

EXECUTIVE SUMMARY

Pending.

1 ADMINISTRATIVE INFORMATION

The Kern River Groundwater Sustainability Agency (KRGSA) covers approximately 361 square miles of the critically-overdrafted Kern County Subbasin (5-022.14), where numerous water and irrigation districts, municipalities, industries, mutual water companies, small water systems, and Kern County all rely on the shared groundwater resources. In compliance with the Sustainable Groundwater Management Act (SGMA), the KRGSA was formed to cooperatively manage local groundwater in a sustainable manner within the KRGSA boundaries as shown on **Figure 1-1**.

The KRGSA is an exclusive Groundwater Sustainability Agency (GSA) in the Kern County Subbasin. KRGSA member agencies include the City of Bakersfield, Kern Delta Water District (KDWD), Kern County Water Agency (KCWA) Improvement District No. 4 (ID4), North of the River Municipal Water District/Oildale Mutual Water Company (NORMWD/OMWC), and East Niles Community Services District (ENCSD). A Notice of Decision by these agencies to become a GSA is included in **Appendix A**. Service areas of these agencies are shown on **Figure 1-2**.

Greenfield CWD is a separate GSA coordinating with the KRGSA to prepare this Groundwater Sustainability Plan (GSP) through an MOU; Greenfield CWD service area is also shown on **Figure 1-2**. In addition, some small pockets of unincorporated lands managed by Kern County are outside of the KRGSA boundaries but are included in this GSP through an MOU with the County. These KRGSA GSP agencies are cooperating with other agencies in the Subbasin for the development of Groundwater Sustainability Plans (GSPs) that collectively cover the entire Subbasin as required by SGMA. A Notice of Intent to Prepare a Groundwater Sustainability Plan was filed with the Department of Water Resources on May 19, 2017 and included in **Appendix B**. The MOUs with Greenfield CWD and Kern County to coordinate on the GSP are included in **Appendix C**.

KRGSA boundaries were developed to generally coincide with Bakersfield city limits and jurisdictional boundaries of other member service areas. A small area of the city limits in the northeast is excluded from the GSA and covered by Olcese Water District (**Figure 1-2**). Since GSA formation, the KRGSA boundaries have been modified slightly to cooperate with and accommodate boundaries being developed by other GSAs. This process ensured that all areas of the Subbasin were covered by a Groundwater Sustainability Plan (GSP).

The KRGSA excludes small areas internal to the outer KRGSA boundary that coincide with unincorporated County lands or other water agencies that have been included in other GSAs (**Figure 1-2**). The largest such area is the Greenfield County Water District (Greenfield CWD), a GSA covering about 2,200 acres in the central KRGSA. Additional lands excluded from the KRGSA occur in unincorporated Kern County (**Figure 1-2**). Although these excluded lands are outside of the KRGSA, Greenfield CWD GSA and most of the County lands within the KRGSA boundary (unless covered by another agency) are included in the KRGSA GSP Plan Area as described in Section 2.

The KRGSA has also coordinated the preparation of the GSP with other GSAs in the Kern County Subbasin. There are currently 11 exclusive GSAs in the Subbasin including the KRGSA, as shown on **Figure 1-3**. Subbasin-wide coordination has been documented in a single coordination agreement that covers the entire basin. The coordination agreement is in **Appendix D**.

1.1 PURPOSE OF THE GROUNDWATER SUSTAINABILITY PLAN

The Kern County Subbasin has been designated a high priority, critically-overdrafted groundwater subbasin by the Department of Water Resources (DWR) (DWR, 2016a). As required by Water Code Section 10720.7, GSAs in critically overdrafted subbasins are required to prepare Groundwater Sustainability Plan (GSPs) for submittal to DWR by January 31, 2020. The purpose of the KRGSA GSP is to assess groundwater conditions within the KRGSA Plan Area, select appropriate sustainable management criteria, and develop projects and management actions to achieve and maintain long-term groundwater sustainability throughout the Plan implementation and planning horizon, pursuant to Water Code Section 10727 et seq.

1.2 SUSTAINABILITY GOAL

The Sustainability Goal of the KRGSA GSP, as defined in Water Code Section 10721(u), is to manage groundwater sustainably in the KRGSA Plan Area to:

- Support current and future beneficial uses of groundwater including municipal, agricultural, industrial, public supply, domestic, and environmental
- Optimize conjunctive use of surface water, imported water, and groundwater
- Avoid or eliminate undesirable results throughout the planning horizon.

Details regarding development and achievement of this sustainability goal are discussed in **Section 5** of this KRGSA GSP.

1.3 AGENCY INFORMATION

KRGSA formation events include:

- March 1, 2016 - KDWD held a public hearing to determine whether to become a GSA, and on March 15, 2016 - adopted Resolution No. 2016-03 electing to jointly become a GSA with the City of Bakersfield and ID4.
- March 2, 2016 - the City of Bakersfield held a public hearing to determine whether to become a GSA and on March 30, 2016 adopted Resolution No. 039-16 electing to jointly become a GSA with KDWD and ID4.
- March 21, 2016 - East Niles Community Services District held a public hearing and adopted Resolution No. 2016-04 to join the GSA.

