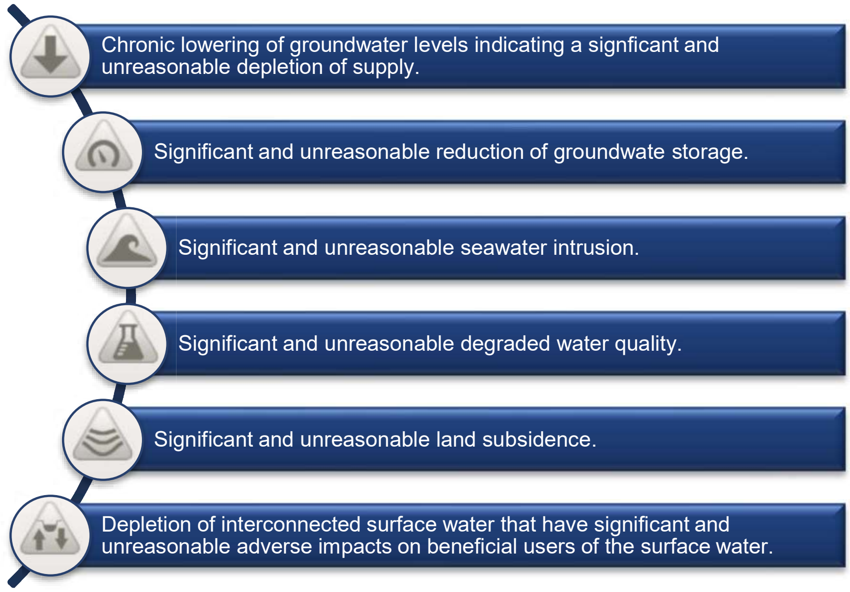
Executive Summary

Section 1 Introduction

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act of 2014 (SGMA), which is codified in Section 10720 et seq. of the California Water Code. This legislation created a statutory framework for groundwater management in California that can be sustained during the planning and implementation horizon without causing undesirable results in the six categories shown to the left.



The location of the South Kings GSA (SKGSA) area is more than 100 miles from the ocean, therefore seawater intrusion or use (as a supply) is not anticipated or feasible, respectively; therefore, seawater intrusion is not discussed significantly in the rest of this GSP.

SGMA requires governments and water agencies of high and medium priority basins to halt groundwater overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, including the Kings Subbasin, the deadline for achieving sustainability is 2040.

The SKGSA is a Joint Powers Authority (JPA) formed for the purpose of developing and implementing the Groundwater Sustainability Plan (GSP). The members include the cities of Fowler, Kingsburg, Parlier and Sanger and the Del Rey Community Services District. The SKGSA is governed by a five-member Board of Directors where the Directors are typically elected or appointed officials from the member agencies.

The sustainability goal of the Kings Basin and the SKGSA is to ensure that, by 2040, the basin is being managed in a sustainable manner to maintain a reliable water supply for current and future beneficial uses without experiencing undesirable results.

Section 2 Plan Area

The Kings Groundwater Subbasin (Kings Subbasin) is in the southern part of the San Joaquin Valley with most of the subbasin surface water being supplied from the Kings and San Joaquin Rivers. The Kings Subbasin boundary is defined in the Department of Water Resources (DWR) Bulletin 118 as DWR Subbasin No. 5-22.08.

The SKGSA boundary encompasses the city and district limits of the member agencies, on the San Joaquin Valley floor in the County of Fresno. The location of the SKGSA and the other GSAs within the Kings

Subbasin are shown in **Figure ES-1.** The SKGSA area boundaries are coterminous with the city and district boundaries but do not encompass their individual spheres of influence. There is no overlap among the seven GSA boundaries and there are no adjudicated areas in the groundwater basin.

