Kings River Watershed Coalition Authority (Kings River Water Quality Coalition)

Location: 4886 East Jensen Avenue, Fresno, California P. O. Box 8259 Fresno, CA 93747 (559) 365-7958 Fax (559) 237-5560

June 12, 2020

BOARD OF DIRECTORS OF THE KINGS RIVER WATERSHED COALITION AUTHORITY (KINGS RIVER WATER QUALITY COALITION)

Mark C. McKean, President Paul Peschel, Vice President

Alta Irrigation District Burrel Ditch Co.

Clarks Fork Rec District #2069 Consolidated Irrigation District

Corcoran Irrigation Co. Crescent Canal Co.

Empire West Side Irrigation District

Fresno Irrigation District

John Heinlen Mutual Water Co.

James Irrigation District

Kings River Conservation District

Kings River Water District Laguna Irrigation District

Last Chance Irrigation District

Lemoore Canal & Irrigation Co

Liberty Canal Co. Liberty Mill Race Co. Lovelace Water Corp. Peoples Ditch Co. Reed Ditch Co.

Riverdale Irrigation District Southeast Lake Water Co. Stratford Irrigation District

Tulare Lake Basin Water Storage District

Tulare Lake Canal Co.

Tulare Lake Reclamation District #761

Upper San Jose Water Co.

This is to notify you of the Meeting of the Policy Committee of the Kings River Watershed Coalition Authority is to be held **Monday**, **June 15**, **2020**. The meeting will begin at 11:00 AM via **ZOOM** web/teleconference. The weblink and call-in information on are the Agenda. Policy Committee Members are: Justin Mendes, Mark McKean, and Kassy Chauhan.

As a result of the COVID-19 emergency and the Governor's Executive Orders N-29-20 and N-33-20, this meeting will occur solely via remote presence by video and teleconference. There will not be a physical public access location. The Authority is conducting the meeting in this manner to protect public health by avoiding public gatherings and requiring social distancing. At the same time, the Authority remains committed to transparency. Members of the public will be able to listen to and watch the meeting, and comment if desired. *Public comments and questions will only be possible during the agendized Public Comment portion of the meeting.* Please see the pages between this notice and the agenda for guidelines and an idea of what to expect.

The patience and cooperation of all participants is appreciated. While every effort has been made to streamline the experience, there may be technical issues and human error. We will attempt to promptly correct any issues that arise.

Individuals who require special accommodations are requested to contact Corey McLaughlin by phone at: (559) 237-5567 or by email at: cmclaughlin@krcd.org.

Sincerely,

Charlotte Gallock

Coordinator File: KRW 101.03

Agenda

KINGS RIVER WATERSHED COALITION AUTHORITY (KINGS RIVER WATER QUALITY COALITION) Policy Committee Meeting

Date: Monday, June 15, 2020

<u>Time</u>: 11:00 AM Location: **ZOOM**

Zoom Link:

https://us02web.zoom.us/j/87827181965?pwd=aWYySjB2U0c4TUJHdFlYT0VFQTM2QT09

One-Tap Mobile: +16699006833,,87827181965#,,1#,982249#

Call-in: +1 669 900 6833; Meeting ID: 878 2718 1965; Password: 982249

1. Addition to or Deletion from the Agenda

2. Public Presentation

Presentation by the Public on matters not on the agenda and within the jurisdiction of the Committee, limited to a timeframe set by the Committee Chair.

3. Approval of Minutes

The Committee will consider approving the June 12, 2020 Policy Committee Meeting minutes

4. Management Zones, Coordinator

The committee will be given information on the potential to develop Nitrate Management Zones within the Kings subbasin portion of the Kings River Water Quality Coalition.

- a) Boundary
- b) Scope of Work/Budget
- c) Recommendation

ADJOURNMENT

Note: The public will be given the opportunity to address the Authority on any item on the agenda before or during the Authority's consideration of that item. Sign in under "Others" on the attendance sheet and indicate which agenda item you wish to address. Comments by individuals and entities will be limited to three minutes or as may be reasonable as determined by the conducting officer.

A person with a qualifying disability under the Americans With Disabilities Act of 1990 may request the Authority provide a disability related modification or accommodation in order to participate in any public meeting of the Authority. Such assistance includes appropriate alternative formats for the Agendas and Agenda packets used for any public meetings of the Authority. Requests for such assistance and for Agendas and Agenda packets shall be made in person, by telephone, facsimile, or written correspondence to the Secretary of the Authority at the offices of the Kings River Conservation District at: 4886 E Jensen, Fresno, CA, 93725, at least 48 hours before a public Authority meeting.

