REQUEST FOR QUALIFICATIONS

FOR GROUNDWATER SUSTAINABILITY AGENCY DATA REVIEW, FEE ANALYSIS, AND RATE SETTING SERVICES

RFQ Issue Date: August 9, 2022

Statement of Qualifications Deadline: **September 6, 2022, 4:00 PM**

Issued by:

Colusa Groundwater Authority

Contact Person:

Colusa Groundwater Authority
Program Manager
Carol Thomas-Keefer
cthomaskeefer@rgs.ca.gov

1. Introduction

The Colusa Groundwater Authority (CGA) is requesting qualification submittals from consultants with experience in data and fee analysis and rate setting for public agencies. The CGA is primarily interested in the consultant's experience in relation to setting fees pursuant to Propositions 26 and 218, specifically as they relate to the Sustainable Groundwater Management Act. Services provided may include all tasks necessary to evaluate, develop options, select, and implement a funding mechanism. This will include a review of the CGA's previous fee study, evaluation of fee alternatives, development of fee/rate schedules to fund the costs of Groundwater Sustainability Plan (GSP) implementation and ongoing administration of the CGA. Services may also include the development of outreach materials and presentations at various Board, Advisory, and community meetings.

If the CGA awards a contract for services as a result of this request for qualifications (RFQ), a Scope of Work will be negotiated, and a contract will be executed establishing the terms and compensation for the subject services. The CGA does not guarantee work to any qualified firm or consultant.

Submittals must be received by **September 6, 2022 at 4:00 PM** to be considered for this opportunity.

All Potential Respondents should note that it is their responsibility to:

- Read carefully all of the contents of this entire RFQ.
- Ask for clarification in writing before submission due dates.
- Address all requirements and follow all procedures of this RFQ.
- Immediately inform the RFQ Contact Person of any problems with this RFQ solicitation.
- Submit all responses by the required dates and times.

2. Background

In September 2014, the California legislature enacted the Sustainable Groundwater Management Act (SGMA) to require sustainable groundwater management statewide. SGMA applies to all high and medium priority groundwater basins as determined by the Department of Water Resources. Implementation of SGMA is achieved through the formation of Groundwater Sustainability Agencies (GSAs) and the preparation and implementation of Groundwater Sustainability Plans (GSPs).

The Colusa Subbasin is a high priority basin required to be managed under SGMA and is shared between Glenn and Colusa Counties. Two GSAs coordinated on developing a single GSP, which was submitted to the Department of Water Resources in January 2022. The first required Annual Report was submitted in April 2022.

The CGA governs the Colusa County portion of the subbasin through a Joint Powers Agreement which includes twelve participating agencies.

In 2018, the GGA retained a consultant to assist with a Proposition 218, Majority Protest Process. This effort produced a fee study in March 2019. The study covers proposed fee schedules for fiscal years 2019/2020 through 2023/2024. The maximum assessment proposed in the fee study is $1.21 per acre. After an extensive process, on June 5, 2019, CGA held a public hearing to consider adopting the CGA operations fee. Absent a majority protest, the CGA Board adopted Resolution 2019-02 "Resolution Certifying the Results of a Proposition 218 Majority Protest Proceeding and Setting the Authority's Operations Fee".

The Resolution established a maximum fee of $1.21 per acre and $1.21 per acre for the 2019/2020 year. Each year, the CGA reconsiders and adopts the operations fee. In 2020/2021 the fee was set at $1.00 per acre, which was maintained in 2021/2022. The fee remains at $1.00 per acre for fiscal year 2022/2023.

It has been the intent of the CGA to re-evaluate the fee structure at the conclusion of the GSP planning process as the CGA shifts to the implementation of the GSP. The GSP was completed and submitted to the Department of Water Resources for review in January 2022.

3. Project Description and Scope of Services

The CGA is seeking to conduct a new/updated rate study to identify funding mechanisms for implementation of the Colusa Subbasin GSP and ongoing administration of the CGA. The CGA expects this project will build on previous efforts and conduct all tasks necessary to evaluate, develop options, select, and implement a funding mechanism appropriate for the GSP implementation phase. Respondents are expected to be familiar with laws and regulations pertaining to the Sustainable Groundwater Management Act, Proposition 26, and Proposition 218.

Services provided may include, but are not limited to:

- Review of the Colusa Subbasin GSP and initial budget and implementation plan
- Review of meeting summaries related to discussions on funding mechanisms
- Evaluation of potential fee alternatives
- Recommendations on selecting an appropriate mechanism and process to implement a fee
- Development of a fee study or Engineers Report as appropriate
- Development of outreach materials
- Presentations to the CGA, advisory committees, or public
- Updating parcel information
- Complying with any ballot, hearing, protest, vote, or other requirement
- Preparing necessary files to place the fee on the County's tax roll
- Related tasks

The CGA anticipates developing draft implementation budgets by early summer 2023, and the project completed with submittal of data files to Colusa County and Yolo County in early August 2023.

4. Qualifications

a) Firm's Background and Experience

   i. Discussion of the firm's experience in water rate studies, cost of service analysis, and rate design services for agencies of similar size, and services provided.

   ii. Discussion of the firm's experience working with GSAs and services provided.

   iii. Experience and qualifications of project manager and key project staff.

b) Firm's Data Analysis Experience

   i. Discussion of the firm's experience in data analysis in communities with similar composition of groundwater users.

ii. Discussion of the firm's GIS capabilities, experience, and preferred software.

c) Experience with 5-year revenue requirement projections for recently formed agencies

i. Discussion of the firm's experience with short to mid-range financial planning for relatively new public agencies and development of fees/rates to cover projected expenses for administration and anticipated projects/programs.

ci) Experience with fee and rate design and implementation

i. Discussion of experience working with Boards, committees, and stakeholders in the rate design process.

ii. Experience with creating compelling community outreach information pertaining to fees and rates.

cii) Additional pertinent information the CGA should consider.

ciii) Ability to perform work subject to the following tentative schedule:

September/October 2022	Work with GSA Staff and Boards to create and finalize scope of services and total compensation
October/November 2022	Commence Work
November 2022-June 2023	Proceed with working including significant input from Boards, advisory committees, stakeholders, and staff
July 2023	Final Report and recommendations to CGA
August 2023	Submit appropriate files to Colusa and Yolo Counties for inclusion of fee on Tax Roll

5. Submission Requirements

Statement of qualifications should be emailed to Carol Thomas-Keefer, CGA Program Manager at cthomaskeefer@rgs.ca.gov. **Late or incomplete submittals will not be considered.**

1. Cover Letter (no longer than two pages)
   The cover letter shall include the name and address of the respondent submitting the proposal, together with the name, address and telephone number of the contact person who will be authorized to make representations for the respondent, the respondent's federal tax ID number and a list of subcontractors/subconsultants, if any. The cover letter shall include a statement that the proposal is valid for 90 days after receipt. The cover letter should convey a clear understanding of the requirements and objectives, and why the respondent is uniquely qualified to be awarded a contract.

2. Respondent's Qualifications
   Responses to the items in the Qualifications Section of this RFQ.

3. Proposed Respondent Team
   The statement of qualifications shall identify the Project Manager who will be primarily responsible for providing services to the CGA, and other staff to be assigned to the team. Please

include the qualifications, training, and certification of the Project Manager, and all other staff who will perform the services outlined herein. Include a resume for each, listing education, experience, and expertise in this type of work.

4. Fee Schedule
   This section shall identify the billing rates for listed personnel, as well as other costs or expensed that would be charged in connection with the work.

5. Conflicts
   This section should identify whether the respondent anticipates it would need to obtain conflict waivers from any existing clients and how the respondent anticipates addressing any potential conflicts with respect to any member agencies of the CGA.

6. References
   The name, addresses, email address, and telephone number of three public agency clients who have contracted with the Respondent for services similar to those described in this RFQ within the last five years.

7. Proposed Scope of Work and Schedule
   Submit an outline of a proposed scope of work and schedule that demonstrates how the consultant would proceed with work within the timeframe specified, the proposed project elements, tentative list of data needs, outreach to Boards, advisory committees, and stakeholders, and approach to community engagement. This should include a high-level approach to major tasks that are typically involved in completing fee studies, with the understanding the final scope of work will be negotiated after the award of a contract.

6. Evaluation Criteria

The following criteria will be used by the CGA in evaluating submissions:

1. Experience and demonstrated competence of the identified key areas of service outlined in the Qualifications section of this RFQ.
2. Reference recommendations.
3. Comprehensive consultant fee schedule.
4. Thoroughness of submission.

The CGA reserves the right to award a contract based on written responses only; however, oral presentations and written questions for further clarification may be required of some or all the respondents at no cost to the CGA. The CGA reserves the right to select more than one (1) contractor or no contractors.

7. Schedule

The following schedule is estimated and subject to change.

Event	Anticipated Date/Time (Subject to Change)
Issue Request for Qualifications	August 9, 2022
Final Date to Submit Questions and Request Clarification	August 16, 2022, 4:00 PM
Questions Answered via Addendum(s)	August 22, 2022, 4:00 PM
Closing date for Request for Qualifications	September 6, 2022, 4:00 PM
Presentation/Demonstration (if desired)	September 19-23, 2022

8. General Information

Any and all communication regarding this solicitation shall be in writing and directed to:

Colusa Groundwater Authority Program Manager
Carol Thomas-Keefer
CThomasKeefer@rgs.ca.gov

This person will serve as the GSA contact for this solicitation and will develop any necessary addendums to the solicitation to provide clarifications if necessary. **DO NOT** contact other GSA staff, Board members, or Selection Committee members regarding this project or selection procedures. Failure to adhere to these instructions may result in disqualification.

Questions and requests for clarification may only be submitted by e-mail to the contact listed above. Verbal, fax, and phone inquiries will not be answered. All questions and requests for clarification shall be submitted no later than **August 16, 2022**. The GSAs reserve the right to decline a response to any question on a case-by-case basis. The GSAs will provide answers and clarifications by posting an addendum(s) on their websites by **August 22, 2022** so all potential Respondents receive consistent information. It is the responsibility of all nterested firms to access the website for this information. **Questions received after August 16, 2022 will not be answered.**

9. Disclosure of Information

All information and materials submitted to the CGA in response to this RFQ may be reproduced by the CGA for the purpose of providing copies to authorized GSA staff and selection committee members involved in the evaluation of the proposals, but shall be exempt from public inspection under the California Public Records Act until such time as a Contract is executed. Bid awards are a matter of public record. Once a Contract is executed, proposals submitted in response to this RFQ are subject to public disclosure as required by law. Your submission of a proposal is considered your consent to the GGA's disclosure of the proposal. The CGA shall not be liable for disclosure of any information or records related to this procurement.

September 6, 2022

EST. 1968
PROVOST & PRITCHARD
CONSULTING GROUP

Colusa Groundwater Authority

Qualifications for Data Review, Fee Analysis, and Rate Setting Services

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LECHOWICZ + TSENG
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September 6, 2022

Carol Thomas-Keefer
Program Manager
Colusa Groundwater Authority
cthomaskeefer@rgs.ca.gov

Dear Ms. Carol Thomas-Keefer,

The team of Lechowicz & Tseng Municipal Consultants (L&T) and Provost & Pritchard Consulting Group (Provost & Pritchard) hereby submits a statement of qualifications to the Colusa Groundwater Authority (CGA or Authority) for Data Review, Fee Analysis, and Rate Setting Services. Both firms have a proven track record. L&T has provided rate studies to water purveyors across the state and Provost & Pritchard provided the CGA's 2019 Fee Study. We have the knowledge and experience to provide the CGA with a financial roadmap for the next five-year period.

L&T is a women-owned firm located in the Bay Area that focuses on financial planning, rate and fee studies, and management consulting for public agencies. Firm principals Alison Lechowicz and Catherine Tseng have over 15 years of financial consulting experience and have completed over 100 projects. L&T will serve as the lead firm to provide financial consulting services with Provost & Pritchard as a subconsultant providing GIS analysis, tax roll preparation, and assessment district services. For more than 54 years, Provost & Pritchard has demonstrated engineering excellence throughout California. Provost & Pritchard's engineering and consulting services are rooted in agricultural water resources, and the firm specializes in providing water resource services.

Our team offers a breadth of resources to the Colusa Groundwater Authority. L&T and Provost & Pritchard have provided fee studies to the newly formed, SGMA-compliant agencies of the Root Creek Water District, McMullin Area Groundwater Sustainability Agency (GSA), and the Kings River East GSA. We will bring this experience to our work with the Colusa Groundwater Authority. Our team will provide a comprehensive review of funding mechanisms including Proposition 218 and 26 rates and fees, land-based assessments, and special taxes. L&T will explain the advantages and disadvantages of each mechanism, make recommendations, and assist with public approval. We will emphasize the value of sustainable water supply to the growers and the avoided cost of state intervention.

Provost & Pritchard enjoyed working with the CGA on the 2019 Fee Study as well as providing continuing tax roll services. Via this prior and ongoing work, Provost & Pritchard is very familiar with the CGA's Board, member agencies, landowner issues (such as dry farming issues on the west-side), and political sensitivities. This familiarity will inform our analysis and streamline our workflow. Engineering staff will work out of Provost & Pritchard's local office in Chico.

Our qualifications to provide Data Review, Fee Analysis, and Rate Setting Services are attached and are valid for 90 days after receipt. L&T will serve as the primary consulting firm and Provost & Pritchard will serve as subconsultant. Please contact us if you have any questions.

Sincerely,
Lechowicz & Tseng Municipal Consultants (Tax ID # 82-0928239)

Alison Lechowicz, Principal and Authorized Representative
909 Marina Village Parkway #135
Alameda, CA 94501
alison@LTmuniconsultants.com
510-545-3182

Provost & Pritchard Consulting Group

Linda G. Sloan, Director of Operations, Chico and Sacramento
3387 Bodero Lane
Chico, CA 95973
lsloan@ppeng.com
866-116-6200

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TEAM BACKGROUND

OVERVIEW

The firms of Lechowicz & Tseng Municipal Consultants (L&T) and Provost and Pritchard Consulting Group (Provost & Pritchard) have partnered together to offer our qualifications for the Colusa Groundwater Authority's (Authority or CGA) request for Data Review, Fee Analysis, and Rate Setting Services. L&T will serve as the lead financial consultant and Provost & Pritchard will serve as subconsultant and provide GIS analysis, assessment district services, and tax roll preparation.

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alison@
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LECHOWICZ & TSENG MUNICIPAL CONSULTANTS

Lead Firm and Main Contact

Services for the CGA include analysis of funding mechanisms, financial master plan, rate or fee reports, and public approval assistance

Firm qualifications and background:

- Firm principals have over 15 years of financial consulting experience
- Recent fee studies for other groundwater sustainability agencies
- Assignment of three staff members
- Located in Alameda, CA

3387 Bodero Lane
Chico, California 95973

(866) 776-6200
lsloan@ppeng.com

PROVOST & PRITCHARD

Engineering Subconsultant

Services for the CGA include GIS analysis, assessment district services and Engineer's Report, tax roll preparation, and public approval assistance

Firm qualifications and background:

- Over 54 years in business
- Conducted prior rate study
- Ongoing work providing tax roll services
- Local office in Chico, CA

L&T BACKGROUND

Lechowicz & Tseng Municipal Consultants is a women-owned firm founded by Alison Lechowicz and Catherine Tseng.

Our objective is to provide financial consulting and management services to local governments. Alison and Catherine have over 30 years combined experience in municipal consulting and public finance. Catherine has a background in urban planning and worked for the City of Oakland before becoming a consultant. Alison has experience working for a civil engineering firm and a background in public administration. Lechowicz & Tseng is registered with the Municipal Securities Rulemaking Board (MSRB) and Securities and Exchange Commission (SEC) as a municipal financial advisory firm. Alison holds the Series 50 (Municipal Advisor Representative) and Series 54 (Municipal Advisor Principal) qualifications.

L&T is committed to providing professional services with superior value and responsiveness. By utilizing a small team approach, our clients receive greater one-on-one attention and can be assured that the work is conducted by highly qualified professionals. Our clients are provided direct communication with the principal consultants who guide the project through each step.

Nature of firm: Women-owned firm organized as an LLC serving public agencies
Services: Utility Rate & Fee Studies, Financial Planning, Capacity Fee Studies, Utility Appraisal, Expert Witness, Public Approval Process
Size of firm: Three staff members
Location of office: Alameda, CA
Registrations: Small Business Enterprise, Women-owned business, Municipal advisory firm registered with the Municipal Securities Rulemaking Board and the Securities and Exchange Commission
Other languages spoken by staff: Spanish

PROVOST & PRITCHARD BACKGROUND

For more than 54 years, Provost & Pritchard has demonstrated engineering excellence throughout California. Our staff is diverse in their specialties, including civil and agricultural engineers, hydrogeologists, environmental specialists, planners, land surveyors, construction managers and field representatives, and support personnel. Our engineering and consulting services are rooted in agricultural water resources, and we specialize in providing water resource services to water agencies.

Of our 230 staff, many work in the water resources field supporting our clients' varied projects and consulting needs. Provost & Pritchard staff also work as an extension of agency staff including for GSAs, water and irrigation districts, community services districts, public utility districts, and municipalities throughout California. Through these experiences our team has developed an understanding of agency processes and the importance of developing proactive relationships with agency staff.

We are a leader in water resources engineering and consulting, providing a variety of services that help clients maximize the benefits from their water supplies and efficiently serve their customers. The firm's diverse range of services that are directly applicable to this project are:

- Proposition 218 and 26 Engineer's Reports and elections
- Geographic Information Systems
- Groundwater management planning for sustainability
- Water resources management, accounting, supply forecasting, and engineering
- Groundwater recharge and banking
- Agricultural and Urban Water Planning
- Conjunctive use planning and implementation
- Conservation and reuse programs
- District engineering, consulting, and management
- Conveyance system design and improvement
- Pumping plants
- Grant writing, application preparation, and funding administration

Since the enactment of SGMA in 2014, Provost & Pritchard has focused on assisting many local agencies comply with SGMA in the formation of Groundwater Sustainability Agencies, stakeholder outreach, basin boundary modifications, planning and implementing Proposition 218 elections, preparing GSPs, annual reports, and, most recently, responding to DWR comments on the submitted GSPs. While preparing more than a dozen GSPs, Provost & Pritchard staff evaluated water supply and demand data to develop a baseline understanding of a client's issues to prepare for SGMA and completed a plethora of hydrologic and hydrogeologic evaluations and reports. In addition, Provost & Pritchard engineers, geologists, hydrogeologists, planners, and water resource specialists crafted various projects and management actions to achieve sustainability.

PROJECT TEAM SERVICES

Rate & Fee Studies

Agricultural and municipal rate studies deriving both traditional and innovative rate structures that comply with cost of service principles and legal requirements. Address policy goals, customer acceptance, and social influences.

Financial Planning & Modeling

Comprehensive financial plans focused on immediate needs as well as the long-term viability of agencies. Our financial models are flexible and user-friendly to allow for cash flow sensitivity analysis and to illustrate the impacts of policy decisions.

Tax Roll Services

Provost & Pritchard staff update parcel information and provide submittals for the collection of direct charges on county tax rolls.

Impact Fee/Capacity Charge Studies

Development impact fees and capacity charge studies that offset the cost of expanding infrastructure to serve new development without placing a burden on existing customers.

Public Approval Process

Lead informational workshops to educate the public about funding options. We provide start-to-finish assistance in the rate and fee approval process, including presentations to decision makers, publication of reports, and printing and mailing of notices. Outside balloting services can be engaged, if needed.

GIS Analysis

Provost & Pritchard GIS specialists perform analysis and data queries, develop maps and other visualization tools with "intelligent data," and turn historic data into useful information.

Utility Appraisal

Develop an inventory of utility assets and determine fair market value. We assist public agencies with negotiating the purchase or sale of utility property.

Expert Witness

Testify on behalf of public agencies to defend against lawsuits. We also represent public agencies as customers of electric utility providers in rate cases at the CA Public Utilities Commission.

QUALIFICATIONS

This section provides our project team's qualifications regarding rate studies, groundwater agency funding mechanisms, GIS data analytics, and public outreach.

FUNDING MECHANISMS

The heart of this assignment is the review and selection of funding mechanisms for the Colusa Groundwater Authority to recover its costs to provide sustainable groundwater management. Although water rates are litigious and there is evolving caselaw, Proposition 218 rates, fees, and/or assessments are likely the most appropriate fee options. L&T has a wealth of experience guiding public agencies through the pros and cons of various funding options to select the optimal alternative.

Rate Studies

Our team specializes in legally rigorous rate and fee studies that comply with Proposition 218, Proposition 26, court rulings, and industry best practices. L&T Principals Alison Lechowicz and Catherine Tseng serve as expert witnesses, and we have been engaged by public agencies to assist with rate litigation. With every study, we carefully consider the proportionality and procedural requirements of applicable statutes and how to craft robust documents. Our final reports provide clients with an administrative record that clearly demonstrates the operating and capital costs that form the basis of the fees.

L&T has provided a wide range of fee studies and financial consulting to public agencies across the state including groundwater agencies, irrigation districts, municipal water districts, cities, community services districts, and a non-profit entity. Provost & Pritchard also has a proven track record of providing rate studies as evidenced by the successful completion of the Colusa Groundwater Authority's 2019 Fee Study.

Groundwater Fees (SGMA)

The Lechowicz & Tseng and Provost & Pritchard team have worked together on several recent Sustainable Groundwater Management Act (SGMA) fee studies. Provost & Pritchard has extensive experience providing engineering support to groundwater agencies in the areas of forming GSAs, preparing GSPs, gathering landowner data, as well as drafting Assessment Engineer's Reports. In our work together, L&T has developed cash flows, cost of service projections, and calculated recommended rates and fees.

June 6, 2018, the McMullin Area Groundwater Sustainability Agency (MAGSA) adopted a parcel charge of $19/acre using the Proposition 218 approval process. Alison Lechowicz worked closely with the GSA's legal team and Provost & Pritchard to determine agency expenses as well as the best method to recover the costs of GSP development. GSA counsel recommended a parcel charge under Proposition

218. Ms. Lechowicz developed a detailed budget and report explaining the cost justification for the fee. L&T also provided printing and mailing services for the Prop 218 notices.

Provost & Pritchard and Ms. Lechowicz have worked together to provide services to the Root Creek Water District (RCWD) since 2014. RCWD is transitioning from an agriculture only water district to an ag plus municipal services district. To offer services to new development, RCWD was required to secure sustainable water rights compliant with SGMA. RCWD has a new Board, new general manager (previously RCWD had no staff), and new operational needs. Ms. Alison Lechowicz provided wide-ranging services to RCWD including rate and fee studies, financial planning, and Board educational workshops. August 8, 2022, we held a successful Proposition 218 public hearing for an updated municipal and agricultural rate study. Our team developed groundwater pumping fees that recover the costs of basin management and imported, replenishment water.

On February 1, 2018, L&T completed a Prop 26 groundwater fee study for the Kings River East Groundwater Sustainability Agency (KREGSA). Ms. Lechowicz worked with the GSA's hydrogeologist to estimate groundwater pumping based on crop reports, evapotranspiration rates, leaching and precipitation records. L&T's final fee report recommended nominal fees for GSA participating agencies that do not pump groundwater and a $/AF groundwater pumping rate for landowners.

TAXES & ASSESSMENTS

Taxes and special assessments are other tools that GSAs can use to generate revenue. Assessments are more difficult to implement than Proposition 218 or 26 fees due to voter approval requirements. Provost & Pritchard will draft and stamp the Engineer's Assessment Report, as needed. L&T and Provost & Pritchard will work with the CGA to develop a property owner outreach strategy to garner support for any potential assessments.

Ms. Lechowicz has experience supporting assessment studies for the Napa Berryessa Resort Improvement District (NBRID, in Napa County) and the Root Creek Water District. For NBRID, Alison served as financial analyst and worked with the community to gain support and the residents voted an assessment of $19,000 per parcel. The assessment was needed to fund wastewater improvements to lift a Cease and Desist Order and to make water system upgrades. For RCWD, L&T and Provost & Pritchard developed an acreage assessment that was critical to fund district overhead and administration.

DIRECT CHARGE SUBMITTAL FOR ASSESSMENTS/FEES

Since 2019, Provost & Pritchard has assisted the Colusa Groundwater Authority with preparing the Direct Charge documents submitted to their respective County taxing agencies each Tax Year. Preparation of each year's documents includes the following services:

- Complete parcel updates based on information provided by Colusa County Assessor and /or Department of Finance and ParcelQuest
- Update calculations for parcels within CGA, based on guidance from CGA for current year charges

- Prepare Data File(s) and submit to County for testing (30 days prior to Aug 10), (not required but can be included if requested by CGA).
- Assist in completing Direct Charge forms and certifications as required by the County
- Submit final Direct Charge data file to County (Due Aug 10 each year)

GEOGRAPHIC INFORMATION SYSTEMS

Provost & Pritchard helps municipal and special districts take full advantage of the Geographic Information Systems via GIS consulting, implementation, training and support services. Our GIS specialists perform analysis and data queries, develop maps and other visualization tools with "intelligent data," and turn historic data into useful information for modern needs. Provost & Pritchard GIS staff have been working with water resources-related data for 20 years. Our GIS team has supported the completion of over 10 Groundwater Sustainability Plans and continues to provide ongoing data analysis and mapping support for several GSAs.

We are an Esri Partner, which gives us full, easy access to the latest ArcGIS technologies and other Esri resources. In addition, we utilize ParcelQuest for parcel data and ownership information.

PUBLIC APPROVAL AND OUTREACH

A key dynamic for the success of a Proposition 218 or assessment funding effort is to inform, educate, and convince affected landowners of the need to change the land assessments to reflect fixed costs of a District through effective presentations and associated landowner/ratepayer discussions at public workshops. Our team is well-versed in planning and delivering such presentations and facilitating constructive, informative stakeholder discussions.

Our approach is to understand any "hot button" issues in your local area and respect political sensitivities. We will work with CGA to gain an understanding of any objections stemming from the prior rate study and to identify specific customer groups who have a high level of engagement with the CGA. This process has been extremely beneficial in other studies that we've completed. In the municipal realm, Ms. Lechowicz conducted Public Works workshops for the Cities of Berkeley and Modesto. She also met with developers regarding rate and fee studies conducted for the Town of Discovery Bay and the Templeton Community Services District. Catherine Tseng worked with the 15-member Water Advisory Committee in the City of Davis. In L&T's prior work with groundwater agencies, it has been helpful to emphasize the value of sustainable water supply to continued agricultural production and land values. We also explained the avoided cost of state intervention against non-compliant basins.

A partial list of agencies, districts, cities, and counties for which Provost & Pritchard has assisted on Proposition 218 elections are listed below. We are fully capable of providing comprehensive printing, mailing, and balloting services.

- Arvin-Edison Water Storage District
- Caruthers Community Services District
- Colusa Groundwater Authority
- Consolidated Irrigation District
- Cuyama Basin Water District
- Dudley Ridge Water District
- Fresno Irrigation District
- Glenn Groundwater Authority
- Laguna Irrigation District
- Lower Tule River Irrigation District
- McMullin Area GSA
- Merced County GSA
- North Fork Kings GSA
- North San Joaquin Water Conservation District
- Pixley Public Utility District
- Pleasant Valley Water District
- Riverdale Public Utility District
- Root Creek Water District
- Sacramento River Westside Levee District
- South San Joaquin Irrigation District
- Southwest Kings GSA
- Tejon-Castaic Water District
- Tranquility Irrigation District
- Wasco Irrigation District

PROJECT TEAM

Provided below is our project team's organizational chart. Lechowicz & Tseng will act as the primary consultant with Provost & Pritchard as subconsultant. Ms. Lechowicz will serve as lead financial analyst and main contact person. Ms. Linda Sloan will serve as the engineering lead and main contact person for Provost & Pritchard. Project team member resumes are provided on the following pages.

Alison Lechowicz

alison@
LTmuniconsultants.com

(510) 545-3182

909 Marina Village Parkway #135
Alameda, CA 94501

EXPERIENCE

- 15 years consulting experience: 5 years Co-founder and Principal at L&T Municipal Consultants, 7 years as Principal and Financial Analyst at Bartle Wells Associates, 3 years as Financial Analyst at Carollo Engineers
- Testified as an expert witness at the CA Public Utilities Commission in electric rate cases of Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric
- Municipal Securities Rulemaking Board, Series 50 – Municipal Advisor Representative
  Series 54 – Municipal Advisor Principal

EDUCATION

- **Columbia University**
  Master of Public Administration
- **University of California, Berkeley**
  Bachelor of Science
  Conservation & Resource Studies

REPRESENTATIVE ASSIGNMENTS

Root Creek Water District (Madera County): Financial plan and rates for the District's groundwater basin and agricultural water service. Water, sewer, and storm drain rates and development fees for municipal service.

Kings River East Groundwater Sustainability Agency: Conducted a Proposition 26 groundwater fee study to recover SGMA compliance costs and GSA formation costs. Estimated water use of growers based on landuse and crop type and allocated costs.

McMullin Area Groundwater Sustainability Agency: Worked with the GSA's engineer to draft a 5-year budget and rate plan under Proposition 218. Developed detailed cost estimates for Board administration and GSP development. Calculated a $19/acre fee for parcels within the GSA. Conducted the Prop 218 printing and mailing of public notices.

Fresno Irrigation District: Financial plan and 30-year rate model. Developed an Excel-based financial model with automated transfers between six funds based on user-entered criteria.

City of Kerman: Completed a water and sewer rate study for the City. Updated winter water use estimates for single family residential sewer rates. Phased-out discounts for multifamily sewer customers.

City of Chowchilla: Completed a water, sewer, storm drain, and solid waste rate study. Rates will support the City's recent bond issuances and overcome prior deficit spending for the solid waste enterprise.

Provided below is a sampling of Alison Lechowicz's project experience since 2010. Prior to 2010, Ms. Lechowicz worked for a civil engineering firm conducting financial analysis for master plans.

CLIENT	PROJECT	DATE COMPLETED
City of Alameda	Sewer Financial Plan and Rate Study	May 2015
City of Anderson	Water and Sewer Rate Study	February 2021
Town of Apple Valley	Water System Acquisition Feasibility Analysis	July 2011
City of Berkeley	Sanitary Sewer Rate Study	June 2015
City of Carmel-by-the-Sea	Bond Refinancing	October 2010
CA City County Street Light Association	Rate economist and expert witness	March 2010 to present (ongoing)
City of Chowchilla	Water, Sewer, Storm Drain, and Solid Waste Rate Study	June 2020
City of Chula Vista	Wastewater Capacity Fee Study Salt Creek Sewer Basin Impact Fee Study Depreciation Review	May 2014 June 2015 July 2018
City of Clovis	Water User Rates and Fee Study	February 2016
City of Colfax	Sewer Rate Affordability Review	June 2010
City of Colusa	Development Impact Fee Study Water System Valuation	June 2011 September 2014
Contra Costa Water District	Water Rate Study	February 2015
City of Cotati	Water and Sewer Rate Study	February 2013
Town of Discovery Bay	Water and Sewer Rate and Capacity Fee Studies	Multiple studies since 2012
City of Emeryville	Sewer Rate Study	November 2016
Fresno Irrigation District	Financial Master Plan	Ongoing
City of Hemet	Water and Sewer Rate Studies and System Valuations Water Fund Rental Fee Analysis	July 2015 August 2018
Home Gardens Sanitary District	Sewer Rate and Capacity Fee Study	May 2015
Indian Wells Valley Water District	Bond Refinancing	December 2012
City of Kerman	Water and Sewer Rate Study	October 2018
City of Kingsburg	Solid Waste Rate Study	August 2022
Kings River E. GSA	Groundwater Fee Study	February 2018
City of Lancaster	Streetlight Valuation	June 2014

CLIENT	PROJECT	DATE COMPLETED
Napa Berryessa Resort Improvement District	Water and Sewer Assessment	July 2012
Newhall County Water District	Water Rate Litigation Support	November 2012
Nipomo CSD	Blacklake Sewer Rate Study Blacklake Streetlight Rate Study	January 2019 March 2022
Novato Sanitary District	Capacity Fee Study Sewer Rate Study	March 2016 April 2016
City of Palmdale	Sewer Service Charge Analysis	May 2011
City of Rio Dell	Wastewater Rate Study Water and Sewer Rate Study	May 2014 April 2022
Root Creek Water District	Water, Sewer, and Storm Drain Rate Study and Financial Plan On-call consulting services	April 2016 Ongoing
San Diego County Water Authority	Cost Allocation Review	May 2011
City of San Fernando	Water and Sewer Rate Study	December 2019
San Joaquin County	Utility Appraisal Utility Appraisal Update	November 2018 January 2022
City of Santa Clarita	Sewer Maintenance Feasibility Study	June 2014
Saticoy Sanitary District	Bank Loan Financing	September 2013
South Tahoe Public Utility District	Sewer Bond Refunding	September 2012
Stege Sanitary District	Multiple sewer rate and connection fee studies	Multiple studies since 2010
Sunnyslope County Water District	Water and Sewer Bond Refinancing	October 2014
Tahoe Truckee Sanitation Agency	Sewer Fee Ordinance Review	May 2010
City of Tehachapi	Water and Sewer Connection Fee Study Parks and Civic Impact Fee Study	February 2020 March 2021
Templeton CSD	Water and Sewer Rates and Capacity Fee Study Parks and Fire Impact Fees	November 2018
Triunfo Sanitation District	Water Infrastructure Financing Automated Meter Financing	February 2011 May 2014
Tulare Lake Drainage District	Project Financing Project Financing	March 2012 January 2013
City of Wasco	Water and Sewer Rate Study	Ongoing
City of Waterford	Sewer Rate Study	June 2019

Catherine Tseng


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909 Marina Village Parkway #135
Alameda, CA 94501

EXPERIENCE

- 5 years Co-founder and Principal at L&T Municipal Consultants
- 10 years prior consulting experience: Vice President at Bartle Wells Associates
- 2 years civil servant: City of Oakland
- Specializes in utility rates, capacity charge, and financing plans for public works projects, and Proposition 218 compliance

EDUCATION

- **Columbia University**
  Master of Urban Planning
- **University of California, Berkeley**
  Bachelor of Arts
  Architecture

REPRESENTATIVE ASSIGNMENTS

City of Rio Dell: Conducted a water and sewer rate study to fund mandated capital projects and eliminate operating deficit.

City of Anderson: Completed a water rate study to address depleting reserves. Analyzed multiple rate scenarios to minimize impacts to customers.

City of San Fernando: Water and sewer financial plan and rate study and Proposition 218 printing and mailing. Offered rate options to meet affordability criteria including funding of only high priority projects.

City of Brisbane: Currently conducting a water and sewer rate study. The City last updated rates in 2013 but has not done a comprehensive cost of service analysis since 2001. The 2021 update will also evaluate rates for a new development area that will double the City's service area.

City of Chowchilla: Completed a water, sewer, storm drain, and solid waste rate study. Rates will support the City's recent bond issuances and overcome prior deficit spending for the solid waste enterprise.

Sausalito-Marin City Sanitary District: Wastewater Facilities Financial Plan to fund capital projects and reconcile past expenses. Developed multiple funding strategies for contract negotiations with a partner agency.

Provided below is a sampling of Catherine Tseng's project experience since 2006.