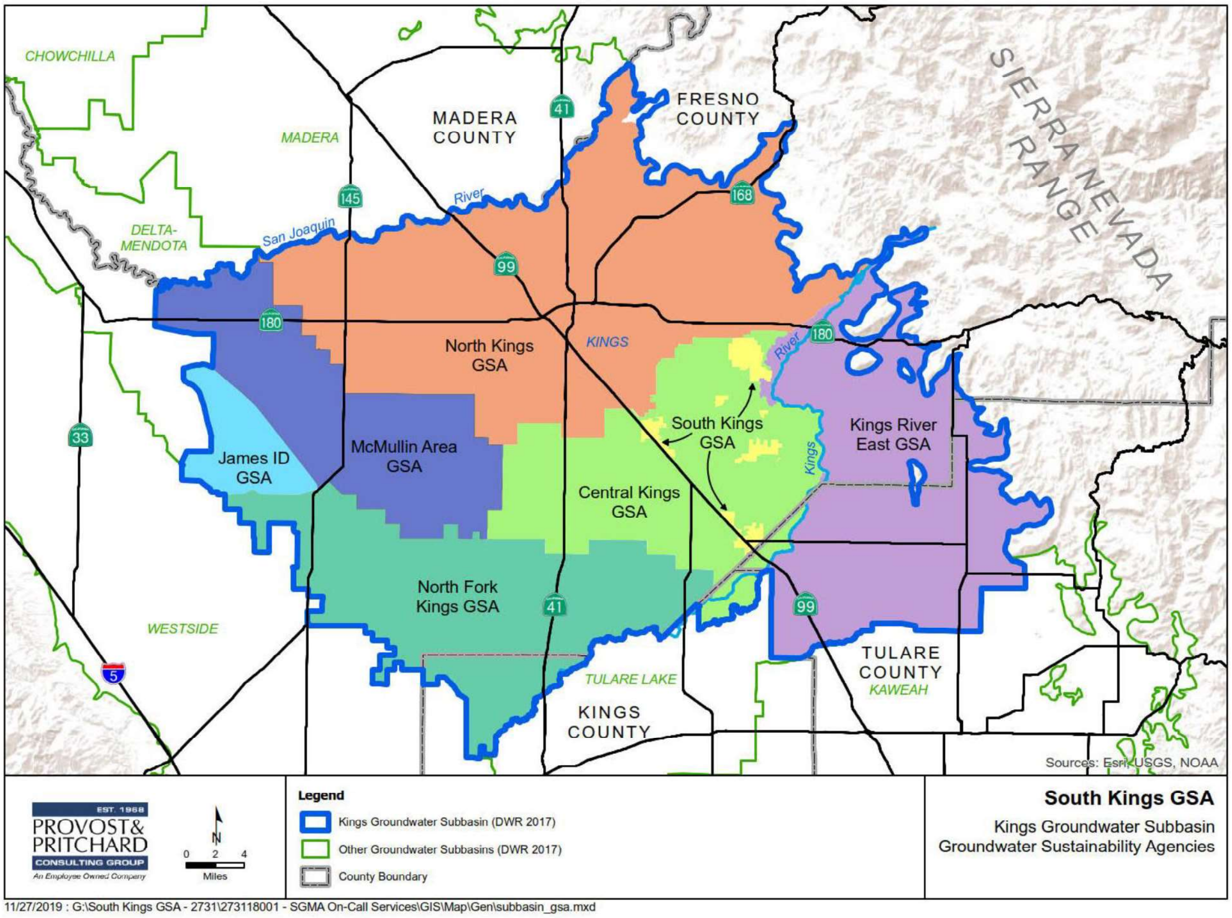


Figure ES-1: Kings Subbasin Groundwater Sustainability Agencies

Figure ES-1 also shows the five Groundwater Subbasins bordering the Kings Subbasin including the Madera Subbasin, Kaweah Subbasin, Tulare Lake Subbasin, Westside Subbasin, and Delta-Mendota Subbasin. The easterly boundary of the Kings Subbasin is the contact with the foothills—generally the 300-ft elevation-- of the Sierra Nevada mountain range.

The South Kings Groundwater Sustainability Plan has the same area as the South Kings Groundwater Sustainability Agency, as shown in **Figure ES-1**. The Plan area boundary is coterminous with the city limits of the four cities (Kingsburg, Fowler, Parlier, Sanger) and the district boundary of the Del Rey Community Service District within the eastern portion of the Kings Subbasin. Six other GSAs together with SKGSA form the boundary of the Kings Subbasin. The SKGSA Plan area is approximately 9,635 acres. The agencies within the GSP do not own surface water facilities but are instead connected, in some portions, to the surface water facilities of the Central Kings Groundwater Sustainably Agency (CKGSA), specifically Consolidated Irrigation District. The agencies do own and operate municipal or quasi-municipal community water facilities throughout their boundaries and several private wells are used in the rural and semi-rural areas throughout the GSA.

The majority of the SKGSA's acreage are utilized by residential or commercial uses, with only 1,012 acres operating in agricultural production. The five agencies rely on groundwater for their water supply and will acquire surface water supplies to recharge the underlying groundwater basin to offset their extraction impacts.

The SKGSA has executed an agreement with the CID for firm surface water deliveries to be utilized for recharge activities; the agreement provisions for annual deliveries with a five-year rolling average of the firm water supply to account for possible dry years. Some of those activities may utilize existing or future CID facilities; however, the SKGSA agencies will be pursuing their own recharge facilities, as discussed in more detail in **Section 6**. The soils that underlie the GSA boundary generally consist of sands and gravels and are conducive to intentional recharge activities.

Section 3 Basin Setting

Hydrogeologic Conceptual Model

The purpose of a Hydrogeologic Conceptual Model (HCM) is to provide an easy to understand description of the general physical characteristics of the regional hydrology, land use, geology, geologic structure, water quality, principal aquifers, and principle aquitards in the basin setting. Once developed, an HCM is useful in providing the context to develop water budgets, monitoring networks, and identification of data gaps. An HCM is not a numerical groundwater model or a water budget model. An HCM is rather a written and graphical description of the hydrologic and hydrogeologic conditions that lay the foundation for future water budget models. In addition, this HCM supports and provides the hydrogeologic setting to support the Groundwater Conditions and Water Budget of this GSP. The narrative HCM description provided in this chapter is accompanied by graphical representations of the South Kings GSA portion of the Kings River basin that have attempted to clearly portray the geographic setting, regional geology, basin geometry, and general water quality. This HCM has been prepared utilizing published studies and resources and will be periodically updated as data gaps are addressed, and new information becomes available.

The Kings Subbasin is an alluvial basin bounded north and south by the San Joaquin and Kings Rivers, respectively. To the east, the subbasin is bounded by the Sierra Nevada foothills and the Delta Mendota and Westside Subbasins to the west.

As shown in **Figure ES-1**, the SKGSA area is located to the east of the center of the Kings Subbasin, which is located in the approximate center of the San Joaquin Valley. The Kings Subbasin is bounded by the foothills of the Sierra Nevada mountains on the east, which define the eastern boundary of the alluvial groundwater aquifer system, by the San Joaquin River on the north, and by the Kings River on the south. The major features that affect groundwater flow are the San Joaquin and Kings Rivers and the basement complex of the Sierra Nevada Mountains (i.e., bedrock). While not known certainly, it is believed minimal amounts of groundwater flow into the SKGSA through fractures in bedrock.

The basement complex of the Sierra Nevada and the seepage loss along the San Joaquin and Kings rivers under natural conditions affect the direction of flow in the region as groundwater flows away from these features. The groundwater flows to the southwest away from the Sierra Nevada Mountains towards the axial trough of the valley. Additionally**,** seepage from the San Joaquin River, and the recharge ridge associated with seepage loss from the river, induce groundwater to flow away from the river to the south and southwest. Numerous groundwater depressions have also developed as aquifer usage has increased over time, which can cause the direction of groundwater flow to vary locally, but the dominant direction of groundwater flow in the region remains southwest.

Soils within the Kings Subbasin can vary significantly. In general, coarser grained soils are found along the eastern portions of the subbasin and adjacent to the San Joaquin River and Kings River, as well as areas associated with recent alluvial deposition along intermittent streams. Finer grained soils are typically found in the area of the compound fan created by intermittent streams in the east and are also found in the western areas of the Subbasin near the Fresno Slough. In general the dominant topsoil textural class in the SKGSA area is moderately coarse (**Figure ES-2**). The map was prepared using soil textural classes from the Natural Resource Conservation Service (NRCS). Patches of coarse soils that regionally trend southwest-northeast are present in much of the GSA area and represent recent alluvial deposits along the area's streams and rivers. Pockets of medium-grained have been mapped in Sanger and Del Rey, while areas of coarse-grained soils have been mapped in Fowler and Kingsburg.