Materials related to an item on this Agenda submitted to the Authority after distribution of the agenda packet are available for public inspection at the offices of the Kings River Watershed Coalition Authority at: 4886 E Jensen, Fresno, CA, 93725, during regular business hours.

File: KRW 101.03



June 11, 2020 File No. 20-7-050

Charlotte Gallock & Debra Dunn Kings River Conservation District 4886 E. Jensen Ave Fresno, CA 93725

SUBJECT: KINGS/TULARE LAKE SUBBASINS PRELIMINARY MANAGEMENT ZONE PROPOSAL SCOPE AND BUDGET FOR TECHNICAL ASSISTANCE

Dear Ms. Gallock and Ms. Dunn:

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) has adopted amendments to the Basin Plans to establish a Salt and Nitrate Control Program in the Central Valley. The Nitrate Control Program establishes two pathways for compliance. Pathway B authorizes the establishment of Management Zones. In general, a Management Zone consists of multiple permittees and other local stakeholders working collectively to first ensure safe drinking water, then to manage nitrate to create a balance within a defined management area, and ultimately to develop and implement a long-term plan for restoration of groundwater (where reasonable, feasible, and practicable) to meet applicable water quality objectives.

To establish a Management Zone, participating permittees are required to develop and submit a series of deliverables to the Central Valley Water Board. The first of these deliverables is the Preliminary Management Zone Proposal (PMZP). The Kings River Conservation District (KRCD) boundary encompasses the Kings Subbasin and Tulare Lake Subbasins Under the Nitrate Control Program, the Kings Subbasin is a Priority 1 area, and the Tulare Lake Subbasin is Priority 2. Regardless of priority, KRCD is identifying the work that will be required for both subbasins to form one Management Zone to comply with the new Nitrate Control Program requirements (Pathway B for Management Zones). The Notices to Comply (NTC) for the Priority 1 subbasins are anticipated to be issued by the Central Valley Water Board by the end of May, 2020¹. The completed PMZP for Priority 1 subbasins must be prepared and submitted to the Board within 270 days following receipt of the NTC. Successful submittal of the PMZP on time to the Central Valley Water Board will necessitate close coordination between KRCD staff and the team to ensure outreach efforts expected by the Water Board and others can occur and all tasks can be completed in a timely manner. While all tasks are important, the expedient implementation of Task 6 is especially critical to confirm the participation of dischargers (and non-dischargers who choose to be engaged) in this time sensitive regulatory process.

¹ As confirmed by Regional Board executive members at the CV-SALTS meeting May 14, 2020.

The primary focus of this letter is to provide a scope of work and budget estimate to assist the stakeholders in the Kings and Tulare Lake Subbasins with the preparation of one PMZP for the two subbasins. Preparation of the PMZP will be completed by Luhdorff and Scalmanini Consulting Engineers (LSCE) working collaboratively with GEI Consultants (GEI). LSCE and GEI previously worked together on the preparation of draft PMZPs as part of the Management Zone pilot studies in the Turlock and Kings River East Groundwater Sustainability Agency (GSA)/Alta Irrigation District (AID) areas for CV-SALTS. For purposes of developing this scope and budget estimate, we have assumed that one Management Zone will be proposed. This Management Zone will include the Kings River East GSA/AID Management Zone developed under the pilot study, the remainder of the Kings Subbasin, and the entirety of the Tulare Lake Subbasin.

A brief description of the tasks requested by KRCD to help complete the PMZP for the Kings and Tulare Lake Subbasins is provided below, followed by a budget table (**Table 1**), and the Schedule of Fees for LSCE and GEI employees. The main role of LSCE and GEI, as consultants, is to provide the technical assistance the project proponents need in order to complete the PMZP. There are several components of the PMZP that are expected to be completed or mostly completed by the project proponents. For example, we understand that most of the interaction with the public and implementation of the outreach components of the Early Action Plan and the PMZP will be completed by the project proponents and not the consultants (LSCE and GEI). However, consultant assistance may be requested for these activities, if needed. The following scope and budget reflect this understanding.

