
</tr>
</tbody>
</table>

Table 4. Views on Adequacy of Future Water Supply to Sustain Economy and Jobs. Note: Don’t know responses were removed for analysis presented in the table. Source: SJV Water Infrastructure Survey, 2020.
SUPPORT FOR A REGIONAL ORGANIZATION AND POSSIBLE SOLUTIONS

Survey respondents were asked a series of questions about their existing knowledge of water policy, who should be responsible for leading efforts on groundwater management, ideas about possible solutions and support for a regional organization charged with developing solutions for current and future water supply shortages.

The Sustainable Groundwater Management Act (SGMA) is a package of three legislative bills signed into law in California in 2014. The law created a framework for sustainable groundwater management and requires governments and water agencies to develop and implement sustainability plans to bring groundwater basins to balanced levels of pumping and recharge (read more at water.ca.gov). Given the relative recency of the legislation, the importance of water to the San Joaquin Valley, and the consistent focus on water needs and policy by local media and policymakers, it is reasonable to assume that voters might be familiar with the SGMA.

The survey asked voters, “How familiar are you with the Sustainable Groundwater Management Act,” and the majority of respondents (49%) reported that they are “not at all familiar” with the act. Another 21% reported that they are “somewhat unfamiliar”, while about 30% reported that they are “somewhat” or “very familiar”. This suggests that the average registered voter is likely not paying close attention to water policy, or at least groundwater management policies and needs.

Respondents were also asked who they thought should lead efforts to address water shortages. Options included state and local governments, the federal government, the private sector, or some combination of public and private agencies. Table 5 shows that the majority of voters (52%) think that a combination of public and private agencies should lead the efforts.

Table 5 also shows that there were a number of significant differences across groups. Differences by gender, age, and political parties all reached statistical significance (p<.05). Democrats were more likely to say the state should lead efforts than members of any other party, with nearly one-third (33%) preferring state leadership on the issue. Almost half (48%) of Democrats said it should be public/private partnerships that take the lead, while over half of Republicans (55%) and DTS voters (57%) preferred this option.

While all people had a preference for public/private leadership on the issues, 34% of women prefer state led efforts, compared to only 23% of men. Similarly, about 32% of younger voters favor state leadership, while 18% of those between 35 and 54 favor federal leadership, the largest of any group. Interestingly, the only group more likely to favor federal leadership were those who have jobs in agriculture (21%), however, the difference between them and those who are not in agriculturally based employment (10%) was just outside the statistical threshold (p=.102) and they are not shown in the table.

Regional Organization

After asking who voters thought should lead efforts, the idea of creating a regional organization in the San Joaquin Valley to develop solutions to address current and future water supply issues was introduced. It was mentioned that this group would include representatives from local governments, low-income communities, agriculture, and environmental groups would be included in the organization. Respondents were then asked if they would support the creation of this group. There was overwhelming support in favor of the creation of a regional organization with 81% of respondents saying “yes” they would favor such an organization, 11% responding “no” and 8% reporting they “don’t know” or are unsure if they would support such an organization.
**Possible Solutions**

When asked about possible solutions to address concerns about water storage in the future, responses were fairly mixed. One-third of respondents felt that the best way to address shortages is by building more water storage (33%), as is shown in Figure 6. Given the ongoing attempts to get dams build in the San Joaquin Valley over the past several years, it is no surprise that this is the most popular among proposed solutions. Nearly one-in-four respondents said that updating systems by installing water efficient technology was the best way to deal with future water shortages. Sixteen percent (16%) thought that repairing current water infrastructure would be most effective, while 13% said that building more canals and aqueducts would be more effective. The least popular solutions proposed were groundwater recharge (12%) and fallowing land (4%).

Examining the question by demographic or characteristics of interest, the only significant differences were by gender and race/ethnicity. Women were more likely to favor repairing current infrastructure and installing water efficient technology than men. Similarly, non-Latino minorities were more likely to favor efficient technology than other groups. Surprisingly, there were almost no noticeable differences across political parties or between those who work in agriculturally related jobs and those who do not.

**WHO SHOULD PAY FOR INFRASTRUCTURE UPDATES?**

Building more dams, updating water infrastructure and installing efficient technology takes money. Survey respondents were asked who they think should be responsible for paying for these needed updates to the San Joaquin Valley’s water infrastructure. Figure 7 shows that the majority of respondents (37%) said the state should responsible for the costs. Just under 25% said that the federal government should pay for the cost of improvements and only 12% stated that it should be city and county governments that bear the brunt of the expense.