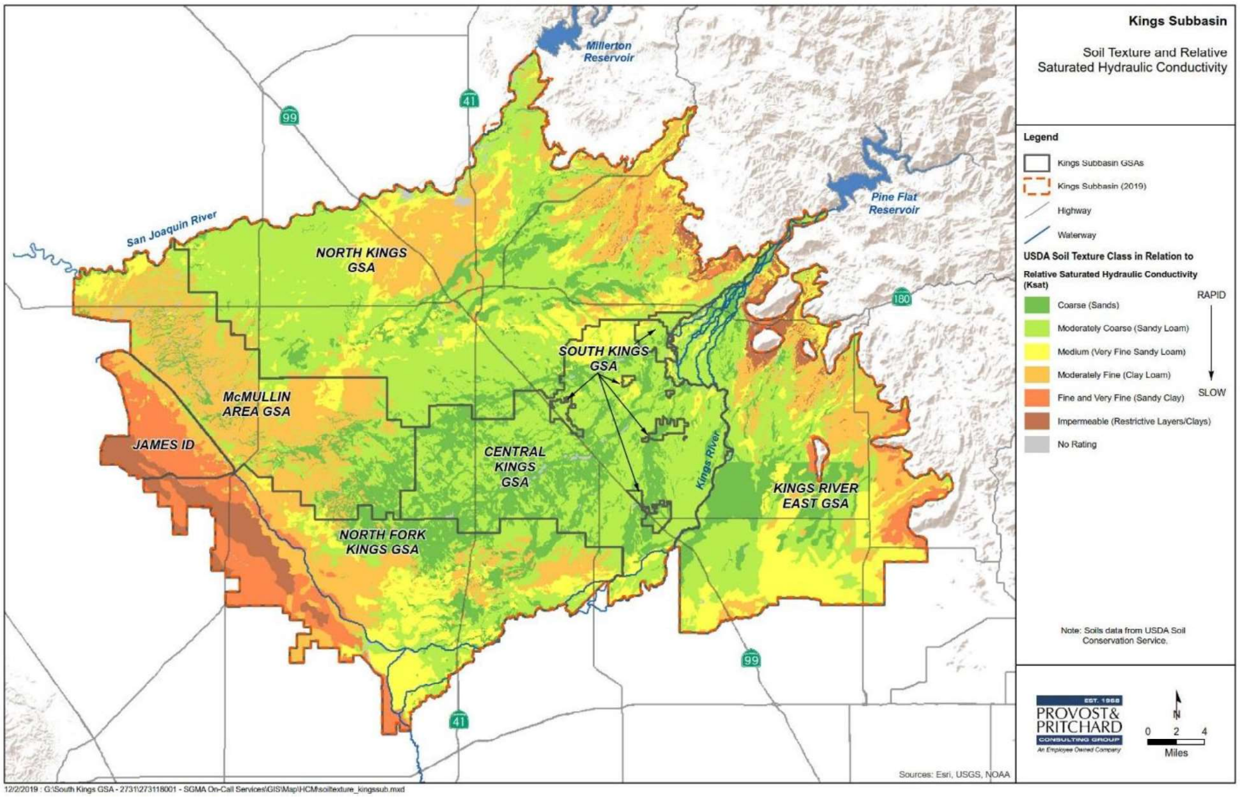


Figure ES-2: Kings Basin Soil Texture and Saturated Hydraulic Conductivity

In this figure, soil textural classes have additionally been related to Saturated Hydraulic Conductivity (Ksat or hydraulic conductivity) based on NRCS general categories. For the SKGSA area, the NRCS has generally described soils to depths of 5 to 7 feet. The hydraulic conductivity values shown on the map are expressed in general terms ranging from relatively rapid for coarse grained topsoils to relatively slow for moderately fine-grained topsoil. Duripan soil horizons (i.e., hardpan), have, for the purposes of this document, been assumed to have largely been broken up through deep tillage related to historical agricultural operations throughout the area.

Groundwater Conditions

Unconfined groundwater conditions extend across essentially the entire Kings Subbasin. Within the western portions of the subbasin, lacustrine and marsh deposits including the well-known regional clays, interbed with more coarse-grained alluvium. Historically, confined groundwater conditions existed below these regional clays, which have been identified as the A, C, and E clays. Currently, confined groundwater conditions still exist below the E and C clays. Groundwater below the A clay no longer appears to be confined. These clays are highly impermeable and restrict the vertical movement of water between more permeable beds wherever they occur. The most extensive and hydrologically important of these aquitards is the E-clay, commonly known as the Corcoran Clay, which is present beneath the approximate western third of the Kings Subbasin, where the depth to the top of the Corcoran Clay ranges from approximately 350 to 550 feet.

Figure ES-3 shows the Spring 2017 groundwater surface elevation contours and general direction of unconfined groundwater flow in the Kings Subbasin for the seasonal high condition. In general, groundwater flow is to the southwest within nearly the entire subbasin with a few notable exceptions where municipal and irrigation pumping in parts of the Kings Subbasin have influenced the direction of groundwater flow or the influence of recharge from basins and the major rivers can be seen.