TASK 1. PROJECT ADMIN/COORDINATION

This task includes communications and phone calls with KRCD to coordinate the technical work required to support the preparation of the PMZP for the Kings and Tulare Lake Subbasins as one Management Zone.

TASK 2. MANAGEMENT ZONE BOUNDARY DELINEATION

As noted above, the Kings River East GSA/AID area, a subarea of the Kings Subbasin, was previously identified as a pilot Management Zone for the CV-SALTS pilot study. This area will be included in the delineation of the new Management Zone that will encompass the Kings Subbasin and Tulare Lake Subbasin. For purposes of scoping this task, we have assumed that this approach of combining the two subbasins into one Management Zone will be proposed. The final delineation of the Management Zone will be based on input from KRCD, and the technical and regulatory justification for the proposed and final boundaries will be developed by LSCE. This task will include descriptions of the factors for consideration necessary to define a Management Zone area and how they apply to the Management Zone for the Kings and Tulare Lake Subbasins.

TASK 3. CHARACTERIZATION OF PROPOSED MANAGEMENT ZONE

The characterization of the Management Zone will include descriptions of the geography (surface waters, groundwater, hydrology, etc.), jurisdictional boundaries within the Management Zone (including



cities and counties), descriptions of the land use, identification of septic systems², and resource management agencies and designations (including Groundwater Sustainability Agencies [GSAs], water districts, coalitions, Disadvantaged Communities and Disadvantaged Unincorporated Communities).

TASK 4. INITIAL ASSESSMENT OF GROUNDWATER CONDITIONS

This task will include an assessment of groundwater conditions in the Kings and Tulare Lake Subbasins. It will include a summary of the hydrogeology of the subbasins, groundwater elevations and flow directions, and the delineation of the Upper Zone of the groundwater aquifer.

This task also involves acquiring new nitrate³ groundwater quality data in and around the entire Kings and Tulare Lake Subbasins to update the existing CV-SALTS database. New groundwater quality data will be acquired from publicly available sources. The publicly available sources include but are not limited to: the U.S. Geological Survey's National Water Information System, the California Department of Water Resources (DWR) Water Data Library, the State Water Board's GeoTracker Groundwater Ambient Monitoring and Assessment Program (GAMA), the California Water Board's Division of Drinking Water (DDW) Water Quality Program database, and the State Water Resources Control Board's GeoTracker (including the Irrigated Lands Regulatory Program [ILRP] Groundwater Quality Trend Monitoring and domestic well nitrate results). Other non-publicly available nitrate groundwater quality data within the Management Zone will be requested and compiled as available. This will include requesting and accessing county records for small and local water systems (from Madera, Fresno, Tulare, Kings, and Kern Counties), as well as other privately held well laboratory testing data for private wells, as available.

The newly updated nitrate groundwater quality data will be qualified and categorized into aquifer/depth zones, based on well depth and/or well type. Updated nitrate groundwater data for the Upper Zone of the groundwater system underlying the Kings and Tulare Lake Subbasins will be used for a geostatistical interpolation of the Upper Zone Ambient Nitrate. This interpolation will be used for identifying potentially impacted areas.

Once identified, these areas will be used in conjunction with Public Water Supply System (PWS) information (service area and well locations), including state small water systems and local small water systems in the Management Zone to identify PWS that are potentially impacted by elevated nitrate concentrations in groundwater. A summary of the delivered water treatment status for each PWS in the Management Zone will also be provided. The spatial interpolation of ambient nitrate in the Upper Zone will also be used to summarize potentially impacted domestic wells and estimated population in the Management Zone.

Other chemical constituents of concern or interest may be collected during this task (such as 1,2,3-TCP, Arsenic, Uranium, etc.). The **Task 3** scope and budget do not include any compilation or analysis of other



² While identification of septic systems is not required to be included in the PMZP, it is an important source of local non-point source nitrate in the subsurface. This brief mapping exercise will provide valuable information for nitrate management.

³ TDS data will also be downloaded but not analyzed at this time, for future use to KRCD.

chemicals beyond nitrate, but if KRCD desires additional interpretation, LSCE can accommodate that with *Optional Task 3*. The budget provided in **Table 1** for *Optional Task 3* represents the incremental cost for each additional chemical constituent of interest. There is a cost benefit in adding additional constituents besides nitrate, as the data can all be requested and downloaded at the same time for little additional cost. The work to categorize wells into depth zones will also be greatly reduced considering many of the wells with additional chemical constituents of concern will have nitrate data; therefore, these wells would already be categorized according to depth zone during **Task 3**, pending readily available well construction information. The assessment of potentially impacted PWS and domestic wells would also result in some cost savings for additional constituents since PWS well data and boundary information, as well as estimates of domestic well locations, will be completed in **Task 3**.