Besides asking about government, respondents were given the choice to say that farmers or residents should be responsible for the expenses. One in five respondents (21%) said that all residents should be responsible for the cost, while 6% said that only farmers should pay for the updates. Finally, only one-half of a percent said that no one should pay for the projects because they should not be built.

Once again, this question was examined in more detail by looking at characteristics of interest. The only variable that produced any significant differences was political party. While members of all political parties reported the state should pay for the improvements, those who identify as Democrats were more likely (41%) than Republicans (35%) or DTS voters to choose this option, as is shown in Table 6. Decline to State voters were the most likely to report the federal government should be responsible (29%), followed by Republicans (28%) and Democrats (22%). Republicans were more likely to say “All residents” should be responsible than members of the other two parties.²

²There was no significant difference between those who have agriculture related jobs and those in non-ag jobs for this question. Just under 4% of those in ag jobs replied “farmers only”, while 7% in non-ag jobs offered that response. This was not a significant difference.
Should Farmers and Residents be Taxed?

When respondents indicated that either “Farmers Only” or “All Residents” should pay for the improvements, they were asked a follow-up question about how those funds would be generated. Figure 8 shows that for those who thought that only farmers should be responsible, 76% thought farmers an added water consumption surcharge on water used would be the way to go. Nineteen percent responded an added property tax should be assessed to pay for the improvements and just under 6% said they did not know how the improvements should be paid for.

Those who replied “All Residents” should pay for improvements were provided one additional option in their follow up survey question, they were presented with the option of a special sales tax (on agricultural goods). Again, the majority (52%) said that they thought a water consumption surcharge was the best way to pay for improvements, while 26% preferred and a special sales tax on agricultural products, and 10% preferred added property tax assessment. Nearly 12% volunteered that they did not know how to pay for the improvements.

Interestingly, looking at these differences by job sector, partisanship, and income produced no significant differences. Of those who said “Farmers Only” should pay, 78% of those with jobs related to agriculture favored a water surcharge as did 77% of those in non-ag professions. Among partisans, 80% of Republicans and 78% of DTS preferred a water surcharge on farmers, while only 66% of Democrats chose this. One-third of Democrats said farmers should have an added property tax assessment, but again, these differences were not statistically significant. The only significant difference was by age. Younger voters and those over 55 were more likely to favor a water surcharge (80%) while only 68% of those between 35-54 agreed, with 32% favoring an additional property tax.

Findings of no difference held for those who answered that “All Residents” should pay for improvements. The only significant difference was for race/ethnicity, with Latinos less likely to favor a special tax than other groups.

SUPPORT FOR A SPECIAL TAX

All respondents were asked if a special sales tax dedicated to water system projects were passed, how likely would they be to support the sales tax. Respondents were informed the special sales tax would be a 0.5 percent tax on goods and services and would amount to an additional $1 for every $200 of goods and services purchased. Figure 9 shows that 25% of respondents said they were very likely to support such a tax and another 42% were somewhat likely. Approximately 30% of respondents said they were not very or not at all likely to support a special sales tax.

Table 6. Who Should Pay for Improvements by Political Party.
Note: Don’t know responses were removed for analysis presented in the table. Source: SJV Water Infrastructure Survey, 2020.

<table>
<thead>
<tr>
<th>Political Party</th>
<th>Dem.</th>
<th>Rep.</th>
<th>DTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>40.6</td>
<td>34.9</td>
<td>35.9</td>
</tr>
<tr>
<td>Federal</td>
<td>21.7</td>
<td>27.9</td>
<td>28.7</td>
</tr>
<tr>
<td>City and County</td>
<td>14.3</td>
<td>9.6</td>
<td>8.3</td>
</tr>
<tr>
<td>Farmers Only</td>
<td>4.3</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td>All Residents</td>
<td>19.1</td>
<td>23.8</td>
<td>22.7</td>
</tr>
<tr>
<td>Do Not Build</td>
<td>0.0</td>
<td>0.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Figure 8. Preference in Source Revenue from Farmers or Residents. Source: SJV Water Infrastructure Survey, 2020.
There were very few differences among groups in support of the tax. Latino respondents were slightly less likely than other groups to oppose a special tax, with only 23 percent responded they were not very or not at all likely to support a tax, compared to 36% of whites and 34% of other minorities (p<.01). Younger voters were also significantly less likely (p<.01) to oppose a special sales tax (21%), compared 30 percent of those between 35-54 and 40 percent of those over 55. There were no significant differences across political parties or even between those who saw the economy as doing poorly and those who thought the economy was good, which is where one might expect to see a divide.