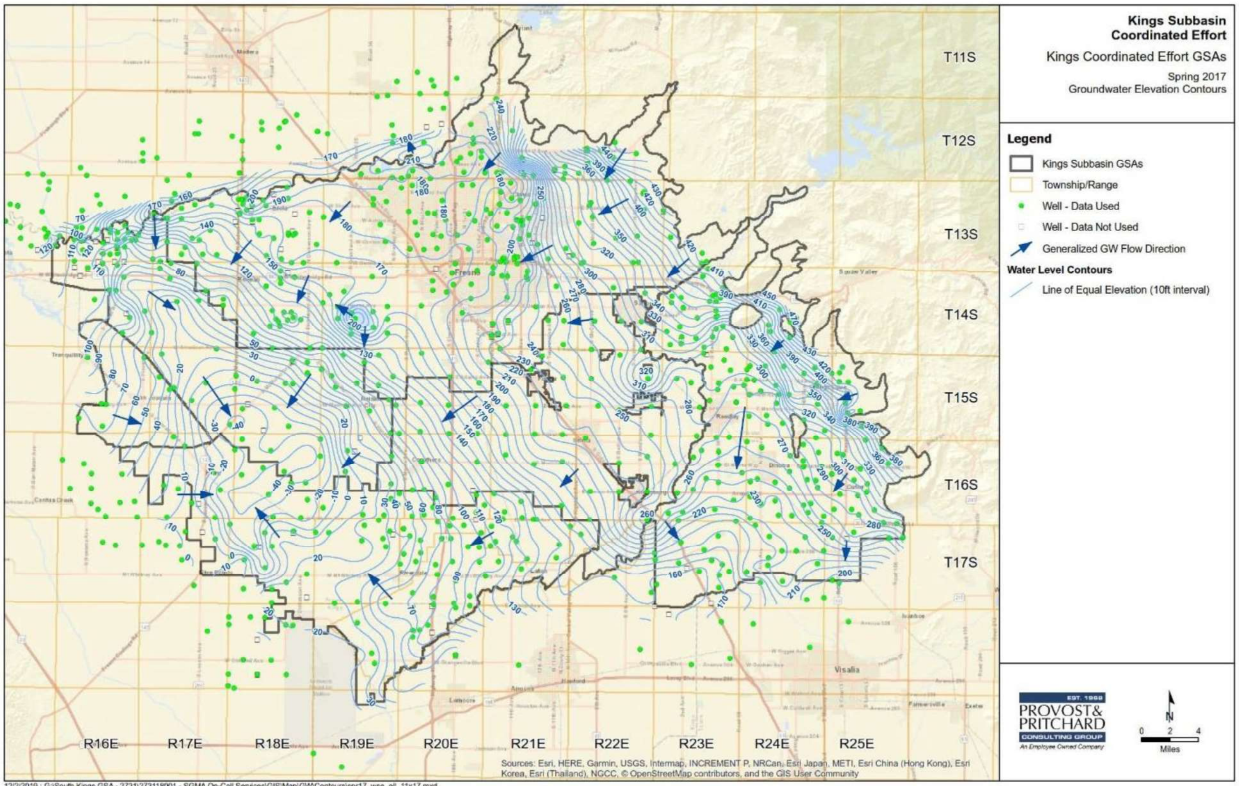


Figure ES-3: Groundwater Surface Elevation Contour Map (Spring, 2017)

In the Fresno-Clovis metropolitan area, an urban cone of depression is located north-northeast of the intersection of Highways 180 and 41 and has caused changes in the generally southwesterly groundwater flow direction as groundwater now moves toward the cone of depression under the urban area. There is also a general increase in groundwater gradient apparently associated with the finer grained deposits of the compound fan of intermittent streams south of the Kings River in the eastern portion of the Kings River East GSA.

In the west-southwest part of the subbasin, the lack of surface water supply combined with decades of agricultural pumping has influenced the natural direction of groundwater flow and created a cone of depression through the middle portion of McMullin GSA and the central portions of North Kings River GSA. The cone of depression has caused changes in the general flow direction and gradients as unconfined groundwater now moves toward the cone of depression from adjacent areas west of the Subbasin and southeast through McMullin GSA. Groundwater east of the Kings River in the Kings River East GSA flows southwesterly near the mountains and to the south-southeast near the Kings River.

Under natural flow conditions, the dominant flow direction in the Kings Subbasin was southwest, roughly perpendicular to the Sierra Nevada and towards the trough of the valley. The San Joaquin and Kings Rivers were historically locations of groundwater discharge and within about 2 to 4 miles of them groundwater flow deviated from the regional southwest direction and flowed towards them. The rivers and Fresno Slough being areas of groundwater discharge were thus gaining streams. Once pumping lowered water levels sufficiently, the San Joaquin and Kings Rivers, for the most part, became losing streams and groundwater started flowing away them.

Groundwater Levels

Depth to groundwater in the northeast side of the SKGSA is approximately 60 feet below ground and gets as low as about 75 feet below ground on the southwest side of Fowler. Higher water levels in Sanger are likely due to its proximity to the Kings River, which recharges the groundwater system through seepage.

The SKGSA used the same wells discussed in **Section 4** for groundwater level monitoring to track and report groundwater depth trends. The periods of record for these wells extend from the 1960s to 2019. One well near each city within SKGSA was chosen to represent groundwater levels for the respective areas. Long term rate of decline for each of the wells ranged from 0.15 feet per year to 0.40 feet per year, with an average rate of decline at 0.30 feet per year for SKGSA. Each of the Spring measurements for the five wells were averaged to create an average depth to water hydrograph for SKGSA, presented as **Figure ES-4**.

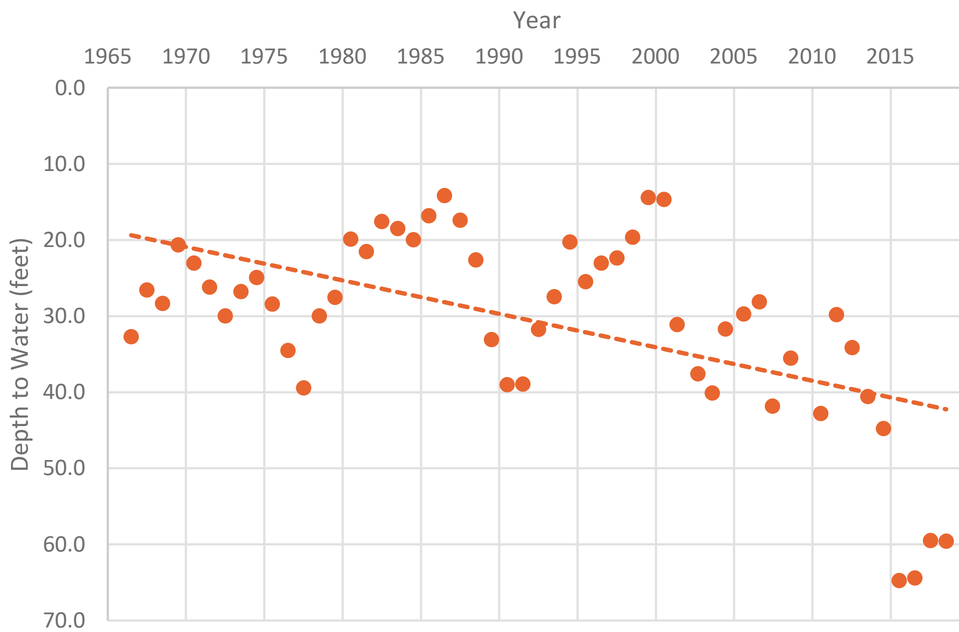


Figure ES-4: Average Depth to Water Measurements (Spring)

