

Section I: Goals and Desired Outcomes  
 East Kaweah GSA Communication & Engagement Plan

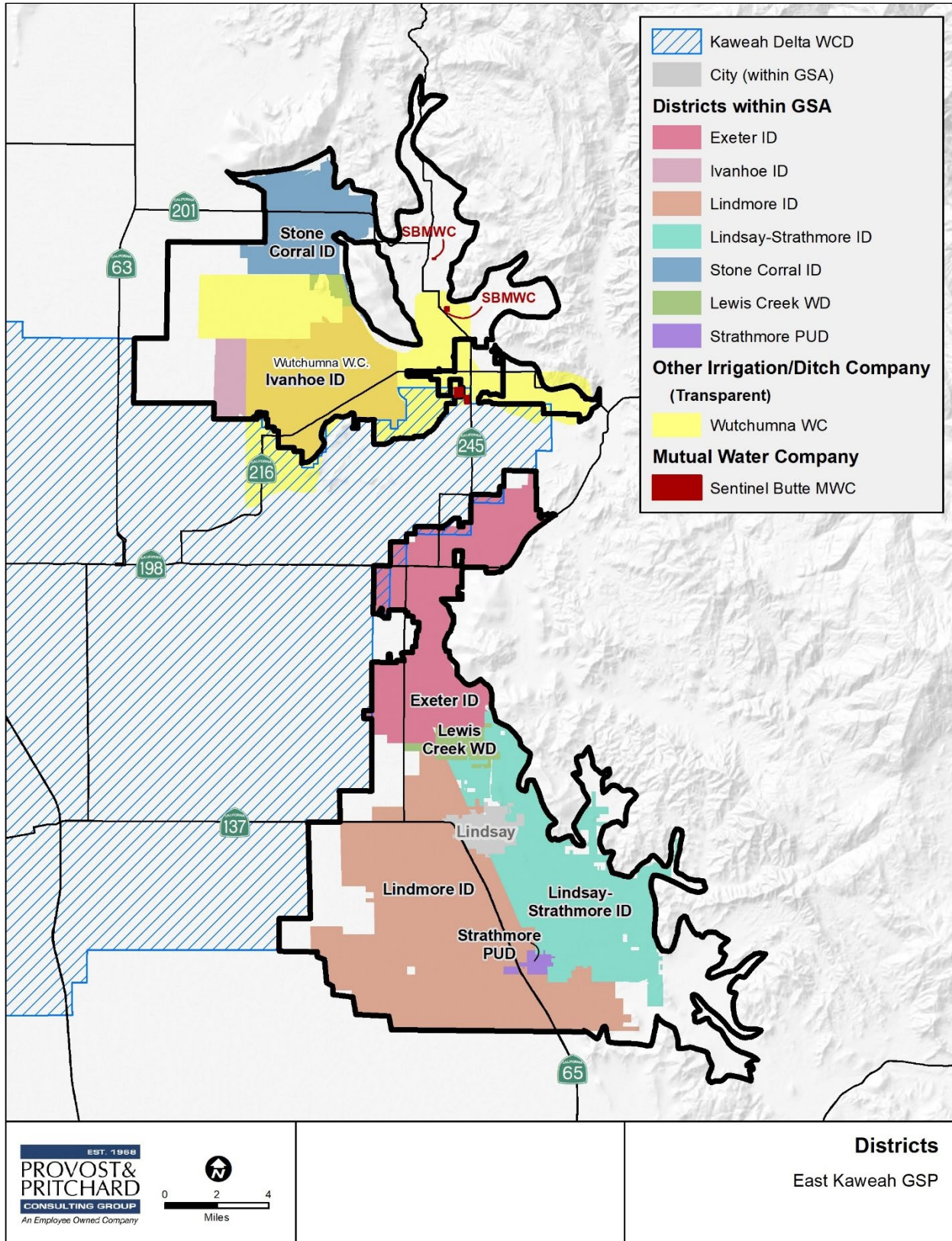


Figure I-3. East Kaweah GSA Public Agencies and Water/Irrigation Districts

Section I: Goals and Desired Outcomes  
 East Kaweah GSA Communication & Engagement Plan

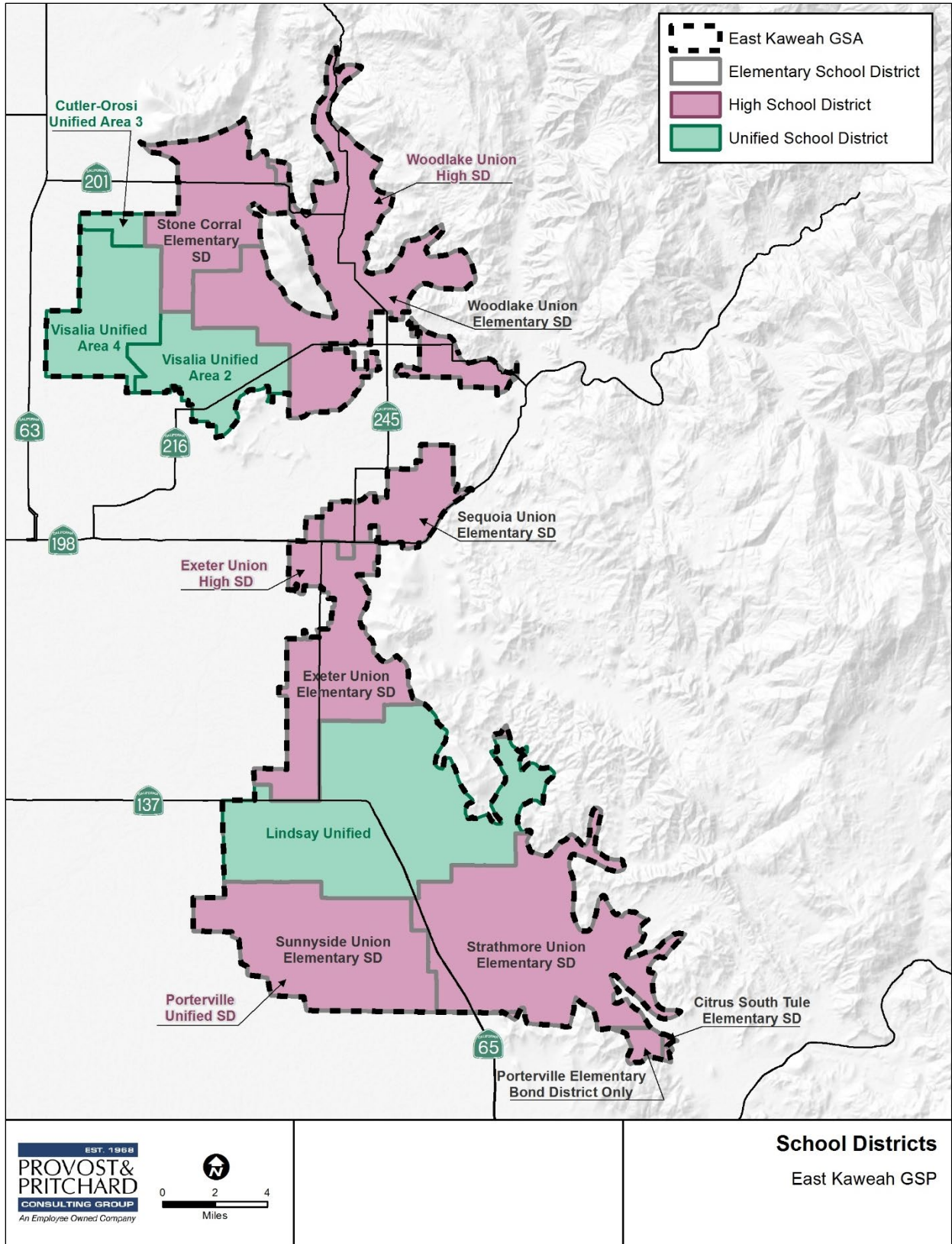


Figure I-4. School Districts within East Kaweah GSA



## II. Audience Identification

### A. Primary Stakeholder Groups

The primary stakeholder groups of the East Kaweah GSA are members of the Board of Directors, Advisory Committee and Technical Advisory Committee. Their specific roles in the communication and engagement process are discussed in this section.

#### II.A.1 Role of Board of Directors

The East Kaweah GSA's Board of Directors was formed to adopt general policies regarding development and implementation of the GSP. The Board is comprised of one elected member of the governing body of each member entity (**Table I-1**), two representatives of a mutual water company or water corporation regulated by the Public Utilities Commission servicing an area within the GSA's jurisdiction, one representative from a landowner and groundwater user in a "white area" appointed by the County of Tulare, and one at-large representative nominated and appointed by the Board of Directors.

The Board of Directors meetings are held at 3 p.m. on the fourth Monday of every January, April, July and October at the Exeter Courthouse Gallery, located at 125 S. B Street in Exeter, California.

#### II.A.2 Committees

A Technical Advisory Committee and Advisory Committee was formed by the Board of Directors to advise the board on matters related to GSP development and implementation within the East Kaweah GSA. These committee members represent the board and the interests of the secondary stakeholders detailed in **Section I.B**.

##### II.A.2.1 Role of Technical Advisory Committee

Each Board of Director is entitled to appoint one technical person to be a member of the Technical Advisory Committee. This committee is involved in the development of the GSP, and works closely with the engineer and technical staff to review and analyze collected data, taking into consideration the feedback received from the Advisory Committee and results of stakeholder surveys within the jurisdiction of the East Kaweah GSA. The Technical Advisory Committee meets every second Friday at 10 a.m. (unless otherwise notified) at Provost & Pritchard Consulting Group, located at 130 N. Garden Street in Visalia.

##### II.A.2.2 Role of Advisory Committee

In Section 10727.8 "Public Notification and Participation; Advisory Committee" of the Sustainable Groundwater Management Act, GSAs may appoint and consult with an advisory committee for the purpose of developing and implementing a GSP. Through this advisory committee, the GSA is able to encourage the active involvement of diverse social, cultural, and economic elements of the population within the groundwater basin prior to and during the development and implementation of the GSP.

In the general interest of encompassing representatives of all interests of the sub-basin, East Kaweah GSA established an Advisory Committee. These representatives encompass residential, agricultural, environmental, rural, domestic well, and municipal interests. The specific role of the East Kaweah GSA's Advisory Committee is to make recommendations to the East Kaweah GSA Board of Directors regarding community outreach and adoption of a GSP that accounts for local interests.

The Advisory Committee meets monthly, on the third Monday of every month at 4 p.m. at the Exeter Courthouse Gallery, located at 125 S. B Street in Exeter, California.

## B. Secondary Stakeholder Groups

Secondary stakeholder groups have been identified by the East Kaweah GSA’s Advisory Committee, based on discussions of interests identified in SGMA, Section 10723.2 “Consideration of All Interests of All Beneficial Uses and Users of Groundwater” (**Table II-1**).

**Table II-1. Consideration of All Interests of All Beneficial Uses and Users of Groundwater**

SGMA, Section 10723.2. Consideration of All Interests of All Beneficial Uses and Users of Groundwater		
Agricultural Users	Domestic Well Owners	Municipal Well Operators
Public Water Systems	Local Land Use Planning Agencies	Environmental Users of Groundwater
Surface Water Users	Federal Government	California Native American Tribes
Disadvantaged Communities	Entities monitoring and reporting groundwater elevations in all or part of a groundwater basin	

Based on these discussions, secondary stakeholders to be targeted for communication and engagement during the GSP development, public review and implementation phases have been narrowed to those with financial, political, business or personal stakes in the management and sustainability of groundwater within the jurisdiction of the East Kaweah GSA. These secondary stakeholders are listed in **Table II-2**.

**Table II-2. Secondary Stakeholder Groups with Interests in the East Kaweah GSA**

Secondary Stakeholder Groups with Interests in the East Kaweah GSA		
Agricultural Users	Domestic Well Owners	Municipal Well Operators
Public Water Systems	Environmental Users of Groundwater	Surface Water Users
Disadvantaged Communities		

Secondary stakeholder groups will be engaged through public outreach meetings and email blasts. These meetings will be held during Phase 2: GSP Preparation and Submission, Phase 3: GSP Review and Evaluation, and Phase 4: Implementation and Reporting.

## C. Community Organizations, Public Agencies and Other Entities

There are many community organizations, public agencies and other entities throughout the East Kaweah GSA boundary that will be utilized to reach out to secondary stakeholders. These resources identified as avenues for outreach opportunities are listed in **Table II-3**. Additional community organizations, public agencies and entities may be added to the list as GSP development and implementation phases move forward, and additional connections are made between the East Kaweah GSA and the communities within its boundary.

East Kaweah GSA will communicate with these resources and request opportunities to give presentations at their respective meetings. If an Advisory Committee member or Board of Director is involved with, or has



Section II: Audience Identification  
East Kaweah GSA Communication & Engagement Plan

contacts within, a community organization, public agency or other entity, they may present on behalf of the East Kaweah GSA to further and streamline outreach efforts. Presentations may include an overview on SGMA and why it is important to the audience, explanation and updates regarding the GSP development process including an awareness of the public review period, and education of GSP requirements during the implementation phase. In addition, East Kaweah GSA will work with these organizations and agencies to distribute stakeholder surveys, public outreach meeting notices, and educational information via email distribution, social media posts, and printed materials (handouts).

**Table II-3. Community Organizations and Public Agencies**

Community Organization & Public Agencies	Secondary Stakeholder Group(s)	Website
<b>Agriculture Organizations</b>		
California Citrus Mutual	Agricultural Users, Domestic Well Owners, Surface Water Users	<a href="https://www.cacitrusmutual.com/">https://www.cacitrusmutual.com/</a>
California Women for Agriculture – Tulare/Kings Chapter	Agricultural Users, Domestic Well Owners, Surface Water Users	
Kaweah Basin Water Quality Association (KBWQA) – Irrigated Lands Regulatory Program	Agricultural Users, Domestic Well Owners, Surface Water Users	<a href="http://www.kaweahbasin.org/">http://www.kaweahbasin.org/</a>
Tulare County Cattlewomen	Agricultural Users, Domestic Well Owners, Surface Water Users, Environmental	
Tulare County Farm Bureau, Tulare County Young Farmers & Ranchers	Agricultural Users, Domestic Well Owners, Surface Water Users	<a href="http://www.tulcofb.org/">http://www.tulcofb.org/</a>
Tule Basin Water Quality Coalition – Irrigated Lands Regulatory Program	Agricultural Users, Domestic Well Owners, Surface Water Users	<a href="http://tbwqc.com">http://tbwqc.com</a>
University of California Cooperative Extension	Agricultural Users, Domestic Well Owners, Surface Water Users	<a href="http://cetulare.ucanr.edu/">http://cetulare.ucanr.edu/</a>
<b>DACs/Environmental Justice Organizations</b>		
Community Water Center	DACs and SDACs	<a href="http://www.communitywatercenter.org/">http://www.communitywatercenter.org/</a>
El Quinto Sol de America	DACs and SDACs	<a href="https://www.elquintosoldeamerica.org/">https://www.elquintosoldeamerica.org/</a>
Leadership Counsel for Justice & Accountability	DACs and SDACs	<a href="http://www.leadershipcounsel.org/">http://www.leadershipcounsel.org/</a>
Rural Communities Association Corporation	Agricultural Users, Domestic Well Owners, Environmental, DACs	<a href="http://www.rcac.org/">http://www.rcac.org/</a>
Self-Help Enterprises	DACs and SDACs	<a href="https://www.selfhelpenterprises.org/">https://www.selfhelpenterprises.org/</a>
<b>Environmental Organizations</b>		
Sequoia Riverlands Trust	Environmental, Agricultural Users	<a href="http://sequoiariverlands.org/">http://sequoiariverlands.org/</a>
Tulare Basin Wildlife Partners	Environmental	<a href="http://www.tularebasinwildlifepartners.org/">http://www.tularebasinwildlifepartners.org/</a>

Section II: Audience Identification  
East Kaweah GSA Communication & Engagement Plan

Community Organization & Public Agencies	Secondary Stakeholder Group(s)	Website
<b>Irrigation Districts/Water Districts/Water Agencies &amp; Commissions</b>		
Exeter Irrigation District	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems	150 S. E Street, Exeter, CA 93221 Telephone: (559) 592-2181
Ivanhoe Irrigation District	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs, Public Water Systems	33777 Road 164, Visalia, CA 93292 Telephone: (559) 798-1118
Kaweah River Basin Integrated Regional Water Management Group	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems, DACs, Municipal Well Operators, Environmental Users	<a href="http://www.kdwcd.com/kdwcdweb_006.htm">http://www.kdwcd.com/kdwcdweb_006.htm</a>
Lindmore Irrigation District	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems	<a href="http://www.lindmoreid.com/">http://www.lindmoreid.com/</a>
Lindsay-Strathmore Irrigation District	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems	<a href="http://www.lsid.org/">http://www.lsid.org/</a>
Sentinel Butte Mutual Water Company	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs, Public Water Systems	Post Office Box 606, Woodlake, CA 93286
Stone Corral Irrigation District	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs, Public Water Systems	37656 Road 172, Visalia, CA 93292 Telephone: (559) 528-4408
Tulare County Water Commission	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs, Municipal Well Operators, Public Water Systems	<a href="http://tularecounty.ca.gov/cao/index.cfm/water-commission/">http://tularecounty.ca.gov/cao/index.cfm/water-commission/</a>
Wutchumna Water Company	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs, Public Water Systems	598 S. Valencia Blvd., Woodlake, CA 93286 Telephone: (559) 564-2682
<b>Municipal Agencies</b>		
City of Lindsay City Council and City Management	Public Water Systems, Municipal Well Operators, DACs	<a href="http://www.lindsay.ca.us/">http://www.lindsay.ca.us/</a>
County of Tulare – Board of Supervisors and County Management	Domestic Well Owners, Surface Water Users, DACs, Municipal Well Operators, Public Water Systems	<a href="http://tularecounty.ca.gov/county/">http://tularecounty.ca.gov/county/</a>
Exeter Chamber of Commerce	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems, DACs, Municipal Well Operators	<a href="http://www.exeterchamber.com/">http://www.exeterchamber.com/</a>

Section II: Audience Identification  
East Kaweah GSA Communication & Engagement Plan

Community Organization & Public Agencies	Secondary Stakeholder Group(s)	Website
Lindsay Chamber of Commerce	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems, DACs, Municipal Well Operators	<a href="http://thelindsaychamber.com/">http://thelindsaychamber.com/</a>
Woodlake Chamber of Commerce	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems, DACs, Municipal Well Operators	<a href="http://www.woodlakechamber.org/">http://www.woodlakechamber.org/</a>
<b>School Districts &amp; Parent-Teacher Associations</b>		
Citrus South Tule Elementary School District	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	
Exeter Union High School District & PTA	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	<a href="http://www.exeter.k12.ca.us/">http://www.exeter.k12.ca.us/</a>
Exeter Union Elementary School District & PTA	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	
Lindsay Unified School District & PTA	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	<a href="http://www.lindsay.k12.ca.us/">http://www.lindsay.k12.ca.us/</a>
Porterville Unified School District (Strathmore High School) & PTA	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	<a href="http://strathmore.portervilleschools.org/">http://strathmore.portervilleschools.org/</a>
Sequoia Union Elementary School District	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	
Stone Corral Elementary School District	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	<a href="http://www.tcoe.org/Districts/StoneCorral.shtm">http://www.tcoe.org/Districts/StoneCorral.shtm</a>
Strathmore Union Elementary School District & PTA	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	<a href="http://www.suesd.k12.ca.us/">http://www.suesd.k12.ca.us/</a>
Sunnyside Union Elementary School District & PTA	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	<a href="http://www.sunnysideunion.com/">http://www.sunnysideunion.com/</a>
Visalia Unified School District (Ivanhoe Elementary School) & PTA	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	<a href="https://www.vusd.org/ivanhoe">https://www.vusd.org/ivanhoe</a>
Woodlake Union High School & Elementary School Districts (Elderwood) & PTAs	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	



Community Organization & Public Agencies	Secondary Stakeholder Group(s)	Website
<b>Service Clubs</b>		
Exeter Eagles Aerie #3608	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems	
Exeter Lions Club	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems	<a href="http://exeterlions.org/">http://exeterlions.org/</a>
Ivanhoe Lions Club	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs	
Kiwanis Club of Exeter	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems	<a href="http://www.exeterkiwanis.org/">http://www.exeterkiwanis.org/</a>
Kiwanis Club of Lindsay	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems, DACs	
Kiwanis Club of Woodlake	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems, DACs	<a href="http://www.woodlakekiwanis.com/">http://www.woodlakekiwanis.com/</a>
Woodlake Lions Club	Agricultural Users, Domestic Well Owners, Surface Water Users, DACs, Public Water Systems	<a href="https://www.woodlakelionsclub.com/">https://www.woodlakelionsclub.com/</a>
Woodlake Rotary Club	Agricultural Users, Domestic Well Owners, Surface Water Users, Public Water Systems, DACs	

## D. Interested Persons List

SGMA Section 10723.4 “Maintenance of Interested Persons List” states: *“The groundwater sustainability agency shall establish and maintain a list of persons interested in receiving notices regarding plan preparation, meeting announcements, and availability of draft plans, maps, and other relevant documents. Any person may request, in writing, to be placed on the list of interested persons.”* In compliance with the SGMA requirement, East Kaweah GSA maintains a list of interested persons, and routinely distributes meeting notices and relevant information to the stakeholders who have requested to be included. The GSA will continue to grow this contact list through the process discussed in **Section V.A.4.**

# III. Audience Survey and Mapping

Through ongoing communications and public education and outreach efforts described in **Section V**, primary and secondary stakeholders had the opportunity to have a voice in the GSP development process. This section discusses in detail the preliminary discussion with primary stakeholders, and implementation of the Stakeholder Survey, which was a valuable source in collecting feedback from target audiences who have vested interests in how the implementation of the GSP will affect their interests.

## A. Stakeholder Survey

### III.A.1 Identification of Stakeholder Issues, Interests and Challenges

Stakeholder issues, interests and anticipated challenges are routinely discussed in Advisory Committee meetings. Advisory Committee members represent the interests of the secondary stakeholders identified for the East Kaweah GSA (**Table II-2**). The focus of these discussions have consisted of identifying the common groundwater uses within the GSA boundary, top concerning issues affecting groundwater, top concerning effects of SGMA on stakeholder interests within the GSA, current practices that could be curtailed to accomplish SGMA goals, and possible mitigation solutions. **Table III-1** summarizes these discussions, which was used as a basis for the development of fact sheets and public meeting presentations for secondary stakeholder groups.

**Table III-1. Stakeholder Issues, Interests & Challenges**

Stakeholder Issues, Interests & Challenges	
<b>Top Concerning Issues Affecting Groundwater:</b>	<ul style="list-style-type: none"> <li>• Economic impacts</li> <li>• New regulations (i.e. SGMA and ILRP), and the impacts on investments and livelihoods</li> <li>• Water quantity (overdraft, recharge, overpumping)</li> <li>• Water quality</li> <li>• Wasting of water (abusing beneficial uses)</li> <li>• Future well moratoriums on future development and ability to farm</li> <li>• Changing of water rights and resulting impacts on local communities (potential water market that impacts/disrupts historical or current way of life and economy)</li> <li>• Growing population and resulting increase demand for water</li> <li>• Needed water infrastructure improvements</li> <li>• Lack of future planning</li> </ul>
<b>Top Concerns of SGMA Effects on Agriculture:</b>	<ul style="list-style-type: none"> <li>• Economic impacts (loss of jobs, loss of tax revenue due to decrease in land values of fallowed ground)</li> <li>• New regulations (i.e. SGMA and ILRP), and the impacts on investments and livelihoods</li> <li>• Legal rights to groundwater (concerns of unequal representation amongst landowners)</li> <li>• Water usage (surface water vs. groundwater)</li> <li>• Decreased quality of food for California and the United States as a whole</li> <li>• Concerns that the agriculture industry will have to pay for SGMA implementation for all of the beneficial users of groundwater</li> </ul>

Stakeholder Issues, Interests & Challenges	
<b>Top Concerns of SGMA Effects on Rural Communities/DACs:</b>	<ul style="list-style-type: none"> <li>• Economic impacts (loss of jobs)</li> <li>• Superdraft of water</li> <li>• Dry wells and lack of funding for a replacement</li> <li>• Water quality</li> <li>• Need for educational efforts on where water comes from, the value of water, water conservation efforts and “What is SGMA”</li> </ul>
<b>Uses that Could be Curtailed to Accomplish SGMA Goals:</b>	<ul style="list-style-type: none"> <li>• Out-of-basin transfers (exporting and importing of water supplies). Keep it at a basin/sub-basin level</li> <li>• Over-pumping</li> </ul>
<b>Possible Mitigation Solutions:</b>	<ul style="list-style-type: none"> <li>• Sustainable conservation of flood water to irrigate and recharge on agriculture lands and environmental preservations</li> <li>• Wholistic watershed approach to achieve more water integration</li> <li>• Surface water transfers into the basin</li> <li>• Improvement of water infrastructure (i.e. more recharge basins, dams, etc.)</li> <li>• Identification of areas of land that should be fallowed</li> <li>• Grazing programs, drying farming with financial incentives</li> </ul>

### III.A.2 Survey Questions

Secondary stakeholders needed to have an opportunity to be heard during the GSP development process, in addition to the involvement of the primary stakeholders who represent their interests. The Stakeholder Survey was a way to gather information from these individuals. The process for conducting the Stakeholder Survey is discussed in [Section V.A.4](#). The Stakeholder Survey and the summary of results is included in [Appendix B](#).

Survey questions recommended by the DWR included:

1. Are you familiar with SGMA regulations?
2. Are you currently engaged in activity or discussions regarding groundwater management in this region?
3. Do you own or manage/operate land in this region?
4. Do you manage water resources? If yes, what is your role?
5. What is your primary interest in land or water resources management?
6. Do you have concerns about groundwater management? If so, what are they?
7. Do you have recommendations regarding groundwater management? If so, what are they?

The East Kaweah GSA Advisory Committee developed additional questions that were incorporated into the survey:

1. Agriculture and Domestic Well Users: What is your well depth? Has your well every gone dry? If so, when?
2. How adequate is your water supply?
3. Where are you getting your water supply? (surface, groundwater, both)
4. Would you be willing to receive information concerning potential groundwater recharge projects?
5. If you grow citrus crops, what methods do you utilize for frost protection? (wind machines, sprinklers, other methods)



6. Other pertinent information the East Kaweah GSA should be aware of or take into consideration while developing the GSP?

If follow-up questions are needed during the GSP implementation phase, a second Stakeholder Survey will be developed and circulated amongst stakeholders.

## B. “Lay of the Land” Overview

Results from Stakeholder Surveys were compiled into a “Lay of the Land Overview” to categorize the feedback received so the technical team could utilize the information during the GSP development phase. This data will be sorted by:

- Type of stakeholder
- Key interests related to groundwater
- Key issues (documented or specific issues of past events)

Preliminary results from discussions with the Advisory Committee at the July, November and December 2017 meetings are listed in **Table III-1**. These results were used as a basis for the development of fact sheets and key messages and talking points (**Section IV**).

### III.B.1 Types of Stakeholders

Types of stakeholders with the greatest interests in the GSP development and resulting implementation efforts to reach groundwater sustainability include agricultural users, domestic well owners, municipal well operators, public water systems, environmental users, surface water users, and disadvantaged communities.

Stakeholder surveys were geared more specifically for agricultural users, domestic well owners, surface water users, and residents of disadvantaged communities. Representatives of municipal well operators, public water systems and environmental users are integral parts of the primary stakeholder group, and are a more specific, smaller target audience, and surveys were not tailored specifically for their interests, as information can be more easily be gained and addressed through one-on-one conversations and collaborative discussions.

### III.B.2 Stakeholder Key Interests Related to Groundwater

The key interests of stakeholders related to groundwater within the East Kaweah GSA boundary include:

- Drinking water
- Domestic, everyday usage
- Agriculture – Farming, ranching (livestock)
- Industrial
- Environmental ecosystem management areas

### III.B.3 Key Documented Issues

Several key documented water resources issues have affected, or have the potential to affect, the key interests of stakeholders within the East Kaweah GSA boundary. As key documented issues arise throughout GSP development, public review and implementation phases, they will be added to this section.

- **Zero Allocation of Friant Supply** – Lindmore Irrigation District received zero allocation of their Friant water supply in 2014 and 2015. This was the first time this has happened, particularly two years in a row, and was a result of the drought.
- **Well Depth to Groundwater Concerns within the Region** – During the recent drought, well depth to groundwater concerns became a forefront issue for agricultural users and domestic well owners and users, and users of public water systems in rural areas (including disadvantaged communities). For domestic well owners and users, the County of Tulare and community organizations provided bottled water for rural communities, and large water tanks were brought in to individual residences to make every day water usage still possible, although limited. Many agricultural users, domestic well owners, and small water systems serving low-income residents either developed new wells or had existing wells drilled to deeper depths.
- **Friant-Kern Canal Subsidence Issues** – In areas of Tulare and Kern counties, land subsidence along the Friant-Kern Canal (FKC) has increased within the past five years. The Visalia Times Delta published an article on August 18, 2017, “Sinking Friant-Kern Canal has \$500M problem.” According to the article, the canal has sunk two to three feet, mostly along a 25-mile stretch, and has already reduced the capacity of the key irrigation artery by 50 to 60 percent in some locations.
- **Water Quantity and Quality Issues within Tooleville** – The disadvantaged community of Tooleville (Tooleville Mutual Nonprofit Water Association) has been facing water quantity and quality issues. Existing wells do not meet water quality standards with high coliform and nitrates, and they do not provide sufficient water. In 2001, Tooleville approached the City of Exeter for help, but concerns over Exeter’s charter city status prevented any connection from being made. In 2005, Tooleville received a funding agreement from the California Department of Public Health (DPH) and Rural Utilities Service to develop a dependable source of potable water. Funding allowed for the consolidation/connection with Exeter if the test well was unsuccessful. In 2005, a preliminary engineering report was completed. In 2006, a test well was constructed, but could not be developed as a water source because of high nitrates and high salinity.

In 2009, a new distribution system with meter-ready connections was constructed so that funding wouldn’t be lost. A study was initiated in 2011 for a new water source and transmission system, which would include a new domestic water well and water storage tank but took into consideration the connection or consolidation with the City of Exeter. In 2011, a water source alternative comparison was done, and it was decided that Tooleville would drill its own well and wheel water through Exeter. Sites for a new well were identified in 2013 and 2015 without success in property negotiations with landowners. In 2016, a time extension request was submitted to the State Water Resources Control Board (SWRCB), requesting an amendment to a funding agreement for an additional 18 months. During the 18 months, a rate comparison between a full consolidation with the City of Exeter and a master meter-type connection to the City. The rate comparison results were presented to the SWRCB and Tooleville, and the SWRCB began conversations with the City about providing water to Tooleville, and locating a viable well site.

- **Tonyville Nitrate Water Treatment Plant** – The Lindsay-Strathmore Irrigation District’s (LSID) North Lindsay Heights Well, which serves the disadvantaged community of Tonyville, is impacted with a level of nitrates and perchlorate that is above the SWRCB’s Division of Drinking Water’s (DDW) maximum contaminant level (MCL).

LSID is under a compliance order issued by DDW that requires treatment to reduce nitrates to less than 90 percent of the MCL. The nitrate treatment system selected by LSID to reduce the nitrate levels is a strong based ion exchange system. The project provides well pilot studies, selected outline design, equipment selection criteria and calculations that will be used to detail design the nitrate system for the well.

- **Plainview Wastewater System Improvements Project** – The County of Tulare conducted a feasibility evaluation of community sanitary sewer collection, treatment, and disposal alternatives to replace existing on-site septic systems. The final report recommended a project for the community that took into consideration capital and operational costs, impacts to Plainview residents, environmental considerations, and anticipated schedule for implementation. Public meetings were held within the community to discuss project alternatives and impacts, and communication with neighboring communities was conducted to determine the potential of consolidation of wastewater facilities.
- **Water Quality Issues within Plainview** – The Plainview Mutual Water Company (**PMWC**) has faced various water quality issues within its water system, as well as the Central Water System that is managed and owned by PMWC. Both systems have had issues with nitrates in the past, and 1,2-Dibromo-3-chloropropane (**DBCP**) and bacterial contamination of the primary well led to the PMWC receiving funds from the USDA, California Department of Health Services and the County of Tulare to drill a new well and replacing the outdated, severely deteriorated water distribution system. Construction of the project was completed in 2009.

In 2012, PMWC obtained the neighboring Central Water System on the western portion of the community. The Central Water System's sole well had nitrate levels that exceeded the MCL. The system also has a water distribution system with thin-walled leaky pipes, and the hydropneumatics tanks have also been prone to leaks. Upon acquiring the system, PMWC applied for state planning funds in 2013 to evaluate alternatives for replacing the contaminated well and distribution system. In May 2017, PMWC signed a funding agreement to start the planning project, which is scheduled to be completed in September 2018. Upon completion of the planning project, PMWC intends to apply for construction funding to drill a new well, acquire a new 250,000-gallon storage tank, replace the distribution system, and connect both systems to secure the reliability of delivering safe drinking water for the entire community.



## IV. Messages and Talking Points

Key messages and talking points will be broken down by phases and stakeholder groups, as different factors and issues will affect different groundwater interests. These messages and talking points are also prone to evolve as the GSP is developed, leaving this section open to be amended and finetuned as communication and engagement efforts move forward.

Fact sheets reflecting key messages will be developed and tailored for the specific GSP development, public review and implementation phases, and made available for public education efforts described in [Section V.A.3.2.](#)

### IV.A.1 Key Messages & Talking Points

#### IV.A.1.1 Universal Key Messages

Universal key messages will be a consistent part of fact sheets and talking points throughout all phases of GSP development, public review and implementation.

- What is SGMA
- Common Uses of Groundwater
- What is the Role of a GSA
- East Kaweah GSA Purpose Statement – “To develop and implement a GSP that uses a holistic approach to reach groundwater sustainability within the boundary of the East Kaweah GSA.”

#### IV.A.1.2 Phase 1: GSA Formation and Coordination

The Phase 1: GSA Formation and Coordination has been completed. During this phase, key messages centered around developing the Board of Directors, official formation of the GSA, and soliciting individuals who represent the interests of all beneficial usages and users of groundwater within the East Kaweah GSA boundary to fill the seats of the Advisory Committee.

#### IV.A.1.3 Phase 2: GSP Preparation and Submission

The first fact sheet was developed and made available on the GSA website, as well as distributed at public outreach meetings and community organization presentations. In addition to the universal key messages, the fact sheet for the GSP development and submission phase included:

- Timeline of the GSP process
- Agricultural Water Usage – Common practices and conservation efforts
- Educational agricultural statistics for community and economic impacts
- Top concerns – Every day usage/lifestyle impacts, economic impacts, land fallowing
- Direction on providing input/voicing concerns (outreach meetings, stakeholder surveys)
- Importance of imported water for people and economic viability

#### IV.A.1.4 Phase 3: GSP Review and Evaluation

Once the draft of the East Kaweah GSA’s GSP was completed, there was the option to develop a second fact sheet. This fact sheet would also consist of the universal key messages, while the rest of the content would be focused on:

- Timeline of the GSP process
- Main points/overview of the GSP
- Process for public review of GSP draft and providing comments to the GSA
- Additional key messages may be added for this phase.

A public comment form was developed in lieu of a fact sheet, and made available with the GSP link for download, and distributed at public outreach events.

#### IV.A.1.5 Phase 4: Implementation and Reporting

Once the East Kaweah GSA’s GSP has been submitted to the DWR, the implementation phase will begin, and key messages will be developed to be focus on implementation efforts that affect the secondary stakeholder groups, which will likely result in more than one fact sheet. As with the previous phases, universal key messages will be included.

### IV.A.2 Likely Questions or Issues and Responses

The “Likely Questions or Issues” list in **Table IV-1** will evolve through the GSP development, public review and implementation phases. This table will be updated with additional questions, and responses will be updated as the East Kaweah GSA’s GSP is developed and answers are more clearly defined.

**Table IV-1. Likely Questions or Issues**

Likely Question or Issue	Response	Phase
“Will I have to fallow my land?”	That information has not been determined yet, as we are in the preliminary stages of GSP development.	Phase 1 & 2
“How can I voice my concerns about how SGMA is going to affect me?”	The public is invited to attend Advisory Committee meetings and Board of Director meetings to be informed about the progress of GSA and GSP development. Public outreach meetings will be held in 2018, and stakeholder surveys may be completed online via <a href="http://www.ekgsa.org">www.ekgsa.org</a> , which will give the public a direct voice into the development of the GSP.	Phase 2
“How much water are we going to be able to pump?”	That information has not been determined yet, as we are in the preliminary stages of GSP development.	Phase 1 & 2
“Are our ag pumps going to be metered? If so, who is going to pay for it?”	That information has not been determined yet, as we are in the preliminary stages of GSP development.	Phase 1 & 2
“What types of management actions and/or projects can help improve groundwater conditions?”	That information has not been determined yet, as we are in the preliminary stages of GSP development.	Phase 1 & 2
“Can groundwater management activities improve water challenges in DACs?”	That information has not been determined yet, as we are in the preliminary stages of GSP development.	Phase 1 & 2

## V. Venues for Engaging

There are a variety of opportunities, venues and methods for the East Kaweah GSA to connect with and engage stakeholders throughout GSA formation, GSP development, GSP review, and GSP implementation phases. Stakeholder groups identified in **Section II** will be engaged in communication efforts as detailed below.

### A. Direct Stakeholder Outreach

#### V.A.1 Collaboration Meetings – Primary Stakeholders

As detailed in **Section II.A**, regular meetings with primary stakeholder groups are held during their regularly scheduled times. Members of the public and partners from other local agencies are encouraged to attend Board of Directors and Advisory Committee meetings to voice their thoughts and concerns throughout the GSP development, public review and implementation phases. Meeting notices and agendas are routinely distributed to the Interested Parties List and are posted on [www.ekgsa.org](http://www.ekgsa.org).

Primary stakeholder meetings are held:

- **Board of Directors Meetings** – Fourth Monday of every January, April, July, and October at 3 p.m., at the Exeter Courthouse Gallery, located at the 125 S. B Street in Exeter.
- **Technical Advisory Committee Meetings** – Second Friday of every month, 10 a.m. unless otherwise notified, at the Exeter Courthouse Gallery, located at the 125 S. B Street in Exeter.
- **Advisory Committee Meetings** – Third Monday of every month at 4 p.m. at the Exeter Courthouse Gallery, located at the 125 S. B Street in Exeter.

#### V.A.2 Educational/Outreach Public Meetings

##### V.A.2.1 Secondary Stakeholders

Educational/outreach public meetings were scheduled for Phase 2: GSP Preparation and Submission, Phase 3: GSP Review and Evaluation, and will be scheduled for Phase 4: Implementation and Reporting (see **Section VI** for the outreach timeline). These meetings have been, and will continue to be, important as the GSP will affect all groundwater users within the East Kaweah GSA's jurisdiction, and the impact of the SGMA implementation is significant. Since the beginning of the GSA formation phase, stakeholders have been inquiring about the impacts of implementation, while many stakeholders were unaware of the SGMA.

Spanish translation services are available at educational/outreach public meetings. Potential venues within the East Kaweah GSA are listed in **Table V-1**.

- **Phase 2: GSP Preparation and Submission** – Public meetings held during Phase 2 were geared towards an overview of SGMA, overview of the process of GSP development, public review and implementation (what stakeholders can expect), distribution of stakeholder surveys, and question/answer sessions. This segment of public meetings gave secondary stakeholders an opportunity to be involved in GSP development and share their thoughts and concerns.

- **Phase 3: GSP Review and Evaluation** – During Phase 3, the draft of the East Kaweah GSP was distributed for public review. During the public review period, public meetings were held at the same venues as during Phase 2 (**Table V-1**). The presentation included an overview of the GSP and gave stakeholders the opportunity to ask questions and provide informal comments on the draft in a public forum.
- **Phase 4: Implementation & Reporting** – Public meetings will be crucial during Phase 4, and will likely be ongoing to educate stakeholders on implementation requirements, guiding them through the steps to compliance and groundwater sustainability.

### V.A.2.2 Community Organizations & Others

Community organizations, public agencies and other entities are listed in **Table II-3**, and will be contacted to schedule opportunities to present at their respective meetings throughout the GSP development, public review and implementation phases. Presentations have included an overview on SGMA and why it is important to them, an explanation of the GSP development and implementation process, including an awareness of the public review period. In addition, East Kaweah GSA worked with these organizations and agencies to distribute stakeholder surveys, public outreach meeting notices, and educational information via email distribution, social media posts, and printed materials. This mode of communication will continue during the implementation phase.

### V.A.2.3 Meeting Notification Process

Stakeholders were invited to public meetings through direct mail by obtaining addresses of property owners within the East Kaweah GSA boundary through the geographic information system (GIS) databases or the County of Tulare. Postcards are most cost effective for mailing and can later be used to expedite meeting check-in and track attendance, if required during the implementation phases. Press releases will be distributed to local media outlets announcing the meeting dates, times and locations. Local community organizations, such as the Tulare County Farm Bureau, will be asked to distribute meeting notices via email blasts to their membership/contact lists.

### V.A.2.4 Ideal Venues

Venue locations will need to have a capacity to hold large audiences. The location list in **Table V-1** will be updated with additional information and other venue possibilities as meetings are scheduled, and venue availability and rental price is confirmed. East Kaweah GSA has worked with disadvantaged communities and community organizations such as Self-Help Enterprises, Community Water Center and Leadership Counsel for Justice & Accountability to hold outreach meetings at convenient times and locations within the DACs. This will continue during the implementation phase.

**Table V-1. Potential Public Meeting Venues & Locations**

Venue	Location
Exeter Veterans Memorial Building	Exeter, Tooleville, Tonyville
Lindsay Wellness Center	Lindsay, Strathmore, Plainview
Ivanhoe Elementary School	Ivanhoe
Stone Corral Elementary School	Stone Corral/Seville area

## V.A.3 Printed Communication

### V.A.3.1 Branding

Branding is defined as the process of creating distinctive and durable perceptions in the minds of a target audience. A brand is a specific look – a persistent, consistent, unique identity for an organization, making it easy for an audience to identify an organization through its consistent and frequent use of branding. The East Kaweah GSA has developed a brand that will be incorporated in all forms of communication and engagement with the public, which includes consistent usage of the official logo, fonts and colors. The East Kaweah GSA Branding Summary is included in [Appendix A](#).

### V.A.3.2 Printed Materials

Printed materials incorporate the visual imagery established through branding efforts and are tailored for specific means of communication throughout the phases of GSP development, public review and implementation. All printed materials are translated into Spanish.

- **Fliers** – Fliers are designed and tailored for secondary stakeholder audiences, and generally encompass infographics and text with key messages that are pertinent for that phase of the GSP process. Distribution may be conducted via direct mail, email, and direct distribution as handouts at schools, community organization meetings, East Kaweah GSA outreach meetings, or door-to-door. In some cases, particularly for outreach to DACs, the fliers are made available both in English and Spanish languages.
- **Fact Sheets** – Fact sheets are developed and updated for each of the GSP phases, and include a section with an overview of SGMA facts, and development, public review and implementation timelines. Fact sheets are made available for download on [www.ekgsa.org](http://www.ekgsa.org), distributed at public meetings and community organizations/entities meetings, and emailed to the Interested Parties List and other organizations' email distribution lists.
- **Letter Correspondence** – When letter correspondence is necessary, particularly during the public review and implementation phases, letters are distributed via email or direct mail. Letters may include pertinent facts and explanations that need to be communicated to stakeholders.
- **Presentation Materials** – Power Point presentations are utilized at educational/outreach public meetings. If a Power Point isn't possible to display for a meeting, display boards printed at 24-inch x 36-inch or larger in size will be used and set up on easels. Handouts of presentations and smaller versions of display boards may be distributed to stakeholders in attendance, and may also be emailed to the Interested Parties list. They are always posted on [www.ekgsa.org](http://www.ekgsa.org) for access by stakeholders as a recap of the meeting.
- **Stakeholder Surveys** – Digital creation and distribution of Stakeholder Surveys is discussed in [Section V.A.4](#). For stakeholders who do not have access to the Internet to complete Stakeholder Surveys online, hard copies were available at educational/outreach public meetings, and could be distributed via direct mail upon request. A Spanish version was also created for distribution within DACs. Once hard copy results were received, they were added to the Google Form version of the Stakeholder Survey in-house to efficiently tabulate survey results.
- **Generic Business Cards** – Generic business cards were created with East Kaweah GSA contact information for primary stakeholders to have on hand to give to secondary stakeholders who may want to contact the GSA directly.
- **Newsletter** – Annual or bi-annual newsletters will be created during the GSP implementation phase to inform stakeholders of compliance requirements and groundwater sustainability updates, opportunities and programs within the Kaweah sub-basin. The newsletter will be distributed to



those on the Interested Parties List, and will be finetuned to include others who have specific roles and requirements in GSP implementation.

- **Other Printed Materials** – Other printed materials may be needed to be developed during the GSP development, public review and implementation phases.

#### V.A.4 Digital Communication

Digital communication outlets will also be designed to incorporate East Kaweah GSA’s branding, and are a significant mode of communication through the GSP development, public review and implementation phases.

- **Website** – Public meeting notices, agendas and minutes of the Board of Directors and Advisory Committee meetings are posted on the East Kaweah GSA’s website, [www.ekgsa.org](http://www.ekgsa.org). This website serves as an integral resource for primary, secondary and other community stakeholders within the East Kaweah GSA boundary. Electronic files of printed materials, presentations and other educational resources, and a direct link to the Stakeholder Survey (English and Spanish versions) are accessible via the website.

As Fact Sheets are created during the development, public review and implementation phases, a PDF of the completed Fact Sheet will be incorporated into the current website sitemap, and will be updated as the Fact Sheet is updated/redesigned. This will serve as a way for stakeholders to easily educate themselves on the GSP process and phases.

- **Stakeholder Surveys** – Stakeholder surveys were discussed in **Section III.A**, and were used for the deliberate polling of secondary stakeholders to give them a direct voice in the GSP development phase. Stakeholder surveys were created via Google Forms, and a link was posted on the [www.ekgsa.org](http://www.ekgsa.org) website and utilized in email blasts to the Interested Parties list. Google Forms is free of charge to use, and survey results were easily exported into Excel to sort through. The distribution process of stakeholder hard copies is described in **Section V.A.3.2**, and a copy of the survey and summary of survey results is included in **Appendix B**.
- **Email Distribution** – As required by SGMA 10723.4 “Maintenance of Interested Persons List,” East Kaweah GSA maintains a contact list and regularly distribute emails to those who have expressed interest in the GSA’s progress. These emails consist of meeting notices and other documents that are pertinent to the East Kaweah GSA and communication efforts. This process will continue.

As outreach meetings are held, the email distribution list will grow through direct contact with stakeholders. As this list expands, a Constant Contact account will be established to more easily send out email blasts of news, digital version of the newsletter, and updates relevant to the interests of primary and secondary stakeholders within the East Kaweah GSA. A “Sign-up for East Kaweah Updates” form will also be posted on [www.ekgsa.org](http://www.ekgsa.org) so website visitors can sign up for the email distribution list directly.

Email blasts for meeting notices, stakeholder surveys, public review notices, and other crucial information will be coordinated with community organizations and stakeholder groups by utilizing their distribution lists. Examples of these organizations are Tulare County Farm Bureau, Lindsay Chamber of Commerce, and irrigation districts within the East Kaweah GSA boundary. A complete working list of organizations are listed in **Table II-3**.

- **Social Media** – Coordination for social media posts announcing upcoming meetings, stakeholder surveys, public review notices, and other crucial information will be coordinated with community organizations and stakeholder groups who operate social media sites through Facebook, Instagram,

Twitter, and others. A working list of these organizations and the number of followers are listed in **Table V-2**.

**Table V-2. Community Organizations Social Media Outlets**

Community Organization	Social Media Outlet/URL	Number of Followers
California Citrus Mutual	Facebook: @CaliforniaCitrusMutual	1,056
California Women for Agriculture – Tulare/Kings	Facebook: @California-Women-for-Agriculture-TulareKings	595
Community Water Center	Facebook: @communitywatercenter	1,669
County of Tulare	Facebook: @countyoftulare	2,442
Exeter Chamber of Commerce	Facebook: @exeterchamber	3,188
Exeter Eagles Aerie #3608	Facebook: @exetereaglesaerie	167
Exeter Lions Club	Facebook: @exeterlions	532
Lindsay Chamber of Commerce	Facebook: @LindsayChamberofCommerce	469
Self-Help Enterprises	Facebook: @selfhelpenterprises	2,053
Sequoia Riverlands Trust	Facebook: @sequoiariverlands	1,911
Tulare Basin Wildlife Partners	Facebook: @tularebasinwildlifepartners	423
Tulare County Cattlewomen	Facebook: @tularecountycattlewomen	461
Tulare County Farm Bureau	Facebook: @TulareCoFarmBureau	1,246
Tulare County Farm Bureau Young Farmers & Ranchers	Facebook: @TulareCoFarmBureauYoungFarmersandRanchers	530
Woodlake Lions Club	Facebook: @woodlakelionsclub	3,942

### V.A.5 Media Coverage

Press releases and public service announcements (**PSA**) are written and distributed to the media list of local newspaper publications, and television/radio stations. These press releases and PSAs will focus on notification of public engagement opportunities such as targeted stakeholder meetings, stakeholder survey circulation, public review/comment processes and opportunities, and GSP implementation.

Direct story pitches will be made when necessary through direct communication with news outlets throughout GSP development and implementation phases. These story pitches will focus on GSP development status updates, how public input is being used, and general overview of SGMA and how it will affect stakeholders (residents and industry) within the East Kaweah GSA boundary.

## VI. Implementation Timeline

The timeline for implementing the East Kaweah GSA’s Communication & Engagement Plan is broken down by phase:

- Phase 1: GSA Formation and Coordination – 2015 through 2017 (**Figure VI-1**)
- Phase 2: GSP Preparation and Submission – 2017 through 2019 (**Figure VI-2**)
- Phase 3: GSP Review and Evaluation – 2019 through 2020 (**Figure VI-3**)
- Phase 4: Implementation and Reporting – 2020 and ongoing

The timelines for Phase 1, Phase 2 and Phase 3 are now complete, and the timeline for Phase 4 will be developed once the phase has begun. The public review phase was held in accordance with SGMA’s public review standards and the implementation timeline will reflect that timeframe once a definitive timeline has been established with the completion and submission of the GSP.

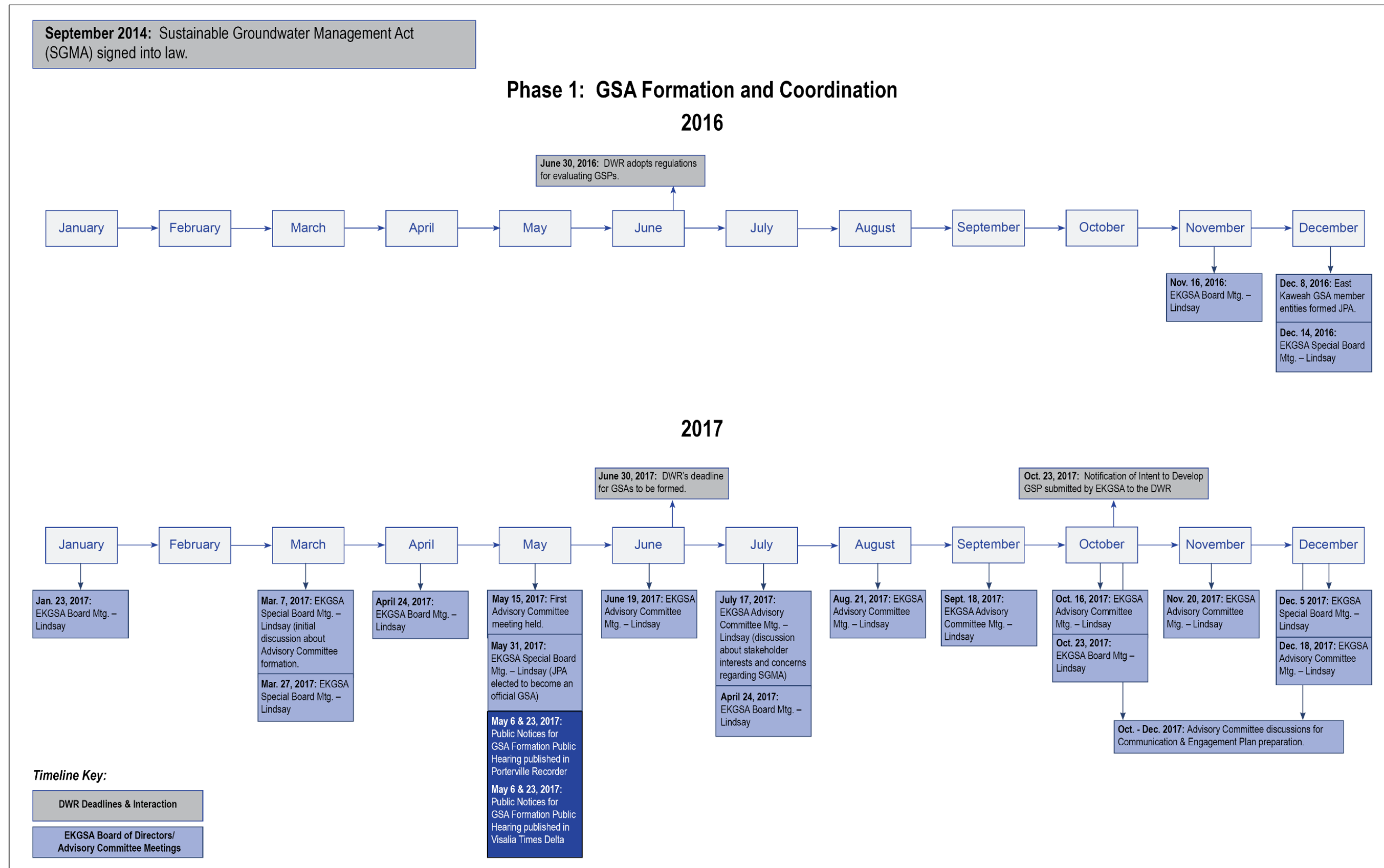


Figure VI-1. East Kaweah GSA Communication & Engagement Timeline – Phase 1: GSA Formation and Coordination

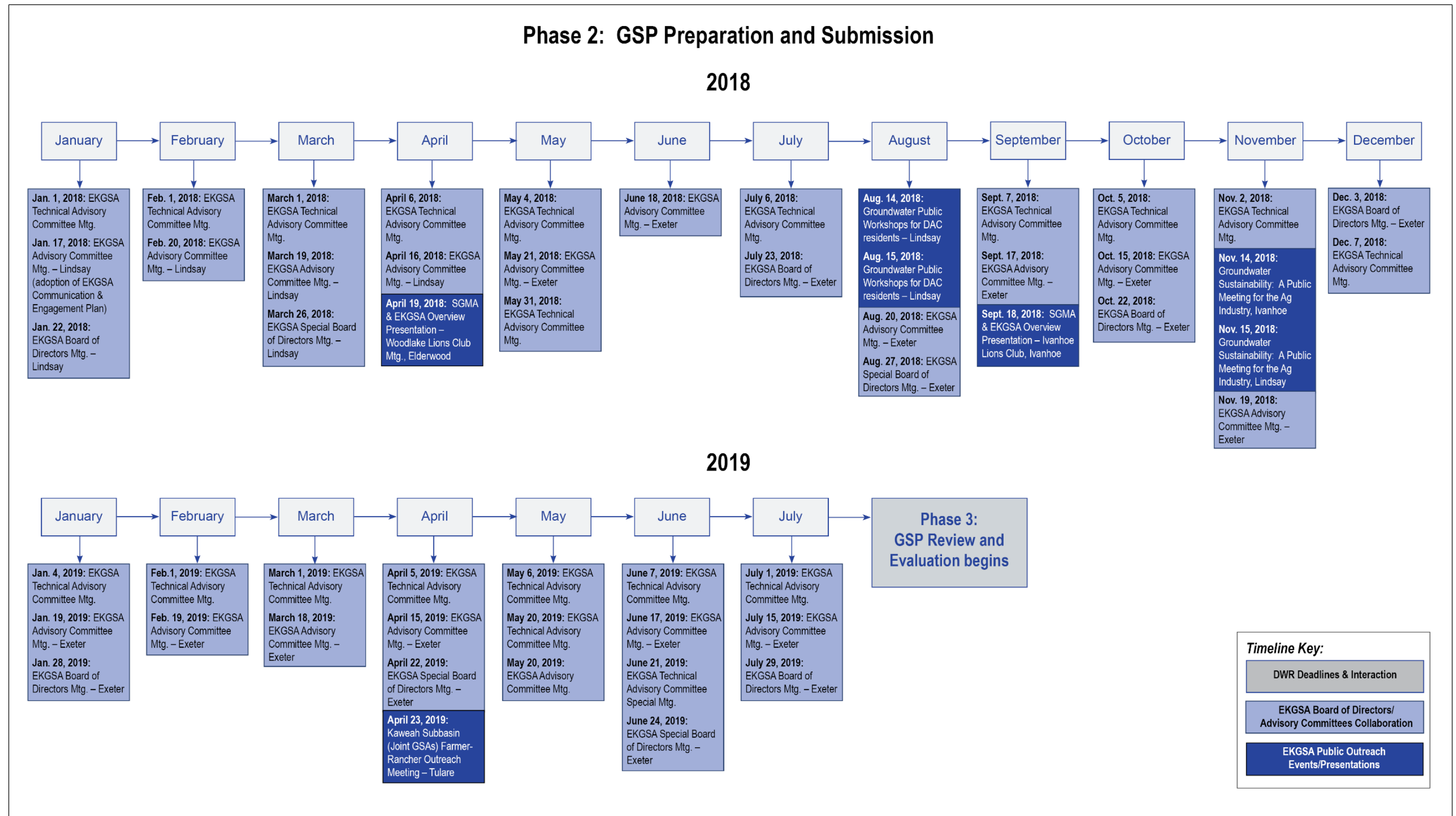


Figure VI-2. East Kaweah GSA Communication & Engagement Timeline – Phase 2: GSP Preparation and Submission



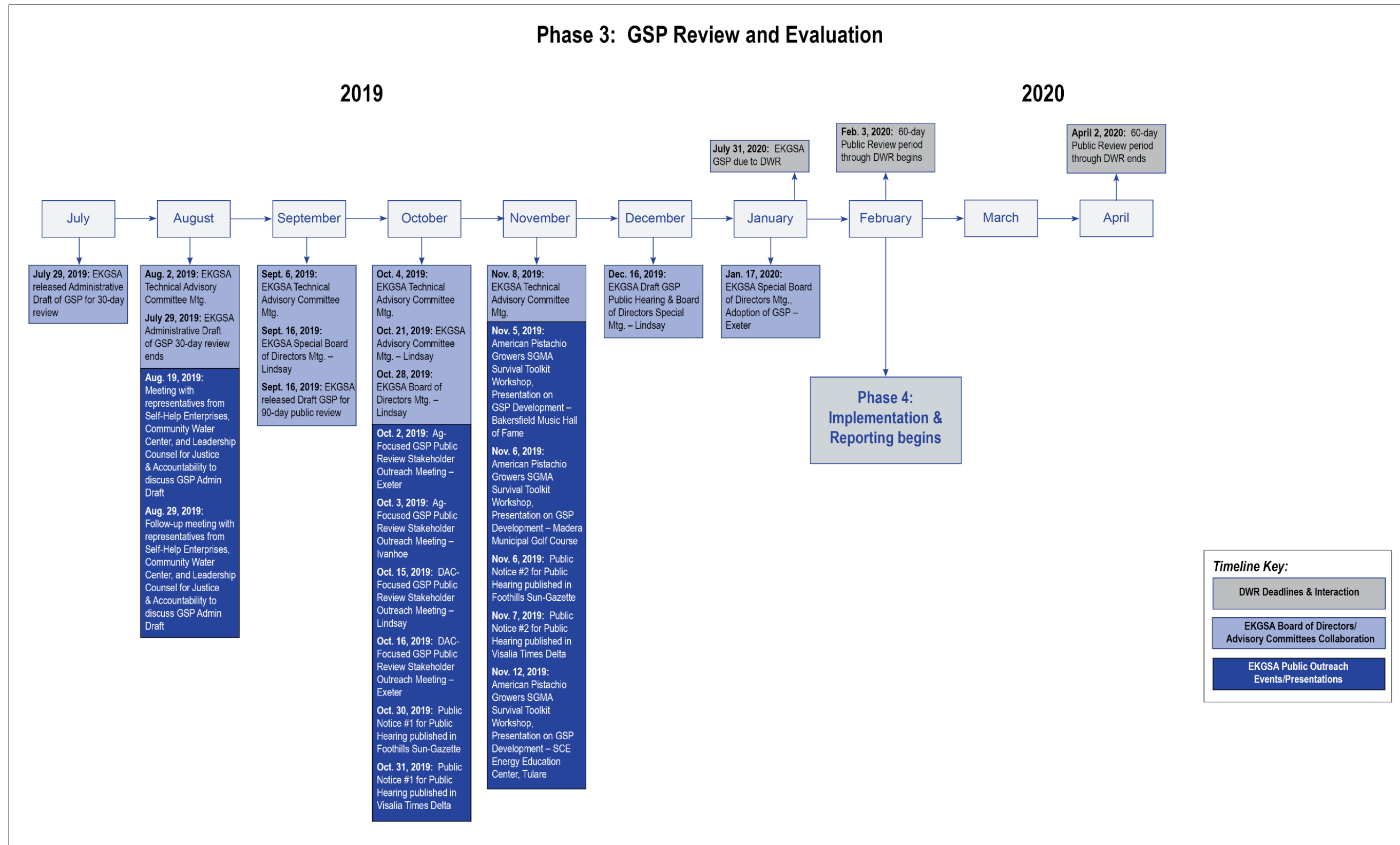


Figure VI-3. East Kaweah GSA Communication & Engagement Timeline – Phase 3: GSP Review and Evaluation

## VII. Evaluation and Assessment

### A. Evaluation and Assessment Process

Having an established “checks and balances” process is essential in keeping public outreach goals on target. SGMA and the resulting GSP will affect everyone within the sub-basin, and outreach efforts must be all-encompassing. To evaluate and assess how outreach efforts are performing as compared to the goals and objectives detailed in the Communication & Engagement Plan, the East Kaweah GSA has established a process:

#### VII.A.1 Monthly Outreach Reports to Advisory Committee

The Outreach Coordinator will provide monthly updates to the Advisory Committee. These updates will include, but will not be limited to:

- Status of upcoming outreach events, and recaps of past outreach events
- Milestone updates/revisions
- Review/input and approval of printed materials (fliers, fact sheets, talking points, etc.)
- Results and status updates of stakeholder surveys

#### VII.A.2 Quarterly Milestone Review

Once per quarter, the Outreach Coordinator will facilitate a more in-depth discussion with the Advisory Committee for feedback regarding communication and engagement efforts for the stakeholder groups the specifically represents. These discussions will cover:

- What has worked well?
- What hasn't worked as planned or could be finetuned for more effective results?
- Lessons learned
- Outreach needs that should be added to the implementation timeline
- Next steps

Following the quarterly review with the Advisory Committee, the East Kaweah GSA's Executive Director, GSP Engineer, Outreach Coordinator, and if necessary, the GSA Liaison, will meet to review public outreach status updates of tasks outlined in the adopted Communication & Engagement Plan, budget analysis, and feedback from the Advisory Committee. Milestone updates will also be discussed, as necessary, to keep up to date with GSP development and implementation phases, and then taken to the Advisory Committee for discussion and subsequent approval.