**Concerns over Taxes**

While registered voters in the survey are in generally in support of a special sales tax, they are not without concerns. Only 8% of survey respondents reported no concerns over the use of a special tax, with an additional 4% reporting they did not know how they felt. The majority of respondents (60%) said they were concerned the money would be diverted to purposes other than water projects. There is little reason to doubt that this concern has been fueled by popular discussions in the media and among citizens about high speed rail and gasoline taxes being used for purposes other than what the voters intended and approved.

Figure 10 shows that the second greatest concern is that the money would not reduce the water shortage conditions (14%), though this is far less prominent than concern over funds being diverted. That is followed by the opinion that the money would not help the regional economy (8%) and not reduce job losses in agriculture (6%). There were no significant differences across any groups in terms of concerns about the special tax. Even partisans were in agreement, with 60% of Democrats and 62% of Republicans sharing concern over funds being diverted to other projects.

Finally, respondents were asked to weigh some personal sacrifice or negative effect they might experience as a result increased costs to address water shortages against public benefits that new projects might produce. The question stated, “Knowing that any potential solution to address future water shortages in the San Joaquin Valley comes at a cost and could have positive or negative impacts, which of the following are you most concerned about when considering alternatives to address water shortage conditions in the Valley?” and respondents could choose from concerns including maintaining their current job and income, sustaining the regional economy for the benefit of everyone, or keeping taxes low. The vast majority of respondents said they were most concerned about sustaining the regional economy for the benefit of everyone (59%). That was followed by keeping taxes low (23%), and maintaining my current job and income received the fewest responses with only 16%.

Singling out those who might be hardest hit by any policies aimed at addressing water shortages, those with agriculturally related jobs, respondents were asked if they would rather pay...
additional taxes to maintain their current job and income levels or keep taxes low, even if it means they may lose their job or have a reduced income. Over half of respondents answered pay additional taxes, 54%, while about 36% said keep taxes as they are now. Eleven percent of respondents replied they do not know. If we remove those “Don’t know” responses, 60% say pay additional taxes, while 40% prefer to keep taxes as they are.

SUMMARY
Overall, residents of the San Joaquin Valley are aware that water shortages are an issue and that improvements to water storage and delivery systems and groundwater recharge are needed. The results show that there is not as much partisan divide as popular rhetoric may lead people to believe over the need to address these issues. Residents of the Valley seem to have a strong preference for water storage over groundwater recharge or updates to existing infrastructure. This could be the result of previous campaigns to build a new dam in the San Joaquin Valley and ongoing discussions focused on storage. Respondents in the survey seem to favor the idea that all residents should pay for any improvements that are made, not just farmers. Nearly seventy percent of survey respondents said they supported the idea of a special sales tax, however many were concerned about the funds being diverted to other purposes.

SURVEY METHODOLOGY
The findings in this report are based on a survey of a random sample of likely voters from the San Joaquin Valley, which includes eight counties: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. The sample was drawn from the California Voter Registration File obtained in June, 2020. Likely voters were identified as those who had voted in two of the last four statewide general elections. Registered voters were limited to one per household. A total of 550 adults were surveyed and almost all of the interviews were conducted in English. Approximately, seventy-five (74.8) percent of the interviews were conducted on cell phones, while the other 25 percent were landlines. The average time to complete a survey was approximately 13 minutes. Interviewing took place on weeknights and weekends from July 15-August 26, 2020. The survey was fielded by California Survey Research Services, Inc. in Northridge, California. Up to 5 attempts were made to reach each randomly selected number on different days during the interview period. Based on the American Association for Public Opinion Research’s (AAPOR) Standard Definitions, Version 9 (2016), we had a response rate of 5.1% (RR1) and a cooperation rate of 24.1% (CR1). The survey was written by Thomas Esqueda and Laura Ramos of the California Water Institute at Fresno State along with Dr. Jeff Cummins and Dr. Lisa Bryant from the Institute for Leadership and Public Policy at Fresno State.