- March 30, 2016 - City of Bakersfield, KDWD, and ID4 sign an MOU to form the KRGSA and manage groundwater resources sustainably within the GSA boundary.
- March 31, 2016 - ID4 held a public hearing to determine whether to become a GSA, and on March 31, 2016 adopted Resolution No. 11-16 electing to jointly become a GSA with the City of Bakersfield and KDWD.
- April 6, 2016 - NORMWD held a public hearing and adopted Resolution No. 2016-2 to join the GSA.
- April 12, 2016 - The City of Bakersfield, KDWD, and ID4 jointly submit a *Notice of Decision to Become a Groundwater Sustainability Agency* and were subsequently determined to be an Exclusive GSA by DWR.

As required by Sections 354.6 and 10723.8, the Notice of Decision to become a GSA is included in **Appendix A**. The appendix includes the MOU, resolutions, list of interested parties, and a preliminary service area boundary map. Since the original formation of the GSA, the KRGSA boundaries have been revised slightly to those shown on **Figures 1-1** and **1-2** in coordination with surrounding agencies.

The KRGSA point of contact is:

Art Chianello, Water Resources Manager
 Kern River Groundwater Sustainability Agency
 1000 Buena Vista Road
 Bakersfield, CA 93311
 661-326-3715
achianel@bakersfieldcity.us

GSA Program Coordinators, serving as Plan Managers, are:

Art Chianello, Water Resources Manager
 Water Resources Department
 (661) 326-3715
achianel@bakersfieldcity.us

Mark Mulkay, General Manager
 Kern Delta Water District
 (661) 834-4656
mulkay@kerndelta.org

David Beard, ID4 Manager
 Kern County Water Agency
 Improvement District No. 4
 (661) 634-1400
dbeard@kcwa.com

As previously stated, Greenfield CWD is cooperating with KRGSA in development of its GSP through an MOU (**Appendix C**). Greenfield CWD is also an exclusive GSA in its service area and has a long-standing relationship of coordination with KDWD. The Greenfield CWD Board of Directors approved a resolution (2016-01) to form a Groundwater Sustainability Agency (GSA) on March 14, 2016. The district filed its Notice of Intent (NOI) to serve as a Groundwater Sustainability Agency (GSA) on April 21, 2016 and was subsequently deemed an exclusive GSA by DWR. This provides Greenfield CWD with the legal authority to participate in the GSP development in the KRGSA Plan Area, which includes all of the Greenfield CWD GSA boundaries.

1.3.1 Organization and Management Structure of the Groundwater Sustainability Agency

As Parties to the MOU, Member Agencies have the following roles and responsibilities:

- Working jointly to fulfill the Purpose of the MOU, SGMA, and the development and implementation of a GSP within the boundaries of the KRGSA.
- Meeting regularly to discuss SGMA, GSP development and implementation activities, assignments, and ongoing work progress.
- Forming committees as necessary to discuss issues that impact the KRGSA.
- The City of Bakersfield and ID4 are jointly responsible for implementing the GSP in areas of the KRGSA that are within both City limits and ID4 boundaries.
- KDWD is responsible for implementing the GSP in agricultural areas within KDWD boundaries.

Unanimous consent of the Parties is the intent for all actions undertaken by the KRGSA; however, if unanimous consent is not achieved, a majority vote is sufficient and required. As stated in the MOU, in the event of an impasse or disagreement, the Parties shall use their best efforts to find a mutually agreeable result. To this effect, the Parties shall consult and negotiate with each other in good faith to reach a solution that is mutually satisfactory. If the Parties do not reach a solution, then the matter shall be submitted to non-binding arbitration or mediation within a reasonable period of time.

To manage the ongoing activities of the KRGSA, Plan Managers meet regularly, typically twice monthly. The Plan Managers guide GSP development, oversee GSA finances, set Board agenda items, and carry out Board actions. Plan Managers also monitor ongoing GSP activities by other GSAs in the Subbasin and coordinate GSP activities as needed.

The KRGSA is governed by a Board of Directors, one from each of the three largest member agencies, the City of Bakersfield, ID4, and KDWD. Currently, KRGSA Board meetings are held monthly at City Hall in Bakersfield on the first Thursday of each month. KRGSA Board meetings are public meetings held in accordance with the Ralph M. Brown Act (California Government Code sections 54950 et seq.) to encourage participation and facilitate communication and collaboration among all KRGSA Members, stakeholders, and other interested parties.

1.3.2 Legal Authority of the GSA

The City of Bakersfield, KDWD, and ID4 are all local public agencies overlying portions of the Kern County Subbasin and each is qualified to become a GSA.