CLIENT	PROJECT	DATE COMPLETED
Alameda County Water District	Water Development Fee Study	January 2012
City of Anderson	Water and Sewer Rate Study	February 2021
Armona Community Services District	Water and Sewer Rate Study	March 2008
City of Benicia	Raw Water Rate Study and Update Water Rate and Connection Fee Study and Update Drought Rate Study	August 2013 and Sept 2015 February 2013 September 2014
Big Bear City Community Services District	Water, Sewer, and Solid Waste Rate Study	May 2015
City of Brisbane	Water and Sewer Rate Study	Ongoing
City of Chowchilla	Water, Sewer, Storm Drain, and Solid Waste Rate Study	June 2020
Coastside County Water District	Water Financing Plan Water Rate Study	August 2009 January 2010
Crestline Sanitation District	Wastewater Rate Study	June 2015
City of Davis	Water Rate Study Water Rate Study Update	March 2013 September 2014
Diablo Water District	Water Bond Financing Bond Refinancing	August 2010 April 2013
El Dorado Irrigation District	Development Impact Fee Study Water Rate Study	October 2008 January 2009
Elk Grove Water District	Water Financial Plan and Rate Study	December 2007
Fairbanks North Star Borough	Bond Refinancing	November 2011 and September 2013
Fresno Irrigation District	Financial Master Plan	Ongoing
City of Glendale	Water Rate Study	May 2015
Town of Hillsborough	Water and Sewer Rate Study	December 2006
City of Hanford	Water Financing	December 2007
Humboldt Bay Municipal Water District	Water Financial Plan	April 2011
Indian Wells Valley Water District	Water Rate Study Bond Financing Water Rate Cost of Service and Development Impact Fee Study	January 2007 August 2009 January 2012 and 2015

CLIENT	PROJECT	DATE COMPLETED
City of Menlo Park	Water Rate Study Recycled Water Analysis	May 2015 October 2015
Montara Water & Sanitary District	Water and Sewer Rate Studies	Multiple studies since 2006
Montecito Water District	Drought Rate Study	February 2015
Novato Sanitary District	Bond Financing	October 2011
Olivehurst Public Utilities District	Water Rate Study and Updates	2007, 2009 and 2014
City of Patterson	Water and Sewer Rate and Capacity Fee Studies	Multiple studies since 2010
City of Rio Dell	Water and Sewer Rate Study	April 2022
Root Creek Water District	Financial Policy Manual	July 2017
Running Springs Water District	Water, Sewer, Fire and Ambulance Rate Studies	July 2010
City of San Bruno	Water and Sewer Rate Study	April 2012
City of San Fernando	Water and Sewer Rate Study	December 2019
Sanitary District No. 5 - Tiburon	Financial Review	September 2013
Sausalito-Marin City Sanitary District	Wastewater Facilities Financing Plan	May 2016
Selma Kingsburg Fowler Sanitation District	Capital Improvements Program Study	March 2008
Solano County Water Agency	Reserve Fund Study	May 2007
Sonoma County Water Agency	Sewer Service Charge and Volumetric Sewer Rate Study	August 2012
City of Tulare	Bond Financing	2010, 2012, 2013, and 2015
Union Sanitary District	Sewer Capacity Fee Study	October 2010
City of Vacaville	Water and Drought Rate Study	October 2015
Town of Yountville	Water and Sewer Rate Study Recycled Water Rate Study	February 2011 April 2012

Sophia Mills

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909 Marina Village Parkway #135
Alameda, CA 94501

EDUCATION

- **Davidson College**
  Bachelor of Arts
  Economics, Spanish

OTHER SKILLS

- Fluent in Spanish
- Proficient in Python 2.7, SAS (statistical analysis software), ArcGIS, HTML, and CSS

REPRESENTATIVE ASSIGNMENTS

City of Rio Dell: Conducted a water and sewer rate study to fund mandated capital projects and eliminate operating deficit. Analyzed impacts of alternative rate structures for each utility.

Town of Discovery Bay CSD: Water and sewer rate study. Assisted the Town in rate updates to accommodate new wastewater regulatory requirements and capital project funding.

City of Anderson: Completed a water rate study to address depleting reserves. Analyzed multiple rate scenarios to minimize impacts to customers.

City of Tehachapi: Conducted a parks and recreation development impact fee study as well as a civic impact fee study based on a 20-year planning horizon.

City of Brisbane: Currently conducting a water and sewer rate study. The City last updated rates in 2013 but has not done a comprehensive cost of service analysis since 2001. The 2022 update will also evaluate rates for a new development area that will double the City's service area.

Linda G. Sloan

PG, CHG

Senior Geologist/ Hydrogeologist, Director of Operations Chico/Sacramento

Education

- ✓ M.S. Geology, California State University, Fresno
- ✓ B.S. Geology, California State University, Fresno

Registration/Certifications

- ✓ Professional Geologist, California #8299
- ✓ Certified Hydrogeologist, California #930
- ✓ HAZWOPER (Supervisor and 40 hours)

Areas of Expertise

- ✓ Groundwater Assessment including Monitoring, Reporting, & Data Evaluation
- ✓ Anti-Degradation Analysis
- ✓ Regulatory Permitting/Compliance
- ✓ Phase I, II & III Assessments/Remediation
- ✓ Groundwater Recharge Potential Investigations

Professional Summary

Linda Sloan is a Director of Operations and senior geologist/ hydrogeologist at Provost & Pritchard. She has more than 20 years of professional environmental and water resources experience, including involvement with all aspects of groundwater monitoring, reporting and data assessment; water supply well design and construction; groundwater recharge potential investigations; leaking underground storage tank (UST) assessments and remediation; and regulatory permitting and compliance for food processing facilities, and dairies. More recently, Ms. Sloan has been heavily involved in preparing Irrigated Lands Regulatory Program (ILRP) trend groundwater monitoring plans and reports for five coalitions, and providing technical review for the overarching Central Valley Groundwater Monitoring Collaborate (CVGMC) plans that cover 10 coalitions in the south Central Valley; Sustainable Groundwater Management Act (SGMA) Groundwater Sustainability Plan (GSP) preparation and review for multiple Groundwater Sustainability Agencies (GSAs), annual report reviews, and responses to the Department of Water Resources (DWR) 180-day response letters to the GSP; and Central Valley Salinity Alternatives for Long-Term Sustainability (CV- SALTS) nitrate management zone report preparations and implementation. Often, Ms. Sloan has been involved in preparing the foundational reports for these more recent Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), and DWR programs. Ms. Sloan is the Director of Operations for both the Chico and Sacramento Provost & Pritchard offices.

Relevant Experience

Proposition 218, Majority Protest Option, Colusa Groundwater Authority (CGA) and Glenn Groundwater Authority (GGA), Colusa and Glenn Counties, California – As Project Manager for both the CGA and GGA efforts, Ms. Sloan coordinated with the GSA leads and Boards to implement the successful long-term funding processes. Activities included attending and presenting at both Board and outreach meetings, keeping the schedule moving in a timely manner, GIS work oversight, engineer's report review, preparation and mailing of information meeting materials and ballots, ballot tallying, and oversight of final coordination with the County Assessors/Auditors for the final fee assessment filings. Provost & Pritchard has continued to provide the fee assessment filings with the Counties since implementation of the Proposition 218s in 2018 and 2019, respectively.

SGMA Assistance, Multiple Confidential Clients, California – Ms. Sloan provides Groundwater Sustainability Plan (GSP) assistance in various capacities including Project Manager, technical advisor, and preparer. Activities include hydrologic conceptual model and basin characterization development, as well as complete GSP preparation, annual report technical review, and DWR 180-day response assistance.

Phase I Technical Workplan, Central Valley Groundwater Monitoring Collaborative (CVGMC) and participating coalitions; Kern, Tulare, Kings, Fresno, and Madera Counties, Technical Reviewer - The CVGMC formed to coordinate a regional groundwater quality monitoring program per Irrigated Lands Regulatory Program requirements. A total of ten coalitions agreed to participate in the collaborative intended to evaluate groundwater quality conditions in agriculturally dominated areas. The Phase I Technical Workplan aggregated and summarized technical components of the individual coalition's Groundwater Trend Monitoring Workplans and outlines a strategy for the coalitions to streamline reporting requirements, collect groundwater quality data, and standardize procedures to ensure the quality of collected data. The Phase I Technical Workplan also describes potential opportunities for future coordination with other groundwater monitoring programs (i.e. CV SALTS and SGMA). A Quality Assurance Programmatic Plan (QAPrP) was developed to define roles, responsibilities, and procedures to ensure that collected data meets programmatic quality standards and data quality limits. Challenges unique to this project included large scale spatial coordination, coordination of multiple entities and expedited timelines. The project was of particular interest to RWQCB staff and management as this was the first project of this type.

Groundwater Quality Assessment Report, Kaweah Basin Water Quality Association, Tulare County, California, Project Geologist/Hydrogeologist, Primary Author – This study included a comprehensive collection and review of existing groundwater data publicly available from various agencies for 1,000,000 acres of area. Groundwater quality and gradient information was collected to determine locations of higher concentrations and was compared to factors including land use designations, soil types, and aquifer information to determine groundwater high vulnerability areas.

Anti-degradation Analysis for Water Conservation Treatment Plant Upgrades, City of Visalia, California, Project Manager – Ms. Sloan led the project team, provided guidance, and assisted with preparation of an anti-degradation analysis report for circulation with the draft environmental impact report for the plant upgrades and recycled water distribution. The newly permitted plant capacity is 22 million gallons a day to tertiary-treat effluent which will be utilized as irrigation water in nearby City of Visalia properties and distributed under agreement to the Tulare Irrigation District. The analysis included preparation of a water management plan, compilation and interpretation of background water quality data for approximately 10,000 acres of parks and farmland, utilization of the data to determine potential groundwater impacts, and resolution of the potential impacts with the maximum benefit to the people of the state.

Replacement Well Permit Denial, Confidential Client, Livermore, California, Project Manager – Ms. Sloan provided hydrogeologic consulting services to appeal agency denial of a replacement well permit on the grounds of basin overdraft and demand to use recycled water for crop irrigation instead. Multiple converging lines of evidence were identified and presented to the agency. Appeal findings were in favor of the client and a permit was issued.

Groundwater Transfer Pilot Study, Confidential Client, Delta-Mendota Sub-basin, California, Project Manager – Ms Sloan designed and implemented a one-year pilot study which included monthly collection and analysis of on-site groundwater quality and elevation data, subsidence surveys, and pump testing to develop aquifer characteristics and to assess potential impacts of a long-term pumping program. Prepared reports included collected site data, hydrographs, and a comprehensive pump test analysis.

Investigation of Groundwater Recharge Potential in the Deer Creek Area near Pixley, Joint Project between Delano-Earlimart Irrigation District and Pixley Irrigation District, Tulare County, California, Project Geologist – Ms. Sloan provided field logging and technical oversight for a hollow-stem drilling field investigation from design through implementation. She then performed data reduction, prepared geologic cross sections, and provided a summary technical memorandum to the districts.

Joe Hopkins

PE

Principal Engineer

Education

- ✓ M.S. Water Engineering, California Polytechnic State University, San Luis Obispo
- ✓ B.S. BioResource & Agricultural Engineering, California Polytechnic State University, San Luis Obispo

Registration/Certifications

- ✓ Civil Engineer, California #74955
- ✓ Agricultural Engineer, California #577

Affiliations

- ✓ United States Committee on Irrigation & Drainage (USCID)
- ✓ Groundwater Resources Association of California (GRAC)

Areas of Expertise

- ✓ Sustainable Groundwater Management Act (SGMA)
- ✓ Water Resources
- ✓ Ag & Municipal Water Planning
- ✓ Irrigation District Engineering

Professional Summary

Joe Hopkins is a principal engineer at Provost & Pritchard with over 15 years of experience in civil and agricultural engineering. He has provided engineering services for water projects throughout the state, including preparing water supply studies, groundwater monitoring reports, designing irrigation systems, securing grant funds, and preparing Prop 218 engineer's reports and fee studies for a wide variety of clients and projects. He has been closely monitoring SGMA since its inception and has been consulting on behalf of local agencies for SGMA compliance, including basin boundary modifications, and GSA organization and GSP development.

Relevant Experience

Southwest Kings GSA – Prop 218 Engineer's Report
Mr. Hopkins prepared an Engineer's Report for the GSA to collect money to manage the GSA and begin preparation of the GSP.

Tri-County Water Authority GSA – Prop 218 Engineer's Report and Fee Study.
Mr. Hopkins prepared an engineer's report for the GSA to collect money to manage the GSA and begin preparation of the GSP. Next, a fee study and was performed to collect groundwater extraction fees to fund GSP implementation.

El Rico GSA – Prop 218 Engineer's Report
Mr. Hopkins prepared an engineer's report for the GSA to collect money to manage the GSA and begin preparation of the GSP.

Merced Subbasin GSA – Fee Study
Mr. Hopkins prepared a Fee Study for the GSA to collect fees to manage the GSA and begin preparation of the GSP.

Aliso Water District GSA – Prop 218 Engineer's Report and Fee Study.
Mr. Hopkins prepared an engineer's report for the GSA to collect money to manage the GSA and begin preparation of the GSP. Next, a fee study was performed to collect groundwater extraction fees to fund GSP implementation.

Tranquillity Irrigation District – Prop 218 Engineer's Report and Fee Study.
Mr. Hopkins prepared an engineer's report to collect money for the base operating cost of the district, as well as a fee study to collect the variable costs of the District tied to water supply.

Northern & Central Delta-Mendota Groundwater Sustainability Plan – As a subconsultant to Woodard & Curran, Mr. Hopkins is involved in providing oversight of the P&P team as it relates to data management, technical, and report services for the North & Central Delta-Mendota GSP group, which is comprised of multiple Groundwater Sustainability Agencies and spans from Patterson, CA to Tranquillity, CA.

Aliso Water District – SGMA Compliance, County of Madera, California, Project Manager - Mr. Hopkins is leading the effort to assist Aliso Water District (AWD) with compliance with SGMA. AWD has relatively no surface water supply and is only operated in a limited capacity, i.e. meeting quarterly and having no staff. Once SGMA was instated, AWD recognized they needed to be proactive to protect the interest of their growers. Our first step was educating the board and growers on what SGMA was and the impacts it could have on their operations. Next, it was identified that AWD straddled two DWR sub-basins, and that the boundary should be adjusted to place AWD wholly within one basin, which would simplify GSA/GSP development and implementation. After consultation with the DWR, and neighboring agencies, a Basin Boundary Modification request was made to DWR. The next step was GSA formation. Through discussions with the board, it was determined the best course of action for their circumstances was to develop a GSA just of their District. An AWD GSA would retain their autonomy for governance but could allow for collaboration for basin wide SGMA compliance. Finally, the GSP was developed. This included collaboration with the rest of the Delta-Mendota basin for GSP development. This included representing AWD in discussions for GSP development, and review and recommendations of measures to reach sustainability. GSP preparation included developing water budgets and developing sustainable management criteria development.

Tranquillity Irrigation District – District Engineer - Mr. Hopkins serves as the District Engineer for the Tranquillity Irrigation District. Mr. Hopkins consults with the District on technical issues related to both municipal and ag related facilities and water supply. He has also prepared many successful grant applications. Finally, Mr. Hopkins has reviewed and commented on TID's behalf for the Northern and Central DM GSP.

Tranquillity Irrigation District Annual Report and Data Management System –Tranquillity Irrigation District is developing an Annual Report and Data Management System in response to growing reporting requirements. Mr. Hopkins is overseeing the development of the Annual Report writing and Data Management System development. This report and system will be used to easily inform the Delta-Mendota Subbasin SGMA progress.

Westside-San Joaquin Integrated Regional Water Management Program – As a subconsultant to Woodard & Curran, Mr. Hopkins assisted in the Westside-San Joaquin Integrated Regional Water Management (WSJ IRWM) Plan 2018 Update. Mr. Hopkins' responsibilities included public outreach and project inventory, selection, and prioritization. Mr. Hopkins was also involved in developing the Prop 1 grant application for the WSJ IRWM Plan's projects in the San Joaquin River Funding Area.

San Luis & Delta-Mendota Water Authority – Basin Boundary Modification Request, County of Merced, California, Project Manager - The San Luis & Delta-Mendota Water Authority (SLDMWA) is a multi-agency Joint Powers Authority that supports its member agency in the operation and maintenance of CVP facilities and also with compliance with government mandates. SLDMWA member agencies comprise a majority of the Delta- Mendota Sub-basin. As such, it was a natural fit for SLDMWA to lead the effort for SGMA compliance in the basin. Recognizing multiple agencies straddle both the Delta-Mendota Sub-basin and an adjacent subbasin, SLDMWA set out to adjust the boundary through a Basin Boundary Modification Request with DWR. Provost and Pritchard was retained to support the SLDMWA through the process. Given a limited amount of time to modify the boundary due to deadlines set by legislation, Provost and Pritchard prepared request materials, reviewed and incorporated data from multiple groundwater management plans, coordinated with multiple agencies both inside and outside of the basin, prepared GIS shapefiles and maps, and garnered letters of support from affect parties. The request was a success, being submitted on time, with no objection.

On-going Consulting Services, Southwest Kings GSA, Kings County, California, District Engineer – Mr. Hopkins serves as the District Engineer for the Southwest Kings GSA. Member agencies consist of Dudley Ridge Water District, RD 761, and the County of Kings. Mr. Hopkins not only helped to form the GSA, he has also been tasked with facilitating the Proposition 218 election (including the Engineer's Report), as well as reviewing the work of subconsultants preparing water budgets and initial numerical models.

Mallory C. Serrao

GIS Specialist

Education

- ✓ B.A., Human Geography & Planning, California State University, Chico
- ✓ B.A., History, California State University, Chico

Areas of Expertise

- ✓ Geographic Information Systems (GIS)
- ✓ ArcMap/ArcGIS Pro
- ✓ CEQA/NEPA Compliance
- ✓ Agency Direct Charge Preparation
- ✓ Phase I Environmental Site Assessments
- ✓ Historical Research
- ✓ Groundwater & Air Quality Monitoring Reporting
- ✓ American Society of Testing and Materials (ASTM) Regulatory Standards
- ✓ SWRCB Underground Storage Tank Cleanup Fund Reimbursement Requests

Professional Summary

Mallory Serrao is a Geographic Information Systems (GIS) specialist at Provost & Pritchard, with over ten years of experience with GIS and environmental services projects. Ms. Serrao has been involved with various GIS applications and projects including CEQA/NEPA environmental documents, municipal land use and planning updates, site-selection and recharge feasibility mapping and Sustainable Groundwater Management Act-related projects. Ms. Serrao has been involved in the preparation of hundreds of Phase I and II environmental site assessments (ESA), Caltrans initial site assessments, transactions screen assessments, and construction and industrial SWPPPs. Additionally, she has assisted in preparing several CEQA and NEPA planning documents Ms. Serrao has also completed tasks related to the preparation of quarterly groundwater monitoring reports and air quality monitoring reports.

Relevant Experience

Proposition 218, Majority Protest Process, Glenn Groundwater Authority, Glenn County, California, GIS Specialist – Ms. Serrao assisted the Glenn Groundwater Authority in their Proposition 218 effort related to long-term funding of the GGA and compliance with SGMA. Ms. Serrao's responsibilities included all data collection, maintenance and analysis related to the Prop 218 process. This included all landowner information, member-agency boundaries, acreage calculations, mapping, outreach materials and the consolidation of data in order to facilitate the Majority Protest process. After the successful Prop 218, Ms. Serrao has also assisted the Authority in preparing the subsequent year's data files for submittal to the County's taxing agency.

Proposition 218, Majority Protest Process, Colusa Groundwater Authority, Colusa County, California, GIS Specialist – Ms. Serrao is assisting the Colusa Groundwater Authority in their Proposition 218 effort related to long-term funding of the CGA and compliance with SGMA. Ms. Serrao's responsibilities included all data collection, maintenance and analysis related to the Prop 218 process. This included all landowner information, member-agency boundaries, acreage calculations, mapping, outreach materials and the consolidation of data in order to facilitate the Majority Protest process. After the successful Prop 218, Ms. Serrao has also assisted the Authority in preparing the subsequent year's data files for submittal to the County's taxing agency.

Water Rate Study and Proposition 218 Support, Glenn-Colusa Irrigation District, Willows, California, GIS Specialist – Ms. Serrao assisted in data management and mapping to develop the Engineer's Report pursuant to the Proposition 218 process.

Groundwater District Formation, Monroeville Water District, Glenn County, California, GIS Specialist – Ms. Serrao assisted Monroeville Water District (formerly Glenn Ground Water District) with the District's initial boundary creation, parcel identification and other activities related to District formation.

GIS Boundary Creation and Parcel Updates, Colusa Basin Drainage District Colusa, Glenn & Yolo Counties, California, GIS Specialist – Ms. Serrao assisted the Colusa Basin Drainage District with a review of the agency's parcels, electoral and boundary information in an effort to create a GIS shapefile of the District boundary and maintain correct parcel information. Ms. Serrao has continued to assist the District in preparing the yearly data files for submittal to the County taxing agencies.

Multiple Groundwater Sustainability Agencies, Groundwater Sustainability Plan (GSP) Preparation, California, GIS Specialist – Ms. Serrao supported the spatial data needs for more than 10 GSP documents for critically over drafted groundwater basins. This included a variety of tasks for each GSP, including the preparation of mapping exhibits for the Plan Area, Hydrological Conceptual Model, and Monitoring chapters and submittal of monitoring location datasets to DWR's SGMA Data Portal.

General Plan and Zoning GIS Updates, City of Yuba City, California, GIS Specialist – Ms. Serrao assisted the City in updating their General Plan and Zoning shapefiles to ensure the public has access to the most up-to-date boundaries and information. The project includes reviewing all amendments and ordinances from the previous ten years, updating the data as necessary and providing updated data and maps to the City.

Environmental Services for the City of Yuba City Bridge Street Widening Project, Yuba City, California, GIS Specialist – Ms. Serrao prepared the necessary CEQA compliant maps for the environmental document analyzing the potential environmental impacts of an urban street widening project connecting Yuba City to Marysville. The project includes widening from two lanes to four lanes, a continuous left-turn lane/landscaped median, bike lanes, curb and gutter, sidewalk, and planter strips.

Barry School Elementary School Water Line Extension CEQA, City of Yuba City, California, Assistant Planner – Ms. Serrao served as the assistant planner for the City of Yuba City's Barry School Pipeline Project. Working with the City's Public Works Department, Ms. Serrao assisted in completing the environmental compliance documentation pursuant to CEQA for the Barry School Pipeline Project to provide safe, reliable and efficient water service to Barry Elementary School by extending the City's water system. The Project received Federal funding through State Water Resources Control Board Drinking Water State Revolving Funds (SRF).

Colusa County SGMA Consulting Services, Reclamation District 108, Colusa County, California, GIS Specialist – Ms. Serrao provided on-call GIS services for RD 108 and Colusa County Water Resources Department related to Groundwater Sustainability Agency (GSA) formation and SGMA in Colusa County. The scope of work included the collection and analysis of GIS data pertinent to the potential GSA and calculating acreages of interest for in-person presentation and collaboration with interested parties.

Hamilton City Lands Phase I Environmental Site Assessment and Phase II Preliminary Site Assessment, The Nature Conservancy, Glenn County, California, Environmental Specialist – Ms. Serrao served as the environmental specialist for the preparation of a Phase I ESA for 990 acres of rural farmland southeast of Hamilton City along the Sacramento River. The client was in the process of transferring the lands to a Reclamation District. The project was completed on time and within budget.

Hamilton City Lands Phase I Environmental Site Assessments Phase 2B, The Nature Conservancy, Glenn County, California, Environmental Specialist – Ms. Serrao served as the environmental specialist for the preparation of two additional Phase I ESAs for various areas along the Sacramento River as part of the Hamilton City J Levee and Reclamation project. These areas included private farmland and state-owned recreation facilities.

FEE SCHEDULE

Provided below is our project team's 2022/2023 billing rate schedule.

Firm	Name	Project Role	Billing Classification	Hourly Rate
	Alison Lechowicz	Primary Team Contact and Lead Financial Analyst	Principal	$195
	Catherine Tseng	Methodological Review	Principal	$195
	Sophia Mills	Supporting Financial Analyst	Financial Analyst	$120
	Linda Sloan, PG, CHG	Provost & Pritchard Project Manager	Senior Geologist/Hydrogeologist	$180
	Joe Hopkins, PE	Technical Adviser – Engineer's Report	Principal Engineer II	$195
	Mallory Serrao	GIS Lead	Associate GIS Specialist IV	$120
	Staff member TBD	Engineer's Report	Associate Engineer IV	$138

The professional time rates include all overhead and indirect costs. Direct expenses incurred on behalf of the client will be billed at cost. Direct expenses include, but are not limited to:

- Travel, meals, lodging
- Printing and report binding
- Outside software development
- Balloting or election services
- Automobile mileage
- Courier services and mailing costs
- Purchase of data sets (GIS shape files)
- Special legal services

DISCLOSURES

NO CONFLICTS

Lechowicz & Tseng Municipal Consultants and Provost & Pritchard have no existing or anticipated conflicts of interest related to proposed work with the Colusa Groundwater Authority.

MUNICIPAL SECURITIES RULEMAKING BOARD

Lechowicz & Tseng Municipal Consultants is a municipal financial advisory firm registered with the Municipal Securities Rulemaking Board (MSRB). While we don't anticipate that our work for CGA will include services that are regulated by the MSRB, our duties as a Municipal Advisor are listed below:

- Lechowicz & Tseng Municipal Consultants will notify the client in writing, if and when, any services transition into municipal advisory services as categorized by the MSRB. Municipal advisory services will cease when the final report is presented to the client.

- Lechowicz & Tseng Municipal Consultants will provide advice and conduct activities with a "duty of care" and a "fiduciary duty" to the client. Our role and responsibilities during this engagement will continue through the completion of the project.

- Lechowicz & Tseng Municipal Consultants is a registered Municipal Advisor with the Securities and Exchange Commission (SEC Registration No. 867-02374) and the Municipal Securities Rulemaking Board (MSRB ID K1236).

- Lechowicz & Tseng Municipal Consultants has never been cited for any legal or disciplinary action regarding municipal advisory activities.

- Lechowicz & Tseng Municipal Consultants has not and will not receive any compensation from any third party seeking to provide services, municipal securities transactions, or municipal financial products related to this assignment. L&T or any of its employees will not engage in any activities that would produce a direct or indirect financial gain for the firm other than compensation for our services identified in this proposal.

The website address for the Municipal Securities Rulemaking Board (MSRB) is www.MSRB.org. The MSRB's website provides a municipal advisory client brochure that describes the protections that may be provided by the MSRB rules and how to file a complaint with an appropriate regulatory authority. The municipal advisory client brochure is accessible via a link on www.MSRB.org or can be downloaded from http://www.msrb.org/~/media/Files/Resources/MSRB-MA-Clients-Brochure.

REFERENCES

Provided below are three project references. All references are for newly formed agencies. Additional references are available by request.

Root Creek Water District

Agricultural Water and Municipal Utility Financial Plan and Rate Studies

The Root Creek Water District (RCWD) was formed to manage groundwater supplies within its basin and provide new utility services for a development area. As a condition of approval, Madera County required RCWD to secure imported water supply, achieve sustainable yield, and comply with the Sustainable Groundwater Management Act (SGMA). Moreover, developers contributed facilities to the District (water, sewer, and storm drain infrastructure) for new residents. A financial master plan was needed to meet SGMA requirements, fund the costs of early-year imported water costs, and cover municipal utility operating expenses.

Since 2014, Ms. Lechowicz has served as project manager and lead financial analyst providing rate studies, financial planning, development impact fee studies, and public approval assistance to the District. Ultimately, the final report included a portfolio of financial tools: loans, community facilities district bonds, acreage assessments, and connection fees. RCWD needed each of these mechanisms to fund a various elements of District expenses.

Ms. Lechowicz provided public approval assistance to the District by explaining requirements to the Board, developing a schedule, drafting public notices, and certifying the results. The annual assessments on land were approved by a majority of the landowners via a mailed ballot election (votes weighted based on total assessment amount per parcel). In addition, groundwater pumping fees were adopted to recover the costs of managing the basin and are cost-competitive with the District's surface water/imported water costs.

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Provost & Pritchard worked in collaboration with Ms. Lechowicz to develop the background information on costs, establish the methodology for how funds were to be collected for paying both operational as well as capital expenses, then developed the engineers report that supported the establishment of assessments as well as developed a report summarizing the costs in support of raising rates.

August 8, 2022, L&T completed an update of the 2016 financial plan, rates, and connection fees. Since the prior study, RCWD has encountered increased construction costs and increased administrative and staffing costs. Ms. Lechowicz wrote outreach materials for the District, provided a presentation at the Proposition 218 hearing, and answered questions from the agricultural and municipal ratepayers.

Kings River East Groundwater Sustainability Agency

SGMA Groundwater Fee Study

February 1, 2018, Lechowicz & Tseng Municipal Consultants completed a groundwater fee study for the Kings River East Groundwater Sustainability Agency (KRE GSA). The intent of the fee study was to recover costs of GSA development, administration, groundwater monitoring, and reporting. Provost & Pritchard helped the GSA estimate long-term administrative, monitoring and consulting expenses, and aided in the identification of funding alternatives to provide long-term financial stability to the GSA. Options included grants, higher assessments approved through processes conforming to Proposition 218 or Proposition 26, or a combination thereof.

The project team and legal counsel ultimately recommended Proposition 26 water service fees. L&T developed cost of service rates and charges that are proportional to the groundwater pumping of each participating agency and, by extension, impacted landowners. In the future, the GSA intends to transition to Proposition 218 fees to recover long-term operating costs.

As a first step in the study, our team identified GSA member agencies that do not pump groundwater but are responsible for administration activities. These agencies will be charged nominal fees. As a second step, we estimated groundwater pumping for the landowners based on landuse, crop type, effective precipitation, and surface water deliveries. GSA expenses related to monitoring and reporting will be recovered by a $/acre foot pumping fee.

L&T also assisted the KRE GSA with the public approval process. Ms. Lechowicz presented draft findings to the GSA's Technical Committee and Board of Directors. Our approach was to emphasize the need for SGMA compliance and the value of sustainable groundwater supply.

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McMullin Area Groundwater Sustainability Agency

SGMA Groundwater Fee Study

The McMullin Area Groundwater Sustainability Agency (MAGSA) is located in Fresno County and covers approximately 115,000 acres. Participating agencies consist of the Raisin City Water District, the Mid-Valley Water District and Fresno County (representing unincorporated areas). June 6, 2018, the Board approved a $19/acre parcel fee recommended by Lechowicz & Tseng Municipal Consultants.

Ms. Lechowicz served as MAGSA's groundwater fee consultant and assisted the agency through each step of the process. L&T's initial deliverable was the creation of a comprehensive 5-year budget. MAGSA intended to recover the costs of GSA formation and GSP development through a new groundwater fee but had not fully "fleshed out" its expenses. Ms. Lechowicz proposed new cost categories for Board administration, customer outreach, and legal expenses based on her experience working with other agencies.

The budget served as the cost of service for the fee calculation. L&T worked with MAGSA's legal counsel to review fee recovery mechanisms including Proposition 26 fees, Proposition 218 rates, taxes, and special assessments. Ultimately, counsel determined that Proposition 218 rates were appropriate for MAGSA. Ms. Lechowicz also reviewed rate structure options including parcel fees, volume-based pumping rates, and rates charged per well in the GSA's service area. Given the GSA's administrative capabilities and limited data availability, the project team recommended a parcel charge.

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Provost & Pritchard helped prepare the GSA's budget and initial cost analysis, researched which type of Proposition 218 to follow, and helped with public outreach.

L&T's scope of work also included procedural support for adoption and implementation of the fee. Ms. Lechowicz drafted the Proposition 218 public notice and had it translated into Spanish. She also coordinated the printing and mailing of the notice to about 1,300 parcels.

SCOPE AND SCHEDULE

Provided below is our suggested scope by task. This initial scope is based on the CGA's request for qualifications as well as our experience working for similar agencies. We are happy to revise the scope in consultations with the CGA.

SCOPE

Task 1 – Project Kickoff and Data Gathering

a) *Kickoff Meeting*
Our project team will meet with CGA staff for a project kickoff meeting to review study goals, milestones, identify project team members, and note roles and responsibilities.

b) *Data Gathering*
To assemble the necessary data to complete the study, we will provide the CGA with a detailed list of information needs. The goal is to understand the CGA's past operating results and current financial standing, member agency participation, groundwater pumping, and capital improvement costs. Data requirements include but are not limited to the items listed below. As needed, we will work with outside entities such as the County tax assessor and the US Department of Agriculture to gather documents.

- Past budgets and audits
- Current operating budget
- GSP and capital improvement projects (as information becomes available)
- Metered groundwater pumping data from urban areas
- Crop reports and landuse data for unmetered agricultural areas
- Groundwater recharge information (percolation areas, injection, conjunctive use, etc. if applicable)
- GIS parcel data
- Landowner property tax roll

Task 2 – Funding Options

a) *Determine Cost of Service*
Review the CGA's near-term operating expenses, analyze expected cost centers over the next five years (such as administration, monitoring and reporting, engineering, capital improvement projects, etc.) and determine the cost of service intended to be recovered by the new fees.

b) *Review Funding Mechanisms*
Provide the CGA with a comprehensive list of funding mechanisms including but not limited to: grants, Proposition 26 regulatory fees, Proposition 218 rates, assessments, and taxes. Describe the advantages and disadvantages of each mechanism, the timeline and procedures for implementation, and the costs that can be legally recovered by each. We will work with the CGA to develop a list of criteria with which to evaluate funding mechanisms potentially including:

- Legal requirements and/or restrictions regarding costs that can be recovered
- Revenue stability
- Timeline for implementation
- Approval threshold (majority affirmative vote vs. protest vote vs. public hearing only)
- Approval process (mailing notices or ballots, holding a public hearing)
- Rate or fee horizon (5-year rate plan, future year CPI increases, etc.)
- Customer acceptance and political palatability

c) *Recommend Funding Mechanisms and Conduct a Board Workshop*
Provide a technical memo and Board workshop describing the cost of service, potential funding mechanisms, and the project team's recommendations. This workshop will give an overview of the legal requirements for fee calculations and the steps for implementation. Seek direction from the Board regarding preferred funding mechanisms.

Task 3 – Rate Design

a) *Evaluate Ratepayer Data*
For this subtask, we will determine how each funding mechanism will be recovered such as land-based assessments or a rate charged based on metered or estimated groundwater pumping. As a second step, the number of billing units for each fee will be determined by reviewing available data sources (county property owner data and metered groundwater use, for example). For unmetered, agricultural water use, we will estimate pumping using crop reports and evapotranspiration records (precipitation and surface water supply netted out).

b) *Develop Rate and Fee Recommendations*
Divide the cost of service by the billing units for each funding mechanism selected by the CGA. Our project team will carefully review any adjustments to the rates needed to account for dry farming, imported surface water, recycled water use, de minimis users, etc. Present rate options to the Board.

c) *Regional Bill Comparison*

For comparison purposes, we will prepare a survey of the current and proposed CGA fees and charges to regional and/or comparable agencies. In addition, we will compare the proposed fees to the cost of alternate sources of water (surface water, for example) and fees charged by the State Water Board for noncompliant basins. The survey will be summarized in tables and charts and can be used for outreach, presentations, and the final report.

Task 4 – Reports

a) *Draft and Final Rate Study Report*

Proposition 218 requires that public agencies develop a detailed administrative record describing the cost of service and rate or fee calculations. Our team will submit a draft report for review and feedback. The report will summarize findings and recommendations and discuss key alternatives when applicable. We will document all data sources used and the five-year cost of service projection. Receive input from the project team and CGA Board. Prepare final reports incorporating feedback received. We will provide printed copies and electronic versions of both the draft and final reports and the Excel models supporting all tasks as requested. Our final report will describe legal requirements and industry standard practice, cost allocation and rate recovery, and our project methodology and approach.

b) *Assessment Engineer's Report*

If needed, Provost & Pritchard will use the cost of service information developed by the team to draft, stamp, and file an Assessment Engineer's Report. The report will describe the amount of the assessment, the parcels subject to the assessment, and the special benefit provided to the impacted parcels.

c) *Financial Model*

All of our workpapers, calculations, charts, and graphs will be included in an Excel-based financial model that will be submitted to the CGA at the conclusion of the study. The model will be easy to use and allow staff to update financial projections.

