

1 Introduction & Plan Area

1.1 General Information

1.1.1 Purpose of Groundwater Sustainability Plan

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 (SGMA) and is codified in Section 10720 et seq. of the California Water Code. In his signing statement, Governor Edmund G. Brown, Jr., emphasized that “groundwater management in California is best accomplished locally.” This legislation created a statutory framework for groundwater management in a manner that can be sustained during the planning and implementation horizon without causing undesirable results.

SGMA requires governments and water agencies of high and medium priority basins to achieve sustainability by avoiding undesirable results. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, including the Kaweah Subbasin to which the East Kaweah Groundwater Sustainability Agency (EKGSA) is a portion, the deadline for achieving sustainability is 2040.

In order to comply with the requirements of SGMA, the EKGSA and the two other Kaweah Subbasin Groundwater Sustainability Agencies (GSA) have contracted with GEI Consultants, Inc. (GEI) for development of the basin setting. The EKGSA has additionally contracted with Provost & Pritchard for the preparation of this Groundwater Sustainability Plan (GSP). The GSP serves to do the following:

- *Describe the basin setting (Hydrogeologic Conceptual Model) to define and describe the geographic and geologic setting of the EKGSA boundaries*
- *Identify and describe the Sustainability Goal for the Kaweah Subbasin and the EKGSA area.*
- *Identify and describe the Six Undesirable Results set forth in SGMA, as they pertain to the Kaweah Sub-Basin and the EKGSA jurisdictional area.*
- *Identify and describe the Specific Minimum Thresholds and Measurable Objectives required for the EKGSA to achieve the Sustainability Goal*
- *Define and identify Projects and Management Actions proposed by EKGSA to achieve the Sustainability Goal.*

1.1.2 Sustainability Goal

SGMA requires that all subbasins develop actions and projects intended to address six Undesirable Results. The EKGSA’s GSP will define each Undesirable Result (UR) and how the EKGSA will address how it will avoid these negative issues to be within sustainable trends by January 31, 2040. For each UR, the GSP will describe how the EKGSA will measure the indicators relative to each against established minimum thresholds. It will also describe the reporting structures that will serve as updated understanding of UR trends. EKGSA intends to develop and implement a GSP that uses a holistic approach to reach groundwater sustainability within its jurisdictional boundary.

1.2 Agency Information

1.2.1 Organization and Management Structure of the GSA

Legal Requirements:

§354.6(a) The name and mailing address of the Agency

§354.6(b) The organization and management structure of the Agency, identifying persons with management authority for implementation of the Plan.

§354.6(c) The name and contact information, including the phone number, mailing address and electronic mail address, of the plan manager.

Agency's Name: East Kaweah GSA (EKGSA)
Agency's Address: 315 E. Lindmore Street, Lindsay, CA 93247
Agency's Mailing Address: P.O. Box 908, Lindsay, CA 93247
Agency's Phone Number: (559) 562-2534
Agency's Fax Number: (559) 562-5642
Agency's Website: ekgsa.org
Contact Person: Michael D. Hagman
Contact Person's Title: Executive Director, EKGSA
Contact Person's Email: mhagman@lindmoreid.com

The EKGSA is a Joint Powers Authority (JPA), formed pursuant to California Government Code sections 6500, et. seq, between the County of Tulare, City of Lindsay, Exeter Irrigation District (ID), Ivanhoe ID, Lindmore ID, Lindsay-Strathmore ID, and Stone Corral ID. The County of Tulare has land use authority over the entirety of EKGSA's jurisdiction. The EKGSA is one of three GSA's formed in the Kaweah Subbasin of the San Joaquin Valley's Tulare Lake Basin (Groundwater Basin 5-22.11). It submitted formation documents to the State of California on June 6, 2017.

The EKGSA has a governing board of eleven individuals all of whom are appointed. Seven of EKGSA's board members are elected officials from the member agencies and are appointed by their respective agency boards (one per agency). Two of the members are appointed by two water companies (Wutchumna Water Company and Sentinel Butte Mutual Water Company, which are special districts formed pursuant to various provisions of the California Water Code and California Water Code Appendix with the power to acquire water supplies for their districts and manage such supply) residing within the EKGSA boundaries. One member is appointed by the County of Tulare and approved by the EKGSA Board of Directors. One board member is appointed at-large by the EKGSA Board of Directors.

The EKGSA has two committees to assist in developing policy and giving guidance from technical, social, and interested party perspectives. The committees are as follows:

Technical Advisory Committee (TAC) – Each EKGSA Board member can appoint one representative to the EKGSA TAC. Therefore, there are eleven TAC representative positions. The TAC reviews, develops, and guides the Board, consultants and staff on technical issues relative to groundwater management and plan development/implementation. This includes development of the Basin Setting, water budget, and required measurable objectives, minimum thresholds and undesirable results on a Subbasin and GSA perspective.

Advisory Committee (AC) – There are eleven members of the advisory committee and it is chaired by an EKGSA Board member. This Board member leads the AC but does not vote on the AC. Membership in the AC is on an appointment basis. As the board desired participation from a variety of disciplines and interests, committee members were appointed via application process which identified

the applicants interests and background as it pertained to water (community, agricultural, management, environmental, etc.) The Board created seats for agriculture (3 members), domestic well user (1 member), rural community (3 members), environmental (2 members), water company (1 member) and, other (1 member - science). The AC considers stakeholder interest in GSP development and implementation from a variety of disciplines and assists in the communication of the EKGSA efforts through the development of a communication and engagement plan.

The EKGSA is led by an Executive Director (ED) under direction of the EKGSA Board of Directors. The ED's role is to coordinate all the Board provided resources toward developing and implementing a GSP with the intention of achieving the goals of SGMA by the year 2040.

Resources Provided:

- Subbasin setting (HCM and Numeric Model) consultants (GEI)
- Engineering/Hydrogeologic support consultants (Provost & Pritchard)
- Legal Counsel (Klein, DeNatale, Goldner, Attorneys at Law)
- Other staff as necessary

1.2.2 Legal Authority of the GSA

Legal Requirements:

§354.6(d) The legal authority of the Agency, with specific reference to citations setting forth the duties, powers, and responsibilities of the Agency, demonstrating that the Agency has the legal authority to implement the plan.

§354.6(e) An estimate of the cost of implementing the Plan and a general description of how the Agency plans to meet those costs.

In accordance with the State of California's Sustainable Groundwater Management Act (AB1739, SB1168, SB1319) signed into law on September 16, 2014 by Governor Jerry Brown, agencies on the eastern portion of the Kaweah Subbasin formed a JPA with the goal of complying with SGMA. Per the law, a public agency or agencies were permitted to form GSAs within the Subbasin (Division 6 of the Water Code, Part 2.74, Chapter 4, Section (§) 10723 et seq. and amendments made to SGMA by Senate Bill (SB) 13 in September 2015). On December 14, 2016 the Board of the EKGSA voted, in Resolution 2016-02, to form an exclusive GSA wholly within the Kaweah Subbasin.

1.2.3 Coordination

1.2.3.1 Kaweah Subbasin Coordination Agreement

Legal Requirements:

§ 357.4. Coordination Agreements

- (a) Agencies intending to develop and implement multiple Plans pursuant to Water Code Section 10727(b)(3) shall enter into a coordination agreement to ensure that the Plans are developed and implemented utilizing the same data and methodologies, and that elements of the Plans necessary to achieve the sustainability goal for the basin are based upon consistent interpretations of the basin setting.
- (b) Coordination agreements shall describe the following:
 - (1) A point of contact with the Department.
 - (2) The responsibilities of each Agency for meeting the terms of the agreement, the procedures for the timely exchange of information between Agencies, and procedures for resolving conflicts between Agencies.
 - (3) How the Agencies have used the same data and methodologies for assumptions described in Water Code Section 10727.6 to prepare coordinated Plans, including the following:
 - (A) Groundwater elevation data, supported by the quality, frequency, and spatial distribution of data in the monitoring network and the monitoring objectives as described in Subarticle 4 of Article 5.
 - (B) A coordinated water budget for the basin, as described in Section 354.18, including groundwater extraction data, surface water supply, total water use, and change in groundwater in storage.
 - (C) Sustainable yield for the basin, supported by a description of the undesirable results for the basin, and an explanation of how the minimum thresholds and measurable objectives defined by each Plan relate to those undesirable results, based on information described in the basin setting.
- (c) The coordination agreement shall explain how the Plans implemented together, satisfy the requirements of the Act and are in substantial compliance with this Subchapter
- (d) The coordination agreement shall describe a process for submitting all Plans, Plan amendments, supporting information, all monitoring data and other pertinent information, along with annual reports and periodic evaluations.
- (e) The coordination agreement shall describe a coordinated data management system for the basin, as described in Section 352.6.
- (f) Coordination agreements shall identify adjudicated areas within the basin, and any local agencies that have adopted an Alternative that has been accepted by the Department. If an Agency forms in a basin managed by an Alternative, the Agency shall evaluate the agreement with the Alternative prepared pursuant to Section 358.2 and determine whether it satisfies the requirements of this Section.
- (g) The coordination agreement shall be submitted to the Department together with the Plans for the basin and, if approved, shall become part of the Plan for each participating Agency.
- (h) The Department shall evaluate a coordination agreement for compliance with the procedural and technical requirements of this Section, to ensure that the agreement is binding on all parties, and that provisions of the agreement are sufficient to address any disputes between or among parties to the agreement.
- (i) Coordination agreements shall be reviewed as part of the five-year assessment, revised as necessary, dated, and signed by all parties.

The Kaweah Subbasin GSAs worked to coordinate Subbasin-wide sustainability goal, undesirable results, and sustainability criteria, amongst many other items. An approved Coordination Agreement will be submitted with this GSP and is also included as [Appendix 1-A](#).

1.2.3.2 Inter-Basin Agreements

Legal Requirements:

§ 357.2. Inter-basin Agreements

Two or more Agencies may enter into an agreement to establish compatible sustainability goals and understanding regarding fundamental elements of the Plans of each Agency as they relate to sustainable groundwater management. Inter-basin agreements may be included in the Plan to support a finding that implementation of the Plan will not adversely affect an adjacent basin's ability to implement its Plan or impede the ability to achieve its sustainability goal. Inter-basin agreements should facilitate the exchange of technical information between Agencies and include a process to resolve disputes concerning the interpretation of that information. Inter-basin agreements may include any information the participating Agencies deem appropriate, such as the following:

(a) General information:

- (1) Identity of each basin participating in and covered by the terms of the agreement.
- (2) A list of the Agencies or other public agencies or other entities with groundwater management responsibilities in each basin.
- (3) A list of the Plans, Alternatives, or adjudicated areas in each basin.