TASK 5. PUBLIC WATER SYSTEMS AND DOMESTIC WELL IDENTIFICATION AND EVALUATION

The spatial interpolation of Upper Zone Ambient Nitrate in the Kings and Tulare Lake Subbasin will be used in **Task 4** for identifying areas potentially impacted by elevated nitrate concentrations. Public water supply systems (PWS), including state small water systems and local small water systems (as received from Madera, Fresno, Tulare, Kings, and Kern Counties), will be identified in the Management Zone. These water supply systems and the associated wells will be assessed, based on location and available water quality data, to estimate which systems and/or wells are potentially impacted by elevated nitrate concentrations. An analysis of the delivered water treatment status will be performed for PWS in the Management Zone. In addition, the spatial interpolation of Upper Zone Ambient Nitrate will be used to identify and summarize potentially impacted domestic wells located throughout the Management Zone.

TASK 6. IDENTIFICATION OF AND COORDINATION WITH MANAGEMENT ZONE PARTICIPANTS

This task involves working closely with the Kings Subbasin and Tulare Lake Subbasin contacts (project proponents) and others as needed to identify candidate participants in the Management Zone, including potential dischargers and non-dischargers. This task includes identification of the following: (a) permitted dischargers within the boundaries of the Management Zone; (b) participants in the relevant GSAs; and (c) other relevant local, regional, state, and federal planning agencies and public/private organizations within the area. Once identified, KRCD staff/project proponents will contact each entity via an outreach effort to determine who will agree to participate in the Management Zone. Some budget has been included in this proposal for consultants to support this effort.

There are numerous individual waste discharge requirements (WDRs) in the Kings/Tulare Lake Subbasins that will receive a NTC. The consultant team understands that KRCD staff/project proponents in consultation with Central Valley Water Board staff will conduct the work necessary to create a complete list of permitted dischargers to be contacted within the planned Management Zone area, including both subbasins. For the Kings River East GSA/AID pilot study, the Central Valley Water Board identified 29 individual WDRs located within the study area that are all candidates for participation in the Management Zone. There are also a number of dischargers under General Orders, including dairies, poultry and confined bovine feeding operations that will also be identified under this task. For budgeting



outreach to dischargers under this task, it was assumed that given the large area of the combined Kings and Tulare Lake Subbasins, there will be up to 40 individual dischargers that will receive a NTC and that the level of outreach activity needed to coordinate with these dischargers will average four hours/discharger (note that the number of individual dischargers and the level of effort per discharger is only an estimate at this time). In addition, it was assumed that trade representatives will conduct their own outreach with affected dischargers, for example, dairies, poultry, confined bovine, and growers. For this proposal, the consultant team will coordinate with KRCD staff/project proponents to conduct outreach to permitted dischargers. We understand that a significant portion of the outreach to affected dischargers to inform them of the proposed Management Zone and seek their commitment to participate in the Management Zone will be conducted by KRCD staff/project proponents. However, the team has included some budget to support this effort. The consultant team will coordinate with KRCD staff/project proponents on how to best support them in their efforts to work with dischargers given the level of effort covered by the budget.

This task also addresses the need to identify and conduct outreach to non-dischargers within the proposed Management Zone area. Collaboration among Management Zone participants will be needed to identify key non-dischargers to include in outreach efforts. It is assumed that the KRCD staff/project proponents will lead outreach efforts to non-dischargers, but a small portion of Task 6 budget includes time for the consultant team to assist with this effort, e.g., to facilitate sharing information and help address questions as they arise.

TASK 7. NITRATE TREATMENT AND CONTROL PRACTICES

This task involves reviewing existing nitrate management programs that are currently being implemented within the Kings and Tulare Lake Subbasins. These management programs may be part of a General Order, WDR, Conditional Waiver, or other regulatorily required nitrate management program. Each existing program will be reviewed and summarized in coordination with the dischargers responsible for implementation of the nitrate management program to identify the specific nitrate-related treatment and control efforts or management practices.