Task 5 – Outreach and Adoption

a) *Board Meeting and Presentations*

Present draft and final results to staff, CGA Board, and stakeholders. Presentations will provide brief background and study objectives, make a clear case why the fees are needed, describe the fee structure (and potentially key alternatives) recommended by the project team, present findings of the fee survey, and discuss related financial and policy recommendations. Our team will document input from the public and prepare meeting minutes.

b) *Stakeholder Outreach*

Our proposed scope includes several informational meetings with the CGA Board. In addition, we recommend the CGA conduct customer outreach meetings. Outreach is especially critical for assessments which require an affirmative vote of landowners. Early in the study, we will work with the CGA to develop an outreach plan to target various stakeholder types (agricultural pumpers, urban pumpers, etc.) and various geographic areas within the CGA territory. Develop communication and outreach materials for outreach meetings of varied messaging for the CGA such as meeting notices, fact sheets, and presentation development. Assist the Board in finding outreach venues, setting meeting dates, and developing invite lists.

Our team will give presentations describing CGA activities and rate options. After the workshops, we will provide a summary to the Board. As appropriate, we will fine-tune our recommendations based on feedback received.

c) *Proposition 218 Implementation*

Our project team will assist the CGA with each step of implementing the proposed rates and fees. For Proposition 218, the CGA must mail impacted property owners a hearing notice 45 days in advance of the public hearing and conduct a protest vote. Our team will draft the notices, develop the property owner mailing list, and coordinate the printing and mailing of the notices. We will attend the public hearing and tabulate the protest votes.

d) *Assessment Implementation*

To proceed with assessment funding, Provost & Pritchard will prepare the Engineer's Report and L&T will assist with implementation. We will coordinate the preparation of the assessment ballots, mail them to property owners, tabulate the votes, and record the assessment with the county tax assessor.

Task 6 – GIS Analysis

a) *Parcel Evaluation*

Provost & Pritchard will acquire and analyze current property data from the Colusa County Assessor, ParcelQuest and other sources of real property information, and perform comparison of the Assessor data with other property data. An Access database will be created to concatenate parcel lists for each owner to minimize duplicative efforts. This information will be used to create balloting and public outreach materials and inform rates/fees analysis.

Task 7 – Tax Roll Preparation

Provost & Pritchard will prepare and submit the final roll as created during the Rate Design and Reports Task to the appropriate Colusa County office for the 2023-2024 Tax Year.

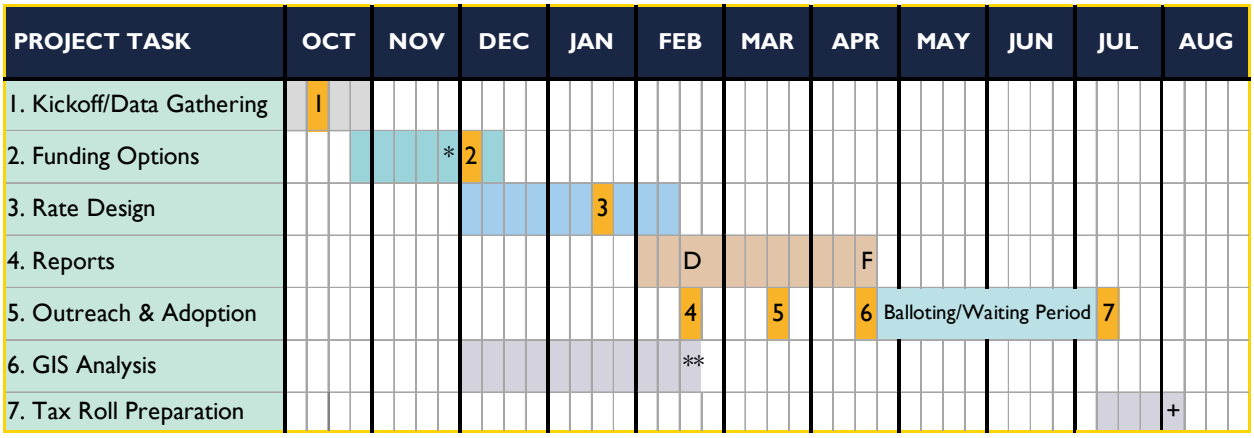
DELIVERABLES

To complete the scope of work described above, we will provide the following items to the Colusa Groundwater Authority:

- Data needs list and kickoff meeting
- 5-year cost of service projection and financial plan
- Analysis of potential funding mechanisms and advantages and disadvantages of each
- Criteria, ranking, and selection of funding mechanisms with CGA input
- Funding options technical memorandum
- Final rate or fee recommendations
- Bill comparison
- Draft and final reports and/or Assessment Engineer's Report
- Board meetings and presentations
- Community workshops and stakeholder outreach potentially including newsletters, FAQs, social media postings, and CGA website updates
- Printing and mailing of Proposition 218 notices and/or assessment ballots using an outside vendor
- Attendance at the final public hearing and tabulation of votes
- GIS data analysis of parcel data for the assignment and collection of fees
- Preparation of the tax roll and submittal to the County Tax Assessor

SCHEDULE

Provided below is our suggested schedule to provide our analysis, conduct stakeholder outreach, and submit the rates or fees in August 2023 for inclusion on the tax roll.



*#s 1 to 7– suggested in-person meetings; * funding options memo submitted; ** GIS parcel data finalized; D – draft report submitted; F – final report submitted; + tax roll submitted to county assessor*

Provided below are our suggested in-person meetings or presentations. These meetings will be supplemented with virtual and/or in-person meetings with CGA staff to review project status and intermediate deliverables.

Meeting #1	Kickoff meeting to be conducted ASAP after notice to proceed
Meeting #2	Presentation of funding mechanisms
Meeting #3	Presentation of rate recommendations/stakeholder outreach meeting
Meeting #4	Presentation of draft report/stakeholder outreach meeting
Meeting #5	Stakeholder outreach meeting
Meeting #6	Presentation of the final report; CGA authorizes public approval process
Meeting #7	Public Hearing; tabulate protests or assessment votes

THANK YOU

LECHOWICZ + TSENG
MUNICIPAL CONSULTANTS

909 Marina Village Parkway #135 | Alameda, CA 94501 | (510) 545-3182 | www.LTmuniconsultants.com

September 1, 2022

Submitted electronically via email
cthomaskeefer@rgs.ca.gov

Colusa Groundwater Authority
Carol Thomas-Keefer, Program Manager

Re: Statement of Qualifications for Data Review, Fee Analysis, and Rate Setting Services for Colusa Groundwater Authority

Dear Ms. Thomas-Keefer:

SCIConsultingGroup and teammate, Larry Walker Associates, Inc. (LWA), (hereto collectively referred to as "the SCI Team") have direct experience in data and fee analysis, and rate setting for public agencies specifically with respect to setting fees and rates pursuant to Propositions 26 and 218 as they relate to the Sustainable Groundwater Management Act.

Additionally, this proposal was developed in consultation with LandIQ, LLC. Depending on the desired rate structure and fee methodology, LandIQ's expertise may prove extremely valuable to the process of fee implementation. LWA has a working relationship with LandIQ and can advise the Authority on the potential benefits of using their services. At the direction of the Authority, LandIQ's services may be used pending a mutually agreeable scope of work.

The SCI Team is pleased to submit, for your review, this Statement of Qualifications ("SOQ") for Data Review, Fee Analysis and Rate Setting Services to the Colusa Groundwater Authority ("Authority"). We have reviewed the Authority's' Request for SOQ and the supporting documents, and this SOQ includes all tasks potentially required for this project. This proposal shall be valid for 90 days after receipt.

By way of introduction, SCI is a California Chapter S Corporation formed in 1985 uniquely focused on revenue enhancement services for public agencies, including planning, designing, justifying and successfully establishing new districts, zones, and associated revenues for their service and capital improvement needs, and managing special assessment levies. SCI's federal tax number, as requested, is 94-2984547.

EXPERTISE ON PROPOSITIONS 13, 26 AND 218 Throughout the process of designing and establishing new Proposition 13, 26 and 218-compliant fees and benefit assessments and working on these projects with many of the leading specialized attorneys in the State, we have gained unparalleled legal and Proposition 13, 26 and 218 compliance expertise.

KNOWLEDGE OF COLUSA COUNTY We have provided consulting and revenue engineering services to many public agencies in Colusa County, including the City of Colusa and several special districts. SCI has conducted community outreach and ballot measures and implementations of fees to affected parcels in Colusa County.

SCI

- City of Colusa
- Colusa Mosquito Abatement District
- Arbuckle Parks and Recreation District
- Williams Fire Protection Authority

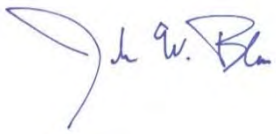
LWA has experience working with local groundwater sustainability agencies, local irrigation/water districts, and local landowners.

LWA

- Glenn Groundwater Authority
- Dunnigan Water District
- Sacramento Regional County Sanitation District
- City and County of Sacramento
- City of Manteca
- City of Stockton
- Sacramento Area Flood Control Agency
- Omochumne-Hartnell Water District

We look forward to this opportunity to assist the Authority with this important project and stand ready to proceed. If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,



John W. Bliss, P.E.,
President

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RESPONDENT'S QUALIFICATIONS

FIRM'S BACKGROUND AND EXPERIENCE

SCI CONSULTING GROUP

SCIConsultingGroup is a privately-owned California Chapter S corporation headquartered in Fairfield, California, with over 35 years of expertise in assisting public agencies in California with planning, justifying and successfully establishing new revenues for their service and capital improvement needs and objectives and managing special assessment levies. SCI has a staff of 20 employees and over 150 current city, county, special district, and school district clients. SCI also offers extensive expertise with the important legal and procedural issues involving benefit assessments, special taxes, and fees. The principals at SCI are acknowledged experts on these public financing mechanisms and were involved with the cleanup legislation for Proposition 218.

EXPERIENCE WITH FUNDING FOR IMPLEMENTATION OF GROUNDWATER SUSTAINABILITY PLANS including:

- Butte Valley GSA (Siskiyou County)
- Los Osos Basin Management Committee (San Luis Obispo County)
- Petaluma Valley GSA (Sonoma County)
- Santa Rosa Plain GSA (Sonoma County)
- Scott Valley GSA (Siskiyou County)
- Shasta Valley GSA (Siskiyou County)
- Sierra Valley Groundwater Management District GSA (Sierra County)
- Sonoma Valley GSA (Sonoma County)
- Ukiah Valley Basin GSA (Mendocino County)

RECENT WATER-RELATED RATE STUDIES including:

- City of Alameda
- City of Berkeley
- City of Cupertino
- City of Davis
- City of Los Altos
- Town of Moraga

SCI possesses extensive assessment, tax and fee engineering and formation expertise, including polling and outreach, particularly for balloted agency-wide assessments in politically challenging areas. These successful agency-wide assessments include all the largest successful assessments in the State as well.

LARRY WALKER ASSOCIATES, INC.

LWA is a privately-owned corporation providing environmental engineering and management services throughout California. Headquartered in Davis, California, LWA has regional offices in Santa Monica, Carlsbad, Berkeley, San Jose and Ventura, as well as an office in Seattle, Washington. Founded in 1979, LWA has been a partner, innovator, and industry leader, assisting municipalities and private businesses in navigating and solving complex and important environmental and public policy challenges. LWA provides a wide range of consulting services ranging from traditional water and wastewater engineering to highly specialized water resource management; groundwater modeling, scenario analysis and sustainable planning; surface water and groundwater monitoring; and stormwater and watershed management.

LANDIQ, LLC

Land IQ is a specialized land and water resource science and remote sensing firm that pairs scientific knowledge of urban, agricultural, and native plant and land systems with advanced remote sensing technologies, custom modeling, and analytical methods to develop powerful and cost-effective client solutions. Our personnel are equipped with extensive experience in remote sensing and spatial analysis, land use mapping, soil-plant-water interactions and water balance modeling, consumptive water demand analysis, irrigation management, spatial data management, climatology, and land and water resources scientific and regulatory issues.

Land IQ is based in Sacramento, California and has been operating for 15 years, with individual staff experience spanning over 26 years. Land IQ is a certified small business with the California Department of General Services. Land IQ has over 30 technical staff. With seventeen resource-based scientists (soil, water, climatology, native systems) and ten spatial scientists (remote sensing, GIS, photogrammetry), we consciously built our firm to integrate both land and spatial disciplines to facilitate a multifaceted and scientifically robust approach to analyzing surface land and water use.

The SCI Team is uniquely qualified to provide the Authority with the highest quality consulting services for the proposed tasks, as detailed in the follow section, because of our:

- Direct experience with all aspects of GSP implementation funding;
- Direct experience with public agencies engagement and funding analysis and strategy;
- Considerable success with fee, assessment and tax implementation (over 140 California; successes);
- Propositions 13, 26 and 218 expertise; and
- Specific groundwater sustainability community outreach expertise.

SUBCONTRACTORS

SCI will serve as the prime contractor and LWA will subcontract with SCI. Pending discussion with the Authority, LandIQ may be used as a subcontractor to provide land mapping expertise.

THE SCI TEAM'S DATA ANALYSIS AND DATABASE DEVELOPMENT EXPERIENCE

Both SCI and LWA are very experienced in database design, development, maintenance, analysis and reporting. For these tasks, LWA will lead the development of the groundwater and parcel characteristics with support from SCI on the parcel characteristics portion. Data elements will include, but not be limited to, the following:

- Land use (available through the Department of Water Resources and Land IQ),
- Consumptive use (derived from satellite imagery),
- Groundwater extractions, and
- Surface water supply.

LWA works with leading experts in agricultural water management to estimate groundwater extractions, including:

- University of California's Cooperative Extension,
- Cal Poly's Irrigation Training & Research Center, and
- Dr. Rick Allen, professor at the University of Idaho.

LWA will utilize existing datasets used in the development of the Colusa Subbasin Groundwater Sustainability Plan (GSP), including the modified version of the California Central Valley Groundwater-

Surface Water Simulation Model (C2VSimFG). Additional information may be obtained through coordination with adjacent subbasins and technical experts, as needed. Ryan Fulton, Water Resources Engineer with LWA, has prior experience with parcel-level data in the region, which would be integral to optimizing updates to a parcel-specific groundwater use database. In addition, Ryan Fulton, has experience in agricultural water management and prior experience with projects within the Colusa and neighboring Subbasins. LWA is very experienced with the use of ArcGIS and Microsoft Access and uses it on projects often.

SCI also routinely works with large data sets analyzing and processing property-related data. SCI manages over 13 million parcels in dBase data sets including nearly all 58 California County Assessors data. SCI has developed numerous complex data sets, relational and flat file with complex table schema. SCI uses Microsoft Office, Microsoft Teams, Microsoft Visual FoxPro (with proprietary programs), ArcGIS and proprietary SQL server-based applications.

THE SCI TEAM'S EXPERIENCE WITH 5-YEAR REVENUE REQUIREMENT PROJECTIONS

The SCI Team has assisted numerous new public agencies develop revenue requirement projections including groundwater sustainability plan and stormwater permit costs. In many cases, these projects have been for new agencies formed by JPA from existing agencies and/or annexations, or they are new services provided by existing agencies without any historical cost data.

For example, SCI recently completed revenue mechanism implementation based upon five-year projected costs for three GSAs in Sonoma County. For the SCI Team's work with the Ukiah Valley Basin, multi-year revenue requirements have been developed and are driving the revenue option recommendations. In these cases, costs must be projected without the benefit of existing similar history.

LWA is working with the GSAs listed above to develop costs associated with managing the GSP on an annual basis including administration, grant management, monitoring and reporting, model and database maintenance and implementation of projects and management actions. In addition, LWA has supported SCI in the development of costs and rate studies for our GSA clients and for several stormwater programs in California.

The SCI Team has provided Funding Options and Recommendations consulting in support of GSP implementation to the following GSAs: Ukiah Valley Basin GSA, Butte Valley GSA, Scott Valley GSA, Shasta Valley GSA and Sierra Valley Groundwater Management District GSA. For this work, the SCI Team analyzed the costs associated with GSP implementation as well as the specific parcels, wells, water pumped, political and historical environment and other attributes of each basin to develop specific options and recommendations.

EXPERIENCE WITH FEE AND RATE DESIGN AND IMPLEMENTATION

SCI has successfully implemented over 140 balloted fees, taxes and assessments. In each case, SCI has worked closely with governing boards, citizen advisory committees and stakeholders to design and implement the revenue mechanism. For each of the over 140 balloted fees, taxes and assessments that SCI has successfully implemented, we have planned and implemented an associated community outreach effort – it is one of our core competencies.

The SCI Team is currently developing Fee Studies for Sonoma Valley GSA, Petaluma Valley GSA and Santa Rosa Plain GSA in Sonoma County (the Santa Rosa Plain GSA draft study is now published and is included as an attachment herein). Utilizing a combination of actual and estimated groundwater use to create parcel-specific databases, these Fee Studies will be used to establish regulatory fee programs in each Basin beginning with fiscal year 2022-23. This process has included multiple community meetings for each GSA,

numerous Board and Advisory Committee presentations and close collaboration with Agency staff. The coordination required for the implementation of these projects in accordance with feedback from the Boards, Staff, Advisory Committees, and public was a key element of the successful adoption of these fee programs.

The SCI Team has developed robust, Proposition 218-complaint Property Related Fee Studies for the water infrastructure (primarily storm drainage) for the Cities of Alameda, Berkeley, Cupertino, Davis, Del Mar and Los Altos and the Town of Moraga over the last four years - more than all other firms in the state, combined. These Fee Studies require an in-depth cost-of services analysis, long range budgets including administrations, operations and maintenance and capital improvements, and strict adherence with Proposition 218 and the associated judicial decisions.

Each of these Fee Studies is the basis for a fee rate. The SCI team works closely with agency staff, stakeholders and the greater community (we typically conduct a survey) to develop goals and develop a fee methodology and rates that balance attributes including optimal revenue generation, reasonable and equitable distribution of revenue burden amongst various rate payers, administrative ease, legal defensibility, ease of understanding, etc.

Our team understands that the general public's lack of understanding of groundwater sustainability and associated critical infrastructure exacerbate the funding challenge. Traditional political approaches likely will not work. Accordingly, the SCI team proposes a unique, "hands-on" strategic approach which begins with the development of initial messaging and branding, followed by direct engagement with local stakeholders and the broader community, refinement of the messaging and branding, and finally, effective and authentic community outreach.

Additional Information

Employment Policies

SCI does not and shall not discriminate against any employee in the workplace or against any applicant for such employment or against any other person because of race, religion, sex, color, national origin, handicap age or any other arbitrary basis. SCI ensures compliance with all civil rights laws and other related statutes.

Insurance

SCI carries professional Errors and Omissions insurance in the amount of $2 million per occurrence and $2 million aggregate. SCI also carries general liability insurance in the amount of $2 million per occurrence and $4 million aggregate.

Independent Contractor

If selected, SCI shall perform all services included in this SOQ as an independent contractor.

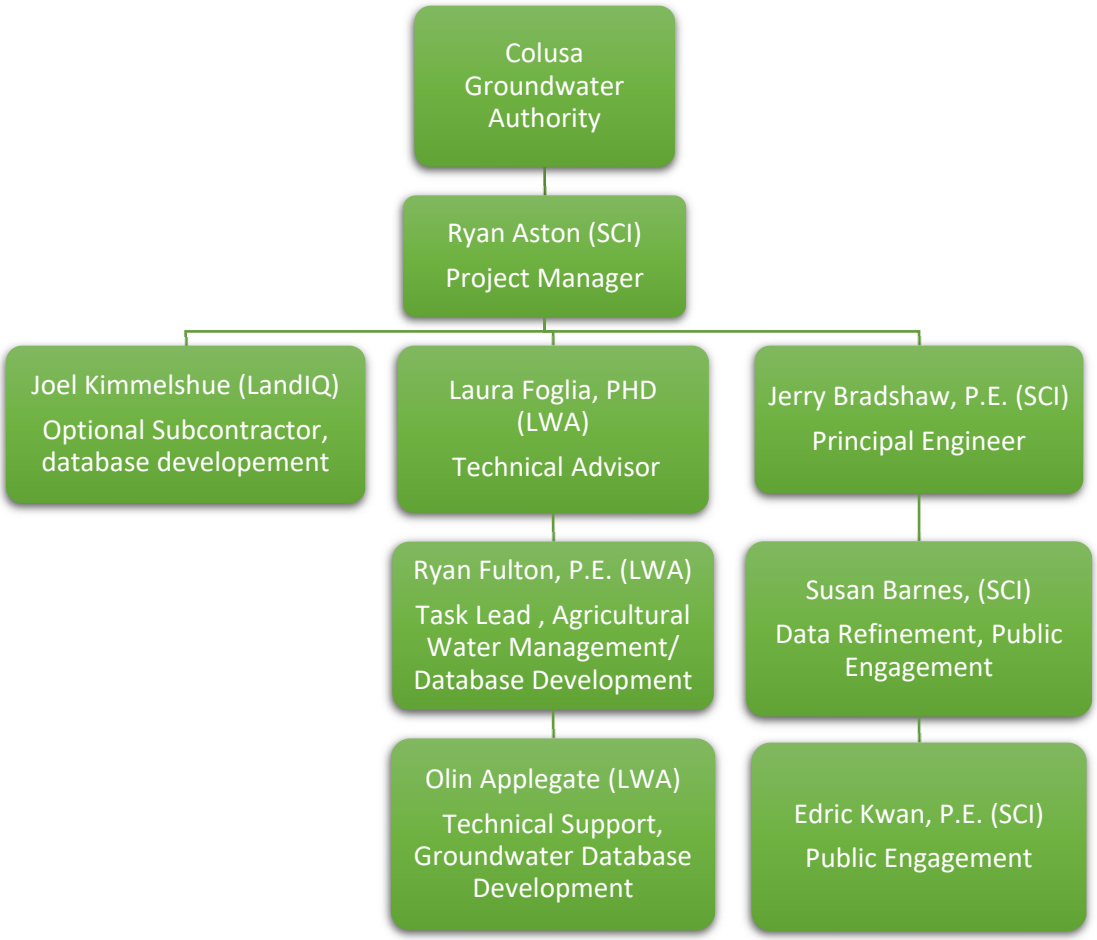
Ability to Perform Work Subject to the Desired Schedule

The SCI Team has reviewed the desired schedule included in the Authority's RFQ and is confident all tasks can be completed as described.

The schedule is of course paramount to ensuring that any funding mechanism be established in time for inclusion on the 2023-24 tax bills. Developing a fee program is an iterative process that will require key input from staff, stakeholders, the Board, the Advisory Committee, and the public. These elements of the schedule described in the RFQ must be met in a timely and effective manner.

PROPOSED RESPONDENT TEAM

SCI and LWA have worked successfully together and continue to work together on numerous projects, primarily for stormwater and groundwater sustainability. LWA provides groundwater sustainability expertise and SCI provides funding expertise. Our complementary skill sets have consistently fulfilled and satisfied our GSA clients' needs relating to funding groundwater sustainability in California. Below is the organizational chart for the proposed project team with each member's role assigned. Please see additional information below showcasing their experience and qualifications.



Jerry Bradshaw, P.E., Senior Engineer, License No. C45884 **SCI**

jerry.bradshaw@sci-cg.com

Mr. Bradshaw is the retired Public Works Director from the City of El Cerrito with over 30 years of experience in public works management and funding. Since 2014, he has worked for SCI, where he has guided dozens of client cities and special districts to develop and administer funding sources for all sorts of public works improvements. His specialty at SCI is stormwater and groundwater funding, where he has been the project manager for over 15 agency efforts for water-related funding, including financial analyses, fee studies, opinion surveys, ballot measures and community engagement. He has also been a regional leader in green infrastructure funding. He is a licensed Civil Engineer and has a Bachelor of Science degree in Civil Engineering from the University of Colorado at Denver.

Ryan Aston, Project Analyst **SCI**

ryan.aston@sci-cg.com

Ryan Aston, Project Analyst, brings 10 years of customer service and data analysis experience to SCI. He specializes in funding options for groundwater sustainability, including identification of viable methodologies and analysis of parcel attributes that contribute to mutually beneficial funding solutions. Mr. Aston has presented such findings at GSA Governing Board and Community Meetings and annual conferences. He also works closely with the SCI team to assist in public opinion research and in Proposition 218-compliant fees, taxes and benefit assessments. Mr. Aston has worked with cities, counties and special districts on a variety of different projects. He earned his Bachelor of Arts degree in Politics from the University of California, Santa Cruz, with emphases in political economy and municipal government.

Susan Barnes, Senior Consultant **SCI**
susan.barnes@sci-cg.com

Susan Barnes specializes in and leads opinion research and new local revenue measure balloting projects, including both benefit assessments and special taxes. She also manages the annual administration of several local funding measures. She uses her excellent facilitation and public speaking experience when working with staff and board members, as well as with constituent groups. Susan's diligent work enables agencies to raise funds needed in order to obtain and maintain the facilities and services their communities desire. She also utilizes her broad project management experience to deliver her projects on time and on budget. Susan earned a Bachelor of Science degree in Business Administration from UC Berkeley and a Master's Degree in Organizational Development from Sonoma State University.

Edric Kwan, P.E., Vice President, License No. C62829 **SCI**
edric.kwan@sci-cg.com

Mr. Kwan has 25 years of experience serving the public works industry. His last 20 years have been with the public sector with 13 of those years in public works director and/or city engineer roles for the County of Alameda, Cities of Richmond and Martinez and Town of Moraga. His firsthand experience relating to the financial challenges of maintaining public infrastructure, including dealing with costly emergency infrastructure failures, led him to join SCI in 2022 to assist other agencies with getting their revenue needs met. His specialty is community engagement, including initial messaging and branding, followed by direct engagement with local stakeholders and the broader community, refinement of the messaging and branding, and finally, effective and authentic community outreach through developing public opinion surveys and educational outreach materials and conducting public presentations. He is a licensed Civil Engineer and has a Bachelor of Science degree in Civil Engineering from the University of California at Berkeley.

Laura Foglia, Ph.D., Vice President **LWA**
lauraf@lwa.com

Dr. Foglia is a Vice President at LWA assisting with projects in the areas of hydrological modelling, groundwater management assistance and managed aquifer recharge. At LWA, she leads the groundwater services for the Ukiah Basin Groundwater Sustainability Agency, the development of Groundwater Sustainability Plans for Siskiyou County and for the South American Subbasin Sacramento Central Groundwater Authority, and she is designing and implementing groundwater recharge projects for the Omochumne-Hartnell Water District and the Scott Valley Irrigation District. Since January 2016, Dr. Foglia is also an Adjunct Faculty Staff in the Land, Air and Water Resources Department at the University of California, Davis, where she teaches a graduate class on groundwater models and model calibration.

Ryan Fulton, P.E., Water Resources Engineer, License No. C87403 **LWA**
ryanf@lwa.com

Mr. Fulton is a Water Resources Engineer at LWA with a focus in agricultural water management. Previously, he worked for Cal Poly's Irrigation Training & Research Center (ITRC), contributing to studies assessing on-farm irrigation efficiencies and consumptive use. In addition, previous work experience includes contributing to a variety of projects across California and the western United States, including in the Colusa Subbasin. Projects involved monitoring groundwater extractions, hydrologic modeling, GIS spatial analyses, consumptive use quantification, irrigation system modernization, flow measurement, water balances, and supporting water agencies comply with state and federal legislation including SGMA, SBx7-7, and SB88. He has supported several local and neighboring irrigation districts implement and adopt rate structures based on actual water use, including for Richvale Irrigation District, Biggs-West Gridley Water District, Western Canal Water District, Reclamation District No. 108, Provident Irrigation District, and Princeton-Codora-Glenn Irrigation District. Since joining LWA in September 2021, Mr. Fulton has contributed to the development of Groundwater Sustainability Plans for Ukiah, South American, Sierra Valley, Scott, Butte, and Shasta Subbasins. Mr. Fulton is supporting Dunnigan Water District and other local agencies secure funding to implement groundwater recharge projects.

Olin Applegate, Project Staff **LWA**
olina@lwa.com

Mr. Applegate is a Project Scientist and hydrologist with work experience at LWA in the groundwater, agriculture, watershed and stormwater service areas. Mr. Applegate's experience at LWA includes assisting clients with SGMA compliance, Regional Water Board negotiation during Waste Discharge Requirements renewals, stormwater permit compliance, TMDL compliance assessment, NPDES permit assistance, completion of groundwater technical reports, monitoring and reporting programs and water quality assessments. Mr. Applegate provides a range of services including data management and analysis, participation in monitoring and special studies, compliance and communication with Regional Waterboards and regulatory analysis. Prior to LWA, Mr. Applegate modeled impacts to groundwater quality from agricultural production in the Central Valley.

Joel Kimmelshue, Principal Soil & Agricultural Scientist **LandIQ**
jkimmelshue@landiq.com

Dr. Kimmelshue is a Principal Soil and Agricultural Scientist for Land IQ. Dr. Kimmelshue is also a founding owner in the firm. He has experience in agricultural and water resources consulting in the western United States (especially California), and agricultural research and crop production throughout the United States. Dr. Kimmelshue has performed technical leadership and/or managed numerous projects and tasks of nearly $40 million dollars over the past 26 years.

Dr. Kimmelshue's consulting experience includes practical and applied solutions for development of water/soil management systems and agricultural systems, specifically with irrigated agriculture. This technical expertise also includes crop consumptive use estimates, crop classification, regulatory support and negotiation, water resources science and planning, land reclamation, soil/plant nutrient dynamics, irrigation and drainage in arid and semi-arid climates, soil classification, and crop production. Predominantly, the objective scientific work that Dr. Kimmelshue performs is driven by ever-changing policy, legislative and environmental pressures on production agricultural systems.

FEE SCHEDULE

Based upon the current project understanding, the SCI Team's proposed budget is shown in the table below.

SCI TEAM
Colusa Groundwater Authority
Data Review, Fee Analysis, and Rate Setting Services

Assigned Staff	SCI				LWA			
Classification	Senior Engineer	Project Analyst	Senior Consultant	Vice President	Vice President	Project Engineer II.B.	Project Scientist II.A.	SCI Admin
	Jerry Bradshaw	Ryan Aston	Susan Barnes	Edric Kwan	Laura Foglia	Ryan Fulton	Olin Applegate	
Fully Loaded Hourly Rate	$265	$130	$203	$265	$310	$198	$224	$73
Subcontractor Markup					*10%*	*10%*	*10%*	

Scope of Work

Work Plan										Total Hours	Total Costs
1	Kick-Off/Data Gathering	2	8	2	2	8	8	2	0	36	$ 8,745
2	Review of GSP/Budget	4	24	0	4	2	18	0	0	52	$ 9,842
3	Evaluation of Fee Alternatives	10	20	2	2	0	4	0	0	38	$ 7,057
4	Development of Parcel Database	9	28	10	2	2	32	32	0	115	$ 24,121
5	Development of Fee Schedules	9	24	16	6	0	2	2	0	59	$ 11,271
6	Community Outreach	2	20	20	20	4	12	0	8	88	$ 17,690
										0	$ -
	TOTAL DIRECT HOURS	**36**	**124**	**50**	**36**	**16**	**76**	**36**	**8**	**388**	**$ 78,727**
										Total Labor Cost	**$ 78,727**

Direct Costs		Number of Units	Cost per Unit		Total Costs
Incidentals	Travel, property data, maps and other out-of-pocket expenses	1	$ 1,500		$ 1,500
Optional Subcontractor: LandIQ	Land mapping services	1	$ 4,500		$ 4,500
				Direct Costs	**$ 6,000**
				TOTAL BASE COSTS	**$ 84,727**

Note: LandIQ services will be identified with feedback from the Authority and may be billed based on a time and materials basis.

CONFLICTS

Conflict of Interest Statements

The SCI Team has no known past, ongoing or potential conflicts of interest for working with the District, performing the Scope of Work or any other service for this Project.

REFERENCES

Below are summaries of the work from recent and relevant projects for the SCI Team. We encourage you to contact these clients regarding our experience and approach.

Sonoma Valley, Petaluma Valley and Santa Rosa Plain GSAs **SCI & LWA**

Project Staff: John Bliss, Jerry Bradshaw and Ryan Aston, SCI, Olin Applegate, LWA

Sonoma and Petaluma Valley GSAs 404 Aviation Boulevard Santa Rosa, CA 95403 Contact: Ann DuBay, Administrator Sonoma Valley and Petaluma Valley GSAs Telephone: (707) 524-8378 E-mail: Ann.DuBay@scwa.ca.gov	Santa Rosa Plain GSA 2235 Mercury Way, Suite 105 Santa Rosa, CA 95407 Contact: Andy Rodgers, Administrator Santa Rosa Plain GSA Telephone: (707) 243-8555 E-mail: arodgers@santarosaplaingroundwater.org

The Sonoma Valley, Petaluma Valley and Santa Rosa Plain groundwater sustainability agencies (as a joint project) sought to update and develop their databases and explore various funding mechanism options for groundwater sustainability plan implementation. The scope of work was broken down into two projects: 1) Rural Community Engagement Strategies and Revenue Recommendations; and 2) Data Review, Fee Analysis and Rate Setting Services.

Rural Community Engagement Strategies and Revenue Recommendations included extensive community outreach, utilizing public opinion surveys and focus groups to identify community perspective and preferences surrounding funding for sustainable groundwater management. Utilizing the results of these efforts, the SCI Team complied a Funding Options Technical Memorandum for each Basin, tying Agency needs and community preferences to optimal funding mechanisms.

Data Review, Fee Analysis and Rate Setting Services included in-depth analysis of various funding options using parcel-specific data, numerous community meetings, development of viable datasets detailing groundwater use and development of robust fee studies for each Agency. The SCI Team analyzed fee studies from across the State, as well as a prior Fee Study Report completed for the Santa Rosa Plain GSA in 2019 in order to determine the best path forward for each Agency.

For each of the three GSAs, the SCI Team worked closely with GSA Agency staff, member agency staff, Advisory Committees, Boards and various stakeholders throughout the process, utilizing a comprehensive approach to identifying community preferences and viable data in support of fee and rate development. The SCI / LWA team has made over 40 PowerPoint presentations since September 2021.

Ukiah Valley Basin Groundwater Sustainability Agency **LWA & SCI**

Project Staff: Laura Foglia, LWA, Ryan Aston, SCI

501 Low Gap Road Ukiah, CA 95482 Contact: Amber Fisette, Deputy Director of Transportation Telephone: (707) 234-2838 E-mail: fisettea@mendocinocounty.org

Beginning in 2018, LWA led a consultant team to work with the Ukiah Valley Basin Groundwater Sustainability Agency (UVBGSA) in developing a groundwater sustainability plan (UVBGSP) for the Ukiah Valley groundwater basin. The LWA Team, which included SCI, assisted UVBGSA with evaluating the most cost-and resource-effective plan toward groundwater sustainability, in compliance with SGMA requirements. The plan was successfully submitted in January 2022.

A key component of the LWA effort was the development of the Integrated Hydrological Model for the entire Upper Russian River watershed. The model was developed and calibrated using current groundwater heads and streamflow measurements, and is now used to simulate future climate scenarios as well as management scenarios. LWA's efforts included program management and client coordination; facilitation and outreach; analysis of existing data and evaluation of enhancements to the data collection network; UVBGSA support with applications for Technical Support Services with the Department of Water Resources; coordination with neighboring subbasins and parallel efforts; development of sustainability goals, measurable objectives and management scenarios; development of UVBGSP implementation plan; and preparation of the UVBGSP. Extensive communication with UVBGSA members and Ukiah Valley stakeholders ensured that groundwater management remains at the local level, while sustainably managing groundwater resources. LWA continues to help Ukiah Valley with GSP implementation of projects and management actions, development of the annual report template, grant completion report and quarterly grant invoicing support.