(b) Technical information:

- (1) An estimate of groundwater flow across basin boundaries, including consistent and coordinated data, methods and assumptions.
- (2) An estimate of stream-aquifer interactions at boundaries.
- (3) A common understanding of the geology and hydrology of the basins and the hydraulic connectivity as it applies to the Agency's determination of groundwater flow across basin boundaries and description of the different assumptions utilized by different Plans and how the Agencies reconciled those differences.
- (4) Sustainable management criteria and a monitoring network that would confirm that no adverse impacts result from the implementation of the Plans of any party to the agreement. If minimum thresholds or measurable objectives differ substantially between basins, the agreement should specify how the Agencies will reconcile those differences and manage the basins to avoid undesirable results. The Agreement should identify the differences that the parties consider significant and include a plan and schedule to reduce uncertainties to collectively resolve those uncertainties and differences.

(c) A description of the process for identifying and resolving conflicts between Agencies that are parties to the agreement.

(d) Inter-basin agreements submitted to the Department shall be posted on the Department's website.

During the development of the GSP, Kaweah Subbasin technical staff met with neighboring Subbasin technical staff to coordinate and share data for modeling boundary conditions. Inter-basin agreements and policies are anticipated to begin shortly into the Implementation period.

1.3 GSP Implementation Costs

Legal Requirements:

§354.6(e) An estimate of the cost of implementing the Plan and a general description of how the Agency plans to meet those costs.

The EKGSA, on behalf of its member agencies and stakeholders, will incur costs to develop and implement its GSP, report the plan efforts annually, and maintain the plan via 5-year updates. Costs and sources of funding are identified as:

- Governance – Estimated costs are \$210,000 annually (plus inflationary increases going forward). Member agencies pay equal share of annual governance costs on a quarterly basis.
- Initial Plan Development – Estimated costs for plan development (including EKGSA’s share of sub-basin setting costs) are \$1.27 million and will be funded as follows:

Table 1-1 Summary of GSP Development Costs

Activity	Cost	Revenue Source	Amount
Basin Setting (GEI, Inc) EKGSA Share	\$437,670	Tulare County Grant	\$ 64,640
		Proposition 1 Grant	\$373,030
EKGSA Groundwater Sustainability Plan	\$829,000	Proposition 1 Grant	\$126,970
		GSA Cost Assignment	\$702,030
Totals	\$1,266,670	Tulare County Grant	\$ 64,640
		Proposition 1 Grant	\$500,000
		GSA Cost Assignment	\$702,030

1.3.1 Costs Generated by GSP Implementation

Table 1-2 presents a description and an estimate of the costs associated with the implementation of the EKGSA GSP and measures associated with SGMA compliance.

1.3.2 GSP Implementation Funding

Through the SGMA Legislation, the EKGSA has the authority to collect funds through different means within its jurisdictional boundaries. These may include, but are not limited to:

- Per-Acre Assessments
- Extraction Fees
- Fines for Over-extraction
- Water Market Fees

In addition to various fee collection options, the EKGSA also has the authority to pursue local, State, and Federal grant funding on behalf of its member agencies for the development of projects within the EKGSA’s jurisdiction for the purposes of satisfying the requirements of SGMA.

Table 1-2 Estimated Costs for GSP Implementation

Item	Description	Estimated Cost
Monitoring	The EKGSA will incorporate a monitoring network tracking groundwater levels, groundwater quality, and land surface subsidence. The EKGSA also proposes to monitor agricultural demand via satellite imagery.	\$463,000 annually
Projects	The EKGSA proposes to incorporate more projects in the area to bolster water supplies by better use of contract supplies and wet-year water supplies.	\$15,535,000 (one-time costs amongst the various projects ¹).
Management Actions/Programs	The EKGSA will implement various management polices to manage, monitor, and correct overdraft conditions to reach sustainability	\$880,000 (various components are annual, others one-time)
Annual Report	The EKGSA will annually report data collected in the previous water year.	\$25,000 annually
5-Year GSP Update & Report	The EKGSA will evaluate data collected and projects and actions implemented to evaluate the GSP and make updates as necessary.	\$375,000 (\$75,000 per year of 5-year increment)

¹ Project costs to potentially be paid by individual project beneficiaries.

1.4 Description of Plan Area

Legal Requirements:

§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:

- (1) The area covered by the Plan, delineating areas managed by the Agency as an exclusive Agency and any areas for which the Agency is not an exclusive Agency, and the name and location of any adjacent basins.
- (2) Adjudicated areas, other Agencies within the basin, and areas covered by an Alternative.
- (3) Jurisdictional boundaries of federal or state land (including the identity of the agency with jurisdiction over that land), tribal land, cities, counties, agencies with water management responsibilities, and areas covered by relevant general plans.
- (4) Existing land use designations and the identification of water use sector and water source type.
- (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 best available information.

1.4.1 Geographic Areas Covered

The Kaweah Subbasin is surrounded by the Kings Groundwater Subbasin on the north, the Tule Groundwater Subbasin on the south, crystalline bedrock of the Sierra Nevada foothills on the east, and the Tulare Lake Subbasin on the west. **Figure 1-1** shows the bordering Subbasins to the Kaweah Subbasin. The Kaweah Subbasin is generally comprised of lands in the Kaweah Delta Water Conservation District. Major rivers and streams in the Subbasin include the Kaweah and St. Johns Rivers. The Kaweah River is the primary source of recharge to the area. Average annual precipitation is 7 to 13 inches, increasing eastward.

The EKGSA is one of three GSAs within the Kaweah Subbasin. There is no overlap among the GSAs and there are no adjudicated areas within the Subbasin. **Figure 1-2** shows the Groundwater Sustainability Agencies within Kaweah Subbasin. There are no adjudicated areas, nor tribal lands within the EKGSA area. State and federal lands are limited to those depicted in **Figure 1-3**. Two small areas in Stone Corral are owned by the California Department of Fish and Game, and the land around Lake Success owned by the Department of Defense slightly cross into the EKGSA area in the southeastern corner. The local entities participating in the East Kaweah GSP are shown in **Figure 1-4**.

1.4.2 Plan Area Setting

Tulare County land use survey was updated by Department of Water Resources (DWR) in 2014. The survey classifications can be seen in **Figure 1-5**. The figure provides a general idea of the local land uses. The area consists of a combination of large and small farming operations that generally host permanent crops such as citrus, fruit and nut trees, and vineyards. The farmed agricultural land represents nearly 90% of the total area.

Figure 1-6 is a map of well density in the GSA area. It illustrates wells per entire section, regardless of the proportion of the section that is within the GSA boundary. There are 2,932 wells shown. The map is based on information available from California's DWR database. It includes all wells for which a well completion report has been submitted and maintained. If a well was destroyed without issuance of a permit, then it will show up on the map as still active. The map does not necessarily show where pumping is concentrated since there is no differentiation between the different well uses. The figure generally indicates higher well densities in rural residential areas that are dependent on groundwater, so each household likely has its own well. **Figure 1-7** depicts the disadvantaged and severely disadvantaged communities (DAC, SDAC). Some of these communities have access to surface water, but most largely rely on groundwater through private or small system wells.

Table 1-3 shows the percent of area for each land-use classification. Permanent crops represent approximately 80.9%, followed by field/hay crops and idle/pasture each making up approximately 14.6%. The urban area is

primarily made up by the City of Lindsay. A few small census designated places and single rural family help round out the approximately 4.5% of the total area.

Table 1-3 Land-Use in East Kaweah GSA

Land-Use Classification	Percent of Total Area
Citrus and Subtropical	69.5
Deciduous Fruits and Nuts	8.1
Field Crops	6.5
Grain and Hay Crops	0.8
Idle	4.1
Pasture	3.2
Truck Nursery and Berry Crops	0.2
Urban	4.5
Vineyard	3.1
Total	100

Water use and water source for several agencies in the EKGSA are shown in Table 1-4. The only community water systems within EKGSA are for the City of Lindsay and communities of Strathmore, Tooleville, Tonyville, and Plainview. Table 1-5 summarizes the water supply availability for CVP and Kaweah supplies since 1977.

Table 1-4 Water Uses and Water Sources

Agency / Water Company	Water Use	Water Source			
		CVP	Kaweah	Other Local	Groundwater*
City of Lindsay	Residential	X			X
Exeter Irrigation District	Agricultural	X			
Ivanhoe Irrigation District	Agricultural	X	X		
Lewis Creek Water District	Agricultural	X			
Lindmore Irrigation District	Agricultural	X			
Lindsay-Strathmore Irrigation District	Agricultural	X	X		X
Pioneer Ditch Company	Agricultural			X	
Plainview Mutual Water Company	Residential				X
Sentinel Butte Mutual Water Company	Agricultural		X		
Stone Corral Irrigation District	Agricultural	X			
Strathmore Public Utility District	Residential	X			X
Tooleville Mutual Nonprofit Water Assoc.	Residential				X
Tulare County	Agricultural	X			
Wutchumna Water Company	Agricultural		X		

*Landowners within the EKGSA and agencies own groundwater wells.

Table 1-5 History of Water Availability

Year	Friant - Class 1	Friant - Class 2	Kaweah River
2018	88%	UcS*	60%
2017	100%	UcS	235%
2016	100%	0%	72%
2015	0%	0%	21%
2014	0%	0%	24%
2013	62%	0%	36%
2012	57%	0%	60%
2011	100%	20%	203%
2010	100%	15%	136%
2009	77%	18%	74%
2008	100%	5%	78%
2007	65%	0%	40%
2006	100%	UcS	167%
2005	100%	UcS	148%
2004	100%	8%	56%
2003	100%	5%	100%
2002	100%	8%	72%
2001	100%	5%	62%
2000	100%	17%	87%
1999	100%	20%	63%
1998	100%	10%	219%
1997	100%	60%	180%
1996	100%	58%	124%
1995	100%	100%	204%
1994	80%	0%	45%
1993	100%	90%	129%
1992	83%	0%	35%
1991	100%	0%	59%
1990	68%	0%	31%
No deficiencies on water deliveries 1978-1989			
1977	25%	0%	22%