# Appendix A

## East Kaweah GSA Branding Summary

---

## East Kaweah Branding Summary



### Color Scheme

#### Full Color Logo

- Light Blue (“East”): CMYK (71-52-0-0); RGB (88-119-186)
- Dark Blue (“Kaweah” and water element): CMYK (97-87-0-0); RGB (37-68-156)
- Black (“Groundwater Sustainability Agency” and water derrick element): CMYK (0-0-0-100); RGB (35-31-32)

#### Black & White Logo

- Light Gray (“East”): CMYK (0-0-0-60); RGB (128-130-133)
- Dark Gray (“Kaweah” and water element): CMYK (0-0-0-80); RGB (88-89-91)
- Black (“Groundwater Sustainability Agency” and water derrick element): CMYK (0-0-0-100); RGB (35-31-32)

### Font

#### Logo

- “East Kaweah”: Rift font, Bold
- “Groundwater Sustainability Agency”: Rift font, Regular

#### Letterhead

- Address/Telephone on Envelope and Letterhead: Arial Narrow, 11 pt., Black
- Website on Letterhead: Arial Narrow, Bold, 16 pt., Light Blue
- Second Page Header: Arial Narrow, 9 pt., Black

# Appendix B

## Stakeholder Survey



# Stakeholder Survey

Date: \_\_\_\_\_

**Stakeholder Type (check all that apply):**

- Agricultural User    
  Domestic Well Owner/User    
  Municipal Well Operator    
  Public Water Systems  
 Environmental User    
  Surface Water User    
  Disadvantaged/Rural Community Resident

Note: The East Kaweah GSA is a public agency. Please complete your name and contact information if you'd like to be added to the GSA's email and mailing list for future updates and information regarding Sustainable Groundwater Management Act (SGMA) and the East Kaweah GSA.

**Name:** \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Email:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

1. Are you familiar with Sustainable Groundwater Management Act (SGMA) regulations?  Yes  No
2. Are you currently engaged in activity or discussions regarding groundwater management in this region?  Yes  No
3. Do you own or manage/operate land in this region?  Yes  No
4. Where are you getting your water supply?  Surface  Groundwater  Both
5. Agriculture & Domestic Well Users: What is your well(s) depth? \_\_\_\_\_
6. Agriculture & Domestic Well Users: Has your well(s) ever gone dry?  Yes  No  
If yes, when (month/year)? \_\_\_\_\_
7. How adequate is your current groundwater supply? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8. If you grow crops, do you use irrigation for frost protection?  Yes  No
9. Do you manage water resources?  Yes  No  
If yes, what is your role? \_\_\_\_\_
10. What is your primary interest in land or water resources management? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Would you be willing to receive information concerning potential groundwater recharge projects?  Yes  No

12. Do you have concerns about groundwater management?  Yes  No

If so, what are they? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. Do you have recommendations regarding groundwater management?  Yes  No

If so, what are they? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Other pertinent information the East Kaweah GSA should be aware of or take into consideration while developing the Groundwater Sustainability Plan (GSP)?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please return completed surveys to the East Kaweah GSA by emailing [tbarton@ppeng.com](mailto:tbarton@ppeng.com), faxing to (559) 636-1177, or mail to East Kaweah GSA, 315 E. Lindmore Ave, Lindsay, CA 93247.

**Stakeholder Surveys may also be completed online by visiting [www.ekgsa.org](http://www.ekgsa.org).**

# Encuesta de Partes Interesadas

Fecha: \_\_\_\_\_

**Tipo de Interesado (marque todas la que apliquen):**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Usuario Agrícola                            | <input type="checkbox"/> Usuario/Dueño de Pozos Domésticos | <input type="checkbox"/> Operador de Pozos Municipales |
| <input type="checkbox"/> Sistemas Públicos de Agua                   | <input type="checkbox"/> Usuario Ambiental                 | <input type="checkbox"/> Usuario de Agua Superficial   |
| <input type="checkbox"/> Residente de Comunidad Rural/ Desfavorecida |  |  |

Nota: El East Kaweah GSA es una agencia pública. Por favor complete su nombre y la información de contacto si desea ser agregado a la lista de correo/ o correo electrónico de la GSA para futuras actualizaciones e información sobre la ley de Administración de Aguas Subterráneas Sustentable (SGMA) y el GSA de East Kaweah.

Nombre: \_\_\_\_\_

Dirección Postal: \_\_\_\_\_

Ciudad: \_\_\_\_\_ Estado: \_\_\_\_\_ Código Postal: \_\_\_\_\_

Correo Electrónico: \_\_\_\_\_ Teléfono: \_\_\_\_\_

- ¿Está usted familiarizado con las regulaciones de la ley de Administración de Aguas Subterráneas Sustentable (SGMA)?  Si  No
- ¿Está usted actualmente involucrado en actividades o discusiones sobre la administración de aguas subterráneas en esta región?  Si  No
- ¿Usted es propietario o administra/opera tierra en esta región?  Si  No
- ¿De dónde recibe su suministro de agua?  Superficial  Subterránea  Ambas
- Usuarios de pozos Agrícolas Y Domésticos: ¿Cuál es la profundidad de su pozo (s)? \_\_\_\_\_
- Usuarios de pozos Agrícolas Y Domésticos: ¿Alguna vez se ha secado su pozo(s)?  Si  No  
Si la respuesta es Si, cuando (mes/año)? \_\_\_\_\_
- ¿Qué tan adecuado es actualmente su suministro de agua subterránea? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- ¿Si usted tiene cultivos, usa agua de riego para protección de las heladas?  Si  No
- ¿Usted administra recursos de agua?  Si  No  
Si la respuesta es Si, ¿cuál es su papel? \_\_\_\_\_
- ¿Cuál es su interés principal en la administración de recursos de agua o tierra? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. ¿Estaría dispuesto a recibir información acerca de los potenciales proyectos de recarga de aguas subterráneas?  Si  No

12. ¿Tiene alguna duda o pregunta sobre la administración de aguas subterráneas?  Si  No

Si la respuesta es Si, ¿cuáles son? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. ¿Tiene usted alguna recomendación sobre la administración de agua subterráneas?  Si  No

Si la repuesta es Si, ¿cuáles son? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. ¿Tiene usted alguna otra información pertinente que debería tener en cuenta el East Kaweah GSA para desarrollar el Plan de Sostenibilidad de Aguas Subterráneas (GSP)?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Por favor regrese la encuesta terminada al East Kaweah GSA enviando un correo electrónico a [tbarton@ppeng.com](mailto:tbarton@ppeng.com), mandando un fax al (559) 636-1177, o por correo a East Kaweah GSA, 315 E. Lindmore Ave, Lindsay, CA 93247.

**Esta Encuesta de Partes Interesadas también se puede completar visitando la página [www.ekgsa.org](http://www.ekgsa.org).**

## **The Sustainable Groundwater Management Act (SGMA) will affect everyone... We want to hear from you!**

As a water user in the East Kaweah Groundwater Sustainability Agency (GSA), your input is crucial for the development of the Groundwater Sustainability Plan (GSP). The attached Stakeholder Survey was developed to provide you with an avenue to voice your concerns and provide your valuable input.

### **Please complete the Stakeholder Survey one of two ways by May 18, 2018:**

1. Complete the attached survey and mail to East Kaweah GSA, 315 E. Lindmore Avenue, Lindsay, CA 93247 or email to [tbarton@ppeng.com](mailto:tbarton@ppeng.com).
2. Complete and submit the Stakeholder Survey online by visiting [www.ekgsa.org](http://www.ekgsa.org).

### **What Is SGMA?**

The Sustainable Groundwater Management Act (SGMA) is a combination of three bills passed by State Legislature and signed by California Governor Jerry Brown in 2014: Assembly Bill 1739, and Senate Bills 1168 and 1319. This legislation provides local agencies with the framework to manage groundwater basins in a sustainable manner, recognizing that groundwater is most effectively managed at the local level. Local agencies are tasked with forming groundwater sustainability agencies (GSA) that will develop and implement groundwater sustainability plans (GSP) to achieve and manage groundwater sustainability by 2040.

### **About East Kaweah GSA**

East Kaweah GSA is responsible for submitting a groundwater sustainability plan (GSP) to the California Department of Water Resources (DWR) by January 31, 2020, while working cooperatively with the Mid-Kaweah and Greater Kaweah GSAs to meet sustainability requirements for the Kaweah Sub-basin as a whole. Through the SGMA phases, the East Kaweah GSA's Board of Directors, Technical Advisory Committee and Advisory Committee will collect and organize data, engage and retain experts and consultants, and solicit feedback from beneficial users of groundwater and interested parties within the GSA boundary.



## Memorandum

**To:** East Kaweah GSA Board of Directors & Advisory Committee

---

**From:** Trilby Barton, Public Outreach Coordinator, Provost & Pritchard Consulting Group

---

**Subject:** Stakeholder Survey Results – Final Report

---

**Date:** January 21, 2019

---

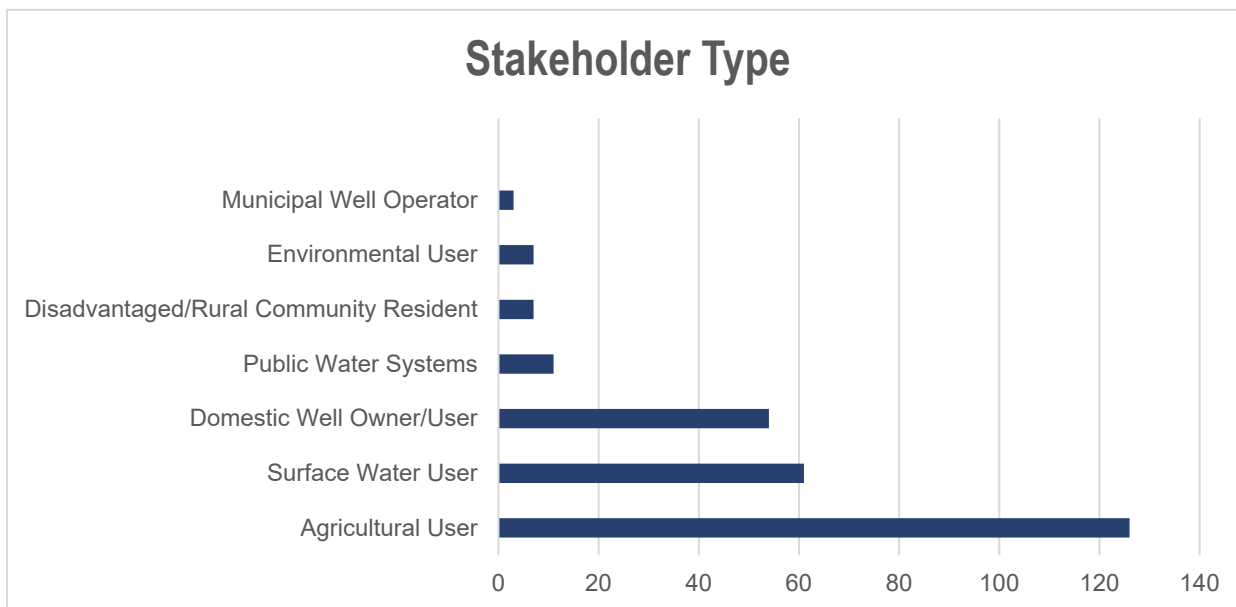
Hard copies and the link to the online version of the East Kaweah GSA's Stakeholder Survey (in both English and Spanish) were circulated throughout the East Kaweah GSA. Surveys were distributed to stakeholders at community organization meetings, sent to all member agencies' clients, and handed out at all East Kaweah GSA stakeholder outreach meetings. For this final report, the composite survey data was sorted through, and duplicate entries were removed. **East Kaweah GSA received a total of 147 responses.**

Reponses were received from nearly all stakeholder types identified in the East Kaweah GSA's Communication & Engagement Plan. Most responses were received from agricultural users, with surface water users and domestic well owner/users and surface water users following.

Overall, stakeholders are primarily concerned about the economic impacts that SGMA will have on the agricultural groundwater users within the East Kaweah GSA boundary.

This memo summarizes the data and comments received from the stakeholders who completed the survey.

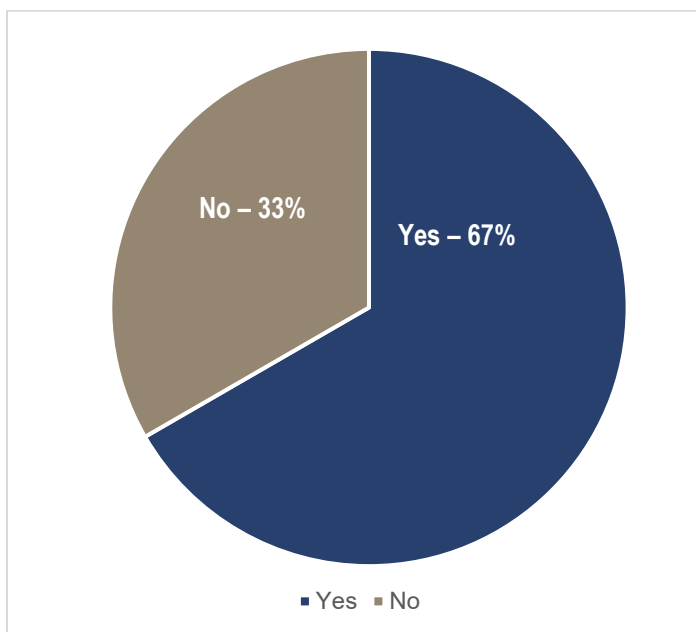
## Final Report of East Kaweah GSA Stakeholder Survey Results



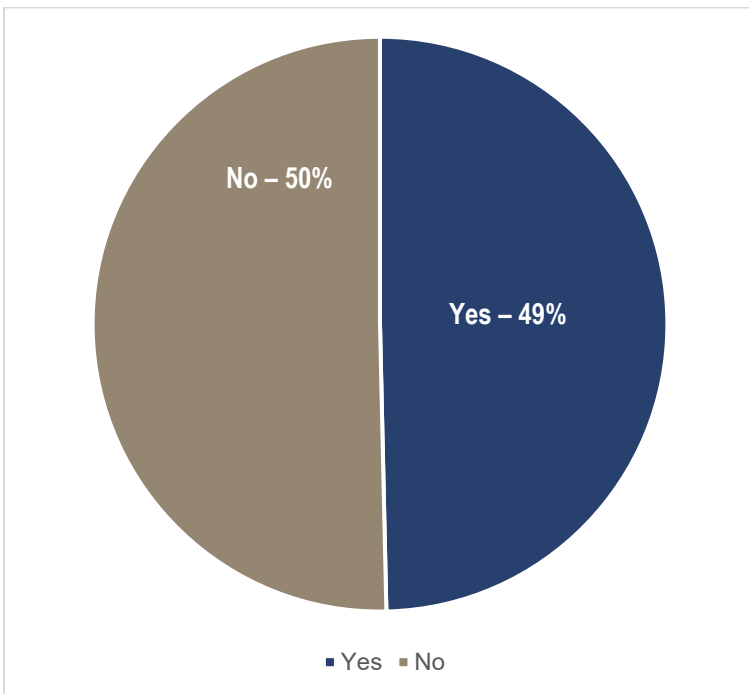
**Stakeholder Type:** (147 responses)

Agricultural User	126	Domestic Well Owner/User	54
Municipal Well Operator	3	Public Water Systems	11
Environmental User	7	Surface Water User	61
Disadvantaged/Rural Community Resident	7		

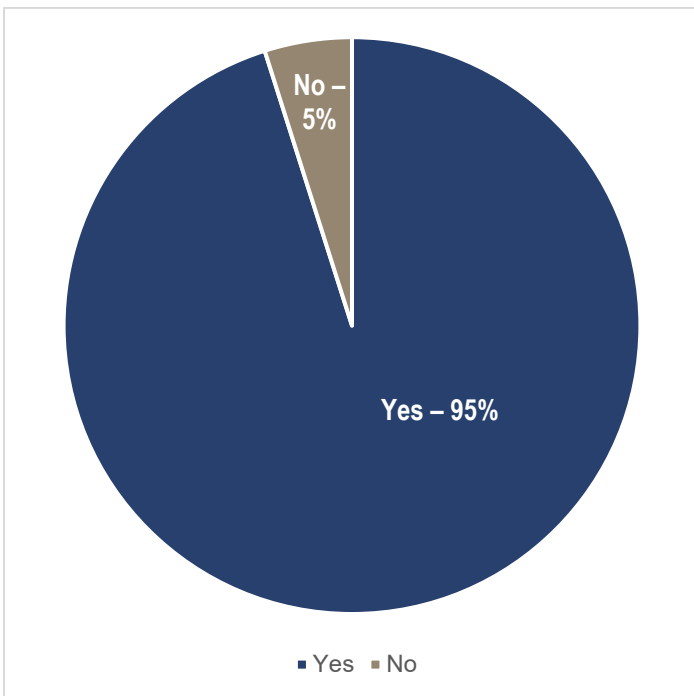
### 1. Are you familiar with Sustainable Groundwater Management Act (SGMA) regulations? (141 responses)



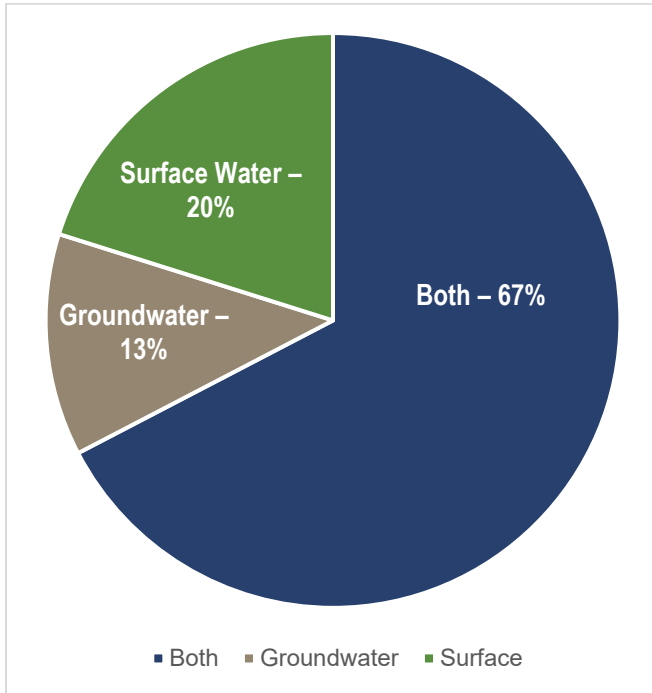
**2. Are you currently engaged in activity or discussions regarding groundwater management in this region? (141 responses)**



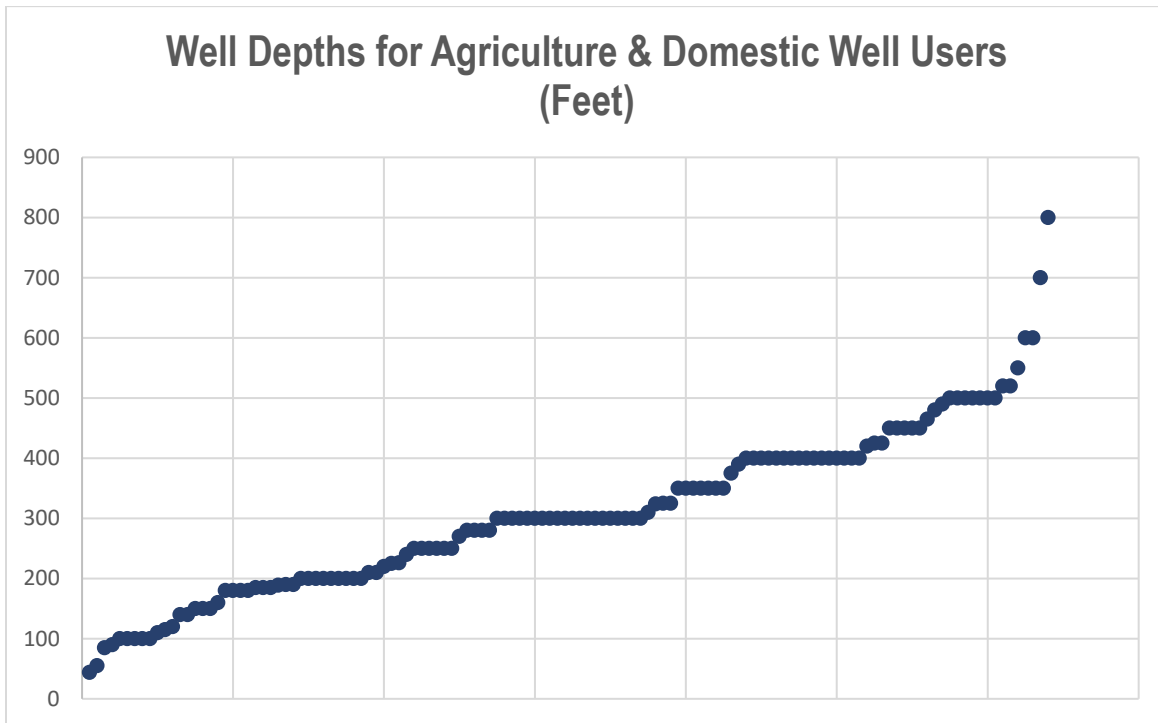
**3. Do you own or manage/operate land in this region? (144 responses)**



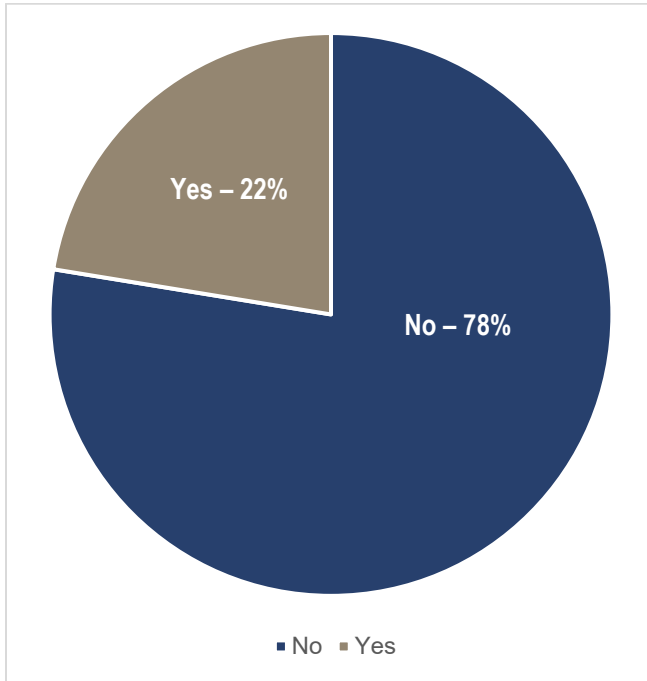
**4. Where are you getting your water supply? (144 responses)**



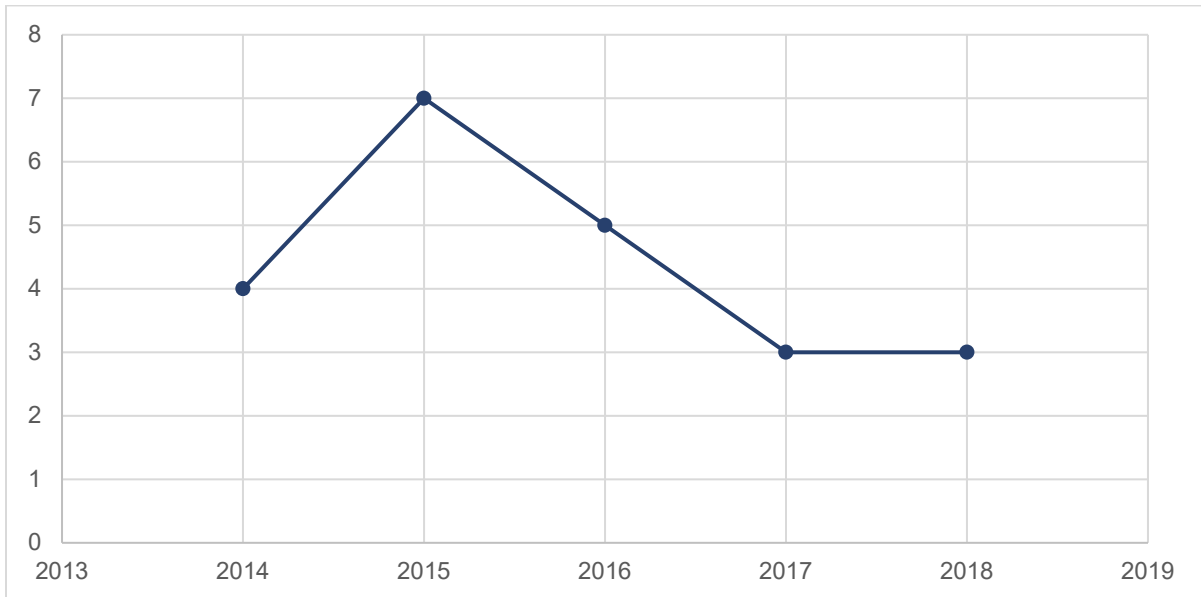
**5. Agriculture & Domestic Well Users: What is your well(s) depth? (95 responses)**



**6. Agriculture & Domestic Well Users: Has you well(s) ever gone dry? (107 responses)**



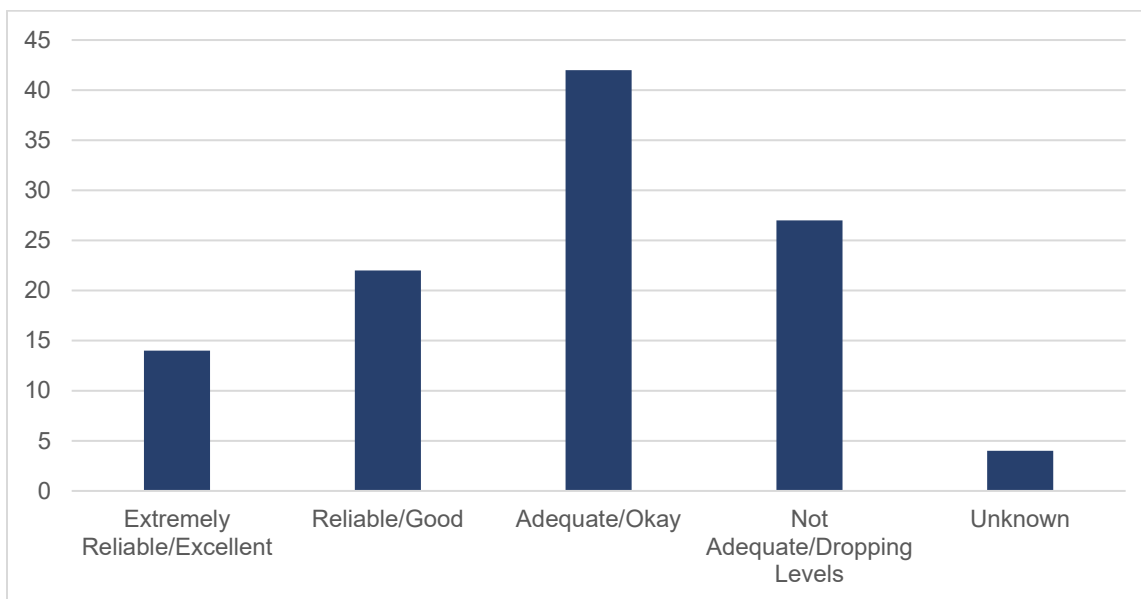
**If yes, when? (22 responses)**



**Additional Comments**

- It might as well be dry; it produces very little water
- Very weak, not much water
- New well last year

## 7. How adequate is your current groundwater supply? (110 responses)



### Additional comments regarding adequacy of groundwater supplies:

#### Reliable/Good

Drilled four new wells in the last five years

Good during wet years

We have what is necessary to maintain use

Good for now

So far supply as been good, but during drought, supply wasn't enough

Water level is about 55-foot

#### Adequate/Okay

Adequate as long as surface supply is reliable

Adequate at current aquifer levels

Adequate but not without the need of surface water supply. It's about half of what it was prior to 2012.

Adequate with sufficient rain and snow so I can rely on surface water and not use well water

Flow fluctuates

New well, only used two months in 2015

At the moment it's sufficient, but may require another well or two for future crop needs

It is variable, but have drilled new wells in place that were pumping sand. Constant concern for permanent crop farmer

#### Not Adequate/Dropping Levels

Haven't recovered from 2012-2016

Supply is limited

Well is at 50 percent of what it was 8-10 years ago; Depends on 80-90 percent of canal

40% of total needs

Groundwater supply is only adequate when used in conjunction with my surface water supply

Fractured rock aquifer only

Depend 100 percent on surface water for irrigation

With surface water in the area, it's declining at a slower pace

Drilling a new well

Can only get may 30-40 percent from the ground

Water is contaminated with chrome-6; water pressure problems

Barely adequate for emergency situations (long-term irrigation)

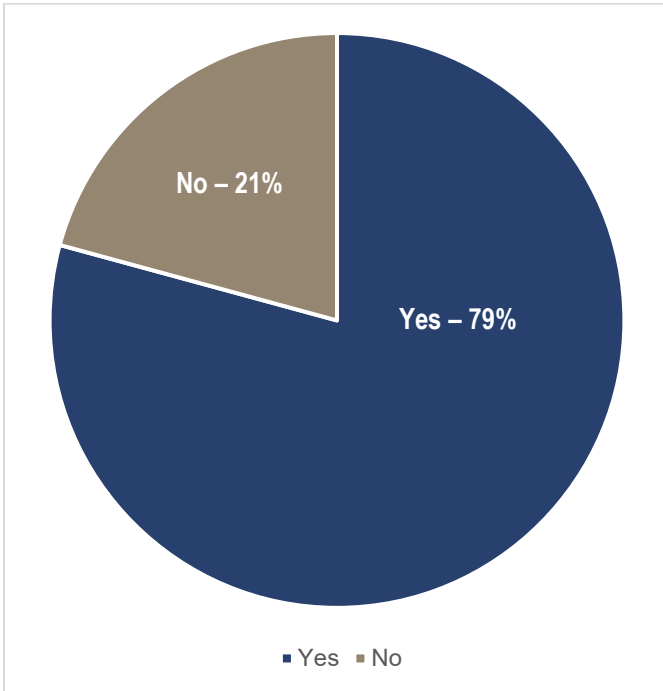
District has very low pressure, irrigation well partially collapsed

#### Unknown

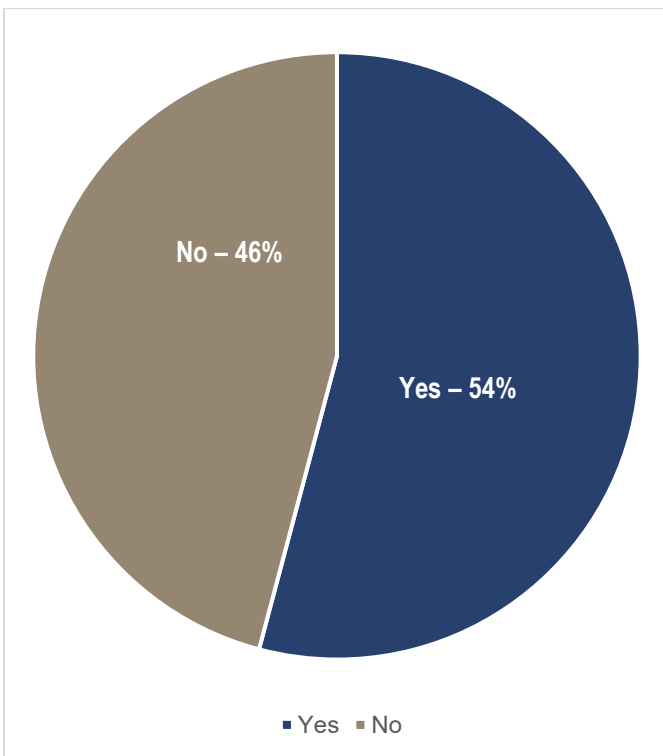
Currently using surface water, but have an option for groundwater use



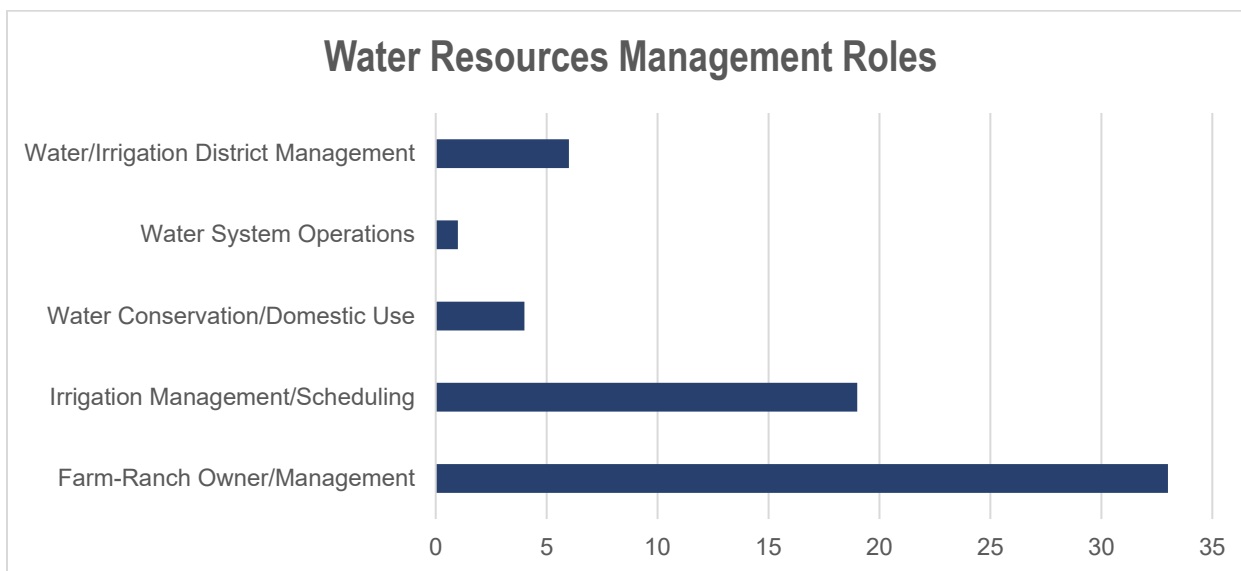
**8. If you grow crops, do you use irrigation for frost protection? (130 responses)**



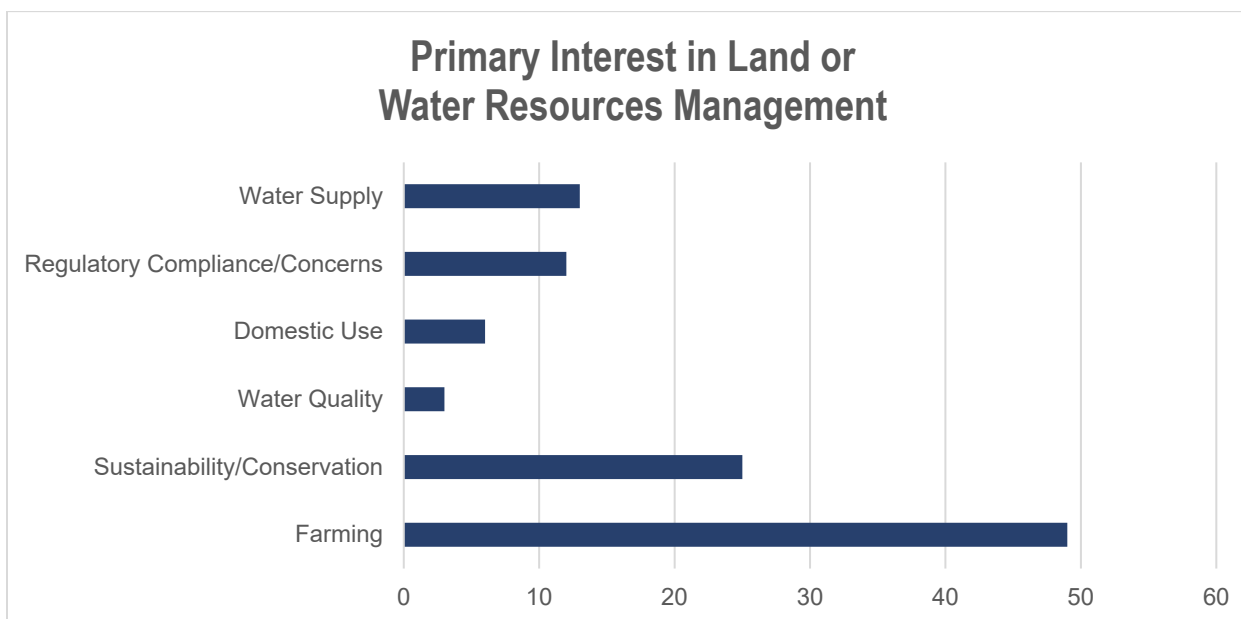
**9. Do you manage water resources? (133 responses)**



**If yes, what is your role? (63 responses)**



**10. What is your primary interest in land or water resources management? (109 responses)**



**Additional comments regarding primary interest in land or water resources management:**

**Water Supply**

Adequate for future demands, adequate/sufficient supply

Adequate surface water available

Maintaining adequate supply for farming and domestic needs

Finding a balance between surface deliveries and our current needs

Good and expedient use of available water and wise planning for future water use

Continue to receive water from the district

Managing limited water supplies, especially groundwater

Water for our future and our crops

For development to continue, water supply must be guaranteed	We need a dependable supply in balance with our growing areas
<b>Regulatory Compliance/Concerns</b>	
I want to ensure that I am complying with the law and protecting the water supply.	The laws that are forth coming
Inaccurate eastern boundary - includes fractured rock areas not included in DWR's SGMA	To get the state government out of controlling our H2O!
Make sure we don't get screwed by the State, and that water gets restored	To return to pre-2010 regulations and water use
Monitoring control over my property and its resources, not allowing a third party to make management decision for me	To utilize all water resources in an efficient and reasonable manner; I firmly believe we have a water storage problem due to lack of planning by our leaders
I want to ensure that I am complying with the law and protecting the water supply.	Use correct economic models to implement SGMA
Setting limits on pumping	The laws that are forth coming
That it is done fairly and equitably	Increased regulation and fees
<b>Domestic Use</b>	
Just interested in having drinking water for residence	Domestic use
Domestic and ag needs	
<b>Water Quality</b>	
Having good water	Water quality for domestic issues and environmental issues (avoid pollution)
Having good reliable clean water for drinking, washing laundry, etc.	
<b>Sustainability/Conservation</b>	
1) Having sustainable water for land and personal uses; 2) Having good clean water for all uses	Sustainability and cost of water supply; controlling excessive regulation of water
Conservation and management of water	Sustainability of groundwater resources
Conservation of water	Sustainable for future domestic and ag use
Don't waste the water - seems to be working	To ultimately be sustainable with our lack of water storage
Future source	Water availability and sustainability
Long term sustainability; Exeter ID needs a means of groundwater recharge	Sustainability - having enough water to grow crops
Zero waste	Water availability for long term planning
Stewardship	Well, I live on the planet and we will run out of water if people and practices don't change.
<b>Farming</b>	
Agriculture/farming use	Agricultural irrigation

Keeping our thriving citrus operation going for many years to come

Agricultural sustainability

Long-term irrigation

Need enough water to grow oranges; 40 acres in Tea Pot Dome has only groundwater

Being able to continue to farm and operate

I'm a farmer and worried that water well will dry up. I have lost due to drought.

Grow quality fruit for local and national world consumption - food & fiber; maintain and continue a standard of living that benefits society, which sustains its programs, other business and quality of life for all.

Ensuring that there is adequate supply to continue farming the land in a similar fashion as the past 50 years; managing groundwater quality/availability

Sustainable water supply for farming

Continue to farm well into the future

Orange grove and private home - which water is supplied from LSID and cannot be consumed

Citrus production

Determining irrigation needs of crop

To be able to sustain my investment in the agricultural land that is my living

To continue to live on and farm properties

To grow a crop, provide food for the world/self and to have a reliable source of water for my family

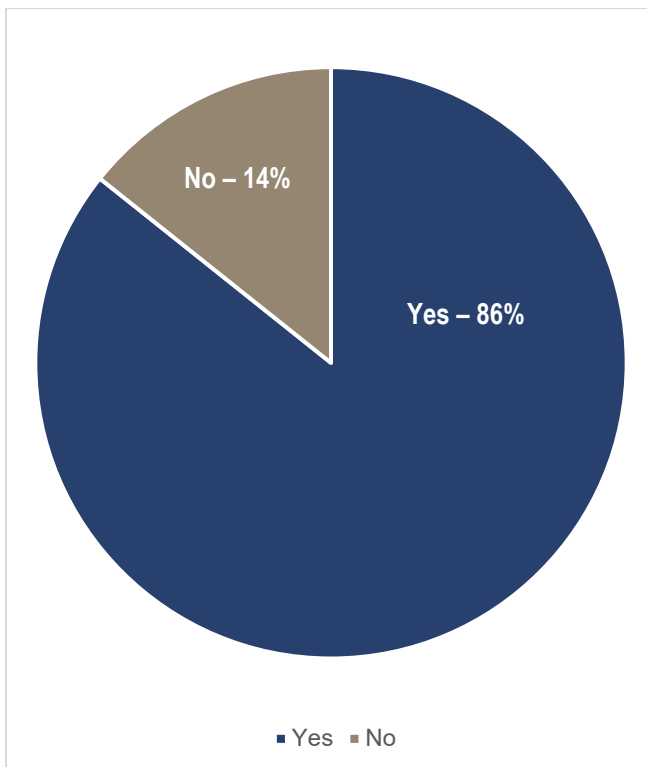
We grow citrus which is our sole crop. We need an adequate water supply approximately 3 ac ft per acre

To secure enough water to continue to farm now and into the future

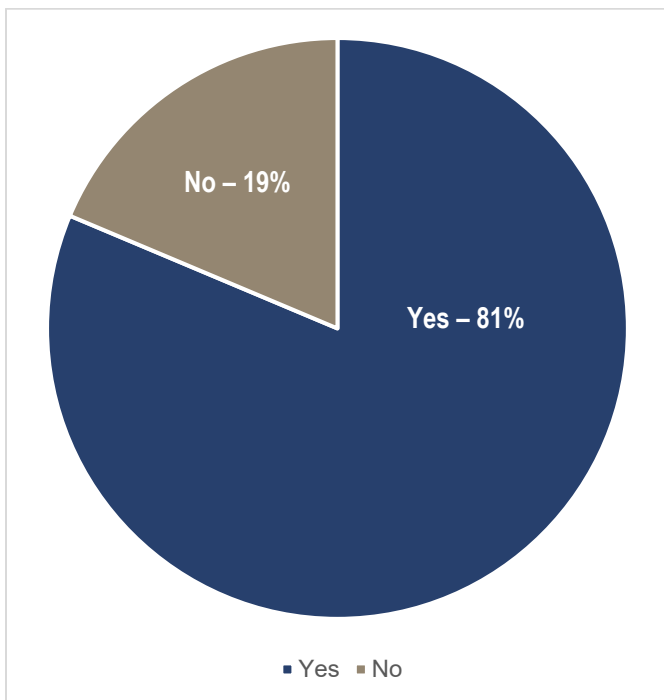
To have enough water to grow our crops

Crop irrigation, crop production

**11. Would you be willing to receive information concerning potential groundwater recharge projects? (133 responses)**



**12. Do you have concerns about groundwater management? (134 responses)**



**Comments regarding concerns about groundwater management: (92 responses)**

1) Depletion; 2) Responsible use; 3) Awareness in general of needs for conservation

Proper management

So long as the various stakeholders are reasonably represented in policy making and applicably applied and enforced on a fair basis. For example, I have been told of large farmer entities that have already drilled 1,000-1,500 ft wells and capped them for later use. Fair or no? Really concerned their biased groups State Water Resources Control Board with no real oversight, hijacks the real solution to California water dilemma. Are we all California citizens with equal rights or are we nothing but pawns to a few? Lawsuits should be filed up to the government Supreme Court.

1) Who owns this water the state is attempting to regulate; 2) What rights are being usurped; 3) Who makes the decisions as to what is most important, humans or environment; 4) What options do we as raisers of the food have when water is so regulated that we no longer sustain our livelihood

Real concern with limiting the amount of water allowed to pump

Any groundwater pumped into canal should not be transported outside the district and that farmer should not be credited for water outside that district...water laundering

Reducing pumping

Being able to stay in business

Shortage of water

Coordination and consistency in groundwater management is important to us

Smart growth needs to be a factor for municipal suppliers

Costs to participate along with regulations associated with future extractions

Definition of roles, transfer between management areas, how carryover will work

Putting limits on pumping

Eliminating groundwater pumping is not an option

So many conflicting interests/needs for groundwater, and so many users do not appear to truly understand what is happening as we move toward regulation.

Enough water to sustain 3 ac ft of water for citrus without fallowing acreage

Some are drilling new wells without any knowledge of the activities  
some not abandoning old wells properly when they drill a new well

Environmental and economic costs

Supply over future needs

Equitable watershed management of recharge capabilities

Sustainability

Excessive regulation/reporting/penalties; loss of and/or encroachment of private property rights and privacy; if we conserve, how do we know that others won't use what we have saved? Are we conserving as ag users just so cities can continue to grow?

That Ag users will be allotted a finite number of acre feet insufficient to product current crops.

Fallowing land

That agriculture remains a priority for this basin

Farming is my livelihood

That proper economic models are used

Groundwater recharge

That restrictions are put in place over time to make necessary management changes

How will the GSA manage or police the groundwater pumping? How will they phase in the pumping restrictions? Will we have to fallow land?

That true science and not politics drive decision making. Most science today has been corrupted

I am interested in groundwater management in this area. I teach irrigation at College of the Sequoias and know that SGMA will affect how we irrigate in the future, maybe not in the next two years but definitely in the next decade.

The cities keep building more houses, that calls for more groundwater usage.

I believe most permanent crop farmers are careful with their groundwater and strive to take/use only what they need. As farming moves to the west side (west of Road 196), farmers who are rotating crops multiple times a year and utilize flood irrigation appear to put a major stress on available water supplies.

The concern is we will be allowed to supply adequate water to our fruit trees.

I fear surface water has already been carved out by large well connected, hand holding and other large interests. I will be forced to a disappointing share at my loss and will be essentially forced out of business.

The existing recharge is inadequate, cities are over pumping as are large farming operations. Groundwater management has not included small farms.

I hope our irrigation district has sufficient groundwater supply when their supply of surface water runs low, and I hope that we have enough groundwater to meet our needs should we ever have to use it.

The government and environmentalists taking water from farms. I do all I can to conserve water - water at night, constantly checking misters, etc.

I want to see resources in Spanish.

The groundwater levels are dropping. I'm not certain that all people are conserving. In fact, I know they are not and this affects me.



I think it is important to be conservative with our water and yet reasonable at the same time. Crops need water. We all need to work together

If groundwater is in limited supply, how will be people be encouraged to conserve, and what will the future look like for those who come after us?

Inability to pump overlying rights

The management of groundwater in the future

Our valley relies on ag and needs enough water to farm. Farmers have invested and reduced water use massively over the past 20 years. Reducing water use further sounds good, but isn't really possible without a loss of crop or farmed acreage. Any reduction of water supply requires fallowing land, which will leave to a drastic loss of jobs for our valley.

Just like everyone else - over pumping and ground sinking

Not having a balanced approach among agencies, equitable funding sources, lack of cooperation among agency and both state and federal government

Limit the regulations and insure no financial burdens are imposed on users

Limits on pumping

Make sure we have groundwater and access to it in the future

Neighboring properties over using groundwater when surface water options are available.

When surface water is redistricted due to drought or other limitations, still need 1.8 to 2 ac ft/ac for permanent crop production

Not having the ability to farm due to government regulation

We want to know how SGMA works

Once draft of underground water and waste

Just concerned about conservation

Overdraft of groundwater

Overdraft/land level sinking-south Friant Kern Canal

Over-regulation

The implementation period for SGMA needs to be fully utilized. The 20-year period was specifically designed to allow for a slow implementation of the safe yield and other sustainable practices

It is an unknown at this point. I only hear speculation and a few hard facts.

The more wells put in, it seems the groundwater supply will be depleted, or substantially reduced

The State will try to take away our water

There are different classes a water users. Those with surface water and those without. I am concerned that the have's will sacrifice the have not's. Also, the State GSA agents do not care about the sub-basins, only the watersheds. Are the three GSA agencies within Kaweah going to work together? Most only care about their own self-preservation.

Too much going out and not enough coming in to keep a balance.

Water releases not being managed properly by the government; we need 100% of what was promised when the Friant was completed. Not 50% to start with like we have now.

Water table keeps dropping.

We are using too much groundwater.

We do not have adequate technical data to support any positions.

We don't have enough water in the state or at least need to use it wisely.

We need to keep more water from the dams and send less of that water to the oceans.

Number of wells and future water supplies; water for agriculture

What are the guidelines?

Length of time this process is taking

White paper areas

Putting limits on pumping

People who have wells should be able to sue them without interference from government

We need water to grow trees and fruit for profit

Over-regulation placing limits on well water draw and/or mandatory recharge as a condition of use of any new or existing well

Proper management

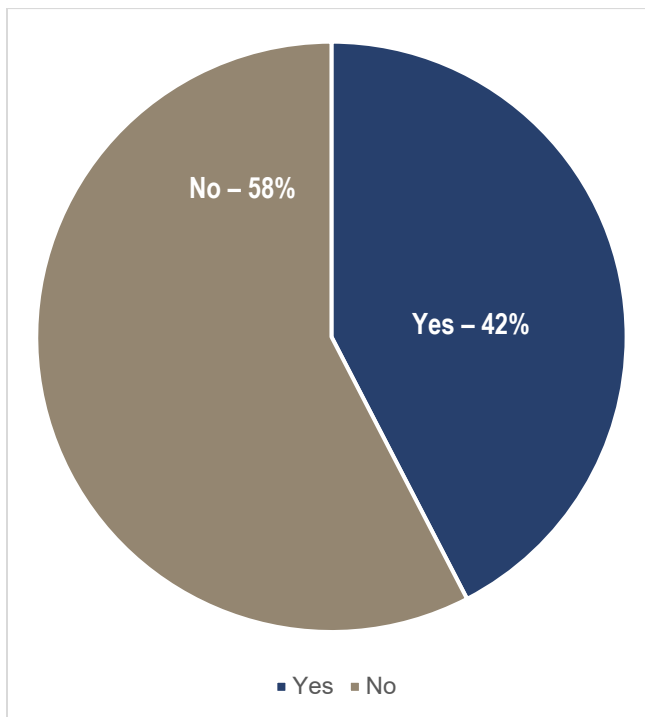
Problem that I see is people buying land for sole purpose of selling water.

Who will be making the decisions/framework, users, elected boards, good appointers? Will it be crop specific or flat per acre allotment? What kind of personal information will be required? What's to stop government takeover no matter what we come up with? Will it end up like air pollution control districts, ever increasing fees never good enough conservation? Will municipalities take precedence over farming needs?

Will I continue to be able to irrigate my orchard?

Who's managing, what's the approximate cost, who pays for it, and how effective will it be?

**13. Do you have recommendations regarding groundwater management? (125 responses)**



**Recommendations regarding groundwater management: (44 responses)**

1) Butt out!; 2) Balance surface deliveries with the groundwater; 3) Decide what is important: fish, rivers or people, and then act accordingly

1) Charge city people more; 2) Forbid any ag water to be moved/sold outside of district (not even to the same sub-basin)

1) Use 100% of surface water allocations; 2) Use low volume emitters; 3) EID adopt a better policy than 24-hour schedules. Pulse irrigation on small blocks is possible w/24 cycles.

All districts within the East Kaweah GSA need to work together, meaning EID, LSID, Lindmore, Ivanhoe, Stone Corral and others.

Balance between supply and area farmed

Be careful what you wish for

Bring in more surface water to use or for recharge

Build more storage

Conserve water, no over-irrigation

Continue your good work and make sure that conservation laws and clean water laws are really followed.

Cooperation and sharing

Develop plans to sink water from wet years and import water into our basin. Have workshops on irrigation monitoring and scheduling as a tool to save water. I think many people over-irrigate. Use shorter sets more frequently,

Don't allow exporting of water

Existing law/case law should be taken into consideration when developing policies or groundwater allocations in the GSP

If there are groundwater allocations, there should also be a groundwater market to give growers options for how they utilize the limited resource

Facilities need to be put in place where water can be bought or sold or otherwise traded. This should be doable for the small growers as well as the large growers.

Flexibility

GSA work together

I believe all pumps should have meters to measure the gpm and AF used. I have four of them and if you log the usage it becomes good information of what is actually being used and what is needed.

I would like to better understand the following: 1) Current water demand in the EKGSA; 2) Contract allocations of state and federal waters within the Kaweah Basin, and historical deliveries; 3) Subtracting 2 from 1 should calculate the groundwater demand over a period of time; 4) The issue is #2. We must fix the problems associated with wavering allocations from the Fed & State. Trevor Joseph (SGMA lead with SWRCB) does not communicate with California Water Commission.

I'd like to make sure water source is available in the future.

Increase storage and insuring adequate supplies to Delta south region

Increase surface water

Leave farmers alone

Let more surface water run through the canal systems so we can recharge

Market system

Moratorium on new water well drilling except for replacement wells and deepening existing wells

More local storage via groundwater recharge so we are not reliant on government. Kern County is already doing this purchasing water from more sources to make up for what we lose from Friant.

More water storage

Multi-year usage variation on allocations. Pump minimal when surface water is abundant, allow additional pump allocation

POW WOW Energy has an interesting product that can monitor well usage, perhaps a partnership with their product, or another, using incentive and grant money would help offset the initial cost of placing monitors on various wells.

Recharge water should only come from existing and/or new storm water catch reservoirs on percentage of stored water which is available, not from curtailment of well usage

Recharging groundwater at maximum

Restrict grass lawn irrigation, tax rebates for fake lawns

Restrict new wells/district amount people can pump, trim wells (big ag)

Simple...more surface water storage

Smart growth needs to be a factor for municipal suppliers

Tax water pumping and have local agency use this to purchase land that has a verifiable pumping history and remove it from production

That we continue to push for more storage, fill surface water allocations and manage our states' once-state-of-the-art water infrastructure system better at the state and federal levels

The current surface water infrastructure was built over 50 years ago when the population was significantly less. There has been no additional storage facilities built to accommodate this tremendous population increase.

The reason groundwater management has been successful in Australia is that the government is not exempt from water management laws. They also have their allocations and must purchase shares the same way any citizen does. If water shares are handed out in a hierarchy, and ag ends up with the scraps, it will cause for a devastating loss of jobs for our valley.

To be determined by farmers, not politicians or environmental groups. Farming as a whole needs to adapt to "best practices" policies as it relates to individual crops and irrigation. 1) Develop plans (extensive) for groundwater recharge - holding basins throughout the valley; 2) No furrow irrigation allowed in tree crops, other alfalfa, tomatoes, onions, assorted vegetables crops to be irrigated with best practices related to water saving practices; 3) All water processing plants (civic and industrial-related) must develop recycling plans for processing for water recharge; 4) All housing (city and county) must re-build/build to meet standards of water saving practices; 5) Mandated ordinances established throughout city-county for limited use of water; 6) If we can't get funding for Temperance Flat (a lie sold to the voters of California), then go with local funding of surcharges to municipal civic entities, and have owners, businesses, renters, farmers - ranchers, etc. get government grants (state and federal) to develop their own infrastructure of recharge; 7) As much as I don't like this idea, maybe we need to look at living away from our creeks (parts of them) to capture water and strategically fill recharge basins in the best locations for aquifers.

To use the water carefully

Use all surface water available, even if it is more costly than pumping groundwater

We would be in favor of creating recharge basins on our property, as it would be a possibility to help capture water in the high flow periods.

#### **14. Other pertinent information the East Kaweah GSA should be aware of or take into consideration while developing the Groundwater Sustainability Plan? (33 responses)**

1) Develop a plan for pumping credits and a market to sell them within the basin to allow people who want to farm to do that and encourage less profitable ground to be fallowed; 2) Allow individuals to get credit for sinking excess surface water they may have into the basin aquifer.

Are you overlapping or duplicating the work of the KBWQA? Do we need to reinvent the wheel? If not, some clarification should be provided to stakeholders about the role of each organization. Can they collaborate to avoid duplication of work and reduce cost?