As noted in Task 6, it is assumed that there will be up to 40 individual dischargers that receive a NTC. Assuming most, if not all, of these dischargers will participate in the Management Zone, each of their nitrate management practices will need to be described and summarized. For this proposal, the consultant team will coordinate with KRCD staff/project proponents to prepare the necessary summaries. We understand that most of these summaries will be prepared by KRCD staff/project proponents working collaboratively with the participating individual dischargers. The consultant team will coordinate with KRCD staff/project proponents on how to best support them in their efforts to work with these dischargers within the level of effort covered by the budget.

Practices implemented by permittees under General Orders can be summarized collectively for each Order. A draft of these practices has already been developed for growers and dairies and included in the pilot study PMZP. For this proposal, it is assumed that the KRCD staff/project proponents will lead preparation of the summary of practices being implemented under the General Orders for poultry and



confined bovine feeding operations. It is also assumed that KRCD staff/project proponents will review and revise the draft summaries previously prepared for growers and dairies to verify the information remains current. The consultant team will incorporate the resulting summaries of practices prepared for each General Order into the PMZP under Task 11.

TASK 8. EARLY ACTION PLAN

The Early Action Plan (EAP) is a key component of the PMZP. The development of the EAP includes the following requirements from the Basin Plan:

- A process to identify affected residents and the outreach utilized to ensure that impacted groundwater users are informed of and given the opportunity to participate in the development of proposed solutions;
- 2. A process for coordinating with others that are not dischargers to address drinking water issues, which must include consideration of coordinating with affected communities, domestic well users and their representatives, the State Water Board's Division of Drinking Water, Local Planning Departments, Local County Health Officials, Sustainable Groundwater Management Agencies, and others as appropriate;
- 3. Specific actions and schedule to address the immediate drinking water needs of affected residents within the Management Zone that do not have interim replacement water; and
- 4. The funding mechanism to implement the EAP.

Development of the EAP involves collaboration with project proponents to develop and implement a process to identify and inform affected residents of the EAP and coordinate with other potentially interested parties within the proposed Management Zone. The goal of this effort is to ensure that the affected residents are given the opportunity to participate in the development of the EAP. Community outreach is assumed to be conducted by the Management Zone project proponents, including the potential need for a "Community Engagement Plan" for implementation during development of the EAP. Upon project proponent request, the consultants could be made available to assist with the planning of this outreach component. The Office of Public Participation of the State Water Board recently (April 27, 2020) provided a guidance document (Guidance for Engaging Communities During Development of Early Action Plans, Central Valley Nitrate Control Program) that will assist in the development of a formal or informal "Community Engagement Plan."

The Draft EAP prepared for the proposed Management Zone will have three draft versions produced in this task. The three drafts include: an Administrative Draft, Public Draft, and Revised Draft. The first draft (Administrative Draft) will be based on the existing EAP prepared for the Kings River East GSA/AID Management Zone pilot study. As part of the development of the Draft EAP, the consultant team will prepare a preliminary budget for EAP implementation based on assumptions agreed upon by project proponents (final budget will be prepared by the project proponents unless consultant support is authorized under Task 8b below). It is assumed that project proponents will lead public outreach efforts to fulfill the community engagement requirements for development of the EAP. The consultant team will coordinate with the Management Zone project proponents to incorporate the outcomes from these



outreach efforts into the EAP drafts, e.g., written descriptions of public outreach activities. The consultant team will also incorporate the outcomes from any other project proponent led efforts into the EAP drafts, e.g., the final EAP budget.

Each revised draft of the EAP will include a detailed response to comments to document the process that was followed to make decisions regarding the content of the EAP and demonstrate to the Central Valley Water Board that consistent with the Community Engagement Plan guidelines community input was considered during development of the EAP. The budget for this task is based on best available information. One of the key issues that impacts level of effort is the need to carefully respond to comments given the sensitivity of some stakeholders to EAP-related issues. For this proposal, we have assumed that the comment/response process can be managed within a reasonable level of effort. If the volume of comments greatly exceeds the comments received during the Pilot Management Zone work or if the nature of the comments is greatly different than previously experienced, additional budget may be required to document the EAP development process, or it may be necessary to request assistance from KRCD staff, e.g., to assist in the preparation of responses to comments. The EAP will be finalized as part of Task 11 for incorporation into the Final PMZP document.