*UcS indicates Uncontrolled Season

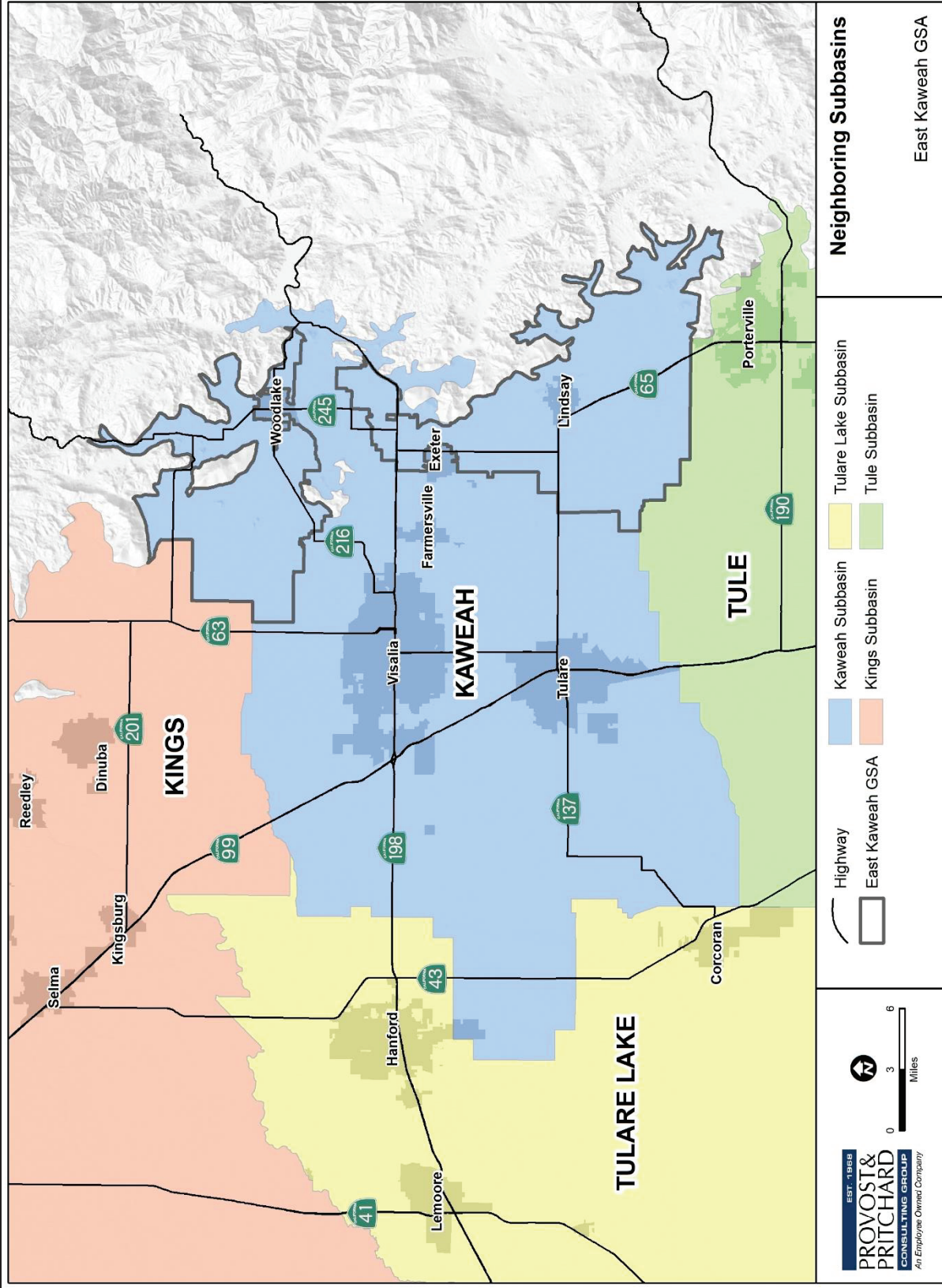


Figure 1-1 Groundwater Subbasins

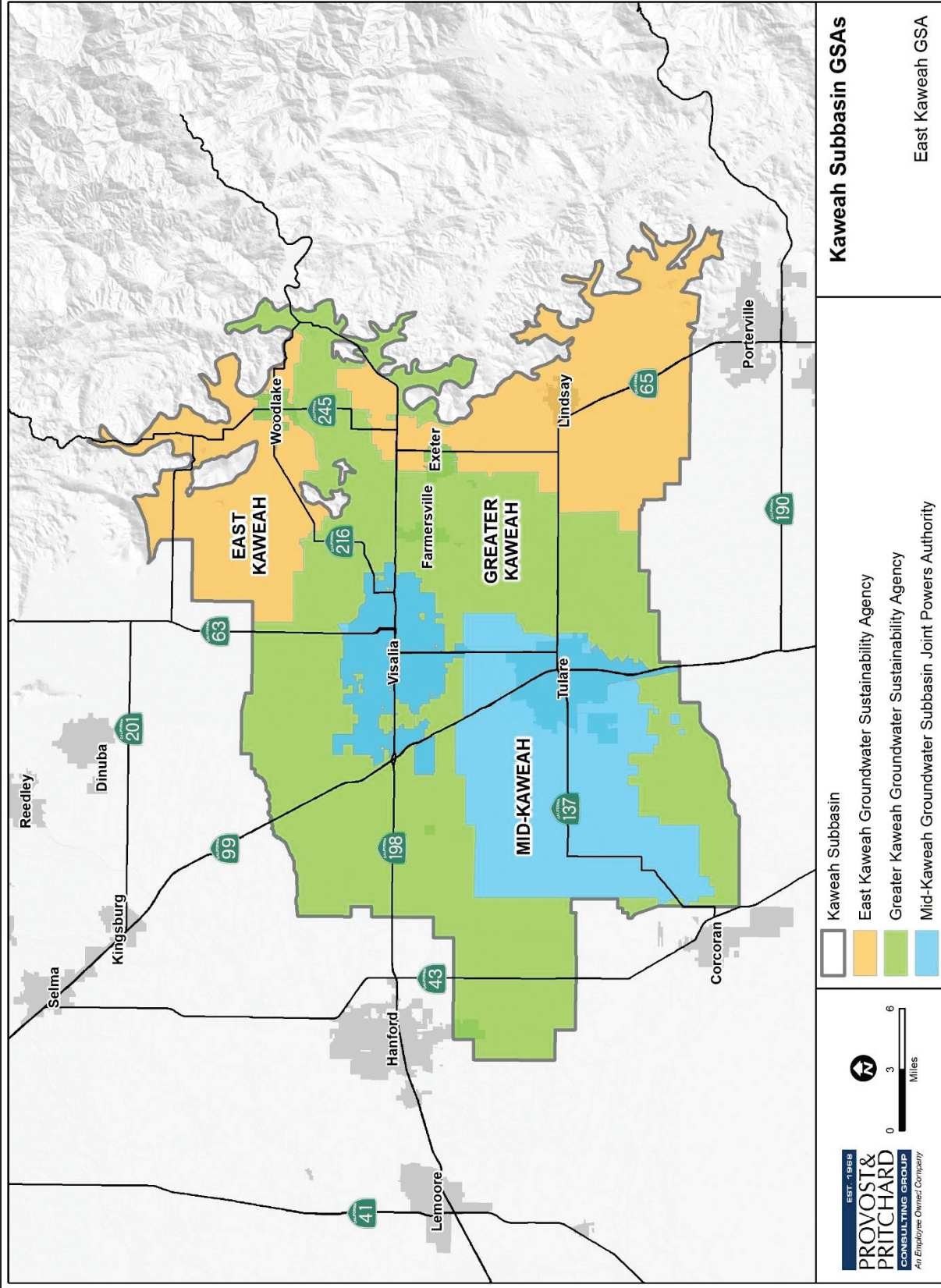


Figure 1-2 Groundwater Sustainability Agencies

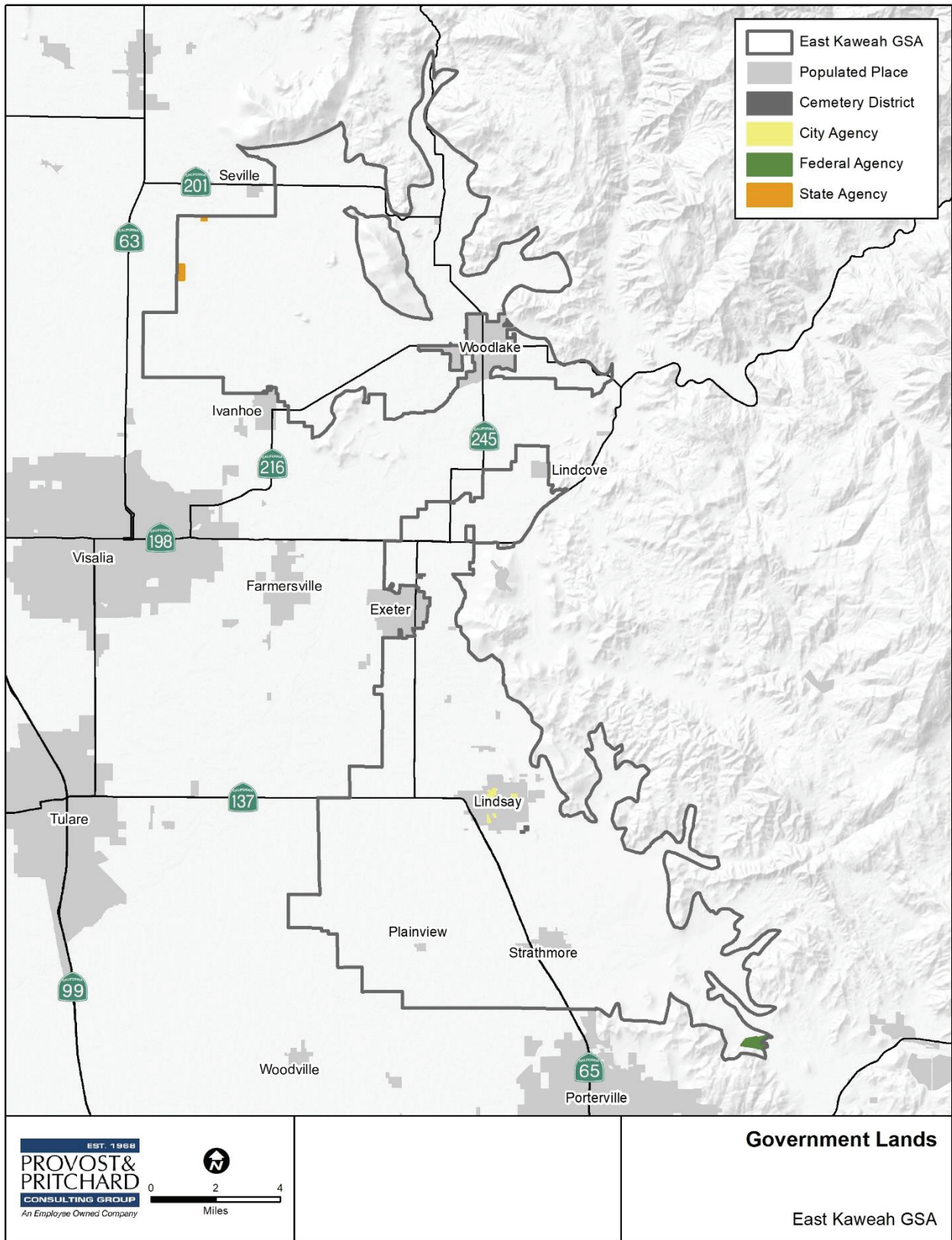


Figure 1-3 Government Lands

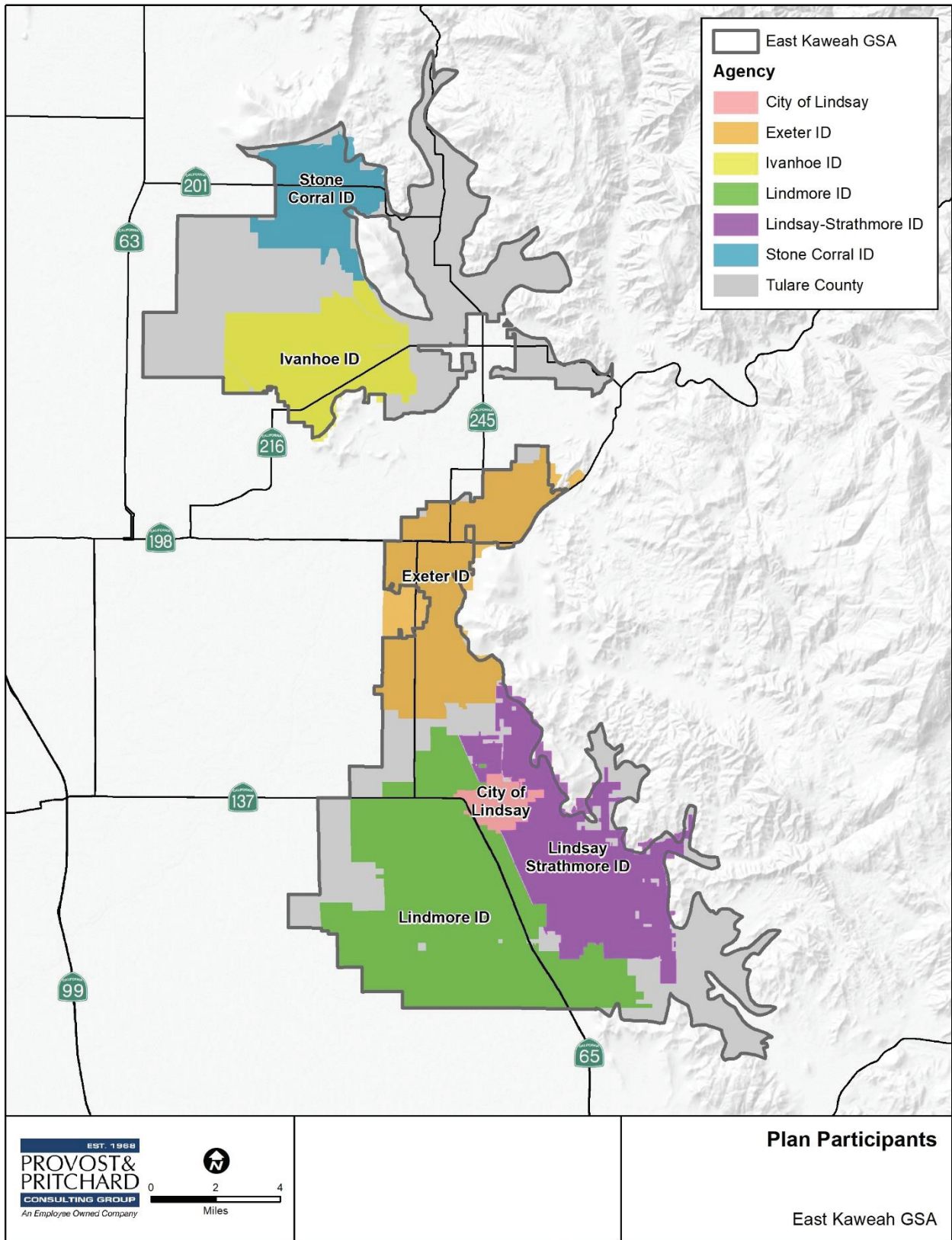


Figure 1-4 EKGSA Plan Participants

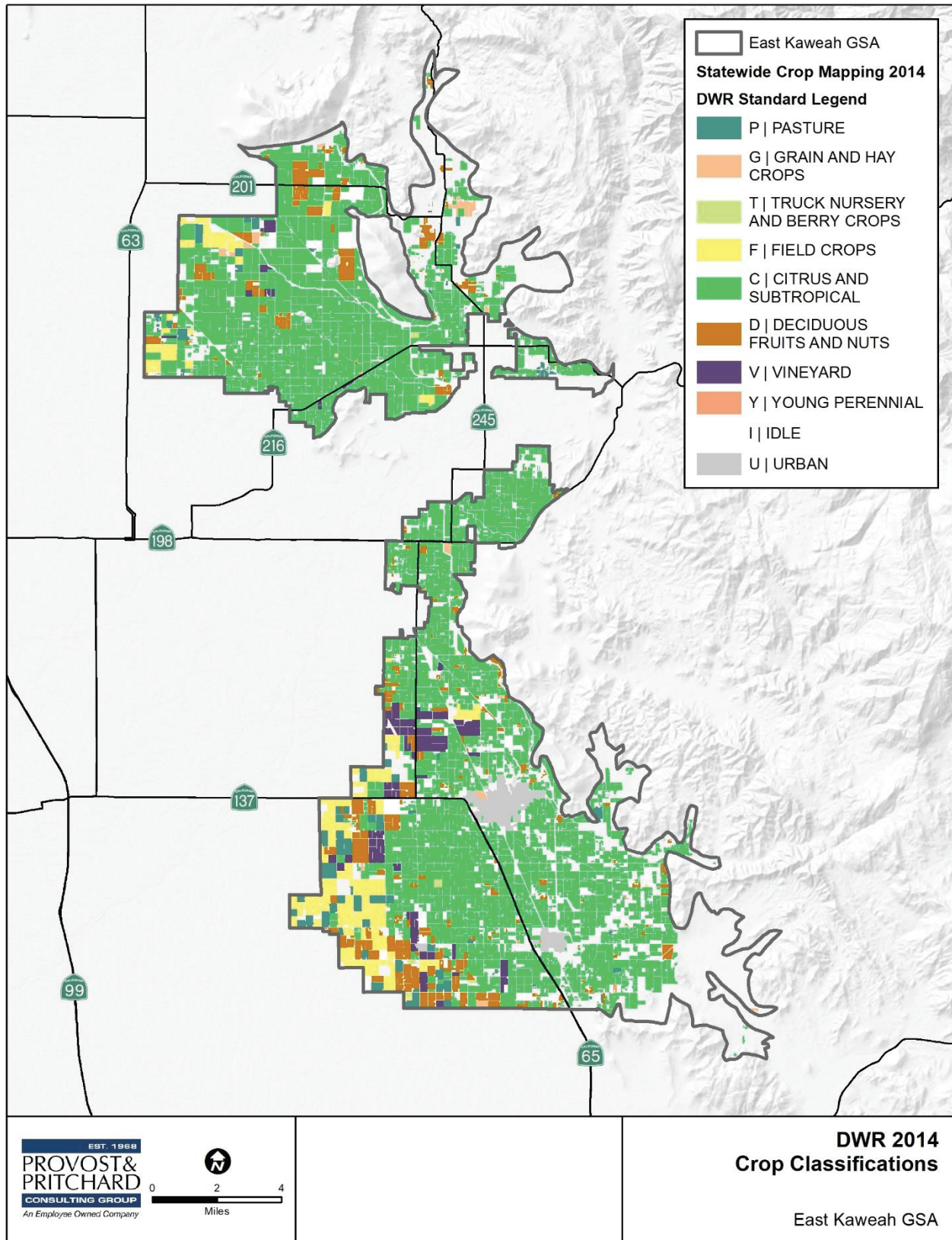


Figure 1-5 EKGSA Land Use

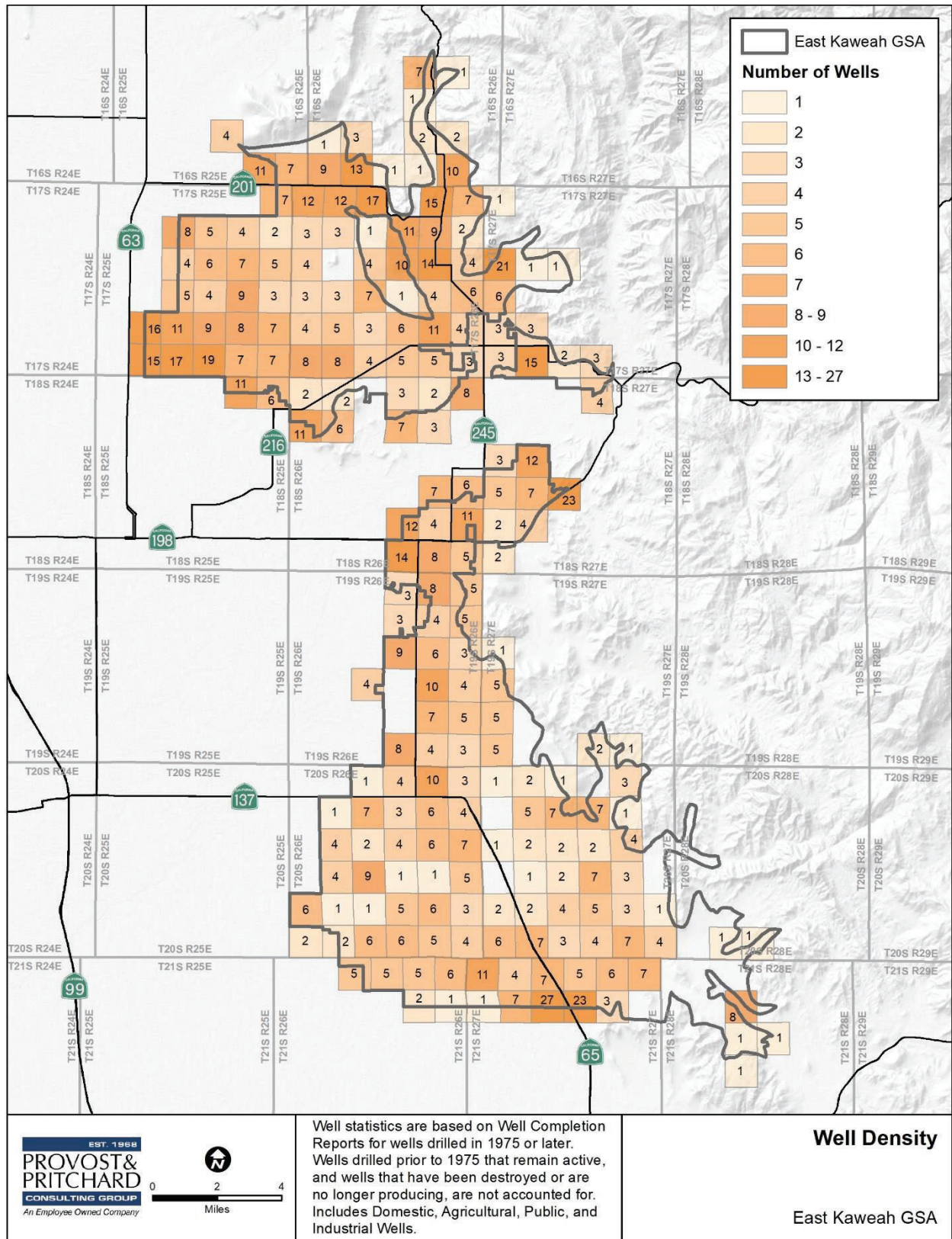


Figure 1-6 Well Density

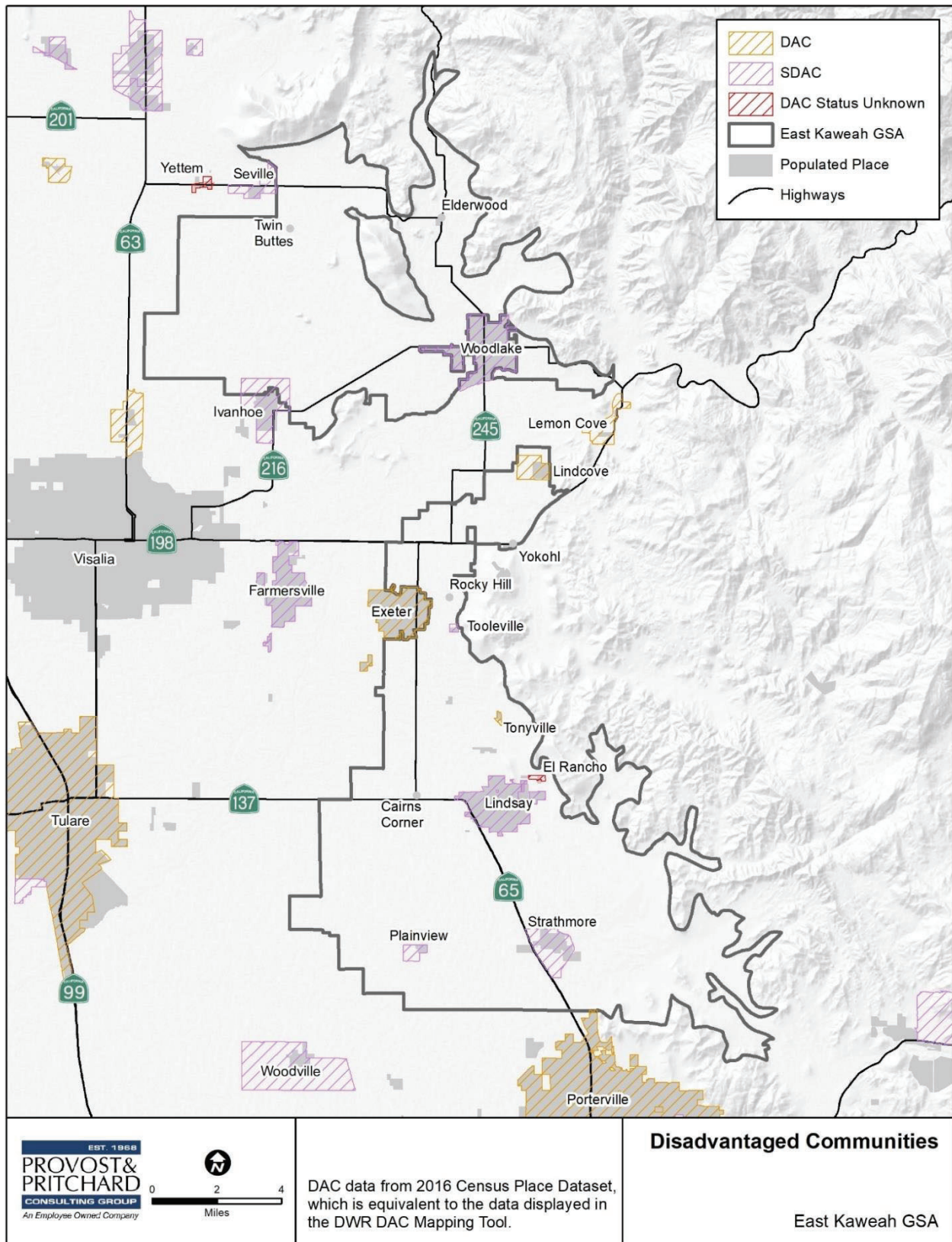


Figure 1-7 S/DAC in the EKGSA

1.4.3 General Plans in Plan Area

The GSA is subject to the Tulare County General Plan 2030 Update, which addresses seven mandatory elements: land use, circulation, housing, open-space, conservation, safety, and noise as those topics exist in the planning area.

A small portion of District 2 within Lindmore ID is subject to the Lindsay Land Use and Circulation Plan, Amendment 81-04 adopted by the Tulare County Board of Supervisors, Resolution 81-2346, on November 24, 1981. The document amended the Land Use and Circulation Elements of the Tulare County General Plan for the Lindsay Area.

The GSP area is subject to the Tulare County Zoning Ordinance, regulated by the Tulare County Resource Management Agency. The Ordinance establishes zones within the County and classifications of land uses and regulating land uses in such zones. Regulations also extend to the height of buildings, open spaces for light and ventilation. It also defines the terms and penalties for violation for adjustment, amendment and enforcement.

The GSP area is subject to the City of Lindsay's General Plan, adopted in July 1989. The General Plan addresses five elements: community development, resource management, hazardous management, and directions for interpretation and implementation.

1.4.3.1 County of Tulare General Plan

Tulare County's General Plan 2030 Update identifies policies and goals for growth within the County. Agriculturally designated areas will be maintained and will divert urban development from valuable agricultural lands (LU-2.1, Tulare County General Plan 2030 Update). The County will also encourage new major residential development near existing infrastructure and employment centers (LU-3.1, Tulare County General Plan 2030 Update). Industrial development is also planned near existing industrial development (LU-5.1, Tulare County General Plan 2030 Update). The GSP area is primarily rural and low density residential, outside of urban development boundaries (UDB), established by Tulare County. The County will require more water as industrial, residential and agricultural lands increase development. Although the GSP area is outside of most planned growth areas; the aquifers are not confined to the same planning boundaries. Tulare County's General Plan 2030 Update developed goals and policies to encourage sustainable groundwater management, some of which are listed below. The efforts established in the listed goals and policies are supportive of sustainable management alluded to in this GSP.

LU-7.16 Water Conservation. The County shall encourage the inclusion of "extra-ordinary" water conservation and demand management measures for residential, commercial, and industrial indoor and outdoor water uses in all new urban development.