Groundwater Quality

Groundwater quality in SKGSA is generally suited for irrigation and domestic use, although there are a few groundwater issues for drinking water that exist. The water is generally described as being a calcium bicarbonate-type water but can also include magnesium, and sodium as the dominant cation. Typical water quality concerns throughout the basin include Nitrate, Arsenic, total dissolved solids (TDS), Dibromochloropropane (DBCP), 1,2,3-Trichloropropane (TCP), Methyl-Tert-Butyl-Ether (MTBE), and Uranium. While some of these constituents are caused by humans, several are naturally occurring.

Land Subsidence

One category of land subsidence occurs when groundwater levels decline due to excessive withdrawals of groundwater. There are two types of within this category of subsidence: elastic and inelastic. Elastic subsidence is recoverable if water levels later rise while inelastic subsidence is permanent. Although there are several causes of inelastic land subsidence, the compression of clay because of groundwater extraction from confined aquifers is the cause of the vast majority of subsidence documented in the San Joaquin Valley, west of the SKGSA. This results in compaction of fine-grained confining beds (clays) above and within the confined aquifer system as water is removed from pores between the sediment grains. Most of the permanent subsidence in the San Joaquin Valley has historically been correlated to overdraft in the confined aquifer below the Corcoran Clay.

However, with increased reliance on groundwater to meet demands, land subsidence is currently occurring in areas outside of the Corcoran clay. Even though subsidence is now occurring in areas outside of the Corcoran clay, the relative amount is less than the historical subsidence in areas underlain by the Corcoran Clay.

Land subsidence was first monitored from the 1920s to 1970s when there was less access to surface water. Subsidence monitoring decreased after the 1970s when there was more access to surface water due to the canals and water storage projects built in California and less reliance on groundwater to meet demands. Monitoring land subsidence increased again in the 2000s. Data from 2013 to 2017 was used to evaluate the land subsidence in the SKGSA area. Data sources include KRCD and NASA InSAR (Interferometric Synthetic Aperture Radar) data provided by DWR. **Figure ES-5** shows NASA InSAR data provided by DWR from May 2015 to April 2017. The legend shows the change in ground surface elevation and provides the most thorough aerial extent coverage of the GSA. There is minimal subsidence shown in the SKGSA area during this period. According to NASA InSAR data, the majority of the GSA has experienced zero to one inch of subsidence over the two years.

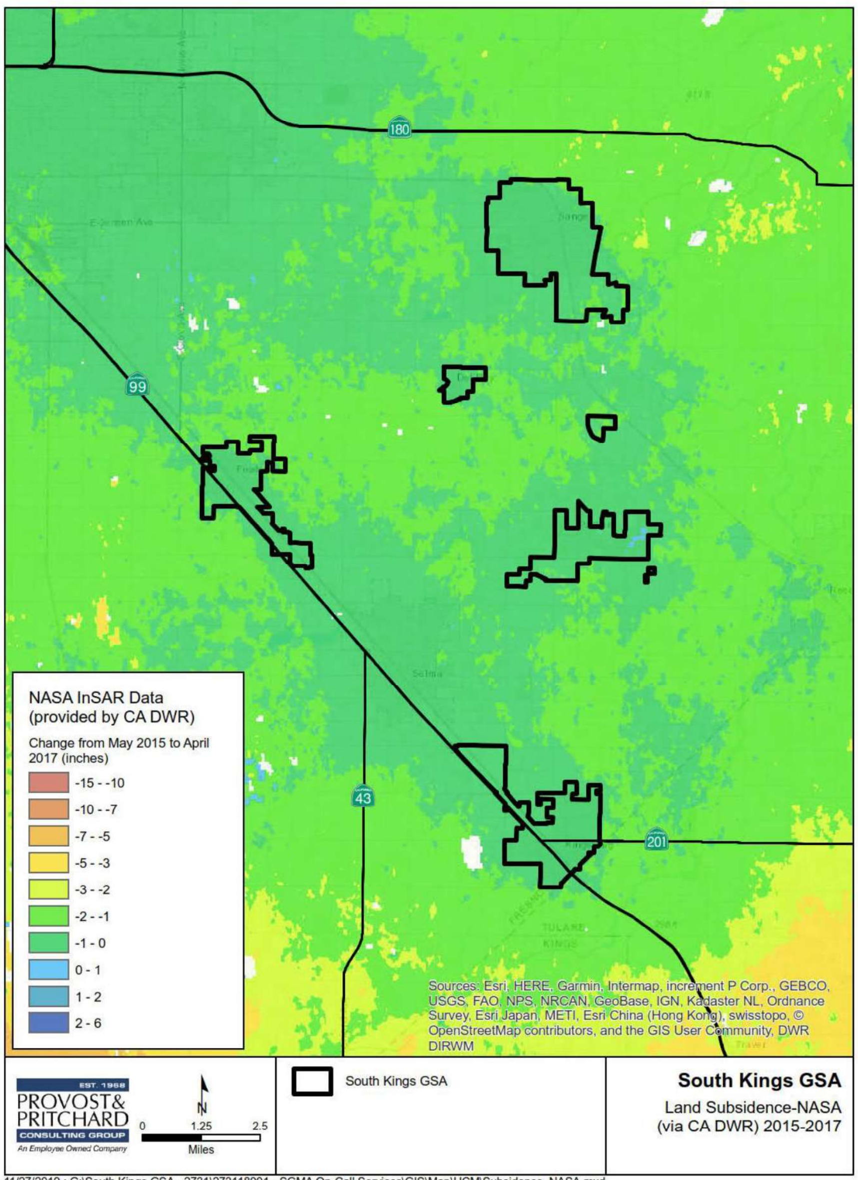


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Figure ES-5: Land Subsidence for South Kings 2015 to 2017 (NASA)

Water Budget

A water budget is an accounting of all the water that flows into and out of a specified area and describes the various components of the hydrologic cycle. A water budget includes all the water supplies, demands, modes of groundwater recharge, and non-recoverable losses, making it possible to identify how much water is stored in a system and changes in groundwater storage during a given period. Aggregated water budgets have been prepared for the entire Kings Subbasin as well as detailed water budgets for the SKGSA and CKGSA combined. The water budgets for SKGSA and CKGSA were prepared in a combined manner due to the geographic positioning of the SKGSA being wholly within the CKGSA.