Task 8b in the budget (Table 1) includes consultant support if requested for the following EAP elements:

- 1. Support for the early identification of filling station locations if included in the EAP,
- 2. Developing the final EAP budget by obtaining cost estimates from vendors to firm up estimated costs in the preliminary budget, and
- 3. Development of alternatives for funding for the EAP.

These three parts of the EAP are considered to be *optional* for the LSCE and GEI consultants for budgeting purposes, but these elements can be supported if requested.

TASK 9. GOVERNANCE DEVELOPMENT SUPPORT (OPTIONAL)

This task is optional and can be completed at the request of the Management Zone project proponents. This task involves preparing support materials for the Management Zone Management Committees, for example the Finance and Governance Committees. This optional task also includes consultant participation in up to six (6) teleconference meetings.

TASK 10. STAKEHOLDER MEETINGS

This task includes participation in two in-person meetings and up to four (4) teleconference meetings with stakeholders. Additional consultant team support can be added as needed on a time and materials basis. The purpose of stakeholder meetings will be to: (a) increase interest in being included in the PMZP as a declared participant in the Management Zone, (b) share information being developed to support the PMZP, and (c) provide a forum for exchange of information.

Budget includes expenses for Vicki Kretsinger Grabert (LSCE) and Richard Meyerhoff (GEI) to attend up to two in-person meetings, as directed by the project proponents. Additional participation from LSCE



and/or GEI in meetings (in-person or teleconference) may be added on a time and materials basis at the request of the project proponents.

TASK 11. PRELIMINARY MANAGEMENT ZONE PROPOSAL

This task involves preparing the following PMZP draft documents:

- 1. Administrative Draft,
- 2. Public Draft,
- 3. Revised Draft

The Administrative Draft PMZP will be provided only to the immediate Management Zone participants. The Public Draft PMZP is to provide the stakeholders and public the opportunity to provide comments prior to the PMZP being submitted to the Regional Board. This will be the public's first opportunity to provide meaningful comments on both the final EAP and the PMZP draft document. The EAP prepared as part of **Task 8** will be incorporated into the PMZP and will ultimately be included as part of the final PMZP submitted to the Central Valley Water Board. The budget for this task is based on best available information and we have assumed that the comment/response process can be managed within a reasonable level of effort. If the volume and/or nature of comments greatly exceeds the level of effort to respond to comments received during the Pilot Management Zone work, additional budget may be required. The Final PMZP is the regulatory document submitted to the Central Valley Water Board. Responses to Central Valley Water Board comments on the PMZP and preparation of a Final Management Zone Proposal are not included in this scope and budget. The PMZP document will follow the template guidelines developed for CV-SALTS by LSCE and GEI and will encourage input (comments) from the Management Zone participants prior to submitting the Final PMZP document.

Sincerely,

LUHDORFF & SCALMANINI CONSULTING ENGINEERS

Sicki Kretsinger Grabert

Vicki Kretsinger Grabert

President

Attachments:

Schedule of Fees for LSCE Schedule of Fees for GEI



Table 1: Proposed budget for Technical Assistance for the Kings and Tulare Lake Subbasins Management Zone Preliminary Management Zone Proposal.