- The City of Bakersfield is a California charter city; its charter was ratified and approved in 1915, with subsequent amendments (see <http://www.qcode.us/codes/bakersfield/>). Title 14 of the City Municipal Code sets forth the City water use regulations, domestic water service area, Fairhaven water service area, duty to supply pure water, and other requirements and obligations related to the City's water service to more than 365,000 residents.
- Kern Delta Water District is a California Water District formed in 1965 under Division 13 of the State Water Code for the purposes of protecting the Kern River Water Rights serving certain lands within the District. KDWD also contracts with the Kern County Water Agency for State Project Water.
- Kern County Water Agency (KCWA) was established by a special act of the Legislature in 1961 (Statutes of 1961, Chapter 1003) to establish a single entity in Kern County to negotiate and administer a water supply contract for State Water Project supply. ID4 was formed by a resolution adopted by the Agency Board on December 21, 1971 to provide a supplemental water supply for portions of the metropolitan Bakersfield area.

As stated in Water Code Section 10723.6 and identified in the MOU, the KRGSA has the power to develop and implement SGMA, including a GSP. The KRGSA can adopt standards for measuring and reporting water use, develop and implement policies designed to reduce or eliminate overdraft within the boundaries of the GSA, develop and implement conservation best management practices, and develop and implement metering, monitoring and reporting related to groundwater pumping.

1.3.3 Estimated Cost of Implementing the GSP and the GSA's Approach to Meet Costs

The KRGSA decided to prepare a GSP for managing groundwater within its boundaries (**Appendix B**); member agencies are cooperatively sharing costs of the Plan. The KRGSA contracted with Todd Groundwater to develop the GSP. KRGSA also contracted with Horizon Water and Environment for Subbasin coordination, assistance with preparation of the GSP, a communication plan, and initial community outreach. Todd Groundwater's amended contract to develop the GSP is for \$723,029 and Horizon's contract is for \$192,000.

The KRGSA is also coordinating with the Kern Groundwater Authority (KGA) and other GSAs in the Kern County Subbasin to ensure Subbasin-wide SGMA compliance. In addition to coordination meetings and agreements, the KRGSA, KGA, and other Subbasin GSAs have cooperated in the development of a local Subbasin numerical model, which is based on a regional model referred to as C2VSim developed by the Department of Water Resources (DWR). The local Subbasin model, referred to as C2VSimFG-Kern, has been used to develop historical, current and future projected water budgets for the Kern County Subbasin and adjacent White Wolf Subbasin. The cost for this work was shared among subbasin GSAs

and totaled \$431,957 for the historical and current water budgets and \$335,000 for the projected water budgets. KRGSA paid approximately 17 percent of the total Subbasin modeling costs.

KRGSA Member Agencies are collectively funding the GSP development and provide financial resources on an as needed basis. Plan Managers and their staff have also committed a significant amount of time to GSP efforts including both preparation and Subbasin coordination. In addition to these local funding sources, the GSP is being partially funded through a DWR grant under the Proposition 1 Sustainable Groundwater Planning Grant (SGPG) program.

Costs to implement the GSP include ongoing monitoring, annual reporting, and development of projects and management actions. Estimation of costs of the projects and actions are in development and will be described in **Section 7** of the Final GSP along with the means for the KRGSA to fund implementation.

1.4 GOVERNING REGULATIONS AND GUIDANCE DOCUMENTS

The KRGSA GSP is being developed to comply with requirements of the Sustainable Groundwater Management Act as codified in the California Water Code, amended in 2015, and effective January 1, 2016. GSP preparation follows the GSP regulations (CCR, Title 23, Division 2., Chapter 1.5, Subchapter 2). The analyses and information provided herein also consider the Best Management Practice Framework documents prepared by DWR to provide Best Management Practices (BMPs) for the sustainable management of groundwater (DWR, 2016, 2017). As defined by the GSP regulations:

“Best management practice” refers to a practice, or combination of practices, that are designed to achieve sustainable groundwater management and have been determined to be technologically and economically effective, practicable, and based on best available science (§351(i)).

BMPs provide guidance and clarification for GSP regulations and also provide examples to assist with the primary components of a GSP. BMPs are voluntary and alternative methods and analyses are acceptable when shown how they also achieve GSP regulatory compliance. DWR has also provided Guidance Documents for assistance in GSP preparation. Once such document includes a Preparation Checklist for GSP submittal to serve as an optional guide for verifying that all requirements of the GSP regulations have been met. A completed Preparation Checklist for GSP Submittal is provided in **Appendix E** to provide references and page numbers in the KRGSA GSP to facilitate review of the document.

1.5 GSP ORGANIZATION

This GSP is organized to follow the GSP regulations (23 California Code of Regulations §§ 350 et seq.) to provide consistency among Subbasin GSPs and facilitate DWR review. Major sections include:

- Executive Summary
- Administrative Information
- Plan Area

- Basin Setting
 - Hydrogeologic Conceptual Model
 - Groundwater Conditions
 - Water Budgets
- Sustainable Management Criteria
- Monitoring Networks
- Projects and Management Actions
- Plan Implementation
- References and Technical Studies