The final sample was weighted by county, age, gender, education, and race/ethnicity to match the characteristics of the San Joaquin Valley registered voter population. The Institute used voter registration estimates from Political Data, Inc. to compare regional demographics to the characteristics of the survey sample in order to assure representativeness. Partial responses were removed from the full sample of 550 respondents. The margin of error for the survey is ±4.0 percent at the 95 percent confidence level for the weighted sample of 493 adults. That is, we are 95 percent confident the results will reflect the likely registered voter responses +/- 4.0 percentage points, if all registered voters in the San Joaquin Valley were interviewed. There are other possible sources of error beyond sampling variability, such as question wording, question sequencing, and survey timing. Additional information about our methodology is available upon request from Dr. Lisa Bryant at lbryant@mail.fresnostate.edu or 559.278.7612.
FREQUENCY REPORT
Fielded July 15 – August 26, 2020
N=493
Weighted by age, education, race/ethnicity, gender and political party.
Margin of error ±4.0% at 95% confidence level

Survey Questions (weighted results in percentage)
Note: Questions 1 and 2 were screening questions verifying voter registration status

Q3. Have you or someone in your household lost their job or had their work hours reduced as result of the COVID-19 outbreak/shelter in place?
Yes, lost their job 13.3
Yes, reduced work hours 19.7
Both 10.7
Neither 56.1
Don’t know/refuse 1.4
[VOLUNTEERED]

Q4. Have you or someone in your household been denied testing for COVID-19 after making a request for testing? 4.9
Yes 95.1
No 0.0
Don’t Know [VOLUNTEERED]

Q5. Aside from the COVID-19, what do you think is the most important issue facing the San Joaquin Valley today? (Record volunteered response, do not read list unless requested)
Crime 4.5
Education 4.2
Energy/Energy prices 0.3
Environment 3.8
Government 1.9
Healthcare/Health 3.7
Homelessness 8.0
Immigration 2.4
Infrastructure 0.7
Jobs/Economy 21.5
Race relations 2.1
Taxes 1.4
Terrorism 0.1
Water Supply 27.8
Other 10.1
Don’t know/refuse to answer [VOLUNTEERED]

Q6. How would you rate the San Joaquin Valley’s current economy?
Excellent 1.7
Good 35.3
Not So Good 42.7
Poor 17.0
Don’t Know/refuse to answer 3.3

Q7. To what extent do you agree with the following statement: the San Joaquin Valley’s economy depends on agricultural production more so than any other place in the state. Do you:
Strongly agree 63.3
Somewhat agree 30.1
Somewhat disagree 4.6
Strongly disagree 0.1
Don’t know/refuse to answer [VOLUNTEERED] 1.1

Q8. How would you rate your satisfaction with your current job? Would you say you are:
Very satisfied 32.2
Somewhat satisfied 19.4
Not too satisfied 6.5
Not at all satisfied 1.4
Not currently employed 40.6
Don’t know/refuse to answer [VOLUNTEERED] 0.0

Q9. Does your job directly or indirectly relate to agriculture or farming in the San Joaquin Valley?
Yes 29.2
No 70.3
Don’t Know [VOLUNTEERED] 0.5

Q9a. (If yes in Q9) What type of job related to agriculture do you have?
Agriculture equipment 7.9
Agricultural chemicals 6.9
Farming/Farmer 10.2
Crop production/Field worker 2.5
Food processing 11.2
Food distribution 27.3
Financing/banking/engineering 9.7
Sales and services for/to ag 23.9
Q10. Do you think the future supply of water in the San Joaquin Valley will be adequate enough for residential use?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35.1</td>
</tr>
<tr>
<td>No</td>
<td>51.1</td>
</tr>
<tr>
<td>Don’t Know [VOLUNTEERED]</td>
<td>13.8</td>
</tr>
</tbody>
</table>

Q11. Do you think the future supply of water in the San Joaquin Valley will be adequate enough for agricultural use?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24.3</td>
</tr>
<tr>
<td>No</td>
<td>65.5</td>
</tr>
<tr>
<td>Don’t Know [VOLUNTEERED]</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Q12. Agricultural production requires water to grow food and fiber, and raise livestock. How would you describe the future water supply conditions for agriculture in the San Joaquin Valley? Is it:

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate enough to sustain the regional economy and there will be no job losses</td>
<td>10.7</td>
</tr>
<tr>
<td>Not adequate enough to sustain the regional economy and there will be many jobs lost</td>
<td>47.5</td>
</tr>
<tr>
<td>Somewhat adequate to sustain the regional economy, but some job losses will occur</td>
<td>37.1</td>
</tr>
<tr>
<td>Don’t know [VOLUNTEERED]</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Q13. Over the past decade, California has experienced droughts and water supply shortages. Studies of water supply indicate that shortages will remain a concern in the future. Who do you think should lead the efforts to address this concern? [CHOOSE ONE]