Dunnigan Area Groundwater Recharge Demonstration and Pilot Project (Project) LWA

Project Staff: Ryan Fulton and Laura Foglia

Dunnigan Water District (DWD)
3817 1st Street
Dunnigan, CA 95937
Contact: William Vanderwaal, Manager
Telephone: (530) 812-6276
E-mail: wvanderwaal@rd108.org

The Westside Sacramento Integrated Regional Water Management (IRWM) program selected the Project to receive the IRWM Funding Area set-aside funds from the Department of Water Resources Urban and Multi-benefit Drought Relief Program. The Project utilizes Section 215 water when it is available, excess contract water from DWD, and purchased surface water from senior water right holders until a permanent winter water right is obtained. Surface water will be diverted from the Tehama-Colusa Canal (TCC) into Buckeye, Dunnigan, and Bird Creeks (i.e., ephemeral streams) and on to approximately 200 acres of farmland enrolled in The Nature Conservancy's multi-benefit recharge program. The Project will improve water supply reliability for the disadvantaged community of Dunnigan; provide habitat for migratory waterfowl; enhance groundwater-dependent ecosystems; and reduce the risk of subsidence damaging nearby infrastructure, including the TCC and Interstate 5.

LWA has worked on or is currently supporting DWD on the following activities:

- Seeking grant funds and other financial support through local, state, and federal agencies;
- Stakeholder coordination including with the Yolo Subbasin Groundwater Agency, private landowners, NGOs, Westside Sacramento IWRM, and funding agencies;
- Implementing a groundwater recharge project that can be implemented long-term and expanded into other areas to stabilize groundwater levels and storage volumes, prevent stream depletions, and protect groundwater-dependent ecosystems;
- Providing technical assistance, which includes refining water budgets and hydrologic model, assessing water quality impacts and habit enhancements, and expanding monitoring network;
- Quantifying all water budget inflows and outflows, including applied water, precipitation, evapotranspiration, tailwater, and deep percolation;
- Site selection and characterization of the recharge site locations;
- Regulatory permitting assistance;
- Overseeing monitoring network installation and ongoing monitoring implementation; and
- Identifying infrastructure upgrades or retrofits to maximize recharge.

PROPOSED SCOPE OF WORK AND SCHEDULE

The SCI Team has thoroughly reviewed the Authority's' RFQ and is well qualified to complete all tasks described in the Project Description. The SCI team proposes the approaches listed below for each task.

I. KICK-OFF MEETING AND INITIAL DATA GATHERING AND REVIEW

The SCI Team will meet with Agency staff to clarify and establish project communication, goals timelines, and deliverables, and discuss best sources of data and additional information.

II. REVIEW OF COLUSA SUBBASIN GSP, INITIAL BUDGET, IMPLEMENTATION PLAN, AND PREVIOUS BOARD DISCUSSIONS ON PROPOSED FEE MECHANISMS

The SCI Team will review and evaluate the Colusa Subbasin GSP, initial budget, and implementation plan. Particular attention will be focused on elements that inform a well-founded fee structure, including parcel attributes, patterns of groundwater use, and availability of data that would likely make up the foundation of a funding mechanism's methodology. The SCI Team will also review meeting summaries related to discussions on proposed fee mechanisms in order to fully understand the Authority's perspective on funding, including preferences, concerns, and needs.

SCI will focus on overall approach, compliance with Proposition 218 and 26, optimal revenue generation, reasonable and equitable distribution of revenue burden amongst various rate payers, administrative ease, legal defensibility, ease of understanding, and other pertinent factors.

III. EVALUATION OF FEE/RATE OPTIONS AND RECOMMENDATIONS AND PRESENTING AT ADVISORY COMMITTEE, BOARD, AND COMMUNITY MEETINGS.

Based upon our research in the previous tasks, input from Agencies staff and other stakeholders, and our experience with numerous similar efforts, the SCI Team will prepare and present a Funding Options Memorandum including pros and cons of funding options (including political viability, legal rigor, reliability, legislative factors, costs of implementation and maintenance, sustainability, timeline, and compatibility with other funding mechanisms.) This Memorandum will identify a range of funding pathways, including fees prescribed in Water Code § 10730 and 10730.2, as well as alternative options such as benefit assessments and special taxes. As part of this review, the SCI Team will evaluate and make recommendations regarding existing non-balloted funding sources, which may more effectively fund groundwater sustainability. The SCI team has developed similar Funding Options Memoranda in Basins across the state, helping to gauge optimal funding mechanisms based on the specific needs and perspective of GSAs, their Boards, and their communities.

It is important to note that funding needs of groundwater management are often fluid and multifaceted, evolving based on many factors. A part of this analysis will include highlighting mechanisms best suited for immediate-term funding as well as the longer-term needs relating to both general administration and GSP implementation.

Communicating the findings of this Memorandum will be vital to elicit input from the Board, Advisory Committee and the Public. SCI will develop a PowerPoint Recommendations Summary Presentation to be used to illustrate the options discussed, their advantages, and their potential challenges.

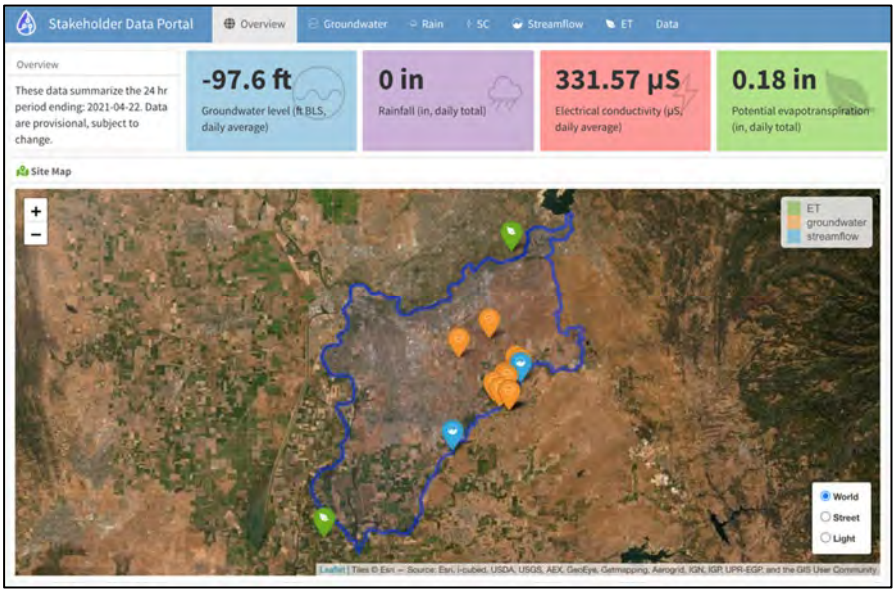
Deliverables

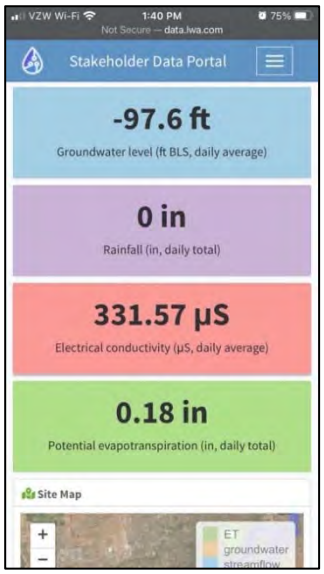
- *Develop Funding Options Memorandum*
- *Develop and present PowerPoint Recommendations Summary Presentation*

IV. Update or Development of Parcel Specific Database of Groundwater Use and Supply

The SCI Team will create a robust database for the Subbasin as needed based upon parcels (from the raw Assessors database) managing all existing all available attributes while adding new attributes such as geographic information regarding basins, pump type and locations, quantity of groundwater pumped etc., land use and other attributes supporting revenue generation. The SCI Team will analyze the data and develop additional data such as proposed fee amounts. The SCI Team has already developed parcel specific databases for Sonoma Valley GSA, Petaluma Valley GSA, Santa Rosa Plain GSA, and others.

LWA will review information provided by the Agencies as requested at the kick-off meeting and review existing databases. Based on this review, LWA will confer with the agencies to determine additional needs and features that would improve the utility of existing databases. LWA has designed and built computer programs to automate the maintenance and upkeep of open source PostgreSQL, MySQL, and SQLite, and PostGIS relational databases; we also have experience in enterprise Access databases. This experience can be applied to updating the Agencies' databases as needed. Other experience that can be leveraged includes design, programming, installation, and maintenance of continuous monitoring hardware that measures groundwater level, soil moisture, streamflow, evapotranspiration, electrical conductivity, and precipitation across groundwater basins in California. In addition, we have written software to automate the extraction, transformation, and loading of tens of thousands of daily measurements from hundreds of these sensors into dashboards and cloud databases. Using this experience, LWA can create dashboards to enable interactive data visualization and exploration and downloads of the most recent data that can be configured as password-protected or public-facing. Moreover, LWA's dashboards are customizable to client needs and may be updated in near-real time (e.g., continuous 15-minute interval data refreshed every 4 hours) to support water management actions that occur on short time scales, such as managed aquifer recharge and pumping tests. As shown below, LWA's dashboards can be easily accessed on PCs and smartphones.





The above images are from a stakeholder groundwater data portal for continuous monitoring in the South American Subbasin that can be accessed on a PC (left) and smartphone (right). Clicking daily summary boxes (blue, purple, red, and green boxes) takes users to specific tabs with detailed continuous monitoring data for these variables.

Based on input from the Agencies' staff and stakeholders, LWA will provide recommendations for incorporating features described above and providing other updates or improvements to the existing

databases. LWA can also engage with other consultants and vendors offering similar services, such as LandIQ.

Deliverables

- *Robust property-specific Databases of pertinent revenue generation characteristics*

V. Development of Fee/Rate Schedules, Established by a Fee Report or Engineer's Report to Fund the Costs of Implementation of the GSP and ongoing administration of the Authority

Should the Authority determine that a fee program is the optimal revenue mechanism for its needs, The SCI Team will prepare a comprehensive Fee Report for the proposed programs and improvements to be funded. The preliminary work will include several rate structure options incorporating all necessary revenues, costs, fund balance targets, reserves, debt service considerations, and capital improvement scenarios. Compliance with all relevant legal requirements will be a primary focus of this Report. Depending on the type of fee implemented, Water Code § 10730, § 10730.2, Proposition 26, and Proposition 218 will likely provide the appropriate legal framework for implementation. In the event that an alternative mechanism is chosen by the Authority, such as a special tax or benefit assessment, the SCI Team is prepared to develop the necessary Engineer's Report, fee ordinance and study, ballot materials etc.

Additionally, the Report will include other legal considerations and issues related to the fee methodology, appeal processes, and alternative revenue enhancement options. If relevant, it will justify potential offsets for surface water rights or recycled water use, helping to establish the framework for the allocation of groundwater extraction on a parcel level. The process will build on the data gathered in previous tasks, including parcel data, community priorities, budgets, cost estimates, and multi-year proforma for all services and improvements.

A large part of this task will be the use of the parcel attributes and corresponding groundwater attributes developed in a previous task. This data will be used to develop the nexus of parcel attributes to the fee structure. This analysis uses many layers of statistical work and a reasoned and stout rationale for the resulting nexus. The Fee Report's development is an iterative process and will be interwoven with the recommended early stakeholder outreach. This process varies depending on the community and will be tailored to fit the individual Agency's situation. SCI will present these fiscal plans, data review and analysis, and various fee scenarios to the Authority in at least one review session. Issues uncovered by the review will be highlighted and remedies suggested. Depending on the iterative path decided upon, new scenarios may be presented to internal (and possibly selected external) stakeholders to help refine the rate structure and incorporate the community's priorities.

Once Agency staff (and possibly the legal counsel) have reviewed the data and information, we will prepare a Draft Fee Report for a consolidated review by staff of the recommended rate structure and fee levels. After that review, SCI will prepare the Final Fee Report that satisfies the requirements of Articles XIIIC and XIIID of the California Constitution (Propositions 26 and 218), the Government Code, Water Code, and other relevant code sections. The Report will be prepared and signed by Jerry Bradshaw, PE, a registered Civil Engineer with extensive experience in this field. The Report will include a detailed description of the proposed fee structure for the programs and improvements, future capital and facility improvement needs, a detailed cost estimate, the rationale used for the fee apportionment, calculation of the specific proposed fee amount for each parcel in the Subbasin, any necessary maps or diagrams, and other elements.

<u>Deliverables</u>:

- *Preliminary Rate Scenarios – Spreadsheet & PowerPoint level*
- *Draft Groundwater Fee Study or Engineer's Report and supporting PowerPoint*

- *Final Groundwater Fee Study or Engineer's Report and supporting PowerPoint*

VI. Preparation of Outreach Materials.

SCI is a firm believer in bringing the community's voice into the process early and often, and defined in two phases:

- **A listening phase** where early concepts for system needs and revenue mechanisms are presented to trusted stakeholders for their input and feedback. This helps the Agencies to broaden their perspective and develop a work product that is responsive to the community's priorities. It also allows the Agencies to develop a robust messaging program to better engage the broader community.

- **An education phase** where the rate structure is well-developed along with message components. This phase typically occurs after the Agency Boards have approved the rate structure along with the GSP implementation goals and objectives.

With this in mind, the SCI Team will assist with public informational and educational outreach strategies and property owner informational services. Our firm's informational outreach efforts, which will continue throughout the funding mechanism's proceeding, include tasks necessary to ensure that the property owners are adequately informed about the funding mechanism's implementation and the proposed services/improvements in their area before the mailing of ballots. The SCI Team understands that basic message components will need to be simple, clear, and transparent, and need to be well supported with detailed and substantive information. Credibility is the most important factor in this outreach.

a. Develop Communication Infrastructure

The SCI Team will carefully evaluate and develop potential communication infrastructure. Working with Agencies staff we will evaluate and ultimately coordinate existing communication infrastructure, including stakeholder contacts, print media, website, social media, print publications, neighborhood groups and newsletters, etc. We will prioritize and integrate the various methods as appropriate. We will also look at e-mail contacts with HOA and neighborhood leaders, and web-based platforms like nextdoor.com. We will develop a schedule for community stakeholder meetings, due dates for local group newsletters, etc. Our extensive experience has shown that the most effective communication mechanisms for this type of infrastructure are small, local, and neighborhood-based, with a personal communication or face-to-face element. This approach is not expensive, but it is a fair amount of work, and is very effective when well-executed.

b. Develop Communication Messaging

The development of the messaging and supporting information is an iterative process with Agencies staff, the SCI Team, and members of the public. Throughout this process, the SCI Team will analyze and refine messaging associated with sustainable groundwater management. In this task, the SCI Team will develop draft communications of various types. These may include website content, Frequently Asked Questions (FAQ) documents, mailers and brochures, PowerPoint presentations, and emails, scripts, and other adaptable messages.

c. Communications Rollout and Implementation

Once the outreach plan is well-vetted, reviewed, and refined, the SCI Team will coordinate the rollout and implementation of the plan. SCI will provide preparation and support for Agencies staff each step along the way and can be available to attend

selected meetings. SCI will also develop detailed rates and parcel data for selected stakeholders (e.g., Chamber of Commerce, school districts, large landowners, etc.).

Deliverables:

- *Outreach Action Plan*
- *Draft messaging documents, updated as needed (website content, FAQ, fact sheet, handouts, PowerPoint, adaptable messaging)*
- *Curation of stakeholders list and meeting schedules*

VII. Compliance with Implementation Procedures and Placing the Fee on the County's Tax Roll

The SCI team will ensure that all substantive and procedural requirements relating to funding mechanism implementation are thoroughly vetted, assuring the necessary compliance specific to each potential funding mechanism. Depending on the type of mechanism selected, SCI will ensure that all requirements are fulfilled in accordance with the pertinent legal pathway, such as Article XIII C or Article XIII D of the California Constitution (Propositions 26 and 218), Water Code § 10730 or 10730.2 (SGMA), California Government Code Sections, and other potentially relevant sources of legal requirements.

SCI has formed and annually administers nearly 1,000 special taxes, assessments, and fees for over 175 public agencies throughout the state. This experience provides useful insight into ensuring that funding mechanisms are properly implemented, from their initial development through submission to the County Auditor's office for inclusion on tax bills.

Luhdorff & Scalmanini
Consulting Engineers

Statement of Qualifications for

Groundwater Sustainability Agency Data Review, Fee Analysis, and Rate Setting Services

Colusa Groundwater Authority

SEPTEMBER 6, 2022

Luhdorff & Scalmanini
Consulting Engineers

September 2, 2022

Ms. Carol Thomas-Keefer
Program Manager
Colusa Groundwater Authority
1213 Market Street
Colusa, CA 95932

SUBJECT: **Response to Request for Qualifications to for Groundwater Sustainability Agency Data Review, Fee Analysis, and Rate Setting Services**

Dear Ms. Thomas-Keefer,

The LSCE team is excited to submit our qualifications to support, coordinate, develop and deliver a successful funding mechanism approach for the Colusa Groundwater Authority (CGA). The main objective for this project is to develop and successfully implement a funding mechanism that will ensure the CGA is successful in supporting future operations of the Colusa Subbasin Groundwater Sustainability Plan (GSP) that spans both Glenn and Colusa Counties. Developing a sustainable funding program is necessary for complying with SGMA requirements and we are excited for the opportunity to make that happen for the Colusa Groundwater Authority. LSCE has implemented several programs for similar sized subbasins, so we are acutely aware of the specific challenges of working in rural areas. Our proposed project team includes staff with knowledge of SGMA implementation and SGMA financial plans, and has experience with similar projects throughout Northern California. Through this work, our team is well suited to provide high-value support to meet the CGA and GSA needs by offering the following benefits:

In-Depth Knowledge of Developing & Implementing Funding Programs

We have never had a Proposition 218 fail. Our project team recently prepared a successful Proposition 218 that was approved for the Solano GSA and we are currently assisting other GSAs with GSP implementation funding strategies. Through this recent experience, we understand that sound management of the development of a fee structure is essential for maintaining trust amongst the various stakeholders. We will support the CGA in navigating the requirements needed to implement a successful funding program. LSCE has experience in evaluating long-term funding options including Proposition 218 and 26 alternatives.

Local Team with Extensive Norther Sacramento Valley Experience

The LSCE Team knows the CGA governance and have experience in the Northern Sacramento Valley. The LSCE team will provide successful solutions as it is comprised of experienced technical staff who understand community leadership and policy. Our experience in the recent implementation of a fee structure in Solano County combined with our local and regional experience, will ensure that we deliver a successful project to the GSA. **The LSCE Team developed an approach that considers the CGA's limited budget and short schedule.**

A Dedicated, Local, and Cohesive Team

Our team has collaborated in the past, so we can direct our collective energy in the development and implementation of a successful funding program. The project will be led by Jacques DeBra and Eddy Teasdale PG, CHG, and the execution of the work will primarily be in the Chico office. Jacques brings extensive experience in understanding water resources funding having worked for over 37 years in both the public and private sectors. The LSCE Team also includes Dr. Duncan MacEwan (ERA Economics) who brings an in-depth understanding and breadth of experience in evaluating the economic and financial impacts of water resources in both urban and agricultural sectors. His reputation and experience will be extremely beneficial as we navigate through the funding process together. Land IQ is also part of the LSCE Team and will provide unmatched database access related to parcel mapping, land use mapping, and analysis of water demand and use. During recent meetings with the California Department of Water Resources, LSCE became aware of opportunities to use Facilitation Support Services (FSS) to support stakeholder outreach specifically related to fee setting projects. We understand that the CGA has an outreach contract with the Center for Collaborative Policy (CCP) and could utilize their services to support this effort, however, we have also included Consensus Building Institute (CBI) on our team as an option to help support outreach development if the CGA is interested or if CCP does not have the resources to support this effort. **The key personnel that are assigned to this project are the same experts that developed the approach, scope, and budget for this proposal.**

Familiarity with the GSA, and Northern Sacramento Valley Regional Funding Issues

Through LSCE Team's current projects supporting Colusa, Tehama, Butte, and Solano Counties we have valuable insights into 1) how local Northern California stakeholders view SGMA (which is very different from other firms working in the San Joaquin area), 2) the importance of developing a funding strategy, and 3) how to equitably distribute those fees amongst varying water user types.

Selection of the LSCE Team will allow an immediate start on the project with a team that excels technically and understands the unique funding requirements working in the Northern Sacramento Valley. On behalf of our team, we are excited to continue our working relationship with the CGA and look forward to committing our team to make this project a success. This proposal is based on current projections of staff availability and costs, and therefore is valid for 90 days following the date of this letter.

Please contact, Jacques DeBra at 530.661.0610 for any questions, including clarification questions regarding this proposal. Eddy Teasdale, PG, CHG is authorized to contractually obligate the firm for the purposes of this proposal.

Luhdorff & Scalmanini, Consulting Engineers

Jacques DeBra
Supervising Water Resources Planner
Project Manager

Eddy Teasdale, PG, CHG
Principal Hydrogeologist

LSCE Authorized Contact	Federal Tax ID Number	Project Subconsultants
Eddy Teasdale, PG, CHG Principal Hydrogeologist 530.207.5746 eteasdale@lsce.com	20-198-4423	ERA Economics Land IQ Consensus Building Institute (CBI) (Optional Subconsultant)

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2 LSCE TEAM QUALIFICATIONS

FIRM BACKGROUND

Luhdorff and Scalmanini, Consulting Engineers (LSCE) was founded in 1980 to fill a recognized need for technical and management expertise in a broad range of issues associated with groundwater resource development and its efficient use.

LSCE is a full-service consulting and services company with proven expertise in groundwater. LSCE provides public and private entities with water management, hydro-geologic and civil engineering services related to the investigation, development, use, protection, and management of water resources.

LSCE's multi-disciplinary team of hydrogeologists, geologists, water resource professionals and engineers have a wide range of expertise in water management, groundwater resources and municipal water supply and production facility planning, funding, design and construction. The LSCE team works across a diverse range of clients in the ag, urban, and environmental sectors. LSCE is owned by eight LSCE professionals including Eddy Teasdale. Since Eddy is a principal partner, he has the authority to make important decisions in a timely manner.

Today more than ever, developing a successful financing strategy and obtaining funding for current and future projects is a top priority. LSCE has a successful track record of identifying and securing funding resources, providing hands-on assistance in writing grant proposals, and developing a funding strategy approach that is comprehensive, realistic, and expedient.

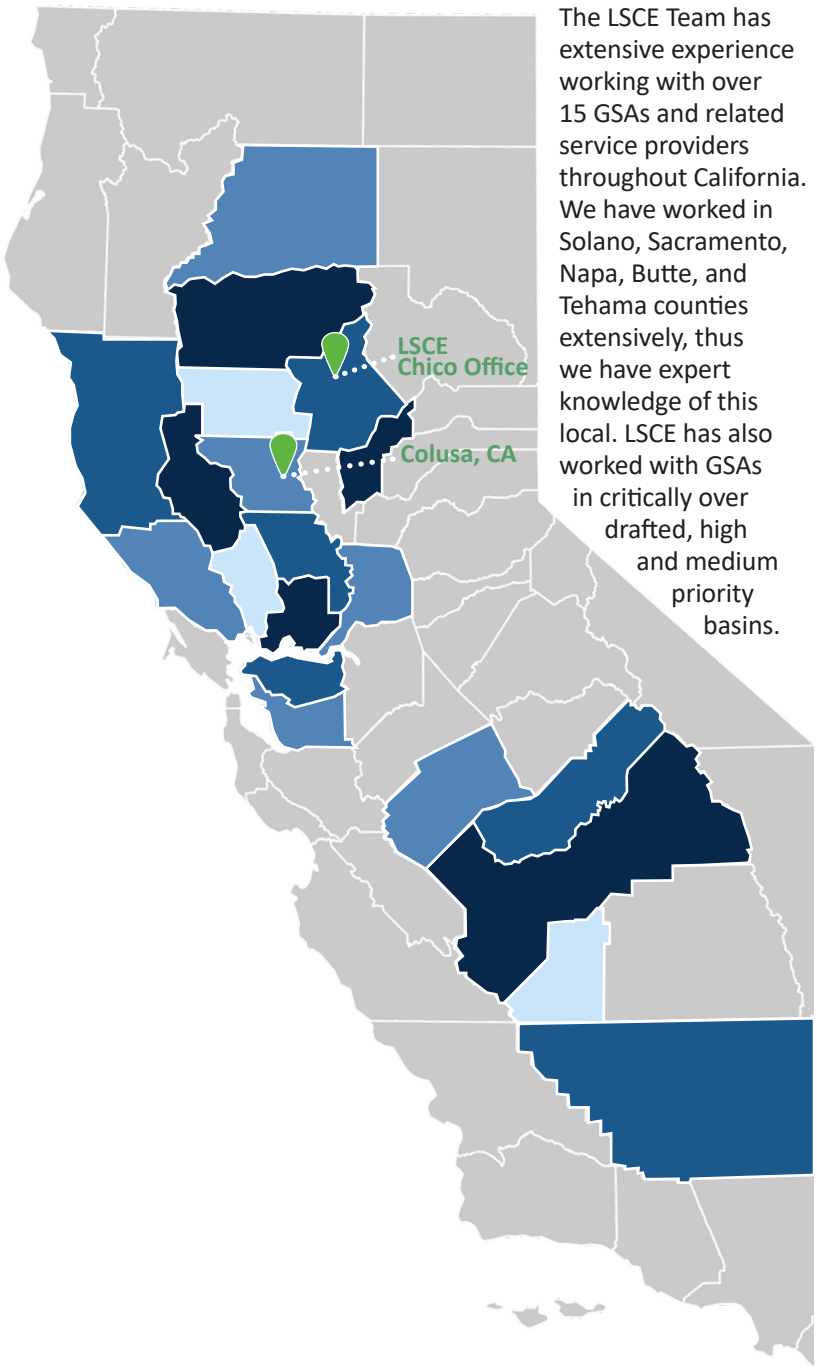
We have secured funding through every Water Proposition in California since 1988, AB 3030; California I-Bank, IRWM planning and implementation, SGMA planning and implementation, DWR Small Community Drought Relief Program, Clean Drinking Water State Revolving Fund planning and construction, WIFIA, USBR Smart Program, and other funding programs for a wide variety of water resource projects.

- **We have extensive Proposition 218 fee development & approval experience for SGMA compliance & utility fee setting.**
- **We have over 35 years of assisting clients develop & implement long-term funding strategies to meet water resource goals & objectives.**
- **We have had no legal challenges to established Proposition 218 fees.**
- **We have expertise in revenue/expense projections, development of five-year revenue projections, & cost allocation analysis for equitable fee setting.**
- **We have had funding procurement success from all State propositions & various federal, state, regional, and market-based funding programs matching project needs with the best available funding sources.**
- **We have completed funding strategy assessments tied to water fee projections & CIP implementation.**
- **We have history leveraging existing relationships with funding agencies.**
- **We have strong experience in grant/ loan application preparation, approval, & funding agreement execution assistance.**
- **We have a record of successfully completing funding application reporting, compliance, disbursements, and administration.**

LSCE'S EXPERIENCE NARRATIVE

On the following pages, we have provided a narrative of our experience and qualifications as outlined in section **4. Qualifications** of the CGA's RFQ.

WORKING WITH GSAs AND SERVICE PROVIDERS



The LSCE Team has extensive experience working with over 15 GSAs and related service providers throughout California. We have worked in Solano, Sacramento, Napa, Butte, and Tehama counties extensively, thus we have expert knowledge of this local. LSCE has also worked with GSAs in critically over drafted, high and medium priority basins.

EXPERIENCE OF OUR PROJECT MANAGER AND KEY STAFF

LSCE has pulled together a strong team whose experience cannot be matched.

Our proposed project manager, **Jacques DeBra**, has 29 years of utility rate development experience including water rate study preparation, cost of service and cost allocation analyses, and implementation of proposed rates through the Proposition 218 process. He has extensive experience in developing complex rate options and designs including both fixed and variable charges and multiple tier/rate charge structures that are Proposition 218 and SGMA compliant.

LSCE Team also include **Eddy Teasdale, PG, CHG,** who is a groundwater and SGMA expert and has assisted GSAs throughout California develop GSPs, comply with SGMA requirements, and assist with GSP implementation and long-term funding strategies to keep local costs as low as possible.

Also on the LSCE Team is **ERA Economics** who is a proven LSCE team partner on other GSA-GSP projects. ERA will lend their expertise on evaluating cost allocation options for the GSA.

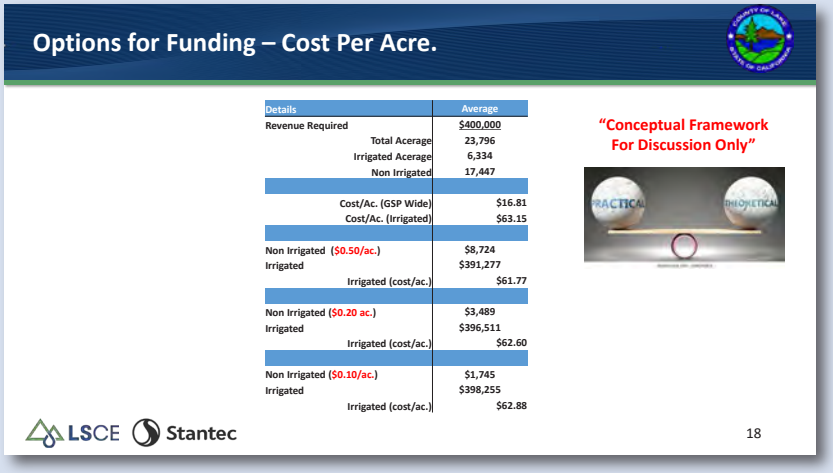
RATE STUDIES, COST OF SERVICE ANALYSIS, & RATE DESIGNS

LSCE is an industry leader with more than 28 years of experience in preparing water, sewer and garbage rate studies in compliance with Proposition 218. All of LSCE's experience involved preparation of five-year revenue needs and projections, cost allocation analysis to achieve rate equity, and experience in designing single charge and multiple tier rate structures where appropriate or if preferred by the client. Jacques was in charge of utility rate updates for the City of Santa Barbara from 1986 through 1990, and City of Davis from 1990 through 2013. He also assisted the City in their conversion from flat to metered rates and introduced tiered water rates to achieve rate equity between user classes. Jacques also teaches AWWA water rate development methodology serving as an AWWA water instructor for the CA-NV Section since 2013. **The LSCE team brings unparalleled utility and SGMA rate experience to this project.**

Data Analysis Experience

The LSCE Team has extensive experience providing data analysis services in communities with similar composition of groundwater users to the CGA. Through our work with many of the GSAs and multiple local agencies that comprise them, we know that existing data are stored in multiple formats – including spreadsheets, water accounting software, and more robust data management systems (i.e., the Irrigated Lands Program). Ultimately, as we work through the development of how to establish the fee implementation process, we will work seamlessly to interact with all the various data sources, information accessibility, and data analysis in a transparent way to comply with the Proposition 218 process. We have outlined content and key exhibits below of how and where we have completed similar services for our clients.

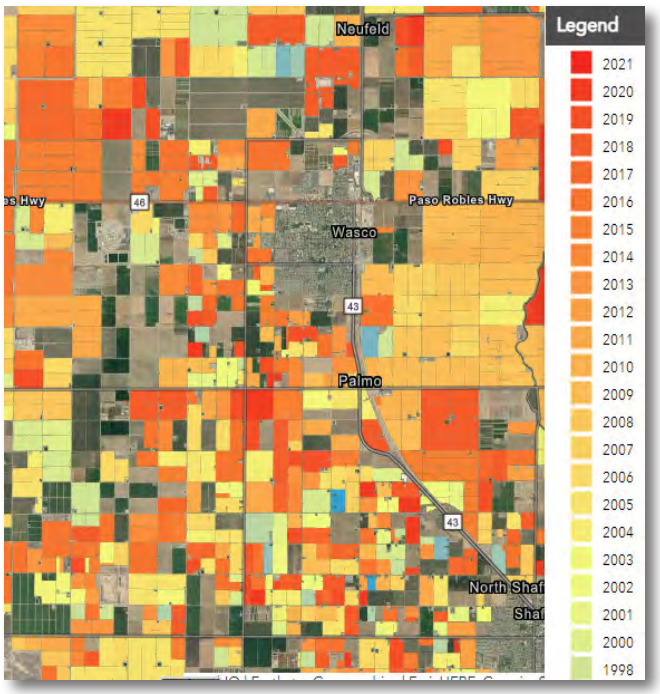
The slide to the right shows the data analysis and evaluation utilizing acreage approach presented to the Lake County Big Valley Groundwater Sustainability Plan Advisory Committee in December 2021.



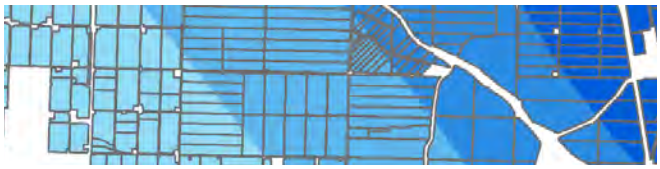
DATA ANALYSIS IN SIMILAR COMMUNITIES

Tehama, Colusa, Butte, Lake County, Napa and Solano Counties - Data compilation and acquisition from public and local entities (i.e., well locations, well construction details, water use, land use category, etc.) to support GSP implementation and financial implementation analysis.

Example to the right of mapping field by field permanent crop age, which is correlated to consumed water, highlighting a possible approach for setting fees based on crop type.



5-Year Revenue Requirement Projections Experience



5-YEAR PROJECTIONS AND RATE PLANNING EXPERIENCE

Jacques DeBra has over 37 years of experience with 5-year revenue projections for recently formed agencies starting with the formation of the Santa Barbara Regional Water Group in the 1980s which involved six agencies and development of initial budgets and implementation plans. He also led the formation of the Davis-Woodland Water Supply Project Group comprised of three agencies with newly developed budgets, implementation plans, and funding strategy for the initial start-up period for a $300M regional water supply conjunctive use project. Jacques also led the formation of the Water Resources Association of Yolo County with development of the regional budget for nine agencies with implementation planning and regional funding strategy that involved developing member fees. Jacques led the formation of the Westside Sacramento IRWM group with member agencies from four counties which involved developing the initial five year budget projections, implementation plans, and funding strategy that involved member fees. More recently, Jacques (and the LSCE Team) have been involved in developing five-year revenue projections for over 15 GSAs as part of their GSP development process.

Fee and Rate Design and Implementation Experience

WORKING WITH BOARDS, AND STAKEHOLDERS IN RATE DESIGN PROCESS

The LSCE Team has extensive board, committee and stakeholder experience in the development of fees for that spans over 40 years with success in different regions throughout California without legal challenge. Our proposed project manager, Jacques DeBra, has designed and implemented public outreach plans associated with leading regional water management organizations which included developing fees to support sustainable implementation of stated goals and objectives. He has addressed various City Councils, boards, related committees and working groups and stakeholders successfully for more than 35-years through collaboration and transparency. He has prepared more than 150 Board type presentations, facilitated many important Board level items, and worked as part of a team to accomplish client objectives. **Jacques has also managed and implemented more than 20 separate SGMA and Proposition 218 rate setting processes involving rate design and implementation within industry standards and Proposition 218 related requirements.** He understands the importance of working with legal counsel on fee/rate projects and engaging their involvement early in the process.