Balance water usage with growers; recharge water now not to hinder current effective use of water today

Balance, trees are a long-term investment, we just have a very hard time not irrigating during these short years

Caution in over-regulating groundwater use for domestic wells, people still live on farms

Collaboration and coordination (but they are already aware of this!)

Concerned over areas included and boundaries of GSAs

Don't give away our groundwater to neighbor GSA

Farmers must thrive in order for California to thrive.

Go with truth not opinion, nor with ideology or politics

Grower credit for groundwater recharge from Friant-sourced surface water. Growers will get creative if a credit in SGMA is offered. Orchards with berms could take surplus flows and purpose for recharge

I appreciate the efforts being taken to comply with the law.

I appreciate what Ivanhoe Irrigation District does to get us as much water as possible. The more I can use district water (even if more expensive) saves using well. Excellent meeting! Appreciate all you are trying to do. We could not do it individually as a small grower.

I don't believe smaller growers should be subsidized, but their interests need to be protected in the development of the GSP. If not, we will be forced to sell.

It would seem that requiring farmers and other users to transition to more sustainable irrigation practices like micro-jet/dripper etc., would be a plan required to be implemented over some time horizon that is needed to participate in long term water management within the East Kaweah Basin.

Keep us informed on the GSA

Know all your communities well and hear their concerns (but it looks like you already have that in your plans)

No solution to our groundwater issues should be viewed as permanent.

Stop environmentalists from wasting water. Build more damn storage.

Surface water importers (contract or pre-1914) have priority.

The groundwater issue could be partially eliminated with increased water storage.

The importance of agriculture to the economy and the role water plays in that industry

We must fix the problems associated with wavering allocations from the federal and state. Trevor Joseph (SGMA lead with SWRCB) does not communicate with California Water Commission.

The LSID area is not an area that has a good supply of groundwater. Its quality is inferior for crops due to its high salt content. If we are limited to small amounts of surface water, that area, and the farmers that make their living off their land will be devastated. I hope and pray someone is listening with true common sense.

The most important issue I foresee is the "uncultivated" acreage that E.W. Merritt Farms and other businesses own within the SGMA boundaries. These acres need to be added to the total acreage allotment of water. For example, if we currently farm 1,000 acres within the boundary, yet we own an additional 4,000 that is currently uncultivated, I would like to see our total allotment of water/acre at 5,000, instead of only 1,000 irrigated acres. If this is unrealistic, then there will be a mass rush to develop the additional 4,000 acres, which may not be in the best interest of the GSA.

Want to make sure larger scale farmers don't get all of the water resources. I'm a small farmer and want to make sure my issues are addressed, and that water supply is available to small farmers.

We have a domestic well at home which irrigated three acres of citrus and on our well #2 block an ag well. We are in LSID and use surface water on our blocks when it is available, however, the environmentalists have ruthlessly curtailed water deliveries to the point the people of the valley are suffering both economically and physically. Enough is enough. Let's let Sacramento and Los Angeles go without.

We need additional storage dams for water

We need to create more storage, and on wet years we need to bank water.

We need to have resources in Spanish.

We want to have water for our homes.

What about water rights that were done 100 years ago when there were only a few people? Who owns Pine Flat Dam. Kaweah, Success??

White paper needs



# Appendix C

## Completed Outreach Efforts

## Completed Outreach Tracking

Meeting/Outreach Event	Date/Location
<b>2016</b>	
East Kaweah GSA Board of Directors Meeting	November 16, 2016, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	December 14, 2016, Lindsay Wellness Center
<b>2017</b>	
East Kaweah GSA Board of Directors Meeting	January 23, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	March 7, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	March 27, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	April 24, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	May 15, 2017, Lindsay Wellness Center
Public Notice for May 31, 2017 Public Hearing regarding GSA Formation published in Porterville Recorder	May 16, 2017; May 23, 2017
Public Notice for May 31, 2017 Public Hearing regarding GSA Formation published in Visalia Times Delta	May 16, 2017; May 23, 2017
East Kaweah GSA Board of Directors Special Meeting	May 31, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	June 19, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	July 17, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	July 24, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	August 21, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	September 18, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	October 16, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	October 23, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	November 20, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	December 5, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	December 18, 2017, Lindsay Wellness Center
<b>2018</b>	
East Kaweah GSA Technical Advisory Committee Meeting	January 12, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Special Meeting	January 17, 2018, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	January 22, 2018, Lindsay Wellness Center
East Kaweah GSA Technical Advisory Committee Meeting	February 9, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	February 20, 2018, Lindsay Wellness Center

Appendix C: Completed Outreach Tracking  
East Kaweah GSA Communication & Engagement Plan

Meeting/Outreach Event	Date/Location
East Kaweah GSA Technical Advisory Committee Meeting	March 2, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	March 19, 2018, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	March 26, 2018, Lindsay Wellness Center
East Kaweah GSA Technical Advisory Committee Meeting	April 6, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	April 16, 2018, Lindsay Wellness Center
SGMA & East Kaweah GSA Overview Presentation – Woodlake Lions Club Meeting	April 19, 2018, Woodlake Lions Rodeo Grounds
East Kaweah GSA Technical Advisory Committee Meeting	May 4, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	May 21, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	May 31, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	June 18, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	July 6, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Board of Directors Meeting	July 23, 2018, Exeter Courthouse Gallery
Groundwater Public Workshop for DACs	August 14, 2018, Lindsay Wellness Center
Groundwater Public Workshop for DACs	August 15, 2018, Exeter Memorial Building
East Kaweah GSA Advisory Committee Meeting	August 20, 2018, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	August 27, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	September 7, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	September 17, 2018, Exeter Courthouse Gallery
SGMA & East Kaweah GSA Overview Presentation, Ivanhoe Lions Club Meeting	September 18, 2018, Ivanhoe Lions Club Clubhouse
East Kaweah GSA Technical Advisory Committee Meeting	October 5, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	October 15, 2018, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	October 22, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	November 2, 2018, Provost & Pritchard Consulting Group's Visalia Office
Groundwater Sustainability: A Public Meeting for the Ag Industry	November 14, 2018, Ivanhoe Memorial Building
Groundwater Sustainability: A Public Meeting for the Ag Industry	November 15, 2018, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	November 19, 2018, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	December 3, 2018, Exeter Courthouse Gallery

Appendix C: Completed Outreach Tracking  
East Kaweah GSA Communication & Engagement Plan

Meeting/Outreach Event	Date/Location
East Kaweah GSA Technical Advisory Committee Meeting	December 7, 2018, Provost & Pritchard Consulting Group's Visalia Office
<b>2019</b>	
East Kaweah GSA Technical Advisory Committee Meeting	January 4, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	January 19, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	January 28, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	February 1, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	February 19, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	March 1, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	March 18, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	April 5, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	April 15, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	April 22, 2019, Exeter Courthouse Gallery
Kaweah Subbasin Farmer-Rancher Outreach Meeting	April 23, 2019, International Agri-Center, Tulare
East Kaweah GSA Technical Advisory Committee Meeting	May 6, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	May 20, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	May 20, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	June 7, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	June 17, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Special Meeting	June 21, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	June 24, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	July 1, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	July 15, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	July 29, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	August 2, 2019, Exeter Courthouse Gallery
Meeting with NGOs to discuss GSP Admin Draft	August 19, 2019, Provost & Pritchard Consulting Group's Visalia office
Meetings with NGOs to discuss GSP Admin Draft	August 29, 2019, Provost & Pritchard Consulting Group's Visalia office
East Kaweah GSA Technical Advisory Committee Meeting	September 6, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	September 16, 2019, Exeter Courthouse Gallery
Ag-Focused GSP Public Review Stakeholder Outreach Meeting	October 2, 2019, Exeter Memorial Building
Ag-Focused GSP Public Review Stakeholder Outreach Meeting	October 3, 2019, Ivanhoe Memorial Building
East Kaweah GSA Technical Advisory Committee Meeting	October 4, 2019, Exeter Courthouse Gallery
DAC-Focused GSP Public Review Outreach Meeting	October 15, 2019, Lindsay Wellness Center

Appendix C: Completed Outreach Tracking  
East Kaweah GSA Communication & Engagement Plan

Meeting/Outreach Event	Date/Location
DAC-Focused GSP Public Review Outreach Meeting	October 16, 2019, Exeter Memorial Building
East Kaweah GSA Advisory Committee Meeting	October 21, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	October 28, 2019, Exeter Courthouse Gallery
Public Notice for GSP Public Hearing published in Foothills Sun Gazette	October 30, 2019 & November 6, 2019
Public Notice for GSP Public Hearing published in Visalia Times Delta	October 31, 2019 & November 7, 2019
American Pistachio Growers SGMA Survival Toolkit Workshop – Presentation on GSP Development	November 5, 2019, Bakersfield Music Hall of Fame
American Pistachio Growers SGMA Survival Toolkit Workshop – Presentation on GSP Development	November 6, 2019, Madera Municipal Golf Course
East Kaweah GSA Technical Advisory Committee Meeting	November 8, 2019, Exeter Courthouse Gallery
American Pistachio Growers SGMA Survival Toolkit Workshop – Presentation on GSP Development & Kaweah Subbasin Update	November 12, 2019, Southern California Edison Energy Education Center, Tulare
East Kaweah GSA Draft GSP Public Hearing and Special Board of Directors Meeting	December 16, 2019, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	January 27, 2020, Exeter Courthouse Gallery

# Appendix 1-C

## List of Public Meetings



## Completed Outreach Tracking

Meeting/Outreach Event	Date/Location
<b>2016</b>	
East Kaweah GSA Board of Directors Meeting	November 16, 2016, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	December 14, 2016, Lindsay Wellness Center
<b>2017</b>	
East Kaweah GSA Board of Directors Meeting	January 23, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	March 7, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	March 27, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	April 24, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	May 15, 2017, Lindsay Wellness Center
Public Notice for May 31, 2017 Public Hearing regarding GSA Formation published in Porterville Recorder	May 16, 2017; May 23, 2017
Public Notice for May 31, 2017 Public Hearing regarding GSA Formation published in Visalia Times Delta	May 16, 2017; May 23, 2017
East Kaweah GSA Board of Directors Special Meeting	May 31, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	June 19, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	July 17, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	July 24, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	August 21, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	September 18, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	October 16, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	October 23, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	November 20, 2017, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	December 5, 2017, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	December 18, 2017, Lindsay Wellness Center
<b>2018</b>	
East Kaweah GSA Technical Advisory Committee Meeting	January 12, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Special Meeting	January 17, 2018, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	January 22, 2018, Lindsay Wellness Center
East Kaweah GSA Technical Advisory Committee Meeting	February 9, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	February 20, 2018, Lindsay Wellness Center

Appendix C: Completed Outreach Tracking  
East Kaweah GSA Communication & Engagement Plan

Meeting/Outreach Event	Date/Location
East Kaweah GSA Technical Advisory Committee Meeting	March 2, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	March 19, 2018, Lindsay Wellness Center
East Kaweah GSA Board of Directors Special Meeting	March 26, 2018, Lindsay Wellness Center
East Kaweah GSA Technical Advisory Committee Meeting	April 6, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	April 16, 2018, Lindsay Wellness Center
SGMA & East Kaweah GSA Overview Presentation – Woodlake Lions Club Meeting	April 19, 2018, Woodlake Lions Rodeo Grounds
East Kaweah GSA Technical Advisory Committee Meeting	May 4, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	May 21, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	May 31, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	June 18, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	July 6, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Board of Directors Meeting	July 23, 2018, Exeter Courthouse Gallery
Groundwater Public Workshop for DACs	August 14, 2018, Lindsay Wellness Center
Groundwater Public Workshop for DACs	August 15, 2018, Exeter Memorial Building
East Kaweah GSA Advisory Committee Meeting	August 20, 2018, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	August 27, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	September 7, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	September 17, 2018, Exeter Courthouse Gallery
SGMA & East Kaweah GSA Overview Presentation, Ivanhoe Lions Club Meeting	September 18, 2018, Ivanhoe Lions Club Clubhouse
East Kaweah GSA Technical Advisory Committee Meeting	October 5, 2018, Provost & Pritchard Consulting Group's Visalia Office
East Kaweah GSA Advisory Committee Meeting	October 15, 2018, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	October 22, 2018, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	November 2, 2018, Provost & Pritchard Consulting Group's Visalia Office
Groundwater Sustainability: A Public Meeting for the Ag Industry	November 14, 2018, Ivanhoe Memorial Building
Groundwater Sustainability: A Public Meeting for the Ag Industry	November 15, 2018, Lindsay Wellness Center
East Kaweah GSA Advisory Committee Meeting	November 19, 2018, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	December 3, 2018, Exeter Courthouse Gallery

Appendix C: Completed Outreach Tracking  
East Kaweah GSA Communication & Engagement Plan

Meeting/Outreach Event	Date/Location
East Kaweah GSA Technical Advisory Committee Meeting	December 7, 2018, Provost & Pritchard Consulting Group's Visalia Office
<b>2019</b>	
East Kaweah GSA Technical Advisory Committee Meeting	January 4, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	January 19, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	January 28, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	February 1, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	February 19, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	March 1, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	March 18, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	April 5, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	April 15, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	April 22, 2019, Exeter Courthouse Gallery
Kaweah Subbasin Farmer-Rancher Outreach Meeting	April 23, 2019, International Agri-Center, Tulare
East Kaweah GSA Technical Advisory Committee Meeting	May 6, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	May 20, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	May 20, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	June 7, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	June 17, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Special Meeting	June 21, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	June 24, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	July 1, 2019, Exeter Courthouse Gallery
East Kaweah GSA Advisory Committee Meeting	July 15, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	July 29, 2019, Exeter Courthouse Gallery
East Kaweah GSA Technical Advisory Committee Meeting	August 2, 2019, Exeter Courthouse Gallery
Meeting with NGOs to discuss GSP Admin Draft	August 19, 2019, Provost & Pritchard Consulting Group's Visalia office
Meetings with NGOs to discuss GSP Admin Draft	August 29, 2019, Provost & Pritchard Consulting Group's Visalia office
East Kaweah GSA Technical Advisory Committee Meeting	September 6, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Special Meeting	September 16, 2019, Exeter Courthouse Gallery
Ag-Focused GSP Public Review Stakeholder Outreach Meeting	October 2, 2019, Exeter Memorial Building
Ag-Focused GSP Public Review Stakeholder Outreach Meeting	October 3, 2019, Ivanhoe Memorial Building
East Kaweah GSA Technical Advisory Committee Meeting	October 4, 2019, Exeter Courthouse Gallery
DAC-Focused GSP Public Review Outreach Meeting	October 15, 2019, Lindsay Wellness Center

Appendix C: Completed Outreach Tracking  
East Kaweah GSA Communication & Engagement Plan

Meeting/Outreach Event	Date/Location
DAC-Focused GSP Public Review Outreach Meeting	October 16, 2019, Exeter Memorial Building
East Kaweah GSA Advisory Committee Meeting	October 21, 2019, Exeter Courthouse Gallery
East Kaweah GSA Board of Directors Meeting	October 28, 2019, Exeter Courthouse Gallery
Public Notice for GSP Public Hearing published in Foothills Sun Gazette	October 30, 2019 & November 6, 2019
Public Notice for GSP Public Hearing published in Visalia Times Delta	October 31, 2019 & November 7, 2019
American Pistachio Growers SGMA Survival Toolkit Workshop – Presentation on GSP Development	November 5, 2019, Bakersfield Music Hall of Fame
American Pistachio Growers SGMA Survival Toolkit Workshop – Presentation on GSP Development	November 6, 2019, Madera Municipal Golf Course
East Kaweah GSA Technical Advisory Committee Meeting	November 8, 2019, Exeter Courthouse Gallery
American Pistachio Growers SGMA Survival Toolkit Workshop – Presentation on GSP Development & Kaweah Subbasin Update	November 12, 2019, Southern California Edison Energy Education Center, Tulare
East Kaweah GSA Draft GSP Public Hearing and Special Board of Directors Meeting	December 16, 2019, Lindsay Wellness Center
East Kaweah GSA Board of Directors Meeting	January 27, 2020, Exeter Courthouse Gallery

# Appendix 1-D

## GSP Comment Matrix

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.1	Albetro Corona	City of Lindsay Resident	General	I would like to have more information about this agency and what it is they are doing in order to know/understand what it is I am supposed to support. I do not want groundwater levels to drop. I would like there to be enough potable water for everyone and water to sustain plants that we eat and that provide our jobs. I need more information.	Information on the EKGSA is included in Chapter 1. Information on SGMA is available on the Department of Water Resources (DWR) website. Additional notices and meetings will be held by the EKGSA and its partners through implementation of the GSP. Your participation is encouraged and appreciated.	No action at this time.
1-D.1	Concepcion Orozco	City of Lindsay Resident	General	I support what this agency is doing. I need more information so that I can make any recommendations. We want a plan that wont cost us more and that maintains groundwater levels	The EKGSA appreciates your support. More information will be shared through newsletters/mailers and meetings. Your participation is encouraged and appreciated. The EKGSA Board will be striving to implement the GSP in a manner than protects potable water and agriculture in a cost effective manner.	No action at this time.
1-D.1	Jose Manual Zepeda	City of Lindsay Resident	General	I support what this organization is doing, but I believe there needs to be more information in order to make any recommendations. I want a plan that maintains the levels of our groundwater, that provides potable water and also maintains agriculture, but a plan that wont cost me more.	The EKGSA appreciates your support. More information will be shared through newsletters/mailers and meetings. Your participation is encouraged and appreciated. The EKGSA Board will be striving to implement the GSP in a manner than protects potable water and agriculture in a cost effective manner.	No action at this time.
1-D.1	Emilia Montiel	City of Lindsay Resident	General	We support what this agency is doing, but we need more information in order to make specific recommendations. We want a plan that wont cost us more and that maintains groundwater levels.	The EKGSA appreciates your support. More information will be shared through newsletters/mailers and meetings. Your participation is encouraged and appreciated. The EKGSA Board will be striving to implement the GSP in a manner than protects potable water and agriculture in a cost effective manner.	No action at this time.
1-D.1	Maria Morales	City of Lindsay Resident	General	I would like to have more information so that I can understand what it is I need to support. I do not want groundwater levels to drop. I would like there to be enough potable water and also enough water to support agriculture.	The EKGSA appreciates your support. More information will be shared through newsletters/mailers and meetings. Your participation is encouraged and appreciated. The EKGSA Board will be striving to implement the GSP in a manner than protects potable water and agriculture in a cost effective manner.	No action at this time.
1-D.1	Salud Lemus	City of Lindsay Resident	General	I support what EKGSA is doing, but I need more information to make recommendations. I would like a plan that won't cost us more and that maintains the groundwater levels.	The EKGSA appreciates your support. More information will be shared through newsletters/mailers and meetings. Your participation is encouraged and appreciated. The EKGSA Board will be striving to implement the GSP in a manner than protects potable water and agriculture in a cost effective manner.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	Groundwater sustainability plans should remain a fluid, living, breathing, adaptive document which provides operational flexibility for the management team to use in maximizing water resources for the farm and rural communities impacted by the GSP implementation.	The EKGSA agrees with this comment and intends to re-visit the GSP as new data and information are available.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	Water pumped from this Subbasin should be applied here, care should be given to avoid impacts to our sustainability and safe yield. We discourage exportation of water out of the Subbasin where in would negatively impact local landowners.	The EKGSA (and Kaweah Subbasin) have not made a policy stance on this item. However, the intent will be to work within the legal confines allotted to the GSAs for managing groundwater and protecting the local beneficial uses and users.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	Plans should seek to address disparity amongst the landowners, and serve the white area and non-white area lands as equitable as possible. We encourage cautious and investigative due diligence in the development of a water market, or any model which may place certain landowners at a competitive disadvantage.	If a water market system is implemented, the EKGSA will thoroughly evaluate and request feedback from various stakeholders prior to establishing policy in an effort to make a system as equitable as possible.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	We encourage strategies which will protect agriculture land from fallowing, or retirement.	The EKGSA will keep this in consideration as implementation proceeds and management actions are evaluated.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	We encourage initiatives that will promote marginal or impaired land being used for recharge and the landowner receiving a financial incentive for making these changes in their cropping strategies.	The EKGSA will keep this in consideration as implementation proceeds and management actions are evaluated.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	We encourage plans to look at broad long-range and short-term ideas that will maximize bringing new non-native water supplies into our hydrologic basin for recharge, and the increase the supply available.	One of the EKGSA's goals will be to maximize the non-native water supplies (primarily Friant CVP) entering the area.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	We support GSPs that seek to study, investigate, and monitor basin conditions before significant disruptive management changes are required to landowners in their jurisdictions.	The EKGSA's intent is to perform full evaluations to the extent possible ahead of making drastic actions through policies or programs.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	We support sustainability goals that help unify each Subbasin and provide additional benefits for the cultivation of crops here in the Tulare Lake basin hydrologic region. We encourage projects to be advanced that promote maintaining agricultural acreage while minimizing the need to idle farmland.	The EKGSA will keep this in consideration as implementation proceeds and management actions are evaluated.	No action at this time.
1-D.2	Tricia Stever Blattler	Tulare County Farm Bureau	General	We support rigorous and relevant education to growers and landowners in the GSA's territory with frequent updates and opportunities for public outreach and feedback.	The EKGSA developed a Communications and Engagement Plan during the process and intends to utilize this plan for providing updates and requesting feedback from stakeholders.	No action at this time.
1-D.3	Karen Yohannes	Stakeholder	Appendix 2-H	Water Accounting Framework: General Apportionment Concern: I am concerned with the current allocation of seepage and how return flows of all appropriators to the salvaged/non-native yield is essentially allowing change to a water right with potential transfers of water to third parties to the injury of GW pumpers even though the seepage has existed for decades and the appropriators will have not physically changed anything on the ground or in their water rights to gain a very valuable credit to the injury of existing groundwater pumpers. The law may allow them to recapture the seepage of runoff for their own use, but that is very different from crediting them with water they have allowed to leave their property for decades and have taken no effort to recapture or prevent from doing so.	The EKGSA will follow existing groundwater law principles in determining any allocation of historical seepage or run-off. As the EKGSA develops any allocation policy in the future, the EKGSA will solicit input from stakeholders so legal concerns can be addressed.	No action at this time.
1-D.3	Karen Yohannes	Stakeholder	Appendix 2-H	The Salvaged category of apportionment to increase the native supply for all GW users. The following variables create uncertainly; Terminus Dam, built with public money by the Army Corps of Engineers, the lack of measurement of surface deliveries, application and actual seepage, leaves room for an apportionment to native supply for the shared benefit of the native supply for the Subbasin. The apportionment is not to be confused with actual projects, just irrigation return flows and conveyance seepage.	The EKGSA and Kaweah Subbasin intend to further evaluate and refine the values associated with the different "buckets" of the Water Accounting Framework as additional data becomes available.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.3	Karen Yohannes	Stakeholder	Ch. 5, Page 5-40	Methods for determining GW allocations: It should not be controversial that if you allocate GW on anything OTHER than actual/historic use, you have a greater probability to giving some folks more than they need and some folks less and the "pain" will be unevenly distributed to those that rely heavily on GW pumping. A proportional approach with historical AND current use are priorities that need to be considered when making pumping allocation decisions and	The EKGSA will keep this in consideration if developing a groundwater allocation policy is pursued. Detailed evaluation will be performed and input from all stakeholders will be requested ahead of developing such policy.	No action at this time.
1-D.3	Karen Yohannes	Stakeholder	Ch. 5, Page 5-40	Comment regarding the "Comprehensive Allocation Method Table 1," the prescriptive right allocation needs to be viewed with the concept of "Self Help" of neighboring farmers that have proven production and other evidence of GW use. It is my opinion that mutual water companies and entities claiming prescription should not be allocated a greater apportionment for their growers than the correlative amount designated for overlying right holders.	The table in reference was provided as a list of potential options the EKGSA could use if an allocation is pursued in the future. No determination of a set method has been made. The EKGSA will keep this comment in consideration for future development.	No action at this time.
1-D.3	Karen Yohannes	Stakeholder	Ch. 5.3.4, Page 5-45	GW Marketing/Trading: GMT 1 Carryover Structure Comment: Please consider the determination of this policy by hydrogeological science and monitoring to avoid impacts to neighboring GW users and sustainability.	The EKGSA intends to develop policy with technical backing and input from stakeholders. Monitoring through the proposed Monitoring Network (and potentially other monitoring mechanisms) will be used to evaluate negative impacts and Undesirable Results.	No action at this time.
1-D.3	Karen Yohannes	Stakeholder	Ch. 5.3.4, Page 5-45	Request to change the words "AND" to "WITHIN": The sentence in the second paragraph "The EKGSA may consider exploring some of these options with neighboring GSA's "AND" Subbasin wide for an aggregated approach and mutual cost savings." The word "AND" implies trading with neighboring GSA's potentially outside the Subbasin. This could have impacts to sustainability, impact supplies and access to our own GW users in our own Subbasin, creating further disparities for access and supply for GW users within our Subbasin. By changing to "... neighboring GSA's 'WITHIN' Subbasin" maintains our priority as a Subbasin.	The intent of this sentence is that the EKGSA may look to develop a market/trading structure with a neighboring GSA (i.e. GKGSA) and (or) look to develop a market/trading structure for the entire Kaweah Subbasin (i.e. Subbasin-wide). <b>Sentence re-written as: "The EKGSA may consider exploring some of these options with the Subbasin GSAs for an aggregated approach and mutual cost savings."</b>	<b>Yes, text revision.</b>
1-D.4	Mario Zamora	City of Lindsay Attorney		Lindsay water demands to confirm: a) 2.48 MGD, b) 2.82 MGD, c) 1,100 AF/Year.	Based on years 2013-2019 (not including 2014 and estimating Dec 2019 usage), the six-year average is 2.21 MGD. This is actual water produced from all three supply sources, NOT metered water. -Michael Camarena	No action at this time.
1-D.4	Mario Zamora	City of Lindsay Attorney		Does Lindsay support GW recharge projects, financially and politically?	Yes, but commitment of City funds would need approval through City budget processes. - Michael Camarena	No action at this time.
1-D.4	Mario Zamora	City of Lindsay Attorney		Projects identified in Draft GSP; a) Willing to support and help?	Yes, but restricted to approval through City budget process. - Michael Camarena	No action at this time.
1-D.4	Mario Zamora	City of Lindsay Attorney		Projects identified in Draft GSP; b) GSA communication with city staff regarding projects?	City staff and Board member Watson have been involved and aware the projects identified and support the projects. - Michael Camarena	No action at this time.
1-D.4	Mario Zamora	City of Lindsay Attorney		Options of recharge based on already owned properties.	City owned properties include open space (parks), general facilities and storm drain basin facilities. Land use, zoning, proximity to adjacent facilities and improvements all factor into whether recharge facilities would be practical on owned properties other than those already improved for storm drain basins. - Michael Camarena	No action at this time.
1-D.4	Mario Zamora	City of Lindsay Attorney		Any city stormwater basins could attach surface water supplies to?	Possibly. This is a project that is already identified on the current list. - Michael Camarena	No action at this time.
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	Ch. 1.1.4, page 1-8	The GSP recognizes the Stone Corral Ecological Reserve that is owned by the Dept. The Dept owns 2 small parcels (13.5 and 80 acres) within the GSA. These lands are primarily managed for terrestrial State and Federal listed species and do not have any wells.	Comment Noted.	No action at this time.
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	Ch. 1.1.5, page 1-29	The GSP does not thoroughly identify environmental beneficial users of groundwater. The Department recommends identifying and elaborating on potential environmental uses and users of groundwater in the Notice and Communications Section.	The focus of this section is for describing the agency/party that would be interacting with the EKGSA on behalf of a beneficial use. <b>The text was modified to expand upon to include description of environmental uses such as GDEs, creeks, and species. CDFW is now listed as an agency the EKGSA would be interacting. At a minimum, this will be the case through the CEQA process on projects and management actions.</b>	<b>Yes, text revision.</b>
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	Ch. 2.4.5, page 2-71	The GSP offers an incomplete analysis of interconnected surface waters (ISW). The Department recommends the GSA consider actions to reconcile the data-poor and geographically incomplete analysis.	As mentioned in the comment, there are data gaps for this analysis which the EKGSA intends to remedy by developing new wells and gauges early on in the GSP Implementation period. As more information is available, the EKGSA will reevaluate the potential GDEs and interconnected surface waters within the boundary. Use of the numeric model will be evaluated. Pending the available data and model set-up, this may or may not provide necessary insight.	No action at this time.
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	Ch. 2.2.7.2, pages 2-26 to 2-27, and Ch. 2.4.6, pages 2-71 to 2-72	The GDE identification sections are based on very limited information to demonstrate exclusion of ecosystems that may depend on GW. The Department concurs there is a lack of info and additional studies and data collection is needed to identify GDEs. The Department recommends evaluating depth to groundwater over a more robust baseline, performing field verification, and evaluating additional references.	As mentioned in the comment, there are data gaps in the areas of the EKGSA where interconnected surface water and GDEs may occur. The EKGSA intends to further study these areas and is open to teaming with certified biologists for field verification. The decision to use the National Wetland Inventory as a starting point is due to the ability to map information for the current evaluation. Other references can be used and combined with field verification and other data to better evaluate presence and impacts. <b>Preliminary mapping for different year types through the base period was added to Figure 2-29 to account for inter-seasonal and inter-annual variability of GDE Demand.</b>	<b>Yes, added analysis.</b>

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	Ch. 3.4, page 3-14 onwards	SMC demonstrate no consideration of undesirable results of environmental beneficial uses and users of GW and MTs do not reflect a 'Critically Overdrafted' Basin status. Environmental users are likely to suffer significant impacts in UR conditions. The Department recommends that discussion of how environmental users were considered during the creation of the SMCs and reconsider SMC with additional data to be gathered. The Department recommends that MTs reflect the 'Critically Overdrafted' status and not allowed continued depletion over the next two decades.	It is important to remember the EKGSA will be managing to the MO and not the MT, so the management of groundwater is not geared toward decline. The MT as they currently stand are reflective of conditions in the 1940s prior to the CVP. The EKGSA intends to use this surface supply and the tools within SGMA to manage sustainably at MOs. If levels do hit MT, there would be undesirable results for all beneficial uses and users in the Subbasin, including the environment. Additionally, the characterization of the GSP text example as "plummeting shallow groundwater depths" is a poor description and sets a narrative that is unfounded. The groundwater level depth at the perched aquifer recovered back to an 8' depth in 2016, a below average (dry) water year.	No action at this time.
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	Ch. 4, page 4-1 onwards	The number and distribution of groundwater monitoring wells in the Plan Area and along the surface waters in the GSA are insufficient for analysis of shallow GW trends and GW-surface water interconnectivity. The Department recommends expediting installation of additional shallow groundwater wells near potential GDEs and interconnected surface waters.	The EKGSA intends to install the additional groundwater monitoring wells as shown in Figure 4-1 early on in the GSP Implementation. These new wells may be multiple-completion pending site specifics. They will be used to further evaluate shallow groundwater, where applicable, in order to bolster the understanding interconnectivity and guide future policies and actions by the EKGSA.	No action at this time.
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	Ch. 5, page 5-1 onwards	Demand reduction management actions critical to Kaweah Subbasin sustainability goal achievement are deprioritized in the Project and Management Actions chapter. The Department recommends earlier implementation of management actions.	The EKGSA will keep this recommendation under consideration. The intent of the EKGSA is to focus on supply augmentation is due to the ability to better utilize existing contracts can help the overdraft condition and is less "painful" to stakeholders. The current slate of projects in the GSP were those that were more fully developed during GSP development, but is not limiting future projects. The current overdraft is an estimate and could be revised (up or down). In the instance it goes down, the current slate of projects may be sufficient. In the instance it goes up, additional projects and/or management actions will need to be implemented more expeditiously. There are also other avenues to track demand other than putting wells on meters.	No action at this time.
1-D.5	Julie Vance	CA Dept of Fish and Wildlife	General	SGMA specifically states implementation of project actions are not exempt from CEQA, the Department is charged by law to provide biological expertise during public agency environmental review efforts, focusing on activities that have the potential to adversely affect fish and wildlife resources.	The EKGSA understands that CEQA will be required to implement project actions.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Groundwater Allocations	We encourage the GSAs to clearly communicate that the WAF (Water Accounting Framework), including the native supply apportionment, is for initial water budget purposes only and is not an allocation or a determination of landowner water rights.	Correct, the WAF is not an allocation. It may assist in developing an allocation in the future, but does not serve that purpose at this time. This message will be consistent at meetings and in notices.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Groundwater Allocations	Should it become necessary management action to allocate the native supply to landowners, the GSAs should use stakeholder-driven process to develop an allocation methodology that is coordinated across the basin and is consistent with the various legal considerations drawn from applicable case law. More information on allocation methodologies can be found in "Groundwater Pumping Allocations Under California's Sustainable Groundwater Management Act - Environmental Defense Fund and New Current Water & Land, dated July 2018".	If an groundwater allocation is pursued, the EKGSA intends to use technical studies and stakeholder input through the development process of such policy.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Groundwater Allocations	If pumping restrictions are required to achieve sustainability, they should be implemented with the most gradual ramp-down possible while still avoiding any undesirable results. This will help to ensure landowners have adequate time to plan, and it will help prevent any sudden disruption to economic activity in the region.	The current proposed ramp-down strives to meet these considerations.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Water Measurement, DMS & Groundwater Markets	GSAs should develop a coordinated, Subbasin-wide data management system (DMS) that is capable of tracking groundwater and surface after use at the landowner, field or parcel level and a coordinated methodology for measuring landowner-level use of groundwater. The DMS should also include, or be capable of interfacing with, a groundwater market platform. If landowner-level groundwater allocations are made, those should be accompanied by a market system that is as flexible as possible in allowing for broad geographic movement and carryover from one year to the next. Markets are essential in facilitating the highest and best use of a limited resource and will be most effective if there is trust in the accuracy of measurements, consistency in data sources, and flexibility available to allow transactions across the basin.	A DMS has been developed and will be rolled out with the GSP submittal. The Kaweah Subbasin will evaluate how a groundwater market platform can be incorporated into the DMS, should such system be developed. The considerations on a market will be evaluated should the Subbasin look to pursue. Stakeholder input will be crucial during such development.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Water Measurement, DMS & Groundwater Markets	GSAs using remote sensing to calculate crop ET as a measurement of consumptive use of groundwater should develop methodologies and quality assurance elements to allow for grower provided information to be included in the ET calculation and calibration.	The EKGSA is pursuing a remote sensing option through LandIQ. As data becomes available it will be evaluated against other options, such as grower provided information, to calibrate and improve.	No action at this time.



App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.6	Adam Brown	Wonderful Citrus	Water Measurement, DMS & Groundwater Markets	GSA should establish criteria and procedures to address any apparent inaccuracies in the ET calculations (for ex: if calculated ET is greater than applied water plus precipitation).	The EKGSA intends to develop policy or procedures to handle such inaccuracies.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Groundwater Recharge and Banking	GSA must develop clear policies and conditions that are consistent with existing storage rights and protect existing investment in groundwater banking and banked inventory, without interference with existing rules and regulations.	The EKGSA will keep this in consideration and work with legal counsel while developing policies in the future.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Groundwater Recharge and Banking	GSA must find a way to incentivize additional investment, such as on-farm recharge, and allow flexibility for recharged or banked water to be freely transferrable (subject to the rights and conditions of use associated with the source water and the avoidance of undesirable results).	The EKGSA will keep this in consideration and work with legal counsel while developing policies in the future.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Groundwater Recharge and Banking	Where possible, GSPs should identify management areas that may benefit from additional recharge and banking.	The EKGSA staff is evaluating management areas through water budget information and an output is to identify areas where additional recharge would be beneficial.	No action at this time.
1-D.6	Adam Brown	Wonderful Citrus	Groundwater Recharge and Banking	We also recommend that GSA work to develop incentives for public or private investment to expand recharge and banking capacity, as these facilities help to achieve multiple benefits (e.g., habitat, water quality, drinking water, etc.)	The EKGSA intends to work with agencies and funding (i.e. grants) where feasible to leverage multi-benefit projects.	No action at this time.
1-D.7		Nature Conservancy et al.	Beneficial Users	The GSP should more clearly identify the DACs in the GSA area, including identifying their locations and names on maps and the population that resides within the communities. The GSP should also clearly identify the data sources used to identify such communities.	The EKGSA has several DACs within its boundaries. Some are discussed related to their community plans in Section 1.4.3. <b>Figure 1-7 has been added to depict the DACs, using DWR's DAC Mapping Tool.</b> Not listing all DACs is to avoid accidentally missing one in a list.	<b>Yes, added figure.</b>
1-D.7		Nature Conservancy et al.	Communications Plan	The GSP should provide more details on how stakeholders, including DACs and environmental beneficial users, were engaged throughout the GSP development process and how their input was incorporated into the GSP process and decisions. DACs are not included in the official Advisory, but instead are listed as a "secondary stakeholder" with interests in the GSA. However no information is provided about how those interests were identified or considered in decision making by the GSA. Appendix 1-B lists two workshops targeted at DACs, on August 14-15 2018, but no information is provided about attendance or feedback and no follow-up workshops are identified.	The term "secondary stakeholder" is used for all stakeholder groups that are not on the Board or a Committee. There is overlap with several beneficial users being on the Board/Committee and listed as secondary. DACs representatives are on the EKGSA Advisory Committee. Most input during development of the GSP was provided at public Board, Advisory, and/or TAC Meetings. Appendix 1-C (previously Appendix 1-B) has been updated to include recent DAC workshops performed during the public comment period for the GSP. <b>The Communications &amp; Engagement Plan (now Appendix 1-B) has been updated to discuss the next steps with outreach during GSP implementation.</b> The EKGSA intends to engage stakeholders, including DACs, as data gaps are being filled and groundwater management policy is being developed.	<b>Yes, added appendix (C&amp;E Plan as appendix instead of link)</b>
1-D.7		Nature Conservancy et al.	Maps	The draft GSP should clearly identify the density of domestic wells and public wells in maps separate from agricultural supply wells. This will help the public identify areas of high proportions of drinking water users are present. Identifying average depth using all wells could mask impacts to domestic or small community wells.	Separate maps are provided for average depth of Agricultural, Domestic, and Public Wells (Figures 2-24 to 2-26). Appendix 2-E provides additional information, including well density, for the Agricultural, Domestic, and Public Wells	No action at this time.
1-D.7		Nature Conservancy et al.	Maps	The draft GSP describes that interconnected surface waters were analyzed and that streamflow contributions were incorporated into the water budget, but the draft GSP does not transparently present the quantitative results of this assessment or clearly identify on maps which reaches are gaining and which are losing, based on seasonal conditions. It is recommended the GSP provides maps of the monitoring network overlaid with location of DACs, GDEs, and any other sensitive beneficial users to allow the reader to evaluate the adequacy of the network to monitor conditions near these beneficial users.	Figure 4-1 is the Monitoring Network with communities listed, most of which are DACs. Interconnected surface waters and GDEs are a data gap for the EKGSA. Areas have been designated as potential GDEs (Figure 2-17) based on current data, and will be evaluated further following GSP submittal. The streamflow contributions for the EKGSA are based from previous studies as robust data for the minor creeks is unavailable. This contribution is included in the 'Mountain Front Recharge' component of the Subsurface Inflow in Section 2.5.3.2.	No action at this time.
1-D.7		Nature Conservancy et al.	Monitoring Network	Based on the monitoring network presented in the draft GSP, it appears that no water quality monitoring will be performed near the DACs of Ivanhoe or Woodlake, which represent a population of over 11,500 people. In addition, approximately 300 domestic wells are located in the area surrounding and north of Ivanhoe and Woodlake, which represents approximately 40% of the domestic wells in the EKGSA area. Therefore, the proposed network of water quality monitoring network appears to be insufficient to monitor impacts to groundwater for drinking water beneficial users, particularly domestic well users and DACs; such monitoring is required pursuant to 23 CCR § 354.34.	This is incorrect. The Monitoring Network is monitoring the wells of Ivanhoe and Woodlake, which are outside the EKGSA boundary. The Monitoring Network also included wells for the Communities of Yettum and Seville, which are outside the EKGSA Boundary, but are down gradient. The initial monitoring network monitors drinking water for approximately 80-90% of the population within the EKGSA. The EKGSA also intends to develop a drinking water well protection program geared towards domestic wells. This program needs volunteers, information on wells, and access agreements for monitoring. These details are to be worked through following GSP submittal.	No action at this time.
1-D.7		Nature Conservancy et al.	Water Budget	Given the uncertainties of climate change, it is appropriate to analyze the impacts of climate change for a range of scenarios (e.g., a mild effects scenario and a high (worst case) effects scenario).	Comment noted. The Kaweah Subbasin GSA coordinated on the Numerical Model development and modeling scenarios. Future iterations may include different climate change scenarios to evaluate a range of potential water budget values.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.7		Nature Conservancy et al.	Water Budget	The GSP includes water demand for agriculture and M&I in general. However, no specifics were provided on drinking water demands by various drinking water users, such as domestic well users, community and non-community water systems. This information should be provided for full transparency of the assumptions, data, and results of the water budgets. Also, a table summarizing each component in the water budget is recommended.	Specific water demand data for domestic well users and small water systems is a data gap during the development of the current water budget. The text describes estimates used for these categories (Section 2.5.3.3) which are based from a previous study in the area, the Water Resources Investigation performed by Kaweah Delta WCD. The EKGSA will be looking to gather and monitor these water uses going forward. Table 2.10 in the GSP summarizes all the components of the EKGSA Water Budget.	No action at this time.
1-D.7		Nature Conservancy et al.	Water Budget	Small water system demand was reported to be estimated from data in previously published reports. Very little specific information is provided in the draft GSP on the methods and assumptions used to estimate the small water system demand. No maps are provided showing the location of the small water systems. The annual demand from small water systems is shown to increase throughout the water budget period, but it is not possible to determine if the values are reasonable from the information provided in the draft GSP. Additional detailed information is necessary for the public to be able to evaluate the accuracy and appropriateness of the small water system demand incorporated in the draft GSP.	Specific water demand data for small water systems is a data gap during the development of the current water budget. The text describes estimates used for this category (Section 2.5.3.3) which is based from a previous study in the area, the Water Resources Investigation performed by Kaweah Delta WCD. The EKGSA will be looking to gather and monitor these water uses going forward. The EKGSA will be looking to partner with stakeholders knowledgeable in these areas to share and evaluate data to make sure water budget numbers are appropriate and as accurate as possible.	No action at this time.
1-D.7		Nature Conservancy et al.	Water Budget	Based on the information presented, it is not clear whether the draft GSP includes water demands by native or riparian vegetation, including wetlands in the historical, current, and future water budgets. These water demands should be quantified, described, and incorporated into the water budgets, and the results should be clearly presented in the GSP.	Water demand estimates for native/riparian vegetation is included in the 'phreatophyte extractions' in Section 2.5.3.3. This is a data gap area, but a methodology utilized in the Water Resources Investigation by Kaweah Delta WCD was used as a starting point to build from going forward.	No action at this time.
1-D.7		Nature Conservancy et al.	Water Budget	Rural domestic pumping for the EKGSA area is reported in Section 2.5.3.3 to be 3,400 AFY. The rural domestic pumping for the entire Subbasin reported in Appendix 2-A is 2,272 AFY. Since the EKGSA area is only a portion of the entire Subbasin, the rural domestic pumping in the EKGSA should be less than the rural domestic pumping reported for the entire Subbasin but the draft GSP instead reports that EKGSA rural domestic pumpage is greater than rural domestic pumpage for the entire Subbasin.	There is a difference in the estimated rural domestic demands between the EKGSA and Subbasin analysis that will need to be further vetted with data, once available. Although the EKGSA is about a quarter of the Kaweah Subbasin, the density of rural homes is larger so the demand will likely be higher for the EKGSA from a proportion view. However, the comment is correct in that the EKGSA value should not be higher than the Subbasin total. As data is gathered and further analyzed it will be shared to discuss accuracy and appropriateness.	No action at this time.
1-D.7		Nature Conservancy et al.	Monitoring Network	The GSP should present the locations of DACs and GDEs in relation to the monitoring network on maps. The GSP should also identify data gaps in the monitoring network for DACs and/or GDEs, if any, and provide plan to address such data gaps if applicable.	The monitoring network figure (4-1) included the communities, most of which are DAC (refer to Figure 1-7), and their relation to monitoring wells. Many of the community wells are proposed to be utilized. GDEs are not included due to the data gaps and resulting uncertainty. As further data and studies are performed maps and figures can be developed showing the monitoring network relation to interconnected waters and GDEs.	No action at this time.
1-D.7		Nature Conservancy et al.	Monitoring Network	The draft GSP identifies 43 monitoring wells for water levels and ten monitoring wells for water quality, but does not include well construction information for these wells. Pursuant to 23 CCR § 352.4, this information is required to be provided in the GSP for all monitoring wells. Without well construction information for monitoring wells included in the GSP, the public and DWR cannot evaluate if the monitoring wells are: (1) adequate for evaluating water levels relative to the MOs and MTs over the long term, and/or (2) how representative the water quality sampling depths are of the zones used for drinking water purposes by domestic well users and community water systems.	Unfortunately, well construction information is not available for the monitoring network wells. The Kaweah Subbasin submitted a grant application to DWR in November 2019 which included video logging monitoring network wells to fill this data gap. The EKGSA is proposing to initially use the CASGEM framework that historical groundwater level monitoring as it fills gap areas with no historical monitoring wells. Over time, it is expected the EKGSA will develop new, dedicated monitoring wells for the monitoring network. As these are developed, the design and construction information will be available for review.	No action at this time.
1-D.7		Nature Conservancy et al.	MOs, MTs, and URs	The draft GSP states that "The EKGSA recognizes that some shallow wells will likely go dry until water levels have been stabilized. Without SGMA and the proposed incremental mitigation by the EKGSA, the shallow wells would have gone dry sooner, requiring the landowners to deepen these existing wells" (Section 3.4.1.2.4). The stated sustainability goal for the Subbasin in the draft GSP is "for each GSA to manage groundwater resources to preserve the quality of life through maintaining the viability of existing enterprises of the region. The goal will also strive to fulfill the water needs of existing enterprises as well as existing and amended county and city general plans that commit to continued economic and population growth within Tulare County" (Section ES 1.3). The draft GSP, however, does not clearly indicate how the proposed water level MTs will preserve the quality of life or support population growth, given the lack of consideration for drinking water beneficial users in the Subbasin, in particular domestic well users and DACs reliant on groundwater.	Groundwater levels reaching Minimum Thresholds would result in significant impacts to all beneficial uses and users within the EKGSA and Subbasin, including domestic well and DAC users. Water levels reaching this levels would not preserve the quality of life and economic or population growth in Tulare County. The EKGSA will be managing groundwater to the Measurable Objectives, which are believed to protect groundwater reliant users and support economic and population growth within Tulare County.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.7		Nature Conservancy et al.	MOs, MTs, and URs	Based on the assessment presented in the "Percentage of Wells Dry at Minimum Threshold" Figure in Appendix 3-A of the draft GSP, the percentage of domestic wells expected to go dry within each threshold region is between 14% and 77%. This assessment appears to have been done relative to the bottom of the total well construction depth. However, water supply wells become unusable or subject to decreased performance and longevity as water levels fall within the screened interval, which will occur before water levels reach the bottom of the well. Therefore, the actual number of domestic wells that would be significantly impacted at the proposed water level MTs would be expected to be higher than represented in Appendix 3-A of the draft GSP.	The analysis was evaluated using the bottom of perforation, not total construction depth. The analysis was performed using the bottom of perforations because the analysis is more straightforward with the data available. Water below perforations is definitive of a dry well. Wells will be impacted prior to groundwater levels hitting the bottom of perforations. However, with challenges to the current well data base and other unknowns (i.e. well pump location) performing analysis based on different parameters adds more uncertainty. The EKGSA intends to bolster this data set by partnering with Tulare County and other stakeholder partners so that a more thorough analysis of impacts can be performed.	No action at this time.
1-D.7		Nature Conservancy et al.	MOs, MTs, and URs	It is recommended that the basin's sustainability goal clearly include nature, which is a beneficial user.	The Subbasin Sustainability Goal is being coordinated amongst the three GSAs and was under development during the public comment period. This comment will be brought up for consideration going forward to be explicitly listed. Protection of the environment and nature is included implicitly in the sustainability goal.	No action at this time.
1-D.7		Nature Conservancy et al.	Management Costs and Actions	The likely benefits and impacts to DAC members and GDEs by the proposed projects and management actions are not clearly identified in the GSP. A discussion should be added for each project to clearly identify the benefits to DAC drinking water users and GDEs, and the potential impacts to the water supply and habitat. For all potential impacts, the project/management action should include a clear plan to monitor for, prevent, and/or mitigate against such impacts.	Benefits and impacts are currently estimated at a preliminary project concept level. Additional analyses related to DAC and habitat will be performed during the CEQA process as a project moves toward implementation. The current slate of proposed projects is intended to bring benefits to all in the area as water slated to be recharged is to come from Friant and/or Kaweah sources which is known to be of higher quality. Plans to monitor and prevent and/or mitigate impacts are likely to be developed with local stakeholders as the projects or management actions are moved toward construction/implementation.	No action at this time.
1-D.7		Nature Conservancy et al.	Management Costs and Actions	The GSP presents very limited information on the interconnectedness of surface water bodies. The GSP should present detailed information on what is known, or include a plan to study the interconnectedness of the surface water bodies over the next 5 yrs.	Very limited information is available regarding interconnectedness of surface water bodies. This is listed as a data gap in Section 2.6. <b>More detail has been added to this data gap to include more studies and field verification are anticipated over the next 5 years.</b>	<b>Yes, text revision.</b>
1-D.8	Thomas Weddle, Craig Wallace	Exeter ID & Lindsay-Strathmore ID	Groundwater MTs and MOs	Enclosed are summary tables prepared by Provost & Pritchard and presented at the October 4th, 2019 East Kaweah GSA Technical Advisory Committee meeting comparing the MTs and MOs for various hydrologic zones and showing the associated variances. In some cases, these variances are significant and, if unresolved, could draw the attention of the State in its independent review of the GSPs. Depending on the circumstances, the variances could also result in one GSA area making it more difficult for the neighboring GSA area to comply with SGMA and implement its GSP. The Districts understand that the GSAs are aware of this issue and are under the belief that discussions continue between the two GSAs on how to resolve this issue. The Districts write to encourage these ongoing discussions and resolution of the issue by (a) making amendments to either or both GSPs; (b) addressing it specifically in the coordination agreement; and/or (c) the two GSAs identifying and committing to a process to resolve promptly following submittal of	The EKGSA intends to work with the GKGSA to resolve the variances. <b>Language has been included in the Coordination Agreement Appendix 6 to the effect that the GSAs will discuss sustainable management criteria and adjustments may be made to either or both GSPs following the necessary discussion and analysis.</b>	<b>Yes, revision to Coordination Agreement</b>
1-D.9	Adriana Renteria	Community Water Center	Plan Area	Included a map indicating the location of public water systems serving SDACs and/or DACs and domestic well communities.	<b>Figure 1-7 has been added to depict the DACs, which used the DWR's DAC Mapping Tool.</b> Several of these communities have public water systems or water companies operating wells. Specifics for mapping these communities systems is unavailable, however their groundwater wells are shown in other sections, such as Figure 4-1 of the Monitoring Network.	<b>Yes, figure added.</b>
1-D.9	Adriana Renteria	Community Water Center	Notice & Communication	Account for S/DAC outreach, engagement and translation services when applying for state funding, establishing and approving operating budgets and enacting groundwater fees	Comment noted. The EKGSA will make sure to consider these costs in future grant funding, budgets, and fees, where appropriate.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Notice & Communication	Consider utilizing the following when looking to communicate with stakeholders and releasing updates during GSP Implementation: 1) Utilize existing community venues for community meetings, workshops and events to provide information. 2) Identify community social media (Facebook, Instagram, etc.) groups, pages and websites and post information. 3) Identify, and work with key community leaders /trusted messengers to distribute information and encourage community participation. 4) Provide bilingual (English and Spanish) information and materials on the website, via email and consider inserting short notices (notices must include key messages, visuals and information that is relevant to the average water user) in water bills and/or community newsletters. 5) Partner with other educational programs to leverage resources and explore opportunities to educate different generational groups.	The Communication & Engagement Plan lays out the plan for continued communication and outreach during GSP Implementation. The EKGSA intends to treat this as a "living document" to be updated as needed going forward. The EKGSA will work with its stakeholders, primarily through the Advisory Committee, to evaluate effective means of communication to utilize methods that effectively reach the most stakeholders.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Notice & Communication	Quantify the number of domestic well users under Section 1.5.2 and expand the description of public water systems to include the number of connections and population they serve. Consider utilizing the draft report from the IRWM Disadvantaged Community Involvement Program to identify this information.	Section 1.5.2 is not intended to specifically quantify the types of beneficial uses and users. Earlier in Section 1, Figure 1-7 is provided to depict communities and the estimated populations within.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	HCM	Include a description of how groundwater quality considerations also impact the potential of recharge suitability under the description of Potential Recharge Areas in Section 2.2.8.3.	The language in this section is focused more on the ability to physically put water in the ground. Other sections, and future CEQA review, will further vet the local site recharge suitability, including quality considerations.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.9	Adriana Renteria	Community Water Center	HCM	Include locations of S/DACs and domestic wells in Figure 2-14 and 2-15.	Adding wells and S/DACs to these figures would likely confuse the map and block the information intended to be portrayed in these figures.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	GW Elevation	Identify communities vulnerable to changes in groundwater levels.	Communities are shown related to well hydrographs in Figure 2-21. A sentence has been added to the first paragraph in Section 2.4.1.2: " <b>All groundwater well users and communities (such as Lindcove, Tonyville, Tooleville, etc.) in the EKGSA are susceptible to significant changes in groundwater levels, particularly those closer to the foothills on the east side, as the aquifer is shallower to bedrock.</b> "	Yes, text revision.
1-D.9	Adriana Renteria	Community Water Center	GW Elevation	Include a description of the impacts experienced during the 2012-2016 drought.	Section 2.4.1.1 includes discussion on impacts experienced by Friant CVP contractors and domestic well users during the drought.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	GW Quality	Include a description of the groundwater quality conditions for each public system. Include a map of current 10-year average groundwater quality conditions overlaid with DACs. Include analysis of how groundwater quality changes fluctuated relative to changes in groundwater level, especially during drought.	The groundwater quality data set is not robust enough to describe the groundwater quality conditions for each public system. The quality data available during the Base Period (1997-2017) and current 10-year average (2008-2017) is portrayed through a series of figures in Appendix 2-F, which have communities shown.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	GW Quality	Include analysis of how groundwater quality changes fluctuated relative to changes in groundwater level, especially during drought.	Groundwater quality fluctuations related to change in groundwater level is discussed in Chapter 3. Appendix 3-B includes an analysis comparing concentrations with the available quality data to changes in groundwater level. Currently, no correlation appears to be seen between changing quality concentrations and water levels.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Subsidence	Include a description of possible impacts of land subsidence for S/DACs, public water systems, and domestic well communities. Include documentation of any historical impacts of land subsidence for S/DACs, public water systems, and domestic well communities in Past Land Subsidence (Section 2.4.4.2).	Community infrastructure impacts are listed in 2.4.4 introduction. Possible impacts to subsidence are further discussed in SMC chapter. Section 2.4.4.2 discusses quantity of subsidence, location, and method of measurement. It does not relate to any specific user.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Include a single tabulation of all the sources used.	The current breakdown of the Water Budget was developed through the Basin Setting and Water Accounting Framework discussed in Appendix 2-A. Data was compiled from public sources, local agencies, and estimate methodologies and needs the context of the text to understand. A single table of sources, beyond that in the references section can be compiled at a later date.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Provide additional information detailing how small water system demand was estimated.	Specific water demand data for small water systems is a data gap during the development of the current water budget. The text describes estimates used for this category (Section 2.5.3.3) which is based from a previous study in the area, the Water Resources Investigation performed by Kaweah Delta WCD. The EKGSA will be looking to gather and monitor these water uses going forward.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Provide additional information detailing how rural domestic water demand was estimated and rectify existing inconsistencies in estimated water demand.	Specific water demand data for domestic well users and small water systems is a data gap during the development of the current water budget. The text describes estimates used for these categories (Section 2.5.3.3) which are based from a previous study in the area, the Water Resources Investigation performed by Kaweah Delta WCD. There is a difference in the estimated rural domestic demands between the EKGSA and Subbasin analysis that will need to be further vetted with data, once available. Although the EKGSA is about a quarter of the Kaweah Subbasin, the density of rural homes is larger so the demand will likely be higher for the EKGSA from a proportion view. However, the comment is correct in that the EKGSA value should not be higher than the Subbasin total. As data is gathered and further analyzed it will be shared to discuss accuracy and appropriateness.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Revise percentage of return flow from rural domestic water to address inconsistencies: Page 99 of Appendix 2-1 states that "Similar to the rural small water system analysis above, a 70 percent portion of the pumped rural domestic water is assumed to return to groundwater via septic system percolation and irrigation return flows (Dziegielewski and Kiefer, 2010). Throughout the Subbasin, an annual total pumpage for rural users was 2,272 AF/WY on average, 30 percent of which returned to groundwater." The assumed fraction of total rural domestic pumping that returns to groundwater and the calculation of net rural domestic pumping reported in Appendix 2-A is inconsistent. It is unclear if the assumed fraction of pumping that returns to groundwater is 30% or 70%.	Appendix 2-A is worded incorrectly. The assumed fraction should read 70%.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Provide additional information regarding the assumptions used to define changes in land use and how that was incorporated into the projected water demand.	The Projected Water Budget uses the Subbasin-wide modeling effort for estimates. More detail on projected land and water use is in Appendix 2-A.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Provide water budget annual component results broken down for each subareas in order to allow for the assessment of the spatial variability of the water budget components.	Currently, the water budget information isn't detailed enough to breakout by Management Area. Implementation of the GSP, and the associated data gathering and monitoring, will better inform water budgets in more localized areas to assist the EKGSA's efforts to manage chronic overdraft areas.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Include an uncertainty analysis to identify the plausible range in water budget results and an indication of the magnitude of the effects these inherent uncertainties may have on the water budget results.	An uncertainty analysis is not included at this time, largely due to some of the data gaps that exist. Measured data, such as that for surface water providers, is generally measured within an accuracy of 10%. Other Water Budget items estimated from reference estimations provide more uncertainty that is difficult to quantify. Through future data gathering efforts to eliminate data gaps, a magnitude of uncertainty can hopefully be quantified and ultimately minimized.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Include an in depth discussion regarding the forthcoming sustainable yield evaluation and describe the potential implications the sustainable yield, the safe yield, and the water accounting framework could have on drinking water use in the EKGSA.	The Water Accounting Framework (WAF) serves as a coordinated starting point to tracking groundwater management and will be built upon to regulate/manage the Subbasin within its sustainable yield. It is the intent of the Subbasin GSAs to continue to discuss the WAF and gather data to evaluate the sustainable and safe yields in the Subbasin and resulting implications. Future iterations should provide information for the in depth discussion desired.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Water Budget	Include a discussion and analysis in the GSP evaluating the projected water budget conditions, specifically focusing on climate change impacts for domestic well users, S/DACs, and community water systems.	The Projected Water Budget uses the Subbasin-wide modeling effort for estimates. More detail on projected land and water use is in Appendix 2-A. Additionally, an updated Numerical Modeling technical memo is provided in Appendix 2-G discussing more of the modeling analysis performed on the Subbasin. As more information is developed and plugged into the Numeric Model, more detailed estimates on the projected impacts can be shared and discussed.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Sustainability Goal	Revise the sustainability goal to include considerations for groundwater quality.	The Sustainability Goal has continued to be revised amongst the Subbasin GSAs during and after the public comment period. The current Sustainability Goal is inclusive of groundwater quality considerations and is included in Section 3.1 and Kaweah Subbasin Coordination Agreement.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Management Areas	Revise the description of the management areas to describe the number of domestic well users within the boundary.	The Management Area descriptions broadly discuss the land use, surface water supply and communities located within. Specifics for a single beneficial use/user is not intended to be included.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Management Areas	Consider developing management areas around vulnerable communities.	The current slate of Management Areas are based on current data availability. As more data and monitoring are performed through Implementation, focused management areas can be developed in areas as need arises.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Management Areas	Revise the description of the Monitoring and Analysis (Section 3.3.3) to better describe how the management areas will operate to avoid undesirable results.	The Management Areas are largely based on political boundaries for tracking water (particularly surface water) within the EKGSA based on past experience tracking surface water imports and groundwater levels. The users within the management areas will work with their available tools (i.e. surface water supplies) to achieve sustainable management in their area. The EKGSA will provide on-going oversight of the management areas to make sure the GSA as a whole is sustainably managed.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Chronic Lowering of Groundwater Levels	Describe how the approach to develop MTs/MOs is protective of diverse drinking water users.	Development of the MTs is based on a projection analysis and results in the EKGSA in similar groundwater level conditions to those experienced in the 1940s prior to the Friant CVP supplies imported by the local contractors. The MOs are set based on Spring 2017 water levels, which currently are understood to be void of undesirable results for all beneficial uses/users. Continued monitoring and evaluation is anticipated to confirm this understanding or point to problem areas to be rectified through sustainable groundwater management.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Chronic Lowering of Groundwater Levels	Clarify the rationale for the water level decline used to develop MTs/MOs and explain how this water level decline is reasonable and sustainable for DACs and domestic well communities in the EKGSA.	The MTs are based on the current base period (1997-2017) which is an average period hydrologically. The current projected decline depicts the resulting overdraft in an average period. The EKGSA intends to sustainably manage groundwater levels to the MO (Spring 2017) which is approximately the current groundwater levels where no known undesirable results are present. Managing to the MO, which is approximated for each Threshold Region, is anticipated to be protective of the local communities and drinking water users and their wells.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Chronic Lowering of Groundwater Levels	Undertake a drinking water well impact analysis that adequately quantifies and captures well impacts at the minimum thresholds, measurable objectives, and proposed undesirable results.	The analysis was performed using the bottom of perforations because the analysis is more straightforward with the current data available. Water below perforations is definitive of a dry well. Wells will be impacted prior to groundwater levels hitting the bottom of perforations. However, with challenges to the current well data base and other unknowns (i.e. well pump location) performing analysis based on different parameters adds more uncertainty. The EKGSA intends to bolster this data set by partnering with Tulare County and other stakeholder partners so that a more thorough analysis of impacts can be performed.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.9	Adriana Renteria	Community Water Center	Chronic Lowering of Groundwater Levels	Clarify the process for evaluating minimum threshold exceedance and the potential actions to address exceedance.	Groundwater level MTs will be evaluated based on the water level at a monitoring network well and the corresponding Threshold Region MT for which the well is located. As well(s) exceed their MT actions include implementing a supply augmentation project nearby and/or management actions such as demand reduction or pumping restrictions of excess use.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Chronic Lowering of Groundwater Levels	Develop a protective minimum threshold near vulnerable communities and high density areas of domestic wells to avoid localized impacts and ensure the protection of these important water sources.	The current slate of Management Areas are based on current data availability. As more data and monitoring are performed through Implementation, focused management areas can be developed in areas as need arises.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Chronic Lowering of Groundwater Levels	Include a definition of a local undesirable result.	The EKGSA intends to apply the Subbasin Undesirable Result to its local areas and stakeholders. It is likely this can be further defined and made unique to the EKGSA as data gaps are filled and continued collaboration amongst stakeholders is held during GSP Implementation.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Chronic Lowering of Groundwater Levels	Ensure that the coordination agreement with the other Kaweah Subbasin GSAs does not negatively impact the EKGSA's local undesirable results and MTs/MOs.	The Coordination Agreement includes language to continue discussions regarding MTs/MOs and evaluating potential solutions. The EKGSA is very interested in making sure other GSA actions do not prevent the EKGSA from sustainably managing the groundwater within its own area.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	Include an assessment of the current 10-year average concentrations of COCs at all monitoring wells to establish MT baseline conditions.	Baseline conditions of the current 10-year average concentration of COCs is included in Table 4-3. As can be seen by this table, there are significant data gaps associated with groundwater quality to be rectified early in the GSP Implementation process.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	Revise MT to prevent further degradation of contaminants beyond 5%, rather than 20%.	The decision to select 20% as the MT for further contaminant degradation is due to variance in lab results experienced by many technical members of the EKGSA. The concern for going less than 20% is that there may be too much "noise" in the data to decipher if there is a trend if thresholds are 5%.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	Include consideration for the state's anti-degradation policy into the GSP.	While not specifically mentioned, the State's anti-degradation policy is imbedded in County Policies and drinking water system programs the EKGSA intends to lean on through development of policies and actions associated with this GSP.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	Provide a detailed explanation of how the proposed water quality MT approach and monitoring network will result in protection of groundwater for DACs and other drinking water beneficial users in the Subbasin.	The quality MTs for drinking water are set respective to drinking water MCL, which strives to observe and protect the drinking water users. The GSP also includes a potential drinking water well observation program that could be developed to more closely monitor drinking water wells.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	Develop a warning system that informs EKGSA stakeholders when contaminants of concern have reached 80% of the MCL.	A warning system is included in the GSP, building from a CV-SALTS example, to inform stakeholders of wells with concentrations less than 80% of the MCL at the starting baseline if the concentration increases.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	Clarify how the GSA plans to align groundwater monitoring efforts and the sustainable management criteria with any emerging contaminants of concern and new MCLs.	The EKGSA strategy for groundwater quality monitoring of public system wells accounts for any emerging contaminants. These public system wells are required through their separate monitoring programs to monitor for emerging contaminants. In the future if emerging contaminants become an issue, the key COC can be adjusted.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	For contaminant levels that are near, or exceed, existing MCLs and for groundwater quality problems that arose or were exacerbated after January 1, 2015, consider the following approaches: 1) Aligning monitoring and management actions to allow the EKGSA to be able to meet a minimum threshold at 80% the MCL over the 50-year planning and implementation horizon, 2) Where there is a significant groundwater quality problem that is clearly under the purview of another agency, confer with that agency and to confirm a plan to address the groundwater quality problem, 3) Where a significant groundwater quality problem is not clearly under the purview of another agency, or the responsible agency is unable to confirm a reasonable plan to address the problem, confer with Regional or State Water Board staff and affected parties, to identify a reasonable plan to address the problem.	The EKGSA intends to partner with agencies responsible for water quality issues, where feasible. This includes monitoring, management actions, and potential project placement (i.e. recharge basin placement).	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Quality	Consider working with local and regional water agencies or the county to implement groundwater quality remediation projects that could improve both quality as well as levels and to ensure groundwater management does not cause further degradation of groundwater quality.	The EKGSA intends to partner with agencies responsible for water quality issues, where feasible. This includes monitoring, management actions, and potential project placement (i.e. recharge basin placement).	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Subsidence	Expand the description of potential impacts for S/DAC communities and rural domestic well users under the description of the Potential Impacts on Beneficial Uses and Users (Section 3.4.3.1.3).	Impacts to community infrastructure (wells, roads, etc.) is included.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Subsidence	Revise the Measurement of Minimum Thresholds section to include the Plainview well point data collection (Section 3.4.3.2.5).	<b>The Plainview well point has been added to this section.</b>	<b>Yes, text revision.</b>