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Government</td>
<td>28.1</td>
</tr>
<tr>
<td>Federal Government</td>
<td>11.0</td>
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<tr>
<td>City and County Government</td>
<td>5.6</td>
</tr>
<tr>
<td>The Private Sector</td>
<td>2.8</td>
</tr>
<tr>
<td>Combination of Public and Private</td>
<td>50.6</td>
</tr>
<tr>
<td>Don’t know [VOLUNTEERED]</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Q14. There is a proposal to create a regional organization in the San Joaquin Valley with representatives from local governments, low-income communities, agriculture, and environmental interests to develop solutions to address current and future water supply conditions. Would you support the creation of this body?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Yes</td>
<td>81.1</td>
</tr>
<tr>
<td>No</td>
<td>10.8</td>
</tr>
<tr>
<td>Don’t Know [VOLUNTEERED]</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Q15. How familiar are you with the Sustainable Groundwater Management Act?

<table>
<thead>
<tr>
<th>Familiarity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very familiar</td>
<td>5.6</td>
</tr>
<tr>
<td>Somewhat familiar</td>
<td>24.4</td>
</tr>
<tr>
<td>Somewhat unfamiliar</td>
<td>20.6</td>
</tr>
<tr>
<td>Not at all familiar</td>
<td>49.1</td>
</tr>
<tr>
<td>Don’t know [VOLUNTEERED]</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Q16. Which of the following solutions do you think would be the most effective at addressing concerns about the future water supply? (Choose one)

<table>
<thead>
<tr>
<th>Solution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fallow agricultural land to reduce water demands (do not plant crops)</td>
<td>3.4</td>
</tr>
<tr>
<td>Repair current water infrastructure</td>
<td>15.0</td>
</tr>
<tr>
<td>Build more canals and aqueducts to move water</td>
<td>12.0</td>
</tr>
<tr>
<td>Build more dams to store water</td>
<td>31.1</td>
</tr>
<tr>
<td>Install water use efficiency technology to reduce water demands on farms, and in homes, businesses and institutions</td>
<td>20.8</td>
</tr>
<tr>
<td>Recharge groundwater into underground storage</td>
<td>11.5</td>
</tr>
<tr>
<td>Don’t know/refuse to answer</td>
<td>6.1</td>
</tr>
</tbody>
</table>
Q17. Of the following, who do you think should pay for new water storage and delivery to address future water supply concerns in the San Joaquin Valley? Do you think it should be:

- State Government: 35.0%
- Federal Government: 23.6%
- City and County Government: 11.1%
- Farmers ONLY in the San Joaquin Valley: 5.5%
- ALL Residents in the San Joaquin Valley: 19.5%
- No one – Don’t build the projects: 0.4%
- [VOLUNTEERED]: 4.8%

Q18. If the federal and state government pay for a portion of new water projects in the San Joaquin Valley, who should pay for the balance of the project costs?

- Farmers Only in the San Joaquin Valley: 18.7%
- All Residents in the San Joaquin Valley: 73.6%
- No one – Don’t build the projects: 2.2%
- [VOLUNTEERED]: 5.6%

Q19. One way to pay for water system improvements in the Valley is through a special sales tax dedicated to water system projects only. Such as special sales tax would add $1 to every $200 purchase of taxable goods and services. If a 0.5-percent (ZERO POINT FIVE PERCENT) special sales tax appeared on the ballot, how likely would you be to support the special sales tax?

- Very likely: 25.2%
- Somewhat likely: 42.3%
- Not very likely: 12.1%
- Not at all likely: 18.2%
- Don’t know [VOLUNTEERED]: 2.2%

Q20. If a 0.5 percent (ZERO POINT FIVE PERCENT) special sales tax was approved by voters to fund water system improvements in the San Joaquin Valley, what would be your greatest concern?

- The money would be diverted to purposes other than water projects: 60.1%
- The money would not reduce the water shortage conditions: 14.3%
- The money would not reduce job losses in agriculture: 5.6%
- The money would not benefit the regional economy: 7.7%
- I have no concerns: 7.7%
- Other [VOLUNTEERED]: 0.3%
- Don’t know [VOLUNTEERED]: 4.2%

Q21. Knowing that any potential solution to address future water shortages in the San Joaquin Valley comes at a cost and could have positive or negative impacts, which of the following are you most concerned about when considering alternatives to address water shortage conditions in the Valley?

- Maintaining my current job and income: 15.7%
- Sustaining the regional economy for the benefit of everyone: 59.3%
- Keeping taxes low: 22.7%
- Don’t know [VOLUNTEERED]: 2.4%
Q22. [IF Q9 = YES, have job related to agriculture] In general, would you rather pay additional taxes to maintain your current job and income, OR would you rather keep taxes as they are now even though you may lose your job or have a reduced income?