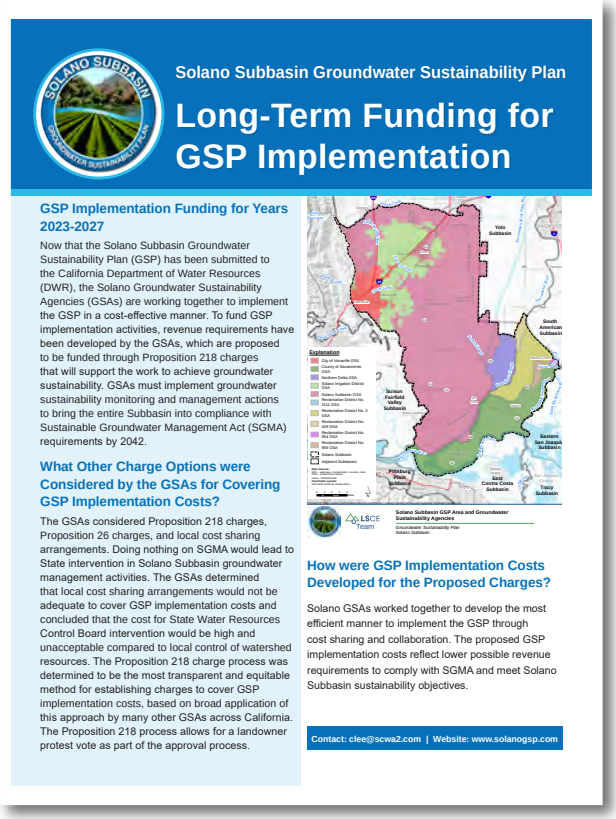
SUMMARY OF STATE SGMA REQUIREMENTS

SGMA Compliance

- Maintain a Functioning GSA (Budget and Staffing)
- Conduct Annual GW Monitoring and Reporting (each April)
- Ongoing GSA Coordination/Outreach
- Prepare/Approve Five-Year GSP Updates

MEDIA OUTREACH

LSCE is an industry leader in assisting clients plan and implement a wide variety of water resource and management related projects, programs, and actions. As a part of this experience, LSCE is accustomed to assisting clients to communicate key information to stakeholders and the community in a timely manner working with various media outreach elements (TV, radio, newspaper, community speaker's bureau, newsletters, social media, and website related outreach). LSCE has experience in taking complex data and information and presenting it in a user-friendly format to clearly communicate client project goals and objectives, key information, benefits, and related topics of interest. This includes extensive media outreach experience in preparing SGMA and utility based fees and rates while meeting all legal requirements and standards. LSCE can assist the CGA with media outreach activities on this project as needed or requested. All media outreach assistance will involve client review and approval in advance of sharing project information with the media.



Solano Subbasin Groundwater Sustainability Plan

Long-Term Funding for GSP Implementation

GSP Implementation Funding for Years 2023-2027

Now that the Solano Subbasin Groundwater Sustainability Plan (GSP) has been submitted to the California Department of Water Resources (DWR), the Solano Groundwater Sustainability Agencies (GSAs) are working together to implement the GSP in a cost-effective manner. To fund GSP implementation activities, revenue requirements have been developed by the GSAs, which are proposed to be funded through Proposition 218 charges that will support the work to achieve groundwater sustainability. GSAs must implement groundwater sustainability monitoring and management actions to bring the entire Subbasin into compliance with Sustainable Groundwater Management Act (SGMA) requirements by 2042.

What Other Charge Options were Considered by the GSAs for Covering GSP Implementation Costs?

The GSAs considered Proposition 218 charges, Proposition 26 charges, and local cost sharing arrangements. Doing nothing on SGMA would lead to State intervention in Solano Subbasin groundwater management activities. The GSAs determined that local cost sharing arrangements would not be adequate to cover GSP implementation costs and concluded that the cost for State Water Resources Control Board intervention would be high and unacceptable compared to local control of watershed resources. The Proposition 218 charge process was determined to be the most transparent and equitable method for establishing charges to cover GSP implementation costs, based on broad application of this approach by many other GSAs across California. The Proposition 218 process allows for a landowner protest vote as part of the approval process.

How were GSP Implementation Costs Developed for the Proposed Charges?

Solano GSAs worked together to develop the most efficient manner to implement the GSP through cost sharing and collaboration. The proposed GSP implementation costs reflect lower possible revenue requirements to comply with SGMA and meet Solano Subbasin sustainability objectives.

Contact: clee@scwa2.com | Website: www.solanogsp.com

Example of the Proposition 218 Fact Sheet that the LSCE Team created for Solano County GSA.

PLANNING FOR MEETINGS TO ENGAGE THE COMMUNITY

Jacques has worked with a wide variety of communities in involving fee/rate design and implementation processes. In order to develop compelling community outreach the LSCE team approach is to tailor community outreach information to fit characteristics of the client and service area impacted by proposed fees/rates. This means using bi-lingual deliverables where needed, designing public meetings that are effective and address stakeholder concerns, conducting a transparent outreach process documenting outreach activities and providing summaries to all parties involved to document concerns and solutions. We have developed Fact Sheets, Frequently Asked Question documents, Special Meeting Agendas and presentation materials, newsletters, website updates, social media outreach, newspaper advertising and articles, whatever strategy will be most effective to engage and involve stakeholders in the fee design and implementation process.

The LSCE Team believes in working closely with our clients to achieve the "no-surprises" approach to community outreach especially as it relates to fee design & implementation efforts.

ADDITIONAL PERTINENT INFORMATION

Jacques DeBra, our proposed project manager, brings a rare combination of extensive public and private sector experience. For 29 years he worked for public agencies in leading and implementing large scale water resource management projects and programs on the governance side. And he has extensive experience in assisting clients as a consultant to achieve local and regional water management goals and objectives in a cost-effective manner. He knows how to get complex water management actions completed with careful planning that involves stakeholders in a collaborative fashion while working with Boards to address challenging issues such as long-term funding strategies for SGMA compliance. His over 35-years of fee/rate experience coupled with his extensive work in securing grant funding from every California proposition since 1988 for a wide variety of clients and projects positions the LSCE team for successfully delivering this project for the CGA.

FIRM PROJECT EXPERIENCE

With more than 1,500 projects completed throughout California, the LSCE Team takes great pride in the continuing relationships we have developed with our clients. **We are dedicated to responsive client service**. Our team combines decades of water resource management and funding expertise with a proven record of accomplishments. We have provided detailed project descriptions for six of the LSCE Team's recent projects, with similar elements to the CGA's project. These projects and the projects in the table below were completed on schedule and within budget demonstrating our technical expertise, sound decision making, and ability to communicate effectively and foster a collaborative environment to resolve challenges. We have provided a table below that outlines some of our key projects and how they relate to the CGA's funding strategy needs. We encourage you to contact our references to verify our responsiveness and quality of service on similar projects.

LSCE Experience Summary Table

Clients/Projects	GSP Development	GSP Implementation	Funding Strategy	Fee Analysis and Rate Study Support	GSA Coordination	SGMA Compliance	Stakeholder Outreach
Solano County GSP Development	☑	☑	☑	☑	☑	☑	☑
Napa County GSP Development	☑	☑	☑	☑	☑	☑	☑
Lake County GSP Development	☑	☑	☑	☑	☑	☑	☑
Tehama County GSP Development (four total GSPs)	☑	☑	☑	☑	☑	☑	☑
Colusa Subbasin GSP Development	☑	☑	☑	☑	☑	☑	☑
Westlands Water District GSP Development	☑	☑	☑	☑	☑	☑	☑
Madera County GSP Development	☑	☑	☑	☑	☑	☑	☑
Chowchilla County GSP Development	☑	☑	☑	☑	☑	☑	☑
East Bay Plain Subbasin GSP Development	☑	☑	☑	☑	☑	☑	☑
East Contra Costa GSP Development	☑	☑	☑	☑	☑	☑	☑
Butte County (Vina, Wyandotte, Butte Subbasin) GSP Development	☑	☑	☑		☑		
Indian Wells Valley GSP Development	☑	☑	☑	☑			☑
Delta Mendota (Farmers Water District)	☑	☑	☑		☑		☑
City of Patterson Water CIP Implementation			☑	☑			
Palermo Clean Water Consolidation Project			☑	☑			☑
Town of Discovery Bay 5-Year Analysis (CIP, Revenue Projections)			☑	☑	☑	☑	☑
City of Davis 5-Year Water and Utility Fee Update			☑	☑		☑	☑
Yolo County Flood Control CIP Plan/Revenue Projection Update			☑	☑	☑	☑	☑
Turner Island WD CIP Plan/Revenue Projection Update			☑	☑	☑	☑	☑

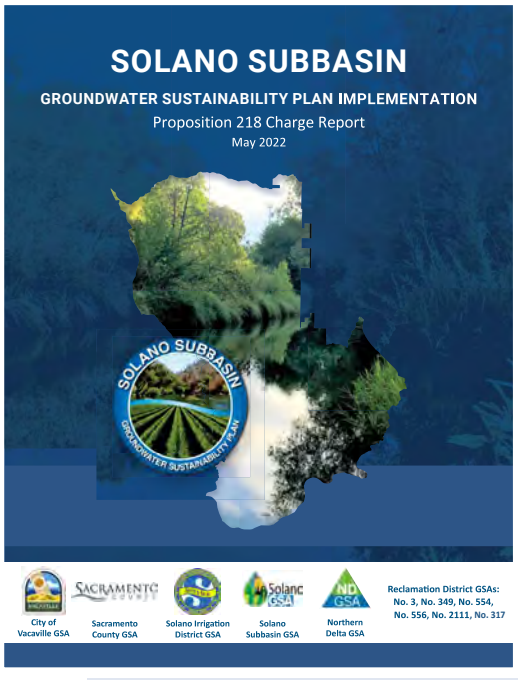
Solano Subbasin GSP and Prop 218 Implementation

SOLANO SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY, CA

The Solano Subbasin Groundwater Sustainability Agency (SGSA) was established in 2017 to help facilitate SGMA compliance in the Solano Subbasin which included other GSAs (City of Vacaville, Solano Irrigation District, Northern Delta, and Sacramento County GSAs). The SGSA is the largest GSA in the Subbasin with about 60% of the Subbasin's area and 85% of Subbasin's groundwater use. LSCE prepared the Solano Subbasin GSP and provided complete long-term funding strategy support including evaluation of funding options (including Proposition 218 and Proposition 26), selection of the Proposition 218 long term funding mechanism, development of five-year SGSA revenue projections, evaluation of cost allocation factors specific to the Solano Subbasin, analysis of various charge options, and preparation of the SGSA Proposition 218 Charge Report which was approved by the SGSA Board of Directors in May 2022. LSCE was the lead on preparation of all Proposition 218 related documentation including preparation of the Proposition 218 Notice and Protest Form, distribution of the Proposition 218 Notice to landowners subject to the charges, and participation in the Proposition 218 approval process including the public hearing and Board approval of proposed charges at the July 2022 meeting. LSCE also worked with the SGSA and other GSAs in preparing updated GSP implementation information, added additional public outreach information to the project website, and supported the SGSA in conducting additional public outreach for stakeholders in advance of Board consideration of proposed Proposition 218 charges. Outreach included updates to all GSP related information with a focus on GSP implementation, virtual town hall meetings, distribution of newsletters with project updates, media coverage, and speaker's bureau for interested stakeholders. LSCE also supported the GSP Implementation MOU process which updated the multiple GSA governance structure, fiscal agent responsibilities, regional cost sharing arrangements, and required SGMA compliance actions.

"After completing our GSP the LSCE team (led by Jacques DeBra) did an outstanding job in getting a charge in place for the Solano GSA within a very tight schedule. They were responsive, professional, and have Proposition 218 expertise that was invaluable throughout the process. Their team supported the development and deployment of substantial public outreach efforts to inform and involve stakeholders impacted by the new charge in a proactive manner. A job well done including the complexities of the Subbasin GSA structure which is appreciated by the GSA."

Chris Lee, Assistant General Manager Solano GSA Manager & Solano County Water Agency



REFERENCE

Mr. Chris Lee
Assistant General Manager
810 Vaca Valley Parkway,
Suite 203
Vacaville, CA 95688
707.455.1105
clee@scwa2.gov

SIMILAR SERVICES TO CGA'S PROJECT

RECENT PUBLIC AGENCY	☑
SHORT TO MID-RANGE FINANCIAL PLANNING	☑
5-YEAR REVENUE PROJECTIONS	☑
COST OF SERVICE ANALYSIS	☑
DATA ANALYSIS/GIS SERVICES	☑
RATE DESIGN SERVICES	☑
WATER RATE STUDY	☑
PROPOSITION 218	☑
PROPOSITION 218 AND 26 EVALUATION	☑
WORK WITH GSAS AND/OR SERVICE PROVIDERS	☑
COMMUNITY OUTREACH	☑
WORK WITH BOARDS/ COMMITTEES/STAKEHOLDERS	☑
SIMILAR SIZE TO CGA	☑

Groundwater Sustainability Plan Development

TEHAMA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, CA

Eddy led the development of four GSPs for the Bowman, Antelope, Los Molinos and Red Bluff Subbasins, including the technical work on the GSP chapters related to water budgets, sustainable management criteria, evaluating sustainability management actions and projects, development of implementation funding and collaborating with the GSA and stakeholders. Based on agency needs, the Tehama County Board of Directors decided that a landowner assessment fee would be used to generate revenue to fund the annual administrative implementation costs and develop a well registration program. Subsequent to the well registration program, an additional fee structure will be implemented, based on the diameter of the well casing, which then will be utilized to support GSP implementation activities through 2027.

Relevant Features

- GSP preparation, which included the development of GSP implementation fee analysis.
- Development of five-year revenue needs for GSP implementation and SGMA compliance.
- Evaluation of funding options (Prop 218, Prop 26, Individual Stakeholder Funding).
- Stakeholder Outreach
- Successful operation under direction of the Board of Supervisors, the Tehama County Groundwater commission all with different interests and opinions which required diplomacy and facilitation skills.
- Development of GSP fee options focused on equitable distribution of the benefits derived from the assessments of each parcel upon which such assessments would be levied.
- Developed and supported implementation of GSP development public outreach and stakeholder engagement plan.

REFERENCE

Mr. Justin Jenson
Deputy Director of Public Works
9380 San Benito Ave
Gerber, CA 96035
530.385.1462 ext. 2020
jjenson@tcpwa.ca.gov

SIMILAR SERVICES TO CGA'S PROJECT

RECENT PUBLIC AGENCY	☑
SHORT TO MID-RANGE FINANCIAL PLANNING	☑
5-YEAR REVENUE PROJECTIONS	☑
COST OF SERVICE ANALYSIS	☑
DATA ANALYSIS/GIS SERVICES	☑
RATE DESIGN SERVICES	☑
WATER RATE STUDY	☑
PROPOSITION 218	☑
PROPOSITION 218 AND 26 EVALUATION	☑
WORK WITH GSAS AND/OR SERVICE PROVIDERS	☑
COMMUNITY OUTREACH	☑
WORK WITH BOARDS/ COMMITTEES/STAKEHOLDERS	☑
SIMILAR SIZE TO CGA	☑

Colusa Subbasin GSP Development

GLENN GROUNDWATER AUTHORITY AND COLUSA GROUNDWATER AUTHORITY, CA

In 2019, the Glenn and Colusa Groundwater Authorities (CGA, CGA) covering the Colusa Subbasin began developing a comprehensive, coordinated Groundwater Sustainability Plan (GSP) to comply with requirements of SGMA. In January 2022 the GSP was submitted for public comment and review by DWR.

ERA Economics was the lead economist on the Davids Engineering team working to develop the Colusa Subbasin GSP. ERA Economics prepared a substantial portion of the Projects and Management Actions chapter, the Plan Implementation chapter, and several technical appendices. Technical appendices included the economic implications of alternative project financing strategies, water allocation approaches, benefit-cost analysis of proposed GSP minimum thresholds, and measurable objectives. **ERA reviewed existing administrative budgets and actuals, worked with the CGA and CGA to develop GSP implementation costs, and summarized all expected costs for GSP implementation.**

The subbasin includes lands that have access to surface water with varying water rights or contracts, and lands that are fully groundwater dependent, without access to district surface water supplies. After the GSP was submitted to DWR, ERA prepared a summary of GSP implementation costs and example options for allocating those costs to different lands in the subbasin. Four scenarios were developed that illustrated how GSP implementation (only) could be allocated to different lands based on access to groundwater.

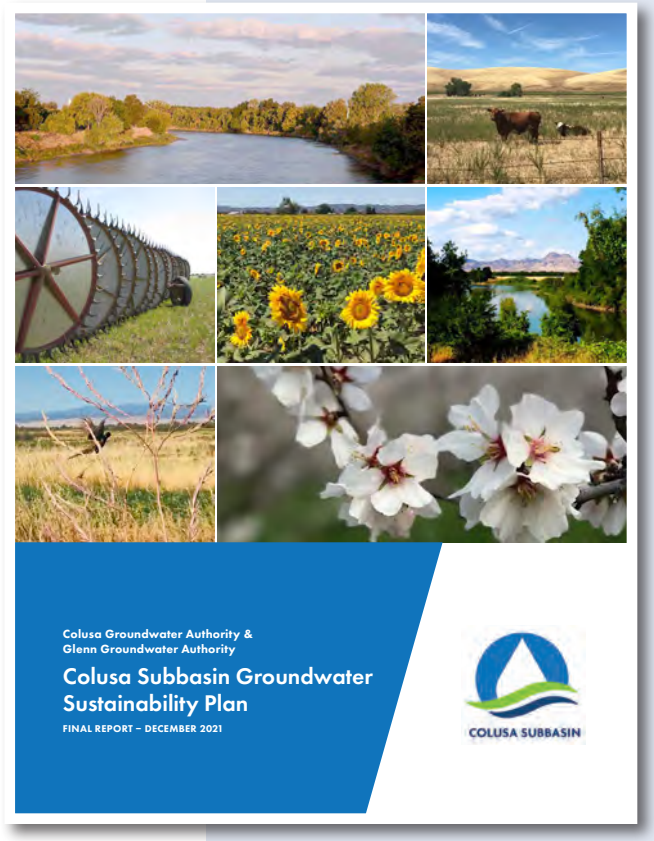
The outcome of the project was a successful GSP submittal to DWR and preliminary overview of GSP implementation costs and cost-allocation options presented to the CGA and CGA Boards.

REFERENCE

Ms. Lisa Hunter
Water Resources Coordinator
225 N Tehama St
Willows, CA 95988
530.934.6540
lhunter@countyofglenn.net

SIMILAR SERVICES TO CGA'S PROJECT

- RECENT PUBLIC AGENCY ☑
- SHORT TO MID-RANGE FINANCIAL PLANNING ☑
- 5-YEAR REVENUE PROJECTIONS ☑
- COST OF SERVICE ANALYSIS ☑
- DATA ANALYSIS/GIS SERVICES ☑
- WORK WITH GSAS AND/OR SERVICE PROVIDERS ☑
- COMMUNITY OUTREACH ☑
- WORK WITH BOARDS/ COMMITTEES/STAKEHOLDERS ☑
- SIMILAR SIZE TO CGA ☑



Groundwater Sustainability Plan

NAPA COUNTY GROUNDWATER SUSTAINABILITY AGENCY

LSCE led the development of the GSP for the Napa Valley Subbasin leveraging its history of working with Napa County since 2008 on water resource planning with a focus on advanced hydrogeologic conceptualization to convey an understanding of groundwater management needs prior to SGMA. This led to implementing early water management actions to help address SGMA requirements.

LSCE's role with Napa was to build comprehensive water resources technical support, stakeholder outreach, groundwater modeling, and address long term funding needs for the GSA.

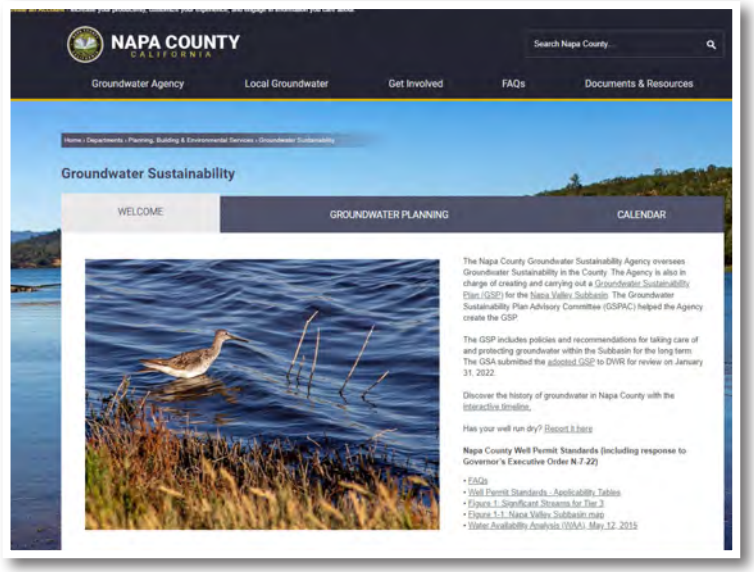
LSCE was responsible for preparing the GSA's GSP including the technical work on the GSP chapters related to water budgets, sustainable management criteria, evaluating sustainability management actions and projects, development of implementation funding strategy and collaborating with the GSA and stakeholders. Based on agency needs, the GSA Board of Directors is evaluating a landowner assessment fee that could be used to generate revenue to fund the annual GSA administration and GSP implementation costs. The GSA is in the process of developing long term funding policy for the first five years of GSP implementation through 2028.

REFERENCE

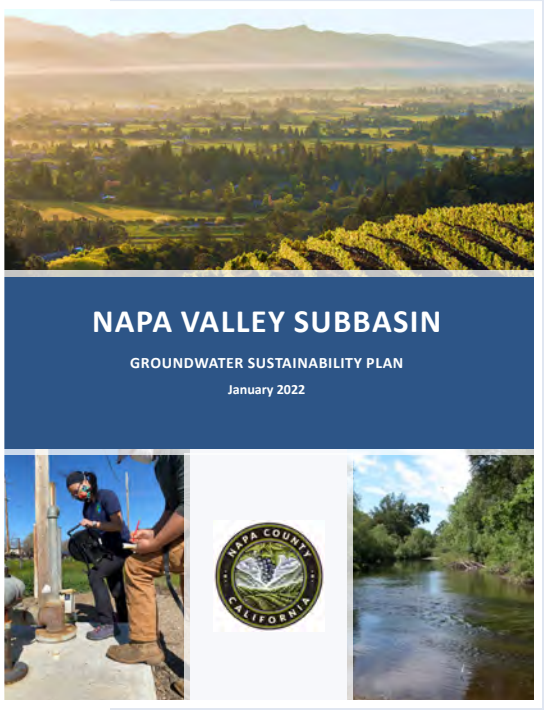
Mr. Jamison Crosby
Natural Resources
Conservation Manager
1195 Third Street
Napa, CA 94559
707.253.4540
jcrosby@napacounty.ca.gov

SIMILAR SERVICES TO CGA'S PROJECT

- RECENT PUBLIC AGENCY ☑
- SHORT TO MID-RANGE FINANCIAL PLANNING ☑
- 5-YEAR REVENUE PROJECTIONS ☑
- COST OF SERVICE ANALYSIS ☑
- DATA ANALYSIS/GIS SERVICES ☑
- RATE DESIGN SERVICES ☑
- WATER RATE STUDY ☑
- WORK WITH GSAS AND/OR SERVICE PROVIDERS ☑
- COMMUNITY OUTREACH ☑
- WORK WITH BOARDS/ COMMITTEES/STAKEHOLDERS ☑
- SIMILAR SIZE TO CGA ☑

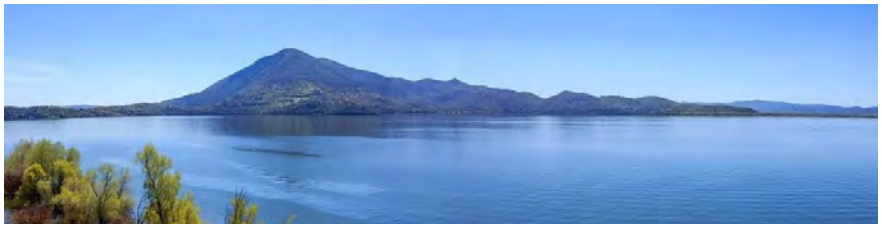


Napa County Website screen-capture of a notice that the County GSA planned to meet to discuss adoption of the GSP. LSCE assisted the County with outreach and many outreach materials like this website post.



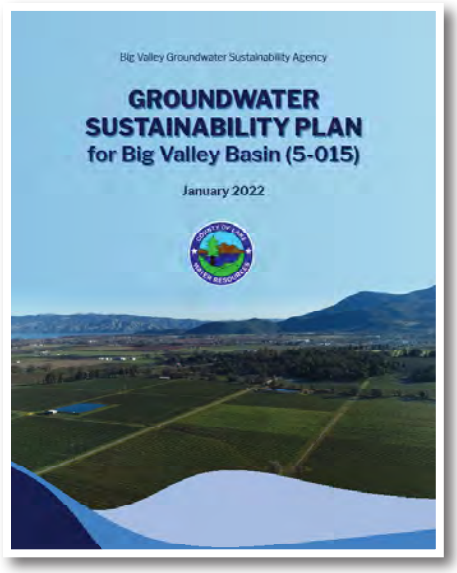
Groundwater Sustainability Plan

COUNTY OF LAKE, WATER RESOURCES DEPARTMENT



Since 2021 to present, LSCE has provided Lake County with SGMA compliance and technical support GSP development, implementation and long-term funding strategy support. Key aspects of these services include:

- Preparation of their 2022 GSP Report.
- Preparation of annual reports (2022).
- Preparation of a GSP implementation funding strategy Technical Memorandum.
- Provided grant management and coordination with DWR technical staff and grant administrators.
- Supported development of groundwater data management system.
- Supported groundwater education and outreach.
- Preparation of analyses and interpretations through reports and associated GIS and graphical products.
- Evaluation of options for revenue implementation based on cost per acre, per parcel and cost per well.
- Coordination with Groundwater Sustainability Plan's advisory committee, specifically focused on future funding options.
- Developed 5-year revenue projections for GSP implementation.
- Evaluated fee options that could be considered to fund long-term GSA costs.



REFERENCE

Ms. Marina Deligiannis
Deputy Water Resources Director
255 N. Forbes Street, Room 309
Lakeport, CA 95453
707.263.2344
marina.dreligiannis@lakecountyca.gov

SIMILAR SERVICES TO CGA'S PROJECT

RECENT PUBLIC AGENCY	☑
SHORT TO MID-RANGE FINANCIAL PLANNING	☑
5-YEAR REVENUE PROJECTIONS	☑
COST OF SERVICE ANALYSIS	☑
DATA ANALYSIS/GIS SERVICES	☑
RATE DESIGN SERVICES	☑
PROPOSITION 218 AND 26 EVALUATION	☑
WORK WITH GSAS AND/OR SERVICE PROVIDERS	☑
COMMUNITY OUTREACH	☑
WORK WITH BOARDS/ COMMITTEES/STAKEHOLDERS	☑
SIMILAR SIZE TO CGA	☑

Evaluation of Water Project Financing in California

DEPARTMENT OF WATER RESOURCES, CA

ERA Economics worked with DWR staff to evaluate current water project funding/financing alternatives, assess constraints to project financing, and develop alternative approaches to improve project financing. The motivation for the project was to evaluate financing options in response to the Governor's Executive Order N-10-19 that directed state agencies to work together to prepare a "water resilience portfolio that meets the needs of California's communities, economy, and the environment through the 21st century" and prioritizes multi-benefit projects/policies.

A major focus for the project was defining multi-benefit recharge and banking projects and identifying alternatives for expanding funding options for projects that provide defined multiple benefits. This included consideration of alternative cost-allocation approaches that quantify different types of project benefits and assign costs in proportion to different benefit categories. The project explored the opportunities and limitations for applying existing water project financing to different project cost components (e.g., capital, O&M, and other public benefits).

The output of the project was a technical memorandum report describing ways to improve the process for financing large, multi-benefit water infrastructure projects in California. The report explored the potential for a Multi-Benefit Revolving Fund (MBRF), modeled after the existing Clean Water State Revolving Fund, to provide improved financing for multi-benefit water projects. The analysis identified inflexibilities with the current project financing approaches and an overview of requirements for project financing under an MBRF (or similar approach), including: cost allocation equity, repayment terms, defining multi-benefits (including public benefits), and project accounting requirements. The white paper provided a series of recommendations to improve water project financing.

With ERA as part of the LSCE team, our combined experience in working with the Department of Water Resources on various funding programs is second to none.

REFERENCE

Mr. Hoa Ly
Engineer
Strategic Water Planning
P.O. Box 942836
Sacramento, CA 94236
916.651.9282
Hoa.Ly@water.ca.gov

SIMILAR SERVICES TO CGA'S PROJECT

- RECENT PUBLIC AGENCY ☑
- SHORT TO MID-RANGE FINANCIAL PLANNING ☑
- 5-YEAR REVENUE PROJECTIONS ☑
- COST OF SERVICE ANALYSIS ☑
- DATA ANALYSIS/GIS SERVICES ☑
- RATE DESIGN SERVICES ☑
- WATER RATE STUDY ☑
- PROPOSITION 218 ☑
- WORK WITH GSAS AND/OR SERVICE PROVIDERS ☑
- COMMUNITY OUTREACH ☑
- WORK WITH BOARDS/ COMMITTEES/STAKEHOLDERS ☑
- SIMILAR SIZE TO CGA ☑

EXECUTIVE DEPARTMENT
STATE OF CALIFORNIA

Executive Order N-10-19

WHEREAS, water is a human right, and is central to California's strength and vitality; and

WHEREAS, we face a range of existing water challenges, including unsafe drinking water across the state, major flood risks that threaten public safety, severely depleted groundwater aquifers, agricultural communities coping with uncertain water supplies, and native fish populations threatened with extinction; and

WHEREAS, climate change is having a profound impact on water and other resources, making the climate warmer and more variable, which reduces mountain snowpack, intensifies drought and wildfires, and drives shorter, more intense wet seasons that worsen flooding; and

WHEREAS, California continues to grow, with our population projected to grow to 50 million over the next several decades and our economic activities expanding as the world's fifth largest economy; and

WHEREAS, the future prosperity of our communities and the health of our environment depend on tackling pressing current water challenges while positioning California to meet broad water needs through the 21st century; and

WHEREAS, many state programs, policies and investments are being implemented, such as the Sustainable Groundwater Management Act and new urban water efficiency standards, that can be built upon to meet these evolving challenges; and

WHEREAS, providing clean, dependable water supplies to communities, agriculture, and industry while restoring and maintaining the health of our watersheds is both necessary and possible; and

WHEREAS, achieving this goal requires a broad portfolio of collaborative strategies between government, sovereign tribes, local communities, water agencies, irrigation districts, environmental conservationists, academia, business and labor leaders, and other stakeholders;

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, by virtue of the power and authority vested in me by the Constitution and the statutes of the State of California, do hereby issue this Order to become effectively immediately.

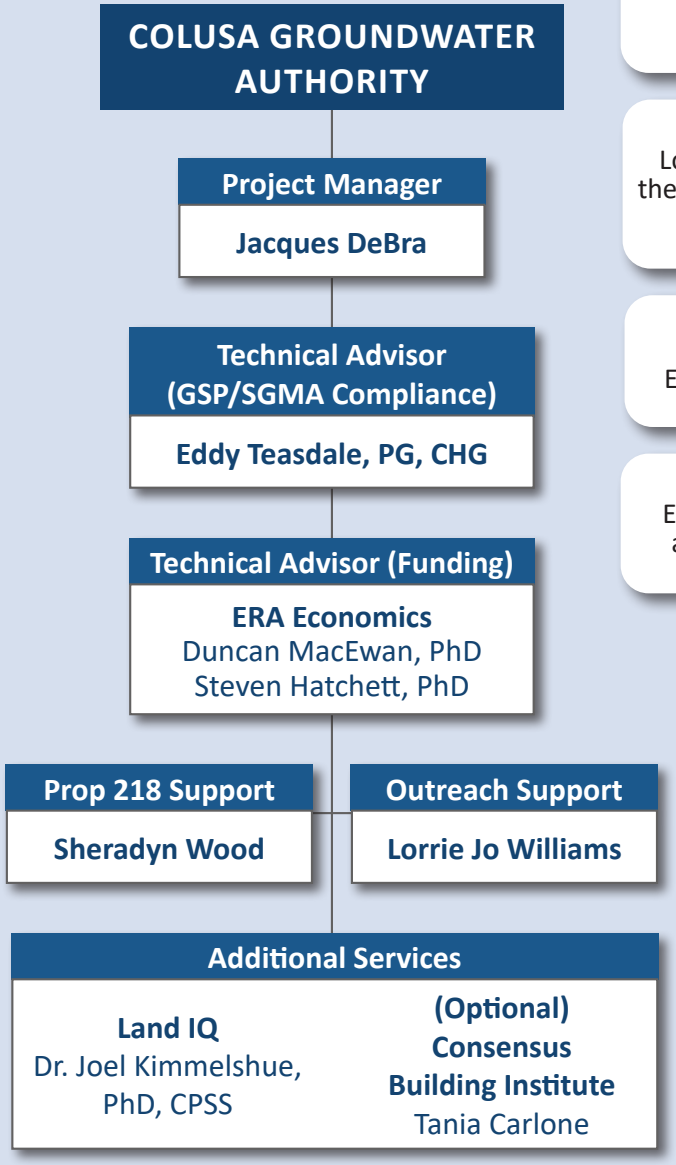
IT IS HEREBY ORDERED THAT:

1. The California Natural Resources Agency, the California Environmental Protection Agency, the California Department of Food and Agriculture, in consultation with the Department of Finance, shall together prepare a water resilience portfolio that meets the needs of California's communities, economy, and environment through the 21st century.

3 PROPOSED LSCE TEAM

LSCE assembled a diverse team to provide funding expertise for this project. The LSCE team has been helping clients comply with the 2014 SGMA legislation and develop and implement groundwater sustainability plans with cost effective project delivery. Our proposed project manager, Jacques DeBra, understands water resources funding having worked for over 37 years in both the public and private sectors. The LSCE Team also includes Dr. Duncan MacEwan with ERA Economics who brings an in-depth understanding and breadth of experience in evaluating the economic and financial impacts of water resources in both urban and agricultural sectors. We have also included Consensus Business Institute (CBI) and Land IQ on the LSCE Team to provide optional outreach expertise and parcel information respectively. Team bios are provided on the following pages and resumes are included in the attached Appendix A.

ORGANIZATIONAL CHART



Jacques DeBra
Extensive experience in SGMA related long-term funding strategies including establishing fees and securing best available grants and loans for management actions.

Eddy Teasdale, PG, CHG
Local water expert who is less than 30 minutes away from the CGA; his thinking and ability to quickly grasp the situation results in developing unexpected options and creative solutions for complex situations.

ERA Economics
Proven LSCE team partner on other GSA-GSP projects. ERA will lend their expertise on evaluating cost allocation options for the GSA.

Sheradyn Wood
Experience in GSP related fee and fee work that LSCE has accomplished. Supported the development of Prop 218 Notices and related public outreach materials.

Lorrie Jo Williams
Brings public outreach experience. Developed outreach materials for multiple sectors including the Farm Bureau and is familiar with outreach strategies in farm-based regions.

Land IQ
Will provide parcel level data and information to assist the team to evaluate and select preferred fee options.

Consensus Building Institute (CBI)
CBI is included on our org chart as an optional service to provide public outreach and stakeholder outreach expertise employed on many other GSP related efforts utilizing FSS funding. The CGA may utilize their current contract with CCP to support this effort

PROJECT MANAGER

Jacques DeBra

PROJECT MANAGER

Jacques brings 37 years of experience: 29 years in managing public water utilities and regional water management organizations, and 7 years as a consultant/ AWWA water instructor. He was a leader in regional water management governance responsible for the planning and implementation of watershed, groundwater and surface water monitoring programs; conjunctive use projects; preparation of groundwater management and integrated water resource planning reports; and delivery of funding strategies to maximize grant funding for local and regional activities. His experience includes planning, development and optimization of future water supplies and portfolios, water demand and supply projections, water system evaluations and assessments, developing long range Capital improvement Plans and budgets and revenue projections, establishing enterprise fee structures, water system consolidations, and securing funding for capital planning and implementation improvements from a variety of State and Federal funding programs. His regional water management governance experience gives him with insights and abilities to facilitate transparent and effective results for clients on complex water issues and projects.

Jacques is a Proposition 218 expert having worked on more than 20 utility fee projects since its passage in 1996. He was responsible for the City of Davis utility fees from 1990 to 2013 and implemented utility fee adjustments on a regular basis throughout the period via the Proposition 218 process. Recently, Jacques has been assisting GSAs to develop long term funding strategies and establish long term funding sources to meet GSA and GSP implementation costs while complying with SGMA requirements.