Water budgets were prepared for a historic period (1997-2011), current period (2016-2017) and future periods (2040 and 2070). The current water budget shows that the combined SKGSA/CKGSA is nearly, but not quite sustainable without an additional 1,100 acre-feet per year (AFY) in additional recharge; further, the combined area will require approximately 15,100 AFY by 2040 to remain sustainable. SKGSA and CKGSA determined the overdraft responsibility for each of the GSAs by estimating their Groundwater Impact, which is essentially their groundwater pumping minus any natural and artificial forms of recharge. Based on these discussions, an agreement was executed for SKGSA to account for approximately 42 percent of their groundwater extraction in recharge projects or through purchasing water from CKGSA. The SKGSA anticipates recharging an annual average of approximately 8,000 AF, based on population projections through 2040. As the member agencies grow and water use changes, that number may change and will potentially increase after 2040. Future water budgets beyond 2040 are based on assumption likely to require modifications as time progresses including population changes, conservation measures, boundary flows and climate change. With these and other uncertainties in the water budgets, they should be treated as approximations that will be updated as more concrete information is understood in the future.

Section 4 Sustainable Management Criteria

The SGMA defines Sustainable Groundwater Management as "*the management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results*." The avoidance of undesirable results is important to the success of the GSP. Several requirements from GSP regulations have been grouped together under the heading of sustainable management criteria, including a sustainability goal, undesirable results, minimum thresholds, and measurable objectives for various indicators of groundwater conditions.

The sustainability goal of the Kings Basin and the SKGSA is to ensure that by 2040 the basin is being operated to maintain a reliable water supply for current and future beneficial uses without experiencing undesirable results. This goal will be met by balancing water demand with available water supply to stabilize declining groundwater levels without significantly and unreasonably impacting water quality, land subsidence or interconnected surface water. The goal of the Basin is to correct and end the long-term trend of a declining water table understanding that water levels will fluctuate based on the season, hydrologic cycle and changing groundwater demands within the basin and its proximity.

The conditions with the basin and this GSA will be considered sustainable when:

- The basin is continuously operated within its sustainable yield.
- The current rate of decline of the groundwater table within the basin monitoring network indicator wells has been corrected and the multi-year trend of water elevations in these wells has been stabilized.
- Groundwater management activities prevent Undesirable Results to groundwater levels, groundwater storage, groundwater quality, land subsidence and interconnected surface water.

The seven GSAs within the Kings Basin have been coordinating within the basin for several years on how to reach and maintain sustainability within the Basin. As described in **Section 3**, the Kings Basin includes significantly varied geologic conditions, water supplies and land uses that lead to different conditions and obligations within each GSA. The basin setting describes the trend of declining groundwater levels within the basin and the SKGSA. The degree of decline varies by location based primarily on land use and available surface water supplies. The Basin setting information, including historic groundwater conditions, surface supplies, groundwater flows, land use and other information were used to establish the water budget, estimates of overdraft within each GSA and sustainable yield. The coordination efforts between the GSAs have resulted in agreed to initial quantities for each GSA to correct in order to correct current and future conditions. These quantities and each GSAs respective obligation will continue to be monitored and evaluated as additional information is gathered.

Each GSA in the Kings Basin is responsible for implementing projects and management actions required to reach sustainability and meet their initial mitigation requirements for overdraft. The measures that will be implemented to ensure the basin will be operated within the sustainable yield are identified in detail in **Section 6** of the GSP. Collectively, these projects and programs have been identified to ensure the basin reaches sustainability by 2040. The projects and programs include technical data and estimates of project benefit, and the total of these benefits within the basin meet the initial estimates for reaching sustainability within the basin.

The basin has agreed to a phased approach of increasing mitigation to achieve sustainability. The proposed mitigation schedule is shown in the table below.

Table ES-1: Overdraft Mitigation Schedule

Period	Percent of Overdraft Mitigated	Cumulative Mitigation
2020-2025	10%	10%
2025-2030	20%	30%
2030-2035	30%	60%
2035-2040	40%	100%

Groundwater Levels

The GSAs within the Kings Basin have defined the Undesirable Result for groundwater levels to be significant and unreasonable when either the water level has declined to a depth that a new productive well cannot be constructed, or when the water level has declined to a depth that water quality cannot be treated for beneficial use.

The following figure (Figure ES-6), shows a typical hydrograph of a monitoring well used to track groundwater levels in the SKGSA. The minimum thresholds established are based on implementation of incremental correction of the historic decline starting immediately and reaching stabilization by 2040. The measurable objective will include the extension of a current stabilizing trendline and the minimum threshold is a projection of the groundwater depth if another 5-year drought were to occur, based on the rate of decline of the last historic drought.

