Yolo County Farmers’ Perspectives on Water Management and the Sustainable Groundwater Management Act (SGMA)

Research Briefing 2 of 3: Farmer Participation and Policy Preferences for SGMA

Background

Yolo County is largely rural and agricultural. Farmer concerns, experiences, practices, and perceptions play an important role in our basin’s groundwater sustainability. In 2017, a mail survey was sent out to 638 farmers and landowners in Yolo County. The survey included questions about farm characteristics, perceptions of change in the county, water scarcity and management practices, the SGMA policy, groundwater sustainability, and demographics. The survey received 137 responses—a response rate of 22%. This briefing summarizes farmer participation and policy preferences for SGMA in the Yolo Subbasin.

Details

Yolo County farmers appear to show broad support for SGMA as shown in Figure 1. Specifically 68% of Yolo County farmers express the belief that SGMA is necessary to achieve groundwater sustainability in Yolo County and 77% believe SGMA is necessary for groundwater sustainability in California. Interestingly, farmers don’t necessarily believe that other farmers feel the same way about SGMA.

Only 38% farmers believe that the majority of farmers think SGMA is necessary for achieving groundwater sustainability in Yolo County, and 46% believe the majority of farmers think SGMA is necessary for achieving groundwater sustainability in California. Also, only a minority of farmers (34%), feel that SGMA will be affordable to implement.

The majority of farmers appear to have positive perceptions of the SGMA process with regard to farmer engagement and participation. Eighty-eight percent of farmers agree that SGMA has been managed at the Yolo County level and

Key Findings

1. The majority of farmers believe that SGMA is necessary to achieve groundwater sustainability in Yolo County and California.

2. At the same time, most respondents thought that other farmers did not think SGMA is necessary for achieving groundwater sustainability in Yolo County.

3. The majority agreed that farmers have been involved in the SGMA process and that the process for engaging them has been fair.

4. Farmers showed a preference for voluntary and infrastructure-based water management options as opposed to regulatory, rule-based options.

Figure 1. Levels of farmer agreement with the necessity for SGMA at the County- and State-scale and perceptions of other farmers’ agreement. Farmers appear to believe that they personally see SGMA as a greater necessity than most of their farming peers.
83% agree that farmers have been involved in the SGMA process. Additionally, 78% of farmers agree that process for engaging with farmers has been fair and have participated in the process themselves. The majority also agree that they understand the policy process for engaging with SGMA (74%) and know how to participate (69%).

Potential SGMA Policy Options

<table>
<thead>
<tr>
<th>Policy Options</th>
<th>Strongly Against</th>
<th>Strongly Support</th>
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<tbody>
<tr>
<td>Farmer adoption of water management practices</td>
<td>23%</td>
<td>25%</td>
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<tr>
<td>Incentives for water saving practices</td>
<td>27%</td>
<td>30%</td>
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<tr>
<td>District investment in conjunctive use infrastructure (e.g. water storage)</td>
<td>20%</td>
<td>39%</td>
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<tr>
<td>Individual recharge credits (e.g. winter flooding)</td>
<td>8%</td>
<td>24%</td>
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<tr>
<td>Public program highlighting farmers implementing water saving practices</td>
<td>9%</td>
<td>21%</td>
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<tr>
<td>Permits for drilling new wells</td>
<td>7%</td>
<td>11%</td>
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<td>Water metering</td>
<td>23%</td>
<td>24%</td>
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<tr>
<td>Water trading through markets</td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td>Moratorium on drilling new wells</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>Fixed quota for water pumping allocated to each farmer</td>
<td>35%</td>
<td>16%</td>
</tr>
<tr>
<td>Groundwater replenishment fees</td>
<td>24%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Yolo county farmers show a preference for voluntary and infrastructure-based water management options as opposed to regulatory, rule-based options as shown in Figure 2. The three voluntary and infrastructure-based water management options that received relatively the highest percentage of support were: Incentives for water saving practices (92% support), district investment in conjunctive use infrastructure (90% support) and adoption of water management practices (92% supported). There was also strong support for individual recharge credits (88% support) and a public program highlighting farmers implementing saving practices. Farmers expressed a moderate amount of support for permits for drilling new wells (74% support), water metering (53% support), and water trading through markets (47% support). The three practices that relatively received the lowest amount of support were: groundwater replenishment fees (23% supported), fixed quota for water pumping allocated to each farmer (25% supported), and a moratorium on drilling new wells (31% supported).

Importance and Next Steps

Current and future agricultural practices will play an important role in shaping Yolo Sub-basin’s Groundwater Sustainability Plan. A collective understanding of our farmers’ engagement with the SGMA process and policy preferences has emerged from this survey. In the other two briefings, we report on Farmer Concerns and Perceptions of Groundwater Conditions; and Farmer Current and Future Groundwater Management Practices. These insights are informing Yolo Sustainable Groundwater Agency’s (YSGA) development of local management strategies.

Acknowledgements

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