Jacques has been an AWWA Water Instructor since 2013 teaching a variety of water management courses including water fee development curriculum consistent with AWWA fee making practices and policies. He also assisted in the development of the AWWA Proposition 218 implementation guide to help water utilities navigate Proposition 218 requirements through local fee adjustment processes.

Jacques has been involved in preparing fee development and approval processes since 1986. He has fee experience both before and after the passage of Proposition 218 and through his Proposition 218 expertise understands how to evaluate fee options (Proposition 218 and 26) and develop fee structures for GSAs that are both SGMA and Proposition 218 compliant. Many of the projects he has worked on are summarized below. Fee cycle refers to an increase process in one or more fee schedules including development of five year revenue projections, cost allocation analysis, and development of fees with corresponding outreach efforts.

Client	Prop 218	SGMA	5-year assessment	Cost of service analysis	Board and stakeholder Coordination	GSA Coordination	Rate studies	Public Agency
Solano County	x	x	x	x	x	x	x	x
Tehama County	x	x	x	x	x	x	x	x
Lake County	x	x	x	x	x	x	x	x
Napa County		x	x	x	x	x	x	x
Butte County		x	x	x	x	x		x
Town of Discovery Bay	x	x	x	x	x	x	x	x
Oro Loma Sanitary Dis.	x	--	x	x	x		x	x
City of Patterson	x	--	x	x	x		x	x
Knights Landing CSD		O	x	x	x		x	x
Westside Sacramento IRWM Group		O	x	x	x		x	x
Water Resources Assoc. of Yolo County		O	x	x	x		x	x
City of Davis (Rate Cycle)	x	O	x	x	x		x	x
City of Davis (Rate Cycle)	x	O	x	x	x		x	x
City of Davis (Rate Cycle)	x	O	x	x	x		x	x
City of Rohnert Park	x	O	x	x	x		x	x
City of Davis (Rate Cycle)	x	O	x	x	x		x	x
City of Davis (Rate Cycle)	x	O	x	x	x		x	x
City of Davis (Rate Cycle)	x	O	x	x	x		x	x
City of Davis (Rate Cycle)	O	O	x	x	x		x	x
City of Davis (Rate Cycle)	O	O	x	x	x		x	x
City of Davis (Rate Cycle)	O	O	x	x	x		x	x
City of Santa Barbara (Rate Cycle)	O	O	x	x	x		x	x
City of Santa Barbara (Rate Cycle)	O	O	x	x	x		x	x
City of Santa Barbara (Rate Cycle)	O	O	x	x	x		x	x
Goleta Water District	O	O	x	x	x		x	x

O = Pre-SGMA or Pre-Prop 218
-- = Not Applicable to Project

PROJECT TEAM

Eddy Teasdale, PG, CHG

TECHNICAL ADVISOR, GSP SGMA COMPLIANCE

Eddy has more than 20 years of water resources experience including preparing funding applications and conducting financial analysis related to water resource planning and management programs. Eddy was responsible for the development of four groundwater sustainability plans and associated annual reports in Tehama County and Butte County supported the development of their 2021-2022 annual reports. Through these northern Californian focused projects, he has developed key relationships with DWR's North District staff in Red Bluff, CA and local stakeholders which can be leveraged as the GSA works through the financial analysis needed to support this project. Through his previous GSP experience where he represented GSAs (i.e., Westlands Water District, Lake County, Tehama County) and stakeholders (i.e., Turner Island Water District, agricultural interests in Kern, McMullin GSA ag users and Indian Wells Valley Subbasin) he understands that GSP implementation costs should not be developed or implemented as top-down regulatory requirements. They must be developed in coordination with local stakeholders in accordance with existing property rights, acknowledge the concerns of all individual landowners, consider and validate opinions, and that competing interests.

"I just wanted to write you a quick note to let you know that we are extremely pleased with Eddy and his team's performance on the GSP development so far. Eddy is very responsive and personable; he is doing a great job handling the complexities of the Districts GSA structure. The progress made is exciting, and I'm confident that Eddy and his team will continue to impress us throughout the GSP development process."

Ryan Teubert, CFM
Former Tehama County Flood Control & Water Resources Manager
Tehama County Public Works, Tehama County, CA

Sheradyn Wood

PROP 218 SUPPORT

Sheradyn has been part of the LSCE team supporting GSAs in developing long-term funding strategies, implementing Proposition 218 based fee structures, and assisting with associated public outreach activities. She assisted with Fee Fact Sheets, Frequently Asked Question documents, and Proposition 218 Notices and related documents. She has also assisted with Proposition 218 Notice distribution to those parcels subject to the fee.

Luhdorff & Scalmanini (LSCE) had secured $1.55M in grants, we just got word that we have been awarded funding for another $1M project (these are DWR small community water system grants), with an $11.7M SRF project in the queue! Very happy working with LSCE.

-Kamie N. Loeser, Director
Butte Dept. of Water and Resource Conservation

Lorrie Jo Williams

OUTREACH SUPPORT

Lorrie Jo brings public outreach experience to the team including direct communications work for public engagement, developing newsletters and fact sheet, newspaper and website announcements, posters, flyers, postcards, brochures, and meeting signage, developing consistent branding for all materials. She has supported outreach in multiple industries, translating complex ideas into understandable visual and written communications in environmental consulting, engineering, public library system, and non-profits including the California Farm Bureau. She will support the desired public outreach activities desired by the CGA during project implementation. Her experience in working the Farm Bureau will be valuable as part of a comprehensive public outreach strategy coordinated with the CGA Board and staff.

ERA Economics

ERA Economics specializes in the economics of water resources and agriculture. Founded in 2013 and based in Davis, California, ERA's team has grown from two founding partners to the current team of eleven professionals. They provide clients with data-driven economic analysis, policy support, and quantitative modeling of projects and policies related to water resources and agriculture in California and across the western U.S. Their services include benefit-cost analyses, feasibility studies, resource and commodity valuation, fiscal and economic impact analyses, and policy evaluation. Members of their team have worked on California water policy and agricultural economics for over three decades, so they understand how economics integrates with other technical and legal analyses to support effective water policy decisions. Their team has extensive experience working with stakeholders and the public in the context of highly scrutinized water and agricultural policy decisions.

Duncan MacEwan, PhD

TECHNICAL ADVISOR, FUNDING

Duncan is the managing partner of ERA Economics. He previously worked as a consultant economist with CH2M where he developed benefit-cost analyses, feasibility studies, and agricultural economic impact analyses for proposed water storage and investment projects, and concurrently held a position as a postdoctoral scholar in the Department of Agricultural and Resource Economics at UC Davis. Some of the current projects he manages at ERA include agricultural impact analyses, water valuation and risk assessments, benefit-cost analyses, and water supply feasibility studies. He has worked as the lead economist on several Groundwater Sustainability Plans in high and medium priority groundwater subbasins across California and is continuing to support GSAs with GSP implementation. Duncan enjoys working with project teams to integrate economics with other technical studies to support water supply planning.

Stephen Hatchett, PhD

TECHNICAL ADVISOR, FUNDING

Steve is an economist and project manager specializing in water resources, agriculture, mathematical modeling, and statistical analysis. Prior to joining ERA Economics, he was senior principal economist and project manager in the Sacramento office of CH2M HILL for more than 20 years, and was principal and owner of Western Resource Economics from 1999 to 2009. Steve's primary focus is on interdisciplinary studies of agricultural production and water use, in which economics is integrated with hydrologic, biological, and engineering analyses. He has more 30 years of experience in project evaluation, including financial and risk analysis, benefit-cost analysis, cost allocation, CEQA/NEPA support, and regional economic impacts. He has assisted federal, state, and local agencies in implementing large programs resulting from new laws, regulations, and court decisions. Steve has also assisted private clients in assessing overall economic feasibility, financial costs and returns, and risk associated with irrigated agricultural production and water use. He has provided technical analysis and testimony to many Boards and Commissions and made numerous presentations at public meetings.

LSCE and ERA have worked together on several other successful projects including the Solano Subbasin Groundwater Sustainability Plan which was completed in record time in 6 months from start to finish.

ADDITIONAL SPECIALTY SUPPORT SERVICES

Land IQ is a specialized land and water resource science and remote sensing firm that pairs scientific knowledge of urban, agricultural, and native plant and land systems with advanced remote sensing technologies, custom modeling, and analytical methods to develop powerful and cost-effective client solutions. Their personnel are equipped with extensive experience in remote sensing and spatial analysis, land use mapping, soil-plant-water interactions and water balance modeling, consumptive water demand analysis, irrigation management, spatial data management, climatology, and land and water resources scientific and regulatory issues.

Dr. Joel Kimmelshue, PhD, CPSS

Joel is a Principal Soil and Agricultural Scientist for Land IQ and a founding owner in the firm. He has performed technical leadership and/or managed numerous projects and tasks of nearly $40 million dollars over the past 26 years. Joel's consulting experience includes practical and applied solutions for development of water/soil management systems and agricultural systems, specifically with irrigated agriculture. This technical expertise also includes crop consumptive use estimates, crop classification, regulatory support and negotiation, water resources science and planning, land reclamation, soil/plant nutrient dynamics, irrigation and drainage in arid and semi-arid climates, soil classification, and crop production.

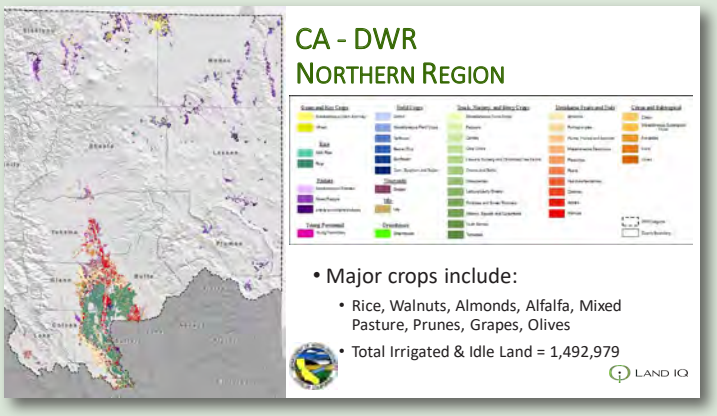
CBI
CATALYZING COLLABORATION

Consensus Building Institute (CBI) is a nonprofit organization with decades of experience helping leaders collaborate to solve complex problems. Their staff are experts in facilitation, mediation, capacity building, citizen engagement, and organizational strategy and development. They are committed to using their skills to build collaboration on today's most significant social, environmental, and economic challenges. They work within and across organizations, sectors, and stakeholder groups.

Tania Carlone

Tania brings more than 20 years' experience in facilitation and mediation, community organizing, organizational leadership, and education. For the past decade, Tania's core practice in facilitation and mediation has focused on collaborative planning and consensus building in multi-party water and natural resources policy environments in California. Since the passage of SGMA, Tania has facilitated SGMA public engagement meetings and workshops statewide for the California Department of Water Resources. She has also facilitated the formation of several GSAs, prepared stakeholder communications and engagement plans, and designed and conducted several SGMA public engagement meetings and workshops in seven groundwater subbasins in the North Sacramento Valley. Tania also facilitated Integrated Regional Water Management Planning efforts and works with agencies and organizations on strategic internal design issues and solutions. Prior to joining CBI, Tania was a Senior Mediator at the Center for Collaborative Policy at Sacramento State University.

Land IQ can utilize their database to help us look at different fee options. They have land mapping techniques that could be a viable tool in establishing an equitable fee development process.



4 FEE SCHEDULE

PROJECT BUDGET SUMMARY

The proposed budget is for providing the CGA data review, fee analysis, and fee setting services which assumes preparation of the FY22-23 Fee Study Engineer's Report (based on the scope of services in the following section) for a not-to-exceed amount of $86,522 on a time and materials basis per LSCE 2022 Schedule of Fees. The estimated Project budget is as follows and a full 2022 LSCE Rate Schedule can be found on the following page:

Estimated Project Budget - Summary Table

Task	Task Description	Budget Amount	Key Deliverables
1	Coordination and Communications	$9,049	Bi-Weekly meetings, fee study element of outreach plan, coordination with legal review, parcel owner assistance (includes **Board Mtg. #1 - Workshop**)
2	Assessment and Parcel Evaluation	$4,550	Review the Colusa Sub-basin GSP and initial budget and implementation plan. Review meeting summaries related to discussions on funding mechanisms. Prepare final assessment data and eliminate data gaps.
3	Prepare Revenue Needs and Cost Allocation TM	$24,986	Draft and final TM cost allocation/options analyses (includes **Board Mtg. #2 – TM Review**)
4	Prepare Engineer's Report	$24,030	Draft and final report with Prop. 218 notice/protest form (includes **Board Mtg. #3 – Report Approval**)
5	Fee Approval	$4,939	Public hearing & fee approval (**Board Mtg. #4 – Fee Approval**)
6	Public Outreach	$14,506	Prepare website updates, FAQs, fact sheets, farm bureau, and other materials to support GSA approved outreach plan
7	Final Assessment Levies	$4,521	Final assessment roll to county parcel database updates
	Total Project Budget	$86,522	

The LSCE Team will prepare all deliverables for CGA review and comment, provide meeting support, and coordinate with the Project team for decision-making and Project updates or changes. The LSCE Team can provide additional services on an as-needed basis, as agreed to in writing, as deemed necessary for the CGA to adopt fees based on the Project deliverables and recommendations.

Proceeding with the Scope of Services in the following section will enable the GSA to establish fees to support revenue needs for GSP implementation during the initial five-year period (2023-2028) in accordance with the objective of completing the fee development and adoption process by June 30, 2023. Thereafter, the GSA would provide the fee-related information to the Colusa County Assessors' Offices by July 2023 to establish fees in 2023 on the December property tax bill. The proposed fees will aid the GSA to comply with SGMA requirements, continue GSP coordination and public outreach efforts, and complete five-year GSP updates. The LSCE Team is available to begin this work immediately to prepare the 2023 Fee Study Engineer's Report and achieve timely adoption of fees to support GSP implementation and SGMA compliance costs recognizing and understanding key steps required to get the fee in place in a timely manner.

LSCE PROPOSED PROJECT BUDGET

Client Colusa GWA
Project Funding Services Proposal
Job No. 22-1-120
Est. By JD/ET
Date 8/26/2022

Cost Estimate for Colusa Groundwater Authority GSA Funding Services Proposal

Luhdorff & Scalmanini Consulting Engineers		Supervising Professional (ET)	Supervising Resource Planner (JD)	Project Professional (PL/LL/AC)	Clerical	ERA Sub-Consultant	Land IQ Subconsultant	CBI Sub-Consultant	Direct Expenses	Summary
Task	**Description**	$225	$215	$175	$83	Schedule	Schedule	DWR Funded	Incurred	
Task 1 – Coordination and Communication										
Task 1.1 – Project Coordination, Meetings, and Administration	Task Hours	6	18	0	2					26
	Task Cost	$1,350	$3,870	$0						$5,220
	Direct Expenses									$0
	SubTotal	$1,350	$3,870	$0						**$5,279**
Task 1.2 – Board Mtg. #1 (Board Workshop)	Task Hours	4	6							10
	Task Cost	$900	$1,290							$2,190
	Direct Expenses									$0
	SubTotal	$900	$1,290							**$2,190**
Task 1.3 – Develop Project and Stakeholder Coordination List	Task Hours	2	2	6	0					10
	Task Cost		$430	$1,050						$1,480
	Direct Expenses								$100	$100
	SubTotal		$430	$1,050						**$1,580**
									Total Task Cost Estimate	**$9,049**
Task 2 – Assessment and Parcel Evaluation										
Task 2.1 - Compile Existing Parcel Level Data for the GSA Service Area	Task Hours	0	2	2						4
	Task Cost	$0	$430	$350						$780
	Direct Expenses						$500			$500
	SubTotal		$430	$350						**$1,280**
Task 2.2 – Search other sources to fill in data gaps/errors	Task Hours	0	4	2						6
	Task Cost		$860	$350						$1,210
	Direct Expenses						$500			$500
	SubTotal		$860	$350						**$1,710**
Task 2.3 – Finalize Parcel Database Information	Task Hours	0	2	4						6
	Task Cost		$860	$700						$1,560
	Direct Expenses						$0			$0
	SubTotal		$860	$700						**$1,560**
									Total Task Cost Estimate	**$4,550**
Task 3 – Prepare Fee Option Evaluation/Selection and Cost Allocation Analyses Technical Memorandum (TM)										
Task 3.1 - Draft Technical Memorandum	Task Hours	2	4	0	2					8
	Task Cost		$860	$0	$166					$1,026
	Direct Expenses					$15,000	$2,500			$17,500
	SubTotal		$860	$0						**$18,526**
Task 3.2 – Final Technical Memorandum	Task Hours	2	4	0						6
	Task Cost		$860	$0						$860
	Direct Expenses					$5,000	$500		$100	$5,600
	SubTotal		$860	$0						**$6,460**
									Total Task Cost Estimate	**$24,986**
Task 4 – Draft and Final Engineer's Report										
Task 4.1 - Draft Report	Task Hours	8	54	24						86
	Task Cost	$1,800	$11,610	$4,200						$17,610
	Direct Expenses									$0
	SubTotal			$4,200						**$17,610**
Task 4.2 – Final Report	Task Hours	2	10	14						26
	Task Cost		$2,150	$2,450						$4,600
	Direct Expenses									$0
	SubTotal		$2,150	$2,450						**$4,600**
Task 4.3 – Board Mtg. 3 - Report Presentation	Task Hours	4	8	0						12
	Task Cost		$1,720	$0						$1,720
	Direct Expenses								$100	$100
	SubTotal		$1,720	$0						**$1,820**
									Total Task Cost Estimate	**$24,030**
Task 5 – Fee Approval										
Task 5.1 - Preparation of Agenda Item and Legal Review	Task Hours	2	10	2	2					16
	Task Cost		$2,150	$350	$166					$2,666
	Direct Expenses									$0
	SubTotal		$2,150	$350						**$2,666**
Task 5.2 – Board Meeting Public Hearing and Approval Items	Task Hours	2	6	2	1					11
	Task Cost	$450	$1,290	$350	$83					$2,173
	Direct Expenses								$100	$100
	SubTotal	$450	$1,290	$350	$83					**$2,273**
									Total Task Cost Estimate	**$4,939**
Task 6 – Public and Stakeholder Outreach										
Task 6.1 – Support Outreach Implementation Plan Deliverables	Task Hours	6	24	40	12					82
	Task Cost	$1,350	$5,160	$7,000	$996					$14,506
	Direct Expenses							$0		$0
	SubTotal	$1,350	$5,160	$7,000	$996					**$14,506**
									Total Task Cost Estimate	**$14,506**
Task 7 – Final Assessment Levies										
Task 7.1 - Prepare County Assessor's Tax Roll File	Task Hours	0	12	4	2					18
	Task Cost	$0	$2,580	$700	$166					$3,446
	Direct Expenses									$0
	SubTotal	$0	$2,580	$700	$166					**$3,446**
Task 7.2 – County Assessor Review and Approval Process	Task Hours	0	4	0	0					4
	Task Cost	$0	$860							$860
	Direct Expenses									$0
	SubTotal	$0	$860							**$860**
Task 7.3 – Submit Final Tax Roll and Revenue Report to GSA	Task Hours		1	0	0					1
	Task Cost		$215	$0	$0					$215
	Direct Expenses									$0
	SubTotal		$215	$0	$0					**$215**
									Total Task Cost Estimate	**$4,521**
SUMMARY	Total LSCE Hours	40	171	100	21					311
	Total LSCE Cost	$5,850	$37,195	$17,500	$1,577					$62,122
	Direct Expenses					$20,000	$4,000	$0	$400	$24,400
									Total Cost Estimate	**$86,522**

2022 LSCE RATE SHEET

Luhdorff & Scalmanini
Consulting Engineers

500 FIRST STREET • WOODLAND, CA 95695

2022 SCHEDULE OF FEES

ENGINEERING AND RELATED FIELD SERVICES

Professional*

Senior Principal	$235/hr.
Principal Professional	$225 to 230/hr.
Supervising Professional	$210 to 220/hr.
Senior Professional	$175 to 210/hr.
Project Professional	$155 to 175/hr.
Staff Professional	$135 to 155/hr.

Technical

Engineering Inspector	$140/hr.
ACAD Drafting/GIS	$142/hr.
Engineering Assistant	$115 to 140/hr.
Scientist	$115 to 140/hr.
Technician	$115 to 140/hr.

Clerical Support

Word Processing, Clerical	$90/hr.
Digital Communications Specialist	$90 to 100/hr.
Project Admin/Accounting Assistant	$90 to 110/hr.

Vehicle Use	$0.58/mi.
Subsistence	Cost Plus 15%
Groundwater Sampling Equipment (Includes Operator)	$170.00/hr
Copies	$0.20 ea.
Professional or Technical Testimony	200% of Regular Rates
Technical Overtime (if required)	150% of Regular Rates
Outside Services/Rentals	Cost Plus 15%
Services by Associate Firms	Cost Plus 15%

** Engineer, Geologist, Hydrogeologist, and Hydrologist*

2022 ERA ECONOMICS RATE SHEET

ERA Economics

Consulting Services Rate Sheet

ERA charges the following hourly rates for economic consulting services. Economic consulting services rates do not apply for litigation matters, including written and oral testimony and all preparation. Rates are updated annually.

Classification	Hourly rate
Director	$265
Senior Principal Economist	$245
Principal Economist	$225
Managing Economist	$205
Senior Economist	$195
Economist/Consultant	$177
Associate Economist II	$165
Associate Economist I	$151
Staff Consultant/Economist	$139
Research Associate II	$113
Research Associate I	$93
Clerical	$75

Travel and Direct Costs

Allowable direct expenses will be agreed in advance with the client and typically include air travel, meals while on travel, rental car transportation, parking, and hotel expenses. Direct expenses will be charged at cost with no mark up. Personal vehicle transportation will be charged at the current federal rate.

Invoicing

Invoices will be submitted monthly, and will include a summary of total hours, cost, and concise description of the services provided by all staff.

5 CONFLICT STATEMENT

LSCE does not anticipate needing to obtain conflict waivers from existing clients. LSCE, to our knowledge, does not have any conflicts with any past, current, or near future projects or clients.

6 REFERENCES

We have provided four references for our project experience below. Please do not hesitate to reach out to confirm our experience and the success of each of these projects.

LSCE References

Client	Project	Contact Information
Solano Subbasin Groundwater Sustainability Agency	• Solano Subbasin GSP and Prop Implementation • Fee Approval, Five Year Projection, and Funding Support	Mr. Chris Lee Assistant General Manager 810 Vaca Valley Parkway, Suite 203 Vacaville, CA 95688 707.455.1105 clee@scwa2.gov
Tehama County Flood Control and Water Conservation District	• Groundwater Sustainability Plan Development • Five-Year Revenue Projections and Funding Options	Mr. Justin Jenson Deputy Director of Public Works 9380 San Benito Ave Gerber, CA 96035 530.385.1462 ext. 2020 jjenson@tcpwa.ca.gov
Napa County Groundwater Sustainability Agency	• Groundwater Sustainability Plan Development • Five-Year Revenue Projections and Funding Options	Mr. Jamison Crosby Natural Resources Conservation Manager 1195 Third Street Napa, CA 94559 707.253.4540 jcrosby@napacounty.ca.gov
County of Lake, Water Resources Department	• Groundwater Sustainability Plan Development • Five-Year Revenue Projections and Funding Options	Ms. Marina Deligiannis Deputy Water Resources Director 255 N. Forbes Street, Room 309 Lakeport, CA 95453 707.263.2344 marina.dreligiannis@lakecountyca.gov

7 PROPOSED SCOPE OF WORK AND SCHEDULE

LSCE APPROACH TO CHALLENGES

The following graphic addresses possible project challenges and solutions that LSCE and the GSA can work together to address to help deliver the project on schedule and within budget.

CHALLENGE 1

Meeting the Project Budget

LSCE'S SOLUTIONS

- Stakeholder outreach is critical, but can increase project budget, integrate CCP and/or CBI and their current Facilitation Support Services contract
- Implement LSCE Quality Control and Quality Assurance methodologies
- Stay within project schedule parameters (outlined under Challenge 2).

CHALLENGE 2

Meeting the Project Schedule

LSCE'S SOLUTIONS

- Establish deliverables and milestones based on project schedule
- Complete sequential items in advance of milestones
- Plan for adequate GSA review time in schedule
- Maintain regular communication between LSCE and GSA project managers throughout the project
- Utilize Solano schedule approach

CHALLENGE 3

Limited Fee Options & Selection

LSCE'S SOLUTIONS

- Evaluate all options for fee generation including parcel, land use (irrigated versus non-irrigated) and parcel water source (i.e., almond, walnuts, olives, rangeland)
- Utilize Land IQ Services to delineate and select fee options efficiently
- Stakeholder coordination needs to be a priority

CHALLENGE 4

Approved Fee and Avoid Legal Challenges

LSCE'S SOLUTIONS

- Implement effective public outreach strategy
- Integrate legal counsel into the process
- Establish fees that are SGMA and Prop 218 compliant

PROJECT PHASES

The CGA has requested assistance with establishing a long-term funding source for CGA operations and SGMA compliance costs. This would involve financial and economic analysis to develop a fee study for a fee to generate necessary revenues to administer and implement the GSP. The CGA anticipates that the fee study will generate revenues for specific GSP-related costs including GSA administration, Annual Monitoring and Reporting, Five-Year GSP Updates, and on-going GSA coordination both within and between GSAs in the region. LSCE and ERA Economics, who have previously worked together on similar projects, (hereafter, the LSCE Team) have partnered to provide the GSA with the services required to develop and implement a long-term fee mechanism.

The scope of services follows a phased approach to develop the fee study deliverable. The LSCE Team applied the same approach for a successful fee study in the Solano Subbasin earlier this year. The project phases include the following:

OUTREACH AND STAKEHOLDER ENGAGEMENT

This phase will span the entire project timeline and will include meetings with the CGA, TAC, and Board as well as targeted public outreach. This also includes required public noticing and hearings to support the Proposition 218 election process.

ASSESSMENT OF REVENUE NEEDS AND COST ALLOCATION OPTIONS

This foundational phase of the project will establish CGA revenue needs to be included in the rate study. The LSCE team will then evaluate options for allocating those costs to different classes of parcels in the Subbasin. It is anticipated that the cost allocation options will include substantial CGA and stakeholder input.

PREPARATION OF THE ENGINEER'S REPORT

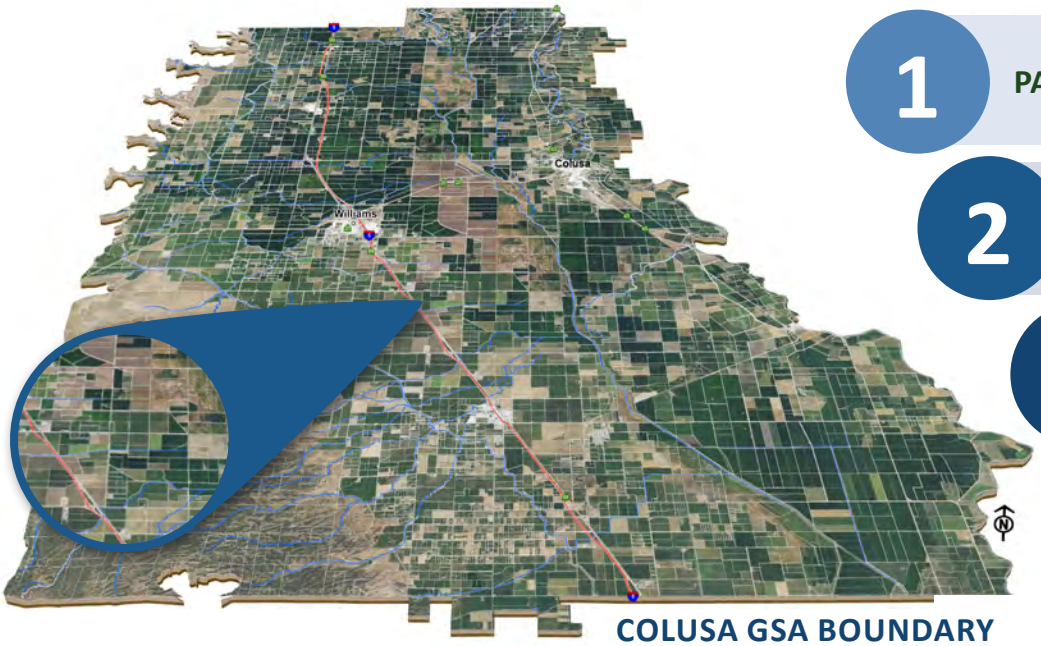
Based on the CGA revenue needs, and preferred cost allocation option selected by the CGA, the LSCE Team will prepare the Engineer's Report to support the fee.

IMPLEMENTATION OF THE FEE

This will include preparing materials, supporting the Proposition 218 election process, coordinating with the Assessor's office, and supporting the Board's public hearing and fee approval actions.

The deliverables for the Scope of Services for the Fee Study includes preparation of draft and final revenue needs and cost allocation technical memorandum (TM) and Fee Study Engineer's Report. The Team will collaborate with the CGA and other team members to develop an organized approach for developing the Fee Study deliverables with quality control measures in place to ensure cost-effective delivery of the project within the project budget and schedule.

PROPOSED FEE OPTION EVALUATION



COLUSA GSA BOUNDARY

1 PARCEL BASED ANALYSIS

2 IRRIGATED VS. NON-IRRIGATED LANDS ANALYSIS

3 PARCEL WATER SOURCE ANALYSIS

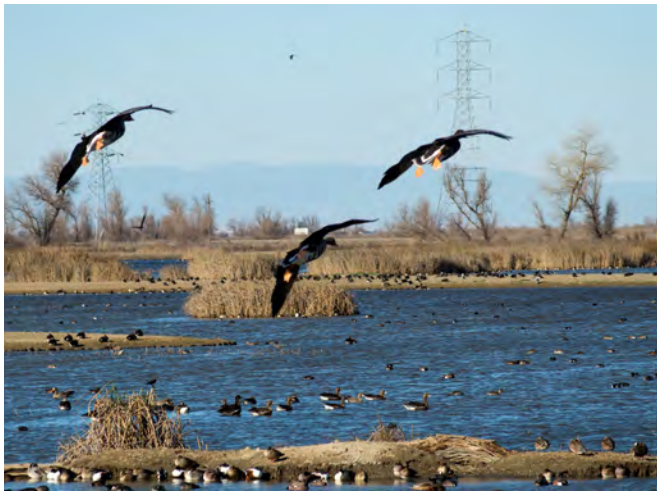
SCOPE OF SERVICES

Task 1. Coordination and Communication

The LSCE Team will coordinate with the CGA as required throughout the project. The LSCE Team will provide a request for information at the start of Task 1 to ensure inclusion of all important information related to developing the draft Technical Memorandum (Task 3) and Engineer's Report deliverable (Task 4). The LSCE Team will share analyses and evaluation metrics and discuss relevance for developing recommended fees that meet future CGA revenue needs. An important step, the Outreach Plan elements specific to the Fee Study will be developed within the first 20-days from Notice to Proceed, in coordination with the CGA. Upon approval, the Fee Study elements of the Outreach Plan will be included in CGA stakeholder meeting processes to ensure transparency and opportunities for stakeholder review within the project schedule. The LSCE Team will conduct bi-weekly project calls to address issues and policy matters in a timely manner, provide regular progress reports, support the GSA in preparing key handouts and presentations as needed during the project, plan for legal counsel review of key fee assumptions and Engineer's Report review, communicate with the County Assessors' Offices and other parties as needed, and coordinate with the CGA in responding to property owner inquiries concerning the proposed fees.

Task 1 Deliverables

- Conduct Bi-weekly team conference calls - agendas/minutes.
- Provide periodic progress reports.
- Prepare CGA meeting handouts and presentations as needed.
- Prepare fee study element of outreach plan (in coordination with CGA).
- Review Task 3 and Task 4 deliverables with legal counsel (in a timely manner and as requested by the CGA).
- Communicate and coordinate with County Assessors' Offices and other parties as needed.
- Respond to property owner inquiries regarding proposed fees in coordination with the CGA.
- Conduct Board Workshop (**Board Meeting #1**).



Task 2. Assessment and Parcel Evaluation

Based on evaluation of data received regarding the fee assessment and parcels included in the fee, which will be incorporated accordingly in Tasks 3 and 4. A draft parcel assessment list will be prepared for review. The goal is to ensure all parcels subject to the proposed GSP implementation fee are included in assessment rolls with the most updated and accurate information available. This includes, but is not limited to, parcel number and location in the Subbasin, land use designation, ownership type, parcel size, water source, and any other relevant parcel related data that would facilitate fair and equitable fees recommendations in Task 3 or 4. Identify other data sources to address data gaps and synchronize the final updated assessment and parcel data in a master file for use in Task 3. It is assumed that, based on available data, we can accurately identify parcels owned by Federal, State, and/or Tribal owners, which are not subject to fees.

Task 2 Deliverables

- Acquire and analyze current property data from the County Assessors' Offices, other real property information vendors and title companies, and perform Assessor data comparisons with other property data sources and validation services.
- Research parcel attributes & ownership information to appropriately calculate and assign the benefit assessments to each parcel for each year.

Key Project Board Meetings

1. **Task 1 — Board Meeting No. 1**
   Board Workshop
2. **Task 3 — Board Meeting No. 2**
   GSA TM Fee Study Workshop – to discuss draft TM recommendations
3. **Task 4 — Board Meeting No. 3**
   Conduct (1) GSA Fee Study Workshop – discuss draft Fee Study Report recommendations
4. **Task 5 — Board Meeting No. 4**
   Conducting a public hearing and considering approval of the recommended fees included in the Fee Study Engineer's Report

Task 3. Preparation of Revenue Needs & Cost Allocation Technical Memorandum

Based on the evaluation of data from Tasks 1 and 2, the LSCE Team will review the GSP implementation costs and other documentation related to PMAs and GSP implementation provided by the GSA and create a cash flow model that will summarize, and categorize CGA revenue needs (i.e., GSP implementation costs) to be included in the fee study. The LSCE Team will concurrently develop up to three (3) options that are SGMA and Proposition 218-compliant for allocating costs to different lands/groundwater users in the Subbasin.

The results of the analysis will be presented to the CGA and documented in a concise Technical Memorandum (TM). This analysis will be based on GSA direction and comments received at the Board Workshop (**Board Meeting #1**). To inform cost allocation options, the LSCE Team will consider work done on SGMA compliance funding strategies for other GSAs throughout California and will incorporate any insights into this project based on similar work with other GSAs with similar challenges and Subbasin conditions. For example, the LSCE Team understands that access to groundwater can vary across subbasins, and this may be a basis for adjusting how costs are allocated to those parcels.

This task will involve analysis to support cost allocation and resulting fee option approaches for up to three (3 scenarios) based on the CGA five-year GSP implementation revenue needs to be included in the TM deliverable. The analysis will be structured to address cost allocation issues considering the variety of property owners who would be subject to a fee. Cost allocation options will be SGMA and Proposition 218 compliant and may include different benefit- and cost-based methodologies. The LSCE Team will prepare recommended cost allocation approaches based on fee options that are feasible based on the availability of parcel level data and supporting information.

The TM will provide recommendations for cost allocation to be discussed with the CGA and stakeholder groups as identified in the Fee Study element of the Outreach Plan. A workshop for the CGA (along with other GSAs) may be included if needed to develop an understanding of the proposed fees that would support the operational and GSP implementation costs (not including projects and management actions) during the initial five-year SGMA compliance period (2023-2028). The TM will document the outcome of different cost allocation scenarios and illustrate the resulting range of fees to different classes of landowners in the Subbasin. Final analysis results and recommendations will be included in the TM deliverable which will be shared with the Board for any final edits or direction. The TM and results of this task will inform and be included in the Engineer's Report developed under Task 4. Any fees developed under this task will be Proposition 218 and SGMA compliant, and consistent with other GSA-adopted fees in California.

