December 15, 2021

Eric Thorburn, P.E., Chair
Stanislaus and Tuolumne Rivers Groundwater Basin Association GSA
P.O. Box 4060
Modesto, CA 95352-4060

Re: Comments on the Modesto Subbasin DRAFT Groundwater Sustainability Plan

Dear Eric:

Over the last several years, the Stanislaus and Tuolumne Rivers Groundwater Basin Association Groundwater Sustainability Agency (STRGBA GSA) has worked tirelessly with their consultant team to prepare the first Groundwater Sustainability Plan (GSP) for the Modesto Subbasin. During GSP development and in accordance with the Sustainable Groundwater Management Act (SGMA), the STRGBA GSA has held dozens of public meetings, workshops, office hours, and preparation of the GSP has been broadly discussed in public meetings of the governing bodies for all of the member agencies. On behalf of V.A. Rodden and many of my neighbors, we appreciate the dedication and transparency with which the DRAFT GSP has been prepared. Since this is the first GSP for the Modesto Subbasin, we firmly believe that perfection should not be the enemy of progress – this is a planning document and will be refined during the implementation period. That being said, I do want to offer a few specific comments related to the DRAFT GSP and those comments are as noted below.

Chapter 5 – Water Budgets

1. Page 5-8 notes, “For the projected water budget, the full period of WY 1969-2018 is used, which provides a 50-year record as required.”

   Comment: We encourage the STRGBA GSA to update the groundwater model to bring it up to date and continuously update the groundwater model as applicable to keep it current.

2. Page 5-23 notes, “Each of these areas supplement their surface water with some groundwater production to meet their agricultural and urban demand, whereas the Non-District East areas rely entirely on groundwater production for its agricultural supplies.”

   Comment: This is not accurate, historically, there is some surface water that has been provided to the Non-District East areas. The GSP should reflect this.

3. Page 5-66 includes Non-District East under the heading “Group 2: Groundwater Only Users.”
Comment: This is not accurate, historically, there is some surface water that has been provided to the Non-District East areas. The GSP should reflect this.

4. Page 5-67 notes, “The groundwater demand reduction is only one and/or part of the overall management actions that would result in groundwater sustainability within the Subbasin; factors such as water right, beneficial uses, needs, and human right to water should also be considered.”

Comment: Demand Management should only be used when projects and management actions set-forth in the GSP either; (1) are not completed or (2) are not delivering the desired results within the implementation horizon.

Chapter 6 – Sustainable Management Criteria

1. Page 5-6 notes, “As indicated in Table 6-1, no impacts from land subsidence have been observed in the Subbasin. However, basin condition indicate that land subsidence could occur if water levels continue to decline.”

Comment: We recommend that the GSA pursue additional monitoring wells west of Highway 99 where the Corcoran Clay is present to monitor and preclude future subsidence within the Modesto Subbasin. Coordination with private landowners and/or the Department of Water Resources (DWR) is required.

2. Page 6-5 notes, “The Stanislaus, Tuolumne, and San Joaquin River are all interconnected surface water as defined by SGMA (see icons on Figure 6-1). Projected water budget analyses indicate increased streamflow depletion will occur in the future, which could lead to undesirable results unless water level declines are arrested (see Section 6.8).”

Comment: All downstream beneficial uses and users of surface water benefit from decreased streamflow depletion. As the GSA weighs and balances the costs of implementing projects and management actions, the benefits to all downstream uses and users should be considered.

3. Page 6-8 notes, “The Non-District East Management Area is defined as lands in the eastern Subbasin outside of Oakdale ID and Modesto ID management areas. Unlike the other management areas, surface water has not been widely available for water supply; groundwater has served as the primary water supply for the expanding agricultural production in the Non-District East Management Area.”

Comment: Has there been expanding agricultural production in the Non-District East Management Area since passage of Stanislaus County’s Groundwater Ordinance? If not, the language noted should be changed to reflect what is actually happening on the ground.
4. Page 6-8 notes, “Most of the infrastructure required for GSP projects will need to be developed in the Non-District East Management Area by local landowners. The Non-District East Management Area will need to develop agreements and partnerships with both Modesto ID and the Oakdale ID management areas to bring additional water supply into the area.”

**Comment:** Discussions with Oakdale ID and Modesto ID should begin immediately such that proper infrastructure design can be initiated and the Subbasin can begin to compete for funding under Prop 68 for project implementation. As structured, surface water to be supplied to the Non-District East Management Area will come at no-harm to existing agricultural and urban customers and if structured correctly, have the potential to be a significant revenue stream for Oakdale ID and Modesto ID.

5. Page 6-12 notes, “Impacted domestic well owners during the 2014-2017 drought reported the need for trucked water, use of temporary or permanent storage tanks, purchase of bottled water, lowering of well pumps, drilling of replacement wells, and other measures.”

**Comment:** Moving forward, the STRGBA GSA should analyze the need for a well mitigation program for domestic well owners caused by declining groundwater levels. Development of such a program may lead to additional operational flexibility within the Subbasin.

6. Page 6-15 notes, “Data gaps are recognized in the monitoring networks for both the Eastern Principal Aquifer and the Western Lower Principal Aquifer.”