- Pay additional taxes to maintain your current job and income: 53.9%
- Keep taxes as they are now even though you may lose your job or have a reduced income: 35.6%
- Don’t know [VOLUNTEERED]: 10.5%

Q23. What is the highest level of school you have completed or the highest degree you have received?

- Less than high school diploma: 2.9%
- High school graduate (high school diploma or GED): 21.0%
- Some college, but no degree: 22.0%
- Associate degree or trade school degree (2-year): 18.9%
- Bachelor’s degree (4-year, BA/BS): 23.7%
- Graduate degree or higher (MA, MBA, JD, MD, PhD): 11.5%

Q24. Please select the category that best describes your total family income before taxes in 2019, including yourself and all those living in your house?

- Below $40,000: 24.7%
- $40,000-$80,000: 32.8%
- Above $80,000: 34.6%
- Don’t know/Refuse to answer [VOLUNTEERED]: 7.9%
### DEMOGRAPHICS USED FOR WEIGHTING

<table>
<thead>
<tr>
<th></th>
<th>Weighted Survey Sample</th>
<th>Registered Voter File (08/2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>County</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresno</td>
<td>25.2</td>
<td>25.4</td>
</tr>
<tr>
<td>Kern</td>
<td>21.0</td>
<td>21.2</td>
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<td>Kings</td>
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<td>Madera</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Merced</td>
<td>5.3</td>
<td>5.2</td>
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<td>San Joaquin</td>
<td>19.3</td>
<td>19.1</td>
</tr>
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<td>Stanislaus</td>
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<td>13.7</td>
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<td>Tulare</td>
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<td>9.2</td>
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<td><strong>Gender</strong></td>
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<td>Male</td>
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<tr>
<td>Female</td>
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<td>47.0</td>
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<td><strong>Age</strong></td>
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<td></td>
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<tr>
<td>18-34</td>
<td>30.9</td>
<td>30.9</td>
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<td>35-54</td>
<td>31.4</td>
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</tr>
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<td>55+</td>
<td>37.7</td>
<td>37.7</td>
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<tr>
<td><strong>Race/Ethnicity</strong></td>
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<td></td>
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<tr>
<td>White</td>
<td>58.7</td>
<td>59.5</td>
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<tr>
<td>Latino</td>
<td>34.9</td>
<td>34.3</td>
</tr>
<tr>
<td>Other</td>
<td>6.4</td>
<td>6.2</td>
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<td><strong>Party Registration</strong></td>
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<td></td>
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<tr>
<td>Democrat</td>
<td>38.3</td>
<td>38.3</td>
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<tr>
<td>Republican</td>
<td>35.6</td>
<td>35.6</td>
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<tr>
<td>No Party Preference/DTS</td>
<td>21.1</td>
<td>21.2</td>
</tr>
<tr>
<td>Other</td>
<td>5.0</td>
<td>4.9</td>
</tr>
</tbody>
</table>
QUESTIONNAIRE

Hello, the Institute for Leadership and Public Policy at Fresno State is conducting a survey about water issues in the San Joaquin Valley. We would like to include your opinion. The survey takes about 10 minutes or less and you can opt out at any time.

1. Are you registered to vote?
   a. Yes
   b. No [DO NOT PROCEED]

2. Just to confirm, which county do you currently live in (cities in parentheses)?
   - Fresno (Clovis, Coalinga, Firebaugh, Fowler, Fresno, Huron, Kerman, Kingsburg, Mendota, Orange Cove, Parlier, Reedley, Sanger, Selma)
   - Kern (Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, Wasco)
   - Kings (Avenal, Corcoran, Hanford, Lemoore)
   - Madera (Chowchilla, Madera)
   - Merced (Atwater, Dos Palos, Gustine, Livingston, Los Banos, Merced)
   - San Joaquin (Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, Tracy)
   - Stanislaus (Ceres, Hughson, Newman, Oakdale, Patterson, Riverbank, Turlock, Waterford)
   - Tulare (Dinuba, Exeter, Farmersville, Lindsay, Porterville, Tulare, Visalia, Woodlake)
   - Another county/ [DO NOT PROCEED]

3. Have you or someone in your household lost their job or had their work hours reduced as result of the COVID-19 outbreak/shelter in place?
   - Yes, lost their job
   - Yes, reduced work hours
   - Both
   - Neither