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.9	Adriana Renteria	Community Water Center	Subsidence	Revise Table 3-7 to clarify the relationship between groundwater quality and land subsidence and include a description of the analysis undertaken to arrive at that conclusion. The section on the Relationship for each Sustainability Indicator (Section 3.4.3.2.2) needs to be revised to clarify that this is not applicable to the EKGSA.	Table 3-7 states there is no known nexus between land subsidence and groundwater quality for the EKGSA.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Monitoring Network - Groundwater Levels	Identify which monitoring wells will be used to assess impacts to drinking water wells caused by changes on groundwater levels and describe how that assessment will be conducted.	Table 4-2 lists monitoring well type and which URs will be evaluated at which well. Many wells are slated to monitor multiple URs and potentially provide direct correlation between groundwater levels and other indicators. Monitoring wells will be monitored regularly (semi-annual or quarterly) to obtain data to compare to MT/MOs and other pertinent items such as water quality and depth of well.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Monitoring Network - Groundwater Levels	Include well construction information for all RMWs included in the GSP.	Unfortunately, well construction information is not available for the monitoring network wells. The Kaweah Subbasin submitted a grant application to DWR in November 2019 which included video logging monitoring network wells to fill this data gap. The EKGSA is proposing to initially use the CASGEM framework that historical groundwater level monitoring as it fills gap areas with no historical monitoring wells. Over time, it is expected the EKGSA will develop new, dedicated monitoring wells for the monitoring network. As these are developed, the design and construction information will be available for review.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Monitoring Network - Water Quality	Expand groundwater quality monitoring network near the DACs of Ivanhoe, Woodlake, and Lindsay.	The groundwater quality monitoring network includes the wells supplying water for Ivanhoe, Woodlake, and Lindsay.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Monitoring Network - Water Quality	Revise the monitoring method to compare actual contaminant levels to the MCL in addition to the 10-year average comparison.	Clarification added to Section 4.5.2, sentence to read: <b>Water quality degradation will be evaluated against the appropriate water quality standard at the time of the sample and at a 10-year rolling average to determine if actions of the EKGSA degrade the beneficial use of water in the Subbasin.</b>	<b>Yes, text revision.</b>
1-D.9	Adriana Renteria	Community Water Center	Monitoring Network - Water Quality	Clarify how the GSA plans to align groundwater monitoring efforts and the sustainable management criteria with any emerging contaminants of concern and new MCLs.	The EKGSA strategy for groundwater quality monitoring of public system wells accounts for any emerging contaminants. These public system wells are required through their separate monitoring programs to monitor for emerging contaminants. In the future if emerging contaminants become an issue, the key COC can be adjusted.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Monitoring Network - Water Quality	Clarify the proposed approach for monitoring and measuring URs for water quality and rectify conflicting descriptions. Create a map based on the information provided in Table 4-2 and specify which irrigation wells will be subject to agricultural MTs and which wells will be subject to municipal MTs. Provide a focused and detailed explanation of how the proposed water quality MT approach and monitoring network will result in the protection of groundwater for S/DACs and other drinking water beneficial users in the Subbasin, as required by 23 CCR § 354.28.	Figure 4-1 denotes which wells are drinking water wells. By tracking drinking water wells against the COC with MTs set based on MCLs, the EKGSA can evaluate the drinking water quality for many communities in and near the EKGSA. The current selected drinking water wells represent approximately 80%-90% of the EKGSA population, which is felt to be a very good representation of the water quality consumed by most within the EKGSA. Going forward more specific domestic wells may be monitored through the Drinking Water Well Protection Program.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Recharge, Dry Wells, and On-farm Recharge Project Types	Include a map that overlays all of the potential recharge projects onto one map and include the location of S/DAC, domestic wells, and public water systems.	Figure 5-1 included in the GSP shows the potential projects and their location across the EKGSA relative to the local communities. Wells are not being included to this map for clarity.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Recharge, Dry Wells, and On-farm Recharge Project Types	Prioritize funding for recharge projects near or up gradient to drinking water systems.	Locating recharge projects is largely based on land availability and project participants. Locating upgradient drinking water systems will be a consideration for future projects but will not be the only consideration as there are other critical criteria such as location to source water supply and recharge capability of a site that will be crucial in developing successful recharge projects.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Recharge, Dry Wells, and On-farm Recharge Project Types	Develop criteria for recharge projects that prevent unintended impacts to drinking water.	The concerns raised in the comment letter for on-farm recharge projects and mobilizing pesticides and fertilizers will be evaluated as the development of the program is further underway. The potential dry well recharge program may serve to recharge water below the upper soil where more active farming has occurred and could alleviate some of the mobilization concerns.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Efficiency Improvements	Require when technically and financially feasible, efficiency improvements in irrigation practices and industrial water use.	Many of the irrigation practices in the EKGSA are already utilizing higher efficiency methods (i.e. sprinklers and microjets) due to the cropping being primarily citrus. Future allocating of groundwater is likely to continue this trend even more without making it an EKGSA mandate. The EKGSA will also be looking to find funding programs, such as those available through the NRCS, to help facilitate irrigation practice improvements.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Well Permitting	Improve data collection via well permitting record.	The EKGSA intends to work with Tulare County (the well permitting agency) to improve the data collection on well permitting including items suggested in the comment letter.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.9	Adriana Renteria	Community Water Center	Well Permitting	Require an additional drinking water impact assessment prior to the construction of new wells with high production capacity.	The EKGSA does not have the authority to require a drinking water impact assessment for a new well permit/construction. Tulare County is the permitting authority. The EKGSA intends to work with Tulare County in providing recommendations for the permitting process, but decision-making authority remains with the County.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Well Permitting	We also ask EKGSA and EHD to consider exempting Small Drinking Water Systems (SDWS) from additional costly and time-consuming permitting criteria and registration processes imposed by new policies.	This can be a future consideration by the EKGSA and Tulare County. The County will have the decision-making authority on the matter.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Well Permitting	Consider expanding Well Construction Policies Section 1.4.4.2 to include policies that would prevent new wells being constructed in areas with high groundwater quality contamination.	Tulare County can evaluate this consideration of preventing well drilling in certain areas. It would be subject to Tulare County amending their Well Construction Policies.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Allocation Framework	When developing a groundwater allocation framework to protect drinking water supplies, we recommend: 1) GSAs establish a non-tradable allocation amount of groundwater as part of the calculation for the sustainable yield to adequately meet drinking water needs for public health and safety, including for drinking, cooking, and sanitary purposes, both now as well into the future. To determine this baseline for drinking water, GSAs will need to work with small community water systems, cities, and/or the county to determine current and future daily drinking water needs. 2) Recommend that allocation decisions are not tied to a time frame but to an adaptive management methodology that can respond timely to undesirable results and adjust allocations accordingly. The adaptive management methodology could guide allocation decisions and be used as a corrective tool to avoid localized drawdown impacts on communities and ecosystems, such as dewatering of shallower wells and streams. 3) Recommend a short period for banking allocation. We are concerned that allowing allocations to be bankable for more than 1 year could result in significant negative externalities. We also recommend that any allocation period be strictly tied to an adaptive management methodology that can respond timely to undesirable results and adjust allocations accordingly. 4) Restrict transitional pumping in excess of the sustainable yield near drinking water systems and households relying on private wells if negative impacts are observed through monitoring or if protective thresholds are exceeded. 5) Develop mitigation measures that support communities, schools, and drinking water well owners in case negative impacts are observed/experienced. 6) Clarify how the program will respond or be updated during a long-term drought. Particularly, with respect to the potential significant impacts that domestic well users, S/DACs face during these extreme weather events.	These are all good suggestions and considerations for an allocation framework. The EKGSA and Kaweah Subbasin as a whole have not developed a groundwater allocation policy or framework at this time but may in the future. The listed items will be part of the discussion in developing such a framework.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Market/Trading Allocations	Before considering a groundwater market framework, consider the following: 1) Establish a non-tradable allocations for drinking water. 2) Work with local communities to establish a buffer for community growth in groundwater allocation. 3) Ensure that monitoring networks are in place to detect the status and trends of groundwater conditions. 4) Implement an early watering system. 5) Implement interim and long term solutions to prevent further lowering of groundwater and adverse water quality impacts to protect drinking water users. 6) Evaluate mechanisms that can allow for flexibility to adjust over time to account for changing conditions and incorporate learning. 7) Devise ways to engage, communicate, and translate technical information to stakeholders, particularly rural communities and private well owners.	These are all good suggestions and considerations for a market or trading system. The EKGSA and Kaweah Subbasin as a whole have not developed a groundwater market or trading system but may in the future. A groundwater allocation policy would need to be developed ahead of a market/trading system. The listed items will be part of the discussion in developing a market.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Fees and Incentives Management Actions	When developing fee structure for the implementation of GSP activities, we recommend exempting small drinking water systems managed by S/DACs and domestic well users from GSAs fees, including use permits and penalty fees	Exempting small drinking water systems and/or domestic wells for S/DAC users could be a future consideration by the EKGSA Board.	No action at this time.
1-D.9	Adriana Renteria	Community Water Center	Groundwater Pumping Restrictions Management	The EKGSA should clarify the proposed analysis and program development of a Groundwater Pumping Restrictions Management Action will be a priority within the first year of GSP Implementation, and we recommend the following when considering such actions: 1) Groundwater demand reduction exemption to S/DACs due to their small role on overall groundwater pumping percentage, 2) Recommend that groundwater pumping restriction actions be also used as a corrective tool to avoid localized drawdown impacts on communities, such as dewatering of shallower wells and/or plume movement. 3) Clarify how the program will respond during a long-term drought and the potential significant impacts that domestic well users and S/DACs face during these extreme weather events. 4) Recommend EKGSA exempts S/DAC communities from penalty fees.	Groundwater pumping restriction policy is yet to be developed. Generally, the EKGSA is focused on implementing the water supply augmentation projects to better utilize surface water supplies available to members of the EKGSA. However, the EKGSA understands that it will likely need to evaluate pumping restriction policy. Through development of such policy, the EKGSA can consider exempting S/DACs from groundwater demand reductions and/or fees, its use as a corrective tool, and how to handle pumping restrictions during prolonged drought periods.	No action at this time.



App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.9	Adriana Renteria	Community Water Center	Drinking Water Well Mitigation Program	We would recommend that the GSA includes the well impact mitigation program as an integral, and fully funded component of the final version of the GSP, and that until such a commitment is made, the GSP is out of compliance with California law.	The EKGSA understands the desire to commit to a fully funded well impact mitigation program. The EKGSA is focused on filling data gaps, including well information for domestic well users, to gain better understanding of the area and potential impacts. Filling data gaps is a funded activity for Implementation. Once data gaps are filled and agreements are in place, the EKGSA and stakeholders can further develop various aspects of the DWWPP, such as those listed in Section 5.3.2.1. The projects and management actions included in the GSP are tools the EKGSA may use to sustainably manage groundwater and protect all beneficial uses and users in the area.	No action at this time.
1-D.10	Thomas Collishaw	Self-Help Enterprises	GW Levels	It is recommended that the Well Observation Program referenced in Section 1.5.3 and 3.4.1 be included as a standalone management action in Section 5.3 of the draft GSP.	The Drinking Water Well Protection Program (DWWPP) is viewed as a standalone action even though it is included in the Wellhead Requirements subset. The management actions were categorized by "like" actions, but are not necessarily linked with other actions. The DWWPP is included with the Wellhead Requirements actions as the program is likely to be developed from tracking wells or well heads.	No action at this time.
1-D.10	Thomas Collishaw	Self-Help Enterprises	GW Levels	We recommend that as more data is gathered about the status of wells and discrepancies in the well impact analysis are addressed, the Sustainable Management Criteria for water levels should be reviewed to potentially set stricter thresholds near at-risk populations.	The analysis was performed using the bottom of perforations because the analysis is more straightforward with the current data available. Water below perforations is definitive of a dry well. Wells will be impacted prior to groundwater levels hitting the bottom of perforations. However, with challenges to the current well data base and other unknowns (i.e. well pump location) performing analysis based on different parameters adds more uncertainty. The EKGSA intends to bolster this data set by partnering with Tulare County and other stakeholder partners so that a more thorough analysis of impacts can be performed.	No action at this time.
1-D.10	Thomas Collishaw	Self-Help Enterprises	GW Levels	It is recommended that EKGSA commit to developing and implementing the Drinking Water Well Protection Program (DWWPP) referenced on section 5.3.2.1 of the draft GSP within the first year of GSP implementation to ensure that potentially affected domestic wells and public water system users do not lose access to drinking water. At a minimum, the draft GSP should include a schedule and describe the work tasks necessary to conduct the aforementioned DWWPP. We also recommend that the DWWPP be included in the draft of the standalone management action instead of being referenced as a sub-tack of the well metering and sampling requirements management action.	Developing the DWWPP is contingent on better domestic well data, such as location and construction information, and also coordination with domestic well owners for access agreements and monitoring protocols. The EKGSA hopes to bolster this data in the first year of Implementation through partnerships with Tulare County and organizations such as Self-Help. Filling data gaps is a funded activity for Implementation. Once data gaps are filled and agreements are in place, the EKGSA and stakeholders can further develop various aspects of the DWWPP, such as those listed in Section 5.3.2.1. The DWWPP is viewed as a standalone action even though it is included in the Wellhead Requirements subset. The management actions were categorized by "like" actions, but are not necessarily linked with other actions. The DWWPP is included with the Wellhead Requirements actions as the program is likely to be developed from tracking wells or well heads.	No action at this time.
1-D.10	Thomas Collishaw	Self-Help Enterprises	GW Quality	When inadvertent water quality issues are likely to occur, or have occurred, due to recharge and on-farm recharge projects, short-term solutions, such as bottled water, should be provided. We ask EKGSA to include short-term solutions to address water quality issues caused by recharge projects as a potential mitigation measurement of the Drinking Water Well Protection Program.	Protection measures, both short and long-term, are listed as a component of the DWWPP. The EKGSA will work with stakeholders to better define these measures as the DWWPP is further developed.	No action at this time.
1-D.10	Thomas Collishaw	Self-Help Enterprises	Public Engagement	Effective public engagement is extremely important during GSP Implementation, we recommend the following strategies to support DAC participation during GSP Implementation: 1) Include the Well Observation Program referenced in Section 1.5.3 and 3.4.1 as a standalone management action in Section 5.3 of the draft GSP. 2) Include a more thorough description of the methods the Agency shall follow to inform the public about the progress on implementing the Plan, including the status of projects and actions, per 23 CCR § 354.10. At a minimum, the GSP should clarify when and how the Communication and Engagement Plan (C&E Plan) will be updated. 3) Update the GSP implementation engagement strategy to include a DAC communications campaign and ongoing workshops in order to solicit feedback, establish trusting relationships, and keep the public informed and engaged during plan updates and especially prior to critical decisions. 4) Account for DACs outreach, engagement and translation services when applying for state funding, establishing and approving operating budgets and enacting groundwater fees. 5) Work with known and respected community leaders to host localized neighborhood meetings. 6) Provide interpretation services, and bilingual materials tailored to the intended audience. 7) Strengthen the partnership between the EKGSA and community-based organizations and nonprofits who have a record of demonstrated success in and clear qualifications for working with these stakeholders. 8) Other tools to be considered include utility bill inserts and newsletters.	The Communication & Engagement Plan lays out the plan for continued communication and outreach during GSP Implementation. The EKGSA intends to treat this as a "living document" to be updated as needed going forward. The EKGSA will work with its stakeholders, primarily through the Advisory Committee, to evaluate effective means of communication to utilize methods that effectively reach the most stakeholders.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	General	The Draft GSP omits critical data, and does not give DWR or the public sufficient information to evaluate compliance with state law or the impact on beneficial users. Specifically, the Draft GSP lacks adequate information regarding issues such as the drinking water impacts from the proposed minimum thresholds and "glidepath" management strategy, the impact of key management decisions on beneficial users, the impact of water levels on groundwater quality, details on the proposed monitoring wells, and an adequate description of how the GSAs in the Subbasin will work together to achieve sustainability. The GSA must incorporate this information into the GSP before the Draft GSP is released to the public for public review.	The EKGSA has developed many of these items based on the current available data and understanding in partnership with the other Kaweah Subbasin GSAs. There are data gaps to fill and improvements to be made through this new information. The EKGSA looks to partner with its stakeholders during GSP Implementation to modify and update the GSP as needed.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	General	The EKGSA must prioritize drinking water as an essential pillar of the proposed GSP. The Draft GSP erroneously attempts to avoid responsibility for significant and disparate impacts on protected groups resulting from its actions.	Protecting the viability of domestic wells and smaller communities is listed in the Sustainability Goal. The EKGSA is not attempting to avoid responsibility and/or cause disparate impacts. The proposed GSP intends to manage to MOs, reduce groundwater overdraft, and protect drinking water wells.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	General	In order to prevent disparate impacts, the East Kaweah GSA must reassess the GSP's potential disparate impacts and include robust and proactive policies, projects, and management actions to protect vulnerable disadvantaged communities and the projected 85% of domestic wells from disparate impacts.	Analysis was performed using the bottom of perforations as an evaluating point for wells going dry because the analysis is more straightforward with the current data available. Water below perforations is definitive of a dry well. Wells will be impacted prior to groundwater levels hitting the bottom of perforations. However, with challenges to the current well data base and other unknowns (i.e. well pump location) performing analysis based on different parameters adds more uncertainty. The EKGSA intends to bolster this data set by partnering with Tulare County and other stakeholder partners so that a more thorough analysis of impacts can be performed. It is also important to remember that the EKGSA will be managing groundwater to the Measurable Objective, not the Minimum Threshold. Significant and unreasonable Undesirable Results are not known to exist at the proposed Measurable Objectives.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	General	The resulting Draft GSP, however, still lacks policies and projects responsive to the needs and concerns voiced by community residents and community-based organizations. While we would like to acknowledge EKGSA has now included a Drinking Water Well Protection Program in the Draft GSP, we want to highlight that the EKGSA has not yet taken steps to adopt it, and its sustainable management criteria will still allow widespread drinking water well impacts and drinking water contamination issues in DACs.	The EKGSA understands the desire to commit to a fully funded well impact mitigation program. The EKGSA is focused on filling data gaps, including well information for domestic well users, to gain better understanding of the area and potential impacts. Filling data gaps is a funded activity for Implementation. Once data gaps are filled and agreements are in place, the EKGSA and stakeholders can further develop various aspects of the DWWPP, such as those listed in Section 5.3.2.1.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Public Engagement	The Draft GSP only includes very general information on what stakeholder input the GSA has received, mostly input from an online survey that is referenced in their "Communication and Engagement Plan", and only vaguely discusses how the GSA used this input to shape the GSP. The GSP must include a discussion on prior stakeholder input that has been gathered throughout the draft development process, and detail how that feedback has shaped the GSP. This review of stakeholder input should include feedback from meetings, written comments, survey results, calls with stakeholders, and in-person meetings with stakeholders. It should do so to show what kind of input it has received, and ensure that feedback represents all types of beneficial users and that feedback was incorporated in all components of the GSP.	Recurring topics from the stakeholder survey and input from meetings are considered throughout the GSP. Items such as, but not limited to, minimizing economic impacts, protecting groundwater levels, protecting groundwater quality, consider agricultural and domestic needs, improving surface water supplies, and solving overdraft, are discussed throughout GSP. The initial listing of the potential policies and management actions were developed from this input. The policies and management actions still need to be developed through filling data gaps and additional stakeholder input prior to fully implementing.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Public Engagement	To show that it is effectively incorporating feedback from all stakeholders, the EKGSA must: 1) Incorporate the feedback of DAC residents and domestic well users into the GSP by constructing policies, actions and projects that are responsive to the needs of those groups. 2) Include a drinking water impacts analysis which clearly shows the impact of the Draft GSP on domestic well users and DACs, and that this analysis is considered in decision-making about all policies and projects in the Draft GSP. 3) Include an adequate discussion on prior stakeholder input that has been gathered throughout the draft development process. Instead of only summarizing stakeholder feedback from the stakeholder survey, the GSP must include all survey results, as well as all feedback from meetings, written comments, survey results, calls with stakeholders, and in-person meetings with stakeholders. This review must also show how all feedback was taken into account in developing the GSP. 4) Ensure workshops and GSA meetings are accessible for all stakeholders, and ensure that such spaces are collecting feedback that represents all types of beneficial users. 5) Ensure that DAC representatives are able to participate actively in decision-making at board and advisory committee levels. 6) Improve the usability of the GSA website, so that stakeholders with access to the internet can more easily access information about the GSA's activities going forward. 7) Include a more robust plan for stakeholder engagement during GSP implementation that has information on how often workshops will be hosted, the GSA must send out notices before any decision-making about projects and modifications of policies, and when and how updates to the GSP can occur.	The Communication & Engagement Plan lays out the plan for continued communication and outreach during GSP Implementation. The EKGSA intends to treat this as a "living document" to be updated as needed going forward. The EKGSA will work with its stakeholders, primarily through the Advisory Committee, to evaluate effective means of communication to utilize methods that effectively reach the most stakeholders.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Sustainability Goal	The Kaweah Subbasin sustainability goal focuses primarily on “the viability of existing enterprises of the region,” the “water needs of existing enterprises,” and local plans that create “economic and population growth.” This sustainability goal focuses on water for industry, is counter to the intent of SGMA, and frustrates the goals of the law because it does not take into account the needs of or “significant and unreasonable” impacts on all types of beneficial users in the GSA area. The EKGSA must work with the Kaweah Subbasin GSAs to agree on a Subbasin-wide sustainability goal that protects all types of beneficial users equitably, avoiding disparate impacts on protected groups.	The intent of the word ‘enterprises’ is to be all-inclusive of beneficial uses and users within the Subbasin rather than specifically list all uses/users and accidentally leave one off the list. Through the public comment period, the Kaweah GSAs have been finalizing the Coordination Agreement, which sets the sustainability goal for the Subbasin. Protecting the viability of domestic wells and smaller communities is listed in the sustainability goal.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Sustainability Goal	The sustainability goal states that it will be reached by the combined efforts of all three GSAs. However, given that the EKGSA has a shallower depth to bedrock, and given that 85% of domestic wells are already at risk of full or partial dewatering from the GSA’s proposed minimum thresholds, we know that groundwater users in the EKGSA cannot afford to be further impacted by overpumping in neighboring GSAs. Therefore we recommend that the GSA set a clear sustainability goal for its own local GSA area, and ensure that the coordination agreement with the other Kaweah GSAs does not negatively impact its sustainability goal.	The EKGSA intends to apply the Subbasin Undesirable Result to its local areas and stakeholders. It is likely this can be further defined and made unique to the EKGSA as data gaps are filled and continued collaboration amongst stakeholders is held during GSP Implementation. The Coordination Agreement includes language to continue discussions regarding MTs/MOs and evaluating potential solutions. The EKGSA is very interested in making sure other GSA actions do not prevent the EKGSA from sustainably managing the groundwater within its own area.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Sustainability Goal	Use the numerical groundwater model to evaluate the change in water levels at representative monitoring wells through 2040, both with and absent of the proposed Projects and Management Actions, and relative to the proposed measurable objectives and minimum thresholds. Use the above analysis to show how all types of beneficial users in the GSA area will be impacted by the proposed glidepath approach.	The Numerical Modeling was coordinated amongst the Kaweah GSAs and included scenarios with and without projects and management actions. An updated Numerical Modeling technical memo is provided in Appendix 2-G discussing more of the modeling analysis performed on the Subbasin. Many of the analyses were not ready at the time of the Public Draft. As more information is developed and data gaps filled, the information will be plugged into the Numeric Model for evaluating the projected impacts. This information will be shared across the Subbasin as it becomes available.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Sustainability Goal	Modify the glidepath approach, by revising the approach altogether or increasing the rate by which groundwater management policies will be applied in the GSA area, in order to equitably protect all beneficial users’ groundwater needs.	The current glidepath approach projects water levels rebounding above 2020 levels (Table 3-5 and Figure 3-7) by full implementation in 2040. It is believed the approach protects all beneficial users while allowing planning and adjustment time to avoid drastic economic impact to the region.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels SMC	The GSA has not shown how it has considered the interests of beneficial users including domestic well owners and DACs. The resulting impact from the proposed sustainable management criteria will likely lead to disparate impacts on protected groups pursuant to state and federal law. Furthermore, the Draft GSP does not show how the sustainable management criteria for groundwater levels will comply with the sustainability goal to “preserve the quality of life or support population growth.”	The MTs are based on the current based period (1997-2017) which is an average period hydrologically. The current projected decline depicts the resulting overdraft in an average period. The EKGSA intends to sustainably manage groundwater levels to the MO (Spring 2017) which is approximately the current groundwater levels where no known undesirable results are present. Managing to the MO, which is approximated for each Threshold Region, is anticipated to be protective of the local communities and drinking water users and their wells.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels Undesirable Levels	Include a local undesirable results definition that makes it clear that the GSA will locally define and address an undesirable result within its service area and protect beneficial users of groundwater.	The EKGSA intends to apply the Subbasin Undesirable Result to its local areas and stakeholders. It is likely this can be further defined and made unique to the EKGSA as data gaps are filled and continued collaboration amongst stakeholders is held during GSP Implementation. The DWWPP described in the GSP is also a potential tool to develop and implement to protect domestic well users.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels MT	The GSA set “threshold areas,” and then set minimum thresholds for each threshold region related to an assumed trajectory of decreasing water levels over the next 20 years, without regard to well depths or other potential impacts. The “glidepath” and the threshold regions were based on a “business as usual” scenario designed to continue allowing pumping in certain areas and diminish the plan’s financial impact on agricultural water users.	This is an incorrect characterization of the glidepath approach. As described in Section 3.4.1.3.1 and shown in Table 3-5 and Figure 3-7, the glidepath is projected to result in higher groundwater levels by the end of the implementation period. This allows time for planning time and setting policy framework without drastically impacting economic impact to the region, which is consistent with the Subbasin Sustainability Goal and input from several stakeholders.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels MT	Consider drinking water impacts in shaping minimum thresholds by working with DACs to determine what is significant and unreasonable impact to their drinking water resources. Include this analysis in the GSP. Ensure that minimum thresholds do not disproportionately negatively impact protected groups, in order to avoid a disparate impact.	The EKGSA intends to gather data to improve the understanding in the area and collaborate with DACs, domestic well users, and their representatives to continually evaluate sustainable management criteria and potential impacts.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels MT	In order to protect drinking water users, the GSAs should place the minimum threshold at a level above where the shallowest domestic well is screened in each Threshold Area.	Based on the current data, the shallowest domestic well screen is 40 to 60 feet below the surface. Setting this as a Minimum Threshold would require immense restrictions on groundwater use for the EKGSA as a whole to achieve. Reaching a Measurable Objective that would be even closer to the surface is likely not possible in most of the EKGSA area.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater levels MT	Provide a robust drinking water protection program to prevent impacts to drinking water users and mitigate drinking water impacts that occur by committing to developing a more complete well canvass and adopting the Drinking Water Well Protection Program.	The EKGSA intends to develop a better well canvass through partnering with the County and other agencies with this information. This is a data gap that is slated to be funded in the GSP. While gathering this data and gaining a better understanding of the wells in the EKGSA, the DWWPP can be further developed and implemented.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels MO	The GSA must include a complete analysis showing the link between Spring 2017 levels and achieving the sustainable yield.	Spring 2017 levels were recommended and discussed at TAC and AC meetings and were approved for the initial MOs based on no known impacts at this time. From experience with tracking surface water imports and groundwater levels, it is believed sustainable management around the sustainable or safe yields can be achieved. The Kaweah Subbasin still needs to fill data gaps to finalize the Subbasin sustainable yield.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels MO	The GSA must clarify how its measurable objectives will achieve the sustainable yield	Sustainable yield will be achieved by management of the demands, groundwater replenishment, and pumping. It is believed the EKGSA can achieve the proposed MOs when managing these components and allowing beneficial users access and use to groundwater.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels MO	The GSA must analyze how many wells will be fully or partially dewatered from Spring 2017 levels, and disclose that data in the GSP.	The well data is challenging as it currently stands, hence the initial analysis evaluating based on the bottom of perforations. Similar analysis has been done relating to the MO and bottom of perforations. <b>A Figure and associated text has been added to Section 3.4.1.3 discussing analysis of wells dry at the proposed MO.</b>	<b>Yes, text revision.</b>
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Levels MO	The GSA must show how it has considered the needs of all beneficial users, including drinking water users, in setting its measurable objectives.	Spring 2017 levels are proposed for the initial MOs based on no known impacts at this time. Based on the added analysis in Section 3.4.1.3 it is believed this is protective of beneficial users. Data gaps still need to be filled to further evaluate impacts and update this understanding.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality	This will not capture drinking water impacts on areas outside municipal water systems, and will leave drinking water for domestic well users vulnerable to unchecked contamination from groundwater management activities and policies. Instead, in order to protect drinking water for all users in the GSA area, the GSA must monitor all wells for compliance with all primary drinking water contaminants.	Monitoring for all primary drinking water contaminants would be a very costly monitoring program and potentially be monitoring for contaminants that are not known to be in the area based on the data that is available. The proposed DWWPP will aim to partner with domestic well users and representatives to set a program that monitors wells for those outside municipal systems. Locating volunteers for the program, the wells, construction information, and establishing monitoring and access agreements are needed to implement such program.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality MT	The Draft GSP does not present the baseline conditions against which contamination measurements from each representative monitoring well will be assessed. Therefore it cannot be determined which minimum threshold will apply to which contaminant at which monitoring site. The GSA has also not presented how many years of data it has for each representative monitoring site.	The groundwater quality data set is not robust and a significant data gap. The current 10-year average (2008-2017) baseline for the wells which this is possible is shown in Table 4-3. The quality data available during the Base Period (1997-2017) is portrayed through a series of figures in Appendix 2-F.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality MT	Immediately plan for, fund and construct new representative monitoring wells or evaluate existing wells to ensure that representative monitoring wells are monitoring for impacts to domestic well users.	The EKGSA intends to construct more dedicated monitoring wells. The initial network intends to lean on the CASGEM wells while monitoring wells are constructed in gap areas. As these are filled, the EKGSA will turn its attention to replacing existing wells.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality	Clarify how the minimum thresholds will be triggered, and how the GSA will determine that it did or did not cause the increase in groundwater contamination.	Minimum thresholds will be triggered based on the criteria set in Section 3.4.2.2.1. Current quality data sets are lacking so additional data gathering and studying are needed to understand current conditions. Focusing on obtaining monitoring data ahead of project or management action implementation will assist the EKGSA determining impacts of its management activities as they come online.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality	Monitoring for compliance with all established primary drinking water standards, hexavalent chromium, and PFOSs/PFOAs, at all representative monitoring wells. We have raised this point at several committee meetings and through written correspondence.	The EKGSA strategy for groundwater quality monitoring of public system wells accounts for any emerging contaminants. These public system wells are required through their separate monitoring programs to monitor for emerging contaminants. In the future if emerging contaminants become an issue, the key COC can be adjusted.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality	Ensure that all monitoring wells are measuring for concentrations of the contaminants of concern every month.	The monitoring network wells are intended to be monitored consistently for the proposed COC and at the proposed interval.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality	Trigger a minimum threshold violation earlier, so that significant spikes in contamination will not be lost in the 10-year average. We recommend that the GSA have minimum thresholds triggered upon two consecutive measurements that exceed the MCL or a 20% increase from the baseline.	The EKGSA can consider this recommendation when quality data gaps are filled and re-evaluates its sustainable management criteria, including MT	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality	We recommend that the GSA include groundwater quality monitoring in its Drinking Water Observation Program to trigger GSA action when contamination spikes occur. Please see more information about the types of projects that could be implemented when a Drinking Water Observation Program is triggered in our comments about Projects and Management Actions.	The Drinking Water Well Protection Program (DWWPP) is anticipated to included quality monitoring when developed and implemented.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality UR	Define its own local interpretation of the subbasins undesirable result.	The EKGSA intends to apply the Subbasin Undesirable Result to its local areas and stakeholders. It is likely this can be further defined and made unique to the EKGSA as data gaps are filled and continued collaboration amongst stakeholders is held during GSP Implementation.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality UR	Consider the impact of its undesirable impact on all types of beneficial users in the GSA area and Ensure that this undesirable result does not cause a disparate impact on protected groups under state civil rights law.	By tracking drinking water wells against the COC with MTs set based on MCLs, the EKGSA can evaluate the drinking water quality for many communities in and near the EKGSA. The current selected drinking water wells represent approximately 80%-90% of the EKGSA population, which is felt to be a very good representation of the water quality consumed by most within the EKGSA. Going forward more specific domestic wells may be monitored through the Drinking Water Well Protection Program.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality MO	Clarify how measurable objective will be triggered. It would be helpful to provide a concrete example in the GSP to show how this will be done.	Measurable objectives would be achieved by monitoring data indicating COC concentrations are not increasing, and potentially decreasing, over time. A sentence has been added to 3.4.2.3.1 to give the example: <b>"An example of meeting the proposed Measurable Objective would be to have a well that has consistent monitoring data for the COC and shows the concentrations of a COC (i.e. Nitrate) remaining at the baseline condition and/or improving (decreasing) in concentration."</b>	<b>Yes, text revision.</b>
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality MO	Ensure the better of highest quality of water achieved since 2015, or the MCL, whichever reflects a lower level of water contamination. Additionally, the GSA should state in the GSP that it will strive to achieve the public health goals for all drinking water contaminants, wherever possible.	The authorities of the GSA is to not cause contamination through its actions to sustainably manage groundwater. The EKGSA is open to partnering with other agencies and programs tasked with remedying water quality concerns, where feasible, such that public health goals can be achieved.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality MO	Consider the interests of beneficial users in creating this policy decision, including consideration of the impact on drinking water resources, and include a description of that data and how it was considered in the GSP.	Data gaps are to be filled in the future and collaborated with beneficial users and representatives to evaluate their accuracy and appropriateness through public meetings, outreach events, and programs to continually evaluate policy effectiveness.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Groundwater Quality MO	The GSP must collaborate with existing groundwater quality management agencies to help create an effective monitoring network to identify the location of contaminant plumes.	The EKGSA intends to partner with agencies responsible for water quality issues, where feasible. This includes monitoring, management actions, and potential project placement (i.e. recharge basin placement).	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Subsidence UR	When considering the subsidence Undesirable Result, the GSA should: 1) Analyze the impact of subsidence on all beneficial user groups. 2) Define a local undesirable result for subsidence that takes into account the critical infrastructure needs of all beneficial user groups, including domestic well owners.	Section 3.4.3.1.2 and 3.4.3.1.3 describe impacts to all beneficial users. During development it was determined that the Friant-Kern Canal is the most critical infrastructure within the EKGSA as it supplies water for both agricultural and drinking water uses. The EKGSA is also using a drinking water well from the community of Plainview to evaluate drinking well impacts in the area most likely susceptible to subsidence impacts.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Subsidence Minimum Threshold	In defining critical infrastructure and setting undesirable results, minimum thresholds, and measurable objectives, the GSA should prioritize infrastructure for drinking water users by addressing the impacts of land subsidence on roads, homes, piping, and wells.	<b>The Plainview well point has been added to Section 3.4.3.2.5 to track impacts to drinking water users.</b>	<b>Yes, text revision.</b>
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Subsidence MO	The GSP should establish the measurable objective for land subsidence as zero change in subsidence resulting from groundwater management actions.	The EKGSA is tying the MO to the object it is measuring. From experience, subsidence has not been a serious issue within the EKGSA. It is anticipated that no impacts to FKC deliveries will be synonymous with zero change in subsidence.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	The projects and management actions set forth in the Draft GSP do not demonstrate a path towards achieving sustainability goals in the plan. The GSA has proposed projects that will increase water supply to make up for a projected 60% of the overdraft in the GSA area, but it has not yet committed to projects or management actions to address the remainder of the overdraft. Before adoption, the EKGSA must identify projects and management actions with clear triggers to reach basin-wide sustainability through demand reduction to prevent disparate impacts on vulnerable water users.	The current slate of projects included in the GSP were those recommended during public meetings and developed to a conceptually level by project proponent. This current listing is intended to be the only efforts undertaken by the EKGSA. Additional projects and management actions are anticipated to be further assist in reaching sustainable management. The current estimate of the water budget and overdraft will be evaluated and modified as additional data is available. Pending the results of this evaluation, the current projects may address more than 60% of the overdraft. They could also address less in which case additional projects and management actions will need to be online sooner than later. The current schedule in Section 6.3 indicates several management actions will begin planning and development early in the implementation period.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	We are concerned that the GSA will not be able to access the surface water which it claims will be used to implement many of its projects. We are aware of the obstacles to obtaining additional surface water, given climate variability and the difficulty of accessing surface water rights. The GSA must clarify how it will overcome these obstacles to surface water. Given these obstacles and the increasing climate variability that will result from climate change, the GSA must immediately begin implementing projects and management actions which reduce groundwater use by the largest users through incentives, fees, allocations, crop conversion, and more.	The EKGSA understands this concern and the Friant Contractors within the EKGSA are intently focused on making sure they can access surface water in as many years possible and take as much as possible when available. While some projects look to Section 215 supplies on the Friant CVP system, there are other management options the Friant Contractors are evaluating to maximize their contracts and bringing in surface supplies, which benefits the EKGSA as a whole.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	The Draft GSP's chapter on projects and management actions does not show how it will prevent drinking water impacts to these groups. The GSA has proposed a preliminary drinking water wells protection program, but the program has not been approved or designed to avoid disparate impacts or significant and unreasonable impacts on disadvantaged communities.	The EKGSA is focused on filling data gaps, including well information for domestic well users, to gain better understanding of the area and potential impacts. Filling data gaps is a funded activity for Implementation. Once data gaps are filled and agreements are in place, the EKGSA and stakeholders can further develop various aspects of the DWWPP, such as those recommended in the comment letter and listed in Section 5.3.2.1.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	The GSA has included a potential management action, WH-2 Installation of Well Flow Meters, to monitor groundwater use. This is in alignment with GSAs' authority under SGMA, and is a vital first step towards accurately quantifying groundwater use in the GSA area. With the data from this metering program, EKGSA will be better equipped to create an equitable water allocation framework and well as have stronger data to help understand what is sustainable yield is the basin should be. We recommend that the GSA board approve and implement this program immediately.	There are other avenues for tracking groundwater pumping, such as that through satellite ET analysis. The EKGSA is pursuing an ET option, but will simultaneously evaluate a well metering policy to check ET results and/or potentially use for other management actions.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	EKGSA should adopt management actions that establish geographical protection areas (buffer zones) by establishing bans, pumping limitations or community-specific management areas around DACs and domestic well clusters.	The EKGSA has not yet developed policy related to groundwater pumping restrictions. This recommendation will be considered when developing the policy.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	Recharge basins should be done near or in DACs and domestic well clusters, not on farm land with contaminated soil that can subsequently contaminate groundwater quality. The EKGSA must also demonstrate the specific benefit to domestic wells and DACs in each of its recharge projects in order to protect vulnerable water users.	Locating recharge projects is largely based on land availability and project participants. Locating upgradient drinking water systems will be a consideration for future projects but will not be the only consideration as there are other critical criteria such as location to source water supply and recharge capability of a site that will be crucial in developing successful recharge projects.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	Projects were given yearly timelines in this version of the GSP, but monthly timelines would ensure that projects are completely efficiently. Timelines should also include deadlines for notifying impacted communities and engaging community residents in project design and implementation.	Project schedules are estimated at this time based on similar project experience and projected timeline for implementing from the project proponent. More defined schedules can be developed as specific project details are developed.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	Detailed information on projects must be available to the public online, as appendices to the GSP, and in a public workshop during a public comment period.	The current slate of projects included in the GSP were those recommended during public meetings and developed to a conceptual level by project proponent. Detailed information still needs to be developed prior to implementing. As this information is developed it will be made available through various means such as the website, public meetings, and notices.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	Encourage multi-benefit projects such as wetlands restoration or stormwater drainage ponds that would eliminate flooding and increase groundwater recharge in disadvantaged communities.	Additional projects are expected to be recommended and evaluated during GSP Implementation. The EKGSA will evaluate the ability to make projects multi-benefit to maximize their impact for sustainable groundwater management.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Projects & Management Actions	Although there are multiple short-term funding sources to leverage for SGMA-related projects, the EKGSA operating budget must be a reliable source of funding over the long-term of GSP implementation. Projects benefitting DACs should be funded by the GSA and member agencies, and should not rely on state grants. Furthermore, the planned land-based assessment must include protections for de minimis water users. EKGSA must ensure the funding scheme for GSP does not create a structural barrier to accessing benefits from plan implementation.	The EKGSA will be evaluating several means of funding SGMA implementation and projects. The EKGSA is currently working through a Prop 218 process for on-going implementation. Other options such as grants, pumping charges, and payments by project proponents will be considered to fund various GSP components and provide sustainable groundwater management benefits to all within the EKGSA.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Monitoring Network	In order to address data gaps in the monitoring network that skew towards community water systems and agricultural groundwater users at different depths of the aquifer, the EKGSA must create and fund a domestic well sampling program.	This will likely be a consideration through the Drinking Water Well Protection Program to be implemented following filling data gaps and collaborating with domestic well users and representatives to establish volunteers, monitoring points, and access agreements with the EKGSA.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Monitoring Network	All monitoring wells for water quality are located in the southern portion of the Subbasin. Thus, no water quality monitoring will be performed near the disadvantaged communities of Ivanhoe or Woodlake, which represents a population of over 11,500 people. In addition, approximately 300 domestic wells are located in the area surrounding and north of Ivanhoe and Woodlake which represents approximately 40% of the domestic wells in the Subbasin. Therefore, the proposed network of water quality monitoring is insufficient to monitor impacts to groundwater for drinking water beneficial users, particularly domestic well users and disadvantaged communities.	The Monitoring Network is monitoring the wells of Ivanhoe and Woodlake, which are outside the EKGSA boundary. The Monitoring Network also included wells for the Communities of Yettem and Seville, which are outside the EKGSA Boundary, but are down gradient. By tracking drinking water wells against the COC with MTs set based on MCLs, the EKGSA can evaluate the drinking water quality for many communities in and near the EKGSA. The current selected drinking water wells represent approximately 80%-90% of the EKGSA population, which is felt to be a very good representation of the water quality consumed by most within the EKGSA. Going forward more specific domestic wells may be monitored through the Drinking Water Well Protection Program.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Monitoring Network	The minimum threshold for water quality is the same across the Subbasin, as such all water quality monitoring wells should be sampling the same. While we still insist the GSA should monitor for all Title 22 contaminants, at minimum domestic use wells should be monitored for all Title 22 contaminants.	The EKGSA can consider which COC to monitor for domestic wells through the Drinking Water Well Protection Program through evaluation of any new data made available and comparing water quality data from public water systems.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Monitoring Network	The GSA must invest in constructing more dedicated monitoring wells and needs to explain how they plan to transition current wells in the monitoring network into dedicated monitoring wells.	The EKGSA intends to construct more dedicated monitoring wells. The initial network intends to lean on the CASGEM wells while monitoring wells are constructed in gap areas. As these are filled, the EKGSA will turn its attention to replacing existing wells.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Plan Implementation	Ensure that the communications and engagement budget is sufficient to cover all costs associated with effective engagement of all types of beneficial users, including translation of materials, interpretation at meetings, workshops held at accessible times and places, services such as food and childcare at evening meetings, door to door outreach to reach more rural stakeholders, collaboration with local nonprofits to implement outreach and engagement, and more.	Continued communications and engagement is included in the proposed budget. It is anticipated that the Kaweah GSAs will partner on several items during initial GSP implementation as much of the focus will be on filling data gaps. The Communications and Engagement Plan speaks further to different tools to be used for outreach. These will be continually evaluated with the Advisory Committee and stakeholders to determine effectiveness in order to best reach all stakeholders in the EKGSA	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Plan Implementation	The EKGSA must: 1) Clarify in the GSP that the GSA will seek and accept feedback from the public on an ongoing basis throughout plan implementation. 2) Clarify that any modification to the GSP must be in writing, noticed and provide sufficient time for public review and feedback. 3) Ensure that the GSA solicits comments and feedback in an accessible way, including publishing translated comment forms, staff who can speak on the phone with residents who speak all threshold languages according to the Bilingual Services Act.	Sentence added to the text in second paragraph of Section 6.6 Periodic Evaluations. Sentence reads: <b>While the EKGSA is evaluating various components of the GSP (i.e. sustainable management criteria), the EKGSA will be seeking feedback from stakeholders through a public process utilizing adequate and appropriate materials. Decisions will be made at public board meetings and coordinated at the Subbasin level, as needed.</b>	<b>Yes, text revision.</b>
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Infringes on Water Rights	The GSP allows continued overdraft above safe yield of the basin, such that drinking water wells will continue to go dry, infringing on the rights of overlying users of groundwater. The GSP must be revised to protect the rights of residents of disadvantaged communities and/or low-income households who hold water rights to groundwater.	The EKGSA is proposing to manage groundwater to Measurable Objectives and alleviate overdraft conditions and remedy declining water levels. As the EKGSA works towards sustainably managing groundwater, it will follow existing law to avoid infringing on water rights.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Conflicts with reasonable and beneficial use	As the Draft GSP authorizes waste and unreasonable use, it conflicts with the reasonable and beneficial use doctrine and the California Constitution.	It is not clear how the EKGSA is authorizing waste and unreasonable use. However, the EKGSA will follow existing California and groundwater law principles as groundwater management policies, programs, projects, and management actions are developed. As the EKGSA navigates through these different items towards sustainable groundwater management, the EKGSA will solicit input from stakeholders so legal concerns can be addressed.	No action at this time.
1-D.11	Nataly Escobedo Garcia, Blanca Escobedo, Amanda Monaco	Leadership Council for Justice and Accountability	Conflicts with Public Trust Doctrine	The Draft GSP does not consider impacts on public trust resources, or attempt to avoid insofar as feasible harm to the public's interest in those resources.	The EKGSA will follow existing California and groundwater law principles as groundwater management policies, programs, projects, and management actions are developed. As the EKGSA navigates these different items towards sustainable groundwater management, the EKGSA will solicit input from stakeholders so legal concerns can be addressed.	No action at this time.
1-D.12	Zach Haydt	Community Water Center	Water Budget	Revise the Basin Setting and Water Budget of the draft GSP to address key missing information on data and assumptions used in the development of these sections in order to better articulate and quantify the needs of drinking water users within the GSA.	The EKGSA and Kaweah Subbasin intend to further evaluate and refine the Water Budget as data gaps are filled and estimates and/or assumptions can be removed from the analysis. The EKGSA will be looking to vet new data with stakeholders on its accuracy and appropriateness.	No action at this time.
1-D.12	Zach Haydt	Community Water Center	GW Levels	We recommend that the GSA revise the assessment of potential impacts on drinking water users as our Focused Technical Review indicates that the usability of up to 85% of domestic wells in the EKGSA area would be expected to be significantly impacted if water levels reach the proposed MTs. Based on the assessment, EKGSA should set stricter minimum thresholds near vulnerable communities and areas with a high density of domestic wells to avoid disproportionate impacts on protected groups. We also recommend including a definition of a local undesirable result that clearly indicates how EKGSA will locally define and address an undesirable result within its service area and protect beneficial users of GW.	The analysis was performed using the bottom of perforations because the analysis is more straightforward with the current data available. Water below perforations is definitive of a dry well. Wells will be impacted prior to groundwater levels hitting the bottom of perforations. However, with challenges to the current well data base and other unknowns (i.e. well pump location) performing analysis based on different parameters adds more uncertainty. The EKGSA intends to bolster this data set by partnering with Tulare County and other stakeholder partners so that a more thorough analysis of impacts can be performed. The current slate of Management Areas and Threshold Regions are based on current data availability. As more data and monitoring are performed through Implementation, focused management areas can be developed in areas as need arises.	No action at this time.

App	From	Agency	Section/Page	Comment	Response	GSP Change?
1-D.12	Zach Haydt	Community Water Center	GW Quality	The draft GSP has utilized a good approach by establishing minimum thresholds and measurable objectives based on maximum contaminant levels (MCLs) for contaminants of concern for municipal use. However, the water quality monitoring network for municipal use is not spaced evenly across the GSA area and the analysis presented does not clearly illustrate how the MOs/MTs will adequately ensure that significant impacts to the long-term viability of the GW resource will be avoided - particularly for domestic water users and S/DACs. That said, the GSA should provide a more detailed explanation of how the proposed water quality MT approach and monitoring network will result in protection of GW for DACs and other drinking water beneficial users. We also recommend developing a warning system that informs EKGSA stakeholders when contaminants of concern have reached 80% of the MCL. Finally, we recommend expanding the GW quality monitoring network near the DACs of Ivanhoe, Woodlake, and Lindsay.	The Monitoring Network is monitoring the wells of Ivanhoe, Woodlake, and Lindsay. The Monitoring Network also included wells for the Communities of Yettem and Seville, which are outside the EKGSA Boundary, but are down gradient. By tracking drinking water wells against the COC with MTs set based on MCLs, the EKGSA can evaluate the drinking water quality for many communities in and near the EKGSA. The current selected drinking water wells represent approximately 80%-90% of the EKGSA population, which is felt to be a very good representation of the water quality consumed by most within the EKGSA. Going forward more specific domestic wells may be monitored through the Drinking Water Well Protection Program. Lastly, a warning system is included in the GSP (Section 3.4.2.3.2), building from a CV-SALTS example, to inform stakeholders of wells with concentrations less than 80% of the MCL at the starting baseline if the concentration increases.	No action at this time.
1-D.12	Zach Haydt	Community Water Center	Drinking Water Well Mitigation Program	If EKGSA defines its sustainability criteria in a way that allows for the dewatering of drinking water wells, it must provide a robust drinking water protection program to prevent impacts to drinking water users and mitigate the drinking water impacts that occur. We appreciate that the EKGSA has incorporated language that outlines a possible well impact prevention and mitigation program. The language in the draft-GSP presents the program as a mere possibility, however, and we believe that California law, including the Human Right to Water, as well as the language of SGMA itself, requires such a program be an integrated part of a GSP. We recommend that the GSA fully integrate a well impact prevention and mitigation program, including a funding structure, in the official GSP.	The EKGSA understands the desire to commit to a fully funded well impact mitigation program. The EKGSA is focused on filling data gaps, including well information for domestic well users, to gain better understanding of the area and potential impacts. Filling data gaps is a funded activity for Implementation. Once data gaps are filled and agreements are in place, the EKGSA and stakeholders can further develop various aspects of the DWWPP, such as those listed in Section 5.3.2.1.	No action at this time.
		Public Hearing		Additional public comments were made at the Public Hearing held December 16, 2019 by Amanda Monaco (LCJA), Blanca Escobedo (LCJA), and Karen Yohannes (Landowner/Stakeholder). Their public comments echoed the comments made in their respective written comment letters.		



Appendix 1-D.1:  
City of Lindsay Resident Comments



## Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhaqman@lindmoreid.com](mailto:mhaqman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10-15-19

Submitted By: Alberto Corona

Company/Agency Name: \_\_\_\_\_

Mailing Address: 861 Lafayette

City: Lindsay State: CA Zip: 93247

Email: \_\_\_\_\_ Telephone: (559) 562-5622

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Agricultural User                      | <input type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User       | <input type="checkbox"/> Surface Water User      |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input checked="" type="checkbox"/> Other _____   |  |

Chapter No./Page No. GSP: \_\_\_\_\_

Comments: \_\_\_\_\_

I would like to have more information about this agency and what it is they are doing in order to know/understand what is it I am supposed to support. I do not want groundwater levels

to drop. I would like there to be enough potable water for everyone and water to sustain plants that we eat and that provide our jobs. I need more information.

Attach additional pages if needed.



## Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhaqman@lindmoreid.com](mailto:mhaqman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10-15-19

Submitted By: Concepcion Orozco

Company/Agency Name: \_\_\_\_\_

Mailing Address: 425 E. Hermosa

City: Lindsay State: CA Zip: 93247

Email: \_\_\_\_\_ Telephone: 559-586-0770

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Agricultural User                      | <input type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User       | <input type="checkbox"/> Surface Water User      |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input checked="" type="checkbox"/> Other         | <u>Resident in the City of Lindsay</u>           |

Chapter No./Page No. GSP: \_\_\_\_\_

Comments: \_\_\_\_\_

I support what this agency is doing. I need more information so that I can make any recommendations. We want a plan that wont cost us more and that maintains groundwater

levels.

Attach additional pages if needed.



# Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhaqman@lindmoreid.com](mailto:mhaqman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10-15-19

Submitted By: Emilia Montiel

Company/Agency Name: \_\_\_\_\_

Mailing Address: 861 W. Silevercrest

City: Lindsay State: CA Zip: 93247

Email: \_\_\_\_\_ Telephone: (559) 568-8631

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Agricultural User                      | <input type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User       | <input type="checkbox"/> Surface Water User      |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input checked="" type="checkbox"/> Other         | <u>Resident in the City of Lindsay</u>           |

Chapter No./Page No. GSP: \_\_\_\_\_

Comments: \_\_\_\_\_

We support what this agency is doing, but we need more information in order to make specific recommendations. We want a plan that wont cost us more and that maintains groundwater levels.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attach additional pages if needed.



## Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhaqman@lindmoreid.com](mailto:mhaqman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10-15-19

Submitted By: Jose Manuel Zepeda

Company/Agency Name: \_\_\_\_\_

Mailing Address: 749 Apia St

City: Lindsay State: CA Zip: 93247

Email: \_\_\_\_\_ Telephone: 559-472-9391

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Agricultural User                      | <input type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User       | <input type="checkbox"/> Surface Water User      |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input checked="" type="checkbox"/> Other         | <u>Resident in the City of Lindsay</u>           |

Chapter No./Page No. GSP: \_\_\_\_\_

Comments: \_\_\_\_\_

I support what this organization is doing, but I believe there needs to be more information in order to make any recommendations. I want a plan that maintains the levels of our

groundwater, that provides potable water and also maintains agriculture, but a plan that wont cost me more.

Attach additional pages if needed.



## Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhaqman@lindmoreid.com](mailto:mhaqman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10-15-19

Submitted By: Maria I. Morales de Lopez

Company/Agency Name: \_\_\_\_\_

Mailing Address: 704 W. Silvercrest Dr.

City: Lindsay State: CA Zip: 93247

Email: \_\_\_\_\_ Telephone: (559) 517-6913

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Agricultural User                      | <input type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User       | <input type="checkbox"/> Surface Water User      |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input checked="" type="checkbox"/> Other         | <u>Resident in the City of Lindsay</u>           |

Chapter No./Page No. GSP: \_\_\_\_\_

Comments: \_\_\_\_\_

I would like to have more information so that I can understand what it is I need to support. I do not want groundwater levels to drop.

I would like there to be enough potable water and also enough water to support agriculture.

Attach additional pages if needed.



## Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhagman@lindmoreid.com](mailto:mhagman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10-15-19

Submitted By: Salud Lemus

Company/Agency Name: \_\_\_\_\_

Mailing Address: 690 W. Hermosa St

City: Lindsay State: CA Zip: 93247

Email: \_\_\_\_\_ Telephone: (559) 792-5050

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Agricultural User                      | <input type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User       | <input type="checkbox"/> Surface Water User      |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input checked="" type="checkbox"/> Other         | <u>Resident in the City of Lindsay</u>           |

Chapter No./Page No. GSP: \_\_\_\_\_

Comments: \_\_\_\_\_

I support what EKGSA is doing, but I need more information to make recommendations. I would like a plan that won't cost us more and that maintains the groundwater levels.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attach additional pages if needed.

Appendix 1-D.2:  
Tulare County Farm Bureau Comments





NOV 04 2019

# TULARE COUNTY FARM BUREAU

*Mission: to promote and enhance the viability of Tulare County agriculture.*

October 30, 2019

East Kaweah Groundwater Sustainability Agency

315 E Lindmore St,  
Lindsay, CA 93247

Re: GSP Comments

To Whom It May Concern:

Tulare County Farm Bureau represents approximately 1,500 farm and ranch members in the county. We are committed to serving as a resource to our farm community, and work to surface and address problems and identify solutions for our members.

We want to thank your GSA management team for the many years of hard work, planning, and organization that has occurred to bring us to this point. We appreciate the work that has been assumed by many irrigation districts, water agencies, paid and volunteer leaders, which have been thrust into these roles to help our basins collectively solve the undesirable conditions set forth in SGMA law, enacted in 2015.

Our over-arching comments are:

- Groundwater sustainability plans should remain a fluid, living, breathing, adaptive document which provides operational flexibility for the management team to use in maximizing water resources for the farm and rural communities impacted by the GSP implementation
- Water pumped from this sub basin should be applied here, care should be given to avoid impacts to our sustainability and safe yield. We discourage exportation of waters out of the sub-basin where it would negatively impact local landowners.
- Plans should seek to address disparity amongst the landowners, and serve the white area and non-white area lands as equitable as possible. We encourage cautious and investigative due diligence in the development of a water market, or any model which may place certain landowners at a competitive disadvantage.
- We encourage strategies which will protect agriculture land from fallowing, or retirement.
- We encourage incentives that will promote marginal or impaired land being used for recharge and the landowner receiving a financial incentive for making these changes in their cropping strategies.
- We encourage plans to look at broad long-range and short-term ideas that will maximize bringing new non-native water supplies into our hydrologic basin for recharge, and to increase the supply available.
- We support GSPs that seek to study, investigate, and monitor basin conditions before significant disruptive management changes are required of landowners in their jurisdictions.
- We support sustainability goals that help unify each sub-basin and provide additional benefits for the cultivation of crops here in the Tulare Lake basin hydrologic region. We encourage projects to be advanced that promote maintaining agricultural acreage while minimizing the need to idle farmland.
- We support rigorous and relevant education to growers and landowners in the GSA's territory with frequent updates and opportunities for public outreach and feedback.

Sincerely,

TRICIA STEVER BLATTLER  
Executive Director

## Appendix 1-D.3: Karen Johannes Comments



# Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhagman@lindmoreid.com](mailto:mhagman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10/28/2019

Submitted By: Karen Yohannes

Company/Agency Name: \_\_\_\_\_

Mailing Address: 31759 Road 156

City: Visalia State: CA Zip: 93292

Email: karenfy@icloud.com Telephone: \_\_\_\_\_

APN(s): \_\_\_\_\_

**Stakeholder Type** (check all that apply):

- Agricultural User
- Domestic Well Owner/User
- Municipal Well Operator
- Public Water Systems
- Environmental User
- Surface Water User
- Disadvantaged/Rural Community Resident
- Other \_\_\_\_\_

Chapter No./Page No. GSP: Appendix 2-H

Comments: \_\_\_\_\_

Water Accounting Framework: General Apportionment Concern:  
 I am concerned with the current allocation of seepage and how return flows of all appropriators to the salvaged/non-native yield is essentially allowing change to a water right with potential transfers of water to third parties to the injury of groundwater pumpers even though the seepage has existed for decades and the appropriators will have not physically changed anything on the ground or in their water rights to gain a very valuable credit to the injury of existing groundwater pumpers. The law may allow them to recapture the seepage or runoff for their own use, but that is very different from crediting them with water they have allowed to leave their property for decades and have taken no effort to recapture or prevent from doing so.

The Salvaged category of apportionment to increase the native supply for all groundwater users. The following variables create uncertainty; the Terminus Dam, built with public money by Army Corp. of Engineers, the lack of measurement of surface deliveries, application and actual seepage, leaves room for an apportionment to native supply for the shared benefit of the native supply for the sub basin. This apportionment is not to be confused with actual projects, just irrigation return flows and conveyance seepage.

Attach additional pages if needed.





# Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhagman@lindmoreid.com](mailto:mhagman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10/28/2019

Submitted By: Karen Yohannes

Company/Agency Name: \_\_\_\_\_

Mailing Address: 35917 Road 156

City: Visalia State: CA Zip: 93292

Email: karenfy@icloud.com Telephone: \_\_\_\_\_

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Agricultural User           | <input checked="" type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator       |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User                  | <input checked="" type="checkbox"/> Surface Water User |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input type="checkbox"/> Other _____                         |  |

Chapter No./Page No. GSP: Chapter 5 p. 40 Methods for Determining Groundwater Allocations

Comments: \_\_\_\_\_  
It should not be controversial that if you allocate groundwater on anything OTHER than actual/historic use, you have a greater probability to giving some folks more than they need and some folks less and the "pain" will be unevenly distributed to those that rely heavily on groundwater pumping. A proportional approach with historical pumping AND current use are priorities that need to be considered when making pumping allocation decisions and policy.

~~Comment regarding the "Comprehensive Allocation Method Table 1, the prescriptive right allocation needs to be viewed with the concept of Self Help of neighboring farmers that have proven production and other evidence of groundwater use. It is my opinion that mutual water companies and entities claiming prescription should not be allocated a greater apportionment for their growers than the correlative amount designated for overlying right holders.~~

Attach additional pages if needed.



## Groundwater Sustainability Plan (GSP) Comment Form

Please complete the following information to provide comments on the draft East Kaweah GSP. Type or print legibly for your comments to be considered. Attach additional sheets if needed. Letters with comments will also be accepted.

Please return this form to the East Kaweah GSA prior to the December 16, 2019 public hearing by emailing [mhagman@lindmoreid.com](mailto:mhagman@lindmoreid.com); hand deliver to 315 E. Lindmore Ave in Lindsay; or mail to East Kaweah GSA, PO Box 908, Lindsay, CA 93247.

Date Submitted: 10/28/2019

Submitted By: Karen Yohannes

Company/Agency Name: \_\_\_\_\_

Mailing Address: 35917 Road 156

City: Visalia State: CA Zip: 93292

Email: karenfy@icloud.com Telephone: \_\_\_\_\_

APN(s): \_\_\_\_\_

Stakeholder Type (check all that apply):

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Agricultural User           | <input checked="" type="checkbox"/> Domestic Well Owner/User | <input type="checkbox"/> Municipal Well Operator       |
| <input type="checkbox"/> Public Water Systems                   | <input type="checkbox"/> Environmental User                  | <input checked="" type="checkbox"/> Surface Water User |
| <input type="checkbox"/> Disadvantaged/Rural Community Resident | <input type="checkbox"/> Other _____                         |  |

Chapter No./Page No. GSP: Chapter 5 page 45 5.3.4. Groundwater Marketing/Trading

Comments: \_\_\_\_\_

GMT 1 Carryover Structure Comment:  
Please consider the determination of this policy by hydrogeological science and monitoring to avoid impacts to neighboring groundwater users and sustainability.

Request to change the words "AND" to "WITHIN"  
The sentence in the second paragraph "The EKGSA may consider exploring some of these options with neighboring GSA's "AND" sub basin wide for an aggregated approach and mutual cost savings". The word, "AND" implies trading with neighboring GSA's potentially outside the sub basin. This could have impacts to sustainability, impact supplies and access to our own groundwater users in our own sub basin, creating further disparities for access and supply for groundwater users within our sub basin. By changing to "...neighboring GSA's 'WITHIN' sub basin maintains our priority as a sub basin.

Attach additional pages if needed.

Appendix 1-D.4:  
City of Lindsay Attorney Comments



# City of Lindsay

DEPARTMENT OF CITY SERVICES

P.O. Box 369 — Lindsay, California 93247 — 150 North Mirage Ave  
559 • 562 • 7102  
559 • 562 • 5748 fax



DATE : December 12, 2019

TO : Michael Hagman, EKGSA Executive Director  
Matt Klinchuch, EKGSA Contract Engineer

FROM : Michael Camarena, City Services Director

RE : City of Lindsay Responses to City Attorney review of Draft GSP

Please find below my responses (in **bold font**) to City Attorney Mario Zamora’s review of the draft Groundwater Sustainable Plan. I have reviewed these items with City of Lindsay EKGSA Board member, Brian Watson as well and he is supportive of the responses.

1. Lindsay water demands to confirm.
  - a. 2.48 MGD
  - b. 2.82 MGD
  - c. 1,100 AF/Year

**Based on years 2013-2019 (not including 2014 and estimating December 2019 usage), the six-year average is 2.21 MGD. This is actual water produced from all three supply sources, NOT metered water.**

2. Does Lindsay support groundwater recharge projects, financially and politically?  
**Yes, but commitment of city finds would need approval through city budget process.**
3. Projects identified in draft GSP;
  - a. Willing to support and help?  
**Yes, but restricted to No. 2 above.**
  - b. GSA communication with City staff regarding projects?  
**City staff and Board member Watson have been involved and aware the projects identified and support the projects.**





4. Options of recharge based on already owned properties.  
**City owned properties include open space (parks), general facilities and storm drain basin facilities. Land use, zoning, proximity to adjacent facilities and improvements all factor into whether recharge facilities would be practical on owned properties other than those already improved for storm drain basins.**
  
5. Any City stormwater basins could attach surface water supplies to?  
**Possibly. This is a project that is already identified on the current list.**

Please let me know if you have any questions or if I can elaborate on the responses above.

Thank you for your continued efforts and support of the development of the GSP.



Appendix 1-D.5:  
CA Dept. Fish & Wildlife Comments



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Central Region  
1234 East Shaw Avenue  
Fresno, California 93710  
(559) 243-4005  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



December 10, 2019

Via Mail and Electronic Mail

Michael Hagman  
East Kaweah GSA  
315 East Lindmore Avenue  
Post Office Box 908  
Lindsay, California 93247  
[mhagman@lindmoreid.com](mailto:mhagman@lindmoreid.com)

**Subject: Comments on the East Kaweah Groundwater Sustainability Plan**

Dear Mr. Hagman:

The California Department of Fish and Wildlife (Department) Central Region is providing comments on the East Kaweah Draft Groundwater Sustainability Plan (GSP) prepared by the East Kaweah Groundwater Sustainability Agency (GSA) pursuant to the Sustainable Groundwater Management Act (SGMA). As trustee agency for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of such species (Fish & Game Code §§ 711.7 and 1802).

Development and implementation of Groundwater Sustainability Plans under SGMA represents a new era of California groundwater management. The Department has an interest in the sustainable management of groundwater, as many sensitive ecosystems and species depend on groundwater and interconnected surface waters, including ecosystems on Department-owned and managed lands within SGMA regulated basins. SGMA and its implementing regulations afford ecosystems and species specific statutory and regulatory consideration, including the following as pertinent to Groundwater Sustainability Plans:

- Groundwater Sustainability Plans shall identify and consider impacts to groundwater dependent ecosystems (GDEs) pursuant to 23 California Code of Regulations (CCR) § 354.16(g) and Water Code § 10727.4(l);
- Groundwater Sustainability Agencies shall consider all beneficial uses and users of groundwater, including environmental users of groundwater pursuant to Water Code §10723.2 (e); and Groundwater Sustainability Plans shall identify and consider potential effects on all beneficial uses and users of groundwater pursuant to 23 CCR §§ 354.10(a), 354.26(b)(3), 354.28(b)(4), 354.34(b)(2), and 354.34(f)(3);

- Groundwater Sustainability Plans shall establish sustainable management criteria that avoid undesirable results within 20 years of the applicable statutory deadline, including depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water pursuant to 23 CCR § 354.22 *et seq.* and Water Code §§ 10721(x)(6) and 10727.2(b) and describe monitoring networks that can identify adverse impacts to beneficial uses of interconnected surface waters pursuant to 23 CCR § 354.34(c)(6)(D); and
- Groundwater Sustainability Plans shall account for groundwater extraction for all Water Use Sectors including managed wetlands, managed recharge, and native vegetation pursuant to 23 CCR §§ 351(al) and 354.18(b)(3).

Furthermore, the Public Trust Doctrine imposes a related but distinct obligation to consider how groundwater management affects public trust resources, including navigable surface waters and fisheries. Groundwater hydrologically connected to navigable surface waters and surface waters tributary to navigable surface waters are also subject to the Public Trust Doctrine to the extent that groundwater extractions or diversions affect or may affect public trust uses (*Environmental Law Foundation v. State Water Resources Control Board* (2018), 26 Cal. App. 5th 844). Accordingly, groundwater plans should consider potential impacts to and appropriate protections for navigable interconnected surface waters and their tributaries, and interconnected surface waters that support fisheries, including the level of groundwater contribution to those waters.

In the context of SGMA statutes and regulations and Public Trust Doctrine considerations, the Department values SGMA groundwater planning that carefully considers and protects groundwater dependent ecosystems and fish and wildlife beneficial uses and users of groundwater and interconnected surface waters.

## **COMMENT OVERVIEW**

The Department supports ecosystem preservation in compliance with SGMA and its implementing regulations based on Department expertise and best available information and science.

The Department recommends the GSP provide additional information and analysis that considers all environmental beneficial uses and users of groundwater in its sustainability management criteria and better characterize and consider surface water-groundwater connectivity. In addition, the Department is providing additional comments and recommendations below.

## COMMENTS AND RECOMMENDATIONS

1. **Comment #1. Plan Area.** Chapter 1 Introduction to Plan Area. Section 1.4 Description of Plan Area, Subsection 1.4.2 Plan Area Setting (page 1-8).

The GSP recognizes the Stone Corral Ecological Reserve that is owned by the Department. The Department owns two small parcels (13.5 acres and 80 acres) within the GSA. These lands are primarily managed for terrestrial State and Federal listed species and do not have any wells.

2. **Comment #2. Environmental Beneficial Users.** Chapter 1 Introduction & Plan Area. Section 1.5 Notice and Communication. Subsection 1.5.2 Description of Beneficial Uses and Users (page 1-29). The GSP does not thoroughly identify environmental beneficial uses and users of groundwater.

- a. *Issue:* Pursuant to 23 CCR § 354.10(a), GSPs should include in the Notice and Communication Section a “description of the beneficial uses and users of groundwater in the basin.” The GSP identifies ‘Environmental Users of Groundwater’ as environmental organizations (page 1-29), rather than as the plants, animals, and groundwater dependent ecosystems that rely on groundwater. Additionally, environmental users were not included in the list of ‘Surface Water Users’ (page 1-30). For example, Cottonwood Creek, Antelope Creek, Yokohl Creek, Lewis Creek, Frazier Creek, and Kaweah River support riparian vegetation and can be potential GDEs, which would constitute beneficial users of surface water (see pages 2-71, 2-73, Figure 2-28 and in the *Kaweah Subbasin Basin Setting Components – Draft* page 146, Figure 19). These vegetated riparian areas are among the environmental beneficial uses and users of surface water and groundwater in the subbasin, in addition to the animal species supported by the in-stream and riparian habitats.
- b. *Recommendations:* The Department recommends identifying and elaborating on potential environmental beneficial uses and users of groundwater in the Notice and Communications Section by including a detailed description on how these users, such as GDEs and the species therein, may rely on groundwater and may be impacted by Sustainable Management Criteria pursuant to 23 CCR §§ 354.10(a), 354.26(b)(3), 354.28(b)(4), 354.34(b)(2), and 354.34(f)(3). The Critical Species LookBook (TNC 2019) is a resource to help identify threatened and endangered species in any basin subject to SGMA and to help understand species relationships to groundwater. The LookBook also offers narrative on species and habitat groundwater dependence that can be a model for describing environmental beneficial uses and users of groundwater in the GSP.

**3. Comment #3. Interconnected Surface Waters.** Chapter 2 Basin Setting. Section 2.4 Groundwater Conditions. Subsection 2.4.5 Interconnected Surface Water Systems (page 2-71). The GSP offers an incomplete analysis of interconnected surface waters (ISW). On page 4-22 Section 4.7.3 Review and Evaluation of Monitoring Network, the GSP states, “Currently there is not a network in place that is specifically designed to monitor groundwater-surface water interconnections.”

- a. *Issue:* The analysis of surface water interconnectivity is based on limited data and offers an incomplete understanding of surface water-groundwater interconnectivity. Pursuant to 23 CCR § 354.16(f), a GSP shall identify “interconnected surface water systems within the basin and an estimate of the quantity and timing of depletions of those systems” within the GSP’s ‘Groundwater Conditions’ section. The GSP provides a qualitative discussion on the likelihood of surface water interconnectivity being restricted to upper reaches of multiple creeks and foothill streams, as well as within the Kaweah River above McKays Point where flow seems to be perennial (pages 2-27, 2-71, 3-20, 4-22); the GSP uses Figure 2-28 to highlight stream reaches where interconnectivity is possible based on historical groundwater measurements within 30 feet of the ground surface (page 2-71 to 2-73). Importantly, many riverine geographies within the Plan Area lack groundwater elevation data, including several eastern extents of the alluvium along Cottonwood Creek, Antelope Creek, Lewis Creek, and Frazier Creek. Streamflow data is also lacking for most of these waterways (page 2-92). Absent baseline information on groundwater elevations and in-streamflow, it is difficult to accurately identify ISW.

Furthermore, the depth-to-groundwater analysis applied to ISW for which there is proximate groundwater data relies on data from Spring 2015, when groundwater levels were “at or near the lowest levels on record since the 1960s” (page 2-72). For example, anecdotal evidence suggests 2015 – several years into a historic drought – is the only year wherein the historically perennial Kaweah River upstream of McKays Point witnessed intermittent dry reaches (page 3-20). An analysis of ISW based on this 2015 single-point-in-time baseline during a historic drought lacks hydrologic validity, because it does not reflect a range of climate conditions/water years, and instead is an outlier with respect to interconnectivity (see Comment #4).

- b. *Recommendations:* To reconcile the data-poor and geographically incomplete analysis of ISW and depletions attributable to groundwater, the Department recommends the GSA consider the following actions:

- i. Install shallow groundwater monitoring wells near potential GDEs along ISW, potentially pairing multiple-completion wells with new streamflow gauges anticipated as part of the expansion of streamflow monitoring (page 3-17) (see Comment #6). These new data sources would support improved understanding of surface water-groundwater interconnectivity. Some of this additional monitoring may be accomplished with the proposed expansion of the existing groundwater monitoring network (page 4-6, Figure 4-1).
- ii. Where the historical data is available, reevaluate ISW using a climatically representative hydrologic baseline for a depth-to-groundwater analysis.
- iii. Identify the estimated quantity, timing, and location of streamflow depletions in the subbasin per 23 CCR 354.28 (c)(6)(A). If this information is not available using the Subbasin's existing numerical model, determine an expeditious and clear approach to estimating these values, potentially integrating new monitoring data streams.
- iv. Periodically reevaluate sustainable management criteria based on an improved understanding of ISW and with consideration for impacts to environmental beneficial uses and users of groundwater (see Comments #2, 4, 5).

**4. Comment #4. Groundwater-Dependent Ecosystems.** Chapter 2 Basin Setting. Section 2.2 Basin Setting, Subsection 2.2.7.2 Delineation of Recharge Areas, Potential Recharge Areas, and Discharge Areas, Including Springs, Seeps, and Wetlands (pages 2-26 to 2-27 and Figures 2-16 and 2-17) and Section 2.4 Groundwater Conditions. Subsection 2.4.6 Groundwater Dependent Ecosystems (pages 2-71 to 2-72 and Figure 2-28). Section 3 Sustainable Management Criteria, Subsection 3.3.2 Management Area Descriptions (pages 3-7 to 3-9 and Figure 3-5), and the *Kaweah Subbasin Basin Setting Components – Draft*. Section 2.10 Groundwater-Dependent Ecosystems (page 146 and Figure 19). The GDE identification sections, pursuant to 23 CCR § 354.16 (g), is based on very limited information to demonstrate exclusion of ecosystems that may depend on groundwater. The Department concurs there is a lack of information and additional studies and data collection is needed to identify GDEs.

- a. *Issue:* Methods applied to the National Wetland Inventory to evaluate potential GDEs locations are not robust.
  - i. Depth to Groundwater: The potential GDEs evaluation was based on a depth-to-groundwater analysis using groundwater elevation data from Spring 2015, when groundwater levels were “at or near

the lowest levels on record since the 1960s” (page 2-72). The GSP does not indicate if the California Department of Water Resources (CDWR) Natural Communities Commonly Associated Groundwater (NCCAG) (Klausmeyer et al. 2018) was referenced as a source to identify potential GDEs in the basin. Potential GDEs were categorized as: 1) GDE supported by shallow groundwater, confirmed via a depth-to-water analysis demonstrating groundwater within 30 feet (or 50 feet as stated in the *Basin* report) of the ground’s surface as of Spring, 2015; 2) GDEs overlying shallow perched aquifers; and 3) potential GDEs overlying aquifers that lack 2015 depth-to-water data availability (Figure 2-17 on page 2-31).

The removal of areas with a depth to groundwater greater than 30 or 50 feet in Spring 2015 relies on a single-point-in-time baseline hydrology, specifically a point in time that is several years into a historic drought when groundwater levels were trending significantly lower due to reduced surface water availability. Exclusion of potential GDEs based on this singular groundwater elevation measurement is questionable because it does not consider representative climate conditions (i.e., seasons and a range of water type years) and it does not account for GDEs that can survive a finite period of time without groundwater access (Naumburg et al. 2005) and can rely on groundwater table recovery periods for long term survival.

- ii. Data Gaps: The GSP acknowledges that there is a data gap to evaluate the GDEs locations in the Data Gap section (page 2-92), and again in the GDE section, noting “Figure 2-28 represents areas where groundwater elevations as of the Spring of 2015 were within 30 feet of the ground surface. Wetlands within these areas may be considered GDEs, however additional study and data are necessary. This data gap will be addressed as part of further study going forward” (page 2-71). The Department concurs the GSP needs additional information to fill in this data gap.
- b. Recommendations: The Department recommends the GSA consider the following for information gathering related to GDEs:
- i. Depth to Groundwater: Develop a hydrologically robust baseline which includes areas with a depth to groundwater greater than 30 feet (or 50 feet as stated in the *Basin* plan) that relies on multiple, climatically representative years of groundwater elevation and that accounts for the inter-seasonal and inter-annual variability of GDE water demand.

- ii. Field Verification: The Department recommends: 1) refining the identification/removal of potential GDEs through field verification; 2) improving readability of GDE maps; 3) identifying groundwater dependent fish and wildlife species in the basin; 4) identifying and implementing appropriate monitoring approaches to track environmental beneficial users over time; 5) developing a monitoring program that is capable of capturing early signs of adverse impacts to GDEs; and 6) designing an appropriate mitigation plan to reverse negative observed impacts to GDEs (e.g., stressed phreatophyte vegetation or increased surface water temperatures [see Comment #2]).
- iii. Include additional references for evaluation: The Department recognizes that National Wetland Inventory (USFWS 2018) is a good starting reference for GDEs; however, the Department recommends the GSP include additional resources for evaluating GDE locations. The Department recommends consulting other references including, but not limited to, the following tools and other resources: the California Department of Fish and Wildlife (CDFW) Vegetation Classification and Mapping Program (VegCAMP) (CDFW 2019A); the CDFW California Natural Diversity Database (CNDDDB) (2019B); the California Native Plant Society (CNPS) Manual of California Vegetation (CNPS 2019A); the CNPS California Protected Areas Database (CNPS 2019B); the USFWS online mapping tool for listed species critical habitat (2019); the U.S. Forest Service CALVEG ecological grouping classification and assessment system (2019); and other publications by Klausmeyer et al. (2018, 2019), Rohde et al. (2018), The Nature Conservancy (TNC) (2014, 2019), and Witham et al. (2014).

**5. Comment #5. Sustainable Management Criteria.** Chapter 3 Sustainable Management Criteria. Section 3.4 Undesirable Results, Minimum Thresholds, and Measurable Objectives by Sustainability Indicator (starting page 3-14). Sustainable Management Criteria (SMC) demonstrate no consideration of undesirable results for environmental beneficial uses and users of groundwater and Minimum Thresholds (MTs) do not reflect a 'Critically Overdrafted' Basin status.

a. *Issues:*

- i. SMC may risk adverse impacts to GDEs by tolerating sustained, on-going groundwater decline (see Comment #5.a.ii), but the GSP offers no analyses on effects of undesirable results to environmental beneficial uses and users of groundwater pursuant



to 23 CCR § 354.26(b)(3). Potential impacts of chronic lowering of groundwater level Undesirable Results (URs) on beneficial uses and users focus on the financial burdens associated with mitigating impacts to wells, such as drilling deeper wells (page 3-18). URs are said to occur when one third of Representative Monitoring sites (RMS) in all three GSA jurisdictions in the Subbasin exceed MTs for groundwater elevation (page 3-17), and the GSP identifies loss of surface water interconnectivity as a cause of groundwater conditions that lead to URs (page 3-18), but lacks a discussion on the potential effects on the beneficial users of interconnected surface water (including environmental users).

Considering GDEs are vulnerable to sustained decreases in groundwater elevation (Naumburg et al., 2005) that are permissible under the proposed MTs (see Comment #5.a.ii), there are likely to be significant impacts to GDEs where interconnectivity is lost under UR conditions. For example, the GSP describes Lewis Creek as “known to have a perched aquifer under it, but even in midst of the drought, groundwater dropped from 7 feet depth to water to 13 feet depth, most likely due to less inflow coming in from the mountains. Based on this understanding and limited impacts of groundwater pumping on interconnected surface water bodies streamflow, it was determined that focusing the minimum threshold on groundwater levels would be appropriate for evaluating any undesirable effects on surface water connection” (page 3-20).<sup>1</sup> The GSP does not justify the italicized statement, and it is unclear how this example of plummeting shallow groundwater depths underlying a potentially interconnected stream supports the concept that groundwater elevation MTs are appropriate for evaluating UR effects on surface water connectivity. The GSP lacks an analysis of how this decline in groundwater elevation impacted Lewis Creek and its beneficial users, but such a decline is likely to impact all overlying vegetation that can root no deeper than seven feet or that relies on sustained instream flow.

Though the GSP does not provide an analysis of potential impacts of MTs and URs on environmental beneficial users of groundwater,

---

<sup>1</sup> Though the GSP explains the use of groundwater elevations as a proxy for depletions of ISW via an analytical model (page 3-17), the data to perform such calculations using the analytical model for areas of likely interconnectivity is lacking (see Comment #3). Accordingly, the suggested significant correlation between groundwater elevations and streamflow depletions is not readily justified pursuant to 23 CCR 354.36(b)(1).

it does suggest that some MTs were adjusted to higher levels in the eastern regions of the GSA due to “the shallow depth to the bottom of the aquifer.” The GSP explains that MTs were investigated to determine if they were sufficiently protective of ISW and, if it was concluded that an MT would cause excessive strain to ISW, a more stringent MT was developed (page 3-21). It is unclear what this analysis entailed in light of limited available data (see Comment #3), how many MTs were impacted, and if final MTs considered potential UR impacts to GDEs.

- ii. In addition to a lack of analysis of SMC impacts to environmental beneficial users of groundwater, the proposed SMC generally do not reflect a ‘Critical Overdrafted’ subbasin. The Kaweah Subbasin is designated as ‘Critically Overdrafted,’ meaning “continuation of present water management practices [in the basin] would probably result in significant adverse overdraft-related environmental, social, or economic impacts” (DWR “Critically Overdrafted”) (DWR 2019). Despite its designated Critically Overdrafted status, the GSP establishes MTs that allow for a decline in groundwater elevations mirroring that of the greatest historical decline witnessed between 1997 and 2017 (page 3-19). As a result, proposed MTs accommodate anywhere from a ~25- to ~100-foot decline in groundwater elevation below historic lows in 2015 (GSA SE, Threshold Region 6 is an exception) (page 3-22). Under MT conditions, the GSP estimates that fully one third of wells will go dry, including one half of all domestic wells (3-21). To postulate that URs are not present until one third of wells go dry overlooks the continuing potential impacts to GDEs that would likely experience adverse impacts even before most shallow domestic wells go dry. Potential GDEs in the Plan Area primarily fall within Threshold Regions 3, 4, and 6. Two of these Threshold Region MTs allow for a ~25-foot decline in groundwater elevations from historic lows in 2015. These MTs that allow for sustained groundwater decline mirror the historical trends that led to the subbasin’s Critically Overdrafted status and that will likely lead to significant and excessive impacts to GDEs reliant on shallow groundwater. Conceptually, there is a disconnect between the subbasin’s ‘Critically Overdrafted’ designation and SMC that are proposed to continue to allow for groundwater level decline.

- b. *Recommendations:* The Department recommends the GSA reevaluate SMC with the following suggestions:

- i. Clarify how species and habitat groundwater needs were considered in the identification of SMC and identify specific potential adverse impacts on environmental beneficial users of groundwater and causal relationships with groundwater pumping (e.g., terrestrial GDE stress/loss, increased instream temperatures, etc.). Reconsider SMC for depletions of ISW after reanalysis of ISW with additional data (see Comment #3).
- ii. Revise MTs to reflect a 'Critically Overdrafted' subbasin designation by seeking to improve current groundwater conditions rather than allow for continued aquifer depletions over the next two decades.

**6. Comment. #6 Monitoring Network.** Chapter 4 Monitoring Network (starting page 4-1). The number and distribution of groundwater monitoring wells in the Plan Area and along the surface waters in the GSA are insufficient for analysis of shallow groundwater trends and groundwater-surface water interconnectivity.

- a. *Issue:* Existing groundwater monitoring wells are insufficient to characterize shallow groundwater and surface water-groundwater interactions within the regions of the Plan Area most likely to support GDEs and ISW: Threshold Regions 3, 4, and 6. Absent an expansion of monitoring wells in these regions, the GSP will have limited success in tracking and understanding impacts to environmental beneficial uses and users of shallow groundwater and interconnected surface waters [23 CCR § 354.34(2)]. The GSP proposes seven new wells to fill-in current data groundwater elevation gaps (page 4-10) and suggests a need to expand the stream gauging network, focusing on Cottonwood, Lewis, and Frazier Creeks (page 2-42). Figure 4-1 shows the Initial Groundwater Monitoring Network, including data gaps in the monitoring network (page 4-6). The data gaps fall predominately in the portions of the GSA most likely to support ISW and GDEs. Expedited installation of monitoring wells in these areas could help improve an understanding of shallow groundwater. Shallow groundwater data are critical to understanding groundwater management impacts on fish and wildlife beneficial uses and users of groundwater, including GDEs and potential interconnected surface water habitats, that are impacted disproportionately by shallow groundwater trends.
- b. *Recommendation:* The Department recommends installing additional shallow groundwater monitoring wells near potential GDEs in the basin and along interconnected surface waters, potentially pairing multiple-completion wells with streamflow gages for improved understanding of surface water-groundwater interconnectivity.

- 7. Comment. #7 Management Actions.** Chapter 5 Project and Management Actions to Achieve Sustainability (starting page 5-1). Demand reduction management actions critical to Kaweah Subbasin sustainability goal achievement are deprioritized in the Project and Management Actions chapter.
- a. *Issue:* The GSP focuses primarily on supply augmentation, deprioritizing demand management actions. For example, the GSP explains, “some management actions, such as education and outreach, will be initiated early in the GSP implementation phase, while other management actions are envisioned to be employed to reduce water demand if project development is not proceeding sufficiently to achieve the sustainability required to reduce overdraft and meet the interim milestones” (page 5-29). Figure 6-1 suggests an implementation schedule that delays the planning start of several demand management actions until as late as 2025 and defers implementation of others until 2025. In the Executive Summary, the GSP even notes that only if project development does not achieve sustainability goals, then will management actions be pursued: “The projects that are currently being considered would yield an estimated average annual volume of approximately 18,200 AF/year if fully implemented as envisioned, which is over 60% of the currently estimated overdraft (28,000 AF/year) in the GSA. The remainder will be saved through projects yet to be developed and/or management actions, if necessary” (page ES-11). As it is, the project actions are only supposed to mitigate 60% of overdraft, so it would be expected that management actions would be needed to achieve full mitigation of overdraft. Considering the Kaweah Subbasins’ current unsustainable rate of groundwater consumption and considering the cost and timing challenges associated with supply augmentation projects, a balanced portfolio approach to achieve groundwater sustainability should include demand-management strategies.
  - b. *Recommendation:* The Department appreciates the thorough identification of potential management actions (starting page 5-29) and recommends expediting implementation of management actions to ensure the GSA will achieve sustainability. Specifically, the Department recommends early implementation of actions such as facility registration and metering of wells so that demand management actions (e.g., pumping restrictions, allocations, and fee structures) can be implemented immediately when needed, rather than be subject to potential institutional and administrative delays that might cost the basin MT exceedances and URs.

### **OTHER COMMENTS: Implementation of Future Project Actions Related to SGMA**

SGMA exempts the preparation and adoption of GSPs from the California Environmental Quality Act (CEQA) (WC § 10728.6); however, SGMA specifically states that implementation of project actions taken pursuant to SGMA are not exempt from CEQA (WC § 10728.6). The Department is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). The Department, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, the Department is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

The Department is also a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381), and the Department expects that it may need to exercise regulatory authority as provided by the Fish and Game Code for implementation of projects related to the GSP that are also subject to CEQA. These projects may be subject to the Department's lake and streambed alteration regulatory authority (i.e., Fish & G. Code, § 1600 et seq.). Notification pursuant to Fish and Game Code § 1602 is warranted if a project will (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); and/or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. Likewise, to the extent that implementation of any project may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required. The Department is required to comply with CEQA in its issuance of a Lake or Streambed Alteration Agreement or an Incidental Take Permit.

**Water Rights:** The implementation of SGMA does not alter or determine surface or groundwater rights (WC § 10720.5). It is the intent of SGMA to respect overlying and other proprietary rights to groundwater, consistent with section 1200 of the Water Code (Section 1(b)(4) of AB 1739). The capture of unallocated stream flows to artificially recharge groundwater aquifers are subject to appropriation and approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code § 1200 et seq. The Department, as Trustee Agency, is consulted by SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Certain fish and wildlife are reliant upon aquatic and riparian ecosystems, which in turn are reliant upon adequate flows of water. The Department therefore has a material interest in assuring that adequate water flows

Michael Hagman, GSA Contact  
East Kaweah GSP  
December 10, 2019  
Page 13

within streams for the protection, maintenance and proper stewardship of those resources. The Department provides, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities.

**CONCLUSION**

In conclusion, the East Kaweah Draft GSP needs to address all SGMA statutes and regulations, and the Department recommends the GSP seriously consider fish and wildlife beneficial uses and interconnected surface waters. The Department recommends that the GSA consider the above comments before the GSP is submitted to CDWR. The Department appreciates the opportunity to provide comments on the East Kaweah Draft GSP. If you have any further questions, please contact Dr. Andrew Gordus, Staff Toxicologist, at [Andy.Gordus@wildlife.ca.gov](mailto:Andy.Gordus@wildlife.ca.gov) or (559) 243-4014 x 239.

Sincerely,



Julie A. Vance  
Regional Manager, Central Region

Enclosures (Literature Cited)

ec: **California Department of Fish and Wildlife**

Joshua Grover, Branch Chief  
Water Branch  
[Joshua.Grover@wildlife.ca.gov](mailto:Joshua.Grover@wildlife.ca.gov)

Robert Holmes, Environmental Program Manager  
Statewide Water Planning Program  
[Robert.Holmes@wildlife.ca.gov](mailto:Robert.Holmes@wildlife.ca.gov)

Briana Seapy, Statewide SGMA Coordinator  
Groundwater Program  
[Briana.Seapy@wildlife.ca.gov](mailto:Briana.Seapy@wildlife.ca.gov)

Annee Ferranti, Environmental Program Manager  
Central Region  
[Annee.Ferranti@wildlife.ca.gov](mailto:Annee.Ferranti@wildlife.ca.gov)

Andy Gordus, Staff Toxicologist  
Central Region  
[Andy.Gordus@wildlife.ca.gov](mailto:Andy.Gordus@wildlife.ca.gov)

Michael Hagman, GSA Contact  
East Kaweah GSP  
December 10, 2019  
Page 14

Annette Tenneboe, Senior Environmental Scientist Specialist  
Central Region  
[Annette.Tenneboe@wildlife.ca.gov](mailto:Annette.Tenneboe@wildlife.ca.gov)

John Battisoni, Senior Environmental Scientist Supervisor  
Central Region  
[John.Battisoni@wildlife.ca.gov](mailto:John.Battisoni@wildlife.ca.gov)

**California Department of Water Resources**

Craig Altare, Supervising Engineering Geologist  
Sustainable Groundwater Management Program  
[Craig.Altare@water.ca.gov](mailto:Craig.Altare@water.ca.gov)

Trent Sherman, SGMA Point of Contact  
South Central Region Office  
[Trent.Sherman@water.ca.gov](mailto:Trent.Sherman@water.ca.gov)

**State Water Resources Control Board**

Natalie Stork, Chief  
Groundwater Management Program  
[Natalie.Stork@waterboards.ca.gov](mailto:Natalie.Stork@waterboards.ca.gov)

**Tulare Basin Watershed Partnership**

Carole Combs  
[ccombs@thegrid.net](mailto:ccombs@thegrid.net)

**Sequoia Riverlands Trust**

Soapy Mulholland  
[soapy@sequoiariverlands.org](mailto:soapy@sequoiariverlands.org)

### **Literature Cited**

- Barlow, P.M., and S.A. Leake. 2012. Streamflow depletion by wells—Understanding and managing the effects of groundwater pumping on streamflow: U.S. Geological Survey Circular 1376.
- California Department of Fish and Wildlife (CDFW). 2019A. Vegetation Classification and Mapping Program. Available from <https://www.wildlife.ca.gov/Data/VegCAMP>
- California Department of Fish and Wildlife (CDFW). 2019B. CNDDDB (California Natural Diversity Database). Rarefind Version 5. Internet Application. CDFW, Sacramento, California. <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>
- California Department of Water Resources (CDWR) 2019. Critically Overdrafted Basins. <https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118/Critically-Overdrafted-Basins>
- California Native Plant Society (CNPS). 2019A. A Manual of California Vegetation, online edition. <http://www.cnps.org/cnps/vegetation/>
- California Native Plant Society (CNPS). 2019B. California Protected Areas Database. (CPAD). Sacramento, California. <https://www.calands.org/cpad/>
- Naumburg E, R. Mata-Gonzalez, R.G. Hunter, T. McLendon and D. Martin. 2005. Phreatophytic vegetation and groundwater fluctuations: a review of current research and application of ecosystem response modeling with an emphasis on great basin vegetation. *Environmental Management*. 35(6):726-40
- Klausmeyer, K., J. Howard, T. Keeler-Wolf, K. Davis-Fadtke, R. Hull, and A. Lyons. 2018. Mapping indicators of groundwater dependent ecosystems in California. <https://data.ca.gov/dataset/natural-communities-commonly-associated-groundwater>
- Klausmeyer, K. R., T. Biswas, M. M. Rohde, F. Schuetzenmeister, N. Rindlaub, and J. K. Howard. 2019. GDE pulse: taking the pulse of groundwater dependent ecosystems with satellite data. San Francisco, California. Available at <https://gde.codefornature.org/> (Same as:TNC. 2019. GDE pulse. Interactive map. Website. <https://gde.codefornature.org/#/home>
- Rohde, M. M., S. Matsumoto, J. Howard, S. Liu, L. Riege, and E. J. Remson. 2018. Groundwater Dependent Ecosystems under the Sustainable Groundwater Management Act: Guidance for Preparing Groundwater Sustainability Plans. The Nature Conservancy, San Francisco, California.



Michael Hagman, GSA Contact  
East Kaweah GSP  
December 10, 2019  
Page 16

The Nature Conservancy (TNC). 2014. Groundwater and stream interaction in California's Central Valley: insights for sustainable groundwater management. Prepared by RMC Water and Environment.

The Nature Conservancy (TNC). 2019. The Critical Species LookBook. Groundwater Resource Hub. <https://groundwaterresourcehub.org/sgma-tools/the-critical-species-lookbook/>

U.S. Forest Service. 2019. Landsat-based classification and assessment of visible ecological groupings, USDA Forest Service (March 2007). <https://www.fs.fed.us/r5/rsi/projects/classification/system.shtml>

U.S. Fish and Wildlife Service (USFWS). 2018. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. <http://www.fws.gov/wetlands/>

U.S. Fish and Wildlife Service (USFWS). 2019. Threatened & Endangered Species Active Critical Habitat Report: online mapping tool. <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>

Witham, C. W., R. F. Holland, and J. E. Vollmar. 2014. Changes in the Distribution of Great Valley Vernal Pool Habitats from 2005 to 2012. Prepared for CVPIA Habitat Restoration Program, U.S. Fish and Wildlife Service, Sacramento, CA. USFWS Grant Agreement No.F11AP00169 with Vollmar Natural Lands Consulting. October 14.

## Appendix 1-D.6: Wonderful Citrus Comments

December 13, 2019

Mike Hagman  
Executive Director  
East Kaweah Groundwater Sustainability Agency  
315 East Lindmore Avenue  
Post Office Box 908  
Lindsay, California 93247-0908

VIA EMAIL: [ekgsa.gsp@ekgsa.org](mailto:ekgsa.gsp@ekgsa.org)

**Re: Comments on East Kaweah Groundwater Sustainability Agency's Draft  
Groundwater Sustainability Plan**

Dear Mr. Hagman,

Thank you for all the hard work you have put into preparing the draft Groundwater Sustainability Plan (GSP), and for the opportunity to provide comments.

In order to best execute the GSP's goal to achieve sustainability by 2040, we encourage the Groundwater Sustainability Agencies (GSAs) to continue to facilitate a stakeholder-driven process as the GSA pushes forward from GSP creation to implementation. To that end, we request that the following comments be considered.

**Groundwater Allocations**

We understand the Kaweah Basin GSAs have developed a "Water Accounting Framework" (WAF) which identifies volumes of water available in each GSA by category, including an apportionment of the native groundwater supply. We encourage the GSAs to clearly communicate that the WAF, including the native supply apportionment, is for initial water budget purposes only and is not an allocation or a determination of landowner water rights.

Should it become a necessary management action to allocate the native supply to landowners, the GSAs should use a stakeholder-driven process to develop an allocation methodology that is coordinated across the basin and is consistent with the various legal considerations drawn from applicable case law. More information on allocation methodologies can be found in *Groundwater Pumping Allocations Under California's Sustainable Groundwater Management Act – Environmental Defense Fund and New Current Water & Land, dated July 2018*. If pumping restrictions are required to achieve sustainability, they should be implemented with the most gradual ramp-down possible while still avoiding any undesirable results. This will help to ensure landowners have adequate time to plan, and it will help to prevent any sudden disruption to economic activity in the region.

## **Water Measurement, Data Management Systems and Groundwater Markets**

GSAs should develop a coordinated, subbasin-wide data management system (DMS) that is capable of tracking groundwater and surface water use at the landowner, field, or parcel level and a coordinated methodology for measuring landowner-level use of groundwater. The DMS should also include, or be capable of interfacing with, a groundwater market platform. If landowner-level groundwater allocations are made, those should be accompanied by a market system that is as flexible as possible in allowing for broad geographic movement and carry-over from one year to the next. Markets are essential in facilitating the highest and best use of a limited resource and will be most effective if there is trust in the accuracy of measurements, consistency in data sources, and flexibility available to allow for transactions across the basin. GSAs using remote sensing to calculate crop ET as a measurement of consumptive use of groundwater should develop methodologies and quality assurance elements to allow for grower provided information to be included into the ET calculation and calibration. Additionally, GSAs should establish criteria and procedures to address any apparent inaccuracies in the ET calculations (for example: if calculated ET is greater than applied water plus precipitation).

## **Groundwater Recharge and Banking**

GSAs must develop clear policies and conditions that are consistent with existing storage rights and protect existing investment in groundwater banking and banked inventory, without interference with existing rules and regulations. GSAs must also find a way to incentivize additional investment, such as on-farm recharge, and allow flexibility for recharged or banked water to be freely transferrable (subject to the rights and conditions of use associated with the source water and the avoidance of undesirable results). Where possible, GSPs should also identify management areas that may benefit from additional recharge and banking. We also recommend that GSAs work to develop incentives for public or private investment to expand recharge and banking capacity, as these facilities help to achieve multiple benefits (e.g., habitat, water quality, drinking water, etc.).

\*\*\*

We appreciate the opportunity to provide feedback on the GSP. We would be happy to discuss these comments at your convenience. Thank you for your consideration.

Sincerely,



Adam Brown  
Vice President, California Farming  
Wonderful Citrus LLC

CC: Paul Hendrix, Mid-Kaweah Groundwater Sustainability Agency  
Eric Osterling, Greater Kaweah Groundwater Sustainability Agency

Appendix 1-D.7:  
Nature Conservancy et al. Comments



December 16, 2019

*Sent via email to [ekgsa.gsp@ekgsa.org](mailto:ekgsa.gsp@ekgsa.org)*

**Re: Comments on Draft Groundwater Sustainability Plan for East Kaweah Groundwater Basin**

To Whom It May Concern,

On behalf of the above-listed organizations, we would like to offer the attached comments on the draft Groundwater Sustainability Plan for the East Kaweah Groundwater Basin. Our organizations are deeply engaged in and committed to the successful implementation of the Sustainable Groundwater Management Act (SGMA) because we understand that groundwater is a critical piece of a resilient California water portfolio, particularly in light of our changing climate. Because California's water and economy are interconnected, the sustainable management of each basin is of interest to both local communities and the state as a whole.

Our organizations have significant expertise in the environmental needs of groundwater and the needs of disadvantaged communities.

- The Nature Conservancy, in collaboration with state agencies, has developed several tools<sup>1</sup> for identifying groundwater dependent ecosystems in every SGMA groundwater basin and has made that tool available to each Groundwater Sustainability Agency.
- Local Government Commission supports leadership development, performs community engagement, and provides technical assistance dealing with groundwater management and other resilience-related topics at the local and regional scales; we provide guidance and resources for statewide applicability to the communities and GSAs we are working with directly in multiple groundwater basins.
- Audubon California is an expert in understanding wetlands and their role in groundwater recharge and applying conservation science to develop multiple-benefit solutions for sustainable groundwater management.
- Community Water Center (CWC) acts as a catalyst for community-driven water solutions through organizing, education, and advocacy. CWC seeks to build and enhance leadership capacity and local community power around water issues, create a regional movement for water justice in California, and enable every community to have access to safe, clean, and affordable drinking water. CWC has supported SGMA implementation through hosting several technical capacity

---

<sup>1</sup> <https://groundwaterresourcehub.org/>



building workshops, developing SGMA education materials, and supporting local leadership and community engagement.

- Clean Water Action and Clean Water Fund are sister organizations that have deep expertise in the provision of safe drinking water, particularly in California's small disadvantaged communities, and co-authored a report on public and stakeholder engagement in SGMA<sup>2</sup>.

Because of the number of draft plans being released and our interest in reviewing every plan, we have identified key plan elements that are necessary to ensure that each plan adequately addresses essential requirements of SGMA. A summary review of your plan using our evaluation framework is attached to this letter as Appendix A. Our hope is that you can use our feedback to improve your plan before it is submitted in January 2020.

This review does not look at data quality but instead looks at how data was presented and used to identify and address the needs of disadvantaged communities (DACs), drinking water and the environment. In addition to informing individual groundwater sustainability agencies of our analysis, we plan to aggregate the results of our reviews to identify trends in GSP development, compare plans and determine which basins may require greater attention from our organizations.

### **Key Indicators**

Appendix A provides a list of the questions we posed, how the draft plan responds to those questions and an evaluation by element of major issues with the plan. Below is a summary by element of the questions used to evaluate the plan.

1. Identification of Beneficial Users. This element is meant to ascertain whether and how DACs and groundwater-dependent ecosystems (GDEs) were identified, what standards and guidance were used to determine groundwater quality conditions and establish minimum thresholds for groundwater quality, and how environmental beneficial users and stakeholders were engaged through the development of the draft plan.
2. Communications plan. This element looks at the sufficiency of the communications plan in identifying ongoing stakeholder engagement during plan implementation, explicit information about how DACs were engaged in the planning process and how stakeholder input was incorporated into the GSP process and decision-making.
3. Maps related to Key Beneficial Uses. This element looks for maps related to drinking water users, including the density, location and depths of public supply and domestic wells; maps of GDE and interconnected surface waters with gaining and losing reaches; and monitoring networks.
4. Water Budgets. This element looks at how climate change is explicitly incorporated into current and future water budgets; how demands from urban and domestic water users were incorporated; and whether the historic, current and future water demands of native vegetation and wetlands are included in the budget.
5. Management areas and Monitoring Network. This element looks at where, why and how management areas are established, as well what data gaps have been identified and how the plan addresses those gaps.
6. Measurable Objectives and Undesirable Results. This element evaluates whether the plan explicitly considers the impacts on DACs, GDEs and environmental beneficial users in the development of Undesirable Results and Measurable Objectives. In addition, it examines

---

2

<https://www.cleanwater.org/publications/collaborating-success-stakeholder-engagement-sustainable-groundwater-management-act>

whether stakeholder input was solicited from these beneficial users during the development of those metrics.

7. Management Actions and Costs. This element looks at how identified management actions impact DACs, GDEs and interconnected surface water bodies; whether mitigation for impacts to DACs is discussed or funded; and what efforts will be made to fill identified data gaps in the first five years of the plan. Additionally, this element asks whether any changes to local ordinances or land use plans are included as management actions.

## Conclusion

We know that SGMA plan development and implementation is a major undertaking, and we want every basin to be successful. We would be happy to meet with you to discuss our evaluation as you finalize your Plan for submittal to DWR. Feel free to contact Suzannah Sosman at [suzannah@aginnovations.org](mailto:suzannah@aginnovations.org) for more information or to schedule a conversation.

Sincerely,



Jennifer Clary  
Water Program Manager  
Clean Water Action/Clean Water Fund



Danielle V. Dolan  
Water Program Director  
Local Government Commission



Samantha Arthur  
Working Lands Program Director  
Audubon California



Adriana Renteria  
Regional Water Management Coordinator  
Community Water Center



Sandi Matsumoto  
Associate Director, California Water Program  
The Nature Conservancy



**Appendix A  
Review of Public Draft GSP**

**Groundwater Basin/Subbasin:** Kaweah Basin/Subbasin (DWR 5-022.11)  
**GSA:** East Kaweah GSA  
**GSP Date:** September 2019 Public Review Draft

**1. Identification of Beneficial Users**

*Were key beneficial users identified and engaged?*

**Selected relevant requirements and guidance:**  
 GSP Element 2.1.5, "Notice & Communication" (§354.10):  
*(a) A description of the beneficial uses and users of groundwater in the basin, including the land uses and property interests potentially affected by the use of groundwater in the basin, the types of parties representing those interests, and the nature of consultation with those parties.*  
 GSP Element 2.2.2, "Groundwater Conditions" (§354.16):  
*(d) Groundwater quality issues that may affect the supply and beneficial uses of groundwater, including a description and map of the location of known groundwater contamination sites and plumes.*  
*(f) Identification of interconnected surface water systems within the basin and an estimate of the quantity and timing of depletions of those systems, utilizing data available from the Department, as specified in Section 353.2, or the best available information.*  
*(g) Identification of groundwater dependent ecosystems within the basin, utilizing data available from the Department, as specified in Section 353.2, or the best available information.*  
 GSP Element 3.3, "Minimum Thresholds" (§354.28):  
*(4) How minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.*

Review Criteria	Y e s	N o	N / A	Relevant Info per GSP	Location (Section, Page <sup>1</sup> )
1. Do beneficial users (BUs) identified within the GSP area include:		<b>X</b>		DACs are not clearly identified in the GSP, but are broadly referred to in certain sections of the document. For example:  "Communication and educational outreach efforts with disadvantaged communities (DAC) and severely disadvantaged communities (SDAC) is essential for the development and implementation of the EKGSA's GSP, and residents are generally dedicated to bettering their communities, particularly when it comes to their water supplies."  "The sustainable yield and ultimate groundwater allocation would take into consideration the existing water rights holders, irrigation districts (IDs), disadvantaged communities (DACs), public utility districts (PUDs), and environmental uses."	Section 1.5.2, page 54  Section 5.3.3.1, page 247
			<b>X</b>	1.4.1 Geographic Areas Covered "There are no adjudicated areas, nor tribal lands within the EKGSA area."	Section 1.4.1, page 33
		<b>X</b>		"Public Water Systems – Several small communities in unincorporated areas of Tulare County are served groundwater through small water systems. Such communities include Plainview, Lindcove, and Tooleville. These communities are represented in multiple ways. The County is a participating member with	Section 1.5.2, page 54

<sup>1</sup> Page numbers refer to the page of the PDF.

**Appendix A**  
**Review of Public Draft GSP**

				representation on the EKGSA Board of Directors. Additionally, there are members and agencies representing communities through the Advisory Committee.”		
2. What data were used to identify presence or absence of DACs?	a. DWR <a href="#">DAC Mapping Tool</a> <sup>2</sup>			X	DACs are referred to, but are not clearly identified in the draft GSP.	
	i. Census Places			X		
	ii. Census Block Groups			X		
	iii. Census Tracts			X		
	b. Other data source			X		
3. Groundwater Conditions section includes discussion of:	a. Drinking Water Quality		X		“While all regulated drinking water constituents were considered, findings from this evaluation show that the most common water quality issues within the EKGSA are: nitrate, arsenic, perchlorate, hexavalent chromium (Chromium VI), dibromochloropropane (DBCP), 1,2,3-trichloropropane (TCP), sodium, and chloride. This water quality discussion is divided by constituent to explain the drinking water standard, agricultural standard (if applicable), potential impacts to beneficial uses in the different regions of the Subbasin, and existing regulatory and monitoring programs dedicated to that constituent.”	Section 2.4.3.3, page 114-115
	b. California Maximum Contaminant Levels (CA MCLs) <sup>3</sup> (or Public Health Goals where MCL does not exist, e.g. Chromium VI)		X		“Arsenic is a regulated chemical for drinking water sources with monitoring and compliance requirements designated by Title 22, §64431 overseen by the SWRCB Division of Drinking Water. Arsenic has a primary drinking water Maximum Contaminant Level (MCL) of 10 parts per billion (ppb) and an Agricultural Water Quality Goal of 100 ppb. In November 2008, the California MCL for arsenic was reduced to from 50 ppb to 10 ppb. At a minimum, public water systems are required by Title 22 §64432 to monitor for arsenic annually. More frequent monitoring is required if arsenic has been historically detected. Monitoring data from the public water systems is available via DDW’s SDWIS database (Section 2.3.2). In addition to DDW regulation, monitoring, and oversight, data on arsenic concentrations is available via the GAMA Priority Basin Project on Geotracker. Arsenic will be monitored as a constituent of concern within the Kaweah Subbasin.”	2.4.3.3.1, page 115
					“The Tulare County Domestic Well Project was a voluntary monitoring program that tested volunteered domestic wells throughout the county in 2006. DBCP was detected in 27 wells within Tulare County with concentrations ranging from 0.01 to 1.63 ug/L. Eight wells had DBCP concentrations above the MCL of 0.2 ug/L. All monitoring data collected for both the Priority Basin and Domestic Well Project is publicly available via the GAMA Geotracker database.”	2.4.3.3.2, page 116
					Section 2.4.3.3.3-2.4.3.3.8 discussed other chemicals of concern in the GSP.	Page 116-122
4. What local, state, and federal standards or plans were used to assess drinking	a. Office of Environmental Health Hazard Assessment Public Health Goal (OEHHA PHGs) <sup>4</sup>		X		“In 2004, the California Environmental Protection Agency’s Office of Environmental Health Hazard Assessment (OEHHA) adopted a public health goal (PHG) for perchlorate at 0.006 mg/L (6 ppb). Following statutory mandates, the perchlorate MCL was established at 6 ppb in October of 2007.	Section 2.4.3.3.5, page 119

<sup>2</sup> DWR DAC Mapping Tool: <https://gis.water.ca.gov/app/dacs/>

<sup>3</sup> CA MCLs: [https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/MCLsandPHGs.html](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLsandPHGs.html)

<sup>4</sup> OEHHA PHGs: [https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/MCLsandPHGs.html](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLsandPHGs.html)

**Appendix A**  
**Review of Public Draft GSP**

<p>water BUs in the development of Minimum Thresholds (MTs)?</p>	<p>b. CA MCLs<sup>3</sup></p>			<p>In 2015, the OEHA lowered the PHG from 6 ppb to 1 ppb, prompting review of the perchlorate MCL.”</p>	
		<b>X</b>		<p>“Arsenic has a primary drinking water Maximum Contaminant Level (MCL) of 10 parts per billion (ppb) and an Agricultural Water Quality Goal of 100 ppb. In November 2008, the California MCL for arsenic was reduced to from 50 ppb to 10 ppb. At a minimum, public water systems are required by Title 22 §64432 to monitor for arsenic annually.”</p>	<p>2.4.3.3.1, page 115</p>
	<p>c. Water Quality Objectives (WQOs) in Regional Water Quality Control Plans</p>	<b>X</b>		<p>See above.</p>	<p>See above.</p>
	<p>d. Sustainable Communities Strategies/ Regional Transportation Plans<sup>5</sup></p>		<b>X</b>		
	<p>e. County and/or City General Plans, Zoning Codes and Ordinances<sup>6</sup></p>		<b>X</b>		
<p>5. Does the GSP identify how environmental BUs and environmental stakeholders were engaged throughout the development of the GSP?</p>	<b>X</b>		<p>” “Environmental Users of Groundwater - There are two primary environmental organizations within the EKGSA boundary, and both entities have a representative on the GSA’s Advisory Committee: Sequoia Riverlands Trust (SRT) and the Tulare Basin Wildlife Partners (TBWP). SRT is a regional nonprofit land trust dedicated to strengthening California’s heartland and the natural and agricultural legacy of the San Joaquin Valley, with a vision focused on creating a future where productive land and healthy natural systems are protected to generate community vitality and economic prosperity. The mission of the TBWP is to engage in multi-benefit projects that promote ecological and economic health, sustaining the area’s agricultural heritage, and enhancing the quality of life in the Tulare Basin for current and future generations. In addition to representation on the Advisory Committee, collaboration meetings will be held with these organizations to make sure their organizational visions and groundwater needs for land conservation and a healthy regional watershed with ecologically functional waterways are taken into consideration during GSP development and implementation phases.”</p>	<p>Section 1.5.2, page 54</p>	

**Summary/ Comments**

The GSP should more clearly identify the DACs in the GSA area, including identifying their locations and names on maps and the population that resides within the communities. The GSP should also clearly identify the data sources used to identify such communities.