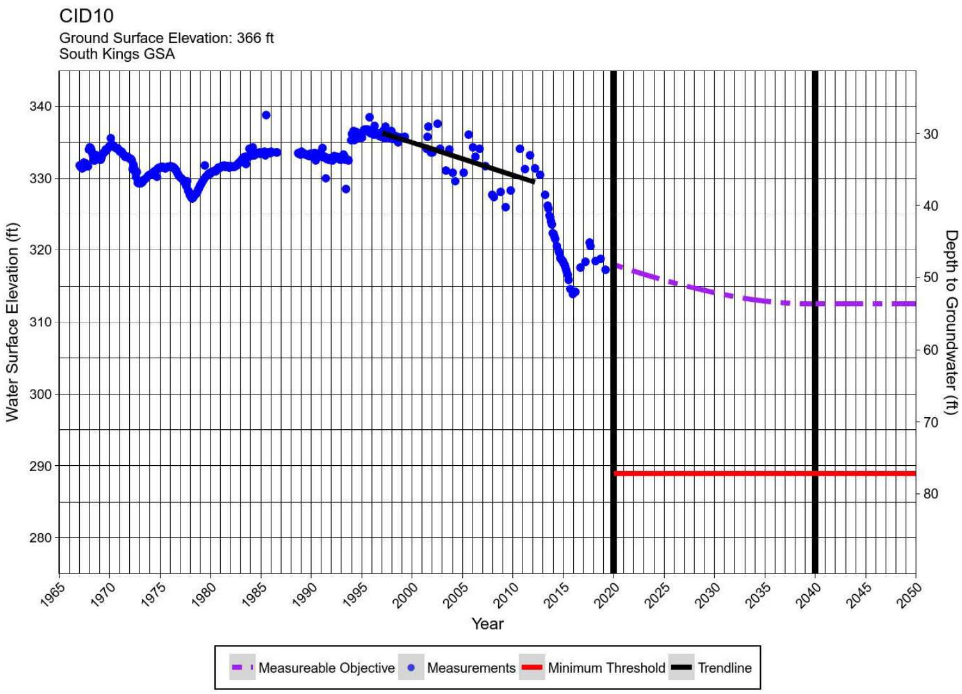

Figure ES-6: SKGSA Monitoring Well Hydrograph

Groundwater Storage

Groundwater storage is directly linked to groundwater levels, and the measurable objective and minimum threshold for groundwater levels dictate the amount of groundwater in storage and available for cyclic use. A common method was utilized to estimate change in groundwater storage for the entire subbasin and within each GSA as part of the coordination efforts within the Kings Subbasin. Storage change was estimated for the Kings Subbasin to be approximately -1.8 million acre-feet during the hydrologic average base period from spring 1997 to spring 2012, or about -122,000 AFY. Estimated storage change in the lower confined aquifer is not possible at this time due to limited or no data from confined wells in the area. Additionally, vertical leakage in the unconfined aquifer through wells and aquitards captures storage change in the confined aquifer. The goal, by 2040, is to stabilize changes in groundwater storage, prevent groundwater storage from falling below the overall storage shown in the measurable objectives, and to prevent the groundwater storage from fluctuating below the minimum thresholds.

Seawater Intrusion

As the SKGSA is more than 100 miles from the nearest seawater, seawater intrusion is not anticipated to effect the GSA and is not discussed further in this GSP.

Groundwater Quality

Groundwater monitoring and reporting by community water systems is a requirement of California Code of Regulations (CCR) Title 22. Community and other public supply wells within the SKGSA monitoring network are already being routinely monitored for a wide range of contaminants, including the chemicals of concern, by the water purveyors under Title 22. The SKGSA will only have authority related to groundwater pumping policies, however the SKGSA will review and analyze publicly available routine groundwater monitoring data, as it becomes available, in order to monitor if groundwater pumping may be exacerbating groundwater quality concerns and where to enforce pumping restrictions should it become necessary.

Within the Kings Basin, the measurable objective shall be to maintain water quality at potable water standards, or in other words, below MCLs for the chemicals of concern. In areas where chemical concentrations are initially above MCLs, the measurable objective shall be to maintain stable or improving groundwater quality trends.

Land Subsidence

As discussed above, NASA InSAR data shows that subsidence in most of the SKGSA area was between 0 and 1 inch over a two-year period. This amount of subsidence is considered very minimal and has had no visual impacts on structures or wells. Furthermore, most inelastic subsidence occurs when there is heavy pumping from below a confining layer such as the E clay; however, this layer does not extend to the SKGSA area, thus subsidence is not anticipated to be an issue. Lastly, as groundwater levels are stabilized over the implementation of this plan, the minimal subsidence is expected to do the same. Therefore, no criteria needs be established for sustainable management criteria. It is planned that there will be periodic checkups to identify if this assertion continues to be true. If trends do not behave as expected, criteria may be established in the future as needed

Interconnected Surface Water and Groundwater

Interconnected surface water has been defined in the California Code of Regulations Title 23, Division 2, Chapter 1.5, Subchapter 2 as surface water that is hydraulically connected at any point by a continuous saturated zone to the underlying aquifer and the overlying surface water is not completely depleted.

The only place that SKGSA may be close enough to affect river flows is in the south east corner of Sanger; however, most of the wells for municipal use are located closer to the center of town, away from the river. The only other surface water in the SKGSA area are a couple of Consolidated ID canals that run through the cities, but groundwater depth throughout the rest of the GSA ranges from 40 to 80 feet, indicating a lack of connection. Due to the current lack of undesirable results and the unlikely event that undesirable results will occur caused by SKGSA pumping, sustainable management criteria will not be evaluated for interconnected surface water.

Section 5 Monitoring Network

This chapter identifies the monitoring network being developed by the SKGSA that collects sufficient data to determine short-term, seasonal, and long-term trends in groundwater and related surface conditions and will yield information necessary to support the implementation of this Plan, evaluation of the effectiveness of this Plan, and decision making by the SKGSA management.

The following figure illustrates the monitoring well network for the SKGSA. The SKGSA will continue to evaluate potential new monitoring well sites, the efficacy of existing monitoring wells, and opportunities to more fully understand the regional data by reviewing nearby well data. Separate monitoring wells are identified to monitor water quality, otherwise all criteria will be evaluated utilizing the remaining wells.