GSP IMPLEMENTATION REVENUE NEEDS – KEY ITEMS TO BE ADDRESSED

- Incorporate Operational and GSP Implementation revenue needs over the next five years (this information would be prepared by the LSCE Team in coordination with the CGA).
- Any other revenue needs identified by the CGA.

COST ALLOCATION – KEY ITEMS TO BE ADDRESSED

- Allocate costs between landowners and/or groundwater users within the Subbasin.
- Allocate costs by operational and GSP implementation categories.
- Allocate costs by land use/other land or resource-based parameters.

COST ALLOCATION FOR UP TO THREE (3) FEE/ ALLOCATION SCENARIOS

1. **Scenario 1: fee per acre ($/acre) – total costs/total acres**
2. **Scenario 2: Separate GSA Administrative and GSP Implementation Cost Fees**
3. **Scenario 3: Separate irrigated vs. non-irrigated based fee cost allocation**

Legal counsel review comments and recommendations will be reflected in TM task deliverables.

The TM will include cost allocation assumptions analyzed and corresponding fee results in easy to read data tables and graphical representations that will be presented for comparison by the CGA and stakeholders with recommendations for key items or approaches to be included in the Fee Study (Task 4).

Task 3 Deliverables

- Prepare Draft Technical Memorandum (TM) – for GSA and stakeholder review and comment.
- **Board Meeting #2**: CGA TM Fee Study Workshop – to discuss draft TM recommendations.
- Final TM – with cost allocation analyses results under proposed fee scenarios, incorporating Board workshop comments and recommendations, and GSA fee implementation processes.

Task 4. Preparation of Fee Study Engineer's Report

Based on the evaluation of data from Tasks 1 and 2, and results and recommendations from Task 3, the draft Fee Study Engineer's Report (Report) will be prepared in accordance with SGMA and Proposition 218 requirements and will consider long term fee administrative costs as part of the fee option evaluation process. The draft Report will utilize the updated five-year CGA SGMA compliance revenue needs (based on initial five-year GSP implementation revenue needs' projections prepared in Task 3), and address cost allocation issues for property owners subject to the fee that benefit from GSP implementation and SGMA compliance. The Report will include fee options evaluated and recommended fees to be discussed with the GSA and stakeholder groups as identified in the Fee Study element of the Outreach Plan. A workshop for the CGA (along with other GSAs) may be included if needed to develop an understanding of the proposed fees that support the operational and GSP implementation costs (not including projects and management actions) during the initial five-year period (2023-2028). Any fees developed under this task will be Proposition 218 and SGMA compliant, and consistent with other GSA-adopted fees in California.

GSP IMPLEMENTATION REVENUE NEEDS – KEY ITEMS TO BE ADDRESSED

- Incorporate Operational and GSP Implementation revenue needs over the next five years (this information will be prepared as part of Task 3).
- Any other revenue needs identified by the CGA as needed for SGMA compliance.

COST ALLOCATION – KEY ITEMS TO BE ADDRESSED

- Allocate costs between landowners and/or groundwater users within the Subbasin.
- Allocating costs by operational and GSP implementation categories.
- Parcel size, type, land use and water source.
- Cost allocation scenario results presented in the Task 3 deliverable.

DEVELOP RECOMMENDED FEES

- Consider fee options based on cost of service and equity perspectives.
- Consider GSP revenue projections over upcoming five-year fee period.
- Determine annual fee increases over five-year fee implementation period.
- Consider inflation adjustments over the period to any proposed fees.
- Prepare Proposition 218 Notice and Protest Form.
- Include legal counsel review comments and recommendations in Report ask deliverables.

The Board will have the opportunity to review the draft Report and provide any final comments that would be incorporated into the final Report for Board approval prior to distribution of the Proposition Notices to landowners subject to the recommended fees.

Task 4 Deliverables

- Prepare Draft Engineer's Report – for CGA and stakeholder review and comment.
- **Board Meeting #3**: Conduct (1) GSA Fee Study Workshop – discuss draft Report recommendations.
- Final Engineer's Report – with final Proposition 218 Notice, proposed fees, and GSA adoption process.

Task 6 Deliverables

- Fee related documentation development: Fact Sheet, FAQ, Fee Study related documents.
- Proposition 218 Notice and Protest Form
- Presentation materials for public meetings and workshops.
- Progress reports on Fee Study element of Outreach Plan implementation efforts (provide support to GSA and stakeholders).
- Website updates and legal notification requirements.

Task 7. Final Assessment Levies

The LSCE Team will coordinate with the CGA to obtain a tax code from the County Assessor's Office early in the project schedule to ensure that the Fee Study can move forward in a timely manner. Based on the results of Task 2, the LSCE Team will prepare a draft final assessment levies master file for CGA review and approval at least 45 days prior to the County Assessor's preparation of the data in the respective County's preferred format. LSCE will coordinate with the GSA to make any final adjustments to the assessment roll with adequate notice to the respective County Assessor Offices following the public hearing for fee adoption. The LSCE Team will brief the CGA in a timely manner as to any data gaps or questionable records for parcels to be included in the final assessment roll. The LSCE Team will also coordinate with the CGA early in the process to determine if any special fee billing arrangements will be required to ensure adequate revenues are collected as part of the Proposition 218 fee process.

Note that scope of services assumes the Proposition 218 Notice will be mailed by CGA staff directly to landowners subject to any SGMA compliance fees approved by the Board.

Task 7 Deliverables

- Obtain a tax code from the County Assessor's Office.
- Submit the final assessment roll as it may be revised following the public hearing to the County Assessor's Office, properly formatted per the respective County's preferred formatting.
- Provide a test file to the County Assessors' Offices at least 30 days prior to the preparation of the data.

PROJECT SCHEDULE

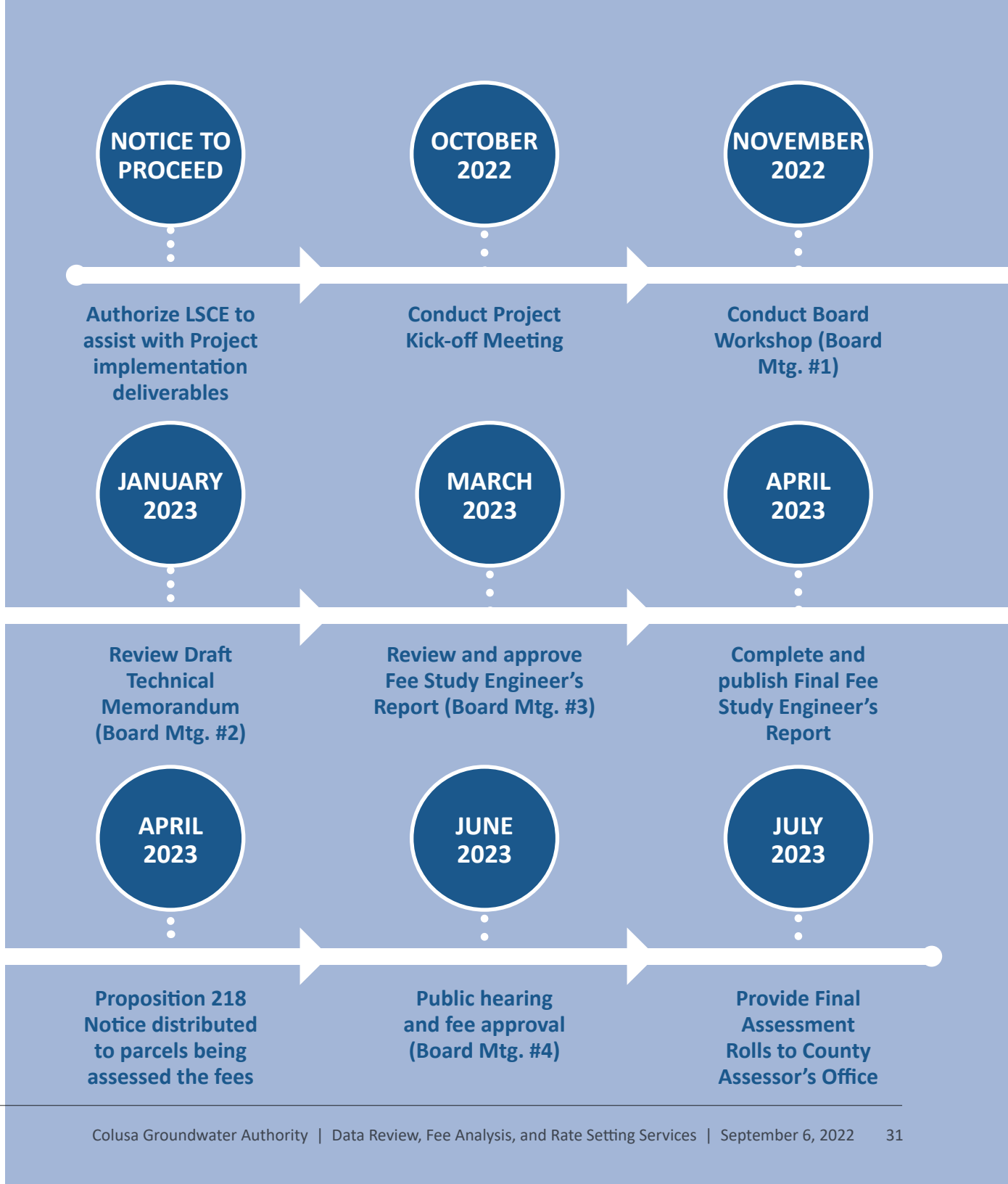
It is anticipated that Fee Study implementation efforts will begin October 1, 2022 and likely end via project close-out by July 31, 2023. This includes initial Board workshop to review scope of work and next steps, preparation of draft and final Technical Memorandum and Fee Study Engineer's Report deliverables with CGA review with public outreach in parallel prior to consideration of adopting proposed fees. Time is allowed for adequate outreach, including engagement with existing CGA and stakeholder processes, to communicate the need for the proposed fees to implement the GSP and maintain compliance with SGMA in a cost-effective manner to maintain local control over its groundwater resources.

The recommended schedule is based on an assumed executed contract date in October 2022, notice to proceed received by October 10, 2022, and timely completion of the project deliverables to enable the CGA to initiate any fees in time for the 2023 County Tax Roll process. The schedule will be updated during implementation as necessary to complete the specified deliverables within the budget and schedule. LSCE will complete the work based on the following schedule highlighting key milestones.

SCHEDULE TIMELINE

- **October 2022**: Authorize the LSCE Team to assist with Project implementation deliverables.
- **October 2022**: Conduct Project Kick-off Meeting.
- **November 2022**: Conduct Board Workshop (Board Mtg. #1).
- **January 2023**: Review Draft Technical Memorandum (Board Mtg. #2).
- **March 2023**: Review and approve Fee Study Engineer's Report (Board Mtg. #3).
- **April 2023**: Complete and publish Final Fee Study Engineer's Report.
- **April 2023**: Proposition 218 Notice distributed to parcels being assessed the fees.
- **June 2023**: Public hearing and fee approval (Board Mtg. #4).
- **July 2023**: Provide Final Assessment Rolls to County Assessor's Office.

This is a schedule for a Proposition 218 approach, a more detailed Project schedule can be provided and will be updated in coordination with the CGA as the work progresses.



Appendix A

Team Resumes

- Jacques DeBra
- Eddy Teasdale
- Duncan MacEwan, PhD
- Steven Hatchett, PhD
- Sheradyn Wood
- Lorrie Jo Williams
- Joel Kimmelshue, PhD, CPSS
- Tania Carlone

Jacques DeBra

Supervising Water Resources Planner

Years of Experience

37

Education

BA, Environmental Studies, University of California, Santa Barbara

Professional Affiliations

- Association of California Water Agencies (ACWA)
- American Public Works Association
- American Water Works Association (AWWA)
- California Urban Water Conservation Council (CUWCC)
- ReUse Association
- Sacramento Area Water Works Association (SAWWA)
- Water Resources Association (WRA)
- Yolo County Water Committee (YCWC)

Jacques brings 37 years of experience: 29 years in managing public water utilities and 8 years as a consultant/AWWA water instructor. He was a leader in regional water management governance responsible for the planning and implementation of watershed, groundwater and surface water monitoring programs; conjunctive use projects; preparation of groundwater management and integrated water resource planning reports; and delivery of funding strategies to maximize grant funding for local and regional activities. His experience includes planning, development and optimization of future water supplies and portfolios, water demand and supply projections, water system evaluations and assessments, developing long range Capital improvement Plans (CIP) and budgets, establishing enterprise rate structures, water system consolidations, and securing funding for capital planning and implementation improvements from a variety of State and Federal funding programs.

EXPERIENCE

Solano Subbasin GSP and Prop 218 Implementation, Solano County, CA: The Solano Subbasin Groundwater Sustainability Agency (SGSA) was established in 2017 to help facilitate SGMA compliance in the Solano Subbasin which included other GSAs (City of Vacaville, Solano Irrigation District, Northern Delta, and Sacramento County GSAs). The SGSA is the largest GSA in the Subbasin with about 60% of the Subbasin's area and 85% of Subbasin's groundwater use. LSCE prepared the Solano Subbasin GSP and provided complete long-term funding strategy support including evaluation of funding options, selection of the Proposition 218 long term funding mechanism, development of five-year SGSA revenue projections, evaluation of cost allocation factors specific to the Solano Subbasin, analysis of various charge options, and preparation of the SGSA Proposition 218 Charge Report which was approved by the SGSA Board of Directors in May 2022. LSCE was the lead on preparation of all Proposition 218 related documentation including preparation of the Proposition 218 Notice and Protest Form, distribution of the Proposition 218 Notice to landowners subject to the charges, and participation in the Proposition 218 approval process including the public hearing and Board approval of proposed charges at the July 2022 meeting. LSCE also worked with the SGSA and other GSAs in preparing updated GSP implementation information, added additional public outreach information to the project website, and supported the SGSA in conducting additional public outreach for stakeholders in advance of Board consideration of proposed Proposition 218 charges. Outreach included updates to all GSP related information with a focus on GSP implementation, virtual town hall meetings, distribution of newsletters

with project updates, media coverage, and speaker's bureau for interested stakeholders. LSCE also supported the GSP Implementation MOU process which updated the multiple GSA governance structure, fiscal agent responsibilities, regional cost sharing arrangements, and required SGMA compliance actions.

Project Funding ($ Budget/funding) – partial list

- 2016 City of Newman DWSRF ($497,000 planning grant for Cr6 compliance)
- 2014-16 Westside IRWMP ($11M Prop. 84 Implementation grant funds)
- 2011-13 Westside IRWMP ($1.5M/$1M Prop. 84 planning grants)
- 2007 Yolo County IRWMP ($1.4M/$984,000 Prop. 50 planning grants)
- Davis-Woodland Water Supply Project – 1990-2009 ($237M)
- Davis/Santa Barbara Utility Rates – water, sewer, sanitation (1990-2013)
- CA-NV Section AWWA Water Use Efficiency Certification Program Development (2007)
- Davis-UC Davis Groundwater Management Plan ($150,000/$110,000 AB303 grant)
- Davis Deep Aquifer Studies I/II ($500,000/$225,000 Prop. 13 grants)
- Davis-Woodland Water Supply Project EIR ($1.4M) – Davis Lead Agency
- Davis Water Supply Feasibility Study ($550,000/$500,000 Prop. 204 grant)
- Bay Area Regional Conservation Program – 1996-present ($2.9M Prop 13&50 grants)
- State-wide Residential End Use Study ($1.2M/$784,000 Prop. 50 grant)
- East Davis Water Storage Tank/Well 32 ($10.2M/$10M I-Bank Loan)
- City of Rohnert Park Meter Retrofit Project ($2.4M/$1.2M Prop. 13 grant – consultant)
- Playfields Artificial Turf Replacement Project ($1M/$250,000 Prop. 50 grant)
- Yolo County Groundwater Monitoring Program – 2001-2013 ($450,000 AB303 grants)
- Yolo County Subsidence Monitoring Program ($148,000 DWR/USACOE grants)
- West Davis Water Storage Tank Project ($5.4M/$5M low interest loan) - Davis
- Integrated Pest Management Plan ($100,000) – Davis
- Meter Reading Contract ($95,000 annually) - Davis
- Davis Meter Retrofit Project ($4.8M/$3.8M Prop. 82 loan/ $377,000 Prop. 13 grant)
- Pollution Load Reduction Program ($1M SWRCB grant/$100,000 EPA grant) – Davis
- Water Resource Plan Development – Santa Barbara Water Agency
- State Water Right Permit Development – Santa Barbara
- Water Conservation Program Manager ($240,000 budget) – Santa Barbara
- Phase II Water Re-use Project Manager ($3.2M/$3M) – Santa Barbara
- Water Rate Development – Tiered Rates ($75,000) – Santa Barbara
- Extensive funding/financing experience for annual budget and utility rate processes

Leadership

- City of Davis Utilities Manager
- AWWA CA-NV Section Chair – 2012-13 ($2.1M budget)
- Facilitated establishment of Water Resources Association of Yolo County (WRA) – 1993
- WRA – Board Alternate, Executive Committee, Technical Committee Chair
- Yolo County IRWMP – led plan development and stakeholder involvement efforts
- Westside IRWMP – Coordinating Committee Governance member
- Davis-Woodland Water Supply Project – Regional Project Manager and Leader
- Yolo County Water Committee – member
- City of Davis/UC Davis Water Management Memorandum of Understanding (2000) – inaugural effort
- Center For Water Policy Consensus – advisor/ panelist
- California Water Plan Update (2005 and 2009) – advisory panel member

- AWWA CA-NV Water Conservation Certification Program Administrator
- AWWA CA-NV Section Water Use Efficiency Certification Program – consultant
- AWWA Manual M-22 (Meter and Line Sizing) Publication – Committee Chair
- Bay Area Regional Conservation Rebate Programs – initiated regional program w/PG&E
- CUWCC – part of founding group and development efforts, member
- Water Education Foundation – industry source in publications
- Established speaker and panelist (AWWA, ACWA), other)
- AWWA Leadership Training – National/Section level
- AWWA Instructor – Water Distribution, Water Use Efficiency, Drought Management
- Department of Water Resources (DWR) – Member of County Drought Advisory and Urban Advisory Groups (2019-2020)

Organizational Experience

- 29-year water professional serving and managing public agencies
- Extensive experience with many multi-agency efforts and collaborations
- Many management/supervision experiences and training
- City of Davis Public Works Managers Group
- Natural Resource Commission Staff Liaison
- Westside Group Coordinating Committee Member
- Westside Integrated Regional Water Management Plan (IRWMP) (Prop. 84)
- Santa Barbara Water Agency – six member regional organization
- AWWA CA-NV Section – Strategic Plan and Business Plan development
- Re-organization experience – planning for and making organizational changes
- Extensive consultant management experience
- Extensive non-profit organization management and budgeting experience
- Extensive experience in coordinating and collaborating with federal, state and regulatory agencies with successful results
- Oversight of various interagency resource agreements, projects and collaborations

Professional Experience

- Various groundwater safe yield and sustainability studies, groundwater plans
- Extensive project management experience on a wide variety of water/resource projects
- Wastewater experience – National Pollutant Discharge Elimination System (NPDES) permits, pollution prevention, recycled water
- Environmental Impact Reports (EIRs) – Well Capacity Replacement and Davis-Woodland Water Supply Projects
- Extensive regional water management and resource planning efforts and initiatives
- Extensive local and regional project and program funding and financing experience
- Long term stakeholder and professional involvement with Bay-Delta proceedings
- Extensive Board and City Council experience including agenda planning
- Executive committee experience – AWWA, WRA, Westside Group
- Direct experience with managing severe drought conditions in Santa Barbara, CA
- Worked on desalination, water transfers, groundwater recharge, recycled water, tiered water rates, and asset management projects with City of Santa Barbara
- Direct experience with water right applications filed with the State Water Resources Control Board (SWRCB) (#30358)
- Direct experience with Central Valley Water Project (CVP) Settlement Contractor summer water purchase and acquisition efforts
- Direct experience in working with regulatory agencies on compliance efforts
- Direct experience in working on legislative matters and addressing legislators
- Direct experience in working with counties on policy and regulatory compliance matters

EDDY TEASDALE, PG, CHG

Supervising Hydrogeologist

Title

Supervising Hydrogeologist

Years of Experience

24

Education

MS, Hydrogeology, University of Idaho, Moscow

BS, Geology, University of Texas, Arlington

Professional Registrations

Professional Geologist
CA No. 7791; ID No. 1561

Certified Hydrogeologist
CA No. No. 926

Professional Affiliations

- California Groundwater Resources Association
- Butte County Well Drillers Advisory Group

Eddy Teasdale has over 24 years of experience working on geological and hydrogeological investigations in the United States and internationally. Eddy has a strong understanding of the current water resources in the Northern Sacramento Valley, through his recent work in Tehama and Butte Counties, through previous work in Glen and Colusa Counties and after working and living in Butte County since 2003. He has extensive experience presenting information and resolving project issues, writing technical reports and working with local, state and federal regulatory agencies. He is the current President of the North Sacramento Valley Groundwater Resources Association and is a member on the technical advisory committee for the Butte County Well Drillers Advisory Group.

EXPERIENCE

Drought Impact Analysis Study, Butte County Department of Water Resources and Conservation, CA: As drought conditions continue to persist throughout the western United States, Butte County not only wants to assess the overall impact of the drought, including the evaluation of the economic impacts but also continue to develop efficient and systematic processes that results in short and long-term reduction in drought impacts to the citizens, economy, and environment in the Northern Sacramento Valley. Mr. Teasdale led the development of the Drought Impact Analysis Study (Study) to document 2021 conditions specifically related to water transfers, groundwater demand, groundwater levels, evaluate the economic impacts on stakeholders and provide recommendations on next steps to improve drought resiliency in the region.

Groundwater Sustainability Plan, Tehama County Flood Control and Water Conservation District, Tehama County: Eddy led the development of 4 GSPs for the Bowman, Antelope, Los Molinos and Red Bluff Subbasins, including the technical work on the GSP chapters related to water budgets, sustainable management criteria, evaluating sustainability management actions and projects, and collaborating with the GSA and stakeholders.

Big Valley Groundwater Sustainability Plan, County of Lake, CA: Since 2021 to present, LSCE has provided Lake County with SGMA compliance and technical support GSP development, implementation and long-term funding strategy support. Key aspects of these services include Preparation of their 2022 GSP Report, preparation of annual reports (2022), preparation of a GSP implementation funding strategy white paper. LSCE provided grant management and coordination with DWR technical staff and grant administrators, supported development of groundwater data management system, and supported groundwater education and outreach. Mr. Teasdale was responsible for the preparation of analyses and interpretations through reports and

associated GIS and graphical products, the evaluation of options for revenue implementation based on cost per acre, per parcel and cost per well and coordination with Groundwater Sustainability Plan's advisory committee, specifically focused on future funding options.

Palermo Clean Water Consolidation Project - Phase 1, Butte County Water and Resource Conservation, CA: Local Coordination. In 2021, LSCE performed the first phase of the Palermo Clean Water Consolidation Project for the Palermo community which is located south of Oroville, California. For over a decade, the community has continued to face health and safety issues due to possible groundwater contamination issues. Through this project the LSCE Team identified the preferred project for consolidation, performed a preliminary design and identified the ideal funding opportunity for the project through the Drinking Water State Revolving Fund.

Nitrogen Isotope Study, Butte County, CA: Project Hydrogeologist. Designed an investigation program for Butte County to assess the source of elevated nitrate in local groundwater. The City was seeking data that would indicate whether elevated nitrate concentrations were attributable to leaky water conveyance piping or to agricultural practices. The study relied on collecting groundwater samples from strategic-located regional water wells and analyzing them for stable nitrogen isotopes and indicator parameters that are associated with municipal wastewater, agricultural fertilizers, and other livestock wastes.

Groundwater Sustainability Plan, Westside Subasin, Westland Water District, San Joaquin Valley, CA: Eddy provided senior guidance for technical and policy support to the GSA for the Westside Subbasin. He also oversaw the technical activities including basin description and water budgets. Guided the client through the process to develop sustainability management criteria and helped to coordinate projects and management actions. Eddy was also the project manager who oversaw the design, installation, and testing of 5 multi complete monitoring wells. These wells will be integrated into the current monitoring program.

Groundwater Sustainability Plan, Indian Wells Valley Groundwater Authority Technical Advisory Committee, Indian Wells Valley, CA: Eddy is representing a large agricultural interest by serving on the Technical Advisory Committee in Indian Wells Valley. The committee tasks range from evaluating options for additional recharge, GSP scope, schedule, and budget development, GSP chapter development and review, and groundwater modeling support.

Groundwater Sustainability Plan, McMullin Area Groundwater Sustainability Agency, Kings Subbasin, Kerman, CA: Eddy provided technical assistance to the GSA's legal counsel. Specific tasks included leading a groundwater modeling analysis to evaluate the impact of agricultural pumping in the basin, helped to refine the overall water budget, developed a sub-basin water budget, identified possible projects and management actions, including an assessment on pumping allocations and the effects that would have on defining sustainability indicators.

Groundwater Sustainability Technical Support, Turner Island Water District, Merced and Delta Mendota Subbasins: Eddy was hired by Turner Island Water District to review of all work being prepared by the Subbasins, GSA consultant. His tasks included review all GSP chapters, provided technical assistance to improve the understanding and management of water resources, and refined and further characterized areas of potential recharge.

Groundwater Evaluation, Sites Reservoir, Colusa County, CA: Assisted in preparing the Initial Alternatives Information Report, Plan Formulation Report, and worked on the Feasibility Study for the North of the Delta Offstream Storage (NODOS) investigation. The Initial Alternatives Information Report identified the project study area; problems and needs; and developed a formal mission statement for the investigation. This report also studied the feasibility of four offstream storage sites that would be suitable for the offstream storage of water from the Sacramento River (Sites Reservoir, Colusa Reservoir, Thomes-Newville Reservoir, and Red Bank Reservoir). The primary objectives for the study are increased water supply and improving the survivability of anadromous fish and other aquatic species. Secondary objectives include recreation, hydropower, and flood control benefits. The Plan Formulation Report refined the objectives for the study, developed and evaluated alternatives, and provided a preliminary assessment of the environmental consequences associated with the alternatives. The alternatives included modifications to existing fish screens and changes in the operation of Red Bluff Diversion Dam to benefit anadromous fish. New and expanded pumping facilities and a terminal regulating reservoir were proposed for the existing Glenn-Colusa and Tehama-Colusa canals to convey water to and from the new reservoir. Expanding the existing canals to increase their capacity, installing a pipeline to further increase conveyance capacity, and using a diversion from Stony Creek Canal to divert water from Black Butte Reservoir into Sites Reservoir were also considered.

Duncan MacEwan, Ph.D.
Principal Economist, ERA Economics

ERA Economics
Environment • Resources • Agriculture

Bio: Duncan is the managing partner of ERA Economics. He previously worked as a consultant economist with CH2M where he developed benefit-cost analyses, feasibility studies, and agricultural economic impact analyses for proposed water storage and investment projects, and concurrently held a position as a postdoctoral scholar in the Department of Agricultural and Resource Economics at UC Davis. Some of the current projects he manages at ERA include agricultural impact analyses, water valuation and risk assessments, benefit-cost analyses, and water supply feasibility studies. He has worked as the lead economist on several Groundwater Sustainability Plans in high and medium priority groundwater subbasins across California and is continuing to support GSAs with GSP implementation. Duncan enjoys working with project teams to integrate economics with other technical studies to support water supply planning.

Professional Memberships

American Agricultural and Applied Economics Association
Western Agricultural Economics Association

Selected Projects

Groundwater Sustainability Plan (GSP) Development, Colusa Subbasin, Colusa County, CA, 2018 - 2022. Duncan was the lead economist working as a subconsultant to Davids Engineering preparing the Colusa Subbasin GSP. Duncan prepared a substantial portion of the Projects and Management Actions chapter, the Plan Implementation chapter, and several technical appendices. Technical appendices included the economic implications of alternative project financing strategies, water allocation approaches, benefit-cost analysis of proposed GSP MT and MO.

Groundwater Sustainability Plan (GSP) Development/Implementation, Solano Subbasin, Solano County, CA, 2018 - Present. Working with LSCE, Duncan was the lead economist for the Solano Subbasin GSP and continues to support the GSAs with GSP implementation. Duncan prepared economic and financial evaluations of potential projects and management actions. For GSP implementation, Duncan developed alternative funding and financing strategies that were presented to the GSAs in support of an ongoing Rate Study.

Groundwater Sustainability Plan (GSP) Development/Implementation, Chowchilla and Madera Subbasins, Madera County, CA, 2017 - Present. As part of the Davids Engineering team, Duncan is the lead economist preparing and implementing the Madera and Chowchilla Subbasin GSPs. He developed economic impact analyses to evaluate potential projects and management actions, and support broader GSP development. Continuing to support GSP implementation, including development of an agricultural land repurposing program.

Groundwater Sustainability Plan (GSP) Development, East Contra Costa Subbasin, Contra Costa County, CA, 2020 - 2021. Working with LSCE, Duncan was the lead economist for the East Contra Costa Subbasin

GSP. He assisted with development of the Projects and Management Actions, Plan Implementation, and funding/financing chapters of the GSP.

Madera County GSA Sustainable Agricultural Lands Conservation (SALC) GSP Program Development, Chowchilla, Delta Mendota, and Madera Subbasins, Madera County, CA, 2020 - Present. Duncan is the lead economist developing the Madera County GSA SALC program. The program includes a financial incentive structure for agricultural land conversion or preservation in specific areas based on land use, water use, and opportunities for achieving multi-benefits. Duncan prepared economic and financial analyses of program costs, incentives, and design. This supported the GSA's successful application for a $10 million grant from the Department of Conservation to begin implementing components of the land repurposing program focused specifically on multi-benefit outcomes.

Sites Reservoir Feasibility Study Update, U.S. Bureau of Reclamation; 2021 - Present. Duncan is working with Reclamation and its partners to analyze agriclultural, M&I, and environmental water supply benefits. This included developing and applying the SWAP and CWEST ag and M&I models to CALSIM model outputs to value water supply for revised Sites project alternatives, and applying those values to the economic feasibility (benefit-cost analysis) and financial feasibility (ability to pay) assessments.

Evaluation of Water Project Financing in California, Department of Water Resources, Sacramento, CA; 2019-2020. With a small group of economists, developed a white paper exploring ways to improve the process for financing large, multi-benefit water infrastructure projects in California. The paper explored the potential for a Multi-Benefit Revolving Fund (MBRF), modelled after the existing Clean Water State Revolving Fund, to provide improved financing for multi-benefit water projects. The paper identified inflexibilities with the current project financing approaches and provided MBRF options.

Processing Tomato Industry Baseline Analysis, California Tomato Growers Association, Sacramento, CA. 2018 - Present. Duncan is the economist for an assessment of the processing tomato industry costs, returns, markets, and market potential. The analysis was commissioned by the Association to improve its understanding of market dynamics in the face of significant cost, price, and regulatory pressures. Duncan prepared an economic analysis of baseline industry costs, projected future costs, water availability under SGMA, and projected domestic and international market demand. This was used to estimate future industry prices and various financial measures of growers' return on investment. The study supported grower contract negotiations. Duncan continues to support the Association with disseminating the results.

Economic and Financial Feasibility of District-wide Pressurized Irrigation, South San Joaquin Irrigation District, Manteca, CA, 2014 – 2016. As a subcontractor to Davids Engineering, Duncan was the lead economist and evaluated the financial and economic feasibility of alternative pressurized irrigation sytems. Economic and financial feasibility was assessed using a series of economic models to establish grower willingess and ability to pay for alternative irrigation systems.

Groundwater Sustainability Plan (GSP) Development, Cuyama Subbasin, Cuyama Valley, CA, 2019 - 2021. As a subconsultant to Woodard & Curran, ERA Economics developed an agricultural economic impact analysis of the draft GSP implementation plan in the Cuyama Subbasin. The analysis established

the costs and benefits of alternative implementation approaches. The economic analysis was initiated in the summer of 2019 and the ERA team presented final study results to the GSA Board in 2021.

Crop Market and Water Risk Assessments. Farm Credit West and Northwest Farm Credit Services. California. 2020 - Present. Lead economist and project manager to develop analyses to quantify water risk and commodity risk in California to support grower business decisions and lender portfolio risk management. Water risk assessments establish water costs, value, and risk under current and projected future availability of irrigation water supply to agricultural regions in California. The studies are used by the client to manage portfolio risk, and to provide market insights for its customers (growers).

Third-Party Impact Analysis of Colorado River Water Transfers. Central Arizona Groundwater Replenishment District. Yuma, AZ. 2014. Duncan developed a calibrated economic model of irrigated agriculture for irrigation districts along the Lower Colorado River. The model was used to assess the value and quantity of water offered by agriculture for potential urban transfers.

Agricultural Economic Impact Analysis of Changes in the Agricultural Groundwater Pumping Charge (Open Space Credit), Santa Clara Valley Water District, San Jose, CA, 2013-2014. Santa Clara Valley Water District (SCVWD) engaged ERA Economics to evaluate the economic impact of proposed increases in the volumetric agricultural groundwater charge paid by irrigators in South County. Duncan developed an economic model of Santa Clara County agriculture that was used to analyze the direct and secondary economic impacts of higher groundwater pumping charges.

Walker River Basin Walker Basin Conservancy. Stored Water Lease Program. Nevada. 2018. Reviewed the Stored Water Lease Program proposed fee structure, incentives, and proposed payments. This included reviewing program goals and agricultural land and water asset values in the region. Developed recommended water leasing values. Proposed alternatives to the direct payment structure that included bidding and other approaches to better align payments with the underlying value of the land and water.

Water Suply Valuation, Confidential Client, Fresno, CA. 2019 – Present. Duncan is working with a client to assess water supply options, cost, and value under potential implementation of SGMA. The study includes strategic advice on possible water supply investment options (and partners), establishing regoinal water supply values, and quantifying potential economic outcomes under SGMA implementation.

Education

Ph.D., Economic Geography, University of California Davis
M.S., Agricultural and Resource Economics, University of California Davis
B.S., Mathematical Economics and Applied Math, California State University Long Beach

Selected Publications

Msangi, S. and MacEwan, D. (*eds*). (2019). Applied Methods for Agriculture and Natural Resource Management. Natural Resource Management and Policy Series. Springer International.

Duncan MacEwan, M. Cayr, A. Taghavi, D. Mitchell, S. Hatchett, R. Howitt. (2017). Hydroeconomic Modeling of Sustainable Groundwater Management. *Water Resources Research*. 53. doi:10.1002/2016WR019639.

Stephen Hatchett, Ph.D.
Director, ERA Economics

ERA Economics
Environment • Resources • Agriculture

Bio: Steve is an economist and project manager specializing in water resources, agriculture, mathematical modelling, and statistical analysis. Prior to joining ERA Economics, he was senior principal economist and project manager in the Sacramento office of CH2M HILL for more than 20 years, from 1987-1998 and 2009-2018, and was principal and owner of Western Resource Economics from 1999 to 2009. Steve's primary focus is on interdisciplinary studies of agricultural production and water use, in which economics is integrated with hydrologic, biological, and engineering analyses. He has more 30 years of experience in project evaluation, including financial and risk analysis, benefit-cost analysis, cost allocation, CEQA/NEPA support, and regional economic impacts. He has assisted federal, state, and local agencies in implementing large programs resulting from new laws, regulations, and court decisions. Steve has also assisted private clients in assessing overall economic feasibility, financial costs and returns, and risk associated with irrigated agricultural production and water use. He has provided technical analysis and testimony to many Boards and Commissions and made numerous presentations at public meetings.

Selected Projects

Madera County GSA Sustainable Agricultural Lands Conservation (SALC) Program Development, Chowchilla, Delta Mendota, and Madera Subbasins, Madera County, CA, 2020 - . Steve is the senior technical adviser developing the Madera County GSA SALC program. The Madera County GSA SALC program includes a financial incentive structure for agricultural land conversion or preservation in specific areas based on land use, water use, and opportunities for achieving multi-benefits. Steve worked with stakeholders and ERA team members over an 18-month public process. This included preparing economic and financial analyses of program costs, incentives, and design. This work supported the Madera County GSA's successful application for a $10 million grant from the Department of Conservation to begin implementing components of the land repurposing program focused specifically on multi-benefit outcomes.