<sup>5</sup> CARB: <https://ww2.arb.ca.gov/resources/documents/scs-evaluation-resources>

<sup>6</sup> OPR General Plan Guidelines: <http://www.opr.ca.gov/planning/general-plan/>

**Appendix A  
Review of Public Draft GSP**

**2. Communications Plan**

*How were key beneficial users engaged and how was their input incorporated into the GSP process and decisions?*

**Selected relevant requirements and guidance:**  
 GSP Element 2.1.5, "Notice & Communication" (§354.10):  
*Each Plan shall include a summary of information relating to notification and communication by the Agency with other agencies and interested parties including the following:*  
 (c) *Comments regarding the Plan received by the Agency and a summary of any responses by the Agency.*  
 (d) *A communication section of the Plan that includes the following:*  
 (1) *An explanation of the Agency's decision-making process.*  
 (2) *Identification of opportunities for public engagement and a discussion of how public input and response will be used.*  
 (3) *A description of how the Agency encourages the active involvement of diverse social, cultural, and economic elements of the population within the basin.*  
 (4) *The method the Agency shall follow to inform the public about progress implementing the Plan, including the status of projects and actions.*

**DWR Guidance Document for GSP Stakeholder Communication and Engagement<sup>7</sup>**

Review Criteria	Y e s	N o	N / A	Relevant Info per GSP	Location (Section, Page)
1. Is a Stakeholder Communication and Engagement Plan (SCEP) included?	X			A communication and Engagement Plan is referenced, but not included in the draft GSP. The document is available on the GSA's website, and is dated January 2018, updated May 2018.	
2. Does the SCEP or GSP identify that ongoing engagement will be conducted during GSP implementation?		X		<p>"Being open and involving stakeholders creates a process that produces a more robust outcome. Accountability and transparency are important to the success of implementing SGMA within the East Kaweah area. The EKGSA Board is committed to transparency in a public decision process and will adhere to practices that help ensure accountability and transparency to ensure the best possible solutions are developed. Some of these practices include:</p> <ul style="list-style-type: none"> <li>• Advanced notifications of meeting times, locations, and agendas.</li> <li>• Web posting of EKGSA materials.</li> <li>• Solicitation of input from stakeholders and good faith effort to incorporate stakeholder interests.</li> </ul> <p>The EKGSA also intends to develop a Drinking Well Observation Program with review and input from drinking water users and representatives. The intent of this program would be to evaluate conditions of drinking water wells, investigate potential impacts, and distribute information to drinking well users within the EKGSA. This program will be useful in further development of a Drinking Water Well Protection Program that may be developed through management action implementation of this GSP."</p>	Section 1.5.4, page 56
3. Does the SCEP or GSP specifically identify how DAC beneficial users			X	The Notice and Communication section of the draft GSP is written in future	

<sup>7</sup> DWR Guidance Document for GSP Stakeholder Communication and Engagement  
<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/Guidance-Documents-for-Groundwater-Sustainability-Plan---Stakeholder-Communication-and-Engagement.pdf>

**Appendix A**  
**Review of Public Draft GSP**

<p>were engaged in the planning process?</p>			<p>tense, describing goals communication methods <i>to be implemented</i>, rather than describing what was actually done during the GSP development process.</p> <p>Appendix 1-B includes a list of over 70 meetings and workshops conducted from November 2016 through October 2019.</p> <p>The draft GSP references a DAC Involvement Program, but does not describe the outreach done through this program.</p>	
<p>4. Does the SCEP or GSP explicitly describe how stakeholder input was incorporated into the GSP process and decisions?</p>		<p><b>X</b></p>	<p>“The Board, in combination with stakeholder input and TAC expert advice, ultimately determined undesirable results based upon the relative levels that would have a significant and unreasonable negative impact not only impact communities with the Kaweah Subbasin, historical and biological quality of life, but would also severely threaten regional agricultural economy and impact the world’s food chain supply.”</p>	<p>Section 3.4, page 162</p>

**Summary/ Comments**

The GSP should provide more details on how stakeholders, including DACs and environmental beneficial users, were engaged throughout the GSP development process and how their input was incorporated into the GSP process and decisions. DACs are not included in the official Advisory, but instead are listed as a “secondary stakeholder” with interests in the GSA. However no information is provided about how those interests were identified or considered in decision making by the GSA. Appendix 1-B lists two workshops targeted at DACs, on August 14-15 2018, but no information is provided about attendance or feedback and no followup workshops are identified.

**Appendix A  
Review of Public Draft GSP**

**3. Maps Related to Key Beneficial Uses**

*Were best available data sources used for information related to key beneficial users?*

Selected relevant requirements and guidance:  
 GSP Element 2.1.4 “Additional GSP Elements” (§354.8):  
*Each Plan shall include a description of the geographic areas covered, including the following information:*  
 (a) *One or more maps of the basin that depict the following, as applicable:*  
 (5) *The density of wells per square mile, by dasymetric or similar mapping techniques, showing the general distribution of agricultural, industrial, and domestic water supply wells in the basin, including de minimis extractors, and the location and extent of communities dependent upon groundwater, utilizing data provided by the Department, as specified in Section 353.2, or the best available information.*

GSP Element 3.5 Monitoring Network (§354.34)  
 (b) *Each Plan shall include a description of the monitoring network objectives for the basin, including an explanation of how the network will be developed and implemented to monitor groundwater and related surface conditions, and the interconnection of surface water and groundwater, with sufficient temporal frequency and spatial density to evaluate the affects and effectiveness of Plan implementation. The monitoring network objectives shall be implemented to accomplish the following:*  
 (c) *Each monitoring network shall be designed to accomplish the following for each sustainability indicator:*  
 (1) *Chronic Lowering of Groundwater Levels. Demonstrate groundwater occurrence, flow directions, and hydraulic gradients between principal aquifers and surface water features by the following methods:*  
 (A) *A sufficient density of monitoring wells to collect representative measurements through depth-discrete perforated intervals to characterize the groundwater table or potentiometric surface for each principal aquifer.*  
 (4) *Degraded Water Quality. Collect sufficient spatial and temporal data from each applicable principal aquifer to determine groundwater quality trends for water quality indicators, as determined by the Agency, to address known water quality issues.*  
 (6) *Depletions of Interconnected Surface Water. Monitor surface water and groundwater, where interconnected surface water conditions exist, to characterize the spatial and temporal exchanges between surface water and groundwater, and to calibrate and apply the tools and methods necessary to calculate depletions of surface water caused by groundwater extractions. The monitoring network shall be able to characterize the following:*  
 (A) *Flow conditions including surface water discharge, surface water head, and baseflow contribution.*  
 (B) *Identifying the approximate date and location where ephemeral or intermittent flowing streams and rivers cease to flow, if applicable.*  
 (C) *Temporal change in conditions due to variations in stream discharge and regional groundwater extraction.*  
 (D) *Other factors that may be necessary to identify adverse impacts on beneficial uses of the surface water.*  
 (f) *The Agency shall determine the density of monitoring sites and frequency of measurements required to demonstrate short-term, seasonal, and long-term trends based upon the following factors:*  
 (3) *Impacts to beneficial uses and users of groundwater and land uses and property interests affected by groundwater production, and adjacent basins that could affect the ability of that basin to meet the sustainability goal.*

Review Criteria		Y e s	N o	N / A	Relevant Info per GSP	Location (Section, Page)
1. Does the GSP Include Maps Related to Drinking Water Users?	a. Well Density	X			Figure 1-6 Well Density This figure lumps all well types together and does not differentiate between domestic wells, public supply wells, and agricultural supply wells.	Figure 1-6, page 41
	b. Domestic and Public Supply Well Locations & Depths			X	Figure 2-25 Average Domestic Well Depth Figure 2-26 Average Public Well Depth The draft GSP does not include the well density/locations of domestic wells	Figures 2-25-2-26, page 112-113

**Appendix A  
Review of Public Draft GSP**

	i. Based on DWR <a href="#">Well Completion Report Map Application</a> <sup>8</sup> ?	X		and public wells separate from agricultural supply wells (Figure 1-6).		
	ii. Based on Other Source(s)?		X			
2. Does the GSP include maps related to Groundwater Dependent Ecosystem (GDE) locations?	a. Map of GDE Locations	X		Figure 2-16 Wetlands Map - "Wetlands data from the National Wetland Inventory" Figure 2-17 Potential Groundwater Dependent Ecosystems - "Wetlands data is from the Natural Communities Commonly Associated with Groundwater (NCCAG) dataset"	Pages 86-87	
	b. Map of Interconnected Surface Waters (ISWs)	X		"An analysis of baseline conditions has been performed, which considered both local knowledge of natural streamflow within the Kaweah Subbasin system including timing and flow regimes (gaining and losing stretches) and gaged streamflow compared to groundwater-level information. Based on this, an estimate of streamflow contribution to the groundwater supply is included in the water budget for the planning base period.	Section 2.4.5, page 129	
	i. Does it identify which reaches are gaining and which are losing?	X				
	ii. Depletions to ISWs are quantified by stream segments.		X			
	iii. Depletions to ISWs are quantified seasonally.		X	Generally, the only available streamflow data is outside the EKGSA. Cottonwood, Lewis, and Frazier Creeks do not have gauges. However, monthly to semiannual groundwater-level measurements collected within the EKGSA support the understanding of the variability of the proximity and separation of the surface water from the groundwater in both wet and drought conditions. In general, the vast majority of the natural streams and manmade ditches throughout the EKGSA are considered losing channels throughout the year with no connectedness between the surface water and groundwater system. However, some upper reaches of the creeks near the foothills and the Kaweah River upstream of McKays Point are more likely to be relatively neutral to gaining stream reaches during times of year. Locations where interconnectivity was possible during the Spring of 2015 are shown in Figure 2-28."		
3. Does the GSP include maps of monitoring networks?	a. Existing Monitoring Wells	X		2.3.1 Existing Groundwater Level Monitoring	Section 2.3.1, page 334, Figure 20, page 468	
	b. Existing Monitoring Well Data sources:	i. California Statewide Groundwater Elevation Monitoring (CASGEM)	X	"The agencies located within the Kaweah Subbasin are involved in several long-term water level measurement program of wells throughout the Subbasin. Twenty-three-member agencies have collaborated and contributed data, which has been compiled and used for this Basin Setting effort. Table 4 provides a summary of the groundwater level monitoring programs being conducted in each jurisdiction throughout the Subbasin. Groundwater level monitoring locations are shown on Figure 20."		
		ii. Water Board Regulated monitoring sites		X	"Within the Kaweah Subbasin, water level data were compiled using data from DWR's CASGEM program, the three GSAs within the Subbasin and the cooperating agencies are listed below. ... Stone Corral Irrigation District "	
		iii. Department of Pesticide Regulation (DPR) monitoring wells		X		
	c. SGMA-Compliance Monitoring Network		X	Figure 4-1: Initial Groundwater Monitoring Network  Table 4-2 Proposed Monitoring Network Information	Figure 4-1, page 189 Table 4-2, page	

<sup>8</sup> DWR Well Completion Report Map Application: <https://www.arcgis.com/apps/webappviewer/index.html?id=181078580a214c0986e2da28f8623b37>

**Appendix A  
Review of Public Draft GSP**

					190-191
i. SGMA Monitoring Network map includes identified DACs?		X			
ii. SGMA Monitoring Network map includes identified GDEs?		X			

**Summary/ Comments**

The draft GSP should clearly identify the density of domestic wells and public wells in maps separate from agricultural supply wells. This will help the public identify areas of high proportions of drinking water users are present. Identifying average depth using all wells could mask impacts to domestic or small community wells.

The draft GSP describes that interconnected surface waters were analyzed and that streamflow contributions were incorporated into the water budget, but the draft GSP does not transparently present the quantitative results of this assessment or clearly identify on maps which reaches are gaining and which are losing, based on seasonal conditions. It is recommended the GSP provides maps of the monitoring network overlaid with location of DACs, GDEs, and any other sensitive beneficial users to allow the reader to evaluate the adequacy of the network to monitor conditions near these beneficial users.

Based on the monitoring network presented in the draft GSP, it appears that no water quality monitoring will be performed near the DACs of Ivanhoe or Woodlake, which represent a population of over 11,500 people. In addition, approximately 300 domestic wells are located in the area surrounding and north of Ivanhoe and Woodlake, which represents approximately 40% of the domestic wells in the EKGSA area. Therefore, the proposed network of water quality monitoring network appears to be insufficient to monitor impacts to groundwater for drinking water beneficial users, particularly domestic well users and DACs; such monitoring is required pursuant to 23 CCR § 354.34.



**Appendix A  
Review of Public Draft GSP**

**4. Water Budgets**

*How were climate change projections incorporated into projected/future water budget and how were key beneficial users addressed?*

**Selected relevant requirements and guidance:**  
 GSP Element 2.2.3 “Water Budget Information” (Reg. § 354.18)  
*Each Plan shall include a water budget for the basin that provides an accounting and assessment of the total annual volume of groundwater and surface water entering and leaving the basin, including historical, current and projected water budget conditions, and the change in the volume of water stored. Water budget information shall be reported in tabular and graphical form.*  
*Projected water budgets shall be used to estimate future baseline conditions of supply, **demand**, and aquifer response to Plan implementation, and to identify the uncertainties of these projected water budget components. The projected water budget shall utilize the following methodologies and assumptions to estimate future baseline conditions concerning hydrology, water demand and surface water supply availability or reliability over the planning and implementation horizon:*  
*(b) The water budget shall quantify the following, either through direct measurements or estimates based on data:*  
*(5) If overdraft conditions occur, as defined in Bulletin 118, the water budget shall include a quantification of overdraft over a period of years during which water year and water supply conditions approximate average conditions.*  
*(6) The water year type associated with the annual supply, demand, and change in groundwater stored.*  
*(c) Each Plan shall quantify the current, historical, and projected water budget for the basin as follows:*  
*(1) Current water budget information shall quantify current inflows and outflows for the basin using the most recent hydrology, water supply, **water demand**, and land use information.*  
**DWR Water Budget BMP**<sup>9</sup>  
**DWR Guidance for Climate Change Data Use During GSP Development and Resource Guide**<sup>10</sup>

Review Criteria	Y e s	N o	N / A	Relevant Info per GSP	Location (Section, Page)
1. Are climate change projections explicitly incorporated in future/ projected water budget scenario(s)?	X			“SGMA requires local agencies developing and implementing GSPs to include water budgets that assess the current, historical, and projected water budgets for the basin, including the effects of climate change. Additional clarification is found in DWR’s Water Budget and Modeling BMPs that describe the use of climate change data to compute projected water budgets and simulate related actions in groundwater/surface water models. DWR also provides SGMA Climate Change Data and published a guide for Climate Change Data Use During Groundwater Sustainability Plan Development (Guidance Document) as the primary source of technical guidance (DWR, 2018). The DWR-provided climate change data is based on the California Water Commission’s Water Storage Investment Program (WSIP) climate change analysis results that use global climate models and	Section 2.5.4.1, page 145

<sup>9</sup> DWR BMP for the Sustainable <management of Groundwater Water Budget:  
<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-4-Water-Budget.pdf>

<sup>10</sup>DWR Guidance Document for the Sustainable Management of Groundwater Guidance for Climate Change Data Use During GSP Development:  
[https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/Climate-Change-Guidance\\_Final.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/Climate-Change-Guidance_Final.pdf)

**Appendix A**  
**Review of Public Draft GSP**

			radiative forcing scenarios recommended for hydrologic studies in California by the Climate Change Technical Advisory Group (CCTAG). Climate data from the recommended GCM models and scenarios have also been downscaled and aggregated to generate an ensemble time series of change factors which describe the projected change in precipitation and evapotranspiration values for climate conditions that are expected to prevail at mid-century and late-century, centered around 2030 and 2070, respectively. The DWR dataset also includes two additional simulation results for extreme climate scenarios under 2070 conditions. Use of the extreme scenarios which represent Drier/Extreme Warming (2070DEW) and Wetter/Moderate Warming (2070WMW) conditions in GSPs is optional."	
2. Is there a description of the methodology used to include climate change?		<b>X</b>	"This section describes the retrieval, processing, and analysis of DWR-provided climate change data to project the impact of climate change on precipitation, evapotranspiration, upstream inflow, and imported flows in the Kaweah Subbasin under future conditions between 2030 and 2070. The precipitation and evapotranspiration change projections are computed relative to a baseline period of 1981 to 2010 and are summarized for the EKGSA, GKGSA and MKGSA areas. ... Groundwater modeling will be used to estimate the sustainable yield through the use of initial thresholds and objectives."	Section 2.5.4 page 145-148
3. What is used as the basis for climate change assumptions?	a. <a href="#">DWR-Provided Climate Change Data and Guidance</a>	<b>X</b>	See above	See above
	b. Other	<b>X</b>	See above	See above
4. Does the GSP use multiple climate scenarios?		<b>X</b>	"The DWR dataset also includes two additional simulation results for extreme climate scenarios under 2070 conditions. Use of the extreme scenarios which represent Drier/Extreme Warming (2070DEW) and Wetter/Moderate Warming (2070WMW) conditions in GSPs is optional."	Section 2.5.4.1, page 145
5. Does the GSP quantitatively incorporate climate change projections?		<b>X</b>	See below.	
6. Does the GSP explicitly account for climate change in the following elements of the future/projected water budget?	a. Inflows: i. Precipitation	<b>X</b>	2.5.4.1.3 Projected Changes in Precipitation "The seasonal distribution of precipitation in the Kaweah Subbasin is projected to change. Decreases in precipitation are anticipated in early fall and late spring while an increase in rainfall is projected in winter and summer. Under 2030 conditions, the largest monthly changes will occur in May where there is a projected decrease of 14% while March and August	Section 2.5.4.1.3, page 146

[https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/Climate-Change-Guidance\\_Final.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/Climate-Change-Guidance_Final.pdf)

DWR Resource Guide DWR-Provided Climate Change Data and Guidance for Use During GSP Development:  
[https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/Resource-Guide-Climate-Change-Guidance\\_v8.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/Resource-Guide-Climate-Change-Guidance_v8.pdf)

**Appendix A**  
**Review of Public Draft GSP**

			will receive increases of approximately 9% and 10%, respectively. Under 2070 conditions, rainfall will decrease by up to 31% in May and the largest increases will occur in September (25%) and January (17%). Although the precipitation pattern is anticipated to change, all three GSA areas will experience minimal changes in total annual precipitation. Increases in annual precipitation for the EKGSA is projected at 0.4% from the baseline period in 2030. By 2070, small decreases in annual precipitation are projected with a change of 0.6% projected for the EKGSA.”	
	ii. Surface Water	X	2.5.4.1.4 Projected Changes in Full Natural Flow “The quantity of surface water that flows into Kaweah Lake, the main local water source, is projected to decrease. Under current climactic conditions Kaweah Lake receives 465 thousand acre-feet (TAF) in 2030; in 2070 this quantity is expected to decrease to 442 TAF. Similarly, peak flows are projected to decrease from monthly peaks of 102 TAF under current climate conditions to 82 TAF by 2030 followed by a minimal decline to 81 TAF under 2070 conditions. Additionally, significant changes in the seasonal timing of flows are expected. In 2030, the monthly inflows into the reservoir are projected to peak in May. By 2070, inflows are projected to occur earlier in the water year, with peak monthly inflows occurring in March.”	Section 2.5.4.1.4, page 146
	iii. Imported Water	X	2.5.4.1.5 Projected Changes in Imported Flow Diversions “...the central tendency of water deliveries from the Friant system to the Kaweah Subbasin would decrease by 8.5% to 154.4 TAF under 2030 conditions and by 16.8% to 140.4 TAF under 2070 conditions. The two extreme climate conditions for 2070 would results in a 37.9% decrease to 104.7 TAF for the Drier/Extreme Warming Conditions and a 10.4% increase to 186.3 TAF for the Wetter/Moderate Warming Conditions, respectively.”	Section 2.5.4.1.5, page 147
	iv. Subsurface Inflow	X		
b. Outflows:	i. Evapotranspiration	X	2.5.4.1.2 Projected Changes in Evapotranspiration “Crops require more water to sustain growth in warmer climates, and this increased water requirement is characterized in climate models using the rate of evapotranspiration. Under 2030 conditions, all three GSAs in the Kaweah Subbasin are projected to experience annual water requirement increases of 3.2% from the baseline period. In 2030 the largest monthly changes will occur in winter and early summer and projected increases of 4.3% to 4.8% will occur in January and 3.8% to 4% will occur in June. Under 2070 conditions, annual evapotranspiration is projected to increase by 8.2% from the baseline period in all three GSA areas. Predictions for 2070 show the largest monthly changes will occur in December with projected increases of between 12.8% to 13.5%. Summer increases peak approximately 8% in May and June.”	Section 2.5.4.1.2, page 146
	ii. Surface Water Outflows	X		

**Appendix A  
Review of Public Draft GSP**

	(incl. Exports)				
	iii. Groundwater Outflows (incl. Exports)	<b>X</b>			
7. Are demands by these sectors (drinking water users) explicitly included in the future/projected water budget?	a. Domestic Well users (<5 connections)	<b>X</b>		<p>“To estimate future M&amp;I demands, which includes dairies, small water systems, rural domestic systems, golf courses, and nursery farms in addition to the main urban centers, 2015 Urban Water Management Plans for the Cities of Visalia (Cal Water, 2016) and the Tulare (City of Tulare, 2015) and California Department of Finance population projections (California Department of Finance, 2017) were utilized. M&amp;I and other demands in the Kaweah Subbasin were 76,400 acre-feet per year in 2015, which was primarily supplied through groundwater pumping. M&amp;I and other demand is projected to increase to 126,421 AFY by 2030 and 186,455 AFY in 2070.”</p>	Section 2.5.4.3.2 of the Basin Setting, page 147
	b. State Small Water systems (5-14 connections)	<b>X</b>			
	c. Small community water systems (<3,300 connections)	<b>X</b>			
	d. Medium and Large community water systems (> 3,300 connections)	<b>X</b>			
	e. Non-community water systems	<b>X</b>			
8. Are water uses for native vegetation and/or wetlands explicitly included in the current and historical water budgets?		<b>X</b>			
9. Are water uses for native vegetation and/or wetlands explicitly included in the projected/future water budget?		<b>X</b>			

**Summary/ Comments**

Given the uncertainties of climate change, it is appropriate to analyze the impacts of climate change for a range of scenarios (e.g., a mild effects scenario and a high (worst case) effects scenario).

The GSP includes water demand for agriculture and M&I in general. However, no specifics were provided on drinking water demands by various drinking water users, such as domestic well users, community and non-community water systems. This information should be provided for full transparency of the assumptions, data, and results of the water budgets. Also, a table summarizing each component in the water budget is recommended.

Small water system demand was reported to be estimated from data in previously published reports. Very little specific information is provided in the draft GSP on the methods and assumptions used to estimate the small water system demand. No maps are provided showing the location of the small water systems. The annual demand from small water systems is shown to increase throughout the water budget period, but it is not possible to determine if the values are reasonable from the information provided in the draft GSP. Additional detailed information is necessary for the public to be able to evaluate the accuracy and appropriateness of the small water system demand incorporated in the draft GSP.

Based on the information presented, it is not clear whether the draft GSP includes water demands by native or riparian vegetation, including wetlands in the historical, current, and future water budgets. These water demands should be quantified, described, and incorporated into the water budgets, and the results should be clearly presented in the GSP.

Rural domestic pumping for the EKGSA area is reported in Section 2.5.3.3 to be 3,400 AFY. The rural domestic pumping for the entire subbasin reported in Appendix 2-A is 2,272 AFY. Since the EKGSA area is only a portion of the entire subbasin, the rural domestic pumping in the EKGSA should be less than the rural domestic pumping reported for the entire subbasin but the draft GSP instead reports that EKGSA rural domestic pumpage is greater than rural domestic pumpage for the entire subbasin.

**Appendix A  
Review of Public Draft GSP**

**5. Management Areas and Monitoring Network**

How were key beneficial users considered in the selection and monitoring of Management Areas and was the monitoring network designed appropriately to identify impacts on DACs and GDEs?

**Selected relevant requirements and guidance:**  
 GSP Element 3.3, "Management Areas" (§354.20):

*(b) A basin that includes one or more management areas shall describe the following in the Plan:*  
 (2) The minimum thresholds and measurable objectives established for each management area, and an explanation of the rationale for selecting those values, if different from the basin at large.  
 (3) The level of monitoring and analysis appropriate for each management area.  
 (4) An explanation of how the management area can operate under different minimum thresholds and measurable objectives without causing undesirable results outside the management area, if applicable.

*(c) If a Plan includes one or more management areas, the Plan shall include descriptions, maps, and other information required by this Subarticle sufficient to describe conditions in those areas.*

**CWC Guide to Protecting Drinking Water Quality under the SGMA<sup>12</sup>**  
**TNC's Groundwater Dependent Ecosystems under the SGMA, Guidance for Preparing GSPs<sup>13</sup>**

Review Criteria	Y e s	N o	N / A	Relevant Info per GSP	Location (Section, Page)
1. Does the GSP define one or more Management Area?	X			"To facilitate implementation of this GSP, it was necessary to look at both the political boundaries already in place and the natural hydrogeologic patterns present in the Subbasin and the EKGSA in particular. Historical boundaries of the member irrigation districts were used to separate the EKGSA into management areas. The district boundaries formed a helpful foundation for GSP implementation due to their status as longstanding public agencies in the community, their near-daily interaction with a majority of the heavily impacted EKGSA denizens, involvement with the GSP development process, ability to leverage surface water imports, and their critical role in future partnerships within the EKGSA on projects and management actions to achieve sustainability by 2040. The larger "urban" areas (City of Lindsay and Strathmore PUD) were grouped into nearby irrigation districts (Lindmore and Lindsay-Strathmore, respectively). The large non-districted areas in the primary intercardinal directions of the EKGSA made logical targets to also form their own management areas. These "non-districted area" management areas are within no other jurisdictional boundary other than Tulare County. These non-district areas will likely have oversight by both Tulare County and the EKGSA. This effectively divided the EKGSA into nine management areas. It is	Section 3.3.1, page 151

<sup>12</sup> CWC Guide to Protecting Drinking Water Quality under the SGMA: [https://d3n8a8pro7vhmxc.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328858/Guide\\_to\\_Protecting\\_Drinking\\_Water\\_Quality\\_Under\\_the\\_Sustainable\\_Groundwater\\_Management\\_Act.pdf?1559328858](https://d3n8a8pro7vhmxc.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328858/Guide_to_Protecting_Drinking_Water_Quality_Under_the_Sustainable_Groundwater_Management_Act.pdf?1559328858)

<sup>13</sup> TNC's Groundwater Dependent Ecosystems under the SGMA, Guidance for Preparing GSPs: <https://www.scienceforconservation.org/assets/downloads/GDEsUnderSGMA.pdf>

**Appendix A**  
**Review of Public Draft GSP**

			believed that forming these management areas based on existing jurisdictional boundaries will allow for effective implementation of EKGSA projects and management actions by leaning upon the existing governance structure of the irrigation districts. In addition, delineation based upon irrigation district service areas simplifies the water budget accounting for each management area as imported surface water supplies are allocated to the irrigation district responsible for its importation.”	
			Nine management areas in the EKGSA. Figure 3-2. Map of EKGSA Management Areas and Overlapping Threshold Regions	Figure 3-2, page 154
2. Were the management areas defined specifically to manage GDEs?		X		
3. Were the management areas defined specifically to manage DACs?		X		
a. If yes, are the Measurable Objectives (MOs) and MTs for GDE/DAC management areas more restrictive than for the basin as a whole?			X	
b. If yes, are the proposed management actions for GDE/DAC management areas more restrictive/ aggressive than for the basin as a whole?			X	
4. Does the GSP include maps or descriptions indicating what DACs are located in each Management Area(s)?		X	The GSP does not include maps or descriptions indicating what DACs/GDEs are within each MA.	Section 3.3.2, page 155-157
5. Does the GSP include maps or descriptions indicating what GDEs are located in each Management Area(s)?		X		
6. Does the plan identify gaps in the monitoring network for DACs and/or GDEs?		X	2.6 Identification of Data Gaps The GSP does not discussed DACs or GDEs in the data gap section.	Section 2.6, page 148
a. If yes, are plans included to address the identified deficiencies?			X	
<b>Summary/ Comments</b>				
The GSP should present the locations of DACs and GDEs in relation to the monitoring network on maps.				
The GSP should also identify data gaps in the monitoring network for DACs and/or GDEs, if any, and provide plan to address such data gaps if applicable.				
The draft GSP identifies 43 monitoring wells for water levels and ten monitoring wells for water quality, but does not include well construction information for these wells. Pursuant to 23 CCR § 352.4, this information is required to be provided in the GSP for all monitoring wells. Without well construction information for monitoring wells included in the GSP, the public and DWR cannot evaluate if the monitoring wells are: (1) adequate for evaluating water levels relative to the MOs and MTs over the long term, and/or (2) how representative the water quality sampling depths are of the zones used for drinking water purposes by domestic well users and community water systems.				

**Appendix A  
Review of Public Draft GSP**

**6. Measurable Objectives, Minimum Thresholds, and Undesirable Results**

*How were DAC and GDE beneficial uses and users considered in the establishment of Sustainable Management Criteria?*

**Selected relevant requirements and guidance:**  
 GSP Element 3.4 “Undesirable Results” (§ 354.26):  
*(b) The description of undesirable results shall include the following:*  
*(3) Potential effects on the beneficial uses and users of groundwater, on land uses and property interests, and other potential effects that may occur or are occurring from undesirable results*  
 GSP Element 3.2 “Measurable Objectives” (§ 354.30)  
*(a) Each Agency shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon.*

Review Criteria	Y e s	N o	N / A	Relevant Info per GSP	Location (Section, Page)
1. Are DAC impacts considered in the development of Undesirable Results (URs), MOs, and MTs for groundwater levels and groundwater quality?		<b>X</b>		DACs are not discussed in the SMC section.	
2. Does the GSP explicitly discuss how stakeholder input from DAC community members was considered in the development of URs, MOs, and MTs?	<b>X</b>			<p>“In general, undesirable results for each sustainability indicator were determined using a lengthy, data informed, and stakeholder-inclusive process. Specifically, the EKGSA Technical Advisory Committee (TAC) and Board of Directors (Board) carefully considered when the five sustainability indicators applicable to the EKGSA would reach levels that were “significant and unreasonable” based upon the quantitative data presented in the Basin Setting and Water Budget (Chapter 2). The Board, in combination with stakeholder input and TAC expert advice, ultimately determined undesirable results based upon the relative levels that would have a significant and unreasonable negative impact not only impact communities with the Kaweah Subbasin, historical and biological quality of life, but would also severely threaten regional agricultural economy and impact the world’s food chain supply.”</p> <p>“The minimum thresholds have been established to allow for continued beneficial use within the EKGSA and provide improved long-term certainty of groundwater levels and corresponding supply. The EKGSA intends to bolster the well data set for future analyses in two ways, partnering with the Kaweah Subbasin GSAs and County of Tulare to develop a more complete well canvass of the area, and developing a Well Observation Program to monitor and evaluate potential impacts to drinking water wells.”</p> <p>The GSP does not clearly identify who the members of the TAC were and whether they represented DACs and other sensitive beneficial users.</p>	<p>Section 3.4, page 162</p> <p>Section 3.4.1.2.4 Page 169</p>
3. Does the GSP explicitly consider impacts to GDEs and environmental BUs of surface water in the development of MOs and MTs for groundwater levels and depletions of ISWs?		<b>X</b>		“Each baseline minimum threshold for groundwater levels was also evaluated by the TAC to determine if it was stringent enough by reviewing if the projected level would cause excessive strain to the health of local communities, the agrarian economy, or interconnected surface water areas.	Section 3.4.1.2.3, page 169

**Appendix A  
Review of Public Draft GSP**

			<p>More stringent minimum thresholds were, and can continue to be, formed if deemed necessary by the EKGSA, its TAC, and relevant stakeholders.”</p> <p>“Minimum thresholds for groundwater levels, interconnected surface water depletions, and aquifer storage were determined for each threshold region after lengthy consideration of the potential impacts on stakeholders within the EKGSA. The minimum thresholds have been established based on historic rate of decline and enough operational flexibility to maintain delivery during a 10-yr drought. The minimum thresholds have been determined based on the plan to correct the existing overdraft with an incremental approach intended to result in stabilized groundwater levels by 2040.”</p>		
4. Does the GSP explicitly consider impacts GDEs and environmental BUs of surface water and recreational lands in the discussion and development of Undesirable Results?		<b>X</b>			
5. Does the GSP clearly identify and detail the anticipated degree of water level decline from current elevations to the water level MOs and MTs?	<b>X</b>		Table 3-2 Groundwater Level Minimum Thresholds Table 3-3. Groundwater Level Measurable Objectives	Table 3-2, page 170	
6. If yes, does it include: <ul style="list-style-type: none"> <li>b. Is this information presented in table(s)?</li> <li>c. Is this information presented on map(s)?</li> <li>d. Is this information presented relative to the locations of DACs and domestic well users?</li> <li>e. Is this information presented relative to the locations of ISW and GDEs?</li> </ul>	<b>X</b>		Table 3-6. Constituents of Concern for the EKGSA with Respective Minimum Threshold	Table 3-3, page 172	
		<b>X</b>	Table 3-8 Minimum Threshold for Land Subsidence	Table 3-6, page 177	
		<b>X</b>	Figure 3-6 Groundwater Minimum Threshold and Well Impacts by Threshold Region	Table 3-8, page 182	
		<b>X</b>		Figure 3-6, page 171	
2. Does the GSP include an analysis of the anticipated impacts of water level MOs and MTs on drinking water users?	<b>X</b>		Figure 3-6 Groundwater Minimum Threshold and Well Impacts by Threshold Region	Page 171	
3. If yes: <ul style="list-style-type: none"> <li>a. On domestic well users?</li> <li>b. On small water system production wells?</li> <li>c. Was an analysis conducted and clearly illustrated (with maps) to identify what wells would be expected to be partially and fully dewatered at the MOs?</li> <li>d. Was an analysis conducted and clearly illustrated (with maps) to identify what wells would be expected to be partially and fully dewatered at the MTs?</li> <li>e. Was an economic analysis performed to assess the increased operation costs associated with increased lift as a result of water level decline?</li> </ul>	<b>X</b>		Figure 3-6 identifies percent of domestic, ag, and public supply wells expected to go dry at the proposed water level MTs.	page 16	
		<b>X</b>			
		<b>X</b>			
		<b>X</b>			
		<b>X</b>			
9. Does the sustainability goal explicitly include drinking water and nature?		<b>X</b>	“The Kaweah Subbasin’s sustainability goal is for each GSA to manage groundwater resources to preserve the quality of life through maintaining the viability of existing enterprises of the region. The goal will also strive to fulfill the water needs of existing enterprises as well as existing and amended county and city general plans that commit to continued economic and population growth within Tulare County. The sustainability goal was derived	Section ES 1.3, page 16	



**Appendix A**  
**Review of Public Draft GSP**

			<p>from Basin Settings, Kaweah Subbasin Hydrologic Model (KSHM), historical and current groundwater conditions, and the water budget. This goal will be achieved via combined implementation of EKGSA, GKGSA, and MKGSA GSPs. Specifically, all GSPs are designed to identify phased implementation of projects and management actions to reduce long-term groundwater overdraft.”</p>	
<p><b>Summary/ Comments</b></p> <p>The draft GSP states that “The EKGSA recognizes that some shallow wells will likely go dry until water levels have been stabilized. Without SGMA and the proposed incremental mitigation by the EKGSA, the shallow wells would have gone dry sooner, requiring the landowners to deepen these existing wells” (Section 3.4.1.2.4). The stated sustainability goal for the subbasin in the draft GSP is “for each GSA to manage groundwater resources to preserve the quality of life through maintaining the viability of existing enterprises of the region. The goal will also strive to fulfill the water needs of existing enterprises as well as existing and amended county and city general plans that commit to continued economic and population growth within Tulare County” (Section ES 1.3). The draft GSP, however, does not clearly indicate how the proposed water level MTs will preserve the quality of life or support population growth, given the lack of consideration for drinking water beneficial users in the subbasin, in particular domestic well users and DACs reliant on groundwater.</p> <p>Based on the assessment presented in the “Percentage of Wells Dry at Minimum Threshold” Figure in Appendix 3-A of the draft GSP, the percentage of domestic wells expected to go dry within each threshold region is between 14% and 77%. This assessment appears to have been done relative to the bottom of the total well construction depth. However, water supply wells become unusable or subject to decreased performance and longevity as water levels fall within the screened interval, which will occur before water levels reach the bottom of the well. Therefore, the actual number of domestic wells that would be significantly impacted at the proposed water level MTs would be expected to be higher than represented in Appendix 3-A of the draft GSP.</p> <p>It is recommended that the basin’s sustainability goal clearly include nature, which is a beneficial user.</p>				

**Appendix A  
Review of Public Draft GSP**

**7. Management Actions and Costs**

What does the GSP identify as specific actions to achieve the MOs, particularly those that affect the key BUs, including actions triggered by failure to meet MOs? What funding mechanisms and processes are identified that will ensure that the proposed projects and management actions are achievable and implementable?

Selected relevant requirements and guidance  
 GSP Element 4.0 Projects and Management Actions to Achieve Sustainability Goal (§ 354.44)  
 (a) Each Plan shall include a description of the projects and management actions the Agency has determined will achieve the sustainability goal for the basin, including projects and management actions to respond to changing conditions in the basin.  
 (b) Each Plan shall include a description of the projects and management actions that include the following:  
 (1) A list of projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or management action.

Review Criteria	Y e s	N o	N / A	Relevant Info per GSP	Location (Section, Page)
1. Does the GSP identify benefits or impacts to DACs as a result of identified management actions?			<b>X</b>	GA-1 Development of Groundwater Allocation Per Acre “The EKGSA may adopt a policy which provides a groundwater allocation on a per acre basis for the GSA as a whole, or for sub-areas of the EKGSA. The policy would identify and forecast the demands associated with prior rights, domestic, community, and environmental uses. The sustainable yield and ultimate groundwater allocation would take into consideration the existing water rights holders, irrigation districts (IDs), disadvantaged communities (DACs), public utility districts (PUDs), and environmental uses. The EKGSA, through collaboration with its beneficial users, may consider whether an equal-, reduced-, or zero-allocation is given to lands with unexercised groundwater rights. The report Groundwater Pumping Allocations under California’s Sustainable Groundwater Management Act (Environmental Defense Fund et. al, 2018) identifies several possible methods of establishing groundwater pumping allocations as shown in the following table excerpted from the 2018 report.” 5.3.3.2 Circumstances for Implementation GA-1 – GA-4 (Sec. 354.44.b.1.A) “The EKGSA may consider an investigative study to determine the current and future needs of the existing water rights holders, IDs, DACs, PUDs, and unexercised rights to determine the sustainable yield and groundwater allocation. The selection of groundwater extraction method may be implemented shortly after the adoption of the GSP for the purposes of the required SMGA annual reporting. The selected groundwater extraction quantification method may change over time, but the groundwater allocation would remain on-going.”  Even though the GSP mentions DACs in the Management Action section, it does not provide any discussion on how DACs will be impacted or benefitted.	Section 5.3.3.1, page 247  Section 5.3.3.2, page 252
2. If yes: f. Is a plan to mitigate impacts on DAC drinking water users included in the proposed Projects and Management Actions?			<b>X</b>	“The EKGSA does not view a well going dry as an undesirable result. However, the EKGSA intends to develop a Well Observation Program which will monitor, evaluate, and notify beneficial users of potential impacts and possible actions	Section 3.4.1.1, page 169

**Appendix A  
Review of Public Draft GSP**

				that may be taken to avoid or minimize undesirable results.”			
	g.	Does the GSP identify costs to fund a mitigation program?		X			
	h.	Does the GSP include a funding mechanism to support the mitigation program?		X			
4.		Does the GSP identify any demand management measures in its projects and management actions?	X		<p>“The Management Actions that may be considered by the EKGSA are discussed below and grouped into the following general topics:</p> <ul style="list-style-type: none"> <li>➤ EO - Education and Outreach</li> <li>➤ WH – Well Head Requirements</li> <li>➤ GA – Groundwater Allocation</li> <li>➤ GMT – Groundwater Marketing/Trading</li> <li>➤ FI – Fees and Incentives</li> <li>➤ GP – Groundwater Pumping Restrictions”</li> </ul>	Section 5.3, page 238	
5.	If yes, does it include:	a. Irrigation efficiency program		X	<p>EO-1 Regular Communication          “This correspondence may provide individual user information as well as aggregated EKGSA groundwater data for comparison purposes. The ongoing correspondence may contain the following information:</p> <ul style="list-style-type: none"> <li>• Individual grower's estimated groundwater use amount in acre-feet/acre.</li> <li>• Average crop demand in acre-feet/acre based upon published CIMIS evapotranspiration values specific to individual’s location.”</li> </ul>	Section 5.3.1.1, page 239	
		b. Ag land fallowing (voluntary or mandatory)		X			
		c. Pumping allocation/restriction	X		<p>5.3.3.1 Groundwater Allocations          GA-1 Development of Groundwater Allocation Per Acre          ...          GA-4 Groundwater Quantification Methods</p>	Section 5.3.3, page 247-253	
		d. Pumping fees/fines	X		FI-1 Pumping Fees for Groundwater Allocations Exceedances	Section 5.3.5, page 258-262	
		e. Development of a water market/credit system	X		GMT-4 Groundwater Trading Structure	Section 5.3.5, page 254-257	
		f. Prohibition on new well construction		X			
		g. Limits on municipal pumping		X			
		h. Limits on domestic well pumping		X			
		i. Other	X		Well Head Requirements	Section 5.3.2, page 242-247	
6.		Does the GSP identify water supply augmentation projects in its projects and management actions?	X		Table 5-1 EKGSA Currently Identified Projects	Table 5-1, page 212	
7.	If yes, does it include:	a. Increasing existing water supplies	X		<p>Includes 7 projects, all of which are recharge projects:</p> <ol style="list-style-type: none"> <li>1. Lewis Creek Recharge - “The funding source will likely be a combination of grant funding, EKGSA funds, and possibly LID funds.”</li> <li>2. Cottonwood Creek Recharge – “The funding source will likely be a combination of grant funding, Stone Corral ID, Ivanhoe ID, and/or EKGSA.”</li> <li>3. Yokohl Creek Recharge – “The funding source will likely be a combination of grant funding, EID, and/or EKGSA.”</li> <li>4. Rancho de Kaweah Water Management &amp; Banking Project – “The funding</li> </ol>	See above	
		b. Obtaining new water supplies		X			
		c. Increasing surface water storage		X			
		d. Groundwater recharge projects – District or Regional level	X				
		e. On-farm recharge		X			
		f. Conjunctive use of surface water		X			
		g. Developing/utilizing recycled water		X			

**Appendix A  
Review of Public Draft GSP**

	h. Stormwater capture and reuse	X			source will likely be a combination of grant funding, LSID, and/or EKGSA.”	
	i. Increasing operational flexibility (e.g., new interties and conveyance)		X		5. Lindmore/Exeter Dry Wells – “The funding source will likely be a combination of grant funding, LID, EID, and/or EKGSA.”	
	j. Other		X		6. Lindsay Recharge Basin – “The funding source will likely be a combination of grant funding, LID, City of Lindsay, and/or EKGSA.”	
8.	Does the GSP identify specific management actions and funding mechanisms to meet the identified MOs for groundwater quality and groundwater levels?		X		7. Wutchumna Ditch Recharge – “ The funding source will likely be a combination of grant funding and EKGSA landowners.”	
9.	Does the GSP include plans to fill identified data gaps by the first five-year report?		X		<p>5.3.2.6 Benefit Realization and Evaluation WH1 - WH-5 (Sec. 354.44.b.5)            “The expected benefits would include a complete geo-database of groundwater extraction locations. Through the DWWPP, a tool may be developed that evaluates potential drinking water well impacts. Requiring new well permits to provide accurate information on location, depth, perforated zone, and measured water use and level would allow for more accurate data analysis of groundwater extraction, storage change, and water table fluctuations. Policy requiring metered wells would also provide private owners with personal usage history and compliment other management actions discussed herein, including education and outreach, groundwater allocation, groundwater marketing and trading, fees and incentives, and pumping restrictions. The expected benefits of water quality sample ports and analytical testing would fill data gaps and provide extractors with useful information. The benefits of self-reporting include the avoidance of EKGSA staff or consultant time to individually collect data. The benefits of developing a DWWPP include protecting the Human Right to Water within the EKGSA, balancing community and economic development needs, and improved understanding of potential impacts on drinking water quality. The evaluation of these benefits would be reviewed periodically and during the annual reporting cycle.”</p> <p>Plan to Fill Data Gaps (One-Time Cost)            “Proper implementation of this GSP, especially as it relates to execution of projects and management actions, is contingent upon filling current data gaps. This process will require determining which measures are necessary to build and maintain a comprehensive assessment of the water budget and ultimately verify groundwater sustainability. This plan to fill data gaps includes, but is not limited to, installing stream gauges, dedicated monitoring wells, and conducting a Proposition 218 vote. Costs are estimated to be approximately \$1,230,000.”</p>	<p>Section 5.3.2.6, page 245</p> <p>Section 6.1, page 263</p>
10.	Do proposed management actions include any changes to local ordinances or land use planning?		X			
11.	Does the GSP identify additional/contingent actions and funding mechanisms in the event that MOs are not met by the identified actions?		X			
12.	Does the GSP provide a plan to study the interconnectedness of surface water bodies?		X			
13.	If yes: a. Does the GSP identify costs to study the		X			

**Appendix A**  
**Review of Public Draft GSP**

interconnectedness of surface water bodies?					
b. Does the GSP include a funding mechanism to support the study of interconnectedness surface water bodies?			<b>X</b>		
14. Does the GSP explicitly evaluate potential impacts of projects and management actions on groundwater levels near surface water bodies?		<b>X</b>			

**Summary/ Comments**

The likely benefits and impacts to DAC members and GDEs by the proposed projects and management actions are not clearly identified in the GSP. A discussion should be added for each project to clearly identify the benefits to DAC drinking water users and GDEs, and the potential impacts to the water supply and habitat. For all potential impacts, the project/management action should include a clear plan to monitor for, prevent, and/or mitigate against such impacts.

The GSP presents very limited information on the interconnectedness of surface water bodies. The GSP should present detailed information on what is known, or include a plan to study the interconnectedness of the surface water bodies over the next 5 years.

Appendix 1-D.8:  
Exeter & Lindsay-Strathmore ID Comments



Mike Hagman`  
Executive Director  
East Kaweah Groundwater Sustainability Agency  
315 East Lindmore Avenue  
P. O. Box 908  
Lindsay, CA 93247-0908

VIA EMAIL: [ekgsa.gsp@ekgsa.org](mailto:ekgsa.gsp@ekgsa.org)

**Re: Boundary Variances in MTs and MOs**

Dear Mr. Hagman,

Exeter Irrigation District and Lindsay Strathmore Irrigation District write to highlight an outstanding, unresolved issue between the draft Groundwater Sustainability Plans (GSPs) prepared by Greater Kaweah and Eastern Kaweah GSAs. The issue relates to differences between minimum thresholds (MTs) and measurable objectives (MOs) in various hydrologic zones set forth in the GSPs.

Enclosed are summary tables prepared by Provost & Pritchard and presented at the October 4<sup>th</sup>, 2019 East Kaweah GSA Technical Advisory Committee meeting comparing the MTs and MOs for various hydrologic zones and showing the associated variances. In some cases, these variances are significant and, if unresolved, could draw the attention of the State in its independent review of the GSPs. Depending on the circumstances, the variances could also result in one GSA area making it more difficult for the neighboring GSA area to comply with SGMA and implement its GSP.

The Districts understand that the GSAs are aware of this issue and are under the belief that discussions continue between the two GSAs on how to resolve this issue. The Districts write to encourage these ongoing discussions and resolution of the issue by (a) making amendments to either or both GSPs; (b) addressing it specifically in the coordination agreement; and/or (c) the two GSAs identifying and committing to a process to resolve promptly following submittal of the GSPs.

Please contact the undersigned should you have any questions.

Sincerely,

---

Thomas Weddle  
General Manager  
Exeter Irrigation District

---

Craig N. Wallace  
General Manager  
Lindsay-Strathmore Irrigation District

CC: Eric Osterling, Greater Kaweah Groundwater Sustainability Agency  
Paul Hendrix, Mid-Kaweah Groundwater Sustainability Agency

**COMPARISON TABLE between MTs (WSE)**

HZ	WSE	Variance	TR	WSE
10	421	(56)	River	365
8	332	(40)	IID-SCID	292
8	332	33	River	365
8	332	(88)	EID	244
7	97	88	EK-NW	185
7	97	195	IID-SCID	292
7	97	147	EID	244
7	97	138	LID-E	235
7	97	48	LID-W	145
6	(8)	83	EK-SW	75
5	66	119	EK-NW	185

**COMPARISON TABLE between MOs (WSE)**

HZ	WSE	Variance	TR	WSE
10	420	(23)	River	397
8	341	(15)	IID-SCID	326
8	341	56	River	397
8	341	(38)	EID	303
7	152	75	EK-NW	227
7	152	174	IID-SCID	326
7	152	151	EID	303
7	152	148	LID-E	300
7	152	77	LID-W	229
6	62	98	EK-SW	160
5	120	107	EK-NW	227

Notes: WSE = Water Surface Elevation  
 HZ = Hydrogeologic Zone  
 TR = Threshold Region



## Appendix 1-D.9: Community Water Center Comments

December 13, 2019

East Kaweah Groundwater Sustainability Agency  
315 E Lindmore St,  
Lindsay, CA 93247

Submitted electronically to:

City of Lindsay, Brian Watson  
County of Tulare, Kuyler Crocker  
Exeter Irrigation District, Joe Ferrara, Vice-Chair  
Ivanhoe Irrigation District, Terry Peltzer  
Lindmore Irrigation District, Edward Milanesio, Chair  
Lindsay-Strathmore Irrigation District, Mike George  
Stone Corral Irrigation District, David C. Roberts  
Sentinal Butte WUC, Paul Buldo  
Wutchumna Water Company, Timothy Gobler  
At-large, Cruz Rivera  
White Area, Rod Burkett  
General Manager, Michael Hagman  
CC'd:

Department of Water Resources Director, Karla Nemath  
Department of Water Resources Deputy Director, Taryn Ravazzini  
Department of Water Resources Kaweah Subbasin, Trent Sherman  
State Water Resources Control Board Chair, Joaquin Esquivel  
State Water Resources Control Board, Natalie Stork  
CalEPA Deputy Secretary, Kristin Peer

**Re: Comments on the Draft East Kaweah Groundwater Sustainability Plan (EK GSP)**

Dear East Kaweah Groundwater Sustainability Agency:

The Community Water Center (CWC) would like to offer several comments and recommendations in response to the East Kaweah Groundwater Sustainability Agency (EK GSA) draft Groundwater Sustainability Plan (GSP) that was released on September 17, 2019.

Community Water Center (CWC) is a 501(c)3 nonprofit that acts as a catalyst for community-driven water solutions through organizing, education, and advocacy. CWC seeks to build and enhance leadership capacity and local community power around water issues, create a regional movement for water justice in California, and enable every community to have access to safe, clean, and affordable drinking water. CWC has worked to facilitate effective Sustainable Groundwater Management Act (SGMA) implementation that meets the needs of vulnerable communities through hosting several community technical capacity building workshops, developing community-facing educational materials, facilitating community GSP review meetings, and participating in GSA meetings.

The comments and recommendations contained in this letter are provided in an effort to protect the drinking water sources of the vulnerable, and often underrepresented, groundwater users that CWC works with. These beneficial users of groundwater include: domestic well owners, community water systems, public water systems, and severely disadvantaged (SDAC) or disadvantaged communities (DAC). The submitted comments are intended to assist EK GSA in developing a groundwater sustainability plan that accomplishes the following objectives:

1. Understands disadvantaged communities' unique vulnerabilities and adequately addresses their drinking water needs;
2. Avoids developing groundwater management actions that cause negative impacts to drinking water supplies or cause a disparate impact on low-income and communities of color;
3. Achieves the objectives required by the SGMA regulations and California's Human Right to Drinking Water in order to ensure the EK GSP adequately addresses the requirements necessary for GSP approval by the Department of Water Resources (DWR); and
4. Achieves the goals required by SGMA without negatively affecting the implementation of the Newsom Administration's newly passed Safe and Affordable Drinking Water Fund (SB 200, Monning, 2019), by limiting or preventing further contamination of drinking water sources or the dewatering of wells that serve low-income communities of color.

The Department of Water Resources (DWR) will be considering AB 685, which established the Human Right to Water as state law, when reviewing and approving GSPs. The Human Right to Water is a California law that recognizes that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." GSPs that do not support access to sufficient and affordable quantities of drinking water, or GSPs that impact access to safe drinking water, may require costly and time-consuming revisions prior to approval from DWR, if not outright or eventual rejection of the GSP.

We are unfortunately very concerned that, without significant changes which we lay out in this comment letter, the proposed GSP will have significant negative impacts for access to safe and sustainable drinking water in our most vulnerable populations within the GSA -- low-income communities and domestic well owners. We urge EK GSA to make changes to better protect the beneficial uses for low-income communities of color that live within the GSA. Detailed comments and recommendations for individual sections of the GSP are included below. CWC also conducted a focused technical review of certain sections of the GSP. Figures and maps from this review are included as attachments and are referenced in this comment letter.

Community Water Center additionally hosted two community workshops within the EK GSA. The first community workshop took place in Plainview and the second community meeting took place in Lindsay. Both of these workshops were hosted in collaboration with El Quinto Sol de America, a grassroots organization in Lindsay and neighboring unincorporated communities of Tooleville, Plainview, El Rancho and Tonyville; and with Self-Help Enterprises (SHE), a community development organization whose mission is to work together with low-income families to build and sustain healthy homes and communities. Comments and reflections from these workshops are included throughout this comment letter.

Here is a summary of a few key comments and recommendations:

### **Water Budget**

Revise the water budget to include all information on data and assumptions used in the development of the water budget. Without a complete GSP draft that thoroughly explains the assumptions and methods used for the development of the water budget, the public is unable to provide meaningful comments and recommendations.

### **Groundwater Levels**

Revise the drinking water well impact analysis to adequately quantify and capture well impacts at the minimum thresholds (MT), measurable objectives (MO), and proposed undesirable results (UR). Our assessment indicates that the usability of over 85% of domestic wells in the EKGSA area would be expected to be significantly impacted if water levels reach the proposed MTs. Describe how the approach to develop MTs/MOs is protective of diverse drinking water users, including domestic well owners and small community water systems.

### **Groundwater Quality**

Clearly identify and describe the current level of contamination at each representative monitoring well and revise sustainable criteria to be protective of drinking water users. Provide a detailed explanation of how the proposed water quality MT approach and monitoring network will result in protection of groundwater for S/DACs and other drinking water beneficial users.

### **Projects and Management Actions - Well Impact Prevention/Mitigation Program**

If EKGSA defines its sustainability criteria in a way that allows for the dewatering of drinking water wells, it must provide a robust drinking water protection program to prevent impacts to drinking water users and mitigate the drinking water impacts that occur.

We appreciate the revisions made and the incorporation of the comments and recommendations we shared during the informal administrative draft GSP review process and we hope the following recommendations continue to help revise sections of the GSP to better address drinking water needs. Thank you for reviewing this letter and for the consideration of our comments on the draft GSP. We look forward to working with the EKGSA to ensure that the GSP is protective of the drinking water sources of vulnerable, and often underrepresented, groundwater stakeholders. Please do not hesitate to contact us with any questions or concerns, or if you would like to meet to further discuss these important sets of issues.

Sincerely,

**Adriana Renteria**

**Community Water Center**



## **Table of Contents**

<u>GSP Section: Introduction &amp; Plan Area</u>	<b>4</b>
<u>Description of Plan Area</u>	4
<u>Notice and Communication</u>	4
<u>GSP Section: Basin Setting</u>	<b>6</b>
<u>Groundwater Conditions</u>	6
<u>Hydrogeologic Conceptual Model</u>	6
<u>Current and Historical Groundwater Elevation Trends</u>	7
<u>Groundwater Quality</u>	7
<u>Land Subsidence</u>	8
<u>Water Budget</u>	9
<u>GSP Section: Sustainable Management Criteria</u>	<b>11</b>
<u>Sustainability Goal</u>	11
<u>Management Areas</u>	12
<u>Undesirable Results, Minimum Thresholds, and Measurable Objectives</u>	13
<u>Chronic Lowering of Groundwater Levels</u>	13
<u>Degraded Water Quality</u>	15
<u>Land Subsidence</u>	18
<u>GSP Section: Monitoring Network</u>	<b>18</b>
<u>Groundwater Levels</u>	18
<u>Water Quality</u>	19
<u>GSP Section: Projects and Management Actions to Achieve Sustainability</u>	<b>21</b>
<u>Projects</u>	21
<u>Recharge, Dry Wells, and On-farm Recharge Project Types</u>	21
<u>Efficiency Improvements</u>	22
<u>Management Actions</u>	23
<u>Wellhead Requirements / Well permitting</u>	23
<u>Groundwater Allocation Framework</u>	23
<u>Groundwater Market / Trading Management Actions</u>	25
<u>Fees and Incentives Management Actions</u>	26
<u>Missing Drinking Water Well Mitigation Program</u>	28
<u>Attachments to this Letter</u>	29

## GSP Section: Introduction & Plan Area

### Description of Plan Area

We appreciate the significant changes made to the Plan Area section and the incorporation of the comments we submitted for the Administrative Draft GSP version. The description of the plan area should be improved to adequately capture the general distribution and characterization of domestic water supply wells in the basin, including de minimis extractors. The draft does not include the location of public water systems serving SDACs, DACs and domestic well communities and does not describe their dependence on groundwater as required by §354.8<sup>1</sup>. Without this information, the plan area is not properly characterized and does not acknowledge the extent of groundwater dependence of these communities. In order to develop a GSP that addresses the needs of all beneficial users, it is critical that the location and groundwater needs of these communities are explicitly addressed early on in the GSP. In order to improve this section, we recommend the following:

- **Include a map indicating the location of public water systems serving SDACs and/or DACs as well as domestic well communities.** In order to contextualize the subsequent sections of the GSP, it is critical that the geographic locations of these communities be included. Maps overlaying the location of these communities should also be included in subsequent sections of the GSP, including but not limited to when describing management areas, threshold regions, or potential recharge locations.