**Comment:** Coordination with private landowners and/or the Department of Water Resources (DWR) is required. Progress to fill these data gaps should be reported in annual reports and the five-year update.

7. Page 6-67 notes, “For the Modesto Subbasin, a glide path provides needed flexibility for MAs of the Subbasin that will continue to decline – at rates dependent on future hydrologic conditions – until projects and management actions are implemented.

**Comment:** The use of interim milestones is something strongly encourage by DWR and are a necessary practical component of the GSP to allow for operational flexibility while projects and management actions come online. The STRGBA GSA should be commended for their practical use of interim milestones in the GSP.

8. Page 6-69 notes, “IMs have been designated conservatively for monitoring wells in the Oakdale ID MA and the NDE MA but will not be used to defer implementation of GSP projects or management actions. Other projects and/or management actions may also be needed during the first five years of GSP implementation to avoid undesirable results near wells if water levels reach the IMs.”
Comment: Implementation of additional projects should be considered before demand management. Demand management has immense economic impacts to the regional economy and the environment and should be avoided at all cost.

Chapter 7 – Monitoring Network

1. Page 7-4 notes, “The monitoring network for the Western Lower Principal Aquifer contains five wells, as illustrated on Figure 7-2 and summarized in Table 7-1. The monitoring network includes two City of Modesto monitoring wells, two Proposition 68 monitoring wells, and one USGS monitoring well.”

Comment: The data gap of groundwater elevations in the Western Lower Principal Aquifer is important as it relates to subsidence. Future annual reports and the five-year update should reflect the actions taken by the STRGBA GSA to fill this data gap.

Chapter 8 & 9 – Projects and Management Actions & Plan Implementation

1. Page 8-6 notes, “However, it is anticipated that not all PMAs will need to be implemented, or that some PMAs will be implemented by one GSA but not the other.”

Comment: Tuolumne County has a de minimis amount of land within the Modesto Subbasin and no PMAs are slated for this area. This should be corrected to be clear that practically speaking there is only one GSA for the Modesto Subbasin.

2. Page 8-12 notes, “This project continues the water purchase agreement between Modesto Irrigation District (MID) and the City of Modesto to meet urban demands. It utilizes the expansion from Phase II of the Modesto Regional Water Treatment Plant (MRWTP).”

Comment: The Amended and Restated Treatment and Delivery Agreement between Modesto ID and the City of Modesto governs the delivery of treated surface water to the City of Modesto.

3. Page 8-24 notes, “The Project involves the delivery of approximately 60,000 AF of surface water from the Tuolumne River in Wet and Above Normal water years (WYs) through a limited number of new points of diversion off MID’s existing irrigation conveyance infrastructure and subsequent conveyance through newly constructed private irrigation conveyance infrastructure for in-lieu and direct recharge during the growing season.

Comment: It should be explicitly noted that this Project is developed to avoid any impacts to MID’s existing agricultural and urban customers. Absent use of this water in nearly one-half of water years, the water would flow down the Tuolumne River and be lost from the Modesto Subbasin.
4. Page 8-25 notes, “Benefits to groundwater conditions in the Modesto Subbasin are also expected to broadly benefit all DACs, SDACs, and EDAs.”

**Comment:** The benefits to DACs, SDACs, and EDAs from the Project is a critical component of the Project and cannot be overstated.

5. Page 8-25 notes, “On average across all years, the MID in-lieu and direct recharge project is expected to provide an average annual benefit 28,800 AFY of recharge benefit to the Modesto Subbasin.”

**Comment:** The continued and future health of the Modesto Subbasin relies on cooperative projects like the Modesto in-lieu and direct recharge project. SGMA empowered locals to solve local problems with local resources, this project does just that, at no water cost to existing agricultural and urban customers.

6. Page 8-27 notes, “It is anticipated that the GSA would identify funding sources to cover project costs as part of project development. These may include grants (e.g. Prop 1, Prop 68, NRCS, others), fees, and loans.”

**Comment:** Post GSP completion the STRGBA GSA should consider engaging in a funding and financing analysis to support rate development in the Modesto Subbasin. Any progress on a funding and financing plan shall be made in the annual reports and the five-year update.

7. Page 8-28 notes, “Historically (2010-2019), OID has had system inflows (diversions) ranging from approximately 165,000 AF to approximately 246,000 AF, with an overall average of approximately 208,000 AF. Given OID’s existing surface water rights off the Stanislaus (300,000 AF) and their overall average system inflows, the surface water contemplated for this Project amounts to approximately 22% of the total available surface water supply above and beyond that necessary to meeting their existing customer demands (on an average basis).

**Comment:** It should be explicitly noted that this Project is developed to avoid any impacts to OID’s existing agricultural customers and still retain some volume of water for “high-value” out-of-basin water transfers as they have historically done.

8. Page 8-29 notes, “Governing agencies that may be consulted for this Project include, but are not limited to: the State Water Resources Control Board (SWRCB), the County(ies) of Stanislaus and/or Tuolumne, and DWR.