WR-1.4 Conversion of Agricultural Water Resources. For new urban development, the County shall discourage the transfer of water used for agricultural purposes (within the prior ten years) for domestic consumption except in the following circumstances:

1. The water remaining for the agricultural operation is sufficient to maintain the land as an economically viable agricultural use,
2. The reduction in infiltration from agricultural activities as a source of groundwater recharge will not significantly impact the groundwater basin.

WR-1.5 Expand Use of Reclaimed Wastewater. To augment groundwater supplies and to conserve potable water for domestic purposes, the County shall seek opportunities to expand groundwater recharge efforts.

WR-1.6 Expand Use of Reclaimed Water. The County shall encourage the use of tertiary treated wastewater and household gray water for irrigation of agricultural lands, recreation and open space areas, and large landscaped areas as a means of reducing demand for groundwater resources.

WR-2.1 Protect Water Quality. All major land use and development plans shall be evaluated as to their potential to create surface and groundwater contamination hazards from point and non-point sources. The County shall confer with other appropriate agencies, as necessary, to assure adequate water quality review to prevent soil erosion; direct discharge of potentially harmful substances; ground leaching from storage of raw materials, petroleum products, or wastes; floating debris; and runoff from the site.

WR-2.2 National Pollutant Discharge Elimination System (NPDES) Enforcement. The County shall continue to support the State in monitoring and enforcing provisions to control non-point source water pollution contained in the U.S. EPA NPDES program as implemented by the Water Quality Control Board.

WR-2.3 Best Management Practices (BMPs). The County shall continue to require the use of feasible BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities, agricultural operations requiring a County Permit and urban runoff in coordination with the Water Quality Control Board.

WR-3.1 Develop Additional Water Sources. The County shall encourage, support and, as warranted, require the identification and development of additional water sources through the expansion of water storage reservoirs, development of groundwater banking for recharge and infiltration, promotion of water conservation programs, and support other projects and programs that intend to increase the water resources available to the County and reduce the individual demands of urban and agricultural users.

WR-3.2 Develop an Integrated Regional Water Management Plan. The County will participate with other agencies and organizations that share water management responsibilities in the County to enhance modeling, data collection, reporting and public outreach efforts to support the development and implementation of appropriate Integrated Regional Water Management Plans (IRWMP) within the County.

WR-3.3 Adequate Water Availability. The County shall review new development proposals to ensure the intensity and timing of growth will be consistent with the availability of adequate water supplies. Projects must submit a Will-Serve letter as part of the application process and provide evidence of adequate and sustainable water availability prior to approval of the tentative map or other urban development entitlement.