Tasks	Lead	Labor	Expenses	Total Cost
Task 1 – Project Management/Coordination	LSCE/GEI	\$8,000	\$0	\$8,000
Coordination Calls	2302, 02.	70,000	Ţ.	Ψ0,000
Task 2 – Management Zone Boundary Delineation				
Proposed & Final Boundary	LSCE	\$10,864	\$0	\$10,864
Technical/Regulatory Justification				
Task 3 – Characterization of Management Zone				
 Geography (SW/GW, hydrology, etc.) 				
 Jurisdiction (cities, counties) 				
• Land Use				
Septic Use	LSCE	\$19,076	\$0	\$19,076
• GSAs				
Water Districts				
• Coalitions				
DACs/DUCs				
Task 4 – Initial Assessment of Groundwater Conditions				
Data Sources and Acquisition				
Data Analysis (hydrogeology; GW elevations and flow; Upper	LSCE	\$40,760	\$0	\$40,760
Zone delineation; Nitrate water quality; nitrate geostatistical	LJCL			
interpolation				
Initial Assessment				
OPTIONAL Task 4 – Additional Chemical Constituent GWQ				
Analysis				
Compilation of one chemical constituent groundwater				
quality data from publicly and privately available databases	LSCE	\$33,944	\$0	\$33,944
Assessment of one chemical constituent of groundwater	2302	ψου,σ τ τ	Ç	433,311
quality data (statistical analysis, identification of potentially				
impacted areas)				
PWS and Domestic Well Identification & Evaluation				
Task 5 – PWS and Domestic Well Identification & Evaluation				
Nitrate-Impacted Areas				
Public Water Supply Systems (PWS, State Smalls, Local				
Smalls)	LSCE	\$18,152	\$0	\$18,152
 Potentially-Impacted Public Supply Wells and Systems 				
Public Water System Delivered Water Treatment Status				
Potentially-Impacted Domestic Wells				
Task 6 - Identification of and Coordination with Management				
Zone Participants				
 Coordinate with KRCD staff/project proponents regarding 	GEI	\$19,620	\$0	\$19,620
participation of Dischargers and Non-Dischargers (assumed up				
to 40 individual dischargers)				
Task 7 – Nitrate Treatment & Control Practices				
 Coordinate with KRCD staff/project proponents on the 				
preparation of Draft/Review Summaries pertaining to				
Individual Dischargers (assumed up to 40 participating	GEI	\$21,050	\$0	\$21,050
individual dischargers and that KRCD staff/project proponents	GEI	321,030	υç	3∠1, U3U
would address permittees under General Orders)				
Coordinate with project proponents to prepare Final				
Summaries				



Ms. GALLOCK & Ms. DUNN JUNE 11, 2020 PAGE 10

Tasks	Lead	Labor	Expenses	Total Cost
Task 8 – Early Action Plan • Prepare EAP Drafts (3) with Comment/ Response Table	GEI	\$23,846	\$0	\$23,846
OPTIONAL: Task 8b – Support for Additional Early Action Plan Components Support Early Identification of Filling Station Locations (if included in the EAP) for the remainder of the MZ (outside of the Kings River East/AID area) Develop Final Budget through Coordination with Vendors Support Development of Funding Mechanism	GEI	\$61,276	\$0	\$61,276
OPTIONAL: Task 9 – Governance Development Support Prepare Materials for MZ Management Committees (e.g., Finance, Governance) Attend up to 6 Meetings	LSCE/GEI	\$35,050	\$600	\$35,650
 Task 10 – Stakeholder Meetings Two in-person meetings Teleconferences (4 total)/Email More participation as needed on a time and materials basis 	LSCE/GEI	\$21,364	\$1,350	\$29,522
Task 11 – Preliminary Management Zone Proposal (including EAP) Administrative Draft PMZP Public Draft PMZP Revised Draft PMZP Proposal Final PMZP	LSCE/GEI	\$58,181	\$0	\$58,181
Estimated Cost to Develop Preliminary Management Zor	ne Proposal	\$247,721	\$1,350	\$249,071
Estimated Cost to Develop Preliminary Management Zone Proposal with One (1) Additional Chemical Constituent Analysis and Optional EAP Components and Governance Support		\$377,991	\$1,950	\$379,941