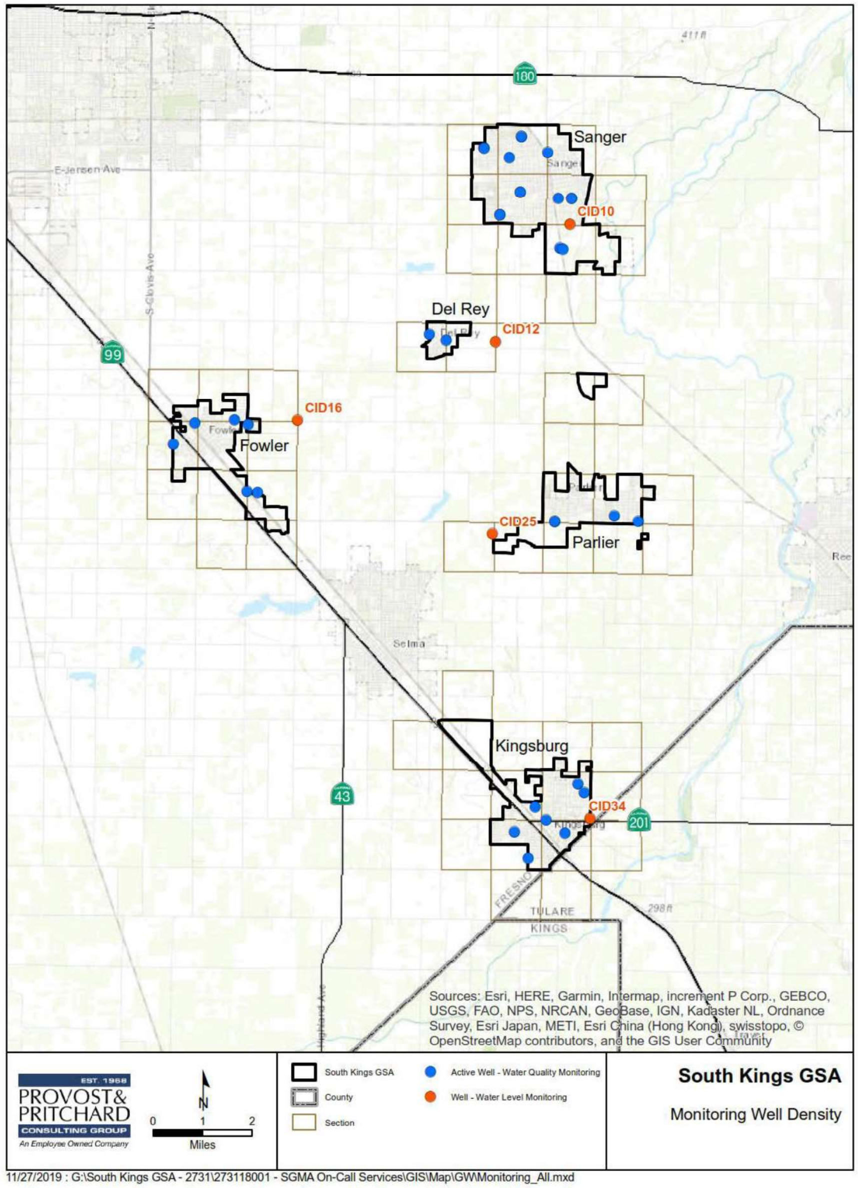

Figure ES-7: SKGSA Monitoring Wells

Chapter 6 Projects and Management Actions to Achieve Sustainability

GSAs have two primary types of tools which may be used to achieve sustainable groundwater management: potential Projects and Management Actions. The SKGSA will reach sustainability if it implements both projects and management actions to mitigate impact of groundwater extraction. The SKGSA efforts focus primarily on recharge of groundwater supplies within the GSA and reduction of groundwater demand and increase of data collection including education and outreach, regulatory policies, incentive-based programs, and enforcement actions.

The SKGSA has identified nineteen potential Projects which may be undertaken by the GSA or individual member agencies to aid in achieving sustainability. Each of the projects are a recharge basin and would allow the member agency the ability to recharge surface water supplies. The recharge basins allow for surface water to be diverted and recharged to replenish the aquifer. If the rain/snowmelt patterns change and more surface water is available outside the normal crop irrigation demand season, these proposed facilities may allow each member agency to take advantage of the timing of the surface water availability and may make more surface water available for recharge.

The SKGSA has identified nine Management Actions which may be undertaken by the GSA or individual member agencies to aid in achieving sustainability. The identified potential Management Actions discussed in Section 6 may be implemented in any order or not at all if determined unnecessary based on sustainability achievement through other methods. The Management Actions may be further refined or revised based on stakeholder input and/or updated available information and/or science. The Management Actions identified include: Education and Outreach, Wellhead Requirements, and Groundwater Pumping Restrictions.

Between the potential Projects and Management Actions, the GSA has identified at least 7,848 AFY of mitigation against groundwater extraction by 2040, which achieves the goals set forth in this GSP. This mitigation amount does not include estimates of benefits from potential Management Actions. The GSA understands the Projects and Management Actions are uncertain, may take longer to implement and may yield varying levels of benefits from those discussed in this GSP. The GSA is equipped to modify and expand, as necessary, to achieve its sustainability goals. Modifications to these Projects and Management Actions will be included in subsequent updates to the GSP.

Chapter 7 Plan Implementation

The adoption of the GSP will be the official start of the Plan Implementation. The GSA will continue its efforts to engage the public and secure the necessary funding to successfully monitor and manage groundwater resources within the Plan Area in a sustainable manner. While the GSP is being reviewed by DWR, the GSA will coordinate with various stakeholders and beneficial users to improve the monitoring network and begin the implementation of projects and management actions. The plan will be implemented under the existing authorities of both the GSA and the member agencies and, through coordinated activities, the groundwater resources of the region will now be managed.

Section 7 includes estimates of costs of implementing the GSP, including Projects and Management Actions; administration costs will be spread proportionally across the member agencies.

Successful implementation of this GSP will be an ongoing effort through 2040 and beyond. The GSA is committed to meeting their sustainability goals and will continue to modify and adjust its approach, when necessary. Those efforts will include engaging stakeholders and the public, monitoring and evaluating groundwater and environmental data pertaining to the GSP sustainability indicators, and overall basin operation and coordination with the other GSAs in the Kings Subbasin.

The GSA will include updates to changes to the GSP or policy changes in its annual report and submit to that report to DWR. Certain components of the GSP may be re-evaluated more frequently than every five years, if deemed necessary. This may occur, for example, if sustainability goals are not being met, additional data is acquired, or priorities change. Those results will be incorporated into the GSP when it is resubmitted to DWR every five years.