WR-3.4 Water Resource Planning. The County shall continue participation in State, regional, and local water resource planning efforts affecting water resource supply and quality.

WR-3.7 Emergency Water Conservation Plan. The County shall develop an emergency water conservation plan for County operated water systems to identify appropriate conservation policies that can be implemented during times of water shortages caused by drought, loss of one or more major sources of supply, contamination of one or more sources of supply, or other natural or man-made events.

WR-3.9 Establish Critical Water Supply Areas. The County shall designate Critical Water Supply Areas to include the specific areas used by a municipality or community for its water supply system, areas

critical to groundwater recharge, and other areas possessing a vital role in the management of the water resources in the County, including those areas with degraded groundwater quality.

WR-3.10 Diversion of Surface Water. Diversions of surface water or runoff from precipitation should be prevented where such diversions may cause a reduction in water available for groundwater recharge.

PFS-1.3 Impact Mitigation. The County shall review development proposals for their impacts on infrastructure (for example, sewer, water, fire stations, libraries, streets, etc.). New development shall be required to pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. The lack of available public or private services or adequate infrastructure to serve a project, which cannot be satisfactorily mitigated by the project, may be grounds for denial of a project or cause for the modification of size, density, and/or intensity of the project.

PF-1.4 Available Infrastructure. The County shall encourage urban development to locate in existing UDBs and Hamlet Development Boundaries (HDBs) where infrastructure is available or may be established in conjunction with development. The County shall ensure that development does not occur unless adequate infrastructure is available, that sufficient water supplies are available or can be made available, and that there are adequate provisions for long term management and maintenance of infrastructure and identified water supplies.

PF-2.2 Modification of Community UDB.

2. Prior to approval of a UDB boundary expansion, the County shall ensure that infrastructure can be provided to serve the new areas added to the UDB and that sufficient water supplies are also available. This may require preparation of an infrastructure master plan that includes methods of financing of improvements and maintenance, as well as representation/documentation of availability and sufficiency of long-term water supplies.

PFS-2.3 Well Testing. The County shall require new development that includes the use of water wells to be accompanied by evidence that the site can produce the required volume of water without impacting the ability of existing wells to meet their needs.

PFS-2.4 Water Connections. The County shall require all new development in UDBs, Urban Area Boundaries (UABs), Community Plans, Hamlet Plans, Planned Communities, Corridor Areas, Area Plans, existing water district service areas, or zones of benefit, to connect to the community water system, where such system exists. The County may grant exceptions in extraordinary circumstances, but in these cases, the new development shall be required to connect to the water system when service becomes readily available.