4. Have you or someone in your household been denied testing for COVID-19 after making a request for testing?
   - Yes
   - No
   - Don’t know [VOLUNTEERED]

5. Aside from the COVID-19, what do you think is the most important issue facing the San Joaquin Valley today? (Record volunteered response, do not read list unless requested)
   - Crime
   - Education
   - Energy/Energy prices
   - Environment
   - Government
   - Healthcare/Health
   - Homelessness
   - Immigration
   - Infrastructure
   - Jobs/Economy
   - Race relations
   - Taxes
   - Terrorism
   - Water Supply
   - Other_____________________
   - Don’t know/refuse to answer [VOLUNTEERED]
6. How would you rate the San Joaquin Valley’s current economy?
   • Excellent
   • Good
   • Not So Good
   • Poor
   • Don’t know/refuse to answer [VOLUNTEERED]

7. To what extent do you agree with the following statement: the San Joaquin Valley’s economy depends on agricultural production more so than any other place in the state. Do you:
   • Strongly agree
   • Somewhat agree
   • Somewhat disagree
   • Strongly disagree
   • Don’t know/refuse to answer [VOLUNTEERED]

8. How would you rate your satisfaction with your current job? Would you say you are:
   • Very satisfied
   • Somewhat satisfied
   • Not too satisfied
   • Not at all satisfied
   • Not currently employed
   • Don’t know/refuse to answer [VOLUNTEERED]

9. Does your job directly or indirectly relate to agriculture or farming in the San Joaquin Valley?
   • Yes.
   • No [SKIP to Q10]
   • Don’t know [SKIP to Q10]

9a. What type of job related to agriculture do you have?
   • Agriculture equipment
   • Agricultural chemicals
   • Farming/Farmer
   • Crop production/Field worker
   • Food processing
   • Food distribution
   • Financing/banking
   • Other: _____________________ [VOLUNTEERED]

10. Do you think the future supply of water in the San Joaquin Valley will be adequate enough for residential use?
    • Yes
    • No
    • Don’t know/refuse to answer [VOLUNTEERED]

11. Do you think the future supply of water in the San Joaquin Valley will be adequate enough for agricultural use?
    • Yes
    • No
    • Don’t Know/refuse to answer [VOLUNTEERED]
12. Agricultural production requires water to grow food and fiber, and raise livestock. How would you describe the future water supply conditions for agriculture in the San Joaquin Valley? Is it:
   • Adequate enough to sustain the regional economy and there will be no job losses
   • Somewhat adequate to sustain the regional economy, but some job losses will occur
   • Not adequate enough to sustain the regional economy and there will be many jobs lost
   • Don’t know [VOLUNTEERED]

13. Over the past decade, California has experienced droughts and water supply shortages. Studies of water supply indicate that shortages will remain a concern in the future. Who do you think should lead the efforts to address this concern? [CHOOSE ONE]
   • State Government
   • Federal Government
   • City and County Government
   • The Private Sector
   • Combination of Public and Private
   • Don’t know [VOLUNTEERED]

14. There is a proposal to create a regional organization in the San Joaquin Valley with representatives from local governments, low-income communities, agriculture, and environmental interests to develop solutions to address current and future water supply conditions. Would you support the creation of this body?
   • Yes
   • No
   • Don’t know [VOLUNTEERED]

15. How familiar are you with the Sustainable Groundwater Management Act?
   • Very familiar
   • Somewhat familiar
   • Somewhat unfamiliar
   • Not at all familiar

16. Which of the following solutions do you think would be the most effective at addressing concerns about the future water supply? [CHOOSE ONE; ROTATE RESPONSES]
   • Fallow agricultural land to reduce water demands (do not plant crops)
   • Repair current water infrastructure
   • Build more canals and aqueducts to move water
   • Build more dams to store water
   • Install water use efficiency technology to reduce water demands on farms, and in homes, businesses and institutions
   • Recharge groundwater into underground storage
   • Don’t know/refuse to answer [VOLUNTEERED]
17. Of the following, who do you think should pay for new water storage and delivery to address future water supply concerns in the San Joaquin Valley? Do you think it should be: (Note to pollers: water storage is dams, water delivery is aqueducts and irrigation canals) [ROTATE RESPONSES EXCEPT LAST TWO]

- State Government
- Federal Government
- City and County Government
- Farmers ONLY in the San Joaquin Valley
- ALL Residents in the San Joaquin Valley
- No one – Don’t build the projects [VOLUNTEERED]
- Don’t know/refuse to answer [VOLUNTEERED]