### Notice and Communication

Public Engagement, when done well, goes far beyond the usual participants to include those members of the community whose voices have traditionally been left out of political and policy debates<sup>2</sup>. It invites citizens to get involved in deliberation, dialogue, and action on public issues that are important to them. More importantly, it helps leaders and decision-makers have a better understanding of the perspectives, opinions, and concerns of citizens and stakeholders, especially the underrepresented ones. This section is generally in accordance with SGMA regulations and adequately captures beneficial uses and users of groundwater. However, the current draft GSP provides limited information regarding how communication and updates related Plan implementation will take place and how this will be accomplished. We recommend the following to ensure effective public engagement and improve this section:

- **Account for S/DAC outreach, engagement and translation services when applying for state funding, establishing and approving operating budgets and enacting groundwater fees:** For Groundwater Sustainability Plan (GSP) development, Self-Help Enterprises (SHE), CWC, and Leadership Counsel for Justice and Accountability (LCJA) received grant funding from the Department of Water Resources (DWR) to assist S/DACs in participating in the development of

---

<sup>1</sup> § 354.8. Description of Plan Area.

<sup>2</sup> DWR. (2018) Stakeholder Communication and Engagement.



local GSPs. Through this grant-funded effort, SHE, CWC, and LICA have assisted the Kaweah GSAs' consultants conduct public workshops by offering interpreting services and supporting community outreach efforts. Our organizations have also conducted additional community outreach and capacity building activities in S/DACs. However, relying on ongoing support from CWC, SHE and LCJA, who currently lack a long-term funding mechanism to support community participation, is not a sustainable approach to sustain community participation for the next 20 years of GSP implementation. In order to ensure proper engagement of underrepresented groundwater users, (disadvantaged communities, residents relying on domestic wells and other Spanish speaking users), EKGSA should account for S/DAC outreach, engagement and translation services when applying for state funding, establishing and approving operating budgets and enacting groundwater fees. GSAs should hire qualified consultants who have a record of proven demonstrated success in and clear qualifications for working with these stakeholders. Effective community outreach and engagement includes but is not limited to conducting direct community outreach, hosting local community meetings, providing information in Spanish and making interpreting services available at meetings and workshops.

- **Utilize existing community venues for community meetings, workshops and events to provide information.** For example, consider conducting short presentations during water board and school district board meetings. Venues should be carefully selected in order to meet the needs of the targeted audience.
- **Identify community social media (Facebook, Instagram, etc.) groups, pages and websites and post information.** Continue to develop media advisories, press releases and work with local media outlets, such as local radio stations, television stations, and local newspapers to captivate a broader audience that are not being reached via the electronic-based outreach currently used.
- **Identify, and work with key community leaders /trusted messengers to distribute information and encourage community participation.**
- **Provide bilingual (English and Spanish) information and materials on the website, via email and consider inserting short notices (notices must include key messages, visuals and information that is relevant to the average water user) in water bills and/or community newsletters.** The Dymally-Alatorre Bilingual Services Act requires that public agencies serving over 10% of non-English speaking constituents provide appropriate translation services<sup>3</sup>. At a minimum, this information should be provided during plan updates, and prior to critical decisions. In particular, the draft GSP released during the formal comment period should include materials highlighting key summaries of the GSP. Critical decision points can also include the adoption of groundwater fees, development and adoption of the Groundwater Allocation Framework, and the Pumping Restriction Program.
- **Partner with other educational programs to leverage resources and explore opportunities to educate different generational groups.**
- **Quantify the number of domestic well users under Section 1.5.2 and expand the description of public water systems to include the number of connections and population they serve.**

---

<sup>3</sup> California Government Code Section 7290.

Consider utilizing the draft report from the IRWM Disadvantaged Community Involvement Program to identify this information<sup>4</sup>.

## GSP Section: Basin Setting

### Groundwater Conditions

Overall, this section is in accordance with GSP regulations and conveys important information about current and historical groundwater conditions in the EKGSA. However, the proposed Groundwater Conditions section can be improved in order to better achieve the objectives of the GSP regulations and be more aligned with the guidance provided in DWR's GSP Emergency Regulations Guide. In particular, this section can be improved by expanding on the information regarding the water issues affecting groundwater sources of S/DACs and households relying on domestic wells.

As part of GSP Regulations Section §355.4, DWR is required to evaluate whether the interests of the beneficial uses and users of groundwater in the basin, as well as the land uses and property interests potentially affected by the use of groundwater in the basin, have been considered<sup>5</sup>. S/DACs and rural families relying on shallow domestic wells are extremely vulnerable to changes in groundwater conditions. Impacts to drinking water sources caused by changes in groundwater levels, plume migration, increased degradation of groundwater quality, and subsidence should not be overlooked and these impacts deserve a more in-depth evaluation. A description of the current issues affecting these vulnerable users is key to demonstrating that the EKGSA is taking proactive actions to protect their human right to water. Without adequate characterization of current and historic challenges that communities dependent on groundwater face, EKGSA will not be able to effectively plan to quantify or avoid potential impacts related to groundwater management. Specific recommendations on how this section can be improved are provided in the forthcoming sections.

### Hydrogeologic Conceptual Model

In order to better depict the hydrogeologic considerations for vulnerable groundwater users, we recommend the following changes:

- **Include a description of how groundwater quality considerations also impact the potential of recharge suitability under the description of Potential Recharge Areas in Section 2.2.8.3.**

---

<sup>4</sup> Integrated Regional Water Management (IRWM) Disadvantaged Community Involvement Program. January 2019. Preliminary Needs Assessment. Tulare Kern Funding Area.  
<https://tularelakebasin.com/alliance/index.cfm/tulare-kern-dac-involvement/needs-assessment/preliminary-needs-assessment/>

<sup>5</sup> DWR. January 2018. Guidance Document for Groundwater Sustainability Plan Stakeholder Communication and Engagement.





- **Include the location of SDACs and DACs and domestic wells in Figure 2-14 and 2-15.** By adding the spatial distribution of communities, stakeholders will be better able to assess which of these communities could benefit from future recharge projects.

## Current and Historical Groundwater Elevation Trends

Changes in groundwater elevation can result in significant impacts to vulnerable communities, including: increased energy costs associated with additional lift pump costs; costs associated with cleaning of the well screen; cost of lowering well pumps; costs of drilling deeper wells; complete dewatering of wells; movement of contaminant plumes; and the financial, emotional, and physical costs associated with having to rely on bottled water. This section can be improved by including a description of the groundwater level conditions in and around S/DACs and by showing whether groundwater levels in these communities have led to dry wells or a decrease in water production. We recommend the following changes:

- **Identify communities vulnerable to changes in groundwater levels.** As previously mentioned, S/DACs and domestic well owners are extremely vulnerable to changes in groundwater levels. Therefore, it is imperative that the GSP properly identify vulnerable communities that have a higher risk of being affected by changes in groundwater levels.
- **Include a description of the impacts experienced during the 2012-2016 drought.** Include a description of the successes and challenges experienced by local agencies and stakeholders when addressing impacts of the last drought, including: number of wells that were dewatered; number of households utilizing the interim household water tank program; local cost of emergency drinking water services; amount of grants/loan programs developed and utilized for replacement wells; and an estimated number of wells currently without a sustainable water source. A good understanding of what happened, including what programs and strategies worked well in effectively addressing impacts to drinking water and what strategies could be improved, can aid the EK GSA with the development of management actions that adequately prepares the GSA to prevent and mitigate potential impacts of future droughts. This planning is important for wells that supply drinking water to vulnerable populations that have limited capacity and resources to respond to extreme weather conditions.

## Groundwater Quality

The draft GSP states that “water in the region is generally safe for most beneficial uses, including agriculture and municipal use” (Section 2.4.3.1)<sup>6</sup>. The current characterization of groundwater quality conditions in the GSA fails to recognize that several public water systems within the GSA have experienced challenges remaining in compliance for safe drinking water standards. According to the Human Right to Water portal, the city of Lindsay has fluctuated being in and out of compliance for the following contaminants: TTHM, total haloacetic acids (Haa5), and 1,2-dibromo-3-chloropropane since 2016. In the past, the Lindsay Strathmore Irrigation District, which provides drinking water to the community of Tonyville, has also been in and out of compliance for the following contaminants: TTHM,

---

<sup>6</sup> Note: Water Code Section 106 indicates domestic water use to be of highest beneficial use.

total haloacetic acids (Haa5), perchlorate, and nitrate. Additionally, the Plainview Mutual Water Company's west (Central) system has also exceeded nitrate MCLs in the past. Further, because of these data gaps in measuring groundwater quality, the extent of groundwater quality contamination for domestic wells or state small water systems is not fully quantified or accounted for in the draft GSP.

This section can be improved by including a better description of groundwater quality conditions near or within S/DAC communities as well as an improvement in understanding how potential groundwater management actions could potentially impact the extent of groundwater contamination. We recommend the following changes:

- **Include a description of historical groundwater quality conditions for each public water system.** As mentioned above, several of the communities within the EKGSA have historically had challenges meeting safe drinking water requirements. In order to prevent further degradation of groundwater quality conditions, it is important to adequately capture current challenges.
- **Include a map of current 10-year average groundwater quality conditions that includes locations of vulnerable communities.** Once current baseline conditions are established, it would be helpful to include the 10-year average conditions overlaid with location of DACs, SDACs, domestic wells, public water systems, and any other sensitive beneficial users. This is important in order to adequately evaluate how groundwater quality issues correlate with drinking water supply areas.
- **Include an analysis of how groundwater quality concentrations have fluctuated relative to changes in groundwater levels, particularly during drought periods.** The level of concentration of a few contaminants of concern included in the GSP are directly influenced by changes in groundwater levels, both by pumping and recharge.<sup>7</sup> The draft GSP indicates that “no statistically significant correlation has been found between groundwater levels and water quality” (Section 3.4.2.2.1). Appendix 2-E does not include a statistical analysis of the change in contaminant concentrations relative to groundwater levels and groundwater storage. It is important to evaluate the relationship between changes in contaminant concentrations and groundwater management activities, in particular for arsenic<sup>8</sup>.

## Land Subsidence

The GSP's current evaluation of land subsidence states general impacts, such as impacts to infrastructure, in particular to the Friant Kern Canal, but fails to describe previous and potential impacts to vulnerable communities. In order to improve this section, we recommend the following changes:

---

<sup>7</sup> See Community Water Center “Guide to Protecting Drinking Water Quality Under the Sustainable Groundwater Management Act” for more information.  
[https://d3n8a8pro7vhm.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328858/Guide\\_to\\_Protecting\\_Drinking\\_Water\\_Quality\\_Under\\_the\\_Sustainable\\_Groundwater\\_Management\\_Act.pdf?1559328858](https://d3n8a8pro7vhm.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328858/Guide_to_Protecting_Drinking_Water_Quality_Under_the_Sustainable_Groundwater_Management_Act.pdf?1559328858)

<sup>8</sup> See Stanford, 2019. A Guide to Water Quality Requirements Under the Sustainable Groundwater Management Act, Spring 2019.



- **Include a description of possible impacts of land subsidence for S/DACs, public water systems, and domestic well communities.** Land subsidence could result in many direct and indirect impacts to vulnerable communities. Direct impacts can include damages to community infrastructure including bridges, pipe crossings, roads; collapsing of well casings, that result in well rehabilitation or replacement; and the mobilization and release of arsenic from clay layers into the groundwater aquifer. Indirect impacts can include flooding and long-term environmental effects<sup>9</sup>.
- **Include documentation of any historical impacts of land subsidence for S/DACs, public water systems, and domestic well communities in Past Land Subsidence (Section 2.4.4.2).** Since S/DACs, public water systems, and domestic well communities often lack the resources to address these damages, it is important to document and describe previous and potential impacts in order to prevent them from occurring or mitigate impacts if they occur.

## Water Budget

The GSP water budget requirements are intended to quantify the water budget in sufficient detail in order to build local understanding of how historical changes have affected the six sustainability indicators in the basin. Ultimately, this information is intended to be used to predict how these same variables may affect or guide future management actions<sup>10</sup>. Another important reason for providing adequate water budget information is to demonstrate that the GSP adheres to all SGMA and GSP regulation requirements and can demonstrate the ability to achieve the sustainability goal within 20 years, and maintain sustainability over the 50 year planning and implementation horizon.

Our focused technical review concluded that the July 2019 draft GSP made available to the public is incomplete, and a full evaluation of the model and assumptions cannot be made at this time. Without a complete GSP draft that thoroughly explains the assumptions and methods used for the development of the water budget, the public is unable to provide meaningful comments and recommendations. The GSP is missing key information that includes all information on data and assumptions used in the development of the water budget. We recommend the following changes:

- **Include a single tabulation of all the sources used.** The sources of data used for the water budget components are identified throughout the text of the draft GSP and Appendix 2-A. However, the discussion and tabulation of all data sources in a single section would improve the ability of the public to assess the data sources and evaluate the water budget assumptions for reasonableness and completeness.
- **Provide additional information detailing how small water system demand was estimated.** Small water system demand was reported to be estimated from data in previously published

---

<sup>9</sup> Galloway, D., Jones, D, and Ingebritsen, S.E. Land Subsidence in the United States. U.S. Geological Survey Circular 1182.

<sup>10</sup> DWR, 2016. Best Management Practices for the Sustainable Management of Groundwater, Modeling (BMP #5), December 2016.



reports. Very little specific information is provided in the draft GSP on the methods and assumptions used to estimate the small water system demand. The annual demand from small water systems is shown to increase throughout the water budget period but it is not possible to determine if the values are reasonable from the information and assumptions provided in the draft GSP.

- **Provide additional information detailing how rural domestic water demand was estimated and rectify existing inconsistencies in estimated water demand.** Rural domestic water demand and consumptive use was estimated using an assumed demand rate of 2 AFY per dwelling and the density of rural domestic dwellings. The draft GSP reports that the density of these dwellings has not changed significantly over time and, therefore, rural domestic pumping has not changed over time. The method and data used to determine the density of these dwellings is not reported and cannot be evaluated and, besides Figure 1-6, no maps are provided in the draft GSP showing the locations of these rural domestic users. Rural domestic pumping for the EKGSA area is reported in Section 2.5.3.3 to be 3,400 AFY. The rural domestic pumping for the entire subbasin reported in Appendix 2-A is 2,272 AFY. Since the EKGSA area is only a portion of the entire subbasin, the rural domestic pumping in the EKGSA should be less than the rural domestic pumping reported for the entire subbasin but the draft GSP instead reports that EKGSA rural domestic pumpage is greater than rural domestic pumpage for the entire subbasin.
- **Revise percentage of return flow from rural domestic water to address inconsistencies:** Page 99 of Appendix 2-1 states that “Similar to the rural small water system analysis above, a 70 percent portion of the pumped rural domestic water is assumed to return to groundwater via septic system percolation and irrigation return flows (Dziegielewski and Kiefer, 2010). Throughout the Subbasin, an annual total pumpage for rural users was 2,272 AF/WY on average, 30 percent of which returned to groundwater.” The assumed fraction of total rural domestic pumping that returns to groundwater and the calculation of net rural domestic pumping reported in Appendix 2-A is inconsistent. It is unclear if the assumed fraction of pumping that returns to groundwater is 30% or 70%.
- **Provide additional information regarding the assumptions used to define changes in land use and how that was incorporated into the projected water demand.** Based on the draft GSP, current land use was determined using the 2014 DWR land use survey data. Urban land is reported to be 4.5% of the total area in the EKGSA. Historical changes in land use area are not reported and, at this time, it cannot be determined if land use changes, including changes in urban areas, were incorporated into the water budget as is required by GSP Regulation Section §354.18.
- **Provide water budget annual component results broken down for each subareas in order to allow for the assessment of the spatial variability of the water budget components.** Section 2.5 presents annual water budget components for water years 1997-2017 for the EKGSA area and Appendix 2-A presents the same information for the subbasin. Components related to urban and rural domestic water use are lumped into two components (wastewater inflow and M&I pumping). The relative contribution of rural domestic and small water system users to these

components cannot be evaluated at this scale, thus it would be helpful to provide information to better support the evaluation of the impacts on DACs and community water systems.

- **Include an uncertainty analysis to identify the plausible range in water budget results and an indication of the magnitude of the effects these inherent uncertainties may have on the water budget results.** The draft GSP does not include any discussion of the uncertainty in the data used for the model and its effect on the water budget results, a key requirement as prescribed by GSP Regulations Section §354.12.
- **Include an in depth discussion regarding the forthcoming sustainable yield evaluation and describe the potential implications the sustainable yield, the safe yield, and the water accounting framework could have on drinking water use in the EKGSA.** The draft GSP includes minimal discussion of the sustainable yield of the subbasin or the EKGSA area, but does note that the subbasin is in overdraft and that a groundwater modeling will be used to estimate the sustainable yield through the use of initial thresholds and objectives. A Water Accounting Framework is included, which provides each GSA with a groundwater supply that is the beginning of a potential groundwater allocation, but there is no discussion of how the allocation will impact each GSA or the rural domestic and small water system users. In addition, the discussion of the sustainable yield does not address how to account for undesirable results that occurred between January 2015 and when GSPs are submitted.
- **Include a discussion and analysis in the GSP evaluating the projected water budget conditions, specifically focusing on climate change impacts for domestic well users, S/DACs, and community water systems.** The adjustments made to the climate change assessment and data sets were made based on guidance and climate change data provided by DWR. However, the draft GSP includes limited discussion of the effects of these changes on the EKGSA water budget and there is no discussion of the impacts to specific areas, such as areas of rural domestic water users or small community water systems. It is noted that both agricultural and M&I demand will increase by 26%, but no information is provided on how these projected demand increases will be met or reduced to meet sustainability goals.

## GSP Section: Sustainable Management Criteria

### Sustainability Goal

We appreciate the changes made in the Kaweah Subbasin sustainability goal and appreciate that the needs of unincorporated communities, schools, and domestic well communities was included in the draft GSP. We do want to note that important statements regarding the protection of water quality have been drastically changed compared to the discussions had with stakeholders. The draft now only references that each individual Kaweah Subbasin GSA's GSPs will address groundwater quality only by 'collaborating with other agencies and entities to '...decelerate ongoing water quality degradation where feasible'. We recommend the following:

- **Revise the sustainability goal to include considerations for groundwater quality.**

## Management Areas

As stated previously in several EKGSA meetings, the draft GSP proposal of nine management areas is concerning and has the potential to impact the GSA's ability to achieve sustainability. As mentioned in the draft GSP, political boundaries do not follow hydrogeologic boundaries, thus, the proposed management areas could limit the potential regional collaboration necessary to achieve sustainable groundwater management. More importantly, the current proposal of management areas and threshold regions has no consideration for vulnerable communities dependent on groundwater and does not adequately describe how the area will operate under different minimum thresholds. We recommend the following changes:

- **Revise the description of the management areas to describe the number of domestic well users within each boundary.** As described in the draft GSP, management areas are responsible for implementing projects and management actions within their area. Without a clear understanding of the domestic well users within the management area boundaries, the current draft GSP fails to adequately describe conditions in these areas as required by Reg 354.20.
- **Consider developing management areas or threshold regions around vulnerable communities.** As currently described, many of the management areas were developed only taking into consideration irrigation district boundaries. However, many vulnerable communities within the EKGSA do not have access to surface water and are dependent on groundwater. S/DACs and domestic well users rely heavily on shallow groundwater wells and the total amount of groundwater used is minimal compared to the overall groundwater usage in the GSA. In order to develop more protective thresholds for vulnerable communities, it would be important to consider developing a protective buffer, management area, or threshold region around them. This recommendation can also be considered under projects and management actions.
- **Revise the description of the Monitoring and Analysis (Section 3.3.3) to better describe how the management areas will operate to avoid undesirable results.** As currently drafted, the description of management areas fails to describe how the different management areas can operate under different minimum thresholds and measurable objectives without causing undesirable results. The chart on Figure 3-1 indicates which threshold regions are within each management area but there is no description of how each management area will address the different water surface elevation conditions. Since S/DACs and domestic well users are the most vulnerable beneficial users within the EKGSA, it is important to clearly indicate how undesirable results will be avoided.





## Undesirable Results, Minimum Thresholds, and Measurable Objectives

### Chronic Lowering of Groundwater Levels

CWC's review of the draft EKGSA GSP identified several data gaps and potential significant impacts to public water systems and domestic wells. As expressed by our organization during several EKGSA meetings, the current GSP does not adequately consider the groundwater impacts that may affect the supply and beneficial uses of groundwater as required by GSP Regulations Section 354.16. As currently written, the GSP is insufficient and is at risk of being deemed inadequate by DWR. We recommend the following changes:

- **Describe how the approach to develop MTs/MOs is protective of diverse drinking water users.** Based on our assessment of the water levels (CWC, Figure 2), 47% of all domestic wells are expected to be fully dewatered and another 39% of wells are expected to be partially dewatered if water levels reach the MTs included in the draft GSP. Thus, the usability of over 85% of domestic wells in the EKGSA area would be expected to be significantly impacted if water levels reach the proposed MTs. The draft GSP states that “until water levels have been stabilized and the basin has reached sustainability, the EKGSA does not view a well going dry as an undesirable result” (Section 3.4.1.2.4), but the draft does not provide information nor a detailed description regarding how many wells in fact would be considered an undesirable result. Moreover, based on the draft GSP water budgets, rural domestic and small water system demand is very low compared to agricultural users and thus not contributing substantially to the overdraft conditions. Nonetheless, the risks imposed on these drinking water users are overlooked and neglected, creating a disproportionate impact.
- **Clarify the rationale for the water level decline used to develop MTs/MOs and explain how this water level decline is reasonable and sustainable for DACs and domestic well communities in the EKGSA.** The EKGSA area includes over 700 domestic wells, 10 DACs with a collective population of over 41,000 people, and thirteen community water systems that serve over 44,000 people (CWC, Figure 1). However, the approach to setting water level MTs and URs does not explicitly take these drinking water beneficial users into account. As described above, the MTs for each threshold region are set relative to an assumed trajectory of decreasing water levels over the next 20 years, without regard to well depths or other potential impacts. The draft GSP acknowledges that the subbasin GSAs must stabilize water levels over the long term because “the decades long trend of drilling deeper and deeper wells would continue causing increased financial burden on stakeholders” (Section 3.4.1.1.3). However, what that stabilized level is, and when that will be achieved is not clearly stated.
- **Clarify the rationale for the water level decline used to develop MTs/MOs and explain how this water level decline is reasonable and sustainable for DACs and domestic well communities in the EKGSA.** The draft GSP states that “The EKGSA recognizes that some shallow wells will likely go dry until water levels have been stabilized. Without SGMA and the proposed incremental mitigation by the EKGSA, the shallow wells would have gone dry sooner, requiring



the landowners to deepen these existing wells” (Section 3.4.1.2.4). The draft GSP, however, does not provide information on how many wells in fact would be considered an undesirable result and does not clearly indicate how the proposed water level MTs will preserve the quality of life or support population growth, given the lack of consideration for drinking water beneficial users in the subbasin, in particular domestic well users and DACs reliant on groundwater. Low income families and severely disadvantaged communities do not have the resources to construct deeper wells nor to implement water treatment systems that require expensive operation and maintenance costs. Moreover, deeper wells as well as water treatment systems result in a significant increase in energy, operation, and maintenance expenses that can reflect back on water bills that are already overpriced in small water systems and above the California water affordability threshold of 1.5% of MHI.

- **Undertake a drinking water well impact analysis that adequately quantifies and captures well impacts at the minimum thresholds, measurable objectives, and proposed undesirable results.** Based on the assessment presented in the “Percentage of Wells Dry at Minimum Threshold” Figure in Appendix 3-A of the draft GSP, the percentage of domestic wells expected to go dry within each threshold region is between 14% and 77%. This assessment appears to have been done relative to the bottom of the total well construction depth. However, water supply wells become unusable or subject to decreased performance and longevity as water levels fall within the screened interval, which will occur before water levels reach the bottom of the well. Therefore, the actual number of domestic wells that would be significantly impacted at the proposed water level MTs would be expected to be higher than represented in Appendix 3-A of the draft GSP. As noted previously, our technical assessment showed that a usability of over 85% of domestic wells in the EKGSA area would be expected to be significantly impacted if water levels reach the proposed MTs. As required by 23 CCR §354.28, a drinking water well impact analysis that adequately quantifies and captures well impacts at the minimum thresholds, measurable objectives, and proposed undesirable result should be included in the GSP in order for the public and DWR to fully evaluate the ability of the proposed SMCs and monitoring program to protect beneficial users within the EKGSA area. The locations of potentially impacted wells should be identified and presented in maps in the GSP so that the public and DWR may assess the well impacts specific to DACs and other sensitive users within the EKGSA area. The GSP should also consider and quantify both the potential dewatering of wells and the pumping costs associated with the increased lift at the projected lower water levels, in order to more fully and transparently consider the impacts to beneficial users. This analysis should be included in the annual reporting process. Analysis should include:
  - Locations of potentially impacted wells overlaid on a map so the public can better assess well impacts specific to DACs, small water systems, or other beneficial users of water,
  - Quantify the number of potentially impacted wells broken down by well type (ag, domestic, small water system, city),
  - Quantify the costs associated with impacted wells including lowering pumps, well replacement and increased pumping costs associated with the increased lift at the projected water levels.





- **Clarify the process for evaluating minimum threshold exceedance and the potential actions to address exceedance.** This clarification should describe the evaluation process, potential actions taken, and the funding to implement actions. Without an adequate well mitigation plan in place, impacts to wells are significant and unreasonable.
- **Develop a protective minimum threshold near vulnerable communities and high density areas of domestic wells to avoid localized impacts and ensure the protection of these important water sources.** Near small community water systems and clusters of domestic well users, EKGSA should reconsider the approach of setting water level MTs as the current proposal leaves key beneficial users in the subbasin, specifically domestic well users and S/DACs vulnerable to significant impacts. It is important to protect vulnerable communities access to a reliable source of water, thus minimum thresholds for groundwater levels should be set at a level above the screen of the shallowest domestic well. If EKGSA decides to define and reach its sustainability goal in a way that allows for the dewatering of drinking water wells, it must provide a robust drinking water protection program to prevent impacts to drinking water users and mitigate drinking water impacts that occur. Recommendations for this type of program are included in the Management Actions and Projects section of this letter.
- **Include a definition of a local undesirable result.** The definition should clearly indicate how the EKGSA will locally define and address an undesirable result within its service area and protect beneficial users of groundwater. Given that water levels in one-third of all RMWs across all three subbasin GSAs must drop below MTs in order for an UR to be triggered, significant and unreasonable impacts could occur within significant portions of the subbasin without triggering a subbasin UR.
- **Ensure that the coordination agreement with the other Kaweah subbasin GSAs does not negatively impact the EKGSA's local undesirable results and MTs/MOs.** Given that the EKGSA has a shallower depth to bedrock, and given that 85% of domestic wells are already at risk of full or partial dewatering from the GSA's proposed minimum thresholds, groundwater users in the EKGSA cannot afford to be further impacted by overpumping in neighboring GSAs.

## Degraded Water Quality

We are pleased that the draft GSP establishes MTs/MOs based on maximum contaminant levels (MCLs) for contaminants of concern for municipal use and that the draft includes considerations to protect areas where groundwater quality is below MCLs by ensuring that groundwater quality does not exceed MCLs. There are however a few areas in regards to groundwater quality sustainable management criteria that are not clear and could cause significant impacts to drinking water users if not adequately addressed. Public water systems are required by state law to be in compliance with water quality objectives. Increased contamination levels, or the presence of new contaminants the system or home previously was not impacted by, cause water systems to utilize more expensive treatment methods and/or the need to purchase additional alternative supplies as blending may become more difficult or impossible. Communities reliant on domestic wells who are aware of contamination in their water and use a point of use/point of entry (POU/POE) filtration systems may no longer be able to use their devices if contaminate levels rise too high. Increased contamination levels result in unreasonable impacts to

access to safe and affordable water and is thus inconsistent with SGMA and the Human Right to Water. In order to avoid these challenges, we recommend the following changes:

- **Include an assessment of the current 10-year average concentrations of COCs at all monitoring wells to establish MT baseline conditions.** The draft GSP indicates that 10-year average COC concentrations will be evaluated for compliance with water quality MTs in the future. It is critical that the GSP draft includes an assessment of the current 10-year average concentrations in order to present the baseline conditions relative to the proposed MOs/MTs.
- **Revise MT to prevent further degradation of contaminants beyond 5%, rather than 20%.** SGMA requires the prevention of undesirable impacts to water quality, including degradation of water quality. An undesirable impact is one that is “significant and unreasonable”. Public water systems are required by state law to be in compliance with water quality objectives. Increased contamination levels necessitate water systems to utilize more expensive treatment methods and/or the need to purchase additional alternative supplies as blending may become more difficult or impossible. Further, communities reliant until domestic wells, who are aware of contamination in their water (while also acknowledging that many reliant upon private wells are unaware of the water quality), and use a POU/POE may no longer be able to use their devices if contaminate levels rise too high. Increased contamination levels result in unreasonable impacts to access to safe and affordable water and is thus inconsistent with SGMA. Therefore, the MT must be revised to prevent impacts to domestic water uses (which is listed as the highest priority use in Water Code Section 106) and there must be plans as to how to mitigate impacts in the short-term.
- **Include consideration for the state’s anti-degradation policy into the GSP.** California’s anti-degradation policy is modeled off the Federal policy. It protects our state’s high quality waters, both surface and groundwater, from degradation. The Policy prohibits the degradation of waters unless there is a finding that it is “...consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water.”<sup>11</sup> The Policy has been interpreted to mean that best practicable treatment or control is required to protect high quality water (water meeting water quality objectives) and best efforts for already degraded waters. Inclusion of this Policy into the GSP will aid the GSA in achieving the goals of SGMA by creating a baseline for how water quality is considered within the basin.
- **Provide a detailed explanation of how the proposed water quality MT approach and monitoring network will result in protection of groundwater for DACs and other drinking water beneficial users in the subbasin.** The current GSP draft does not clearly describe the GSA’s intended plan for monitoring and managing for water quality sustainability for all beneficial users. As required in 23 CCR § 354.28, it is necessary that an explanation for potential impacts of drinking water users be included.
- **Develop a warning system that informs EKGSA stakeholders when contaminants of concern have reached 80% of the MCL.** This system is especially important for wells with COC concentrations less than 80% the MCL that experience impacts due to groundwater management activities. For wells with contaminant levels approaching the MCL, EKGSA could consider taking the following actions: notify nearby domestic well owners and community water

---

<sup>11</sup> Resolution 68-16.



systems; undertake an analysis to pinpoint the cause; provide information to groundwater users regarding impacts of groundwater management actions; reassess pumping allocation; and/or if the contaminant is clearly under the purview of another agency, confer with that agency to confirm a plan to address the groundwater quality problem.

- **Clarify how the GSA plans to align groundwater monitoring efforts and the sustainable management criteria with any emerging contaminants of concern and new MCLs.** Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOAs) have been identified as emerging contaminants in the basin. Due to their emergence, it is important that EKGSA includes these contaminants as COCs to be monitored and evaluated. In addition to these two contaminants, the draft GSP would benefit from an explanation of how the plan will be updated to align groundwater monitoring efforts and the sustainable management criteria with any emerging contaminants in the basin and any future new MCLs.
- For contaminant levels that are near, or exceed, existing MCLs and for groundwater quality problems that arose or were exacerbated after January 1, 2015, consider the following approaches<sup>12</sup>:
  - **Aligning monitoring and management actions to allow the EKGSA to be able to meet a minimum threshold at 80% the MCL over the 50-year planning and implementation horizon.** This could be accomplished by monitoring groundwater quality trends to ensure that naturally occurring contaminants, like arsenic and uranium, are not exacerbated through groundwater management practices and by working with appropriate agencies to remediate quality issues, where feasible.
  - **Where there is a significant groundwater quality problem that is clearly under the purview of another agency, confer with that agency and to confirm a plan to address the groundwater quality problem.** If such a plan exists, the water quality problem and the plan should be referenced in the GSP reviews.
  - **Where a significant groundwater quality problem is not clearly under the purview of another agency, or the responsible agency is unable to confirm a reasonable plan to address the problem, confer with Regional or State Water Board staff and affected parties, to identify a reasonable plan to address the problem.** If no reasonable plan is identified and remediating the problem is impractical or infeasible, the GSA should include in the Plan an explanation of the problem and the reasons why remediation is impractical or infeasible.
- **Consider working with local and regional water agencies or the county to implement groundwater quality remediation projects that could improve both quality as well as levels and to ensure groundwater management does not cause further degradation of groundwater quality.** The strategic governance structure of GSAs can uniquely leverage resources, provide local empowerment, centralize information, and help define a regional approach to groundwater quality management unlike any other regional organization. When implemented effectively, GSAs have the potential to be instrumental in reducing levels of contaminants in their regions, thus reducing the cost of providing safe drinking water to residents. GSAs are the regional agency that can best comprehensively monitor and minimize negative impacts of

---

<sup>12</sup> Moran, T. and Belin A. (2019) A guide to Water Quality Requirements Under the sustainable Groundwater Management Act. Stanford Digital Repository. Available at: <https://purl.stanford.edu/dw122nb4780>.

declining groundwater levels and degraded groundwater quality that would directly impact rural domestic well users and S/DAC within their jurisdictions. When potential projects are proposed, EKGSA should consider how projects could potentially both positively and negatively impact groundwater quality conditions and should take leadership in coordinating regional solutions.

## Land Subsidence

As mentioned previously, land subsidence could have significant impacts on vulnerable community infrastructure. In communities that do not have the financial capacity to address costly infrastructure damages, impacts of land subsidence should be evaluated more closely. We recommend the following changes:

- **Expand the description of potential impacts for S/DAC communities and rural domestic well users under the description of the Potential Impacts on Beneficial Uses and Users (Section 3.4.3.1.3).**
- **Revise the Measurement of Minimum Thresholds section to include the Plainview well point data collection (Section 3.4.3.2.5).** The matrix on Table 3-1 mentions that the Plainview well point will be utilized as a measurement methodology yet there is no mention of past impacts of land subsidence on the Plainview wells or on wells of other S/DACs and public water systems and this data point is not currently included in the description of measurement of land subsidence.
- **Revise Table 3-7 to clarify the relationship between groundwater quality and land subsidence and include a description of the analysis undertaken to arrive at that conclusion.** Researchers have found that there is a relationship between land subsidence caused by overpumping and increases in contaminants like arsenic<sup>13</sup>. The section on the Relationship for each Sustainability Indicator (Section 3.4.3.2.2) needs to be revised to clarify that this is not applicable to the EKGSA.

## GSP Section: Monitoring Network

### Groundwater Levels

Robust monitoring networks are critical to ensuring that the GSP is on track to meet sustainability goals. GSAs undertaking recharge, significant changes in pumping volume or location, conjunctive management or other forms of active management as part of GSP implementation, must consider the interests of beneficial users, including domestic well owners and S/DACs. As currently developed, the monitoring network does not adequately monitor how groundwater management actions related to groundwater levels could impact vulnerable communities. We recommend the following changes:

---

<sup>13</sup> Smith, R., Knight, R., & Fendorf, S. (2018). Overpumping leads to California groundwater arsenic threat. *Nature communications*, 9(1), 2089. doi:10.1038/s41467-018-04475-3



- **Identify which monitoring wells will be used to assess impacts to drinking water wells caused by changes on groundwater levels and describe how that assessment will be conducted.** As required by 23 CCR § 354.28, DWR will evaluate the ability of the proposed monitoring program to properly assess impacts to beneficial users of groundwater and to protect beneficial users within the subbasin. In particular, it is important to clarify how EKGSA plans to monitor and assess drinking water wells at risk of dewatering.
- **Include well construction information for all RMWs included in the GSP.** The draft GSP identifies 43 RMWs for water levels, but does not include well construction information for these wells as is required for all monitoring wells by 23 CCR § 352.4. This type of information is critical to allow the public and DWR evaluate if the RMWs are adequate in evaluating water levels relative to the MOs and MTs over the long term.

## Water Quality

For the reasons identified below, the water quality representative monitoring wells (RMW) are inadequate for determining if the actions of the EKGSA degrade the beneficial use of water and for ensuring that the stated water quality UR of impacting the long-term viability of the groundwater resource will be avoided —particularly for domestic water users and S/DACs.

GSAs undertaking recharge, significant changes in pumping volume or location, conjunctive management or other forms of active management as part of GSP implementation, must consider the interests of beneficial users, including domestic well owners and S/DACs. For these vulnerable groups, GSAs should avoid disproportionate impacts. The draft GSP lacks representative monitoring wells in areas where drinking water users may be particularly vulnerable to groundwater supply and quality issues, leaving EKGSA with no ability to adequately measure and avoid significant and unreasonable impacts to those users. It is critical that EKGSA develop sufficient monitoring networks, capable of detecting changes in groundwater quality conditions related to groundwater management. We recommend the following changes:

- **Expand groundwater quality monitoring network near the DACs of Ivanhoe, Woodlake, and Lindsay.** Based on the spatial distribution of the 10 wells dedicated to monitor water quality developed with the information provided in Table 4-2, the network effectively consists of six locations within the EKGSA that are not spaced evenly across the area. As shown in Figure 3 of Attachment A, all RMWs for water quality are located in the southern portion of the EKGSA area. Thus, no water quality monitoring will be performed near the DACs of Ivanhoe or Woodlake, which represents a population of over 11,500 people. In addition, approximately 300 domestic wells are located in the area surrounding and north of Ivanhoe and Woodlake, which represents approximately 40% of the domestic wells in the EKGSA area. Therefore, the proposed network of water quality RMWs appears to be insufficient to monitor impacts to groundwater for drinking water beneficial users, particularly domestic well users and DACs; such monitoring is required by 23 CCR § 354.34. In addition to these two communities, there are a considerable number of domestic wells located around the city of Lindsay that would also benefit from an expanded monitoring of groundwater quality.



- **Revise the monitoring method to compare actual contaminant levels to the MCL in addition to the 10-year average comparison.** This allows monitoring to prevent public health crisis and better measure progress of the GSA.
- **Clarify how the GSA plans to align groundwater monitoring efforts and the sustainable management criteria with any emerging contaminants of concern and new MCLs.** Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOAs) have been identified as emerging contaminants in the basin. Due to their emergence, it is important that EKGSA include these contaminants as COCs to be monitored and evaluated. In addition to these two contaminants, the draft GSP would benefit from an explanation of how the plan will be updated to align groundwater monitoring efforts and the sustainable management criteria with any emerging contaminants in the basin and any future new MCLs.
- **Include well construction information for all RMWs included in the GSP.** The draft GSP identifies 43 RMWs for water levels, but does not include well construction information for these wells as is required for all monitoring wells by 23 CCR § 352.4. This type of information is critical to allow the public and DWR evaluate if the RMWs are adequate in evaluating water levels relative to the MOs and MTs over the long term.
- **Clarify the proposed approach for monitoring and measuring URs for water quality and rectify conflicting descriptions.** Section 4.5.1 of the draft GSP states that wells supplying drinking water (i.e. public systems) will be monitored quarterly for the common constituents of concern (COCs) 1,2,3-Trichloropropane (1,2,3 TCP), 1,2-Dibromo-3-chloropropane (DBCP), Arsenic, Hexavalent Chromium, Nitrate, Perchlorate, Sodium, Chloride, and Total Dissolved Solids (TDS). Wells supplying irrigation water will be monitored for Chloride, Sodium, and TDS, also on a quarterly basis. It is also noted that these COCs are proposed to be monitored at all wells in the groundwater level monitoring network, in order to develop a more robust data set since current coverage of groundwater quality data is lacking for many parts of the EKGSA. However, based on Table 4-2, only 10 wells, all of which are municipal wells, will be monitored and used for evaluation of URs related to groundwater quality. The current GSP draft is unclear and would benefit from further revision and clarification, two suggestions on clarity to consider:
  - **Create a map based on the information provided in Table 4-2 and specify which irrigation wells will be subject to agricultural MTs and which wells will be subject to municipal MTs.** By improving the presentation of information in the monitoring network section, stakeholders will be able to better evaluate the adequacy of the network to monitor conditions near beneficial users and uses.
  - **Provide a focused and detailed explanation of how the proposed water quality MT approach and monitoring network will result in the protection of groundwater for S/DACs and other drinking water beneficial users in the subbasin, as required by 23 CCR § 354.28.**



# GSP Section: Projects and Management Actions to Achieve Sustainability

## Projects

### Recharge, Dry Wells, and On-farm Recharge Project Types

Groundwater recharge projects can have multiple benefits such as increasing groundwater storage and levels, as well as diluting contaminant plumes and improving groundwater quality. Carefully designed and implemented recharge projects, dry wells, on-farm recharge and storage projects type can simultaneously provide benefits to communities, farmers, and ecosystems. However, if not properly designed, recharge projects may mobilize nitrates, pesticides, and fertilizers, as well as naturally occurring contaminants, and can lead to the further degradation of groundwater quality, impacting drinking water wells. Currently, it is unclear if these proposed projects include precautions of groundwater quality degradation or if groundwater quality is included in the monitoring plan of these projects. In order to develop recharge projects that move the subbasin towards sustainability, avoid the further degradation of groundwater, and improve drinking water conditions, we recommend the following considerations and changes:

- **Include a map that overlays all of the potential recharge projects onto one map and include the location of S/DAC, domestic wells, and public water systems.** As currently described, stakeholders are unable to effectively evaluate the collective potential benefits or impacts of recharge projects for drinking water users in the EKGSA.
- **Prioritize funding for recharge projects near or up gradient to drinking water systems.** These types of projects can strategically deliver multiple benefits, including increased groundwater levels and the improvement of groundwater quality.
- **Develop criteria for recharge projects that prevent unintended impacts to drinking water. Some recommendations for this criteria include<sup>14</sup>:**

1. When selecting sites for on-farm recharge projects, GSAs can work with growers who are implementing some or all of the following in order to minimize the mobilization of pesticides and fertilizers:

- Using best management practices that optimize chemical use so residuals do not enter recharge water;
- Growing crops that require fewer fertilizers (e.g. legumes);
- Recharging during winter months (when less/no fertilizer is being used);

---

<sup>14</sup>Community Water Center. Guide to Protecting Drinking Water Quality Under the Sustainable Groundwater Management Act. [https://d3n8a8pro7vnm.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328858/Guide\\_to\\_Protecting\\_Drinking\\_Water\\_Quality\\_Under\\_the\\_Sustainable\\_Groundwater\\_Management\\_Act.pdf?1559328858](https://d3n8a8pro7vnm.cloudfront.net/communitywatercenter/pages/293/attachments/original/1559328858/Guide_to_Protecting_Drinking_Water_Quality_Under_the_Sustainable_Groundwater_Management_Act.pdf?1559328858)

- Minimizing fall applications of fertilizers and pesticides;
- Not surrounded by dairy operations.

2. When implementing on-farm recharge projects, recharge on the same plot of land annually for a consecutive number of years in order to most effectively flush out and dilute residual contaminants (especially nitrate) left behind from previous applications. Continued flushing will also help reduce bicarbonate, calcium, and organic carbon transport which will limit their impact on the dissolution and release of uranium and/or arsenic.

3. Prior to implementing any recharge project, identify all nearby drinking water wells (both public supply and private wells). Additional monitoring wells that collect groundwater quality samples may need to be installed in key areas to protect public health.

4. Prior to implementing any recharge project, collect data to characterize the upper soil zone and groundwater quality, including the amount of fertilizer applied and any naturally occurring contaminants present in the soil. Monitor and adjust the quality of water being recharged in order to limit the mobilization of naturally occurring contaminants (e.g. monitoring oxygen, pH, electrical conductivity, and nitrate levels).

5. Consider recharging through excavated points, ditches/canals, and other designated recharge basins in order to bypass soil layers with naturally occurring contaminants, pesticides, and/or nitrate.

## Efficiency Improvements

We appreciate EKGSA's intent to potentially adopt projects that increase water efficiency within the area. However, EKGSA is on the brink of a major transition as it seeks to balance its groundwater resources through policies that will likely affect all groundwater users. As noted previously, the risks imposed on rural domestic and small water system are significant and currently overlooked and neglected in the draft GSP. With the challenges ahead and the potential impacts to important drinking water sources, projects that minimize water waste should be a priority and should be implemented sooner rather than later. We recommend the following:

- **Require when technically and financially feasible, efficiency improvements in irrigation practices and industrial water use.** With scarce groundwater resources, farmers should adjust their irrigation practices and ultimately extract only enough groundwater to meet the crop demand. Incentives should be made available to farmers with limited resources to implement such efficiency improvements.



## Management Actions

### Wellhead Requirements / Well permitting

With approximately 7,000 to 15,000 new wells constructed each year in California,<sup>15</sup> GSAs have the difficult task to manage groundwater and mitigate for overdraft conditions.<sup>16</sup> Well permitting is a key component to support addressing the groundwater challenges and overdraft conditions and we are pleased that EKGSA plans to work with Tulare County Environmental Health Division (EHD) to increase well requirements for new wells. We recommend the following additional permitting criteria to support the successful implementation of the GSP:

- **Improve the well permitting record by collecting the following data:** well construction permits according to groundwater beneficial use for each new permitted well (e.g. agricultural, domestic, industrial, and municipal); identifying the reason for constructing a new well or well replacement; and well depth for monitoring purposes.
- **Require an additional drinking water impact assessment prior to the construction of new wells with high production capacity.** This analysis would include an assessment of potential adverse impacts to drinking water supplies, such as the analysis of how the proposed high production well pumping would influence long-term groundwater level fluctuations and the identification of the zone of influence of the pumping well.
- **We also ask EKGSA and EHD to consider exempting Small Drinking Water Systems (SDWS) from additional costly and time-consuming permitting criteria and registration processes imposed by new policies.** These smaller systems have unique constraints and play a small role in overall groundwater pumping, therefore, we suggest the draft GSP monitor SDWS groundwater extraction managed by S/DACs using a reasonable methodology, potentially similar to what would be proposed for de minimis users.
- **Consider expanding Well Construction Policies Section 1.4.4.2 to include policies that would prevent new wells being constructed in areas with high groundwater quality contamination.** The EKGSA should work with Tulare County to develop well construction policies that prevent new wells from being constructed in areas with known contamination. If new domestic wells are allowed to be constructed in areas with known quality contamination, the County should require that these wells be drilled deep enough to access the highest quality water by avoiding contamination of the vadose zone. Both of these strategies can prevent new domestic well owners from being impacted by contaminated drinking water.

### Groundwater Allocation Framework

The foundation of a well-designed groundwater allocation framework requires a fair and adequate allocation of groundwater for drinking water uses, an additional margin for future growth, and rules that avoid or mitigate potential impacts to communities dependent on groundwater supplies. If these components are missing, the allocation framework can have significant negative impacts upon a

---

<sup>15</sup> California Department of Water Resources. Available at: <https://water.ca.gov/Programs/Groundwater-Management/Wells>

<sup>16</sup> As per GSP Regulations Section 355.4 Criteria for Plan Evaluation.

community's drinking water supply. When developing a groundwater allocation framework, EKGSA should consider appropriate measurements to ensure that the framework is protective of the Human Right to Water (AB 685). We recommend the following:

- **Sustainable yield allocation:** As presented in the draft GSP water budget, 90% of the groundwater outflow is from pumping for agricultural uses and only 2% of the groundwater outflow is from pumping for municipal and industrial (M&I) uses. The draft GSP estimates that rural domestic demand is less than 5% of total M&I demand and small water system demand is less than 8% of total M&I demand on average during the 1981-2017 historical period. In order to best protect drinking water needs for communities, we recommend that GSAs establish a non-tradable allocation amount of groundwater as part of the calculation for the sustainable yield to adequately meet drinking water needs for public health and safety, including for drinking, cooking, and sanitary purposes, both now as well into the future. In order to determine this baseline for drinking water, GSAs will need to work with small community water systems, cities, and/or the county to determine current and future daily drinking water needs.
- **Allocation decisions time-frame:** In the context of extreme weather events and given the unique set of factors that play a role in the recharge of the aquifers within the GSAs area, we recommend that allocations decisions are not tied to a time frame but to an adaptive management methodology that can respond timely to undesirable results and adjust allocations accordingly. The adaptive management methodology could guide allocation decisions and be used as a corrective tool to avoid localized drawdown impacts on communities and ecosystems, such as dewatering of shallower wells and streams. Particular attention should be placed on protecting groundwater levels for drinking water beneficial uses in the vicinity of community water systems of all kinds (municipal and unincorporated) and domestic well communities.
- **Banking allocation of groundwater:** Susceptibility to experiencing undesirable results from a given amount of pumping depends on hydrogeologic, climatic, biological, and other factors that can vary significantly within short and long periods. We recommend a short period for banking allocation. We are concerned that allowing allocations to be bankable for more than 1 year could result in significant negative externalities. We also recommend that any allocation period be strictly tied to an adaptive management methodology that can respond timely to undesirable results and adjust allocations accordingly. This is particularly important in the context of changing climate and data uncertainties.
- **Transitional allocations and period:** The following protective measures can be considered if excessive pumping is allowed during the transition period or if transitional buffer allocations are made available to eligible groundwater users:
  - Develop an adaptive management methodology based on SGMA monitoring requirements to guide any allocation decisions and to be used as a corrective tool to avoid impacts of localized drawdown on vulnerable communities and ecosystems.
  - Restrict transitional pumping in excess of the sustainable yield near drinking water systems and households relying on private wells if negative impacts are observed through monitoring or if protective thresholds are exceeded.



- Develop mitigation measures that support communities, schools, and drinking water well owners in case negative impacts are observed/experienced.
- **Prolonged droughts:** When developing the EKGSA Groundwater Allocation Framework, clarify how the program will respond or be updated during a long-term drought. Particularly, with respect to the potential significant impacts that domestic well users, S/DACs face during these extreme weather events. We recommend the following:
  - Recognize and appropriately account for negative externalities especially during prolonged droughts by designing allocation rules that support progress toward sustainability and sufficiently address negative impacts.
  - Provide security considerations to support access to safe drinking water for DACs, SDACs, and underrepresented communities within GSA boundaries during prolonged drought periods.
  - Provide security considerations to ensure that allocations during prolonged drought periods do not individually or cumulatively hinder communities and domestic well owners access to water.
  - Develop an adaptive management methodology to be used as a corrective tool to avoid any localized drawdown impacts on communities and ecosystems, such as dewatering of shallower wells and streams.
  - Develop a drought drinking water prevention/mitigation plan that is capable to timely respond to families at risk or impacted by prolonged droughts.

## Groundwater Market / Trading Management Actions

There are a number of critical foundational steps agencies need to take before even considering a groundwater market as a possible tool for groundwater management. Changing where and when groundwater is pumped or the place, method, timing, or purpose of its use, can significantly change the impacts experienced by people and ecosystems. Whether a groundwater market leads to harmful or beneficial impacts all depends on how the market is designed, governed, implemented, and what feedback mechanisms are included and utilized throughout the life of the market. Groundwater markets are not a viable option where the potential impacts of trading are not well understood— which is the case in areas that have significant data gaps and data uncertainties— where trading rules cannot sufficiently address negative externalities, or where the expected benefits of a market do not outweigh the burdens and uncertainties associated with designing and implementing a market<sup>17</sup>.

The foundation of a well-designed trading program requires a fair and adequate allocation of groundwater for drinking water uses, an additional margin for future growth prior to allocating water for trading purposes, and trading rules that avoid undesirable results as well as avoid or mitigate potential impacts to communities dependent on groundwater supplies. If these components are missing, the market can have significant negative impacts upon a community's drinking water supply. Some impacts

---

<sup>17</sup> Green Nylen, Nell, Michael Kiparsky, Kelly Archer, Kurt Schnier, and Holly Doremus. 2017. Trading Sustainably: Critical Considerations for Local Groundwater Markets Under the Sustainable Groundwater Management Act. Center for Law, Energy & the Environment, UC Berkeley School of Law, Berkeley, CA. 90 pp1

include, but are not limited to: localized drying of community and domestic wells, increased contamination levels, or unaffordable water rates. Before considering a groundwater market framework, consider the following:

- **Establish a non-tradeable allocation for drinking water:** A non-tradable allocation amount of groundwater should be included as part of the calculation for the sustainable yield to adequately meet drinking water needs for public health and safety, including for drinking, cooking, and sanitary purposes.
- **Work with local communities to establish a buffer for community growth in groundwater allocation:** In order to determine this baseline for drinking water, GSAs will need to work with small community water systems, cities, and/or the county to determine current and future daily drinking water needs.
- **Ensure that monitoring networks are in place to detect the status and trends of groundwater conditions,** and to ensure that the market is running well and is not resulting in adverse impacts to groundwater quality and/or groundwater levels.
- **Implement an early warning system** utilizing data collected through the monitoring network that helps identify at-risk groundwater users and anticipate potential negative impacts, such as groundwater level declines or worsening groundwater quality. Provide security considerations to ensure that transfers do not individually or cumulatively cause or contribute to violations of water quality standards.
- If negative impacts are identified from groundwater trading, **implement interim and long-term solutions to prevent further lowering of groundwater and adverse water quality impacts to protect drinking water users.** The GSA will also need to reevaluate the rules that govern the groundwater market to ensure that future impacts are avoided or mitigated.
- Evaluate mechanisms that can be built into the system that allow for flexibility to adjust over time, to account for changing climatic conditions, and incorporate learning.
- Devise ways to help engage, communicate and translate technical information to stakeholders, particularly to rural communities and private well owners.

## Fees and Incentives Management Actions

**When developing fee structure for the implementation of GSP activities, we recommend exempting small drinking water systems managed by S/DACs and domestic well users from GSAs fees, including use permits and penalty fees.** Small, rural S/DACs have limited economic resources and often have water bills that are normally already above the California water affordability threshold of 1.5% of MHI. Considering their small usage of groundwater overall, exempting vulnerable communities from groundwater fees supports efforts to ensure access to safe and affordable drinking water.

Additionally, S/DACs and low-income residents have contributed to the implementation of SGMA through other methods. For example, the Kaweah Subbasin, like many others around the state, was granted an S/DAC waiver and qualified for \$1.5 million in grant funds to offset the costs of developing

the GSP. The S/DAC waiver was granted by demonstrating the number of S/DACs located within the subbasin. Additional grants were also obtained to construct monitoring wells and a recharge basin.

### Groundwater Pumping Restrictions Management Action

With the passage of SGMA and now the imminent GSP submission to DWR, groundwater has been a recurrent topic of discussion in water meetings, workshops, public events and has even received wide media coverage. With this increased public awareness of the challenges ahead, EKGSA should carefully consider potential impacts of postponing the discussion of tough yet necessary groundwater demand reduction actions. We believe that now is the time to collaborate, discuss, require stakeholder input, and define policies that are hard yet inevitable to properly mitigate for the overdraft condition in EKGSA as required by SGMA. Stakeholders that could be affected by a groundwater demand reduction actions would greatly benefit from knowing and understanding these new policies sooner rather than later in order to begin planning accordingly for the future and viability of their activities. The current draft lacks detailed information, guidance, and clarification of what may approved/what stakeholders can expect of a Groundwater Pumping Restrictions Management Action. EKGSA should clarify that the proposed analysis and program development will be of high priority and conducted within the first year of GSP implementation. When developing a groundwater demand reduction program, EKGSA should consider appropriate measurements to ensure that the framework is protective of the human right to water statute. We recommend the following:

- **Groundwater demand reduction exception to SDACs and DACs:** Due to their small role on overall groundwater pumping percentage, drinking water systems, particularly systems supplying water to DACs and SDACs, should be exempt from any groundwater demand reduction action to protect their efforts on providing affordable safe water.
- **Localized overdraft near DACs and SDACs:** Particular attention should be placed on protecting groundwater levels and quality for drinking water beneficial uses near drinking water systems and households relying on private wells. We recommend that groundwater pumping restriction actions be also used as a corrective tool to avoid localized drawdown impacts on communities, such as dewatering of shallower wells and/or plume movement. Drinking water wells at risk of dewatering or contamination due to nearby groundwater pumping should trigger groundwater demand reduction actions or other type of prevention/mitigation actions. It is critical that the EKGSA monitoring network adequately assesses impacts on drinking water wells due to lowering of groundwater levels and water quality degradation.
- **Prolonged droughts:** When developing the Groundwater Pumping Restrictions Management Action, clarify how the program will respond during a long-term drought and the potential significant impacts that domestic well users and S/DACs face during these extreme weather events.
- **Over-pumping financial penalties:** Penalties for S/DAC water providers with limited technical, managerial, and financial capacity have often been found by the SWRCB to be counter-productive. We recommend EKGSA exempts S/DAC communities from penalty fees. If the EKGSA considers implementing a penalty fee for over-pumping, at a minimum consider 1) creating a flexible warning system and appeal process with S/DAC users, 2) proactively assist

community drinking water systems that may be at risk of over-pumping, and 3) offer conditional forgiveness and reduction of penalties. This would encourage transparency and working collaboratively with EKGSA to take corrective actions addressing the underlying causes of over pumping. If small communities are surpassing groundwater allocations to the extent that they are being penalized, it is possible that the proposed groundwater allocation does not fully meet their basic drinking water needs and should be revisited.

- **Transferability of allocations / Groundwater Markets:** Please see previous comments regarding Groundwater Markets.

## Missing Drinking Water Well Mitigation Program

As noted previously, our review indicated that the usability of over 85% of domestic wells near the representative monitoring wells in the EK GSA area would be expected to be significantly impacted if water levels reach the proposed MTs. Moreover, based on the draft GSP water budget, rural domestic and small water system demand does not contribute substantially to the overdraft conditions, yet the risks imposed on these drinking water users are overlooked and neglected, creating a disproportionate impact on already vulnerable communities. Without any clear actions regarding establishing a groundwater allocation or addressing reductions in groundwater pumping, drinking water users could face significant impacts, particularly if the region faces another drought. If EK GSA defines its sustainability criteria in a way that allows for the dewatering of drinking water wells, it must provide a robust drinking water protection program to prevent impacts to drinking water users and mitigate the drinking water impacts that occur.

A GSP which lacks a mitigation program to curtail the effects of projects and management actions on the safety, quality, affordability, or availability of domestic water, violates both SGMA itself and the Human Right to Water. The Human Right to Water (AB 685) (HR2W) was signed in 2012 and added § 106.3 to the California Water Code, declaring it, “the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”<sup>18</sup>

The HR2W applies to all state agencies, requiring they, “...shall consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water...”<sup>19</sup> Both the State Water Resources Control Board (SWRCB) and the Department of Water Resources (DWR), are required to consider HR2W when revising, adopting, or establishing policies, regulations, and grant criteria that may impact the uses of water for domestic purposes. Furthermore, DWR is expressly compelled to review GSPs for compliance with the HR2W by 23 CCR §350.4(g).

The California legislature has recognized that water used for domestic purposes has priority over all other uses since 1913.<sup>20</sup> Reserving top priority for domestic water use was later codified in 1943, in Water Code § 106, which declares it the, “established policy of this State that the use of water for

---

<sup>18</sup> WAT § 106.3 (a).

<sup>19</sup> WAT § 106.3(b).

<sup>20</sup> California Water Commission Act of 1913 § 20.



domestic purposes is the highest use of water and that the next highest use is for irrigation.”<sup>21</sup> More recently, the passage of the Safe and Affordable Drinking Water Act by Governor Newsom<sup>22</sup> indicates a clear state-level commitment to providing safe and affordable drinking water to California’s most vulnerable residents. Poor implementation of SGMA would threaten the success of the Safe and Affordable Drinking Water Fund and would run counter to Governor Newsom’s vision of providing safe water to all.

To ensure compliance with the legislature’s long established position, and in accordance with 23 CCR §350.4(g), the HR2W requires that DWR must consider the effects on domestic water users when reviewing and approving GSPs.<sup>23</sup>

A carefully designed and implemented Drinking Water Well Impact Mitigation Program can support a statewide goal of ensuring access to clean, safe, reliable, and affordable drinking water. Including this type of program in a GSP also helps to create a groundwater management plan that understands DACs’ unique social and economic vulnerabilities, is sensitive to their drinking water needs, and avoids causing a further disparate impact on low-income communities.