PFS-2.5 New Systems or Individual Wells. Where connection to a community water system is not feasible per PFS-2.4: Water Connections, service by individual wells or new community systems may be allowed if the water source meets standards for quality and quantity.

PFS-4.5 Detention/Retention Basins Design. The County shall require that stormwater detention/retention basins be visually unobtrusive and provide a secondary use, such as recreation, when feasible.

PFS-4.6 Agency Coordination. The County shall work with the Army Corps of Engineers and other appropriate agencies to develop stormwater detention/retention facilities and recharge facilities that enhance flood protection and improve groundwater recharge.

PFS-4.7 NPDES Enforcement. The County shall continue to monitor and enforce provisions to control non-point source water pollution contained in the U.S. Environmental Protection Agency NPDES program.

PFS-7.2 Fire Protection Standards. The County shall require all new development to be adequately served by water supplies, storage, and conveyance facilities supplying adequate volume, pressure, and capacity for fire protection.

Housing Policy 2.21. Require all proposed housing within the development boundaries of unincorporated communities is either (1) served by community water and sewer, or (2) that physical conditions permit safe treatment of liquid waste by septic tank systems and the use of private wells.

Housing Policy 4.13. Promote energy efficiency and water conservation.

Table 1-6 lists all General Plan water resources policies. These policies can be found in their entirety in the Tulare County General Plan.

Table 1-6. Tulare County General Plan Policies

Tulare County General Plan Policies	
Policy Number	Title
WATER SUPPLY	
WR-1.1	Groundwater Withdrawal
WR-1.3	Water Export Outside County
WR-1.4	Conversion of Agricultural Water Resources
WR-1.5	Expand Use of Reclaimed Wastewater
WR-1.6	Expand Use of Reclaimed Water
WR-1.7	Collection of Additional Groundwater Information
WR-1.8	Groundwater Basin Management
WR-1.9	Collection of additional Surface Water Information
WR-1.10	Channel Modification
WR-3.1	Develop Additional Water Sources
WR-3.2	Develop an Integrated Regional Water Master Plan
WR-3.3	Adequate Water Availability
WR-3.4	Water Resource Planning
WR-3.5	Use of Native and Drought Tolerant Landscaping
WR-3.6	Agricultural Irrigation Efficiency
WR-3.7	Emergency Water Conservation Plan
WR-3.8	Educational Programs
WR-3.9	Establish Critical Water Supply Areas
WR-3.10	Diversion of Surface Water
WR-3.11	Policy Impacts to Water Resources
WR-3.12	Joint Water Projects with Neighboring Counties
WR-3.13	Coordination of Watershed Management on Public Land
PFS-2.1	Water Supply
PFS-2.2	Adequate Systems
PFS-2.3	Well Testing

Tulare County General Plan Policies	
Policy Number	Title
WATER SUPPLY	
PFS-2.5	New Systems or Individual Wells
WATER QUALITY	
WR-1.2	Groundwater Monitoring
WR-1.7	Collection of Additional Groundwater Information
WR-1.8	Groundwater Basin Management
WR-2.1	Protect Water Quality
WR-2.2	NPDES Enforcement
WR-2.3	Best Management Practices
WR-2.4	Construction Site Sediment
WR-2.5	Major Drainage Management
WR-2.6	Degraded Water Resources
WR-2.7	Industrial and Agricultural Sources
WR-2.8	Point Source Control
WR-2.9	Private Wells
PFS-2.1	Water Supply
PFS-2.5	New Systems or Individual Wells

The following are a list of communities within EKGSA that have a Hamlet, Community or Legacy Plan. These communities are in unincorporated areas and they fall under the jurisdiction of Tulare County and as such are subject to the goals, objectives and policies found within the Tulare County General Plan. The EKGSA will consider growth, water quality, and water quantity within these communities when assessing potential actions and management while implementing the GSP.

1.4.3.1.1 Lindcove Hamlet Plan

Lindcove is currently designated as a Hamlet in the 2030 Tulare County General Plan (2012). Lindcove is a census-designated place (CDP) located in the northeastern portion of Tulare County. It is bounded by Avenue 312 in the south, Boston Avenue in the north, Road 226 in the west, and Road 228 in the east and encompasses 0.7 square miles of land. It is not directly served by any State Route.

Lindcove is a private well community where residents own and maintain their own well. Residents have expressed that they are interested in exploring their options for connecting to a neighboring community water system, they understand that this may include an initial cost and would result in paying a monthly water bill. Some residents are concerned with their water quality and perceive their water to be unsafe to drink. Most families do not drink the water from their tap, they either buy bottled water or have a water filtration system. In 2014, Self-Help Enterprises (SHE) tested nine water wells in Lindcove. Four of the nine wells had Total Coliform present, all nine wells tested over the MCL for Nitrates and four wells exceeded the MCL for 1,2,3-TCP. Lindcove also lacks a sanitary sewer service and relies on individual or community septic systems.

According to the Lindcove Hamlet Plan (2017), Lindcove has a projected growth rate of 1.3%, which is consistent with the rest of the County. Any development within the community of Lindcove is subject to the goals and policies set forth in the Tulare County General Plan encouraging sustainable groundwater management.

1.4.3.1.2 *Plainview Community Plan*

As an unincorporated community, Plainview contains a mixture of residential, neighborhood commercial, religious establishments, and limited industrial areas similar to the type of land uses found in incorporated places within Tulare County. Farm and Agricultural land uses bound Plainview on the north, east, south, and western portions of Plainview's urbanized area. Plainview is currently designated an unincorporated community in the 2030 Tulare County General Plan (2012).

Plainview is located within the Lindmore ID. Lindmore ID serves agricultural water to properties in the vicinity of the community of Plainview. The Plainview Mutual Water Company (PMWC) provides water to Plainview residents. According to the Plainview Community Plan (2019), Plainview has a projected growth rate of 1.3%, which is consistent with the rest of the unincorporated areas within the County.

Any development within the community of Plainview is subject to the goals and policies set forth in the Tulare County General Plan encouraging sustainable groundwater management.

1.4.3.1.3 *Strathmore Community Plan*

Strathmore is currently designated an unincorporated community in the 2030 Tulare County General Plan (2012). It is located on the east side of the San Joaquin Valley near the base of the Sierra Nevada Mountains in the southeastern area of the EKGSA. Strathmore lies within the Kaweah Watershed and receives its water supply primarily from the Friant Division CVP and operations of Lake Millerton. The Strathmore Public Utility District operates a water supply and distribution system under the jurisdiction of the California Department of Health Services Division (CDHSD) of Drinking Water and Environmental Management. Strathmore has approximately 455 drinking water connections as of May 2012.

According to the Strathmore Community Plan (2017), Strathmore has a projected growth rate of 1.3%, which is consistent with the rest of the unincorporated areas within the County.

Any development within the community of Strathmore is subject to the goals and policies set forth in the Tulare County General Plan encouraging sustainable groundwater management.

1.4.3.1.4 *Tonyville Hamlet Plan*

The community of Tonyville is located on the east side of the San Joaquin Valley and is a CDP located in Tulare County. It is bounded by Avenue 252 to the south, Avenue 254 to the north, and Road 216 to the west and encompasses 0.05 square miles of land. Tonyville is currently designated as a Hamlet in the 2030 Tulare County General Plan (2012).

Domestic water service in Tonyville is provided by the Lindsay-Strathmore ID and sanitary sewer service is provided by Tulare County. Tonyville does not currently have a storm drainage system.

According to the Tonyville Hamlet Plan (2017), Tonyville has a projected growth rate of 1.3%, which is consistent with the rest of the unincorporated areas within the County.

Any development within the community of Tonyville is subject to the goals and policies set forth in the Tulare County General Plan encouraging sustainable groundwater management.

1.4.3.1.5 *Tooleville Legacy Plan*

The Tooleville CDP is a small rural community located on the east side of Spruce Road (Road 204) roughly a mile and a half east of the City of Exeter in Tulare County.

Tooleville Mutual Non-Profit Water Association is a small mutual water company run by a five-member board. Tooleville has two undependable water wells and is planning to drill a new well once the location has been determined. They are actively searching for potential well sites in Tooleville and neighboring Exeter. Tooleville is exploring the different ways that could potentially partner with Exeter by reviewing three options: water wheeling, master meter or full consolidation with the City of Exeter. Tooleville residents report that the community does not have adequate storm water drainage.

Any development within the community of Tooleville is subject to the goals and policies set forth in the Tulare County General Plan encouraging sustainable groundwater management.

1.4.3.2 City of Lindsay General Plan

The City of Lindsay's 1989 General Plan is due for an update, and is missing additional mandatory elements, (mandated by the State), that would analyze groundwater sustainability, as it applies in current and projected times. A General Plan Update for the City of Lindsay is currently underway, completion of the general plan update is anticipated in late 2019.

1.4.4 Plan Elements from CWC Section 10727.4

Legal Requirements:

§354.8(g) A description of any of the additional Plan elements included in the Water Code Section 10727.4 that the Agency determines to be appropriate.

The EKGSA and Kaweah Subbasin agencies already have several protective practices for groundwater sustainability and protection. This section will describe some of those elements applicable to SGMA compliance that may not be further discussed in the GSP.

1.4.4.1 Wellhead Protection

A wellhead protection area (WHPA) is a surface and subsurface land area regulated to prevent contamination of a well or well-field supplying a public water system. This program, established under the Safe Drinking Water Act (SDWA) (42 U.S.C. 330f-300j), is implemented through state governments. The WHPA may also be the recharge area that provides the water to a well or wellfield. WHPAs can vary in size and shape depending on subsurface geologic conditions, the direction of groundwater flow, pumping rates and aquifer characteristics.

While the Wellhead Protection Program (WHPP) was established following the 1986 amendments to the Federal SDWA, the program was designed to protect groundwaters that supply drinking water to wells at public water systems across the nation. The 1996 Federal SDWA amendments require each state to develop and implement a Source Water Assessment Program. Section 11672.60 of the California Health and Safety Code requires the Department of Health Services (DHS, the precursor to CDPH) to develop and implement a program to protect sources of drinking water, specifying that the program must include both a source water assessment program and a wellhead protection program. In response to both legal mandates, DHS developed the Drinking Water Source Assessment and Protection (DWSAP) Program.

California's DWSAP Program addresses both groundwater and surface water sources. The groundwater portion of the DWSAP Program serves as the State's wellhead protection program. In developing the surface water components of the DWSAP Program, DHS integrated the existing requirements for watershed sanitary surveys. DHS submitted the DWSAP Program in January 1999. The United States Environmental Protection Agency (EPA) approved the DWSAP as California's wellhead protection program in January 1999. In November 1999, EPA gave final approval of the DWSAP Program as California's sources water assessment and protection program. DHS was responsible for the completion of all assessments by May 2003.

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Documents/DWSAPGuidance/DW_SAP_document.pdf.

