Eastern San Joaquin Groundwater Authority needs to consider domestic well water users

Editor, Manteca Bulletin, The 2014 California Sustainable Groundwater Management Act (SGMA) requires that critically overdrafted groundwater basins, like the Eastern San Joaquin Groundwater Subbasin in San Joaquin County, submit to the Department of Water Resources (DWR) a plan to achieve sustainability (outflows = inflows) by 2040.

The final Eastern San Joaquin Groundwater Sustainability Plan (GSP) was submitted in January 2020 giving the 16 Groundwater Sustainability Agencies (GSAs) 20 years to effect changes towards groundwater sustainability. In addition to sustainable groundwater uses, the law requires, in the meantime, that GSAs enact management practices that must avoid undesirable results, such as "significant and unreasonable" depletion of groundwater aquifers, degraded water quality or land subsidence.

Overdrafted groundwater basins occur when more water is pumped out (extracted) than is recharged (natural percolation). The valley groundwater levels represent waters that originated over thousands of years and in large part due to the melting of glaciers that covered large areas of the Sierra Nevada mountain range.

The Delta-Sierra Group of the Sierra Club submitted comments during the preparation of the GSP, participated in meetings, advocated for more stakeholder engagement opportunities, and submitted written comments on the final GSP. Several other non-governmental organizations including Clean Water Action, the Nature Conservancy, Audubon California, Local Government Commission, American Rivers, and California Sportfishing Protection Alliance all submitted written comments on the GSP. Written comments can be found at the DWR SGMA Portal for the Eastern San Joaquin Subbasin: https://sgma.water.ca.gov/portal/ gsp/comments/47. T he DWR had two years to review the submitted plan and consider comments before making a finding of adequacy of the plan to achieve the goals of SGMA. In January 2022, DWR deemed the GSP as incomplete because the plan failed to adequately address impacts on domestic drinking water wells, amongst other areas.

The Eastern San Joaquin Subbasin Groundwater Authority (GWA) is the entity created by the 16 GSAs to prepare SGMA reports for the subbasin. A matrix was developed by the GWA to respond to DWR system stakeholders. Domestic well owners and small groundwater system users bear the burden of GSAs' lack of management actions, with dry wells and/or increased pumping costs.

Yes, groundwater levels decline during dry years, but increased groundwater extractions related to new well installations and continued overdraft pumping rates create an added burden on domestic well and small groundwater system stakeholders. These groundwater impacts require mitigation and careful consideration of specific projects and management options to mitigate, not a "Push Back" response.

Next steps should include developing a program to mitigate for shallow well impacts relating to groundwater lowering either due to continued unsustainable pumping or installation and operation of new irrigation wells. Nongovernmental organizations such as Self-Help Enterprises, the Leadership Counsel for Justice and Accountability and the Community Water Center have developed a report, Framework for Drinking Water Well Impact Mitigation Program which could be used when developing our basin's well mitigation program.

The Eastern San Joaquin Subbasin GSP set the threshold for undesirable effects when 25 percent of wells monitored decreased groundwater levels to depths that would allow 10 percent of domestic wells to go dry, without a management plan. In fact, there is no public geospatial database available to disclose new well permits.

There are reported nine staff people that work in the well permitting group at San Joaquin County Environmental Health reviewing, issuing, and inspecting 1,353 well, pump and boring permits, annually. In critically overdrafted basins, new well permits are required to be posted and the way San Joaquin County has elected to do this is by street address and year, with data on individual pdf files rather than a geospatial database. For example, last year in the A folder, is a permit for a new 500-foot irrigation well on Alpine Road with a diameter of over 12 inches. As is the ministerial practice of San Joaquin County, no nearby neighbor was notified nor was the GSA notified to approve, deny, or condition the groundwater well's use, as is allowed under SGMA regulations.

comments which included “Push Back” on DWR’s comment to include specific projects and management actions to offset drought related groundwater reductions or drinking water impacts due to continued overdraft.

The “Push Back” response ignores the fact that the GSAs are not managing well installations and pump lowering efforts. Continued permitting of large irrigation wells, without regard to how those wells will impact neighboring wells, does not create an equitable situation for domestic well or small groundwater

Until we get a handle on the scope of new well installations and monitoring well use, we will forever be chasing sustainable groundwater use, and our vulnerable shallow groundwater users will continue to be at risk. **Mary Elizabeth California Naturalist, Delta-Sierra Group Conservation Chair**