18. If the federal and state government pay for a portion of new water projects in the San Joaquin Valley, who should pay for the balance of the project costs? [ROTATE RESPONSES EXCEPT LAST TWO]

- Farmers Only in the San Joaquin Valley. [GO TO 18A]
- All Residents in the San Joaquin Valley. [GO TO 18B]
- No one – Don’t build the projects [VOLUNTEERED]
- Don’t know/refuse to answer [VOLUNTEERED]

18a. [If Q18 = Farmers only in the San Joaquin Valley] Which revenue source from farmers in the Valley would you support? [ROTATE RESPONSES EXCEPT LAST ONE]

- Added Property Tax Assessment
- Added water consumption surcharge (based on use)
- Don’t know [VOLUNTEERED]

18b. [If Q18 = All residents in the San Joaquin Valley] Which revenue source from all residents in the Valley would you support? [ROTATE RESPONSES EXCEPT LAST ONE]

- Added Property Tax Assessment
- Added Water Consumption Surcharge (based on use)
- Added Special Sales Tax
- Don’t know [VOLUNTEERED]

19. One way to pay for water system improvements in the Valley is through a special sales tax dedicated to water system projects only. Such as special sales tax would add $1 to every $200 purchase of taxable goods and services. If a 0.5-percent (ZERO POINT FIVE PERCENT) special sales tax appeared on the ballot, how likely would you be to support the special sales tax?

- Very likely
- Somewhat likely
- Not very likely
- Not at all likely
- Don’t know [VOLUNTEERED]
20. If a 0.5 percent (ZERO POINT FIVE PERCENT) special sales tax was approved by voters to fund water system improvements in the San Joaquin Valley, what would be your greatest concern? [CHOOSE ONE; ROTATE RESPONSE OPTIONS EXCEPT LAST TWO]
   • The money would be diverted to purposes other than water projects
   • The money would not reduce the water shortage conditions
   • The money would not reduce job losses in agriculture
   • The money would not benefit the regional economy
   • I have no concerns
   • Other _____ [VOLUNTEERED]
   • Don’t know [VOLUNTEERED]

21. Knowing that any potential solution to address future water shortages in the San Joaquin Valley comes at a cost and could have positive or negative impacts, which of the following are you most concerned about when considering alternatives to address water shortage conditions in the Valley? [ROTATE RESPONSE OPTIONS EXCEPT LAST ONE]
   • Maintaining my current job and income
   • Sustaining the regional economy for the benefit of everyone
   • Keeping taxes low
   • Don’t know [VOLUNTEERED]

22. [IF Q9 = YES, have job related to agriculture] In general, would you rather pay additional taxes to maintain your current job and income, OR would you rather keep taxes as they are now even though you may lose your job or have a reduced income? [ROTATE RESPONSE OPTIONS EXCEPT LAST ONE]
   • Pay additional taxes to maintain your current job and income
   • Keep taxes as they are now even though you may lose your job or have a reduced income
   • Don’t know [VOLUNTEERED]

DEMOGRAPHIC QUESTIONS

23. What year were you born?

24. Do you identify as:
   • Male
   • Female
   • Non-binary or other
   • Refuse to Answer [VOLUNTEERED]

25. What is the highest level of school you have completed or the highest degree you have received?
   • Less than high school diploma
   • High school graduate (high school diploma or GED)
   • Some college, but no degree
   • Associate degree or trade school degree (2-year)
   • Bachelor’s degree (4-year, BA/BS)
   • Graduate degree or higher (MA, MBA, JD, MD, PhD)
   • Refuse to Answer [VOLUNTEERED]
26. Which racial or ethnic group do you most closely identify with? (Can choose more than one if they volunteer more than one.)
   • White (Caucasian)
   • Latino (Hispanic/Mexican/Brazilian/Central America or South America)
   • Black or African American
   • Asian/Pacific Islander (Hmong/Sikh/Asian Indian/Chinese/Filipino)
   • American Indian or Alaska Native
   • Other __________________________________
   • DK/Prefer not to answer [VOLUNTEERED]

27. With which political party are you currently registered? [ROTATE FIRST TWO RESPONSES]
   • Democratic Party
   • Republican Party
   • Decline to State/Independent
   • Third Party (Libertarian, Green, Constitution, etc.)
   • Don’t know/refuse to answer [VOLUNTEERED]

28. Finally, please select the category that best describes your total family income before taxes in 2019, including yourself and all those living in your house?
   • Below $40,000
   • $40,000 - $80,000
   • Above $80,000
   • Don’t know/refuse to answer [VOLUNTEERED]