WHPPs are not regulatory in nature, nor do they address specific sources. They are designed to focus on the management of the resource rather than control a limited set of activities or contaminant sources. Contaminants from the surface can enter an improperly designed or constructed well along the outside edge of the well casing or directly through openings in the wellhead. A well is also the direct supply source to the customer, and such contaminants entering the well could then be pumped out and discharged directly into the distribution system. Therefore, essential to any WHPP are proper well design, construction, and site grading to prevent intrusion of contaminants into the well from surface sources.

Wellhead protection is performed primarily during design and can include requiring annular seals at the well surface, providing adequate drainage around wells, constructing wells at high locations, and avoiding well locations that may be subject to nearby contaminated flows. Wellhead protection is required for potable water supplies and is not generally required, but is still recommended, for agricultural wells.

Municipal and agricultural wells constructed by the member agencies are designed and constructed in accordance with Tulare County code requirements. A permit is needed from the County to construct a new well. In addition, the member agencies encourage landowners to follow the same standard for privately owned wells. Tulare County Code Part IV. Article 9 provides specifications pertaining to wellhead protection:

- Location of wells
- Casings – casing materials and casing thickness
- Methods for sealing the well from intrusion of surface contaminants
- Covering or protecting the boring at the end of each day from potential pollution sources or vandalism
- Site grading to assure drainage is away from the wellhead.

1.4.4.2 Well Construction Policies

Proper well construction is important to ensure reliability, longevity, and protection of groundwater resources from contamination. Tulare County has adopted a well construction permitting program consistent with State Well Standards (DWR Bulletin 74-81 and 74-90) to help assure proper construction of private wells. The County maintains records of all wells drilled in the area. As of September 2017, the implementation of the Tulare county new well ordinance took effect. This ordinance among other things place restrictions on the drilling of new wells on previously non-irrigated land where the land has not had a well or has not had surface water in the past. Drilling a new well or deepening or destroying existing wells requires a County permit. Usually, the process takes about a week. Under the authority of the Health Officer, staff from Tulare County Environmental Health Division can assist to ensure accuracy and timeliness of permits processed for the unincorporated areas of Tulare County. Electrical connection and other associated permits may be required by the Tulare County Resource Management Agency. State Well Standards also address annular seals, surface features, well development, water quality testing and various other topics. Well construction policies intended to ensure proper wellhead protection are discussed in Wellhead Protection Section above.

1.4.4.3 Well Abandonment/Well Destruction Program

Well abandonment generally includes properly capping and locking a well. Tulare County Code stipulates that any well, which has been placed inactive for a period of more than one (1) year shall be deemed abandoned and be required to properly destroyed unless the owner provides evidence of his intentions for continued use. Well destruction includes completely filling in a well in accordance with standard procedures. Proper well destruction and abandonment accomplishes the following: 1) eliminates the physical hazard of the well, 2) eliminates a pathway for migration of contamination, and 3) prevents hydrologic changes in the aquifer system, such as the

changes in hydraulic head and the mixing of water between aquifers. They are necessary to protect groundwater resources and public safety.

The administration of a well construction, abandonment, and destruction program has been delegated to the Counties by the State legislature. Tulare County requires that wells be abandoned according to Tulare Code Part IV. Article 13. Defective, Inactive, and Well Destruction Standards. Enforcement of the well abandonment policies is faced with the limitations in staff and funding.

The EKGSA, in cooperation with the County, will strive to properly destroy any of their wells that are no longer used and will encourage proper well destruction procedures for private wells. In addition, the EKGSA may request that some unusable wells be converted to monitoring wells, rather than destroy them, so that they can become a cost-effective way to bolster the EKGSA's groundwater monitoring network.

1.4.4.4 Replenishment of Groundwater

Groundwater replenishment happens through direct recharge and in-lieu recharge. According to DWR, water used for direct recharge most often comes from flood flows, water conservation, recycled water, desalination and water transfers. During the hydrologic cycle, replenishment occurs naturally when rain, stormwater, and the flow from rivers, streams and creeks seep into an aquifer. Water also gets into ground as farmers irrigate fields and orchards. Replenishment within the context of groundwater management is accomplished through recharge at a rate that exceeds baseline conditions, maintaining or improving groundwater elevation levels. Primary recharge methods available in the Kaweah Subbasin are direct spreading of water and in-lieu recharge where an alternative source (i.e. surface water) is provided to users who would normally use groundwater, thereby leaving groundwater in place for later use and increasing the potential to improve groundwater levels.

In the EKGSA and Kaweah Subbasin, the primary surface water sources for groundwater replenishment include precipitation, Kaweah River flows, and San Joaquin River water via Friant CVP contracts. The EKGSA aims to develop several recharge, storage, conservation, and/or water recycling projects utilizing these supplies. The EKGSA will also strive to identify funding and implement regional projects that help the region achieve groundwater sustainability. This can include recharge projects that take advantage of areas conducive to recharge and areas where recharge provides the most benefits, thereby reducing the burden on certain agencies from having to recharge in their boundaries if they do not have suitable land or soils. The Project and Management Actions to Achieve Sustainability Chapter (Chapter 5) provides descriptions, estimated costs, and estimated yield for numerous proposed projects.

1.4.4.5 Conjunctive Use

Conjunctive use of water relates to the combined use of ground and surface water, thus augmenting the water supply and providing higher water reliability. Conjunctive use functions such that surface water supplies are used during wet years, so that groundwater can be saved for use during dry periods. Many of the agencies within the East Kaweah, like much of the Kaweah Subbasin, operate the aquifer in a conjunctive manner. Agencies use their surface water, when available, to meet demands, or to recharge for later use. When surface water supplies are not available, agencies utilize groundwater to meet demands.

1.4.4.6 Efficient Water Management Practices

Water management is an important element of irrigated crop production. Efficient irrigation systems and water management practices can help maintain farm profitability in an era of limited, higher-cost water supplies. Efficient water management may also reduce the impact of irrigated production on offsite water quantity and quality. As is often the case, technology is not the whole solution anywhere, but part of the solution almost everywhere. Water conservation has been, and will continue to be, an important tool in local water management, as well as a key strategy in achieving sustainable groundwater management. Recycled water use is considered as

an efficient water practice. Where possible, this practice is already being utilized by members of the EKGSA. Future efforts will look to bolster efficient water management and use of recycled water.

1.4.4.7 Relationships with State and Federal Agencies

From a regulatory standpoint, the EKGSA members have numerous relationships with State and Federal agencies related to flood water supply, water quality, and water management. The relationship most unique to the EKGSA area is the relationship with the United States Bureau of Reclamation (Reclamation) for Friant CVP supplies of the San Joaquin River. Six of the seven EKGSA member agencies have contracts with Reclamation. The Friant Dam is owned and operated by Reclamation. Reclamation is also the lead agency for the San Joaquin River Restoration, which has resulted in significant delivery curtailments to Friant contractors.

EKGSA members are also eligible to receive grants from various agencies for water-related projects. Grants can be obtained from Reclamation, DWR, SWRCB, and others. The EKGSA will work to track grant programs and, when successful, administer and implement grant contracts.

1.4.4.8 Land Use Planning

Tulare County and the City of Lindsay are the only member agencies with direct land use planning authority. However, all the member agencies have an interest in land use planning policies, and how it will impact their continued development and water supplies. **Figure 1-5** is a map showing land use in the EKGSA area, including areas that are developed for agriculture and urban use.

Land use policies are documented in various reports such as General Plans, Specific Plans, and plans for proposed developments. Updating some of these plans is a multi-year process and not all could be fully updated concurrently with the GSP development. These plans are anticipated to be modified gradually over time as the EKGSA and Tulare County work to meet the goals and objectives of this GSP. Some smaller communities have no formal land use policies or rely on County policies.

1.5 Notice and Communication

1.5.1 Participating Agencies

Legal Requirements:

§354.8(b) A written description of the Plan area, including a summary of the jurisdictional areas and other features depicted on the map.

There are seven participating member agencies in the EKGSA. They are: City of Lindsay, County of Tulare, Exeter ID, Ivanhoe ID, Lindmore ID, Lindsay-Strathmore ID, and Stone Corral ID. A description of these entities is provided below.

1.5.1.1 City of Lindsay

The City of Lindsay (City) is in Tulare County, near the base of the Sierra Nevada Mountains in the San Joaquin Valley. The City has a small, but growing population of 13,417 in 2015 and is expected to reach 15,408 by year 2030. Average Day Demands (ADD) for 2015 is estimated at 2.48 million gallons per day (MGD). By sustaining a usage rate of 199 gallon per capita per day, the City's 2030 ADD would be 2.82 MGD. The City's water is supplied from both surface and groundwater sources. Surface water is provided through a CVP Class 1 long-term contract from Reclamation for 2,500 AF. The City has 3 existing deep wells. Two wells are active, and one well is emergency standby only. Surface water enters the City's infrastructure through a turnout at the FKC, located 1.3 miles east of the City limits, and travels through dual 12-inch pipes to the Surface Water Treatment Plant (SWTP). The SWTP is capable of producing up to 1,800 gallon per minute (GPM). During peak demand

periods when surface water is available, the SWTP is the primary water supply source with the groundwater supplementing the supply as necessary. Annual Reclamation allocations can affect how Lindsay manages primary and supplemental water sources. Surface water deliveries are halted when the FKC is taken offline for general maintenance or dewatering. Typical FKC timeframe for maintenance and dewatering is every third year targeting low demand months November through February. When surface water supply is unavailable, the City is dependent exclusively on groundwater.

1.5.1.2 County of Tulare

Tulare County was first formed in 1852 with a larger land area. Sections of the County were later given to Fresno, Kern, Inyo, and Kings Counties with the most recent separation in 1893. The county has a total area of 4,839 square miles of which 4,824 square miles is land and 14 square miles (0.3%) is water. Major watercourses are the Kaweah River, St. John's River, Tule River, and Friant-Kern Canal. The western side of the County is within the San Joaquin Valley and is bordered by Kings County, while eastern part stretches across the Sierra Nevada and is bordered by Inyo County to the east. The San Joaquin Valley floor, between the Sierra Nevada and coastal ranges, is fifty to sixty miles wide and has an elevation near the City of Visalia (the county seat) of about 330 feet. The United States Census reported that as of July 1, 2017 Tulare County is estimated to have a population of 464,493. Tulare County is home to 8 incorporated communities, all located on the Valley floor. Over 40% of the County's total population resides in the Visalia and Tulare metropolitan area. Within the EKGSA area, about 41,428 acres (approximately 35% of the GSA area) are located outside of the irrigation/water districts' service areas and constitute the County's "white spaces" area (*SGMA legislation addresses unmanaged areas or "white spaces" within a groundwater basin through the presumption that the overlying county(s) will become the responsible for these areas (Water Code §10724(a))*). They rely solely on private groundwater wells. Domestic water demands are met by private domestic and/or community wells.

1.5.1.3 Exeter Irrigation District

The Exeter Irrigation District (EID) is located in northwest Tulare County east of Visalia with headquarters in Exeter, California. The district encompasses approximately 15,000 acres, of which about 12,700 acres are irrigated, and serves agricultural landowners primarily growing permanent crops.