SCHEDULE OF FEES - ENGINEERING AND FIELD SERVICES 2020

Professional					
Senior Principal	\$225/hr				
Principal Professional	\$220/hr				
Supervising Professional	\$210/hr				
Senior Professional	\$192/hr				
Project Professional	\$150 to 170/hr				
Staff Professional	\$135 to 145/hr				
Technical					
Engineering Inspector	\$140/hr				
ACAD Drafting/GIS	\$135/hr				
Engineering Assistant	\$105 to 125/hr				
Scientist	\$105 to 125/hr				
Technician	\$105 to 125/hr				
Clerical Support					
Clerical Suppo	ort				
Word Processing, Clerical	\$80/hr				
Word Processing, Clerical	\$80/hr				
Word Processing, Clerical Digital Communications Specialist	\$80/hr \$90/hr \$100/hr				
Word Processing, Clerical Digital Communications Specialist Project Admin/Accounting Assistant	\$80/hr \$90/hr \$100/hr				
Word Processing, Clerical Digital Communications Specialist Project Admin/Accounting Assistant Other Sevice	\$80/hr \$90/hr \$100/hr				
Word Processing, Clerical Digital Communications Specialist Project Admin/Accounting Assistant Other Sevice Vehicle Use	\$80/hr \$90/hr \$100/hr \$ \$0.58/mi				
Word Processing, Clerical Digital Communications Specialist Project Admin/Accounting Assistant Other Sevice Vehicle Use Subsistence	\$80/hr \$90/hr \$100/hr \$ \$0.58/mi Cost Plus 15%				
Word Processing, Clerical Digital Communications Specialist Project Admin/Accounting Assistant Other Sevice Vehicle Use Subsistence Groundwater Sampling Equipment (Includes Operator)	\$80/hr \$90/hr \$100/hr \$ \$0.58/mi Cost Plus 15% \$170.00/hr				
Word Processing, Clerical Digital Communications Specialist Project Admin/Accounting Assistant Other Sevice Vehicle Use Subsistence Groundwater Sampling Equipment (Includes Operator) Copies	\$80/hr \$90/hr \$100/hr \$ \$0.58/mi Cost Plus 15% \$170.00/hr 0.20 ea				
Word Processing, Clerical Digital Communications Specialist Project Admin/Accounting Assistant Other Sevice Vehicle Use Subsistence Groundwater Sampling Equipment (Includes Operator) Copies Professional or Technical Testimony	\$80/hr \$90/hr \$100/hr \$ \$0.58/mi Cost Plus 15% \$170.00/hr 0.20 ea 200% of Regular Rates				



FEE SCHEDULE

Personnel Category	Hourly Billing Rate \$ per hour
Staff Professional – Grade 1	\$ 123
Staff Professional – Grade 2	\$ 135
Project Professional – Grade 3	\$ 148
Project Professional – Grade 4	\$ 166
Senior Professional – Grade 5	\$ 196
Senior Professional – Grade 6	\$ 223
Senior Professional – Grade 7	\$ 255
Senior Consultant – Grade 8	\$ 275
Senior Consultant – Grade 9	\$ 320
Senior Principal – Grade 10	\$ 360
Senior Drafter and Designer	\$ 148
Drafter / Designer and Senior Technician	\$ 135
Field Professional	\$ 111
Technician, Word Processor, Administrative Staff	\$ 110
Office Aide	\$ 86

These rates are billed for both regular and overtime hours in all categories.

Rates will increase up to 5% annually, at GEI's option, for all contracts that extend beyond twelve (12) months after the date of the contract. Rates for Deposition and Testimony are increased 1.5 times.

OTHER PROJECT COSTS

Subconsultants, Subcontractors and Other Project Expenses - All costs for subconsultants, subcontractors and other project expenses will be billed at cost plus a 10% service charge. Examples of such expenses ordinarily charged to projects are subcontractors; subconsultants: chemical laboratory charges; rented or leased field and laboratory equipment; outside printing and reproduction; communications and mailing charges; reproduction expenses; shipping costs for samples and equipment; disposal of samples; rental vehicles; fares for travel on public carriers; special fees for insurance certificates, permits, licenses, etc.; fees for restoration of paving or land due to field exploration, etc.; state and local sales and use taxes and state taxes on GEI fees. The 10% service charge will not apply to GEI-owned equipment and vehicles or in-house reproduction expenses.

Field and Laboratory Equipment Billing Rates – GEI-owned field and laboratory equipment such as pumps, sampling equipment, monitoring instrumentation, field density equipment, portable gas chromatographs, etc. will be billed at a daily, weekly, or monthly rate, as needed for the project. Expendable supplies are billed at a unit rate.

Transportation and Subsistence - Automobile expenses for GEI or employee owned cars will be charged at the rate per mile set by the Internal Revenue Service for tax purposes plus tolls and parking charges or at a day rate negotiated for each project. When required for a project, four-wheel drive vehicles owned by GEI or the employees will be billed at a daily rate appropriate for those vehicles. Per diem living costs for personnel on assignment away from their home office will be negotiated for each project.

PAYMENT TERMS

Invoices will be submitted monthly or upon completion of a specified scope of service, as described in the accompanying contract (proposal, project, or agreement document that is signed and dated by GEI and CLIENT).

Payment is due upon receipt of the invoice. Interest will accrue at the rate of 1% of the invoice amount per month, for amounts that remain unpaid more than 30 days after the invoice date. All payments will be made by either check or electronic transfer to the address specified by GEI and will include reference to GEI's invoice number.