We note with approval that the EK GSA has responded to our comments on their first draft, such that the draft-GSP now contains a description of a well impact prevention program. While we are very pleased that EKGSA has taken this step in the right direction, the lack of commitment to the well impact mitigation program leaves rural domestic and small water system users, as well as DACs, subject to all the harms described above. Therefore, we would recommend that the GSA includes the well impact mitigation program as an integral, and fully funded component of the final version of the GSP, and that until such a commitment is made, the GSP is out of compliance with California law.

## Attachments to this Letter

1. CWC, Figure 1— Monitoring Wells for Groundwater Levels Relative to Domestic Wells, DACs, and Community Water Systems
2. CWC, Figure 2— Water Level Minimum Thresholds and Domestic Wells
3. CWC, Figure 3— Monitoring Network for Water Quality Relative to Domestic Wells, DACs, and Community Water Systems

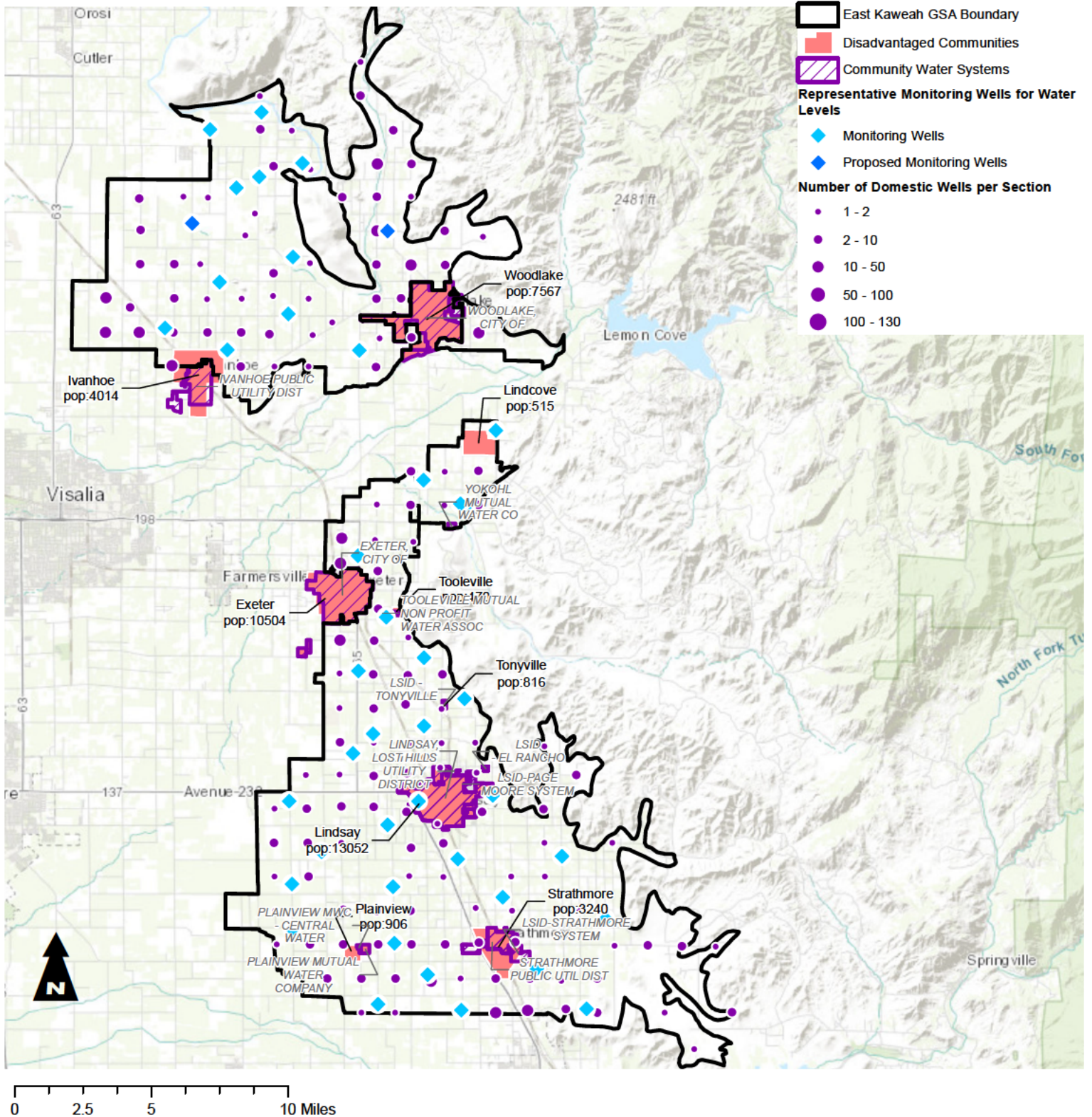
---

<sup>21</sup> WAT§ 106; This policy is also noted in the Legislative Counsel’s Digest for AB 685.

<sup>22</sup> SB 200, Monning (2019).

<sup>23</sup> *See generally*, WAT § 106.3 (b).

**Figure 1 - Monitoring Network for GW Levels Relative to Domestic Wells, DACs, and Community Water Systems  
East Kaweah GSA**

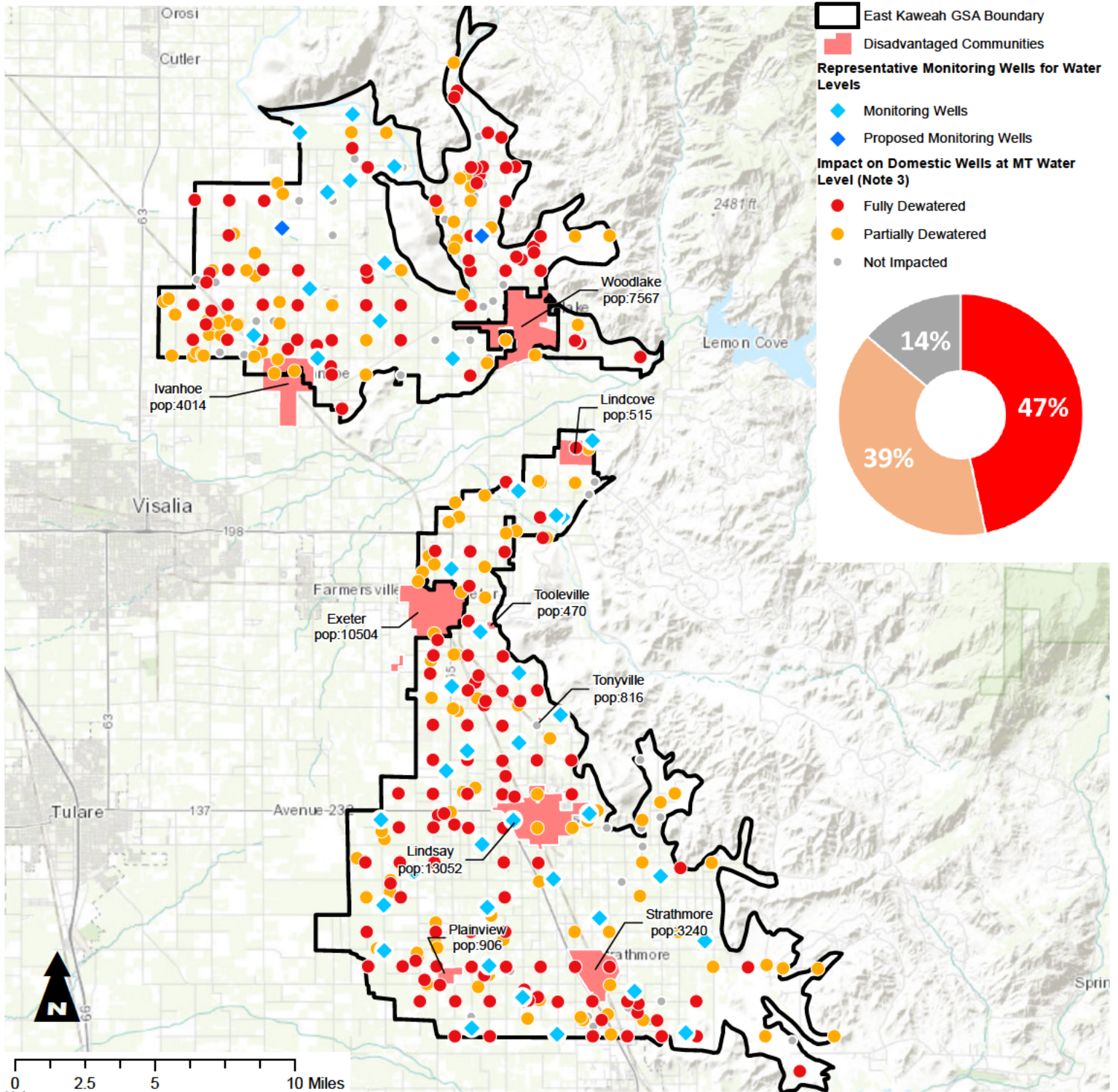


**Notes**  
1. All locations are approximate.

- References**
1. Domestic Well Densities: CWC draft Vulnerability Tool as of August 6, 2019.
  2. Disadvantaged community data: downloaded on August 6, 2019 from the DAC Mapping Tool: <https://gis.water.ca.gov/app/dacs/>.
  3. Community Water System data: downloaded on August 6, 2019 from Tracking California: <https://trackingcalifornia.org/water/map-viewer>.
  4. Groundwater level monitoring well information are from Table 4-2 in Draft East Kaweah GSA GSP dated July 2019.



**Figure 2 - Water Level Minimum Thresholds and Domestic Wells  
East Kaweah GSA**



**Notes**

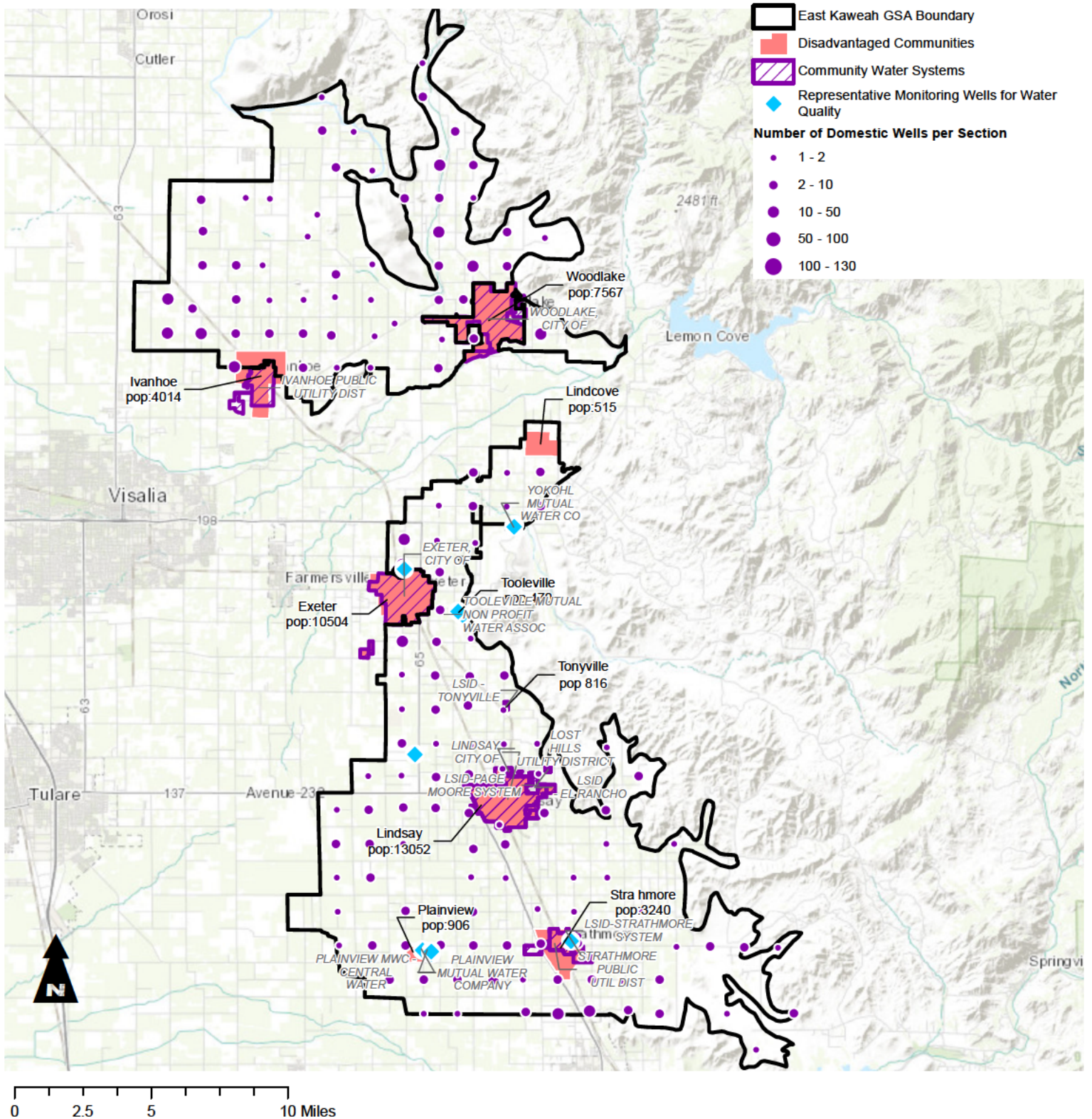
- All locations are approximate.
- The depth of domestic wells is compared to the Depth To Water MT values presented in Figure-Percentage of Wells Dry at Minimum Threshold of Appendix 3-A of the Draft GSP. Where available, bottom of screen interval was used for this assessment, and bottom of well depth was used for the remaining wells.
- For purposes of this assessment, a well is identified as fully dewatered at the proposed MT if the MT is below or at the bottom of the well screen interval; a well is identified as partially dewatered at the proposed MT if the MT is below or at the midpoint of the well screen interval.

**References**

- Domestic Well data: CWC draft Vulnerability Tool as of May 16, 2019.
- Disadvantaged community data: downloaded on August 6, 2019 from the DAC Mapping Tool: <https://gis.water.ca.gov/app/dacs/>. Last updated in 2016.
- Community Water System data: downloaded on August 6, 2019 from Tracking California: <https://trackingcalifornia.org/water/map-viewer>.
- Groundwater level monitoring well information are from Table 4-2 in Draft East Kaweah GSA GSP, dated July 2019. Depth To Water MT values are from Figure-Percentage of Wells Dry at Minimum Threshold of Appendix 3-A of the Draft GSP.



**Figure 3 - Monitoring Network for Water Quality Relative to Domestic Wells, DACs, and Community Water Systems  
East Kaweah GSA**



**Notes**  
1. All locations are approximate.

- References**
1. Domestic Well Densities: CWC draft Vulnerability Tool as of August 6, 2019.
  2. Disadvantaged community data: downloaded on August 6, 2019 from the DAC Mapping Tool: <https://gis.water.ca.gov/app/dacs/>.
  3. Community Water System data: downloaded on August 6, 2019 from Tracking California: <https://trackingcalifornia.org/water/map-viewer>.
  4. Groundwater level monitoring well information are from Table 4-2 in Draft East Kaweah GSA GSP dated July 2019.

## Appendix 1-D.10: Self-Help Enterprises Comments



*A Nonprofit Housing and Community Development Organization*

December 13, 2019

**East Kaweah Groundwater Sustainability Agency  
Public Review Groundwater Sustainability Plan**

315 E. Lindmore Ave.  
Lindsay, CA 93247

Submitted electronically to: [ekgsa.gsp@ekgsa.org](mailto:ekgsa.gsp@ekgsa.org)

**Re: Comments/Recommendations on the East Kaweah Draft Groundwater Sustainability Plan**

Dear East Kaweah Groundwater Sustainability Agency (EKGSA),

Self-Help Enterprises (SHE) would like to offer comments and recommendations in response to the East Kaweah Groundwater Sustainability Plan (GSP) that was released for a 90-day public comment period on September 17, 2019. SHE is a nationally recognized housing and community development organization whose mission is to work together with low-income families to build and sustain healthy homes and communities.

To date, SHE has been assisting several communities to participate in Sustainable Groundwater Management Act (SGMA) related workshops, trainings and Groundwater Sustainability Agency (GSA) meetings. Within the Kaweah Subbasin, SHE has partnered with GSA staff to hold local and regional SGMA workshops and conducted outreach in disadvantaged communities (DACs) in order to encourage and facilitate their residents participation in the development of their GSP. Additionally, SHE staff conducted community outreach and capacity building activities in DACs and attended several EKGSA Committee meetings. Moreover, on August 30, 2019, SHE and Community Water Center offered detailed comments and recommendations in response to the EKGSA draft GSP that was released for a 30-day informal comment period on July 30, 2019.

The submitted comments are intended to assist EKGSA in developing a groundwater sustainability plan that accomplishes the following objectives:

1. Understands DACs' unique vulnerabilities and adequately addresses their drinking water needs;
2. Avoids developing groundwater management actions that cause negative impacts to drinking water supplies or cause a disparate impact on low-income communities of color; and
3. Achieves the objectives required by the GSP regulations and California's Human Right to Drinking Water (AB 685) in order to ensure the GSP adequately addresses the requirements necessary for GSP approval by the Department of Water Resources (DWR).



In 2012, California became the first state in the nation to legislatively recognize the Human Right to Water. AB 685 declares it is the policy of the state that “every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.” With this passage of AB 685, relevant state agencies, including the State Water Resources Control Board (SWRCB) and DWR, are now required to consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria that may impact the uses of water for domestic purposes. These agencies must consider how state actions may impact the Human Right to Water. As such and according to 23 CCR §350.4, DWR will be considering AB 685 when reviewing and approving GSPs. Therefore, GSPs that do not properly consider groundwater reliance and drinking water uses by DACs and households served by private domestic wells, or that do not effectively avoid significant and unreasonable impacts, may not be deemed adequate and may result in costly and time-consuming revisions in order to obtain approval from DWR which we all hope to avoid.

Upon conducting the GSP review, we would like to first and foremost acknowledge EKGSA efforts in addressing several of the comments provided on our letter submitted on August 30, 2019. The improvements made on the GSP demonstrate EKGSA’s commitment on understanding DACs’ unique vulnerabilities and efforts to address their drinking water needs. Overall, the updated GSP better captures beneficial users of groundwater and provides insight on groundwater issues that are currently or have historically affected groundwater sources of DACs and households relying on domestic wells.

#### *Groundwater Quality*

As we have expressed on our previous letter, we are pleased that the draft GSP establishes minimum thresholds and measurable objectives based on maximum contaminant levels (MCLs) for contaminants of concern (COC) for municipal use, and that the draft includes considerations to protect areas where groundwater quality is below MCLs by ensuring that groundwater quality does not degrade to exceed MCLs. We also appreciate the inclusion of additional information clarifying when the EKGSA will evaluate water quality trends, partnering with other regulatory agencies, and/or when potential management action(s) will be implemented. We are also thankful for the inclusion of Table 4-3 that presents the baseline conditions relative to the 10-year average COC concentration for each applicable representative monitoring well.

#### *Groundwater Levels*

We greatly appreciate that the updated GSP defines and presents the potential impacts of minimum thresholds of groundwater levels on water users and lays out how EKGSA plans to bolster the well data set for future analysis. We are also pleased that the EKGSA intends to partner with other Kaweah Subbasin GSAs and the County of Tulare to develop a more complete well canvass of the area, and develop a Well Observation Program to monitor and evaluate potential impacts to drinking water wells. However, without more specific and clear details of the aforementioned program, in particular to what pertains to how and when the program will be implemented and funded, the public and DWR cannot assess the adequacy of this program to address the needs of the communities or provide productive and meaningful comments on such a plan. **It is therefore recommended that the Well Observation Program referenced in Section 1.5.3 and 3.4.1 be included as a standalone management action in Section 5.3 of the draft GSP.** We would like to reiterate our commitment in working with the GSA staff and consulting team to help improve any data gaps and ensure that the analysis properly captures the potential risks to drinking water users.

Despite the significant improvements, we remain concerned that the risks imposed to drinking water users with the proposed minimum thresholds (MTs) for groundwater levels continue to be substantial.

According to the analysis contained in the focused technical review developed by SHE in partnership with Community Water Center and Leadership Counsel for Justice and Accountability, the usability of over 85% of domestic wells in the EKGSA area would be expected to be impacted if water levels reach the proposed MTs. These estimates are much higher than the one-half of domestic wells projected impact noted in Section 3.4.1.2.4 of the draft GSP. Even though these results do not appear to be consistent, either way this projects significant impacts to drinking water users.

Further, the GSP does not define the occurrence of an undesirable result (UR) until “one-third (33%) of the representative monitoring wells in the subbasin, across all three GSAs, exceed their respective MTs”. Therefore, the GSP allows water levels to drop across the subbasin, and allows large areas of the subbasin to fall below MTs for multiple years before the GSAs are required to take more significant actions to stabilize water levels.

While we appreciate the EKGSA’s intent to develop a Well Observation Program to monitor and evaluate potential impacts to drinking water wells and an interest in developing a Drinking Water Wells Protection Program (DWRPP), none of the identified measures have been approved by the EKGSA Board and it is not clear how the mitigation measures will be implemented. Without clear actions regarding setting stricter thresholds near vulnerable communities, providing mitigation measures to impaired wells, establishing a groundwater allocation, or addressing reductions in groundwater pumping, significant and unreasonable impacts could occur to the most vulnerable drinking water users within noteworthy portions of the subbasin, particularly if the region faces another drought. For these reasons and given our involvement at several EKGSA meetings, **we recommend that as more data is gathered about the status of wells and discrepancies in the well impact analysis are addressed, the Sustainable Management Criteria for water levels should be reviewed to potentially set stricter thresholds near at risk populations.**

Moreover, we believe that if the sustainability criteria are defined in a way that allows for the dewatering of drinking water wells, a robust drinking water protection program must be provided to prevent impacts to drinking water users and mitigate the drinking water impacts that occur. **It is therefore recommended that EKGSA commit to developing and implementing the Drinking Water Wells Protection Program (DWWPP) referenced on section 5.3.2.1 of the draft GSP within the first year of GSP implementation to ensure that potentially affected domestic wells and public water system users do not lose access to drinking water. At a minimum, the draft GSP should include a schedule and describe the work tasks necessary to conduct the aforementioned DWWPP. We also recommend that the DWWPP be included in the draft GSP as a standalone management action instead of being referenced as a sub-task of the well metering and sampling requirements management action.**

The development and implementation of a protection program should be a priority and not be postponed to forthcoming years. Self-Help Enterprises partnered with Community Water Center and Leadership Counsel for Justice and Accountability to develop a factsheet with key considerations for establishing a drinking water well mitigation program. The factsheet will include relevant information about mitigation measurements, adaptive management strategies, funding opportunities, cost estimates, and examples of existent groundwater management actions paired with a program designed to prevent, eliminate or mitigate significant adverse impacts to drinking water wells. The factsheet is expected to be released in January 2020 and will be made available to GSAs as a framework reference to support in their efforts to develop a mitigation/assistance program.

### ***Recharge Projects***

We are also pleased that the updated GSP states that water quality will be measured in the vicinity of recharge projects and that on-farm recharge projects will have to minimize leaching of fertilizer through

the root zone. These commitments are in accordance with the recommendations provided by SWRCB<sup>1</sup> and Stanford<sup>2</sup>. However, while we appreciate that the updated GSP acknowledges the potential risks of inadvertent drinking water quality associated with recharge projects, it remains unclear how impacts to drinking water users will be mitigated if they occur. **When inadvertent water quality issues are likely to occur, or have occurred, due to recharge and on-farm recharge projects, short-term solutions, such as bottled water, should be provided. We ask EKGSA to include short-term solutions to address water quality issues caused by recharge projects as a potential mitigation measurement of the Drinking Water Wells Protection Program.** The short-term solution would address any initial spike in concentrations in groundwater quality caused by a recharge basin until groundwater quality stabilizes or improves.

### *Effective Public Engagement*

Effective public engagement is extremely important during plan implementation and we are pleased with EKGSA's intent to develop the Notification of Annual Groundwater Use Management Action and the Drinking Well Observation Program with input from drinking water users and representatives. The programs will encourage citizens to get involved in deliberation, dialogue, and action on public issues that are important to them. More importantly, it will help EKGSA and decision-makers to have a better understanding of the perspectives, opinions, and concerns of citizens and stakeholders. Based on an evaluation of the success and constraints encountered by our organization with outreach and engagement efforts within EKGSA area, we recommend the following outreach and engagement strategies to support DAC participation during GSP implementation:

- Include the Well Observation Program referenced in Section 1.5.3 and 3.4.1 as a standalone management action in Section 5.3 of the draft GSP. As expressed previously, without more specific and clear details of the program, in particular to what pertains to how and when the program will be implemented and funded, the public and DWR cannot assess the adequacy of this program to address the needs of the communities or provide productive and meaningful comments on such a plan.
- Include a more thorough description of the methods the Agency shall follow to inform the public about the progress on implementing the Plan, including the status of projects and actions, per 23 CCR § 354.10. At a minimum, the GSP should clarify when and how the Communication and Engagement Plan (C&E Plan) will be updated.
- Update the GSP implementation engagement strategy to include a DAC communications campaign and ongoing workshops in order to solicit feedback, establish trusting relationships, and keep the public informed and engaged during plan updates and especially prior to critical decisions. Critical decision points may include but are not limited to the five year GSP review, adoption of groundwater fees, development and adoption of the well observation program and the assistance for impaired wells, consideration of groundwater markets, and the groundwater allocation program.
- Account for DACs outreach, engagement and translation services when applying for state funding, establishing and approving operating budgets and enacting groundwater fees.
- Work with known and respected community leaders to host localized neighborhood meetings.
- Provide interpretation services, and bilingual materials tailored to the intended audience.

---

<sup>1</sup> State Water Boards, Water Quality Frequently Asked Questions document:

[https://www.waterboards.ca.gov/water\\_issues/programs/gmp/docs/sgma/sgma\\_water\\_quality\\_faq.pdf](https://www.waterboards.ca.gov/water_issues/programs/gmp/docs/sgma/sgma_water_quality_faq.pdf)

<sup>2</sup> Stanford, 2019. A Guide to Water Quality Requirements Under the Sustainable Groundwater Management Act, Spring 2019:

<https://stacks.stanford.edu/file/druid:dw122nb4780/A%20Guide%20to%20Water%20Quality%20Requirements%20under%20SGMA.pdf>

- Strengthen the partnership between the EKGSA and community-based organizations and nonprofits who have a record of demonstrated success in and clear qualifications for working with these stakeholders.
- Other tools to be considered include utility bill inserts and newsletters.

In closing, we would like to reiterate our commitment to working with you, the GSA staff, and the consulting team to ensure that the East Kaweah GSP properly protects the drinking water sources of the most vulnerable, and often underrepresented, groundwater users within the Kaweah subbasin.

Please let us know if you have any questions or wish to discuss our comments and recommendations further.

Sincerely,



Thomas J. Collishaw  
President/CEO



**Focused Technical Review:**  
**July 2019 East Kaweah GSA Administrative Draft Groundwater Sustainability Plan (GSP)**

## **Water Levels**

The draft GSP sets the minimum thresholds (MTs) for groundwater levels as the projected 2040 groundwater levels based on a “baseline trend analysis” using data from the 1997-2017 time period. The East Kaweah Groundwater Sustainability Agency (EKGSAs) area was then subdivided into ten “threshold regions” that reportedly share similar hydrogeologic behavior and each was assigned an MT for water levels. The draft GSP further defines the undesirable result (UR) for chronic lowering of water levels as being when one-third of the representative monitoring sites in all three GSA jurisdictions<sup>1</sup> exceed their respective MTs. This approach to setting water level MTs and URs leaves key beneficial users in the Kaweah Subbasin (subbasin), specifically domestic well users and members of disadvantaged communities (DACs), potentially vulnerable to impacts.

- As shown on **Figure 1**, the EKGSAs area includes over 700 domestic wells, 10 DACs with a collective population of over 41,000 people, and thirteen community water systems that serve over 44,000 people.<sup>2</sup> However, the approach to setting water level MTs and URs does not explicitly take these drinking water beneficial users into account. As described above, the MTs for each threshold region are set relative to an assumed trajectory of decreasing water levels over the next 20 years, without regard to well depths or other potential impacts. The draft GSP acknowledges that the subbasin GSAs must stabilize water levels over the long term because “the decades long trend of drilling deeper and deeper wells would continue causing increased financial burden on stakeholders” (Section 3.4.1.1.3). **However, what that stabilized level is, and when that will be achieved is not clearly stated.**
- The draft GSP also states that “The EKGSAs recognizes that some shallow wells will likely go dry until water levels have been stabilized. Without SGMA and the proposed incremental mitigation by the EKGSAs, the shallow wells would have gone dry sooner, requiring the landowners to deepen these existing wells” (Section 3.4.1.2.4). The stated sustainability goal for the subbasin in the draft GSP is “for each GSA to manage groundwater resources to preserve the quality of life through maintaining the viability of existing enterprises of the region. The goal will also strive to fulfill the water needs of existing enterprises as well as existing and amended county and city general plans that commit to continued economic and population growth within Tulare County” (Section ES 1.3). **The draft GSP, however, does not clearly indicate how the proposed water level MTs will preserve the quality of life or support population growth, given the lack of consideration for drinking water beneficial users in the subbasin, in particular domestic well users and DACs reliant on groundwater.**

---

<sup>1</sup> The three GSA jurisdictions include the East Kaweah GSA, the Greater Kaweah GSA, and the Mid-Kaweah GSA.

<sup>2</sup> DACs and community water systems immediately adjacent to the East Kaweah GSA boundary are included in these counts.

- Based on the assessment presented in the “Percentage of Wells Dry at Minimum Threshold” Figure in Appendix 3-A of the draft GSP, the percentage of domestic wells expected to go dry within each threshold region is between 14% and 77%. This assessment appears to have been done relative to the bottom of the total well construction depth. However, water supply wells become unusable or subject to decreased performance and longevity as water levels fall within the screened interval, which will occur before water levels reach the bottom of the well. **Therefore, the actual number of domestic wells that would be significantly impacted at the proposed water level MTs would be expected to be higher than represented in Appendix 3-A of the draft GSP.**
- **Figure 2** shows the approximate location of domestic wells within the EKGSA area. Based on available well construction information, the domestic well screens are compared to the proposed MTs (per the “Percentage of Wells Dry at Minimum Threshold” Figure in Appendix 3-A of the draft GSP). For purposes of the assessment conducted herein, a well is identified as *fully dewatered* if the MT is below or at the bottom of the well screen interval and a well is identified as *partially dewatered* at if the MT is below or at the midpoint of the well screen interval. Based on this assessment, 47% of all domestic wells are expected to be fully dewatered and another 39% of wells are expected to be partially dewatered if water levels reach the MTs included in the draft GSP. **Thus, the usability of over 85% of domestic wells in the EKGSA area would be expected to be significantly impacted if water levels reach the proposed MTs. As such, the assessment presented in Appendix 3-A of the draft GSP appears to underrepresent the actual impacts to domestic well users that would be expected to occur under projected conditions.**
- The draft GSP includes proposed Projects and Management Actions to reduce the estimated annual overdraft of 28,100 acre-feet per year (AFY) to zero AFY by 2040 (Section 6.3; Figure 6-2). However, it is not clear from the draft GSP how the timeframe of the proposed glide path is expected to affect water levels in the subbasin. **It is therefore recommended that the numerical groundwater model be used to evaluate the change in water levels at representative monitoring wells (RMWs) through 2040 both with and absent of the proposed Projects and Management Actions, and relative to the proposed Measurable Objectives (MOs) and MTs.** Such an assessment would allow the public to evaluate the impacts and benefits of the proposed projects, actions, and thresholds on beneficial users in the subbasin.
- Given that water levels in one-third of all RMWs across all three subbasin GSAs must drop below MTs in order for an UR to be triggered, **significant and unreasonable impacts could occur within significant portions of the subbasin without triggering a subbasin UR. The draft GSP should include a local UR definition that makes it clear that the EKGSA will locally define and address an UR within its service area and protect beneficial users of groundwater.**

## Water Quality

The draft GSP describes the MTs for water quality based on the beneficial uses, which includes agricultural supply and municipal and domestic supply. URs for degraded water quality are defined as occurring when “due to the impacts of EKGSA’s projects or management actions on groundwater flow, concentrations of constituents of concern increase beyond the baseline concentration to significantly impact the beneficial uses and users of Kaweah Subbasin groundwater” (Section 3.4.2.1). The draft GSP sets water quality MTs

“based on a 10-year running average for [constituents of concern] COCs at a monitoring location. Minimum thresholds will breakdown to two categories, as follows:

- For wells with 10-year average COC concentrations less than the recognized standard, no increase in concentration beyond the standard
- For wells with 10-year average COC concentrations greater than the recognized standard, no increases beyond 20% to the initial average concentration at GSP implementation” (Section 3.4.2.2).

The draft GSP identifies the following constituents as COCs for municipal water use: 1,2,3-trichloropropane (1,2,3-TCP), 1,2-Dibromo-3-chloropropane (DBCP), arsenic, chloride, hexavalent chromium, nitrate (as N), perchlorate, sodium, and total dissolved solids (TDS). The following are identified as COCs for agricultural use: chloride, sodium, and TDS (Table 3-6). For the reasons identified below, the water quality monitoring network and analysis presented in the draft GSP does not clearly illustrate how the MOs/MTs will be sufficient to ensure that the stated water quality UR of impacting the long-term viability of the groundwater resource, particularly for domestic water users and DACs, will be avoided.

- The draft GSP sets MOs/MTs for groundwater quality for ten RMWs within the EKGSA area; however, given that several wells are located very near each other, based on the spatial distribution, the network effectively consists of six locations within the EKGSA.<sup>3</sup> This represents one well for approximately 31 square miles of groundwater subbasin, or 3 wells per 100 square miles. This monitoring well density is within the established DWR guidance for monitoring well densities of between 0.2 and 10 wells per 100 square miles.<sup>4</sup> However, these wells are not spaced evenly across the EKGSA area. As shown in **Figure 3**, all RMWs for water quality are located in the southern portion of the EKGSA area. Thus, no water quality monitoring will be performed near the DACs of Ivanhoe or Woodlake, which represent a population of over 11,500 people. In addition, approximately 300 domestic wells are located in the area surrounding and north of Ivanhoe and Woodlake, which represents approximately 40% of the domestic wells in the EKGSA area. **Therefore, the proposed network of water quality RMWs appears to be insufficient to monitor impacts to groundwater for drinking water beneficial users, particularly domestic well users and DACs; such monitoring is required pursuant to 23 CCR § 354.34.**
- The draft GSP states that “Unlike groundwater storage and surface water depletion, no statistically significant correlation has been found between groundwater levels and water quality in the EKGSA (Appendix 2-E)” (Section 3.4.2.2.1). However, Appendix 2-E only includes a series of maps showing constituent occurrences over several time periods. Appendix 2-E does not include a statistical analysis or assessment of the change in constituent concentrations relative to the change in water levels or other drivers. **At a minimum, the change in water quality constituent concentrations should be analyzed relative to change in water levels, particularly over drought periods, to**

---

<sup>3</sup> It is noted that the GSP acknowledges that water quality data from additional wells will be included for annual reporting purposes, but not compliance purposes under SGMA.

<sup>4</sup> DWR, 2016. *Best Management Practices for the Sustainable Management of Groundwater, Monitoring Networks and Identification of Data Gaps (BMP #2)*, December 2018.

**evaluate the potential relationship between water quality and groundwater management activities for arsenic and other constituents.**<sup>5</sup>

- The draft GSP indicates that 10-year average COC concentrations will be evaluated for compliance with water quality MTs in the future. **The draft GSP should include an assessment of the current 10-year average concentrations of COCs at the RMWs for purposes of presenting the baseline conditions relative to the proposed MOs/MTs.**
- The draft GSA states that “These COC concentrations will be with respect to the beneficial use the groundwater well supplies. Thus, public drinking wells will be subject to the municipal minimum threshold standard, and irrigation wells will be subject to the agricultural minimum threshold standards. A compiled list of COCs relevant to the EKGSA and their respective threshold levels is presented in Table 4-6”<sup>6</sup> (Section 3.4.2.2.1). Therefore, based on the draft GSP, the intended use of each RMW is the only beneficial use that will be evaluated for with respect to water quality thresholds. Thus, even when an agricultural supply well used for water quality monitoring is proximate to drinking water users, standards associated with drinking water use will not be considered in the evaluation. The RMWs for water quality shown in Table 4-2 are indicated as municipal, drinking water wells. However, Table 3-6 (Constituents of Concern for the EKGSA with Respective Minimum Threshold) includes information for three COCs applicable to agricultural use. **These references and description of the water quality monitoring network and MOs/MTs appear to conflict and do not clearly describe the GSA’s intended plan for monitoring and managing for water quality sustainability for all beneficial users.**
- Section 4.5.1 of the draft GSP states that “Data ... indicate the common constituents of concern (COCs) in the EKGSA include: 1,2,3-Trichloropropane (1,2,3 TCP), 1,2-Dibromo-3-chloropropane (DBCP), Arsenic, Hexavalent Chromium, Nitrate, Perchlorate, Sodium, Chloride, and Total Dissolved Solids (TDS). Wells supplying drinking water (i.e. public systems) will be monitored for all of these COC quarterly. Wells supplying irrigation water will be monitored for Chloride, Sodium, and TDS COC, also on a quarterly basis. ... These COCs are proposed to be monitored at all wells in the groundwater level monitoring network, based on their use to develop a more robust data set since current coverage of groundwater quality data is lacking for many parts of the EKGSA.” However, based on Table 4-2, only 10 wells, all of which are municipal wells, will be monitored and used for evaluation of URs related to groundwater quality. As identified above, other similar conflicting descriptions are provided in the draft GSP. Therefore, the GSP should better clarify its approach to monitoring for and measuring URs for water quality. **Per 23 CCR § 354.28, the draft GSP should provide a detailed explanation as to how the proposed water quality MT approach and monitoring network will result in protection of groundwater for DACs and other drinking water beneficial users in the subbasin.**

---

<sup>5</sup> Stanford, 2019. *A Guide to Water Quality Requirements Under the Sustainable Groundwater Management Act*, Spring 2019.

<sup>6</sup> No Table 4-6 is provided in the draft GSP. Based on context, it is assumed that this reference is intended to refer to Table 3-6.

## Monitoring Network

- Specific comments regarding the adequacy of proposed water level and water quality RMW networks to monitor impacts to the beneficial uses or users of groundwater (23 CCR § 352.34) are provided above.
- The draft GSP identifies 43 RMWs for water levels and ten RMWs for water quality, but does not include well construction information for these wells. Pursuant to 23 CCR § 352.4, this information is required to be provided in the GSP for all monitoring wells. **Without well construction information for RMWs included in the GSP, the public and DWR cannot evaluate if the RMWs are: (1) adequate for evaluating water levels relative to the MOs and MTs over the long term, and/or (2) how representative the water quality sampling depths are of the zones used for drinking water purposes by domestic well users and community water systems.**

## Well Mitigation Program

Based on our assessment of the water level and well construction data, over 85% of domestic wells have the potential to be partially or fully dewatered if water levels reach the proposed MT levels. However, the draft GSP does not include or describe any plans to develop a well impact mitigation program. Such a program could include a combination of replacing impacted wells with new, deeper wells and/or connecting domestic users to a public or community water system. Key considerations for establishing such a program should include:

- A strong preference for connecting current domestic well users to a public water system, whenever possible. Public water systems have an obligation to test water quality for water served, and although the community water systems in this area typically have limited resources, they do have a greater ability to install treatment systems to address water quality impacts, recoup funds for litigated contamination such as 1,2,3-TCP, and apply for and receive grant funding for beneficial projects. Because of this, public water systems, including small community water systems provide a more reliable drinking water source than privately-owned domestic wells.
- A secure and reliable funding source and mechanism for implementation of such a program needs to be identified. While grant or emergency funding could potentially be available for such a program when needed, the availability of these funds is not certain. A more secure funding mechanism could be the establishment of a reserve fund that is paid into on an annual basis and accrues funds that would then available as water levels drop in the future.
- The implementation of this program should be triggered before wells begin to become unusable, so that funding will be available, and the necessary planning and contracting will be completed such that the necessary construction will be implemented without unnecessarily leaving community members without access to running tap water. Thus, the program should be designed to be proactive, rather than reactive.
- A well mitigation program should not be established only in case of emergency, such as a tanked water program implemented in portions of the state during the last drought. Droughts are said to



be becoming more and more frequent and severe, and as such should be included as part of the long-term sustainability planning for the subbasin.

## Water Budget

The Water Budget section (Section 2.5) was reviewed to identify approaches and assumptions used in the water budget development that may not be protective of domestic water users, DACs, and small community water systems. The Water Budget section focuses on the EKGSA portion of the subbasin and refers to Appendix 2-A (Kaweah Subbasin Basin Setting Components – Draft, March 2019) for subbasin-wide water budget information and results. Per the draft GSP, the water budgets were developed using the Kaweah Subbasin Hydrologic Model (KSHM) numerical groundwater flow model. Additional information on model specifics and the relationship to the water budget is reported in Appendix 2-F (which was not provided in the draft GSP). The draft GSP is therefore incomplete and a full evaluation of the model and assumptions cannot be made at this time.

- The sources of data used for the water budget components are identified throughout the text of the draft GSP and Appendix 2-A. However, there is no single tabulation of all the sources used. **Discussion and tabulation of all data sources in a single section would improve the ability of the public to assess the data sources and evaluate the water budget assumptions for reasonableness and completeness.**
- Based on the draft GSP water budgets, agricultural-related components are the largest components of the water budget in the EKGSA area. For example, 90% of the groundwater outflow is from pumping for agricultural uses and only 2% of the groundwater outflow is from pumping for municipal and industrial (M&I) uses. The draft GSP estimates that rural domestic demand is less than 5% of total M&I demand and small water system demand is less than 8% of total M&I demand on average during the 1981-2017 historical period. **Water demand by these drinking water users is very low compared to agricultural users and thus not contributing substantially to the overdraft conditions, but based on the water level MT assessment described above, over 85% of domestic wells are expected to be impacted if water levels drop to the proposed MTs, creating a disproportionate impact.**
- Small water system demand was reported to be estimated from data in previously published reports. Very little specific information is provided in the draft GSP on the methods and assumptions used to estimate the small water system demand. No maps are provided showing the location of the small water systems. The annual demand from small water systems is shown to increase throughout the water budget period, but it is not possible to determine if the values are reasonable from the information provided in the draft GSP. **Additional detailed information is necessary for the public to be able to evaluate the accuracy and appropriateness of the small water system demand incorporated in the draft GSP.**
- Rural domestic water demand and consumptive use was estimated using an assumed demand rate of 2 AFY per dwelling and the density of rural domestic dwellings. The draft GSP reports that the density of these dwellings has not changed significantly over time and, therefore, rural domestic pumpage has not changed over time. The method and data used to determine the

density of these dwellings is not reported and cannot be evaluated. No maps are provided in the draft GSP showing the locations of these rural domestic users. Rural domestic pumping for the EKGSA area is reported in Section 2.5.3.3 to be 3,400 AFY. The rural domestic pumping for the entire subbasin reported in Appendix 2-A is 2,272 AFY. **Since the EKGSA area is only a portion of the entire subbasin, the rural domestic pumping in the EKGSA should be less than the rural domestic pumping reported for the entire subbasin but the draft GSP instead reports that EKGSA rural domestic pumpage is greater than rural domestic pumpage for the entire subbasin.**

- Page 99 of Appendix 2-1 states that “Similar to the rural small water system analysis above, a 70 percent portion of the pumped rural domestic water is assumed to return to groundwater via septic system percolation and irrigation return flows (Dziegielewski and Kiefer, 2010). Throughout the Subbasin, an annual total pumpage for rural users was 2,272 AF/WY on average, 30 percent of which returned to groundwater.” **The assumed fraction of total rural domestic pumping that returns to groundwater and the calculation of net rural domestic pumping reported in Appendix 2-A is inconsistent. It is unclear if the assumed fraction of pumping that returns to groundwater is 30% or 70%.**
- Based on the draft GSP, current land use was determined using the 2014 DWR land use survey data. Urban land is reported to be 4.5% the total area in the EKGSA. **Historical changes in land use area are not reported and it cannot be determined based on the information provided in the draft GSP if land use changes, including changes in urban areas, were incorporated into the water budget.**
- Section 2.5 presents annual water budget components for water years 1997-2017 for the EKGSA area and Appendix 2-A presents the same information for the subbasin. Components related to urban and rural domestic water use are lumped into two components (wastewater inflow and M&I pumpage). The relative contribution of rural domestic and small water system users to these components cannot be evaluated at this scale. **Presentation of water budget results for subareas of the subbasin would allow for assessment of the spatial variability in the water budget components. It would provide information more useful for the evaluation of the impacts on areas such as DACs and community water systems.**
- The draft GSP does not include any discussion of the uncertainty in the data used for the model and its affect on the water budget results. **The GSP should include an uncertainty analysis to identify the plausible range in water budget results and an indication of the magnitude of the effects these inherent uncertainties may have on the water budget results.**<sup>7</sup>
- The draft GSP includes minimal discussion of the sustainable yield of the subbasin or the EKGSA area, but does note that the subbasin is in overdraft. A Water Accounting Framework is included, which provides each GSA with a groundwater supply that is the beginning of a potential groundwater allocation, but here is no discussion of how the allocation will impact each GSA or the rural domestic and small water system users. **Such a discussion should be added to the GSP**

---

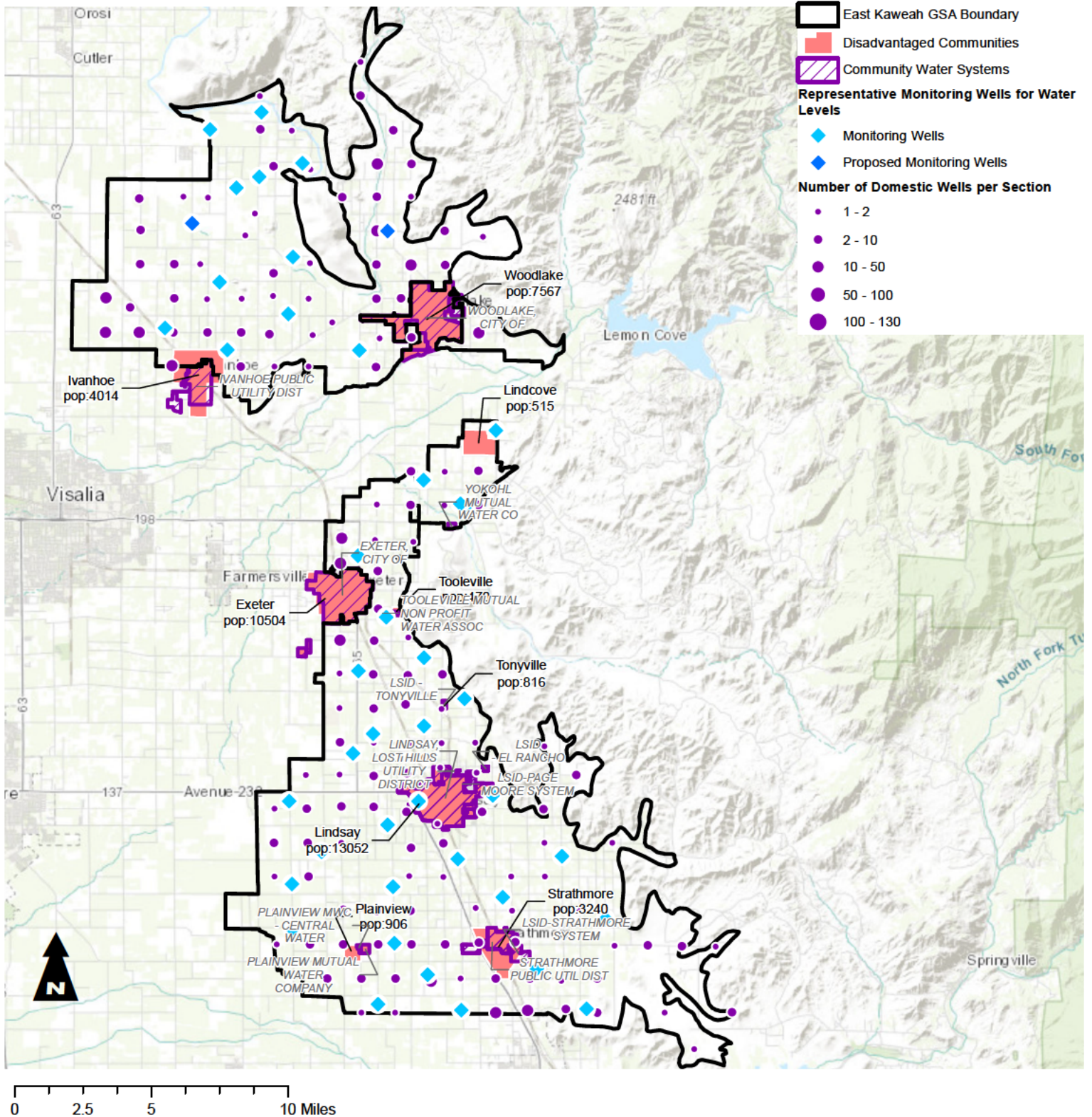
<sup>7</sup> DWR, 2016. *Best Management Practices for the Sustainable Management of Groundwater, Modeling (BMP #5)*, December 2016.



**so that the public may be able understand and evaluate the implications of the sustainable yield evaluation.**

- The draft GSP assesses the effect of climate change on the water budget by updating the model to incorporate projected changes in evapotranspiration, precipitation, streamflow, and imported water due to climate change. The adjustments to these data sets were made based on guidance and climate change data provided by DWR. The draft GSP includes limited discussion of the effects of these changes on the EKGSA water budget and there is no discussion of the impacts to specific areas such as areas of rural domestic development or small community water systems. It is noted that both agricultural and M&I demand will increase by 26%, but no information is provided on how these projected demand increases will be met or reduced to meet sustainability goals. **Such a discussion should be added so that the public may be able understand and evaluate the climate change assessment and its implication for domestic well users, DACs, and community water systems.**

**Figure 1 - Monitoring Network for GW Levels Relative to Domestic Wells, DACs, and Community Water Systems  
East Kaweah GSA**

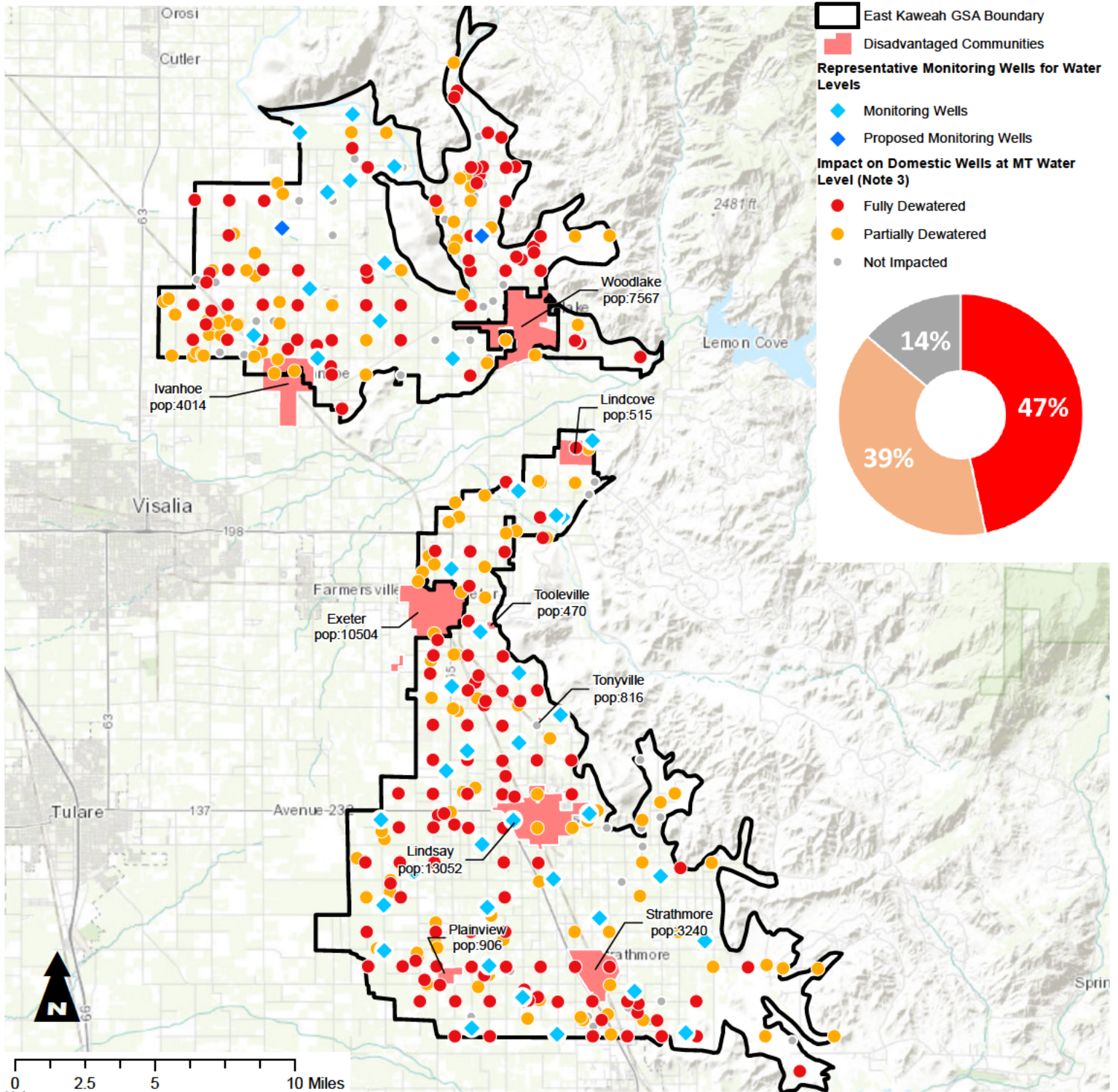


**Notes**  
1. All locations are approximate.

- References**
1. Domestic Well Densities: CWC draft Vulnerability Tool as of August 6, 2019.
  2. Disadvantaged community data: downloaded on August 6, 2019 from the DAC Mapping Tool: <https://gis.water.ca.gov/app/dacs/>.
  3. Community Water System data: downloaded on August 6, 2019 from Tracking California: <https://trackingcalifornia.org/water/map-viewer>.
  4. Groundwater level monitoring well information are from Table 4-2 in Draft East Kaweah GSA GSP dated July 2019.



**Figure 2 - Water Level Minimum Thresholds and Domestic Wells  
East Kaweah GSA**



**Notes**

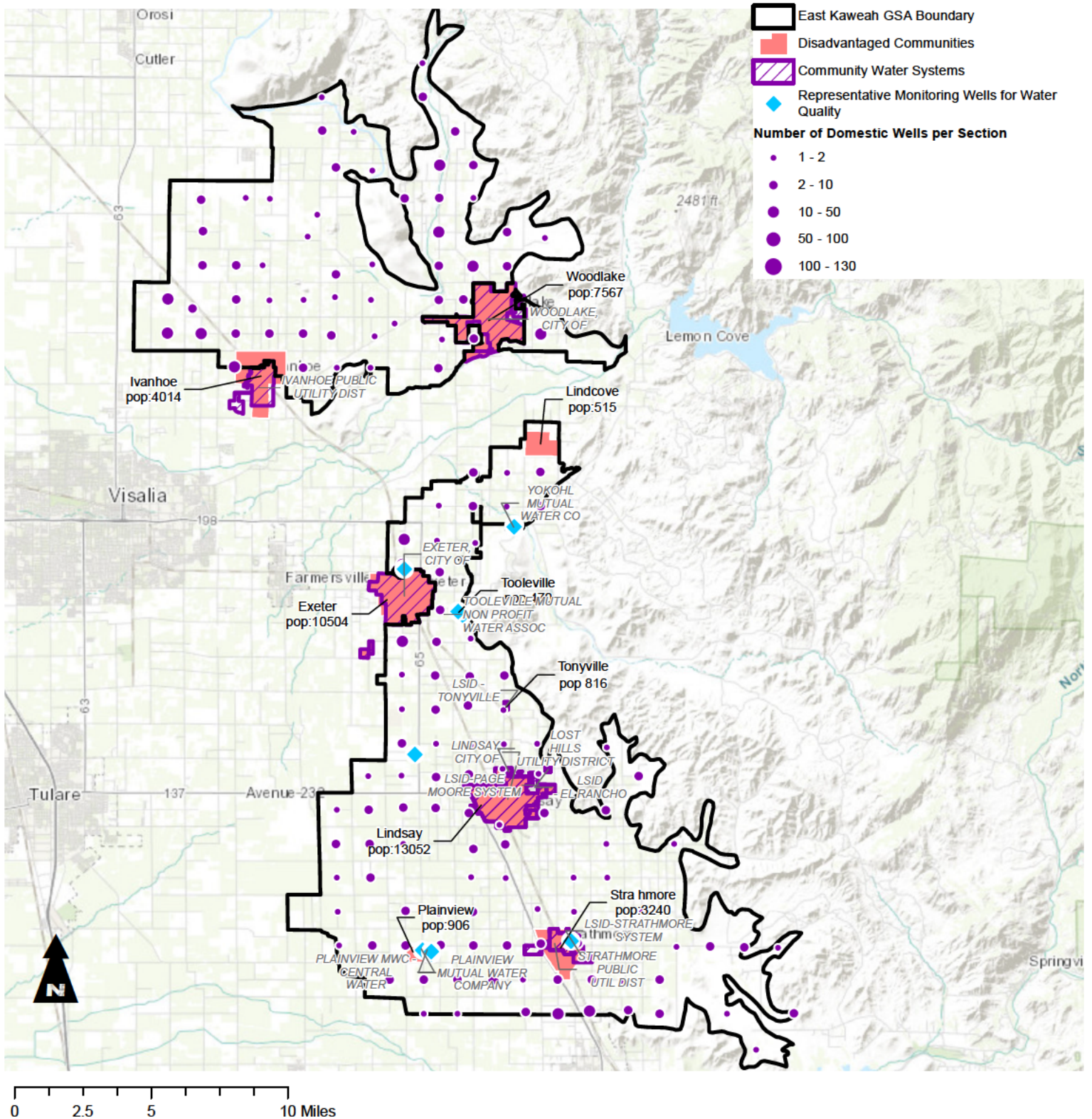
- All locations are approximate.
- The depth of domestic wells is compared to the Depth To Water MT values presented in Figure-Percentage of Wells Dry at Minimum Threshold of Appendix 3-A of the Draft GSP. Where available, bottom of screen interval was used for this assessment, and bottom of well depth was used for the remaining wells.
- For purposes of this assessment, a well is identified as fully dewatered at the proposed MT if the MT is below or at the bottom of the well screen interval; a well is identified as partially dewatered at the proposed MT if the MT is below or at the midpoint of the well screen interval.

**References**

- Domestic Well data: CWC draft Vulnerability Tool as of May 16, 2019.
- Disadvantaged community data: downloaded on August 6, 2019 from the DAC Mapping Tool: <https://gis.water.ca.gov/app/dacs/>. Last updated in 2016.
- Community Water System data: downloaded on August 6, 2019 from Tracking California: <https://trackingcalifornia.org/water/map-viewer>.
- Groundwater level monitoring well information are from Table 4-2 in Draft East Kaweah GSA GSP, dated July 2019. Depth To Water MT values are from Figure-Percentage of Wells Dry at Minimum Threshold of Appendix 3-A of the Draft GSP.



**Figure 3 - Monitoring Network for Water Quality Relative to Domestic Wells, DACs, and Community Water Systems  
East Kaweah GSA**



**Notes**  
1. All locations are approximate.

- References**
1. Domestic Well Densities: CWC draft Vulnerability Tool as of August 6, 2019.
  2. Disadvantaged community data: downloaded on August 6, 2019 from the DAC Mapping Tool: <https://gis.water.ca.gov/app/dacs/>.
  3. Community Water System data: downloaded on August 6, 2019 from Tracking California: <https://trackingcalifornia.org/water/map-viewer>.
  4. Groundwater level monitoring well information are from Table 4-2 in Draft East Kaweah GSA GSP dated July 2019.