EID has a contract with Reclamation for Friant Division CVP supplies, EID's contract (Contract No. 175r-2508D) is for 11,500 AF Class 1 and 19,000 AF Class 2. The District has 60 miles of reinforced concrete pipeline. The District does not own wells; therefore, groundwater is extracted through privately owned wells when surface supplies are unavailable.

1.5.1.4 Ivanhoe Irrigation District

Ivanhoe Irrigation District (IID) is located in Tulare County northeast of Visalia. IID encompasses approximately 11,000 acres, of which 10,000 are irrigated. The St. Johns River lies to the south, and Cottonwood Creek cuts through the northeastern corner of the District.

IID was formed in 1948, and in 1949 entered into a long-term contact with Reclamation for Friant CVP supplies. The Contract amounts are for 6,500 AF Class 1 and 500 AF of Class 2 water. In addition, Ivanhoe ID owns shares of Wutchumna Water Company stock for water from the Kaweah River.

In 2010, IID along with the Kaweah Delta Water Conservation District (KDWCD), executed a resources exchange in which KDWCD became a long-term Friant Division CVP contractor through a partial contract assignment from IID totaling 1,200 AF of Class 1 water and 7,400 AF of Class 2 water. In exchange for the partial assignment, IID received KDWCD's water supply from the Longs Canal Company, 2,500 AF of storage capacity in Lake Kaweah, and a cash payment.

IID has 48 miles of pipeline and three groundwater recharge areas over approximately 15 acres, as well as approximately three miles of Cottonwood Creek which are also used for recharge purposes. IID does not own or operate groundwater extraction facilities. Therefore, landowners must provide their own wells to sustain irrigation during periods when IID does not have surface water supplies available.

1.5.1.5 Lindmore Irrigation District

The Lindmore Irrigation District (LID) is located in Tulare County near the City of Lindsay, approximately 18.7 miles southeast of Visalia and is adjacent to the northern edge of the City of Porterville limits. Lewis Creek runs through the northern portion of the District. LID has over 27,000 acres, of which between 23,000 and 24,000 are irrigated. LID lands are contained entirely within the Kaweah Subbasin. The District was organized March 6, 1937, for securing a supplemental water supply from the United States Bureau of Reclamation's (Reclamation) Central Valley Project (CVP). The District was organized under California laws pertaining to the formation and operation of irrigation districts.

The District had no canal or ditch system and development had been brought about entirely by irrigation from privately owned wells. Accordingly, on February 28, 1948, Contract No. 174r-1635 was entered with Reclamation for a water supply from the Friant-Kern Canal (FKC) as part of the Friant Division of the CVP. The CVP contract amounts are 33,000 AF Class 1 and 22,000 AF Class 2. The Contract also included the construction of LID's concrete pipe distribution system, which includes approximately 170 miles of pipeline. LID has six reservoirs, two of which are unlined lending to approximately 35 acres for groundwater recharge, as well two pilot dry-wells used for recharge purposes. LID does not own or operate groundwater extraction facilities. Therefore, landowners must provide their own wells to sustain irrigation during periods when LID does not have surface water supplies available.

1.5.1.6 Lindsay-Strathmore Irrigation District

The Lindsay-Strathmore Irrigation District (LSID) is located in Tulare County with headquarters in Lindsay. The District extends approximately from Tonyville to Strathmore. Lewis Creek runs through the northern portion of the District and the FKC runs the length of the District from north to south. LSID was formed in 1915 and encompasses approximately 15,400 acres, of which about 12,700 acres are irrigated, and serves both agricultural and municipal/industrial water users including the disadvantaged communities of Tonyville and a portion of Strathmore.

LSID has a contract with Reclamation for Friant Division CVP supplies, LSID's contract is for 27,500 AF Class 1 water. The District has 115 miles of pipeline. Groundwater is extracted via four district-owned wells to supply residents during winter months when the CVP supplies are low or the FKC is dewatered for maintenance. The LSID does not currently recharge groundwater within the district as most underlying soils provide for low infiltration rates with the exception of Lewis Creek and certain other areas that will be evaluated for recharge in the future.

In addition to CVP supplies, LSID also has ownership of shares in the Wutchumna Water Company for water from the Kaweah River. LSID utilizes all its available surface supplies to provide for a reliable dry-year supply and annually minimize the amount of groundwater used in the District. As a result, groundwater use is minimal except in extreme dry years and during FKC outages.

1.5.1.7 Stone Corral Irrigation District

The Stone Corral Irrigation District (SCID) is located in Tulare County, north of the city of Visalia and west of the city of Woodlake. SCID was organized in July 1948, for the purpose of contracting for a water supply from Reclamation for Friant Division CVP supplies, and for the construction of a distribution system which is 27 miles of pipeline. The district encompasses approximately 6,500 acres, of which about 5,500 acres are irrigated, and serves approximately 100 agricultural landowners growing predominately permanent crops.

SCID's contract is for 10,000 AF Friant Division CVP – Class 1 (Contract #I75R-2555-D). Additionally, SCID has an annual entitlement for 950 AF of Cross Valley Canal – CVP (Contract # 14-06-200-8293A-IR16). SCID does not own or operate groundwater extraction facilities. Therefore, landowners must provide their own wells to sustain irrigation during periods when SCID does not have surface water supplies available.

1.5.2 Description of Beneficial Uses and Users

Legal Requirements:

§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:

(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.

Beneficial users within the EKGSA area were identified through discussions with the Advisory Committee during development of the Communication and Engagement Plan. The identified beneficial users from this process are described below.

Agricultural Users – Most of the EKGSA's area is composed of agricultural users. Agricultural users are represented on the EKGSA Board of Directors through the member agencies, as well as through members on the Advisory Committee. The EKGSA has developed and continues to improve blanket mailing and emailing lists which were and will continue to be used to notice landowner outreach events. These lists will continue to be expanded and maintained throughout the development of the GSP and GSP implementation to ensure overlying users stay informed and have a reasonable opportunity to participate in the process.

Domestic Well Users – There is a significant number of rural residents within the GSA boundaries that are reliant upon groundwater to meet their domestic needs. The EKGSA aims to include rural residents in the process through direct communications and public meetings. The EKGSA will afford rural residents every opportunity to engage in groundwater planning and management efforts that may have an impact on their domestic wells.

Municipal Well Operators – The primary municipal well operators within the boundaries of the EKGSA are for the City of Lindsay. The City of Lindsay utilizes both surface water and groundwater to supply its demands. The City is represented on the EKGSA Board of Directors and also participates on the Technical Advisory Committee. Strathmore Public Utility District would be the next largest municipal user, however most their demand is met with surface water from Friant CVP supplies.

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 representation on the EKGSA Board of Directors. Additionally, there are members and agencies representing communities through the Advisory Committee.

Environmental Users of Groundwater - There are two primary local 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. Environmental uses in the area include creeks, species, and habitat such as groundwater dependent ecosystems (GDE). The California Department of Fish & Wildlife (CDFW) is the State Trustee for fish and wildlife resources. The EKGSA and CDFW will be coordinating and interacting on behalf of these users, at a minimum, through the CEQA process as GSP Implementation activities such as projects and management actions are evaluated and moved forward.

Surface Water Users – There are many users of surface water, agricultural and municipal, in the EKGSA boundary. Most of the surface water used is imported from Friant Division CVP supplies for irrigation purposes. Additionally, private water companies bring in additional surface water supplies to the EKGSA from the Kaweah River. The community of Tonyville receives surface water from LSID. The various users of surface water are represented on the EKGSA Board of Directors and/or within the Advisory Committee.

Disadvantaged Communities – 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. Important information that will be essential to communicate to and engage DACs will include an explanation of SGMA, water conservation education, and soliciting feedback from community members on water quantity and water quality challenges their communities may face. By including DACs and SDACs in communication efforts during the development, public review and implementation phases of the GSA, residents will be more likely to participate and provide feedback that could be crucial to long-term solutions for groundwater sustainability within their communities. Any feedback received from DAC stakeholders were reviewed by the Advisory Committee and Technical Advisory Committee and taken into consideration during the GSP development phase.

1.5.3 Public Engagement/Public Outreach Plan

Legal Requirements:

- §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:
- (b) A list of public meetings at which the Plan was discussed or considered by the Agency.
 - (c) Comments regarding the Plan received by the Agency and a summary of any responses by the Agency.
 - (d)(2) Identification of opportunities for public engagement and a discussion of how public input and response will be used

The development of the EKGSA GSP is an inclusive, transparent effort requiring ongoing engagement with a variety of stakeholders to allow public input and response during various stages of development. In addition to this GSP, the EKGSA has also developed a Communication & Engagement (C&E) Plan. The purpose of the C&E Plan is to guide EKGSA's stakeholder involvement efforts. It will be a living document that is intended to be flexible and adaptive to reflect stakeholders' needs and best practices for stakeholder involvement. The current version of the C&E Plan is included in **Appendix 1-B**. In the future, as updates and adjustments are made, the most current version of the C&E Plan can be found on the EKGSA website at <http://www.ekgsa.org>.

The C&E Plan's overarching goal is to inform, encourage engagement, and build stakeholder support for EKGSA's direction in reaching groundwater sustainability. A diverse, active, engaged public will help better identify issues, form solutions, and create a partnership between the EKGSA Board and stakeholders.

Goals that the C&E Plan seeks to accomplish include:

- Build stakeholder and public understanding of SGMA including purpose, timeline, and requirements.

- Inform and raise awareness about EKGSA including governance structure and powers.
- Provide accurate, easy-to-understand, and timely information for ongoing Board activities and GSP development activities.
- Promote communication between stakeholders and the EKGSA Board.
- Describe how EKGSA stakeholders relate to the broad sustainability goals of the Kaweah Subbasin.
- Encourage and solicit public comments before key decision points of GSP development.
- Implement SGMA in a transparent manner.

The EKGSA will incorporate key messages in all its communications and engagement activities to help foster clear and accurate communications. This will ensure a level of consistency across all outreach efforts, instill trust by stakeholders, and provide the opportunity for EKGSA staff to engage with stakeholders and communicate a common message. Messages will continue to be developed beyond the submittal of the GSP, as implementation of the GSP will be critical to the success of the stakeholders within the area.

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:

- Advanced notifications of meeting times, locations, and agendas.
- Web posting of EKGSA materials.
- Solicitation of input from stakeholders and good faith effort to incorporate stakeholder interests.

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.

A list of the public meetings and outreach events is included in [Appendix 1-C](#).

1.5.4 Comments Received

This section will be completed as the GSP is circulated to the public and the EKGSA's committees for review and comment. A system for managing public comments and responses will be developed to track comments received and status of comments. The comment tracking document will be included in [Appendix 1-D](#).

1.6 GSP Organization and Preparation Checklist

This GSP, developed in compliance with SGMA, consists of the following chapters:

- Basin Setting
- Sustainable Management Criteria
- Monitoring Networks
- Projects & Management Actions to Achieve Sustainability
- GSP Implementation