Project Manager, Implementation and Rulemaking for the Sustainable Groundwater Management Act, Department of Water Resources, Sacramento, CA; 2015-16. Assisted DWR with developing regulations, including supporting economic analysis and other documents, to implement the Sustainable Groundwater Management Act of 2015. This act requires local agencies to develop and implement management plans to achieve sustainable groundwater use. Regulations addressed groundwater basin boundary changes and criteria for evaluating local groundwater management plans.

Economist, Evaluation of Water Project Financing in California, Department of Water Resources, Sacramento, CA; 2019-2020. With a small group of economists, developed a white paper exploring ways to improve the process for financing large, multi-benefit water infrastructure projects in California. The paper explored the potential for a Multi-Benefit Revolving Fund (MBRF), modelled after the existing Clean Water State Revolving Fund, to provide improved financing for multi-benefit water projects. The paper identified inflexibilities with the current project financing approaches and provided some examples of how an MBRF could work.

Economist, White Paper on Economic Value of Groundwater; Department of Water Resources, Sacramento, CA; 2019-2020. Developed a report for DWR describing the multiple benefits provided by groundwater in California. The report discussed the types of benefits provided, methods for quantifying the benefits, examples and aggregate estimates of value, and the use of groundwater valuation for water planning. The report was used in DWR's Bulletin 118 update.

Economic Review of Grant Program Applications, Department of Water Resources, Sacramento, CA; 2001-2017. Assisted the Department in developing guidelines and reviewing ten rounds of grant applications submitted for local funding, including proposals for water conservation, integrated regional water management, flood control, groundwater recharge and storage, and desalination.

Water Market Development, McMullin Area GSA, Kings County, CA, 2017 - 2021. Worked with the ERA team and consultants at other firms to develop a water market (trading) strategy in the McMullin GSA. The analysis includes a review of other water markets and outline of potential options for the MAGSA area. The market is being considered to support SGMA implementation and reduce land idling or lower the cost of and specific land idling that is required. The project includes water market design and simulation of financial/economic outcomes for growers in the MAGSA.

Project Manager, Rulemaking Assistance and Quantification of Public Benefits for the Water Storage Investment Program, California Water Commission, Sacramento, CA; 2015-present. Currently working with California Water Commission and DWR staff to develop and implement methods for quantification and management of public benefits as required by a voter-approved bond in 2014. Helped staff prepare regulation text on quantification of benefits, including physical quantification, economic quantification, cost estimation standards, and cost allocation. Over $2.5 billion in funding is expected to be provided for 8 water storage projects. Steve has participated in numerous presentations to the Commission, public, and stakeholder advisory committee.

Senior Economist; Economic Consequences of Sustainable Groundwater Management - Modeling Assistance, Private Client; 2013-2014. Provided senior review and technical assistance to support an integrated groundwater/economic modeling analysis for a San Joaquin Valley groundwater basin currently in long-term overdraft. The analysis used existing models of groundwater/surface water hydrology and agricultural economics to evaluate several scenarios for eliminating long-term groundwater overdraft. Costs associated with near-term reduction in water use were compared to long-term sustainability benefits.

Economics Task Manager; Efficiency Conservation Program; Imperial Irrigation District; El Centro, CA; Worked with the District Program Manager and staff to develop and implement IID's water conservation program. Responsible for designing and evaluating alternative incentive programs to encourage growers to adopt water-conserving irrigation technologies. Worked with engineers and hydrologists to develop a field-level grower decision model of the District that compared costs and water savings under different conservation program designs. Assisted in developing the conservation agreements, rules, and payment structure for participating growers. Participated in many meetings and workshops with District growers and staff.

Lead Economist; Klamath Basin On-Project Plan Demand Management, Klamath Water and Power Association, Klamath Falls, OR; 2012-2013. Assisted a team developing options to reduce agricultural water demands in order to meet diversion limits from the Klamath River.

Economics Task Leader; Snake River Decision Support System; U. S. Bureau of Reclamation; Pacific Northwest Region; Boise; ID. Lead economist in development of a computer-based decision support system (DSS) for management of the Snake River Basin in Idaho. Compiled data on crop acreages, revenues, and costs and created a model of irrigated agricultural production in the Basin. The DSS allows resource managers to access, display, and analyze information related to water resource decisions, and facilitates the coordination of hydrologic, biological, and economic analysis. Prepared the agricultural impact analysis for a study of acquiring water from agricultural uses to augment in-stream flow.

Lead Economist; Update to the Lower Colorado Salinity Economic Impact Model, U.S. Bureau of Reclamation; 2018-2020. Currently assisting Reclamation and its stakeholder partners to review and update the salinity cost model for agricultural, municipal, and industrial water use in the Lower Colorado Basin, including southern California. A team of engineers, agronomists and economists is reviewing data structures, inputs, and damage calculations to bring the model up to an improved and consistent form to use for policy analysis.

Technical Lead for Agricultural Resources and Economics; Long-Term Operations EIS, US Bureau of Reclamation; Sacramento, CA; 2013-2015. Technical team leader for a group of economists that assessed the agriculatural impacts associated with alternatives to operate CVP and SWP facilities consistent with biological opinions issued by the Fish and Wildlife Service and the National Marine Fisheries Service. Potential impacts were assessed for agricultural users, Municipal and industrial users, in-stream uses, and recreation. The economic assessment was linked both to operational and water quality changes affecting users of water from the Sacramento-San Joaquin Delta.

Economist; Economic Analysis of the 2014 Drought for California Agriculture. California Department of Food and Agriculture and U.C. Davis; Sacramento, CA; 2014-2015. As a sub-consultant to ERA Economics, assisted a team of agricultural economists that updated and revised the SWAP agricultural production model to assess economic impacts of the drought on California agriculture. The team revised and updated crop production, cost, revenue, and water use data in the model. Provided review of model results as requested.

Education

Ph.D., Agricultural Economics, University of California at Davis
M. A., Administration, University of California at Riverside
B. S., Forestry, University of California at Berkeley

Selected Recent Publications

With D. MacEwan. Hydroeconomic Modeling and GSP Development. Presented at the 2018 Western Groundwater Conference of the Groundwater Resources Association. Sacramento, CA. 2018.

With D. MacEwan, M. Cayar, A. Taghavi, D. Mitchell, and R. Howitt. Hydroeconomic Modeling of Sustainable Groundwater Management. Water Resources Research. Vol: 53, Pages: 2384–2403. 2017.

SHERADYN WOOD

Associate Communications Manager

Years of Experience

6

Education

BS, Journalism, University of Nevada, Reno

Programs

- Adobe Suite (InDesign, Illustrator, Photoshop, Acrobat, Bridge, Lightroom)

Certifications

ADA Compliance - ADA-125

Sheradyn has been part of the LSCE team supporting GSAs in developing long-term funding strategies, implementing Proposition 218 based fee structures, and assisting with associated public outreach activities. She assisted with Fee Fact Sheets, Frequently Asked Question documents, and Proposition 218 Notices and related documents. She has also assisted with Proposition 218 Notice distribution to those parcels subject to the fee.

EXPERIENCE

Luhdorff and Scalmanini Consulting Engineers, Woodland, CA: Associate Communications Manager. Sheradyn is responsible for the strategizing, creation and implementation of outreach materials including flyers, pamphlets, fact-sheets, presentations, and much more. She has assisted with the Proposition 218 process for Solano County GSA as well as the GSP development for all four GSPs for Tehama County (Antelope, Bowman, Red Bluff, and Los Molinos).

Luhdorff and Scalmanini Consulting Engineers, Woodland, CA: Associate Communications Manager. Sheradyn is responsible for the day-to-day management of marketing/admin duties at LSCE. These duties include word processing for all company deliverables, coordination of workload for two marketing/administrative staff, and tracking of pipeline of project pursuits. Sheradyn is also responsible for the start-to-finish process of proposal production including, kick-off, content organization, finalization, and physical production of the firm's proposals. This process also includes assuring compliance with the Request for Proposals sent out from the client.

West Yost Associates, Sacramento, CA: Marketing Coordinator. Sheradyn was responsible for the daily upkeep of marketing boilerplate information including resumes, bios, project descriptions and project photos. She was also responsible for tracking Request for Proposals that were released by potential clients. Mainly, Sheradyn was responsible for proposal production process from start to finish. This includes the kick-off meeting, team coordination, graphic layout, and the physical production of the proposals.

West Yost Associates, Sacramento, CA: Office Coordinator (Promotion): Sheradyn was responsible for the day to day running of the office, but more importantly, Sheradyn was responsible for the word processing of all deliverables that were being sent out of the Sacramento office. These deliverables included letters, technical memorandums, and small to large scale reports.

LORRIE JO WILLIAMS

Publications Specialist

Years of Experience

35

Education

BS, Design, University of California, Davis

Lorrie Jo has public outreach experience including direct communications work for public engagement, developing newsletters and fact sheet, newspaper and website announcements, posters, flyers, postcards, brochures, and meeting signage, developing consistent branding for all materials. She has supported outreach in multiple industries, translating complex ideas into understandable visual and written communications in environmental consulting, engineering, public library system, and non-profits including the California Farm Bureau. She will support the desired public outreach activities desired by the CSGSA during project implementation. Her experience in working the Farm Bureau will be valuable as part of a comprehensive public outreach strategy coordinated with the CSGSA Board and staff.

Lorrie Jo is also an administrative and graphic design professional with a diverse background in office/business management, project management, marketing, and graphic design across multiple industries. In an administrative capacity, Lorrie Jo has worked with several business start-ups. Assisting with website and logo design, document templates, accounting systems, insurance, and licensing.

As a graphic designer and document specialist, she has prepared environmental, planning, and other technical publications, public outreach materials, conference and marketing collateral, magazine and newsletter layouts, interpretive signage, and website graphics. She also designed an award winning book including layout, illustration, and photography. Lorrie Jo is well versed in the Microsoft Office and Adobe Creative Suite applications.

EXPERIENCE

Office/Marketing Administration: Prepared proposals and presentations. Developed and maintained marketing/operations databases. Managed bookkeeping, contracting, and administration for small businesses.

Project Management: Over 10 years of experience managing marketing, operations, and graphics projects within required time frames while identifying potential problems to reduce implementation costs.

Technical Knowledge: Proven ability to translate complex concepts into accessible content/designs for multiple audiences; from industry insiders to the general public.

Graphic Design/Document Production: Over fifteen years of experience designing and implementing long documents, posters, newsletters, brochures/handouts, presentations, business cards, and logos.

Joel Kimmelshue, Ph.D., CPSS
Principal Agricultural and Soil Scientist

Education

Ph.D., Soil Science (Water Resources concentration), North Carolina State Univ., Raleigh, 1996
M.S., Soil Science (Ag Engineering concentration), North Carolina State Univ., Raleigh, 1992
B.S., Soil Science (Crop Sci. concentration), California Polytechnic State Univ., San Luis Obispo, 1990

Professional Registrations and Organizations

Certified Professional Soil Scientist (CPSS - #18204) – American Registry of Certified Professionals in Agronomy, Crops and Soils; American Society of Agronomy; Soil Science Society of America

Distinguishing Qualifications

Expert/Specialist in the following areas:

- Land use assessments and crop identification
- Production agricultural systems
- Soil/water/plant relations in arid climates
- Irrigation and drainage management
- Crop consumptive use estimates
- Agricultural water resources
- Soil nutrient interactions and environmental issues in soils
- Soil and water salinity management for agriculture
- Water quality for irrigated agriculture
- Regulatory support and negotiation for agriculture
- Agricultural research

Relevant Experience

Dr. Kimmelshue is a Principal Soil and Agricultural Scientist for Land IQ. Dr. Kimmelshue is also a founding owner in the firm. He has experience in agricultural and water resources consulting in the western United States (especially California), and agricultural research and crop production throughout the United States. Dr. Kimmelshue has performed technical leadership and/or managed numerous projects and tasks of nearly $40 million dollars over the past 26 years.

Dr. Kimmelshue's consulting experience includes practical and applied solutions for development of water/soil management systems and agricultural systems, specifically with irrigated agriculture. This technical expertise also includes crop consumptive use estimates, crop classification, regulatory support and negotiation, water resources science and planning, land reclamation, soil/plant nutrient dynamics, irrigation and drainage in arid and semi-arid climates, soil classification, and crop production. Predominantly, the objective scientific work that Dr. Kimmelshue performs is driven by ever-changing policy, legislative and environmental pressures on production agricultural systems.

Select Representative Projects

- **Principal in Charge and Technical Lead – Quarterly Crop Mapping in Palo Verde Irrigation District – Metropolitan Water District, Los Angeles, CA**
- **Principal in Charge and Technical Lead – Nationwide Mapping of Pecans – American Pecan Council.**
- **Principal in Charge and Technical Lead – Statewide Crop and Land Use Mapping – California Department of Water Resources.**
- **Principal in Charge and Project Manager – Monthly Remotely Sensed Crop Consumptive Use – Semitropic Water Storage District, North Kern Water Storage District, Shafter Wasco Irrigation District and 19 other GSAs for a total of 2.3 million acres.**
- **Project Manager and Technical Lead–Cold Water Rice Yield Loss Determination; Western Canal Water District, Richvale Irrigation District, Biggs West Gridley Irrigation District; Cold Water Influences on Rice Yield; Nelson, Richvale, and Gridley, CA.**
- **Principal In Charge/Technical Specialist – Statewide Spatial Mapping of Almonds, Walnuts, Pistachios, and Dried Plums; Almond Board of California, California Walnut Commission, California Pistachio Research Board, California Dried Plum Board; Modesto/Sacramento/Fresno, CA.**
- **Technical Lead and Project Manager – Kern River Watershed Coalition Authority, Sub Basin Review of Agricultural Irrigation and Drainage Practices and Crop Impacts; Bakersfield, CA.**
- **Technical Lead – San Joaquin River Restoration Program, Seepage Management Plan, Expert Review Panel Member; United States Bureau of Reclamation; Sacramento, CA.**
- **Project Manager and Technical Lead–Historical and Present Crop Evaluation and Water Use Estimate; Brownstein, Hyatt, Farber, Schreck – Water Law Firm – representing a Confidential Client; Bakersfield, California.**
- **Project Manager and Technical Lead–Blending of Saline Mine Water with Central Arizona Project (CAP) Water for Irrigation to Cotton, Alfalfa, and Sod; Rio Tinto Mining Company – Resolution Copper; Superior and Queen Creek, Arizona.**
- **Technical Lead and Task Manager–Blackfeet Indian Reservation Water Right Adjudication; Bureau of Indian Affairs/Department of Justice; Browning, Montana.**
- **Technical Specialist – Owens Lake Dust Control; Los Angeles Department of Water and Power; Los Angeles/Lone Pine, CA.**
- **Project Manager and Technical Lead–Irrigation Water Reuse – Water Demand Estimates and Water Quality Suitability; City of Hollister and San Benito County Water District; Hollister, California.**
- **Project Manager and Technical Lead–Santa Clara River Watershed Total Maximum Daily Load (TMDL) Collaborative Process; Agricultural Irrigation Thresholds for Chloride and Salinity; Los Angeles County Sanitation Districts; Fillmore, California.**

Tania Carlone

Senior Mediator
Consensus Building Institute, Inc.
Tel. (510) 684-0504| E-mail tcarlone@cbi.org

PROFESSIONAL SUMMARY

A collaboration specialist with more than 20 years' experience in community engagement, collaborative planning and governance, organizational development, and conflict resolution in diverse settings throughout California and internationally. Substantial experience designing and facilitating inclusive water and natural resources policy environments.

EXPERIENCE

2018- present — Consensus Building Institute — San Francisco, CA
Senior Associate Mediator/Facilitator
Mediate and facilitate complex, multiparty public policy processes with a primary focus on water and natural resources planning and conflict resolution.

2014- 2018 — Center for Collaborative Policy — Sacramento, CA
Senior Mediator/Facilitator
Facilitated and mediated multi-party public policy processes in a broad range of policy areas with a focus on natural resources and land-use. Provided impartial, third party services in public involvement and decision making. Served as the Deputy Water Program Manager for a large water resources project portfolio.

2011-2014 — Independent Consultant — Berkeley, CA
Provided facilitation and communications and engagement services in multi-party integrated regional water management planning processes as well as grant writing, strategic planning, special projects assistance, and leadership coaching for non-governmental organizations.

2007-2011 — Yuba Watershed Institute — Nevada City, CA
Executive Director
Initiated a conservation corridor program; created a wildlife monitoring project; expanded the organization's community-based forest management model in cooperation with federal agencies and private landowners in the Wildland Urban Interface; diversified a community-based natural science/history education program; convened an editorial board to publish a 20th anniversary book entitled *The Nature of This Place*, Comstock-Bonanza Press, 2010, and coordinated a regional book tour for its release.

2005-2007 — Natural Heritage Institute — Nevada City, CA
Sierra Rivers Program Associate

Supported complex watershed restoration, planning and water policy projects; conducted research, concept development, partner cultivation and engagement, and writing of successful grant proposals to fund Sierra Rivers Program activities.

2001-2005 Seeds of Learning Sonoma, CA (Nicaragua and El Salvador)
Executive Director
Managed a 25-member staff in three countries; supervised the development, implementation and evaluation of all programs, namely, school construction, learning and vocational education resource centers, teacher training, primary secondary and university scholarships, sister schools and international service learning trips; led fundraising and donor cultivation, strategic planning, financial and strategic management of this non-governmental organization.

1997-2001 San Domenico School San Anselmo, CA
Program Director and Administrator
Directed a high school integrated humanities program; supervised a team of 5 teachers; facilitated the six-year accreditation process and wrote the Self-Study document and 6-year Action Plan for this K-12 independent school; developed an award-winning schoolwide sustainability program and served as the curriculum specialist on the program team; coordinated the school service learning program in partnership with national and international charitable organizations.

1995-1997 United States Peace Corps Russia (Far East)
Volunteer and Trainer
Completed a three month pre-volunteer service training program; served as a professor at a teacher training institute; collaborated with a Russian counterpart to write a text book and conducted teacher trainings in the use of video-based and multi-media teaching methodologies to aid foreign language acquisition and cultivate cross cultural understanding; acted as an advisor to the first student association on campus; served as a trainer for the successive group of forty Peace Corps volunteers.

EDUCATION

1993-1995 University of San Francisco San Francisco, CA
Master of Arts, Education and Organizational Leadership

1988-1992 University of San Francisco San Francisco, CA
Bachelor of Arts, Political Science & Peace and Conflict Studies

RELEVANT TRAINING

2015 Professional Development Seminar Series (40 hours), Center for Collaborative Policy, Sacramento, CA.
2014 *Negotiating Effective Environmental Agreements* intensive, Concur Inc., Berkeley, CA.
2010 Community Environmental Legal Defense Fund Community Organizing Training, Grass Valley, CA.

2001-2011 Organizational Development training (50 hours) in fundraising, strategic planning, executive coaching, leadership and management, CompassPoint Non-profit Services, Oakland, CA.

PROFESSIONAL AFFILIATIONS

Association for Conflict Resolution: Member
International Association for Public Participation: Member

SELECTED PROJECTS

Water Resources

Groundwater Sustainability Agency (GSA) Coordination in North Sacramento Valley, Butte, Colusa, Glenn, Tehama counties, California, 2018- present. Facilitating the negotiation of legal agreements among thirteen groundwater sustainability agencies to collaboratively develop and implement groundwater sustainability plans in the Corning and Butte subbasins. Developing communications and engagement plans to promote the active participation of diverse stakeholders.

Groundwater Sustainability Plan Collaboration in the Vina and Wyandotte Subbasins, Butte, Tehama, Yuba counties, California, 2017- present. Mediated agreements on governance for two emergent groundwater agencies, including legal structure, governing board structure, voting, initial funding, and public advisory component in two priority basins under California's Sustainable Groundwater Management Act. Provided strategic consultation on countywide community engagement. Facilitated more than ten public workshops to solicit input and build widespread support and understanding. Conducted issue assessment with eligible agencies and stakeholders to assess issues and design a decision-making framework on the agency formation process.

Sierra Valley Basin Groundwater Management, Sierra and Plumas counties, California, 2018- present. Conducted a situational assessment and is currently working with a team to chart a course for the development of a Groundwater Sustainability Plan. Facilitating the development of a coordination agreement between Sierra Valley Groundwater Management District and Plumas County, the two Groundwater Sustainability Agencies in the Sierra Valley Basin. A key challenge in Sierra Valley will be to engage stakeholders in GSP development and to help build the capacity of stakeholders to implement SGMA in this rural, severely disadvantaged area.

Groundwater Sustainability Agency Formation in Shasta County, Shasta County, California, 2016-2017. Conducted interviews with eligible agencies and key stakeholders to assess issues and identify stakeholder preferences on the formation of a Groundwater Sustainability Agency required under SGMA. Mediated conflicts among agencies and structured dialogues that led to the formation of one six-agency GSA to manage groundwater in the Enterprise and Anderson subbasins.

Truckee River Basin Water Group (TRBWG) Assessment and Charter Adoption, Truckee, California, 2016-2017. Completed an extensive stakeholder assessment including interviews and on-line survey and provided governance recommendations to improve the stability and enhance the effectiveness of the Truckee River Basin Water Group, a stakeholder forum comprised of local government representatives for the Town of Truckee and three counties, recreational and environmental interests, as well as state and federal agencies that coordinate on the implementation of the Nevada-California interstate Truckee

River Operating Agreement (TROA). Facilitated the consensus adoption of a TRBWG charter which defines the purpose, governance structure, roles and responsibilities, and operational principles for the group.

Coalition to Support Delta Projects, Sacramento, California, 2015-2016. In April 2012, this project was initiated by the leaders of the following constituencies: water exporters, environmentalists, Delta farmers, and Delta-area county governments. The Coalition's purpose was to identify worthy near-term, low-risk, and feasible Delta Projects to move forward in the planning and regulatory process. The Coalition coordinated with the Delta Conservancy, the California Department of Fish and Wildlife and California Department of Water Resources (DWR) to foster greater collaboration with existing local and regional Delta efforts to develop high level visions and identify projects for Proposition 1 funding. Provided facilitation support and strategic guidance for the Coalition.

Santa Rosa Plain Groundwater Management, Sonoma County, California, 2015-2017. Facilitated quarterly meetings of the Santa Rosa Plain Basin Advisory Panel (Panel), a group that advised the Sonoma County Water Agency on the implementation of the Santa Rosa Plain Groundwater Management Program. The Panel was comprised of nearly 40 members representing diverse stakeholder interests. Collaborated with a project team comprised of agency staff and a technical consultant to develop a meeting framework and prepare technical presentations to inform the Panel and assist them in making informed management recommendations.

SGMA Public Meetings and Workshops, statewide, California, 2015-2018. Collaborated with the DWR Sustainable Groundwater Management Program (SGMP) Team to design and facilitate approximately 30 public meetings, listening sessions and interactive workshops statewide to educate stakeholders and receive public feedback on the regulatory framework for SGMA implementation, and to provide technical assistance to help groundwater basins implement SGMA locally. The meetings included: Basin Boundary Listening Sessions and public meetings, Groundwater Sustainable Plan (GSP) and Alternative Regulations webcasts and public meetings, SGMA Best Management Practices public sessions, A Regional Water Sustainability Summit, a GSP Central Valley Workshop, and Sustainable Management Criteria public sessions. Provided strategic guidance and coordinates with DWR for meeting outreach, preparation, small group facilitation and documentation of meeting proceedings.

Lower Walnut Creek Restoration Project, Martinez, California, 2015-2017. Conducted a stakeholder assessment to explore issues and concerns of landowners, land management and regulatory agencies in the restoration plan area. Developed a public participation program and assisted the Contra Costa Flood Control and Water Conservation District implement the program. Formed a Stakeholder Advisory Group (SAG) and facilitated discussions to reach consensus on a preferred restoration alternative for Lower Walnut Creek.

Integrated Regional Water Management (IRWM) Capacity Building Workshop, Statewide, California, 2014. The primary purpose of the full-day workshop was to provide tools and resources to IRWM regions, with a focus on the needs of tribes, disadvantaged communities and local agencies. The workshop was held simultaneously in Redding, Stockton, Clovis, Los Angeles and Placerville. The webcast plenary sessions were broadcast live from Stockton to remote locations throughout the state. Ms. Carlone served as the emcee for the web-cast, moderated panel discussions, facilitated discussions live in Stockton while coordinating with remote locations to address audience questions.

Yuba County Integrated Regional Water Management Plan, Marysville, California, 2013-2015. Facilitated a five-year plan update process of a comprehensive integrated regional water management

plan in Yuba County. Conducted targeted outreach to Disadvantaged Communities and assisted stakeholders develop integrated projects for inclusion in the plan. Following the adoption of the plan, collaborated with the Stockholm Environment Institute (SEI) to apply the Watershed Evaluation and Planning (WEAP) model as a tool for demonstrating the regional impacts of the proposed projects and actions.

Cosumnes, American, Bear and Yuba (CABY) Rivers Integrated Regional Water Management Plan, Auburn, California, 2011-2014. Facilitated a five-year plan update process of a comprehensive integrated regional water management plan across four counties in the foothills of the Sierra Nevada Mountains. Led targeted outreach to Disadvantaged Communities in the CABY region and assisted stakeholders to develop integrated projects for inclusion in the plan. Following the adoption of the plan.

Lahontan Basins Integrated Regional Water Management Plan, Lassen and Sierra counties, California, 2013-2014. Lahontan Basins is approximately 1,939 square miles including most of Lassen County and a portion of northern Sierra County. The Lahontan Basins IRWM is a shared effort by Lassen County, Honey Lake Valley RCD, Lassen Irrigation Company, City of Susanville and the Susanville Indian Rancheria to identify regional and multi-beneficial projects for the Lahontan Basins Watershed. Provided strategic guidance to the principal consultant, Dyer Engineering Associates, related to process design, community outreach, and project development. Additionally, served as a reviewer for the plan.

Forest and Natural Resources Management

Amador Calaveras Consensus Group (ACCG), Amador and Calaveras counties, California, 2018-Present. Provide neutral assessment, facilitation, mediation, and process design services for this complex, multi-party collaborative spanning the Eldorado and Stanislaus National Forests. Conducted a situational assessment and developed a Collaborative Engagement Strategy to help the ACCG refine its governance structure, policies and procedures and to acquire the tools and resources necessary to increase the group's collaborative capacity and achieve its mission to promote fire safe communities, healthy forests and watersheds, and sustainable local economies. In 2012, the ACCG was awarded Collaborative Forest Landscape Restoration (CFLR) program funding for ten years. Facilitating general meetings for the collaborative and the Planning Work Group meetings, where the ACCG collaboratively develops projects, taking them through the NEPA process.

Tahoe Central Sierra Initiative (TCSI) Comparative Resilience Workshop, Placerville, California, 2018. Provided strategic guidance, process design, and facilitation for a 2-day workshop to identify desired landscape outcomes for the TCSI landscape and to identify methods and metrics for assessing resilience. Facilitated a working group on the second day of the workshop to draft a desired landscape outcomes proposal for the 4 million acre landscape.

Early Adopter Forests Team Mediation, Vallejo, California, 2017. Interviewed Forest Service team members in the Regional Office and on the Inyo, Sierra and Sequoia National Forests to assess the functioning of the Early Adopter Forests Core Team charged with developing the environmental impact documents and forest plans for the first forests adopting the 2012 Planning Rule. Presented findings to Regional Office Ecosystem Planning executive leadership and the Core Team and recommended actions to improve the effectiveness of the Core Team and the communications between leadership and the team. Provided ongoing strategic advice to executive leadership and facilitation support for the Core Team charged with completing the Inyo Forest Plan.

Watershed Improvement Program, Auburn, California, 2016. The Sierra Nevada Watershed Improvement Program is a coordinated, integrated, collaborative program to restore the health of California's primary watershed through increased investment and needed policy changes. Served as a strategic advisor to the program director to help launch the program.

Southern Sierra Conservation Cooperative (SSCC), Southern Sierra, California, 2016. The SSCC is an interagency and NGO cooperative to conserve the biodiversity and key ecosystem functions of the Southern Sierra in the face of landscape scale change. Conducted a stakeholder assessment and designed and implemented an all-day reconvention meeting to establish goals and implementation actions to address climate change effects in the southern Sierra, particularly related to tree mortality.

Sierra Cascades Dialog Sessions, Sacramento, California, 2014-2015. Co-designed and facilitated the Sierra-Cascades Dialog. The Dialog focused on the future of the Sierra Nevada and Cascades. Dialog Sessions provided an opportunity for shared meaning, aligned actions, mutual respect, and understanding different perspectives. The quarterly meeting brought together more than one hundred public and private land managers and stakeholders to grapple with an "all lands" approach to planning and conservation and lay the foundation for Forest Plan revision. Participants represented a broad range of stakeholders including all types of government, communities, environmental, water agencies, and industry. Dialog outcomes informed future Forest Service management strategies.

King Fire Restoration Stakeholder Workshop, Placerville, California, 2014. The purpose of the workshop was for the Eldorado National Forest to communicate to key stakeholders and the public currently available information regarding the King Fire Restoration and to discuss possible options for the Proposed Action in this pre-NEPA phase of the project. Provided process design, agenda development and strategic advice to Forest Service staff in planning the workshop and facilitated the all-day workshop.

Rim Fire Recovery Stakeholder Workshop, Sonora, California, 2015. The Rim Fire burned 257,314 acres in the Stanislaus National Forest and Yosemite National Park. The large scale of high severity burning in the fire poses unprecedented challenges for recovery, restoration, and reforestation. Facilitated a workshop to receive stakeholder input on the recovery alternatives for the EIR for the NEPA process.

Mountain Meadows Prioritization for Restoration on Public Lands in the Yuba and Mokelumne Watersheds, Sierra Nevada, California, 2011. Facilitated meetings between the not-for-profit organization American Rivers and the Tahoe National Forest to design a protocol for assessing and prioritizing meadows for restoration on public lands in these two watersheds. While guiding the process to develop a mountain meadows health scorecard as a rapid assessment tool, assisted project partners establish an improved, collaborative process for future partnerships between the Forest Service and NGOs. Following this process, these two entities successfully pursued funding to prioritize meadows for restoration on public lands in the American River Watershed.

Sierra Solutions for Private Meadow Restoration, Sierra Nevada, California, 2011.
Created education and outreach materials as tools to engage private property owners and ranchers in meadow enhancement and restoration solutions. Made technical and scientific content accessible and useful to the lay person through the development of a meadows primer pamphlet and accompanying brochure. Meadow restoration has represented a source of conflict between some stakeholder groups. These materials were created to address these concerns and to bring diverse parties together to seek mutually beneficial solutions to meadow impairment across the Sierra.

Pesticide Management

Field Fumigant Notification Workshops, statewide, California, 2016. Facilitated workshops to collect stakeholder input on the development of new rules for field fumigant notifications. More than 200 people from a range of interests attended the workshops.

Pest Management Advisory Committee (PMAC), Sacramento, California, 2015-2018. The Department of Pesticide Regulation's Pest Management Research Grant Program was established to develop practices that reduce use of high-risk pesticides and thereby the risk of unanticipated impacts on public health and the environment. The Department's Pest Management Alliance Grant program solicits and funds projects that increase adoption of effective pest management practices that reduce risks to human health and the environment. Annually, facilitated two meetings with the Pest Management Action Committee (PMAC) where the group reached consensus recommendations on grant awards for the Research and Alliance Grant Programs.

Workshops for Restrictions on Pesticide Use Near Schools, statewide, California, 2015. Facilitated a series of 15 workshops in six locations throughout the state to receive input from school administrators, the agricultural industry, and the public on the development of new rules for the use of pesticides near schools. DPR presented two central concepts for workshop participants to consider for the development of new regulations. The concepts focused on notification of pesticide application and consideration of restrictions such as timing of applications, distance of application from schools, types of pesticides used near schools, and methods of application. In several locations throughout the state the meetings attracted up to 200 community members. At times, workshop participants' emotions ran high. Created a safe environment for all voices to be heard and for the full range of comments and concerns to be raised.

Air Quality & Cultural Resources

Owens Lake Cultural Resources Task Force, Owen's Valley, California, 2014-2015. Co-facilitated this task force, which focused on four specific culturally sensitive sites in Owens Valley. The Task Force was charged with recommending to the Los Angeles Department of Water and Power and Great Basin Unified Air Pollution Control District how to balance dust control mitigation and protection of cultural resources on these four sites. The first task was to develop consensus among area tribes regarding how they would like to see that balance achieved. Second, the tribes presented their recommendation to the rest of the Task Force, considered feedback, and refined their recommendation as they deemed appropriate. The Task Force unanimously accepted the Tribes' recommendations in December 2014. The co-conveners implemented the Tribes' recommendation for these four sites in 2015.

Land-use Planning

Sonoma Developmental Center (SDC), Conceptual Master Plan- Study Phase, Sonoma Valley, California, 2017- 2018. Conducted stakeholder assessment interviews with approximately 70 individuals. Collaborated with the planning firm and the State of California to assemble a Community Advisory Committee (CAC) comprised of diverse, representative interests charged with advising the Team on the site assessment findings and analysis. Facilitated the CAC and an interactive, community workshop to receive public input on the site assessment findings and analysis.

Transform Sonoma Developmental Center (SDC), Sonoma Valley, CA, 2014-2016. Designed and facilitated the community learning and public planning effort to inform state officials of the community's vision, goals, and desired alternatives for the future of SDC. Conducted broad community outreach, designed, and facilitated a highly interactive workshop for 250 stakeholders and interested parties. Distilled stakeholder input to draft a community vision for the future of the site which contributed to the State's investment in a site assessment and conceptual master planning process for the site.

Assessments

Resilient by Design, Bay Area, California, 2018. This yearlong international design competition focused the region on creating resilience to sea level rise and flooding while addressing other regional challenges. CBI's team conducted an assessment of the process and outcomes, capturing the impacts and lessons learned with a focus on understanding the overall progress the region has made and thinking about the next phase of implementation. Conducted 29 interviews with agency, nonprofit, community, and design team representatives to assess the Challenge's impact, lessons learned, and potential next steps toward a resilient Bay Area and prepared assessment findings report.

The Martis Fund, Tahoe-Truckee, CA 2017. Completed a strategic organizational assessment and implemented recommendations to improve the functioning of the Board of Directors, devise a staff succession plan, and develop a strategy document to mediate a Board of Directors discussion on the future of the organization's workforce housing program.

Yuba River Accord River Management Team (RMT), Sacramento, California, 2015.The RMT is composed of a Planning and Operations group tasked with implementing a detailed monitoring and evaluation study program for the Lower Yuba River as specified in the Lower Yuba River Accord. The RMT membership is limited to signatories of the Yuba Accord, including the Yuba Water Agency, California Department of Fish & Wildlife, National Marine Fisheries Service, US Fish & Wildlife Service, South Yuba River Citizens League, The Bay Institute, Friends of the River, Trout Unlimited, Pacific Gas & Electric, and the Department of Water Resources. Conducted a conflict assessment, presented findings and recommendations to the group, and mediated a consensus-seeking discussion to adopt assessment recommendations.

SELECTED PUBLICATIONS AND REPORTS

M.E. DuPraw, S. Di Vittorio, D. Ceppos, M.D. Wylie, M. Kopell, S. Lucero, T. Carlone, M. Meyer, and S. Horii. 2017. Groundwater Sustainability Plans: California's Newly-Formed Groundwater Sustainability Agencies – The Rewards of Optimizing Effective Coordination and Collaboration. The Water Report: Issue 162, August.

American Bar Association, 2019. Environment, Energy, and Resources Law: The Year in Review, 2018. Contributor, Chapter 25: Alternative Dispute Resolution.

PRESENTATIONS AND LECTURES

MIT Water Summit 2018, Thirsty Cities. Cambridge, Massachusetts, 2018. Panel presentation, "Water Sharing Beyond a City's Limits."