**Comment:** The U.S. Bureau of Reclamation should be added to the list of potential governing agencies.

9. Page 8-31 notes, “It is anticipated that the GSA would identify funding sources to cover project costs as part of project development. These may include grants (e.g. Prop 1, Prop 68, NRCS, others), fees, and loans.”
Comment: Post GSP completion the STRGBA GSA should consider engaging in a funding and financing analysis to support rate development in the Modesto Subbasin. Any progress on a funding and financing plan shall be made in the annual reports and the five-year update.

10. Page 8-32 notes, “The Tuolumne River Flood Mitigation and Direct Recharge Project (Project) is intended to be a cooperative long-term project between Modesto Irrigation District (MID) and the non-district east landowners and is designed to be implemented with no impacts to MID’s existing agricultural and urban customer.”

Comment: The benefits to flood protection at a state level, local level, and for landowners on the lower Tuolumne River should be considered as part of project implementation and costs should be shared as determined appropriate and equitable.

11. Page 8-36 notes, “The Dry Creek Flood Mitigation and Direct Recharge Project (Project) is intended to be a cooperative long-term Project implemented by the non-district east landowners and is designed to be constructed and managed in a way to prevent negative impacts to downstream users.

Comment: The benefits to flood protection at a state level, local level, and for landowners on the lower Tuolumne River should be considered as part of project implementation and costs should be shared as determined appropriate and equitable.

12. Page 8-49 notes, “However, it is anticipated that not all Management Action will need to be implemented, or that individual Management Actions may be implemented by one GSA but not by the other.”

Comment: Tuolumne County has a de minimis amount of land within the Modesto Subbasin and no PMAs are slated for this area. This should be corrected to be clear that practically speaking there is only one GSA for the Modesto Subbasin.

13. Page 8-51 notes, “In case Projects are insufficient to manage the Subbasin in a sustainable condition, strategies may need to be developed to manage the agricultural and urban water demands in the Subbasin.”

Comment: This is the correct progression and the STRGBA GSA should be applauded for their approach to maintain current landuse through project implementation. Progress towards project implementation should be reported in annual reports and made available to the public. Any future decision by the STRGBA GSA to move toward demand management should be well vetted, discussed publicly, and provide the platform for all stakeholders to participate.
14. Page 8-51 notes, “Voluntary Conservation and/or Land Fallowing covers several strategies that can be designed to achieve both temporary and permanent water demand reduction.”

Comment: Should voluntary conservation and/or land fallowing be considered by the STRGBA GSA during the implementation horizon as a result of unsuccessful project implementation, the STRGBA GSA should consider engaging in a funding and financing analysis and financial incentives should be considered as a means of incentivizing land fallowing.

15. Page 8-57 notes, “The Water Accounting Framework consists of four-tiered Management Actions that will be implemented in a prioritized order as determined by the Modesto Subbasin GSA to meet the Subbasin’s sustainability goal.”

Comment: Consistent with SGMA, development and implementation of a water accounting framework or like program should be developed in a public and transparent public process. This should be explicitly noted for this project and all like projects included in the GSP, but yet to be developed.

16. Page 8-66 notes, “While there are certain administrative costs anticipated with the development and implementation of a Groundwater Extraction Fee, the Groundwater Extraction Fee itself is potential mechanism to fund the costs of groundwater management.”

Comment: Aside from the administrative costs anticipated, there are significant initial capital and ongoing maintenance costs associated with measurement of groundwater extraction. Flowmeters are expensive, rarely installed correctly, and need frequent calibration to ensure accuracy long-term.

17. Page 8-72 notes, “Analysis of conditions under Scenario 2 shows that under project buildout, sustainability goals as defined by the Minimum Thresholds (MTs) outlined in Chapter 6, Sustainability Management Criteria, can be met without demand management.”

Comment: This is perhaps the most important conclusion in the GSP. Through regional cooperation, the Modesto Subbasin can be sustainable.

18. Page 8-72 notes, “In the near-term, sustainability of the Modesto Subbasin relies on the Non-District East area to actively pursue the development of these projects and understands that interim management actions, including the potential for demand reduction, may be necessary to meet SMCs.”

Comment: Clarification should be added to this statement recognizing that demand reduction will only be necessary if projects are not completed within the implementation horizon or aren’t delivering the benefit expected to occur.
As the DRAFT GSP clearly demonstrates, sustainability within the Modesto Subbasin can be achieved through regional cooperation and use of available surface water supplies above and beyond that necessary to meet existing agricultural and urban demands. Further, delivery and use of surface water by Non-District East lands has the potential to generate substantial revenue for the local surface water suppliers allowing them to; (1) off-set rates for their customers and (2) continue to modernize their irrigation conveyance systems. From the perspective of regional collaboration and cooperation, this is simply a win-win for all involved. As noted in the comments included herein, we would recommend that following submission of the GSP at the end of January, the STRGBA GSA engage in a funding and financing analysis to lay the foundation for equitable allocation of implementation costs.

Thank you for the opportunity to comment and again, we commend the STRGBA GSA, its member agencies, and the consultant team on a job well done.

Sincerely,

Bill Jackson
V.A. Rodden